



Prepared for

Crisp County Power Commission

202 S. 7th Street
Cordele, Georgia 31015

2022 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

**CRISP COUNTY POWER COMMISSION
PLANT CRISP ASH POND
Warwick, Georgia**

Prepared by

Geosyntec 
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

July 2022

CERTIFICATION BY QUALIFIED GROUNDWATER SCIENTIST

I certify that this Annual Groundwater Monitoring Report meets the requirements of Section 40 C.F.R. §257 of the Federal Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule (40 C.F.R. §257) and the Georgia EPD Solid Waste Management Rule for Coal Combustion Residuals (391-3-4-.10). The Annual Groundwater Monitoring Report includes statistical methods and narrative description appropriate for evaluating the groundwater monitoring data for the CCR management area.

JIMMY WHITMER

Printed Name of Qualified Groundwater Scientist

PG001302
Registration No.

Georgia
Registration State



07/29/2022
Stamp/Signature/Date

TABLE OF CONTENTS

CERTIFICATION BY QUALIFIED GROUNDWATER SCIENTIST	i
EXECUTIVE SUMMARY	v
1.0 INTRODUCTION	1
1.1 Overview	1
1.2 Site History	2
1.3 Geologic and Hydrogeologic Setting	2
1.4 Groundwater Monitoring Well Network	3
2.0 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS RESULTS	5
2.1 Groundwater Sampling and Laboratory Analysis	5
2.2 Groundwater Monitoring Results	6
3.0 STATISTICAL DATA ANALYSIS PROCEDURES	7
3.1 Appendix III Statistical Methods	7
3.2 Appendix IV Statistical Methods	8
3.3 Evaluation of SSLs for Appendix IV Constituents	9
4.0 STATISTICAL ANALYSIS RESULTS	10
5.0 FUTURE GROUNDWATER MONITORING PROGRAM	11
6.0 REFERENCES	12

LIST OF TABLES

Table 1	Monitoring Well Network Summary
Table 2	Groundwater Elevation Summary
Table 3	Hydraulic Gradient and Groundwater Flow Velocity Calculations
Table 4	Appendix III Analytical Data Summary – Sampling Performed on April 26, 2022
Table 5	Appendix IV Analytical Data Summary – Sampling Performed on April 26, 2022
Table 6	Evaluation of SSIs for Appendix III Constituents

Table 7	Summary of Basic Groundwater Statistics and GWPS for Appendix IV Constituents
Table 8	Evaluation of SSLs for Appendix IV Constituents

LIST OF FIGURES

Figure 1	Groundwater Monitoring Well Location Map
Figure 2	Potentiometric Surface Map – April 26, 2022

LIST OF APPENDICES

Appendix A	Well Inspection Forms
Appendix B	Field Groundwater Sampling Forms
Appendix C	Laboratory Analytical Reports
Appendix D	Statistical Calculations and Time-series Graphs

LIST OF ACRONYMS AND ABBREVIATIONS

CCPC	Crisp County Power Commission
CCR	Coal Combustion Residuals
C.F.R.	Code of Federal Regulations
cm/sec	Centimeters per Second
DNR	Department of Natural Resources
DO	Dissolved Oxygen
ft/day	Feet per Day
ft/ft	Feet per Foot
ft/year	Feet per Year
GA EPD	Georgia Environmental Protection Division
GWPS	Groundwater Protection Standard
K_h	Horizontal Hydraulic Conductivity
MCL	Maximum Contaminant Level
mg/L	Milligram per Liter
MW	Megawatt
NTU	Nephelometric Turbidity Units
ORP	Oxidation Reduction Potential
PE	Professional Engineer
QA/QC	Quality Assurance/Quality Control
SESD	Science and Ecosystem Support Division
SOP	Standard Operating Procedure
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
SU	Standard Unit
USEPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit

EXECUTIVE SUMMARY

Crisp County Power Commission (CCPC) has been monitoring the groundwater quality at the Plant Crisp Ash Pond (ash pond) in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule [40 Code of Federal Regulations (C.F.R.) Part 257, Subpart D] and the Georgia Environmental Protection Division (GA EPD) Rule for CCR (391-3-4-.10). The timeline and status of the monitoring program and the relevant findings and conclusions derived for the reporting period (i.e., between January and June 2022) are summarized as follows:

- In compliance with 40 C.F.R. §257.94, a groundwater detection monitoring program was conducted between February 2017 and September 2017.
- In compliance with 40 C.F.R. §257.95(a), CCPC initiated an assessment monitoring program in March 2018. The ash pond has been monitored under the assessment monitoring program from March 2018 through the current reporting period.
- Pursuant to Rule 40 C.F.R. 257.95 and 391-3-4-.10(6), Statistically Significant Increases (SSIs) above background levels were identified for Appendix III¹ constituents. No Statistically Significant Levels (SSLs) above the Groundwater Protection Standards were identified for Appendix IV² constituents during the reporting period. A summary of statistically significant values of Appendix III and Appendix IV parameters is provided in the table below.

Appendix III Parameter	April 2022
<i>Boron</i>	<i>MW-D1, MW-D2, MW-D3</i>
<i>Calcium</i>	<i>MW-D1, MW-D2</i>
<i>Fluoride</i>	<i>MW-D3</i>
<i>Sulfate</i>	<i>MW-D1, MW-D2, MW-D3</i>
<i>Total Dissolved Solids (TDS)</i>	<i>MW-D1, MW-D2, MW-D3</i>
Appendix IV Parameter³	<i>None</i>

¹ Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

² Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

³ A state statistically significant level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, or the calculated background interwell prediction limit. A federal SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

- Pursuant to 40 C.F.R. §257.95(d)(1) and GA EPD CCR Rule, assessment monitoring will continue at the ash pond. The next assessment report will be submitted to the GA EPD in January 2023.

1.0 INTRODUCTION

1.1 Overview

Geosyntec Consultants (Geosyntec) of Kennesaw, Georgia, at the request of Crisp County Power Commission (CCPC), prepared this 2022 Semi-Annual Groundwater Monitoring Report for the ash pond located at CCPC's Plant Crisp (the Site). Plant Crisp is located in Warwick, Georgia, on the southern end of Lake Blackshear (**Figure 1**). CCPC installed a groundwater monitoring well network in February 2017 in compliance with the requirements of the 40 Code of Federal Regulations (C.F.R.) §257.91 and the subsequently enacted Section 391-3-4-.10(6) of the Georgia Environmental Protection Division (GA EPD) Coal Combustion Residuals (CCR) Rule (eff. March 28, 2018).

A groundwater detection monitoring program was conducted between February and September 2017 in compliance with the requirements of the 40 C.F.R. §257.94. The first Annual Groundwater Monitoring Report summarizing the results of detection groundwater monitoring activities was prepared in January 2018 [Geosyntec, 2018]. In compliance with 40 C.F.R. §257.95(a), CCPC initiated an assessment monitoring program for the ash pond in March 2018. The assessment monitoring for this reporting period consisted of performing a semi-annual monitoring event in April 2022. The April 2022 assessment monitoring event was performed for constituents listed in Appendix III to part §257 (referred herein as Appendix III constituents) and Appendix IV to part §257 (referred herein as Appendix IV constituents) (40 C.F.R. §257.95(b)). The groundwater monitoring and statistical analyses were performed consistent with the Groundwater Monitoring and Statistical Analysis Plan prepared for the ash pond in October 2017 and revised in April 2020.

The purpose of this report is to present a summary of the April 2022 groundwater assessment monitoring activities and associated laboratory and statistical analysis results. The report has been prepared to meet the semi-annual reporting requirements of GA EPD CCR Rule 391-3-4-.10(6)(c)⁴.

In summary, the April 2022 sampling event detected concentrations of 40 C.F.R. §257, Appendix IV constituents, but at concentrations below their respective United States Environmental Protection Agency's (USEPA's) maximum contaminant levels (MCLs).

⁴ The semi-annual groundwater monitoring report is a state requirement under DNR Rule 391-3-4.10(6)(c): The owner or operator of a CCR unit must submit a semi-annual report to the Division to coincide with the semi-annual sampling event. A qualified groundwater scientist must certify the report.

1.2 Site History

Plant Crisp is a dual-fuel (coal and natural gas) electrical generation facility, with a 12.5-megawatt (MW) capacity coal-fired unit and 5 MW capacity natural gas combustion turbine. The byproducts of power generation from the combustion of coal (commonly referred to as CCR) at Plant Crisp included mainly fly ash and bottom ash. The CCR was disposed into a 6.5-acre ash pond located within the plant property using wet sluicing method. The ash pond was constructed in the mid-1970s, as an unlined pond [CDM Smith, 2014], and started to receive sluiced ash in 1976. The coal burning and resulting ash disposal was conducted until August 2015. The coal burn unit was briefly re-activated in December 2016 to eliminate an existing small coal supply. The last burning of coal took place on March 22, 2017. In October 2016, CCPC submitted notification of closure by removal in accordance with 40 C.F.R. §257. The original schedule for closure would have removed CCR by February 2018, however, Georgia Department of Natural Resources (DNR) CCR management regulations were issued in November 2016, DNR Rule 391-3-4-.07(5), after the initial closure plan. DNR Rule 391-3-4-.07(5) required GA EPD's approval of CCR management plans for the receiving landfill. GA EPD approved the CCR management plan for the receiving landfill on March 28, 2019. On November 19, 2018, CCPC submitted a CCR permit application for the existing impoundment and closure of the ash pond by removal in accordance with 40 C.F.R. §257.102(c) and the GA EPD CCR Rule 391-3-4-.10 and other GA EPD regulations as applicable. GA EPD issued a permit on August 17, 2020 authorizing the handling of CCR and closure through removal of the ash pond. CCPC is decommissioning the ash pond in accordance with the permit, federal, and state requirements and the CCR management plan.

The electrical generation facility, ash pond, and hydroelectric dam are located on approximately 100 acres of CCPC property near Lake Blackshear and the Flint River (**Figure 1**). The ash pond has embankments on the western and partially southern and northern sides. The maximum embankment height is on the west end and is approximately 22 feet [Rizzo Associates, 2015]. The ash pond was classified as a low hazard unit during the USEPA's coal combustion residuals impoundment assessment, dated February 2014 and conducted by CDM Smith [CDM Smith, 2014].

1.3 Geologic and Hydrogeologic Setting

CCPC is located in the Coastal Plain Physiographic Province of Georgia, which is generally characterized by gently rolling to nearly flat topography. The Coastal Plain Physiographic Province of Georgia is characterized by Late Cretaceous and Cenozoic sedimentary rocks and sediments. Based on the Geologic Map of Georgia [Georgia Department of Natural Resources, 1997], the Site is underlain by Quaternary-aged stream alluvium and undifferentiated terrace deposits underlain by residual soil derived by the

weathering of Eocene-aged limestone. Beneath the residuum is Eocene-aged limestone (the Ocala Limestone) that dips gently to the southeast and generally thicken in that direction [Hicks et al, 1987]. The Ocala Limestone comprises part of the Upper Floridan aquifer, which is underlain by low permeability zones within the Lisbon Formation (argillaceous limestone). Subsurface investigations at the Site generally describe the surface geology as embankment fill, alluvium, residuum and limestone bedrock [ND&T, 1994, Rizzo, 2015, Geosyntec, 2019].

The uppermost aquifer at the Site is the unconfined groundwater aquifer that occurs in the alluvium and some upper portions of the residuum. The alluvial sediments consist of alternating layers of clay, silty sand, silty clayey sand, and some gravel (SM, SM-SC). While most of the of the residuum consists of clays and calcareous clay (marl) with limestone fragments, there may be sandy clay and gravelly clay lenses that could act along with the overlying alluvium as part of the uppermost aquifer. Based on field observations (increasing clay content with depth in the residuum and increasing blow counts with depth), the hydraulic conductivity of the residuum is expected to decline with depth. As such, the lower part of the residuum is likely a confining unit and represents the lower boundary of the uppermost aquifer. Recharge to the uppermost aquifer is from infiltration of precipitation. In March 2019, Geosyntec performed slug testing in four monitoring wells to estimate horizontal hydraulic conductivity (K_h) of the uppermost aquifer. Based on the slug testing results, the geometric mean of the K_h in the uppermost aquifer was estimated as 1.44×10^{-4} centimeter per second (cm/sec) [0.41 feet per day (ft/day)]. This value is similar to the K_h estimated for the alluvium and residuum during previous investigations.

Under natural conditions, the water table surface is a subdued reflection of the topography, with groundwater generally flowing from southeast to northwest from the higher elevations to lower elevations toward the Flint River. The movement of groundwater in the uppermost aquifer can be characterized as porous media flow.

1.4 Groundwater Monitoring Well Network

In accordance with 40 C.F.R. §257.91, a groundwater monitoring system was installed that (1) consists of a sufficient number of wells; (2) is installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer; and (3) represents the groundwater quality both upgradient of the units (i.e., background conditions) and passing the waste boundary of the units. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions. The well network was certified by a professional engineer (PE) on June 14, 2017; the certification is maintained in the facility's Operating Record. Well construction diagrams of the monitoring wells were included in the January 2018 Annual

Groundwater Monitoring Report [Geosyntec, 2018] as well as the Groundwater Monitoring and Statistical Analysis Plan [Geosyntec, 2020]. The certified groundwater monitoring well network includes one monitoring well (MW-U1) located upgradient of the ash pond, representing background groundwater conditions, and three monitoring wells (MW-D1, MW-D2, and MW-D3) located downgradient of the ash pond. The locations of the monitoring wells are shown on **Figure 1** and well construction details are provided in **Table 1**. The monitoring wells are screened in the uppermost aquifer underlying the ash pond, which occurs in the alluvium and some upper portions of the residuum.

CCPC does not currently plan to expand the certified monitoring well network. During the monitoring period: (i) all wells were functioning properly; (ii) there were no dry wells; and (iii) no additional well installation or abandonment was conducted. Inspection of certified well network by a qualified groundwater scientist was performed in April 2022 (Appendix A). No corrective action is needed for any of the four monitoring wells.

2.0 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS RESULTS

2.1 Groundwater Sampling and Laboratory Analysis

The groundwater assessment monitoring event for this reporting period was conducted on April 26, 2022. The groundwater samples were collected in accordance with the USEPA Science and Ecosystem Support Division (SESD) Standard Operating Procedure (SOP No. SESDPROC-301-R4) [USEPA, Athens, Georgia, 2017]. Prior to sampling, depth to groundwater and total well depth were measured for each monitoring well using an electrical water level indicator. The water level indicator was cleaned between wells following the decontamination procedure listed under SESDPROC-205-R3 [USEPA, Athens, Georgia, 2015]. Depth to groundwater data and groundwater elevations are summarized in **Table 2**. The groundwater elevation data was used to prepare a potentiometric surface map, provided as **Figure 2**. Based on the potentiometric surface map, groundwater flow direction is from southeast towards northwest with a hydraulic gradient of approximately 0.010 feet per foot (ft/ft) (**Table 3**). The average horizontal groundwater flow velocity was calculated using Darcy's equation as approximately 7.8 feet per year (ft/year) (**Table 3**).

Groundwater sampling was performed using a low-flow sampling method. To assess that the samples collected were representative of the groundwater in the aquifer, field water quality parameters were measured during purging using a Horiba U-52 water quality meter. These parameters include temperature, pH, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen (DO). Measurements were taken within an enclosed flow-through cell to minimize effects of contact with air. Turbidity was measured using Hach 2100P turbidity meter. Purging was considered complete when the following stabilization criteria were met for at least three consecutive measurements (as defined by USEPA SESD SOP No. SESDPROC-301-R4):

- pH \pm 0.1 Standard Units (SU);
- Conductivity \pm 5%;
- Dissolved oxygen \pm 0.2 milligrams per liter (mg/L) or \pm 10% change in saturation, whichever is greater;
- Turbidity measured less than 10 nephelometric turbidity units (NTU); and
- ORP \pm 20 mV.

Field groundwater sampling forms are provided in **Appendix B**.

The groundwater samples were collected in laboratory-provided containers. Following sampling, the bottles were sealed, labeled, packed in ice, and shipped under chain-of-custody protocol to Eurofins Test America Laboratories in Pensacola, FL, a certified laboratory pursuant to the Georgia State Program. The chain-of-custody procedures were conducted in accordance with SESDPROC-005-R2 [USEPA, Athens, Georgia 2013]. The groundwater samples were analyzed for Appendix III constituents (i.e., boron, calcium, chloride, fluoride, sulfate, total dissolved solids) and Appendix IV constituents (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, radium 226 and 228 combined, selenium, and thallium). The metal constituents were analyzed as total recoverable as the samples were not field-filtered. Radium was analyzed at Eurofins Test America Laboratories in St. Louis, MO. Groundwater pH, also an Appendix III constituent, was measured in the field using a Horiba water quality meter.

Field duplicate sample (DUP-18) was collected from monitoring well MW-D1 for quality assurance/quality control (QA/QC). The duplicate sample was collected in laboratory-provided bottles and submitted under the same chain-of-custody as the primary samples for analysis of the same parameters by Eurofins Test America laboratories.

2.2 Groundwater Monitoring Results

Laboratory analytical results for Appendix III constituents from the April 2022 monitoring event are summarized in **Table 4**. Appendix III constituents were detected in the upgradient and downgradient monitoring well locations.

Laboratory analytical results for Appendix IV constituents are summarized in **Table 5**. Low levels of Appendix IV constituents (, barium, chromium, fluoride, molybdenum, and radium 226 and 228 combined) were detected in the downgradient monitoring wells. Similarly, low levels of arsenic, barium, chromium, fluoride, and radium 226 and 228 combined were detected in the background/upgradient monitoring well MW-U1. **Table 5** shows that the detected concentrations of Appendix IV constituents are below their respective USEPA's MCLs. Low level Appendix IV constituents detected during the April 2022 monitoring event can be naturally occurring as some of these constituents were also detected at low concentrations in the background well. Laboratory reports are included in **Appendix C**.

The April 2022 assessment monitoring results were statistically evaluated in accordance with 40 C.F.R. §257.93(g). The statistical analysis results are discussed in Section 3.

3.0 STATISTICAL DATA ANALYSIS PROCEDURES

Statistical analysis of the groundwater data collected during the assessment monitoring event was performed in accordance with the methods listed in the Groundwater Monitoring and Statistical Analysis Plan [Geosyntec, 2020b]. The statistical methods meet the requirements of the methods specified in 40 C.F.R. §257.93(f) (1) through (5) and the performance standards specified in 40 C.F.R. §257.93(g). Statistical analysis was performed using Sanitas™ v.9.6.05 software for Appendix III and Appendix IV constituents. Sanitas™ is a decision-support software package, that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the USEPA document Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance (Unified Guidance) (USEPA, 2009).

The primary objectives of the statistical data analysis conducted during this reporting period are:

- (i) To assess if Appendix III constituents have returned to background levels.
- (ii) To calculate statistically derived background concentration for each Appendix IV constituent. The statistically derived background concentration will be used as Groundwater Protection Standard (GWPS) when the statistically derived background concentration is higher than the MCL (if an MCL has been established under 40 C.F.R. §161.62 and 40 C.F.R. §141.66) or the standard listed under 40 C.F.R. §257.95 (h)(2) for those constituents without an established MCL.
- (iii) To construct a lower confidence interval for each constituent at each downgradient well and compare the lower confidence interval to an established GWPS and determine whether a statistically significant level (SSL) is present at any of the downgradient monitoring wells.

Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in Sections 3.1 and 3.2.

3.1 Appendix III Statistical Methods

Based on guidance from GA EPD, statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PLs). Interwell PLs pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the background limit to assess whether there are significant statistical increases (SSIs). An "initial exceedance" occurs

when an Appendix III constituent reported in the groundwater of a downgradient compliance monitoring well exceeds the constituent's associated PL.

3.2 Appendix IV Statistical Methods

As a first step in developing the GWPS, groundwater data from the background well were screened for potential outlier (anomalous) data. In addition to visual inspection using time-series plots, statistical methods, such as the USEPA 1989 Outlier Screening method, were used to identify outliers in the groundwater data (when the data was normally distributed). Tukey's Outlier Screening method was used when background well data was not normally distributed. Although outliers were detected, they were not removed from the statistical analysis due to: (i) a large number of non-detects (also referred as censored data in the USEPA Unified Guidance) in the data set; and (ii) the USEPA Unified Guidance recommendation on screening data only if the source of the outlier is known. Data distribution was checked using Shapiro Wilk method at 99% confidence level. This method is appropriate for a sample size of less than 50. For statistical data analysis, non-detect laboratory results were replaced with their reporting limit in accordance with the USEPA Unified Guidance recommendation [USEPA, 2009].

The USEPA Unified Guidance recommends utilizing upper tolerance limits (UTL) from the background well to establish background concentrations. In addition, the CCR Rule lists the UTL method, calculated using data from the background well, as one of the methods acceptable for CCR data analysis [40 C.F.R. §257.93(f)(3)]. As a result, the GWPSs for the site were developed utilizing the UTL method and generally consisted of the following procedures:

- Parametric tolerance limits (95% coverage and 95% confidence) were constructed when the background data followed a normal or transformed-normal distribution.
- Non-parametric tolerance limits were calculated for data sets with greater than 50% non-detect values, and for data sets which do not follow a normal or transformed-normal distribution.
- The UTL was calculated for each constituent using background well data collected during the eight detection monitoring events and the assessment monitoring events conducted to date. As described in 40 C.F.R. §257.95(h), which was adopted into the GA EPD Rules for Solid Waste Management 391-3-4-.10 on February 22, 2022, the GWPS is:
 - (1) the maximum contaminant level (MCL) established under 40 C.F.R. §141.62 and §141.66.

- (2) where an MCL has not been established:
 - (i) Cobalt 0.006 mg/L;
 - (ii) Lead 0.015 mg/L;
 - (iii) Lithium 0.040 mg/L; and
 - (iv) Molybdenum 0.100 mg/L.
- (3) the UTL computed from background well data for constituents where the UTL is higher than the MCL or rule-specified GWPS.

3.3 Evaluation of SSLs for Appendix IV Constituents

The USEPA Unified Guidance [USEPA, 2009] recommends utilizing the lower confidence interval from a downgradient well along with the double quantification rule to evaluate SSLs. A 99% lower confidence interval was constructed for each constituent at each downgradient well and the double quantification rule was used to evaluate SSLs. Under this rule, an SSL can be concluded if the lower confidence limit is higher than the GWPS.

4.0 STATISTICAL ANALYSIS RESULTS

Appendix III statistical analyses results identified SSIs for the following constituents: boron, calcium, fluoride, sulfate, and TDS. The PL for each constituent and the list of wells with SSIs are summarized in **Table 6**. Because groundwater conditions have not returned to background, assessment monitoring should continue pursuant to 40 C.F.R. §257.95(d)(1) and GA EPD CCR Rule.

The statistical analysis results for Appendix IV constituents are summarized in **Table 7**, which shows the (i) ratio of non-detects to total number of samples; (ii) basic statistics for each constituent in a monitoring well such as minimum and maximum; (iii) UTL of each constituent constructed based on the background well data; (iv) an MCL value for the constituent (if available) established under 40 C.F.R. §161.62 and 40 C.F.R. §141.66 or the standard listed under 40 C.F.R. §257.95(h)(2); and (v) the selected GWPS for each constituent.

Table 8 shows the lower confidence limit constructed for each constituent at each downgradient well and the results of comparison between the lower confidence limit and the selected GWPS to evaluate if there are any SSLs. Comparison of the lower confidence limit to the selected GWPS revealed no SSLs during the reporting period. The Sanitas™ statistical calculations and time-series graphs for each constituent are provided in **Appendix D**.

5.0 FUTURE GROUNDWATER MONITORING PROGRAM

Data collected during the assessment monitoring event indicated that Appendix IV constituents detected in the downgradient monitoring wells were below their respective GWPS. Pursuant to the CCR Rule 40 C.F.R. §257.95(d)(1) and GA EPD's CCR Rules, CCPC will continue groundwater sampling semi-annually for Appendix III and Appendix IV constituents. The next semi-annual groundwater monitoring report will be submitted by January 31, 2023 pursuant to the Georgia EPD CCR Rule 391-3-4-.10(6)(c).

6.0 REFERENCES

- CDM Smith, (2014). “Assessment of Dam Safety of Coal Combustion Surface Impoundments – Final Report: Crisp County Power Commission Plant Crisp Warwick, Georgia.” Prepared for U.S. Environmental Protection Agency Washington, D.C., Rev. 1, February 2014.
- Geologic Map of Georgia, (1976, Reprinted in 1997), Georgia Department of Natural Resources, Geologic and Water Resources Division, Georgia Geologic Survey.
- Geosyntec (2018). Annual Groundwater Monitoring Report. Plant Crisp Ash Pond. Prepared for Crisp County Power Commission, January 2018.
- Geosyntec (2019). Supplemental Hydrogeologic Assessment Report for Plant Crisp Ash Pond Revision 1, Crisp County Power Commission. December 2019.
- Geosyntec (2020a). 2020 Semi-annual Groundwater Monitoring Report. Crisp County Power Commission, Plant Crisp Ash Pond. July 2020.
- Geosyntec (2020b). Groundwater Monitoring and Statistical Analysis Plan. Crisp County Power Commission, Plant Crisp Ash Pond. April 2020.
- Hicks, D.W., Gill, H.E., and Longworth S.A. (1987). Hydrogeology, Chemical Quality, and Availability of Ground Water in the Upper Floridan Aquifer, Albany Area, Georgia (USGS).
- ND&T (1994). Report of Geotechnical Investigation, Lake Blackshear Dam Repairs, November 1994.
- Rizzo Associates. (2015). “Dam Safety Assessment Report Plant Crisp Coal Combustion Waste Impoundment.” Submitted to Crisp County Power Commission, 14-5232, Rev. 0, January 2015.
- 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 2009.
- USEPA (2013). Science and Ecosystem Support Division (SESD, Athens, Georgia) Sample and Evidence Management (SESDPROC-005-R2).
- USEPA (2015). Science and Ecosystem Support Division (SESD, Athens, Georgia) Field Equipment Cleaning and Decontamination (SESDPROC-205-R3).

USEPA (2017). Science and Ecosystem Support Division (SESD, Athens, Georgia)
Groundwater Sampling Operating Procedure (SOP) (SESDPROC-301-R4).

TABLES

**Table 1. Monitoring Well Network Summary
Crisp County Power Commission
Plant Crisp Ash Pond**

Well ID	Hydraulic Location	Installation Date	Well Depth (ft, BTOC)	Easting⁽¹⁾	Northing⁽¹⁾	TOC Elevation⁽²⁾ (ft, MSL)	Screen Interval Elevation⁽²⁾ (ft, MSL)
MW-D1	Downgradient	2/22/2017	22.86	2365315.12	670708.47	241.77	218.85-228.85
MW-D2	Downgradient	2/21/2017	22.6	2365308.73	671291.61	232.66	209.64-219.64
MW-D3	Downgradient	2/22/2017	22.7	2365715.53	671291.07	233.78	210.52-220.52
MW-U1	Upgradient	2/23/2017	37.4	2366420.55	669996.79	249.52	212.78-222.78

Notes:

ft = feet

MSL = above mean sea level.

TOC = Top of casing

BTOC = Below top of casing

The easting, northing, and TOC elevations were obtained from a revised survey performed by J.B. Faircloth & Associates, P.C. on 26 November 2019.

⁽¹⁾ :The easting and northing coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet.

⁽²⁾ : Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

**Table 2. Groundwater Elevation Summary
Crisp County Power Commission
Plant Crisp Ash Pond**

Well ID	TOC Elevation (ft, MSL)	4/26/2022	
		Depth to Groundwater (ft, BTOC)	Groundwater Elevation ⁽¹⁾ (ft, MSL)
MW-D1	241.77	15.40	226.37
MW-D2	232.66	12.53	220.13
MW-D3	233.78	7.93	225.85
MW-U1	249.52	11.55	237.97
Lake Blackshear	--	--	236.98 ⁽²⁾

Notes:

ft = feet

MSL = mean sea level.

TOC = Top of casing

BTOC = Below top of casing

-- = not applicable

⁽¹⁾: Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).

⁽²⁾: Surface water elevation on 4/26/2022 at 12:00 PM.

**Table 3. Hydraulic Gradient and Groundwater Flow Velocity Calculations
Crisp County Power Commission
Plant Crisp Ash Pond**

Well Gauging Date	Hydraulic Gradient				Groundwater Flow Velocity		
	h ₁ (ft)	h ₂ (ft)	Δl (ft)	Δh/Δl (ft/ft)	K _h (ft/day)	η _e	V (ft/year) ¹
4/26/2021	237.97	220.13	1,710	0.010	0.41	0.20	7.8

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

ft/year = feet per year

h₁ and h₂ = groundwater elevation for MW-U1 and MW-D2, respectively.

Δh/Δl = hydraulic gradient

K_h = hydraulic conductivity geometric mean of 0.41 ft/day estimated using slug testing in monitoring wells.

Δl = distance between MW-U1 and MW-D2.

η_e = effective porosity (estimated based on fine-grained sand aquifer) (Kresic, 2007)

V = groundwater flow velocity

⁽¹⁾ Groundwater flow velocity equation: $V = [K_h * (\Delta h / \Delta l)] / \eta_e$

**Table 4. Appendix III Analytical Data Summary - Sampling Performed on April 26, 2022
Crisp County Power Commission
Plant Crisp Ash Pond**

Appendix III to 40 C.F.R. Part 257 - Constituents for Detection Monitoring

Constituent	Unit	MCL ⁽¹⁾	MDL ⁽²⁾	Upgradient Well ID	Downgradient Well ID			
				MW-U1	MW-D1		MW-D2	MW-D3
					MW-D1	DUP-18		
Boron	mg/L	N/A	0.0012	<0.05 (0.0067 J)	0.15	0.14	0.11	0.19
Calcium	mg/L	N/A	0.63	34 B	65 B	61 B ^{^2}	130 B	21 B
Chloride	mg/L	N/A	1.4	<2.0 (1.9 J)	2.9	2.6	3.8	4.1
Fluoride	mg/L	4	0.070	<0.1 (0.070 J)	<0.1 (0.080 J)	<0.1 (0.082 J)	ND	0.14
Sulfate	mg/L	N/A	1.4	<5.0 (4.3 J)	29	29	16	33
pH⁽³⁾	SU	N/A	--	8.10	6.73	6.80	6.86	7.32
Total Dissolved Solids	mg/L	N/A	5.0	98	270	180	440	280

Notes:

mg/L = milligrams per liter.

MCL = Maximum Contaminant Level

MDL = Method Detection Limit

S.U. = Standard Unit.

N/A = not applicable because the constituent does not have an MCL.

J = result is less than the reporting level but greater than or equal to the MDL and the reported concentration is an approximate value.

B = compound was found in the blank and sample.

^{^2} = Calibration Blank (initial calibration blank (ICB) and/or continuing calibration blank CCB) is outside acceptance limits.

-- = not applicable

DUP-18 is a duplicate sample collected from MW-D1.

⁽¹⁾: MCLs indicate USEPA maximum contaminant levels. MCLs are established under 40 CFR §141.62 and 40 CFR

⁽²⁾: MDL indicates minimum detection limit, which is the minimum concentration of analyte that can be measured and reported.

⁽³⁾: The pH value was recorded at the time of sample collection in the field.

**Table 5. Appendix IV Analytical Data Summary - Sampling Performed on April 26, 2022
Crisp County Power Commission
Plant Crisp Ash Pond**

Appendix IV to 40 C.F.R. Part 257 - Constituents for Assessment Monitoring

Constituent	Unit	MCL ⁽¹⁾	USEPA's Health-Based Level ⁽²⁾	MDL ⁽³⁾	Upgradient Well ID	Downgradient Well ID			
					MW-U1	MW-D1		MW-D2	MW-D3
						MW-D1	DUP-18		
Antimony	mg/L	0.006	N/A	0.0015	ND	ND	ND	ND	ND
Arsenic	mg/L	0.01	N/A	0.0012	0.0019	ND	ND	ND	ND
Barium	mg/L	2	N/A	0.00070	0.0031	0.015	0.014	0.14	0.072
Beryllium	mg/L	0.004	N/A	0.00092	ND	ND	ND	ND	ND
Cadmium	mg/L	0.005	N/A	0.00065	ND	ND	ND	ND	ND
Chromium	mg/L	0.1 ⁽³⁾	N/A	0.0010	0.0026	<0.0025 (0.0015 J)	ND	ND	ND
Cobalt	mg/L	N/A	0.006	0.00056	ND	ND	ND	ND	ND
Fluoride	mg/L	4	N/A	0.070	<0.1 (0.070 J)	<0.1 (0.080 J)	<0.1 (0.082 J)	ND	0.14
Lead	mg/L	0.015 ⁽⁴⁾	N/A	0.00081	ND	ND	ND	ND	ND
Lithium	mg/L	N/A	0.04	0.0049	ND	ND	ND	ND	ND
Mercury	mg/L	0.002 ⁽⁵⁾	N/A	0.00015	ND	ND	ND	ND	ND
Molybdenum	mg/L	N/A	0.1	0.0013	ND	ND	ND	ND	<0.01 (0.0030 J)
Radium 226 and 228 Combined	pCi/L	5	N/A	-- ⁽⁶⁾	0.239 U	0.314 U	0.357 U	0.783	0.374 U
Selenium	mg/L	0.05	N/A	0.00082	ND	ND	ND	ND	ND
Thallium	mg/L	0.002	N/A	0.00046	ND	ND	ND	ND	ND

Notes:

mg/L = milligrams per liter.

pCi/L = picocuries per liter.

ND = the constituent was not detected above the analytical method detection limit (MDL).

J = concentration is less than the reporting level but greater than or equal to the MDL and the reported concentration is an approximate value.

U = result is less than the sample detection limit.

N/A = not applicable for the constituent.

⁽¹⁾: MCLs indicate USEPA maximum contaminant levels. MCLs are established under 40 CFR §141.62 and 40 CFR§141.66.

⁽²⁾: USEPA's health-based level as Groundwater Protection Standard (40 CFR §257.95 (h)(2)).

⁽³⁾: MCL value for total chromium.

⁽⁴⁾: Lead Treatment Technology Action Level is 0.015 mg/L.

⁽⁵⁾: Value for inorganic mercury.

⁽⁶⁾: During the analysis of radium, background concentrations are subtracted, thus each sample have a different Minimum Detectable Concentration (MDC). The MDCs were as follows: 0.716 pCi/L for MW-U1, 0.537 pCi/L for MW-D1, 0.591 pCi/L for MW-D2, 0.528 pCi/L for MW-D3, and 0.503 pCi/L for DUP-14.

**Table 6. Evaluation of SSIs for Appendix III Constituents
Crisp County Power Commission
Plant Crisp Ash Pond**

Appendix III to Part 257 Constituents for Detection Monitoring	Prediction Limit¹	Wells with SSI
Boron (mg/L)	0.05	MW-D1, MW-D2, MW-D3
Calcium (mg/L)	39.64	MW-D1, MW-D2
Chloride (mg/L)	9.833	None
Field pH (S.U.)	<5.686 or >9.179	None
Fluoride (mg/L)	0.10180	MW-D3
Sulfate (mg/L)	6.703	MW-D1, MW-D2, MW-D3
Total Dissolved Solids (TDS) (mg/L)	141.6	MW-D1, MW-D2, MW-D3

Notes:

mg/L = milligrams per liter.

SSI = Statistically Significant Increases from Background.

S.U. = Standard Unit

¹: The Prediction Limit was calculated using data collected from the background well MW-U1 between February 2017 and April 2022.

**Table 7. Summary of Basic Groundwater Statistics and GWPS for Appendix IV Constituents
Crisp County Power Commission
Plant Crisp Ash Pond**

Appendix IV to Part 257 - Constituents for Assessment Monitoring	Well ID	Number of Samples	Number of Non-detects	% Non-detects	Minimum	Maximum	Upper Tolerance Limit	Maximum Contaminant Level (MCL established under 40 CFR §161.62 and 40 CFR §141.66) or Groundwater Protection Standard (GWPS listed under 40 CFR §257.95(h)(2))	Selected GWPS for the Site
Antimony [mg/L]	MW-U1	13	13	100%	<0.0005	<0.0025	0.0025	0.006	0.006
	MW-D1	13	13	100%	<0.0005	<0.0025			
	MW-D2	13	13	100%	<0.0005	<0.0025			
	MW-D3	13	13	100%	<0.0005	<0.0025			
Arsenic [mg/L]	MW-U1	18	14	78%	0.00015 (JB)	0.0019	0.0019	0.01	0.01
	MW-D1	18	18	100%	<0.00025	<0.0013			
	MW-D2	18	14	78%	0.00027 (B)	<0.0013			
	MW-D3	18	4	22%	0.00048 (J)	0.0016			
Barium [mg/L]	MW-U1	18	0	0%	0.0018	0.0062	0.0062	2	2
	MW-D1	18	0	0%	0.0095	0.027			
	MW-D2	18	0	0%	0.087	0.190			
	MW-D3	18	0	0%	0.061	0.230			
Beryllium [mg/L]	MW-U1	13	13	100%	<0.0004	<0.0025	0.002	0.004	0.004
	MW-D1	13	13	100%	<0.0004	<0.0025			
	MW-D2	13	13	100%	<0.0004	<0.0025			
	MW-D3	13	13	100%	<0.0004	<0.0025			
Cadmium [mg/L]	MW-U1	14	14	100%	<0.0002	<0.0025	0.001	0.005	0.005
	MW-D1	14	13	93%	<0.0002	<0.0025			
	MW-D2	14	13	93%	0.000075 (J)	<0.0025			
	MW-D3	14	14	100%	0.000071 (J)	<0.0025			
Chromium [mg/L]	MW-U1	16	0	0%	0.0011	0.0051	0.0051	0.1	0.1
	MW-D1	16	14	88%	<0.0005	0.0034			
	MW-D2	16	15	94%	<0.0005	0.0038			
	MW-D3	16	15	94%	<0.0005	0.0029			
Cobalt [mg/L]	MW-U1	17	17	100%	<0.0005	<0.0025	0.0025	0.006	0.006
	MW-D1	17	17	100%	<0.0005	<0.0025			
	MW-D2	17	15	88%	0.00047 (J)	<0.0025			
	MW-D3	17	2	12%	0.00035 (J)	<0.0025			
Fluoride [mg/L]	MW-U1	18	2	11%	0.040 (J)	0.100 (B)	0.1251	4	4
	MW-D1	18	0	0%	0.040 (J)	0.120			
	MW-D2	18	1	6%	0.040 (J)	0.120 (B)			
	MW-D3	18	0	0%	0.060 (J)	0.200 (F1)			
Lead [mg/L]	MW-U1	13	12	92%	<0.00025	<0.0013	0.0013	0.015	0.015
	MW-D1	13	12	92%	<0.00025	<0.0013			
	MW-D2	13	11	85%	<0.00025	<0.0013			
	MW-D3	13	13	100%	<0.00025	<0.0013			
Lithium [mg/L]	MW-U1	15	14	93%	0.00034 (J)	<0.0025	0.0025	0.04	0.04
	MW-D1	15	14	93%	<0.0005	<0.005			
	MW-D2	15	13	87%	<0.0005	<0.005			
	MW-D3	15	12	80%	0.00048 (J)	<0.005			
Mercury [mg/L]	MW-U1	13	12	92%	0.000099 (JB)	<0.0002	0.0002	0.002	0.002
	MW-D1	13	12	92%	0.000077 (JB)	<0.0002			
	MW-D2	13	11	85%	0.00011 (JB)	<0.0002			
	MW-D3	13	12	92%	0.00011 (JB)	<0.0002			
Molybdenum [mg/L]	MW-U1	16	16	100%	<0.002	<0.01	0.01	0.10	0.10
	MW-D1	16	16	100%	<0.002	<0.015			
	MW-D2	16	13	81%	0.0012 (J)	<0.015			
	MW-D3	16	4	25%	0.0017 (J)	<0.01			
Radium 226 and 228 228 Combined [pCi/L]	MW-U1	18	4	22%	0.000	<5	5	5	5
	MW-D1	18	4	22%	0.0994	<5			
	MW-D2	18	4	22%	0.0139	<5			
	MW-D3	18	5	28%	0.0501	<5			
Selenium [mg/L]	MW-U1	15	8	53%	0.00039	<0.0013	0.0013	0.05	0.05
	MW-D1	15	14	93%	<0.00025	<0.0013			
	MW-D2	15	12	80%	<0.00025	<0.0013			
	MW-D3	15	11	73%	0.00021 (J)	0.0028			
Thallium [mg/L]	MW-U1	17	17	100%	<0.0001	<0.0005	0.0005	0.002	0.002
	MW-D1	17	17	100%	<0.0001	<0.0005			
	MW-D2	17	7	41%	0.000085 (J)	<0.0005			
	MW-D3	17	3	18%	0.000095 (J)	<0.0005			

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

J = Result is less than the reporting level but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.

B = Compound was found in the blank and sample.

**Table 8. Evaluation of SSLs for Appendix IV Constituents
Crisp County Power Commission
Plant Crisp Ash Pond**

Appendix IV to Part 257 - Constituents for Assessment Monitoring	Well ID	Selected Groundwater Protection Standard (GWPS) for the Site (From Table 7)	Lower Confidence Limit if a constituent is Detected During the April 2022 Monitoring Period	Concentrations in Downgradient Well Show Statistically Significant Level (SSL) Above GWPS?
Antimony [mg/L]	MW-U1	0.006	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Arsenic [mg/L]	MW-U1	0.01	Background Well	
	MW-D1		0.00025	No
	MW-D2		0.00095	No
	MW-D3		0.000776	No
Barium [mg/L]	MW-U1	2	Background Well	
	MW-D1		0.01145	No
	MW-D2		0.1265	No
	MW-D3		0.1148	No
Beryllium [mg/L]	MW-U1	0.004	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Cadmium [mg/L]	MW-U1	0.005	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Chromium [mg/L]	MW-U1	0.1	Background Well	
	MW-D1		0.0015	No
	MW-D2		0.0012	No
	MW-D3		0.0005	No
Cobalt [mg/L]	MW-U1	0.0060	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Fluoride [mg/L]	MW-U1	4	Background Well	
	MW-D1		0.06213	No
	MW-D2		0.05	No
	MW-D3		0.1	No
Lead [mg/L]	MW-U1	0.0150	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Lithium [mg/L]	MW-U1	0.0400	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Mercury [mg/L]	MW-U1	0.002	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Molybdenum [mg/L]	MW-U1	0.10	Background Well	
	MW-D1		0.0020	No
	MW-D2		0.0020	No
	MW-D3		0.0019	No
Radium 226 and 228 Combined [pCi/L]	MW-U1	5	Background Well	
	MW-D1		0.156	No
	MW-D2		0.333	No
	MW-D3		0.409	No
Selenium [mg/L]	MW-U1	0.05	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Thallium [mg/L]	MW-U1	0.002	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

ND = Not Detected

Highlighted cells show the background well (MW-U1).

FIGURES




\\a-no-01\pfr1\Crisp County\GIS\MXD\2022\GW Monitoring Well Location Map.mxd 5/18/2022 3:15:21 PM

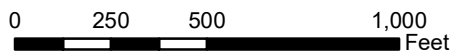


Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Aerial Photograph from June 2016.



Legend

-  Groundwater Monitoring Well
-  Ash Pond Limits
-  CCPC Property Boundary



Groundwater Monitoring Well Location Map

Crisp County Power Commission
Warwick, Georgia

Geosyntec 
consultants

DATE:	JULY 2022
PROJECT NO.	GW6152
DOCUMENT NO.	GA220207
FILE NO.	GW Monitoring Well Location Map.mxd
FIGURE NO.	1

KENNESAW, GA

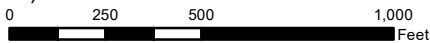


Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community Aerial Photograph from June 2016.

\\a-no-01\p\c\crisp County\GIS\MXD\2022\April 2022 Potentiometric Surface Map.mxd 6/29/2022 3:42:29 PM

Legend

- Groundwater Monitoring Well
- Groundwater Flow Direction
- Groundwater Elevation Contour- 26 April 2022 (ft, MSL)
- Ash Pond Limits
- Approximate CCPC Property Boundary



**Potentiometric Surface Map
April 26, 2022**

Crisp County Power Commission
Warwick, Georgia

Geosyntec
consultants

DATE:	JULY 2022
PROJECT NO.	GW6152
DOCUMENT NO.	GA220207
FILE NO.	APRIL 2022 POTENTIOMETRIC SURFACE MAP.MXD
FIGURE NO.	2

KENNESAW, GA

APPENDIX A

Well Inspection Forms

MEMORANDUM

DATE: July 29, 2022

TO: Ronnie Miller, Crisp County Power Commission

CC: Dawit Yifru., Geosyntec Consultants

FROM: Geosyntec Consultants

SUBJECT: **Crisp County Power Commission – Well Inspection Documentation**

Geosyntec Consultants has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Crisp County Power Commission during the 2022 semi-annual reporting period. Documentation of the well inspections are provided as an attachment to this memorandum.

Date	Well ID	Maintenance/ Repair Performed
4/26/2022	MW-U1, MW-D1, MW-D2, MW-D3	Do not need maintenance or repair at this time, no action taken.

Well Inspection Form

Plant Name/Unit Name
Field Technician
Well ID

CRISP COUNTY POWER Comm.
DAWIT YIERU
MW-D1

Date (mm/dd/yyyy)
Field Conditions

4/26/2022
slightly cloudy

	Yes	No	Comments
1 Location/Identification			
a Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d Are appropriate measures in place to protect the well (e.g., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing			
a Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the well locked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f If locked, is the well lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Is the well lid in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad			
a Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing			
a Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the depth of the well consistent with past well logs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5 Sampling and Data Collection Equipment			
a Indicate if the well is equipped with dedicated sampling equipment , a dedicated water quality sonde , and/or dedicated water level data logger .	<u>Not applicable</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Corrective Actions			
a Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, indicate here:			

Well Inspection Form

Plant Name/Unit Name CRISP County Power Comm.
 Field Technician Dawit Yifru
 Well ID MW-02

Date (mm/dd/yyyy) 4/26/22
 Field Conditions Sunny

	Yes	No	Comments
1 Location/Identification			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well visible and accessible?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well properly identified with the correct well ID?
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is the well in a high traffic area?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are appropriate measures in place to protect the well (e.g., bollards)?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)
2 Protective Casing			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the protective casing free from apparent damage and able to be secured?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing free of degradation or deterioration?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the casing have a functioning weep hole?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well locked?
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If locked, is the well lock in good condition?
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well lid in good condition?
3 Surface Pad			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in good condition (not cracked or broken)?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad sloped away from the protective casing?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in complete contact with the protective casing?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the pad surface clean (not covered with sediment or debris)?
4 Internal Casing			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the cap prevent entry of foreign material into the well?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well properly vented for equilibration of air pressure?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the survey point clearly marked on the inner casing?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the depth of the well consistent with past well logs?
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)
5 Sampling and Data Collection Equipment			
a			Indicate if the well is equipped with dedicated sampling equipment , a dedicated water quality sonde , and/or dedicated water level data logger . Not applicable
b			If equipped with dedicated sampling equipment, is it in good operational condition?
c			If equipped with a dedicated water quality sonde, is it in good operational condition?
d			Does the desiccant need to be replaced on the water quality sonde?
e			If equipped with a water level data logger, is it in good operational condition?
f			Does the well recharge adequately when purged?
g			Does the well require redevelopment (low flow, excess turbidity)?
6 Corrective Actions			
a		<input checked="" type="checkbox"/>	Are corrective actions needed? If yes, indicate here:

Well Inspection Form

Plant Name/Unit Name Crisp County Power Co.
 Field Technician Dawit Yifru
 Well ID MW-03

Date (mm/dd/yyyy) 4/26/2022
 Field Conditions Sunny

	Yes	No	Comments
1 Location/Identification			
a Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d Are appropriate measures in place to protect the well (e.g., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2 Protective Casing			
a Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the well locked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f If locked, is the well lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Is the well lid in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3 Surface Pad			
a Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4 Internal Casing			
a Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e Is the depth of the well consistent with past well logs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5 Sampling and Data Collection Equipment			
a Indicate if the well is equipped with dedicated sampling equipment , a dedicated water quality sonde , and/or dedicated water level data logger .	<input type="checkbox"/>	<input type="checkbox"/>	<i>Not applicable</i>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Corrective Actions			
a Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, indicate here:			

Well Inspection Form

Plant Name/Unit Name CRISP COUNTY POWER COMM. Date (mm/dd/yyyy) 4/26/2022
 Field Technician DAWIT YIFRU Field Conditions Sunny
 Well ID MW-41

	Yes	No	Comments
1 Location/Identification			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well visible and accessible?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well properly identified with the correct well ID?
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is the well in a high traffic area?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are appropriate measures in place to protect the well (e.g., bollards)?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)
2 Protective Casing			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the protective casing free from apparent damage and able to be secured?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing free of degradation or deterioration?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the casing have a functioning weep hole?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well locked?
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If locked, is the well lock in good condition?
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well lid in good condition?
3 Surface Pad			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in good condition (not cracked or broken)?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad sloped away from the protective casing?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in complete contact with the protective casing?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the pad surface clean (not covered with sediment or debris)?
4 Internal Casing			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the cap prevent entry of foreign material into the well?
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well properly vented for equilibration of air pressure?
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the survey point clearly marked on the inner casing?
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the depth of the well consistent with past well logs?
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)
5 Sampling and Data Collection Equipment			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Indicate if the well is equipped with dedicated sampling equipment , a dedicated water quality sonde , and/or dedicated water level data logger .
b	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If equipped with dedicated sampling equipment, is it in good operational condition?
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If equipped with a dedicated water quality sonde, is it in good operational condition?
d	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the desiccant need to be replaced on the water quality sonde?
e	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If equipped with a water level data logger, is it in good operational condition?
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the well recharge adequately when purged?
g	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the well require redevelopment (low flow, excess turbidity)?
6 Corrective Actions			
a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Are corrective actions needed?
If yes, indicate here:			

GEOSYNTEC CONSULTANTS
Photographic Record

Client: Ronnie Miller

Project Number: GW6152

Site Name: Crisp County Power Commission

Site Location: 961 Power Dam Rd, Warwick, GA 31796

Photograph 1

Date: 26 April, 2022

Direction: East

Comments: MW-U1 with well marker, bollards, intact well pad, and locked protective casing.



Photograph 2

Date: 26 April, 2022

Direction: Southwest

Comments: MW-D1 with well marker, bollards, intact well pad, and locked protective casing.



GEOSYNTEC CONSULTANTS
Photographic Record

Client: Ronnie Miller

Project Number: GW6152

Site Name: Crisp County Power Commission

Site Location: 961 Power Dam Rd, Warwick, GA 31796

Photograph 3

Date: 26 April, 2022

Direction: Northwest

Comments: MW-D2 with well marker, bollards, intact well pad, and locked protective casing.



Photograph 4

Date: 26 April, 2022

Direction: North

Comments: MW-D3 with well marker, bollards, intact well pad, and locked protective casing.



APPENDIX B

Field Groundwater Sampling Forms

GROUNDWATER SAMPLING LOG

SITE NAME: CRISP COUNTY POWER COMMISSION	SITE LOCATION: 961 Power Dam Road, Warwick, GA 31796
WELL NO: MW-D1	SAMPLE ID: MW-D1
DATE: 4/26/2022	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 12 feet to 22 feet	STATIC DEPTH TO WATER (feet): 15.36	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (22.86 feet - 15.36 feet) X 0.16 gallons/foot = 1.2 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 19	PURGING INITIATED AT: 11:19	PURGING ENDED AT: 12:00	TOTAL VOLUME PURGED (gallons): 2.6

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	ml/min PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	ORP (mv)	COLOR (describe)
11:19	0.0	0.0	255	15.70	7.40	23.47	0.277	3.61	5.10	227	clear
11:30	0.74	0.74	255	15.84	6.74	23.37	0.380	3.78	0.47	252	clear
11:35	0.34	1.08	255	16.30	6.76	23.36	0.383	3.69	0.22	246	clear
11:42	0.43	1.50	230	16.10	6.79	23.46	0.382	3.44	0.16	239	clear
11:49	0.43	1.93	230	16.24	6.81	23.60	0.375	3.18	0.15	234	clear
11:54	0.30	2.23	230	16.30	6.81	23.83	0.368	2.99	0.32	231	clear
12:00	0.36	2.60	230	16.41	6.80	23.93	0.351	2.90	0.54	228	clear
12:30	1.82	4.42	230	16.70	6.73	24.15	0.332	3.00	1.21	232	clear

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Kristan Orendorff / Geosyntec			SAMPLER(S) SIGNATURE(S): Kristan Orendorff			SAMPLING INITIATED AT: 12:00		SAMPLING ENDED AT: 12:10	
PUMP OR TUBING DEPTH IN WELL (feet): 19			TUBING MATERIAL CODE: LDPE			FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N <input type="radio"/>			TUBING Y <input type="radio"/> N <input checked="" type="radio"/> (replaced)			DUPLICATE: <input checked="" type="radio"/> Y <input type="radio"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	HDPE	1.9L	HNO3	----		9315, 9320, Ra226, Ra228	APP	250
	1	HDPE	1.0L	NONE	----		SM4500, 2540C	APP	250
	1	HDPE	0.25L	HNO3	----		6020, 7470A	APP	250

FIELD SAMPLING CONDITIONS:
 1. Well Sign Present: Yes No
 2. Well Access: yes
 3. Sampling & Purging Equipment Condition: clean
 4. Site Condition that may Affect Sampling Present? Yes (describe below) No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SESDPROC-301-R4)

pH: ± 0.1 units **Specific Conductance:** ± 5% **Dissolved Oxygen:** 0.2 mg/L or 10% change in saturation (whichever is greater) **Turbidity:** readings ≤ 10 NTU; **ORP:** ± 20 mV.

GROUNDWATER SAMPLING LOG

SITE NAME: CRISP COUNTY POWER COMMISSION	SITE LOCATION: 961 Power Dam Road, Warwick, GA 31796
WELL NO: MW-D2	SAMPLE ID: MW-D2
DATE: 4/26/2022	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 12 feet to 22 feet	STATIC DEPTH TO WATER (feet): 12:55	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (22.6 feet - 12.55 feet) X 0.16 gallons/foot = 1.61 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 17	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17	PURGING INITIATED AT: 1:23	PURGING ENDED AT: 2:01	TOTAL VOLUME PURGED (gallons): 2.17

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	ml/min PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mv)	COLOR (describe)
1:23	0.0	0.0	240	13.40	6.60	23.25	0.443	1.37	0.30	236	clear
1:29	0.38	0.38	240	13.41	6.43	21.80	0.559	0.00	0.18	239	clear
1:35	0.38	0.76	240	13.70	6.33	21.71	0.557	0.00	0.10	237	clear
1:42	0.41	1.17	220	13.90	6.35	21.73	0.587	0.00	0.23	231	clear
1:49	0.37	1.54	200	14.04	6.66	21.80	0.593	0.00	0.14	212	clear
1:56	0.37	1.91	200	14.19	6.75	21.99	0.601	0.00	0.15	202	clear
2:01	0.26	2.17	200	14.26	6.72	23.17	0.606	0.00	0.18	195	clear
2:25	0.32	2.49	200	14.46	6.86	22.40	0.607	0.00	0.12	162	clear

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tristan Orndorff / Geosyntec			SAMPLER(S) SIGNATURE(S): <i>Tristan Orndorff</i>			SAMPLING INITIATED AT: 2:01	SAMPLING ENDED AT: 2:24		
PUMP OR TUBING DEPTH IN WELL (feet): 17			TUBING MATERIAL CODE: LDPE		FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>	FILTER SIZE: _____ µm			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N <input type="radio"/>			TUBING Y <input type="radio"/> N <input checked="" type="radio"/> (replaced)		DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	HDPE	1.9L	HNO3	----		9315, 9320, Ra226, Ra228	APP	250
	1	HDPE	1.0L	NONE	----		SM4500, 2540C	APP	250
	1	HDPE	0.25L	HNO3	----		6020, 7470A	APP	250

FIELD SAMPLING CONDITIONS:

- Well Sign Present: Yes No
- Well Access: yes
- Sampling & Purging Equipment Condition: clean, something may be wrong with DO?
- Site Condition that may Affect Sampling Present? Yes (describe below) No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1 **STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SESDPROC-301-R4)**
 pH: ± 0.1 units Specific Conductance: ± 5% Dissolved Oxygen: 0.2 mg/L or 10% change in saturation (whichever is greater) Turbidity: readings ≤ 10 NTU; ORP: ± 20 mV.

GROUNDWATER SAMPLING LOG

SITE NAME: CRISP COUNTY POWER COMMISSION	SITE LOCATION: 961 Power Dam Road, Warwick, GA 31796
WELL NO: MW-D3	SAMPLE ID: MW-D3
DATE: 4/26/2022	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 12 feet to 22 feet	STATIC DEPTH TO WATER (feet): 8.03	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (22.7 feet - 8.03 feet) X 0.16 gallons/foot = 2.35 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 3:05	PURGING ENDED AT: 3:44	TOTAL VOLUME PURGED (gallons): 2.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	ml/min PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mv)	COLOR (describe)
3:05	0.0	0.0	230	9.3	7.41	29.87	0.448	0.00	0.24	183	clear
3:16	0.60	0.60	205	9.82	7.41	28.65	0.449	0.00	0.03	181	clear
3:23	0.35	0.95	190	9.90	7.40	27.27	0.458	0.00	0.09	173	clear
3:28	0.25	1.20	190	9.93	7.39	27.07	0.462	0.00	0.09	-	clear
3:36	0.40	1.60	190	9.94	7.39	26.94	0.460	0.00	0.09	149	clear
3:44	0.40	2.00	190	9.95	7.36	26.80	0.460	0.00	0.10	136	clear
4:10	1.31	3.31	190	9.95	7.32	27.14	0.464	0.00	0.09	127	clear

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tristan Orndorff / Geosyntec		SAMPLER(S) SIGNATURE(S): Tristan Orndorff		SAMPLING INITIATED AT: 3:50	SAMPLING ENDED AT: 4:10
PUMP OR TUBING DEPTH IN WELL (feet): 15		TUBING MATERIAL CODE: LDPE		FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> N (replaced)		DUPLICATE: Y <input checked="" type="radio"/>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	HDPE	1.9L	HNO3	----		9315, 9320, Ra226, Ra228	APP	250
	1	HDPE	1.0L	NONE	----		SM4500, 2540C	APP	250
	1	HDPE	0.25L	HNO3	----		6020, 7470A	APP	250

FIELD SAMPLING CONDITIONS:

- Well Sign Present: Yes No
- Well Access: No issues
- Sampling & Purging Equipment Condition: clean DO Results?
- Site Condition that may Affect Sampling Present? Yes (describe below) No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SESDPROC-301-R4)
 pH: ± 0.1 units Specific Conductance: ± 5% Dissolved Oxygen: 0.2 mg/L or 10% change in saturation (whichever is greater) Turbidity: readings ≤ 10 NTU; ORP: ± 20 mV

GROUNDWATER SAMPLING LOG

SITE NAME: CRISP COUNTY POWER COMMISSION	SITE LOCATION: 961 Power Dam Road, Warwick, GA 31796
WELL NO: MW-UI	SAMPLE ID: MW-UI
DATE: 4/26/2022	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 27 feet to 37 feet	STATIC DEPTH TO WATER (feet): 11.55	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (37.4 feet - 11.55 feet) X 0.16 gallons/foot = 4.14 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 25	PURGING INITIATED AT: 9:45	PURGING ENDED AT: 10:35	TOTAL VOLUME PURGED (gallons): 3.3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	ML/min PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/l or % saturation)	TURBIDITY (NTUs)	ORP (mv)	COLOR (describe)
9:45	0.0	0.0	290	11.55	6.58	22.21	0.218	5.97	9.80	295	clear
9:55	0.66	0.66	250	12.40	7.06	22.11	0.212	5.38	18.10	280	clear
10:03	0.53	1.19	250	12.23	7.86	22.10	0.178	4.25	16.00	232	clear
10:11	0.53	1.72	250	12.23	7.95	22.15	0.176	4.11	13.90	221	clear
10:18	0.46	2.18	250	12.23	8.04	22.18	0.173	4.65	12.00	204	clear
10:25	0.46	2.64	250	12.23	8.09	22.20	0.171	3.84	10.32	199	clear
10:30	0.33	2.97	250	12.23	8.10	22.26	0.169	4.14	9.56	196	clear
10:35	0.33	3.30	250	12.23	8.10	22.29	0.169	4.04	8.96	196	clear

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Tristan Orndorff / Geosyntec			SAMPLER(S) SIGNATURE(S): <i>Tristan Orndorff</i>			SAMPLING INITIATED AT: 10:30		SAMPLING ENDED AT: 10:50	
PUMP OR TUBING DEPTH IN WELL (feet): 25			TUBING MATERIAL CODE: LDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N) TUBING Y <input checked="" type="checkbox"/> (replaced)					DUPLICATE: Y <input checked="" type="checkbox"/> (N)				

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	HDPE	1.9L	HNO3	----		9315, 9320, Ra226, Ra228	APP	250
	1	HDPE	1.0L	NONE	----		SM4500, 2540C	APP	250
	1	HDPE	0.25L	HNO3	----		6020, 7470A	APP	250

FIELD SAMPLING CONDITIONS:
 1. Well Sign Present: Yes No
 2. Well Access: NO access issues.
 3. Sampling & Purging Equipment Condition: clean
 4. Site Condition that may Affect Sampling Present? Yes (describe below) No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SESDPROC-301-R4)
 pH: ± 0.1 units Specific Conductance: ± 5% Dissolved Oxygen: 0.2 mg/L or 10% change in saturation (whichever is greater) Turbidity: readings ≤ 10 NTU; ORP: ± 20 mV.

APPENDIX C

Laboratory Analytical Reports

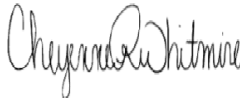
ANALYTICAL REPORT

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

Laboratory Job ID: 400-219114-1
Laboratory Sample Delivery Group: CCPC, Warwick GA
Client Project/Site: Crisp County CCR

For:
Geosyntec Consultants, Inc.
1255 Roberts Blvd, NW
Suite 200
Kennesaw, Georgia 30144

Attn: Dawit Yifru



Authorized for release by:
5/12/2022 4:49:48 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



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.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	4
Method Summary	6
Sample Summary	7
Client Sample Results	8
Definitions	13
Chronicle	14
QC Association	16
QC Sample Results	19
Chain of Custody	25
Receipt Checklists	27
Certification Summary	28

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Job ID: 400-219114-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative 400-219114-1

Receipt

The samples were received on 4/28/2022 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 9.8° C and 11.9° C.

Metals

Method 6020: The method blank for preparation batch 400-576023 and analytical batch 400-576143 contained Calcium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The continuing calibration blank (CCB) for analytical batch 400-576309 contained Calcium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

General Chemistry

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-575886 was outside control limits. Sample non-homogeneity is suspected.

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-576207 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 SO4 E: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 400-576114 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.



Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: DUP-18

Lab Sample ID: 400-219114-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.14		0.050	0.0012	mg/L	5		6020	Total Recoverable
Calcium	61	B ^2	1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	180		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	2.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.082	J	0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	29		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.80				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-D2

Lab Sample ID: 400-219114-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.11		0.050	0.0012	mg/L	5		6020	Total Recoverable
Calcium	130	B	1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	440		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	3.8		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.86				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-D3

Lab Sample ID: 400-219114-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.072		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.19		0.050	0.0012	mg/L	5		6020	Total Recoverable
Calcium	21	B	1.3	0.63	mg/L	25		6020	Total Recoverable
Molybdenum	0.0030	J	0.010	0.0013	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	280		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	4.1		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.14		0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	33		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	7.32				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-D1

Lab Sample ID: 400-219114-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.015		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.15		0.050	0.0012	mg/L	5		6020	Total Recoverable
Calcium	65	B	1.3	0.63	mg/L	25		6020	Total Recoverable
Chromium	0.0015	J	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	270		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	2.9		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR

Job ID: 400-219114-1
 SDG: CCPC, Warwick GA

Client Sample ID: MW-D1 (Continued)

Lab Sample ID: 400-219114-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.080	J	0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	29		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.73				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-U1

Lab Sample ID: 400-219114-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0019		0.0013	0.0012	mg/L	5		6020	Total Recoverable
Barium	0.0031		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.0067	J	0.050	0.0012	mg/L	5		6020	Total Recoverable
Calcium	34	B	0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0026		0.0025	0.0010	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	98		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	1.9	J	2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.070	J	0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.3	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	8.10				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

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 Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-219114-1	DUP-18	Water	04/26/22 00:01	04/28/22 09:07
400-219114-2	MW-D2	Water	04/26/22 14:01	04/28/22 09:07
400-219114-3	MW-D3	Water	04/26/22 15:50	04/28/22 09:07
400-219114-4	MW-D1	Water	04/26/22 12:00	04/28/22 09:07
400-219114-5	MW-U1	Water	04/26/22 10:30	04/28/22 09:07

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: DUP-18

Lab Sample ID: 400-219114-1

Date Collected: 04/26/22 00:01

Matrix: Water

Date Received: 04/28/22 09:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 02:02	5
Arsenic	ND		0.0013	0.0012	mg/L		05/02/22 12:01	05/03/22 02:02	5
Barium	0.014		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 02:02	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 02:02	5
Boron	0.14		0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 02:02	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 02:02	5
Calcium	61	B ^2	1.3	0.63	mg/L		05/02/22 12:01	05/03/22 20:12	25
Chromium	ND		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 02:02	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 02:02	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 02:02	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 02:02	5
Molybdenum	ND		0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 02:02	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 02:02	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 02:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		5.0	5.0	mg/L			04/29/22 16:51	1
Chloride	2.6		2.0	1.4	mg/L			05/03/22 00:25	1
Fluoride	0.082	J	0.10	0.070	mg/L			05/09/22 12:55	1
Sulfate	29		5.0	1.4	mg/L			05/03/22 02:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.80				SU			04/25/22 23:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: MW-D2
Date Collected: 04/26/22 14:01
Date Received: 04/28/22 09:07

Lab Sample ID: 400-219114-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 02:25	5
Arsenic	ND		0.0013	0.0012	mg/L		05/02/22 12:01	05/04/22 15:22	5
Barium	0.14		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 02:25	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 02:25	5
Boron	0.11		0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 02:25	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 02:25	5
Calcium	130 B		1.3	0.63	mg/L		05/02/22 12:01	05/03/22 20:31	25
Chromium	ND		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 02:25	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 02:25	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 02:25	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 02:25	5
Molybdenum	ND		0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 02:25	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 02:25	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 02:25	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	440		5.0	5.0	mg/L			05/03/22 14:20	1
Chloride	3.8		2.0	1.4	mg/L			05/03/22 00:25	1
Fluoride	ND		0.10	0.070	mg/L			04/29/22 11:57	1
Sulfate	16		5.0	1.4	mg/L			05/03/22 02:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.86				SU			04/26/22 13:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: MW-D3

Lab Sample ID: 400-219114-3

Date Collected: 04/26/22 15:50

Matrix: Water

Date Received: 04/28/22 09:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 02:29	5
Arsenic	ND		0.0013	0.0012	mg/L		05/02/22 12:01	05/03/22 02:29	5
Barium	0.072		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 02:29	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 02:29	5
Boron	0.19		0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 02:29	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 02:29	5
Calcium	21	B	1.3	0.63	mg/L		05/02/22 12:01	05/03/22 20:35	25
Chromium	ND		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 02:29	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 02:29	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 02:29	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 02:29	5
Molybdenum	0.0030	J	0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 02:29	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 02:29	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 02:29	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		5.0	5.0	mg/L			05/03/22 14:20	1
Chloride	4.1		2.0	1.4	mg/L			05/03/22 00:25	1
Fluoride	0.14		0.10	0.070	mg/L			04/29/22 11:49	1
Sulfate	33		5.0	1.4	mg/L			05/03/22 02:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.32				SU			04/26/22 14:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: MW-D1

Lab Sample ID: 400-219114-4

Date Collected: 04/26/22 12:00

Matrix: Water

Date Received: 04/28/22 09:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 02:32	5
Arsenic	ND		0.0013	0.0012	mg/L		05/02/22 12:01	05/03/22 02:32	5
Barium	0.015		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 02:32	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 02:32	5
Boron	0.15		0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 02:32	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 02:32	5
Calcium	65 B		1.3	0.63	mg/L		05/02/22 12:01	05/03/22 20:41	25
Chromium	0.0015 J		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 02:32	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 02:32	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 02:32	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 20:38	5
Molybdenum	ND		0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 02:32	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 02:32	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 02:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		5.0	5.0	mg/L			05/03/22 14:20	1
Chloride	2.9		2.0	1.4	mg/L			05/03/22 00:25	1
Fluoride	0.080 J		0.10	0.070	mg/L			04/29/22 11:53	1
Sulfate	29		5.0	1.4	mg/L			05/03/22 02:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.73				SU			04/26/22 11:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: MW-U1

Lab Sample ID: 400-219114-5

Date Collected: 04/26/22 10:30

Matrix: Water

Date Received: 04/28/22 09:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 02:35	5
Arsenic	0.0019		0.0013	0.0012	mg/L		05/02/22 12:01	05/03/22 02:35	5
Barium	0.0031		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 02:35	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 02:35	5
Boron	0.0067	J	0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 02:35	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 20:44	5
Calcium	34	B	0.25	0.13	mg/L		05/02/22 12:01	05/03/22 20:44	5
Chromium	0.0026		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 02:35	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 02:35	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 02:35	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 02:35	5
Molybdenum	ND		0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 02:35	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 02:35	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 02:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	98		5.0	5.0	mg/L			05/03/22 14:20	1
Chloride	1.9	J	2.0	1.4	mg/L			05/03/22 00:25	1
Fluoride	0.070	J	0.10	0.070	mg/L			04/29/22 12:01	1
Sulfate	4.3	J	5.0	1.4	mg/L			05/03/22 02:55	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.10				SU			04/26/22 09:30	1

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: DUP-18

Lab Sample ID: 400-219114-1

Date Collected: 04/26/22 00:01

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576143	05/03/22 02:02	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	576309	05/03/22 20:12	KIS	TAL PEN
Total/NA	Prep	7470A			576157	05/03/22 10:38	NET	TAL PEN
Total/NA	Analysis	7470A		1	576320	05/03/22 16:59	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	575886	04/29/22 16:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	576110	05/03/22 00:25	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	576933	05/09/22 12:55	KB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	576114	05/03/22 02:55	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	576172	04/25/22 23:01	EHS	TAL PEN

Client Sample ID: MW-D2

Lab Sample ID: 400-219114-2

Date Collected: 04/26/22 14:01

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576457	05/04/22 15:22	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576143	05/03/22 02:25	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	576309	05/03/22 20:31	KIS	TAL PEN
Total/NA	Prep	7470A			576157	05/03/22 10:38	NET	TAL PEN
Total/NA	Analysis	7470A		1	576320	05/03/22 17:01	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	576207	05/03/22 14:20	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	576110	05/03/22 00:25	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	575844	04/29/22 11:57	KB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	576114	05/03/22 02:55	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	576172	04/26/22 13:01	EHS	TAL PEN

Client Sample ID: MW-D3

Lab Sample ID: 400-219114-3

Date Collected: 04/26/22 15:50

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576143	05/03/22 02:29	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	576309	05/03/22 20:35	KIS	TAL PEN
Total/NA	Prep	7470A			576157	05/03/22 10:38	NET	TAL PEN
Total/NA	Analysis	7470A		1	576320	05/03/22 17:03	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	576207	05/03/22 14:20	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	576110	05/03/22 00:25	DN1	TAL PEN

Eurofins Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Client Sample ID: MW-D3

Lab Sample ID: 400-219114-3

Date Collected: 04/26/22 15:50

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	575844	04/29/22 11:49	KB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	576114	05/03/22 02:55	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	576172	04/26/22 14:50	EHS	TAL PEN

Client Sample ID: MW-D1

Lab Sample ID: 400-219114-4

Date Collected: 04/26/22 12:00

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576143	05/03/22 02:32	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576309	05/03/22 20:38	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		25	576309	05/03/22 20:41	KIS	TAL PEN
Total/NA	Prep	7470A			576157	05/03/22 10:38	NET	TAL PEN
Total/NA	Analysis	7470A		1	576320	05/03/22 17:05	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	576207	05/03/22 14:20	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	576110	05/03/22 00:25	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	575844	04/29/22 11:53	KB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	576114	05/03/22 02:55	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	576172	04/26/22 11:00	EHS	TAL PEN

Client Sample ID: MW-U1

Lab Sample ID: 400-219114-5

Date Collected: 04/26/22 10:30

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576143	05/03/22 02:35	KIS	TAL PEN
Total Recoverable	Prep	3005A			576023	05/02/22 12:01	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	576309	05/03/22 20:44	KIS	TAL PEN
Total/NA	Prep	7470A			576157	05/03/22 10:38	NET	TAL PEN
Total/NA	Analysis	7470A		1	576320	05/03/22 17:07	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	576207	05/03/22 14:20	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	576110	05/03/22 00:25	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	575844	04/29/22 12:01	KB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	576114	05/03/22 02:55	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	576172	04/26/22 09:30	EHS	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Metals

Prep Batch: 576023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total Recoverable	Water	3005A	
400-219114-2	MW-D2	Total Recoverable	Water	3005A	
400-219114-3	MW-D3	Total Recoverable	Water	3005A	
400-219114-4	MW-D1	Total Recoverable	Water	3005A	
400-219114-5	MW-U1	Total Recoverable	Water	3005A	
MB 400-576023/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-576023/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-219114-1 MS	DUP-18	Total Recoverable	Water	3005A	
400-219114-1 MSD	DUP-18	Total Recoverable	Water	3005A	

Analysis Batch: 576143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total Recoverable	Water	6020	576023
400-219114-2	MW-D2	Total Recoverable	Water	6020	576023
400-219114-3	MW-D3	Total Recoverable	Water	6020	576023
400-219114-4	MW-D1	Total Recoverable	Water	6020	576023
400-219114-5	MW-U1	Total Recoverable	Water	6020	576023
MB 400-576023/1-A ^5	Method Blank	Total Recoverable	Water	6020	576023
LCS 400-576023/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	576023
400-219114-1 MS	DUP-18	Total Recoverable	Water	6020	576023
400-219114-1 MSD	DUP-18	Total Recoverable	Water	6020	576023

Prep Batch: 576157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	7470A	
400-219114-2	MW-D2	Total/NA	Water	7470A	
400-219114-3	MW-D3	Total/NA	Water	7470A	
400-219114-4	MW-D1	Total/NA	Water	7470A	
400-219114-5	MW-U1	Total/NA	Water	7470A	
MB 400-576157/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-576157/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-219183-T-6-C MS	Matrix Spike	Total/NA	Water	7470A	
400-219183-T-6-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 576309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total Recoverable	Water	6020	576023
400-219114-2	MW-D2	Total Recoverable	Water	6020	576023
400-219114-3	MW-D3	Total Recoverable	Water	6020	576023
400-219114-4	MW-D1	Total Recoverable	Water	6020	576023
400-219114-4	MW-D1	Total Recoverable	Water	6020	576023
400-219114-5	MW-U1	Total Recoverable	Water	6020	576023
400-219114-1 MS	DUP-18	Total Recoverable	Water	6020	576023
400-219114-1 MSD	DUP-18	Total Recoverable	Water	6020	576023

Analysis Batch: 576320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	7470A	576157
400-219114-2	MW-D2	Total/NA	Water	7470A	576157
400-219114-3	MW-D3	Total/NA	Water	7470A	576157
400-219114-4	MW-D1	Total/NA	Water	7470A	576157

Eurofins Pensacola

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Metals (Continued)

Analysis Batch: 576320 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-5	MW-U1	Total/NA	Water	7470A	576157
MB 400-576157/14-A	Method Blank	Total/NA	Water	7470A	576157
LCS 400-576157/15-A	Lab Control Sample	Total/NA	Water	7470A	576157
400-219183-T-6-C MS	Matrix Spike	Total/NA	Water	7470A	576157
400-219183-T-6-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	576157

Analysis Batch: 576457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-2	MW-D2	Total Recoverable	Water	6020	576023

General Chemistry

Analysis Batch: 575844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-2	MW-D2	Total/NA	Water	SM 4500 F C	
400-219114-3	MW-D3	Total/NA	Water	SM 4500 F C	
400-219114-4	MW-D1	Total/NA	Water	SM 4500 F C	
400-219114-5	MW-U1	Total/NA	Water	SM 4500 F C	
MB 400-575844/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-575844/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-218894-A-9 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-218894-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 575886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	SM 2540C	
MB 400-575886/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-575886/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-218991-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 576110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	SM 4500 CI- E	
400-219114-2	MW-D2	Total/NA	Water	SM 4500 CI- E	
400-219114-3	MW-D3	Total/NA	Water	SM 4500 CI- E	
400-219114-4	MW-D1	Total/NA	Water	SM 4500 CI- E	
400-219114-5	MW-U1	Total/NA	Water	SM 4500 CI- E	
MB 400-576110/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-576110/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-576110/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-219148-D-2 MS	Matrix Spike	Total/NA	Water	SM 4500 CI- E	
400-219148-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 576114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	SM 4500 SO4 E	
400-219114-2	MW-D2	Total/NA	Water	SM 4500 SO4 E	
400-219114-3	MW-D3	Total/NA	Water	SM 4500 SO4 E	
400-219114-4	MW-D1	Total/NA	Water	SM 4500 SO4 E	
400-219114-5	MW-U1	Total/NA	Water	SM 4500 SO4 E	
MB 400-576114/5	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Eurofins Pensacola

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

General Chemistry (Continued)

Analysis Batch: 576114 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-576114/6	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-576114/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
180-137057-A-23 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
180-137057-A-23 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 576207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-2	MW-D2	Total/NA	Water	SM 2540C	
400-219114-3	MW-D3	Total/NA	Water	SM 2540C	
400-219114-4	MW-D1	Total/NA	Water	SM 2540C	
400-219114-5	MW-U1	Total/NA	Water	SM 2540C	
MB 400-576207/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-576207/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-219228-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 576933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	SM 4500 F C	
MB 400-576933/1	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-576933/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-218596-K-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-218596-K-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 576172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	Field Sampling	
400-219114-2	MW-D2	Total/NA	Water	Field Sampling	
400-219114-3	MW-D3	Total/NA	Water	Field Sampling	
400-219114-4	MW-D1	Total/NA	Water	Field Sampling	
400-219114-5	MW-U1	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-576023/1-A ^5
Matrix: Water
Analysis Batch: 576143

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.0025	0.0015	mg/L		05/02/22 12:01	05/03/22 01:56	5
Arsenic	ND		0.0013	0.0012	mg/L		05/02/22 12:01	05/03/22 01:56	5
Barium	ND		0.0025	0.00070	mg/L		05/02/22 12:01	05/03/22 01:56	5
Beryllium	ND		0.0020	0.00092	mg/L		05/02/22 12:01	05/03/22 01:56	5
Boron	ND		0.050	0.0012	mg/L		05/02/22 12:01	05/03/22 01:56	5
Cadmium	ND		0.0010	0.00065	mg/L		05/02/22 12:01	05/03/22 01:56	5
Calcium	0.280		0.25	0.13	mg/L		05/02/22 12:01	05/03/22 01:56	5
Chromium	ND		0.0025	0.0010	mg/L		05/02/22 12:01	05/03/22 01:56	5
Cobalt	ND		0.0025	0.00056	mg/L		05/02/22 12:01	05/03/22 01:56	5
Lead	ND		0.0013	0.00081	mg/L		05/02/22 12:01	05/03/22 01:56	5
Lithium	ND		0.0025	0.0049	mg/L		05/02/22 12:01	05/03/22 01:56	5
Molybdenum	ND		0.010	0.0013	mg/L		05/02/22 12:01	05/03/22 01:56	5
Selenium	ND		0.0013	0.00082	mg/L		05/02/22 12:01	05/03/22 01:56	5
Thallium	ND		0.00050	0.00046	mg/L		05/02/22 12:01	05/03/22 01:56	5

Lab Sample ID: LCS 400-576023/2-A ^5
Matrix: Water
Analysis Batch: 576143

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0500	0.0524		mg/L		105	80 - 120
Barium	0.0500	0.0526		mg/L		105	80 - 120
Beryllium	0.0500	0.0522		mg/L		104	80 - 120
Boron	0.100	0.0898		mg/L		90	80 - 120
Cadmium	0.0500	0.0537		mg/L		107	80 - 120
Calcium	5.00	5.16		mg/L		103	80 - 120
Chromium	0.0500	0.0519		mg/L		104	80 - 120
Cobalt	0.0500	0.0492		mg/L		98	80 - 120
Lead	0.0500	0.0509		mg/L		102	80 - 120
Lithium	0.0500	0.0492		mg/L		98	80 - 120
Molybdenum	0.0500	0.0498		mg/L		100	80 - 120
Selenium	0.0500	0.0483		mg/L		97	80 - 120
Thallium	0.0100	0.00983		mg/L		98	80 - 120

Lab Sample ID: 400-219114-1 MS
Matrix: Water
Analysis Batch: 576143

Client Sample ID: DUP-18
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Antimony	ND		0.0500	0.0546		mg/L		109	75 - 125
Arsenic	ND		0.0500	0.0505		mg/L		101	75 - 125
Barium	0.014		0.0500	0.0665		mg/L		104	75 - 125
Beryllium	ND		0.0500	0.0530		mg/L		106	75 - 125
Boron	0.14		0.100	0.243		mg/L		107	75 - 125
Cadmium	ND		0.0500	0.0517		mg/L		103	75 - 125
Chromium	ND		0.0500	0.0517		mg/L		103	75 - 125
Cobalt	ND		0.0500	0.0492		mg/L		98	75 - 125
Lead	ND		0.0500	0.0511		mg/L		102	75 - 125

Eurofins Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

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

Lab Sample ID: 400-219114-1 MS
Matrix: Water
Analysis Batch: 576143

Client Sample ID: DUP-18
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Lithium	ND		0.0500	0.0483		mg/L		97	75 - 125	
Molybdenum	ND		0.0500	0.0504		mg/L		101	75 - 125	
Selenium	ND		0.0500	0.0498		mg/L		100	75 - 125	
Thallium	ND		0.0100	0.0103		mg/L		103	75 - 125	

Lab Sample ID: 400-219114-1 MS
Matrix: Water
Analysis Batch: 576309

Client Sample ID: DUP-18
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Calcium	61	B ^2	5.00	65.8	4	mg/L		101	75 - 125	

Lab Sample ID: 400-219114-1 MSD
Matrix: Water
Analysis Batch: 576143

Client Sample ID: DUP-18
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	ND		0.0500	0.0546		mg/L		109	75 - 125		0	20
Arsenic	ND		0.0500	0.0500		mg/L		100	75 - 125		1	20
Barium	0.014		0.0500	0.0680		mg/L		107	75 - 125		2	20
Beryllium	ND		0.0500	0.0526		mg/L		105	75 - 125		1	20
Boron	0.14		0.100	0.237		mg/L		101	75 - 125		2	20
Cadmium	ND		0.0500	0.0512		mg/L		102	75 - 125		1	20
Chromium	ND		0.0500	0.0526		mg/L		105	75 - 125		2	20
Cobalt	ND		0.0500	0.0491		mg/L		98	75 - 125		0	20
Lead	ND		0.0500	0.0503		mg/L		101	75 - 125		2	20
Lithium	ND		0.0500	0.0477		mg/L		95	75 - 125		1	20
Molybdenum	ND		0.0500	0.0516		mg/L		103	75 - 125		2	20
Selenium	ND		0.0500	0.0496		mg/L		99	75 - 125		1	20
Thallium	ND		0.0100	0.00998		mg/L		100	75 - 125		3	20

Lab Sample ID: 400-219114-1 MSD
Matrix: Water
Analysis Batch: 576309

Client Sample ID: DUP-18
Prep Type: Total Recoverable
Prep Batch: 576023

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Calcium	61	B ^2	5.00	61.4	4	mg/L		13	75 - 125		7	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-576157/14-A
Matrix: Water
Analysis Batch: 576320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576157

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00015	mg/L		05/03/22 10:38	05/03/22 16:26	1

Eurofins Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

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

Lab Sample ID: LCS 400-576157/15-A
Matrix: Water
Analysis Batch: 576320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00101	0.00110		mg/L		109	80 - 120

Lab Sample ID: 400-219183-T-6-C MS
Matrix: Water
Analysis Batch: 576320

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 576157

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00201	0.00191		mg/L		95	80 - 120

Lab Sample ID: 400-219183-T-6-D MSD
Matrix: Water
Analysis Batch: 576320

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 576157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	ND		0.00201	0.00191		mg/L		95	80 - 120	0	20

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

Lab Sample ID: MB 400-575886/1
Matrix: Water
Analysis Batch: 575886

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0	5.0	mg/L			04/29/22 16:51	1

Lab Sample ID: LCS 400-575886/2
Matrix: Water
Analysis Batch: 575886

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	296		mg/L		101	78 - 122

Lab Sample ID: 400-218991-C-1 DU
Matrix: Water
Analysis Batch: 575886

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	1500		1410	F3	mg/L		8	5

Lab Sample ID: MB 400-576207/1
Matrix: Water
Analysis Batch: 576207

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0	5.0	mg/L			05/03/22 14:20	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

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

Lab Sample ID: LCS 400-576207/2
Matrix: Water
Analysis Batch: 576207

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	252		mg/L		86	78 - 122

Lab Sample ID: 400-219228-A-2 DU
Matrix: Water
Analysis Batch: 576207

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		500	F3	mg/L		95	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-576110/6
Matrix: Water
Analysis Batch: 576110

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0	1.4	mg/L			05/03/22 00:23	1

Lab Sample ID: LCS 400-576110/7
Matrix: Water
Analysis Batch: 576110

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	30.4		mg/L		101	90 - 110

Lab Sample ID: MRL 400-576110/3
Matrix: Water
Analysis Batch: 576110

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	1.53	J	mg/L		76	50 - 150

Lab Sample ID: 400-219148-D-2 MS
Matrix: Water
Analysis Batch: 576110

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	2.2		10.0	13.4		mg/L		112	73 - 120

Lab Sample ID: 400-219148-D-2 MSD
Matrix: Water
Analysis Batch: 576110

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	2.2		10.0	13.4		mg/L		112	73 - 120	0	8

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-575844/3
Matrix: Water
Analysis Batch: 575844

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.070	mg/L			04/29/22 11:22	1

Lab Sample ID: LCS 400-575844/6
Matrix: Water
Analysis Batch: 575844

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	5.08		mg/L		102	90 - 110

Lab Sample ID: 400-218894-A-9 MS
Matrix: Water
Analysis Batch: 575844

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	0.47		1.00	1.30		mg/L		83	75 - 125

Lab Sample ID: 400-218894-A-9 MSD
Matrix: Water
Analysis Batch: 575844

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	0.47		1.00	1.30		mg/L		83	75 - 125	0	4

Lab Sample ID: MB 400-576933/1
Matrix: Water
Analysis Batch: 576933

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.070	mg/L			05/09/22 12:55	1

Lab Sample ID: LCS 400-576933/4
Matrix: Water
Analysis Batch: 576933

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: 400-218596-K-1 MS
Matrix: Water
Analysis Batch: 576933

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	0.84		1.00	1.72		mg/L		88	75 - 125

Lab Sample ID: 400-218596-K-1 MSD
Matrix: Water
Analysis Batch: 576933

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	0.84		1.00	1.75		mg/L		92	75 - 125	2	4

Eurofins Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-576114/5
Matrix: Water
Analysis Batch: 576114

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.4	mg/L			05/03/22 02:55	1

Lab Sample ID: LCS 400-576114/6
Matrix: Water
Analysis Batch: 576114

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

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

Lab Sample ID: MRL 400-576114/7
Matrix: Water
Analysis Batch: 576114

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	5.00	3.66	J	mg/L		73	50 - 150

Lab Sample ID: 180-137057-A-23 MS
Matrix: Water
Analysis Batch: 576114

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	2800		250	2360	4	mg/L		-184	77 - 128

Lab Sample ID: 180-137057-A-23 MSD
Matrix: Water
Analysis Batch: 576114

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	2800		250	2350	4	mg/L		-186	77 - 128	0	5

Chain of Custody Record

Client Information		Sampler: <u>Tristan Orndorff</u>		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-110409-29334.1																																																																																																																																				
Client Contact: Dawit Yifru		Phone: <u>678-718-4739</u>		E-Mail: Cheyenne.Whitmire@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1																																																																																																																																				
Company: Geosyntec Consultants, Inc.		PWSID:		Analysis Requested		 400-219114 COC		Job #:																																																																																																																																				
Address: 1255 Roberts Blvd, NW Suite 200		Due Date Requested:						Preservation Codes:																																																																																																																																				
City: Kennesaw		TAT Requested (days): <u>Standard</u>		Field Filtered Sample (Yes or No) m MS/MSD (Yes or No)		Total Number of Containers		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 - EDTA																																																																																																																																				
State, Zip: GA, 30144		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC SM4500_Cl_E - Chloride 6020 - Sb,As,Ba,Be,Ca,Cd,Cr,Co,Li,Pb,Ti,Se,Mo 7470A - Mercury 2540C - Total Dissolved Solids 4500_F_C - Fluoride SM4500_SO4_E - Sulfate Field Sampling - Field pH		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)																																																																																																																																		
Phone: <u>678-202-9569</u>		PO #: Purchase Order not required						3000 - Arsenic 3001 - Barium 3002 - Cadmium 3003 - Chromium 3004 - Copper 3005 - Lead 3006 - Manganese 3007 - Mercury 3008 - Nickel 3009 - Selenium 3010 - Silver 3011 - Vanadium 3012 - Zinc		Other:																																																																																																																																		
Email: dyifru@geosyntec.com		WO #:																																																																																																																																										
Project Name: Crisp County CCR		Project #: 40007960		Sample Identification		Special Instructions/Note:																																																																																																																																						
Site: <u>CCPC, Warwick GA</u>		SSOW#:																																																																																																																																										
				<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>m MS/MSD (Yes or No)</th> <th>3000 - Arsenic</th> <th>3001 - Barium</th> <th>3002 - Cadmium</th> <th>3003 - Chromium</th> <th>3004 - Copper</th> <th>3005 - Lead</th> <th>3006 - Manganese</th> <th>3007 - Mercury</th> <th>3008 - Nickel</th> <th>3009 - Selenium</th> <th>3010 - Silver</th> <th>3011 - Vanadium</th> <th>3012 - Zinc</th> </tr> </thead> <tbody> <tr> <td><u>DUP - 18</u></td> <td><u>4/26/22</u></td> <td></td> <td><u>G</u></td> <td><u>Water</u></td> <td><u>N</u></td> <td><u>N</u></td> <td><u>1</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td><u>MW - D2</u></td> <td><u>4/26/22</u></td> <td><u>2:01</u></td> <td><u>G</u></td> <td><u>Water</u></td> <td><u>N</u></td> <td><u>N</u></td> <td><u>1</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td><u>MW - D3</u></td> <td><u>4/26/22</u></td> <td><u>3:50</u></td> <td><u>G</u></td> <td><u>Water</u></td> <td><u>N</u></td> <td><u>N</u></td> <td><u>1</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td><u>MW - D1</u></td> <td><u>4/26/22</u></td> <td><u>12:00</u></td> <td><u>G</u></td> <td><u>Water</u></td> <td><u>N</u></td> <td><u>N</u></td> <td><u>1</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td><u>MW - U1</u></td> <td><u>4/26/22</u></td> <td><u>10:30</u></td> <td><u>G</u></td> <td><u>Water</u></td> <td><u>N</u></td> <td><u>N</u></td> <td><u>1</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td><u>Water</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		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)	m MS/MSD (Yes or No)	3000 - Arsenic	3001 - Barium	3002 - Cadmium	3003 - Chromium	3004 - Copper	3005 - Lead	3006 - Manganese	3007 - Mercury	3008 - Nickel	3009 - Selenium	3010 - Silver	3011 - Vanadium	3012 - Zinc	<u>DUP - 18</u>	<u>4/26/22</u>		<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>MW - D2</u>	<u>4/26/22</u>	<u>2:01</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>MW - D3</u>	<u>4/26/22</u>	<u>3:50</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>MW - D1</u>	<u>4/26/22</u>	<u>12:00</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>MW - U1</u>	<u>4/26/22</u>	<u>10:30</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>					<u>Water</u>															PH = 6.80 PH = 6.86 PH = 7.32 PH = 6.73 PH = 8.10	
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)	m MS/MSD (Yes or No)	3000 - Arsenic	3001 - Barium	3002 - Cadmium	3003 - Chromium	3004 - Copper	3005 - Lead	3006 - Manganese	3007 - Mercury	3008 - Nickel	3009 - Selenium	3010 - Silver	3011 - Vanadium	3012 - Zinc																																																																																																																										
<u>DUP - 18</u>	<u>4/26/22</u>		<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>																																																																																																																										
<u>MW - D2</u>	<u>4/26/22</u>	<u>2:01</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>																																																																																																																										
<u>MW - D3</u>	<u>4/26/22</u>	<u>3:50</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>																																																																																																																										
<u>MW - D1</u>	<u>4/26/22</u>	<u>12:00</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>																																																																																																																										
<u>MW - U1</u>	<u>4/26/22</u>	<u>10:30</u>	<u>G</u>	<u>Water</u>	<u>N</u>	<u>N</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>																																																																																																																										
				<u>Water</u>																																																																																																																																								
				<u>last item</u>																																																																																																																																								

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

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

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: <u>Tristan Orndorff</u>	Date/Time: <u>4/27/2022 11:30</u>	Company: <u>Geosyntec</u>	Received by: <u>Fedex</u>	Date/Time: _____	Company: _____
Relinquished by: _____	Date/Time: _____	Company: _____	Received by: _____	Date/Time: _____	Company: _____
Relinquished by: _____	Date/Time: _____	Company: _____	Received by: _____	Date/Time: <u>4/28/22 09:07</u>	Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____

Cooler Temperature(s) °C and Other Remarks: 9.8° 11.9° IR10



Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-219114-1
SDG Number: CCPC, Warwick GA

Login Number: 219114

List Number: 1

Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Client notified
Cooler Temperature is recorded.	True	9.8°C, 11.9°C IR10
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	No time on COC or sample containers for Dup-18
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR

Job ID: 400-219114-1
SDG: CCPC, Warwick GA

Laboratory: Eurofins 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
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
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-23
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
West Virginia DEP	State	136	05-31-22

ANALYTICAL REPORT

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

Laboratory Job ID: 400-219114-2

Laboratory Sample Delivery Group: CCPC, Warwick GA
Client Project/Site: Crisp County CCR RADS

For:

Geosyntec Consultants, Inc.
1255 Roberts Blvd, NW
Suite 200
Kennesaw, Georgia 30144

Attn: Dawit Yifru



Authorized for release by:
5/27/2022 4:31:38 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222

Cheyenne.Whitmire@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	11
Chronicle	12
QC Association	14
QC Sample Results	15
Chain of Custody	17
Receipt Checklists	19
Certification Summary	20

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Job ID: 400-219114-2

Laboratory: Eurofins Pensacola

Narrative

Job Narrative 400-219114-2

Receipt

The samples were received on 4/28/2022 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 9.8° C and 11.9° C.

RAD

Method 9315: Radium 226 Batch 160-563228. 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-18 (400-219114-1), MW-D2 (400-219114-2), MW-D3 (400-219114-3), MW-D1 (400-219114-4), MW-U1 (400-219114-5), (LCS 160-563228/1-A), (MB 160-563228/24-A), (240-165647-L-3-A), (240-165647-A-3-A MS) and (240-165647-A-3-B MSD)

Method 9320: Radium-228 prep batch 160-563242. The LCS recovered at 127%. 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. (LCS 160-563242/1-A)

Method 9320: Radium-228 prep batch 160-0563242. 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-18 (400-219114-1), MW-D2 (400-219114-2), MW-D3 (400-219114-3), MW-D1 (400-219114-4), MW-U1 (400-219114-5), (LCS 160-563242/1-A), (MB 160-563242/24-A), (240-165647-L-3-B), (240-165647-A-3-C MS) and (240-165647-A-3-D MSD)



Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

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 St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-219114-1	DUP-18	Water	04/26/22 00:01	04/28/22 09:07
400-219114-2	MW-D2	Water	04/26/22 14:01	04/28/22 09:07
400-219114-3	MW-D3	Water	04/26/22 15:50	04/28/22 09:07
400-219114-4	MW-D1	Water	04/26/22 12:00	04/28/22 09:07
400-219114-5	MW-U1	Water	04/26/22 10:30	04/28/22 09:07

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

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADs

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Client Sample ID: DUP-18

Lab Sample ID: 400-219114-1

Date Collected: 04/26/22 00:01

Matrix: Water

Date Received: 04/28/22 09:07

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0258	U	0.0958	0.0959	1.00	0.183	pCi/L	05/02/22 10:13	05/25/22 21:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					05/02/22 10:13	05/25/22 21:43	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.331	U	0.315	0.316	1.00	0.503	pCi/L	05/02/22 10:51	05/23/22 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					05/02/22 10:51	05/23/22 13:01	1
Y Carrier	83.0		40 - 110					05/02/22 10:51	05/23/22 13:01	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	0.357	U	0.329	0.330	5.00	0.503	pCi/L		05/26/22 22:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

Client Sample ID: MW-D2

Lab Sample ID: 400-219114-2

Date Collected: 04/26/22 14:01

Matrix: Water

Date Received: 04/28/22 09:07

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0842	U	0.112	0.112	1.00	0.187	pCi/L	05/02/22 10:13	05/25/22 21:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					05/02/22 10:13	05/25/22 21:43	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.699		0.404	0.409	1.00	0.591	pCi/L	05/02/22 10:51	05/23/22 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					05/02/22 10:51	05/23/22 13:01	1
Y Carrier	82.6		40 - 110					05/02/22 10:51	05/23/22 13:01	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	0.783		0.419	0.424	5.00	0.591	pCi/L		05/26/22 22:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADs

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

Client Sample ID: MW-D3
Date Collected: 04/26/22 15:50
Date Received: 04/28/22 09:07

Lab Sample ID: 400-219114-3
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	-0.00126	U	0.0876	0.0876	1.00	0.182	pCi/L	05/02/22 10:13	05/25/22 21:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					05/02/22 10:13	05/25/22 21:43	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.375	U	0.333	0.335	1.00	0.528	pCi/L	05/02/22 10:51	05/23/22 13:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					05/02/22 10:51	05/23/22 13:02	1
Y Carrier	84.1		40 - 110					05/02/22 10:51	05/23/22 13:02	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.374	U	0.344	0.346	5.00	0.528	pCi/L		05/26/22 22:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADs

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

Client Sample ID: MW-D1
Date Collected: 04/26/22 12:00
Date Received: 04/28/22 09:07

Lab Sample ID: 400-219114-4
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	0.0166	U	0.0865	0.0866	1.00	0.175	pCi/L	05/02/22 10:13	05/25/22 21:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.8		40 - 110					05/02/22 10:13	05/25/22 21:44	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.297	U	0.329	0.330	1.00	0.537	pCi/L	05/02/22 10:51	05/23/22 13:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.8		40 - 110					05/02/22 10:51	05/23/22 13:02	1
Y Carrier	84.5		40 - 110					05/02/22 10:51	05/23/22 13:02	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.314	U	0.340	0.341	5.00	0.537	pCi/L		05/26/22 22:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADs

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

Client Sample ID: MW-U1

Lab Sample ID: 400-219114-5

Date Collected: 04/26/22 10:30

Matrix: Water

Date Received: 04/28/22 09:07

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.166	U	0.144	0.145	1.00	0.211	pCi/L	05/02/22 10:13	05/25/22 21:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					05/02/22 10:13	05/25/22 21:44	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0724	U	0.395	0.395	1.00	0.716	pCi/L	05/02/22 10:51	05/23/22 13:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					05/02/22 10:51	05/23/22 13:02	1
Y Carrier	84.5		40 - 110					05/02/22 10:51	05/23/22 13:02	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.239	U	0.420	0.421	5.00	0.716	pCi/L		05/26/22 22:23	1

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Client Sample ID: DUP-18

Lab Sample ID: 400-219114-1

Date Collected: 04/26/22 00:01

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			563228	05/02/22 10:13	MS	TAL SL
Total/NA	Analysis	9315		1	567255	05/25/22 21:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			563242	05/02/22 10:51	MS	TAL SL
Total/NA	Analysis	9320		1	566897	05/23/22 13:01	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	567530	05/26/22 22:23	EMH	TAL SL

Client Sample ID: MW-D2

Lab Sample ID: 400-219114-2

Date Collected: 04/26/22 14:01

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			563228	05/02/22 10:13	MS	TAL SL
Total/NA	Analysis	9315		1	567255	05/25/22 21:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			563242	05/02/22 10:51	MS	TAL SL
Total/NA	Analysis	9320		1	566897	05/23/22 13:01	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	567530	05/26/22 22:23	EMH	TAL SL

Client Sample ID: MW-D3

Lab Sample ID: 400-219114-3

Date Collected: 04/26/22 15:50

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			563228	05/02/22 10:13	MS	TAL SL
Total/NA	Analysis	9315		1	567255	05/25/22 21:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			563242	05/02/22 10:51	MS	TAL SL
Total/NA	Analysis	9320		1	566897	05/23/22 13:02	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	567530	05/26/22 22:23	EMH	TAL SL

Client Sample ID: MW-D1

Lab Sample ID: 400-219114-4

Date Collected: 04/26/22 12:00

Matrix: Water

Date Received: 04/28/22 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			563228	05/02/22 10:13	MS	TAL SL
Total/NA	Analysis	9315		1	567255	05/25/22 21:44	SCB	TAL SL
Total/NA	Prep	PrecSep_0			563242	05/02/22 10:51	MS	TAL SL
Total/NA	Analysis	9320		1	566897	05/23/22 13:02	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	567530	05/26/22 22:23	EMH	TAL SL

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Client Sample ID: MW-U1

Lab Sample ID: 400-219114-5

Date Collected: 04/26/22 10:30

Matrix: Water

Date Received: 04/28/22 09:07

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	PrecSep-21			563228	05/02/22 10:13	MS	TAL SL
Total/NA	Analysis	9315		1	567255	05/25/22 21:44	SCB	TAL SL
Total/NA	Prep	PrecSep_0			563242	05/02/22 10:51	MS	TAL SL
Total/NA	Analysis	9320		1	566897	05/23/22 13:02	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	567530	05/26/22 22:23	EMH	TAL SL

Laboratory References:

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



QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Rad

Prep Batch: 563228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	PrecSep-21	
400-219114-2	MW-D2	Total/NA	Water	PrecSep-21	
400-219114-3	MW-D3	Total/NA	Water	PrecSep-21	
400-219114-4	MW-D1	Total/NA	Water	PrecSep-21	
400-219114-5	MW-U1	Total/NA	Water	PrecSep-21	
MB 160-563228/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-563228/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-165647-A-3-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
240-165647-A-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 563242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-219114-1	DUP-18	Total/NA	Water	PrecSep_0	
400-219114-2	MW-D2	Total/NA	Water	PrecSep_0	
400-219114-3	MW-D3	Total/NA	Water	PrecSep_0	
400-219114-4	MW-D1	Total/NA	Water	PrecSep_0	
400-219114-5	MW-U1	Total/NA	Water	PrecSep_0	
MB 160-563242/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-563242/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-165647-A-3-C MS	Matrix Spike	Total/NA	Water	PrecSep_0	
240-165647-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
SDG: CCPC, Warwick GA

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-563228/24-A
Matrix: Water
Analysis Batch: 567416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563228

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.05280	U	0.0612	0.0614	1.00	0.169	pCi/L	05/02/22 10:13	05/26/22 07:37	1
Carrier	MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					05/02/22 10:13	05/26/22 07:37	1
	84.5									

Lab Sample ID: LCS 160-563228/1-A
Matrix: Water
Analysis Batch: 567255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563228

Analyte	Spike Added	LCS		Total	RL	MDC	Unit	%Rec	%Rec Limits
		Result	Qual	Uncert. (2σ+/-)					
Radium-226	11.3	9.945		1.16	1.00	0.168	pCi/L	88	75 - 125
Carrier	LCS		Limits						
Ba Carrier	%Yield	Qualifier	40 - 110						
	81.5								

Lab Sample ID: 240-165647-A-3-A MS
Matrix: Water
Analysis Batch: 567416

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 563228

Analyte	Sample		Spike	MS		Total	RL	MDC	Unit	%Rec	%Rec Limits
	Result	Qual	Added	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.249		11.4	9.859		1.13	1.00	0.152	pCi/L	84	60 - 140
Carrier	MS		Limits								
Ba Carrier	%Yield	Qualifier	40 - 110								
	86.0										

Lab Sample ID: 240-165647-A-3-B MSD
Matrix: Water
Analysis Batch: 567416

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 563228

Analyte	Sample		Spike	MSD		Total	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
	Result	Qual	Added	Result	Qual	Uncert. (2σ+/-)							
Radium-226	0.249		11.3	10.47		1.20	1.00	0.196	pCi/L	91	60 - 140	0.26	1
Carrier	MSD		Limits										
Ba Carrier	%Yield	Qualifier	40 - 110										
	77.1												

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-563242/24-A
Matrix: Water
Analysis Batch: 566898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563242

Analyte	MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.5973		0.325	0.330	1.00	0.457	pCi/L	05/02/22 10:51	05/23/22 13:06	1

Eurofins Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADs

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

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

	<i>MB</i>	<i>MB</i>							
<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>		<i>Prepared</i>	<i>Analyzed</i>	<i>Dil</i>	<i>Fac</i>	
Ba Carrier	84.5		40 - 110		05/02/22 10:51	05/23/22 13:06		1	
Y Carrier	91.6		40 - 110		05/02/22 10:51	05/23/22 13:06		1	

Lab Sample ID: LCS 160-563242/1-A
Matrix: Water
Analysis Batch: 566897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563242

<i>Analyte</i>		<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qual</i>	<i>Total Uncert. (2σ+/-)</i>	<i>RL</i>	<i>MDC</i>	<i>Unit</i>	<i>%Rec</i>	<i>%Rec Limits</i>
Radium-228		8.60	10.93		1.43	1.00	0.560	pCi/L	127	75 - 125

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>						
Ba Carrier	81.5		40 - 110						
Y Carrier	84.5		40 - 110						

Lab Sample ID: 240-165647-A-3-C MS
Matrix: Water
Analysis Batch: 566897

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 563242

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qual</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qual</i>	<i>Total Uncert. (2σ+/-)</i>	<i>RL</i>	<i>MDC</i>	<i>Unit</i>	<i>%Rec</i>	<i>%Rec Limits</i>
Radium-228	0.552		8.64	10.40		1.37	1.00	0.510	pCi/L	114	60 - 140

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>						
Ba Carrier	86.0		40 - 110						
Y Carrier	86.0		40 - 110						

Lab Sample ID: 240-165647-A-3-D MSD
Matrix: Water
Analysis Batch: 566897

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 563242

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qual</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qual</i>	<i>Total Uncert. (2σ+/-)</i>	<i>RL</i>	<i>MDC</i>	<i>Unit</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RER</i>	<i>Limit</i>
Radium-228	0.552		8.56	11.84		1.54	1.00	0.595	pCi/L	132	60 - 140	0.49	1

<i>Carrier</i>	<i>%Yield</i>	<i>Qualifier</i>	<i>Limits</i>						
Ba Carrier	77.1		40 - 110						
Y Carrier	86.7		40 - 110						

Chain of Custody Record

Client Information

Client Contact: Kristen Orndorff
 Phone: 678-718-4739
 Company: Geosyntec Consultants, Inc.

Address: 1255 Roberts Blvd, NW Suite 200
 City: Kennesaw
 State, Zip: GA, 30144
 Phone: 678-202-9569
 Email: doryu@geosyntec.com
 Project Name: Crisp County CCR
 Site: CCPC, Warwick GA

Lab PM: Whitmore, Cheyenne R
 E-Mail: Cheyenne.Whitmore@et.eurofins.com

Due Date Requested: Standard
 TAT Requested (days): Standard
 Compliance Project: Δ Yes Δ No
 PO #: Purchase Order not required
 WO #:
 Project #: 40007960
 SSOW #:

Carrier Tracking No(s): 400-110409-29334.1
 State of Origin: Page 1 of 1
 Job #:

Analysis Requested

Analysis	Y	N	D	N	N	N
9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc	1	0	0	0	0	0
5M4500_Cl_E - Chloride	1	0	0	0	0	0
6020 - Sb,As,B, Ba, Be, Ca, Cd, Cr, Co, Li, Pb, Tl, Se, Mo	1	0	0	0	0	0
7470A - Mercury	1	0	0	0	0	0
2540C - Total Dissolved Solids	1	0	0	0	0	0
4500_F_C - Fluoride	1	0	0	0	0	0
SM4500_S04_E - Sulfate	1	0	0	0	0	0
Field Sampling - Field pH	1	0	0	0	0	0

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, B=soil, A=air)
<u>DWP-18</u>	<u>4/26/22</u>		<u>G</u>	<u>Water</u>
<u>MW-D2</u>	<u>4/26/22</u>	<u>2:01</u>	<u>G</u>	<u>Water</u>
<u>MW-D3</u>	<u>4/26/22</u>	<u>3:50</u>	<u>G</u>	<u>Water</u>
<u>MW-D1</u>	<u>4/26/22</u>	<u>12:00</u>	<u>G</u>	<u>Water</u>
<u>MW-U1</u>	<u>4/26/22</u>	<u>10:30</u>	<u>G</u>	<u>Water</u>
				<u>Water</u>

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

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

Empty Kit Relinquished by:

Relinquished by: Kristen Orndorff Date: 4/27/2022 11:30
 Relinquished by: Geosyntec Company
 Relinquished by: Company Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Special Instructions/Note:

pH = 6.80
pH = 6.86
pH = 7.32
pH = 6.73
pH = 8.10

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:

Received by: Fedex Date/Time:
 Received by: Company Date/Time:
 Received by: Company Date/Time: 4/28/22 09:07
 Cooler Temperature(s) °C and Other Remarks: 9.8°C 11.9°C IR10



Chain of Custody Record

Client Information
 Client Contact: Dawit Yifru
 Company: Geosyntec Consultants, Inc.
 Address: 1255 Roberts Blvd, NW Suite 200
 City: Kennesaw
 State, Zip: GA, 30144
 Phone: 404-202-9569
 Email: dyifru@geosyntec.com
 Project Name: Crisp County CCR
 Site: CCR, Warwick GA

Sampler: Tristan Orndorff
 Phone: 678-718-4739
 Lab PM: Whitmire, Cheyenne R
 E-Mail: Cheyenne.Whitmire@et.eurofins.com

Carrier Tracking No(s): 400-110409-293334.1
 Page: Page 1 of 1
 State of Origin: Job #:

Analysis Requested
 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc
 SM4500_Cl_E - Chloride
 6020 - Sb,As,Ba,Be,Ca,Cd,Cr,Cu,Co,Li,Pb,Ti,Se,Mo
 7470A - Mercury
 2540C - Total Dissolved Solids
 4500_F_C - Fluoride
 SM4500_SO4_E - Sulfate
 Field Sampling - Field pH

Preservation Codes:
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)
 Other:

Special Instructions/Note:
 PH = 6.80
 PH = 6.84
 PH = 7.32
 PH = 6.73
 PH = 8.10

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Soil, Other)	Field Filtered Sample (Yes/No)	Performs MS/MSD (Yes/No)	7470A - Mercury	2540C - Total Dissolved Solids	4500 F_C - Fluoride	SM4500 SO4 E - Sulfate	Field Sampling - Field pH	Total Number of Containers
DWP-18	4/26/22		G	Water	N	N	1	1	1	1		
MW-D2	4/26/22	2:01	G	Water	N	N	1	1	1	1		
MW-D3	4/26/22	3:50	G	Water	N	N	1	1	1	1		
MW-D1	4/26/22	12:00	G	Water	N	N	1	1	1	1		
MW-UI	4/26/22	10:30	G	Water	N	N	1	1	1	1		
<i>Water</i>												
<i>Last item</i>												

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

Empty Kit Relinquished by:
 Relinquished by: *Tristan Orndorff*
 Date/Time: 4/27/2022 11:30
 Company: *Geosyntec*

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

Special Instructions/QC Requirements:
 Method of Shipment: _____
 Received by: *Fedex*
 Date/Time: _____
 Company: _____

Custody Seals Intact:
 Yes
 No
 Relinquished by: _____
 Date/Time: _____
 Company: _____

Cooler Temperature(s) °C and Other Remarks:
 9.8°C 11.9°C IR10

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-219114-2
SDG Number: CCPC, Warwick GA

Login Number: 219114

List Number: 1

Creator: Roberts, Alexis J

List Source: Eurofins 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	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	9.8°C, 11.9°C IR10
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	No time on COC or sample containers for Dup-18
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: Geosyntec Consultants, Inc.
 Project/Site: Crisp County CCR RADS

Job ID: 400-219114-2
 SDG: CCPC, Warwick GA

Laboratory: Eurofins 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	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	07-01-22
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	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
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	04-01-23
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
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

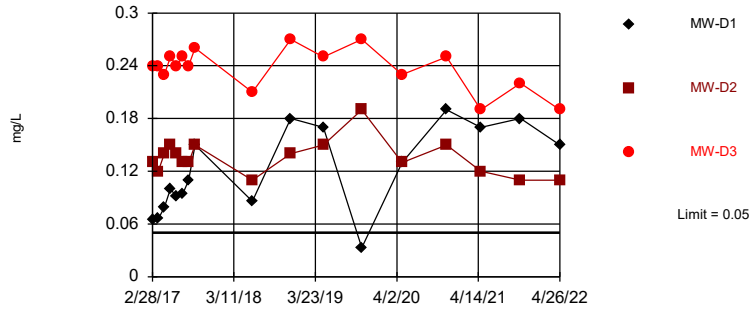


APPENDIX D

Statistical Calculations and Time-series Graphs

Exceeds Limit: MW-D1, MW-D2, MW-D3

Prediction Limit
Interwell Non-parametric

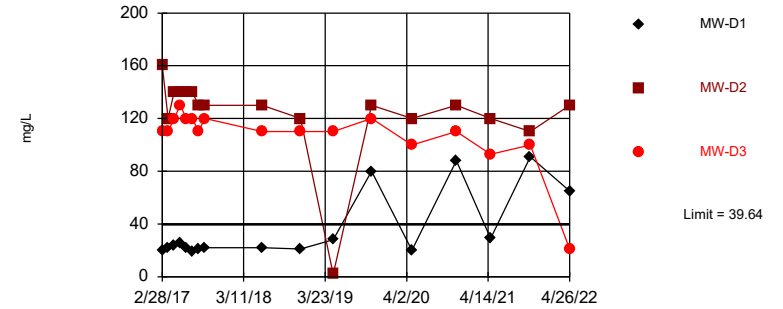


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 72.22% NDs. Annual per-constituent alpha = 0.0304. Individual comparison alpha = 0.005131 (1 of 2). Comparing 3 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Boron Analysis Run 6/27/2022 4:03 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D1, MW-D2

Prediction Limit
Interwell Parametric

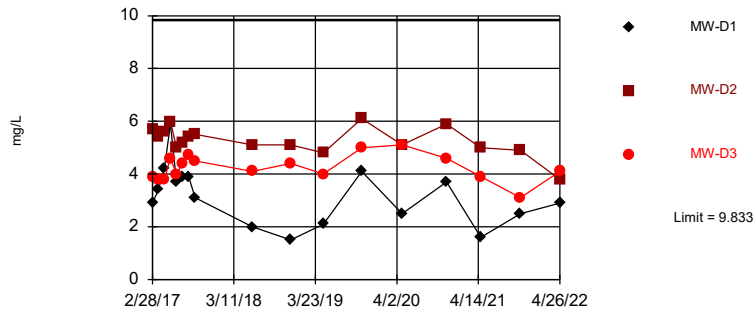


Background Data Summary: Mean=34.82, Std. Dev.=2.481, n=17. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9604, critical = 0.851. Kappa = 1.942 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Calcium Analysis Run 6/27/2022 4:03 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Prediction Limit
Interwell Non-parametric

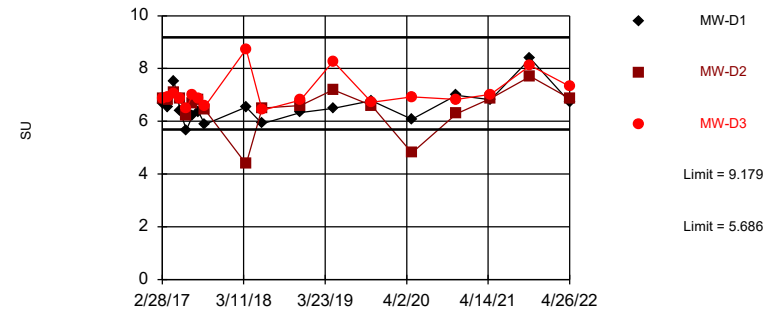


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 17 background values. Annual per-constituent alpha = 0.03331. Individual comparison alpha = 0.00563 (1 of 2). Comparing 3 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Chloride Analysis Run 6/27/2022 4:04 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limits

Prediction Limit
Interwell Parametric

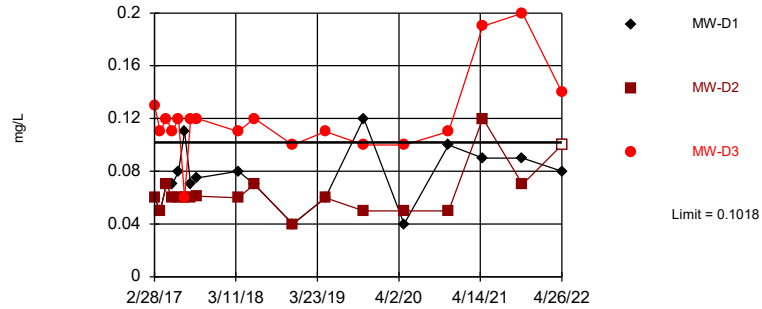


Background Data Summary: Mean=7.432, Std. Dev.=0.9078, n=18. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8664, critical = 0.858. Kappa = 1.924 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001253. Comparing 3 points to limit.

Constituent: Field pH Analysis Run 6/27/2022 4:04 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D3

Prediction Limit
 Interwell Parametric

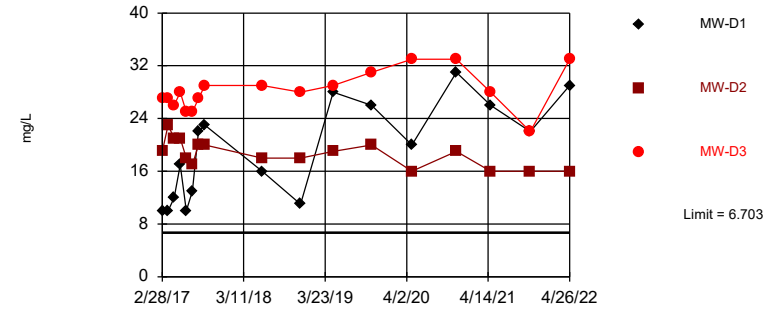


Background Data Summary (based on square root transformation): Mean=0.2513, Std. Dev.=0.03522, n=18, 11.11% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8756, critical = 0.858. Kappa = 1.924 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 6/27/2022 4:05 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D1, MW-D2, MW-D3

Prediction Limit
 Interwell Parametric

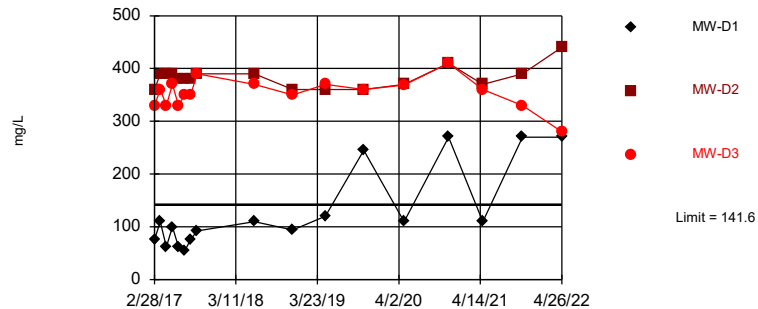


Background Data Summary (based on square root transformation): Mean=1.733, Std. Dev.=0.4408, n=17, 11.76% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8669, critical = 0.851. Kappa = 1.942 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Sulfate Analysis Run 6/27/2022 4:07 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D1, MW-D2, MW-D3

Prediction Limit
 Interwell Parametric



Background Data Summary: Mean=97.53, Std. Dev.=22.69, n=17. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9453, critical = 0.851. Kappa = 1.942 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Total Dissolved Solids Analysis Run 6/27/2022 4:07 PM View: Sanitas_Statistics Sampling E
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Prediction Limit

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10 Printed 6/27/2022, 4:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	MW-D1	0.05	n/a	4/26/2022	0.15	Yes	18	72.22	n/a	0.005131	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-D2	0.05	n/a	4/26/2022	0.11	Yes	18	72.22	n/a	0.005131	NP Inter (NDs) 1 of 2
Boron (mg/L)	MW-D3	0.05	n/a	4/26/2022	0.19	Yes	18	72.22	n/a	0.005131	NP Inter (NDs) 1 of 2
Calcium (mg/L)	MW-D1	39.64	n/a	4/26/2022	65	Yes	17	0	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	MW-D2	39.64	n/a	4/26/2022	130	Yes	17	0	No	0.002505	Param Inter 1 of 2
Calcium (mg/L)	MW-D3	39.64	n/a	4/26/2022	21	No	17	0	No	0.002505	Param Inter 1 of 2
Chloride (mg/L)	MW-D1	9.833	n/a	4/26/2022	2.9	No	17	0	n/a	0.00563	NP Inter (normality) ...
Chloride (mg/L)	MW-D2	9.833	n/a	4/26/2022	3.8	No	17	0	n/a	0.00563	NP Inter (normality) ...
Chloride (mg/L)	MW-D3	9.833	n/a	4/26/2022	4.1	No	17	0	n/a	0.00563	NP Inter (normality) ...
Field pH (SU)	MW-D1	9.179	5.686	4/26/2022	6.73	No	18	0	No	0.001253	Param Inter 1 of 2
Field pH (SU)	MW-D2	9.179	5.686	4/26/2022	6.86	No	18	0	No	0.001253	Param Inter 1 of 2
Field pH (SU)	MW-D3	9.179	5.686	4/26/2022	7.32	No	18	0	No	0.001253	Param Inter 1 of 2
Fluoride (mg/L)	MW-D1	0.1018	n/a	4/26/2022	0.08J	No	18	11.11	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	MW-D2	0.1018	n/a	4/26/2022	0.1ND	No	18	11.11	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	MW-D3	0.1018	n/a	4/26/2022	0.14	Yes	18	11.11	sqrt(x)	0.002505	Param Inter 1 of 2
Sulfate (mg/L)	MW-D1	6.703	n/a	4/26/2022	29	Yes	17	11.76	sqrt(x)	0.002505	Param Inter 1 of 2
Sulfate (mg/L)	MW-D2	6.703	n/a	4/26/2022	16	Yes	17	11.76	sqrt(x)	0.002505	Param Inter 1 of 2
Sulfate (mg/L)	MW-D3	6.703	n/a	4/26/2022	33	Yes	17	11.76	sqrt(x)	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	MW-D1	141.6	n/a	4/26/2022	270	Yes	17	0	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	MW-D2	141.6	n/a	4/26/2022	440	Yes	17	0	No	0.002505	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	MW-D3	141.6	n/a	4/26/2022	280	Yes	17	0	No	0.002505	Param Inter 1 of 2

Summary Report

Constituent: Antimony (mg/L) Analysis Run 6/27/2022 4:17 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0025 (**)	<0.0025 (F1)	<0.0025 (**)	<0.0025 (**)
3/27/2017	<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025	<0.0025	<0.0025	<0.0025
5/22/2017	<0.0025	<0.0025	<0.0025	<0.0025
6/19/2017	<0.0025	<0.0025	<0.0025	<0.0025
7/17/2017	<0.0025	<0.0025	<0.0025	<0.0025
8/14/2017	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2017	<0.0025	<0.0025	<0.0025	<0.0025
3/22/2018	<0.0025	<0.0025	<0.0025	<0.0025
4/29/2019	<0.0025	<0.0025	<0.0025	<0.0025
4/27/2020	<0.0005 (^)	<0.0005 (^)	<0.0005	<0.0005 (^)
4/26/2021	<0.0025	<0.0025	<0.0025	<0.0025
4/26/2022	<0.0025	<0.0025	<0.0025	<0.0025

Summary Report

Constituent: Antimony Analysis Run 6/27/2022 4:12 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 52
ND/Trace = 52
Wells = 4
Minimum Value = 0.0005
Maximum Value = 0.0025
Mean Value = 0.002346
Median Value = 0.0025
Standard Deviation = 0.0005381
Coefficient of Variation = 0.2294
Skewness = -3.175

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	13	13	0.0005	0.0025	0.002346	0.0025	0.0005547	0.2364	-3.175
MW-D2	13	13	0.0005	0.0025	0.002346	0.0025	0.0005547	0.2364	-3.175
MW-D3	13	13	0.0005	0.0025	0.002346	0.0025	0.0005547	0.2364	-3.175
MW-U1 (bg)	13	13	0.0005	0.0025	0.002346	0.0025	0.0005547	0.2364	-3.175

Summary Report

Constituent: Arsenic (mg/L) Analysis Run 6/27/2022 4:16 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0013	<0.0013	0.0015	<0.0013
3/27/2017	<0.0013	<0.0013	<0.0013	<0.0013
4/24/2017	<0.0013	0.00083 (J)	0.00052 (J)	<0.0013
5/22/2017	<0.0013	0.00048 (J)	0.00092 (J)	<0.0013
6/19/2017	<0.0013	<0.0013	0.00097 (J)	<0.0013
7/17/2017	<0.0013	0.00095 (J)	0.0016	0.00046 (J)
8/14/2017	<0.0013	<0.0013	0.00048 (J)	<0.0013
9/13/2017	<0.0013	<0.0013	0.00079 (J)	<0.0013
3/22/2018	<0.0013	<0.0013	0.0006 (J)	<0.0013
6/5/2018	<0.0013	<0.0013	0.00067 (J)	<0.0013
11/29/2018	<0.0013	<0.0013	<0.0013	<0.0013
4/29/2019	<0.0013	<0.0013	0.00048 (J)	<0.0013
10/23/2019	<0.0013	<0.0013	0.00076 (J)	<0.0013
4/27/2020	<0.00025 (*)	0.00027 (B)	0.001 (B)	0.00015 (JB)
11/19/2020	<0.0013	<0.0013	0.0011 (J)	<0.0013
4/26/2021	<0.0013	<0.0013	0.001 (J)	<0.0013
10/26/2021	<0.0013	<0.0013	<0.0013	0.0013
4/26/2022	<0.0013	<0.0013	<0.0013	0.0019

Summary Report

Constituent: Arsenic Analysis Run 6/27/2022 4:16 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 72
 ND/Trace = 66
 Wells = 4
 Minimum Value = 0.00015
 Maximum Value = 0.0019
 Mean Value = 0.001148
 Median Value = 0.0013
 Standard Deviation = 0.0003337
 Coefficient of Variation = 0.2906
 Skewness = -1.365

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	18	18	0.00025	0.0013	0.001242	0.0013	0.0002475	0.1993	-3.881
MW-D2	18	14	0.00027	0.0013	0.001152	0.0013	0.0003144	0.273	-1.916
MW-D3	18	4	0.00048	0.0016	0.0009772	0.000985	0.0003531	0.3613	0.1096
MW-U1 (bg)	18	14	0.00015	0.0019	0.001223	0.0013	0.0003663	0.2995	-1.676

Summary Report

Constituent: Barium (mg/L) Analysis Run 6/27/2022 4:19 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	0.011	0.087	0.22	0.0034
3/27/2017	0.0099	0.11	0.23	0.0026
4/24/2017	0.011	0.15	0.2	0.0022 (J)
5/22/2017	0.013	0.12	0.21	0.002 (J)
6/19/2017	0.012	0.11	0.21	0.0021 (J)
7/17/2017	0.012	0.16	0.2	0.0025
8/14/2017	0.014	0.13	0.18	0.002 (J)
9/13/2017	0.014	0.14	0.18	0.0023 (J)
3/22/2018	0.0095	0.15	0.16	0.0021 (J)
6/5/2018	0.01	0.19	0.15	0.0025
11/29/2018	0.0099	0.15	0.14	0.0018 (J)
4/29/2019	0.015	0.16	0.1	0.0018 (J)
10/23/2019	0.027	0.14	0.13	0.0022 (J)
4/27/2020	0.015	0.15	0.091	0.0022
11/19/2020	0.024	0.14	0.084	0.0062
4/26/2021	0.017	0.14	0.061	0.0021 (J)
10/26/2021	0.022 (B)	0.17	0.074 (B)	0.0024 (JB)
4/26/2022	0.015	0.14	0.072	0.0031

Summary Report

Constituent: Barium Analysis Run 6/27/2022 4:19 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 72
 ND/Trace = 11
 Wells = 4
 Minimum Value = 0.0018
 Maximum Value = 0.23
 Mean Value = 0.07689
 Median Value = 0.044
 Standard Deviation = 0.07549
 Coefficient of Variation = 0.9819
 Skewness = 0.4357

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	18	0	0.0095	0.027	0.01452	0.0135	0.00507	0.3493	1.251
MW-D2	18	0	0.087	0.19	0.1409	0.14	0.02388	0.1694	-0.2995
MW-D3	18	0	0.061	0.23	0.1496	0.155	0.0574	0.3838	-0.1852
MW-U1 (bg)	18	0	0.0018	0.0062	0.002528	0.0022	0.001004	0.3972	2.928

Summary Report

Constituent: Beryllium (mg/L) Analysis Run 6/27/2022 4:20 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.002	<0.002	<0.002	<0.002
3/27/2017	<0.002	<0.002	<0.002	<0.002
4/24/2017	<0.002	<0.002	<0.002	<0.002
5/22/2017	<0.002	<0.002	<0.002	<0.002
6/19/2017	<0.002	<0.002	<0.002	<0.002
7/17/2017	<0.002	<0.002	<0.002	<0.002
8/14/2017	<0.002	<0.002	<0.002	<0.002
9/13/2017	<0.002	<0.002	<0.002	<0.002
3/22/2018	<0.0025	<0.0025	<0.0025	<0.0025
4/29/2019	<0.002	<0.002	<0.002	<0.002
4/27/2020	<0.0004	<0.0004 (*)	<0.0004 (*)	<0.0004 (*)
4/26/2021	<0.002	<0.002	<0.002	<0.002
4/26/2022	<0.002	<0.002	<0.002	<0.002

Summary Report

Constituent: Beryllium Analysis Run 6/27/2022 4:20 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 52
 ND/Trace = 52
 Wells = 4
 Minimum Value = 0.0004
 Maximum Value = 0.0025
 Mean Value = 0.001915
 Median Value = 0.002
 Standard Deviation = 0.0004616
 Coefficient of Variation = 0.241
 Skewness = -2.635

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	13	13	0.0004	0.0025	0.001915	0.002	0.0004758	0.2484	-2.635
MW-D2	13	13	0.0004	0.0025	0.001915	0.002	0.0004758	0.2484	-2.635
MW-D3	13	13	0.0004	0.0025	0.001915	0.002	0.0004758	0.2484	-2.635
MW-U1 (bg)	13	13	0.0004	0.0025	0.001915	0.002	0.0004758	0.2484	-2.635

Summary Report

Constituent: Cadmium (mg/L) Analysis Run 6/27/2022 4:22 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.001	<0.001	<0.001	<0.001
3/27/2017	<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001	<0.001	<0.001	<0.001
5/22/2017	<0.001	<0.001	<0.001	<0.001
6/19/2017	<0.001	<0.001	<0.001	<0.001
7/17/2017	<0.001	<0.001	<0.001	<0.001
8/14/2017	<0.001	<0.001	<0.001	<0.001
9/13/2017	<0.001	<0.001	<0.001	<0.001
3/22/2018	<0.0025	<0.0025	<0.0025	<0.0025
4/29/2019	<0.001	<0.001	<0.001	<0.001
4/27/2020	<0.0002	7.5E-05 (J*)	7.1E-05 (J)	<0.0002
11/19/2020	<0.001	<0.001	<0.001	<0.001
4/26/2021	<0.001	<0.001	<0.001	<0.001
4/26/2022	<0.001	<0.001	<0.001	<0.001

Summary Report

Constituent: Cadmium Analysis Run 6/27/2022 4:22 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 56
ND/Trace = 56
Wells = 4
Minimum Value = 0.000071
Maximum Value = 0.0025
Mean Value = 0.001045
Median Value = 0.001
Standard Deviation = 0.0004648
Coefficient of Variation = 0.4446
Skewness = 1.691

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	14	14	0.0002	0.0025	0.00105	0.001	0.0004686	0.4463	1.887
MW-D2	14	13	0.000075	0.0025	0.001041	0.001	0.0004869	0.4677	1.523
MW-D3	14	13	0.000071	0.0025	0.001041	0.001	0.0004875	0.4684	1.512
MW-U1 (bg)	14	14	0.0002	0.0025	0.00105	0.001	0.0004686	0.4463	1.887

Summary Report

Constituent: Chromium (mg/L) Analysis Run 6/27/2022 4:23 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	0.0034	0.0038	0.0029	0.0051
3/27/2017	<0.0025	<0.0025	<0.0025	0.0017 (J)
4/24/2017	<0.0025	<0.0025	<0.0025	0.0014 (J)
5/22/2017	<0.0025	<0.0025	<0.0025	0.0014 (J)
6/19/2017	<0.0025	<0.0025	<0.0025	0.0014 (J)
7/17/2017	<0.0025	<0.0025	<0.0025	0.0014 (J)
8/14/2017	<0.0025	<0.0025	<0.0025	0.0012 (J)
9/13/2017	<0.0025	<0.0025	<0.0025	0.0014 (J)
3/22/2018	<0.0025	<0.0025	<0.0025	0.0016 (J)
11/29/2018	<0.0025	<0.0025	<0.0025	0.0012 (J)
4/29/2019	<0.0025	<0.0025	<0.0025	0.0011 (J)
4/27/2020	<0.0005 (^)	<0.0005 (^)	<0.0005 (^)	0.0013
11/19/2020	<0.0025 (^)	<0.0025 (^)	<0.0025 (^)	0.0015 (J)
4/26/2021	<0.0025	<0.0025	<0.0025	0.0011 (J)
10/26/2021	<0.0025	0.0012 (J)	<0.0025	0.0016 (J)
4/26/2022	0.0015 (J)	<0.0025	<0.0025	0.0026

Summary Report

Constituent: Chromium Analysis Run 6/27/2022 4:22 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 64
 ND/Trace = 58
 Wells = 4
 Minimum Value = 0.0005
 Maximum Value = 0.0051
 Mean Value = 0.002208
 Median Value = 0.0025
 Standard Deviation = 0.0007633
 Coefficient of Variation = 0.3457
 Skewness = 0.2125

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	16	14	0.0005	0.0034	0.002369	0.0025	0.0006074	0.2564	-1.86
MW-D2	16	14	0.0005	0.0038	0.002375	0.0025	0.0006894	0.2903	-1.112
MW-D3	16	15	0.0005	0.0029	0.0024	0.0025	0.0005164	0.2152	-3.36
MW-U1 (bg)	16	0	0.0011	0.0051	0.001688	0.0014	0.0009749	0.5777	2.948

Summary Report

Constituent: Cobalt (mg/L) Analysis Run 6/27/2022 4:26 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0025	0.00047 (J)	0.0011 (J)	<0.0025
3/27/2017	<0.0025	<0.0025	0.00079 (J)	<0.0025
4/24/2017	<0.0025	<0.0025	0.001 (J)	<0.0025
5/22/2017	<0.0025	<0.0025	0.0012 (J)	<0.0025
6/19/2017	<0.0025	<0.0025	0.0015 (J)	<0.0025
7/17/2017	<0.0025	<0.0025	0.0014 (J)	<0.0025
8/14/2017	<0.0025	<0.0025	0.0013 (J)	<0.0025
9/13/2017	<0.0025	<0.0025	0.0014 (J)	<0.0025
3/22/2018	<0.0025	<0.0025	0.0015 (J)	<0.0005
6/5/2018	<0.0025	<0.0025	0.0017 (J)	<0.0025
11/29/2018	<0.0025	<0.0025	0.00098 (J)	<0.0025
4/29/2019	<0.0025	<0.0025	0.0013 (J)	<0.0025
10/23/2019	<0.0025	<0.0025	0.0012 (J)	<0.0025
4/27/2020	<0.0005 (*)	0.001	0.00035 (J)	<0.0005 (*)
11/19/2020	<0.0025	<0.0025	0.00059 (J)	<0.0025
4/26/2021	<0.0025	<0.0025	<0.0025	<0.0025
4/26/2022	<0.0025	<0.0025	<0.0025	<0.0025

Summary Report

Constituent: Cobalt Analysis Run 6/27/2022 4:23 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 68
 ND/Trace = 67
 Wells = 4
 Minimum Value = 0.00035
 Maximum Value = 0.0025
 Mean Value = 0.002063
 Median Value = 0.0025
 Standard Deviation = 0.0007167
 Coefficient of Variation = 0.3474
 Skewness = -1.205

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	17	17	0.0005	0.0025	0.002382	0.0025	0.0004851	0.2036	-3.75
MW-D2	17	15	0.00047	0.0025	0.002292	0.0025	0.0005936	0.259	-2.487
MW-D3	17	2	0.00035	0.0025	0.001312	0.0013	0.0005622	0.4284	0.7009
MW-U1 (bg)	17	17	0.0005	0.0025	0.002265	0.0025	0.0006642	0.2933	-2.373

Summary Report

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/27/2022 4:27 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	0.421	0.506	0.522	0.117
3/27/2017	0.655	1.28	0.557	0
4/24/2017	0.212	0.756	0.572	0.19
5/22/2017	0.186	0.333	0.457	0.133
6/19/2017	0.156	0.388	0.78	0.135
7/17/2017	0.153	0.534	0.409	0.19
8/14/2017	0.287	0.452	0.339	0.302
9/13/2017	0.816	0.453	1.28	0.614
3/22/2018	0.643	0.716	1.17	0.131
6/5/2018	0.149	0.0139	0.564	0
11/29/2018	0.0994	0.18	0.0501	0.0234
4/29/2019	<0.457	<0.42	0.594	<0.386
10/23/2019	<0.439	<0.484	<0.465	<0.508
4/27/2020	0.401	<0.184	<0.326	<0.298
11/19/2020	0.833	<5	<5	0.615
4/26/2021	<5	0.773	<5	0.609
10/26/2021	0.749	0.812	0.666	0.801
4/26/2022	<5	0.783	<5	<5

Summary Report

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 4:27 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 72
 ND/Trace = 17
 Wells = 4
 Minimum Value = 0
 Maximum Value = 5
 Mean Value = 0.8962
 Median Value = 0.461
 Standard Deviation = 1.385
 Coefficient of Variation = 1.545
 Skewness = 2.521

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	18	4	0.0994	5	0.9254	0.43	1.502	1.623	2.356
MW-D2	18	4	0.0139	5	0.7815	0.495	1.092	1.398	3.435
MW-D3	18	5	0.0501	5	1.32	0.568	1.717	1.301	1.686
MW-U1 (bg)	18	4	0	5	0.5585	0.244	1.134	2.031	3.593

Summary Report

Constituent: Fluoride (mg/L) Analysis Run 6/27/2022 4:29 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	0.06 (J)	0.06 (J)	0.13	0.06 (J)
3/27/2017	0.05 (J)	0.05 (J)	0.11	0.04 (J)
4/24/2017	0.07 (J)	0.07 (J)	0.12	0.06 (J)
5/22/2017	0.07 (J)	0.06 (J)	0.11	0.06 (J)
6/19/2017	0.08 (J)	0.06 (J)	0.12	0.06 (J)
7/17/2017	0.11	0.06 (J)	0.06 (J)	0.06 (J)
8/14/2017	0.07 (J)	0.06 (J)	0.12	0.05 (J)
9/13/2017	0.075 (J)	0.061 (J)	0.12	0.058 (J)
3/22/2018	0.08 (J)	0.06 (J)	0.11	0.07 (J)
6/5/2018	0.07 (J)	0.07 (J)	0.12	0.06 (J)
11/29/2018	0.04 (J)	0.04 (J)	0.1	0.04 (J)
4/29/2019	0.06 (J)	0.06 (J)	0.11	<0.1
10/23/2019	0.12 (B)	0.05 (JB)	0.1 (B)	0.05 (JB)
4/27/2020	0.04 (J)	0.05 (J)	0.1	0.05 (J)
11/19/2020	0.1	0.05 (J)	0.11	0.07 (J)
4/26/2021	0.09 (JB)	0.12 (B)	0.19 (B)	0.1 (B)
10/26/2021	0.09 (J)	0.07 (J)	0.2 (F1)	<0.1
4/26/2022	0.08 (J)	<0.1	0.14	0.07 (J)

Summary Report

Constituent: Fluoride Analysis Run 6/27/2022 4:28 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 72
 ND/Trace = 50
 Wells = 4
 Minimum Value = 0.04
 Maximum Value = 0.2
 Mean Value = 0.08103
 Median Value = 0.07
 Standard Deviation = 0.03272
 Coefficient of Variation = 0.4038
 Skewness = 1.276

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	18	0	0.04	0.12	0.07528	0.0725	0.02173	0.2886	0.2446
MW-D2	18	1	0.04	0.12	0.06394	0.06	0.01882	0.2943	1.804
MW-D3	18	0	0.06	0.2	0.1206	0.115	0.03171	0.263	1.121
MW-U1 (bg)	18	2	0.04	0.1	0.06433	0.06	0.01858	0.2887	0.928

Summary Report

Constituent: Lead (mg/L) Analysis Run 6/27/2022 4:30 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0013 (^)	0.0005 (J)	<0.0013 (^)	<0.0013
3/27/2017	<0.0013	<0.0013	<0.0013	<0.0013
4/24/2017	<0.0013	<0.0013	<0.0013	<0.0013
5/22/2017	<0.0013	<0.0013	<0.0013	0.00065 (J)
6/19/2017	<0.0013	<0.0013	<0.0013	<0.0013
7/17/2017	<0.0013	<0.0013	<0.0013	<0.0013
8/14/2017	0.0008 (J)	0.00037 (J)	<0.0013	<0.0013
9/13/2017	<0.0013	<0.0013	<0.0013	<0.0013
3/22/2018	<0.0013	<0.0013	<0.0013	<0.0013
4/29/2019	<0.0013	<0.0013	<0.0013	<0.0013
4/27/2020	<0.00025 (^)	<0.00025 (^)	<0.00025 (^)	<0.00025 (^)
4/26/2021	<0.0013	<0.0013	<0.0013	<0.0013
4/26/2022	<0.0013	<0.0013	<0.0013	<0.0013

Summary Report

Constituent: Lead Analysis Run 6/27/2022 4:29 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 52
 ND/Trace = 52
 Wells = 4
 Minimum Value = 0.00025
 Maximum Value = 0.0013
 Mean Value = 0.001164
 Median Value = 0.0013
 Standard Deviation = 0.0003321
 Coefficient of Variation = 0.2853
 Skewness = -2.119

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	13	12	0.00025	0.0013	0.001181	0.0013	0.0003119	0.2642	-2.409
MW-D2	13	11	0.00025	0.0013	0.001086	0.0013	0.0004096	0.3771	-1.333
MW-D3	13	13	0.00025	0.0013	0.001219	0.0013	0.0002912	0.2389	-3.175
MW-U1 (bg)	13	12	0.00025	0.0013	0.001169	0.0013	0.0003295	0.2818	-2.163

Summary Report

Constituent: Lithium (mg/L) Analysis Run 6/27/2022 4:31 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0025	<0.0025	<0.0025	<0.0025
3/27/2017	<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025	<0.0025	<0.0025	<0.0025
5/22/2017	<0.0025	<0.0025	<0.0025	<0.0025
6/19/2017	<0.0025	<0.0025	<0.0025	<0.0025
7/17/2017	<0.0025	<0.0025	<0.0025	<0.0025
8/14/2017	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2017	<0.0025	<0.0025	<0.0025	<0.0025
3/22/2018	<0.005	<0.005	<0.005	0.00034 (J)
11/29/2018	<0.0025	<0.0025	<0.0025	<0.0025
4/29/2019	<0.0025	0.0011 (J)	0.0013 (J)	<0.0025
4/27/2020	<0.0005 (^)	<0.0005	0.00048 (J)	<0.0005 (^)
11/19/2020	0.0023 (J)	0.0031	0.0024 (J)	<0.0025
4/26/2021	<0.0025	<0.0025	<0.0025	<0.0025
4/26/2022	<0.0025	<0.0025	<0.0025	<0.0025

Summary Report

Constituent: Lithium Analysis Run 6/27/2022 4:31 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 60
 ND/Trace = 59
 Wells = 4
 Minimum Value = 0.00034
 Maximum Value = 0.005
 Mean Value = 0.002417
 Median Value = 0.0025
 Standard Deviation = 0.0008526
 Coefficient of Variation = 0.3528
 Skewness = 0.3034

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	15	14	0.0005	0.005	0.00252	0.0025	0.0008571	0.3401	0.822
MW-D2	15	13	0.0005	0.005	0.00248	0.0025	0.0009473	0.382	0.5088
MW-D3	15	12	0.00048	0.005	0.002445	0.0025	0.0009156	0.3744	0.7303
MW-U1 (bg)	15	14	0.00034	0.0025	0.002223	0.0025	0.0007325	0.3296	-2.165

Summary Report

Constituent: Mercury (mg/L) Analysis Run 6/27/2022 4:32 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	7.7E-05 (JB)	0.00018 (JB)	0.00011 (JB)	9.9E-05 (JB)
3/27/2017	<0.0002	0.00011 (J)	<0.0002	<0.0002
4/24/2017	<0.0002	<0.0002	<0.0002	<0.0002
5/22/2017	<0.0002	<0.0002	<0.0002	<0.0002
6/19/2017	<0.0002	<0.0002	<0.0002	<0.0002
7/17/2017	<0.0002	<0.0002	<0.0002	<0.0002
8/14/2017	<0.0002	<0.0002	<0.0002	<0.0002
9/13/2017	<0.0002	<0.0002	<0.0002	<0.0002
3/22/2018	<0.0002	<0.0002	<0.0002	<0.0002
4/29/2019	<0.0002	<0.0002	<0.0002	<0.0002
4/27/2020	<0.0002	<0.0002	<0.0002	<0.0002
4/26/2021	<0.0002	<0.0002	<0.0002	<0.0002
4/26/2022	<0.0002	<0.0002	<0.0002	<0.0002

Summary Report

Constituent: Mercury Analysis Run 6/27/2022 4:32 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 52
 ND/Trace = 52
 Wells = 4
 Minimum Value = 0.000077
 Maximum Value = 0.0002
 Mean Value = 0.0001918
 Median Value = 0.0002
 Standard Deviation = 0.00002747
 Coefficient of Variation = 0.1432
 Skewness = -3.237

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	13	12	0.000077	0.0002	0.0001905	0.0002	0.00003411	0.179	-3.175
MW-D2	13	11	0.00011	0.0002	0.0001915	0.0002	0.00002512	0.1311	-2.94
MW-D3	13	12	0.00011	0.0002	0.0001931	0.0002	0.00002496	0.1293	-3.175
MW-U1 (bg)	13	12	0.000099	0.0002	0.0001922	0.0002	0.00002801	0.1457	-3.175

Summary Report

Constituent: Molybdenum (mg/L) Analysis Run 6/27/2022 4:33 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.01	0.0012 (J)	0.0088 (J)	<0.01
3/27/2017	<0.01	<0.01	0.0023 (J)	<0.01
4/24/2017	<0.01	<0.01	0.0018 (J)	<0.01
5/22/2017	<0.01	0.0025 (J)	0.0031 (J)	<0.01
6/19/2017	<0.01	0.0016 (J)	0.0043 (J)	<0.01
7/17/2017	<0.01	<0.01	0.0027 (J)	<0.01
8/14/2017	<0.01	<0.01	0.0017 (J)	<0.01
9/13/2017	<0.01	<0.01	0.0021 (J)	<0.01
3/22/2018	<0.015	<0.015	0.0022 (J)	<0.003
6/5/2018	<0.01	<0.01	0.0022 (J)	<0.01
11/29/2018	<0.01	<0.01	<0.01	<0.01
4/29/2019	<0.01	<0.01	<0.01	<0.01
4/27/2020	<0.002 (^)	<0.002 (^)	0.0019 (J)	<0.002 (^)
11/19/2020	<0.01 (^)	<0.01	<0.01	<0.01
4/26/2021	<0.01	<0.01	<0.01	<0.01
4/26/2022	<0.01	<0.01	0.003 (J)	<0.01

Summary Report

Constituent: Molybdenum Analysis Run 6/27/2022 4:33 PM View: Sanitas_Statistics Sampling Events 1 through 18
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 64
ND/Trace = 64
Wells = 4
Minimum Value = 0.0012
Maximum Value = 0.015
Mean Value = 0.007975
Median Value = 0.01
Standard Deviation = 0.003698
Coefficient of Variation = 0.4638
Skewness = -0.746

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	16	16	0.002	0.015	0.009812	0.01	0.002428	0.2475	-1.622
MW-D2	16	13	0.0012	0.015	0.008269	0.01	0.004044	0.4891	-0.7559
MW-D3	16	4	0.0017	0.01	0.004756	0.00285	0.00355	0.7463	0.7381
MW-U1 (bg)	16	16	0.002	0.01	0.009062	0.01	0.002568	0.2834	-2.291

Summary Report

Constituent: Selenium (mg/L) Analysis Run 6/27/2022 4:34 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0013	<0.0013	0.0028	<0.0013
3/27/2017	<0.0013	<0.0013	<0.0013	<0.0013
4/24/2017	<0.0013	<0.0013	<0.0013	<0.0013
5/22/2017	<0.0013	0.001 (J)	0.00037 (J)	0.00076 (J)
6/19/2017	<0.0013	0.00059 (JB)	0.001 (JB)	0.00062 (JB)
7/17/2017	0.00033 (J)	0.00033 (J)	<0.0013	0.0007 (J)
8/14/2017	<0.0013	<0.0013	<0.0013	0.00058 (J)
9/13/2017	<0.0013	<0.0013	<0.0013	0.00041 (J)
3/22/2018	<0.0013	<0.0013	<0.00025	0.00039
11/29/2018	<0.0013	<0.0013	<0.0013	<0.0013
4/29/2019	<0.0013	<0.0013	<0.0013	<0.0013
4/27/2020	<0.00025	<0.00025	0.00021 (J)	0.00061
11/19/2020	<0.0013	<0.0013	<0.0013	<0.0013
4/26/2021	<0.0013	<0.0013	<0.0013	<0.0013
4/26/2022	<0.0013	<0.0013	<0.0013	<0.0013

Summary Report

Constituent: Selenium Analysis Run 6/27/2022 4:34 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 60
 ND/Trace = 57
 Wells = 4
 Minimum Value = 0.00021
 Maximum Value = 0.0028
 Mean Value = 0.001101
 Median Value = 0.0013
 Standard Deviation = 0.000442
 Coefficient of Variation = 0.4015
 Skewness = 0.01535

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	15	14	0.00025	0.0013	0.001165	0.0013	0.0003557	0.3052	-2.165
MW-D2	15	12	0.00025	0.0013	0.001098	0.0013	0.0003804	0.3464	-1.484
MW-D3	15	11	0.00021	0.0028	0.001175	0.0013	0.0006131	0.5216	0.6699
MW-U1 (bg)	15	8	0.00039	0.0013	0.0009647	0.0013	0.0003819	0.3959	-0.3031

Summary Report

Constituent: Thallium (mg/L) Analysis Run 6/27/2022 4:35 PM View: Sanitas_Statistics Sampling Events 1 through 18

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

	MW-D1	MW-D2	MW-D3	MW-U1 (bg)
2/28/2017	<0.0005	0.00011 (J)	0.00013 (J)	<0.0005
3/27/2017	<0.0005	<0.0005	0.00011 (J)	<0.0005
4/24/2017	<0.0005	<0.0005	9.5E-05 (J)	<0.0005
5/22/2017	<0.0005	0.00011 (J)	0.00011 (J)	<0.0005
6/19/2017	<0.0005	0.00011 (J)	0.00012 (J)	<0.0005
7/17/2017	<0.0005	0.00011 (J)	0.00012 (J)	<0.0005
8/14/2017	<0.0005	0.00013 (J)	0.00011 (J)	<0.0005
9/13/2017	<0.0005	0.00012 (J)	0.00013 (J)	<0.0005
3/22/2018	<0.0005	<0.0005	0.0001 (J)	<0.0005
6/5/2018	<0.0005	8.5E-05 (J)	0.00012 (J)	<0.0005
11/29/2018	<0.0005	8.5E-05 (J)	0.0001 (J)	<0.0005
4/29/2019	<0.0005	<0.0005	0.00011 (J)	<0.0005
10/23/2019	<0.0005	0.00026 (J)	0.00017 (J)	<0.0005
4/27/2020	<0.0001 (*)	0.00013	0.00012	<0.0001 (*)
11/19/2020	<0.0005	<0.0005	<0.0005	<0.0005
4/26/2021	<0.0005	<0.0005	<0.0005	<0.0005
4/26/2022	<0.0005	<0.0005	<0.0005	<0.0005

Summary Report

Constituent: Thallium Analysis Run 6/27/2022 4:35 PM View: Sanitas_Statistics Sampling Events 1 through 18
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2022, a summary of the selected data set:

Observations = 68
 ND/Trace = 66
 Wells = 4
 Minimum Value = 0.000085
 Maximum Value = 0.0005
 Mean Value = 0.0003543
 Median Value = 0.0005
 Standard Deviation = 0.0001876
 Coefficient of Variation = 0.5295
 Skewness = -0.5141

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
MW-D1	17	17	0.0001	0.0005	0.0004765	0.0005	0.00009701	0.2036	-3.75
MW-D2	17	7	0.000085	0.0005	0.0002794	0.00013	0.0001939	0.6939	0.2675
MW-D3	17	3	0.000095	0.0005	0.000185	0.00012	0.0001512	0.8174	1.652
MW-U1 (bg)	17	17	0.0001	0.0005	0.0004765	0.0005	0.00009701	0.2036	-3.75

Outlier Analysis

CCPC Plant Crisp Ash Pond Site

Client: Geosyntec

Data: Sanitas_Statistics Sampling Events 1 through 10

Printed 6/27/2022, 4:39 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	12	0.002333	0.0005774	unknown	ShapiroWilk
Antimony (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	12	0.002333	0.0005774	unknown	ShapiroWilk
Antimony (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	12	0.002333	0.0005774	unknown	ShapiroWilk
Antimony (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	12	0.002333	0.0005774	unknown	ShapiroWilk
Arsenic (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	17	0.001238	0.0002547	unknown	ShapiroWilk
Arsenic (mg/L)	MW-D2	Yes	0.00027	4/27/2020	NP (nrm)	NaN	17	0.001143	0.0003218	unknown	ShapiroWilk
Arsenic (mg/L)	MW-D3	No	n/a	n/a	NP	NaN	17	0.000...	0.0003544	sqrt(x)	ShapiroWilk
Arsenic (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	17	0.001183	0.000335	unknown	ShapiroWilk
Barium (mg/L)	MW-D1	No	n/a	n/a	NP	NaN	17	0.01449	0.005225	ln(x)	ShapiroWilk
Barium (mg/L)	MW-D2	No	n/a	n/a	NP	NaN	17	0.141	0.02461	x^2	ShapiroWilk
Barium (mg/L)	MW-D3	No	n/a	n/a	NP	NaN	17	0.1541	0.0557	x^2	ShapiroWilk
Barium (mg/L)	MW-U1 (bg)	Yes	0.0062	11/19/2020	NP	NaN	17	0.002494	0.001024	ln(x)	ShapiroWilk
Beryllium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001908	0.0004963	unknown	ShapiroWilk
Beryllium (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001908	0.0004963	unknown	ShapiroWilk
Beryllium (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001908	0.0004963	unknown	ShapiroWilk
Beryllium (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001908	0.0004963	unknown	ShapiroWilk
Cadmium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	13	0.001054	0.0004875	unknown	ShapiroWilk
Cadmium (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	13	0.001044	0.0005066	unknown	ShapiroWilk
Cadmium (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	13	0.001044	0.0005073	unknown	ShapiroWilk
Cadmium (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	13	0.001054	0.0004875	unknown	ShapiroWilk
Chromium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	15	0.002427	0.0005812	unknown	ShapiroWilk
Chromium (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	15	0.002367	0.0007128	unknown	ShapiroWilk
Chromium (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	15	0.002393	0.0005338	unknown	ShapiroWilk
Chromium (mg/L)	MW-U1 (bg)	Yes	0.0051	2/28/2017	NP	NaN	15	0.001627	0.0009772	ln(x)	ShapiroWilk
Cobalt (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	16	0.002375	0.0005	unknown	ShapiroWilk
Cobalt (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	16	0.002279	0.0006106	unknown	ShapiroWilk
Cobalt (mg/L)	MW-D3	No	n/a	n/a	NP	NaN	16	0.001238	0.000487	sqrt(x)	ShapiroWilk
Cobalt (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	16	0.00225	0.0006831	unknown	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-D1	No	n/a	n/a	NP	NaN	17	0.6857	1.139	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-D2	Yes	5	11/19/2020	NP	NaN	17	0.7815	1.126	x^(1/3)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-D3	No	n/a	n/a	NP (nrm)	NaN	17	1.103	1.495	unknown	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-U1 (bg)	No	n/a	n/a	NP	NaN	17	0.2972	0.2491	sqrt(x)	ShapiroWilk
Fluoride (mg/L)	MW-D1	No	n/a	n/a	NP	NaN	17	0.075	0.02236	sqrt(x)	ShapiroWilk
Fluoride (mg/L)	MW-D2	No	n/a	n/a	NP (nrm)	NaN	17	0.06182	0.01704	unknown	ShapiroWilk
Fluoride (mg/L)	MW-D3	Yes	0.06,0.19...	7/17/2017...	NP	NaN	17	0.1194	0.0323	ln(x)	ShapiroWilk
Fluoride (mg/L)	MW-U1 (bg)	No	n/a	n/a	NP (nrm)	NaN	17	0.064	0.01909	unknown	ShapiroWilk
Lead (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001171	0.0003237	unknown	ShapiroWilk
Lead (mg/L)	MW-D2	No	n/a	n/a	NP (nrm)	NaN	12	0.001068	0.0004225	unknown	ShapiroWilk
Lead (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001213	0.0003031	unknown	ShapiroWilk
Lead (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	12	0.001158	0.0003417	unknown	ShapiroWilk
Lithium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	14	0.002521	0.0008894	unknown	ShapiroWilk
Lithium (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	14	0.002479	0.0009831	unknown	ShapiroWilk
Lithium (mg/L)	MW-D3	Yes	0.005,0.0...	3/22/2018...	NP (nrm)	NaN	14	0.002441	0.00095	unknown	ShapiroWilk
Lithium (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	14	0.002203	0.000756	unknown	ShapiroWilk
Mercury (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	12	0.000...	0.0000...	unknown	ShapiroWilk
Mercury (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	12	0.000...	0.0000261	unknown	ShapiroWilk
Mercury (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	12	0.000...	0.0000...	unknown	ShapiroWilk
Mercury (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	12	0.000...	0.0000...	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	15	0.0098	0.002513	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-D2	No	n/a	n/a	NP (nrm)	NaN	15	0.008153	0.004158	unknown	ShapiroWilk

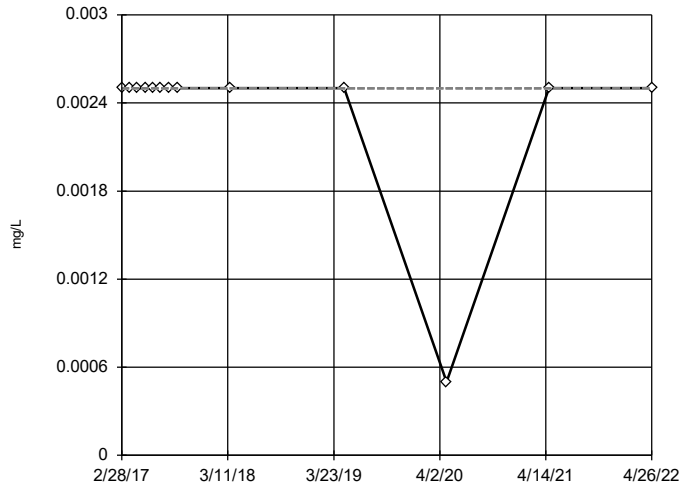
Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10 Printed 6/27/2022, 4:39 PM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Molybdenum (mg/L)	MW-D3	No	n/a	n/a	NP (nrm)	NaN	15	0.004873	0.003642	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	15	0.009	0.002646	unknown	ShapiroWilk
Selenium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	14	0.001156	0.0003671	unknown	ShapiroWilk
Selenium (mg/L)	MW-D2	No	n/a	n/a	NP (nrm)	NaN	14	0.001084	0.0003904	unknown	ShapiroWilk
Selenium (mg/L)	MW-D3	No	n/a	n/a	NP (nrm)	NaN	14	0.001166	0.0006352	unknown	ShapiroWilk
Selenium (mg/L)	MW-U1 (bg)	No	n/a	n/a	NP (nrm)	NaN	14	0.000...	0.0003845	unknown	ShapiroWilk
Thallium (mg/L)	MW-D1	n/a	n/a	n/a	NP (nrm)	NaN	16	0.000475	0.0001	unknown	ShapiroWilk
Thallium (mg/L)	MW-D2	No	n/a	n/a	NP (nrm)	NaN	16	0.000...	0.0001914	unknown	ShapiroWilk
Thallium (mg/L)	MW-D3	Yes	0.0005,0....	11/19/202...	NP	NaN	16	0.000...	0.0001318	ln(x)	ShapiroWilk
Thallium (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	16	0.000475	0.0001	unknown	ShapiroWilk

Tukey's Outlier Screening

MW-D1

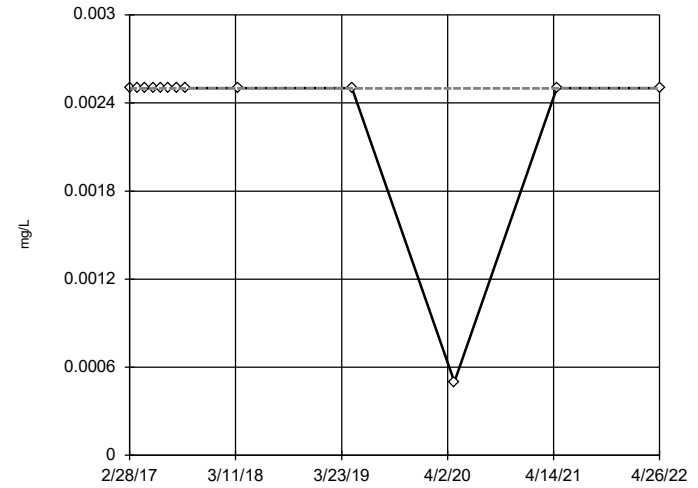


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/27/2022 4:41 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

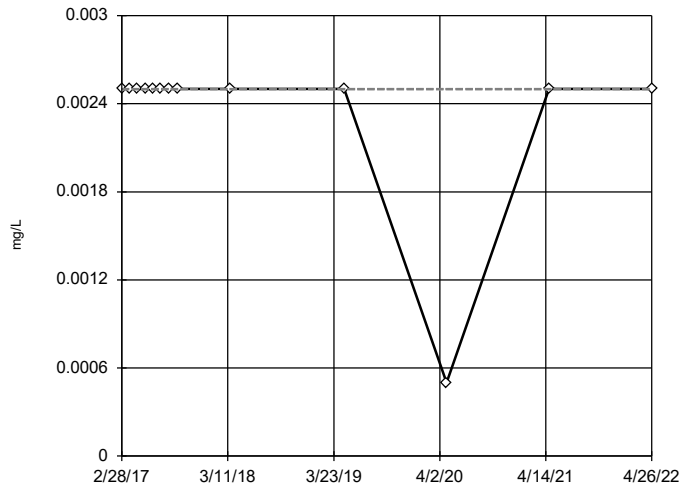


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/27/2022 4:42 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

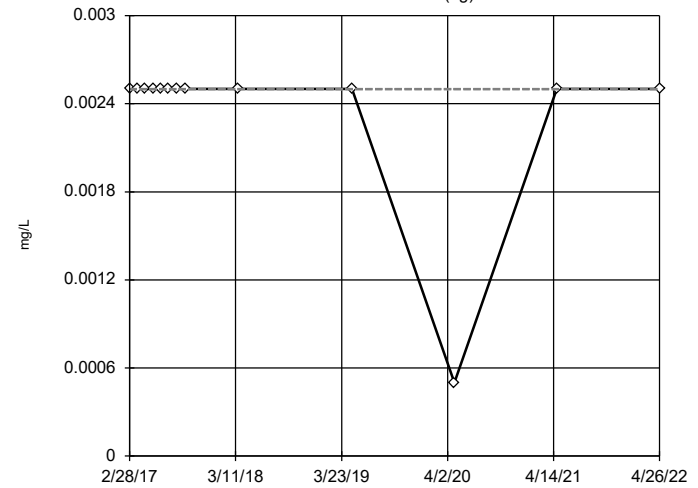


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/27/2022 4:43 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

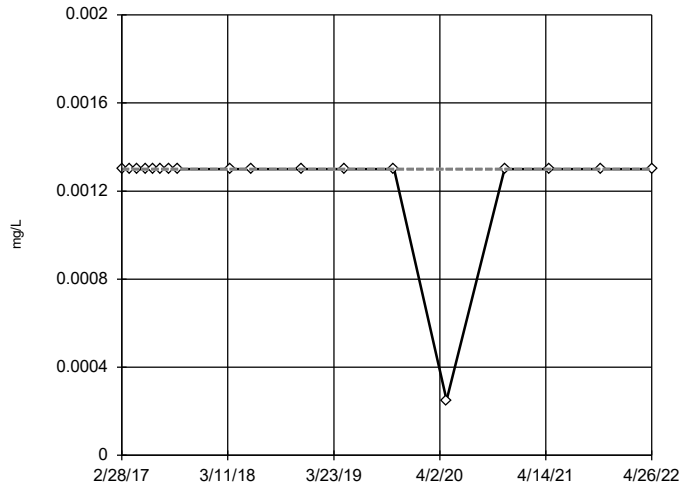


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/27/2022 4:43 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

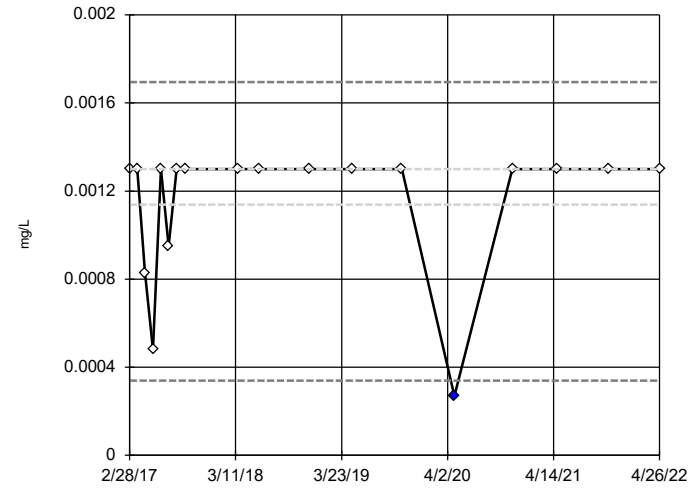


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were x⁴ transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Arsenic Analysis Run 6/27/2022 4:49 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

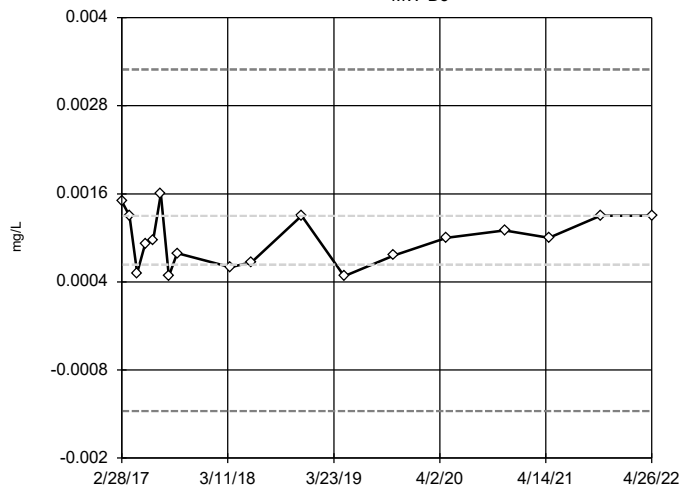


n = 18
 Outlier is drawn as solid.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.001694, low cutoff = 0.0003391, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 6/27/2022 4:49 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

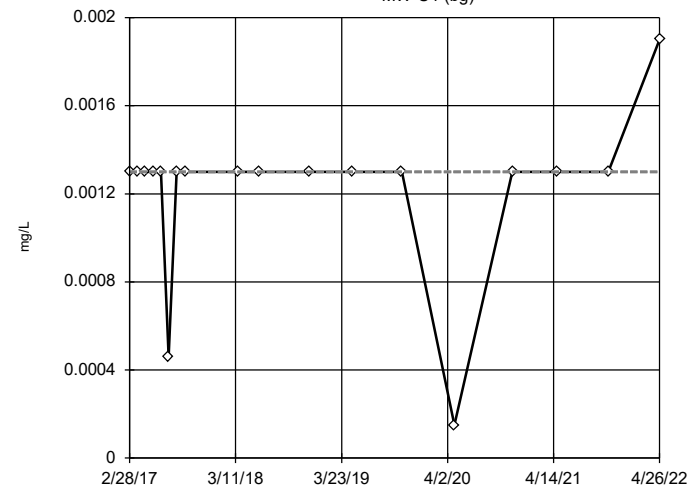


n = 18
 No outliers found.
 Tukey's method selected by user.
 Ladder of Powers transformations did not improve normality; analysis run on raw data.
 High cutoff = 0.003295, low cutoff = -0.00136, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 6/27/2022 4:49 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

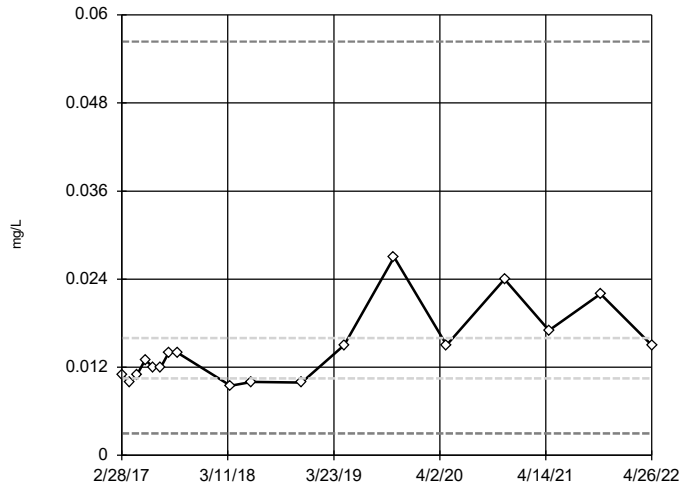
MW-U1 (bg)



n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Arsenic Analysis Run 6/27/2022 4:50 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

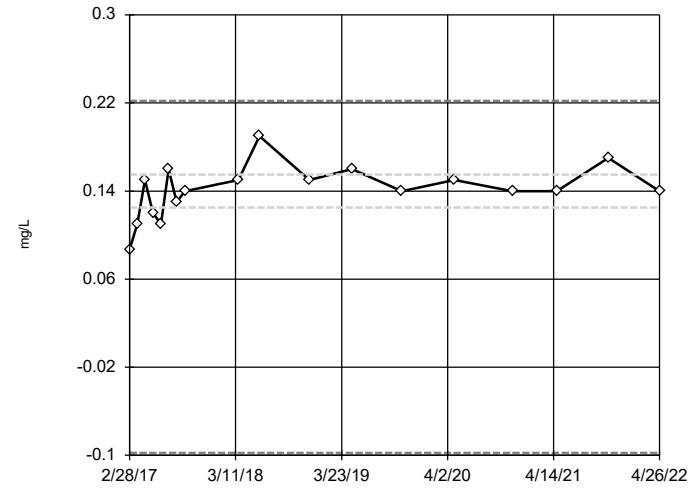
Tukey's Outlier Screening MW-D1



n = 18
No outliers found. Tukey's method selected by user.
Data were natural log transformed to achieve best W statistic (graph shown in original units).
High cutoff = 0.05636, low cutoff = 0.002971, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/27/2022 4:51 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

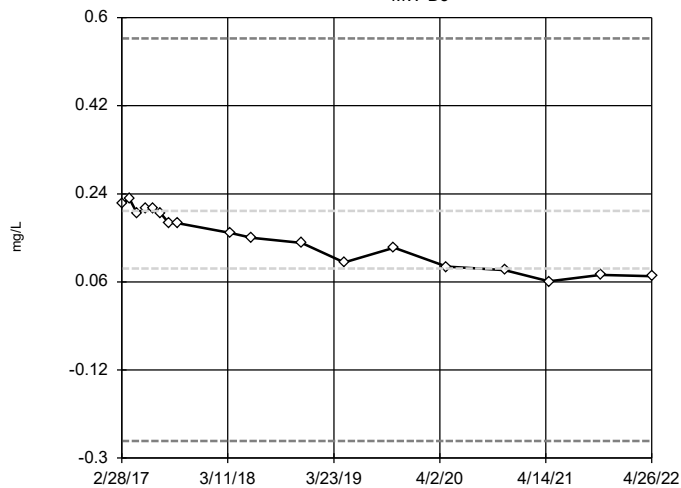
Tukey's Outlier Screening MW-D2



n = 18
No outliers found. Tukey's method selected by user.
Data were square transformed to achieve best W statistic (graph shown in original units).
High cutoff = 0.2219, low cutoff = -0.09772, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/27/2022 4:52 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

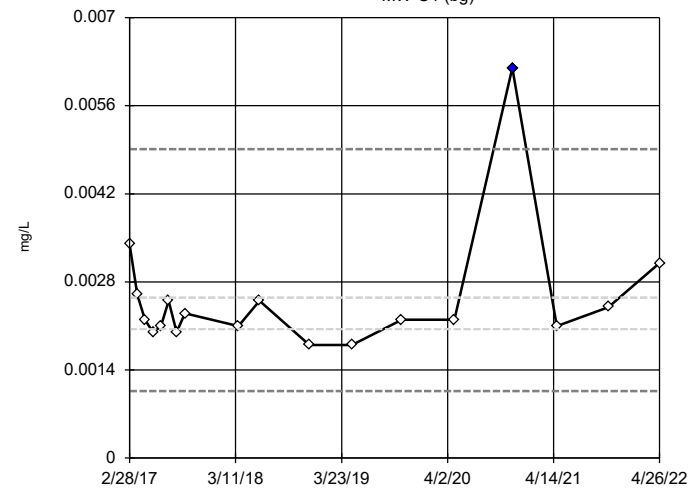
Tukey's Outlier Screening MW-D3



n = 18
No outliers found. Tukey's method selected by user.
Ladder of Powers transformations did not improve normality; analysis run on raw data.
High cutoff = 0.5575, low cutoff = -0.265, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/27/2022 4:52 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening MW-U1 (bg)

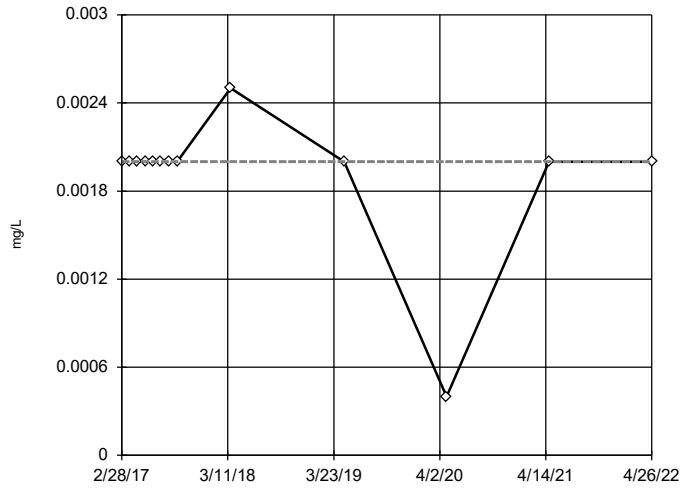


n = 18
Outlier is drawn as solid. Tukey's method selected by user.
Data were natural log transformed to achieve best W statistic (graph shown in original units).
High cutoff = 0.004909, low cutoff = 0.001064, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/27/2022 4:52 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

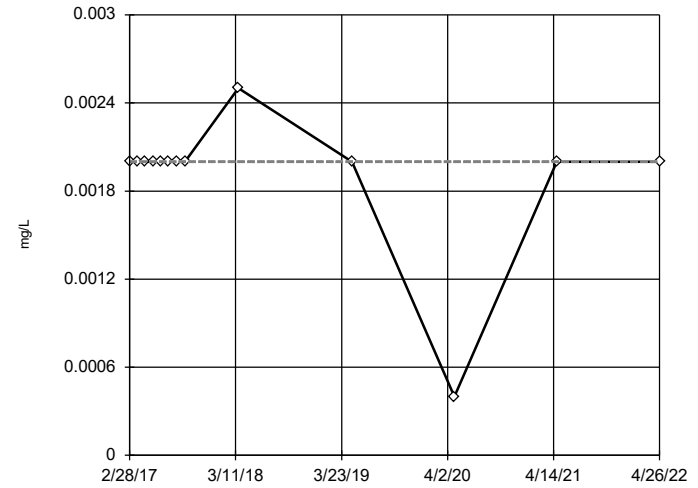


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 6/27/2022 4:54 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

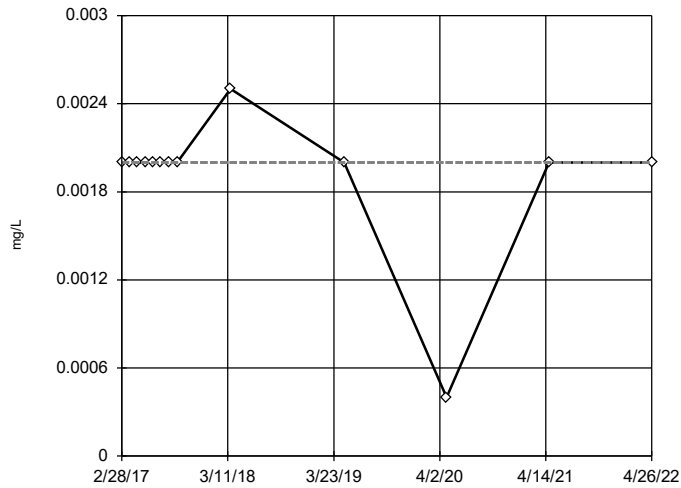


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 6/27/2022 4:54 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

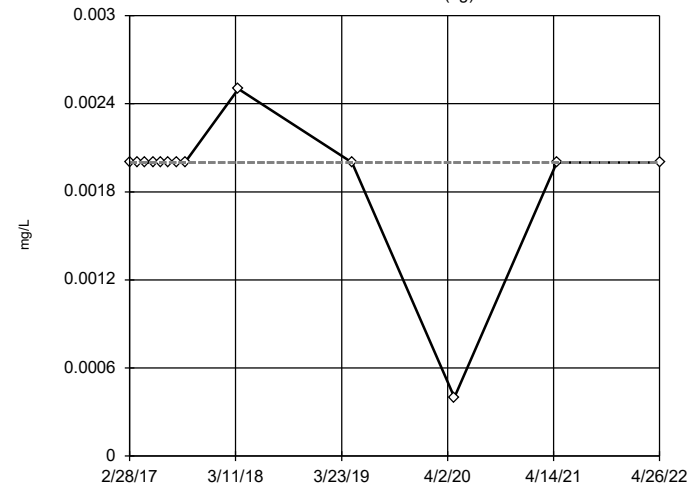


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 6/27/2022 4:54 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

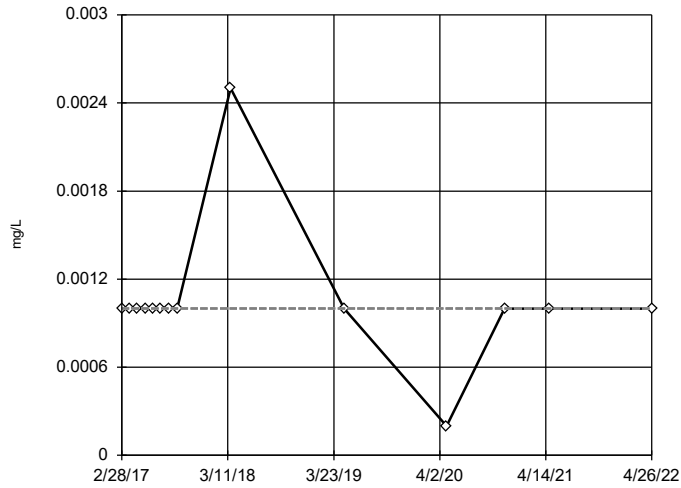


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 6/27/2022 4:54 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1



n = 14

No outliers found. Tukey's method selected by user.

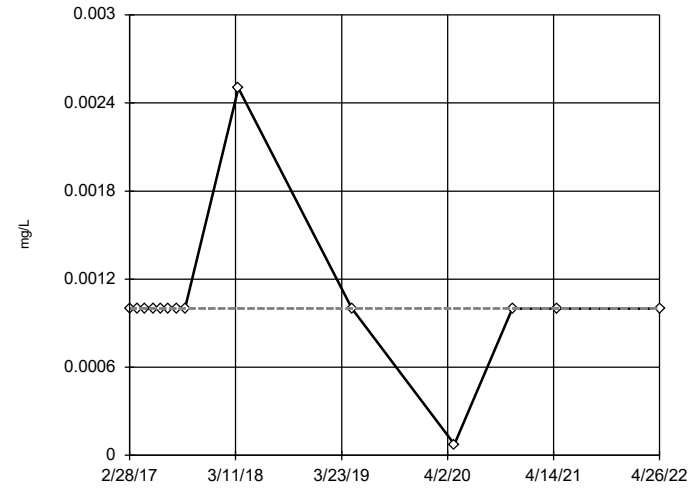
Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 6/27/2022 4:55 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2



n = 14

No outliers found. Tukey's method selected by user.

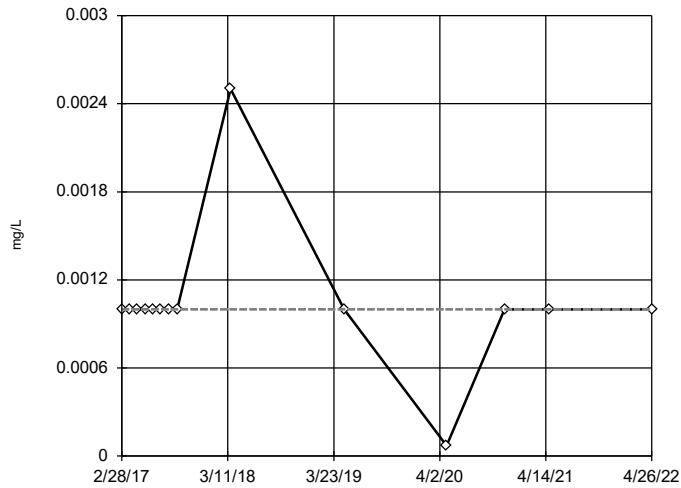
Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 6/27/2022 4:55 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3



n = 14

No outliers found. Tukey's method selected by user.

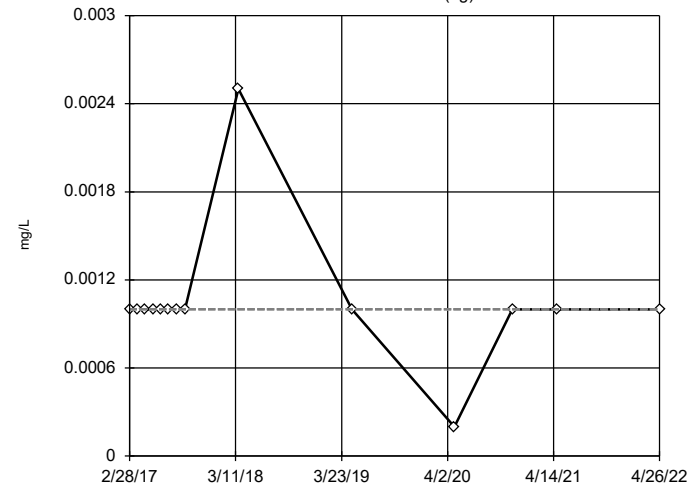
Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 6/27/2022 4:55 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)



n = 14

No outliers found. Tukey's method selected by user.

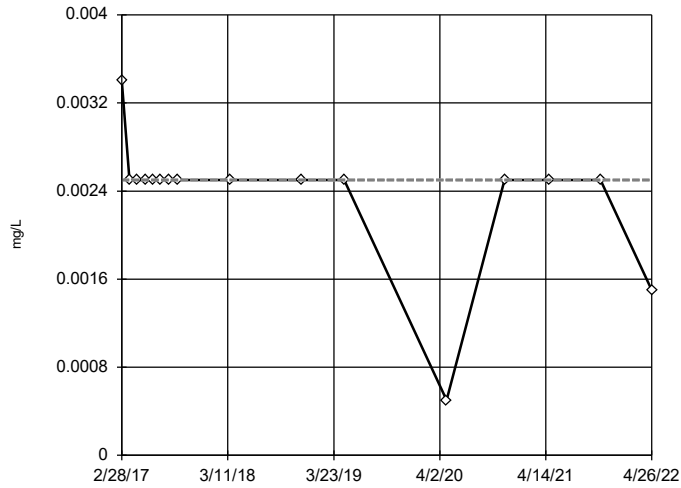
Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 6/27/2022 4:55 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

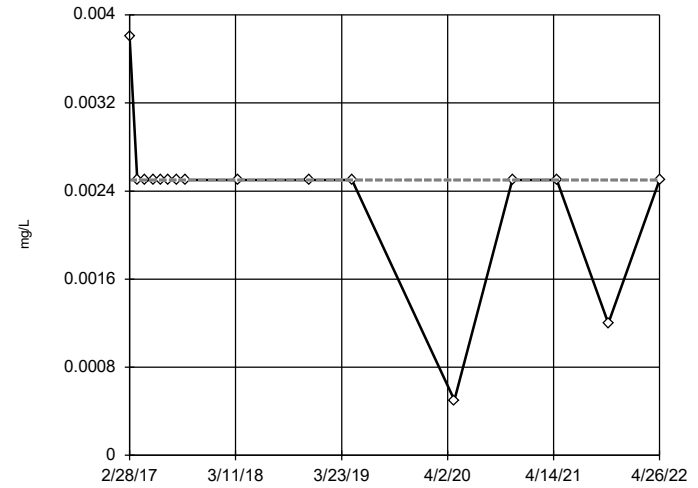


n = 16
 No outliers found. Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Chromium Analysis Run 6/27/2022 4:56 PM View: Sanitas_Statistics Sampling Events 1 thro
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

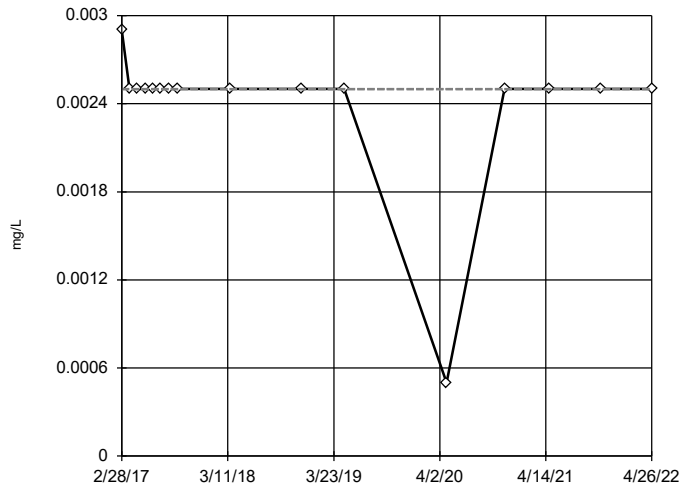


n = 16
 No outliers found. Tukey's method selected by user.
 Ladder of Powers transformations did not improve normality; analysis run on raw data.
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Chromium Analysis Run 6/27/2022 4:56 PM View: Sanitas_Statistics Sampling Events 1 thro
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

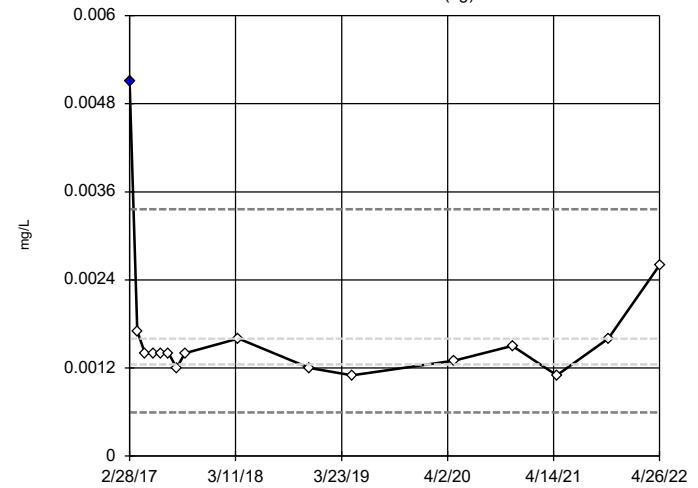


n = 16
 No outliers found. Tukey's method selected by user.
 Data were x*5 transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Chromium Analysis Run 6/27/2022 4:56 PM View: Sanitas_Statistics Sampling Events 1 thro
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

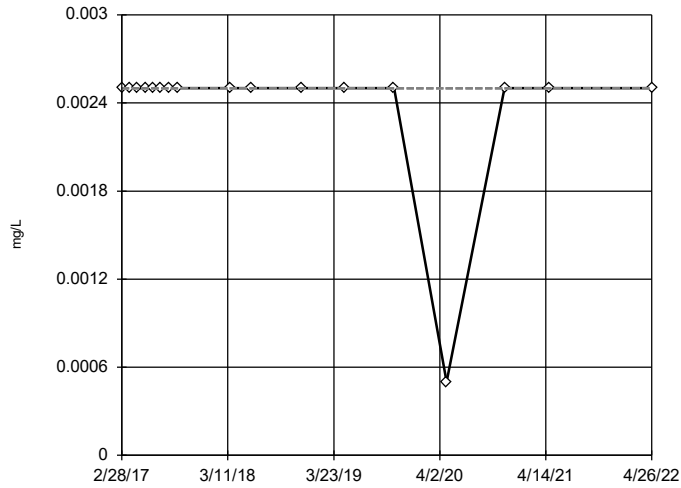


n = 16
 Outlier is drawn as solid.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.003364, low cutoff = 0.0005941, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 6/27/2022 4:56 PM View: Sanitas_Statistics Sampling Events 1 thro
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

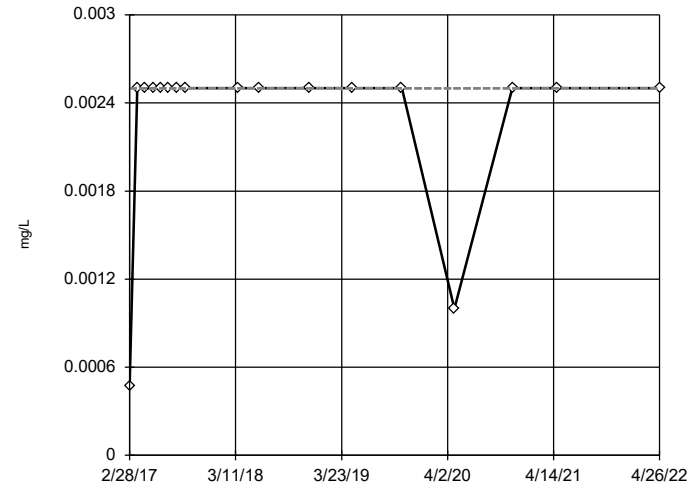


n = 17
 No outliers found. Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cobalt Analysis Run 6/27/2022 4:58 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

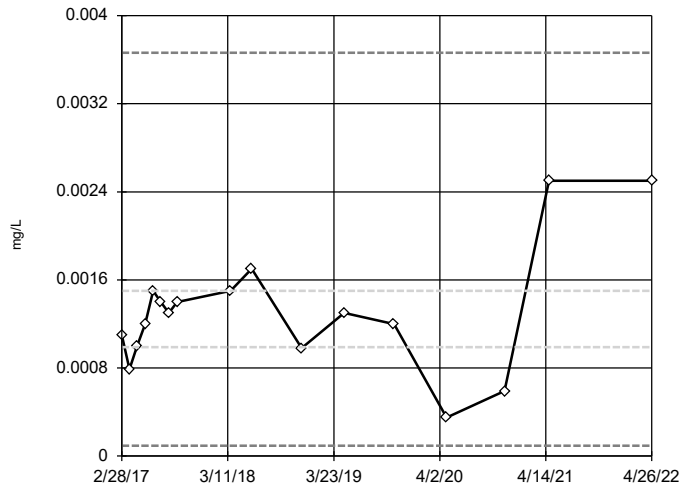


n = 17
 No outliers found. Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cobalt Analysis Run 6/27/2022 4:59 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

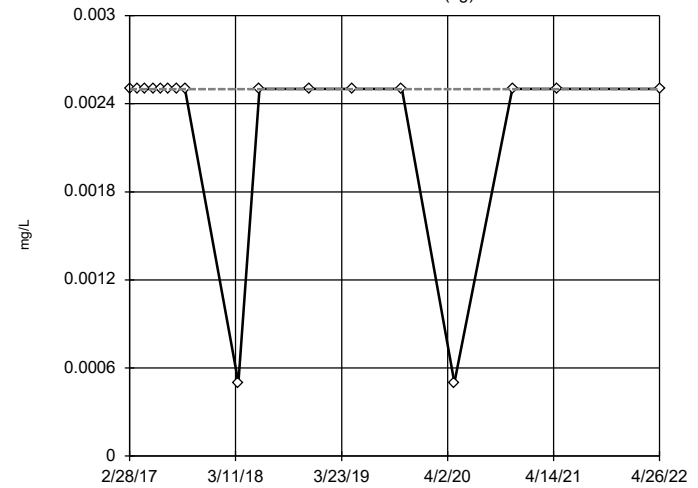


n = 17
 No outliers found. Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.003664, low cutoff = 0.0009343, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 6/27/2022 4:59 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

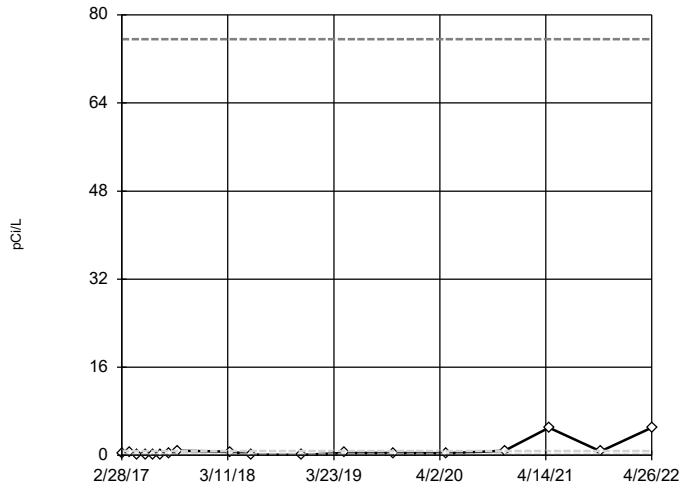


n = 17
 No outliers found. Tukey's method selected by user.
 Data were x^6 transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cobalt Analysis Run 6/27/2022 4:59 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

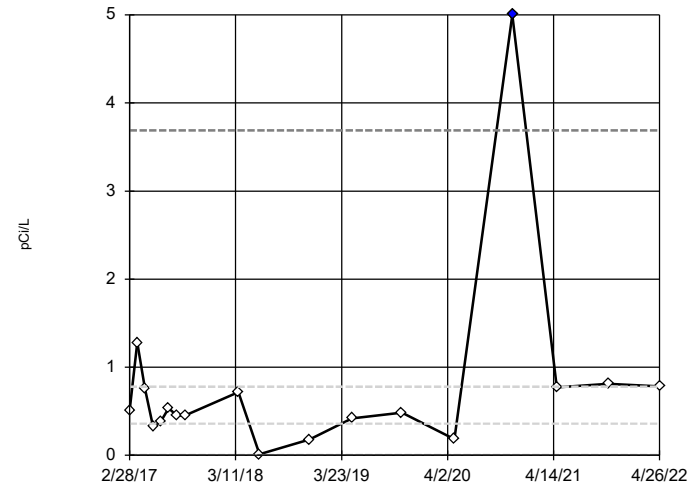


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 75.58, low cutoff = 0.001762, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 5:03 PM View: Sanitas_Statistics Sam
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

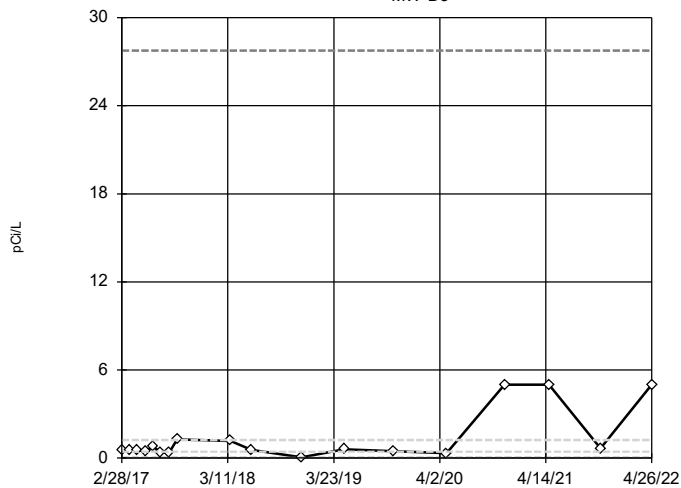


n = 18
 Outlier is drawn as solid. Tukey's method selected by user.
 Data were cube root transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 3.689, low cutoff = 0.0006319, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 5:03 PM View: Sanitas_Statistics Sam
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

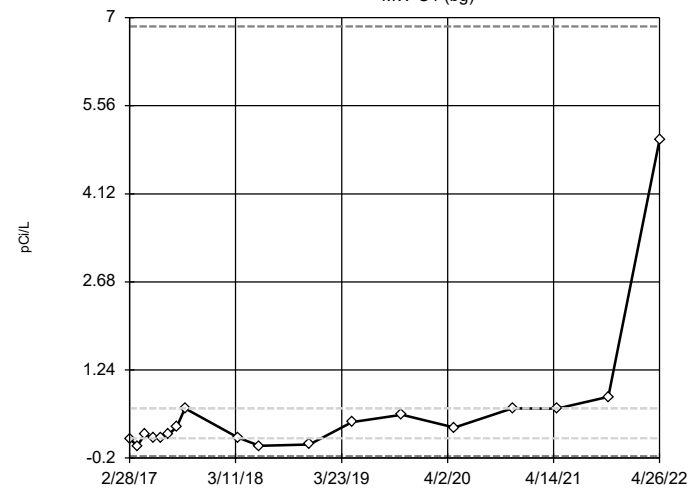


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 27.75, low cutoff = 0.01906, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 5:04 PM View: Sanitas_Statistics Sam
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

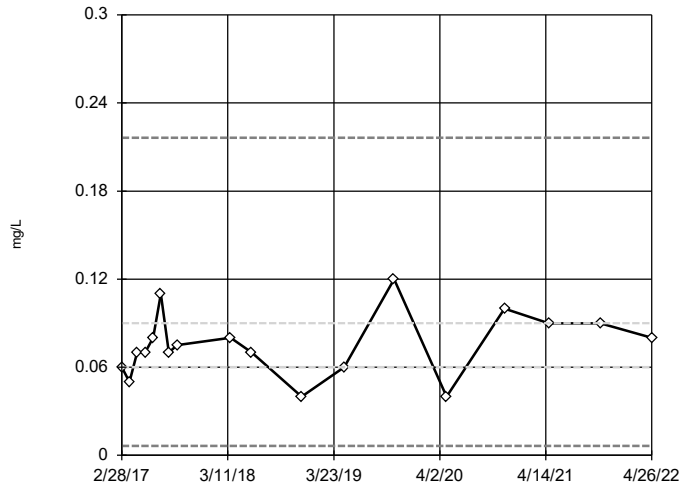


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were cube root transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 6.856, low cutoff = -0.1686, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 5:04 PM View: Sanitas_Statistics Sam
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

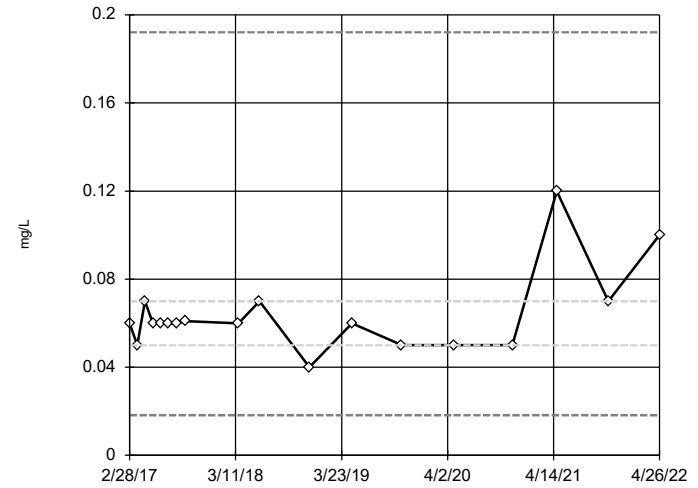


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.2164, low cutoff = 0.006367, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 6/27/2022 5:05 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

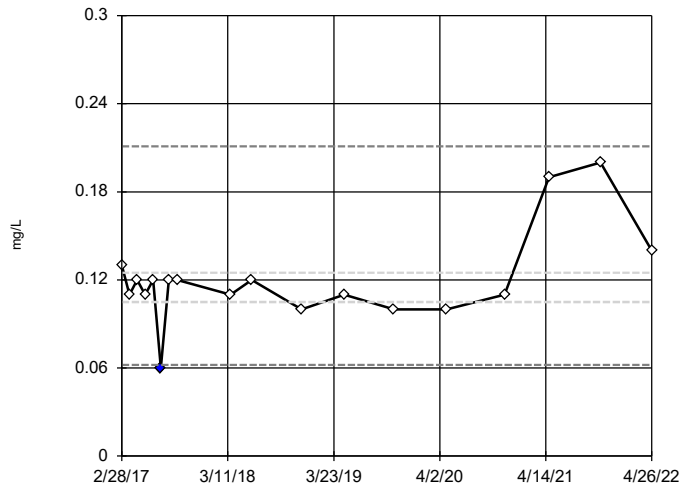


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.1921, low cutoff = 0.01822, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 6/27/2022 5:06 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

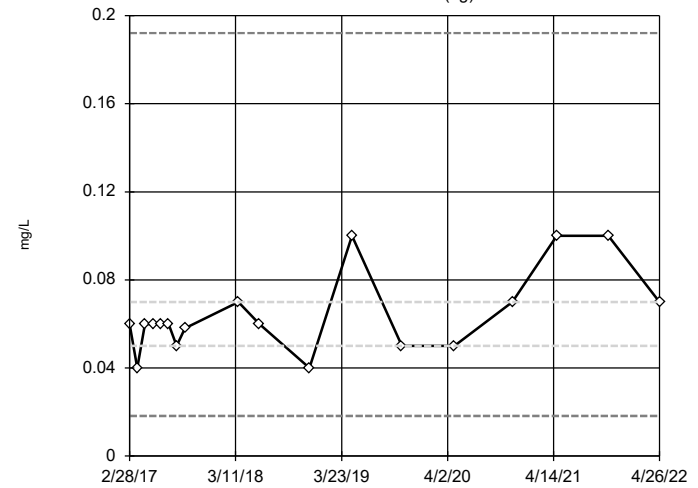


n = 18
 Outlier is drawn as solid.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.2109, low cutoff = 0.0621, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 6/27/2022 5:06 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

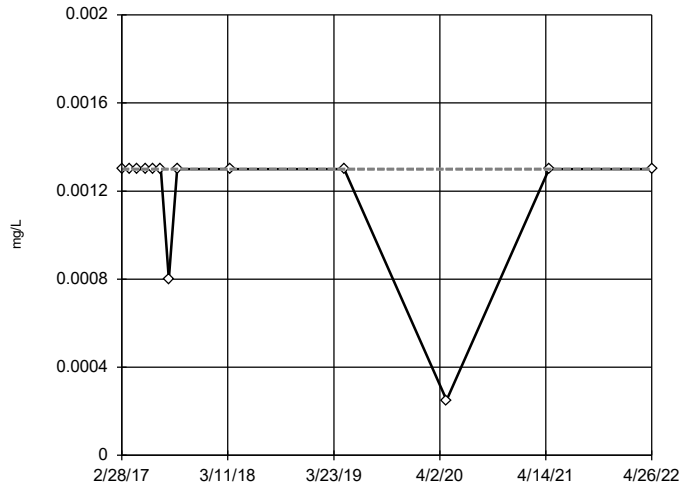


n = 18
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.1921, low cutoff = 0.01822, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 6/27/2022 5:06 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

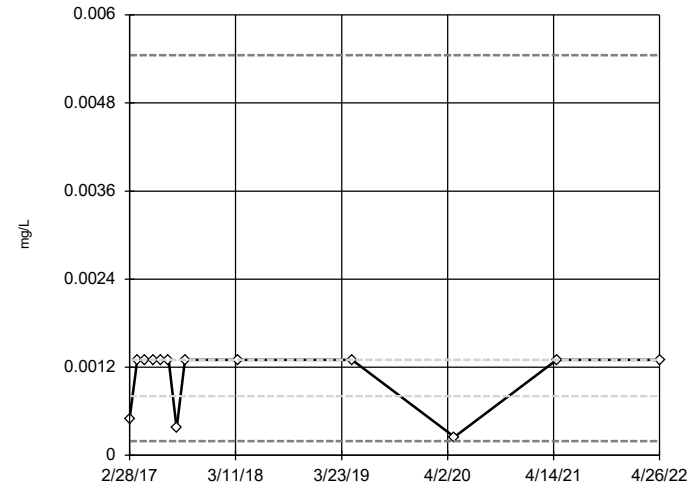


n = 13
 No outliers found. Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 6/27/2022 5:07 PM View: Sanitas_Statistics Sampling Events 1 through 1
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

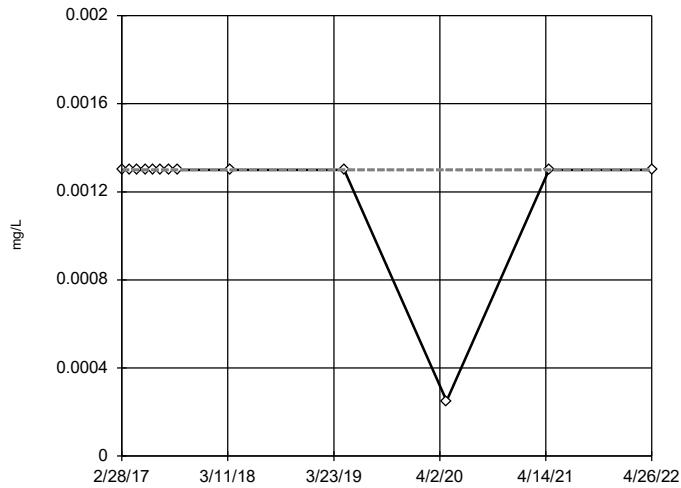


n = 13
 No outliers found. Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.00545, low cutoff = 0.0001923, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 6/27/2022 5:07 PM View: Sanitas_Statistics Sampling Events 1 through 1
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

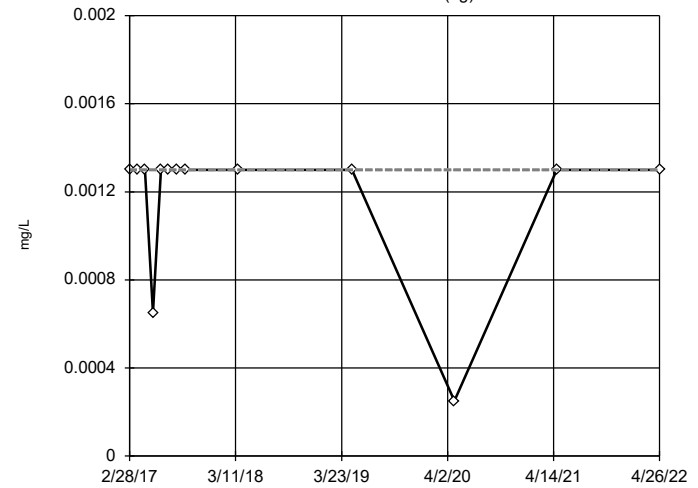


n = 13
 No outliers found. Tukey's method selected by user.
 Data were cube transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 6/27/2022 5:07 PM View: Sanitas_Statistics Sampling Events 1 through 1
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

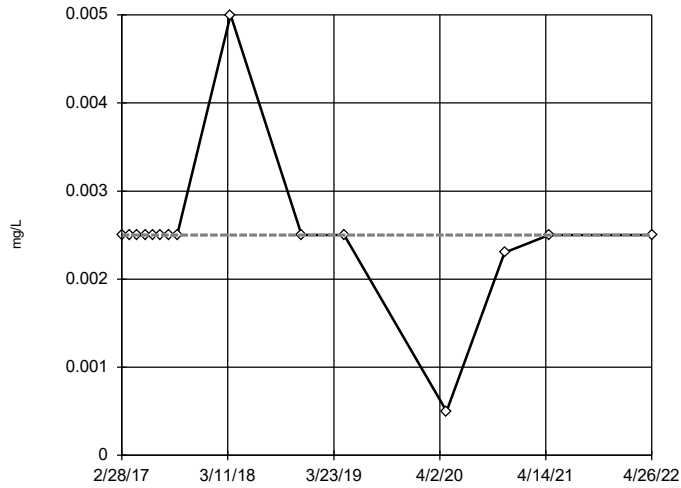


n = 13
 No outliers found. Tukey's method selected by user.
 Ladder of Powers transformations did not improve normality; analysis run on raw data.
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 6/27/2022 5:07 PM View: Sanitas_Statistics Sampling Events 1 through 1
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

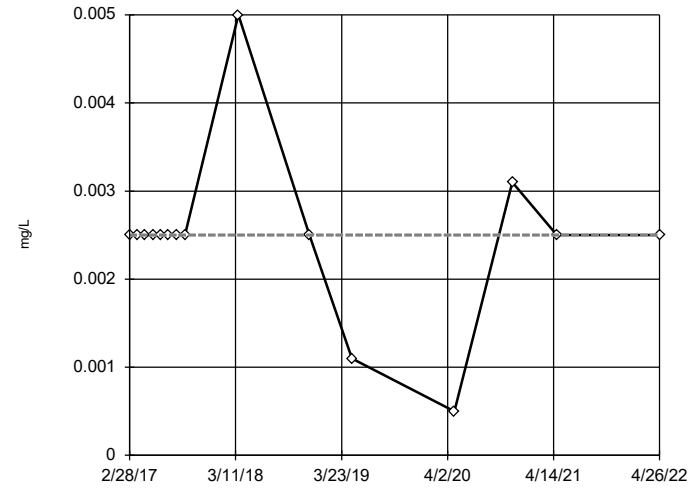


n = 15
 No outliers found.
 Tukey's method selected by user.
 Ladder of Powers transformations did not improve normality; analysis run on raw data.
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/27/2022 5:07 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

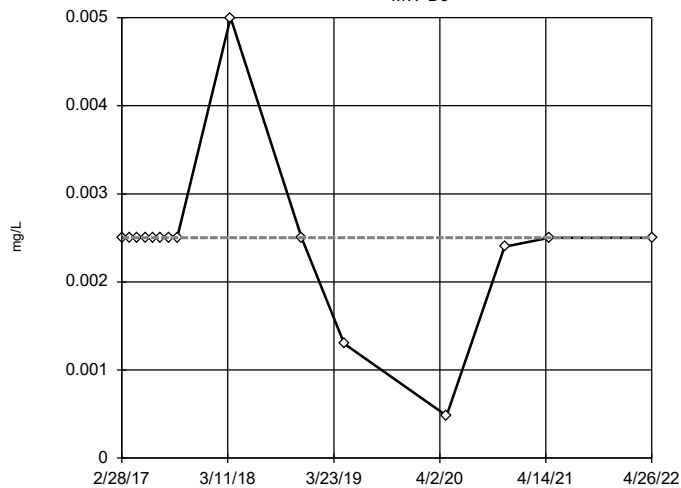


n = 15
 No outliers found.
 Tukey's method selected by user.
 Ladder of Powers transformations did not improve normality; analysis run on raw data.
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/27/2022 5:08 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

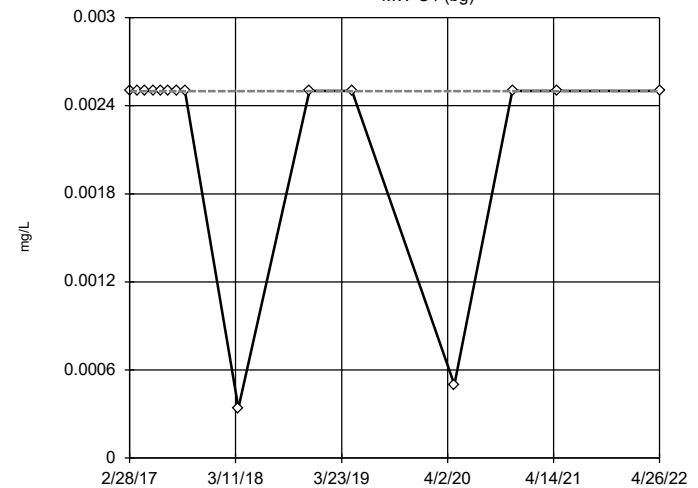


n = 15
 No outliers found.
 Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/27/2022 5:08 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

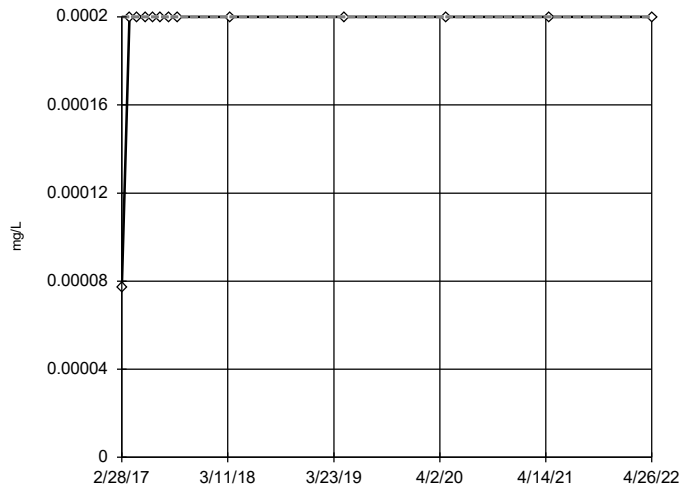


n = 15
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/27/2022 5:08 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

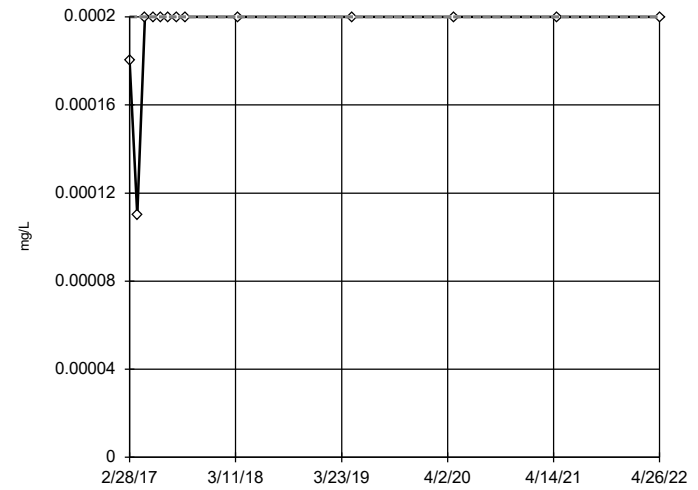


n = 13
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 6/27/2022 5:09 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

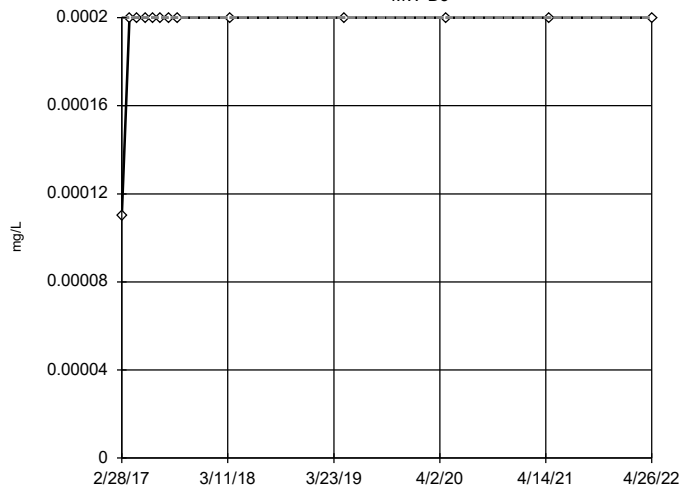


n = 13
 No outliers found.
 Tukey's method selected by user.
 Data were x⁴ transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 6/27/2022 5:09 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

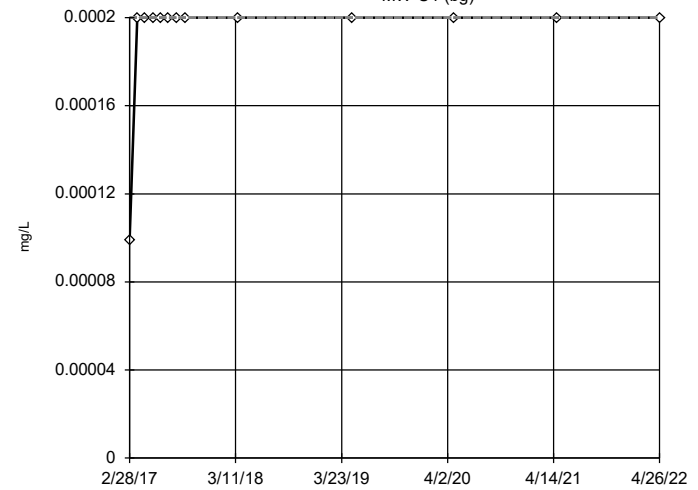


n = 13
 No outliers found.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 6/27/2022 5:09 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

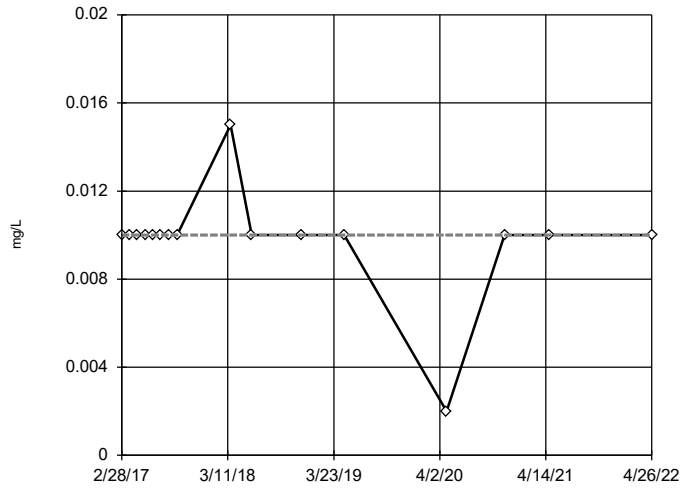


n = 13
 No outliers found.
 Tukey's method selected by user.
 Data were cube root transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 6/27/2022 5:09 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

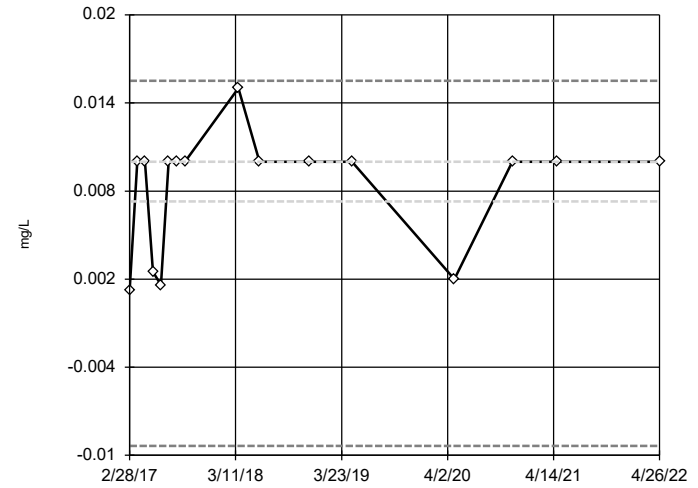


n = 16
 No outliers found.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 6/27/2022 5:10 PM View: Sanitas_Statistics Sampling Events 1 th
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

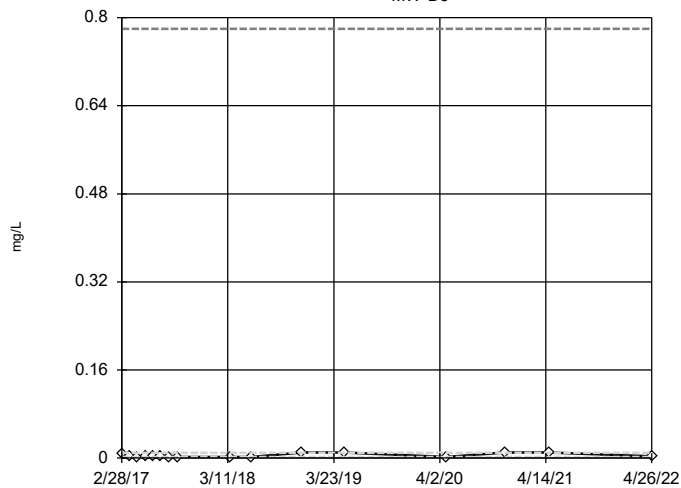


n = 16
 No outliers found.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.01551, low cutoff = -0.009354, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 6/27/2022 5:10 PM View: Sanitas_Statistics Sampling Events 1 th
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

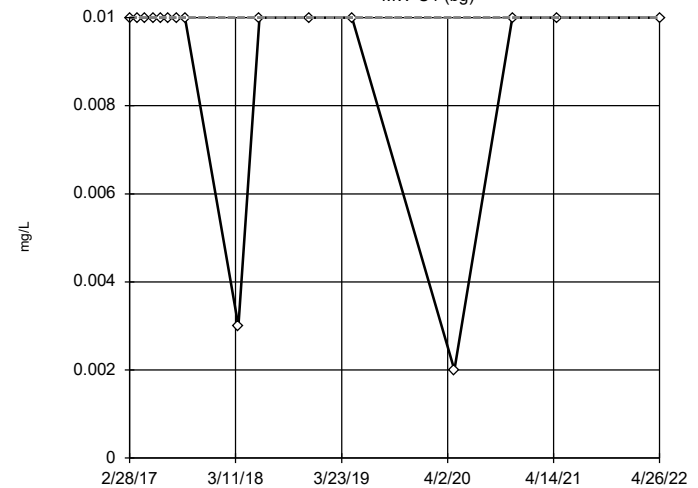


n = 16
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.7798, low cutoff = 0.00002586, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 6/27/2022 5:10 PM View: Sanitas_Statistics Sampling Events 1 th
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

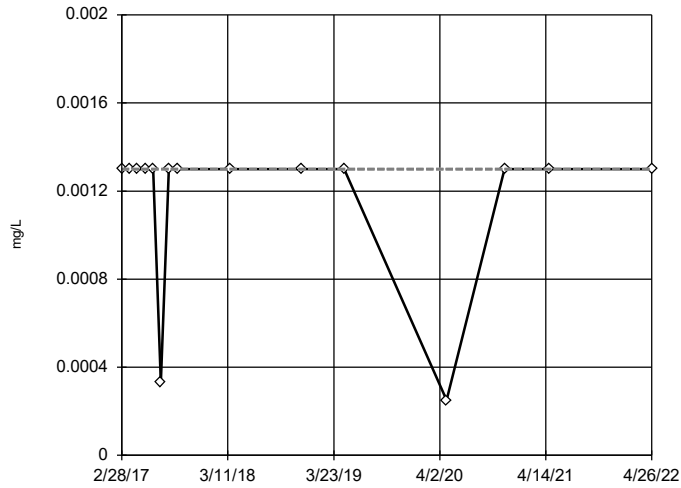


n = 16
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 6/27/2022 5:10 PM View: Sanitas_Statistics Sampling Events 1 th
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

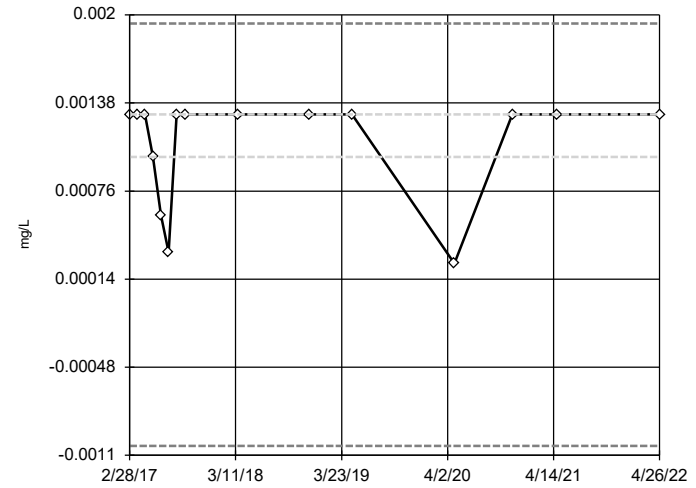


n = 15
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 6/27/2022 5:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

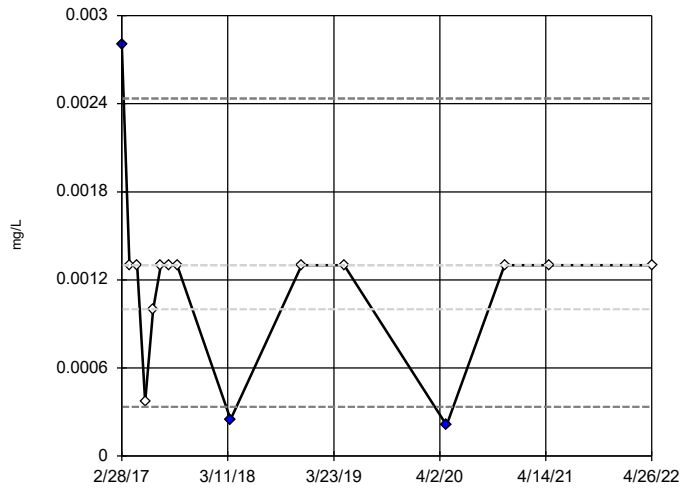


n = 15
 No outliers found.
 Tukey's method selected by user.
 Data were square transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.001939, low cutoff = -0.001034, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/27/2022 5:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

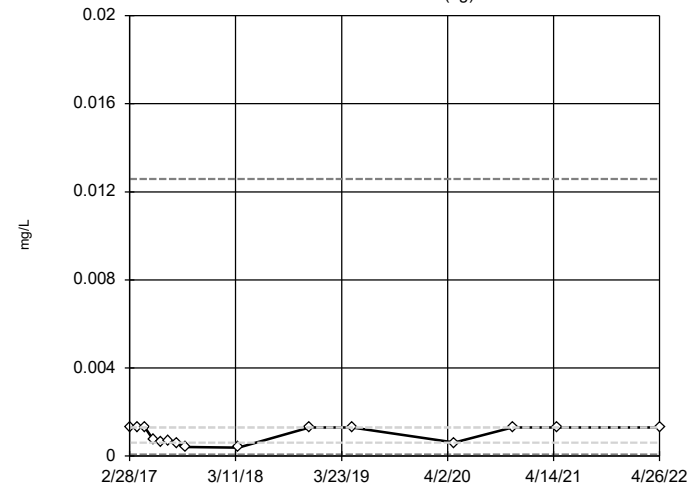


n = 15
 Outliers are drawn as solid.
 Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.002436, low cutoff = 0.0003358, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/27/2022 5:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

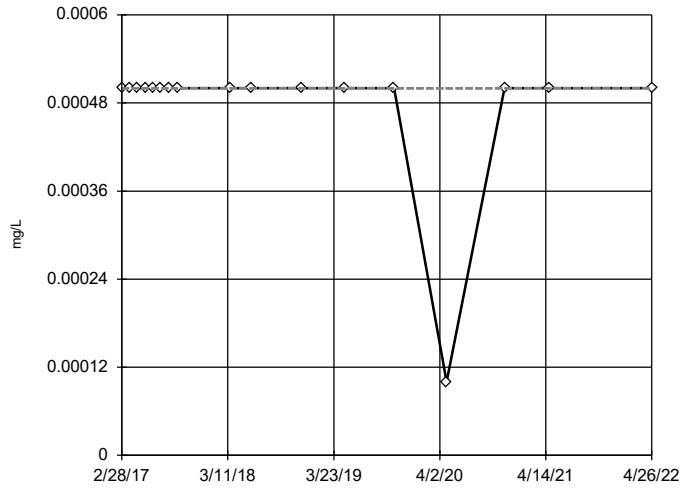


n = 15
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.01258, low cutoff = 0.00006302, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/27/2022 5:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D1

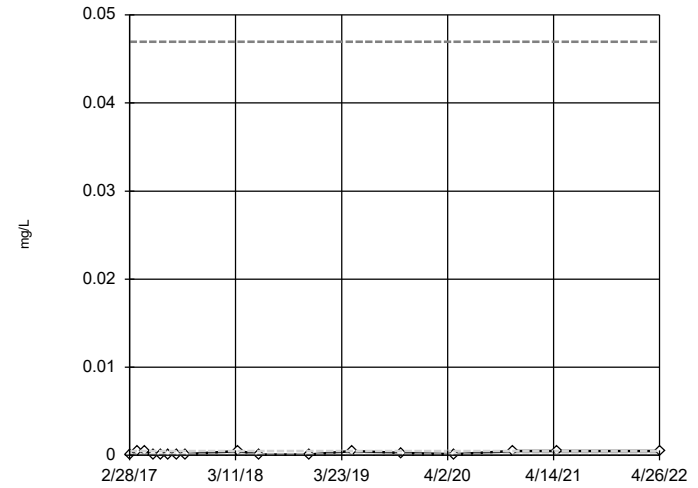


n = 17
 No outliers found.
 Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Thallium Analysis Run 6/27/2022 5:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D2

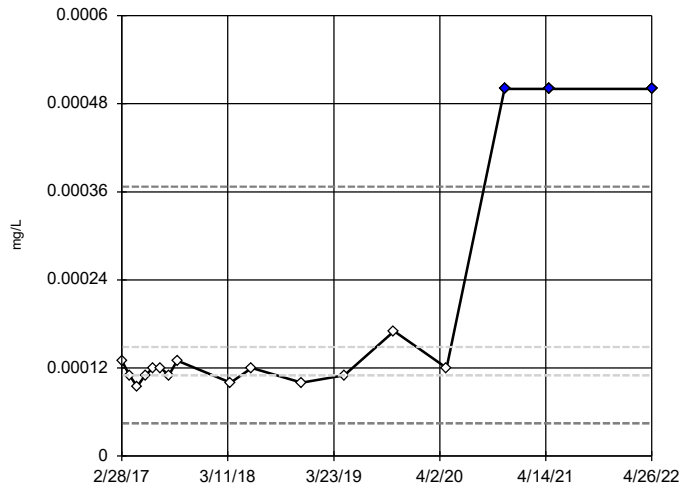


n = 17
 No outliers found.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.04696, low cutoff = 0.000001171, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 6/27/2022 5:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-D3

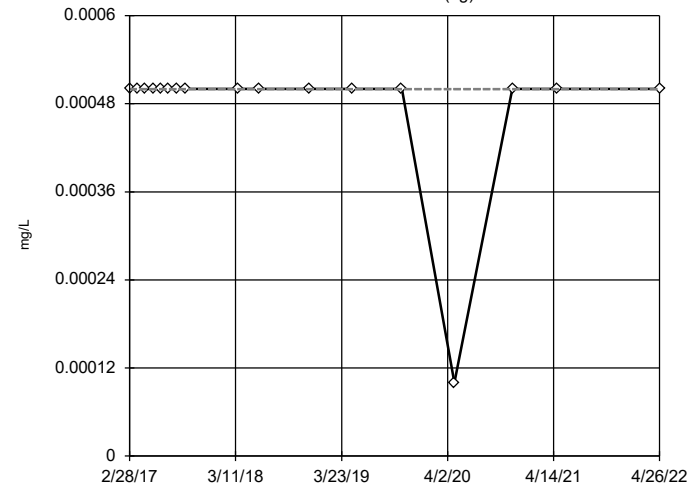


n = 17
 Outliers are drawn as solid.
 Tukey's method selected by user.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.0003669, low cutoff = 0.00004456, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 6/27/2022 5:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening

MW-U1 (bg)

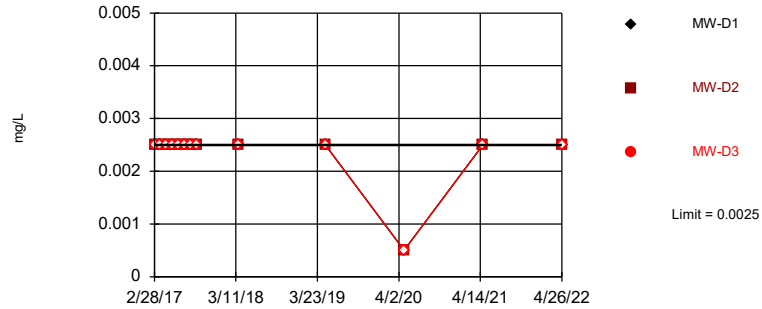


n = 17
 No outliers found.
 Tukey's method selected by user.
 Data were square root transformed to achieve best W statistic (graph shown in original units).
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Thallium Analysis Run 6/27/2022 5:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

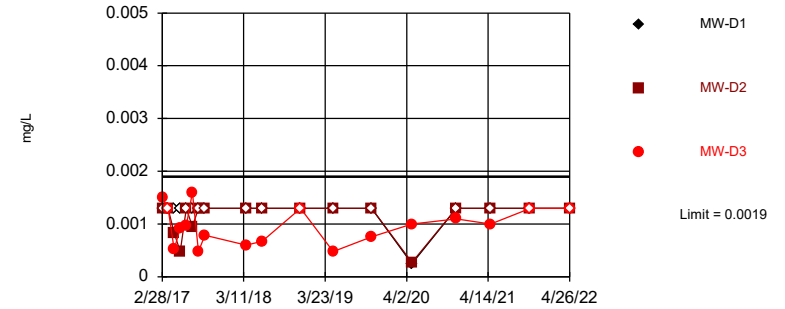


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 70.12% coverage at alpha=0.01; 79.49% coverage at alpha=0.05; 94.73% coverage at alpha=0.5. Report alpha = 0.5133.

Constituent: Antimony Analysis Run 6/27/2022 5:16 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

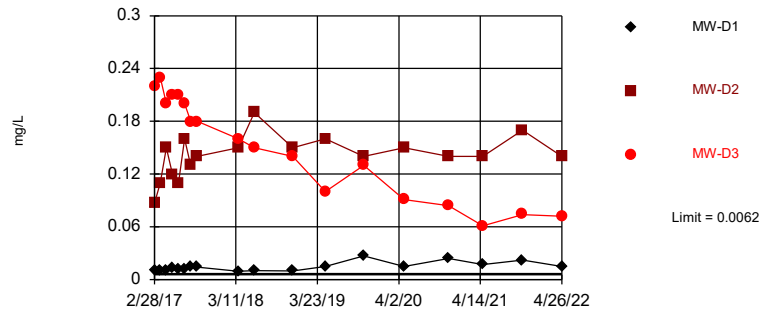


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. Limit is highest of 18 background values. 77.78% NDs. 77.54% coverage at alpha=0.01; 84.57% coverage at alpha=0.05; 96.29% coverage at alpha=0.5. Report alpha = 0.3972.

Constituent: Arsenic Analysis Run 6/27/2022 5:18 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D1, MW-D2, MW-D3

Tolerance Limit
Interwell Non-parametric

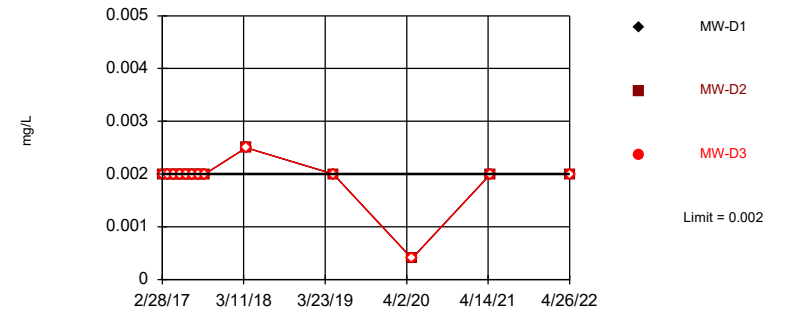


Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Most recent observation is compared with limit. Limit is highest of 18 background values. 77.54% coverage at alpha=0.01; 84.57% coverage at alpha=0.05; 96.29% coverage at alpha=0.5. Report alpha = 0.3972.

Constituent: Barium Analysis Run 6/27/2022 5:19 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

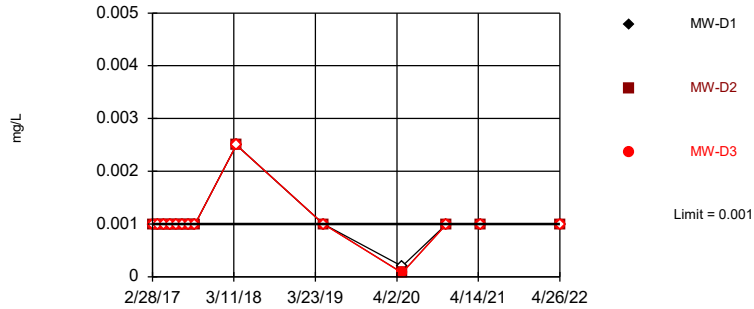


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 70.12% coverage at alpha=0.01; 79.49% coverage at alpha=0.05; 94.73% coverage at alpha=0.5. Report alpha = 0.5133.

Constituent: Beryllium Analysis Run 6/27/2022 5:19 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

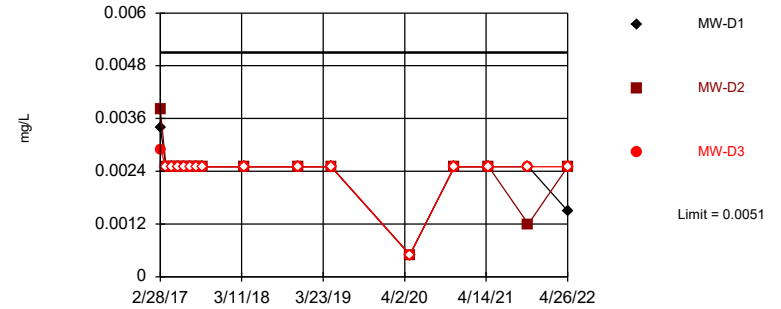


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 72.07% coverage at alpha=0.01; 80.66% coverage at alpha=0.05; 95.12% coverage at alpha=0.5. Report alpha = 0.4877.

Constituent: Cadmium Analysis Run 6/27/2022 5:20 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

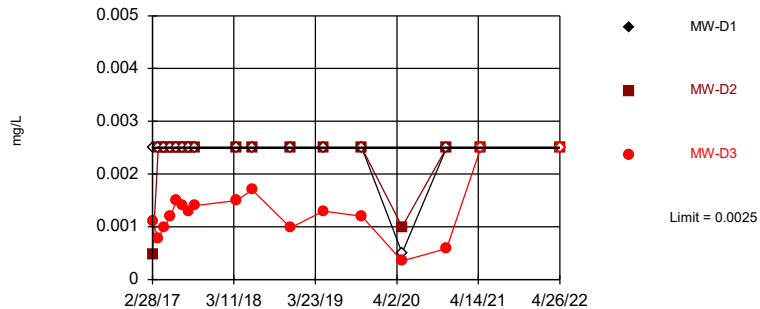


Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Most recent observation is compared with limit. Limit is highest of 16 background values. 74.8% coverage at alpha=0.01; 83.01% coverage at alpha=0.05; 95.9% coverage at alpha=0.5. Report alpha = 0.4401.

Constituent: Chromium Analysis Run 6/27/2022 5:20 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

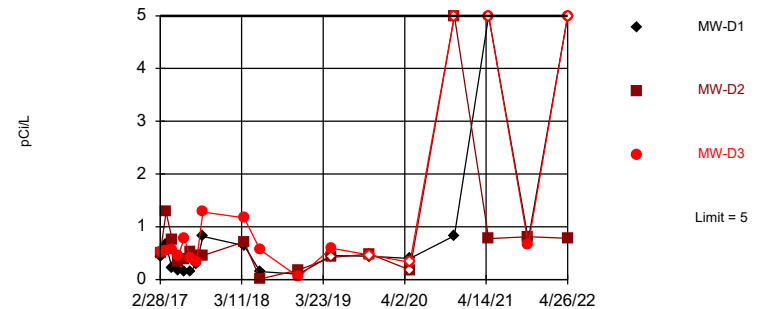


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 76.37% coverage at alpha=0.01; 83.79% coverage at alpha=0.05; 95.9% coverage at alpha=0.5. Report alpha = 0.4181.

Constituent: Cobalt Analysis Run 6/27/2022 5:20 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

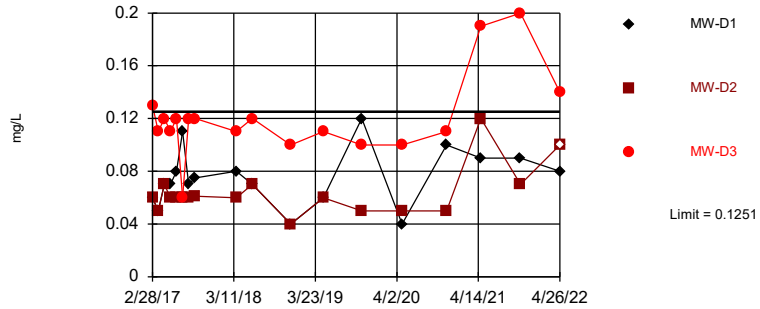


Non-parametric test used in lieu of parametric tolerance limit because the data required both a power transformation and Cohen's adjustment. Most recent observation is compared with limit. Limit is highest of 18 background values. 22.22% NDs. 77.54% coverage at alpha=0.01; 84.57% coverage at alpha=0.05; 96.29% coverage at alpha=0.5. Report alpha = 0.3972.

Constituent: Combined Radium 226 + 228 Analysis Run 6/27/2022 5:21 PM View: Sanitas_Statistics Sam
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Exceeds Limit: MW-D3

Tolerance Limit
Interwell Parametric

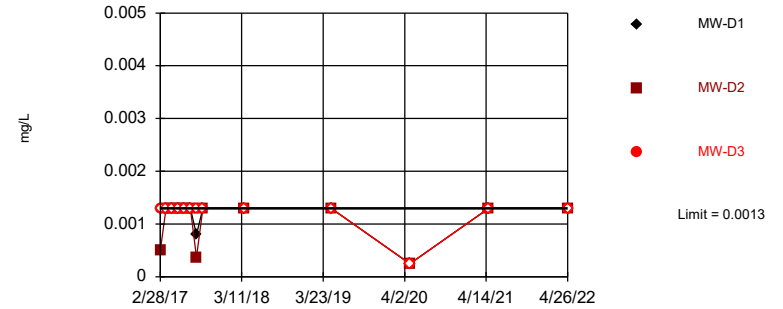


95% coverage. Most recent observation is compared with limit. Background Data Summary (based on square root transformation): Mean=0.2513, Std. Dev.=0.03522, n=18, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8756, critical = 0.858. Report alpha = 0.01.

Constituent: Fluoride Analysis Run 6/27/2022 5:22 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

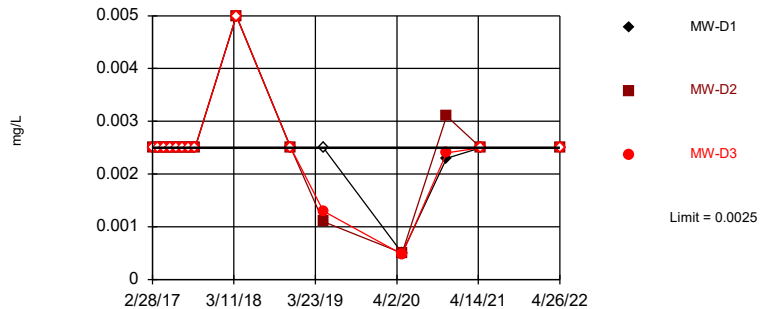


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. Limit is highest of 13 background values. 92.31% NDs. 70.12% coverage at alpha=0.01; 79.49% coverage at alpha=0.05; 94.73% coverage at alpha=0.5. Report alpha = 0.5133.

Constituent: Lead Analysis Run 6/27/2022 5:22 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

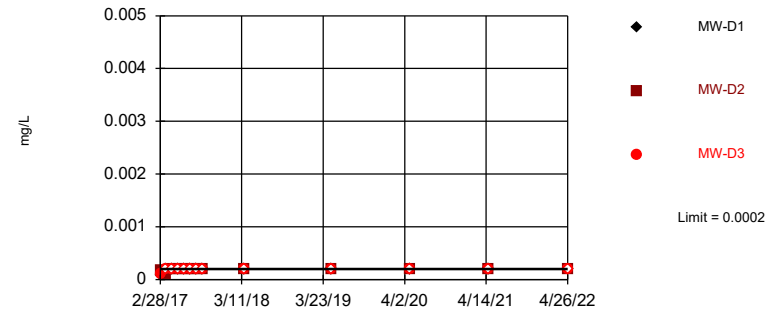


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. Limit is highest of 15 background values. 93.33% NDs. 73.63% coverage at alpha=0.01; 81.84% coverage at alpha=0.05; 95.51% coverage at alpha=0.5. Report alpha = 0.4633.

Constituent: Lithium Analysis Run 6/27/2022 5:22 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

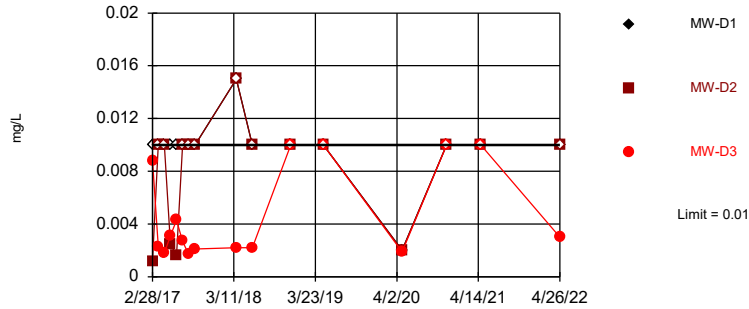


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. Limit is highest of 13 background values. 92.31% NDs. 70.12% coverage at alpha=0.01; 79.49% coverage at alpha=0.05; 94.73% coverage at alpha=0.5. Report alpha = 0.5133.

Constituent: Mercury Analysis Run 6/27/2022 5:22 PM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

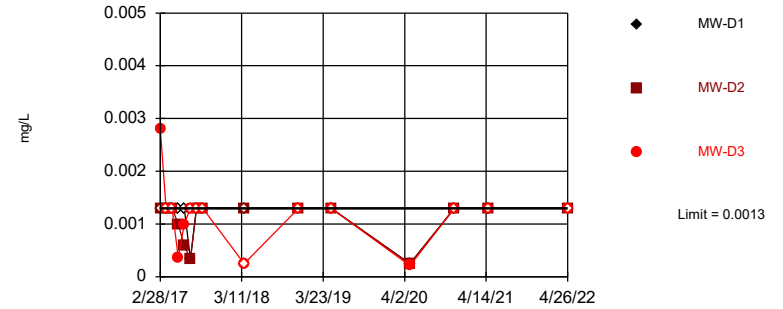


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 74.8% coverage at alpha=0.01; 83.01% coverage at alpha=0.05; 95.9% coverage at alpha=0.5. Report alpha = 0.4401.

Constituent: Molybdenum Analysis Run 6/27/2022 5:23 PM View: Sanitas_Statistics Sampling Events 1 th
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric

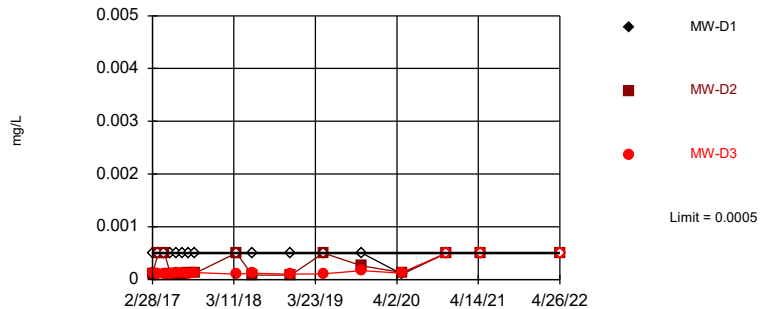


Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Most recent observation is compared with limit. Limit is highest of 15 background values. 53.33% NDs. 73.63% coverage at alpha=0.01; 81.84% coverage at alpha=0.05; 95.51% coverage at alpha=0.5. Report alpha = 0.4633.

Constituent: Selenium Analysis Run 6/27/2022 5:23 PM View: Sanitas_Statistics Sampling Events 1 throu
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Within Limit

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Most recent observation is compared with limit. All background values were censored; limit is most recent reporting limit. 76.37% coverage at alpha=0.01; 83.79% coverage at alpha=0.05; 95.9% coverage at alpha=0.5. Report alpha = 0.4181.

Constituent: Thallium Analysis Run 6/27/2022 5:24 PM View: Sanitas_Statistics Sampling Events 1 throug
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

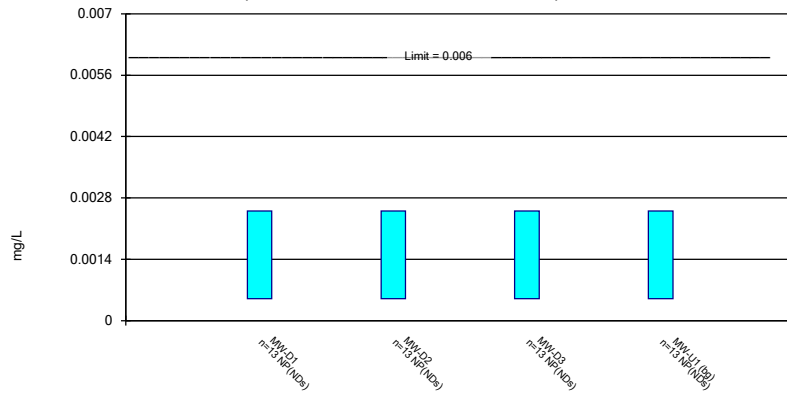
Tolerance Limit

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10 Printed 6/29/2022, 2:10 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.0025	n/a	n/a	n/a	13	100	n/a	0.5133	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0019	n/a	n/a	n/a	18	77.78	n/a	0.3972	NP Inter(NDs)
Barium (mg/L)	n/a	0.0062	n/a	n/a	n/a	18	0	n/a	0.3972	NP Inter(normal...
Beryllium (mg/L)	n/a	0.002	n/a	n/a	n/a	13	100	n/a	0.5133	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.001	n/a	n/a	n/a	14	100	n/a	0.4877	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0051	n/a	n/a	n/a	16	0	n/a	0.4401	NP Inter(normal...
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	17	100	n/a	0.4181	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	5	n/a	n/a	n/a	18	22.22	n/a	0.3972	NP Inter(Cohens...
Fluoride (mg/L)	n/a	0.1251	n/a	n/a	n/a	18	11.11	sqrt(x)	0.01	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	13	92.31	n/a	0.5133	NP Inter(NDs)
Lithium (mg/L)	n/a	0.0025	n/a	n/a	n/a	15	93.33	n/a	0.4633	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	13	92.31	n/a	0.5133	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	16	100	n/a	0.4401	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	n/a	n/a	n/a	15	53.33	n/a	0.4633	NP Inter(normal...
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	17	100	n/a	0.4181	NP Inter(NDs)

Non-Parametric Confidence Interval

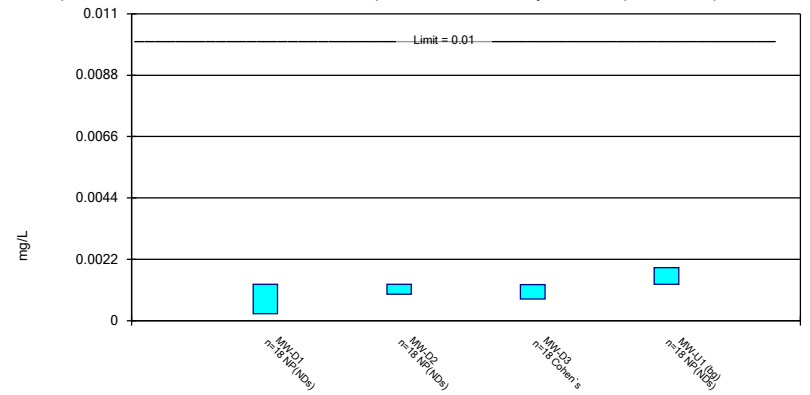
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 6/27/2022 6:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Parametric and Non-Parametric (NP) Confidence Interval

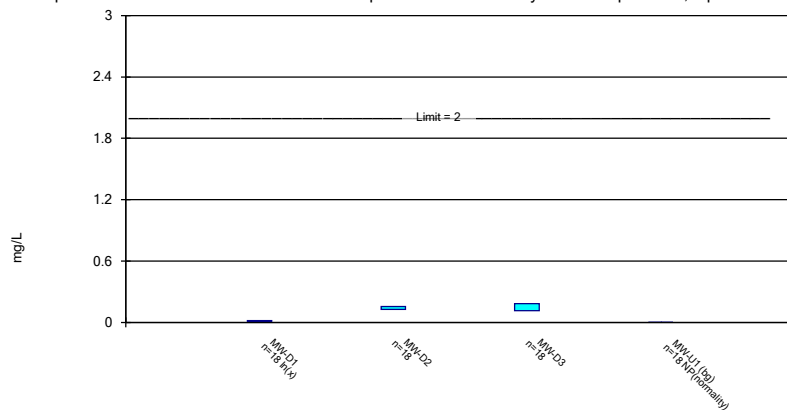
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 6/27/2022 6:12 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Parametric and Non-Parametric (NP) Confidence Interval

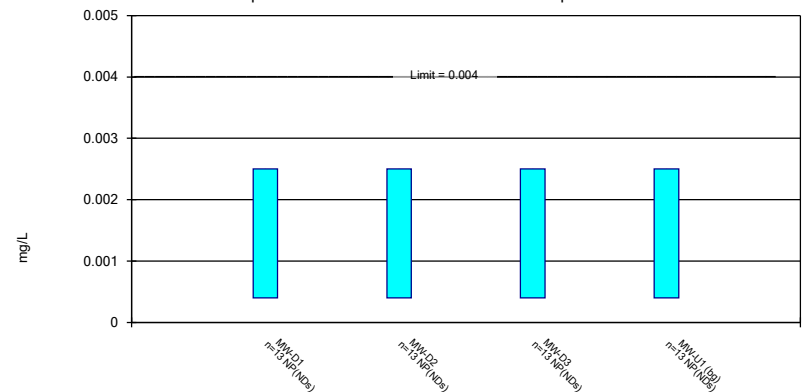
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 6/27/2022 6:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

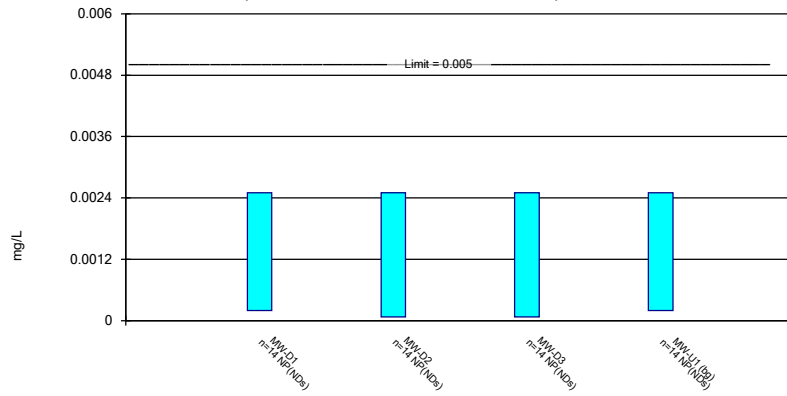
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



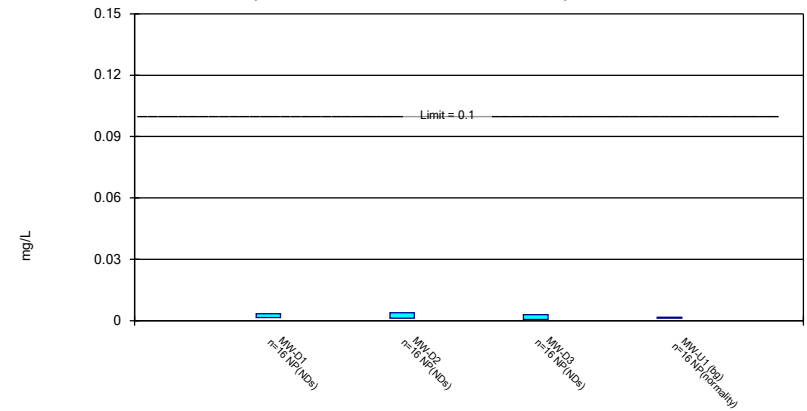
Constituent: Beryllium Analysis Run 6/27/2022 6:13 PM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 6/29/2022 9:20 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

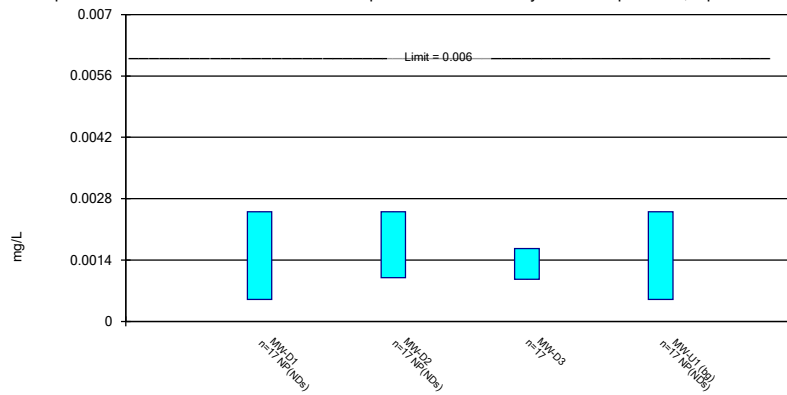
Non-Parametric Confidence Interval
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 6/29/2022 9:20 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Parametric and Non-Parametric (NP) Confidence Interval

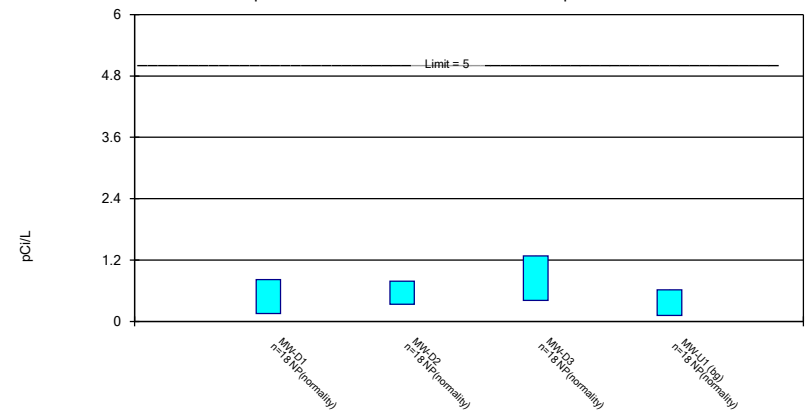
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/29/2022 9:20 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval

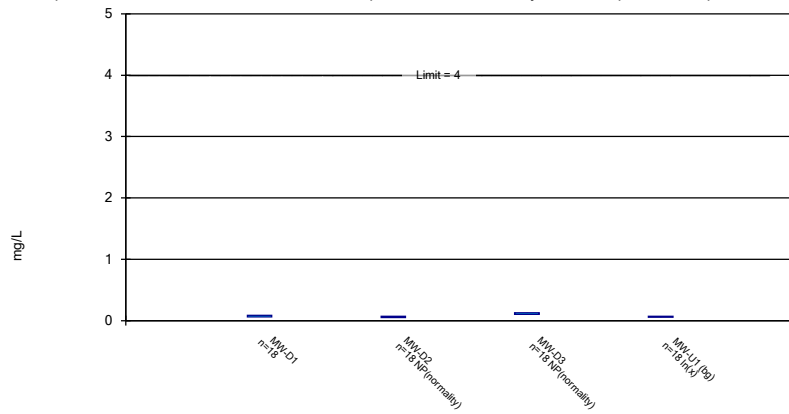
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Combined Radium 226 + 228 Analysis Run 6/29/2022 9:21 AM View: Sanitas_Statistics Sam
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Parametric and Non-Parametric (NP) Confidence Interval

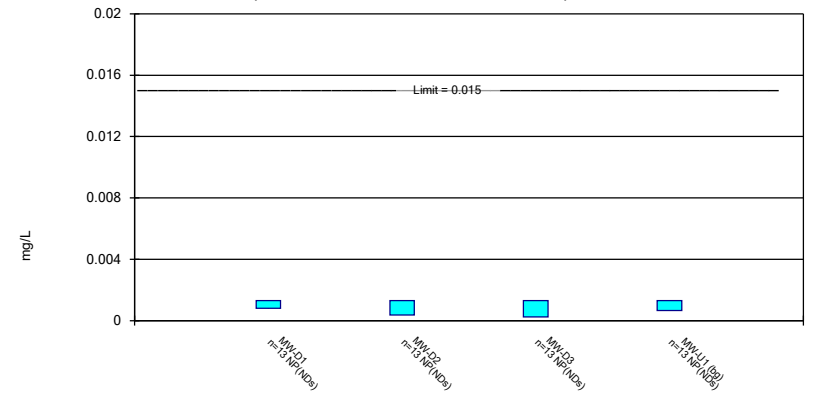
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 6/29/2022 9:21 AM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval

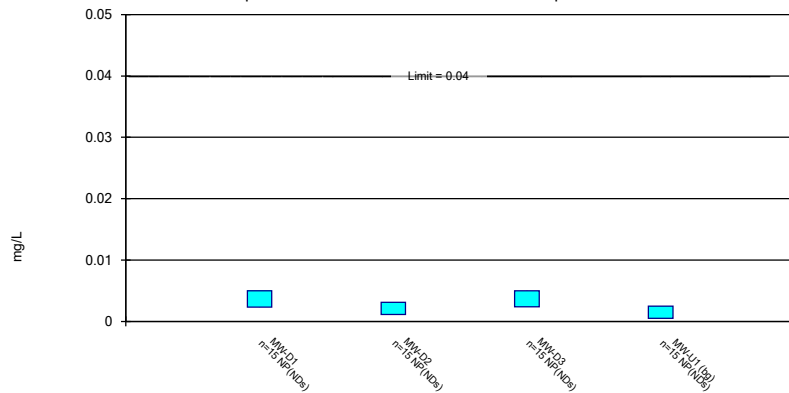
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 6/29/2022 9:22 AM View: Sanitas_Statistics Sampling Events 1 through 1
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval

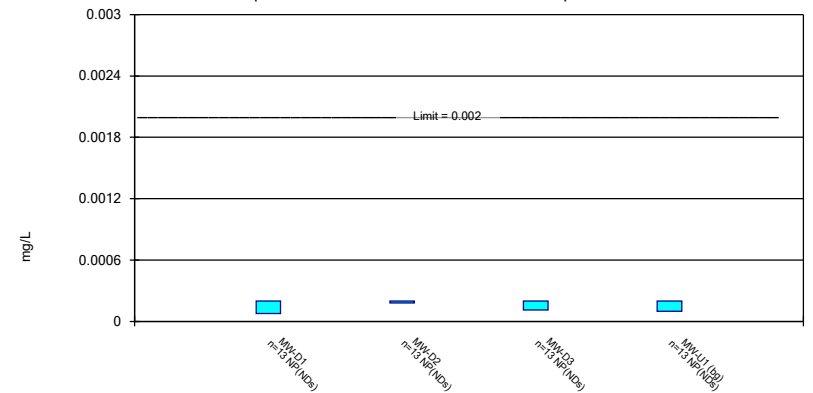
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 6/29/2022 9:23 AM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

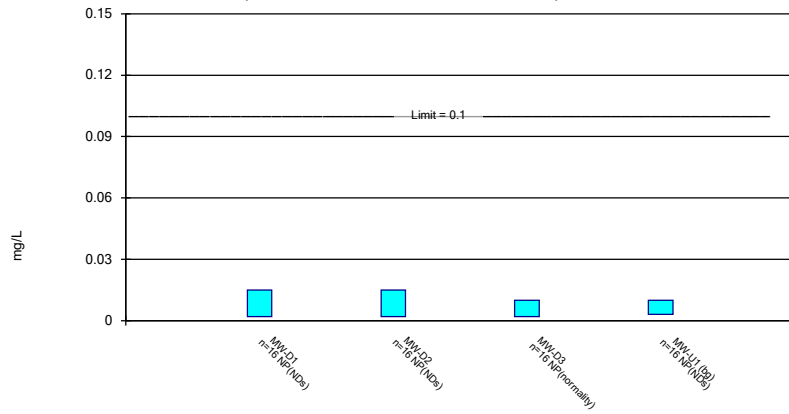
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



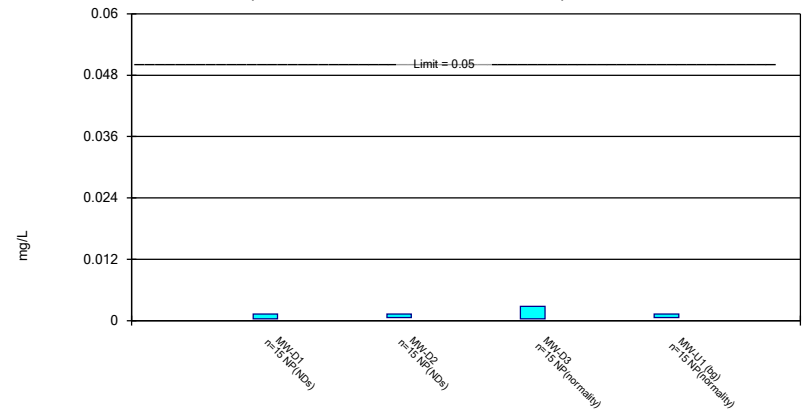
Constituent: Mercury Analysis Run 6/29/2022 9:23 AM View: Sanitas_Statistics Sampling Events 1 through 10
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval
Compliance Limit is not exceeded. Per-well alpha = 0.01.



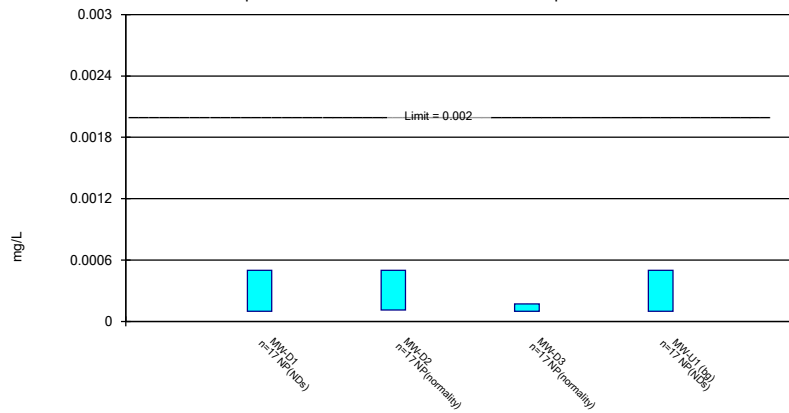
Constituent: Molybdenum Analysis Run 6/29/2022 9:23 AM View: Sanitas_Statistics Sampling Events 1 th
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 6/29/2022 9:24 AM View: Sanitas_Statistics Sampling Events 1 thro
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Non-Parametric Confidence Interval
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 6/29/2022 9:24 AM View: Sanitas_Statistics Sampling Events 1 throug
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Confidence Interval

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10 Printed 6/29/2022, 9:25 AM

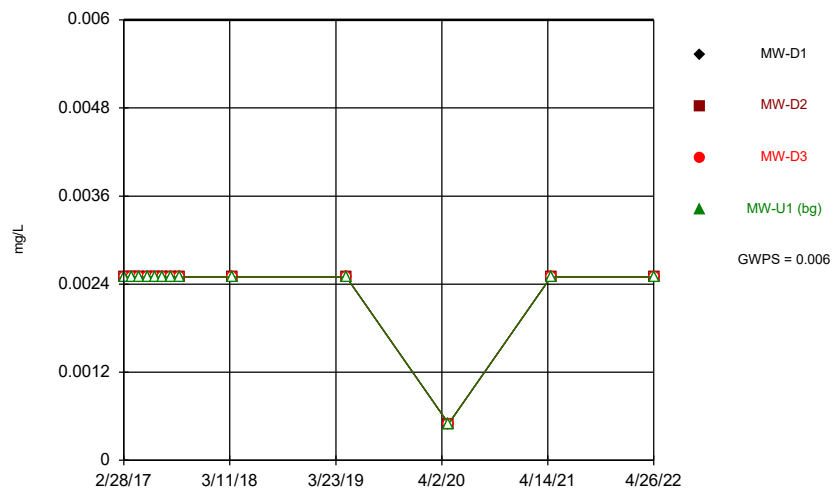
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-D1	0.0025	0.0005	0.006	n/a	No	13	0.002346	0.0005547	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D2	0.0025	0.0005	0.006	n/a	No	13	0.002346	0.0005547	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D3	0.0025	0.0005	0.006	n/a	No	13	0.002346	0.0005547	100	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-U1 (bg)	0.0025	0.0005	0.006	n/a	No	13	0.002346	0.0005547	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D1	0.0013	0.00025	0.01	n/a	No	18	0.001242	0.0002475	100	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D2	0.0013	0.00095	0.01	n/a	No	18	0.001152	0.0003144	77.78	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D3	0.001296	0.000776	0.01	n/a	No	18	0.000...	0.0003531	22.22	Cohen's	No	0.01	Param.
Arsenic (mg/L)	MW-U1 (bg)	0.0019	0.0013	0.01	n/a	No	18	0.001223	0.0003663	77.78	Cohen's	No	0.01	NP (NDs)
Barium (mg/L)	MW-D1	0.01668	0.01145	2	n/a	No	18	0.01452	0.00507	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-D2	0.1554	0.1265	2	n/a	No	18	0.1409	0.02388	0	None	No	0.01	Param.
Barium (mg/L)	MW-D3	0.1843	0.1148	2	n/a	No	18	0.1496	0.0574	0	None	No	0.01	Param.
Barium (mg/L)	MW-U1 (bg)	0.0026	0.002	2	n/a	No	18	0.002528	0.001004	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-D1	0.0025	0.0004	0.004	n/a	No	13	0.001915	0.0004758	100	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D2	0.0025	0.0004	0.004	n/a	No	13	0.001915	0.0004758	100	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D3	0.0025	0.0004	0.004	n/a	No	13	0.001915	0.0004758	100	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-U1 (bg)	0.0025	0.0004	0.004	n/a	No	13	0.001915	0.0004758	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D1	0.0025	0.0002	0.005	n/a	No	14	0.00105	0.0004686	100	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D2	0.0025	0.000075	0.005	n/a	No	14	0.001041	0.0004869	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D3	0.0025	0.000071	0.005	n/a	No	14	0.001041	0.0004875	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-U1 (bg)	0.0025	0.0002	0.005	n/a	No	14	0.00105	0.0004686	100	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D1	0.0034	0.0015	0.1	n/a	No	16	0.002369	0.0006074	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D2	0.0038	0.0012	0.1	n/a	No	16	0.002375	0.0006894	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D3	0.0029	0.0005	0.1	n/a	No	16	0.0024	0.0005164	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-U1 (bg)	0.0017	0.0012	0.1	n/a	No	16	0.001688	0.0009749	0	None	No	0.01	NP (normality)
Cobalt (mg/L)	MW-D1	0.0025	0.0005	0.006	n/a	No	17	0.002382	0.0004851	100	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D2	0.0025	0.001	0.006	n/a	No	17	0.002292	0.0005936	88.24	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D3	0.001665	0.0009601	0.006	n/a	No	17	0.001312	0.0005622	11.76	None	No	0.01	Param.
Cobalt (mg/L)	MW-U1 (bg)	0.0025	0.0005	0.006	n/a	No	17	0.002265	0.0006642	100	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	MW-D1	0.816	0.156	5	n/a	No	18	0.9254	1.502	22.22	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-D2	0.783	0.333	5	n/a	No	18	0.7815	1.092	22.22	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-D3	1.28	0.409	5	n/a	No	18	1.32	1.717	27.78	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-U1 (bg)	0.614	0.117	5	n/a	No	18	0.5585	1.134	22.22	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D1	0.08842	0.06213	4	n/a	No	18	0.07528	0.02173	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-D2	0.07	0.05	4	n/a	No	18	0.06394	0.01882	5.556	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D3	0.13	0.1	4	n/a	No	18	0.1206	0.03171	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	MW-U1 (bg)	0.07317	0.05261	4	n/a	No	18	0.06433	0.01858	11.11	None	ln(x)	0.01	Param.
Lead (mg/L)	MW-D1	0.0013	0.0008	0.015	n/a	No	13	0.001181	0.0003119	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-D2	0.0013	0.00037	0.015	n/a	No	13	0.001086	0.0004096	84.62	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-D3	0.0013	0.00025	0.015	n/a	No	13	0.001219	0.0002912	100	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-U1 (bg)	0.0013	0.00065	0.015	n/a	No	13	0.001169	0.0003295	92.31	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D1	0.005	0.0023	0.04	n/a	No	15	0.00252	0.0008571	93.33	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D2	0.0031	0.0011	0.04	n/a	No	15	0.00248	0.0009473	86.67	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D3	0.005	0.0024	0.04	n/a	No	15	0.002445	0.0009156	80	None	No	0.01	NP (NDs)
Lithium (mg/L)	MW-U1 (bg)	0.0025	0.0005	0.04	n/a	No	15	0.002223	0.0007325	93.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D1	0.0002	0.000077	0.002	n/a	No	13	0.000...	0.0000...	92.31	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D2	0.0002	0.00018	0.002	n/a	No	13	0.000...	0.0000...	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D3	0.0002	0.00011	0.002	n/a	No	13	0.000...	0.0000...	92.31	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-U1 (bg)	0.0002	0.000099	0.002	n/a	No	13	0.000...	0.0000...	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D1	0.015	0.002	0.1	n/a	No	16	0.009812	0.002428	100	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D2	0.015	0.002	0.1	n/a	No	16	0.008269	0.004044	81.25	None	No	0.01	NP (NDs)

Confidence Interval

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10 Printed 6/29/2022, 9:25 AM

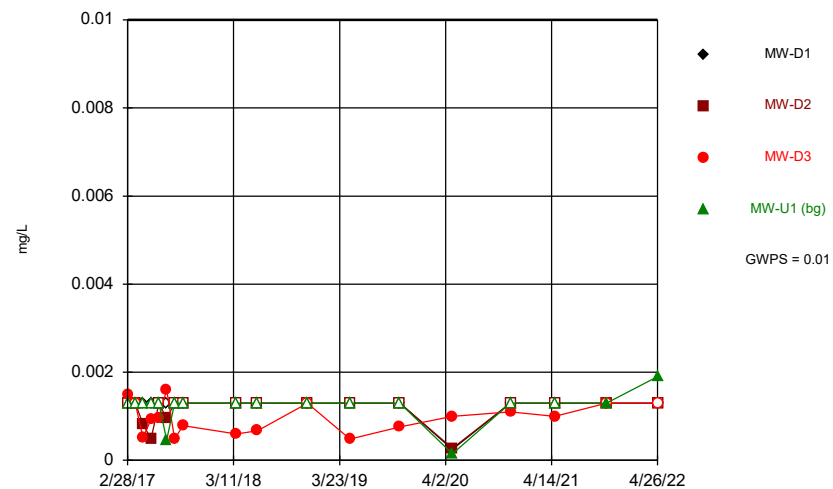
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Lower Compl.</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-D3	0.01	0.0019	0.1	n/a	No	16	0.004756	0.00355	25	None	No	0.01	NP (normality)
Molybdenum (mg/L)	MW-U1 (bg)	0.01	0.003	0.1	n/a	No	16	0.009062	0.002568	100	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D1	0.0013	0.00033	0.05	n/a	No	15	0.001165	0.0003557	93.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D2	0.0013	0.00059	0.05	n/a	No	15	0.001098	0.0003804	80	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D3	0.0028	0.00037	0.05	n/a	No	15	0.001175	0.0006131	73.33	None	No	0.01	NP (normality)
Selenium (mg/L)	MW-U1 (bg)	0.0013	0.00058	0.05	n/a	No	15	0.000...	0.0003819	53.33	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-D1	0.0005	0.0001	0.002	n/a	No	17	0.000...	0.0000...	100	None	No	0.01	NP (NDs)
Thallium (mg/L)	MW-D2	0.0005	0.00011	0.002	n/a	No	17	0.000...	0.0001939	41.18	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-D3	0.00017	0.0001	0.002	n/a	No	17	0.000185	0.0001512	17.65	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-U1 (bg)	0.0005	0.0001	0.002	n/a	No	17	0.000...	0.0000...	100	None	No	0.01	NP (NDs)

Time Series



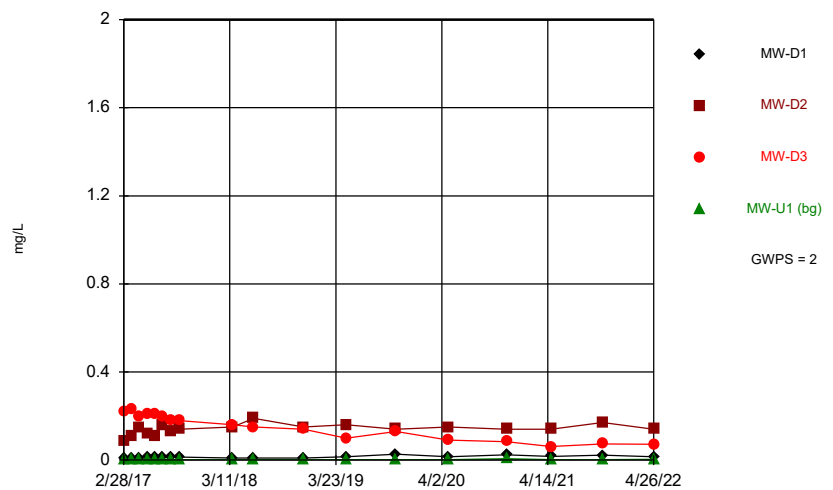
Constituent: Antimony Analysis Run 6/29/2022 9:34 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



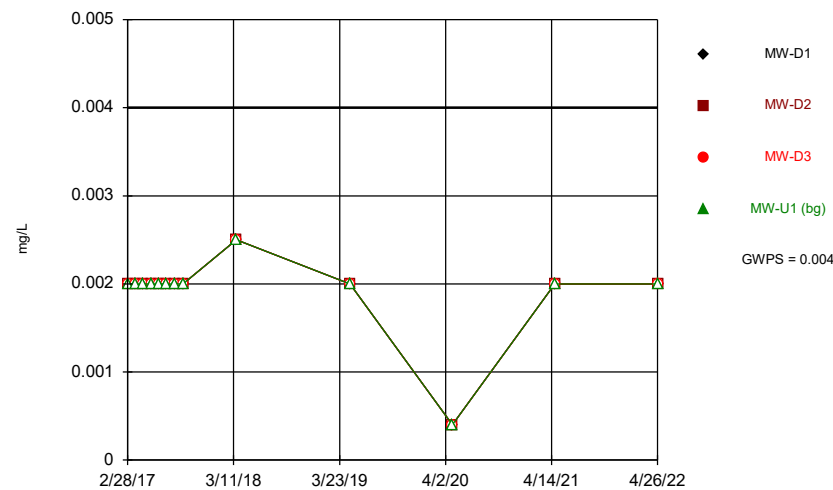
Constituent: Arsenic Analysis Run 6/29/2022 9:37 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



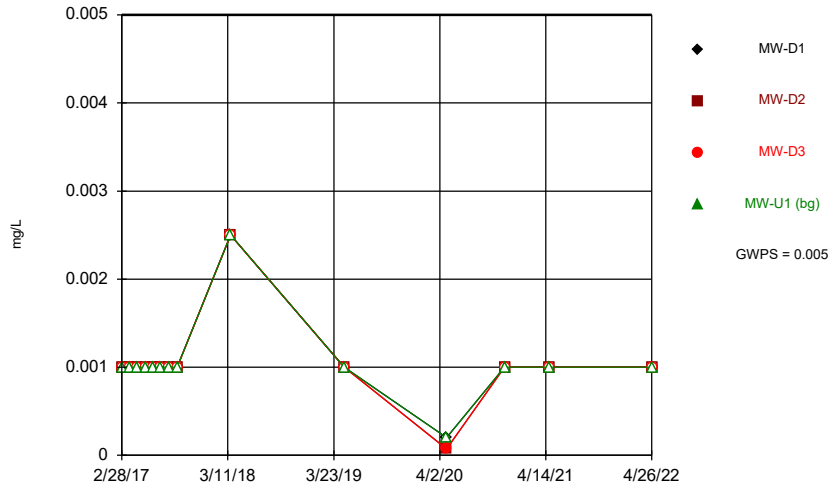
Constituent: Barium Analysis Run 6/29/2022 9:37 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



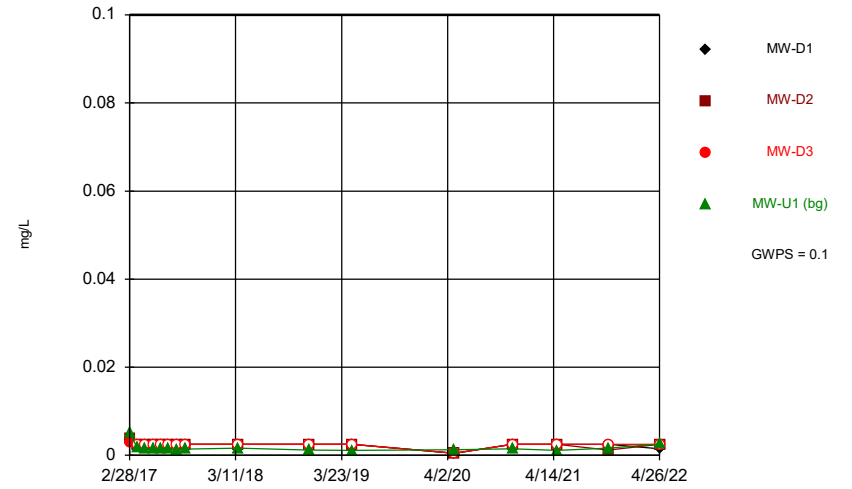
Constituent: Beryllium Analysis Run 6/29/2022 9:38 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



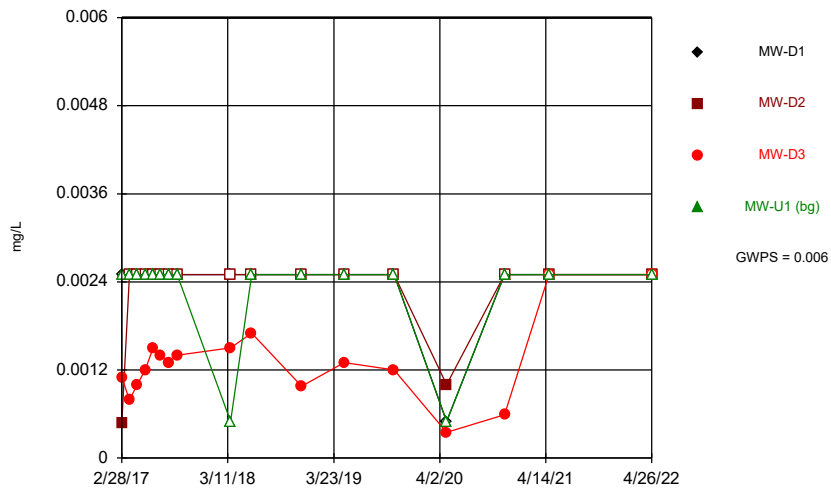
Constituent: Cadmium Analysis Run 6/29/2022 9:40 AM View: Sanitas_Statistics Sampling Events 1 thru
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



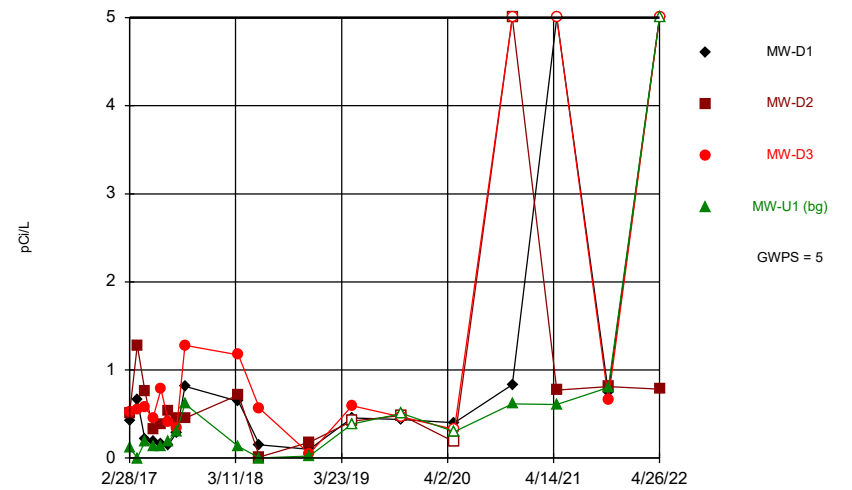
Constituent: Chromium Analysis Run 6/29/2022 9:40 AM View: Sanitas_Statistics Sampling Events 1 thru
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



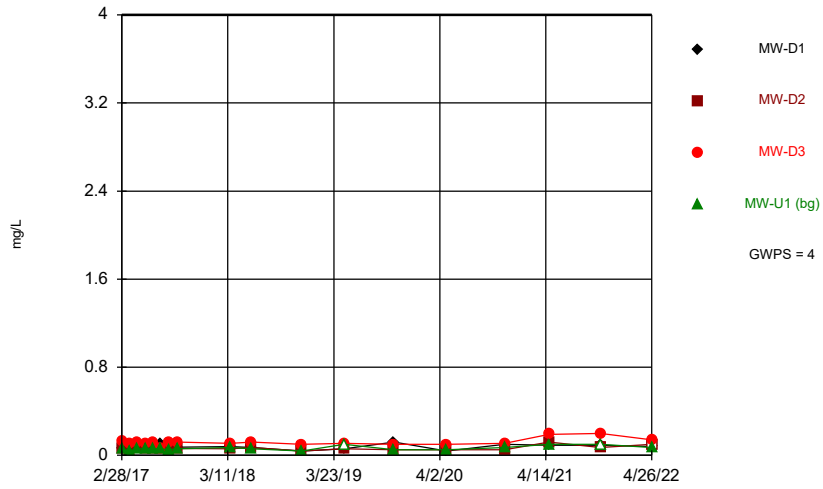
Constituent: Cobalt Analysis Run 6/29/2022 9:41 AM View: Sanitas_Statistics Sampling Events 1 through
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



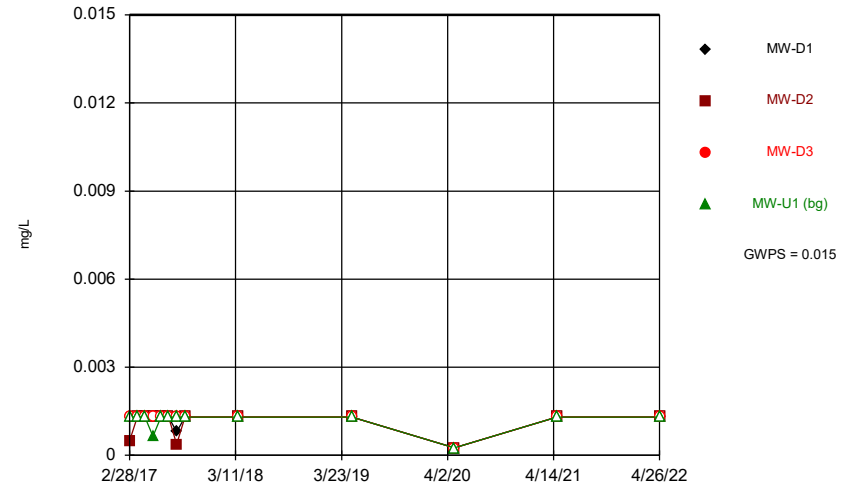
Constituent: Combined Radium 226 + 228 Analysis Run 6/29/2022 9:41 AM View: Sanitas_Statistics Sam
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



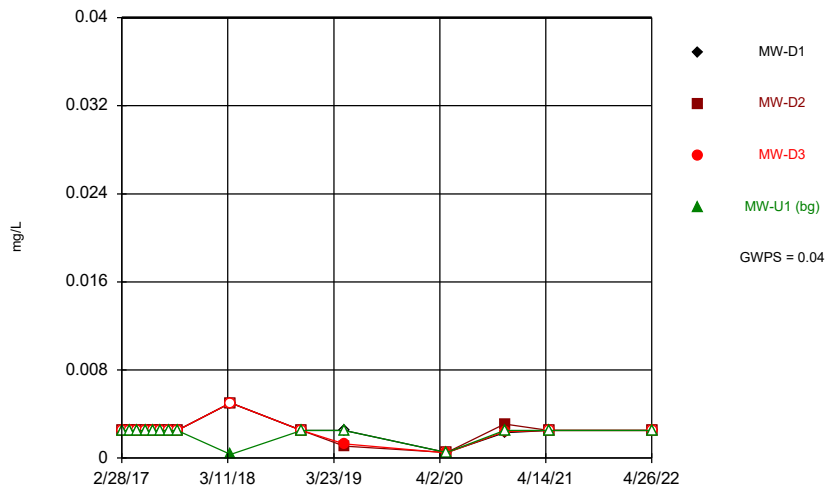
Constituent: Fluoride Analysis Run 6/29/2022 9:42 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



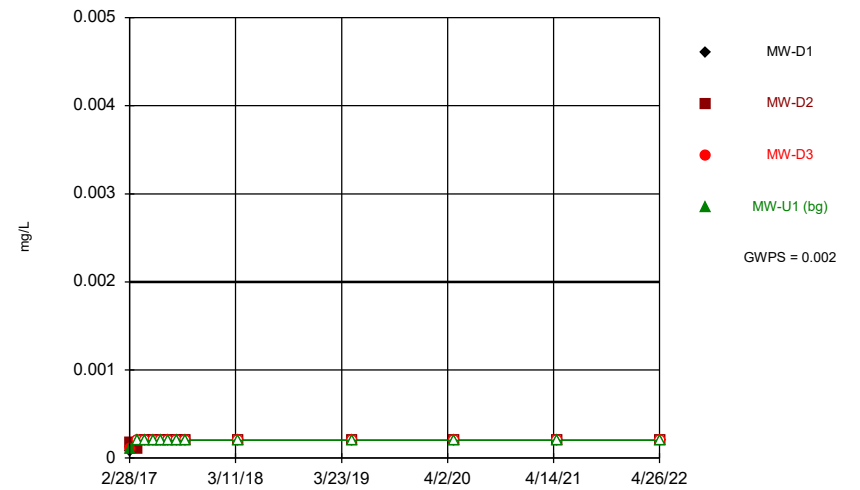
Constituent: Lead Analysis Run 6/29/2022 9:44 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



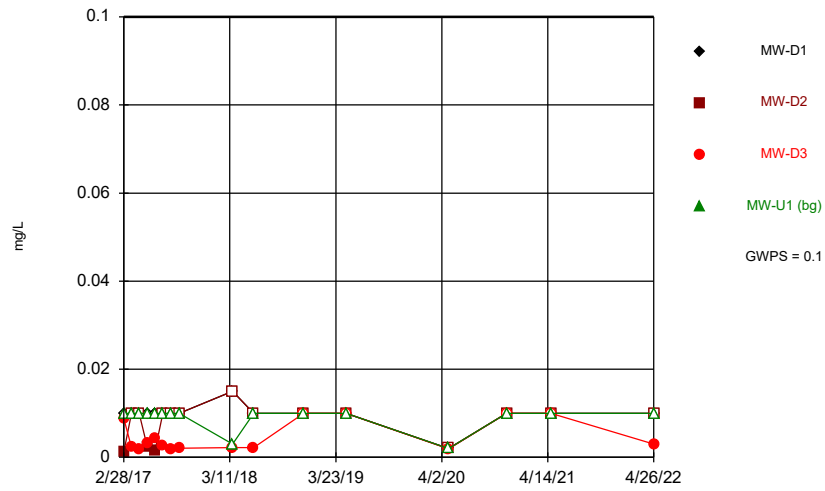
Constituent: Lithium Analysis Run 6/29/2022 9:44 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



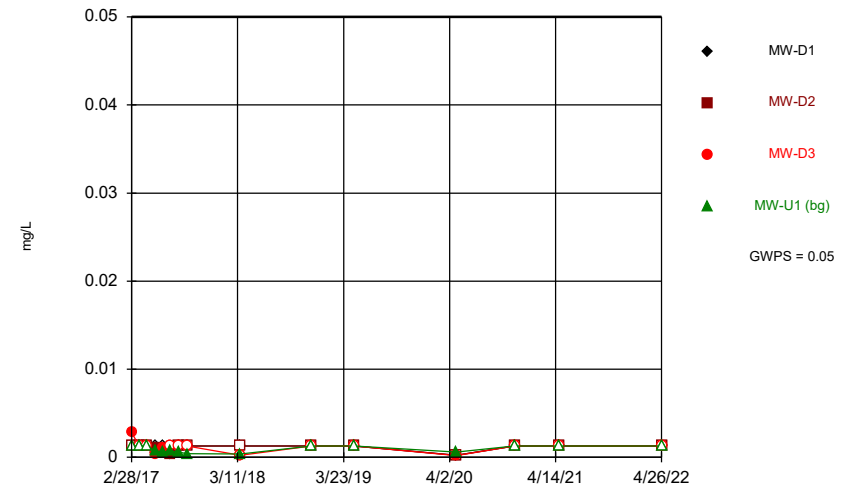
Constituent: Mercury Analysis Run 6/29/2022 9:44 AM View: Sanitas_Statistics Sampling Events 1 through 10
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



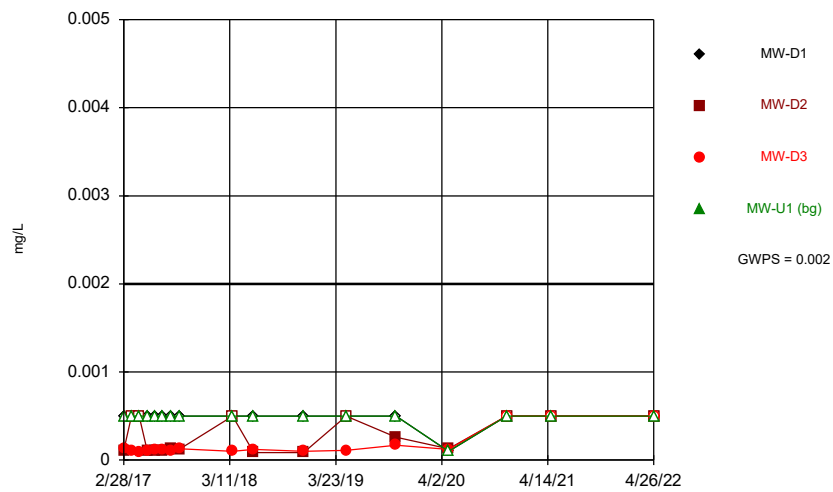
Constituent: Molybdenum Analysis Run 6/29/2022 9:45 AM View: Sanitas_Statistics Sampling Events 1 th
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



Constituent: Selenium Analysis Run 6/29/2022 9:45 AM View: Sanitas_Statistics Sampling Events 1 thro
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10

Time Series



Constituent: Thallium Analysis Run 6/29/2022 9:45 AM View: Sanitas_Statistics Sampling Events 1 throug
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas_Statistics Sampling Events 1 through 10