



*Prepared for*

**Crisp County Power Commission**

202 S. 7th Street  
Cordele, Georgia 31015

# **2021 ANNUAL GROUNDWATER MONITORING REPORT**

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

*Prepared by*

**Geosyntec**   
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engineers | scientists | innovators

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January 2022

**CERTIFICATION BY QUALIFIED PROFESSIONAL ENGINEER**

I certify that this Annual Groundwater Monitoring Report was prepared by me or under my direct supervision and 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.

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1/18/2022

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**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.

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## LIST OF ACRONYMS

CCPC	Crisp County Power Commission
CCR	Coal Combustion Residuals
C.F.R.	Code of Federal Regulations
DO	Dissolved Oxygen
ft/day	Feet per Day
ft/ft	Feet per Foot
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
RSL	Regional Screening Levels
SESD	Science and Ecosystem Support Division
SOP	Standard Operating Procedure
SSI	Statistically Significant Increase
SSL	Statistically Significant Level
s.u.	Standard Unit
USEPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit

## EXECUTIVE SUMMARY

Crisp County Power Commission (CCPC) has been monitoring 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 this reporting period (January through December 2021) are summarized as follows.

- In compliance with 40 C.F.R. §257.94, a groundwater detection monitoring program was conducted between February 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 40 C.F.R. §257.95 and GA EPD Rule 391-3-4-.10(6), no Statistically Significant Levels above the Groundwater Protection Standards were identified during the reporting period.
- Pursuant to 40 C.F.R. §257.95(d)(1) and GA EPD CCR Rule, assessment monitoring will continue at the ash pond.

## 1.0 INTRODUCTION

### 1.1 Overview

Geosyntec Consultants (Geosyntec) of Kennesaw, Georgia, at the request of Crisp County Power Commission (CCPC), prepared this 2021 Annual Groundwater Monitoring Report for the ash pond located at CCPC's Plant Crisp. 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 Section 391-3-4-.10(6) of the Georgia Environmental Protection Division (GA EPD) Coal Combustion Residuals (CCR) Rule.

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 continued in 2021 by performing semi-annual monitoring events in April 2021 and October 2021. The April 2021 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 October 2021 semi-annual assessment monitoring event was performed for all parameters in Appendix III to part §257 and for those constituents in Appendix IV that were detected during the April 2021 monitoring (40 C.F.R. §257.95(d)(1)). The groundwater monitoring and statistical analysis 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 2021 and October 2021 groundwater assessment monitoring activities and associated laboratory and statistical analysis results. The report has been prepared to meet the annual reporting requirements of 40 C.F.R. §257.90(e) and semi-annual reporting requirements of GA EPD CCR Rule 391-3-4-.10(6)(c).

In summary, the April 2021 and October 2021 sampling events detected concentrations of 40 C.F.R. §257, Appendix IV constituents but all concentrations were below their



respective USEPA's maximum contaminant levels (MCLs) (Appendix I to 40 C.F.R. §257)<sup>1</sup>.

## 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 19 November 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 rule 391-3-4-.10 and other GA EPD regulations as applicable. GA EPD issued a permit on August 17, 2020.

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 United States Environmental Protection Agency's (USEPA) coal combustion residuals impoundment assessment, dated February 2014 and conducted by CDM Smith [CDM Smith, 2014].

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<sup>1</sup> MCLs are the maximum contaminant levels for potable drinking water which are established setting a lifetime consumption risk or acute level and would be applied to municipal or other drinking water sources.

### **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  $1.44 \times 10^{-4}$  cm/sec (0.41 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 will be performed in 2022 (i.e., within five years after installation).

## 2.0 GROUNDWATER SAMPLING AND LABORATORY ANALYSIS RESULTS

### 2.1 Groundwater Sampling and Laboratory Analysis

Groundwater assessment monitoring events were conducted on April 26, 2021 and October 26, 2021. 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 from the April and October monitoring events are summarized in **Table 2**. The groundwater elevation data were used to prepare potentiometric surface maps, provided as **Figure 2** and **Figure 3**, respectively. Based on the potentiometric surface maps, groundwater flow direction is from southeast towards northwest with a hydraulic gradient of approximately 0.008 ft/ft (**Table 3**). The average horizontal groundwater flow velocity was calculated using Darcy's equation as approximately 6.3 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;
- 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 A**.

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 April 2021 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. The October 2021 groundwater samples were analyzed for Appendix III constituents and Appendix IV constituents that were detected during the April 2021 monitoring event (i.e., arsenic, barium, chromium, fluoride, and radium 226 and 228 combined). Groundwater pH, also an Appendix III constituent, was measured in the field using a Horiba water quality meter.

Field duplicate samples (DUP-16 in April 2021 and DUP-17 in October 2021) were collected for quality assurance/quality control (QA/QC). DUP 16 was collected from MW-D3 whereas DUP-17 was collected from MW-D2. The duplicate samples were collected in laboratory-provided bottles and submitted under the same chain-of-custody as the primary samples for analysis of the same parameters by Test America Laboratories.

## **2.2 April 2021 Groundwater Monitoring Results**

Laboratory analytical results for Appendix III constituents from the April 2021 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 (arsenic, barium, fluoride, and radium 226 and 228 combined) were detected in the downgradient monitoring wells. Similarly, low levels of 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

maximum contaminant levels (MCLs). Low level Appendix IV constituents detected during the April 2021 monitoring event can be naturally occurring as some of these constituents were also detected at low concentrations in the background well. Laboratory reports for the April 2021 monitoring event are included in **Appendix B**.

### **2.3 October 2021 Groundwater Monitoring Results**

Laboratory analytical results of Appendix III constituents from the October 2021 groundwater assessment monitoring event are summarized in **Table 6**. Appendix III constituents were detected in the downgradient and upgradient monitoring well locations.

Laboratory analytical results of Appendix IV constituents from the October 2021 groundwater assessment monitoring event are summarized in **Table 7**. Low levels of Appendix IV constituents (barium, chromium, fluoride, and radium 226 and 228 combined) were detected in the downgradient monitoring wells. Similarly, low levels of arsenic, barium, chromium, and radium 226 and 228 combined were detected in the background/upgradient monitoring well MW-U1. **Table 7** shows that the detected concentrations of Appendix IV constituents are below their respective USEPA's maximum contaminant levels (MCLs). Low level Appendix IV constituents detected during the October 2021 monitoring event can be naturally occurring as some of these constituents were also detected at low concentrations in the background well. The October 2021 laboratory reports are provided in **Appendix B**.

The April and October 2021 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 ASSESSMENT MONITORING 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, 2020]. 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 IV constituents.

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

- (i) To calculate statistically derived background concentration for each Appendix IV constituent. The statistically derived background concentration is 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.
- (ii) 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.

#### **3.1 GWPS for Appendix IV Constituents**

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 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), 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.



- USEPA's updated GWPS have not yet been incorporated under GA EPD's CCR Rule<sup>2</sup>. The GWPS based on the GA EPD CCR Rule is:
  - (1) the federally established MCL for Appendix IV constituents.
  - (2) where an MCL has not been established, the background concentration for Appendix IV constituents.
  - (3) background levels for constituents where the background level is higher than the MCL for Appendix IV constituents.

### **3.2 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.

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<sup>2</sup> GA EPD has adopted Federal CCR Rule as provided in 80 Fed. Reg. 21468 (April 17, 2015); as amended at 80 Fed. Reg. 37988 (July 2, 2015) and 81 Fed. Reg. 51807 (August 5, 2016). Portions of these federal rules have since been repealed. See, e.g. 83 Fed. Reg. 36,435 (July 30, 2018).

#### 4.0 STATISTICAL ANALYSIS RESULTS

The statistical analysis results are summarized in **Table 8**, 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 9** 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 2021 monitoring period. The Sanitas™ statistical calculations and time-series graphs for each constituent are provided in **Appendix C**.

## **5.0 FUTURE GROUNDWATER MONITORING PROGRAM**

Data collected during the assessment monitoring events 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, groundwater samples will be collected semi-annually for Appendix III and Appendix IV constituents. The next annual groundwater monitoring report summarizing the 2022 groundwater monitoring results will be submitted by 31 January 2023. Pursuant to the Georgia rule 391-3-4-.10(6)(c), a semi-annual report that coincides with the semi-annual sampling event will be submitted to GA EPD by 31 July 2022.

## 6.0 REFERENCES

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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) Standard Operating Procedure (SOP) (SESDPROC-301-R4).

# TABLES

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

<b>Well ID</b>	<b>Hydraulic Location</b>	<b>Installation Date</b>	<b>Well Depth (ft, BTOC)</b>	<b>Easting</b>	<b>Northing</b>	<b>TOC Elevation (ft, MSL)</b>	<b>Screen Interval Elevation (ft, MSL)</b>
<b>MW-D1</b>	Downgradient	2/22/2017	23.16	2365315.12	670708.47	241.77	218.85-228.85
<b>MW-D2</b>	Downgradient	2/21/2017	23.37	2365308.73	671291.61	232.66	209.64-219.64
<b>MW-D3</b>	Downgradient	2/22/2017	23.54	2365715.53	671291.07	233.78	210.52-220.52
<b>MW-U1</b>	Upgradient	2/23/2017	36.95	2366420.55	669996.79	249.52	212.78-222.78

**Notes:**

ft = feet

BTOC = Below top of casing

MSL = above mean sea level.

TOC = 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

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

Well ID	TOC Elevation (ft, MSL)	4/26/2021		10/26/2021	
		Depth to Groundwater (ft, BTOC)	Groundwater Elevation (ft, MSL)	Depth to Groundwater (ft, BTOC)	Groundwater Elevation (ft, MSL)
MW-D1	241.77	14.20	227.57	15.56	226.21
MW-D2	232.66	12.45	220.21	14.17	218.49
MW-D3	233.78	5.61	228.17	7.27	226.51
MW-U1	249.52	9.52	240.00	13.67	235.85
Lake Blackshear	--	--	236.91*	--	237.00*

**Notes:**

ft = feet

BTOC = Below top of casing

MSL = mean sea level.

TOC = Top of casing

\*: Surface water elevation



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

Date	Hydraulic Gradient				Groundwater Flow Velocity		
	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	Δl (ft)	Δh/Δl (ft/ft)	K <sub>h</sub> (ft/day)	η <sub>e</sub>	V (ft/year) <sup>1</sup>
4/26/2021	240.00	227.57	1,313	0.009	0.41	0.20	7.1
10/26/2021	235.85	226.21	1,313	0.007	0.41	0.20	5.5
Average				0.008	0.41	0.20	6.3

**Notes:**

ft = feet

ft/day = feet per day

ft/ft = feet per foot

h<sub>1</sub> and h<sub>2</sub> = groundwater elevation for MW-U1 and MW-D1, respectively.

Δl = distance between MW-U1 and MW-D1.

Δh/Δl = hydraulic gradient

K<sub>h</sub> = hydraulic conductivity of 0.41 ft/day estimated using slug testing in monitoring wells.

η<sub>e</sub> = effective porosity (estimated based on fine-grained sand aquifer) (Kresic, 2007)

V = groundwater flow velocity

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

**Table 4. Appendix III Analytical Data Summary - Sampling Performed on April 26, 2021  
Crisp County Power Commission  
Plant Crisp Ash Pond**

**Appendix III to 40 CFR Part 257 - Constituents for Detection Monitoring**

Constituent	Unit	MCL <sup>(1)</sup>	MDL <sup>(2)</sup>	Upgradient Well ID		Downgradient Well ID		
				MW-U1	MW-D1	MW-D2	MW-D3	
							MW-D3	DUP-16
<b>Boron</b>	mg/L	N/A	0.018	ND ^3+	0.17	0.12	0.19	0.19
<b>Calcium</b>	mg/L	N/A	0.63	33	29	120	93 B^5-	100
<b>Chloride</b>	mg/L	N/A	1.4	ND F1	1.6 J	5.0	3.9	3.9
<b>Fluoride</b>	mg/L	4	0.032	0.1 B	0.090 JB	0.12 B	0.19 B	0.22 B
<b>Sulfate</b>	mg/L	N/A	1.4	1.8 J	26	16	28	29
<b>pH<sup>(3)</sup></b>	SU	N/A	--	7.91	6.82	6.87	7.02	7.03
<b>Total Dissolved Solids</b>	mg/L	N/A	5.0	98	110	370	360	350

**Notes:**

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.

F1 - MS and/or MSD recovery exceeds control limits.

^3+ - Reporting Limit Check Standard is outside acceptance limits, high biased

^5- - Linear Range Check (LRC) is outside acceptance limits, low biased.

SU - standard unit.

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

-- There is no MDL for pH.

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

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, 2021  
Crisp County Power Commission  
Plant Crisp Ash Pond**

**Appendix IV to 40 CFR Part 257 - Constituents for Assessment Monitoring**

Constituent	Unit	MCL <sup>(1)</sup>	USEPA's Health-Based Level <sup>(2)</sup>	MDL <sup>(3)</sup>	Upgradient Well ID		Downgradient Well ID		
					MW-U1	MW-D1	MW-D2	MW-D3	
								MW-D3	DUP-16
Antimony	mg/L	0.006	N/A	0.0015	ND	ND	ND	ND	ND
Arsenic	mg/L	0.01	N/A	0.000390	ND	ND	ND	0.0010 J	0.00080 J
Barium	mg/L	2	N/A	0.00070	0.0021 J	0.017	0.14	0.061	0.065
Beryllium	mg/L	0.004	N/A	0.000170	ND	ND	ND	ND	ND
Cadmium	mg/L	0.005	N/A	0.000280	ND	ND	ND	ND	ND
Chromium	mg/L	0.1 <sup>(4)</sup>	N/A	0.0010	0.0011 J	ND	ND	ND	ND
Cobalt	mg/L	N/A	0.006	0.00056	ND	ND	ND	ND	ND
Fluoride	mg/L	4	N/A	0.032	0.10 B	0.09 JB	0.12 B	0.19 B	0.22 B
Lead	mg/L	0.015 <sup>(5)</sup>	N/A	0.000290	ND	ND	ND	ND	ND
Lithium	mg/L	N/A	0.04	0.0019	ND	ND	ND	ND	ND
Mercury	mg/L	0.002 <sup>(6)</sup>	N/A	0.00007	ND	ND	ND	ND	ND
Molybdenum	mg/L	N/A	0.1	0.0045	ND	ND	ND	ND	ND
Radium 226 and 228 Combined	pCi/L	5	N/A	-- <sup>(7)</sup>	0.609	-0.033 U	0.773	0.352 U	0.395 U
Selenium	mg/L	0.05	N/A	0.00082	ND	ND	ND	ND	ND
Thallium	mg/L	0.002	N/A	0.000120	ND	ND	ND	ND	ND

**Notes:**

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

B - compound was found in the blank and sample.

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.

- MCLs indicate USEPA maximum contaminant levels. MCLs are established under 40 CFR §141.62 and 40 CFR§141.66.
- USEPA's health-based level as Groundwater Protection Standard (40 CFR §257.95 (h)(2)).
- MDL indicates minimum detection limit, which is the minimum concentration of analyte that can be measured and reported.
- MCL value for total chromium.
- Lead Treatment Technology Action Level is 0.015 mg/L.
- Value for inorganic mercury.
- During the analysis of radium, background concentrations are subtracted, thus each sample have a different Minimum Detectable Concentration (MDC). The MDCs were as follows: 0.451 pCi/L for MW-

**Table 6. Appendix III Analytical Data Summary - Sampling Performed on October 26, 2021**  
**Crisp County Power Commission**  
**Plant Crisp Ash Pond**

**Appendix III to 40 CFR Part 257 - Constituents for Detection Monitoring**

Constituent	Unit	MCL <sup>(1)</sup>	MDL <sup>(2)</sup>	Upgradient Well ID	Downgradient Well ID			
				MW-U1	MW-D1	MW-D2		MW-D3
						MW-D2	DUP-17	
<b>Boron</b>	mg/L	N/A	0.0012 <sup>(4)</sup>	<0.01 (0.007 J)	0.18	0.11 B	0.13 B	0.22
<b>Calcium</b>	mg/L	N/A	0.13	36	91	110	130	100
<b>Chloride</b>	mg/L	N/A	1.4	<2 (1.7 J)	2.5	4.9	7.2	3.1
<b>Fluoride</b>	mg/L	4	0.070	ND	<0.1 (0.09 J)	<0.1 (0.07 J)	<0.1 (0.07 J)	0.2 F1 F2
<b>Sulfate</b>	mg/L	N/A	1.4	ND	22	16	16	22
<b>pH<sup>(3)</sup></b>	SU	N/A	--	9.28	8.38	7.70	7.70	8.11
<b>Total Dissolved Solids</b>	mg/L	N/A	5.0	86	270	390	400	330

**Notes:**

B - Compound was found in the blank and sample.

F1 - MS and/or MSD recovery exceeds control limits.

F2 - MS/MSD RPD exceeds control limits.

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

N/A - Constituent does not have an MCL.

ND - Constituent was not detected above the analytical method detection limit (MDL).

SU - Standard unit.

-- There is no MDL for pH.

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

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.

4. MDL for boron was 0.00024 mg/L for MW-U1.

**Table 7. Appendix IV Analytical Data Summary - Sampling Performed on October 26, 2021  
Crisp County Power Commission  
Plant Crisp Ash Pond**

**Appendix IV to 40 CFR Part 257 - Constituents for Assessment Monitoring**

Constituent	Unit	MCL <sup>(1)</sup>	USEPA's Health-Based Level <sup>(2)</sup>	MDL <sup>(3)</sup>	Upgradient Well ID	Downgradient Well ID			
					MW-U1	MW-D1	MW-D2		MW-D3
							MW-D2	DUP-17	
<b>Arsenic</b>	mg/L	0.01	N/A	0.00120	0.0013	ND	ND	ND	ND
<b>Barium</b>	mg/L	2	N/A	0.0007	<0.0025 (0.0024 J B)	0.022 B	0.170	0.170	0.074 B
<b>Chromium</b>	mg/L	0.1 <sup>(4)</sup>	N/A	0.001	<0.0025 (0.0016 J)	ND	<0.0025 (0.0012 J)	ND	ND
<b>Fluoride</b>	mg/L	4	N/A	0.070	ND	<0.1 (0.09 J)	<0.1 (0.07 J)	<0.1 (0.07 J)	0.2 F1 F2
<b>Radium 226 and 228 Combined</b>	pCi/L	5	N/A	-- <sup>(5)</sup>	0.801	0.749	0.812	0.651	0.666

**Notes:**

B - Compound was found in the blank and sample.

F1 - MS and/or MSD recovery exceeds control limits.

F2 - MS/MSD RPD exceeds control limits.

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

N/A - not applicable for the constituent.

ND - the substance was not detected above the analytical method detection limit.

U - result is less than the sample detection limit.

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. MDL indicates minimum detection limit, which is the minimum concentration of analyte that can be measured and reported.
4. MCL value for total chromium.
5. During the analysis of radium, background concentrations are subtracted, thus each sample have a different Minimum Detectable Concentration (MDC). The MDCs were as follows: 0.490 pCi/L for MW-U1, 0.440 pCi/L for MW-D1, 0.389 pCi/L for MW-D2, 0.405 pCi/L for MW-D3, and 0.351 pCi/L for DUP-17.

**Table 8. 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 Groundwater Protection Standard (GWPS) for the Site
Antimony [mg/L]	MW-U1	12	12	100%	<0.0005	<0.0025	0.0025	0.006	0.006
	MW-D1	12	12	100%	<0.0005	<0.0025			
	MW-D2	12	12	100%	<0.0005	<0.0025			
	MW-D3	12	12	100%	<0.0005	<0.0025			
Arsenic [mg/L]	MW-U1	17	14	82%	0.00015 (JB)	<0.0013	0.0013	0.01	0.01
	MW-D1	17	17	100%	<0.00025	<0.0013			
	MW-D2	17	13	76%	0.00027 (B)	<0.0013			
	MW-D3	17	3	18%	0.00048 (J)	0.0016			
Barium [mg/L]	MW-U1	17	0	0%	0.0018	0.0062	0.0062	2	2
	MW-D1	17	0	0%	0.0095	0.027			
	MW-D2	17	0	0%	0.087	0.190			
	MW-D3	17	0	0%	0.061	0.230			
Beryllium [mg/L]	MW-U1	12	12	100%	<0.0004	<0.0025	0.002	0.004	0.004
	MW-D1	12	12	100%	<0.0004	<0.0025			
	MW-D2	12	11	92%	<0.0004	<0.0025			
	MW-D3	12	11	92%	<0.0004	<0.0025			
Cadmium [mg/L]	MW-U1	12	12	100%	<0.0002	<0.0025	0.001	0.005	0.005
	MW-D1	12	12	100%	<0.0002	<0.0025			
	MW-D2	12	12	100%	0.000075 (J)	<0.0025			
	MW-D3	12	12	100%	0.000071 (J)	<0.0025			
Chromium [mg/L]	MW-U1	15	0	0%	0.0011	0.0051	0.0051	0.1	0.1
	MW-D1	15	14	93%	<0.0005	0.0034			
	MW-D2	15	13	87%	<0.0005	0.0038			
	MW-D3	15	14	93%	<0.0005	0.0029			
Cobalt [mg/L]	MW-U1	16	16	100%	<0.0005	<0.0025	0.0025	0.006	0.0025*
	MW-D1	16	16	100%	<0.0005	<0.0025			
	MW-D2	16	14	88%	0.00047 (J)	<0.0025			
	MW-D3	16	1	6%	0.00035 (J)	0.0017 (J)			
Fluoride [mg/L]	MW-U1	17	2	12%	0.040	0.100	0.1279	4	4
	MW-D1	17	0	0%	0.040	0.120			
	MW-D2	17	0	0%	0.040	0.200			
	MW-D3	17	0	0%	0.060	0.200 F1			
Lead [mg/L]	MW-U1	12	11	92%	<0.00025	<0.0013	0.0013	0.015	0.0013*
	MW-D1	12	11	92%	<0.00025	<0.0013			
	MW-D2	12	10	83%	<0.00025	<0.0013			
	MW-D3	12	12	100%	<0.00025	<0.0013			
Lithium [mg/L]	MW-U1	14	13	93%	0.00034 (J)	<0.0025	0.0025	0.04	0.0025*
	MW-D1	14	13	93%	<0.0005	<0.005			
	MW-D2	14	12	86%	<0.0005	<0.005			
	MW-D3	14	11	79%	0.00048 (J)	<0.005			
Mercury [mg/L]	MW-U1	12	11	92%	0.000099 (JB)	<0.0002	0.0002	0.002	0.002
	MW-D1	12	11	92%	0.000077 (JB)	<0.0002			
	MW-D2	12	10	83%	0.00011 (JB)	<0.0002			
	MW-D3	12	11	92%	0.00011 (JB)	<0.0002			
Molybdenum [mg/L]	MW-U1	15	15	100%	<0.002	<0.01	0.01	0.10	0.01*
	MW-D1	15	15	100%	<0.002	<0.015			
	MW-D2	15	12	80%	0.0012 (J)	<0.015			
	MW-D3	15	4	27%	0.0017 (J)	<0.01			
Radium 226 and 228 228 Combined [pCi/L]	MW-U1	17	3	18%	0.000	0.801	1.235	5	5
	MW-D1	17	3	18%	0.099	0.833			
	MW-D2	17	4	24%	0.014	1.280			
	MW-D3	17	4	24%	0.050	1.280			
Selenium [mg/L]	MW-U1	14	7	50%	0.00039	<0.0013	0.0013	0.05	0.05
	MW-D1	14	13	93%	<0.00025	<0.0013			
	MW-D2	14	11	79%	<0.00025	<0.0013			
	MW-D3	14	10	71%	0.00021 (J)	0.0028			
Thallium [mg/L]	MW-U1	16	16	100%	<0.0001	<0.0005	0.0005	0.002	0.002
	MW-D1	16	16	100%	<0.0001	<0.0005			
	MW-D2	16	6	38%	0.000085 (J)	<0.0005			
	MW-D3	16	2	13%	0.000095 (J)	<0.0005			

**Notes:**

mg/L = milligrams per liter

pCi/L = picocuries per liter

ND = Not Detected

NA = Not Available

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

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.

\*: The background level or UTL was selected as GWPS because USEPA's updated GWPS have not yet been incorporated under GA EPD Rule.

**Table 9. 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 8)	Lower Confidence Limit if Detected During the 2021 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		0.000125	No
	MW-D2		0.00095	No
	MW-D3		0.000743	No
Barium [mg/L]	MW-U1	2	Background Well	
	MW-D1		0.0113	No
	MW-D2		0.1256	No
	MW-D3		0.1192	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		0.00050	No
	MW-D2		0.00120	No
	MW-D3		0.00050	No
Cobalt [mg/L]	MW-U1	0.0025	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Fluoride [mg/L]	MW-U1	4	Background Well	
	MW-D1		0.06099	No
	MW-D2		0.050	No
	MW-D3		0.100	No
Lead [mg/L]	MW-U1	0.0013	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Lithium [mg/L]	MW-U1	0.0025	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	0.01	Background Well	
	MW-D1		ND	No
	MW-D2		ND	No
	MW-D3		ND	No
Radium 226 and 228 228 Combined [pCi/L]	MW-U1	5	Background Well	
	MW-D1		0.1560	No
	MW-D2		0.3330	No
	MW-D3		0.4090	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	15	
	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



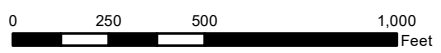
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Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Aerial Photograph from June 2016.



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



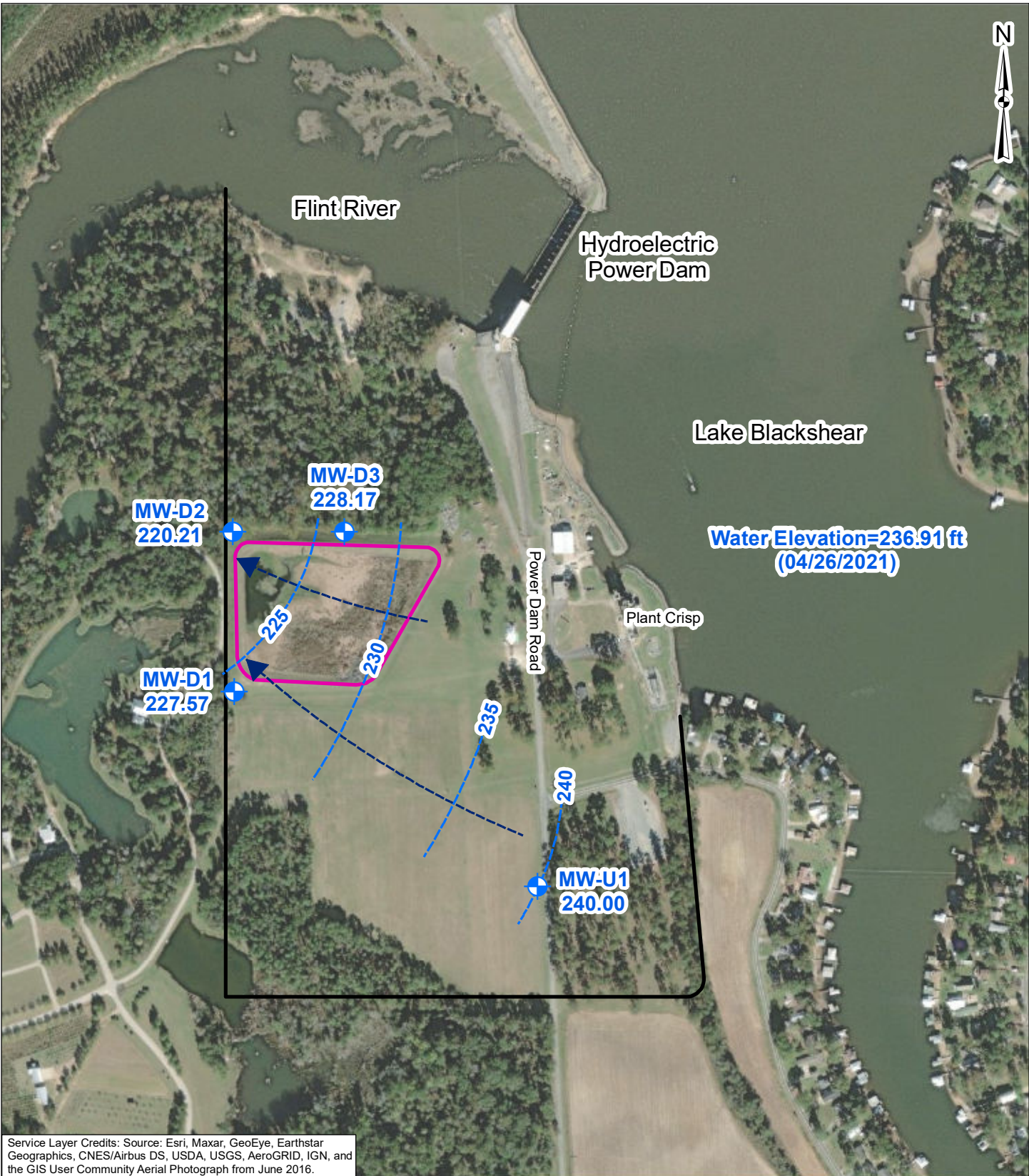
**Groundwater Monitoring Well Location Map**

Crisp County Power Commission  
Warwick, Georgia



DATE:	JANUARY 2022
PROJECT NO.	GW6152
DOCUMENT NO.	GA 220015
FILE NO.	GW MONITORING WELL LOCATION MAP.MXD
FIGURE NO.	1

KENNESAW, GA








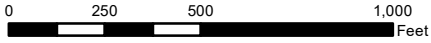
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Aerial Photograph from June 2016.

\\a-no-01\p1\GIS\Crisp County\GIS\MXD\2021\April 2021 Potentiometric Surface Map.mxd 1/7/2022 3:28:03 PM



**Legend**

-  Groundwater Monitoring Well
-  Groundwater Flow Direction
-  Groundwater Elevation Contour - 26 April 2021 (ft, MSL)
-  Ash Pond Limits
-  CCPC Property Boundary



**Potentiometric Surface Map  
26 April 2021**

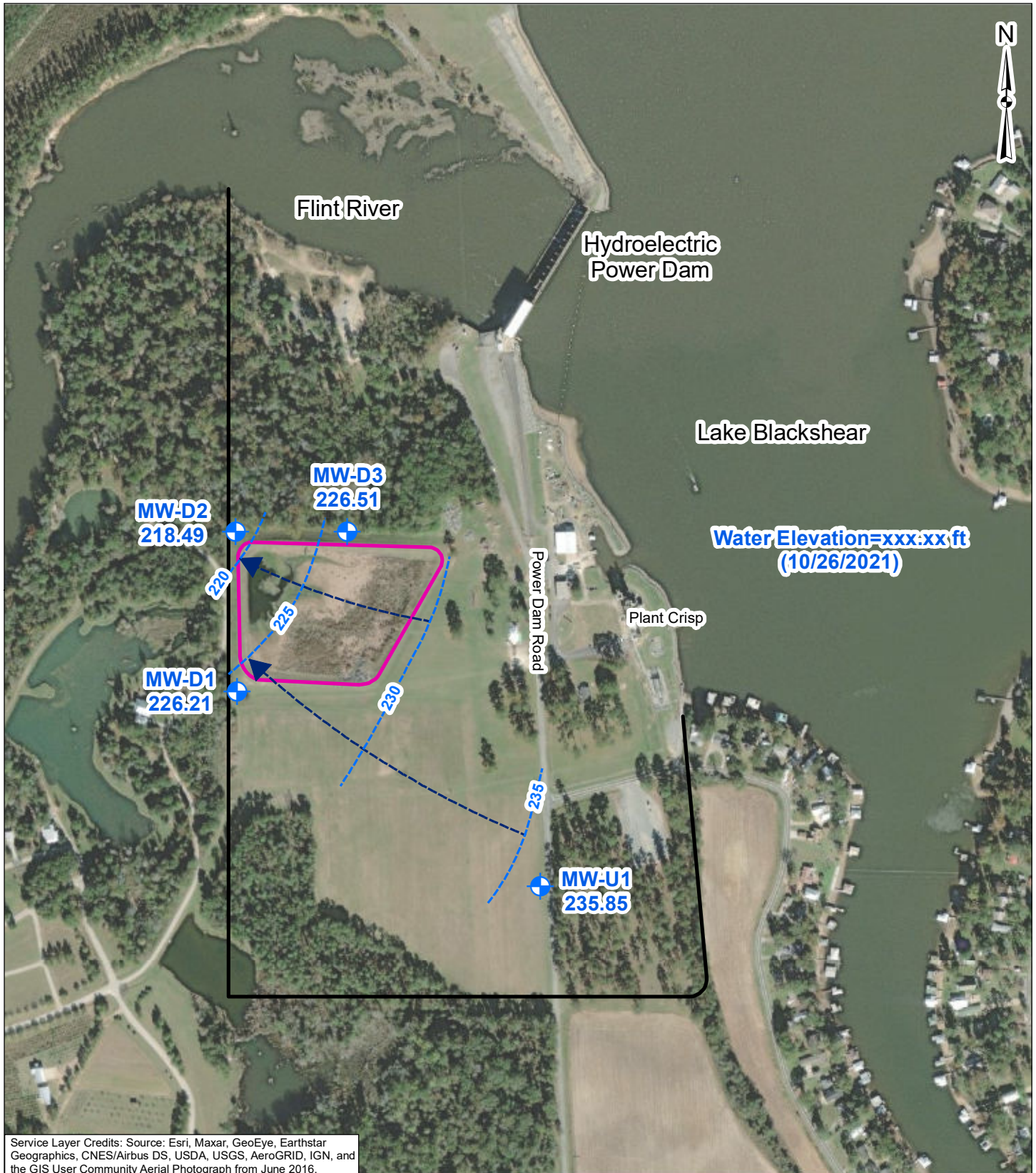
Crisp County Power Commission  
Warwick, Georgia



DATE:	JANUARY 2022
PROJECT NO.	GW6152
DOCUMENT NO.	GA 220015
FILE NO.	APRIL 2021 POTENTIOMETRIC SURFACE MAP.MXD
FIGURE NO.	2

KENNESAW, GA

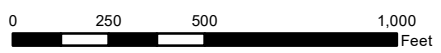
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Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Aerial Photograph from June 2016.



- Legend**
- Groundwater Monitoring Well
  - Groundwater Flow Direction
  - October 2021 Groundwater Elevation Contour
  - Ash Pond Limits
  - CCPC Property Boundary



**Potentiometric Surface Map  
26 October 2021**  
Crisp County Power Commission  
Warwick, Georgia

**Geosyntec**  
consultants

DATE:	JANUARY 2022
PROJECT NO.	GW6152
DOCUMENT NO.	GA 220015
FILE NO.	OCTOBER 2021 POTENTIOMETRIC SURFACE MAP.MXD
FIGURE NO.	2

KENNESAW, GA

# APPENDIX A

## Field Groundwater Sampling Forms

April 2021



# GROUNDWATER SAMPLING LOG

SITE NAME: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-01</b>	DATE: <b>4/26/21</b>
SAMPLE ID: <b>MW-01-20210426</b>	

## PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: <b>12</b> feet to <b>22</b> feet	STATIC DEPTH TO WATER (feet): <b>14.2</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>22.60</b> feet - <b>14.2</b> feet ) X <b>0.16</b> gallons/foot = <b>1.25</b> 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): <b>17</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17</b>	PURGING INITIATED AT: <b>1255</b>	PURGING ENDED AT: <b>1342</b>	TOTAL VOLUME PURGED (gallons): <b>2.9</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
<b>1256</b>	<b>0.0</b>	<b>0.0</b>	<b>0.066</b>	<b>14.15</b>	<b>6.82</b>	<b>27.91</b>	<b>291</b>	<b>41.7</b>	<b>10</b>	<b>165</b>	<b>CLEAR</b>
<b>1317</b>	<b>1.25</b>	<b>1.25</b>	<b>0.066</b>	<b>14.25</b>	<b>6.20</b>	<b>24.27</b>	<b>191</b>	<b>58.0</b>	<b>2</b>	<b>198</b>	<b>CLEAR</b>
<b>1322</b>	<b>0.33</b>	<b>1.58</b>	<b>0.066</b>	<b>14.33</b>	<b>6.27</b>	<b>24.12</b>	<b>195</b>	<b>36.2</b>	<b>1</b>	<b>198</b>	<b>CLEAR</b>
<b>1327</b>	<b>0.33</b>	<b>1.91</b>	<b>0.066</b>	<b>14.15</b>	<b>6.24</b>	<b>24.11</b>	<b>195</b>	<b>33.8</b>	<b>1</b>	<b>199</b>	<b>CLEAR</b>
<b>1332</b>	<b>0.33</b>	<b>2.24</b>	<b>0.066</b>	<b>14.14</b>	<b>6.26</b>	<b>23.11</b>	<b>188</b>	<b>37.8</b>	<b>1</b>	<b>204</b>	<b>CLEAR</b>
<b>1337</b>	<b>0.33</b>	<b>2.57</b>	<b>0.066</b>	<b>14.13</b>	<b>6.25</b>	<b>23.31</b>	<b>189</b>	<b>38.0</b>	<b>1</b>	<b>205</b>	<b>CLEAR</b>
<b>1342</b>	<b>0.33</b>	<b>2.90</b>	<b>0.066</b>	<b>14.13</b>	<b>6.25</b>	<b>23.35</b>	<b>189</b>	<b>38.3</b>	<b>1</b>	<b>208</b>	<b>CLEAR</b>

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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>S. RANDALL</b>			SAMPLER(S) SIGNATURE(S): <i>Steph W. Randall</i>			SAMPLING INITIATED AT: <b>1345</b>		SAMPLING ENDED AT: <b>1405</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>			TUBING MATERIAL CODE: <b>LDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			TUBING Y <input checked="" type="checkbox"/> N <input type="checkbox"/> (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			
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			
	<b>1</b>	<b>HDPE</b>	<b>1.9L</b>	<b>HNO3</b>	<b>----</b>		<b>9315, 9320, Ra226, Ra228</b>	<b>APP</b>	<b>250</b>
	<b>1</b>	<b>HDPE</b>	<b>1.0L</b>	<b>NONE</b>	<b>----</b>		<b>SM4500, 2540C</b>	<b>APP</b>	<b>250</b>
	<b>1</b>	<b>HDPE</b>	<b>0.25L</b>	<b>HNO3</b>	<b>----</b>		<b>6020, 7470A</b>	<b>APP</b>	<b>250</b>

FIELD SAMPLING CONDITIONS:

- Well Sign Present:  Yes  No
- Well Access: **CLEAR, EXCELLENT**
- Sampling & Purging Equipment Condition: **DO erratic.** DO sensor not working properly during purging of this well.
- 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 = Bailor; 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: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-D2</b>	SAMPLE ID: <b>MW-D2-20210426</b>
DATE: <b>4/26/21</b>	

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: <b>12</b> feet to <b>22</b> feet	STATIC DEPTH TO WATER (feet): <b>12.45</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>22.40</b> feet - <b>12.45</b> feet ) X <b>0.16</b> gallons/foot = <b>1.66</b> 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): <b>17</b>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17</b>		PURGING INITIATED AT: <b>0955</b>							
				PURGING ENDED AT: <b>1040</b>							
TOTAL VOLUME PURGED (gallons): <b>2.5</b>											
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
1000	0.0	0.0	0.066	12.8	6.87	19.66	571	9.2	13.0	134	CLEAR
1025	1.6	1.6	0.066	13.81	6.78	20.04	550	6.1	3.0	132	CLEAR
1030	0.33	1.93	0.066	13.91	6.79	20.13	551	4.9	2.0	132	CLEAR
1035	0.33	2.26	0.066	14.04	6.80	20.33	551	4.7	1.0	128	CLEAR
1040	0.33	2.59	0.066	14.1	6.80	20.39	551	4.6	1.0	126	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" = 0.008; 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: <b>S. RANDALL</b>			SAMPLER(S) SIGNATURE(S): <i>Stephan W. Randall</i>			SAMPLING INITIATED AT: <b>1045</b>		SAMPLING ENDED AT: <b>1105</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>17</b>			TUBING MATERIAL CODE: <b>LDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			TUBING Y <input checked="" type="checkbox"/> N <input type="checkbox"/> (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPME NT 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: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 2. Well Access: <u>NO PROBLEMS NOTE D</u> 3. Sampling & Purging Equipment Condition: <u>EXCELLENT</u> 4. Site Condition that may Affect Sampling Present? <input type="checkbox"/> Yes (describe below) <input checked="" type="checkbox"/> 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

0800 Dup-16-20210426

SITE NAME: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MM-03</b>	SAMPLE ID: <b>MM-03-20210426</b> DATE: <b>4/26/21</b>

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: <b>12</b> feet to <b>22</b> feet	STATIC DEPTH TO WATER (feet): <b>5.61</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>22.52</b> feet - <b>5.61</b> feet ) X <b>0.16</b> gallons/foot = <b>2.70</b> 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): <b>17'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>	PURGING INITIATED AT: <b>1110</b>	PURGING ENDED AT: <b>1206</b>	TOTAL VOLUME PURGED (gallons): <b>3.74</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
1110	0.0	0.0	0.066	6.5	7.02	21.92	522	10.2	3	151	CLEAR
1151	2.75	2.75	0.066	7.95	7.03	26.17	462	3.4	1	115	CLEAR
1156	0.33	<del>3.08</del>	0.066	8.08	7.03	26.49	458	3.7	1	114	CLEAR
1201	0.33	3.41	0.066	8.08	7.03	26.94	455	3.2	1	111	CLEAR
1206	0.33	3.74	0.066	7.98	7.03	27.37	453	3.5	1	109	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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>S. RANDALL</b>			SAMPLER(S) SIGNATURE(S): <i>Stephen W. Randall</i>			SAMPLING INITIATED AT: <b>1210</b>		SAMPLING ENDED AT: <b>1245</b>		
PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>			TUBING MATERIAL CODE: <b>LDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			TUBING Y <input checked="" type="checkbox"/> N (replaced) <input type="checkbox"/>			DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
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	9315, 9320, Ra226, Ra228		250	
	1	HDPE	1.9L	HNO3	----		SM4500, 2540C		250	
	1	HDPE	1.0L	NONE	----		6020, 7470A		250	
	1	HDPE	0.25L	HNO3	----					

FIELD SAMPLING CONDITIONS:

- Well Sign Present:  Yes  No
- Well Access: EXCELLENT, CLEAR
- Sampling & Purging Equipment Condition: EXCELLENT
- 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 = Bailor; 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: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-41</b>	DATE: <b>4/26/2021</b>
SAMPLE ID: <b>MW-41-20210426</b>	

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: <b>27</b> feet to <b>37</b> feet	STATIC DEPTH TO WATER (feet): <b>9.52</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>37.15</b> feet - <b>9.52</b> feet ) X <b>0.16</b> gallons/foot = <b>4.42</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <b>1</b> gallons + ( <b>1</b> gallons/foot X <b>17</b> feet ) + <b>0</b> gallons = <b>17</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>	PURGING INITIATED AT: <b>1420</b>	PURGING ENDED AT: <b>1555</b>	TOTAL VOLUME PURGED (gallons): <b>5.5</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
1422	0.0	0.0	0.066	9.9	7.91	29.53	149	5.31	5	125	CLEAR
1540	4.5	4.5	0.066	10.1	7.92	26.12	155	4.07	1	146	CLEAR
1545	0.33	4.83	0.066	10.1	7.92	26.19	155	4.08	1	147	CLEAR
1550	0.33	5.16	0.066	10.1	7.91	26.22	154	4.10	1	147	CLEAR
1555	0.33	5.49	0.066	10.2	7.92	26.15	155	4.14	1	147	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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>Stephen W. Randall</b>		SAMPLER(S) SIGNATURE(S): <b>Stephen W. Randall</b>		SAMPLING INITIATED AT: <b>1600</b>	SAMPLING ENDED AT: <b>1620</b>				
PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>		TUBING MATERIAL CODE: <b>LDPE</b>	FIELD-FILTERED: Y <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm					
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>		TUBING Y <input checked="" type="checkbox"/> (Replaced)	DUPLICATE: Y <input checked="" type="checkbox"/>						
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: EXCELLENT, CLEAR
- Sampling & Purging Equipment Condition: DO SEEMS TO HAVE CLEARED
- 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 = Bailor; 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.

October 2021



## GROUNDWATER SAMPLING LOG

SITE NAME: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-D3</b>	SAMPLE ID: <b>MW-D3-2021026</b>
DATE: <b>10/26/21</b>	

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): <b>0.16</b>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>22.76</b> feet - <b>7.25</b> feet ) X <b>0.16</b> gallons/foot = <b>2.5</b> 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): <b>17</b>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17</b>		PURGING INITIATED AT: <b>1430</b>
				PURGING ENDED AT: <b>1455</b>
TOTAL VOLUME PURGED (gallons): <b>2.5</b>				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
0000	0	0	0.066	8.62	8.36	27.81	358	4.35	12.60	166	clear
1455	2.5	2.5	0.066	9.91	8.14	27.93	392	0.07	3.30	150	"
1500	0.33	2.83	0.066	9.94	8.12	27.81	392	0.00	1.50	142	17
1505	0.33	3.16	0.066	9.97	8.11	27.66	394	0.00	0.95	130	"

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: <b>C. CAIN IGEO</b>			SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT: <b>1516</b>		SAMPLING ENDED AT: <b>1520</b>			
PUMP OR TUBING DEPTH IN WELL (feet):			TUBING MATERIAL CODE: <b>LDPE</b>			FIELD-FILTERED: Y <input checked="" type="checkbox"/>		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/>								
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: Easy
3. Sampling & Purging Equipment Condition: Good
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; 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: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <i>MU-D1</i>	SAMPLE ID: <i>MU-D1-2021026</i>
DATE: <i>10/26/21</i>	

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: <i>12</i> feet to <i>22</i> feet	STATIC DEPTH TO WATER (feet): <i>15.53</i>	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: <b>1</b> WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <i>22.84</i> feet - <i>15.53</i> feet ) X <b>0.16</b> <i>1.169</i> gallons/foot = <i>1.20</i> gallons				
EQUIPMENT VOLUME PURGE: <b>1</b> 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): <i>17'</i>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <i>17'</i>	PURGING INITIATED AT: <i>1540</i>	PURGING ENDED AT: <i>1615</i>	TOTAL VOLUME PURGED (gallons): <i>2.57</i>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
<i>0000</i>	<i>0.00</i>	<i>0.00</i>	<i>0.066</i>	<i>15.97</i>	<i>8.49</i>	<i>21.74</i>	<i>381</i>	<i>4.37</i>	<i>2.12</i>	<i>169</i>	<i>Clear</i>
<i>1555</i>	<i>1.25</i>	<i>1.25</i>	<i>0.066</i>	<i>16.93</i>	<i>8.36</i>	<i>20.89</i>	<i>383</i>	<i>3.47</i>	<i>0.59</i>	<i>178</i>	<i>Clear</i>
<i>1600</i>	<i>0.33</i>	<i>1.58</i>	<i>0.066</i>	<i>17.12</i>	<i>8.36</i>	<i>20.78</i>	<i>383</i>	<i>2.84</i>	<i>1.06</i>	<i>178</i>	<i>Clear</i>
<i>1605</i>	<i>0.33</i>	<i>1.91</i>	<i>0.066</i>	<i>17.42</i>	<i>8.37</i>	<i>20.77</i>	<i>382</i>	<i>2.36</i>	<i>1.27</i>	<i>178</i>	<i>Clear</i>
<i>1610</i>	<i>0.33</i>	<i>2.24</i>	<i>0.066</i>	<i>17.71</i>	<i>8.37</i>	<i>20.67</i>	<i>381</i>	<i>2.40</i>	<i>0.74</i>	<i>179</i>	<i>Clear</i>
<i>1615</i>	<i>0.33</i>	<i>2.57</i>	<i>0.066</i>	<i>17.79</i>	<i>8.38</i>	<i>20.92</i>	<i>379</i>	<i>2.38</i>	<i>0.58</i>	<i>179</i>	<i>Clear</i>

**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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Shane Barton GeoSmith</i>			SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>1620</i>	SAMPLING ENDED AT: <i>1630</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>17'</i>			TUBING MATERIAL CODE: <b>LDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
	<i>1</i>	<b>HDPE</b>	<i>1.9L</i>	<b>HNO3</b>	<i>----</i>		<i>9315, 9320, Ra226, Ra228</i>	<b>APP</b>	<b>250</b>
	<i>1</i>	<b>HDPE</b>	<i>1.0L</i>	<b>NONE</b>	<i>----</i>		<b>SM4500, 2540C</b>	<b>APP</b>	<b>250</b>
	<i>1</i>	<b>HDPE</b>	<i>0.25L</i>	<b>HNO3</b>	<i>----</i>		<b>6020, 7470A</b>	<b>APP</b>	<b>250</b>

**FIELD SAMPLING CONDITIONS:**  
 1. Well Sign Present:  Yes  No  
 2. Well Access: *Easy*  
 3. Sampling & Purging Equipment Condition: *Good*  
 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 = Bailor; 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.

DUP-17-2021026

### GROUNDWATER SAMPLING LOG

SITE NAME: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-D2</b>	SAMPLE ID: <b>MW-D2-2021026</b>
DATE: <b>10/26/21</b>	

#### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>22.66</b> feet - <b>14.19</b> feet ) X <b>0.16</b> gallons/foot = <b>1.5</b> 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): <b>17'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>17'</b>	PURGING INITIATED AT: <b>1255</b>	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
<b>0000</b>				<b>14.19</b>							
<b>1315</b>	<b>1.5</b>	<b>1.5</b>	<b>0.066</b>	<b>15.49</b>	<b>7.78</b>	<b>21.52</b>	<b>510</b>	<b>0.14</b>	<b>1.24</b>	<b>161</b>	<b>Clear</b>
<b>1320</b>	<b>0.33</b>	<b>1.83</b>	<b>0.066</b>	<b>15.68</b>	<b>7.77</b>	<b>21.35</b>	<b>509</b>	<b>2.14</b>	<b>1.15</b>	<b>117</b>	<b>"</b>
<b>1325</b>	<b>0.33</b>	<b>2.16</b>	<b>0.066</b>	<b>15.74</b>	<b>7.57</b>	<b>23.14</b>	<b>475</b>	<b>2.67</b>	<b>2.77</b>	<b>129</b>	<b>"</b>
<b>1330</b>	<b>0.33</b>	<b>2.49</b>	<b>0.066</b>	<b>15.74</b>	<b>7.61</b>	<b>23.61</b>	<b>488</b>	<b>3.87</b>	<b>1.68</b>	<b>127</b>	<b>"</b>
<b>1335</b>	<b>0.33</b>	<b>2.825</b>	<b>0.066</b>	<b>15.74</b>	<b>7.69</b>	<b>23.69</b>	<b>472</b>	<b>3.90</b>	<b>1.58</b>	<b>123</b>	<b>"</b>
<b>1340</b>	<b>0.33</b>	<b>3.15</b>	<b>0.066</b>	<b>15.74</b>	<b>7.70</b>	<b>23.78</b>	<b>476</b>	<b>3.94</b>	<b>1.36</b>	<b>122</b>	<b>"</b>

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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

#### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <b>C. CAIN / GEG</b>		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: <b>1345</b>	SAMPLING ENDED AT: <b>1410</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>/</b>		TUBING MATERIAL CODE: <b>LDPE</b>	FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>	FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)			DUPLICATE: <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			
	<b>1</b>	<b>HDPE</b>	<b>1.9L</b>	<b>HNO3</b>	<b>----</b>		<b>9315, 9320, Ra226, Ra228</b>	<b>APP</b>	<b>250</b>
	<b>1</b>	<b>HDPE</b>	<b>1.0L</b>	<b>NONE</b>	<b>----</b>		<b>SM4500, 2540C</b>	<b>APP</b>	<b>250</b>
	<b>1</b>	<b>HDPE</b>	<b>0.25L</b>	<b>HNO3</b>	<b>----</b>		<b>6020, 7470A</b>	<b>APP</b>	<b>250</b>

FIELD SAMPLING CONDITIONS:

- Well Sign Present:  Yes  No
- Well Access: Easy
- Sampling & Purging Equipment Condition: Good
- 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 = Bailor; 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: <b>CRISP COUNTY POWER COMMISSION</b>	SITE LOCATION: <b>961 Power Dam Road, Warwick, GA 31796</b>
WELL NO: <b>MW-01</b>	SAMPLE ID: <b>MW-01-2021026</b>
DATE: <b>10/26/21</b>	

### PURGING DATA

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>0.25</b>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <b>PP</b>
WELL VOLUME PURGE: <b>1</b> WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>37.41</b> feet - <b>13.67</b> feet ) X <b>0.16</b> gallons/foot = <b>3.80</b> gallons				
EQUIPMENT VOLUME PURGE: <b>1</b> 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): <b>32</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>32</b>	PURGING INITIATED AT: <b>0930</b>	PURGING ENDED AT: <b>1220</b>	TOTAL VOLUME PURGED (gallons): <b>7.66</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	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)
0930	0.0	0.0	0.066	13.82	7.53	17.73	0.167	5.74	48.0355	212	Clear
1045	4.0	4.0	0.066	14.29	9.19	18.03	149	4.87	6.24	203	Clear
1050	0.33	4.33	0.066	14.29	9.22	18.12	149	4.80	6.20	198	Clear
Trouble with pH sensor											
1216	7.0	7.0	0.066	14.36	9.26	19.20	149	9.60	2.61	192	"
1215	7.33	7.33	0.066	14.36	9.28	19.16	150	9.56	1.99	191	"
1220	7.66	7.66	0.066	14.37	9.28	19.12	149	9.59	2.02	191	"

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: <b>C. CAIN / GEO</b>	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: <b>1225</b>	SAMPLING ENDED AT: <b>1235</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>32</b>	TUBING MATERIAL CODE: <b>LDPE</b>	FIELD-FILTERED: Y <input checked="" type="checkbox"/>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <input type="checkbox"/> N <input type="checkbox"/> TUBING Y <input type="checkbox"/> N (replaced) <input type="checkbox"/>	DUPLICATE: Y <input checked="" type="checkbox"/>		

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: Easy  
 3. Sampling & Purging Equipment Condition: Good  
 4. Site Condition that may Affect Sampling Present? \_\_\_\_\_ Yes (describe below)  No  
Some ballroads are loose

**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 B

### Laboratory Analytical Reports

April 2021

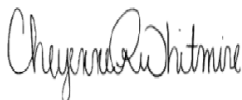
## ANALYTICAL REPORT

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Tel: (850)474-1001

Laboratory Job ID: 400-202647-1  
Laboratory Sample Delivery Group: Crisp Co. Power  
Client Project/Site: CCR App.III/IV GW Monitoring

For:  
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Authorized for release by:  
5/13/2021 11:33:04 AM

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



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# Case Narrative

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

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## Job ID: 400-202647-1

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Laboratory: Eurofins TestAmerica, Pensacola

### Narrative

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#### Job Narrative 400-202647-1

#### Metals

Method 6020: The method blank for preparation batch 400-529524 and analytical batch 400-529803 contained Lithium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: CRI recover outside SOP's criteria. The sample is ND; therefore, the data is reported. MW-U1-20210426 (400-202647-5)

Method 7470A: ICV was inadvertently omitted during the calibration process 400-529808. The associated laboratory control sample (LCS) met acceptance criteria and ICV passed when analyzed. Therefore, data is report. DUP-16-20210426 (400-202647-1), MW-D2-20210426 (400-202647-2), MW-D3-20210426 (400-202647-3), MW-D1-20210426 (400-202647-4), MW-U1-20210426 (400-202647-5), (LCS 400-529577/15-A), (MB 400-529577/14-A), (400-202594-Q-2-A), (400-202594-Q-2-B MS), (400-202594-Q-2-C MSD) and (400-202594-Q-2-A SD ^5)

#### General Chemistry

Method SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-531000 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.



# Detection Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

## Client Sample ID: DUP-16-20210426

## Lab Sample ID: 400-202647-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00080	J	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.065		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.19		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	100		1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	350		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	3.9		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22	B	0.10	0.032	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	7.03				SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-D2-20210426

## Lab Sample ID: 400-202647-2

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	0.12		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	120		1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	370		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	5.0		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12	B	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.87				SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-D3-20210426

## Lab Sample ID: 400-202647-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0010	J	0.0013	0.00039	mg/L	5		6020	Total Recoverable
Barium	0.061		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.19		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	93	B ^5-	1.3	0.63	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	360		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	3.9		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.19	B	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	28		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	7.02				SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-D1-20210426

## Lab Sample ID: 400-202647-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.017		0.0025	0.00070	mg/L	5		6020	Total Recoverable
Boron	0.17		0.050	0.018	mg/L	5		6020	Total Recoverable
Calcium	29		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	110		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

# Detection Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

## Client Sample ID: MW-D1-20210426 (Continued)

## Lab Sample ID: 400-202647-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6	J	2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	J B	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	26		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-U1-20210426

## Lab Sample ID: 400-202647-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0021	J	0.0025	0.00070	mg/L	5		6020	Total Recoverable
Calcium	33		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	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
Fluoride	0.10	B	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	7.91				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

# Method Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

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

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

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



# Sample Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-202647-1	DUP-16-20210426	Water	04/26/21 08:00	04/28/21 09:39	
400-202647-2	MW-D2-20210426	Water	04/26/21 10:45	04/28/21 09:39	
400-202647-3	MW-D3-20210426	Water	04/26/21 12:10	04/28/21 09:39	
400-202647-4	MW-D1-20210426	Water	04/26/21 13:45	04/28/21 09:39	
400-202647-5	MW-U1-20210426	Water	04/26/21 16:00	04/28/21 09:39	

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

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: DUP-16-20210426**

**Lab Sample ID: 400-202647-1**

Date Collected: 04/26/21 08:00

Matrix: Water

Date Received: 04/28/21 09:39

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/28/21 14:05	04/29/21 22:05	5
<b>Arsenic</b>	<b>0.00080</b>	<b>J</b>	0.0013	0.00039	mg/L		04/28/21 14:05	04/29/21 22:05	5
<b>Barium</b>	<b>0.065</b>		0.0025	0.00070	mg/L		04/28/21 14:05	04/29/21 22:05	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/28/21 14:05	04/29/21 22:05	5
<b>Boron</b>	<b>0.19</b>		0.050	0.018	mg/L		04/28/21 14:05	04/30/21 15:54	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/28/21 14:05	04/29/21 22:05	5
<b>Calcium</b>	<b>100</b>		1.3	0.63	mg/L		04/28/21 14:05	04/30/21 18:57	25
Chromium	0.0010	U	0.0025	0.0010	mg/L		04/28/21 14:05	04/29/21 22:05	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/28/21 14:05	04/29/21 22:05	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/28/21 14:05	04/29/21 22:05	5
Lithium	0.0019	U	0.0025	0.0019	mg/L		04/28/21 14:05	04/29/21 22:05	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/28/21 14:05	04/29/21 22:05	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/28/21 14:05	04/29/21 22:05	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/28/21 14:05	04/29/21 22:05	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 17:12	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>350</b>		5.0	5.0	mg/L			04/29/21 12:51	1
<b>Chloride</b>	<b>3.9</b>		2.0	1.4	mg/L			05/08/21 02:48	1
<b>Fluoride</b>	<b>0.22</b>	<b>B</b>	0.10	0.032	mg/L			05/10/21 16:20	1
<b>Sulfate</b>	<b>29</b>		5.0	1.4	mg/L			05/09/21 15:15	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.03</b>				SU			04/26/21 07:00	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D2-20210426**

**Lab Sample ID: 400-202647-2**

Date Collected: 04/26/21 10:45

Matrix: Water

Date Received: 04/28/21 09:39

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/28/21 14:05	04/29/21 22:09	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		04/28/21 14:05	04/29/21 22:09	5
<b>Barium</b>	<b>0.14</b>		0.0025	0.00070	mg/L		04/28/21 14:05	04/29/21 22:09	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/28/21 14:05	04/29/21 22:09	5
<b>Boron</b>	<b>0.12</b>		0.050	0.018	mg/L		04/28/21 14:05	04/30/21 15:58	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/28/21 14:05	04/29/21 22:09	5
<b>Calcium</b>	<b>120</b>		1.3	0.63	mg/L		04/28/21 14:05	04/30/21 19:01	25
Chromium	0.0010	U	0.0025	0.0010	mg/L		04/28/21 14:05	04/29/21 22:09	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/28/21 14:05	04/29/21 22:09	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/28/21 14:05	04/29/21 22:09	5
Lithium	0.0019	U	0.0025	0.0019	mg/L		04/28/21 14:05	04/29/21 22:09	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/28/21 14:05	04/29/21 22:09	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/28/21 14:05	04/29/21 22:09	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/28/21 14:05	04/29/21 22:09	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 17:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>370</b>		5.0	5.0	mg/L			04/29/21 12:51	1
<b>Chloride</b>	<b>5.0</b>		2.0	1.4	mg/L			05/08/21 02:48	1
<b>Fluoride</b>	<b>0.12</b>	<b>B</b>	0.10	0.032	mg/L			05/10/21 16:27	1
<b>Sulfate</b>	<b>16</b>		5.0	1.4	mg/L			05/09/21 15:15	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>6.87</b>				SU			04/26/21 09:45	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

**Client Sample ID: MW-D3-20210426**

**Lab Sample ID: 400-202647-3**

Date Collected: 04/26/21 12:10

Matrix: Water

Date Received: 04/28/21 09:39

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/29/21 10:32	04/29/21 22:20	5
<b>Arsenic</b>	<b>0.0010</b>	<b>J</b>	0.0013	0.00039	mg/L		04/29/21 10:32	04/29/21 22:20	5
<b>Barium</b>	<b>0.061</b>		0.0025	0.00070	mg/L		04/29/21 10:32	04/29/21 22:20	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/29/21 10:32	04/29/21 22:20	5
<b>Boron</b>	<b>0.19</b>		0.050	0.018	mg/L		04/29/21 10:32	05/10/21 12:45	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/29/21 10:32	04/29/21 22:20	5
<b>Calcium</b>	<b>93</b>	<b>B ^5-</b>	1.3	0.63	mg/L		04/29/21 10:32	05/10/21 12:48	25
Chromium	0.0010	U	0.0025	0.0010	mg/L		04/29/21 10:32	04/29/21 22:20	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/29/21 10:32	04/29/21 22:20	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/29/21 10:32	04/29/21 22:20	5
Lithium	0.0019	U	0.0025	0.0019	mg/L		04/29/21 10:32	04/29/21 22:20	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/29/21 10:32	04/29/21 22:20	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/29/21 10:32	04/29/21 22:20	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/29/21 10:32	04/29/21 22:20	5

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 17:16	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>360</b>		5.0	5.0	mg/L			04/29/21 12:51	1
<b>Chloride</b>	<b>3.9</b>		2.0	1.4	mg/L			05/08/21 02:48	1
<b>Fluoride</b>	<b>0.19</b>	<b>B</b>	0.10	0.032	mg/L			05/10/21 16:30	1
<b>Sulfate</b>	<b>28</b>		5.0	1.4	mg/L			05/09/21 15:15	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.02</b>				SU			04/26/21 11:10	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D1-20210426**

**Lab Sample ID: 400-202647-4**

Date Collected: 04/26/21 13:45

Matrix: Water

Date Received: 04/28/21 09:39

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/28/21 14:05	04/29/21 22:13	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		04/28/21 14:05	04/29/21 22:13	5
<b>Barium</b>	<b>0.017</b>		0.0025	0.00070	mg/L		04/28/21 14:05	04/29/21 22:13	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/28/21 14:05	04/29/21 22:13	5
<b>Boron</b>	<b>0.17</b>		0.050	0.018	mg/L		04/28/21 14:05	04/30/21 16:02	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/28/21 14:05	04/29/21 22:13	5
<b>Calcium</b>	<b>29</b>		0.25	0.13	mg/L		04/28/21 14:05	04/30/21 16:02	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		04/28/21 14:05	04/29/21 22:13	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/28/21 14:05	04/29/21 22:13	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/28/21 14:05	04/29/21 22:13	5
Lithium	0.0019	U	0.0025	0.0019	mg/L		04/28/21 14:05	04/29/21 22:13	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/28/21 14:05	04/29/21 22:13	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/28/21 14:05	04/29/21 22:13	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/28/21 14:05	04/29/21 22:13	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 17:18	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>110</b>		5.0	5.0	mg/L			04/29/21 12:51	1
<b>Chloride</b>	<b>1.6</b>	<b>J</b>	2.0	1.4	mg/L			05/08/21 02:48	1
<b>Fluoride</b>	<b>0.090</b>	<b>J B</b>	0.10	0.032	mg/L			05/10/21 16:34	1
<b>Sulfate</b>	<b>26</b>		5.0	1.4	mg/L			05/09/21 15:15	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>6.82</b>				SU			04/26/21 12:45	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: MW-U1-20210426**

**Lab Sample ID: 400-202647-5**

Date Collected: 04/26/21 16:00

Matrix: Water

Date Received: 04/28/21 09:39

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/28/21 14:05	04/29/21 22:17	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		04/28/21 14:05	04/29/21 22:17	5
<b>Barium</b>	<b>0.0021</b>	<b>J</b>	0.0025	0.00070	mg/L		04/28/21 14:05	04/29/21 22:17	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/28/21 14:05	04/29/21 22:17	5
Boron	0.018	U ^3+	0.050	0.018	mg/L		04/28/21 14:05	04/29/21 22:17	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/28/21 14:05	04/29/21 22:17	5
<b>Calcium</b>	<b>33</b>		0.25	0.13	mg/L		04/28/21 14:05	04/30/21 16:13	5
<b>Chromium</b>	<b>0.0011</b>	<b>J</b>	0.0025	0.0010	mg/L		04/28/21 14:05	04/29/21 22:17	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/28/21 14:05	04/29/21 22:17	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/28/21 14:05	04/29/21 22:17	5
Lithium	0.0019	U	0.0025	0.0019	mg/L		04/28/21 14:05	04/29/21 22:17	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/28/21 14:05	04/29/21 22:17	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/28/21 14:05	04/29/21 22:17	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/28/21 14:05	04/29/21 22:17	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 17:20	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>98</b>		5.0	5.0	mg/L			04/29/21 12:51	1
Chloride	1.4	U F1	2.0	1.4	mg/L			05/08/21 02:54	1
<b>Fluoride</b>	<b>0.10</b>	<b>B</b>	0.10	0.032	mg/L			05/10/21 16:37	1
<b>Sulfate</b>	<b>1.8</b>	<b>J</b>	5.0	1.4	mg/L			05/09/21 15:15	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.91</b>				SU			04/26/21 15:00	1

# Definitions/Glossary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

## Qualifiers

### Metals

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
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.
U	Indicates the analyte was analyzed for but not detected.

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

## 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: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: DUP-16-20210426**

**Lab Sample ID: 400-202647-1**

**Date Collected: 04/26/21 08:00**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	529803	04/29/21 22:05	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	530035	04/30/21 15:54	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		25	530035	04/30/21 18:57	AS	TAL PEN
Total/NA	Prep	7470A			529577	04/29/21 11:00	NET	TAL PEN
Total/NA	Analysis	7470A		1	529808	04/29/21 17:12	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	529669	04/29/21 12:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	531000	05/08/21 02:48	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	531172	05/10/21 16:20	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	531034	05/09/21 15:15	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	525973	04/26/21 07:00	EHS	TAL PEN

**Client Sample ID: MW-D2-20210426**

**Lab Sample ID: 400-202647-2**

**Date Collected: 04/26/21 10:45**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	529803	04/29/21 22:09	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	530035	04/30/21 15:58	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		25	530035	04/30/21 19:01	AS	TAL PEN
Total/NA	Prep	7470A			529577	04/29/21 11:00	NET	TAL PEN
Total/NA	Analysis	7470A		1	529808	04/29/21 17:14	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	529669	04/29/21 12:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	531000	05/08/21 02:48	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	531172	05/10/21 16:27	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	531034	05/09/21 15:15	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	525973	04/26/21 09:45	EHS	TAL PEN

**Client Sample ID: MW-D3-20210426**

**Lab Sample ID: 400-202647-3**

**Date Collected: 04/26/21 12:10**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			529524	04/29/21 10:32	KW	TAL PEN
Total Recoverable	Analysis	6020		5	529803	04/29/21 22:20	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/29/21 10:32	KW	TAL PEN
Total Recoverable	Analysis	6020		5	531201	05/10/21 12:45	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/29/21 10:32	KW	TAL PEN
Total Recoverable	Analysis	6020		25	531201	05/10/21 12:48	AS	TAL PEN

Eurofins TestAmerica, Pensacola



# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D3-20210426**

**Lab Sample ID: 400-202647-3**

**Date Collected: 04/26/21 12:10**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			529577	04/29/21 11:00	NET	TAL PEN
Total/NA	Analysis	7470A		1	529808	04/29/21 17:16	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	529669	04/29/21 12:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	531000	05/08/21 02:48	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	531172	05/10/21 16:30	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	531034	05/09/21 15:15	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	525973	04/26/21 11:10	EHS	TAL PEN

**Client Sample ID: MW-D1-20210426**

**Lab Sample ID: 400-202647-4**

**Date Collected: 04/26/21 13:45**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	529803	04/29/21 22:13	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	530035	04/30/21 16:02	AS	TAL PEN
Total/NA	Prep	7470A			529577	04/29/21 11:00	NET	TAL PEN
Total/NA	Analysis	7470A		1	529808	04/29/21 17:18	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	529669	04/29/21 12:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	531000	05/08/21 02:48	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	531172	05/10/21 16:34	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	531034	05/09/21 15:15	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	525973	04/26/21 12:45	EHS	TAL PEN

**Client Sample ID: MW-U1-20210426**

**Lab Sample ID: 400-202647-5**

**Date Collected: 04/26/21 16:00**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	529803	04/29/21 22:17	AS	TAL PEN
Total Recoverable	Prep	3005A			529524	04/28/21 14:05	KW	TAL PEN
Total Recoverable	Analysis	6020		5	530035	04/30/21 16:13	AS	TAL PEN
Total/NA	Prep	7470A			529577	04/29/21 11:00	NET	TAL PEN
Total/NA	Analysis	7470A		1	529808	04/29/21 17:20	NET	TAL PEN
Total/NA	Analysis	SM 2540C		1	529669	04/29/21 12:51	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	531000	05/08/21 02:54	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	531172	05/10/21 16:37	KAK	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	531034	05/09/21 15:15	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	525973	04/26/21 15:00	EHS	TAL PEN

**Laboratory References:**

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

Eurofins TestAmerica, Pensacola

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

## Metals

### Prep Batch: 529524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total Recoverable	Water	3005A	
400-202647-2	MW-D2-20210426	Total Recoverable	Water	3005A	
400-202647-3	MW-D3-20210426	Total Recoverable	Water	3005A	
400-202647-4	MW-D1-20210426	Total Recoverable	Water	3005A	
400-202647-5	MW-U1-20210426	Total Recoverable	Water	3005A	
MB 400-529524/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-529524/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
400-202201-E-39-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-202201-E-39-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Prep Batch: 529577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	7470A	
400-202647-2	MW-D2-20210426	Total/NA	Water	7470A	
400-202647-3	MW-D3-20210426	Total/NA	Water	7470A	
400-202647-4	MW-D1-20210426	Total/NA	Water	7470A	
400-202647-5	MW-U1-20210426	Total/NA	Water	7470A	
MB 400-529577/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-529577/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-202594-Q-2-B MS	Matrix Spike	Total/NA	Water	7470A	
400-202594-Q-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

### Analysis Batch: 529803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total Recoverable	Water	6020	529524
400-202647-2	MW-D2-20210426	Total Recoverable	Water	6020	529524
400-202647-3	MW-D3-20210426	Total Recoverable	Water	6020	529524
400-202647-4	MW-D1-20210426	Total Recoverable	Water	6020	529524
400-202647-5	MW-U1-20210426	Total Recoverable	Water	6020	529524
MB 400-529524/1-A ^5	Method Blank	Total Recoverable	Water	6020	529524
LCS 400-529524/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	529524
400-202201-E-39-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	529524
400-202201-E-39-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	529524

### Analysis Batch: 529808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	7470A	529577
400-202647-2	MW-D2-20210426	Total/NA	Water	7470A	529577
400-202647-3	MW-D3-20210426	Total/NA	Water	7470A	529577
400-202647-4	MW-D1-20210426	Total/NA	Water	7470A	529577
400-202647-5	MW-U1-20210426	Total/NA	Water	7470A	529577
MB 400-529577/14-A	Method Blank	Total/NA	Water	7470A	529577
LCS 400-529577/15-A	Lab Control Sample	Total/NA	Water	7470A	529577
400-202594-Q-2-B MS	Matrix Spike	Total/NA	Water	7470A	529577
400-202594-Q-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	529577

### Analysis Batch: 530035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total Recoverable	Water	6020	529524
400-202647-1	DUP-16-20210426	Total Recoverable	Water	6020	529524
400-202647-2	MW-D2-20210426	Total Recoverable	Water	6020	529524

Eurofins TestAmerica, Pensacola

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

## Metals (Continued)

### Analysis Batch: 530035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-2	MW-D2-20210426	Total Recoverable	Water	6020	529524
400-202647-4	MW-D1-20210426	Total Recoverable	Water	6020	529524
400-202647-5	MW-U1-20210426	Total Recoverable	Water	6020	529524
MB 400-529524/1-A ^5	Method Blank	Total Recoverable	Water	6020	529524
LCS 400-529524/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	529524

### Analysis Batch: 531201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-3	MW-D3-20210426	Total Recoverable	Water	6020	529524
400-202647-3	MW-D3-20210426	Total Recoverable	Water	6020	529524

## General Chemistry

### Analysis Batch: 529669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	SM 2540C	
400-202647-2	MW-D2-20210426	Total/NA	Water	SM 2540C	
400-202647-3	MW-D3-20210426	Total/NA	Water	SM 2540C	
400-202647-4	MW-D1-20210426	Total/NA	Water	SM 2540C	
400-202647-5	MW-U1-20210426	Total/NA	Water	SM 2540C	
MB 400-529669/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-529669/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-202594-E-3 DU	Duplicate	Total/NA	Water	SM 2540C	

### Analysis Batch: 531000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	SM 4500 Cl- E	
400-202647-2	MW-D2-20210426	Total/NA	Water	SM 4500 Cl- E	
400-202647-3	MW-D3-20210426	Total/NA	Water	SM 4500 Cl- E	
400-202647-4	MW-D1-20210426	Total/NA	Water	SM 4500 Cl- E	
400-202647-5	MW-U1-20210426	Total/NA	Water	SM 4500 Cl- E	
MB 400-531000/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-531000/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-531000/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-202647-5 MS	MW-U1-20210426	Total/NA	Water	SM 4500 Cl- E	
400-202647-5 MSD	MW-U1-20210426	Total/NA	Water	SM 4500 Cl- E	

### Analysis Batch: 531034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	SM 4500 SO4 E	
400-202647-2	MW-D2-20210426	Total/NA	Water	SM 4500 SO4 E	
400-202647-3	MW-D3-20210426	Total/NA	Water	SM 4500 SO4 E	
400-202647-4	MW-D1-20210426	Total/NA	Water	SM 4500 SO4 E	
400-202647-5	MW-U1-20210426	Total/NA	Water	SM 4500 SO4 E	
MB 400-531034/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-531034/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-531034/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-202647-5 MS	MW-U1-20210426	Total/NA	Water	SM 4500 SO4 E	
400-202647-5 MSD	MW-U1-20210426	Total/NA	Water	SM 4500 SO4 E	

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

## General Chemistry

### Analysis Batch: 531172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	SM 4500 F C	
400-202647-2	MW-D2-20210426	Total/NA	Water	SM 4500 F C	
400-202647-3	MW-D3-20210426	Total/NA	Water	SM 4500 F C	
400-202647-4	MW-D1-20210426	Total/NA	Water	SM 4500 F C	
400-202647-5	MW-U1-20210426	Total/NA	Water	SM 4500 F C	
MB 400-531172/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-531172/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-202647-1 MS	DUP-16-20210426	Total/NA	Water	SM 4500 F C	
400-202647-1 MSD	DUP-16-20210426	Total/NA	Water	SM 4500 F C	

## Field Service / Mobile Lab

### Analysis Batch: 525973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	Field Sampling	
400-202647-2	MW-D2-20210426	Total/NA	Water	Field Sampling	
400-202647-3	MW-D3-20210426	Total/NA	Water	Field Sampling	
400-202647-4	MW-D1-20210426	Total/NA	Water	Field Sampling	
400-202647-5	MW-U1-20210426	Total/NA	Water	Field Sampling	

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

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

**Lab Sample ID: MB 400-529524/1-A ^5**  
**Matrix: Water**  
**Analysis Batch: 529803**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.0015	U	0.0025	0.0015	mg/L		04/28/21 14:05	04/29/21 20:49	5
Arsenic	0.00039	U	0.0013	0.00039	mg/L		04/28/21 14:05	04/29/21 20:49	5
Barium	0.00070	U	0.0025	0.00070	mg/L		04/28/21 14:05	04/29/21 20:49	5
Beryllium	0.00017	U	0.0020	0.00017	mg/L		04/28/21 14:05	04/29/21 20:49	5
Cadmium	0.00028	U	0.0010	0.00028	mg/L		04/28/21 14:05	04/29/21 20:49	5
Chromium	0.0010	U	0.0025	0.0010	mg/L		04/28/21 14:05	04/29/21 20:49	5
Cobalt	0.00056	U	0.0025	0.00056	mg/L		04/28/21 14:05	04/29/21 20:49	5
Lead	0.00029	U	0.0013	0.00029	mg/L		04/28/21 14:05	04/29/21 20:49	5
Lithium	0.00200	J	0.0025	0.0019	mg/L		04/28/21 14:05	04/29/21 20:49	5
Molybdenum	0.0045	U	0.010	0.0045	mg/L		04/28/21 14:05	04/29/21 20:49	5
Selenium	0.00082	U	0.0013	0.00082	mg/L		04/28/21 14:05	04/29/21 20:49	5
Thallium	0.00012	U	0.00050	0.00012	mg/L		04/28/21 14:05	04/29/21 20:49	5

**Lab Sample ID: MB 400-529524/1-A ^5**  
**Matrix: Water**  
**Analysis Batch: 530035**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	0.13	U	0.25	0.13	mg/L		04/28/21 14:05	04/30/21 15:47	5

**Lab Sample ID: LCS 400-529524/2-A ^5**  
**Matrix: Water**  
**Analysis Batch: 529803**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0427		mg/L		85	80 - 120
Barium	0.0500	0.0424		mg/L		85	80 - 120
Beryllium	0.0500	0.0459		mg/L		92	80 - 120
Cadmium	0.0500	0.0474		mg/L		95	80 - 120
Chromium	0.0500	0.0472		mg/L		94	80 - 120
Cobalt	0.0500	0.0462		mg/L		92	80 - 120
Lead	0.0500	0.0460		mg/L		92	80 - 120
Lithium	0.0500	0.0443		mg/L		89	80 - 120
Molybdenum	0.0500	0.0453		mg/L		91	80 - 120
Selenium	0.0500	0.0477		mg/L		95	80 - 120
Thallium	0.0100	0.00876		mg/L		88	80 - 120

**Lab Sample ID: LCS 400-529524/2-A ^5**  
**Matrix: Water**  
**Analysis Batch: 530035**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

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

**Lab Sample ID: 400-202201-E-39-B MS ^5**  
**Matrix: Water**  
**Analysis Batch: 529803**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Antimony	0.0015	U	0.0500	0.0483		mg/L		97		75 - 125
Arsenic	0.00039	U	0.0500	0.0481		mg/L		96		75 - 125
Barium	0.084		0.0500	0.126		mg/L		85		75 - 125
Beryllium	0.00017	U	0.0500	0.0494		mg/L		99		75 - 125
Cadmium	0.00028	U	0.0500	0.0490		mg/L		98		75 - 125
Chromium	0.0022	J	0.0500	0.0508		mg/L		97		75 - 125
Cobalt	0.00097	J	0.0500	0.0489		mg/L		96		75 - 125
Lead	0.00029	U	0.0500	0.0477		mg/L		95		75 - 125
Lithium	0.0019	U	0.0500	0.0466		mg/L		93		75 - 125
Molybdenum	0.0045	U	0.0500	0.0476		mg/L		95		75 - 125
Selenium	0.0015		0.0500	0.0515		mg/L		100		75 - 125
Thallium	0.00012	U	0.0100	0.00908		mg/L		91		75 - 125

**Lab Sample ID: 400-202201-E-39-C MSD ^5**  
**Matrix: Water**  
**Analysis Batch: 529803**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 529524**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Antimony	0.0015	U	0.0500	0.0479		mg/L		96		75 - 125	1	20
Arsenic	0.00039	U	0.0500	0.0486		mg/L		97		75 - 125	1	20
Barium	0.084		0.0500	0.126		mg/L		85		75 - 125	0	20
Beryllium	0.00017	U	0.0500	0.0474		mg/L		95		75 - 125	4	20
Cadmium	0.00028	U	0.0500	0.0481		mg/L		96		75 - 125	2	20
Chromium	0.0022	J	0.0500	0.0505		mg/L		97		75 - 125	1	20
Cobalt	0.00097	J	0.0500	0.0475		mg/L		93		75 - 125	3	20
Lead	0.00029	U	0.0500	0.0471		mg/L		94		75 - 125	1	20
Lithium	0.0019	U	0.0500	0.0454		mg/L		91		75 - 125	3	20
Molybdenum	0.0045	U	0.0500	0.0473		mg/L		95		75 - 125	1	20
Selenium	0.0015		0.0500	0.0517		mg/L		100		75 - 125	0	20
Thallium	0.00012	U	0.0100	0.00911		mg/L		91		75 - 125	0	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 400-529577/14-A**  
**Matrix: Water**  
**Analysis Batch: 529808**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 529577**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.000070	U	0.00020	0.000070	mg/L		04/29/21 11:00	04/29/21 16:44	1

**Lab Sample ID: LCS 400-529577/15-A**  
**Matrix: Water**  
**Analysis Batch: 529808**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 529577**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Mercury	0.00101	0.000938		mg/L		93		80 - 120

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

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

**Lab Sample ID: 400-202594-Q-2-B MS**  
**Matrix: Water**  
**Analysis Batch: 529808**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 529577**  
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.000070	U	0.00201	0.00168		mg/L		83	80 - 120

**Lab Sample ID: 400-202594-Q-2-C MSD**  
**Matrix: Water**  
**Analysis Batch: 529808**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 529577**  
 %Rec. RPD

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.000070	U	0.00201	0.00167		mg/L		83	80 - 120	0	20

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

**Lab Sample ID: MB 400-529669/1**  
**Matrix: Water**  
**Analysis Batch: 529669**

**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	5.0	U	5.0	5.0	mg/L			04/29/21 12:51	1

**Lab Sample ID: LCS 400-529669/2**  
**Matrix: Water**  
**Analysis Batch: 529669**

**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	302		mg/L		103	78 - 122

**Lab Sample ID: 400-202594-E-3 DU**  
**Matrix: Water**  
**Analysis Batch: 529669**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	250	U	400		mg/L		NC	5

## Method: SM 4500 Cl- E - Chloride, Total

**Lab Sample ID: MB 400-531000/16**  
**Matrix: Water**  
**Analysis Batch: 531000**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	U	2.0	1.4	mg/L			05/08/21 02:45	1

**Lab Sample ID: LCS 400-531000/17**  
**Matrix: Water**  
**Analysis Batch: 531000**

**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	27.5		mg/L		92	90 - 110

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

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

Lab Sample ID: MRL 400-531000/13  
 Matrix: Water  
 Analysis Batch: 531000

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.00		mg/L		100	50 - 150

Lab Sample ID: 400-202647-5 MS  
 Matrix: Water  
 Analysis Batch: 531000

Client Sample ID: MW-U1-20210426  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.4	U F1	10.0	13.7	F1	mg/L		137	73 - 120

Lab Sample ID: 400-202647-5 MSD  
 Matrix: Water  
 Analysis Batch: 531000

Client Sample ID: MW-U1-20210426  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	1.4	U F1	10.0	13.8	F1	mg/L		138	73 - 120	1	8

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-531172/3  
 Matrix: Water  
 Analysis Batch: 531172

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0600	J	0.10	0.032	mg/L			05/10/21 16:11	1

Lab Sample ID: LCS 400-531172/6  
 Matrix: Water  
 Analysis Batch: 531172

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	4.72		mg/L		94	90 - 110

Lab Sample ID: 400-202647-1 MS  
 Matrix: Water  
 Analysis Batch: 531172

Client Sample ID: DUP-16-20210426  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.22	B	1.00	1.29		mg/L		107	75 - 125

Lab Sample ID: 400-202647-1 MSD  
 Matrix: Water  
 Analysis Batch: 531172

Client Sample ID: DUP-16-20210426  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Fluoride	0.22	B	1.00	1.29		mg/L					



# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
 SDG: Crisp Co. Power

## Method: SM 4500 SO4 E - Sulfate, Total

**Lab Sample ID: MB 400-531034/6**  
**Matrix: Water**  
**Analysis Batch: 531034**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.4	U	5.0	1.4	mg/L			05/09/21 15:04	1

**Lab Sample ID: LCS 400-531034/7**  
**Matrix: Water**  
**Analysis Batch: 531034**

**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	16.0		mg/L		106	90 - 110

**Lab Sample ID: MRL 400-531034/3**  
**Matrix: Water**  
**Analysis Batch: 531034**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.98	J	mg/L		100	50 - 150

**Lab Sample ID: 400-202647-5 MS**  
**Matrix: Water**  
**Analysis Batch: 531034**

**Client Sample ID: MW-U1-20210426**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.8	J	10.0	12.4		mg/L		105	77 - 128

**Lab Sample ID: 400-202647-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 531034**

**Client Sample ID: MW-U1-20210426**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.8	J	10.0	12.4		mg/L		106	77 - 128	0	5



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-202647-1  
SDG Number: Crisp Co. Power

**Login Number: 202647**

**List Number: 1**

**Creator: Whitley, Adrian**

**List Source: Eurofins TestAmerica, Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2, 22.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-1  
SDG: Crisp Co. Power

## Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026002	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-21

## ANALYTICAL REPORT

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

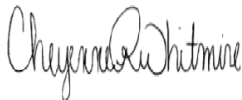
Laboratory Job ID: 400-202647-2

Laboratory Sample Delivery Group: Crisp Co. Power  
Client Project/Site: CCR App.III/IV GW Monitoring

**For:**

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

Attn: Dawit Yifru



Authorized for release by:  
6/4/2021 9:42:50 AM

Cheyenne Whitmire, Project Manager II  
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### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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



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# Case Narrative

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

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## Job ID: 400-202647-2

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Laboratory: Eurofins TestAmerica, Pensacola

### Narrative

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#### Job Narrative 400-202647-2

#### RAD

Method 9315: Radium-226 Batch 160-509356. 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-16-20210426 (400-202647-1), MW-D2-20210426 (400-202647-2), MW-D3-20210426 (400-202647-3), MW-D1-20210426 (400-202647-4), MW-U1-20210426 (400-202647-5), (LCS 160-509356/1-A), (MB 160-509356/24-A), (280-147998-A-2-E) and (280-147998-M-2-B DU)

Method 9320: Radium-228 Batch 160-509365. 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-16-20210426 (400-202647-1), MW-D2-20210426 (400-202647-2), MW-D3-20210426 (400-202647-3), MW-D1-20210426 (400-202647-4), MW-U1-20210426 (400-202647-5), (LCS 160-509365/1-A), (MB 160-509365/24-A), (280-147998-A-2-F) and (280-147998-M-2-C DU)



# Method Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

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

#### Protocol References:

None = None

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

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

#### Laboratory References:

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



# Sample Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-202647-1	DUP-16-20210426	Water	04/26/21 08:00	04/28/21 09:39	
400-202647-2	MW-D2-20210426	Water	04/26/21 10:45	04/28/21 09:39	
400-202647-3	MW-D3-20210426	Water	04/26/21 12:10	04/28/21 09:39	
400-202647-4	MW-D1-20210426	Water	04/26/21 13:45	04/28/21 09:39	
400-202647-5	MW-U1-20210426	Water	04/26/21 16:00	04/28/21 09:39	

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

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

**Client Sample ID: DUP-16-20210426**

**Lab Sample ID: 400-202647-1**

Date Collected: 04/26/21 08:00

Matrix: Water

Date Received: 04/28/21 09:39

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.303		0.194	0.196	1.00	0.263	pCi/L	05/12/21 13:58	06/03/21 07:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.2		40 - 110					05/12/21 13:58	06/03/21 07:37	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0919	U	0.344	0.344	1.00	0.597	pCi/L	05/12/21 14:38	06/01/21 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.2		40 - 110					05/12/21 14:38	06/01/21 12:59	1
Y Carrier	87.5		40 - 110					05/12/21 14:38	06/01/21 12:59	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	0.395	U	0.395	0.396	5.00	0.597	pCi/L		06/03/21 21:24	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D2-20210426**

**Lab Sample ID: 400-202647-2**

Date Collected: 04/26/21 10:45

Matrix: Water

Date Received: 04/28/21 09:39

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.255</b>		0.162	0.163	1.00	0.207	pCi/L	05/12/21 13:58	06/03/21 07:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.8		40 - 110					05/12/21 13:58	06/03/21 07:37	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.518</b>		0.295	0.299	1.00	0.440	pCi/L	05/12/21 14:38	06/01/21 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.8		40 - 110					05/12/21 14:38	06/01/21 12:59	1
Y Carrier	89.7		40 - 110					05/12/21 14:38	06/01/21 12:59	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
<b>Combined Radium 226 + 228</b>	<b>0.773</b>		0.337	0.341	5.00	0.440	pCi/L		06/03/21 21:24	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D3-20210426**

**Lab Sample ID: 400-202647-3**

Date Collected: 04/26/21 12:10

Matrix: Water

Date Received: 04/28/21 09:39

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0920	U	0.122	0.122	1.00	0.203	pCi/L	05/12/21 13:58	06/03/21 07:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.3		40 - 110					05/12/21 13:58	06/03/21 07:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.260	U	0.291	0.292	1.00	0.478	pCi/L	05/12/21 14:38	06/01/21 13:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.3		40 - 110					05/12/21 14:38	06/01/21 13:00	1
Y Carrier	93.1		40 - 110					05/12/21 14:38	06/01/21 13:00	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	0.352	U	0.316	0.316	5.00	0.478	pCi/L		06/03/21 21:24	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D1-20210426**

**Lab Sample ID: 400-202647-4**

Date Collected: 04/26/21 13:45

Matrix: Water

Date Received: 04/28/21 09:39

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00177	U	0.112	0.112	1.00	0.238	pCi/L	05/12/21 13:58	06/03/21 07:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.7		40 - 110					05/12/21 13:58	06/03/21 07:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0312	U	0.286	0.286	1.00	0.524	pCi/L	05/12/21 14:38	06/01/21 13:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.7		40 - 110					05/12/21 14:38	06/01/21 13:00	1
Y Carrier	89.3		40 - 110					05/12/21 14:38	06/01/21 13:00	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	-0.0330	U	0.307	0.307	5.00	0.524	pCi/L		06/03/21 21:24	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-U1-20210426**

**Lab Sample ID: 400-202647-5**

Date Collected: 04/26/21 16:00

Matrix: Water

Date Received: 04/28/21 09:39

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172	U	0.145	0.146	1.00	0.218	pCi/L	05/12/21 13:58	06/03/21 07:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					05/12/21 13:58	06/03/21 07:40	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.437	U	0.293	0.295	1.00	0.451	pCi/L	05/12/21 14:38	06/01/21 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					05/12/21 14:38	06/01/21 13:01	1
Y Carrier	85.6		40 - 110					05/12/21 14:38	06/01/21 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
<b>Combined Radium 226 + 228</b>	<b>0.609</b>		0.327	0.329	5.00	0.451	pCi/L		06/03/21 21:24	1

# Definitions/Glossary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

## 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: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

**Client Sample ID: DUP-16-20210426**

**Lab Sample ID: 400-202647-1**

**Date Collected: 04/26/21 08:00**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			509356	05/12/21 13:58	LAR	TAL SL
Total/NA	Analysis	9315		1	512655	06/03/21 07:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509365	05/12/21 14:38	LAR	TAL SL
Total/NA	Analysis	9320		1	512417	06/01/21 12:59	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	512663	06/03/21 21:24	GRW	TAL SL

**Client Sample ID: MW-D2-20210426**

**Lab Sample ID: 400-202647-2**

**Date Collected: 04/26/21 10:45**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			509356	05/12/21 13:58	LAR	TAL SL
Total/NA	Analysis	9315		1	512655	06/03/21 07:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509365	05/12/21 14:38	LAR	TAL SL
Total/NA	Analysis	9320		1	512417	06/01/21 12:59	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	512663	06/03/21 21:24	GRW	TAL SL

**Client Sample ID: MW-D3-20210426**

**Lab Sample ID: 400-202647-3**

**Date Collected: 04/26/21 12:10**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			509356	05/12/21 13:58	LAR	TAL SL
Total/NA	Analysis	9315		1	512655	06/03/21 07:38	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509365	05/12/21 14:38	LAR	TAL SL
Total/NA	Analysis	9320		1	512417	06/01/21 13:00	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	512663	06/03/21 21:24	GRW	TAL SL

**Client Sample ID: MW-D1-20210426**

**Lab Sample ID: 400-202647-4**

**Date Collected: 04/26/21 13:45**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			509356	05/12/21 13:58	LAR	TAL SL
Total/NA	Analysis	9315		1	512655	06/03/21 07:38	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509365	05/12/21 14:38	LAR	TAL SL
Total/NA	Analysis	9320		1	512417	06/01/21 13:00	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	512663	06/03/21 21:24	GRW	TAL SL



# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

**Client Sample ID: MW-U1-20210426**

**Lab Sample ID: 400-202647-5**

**Date Collected: 04/26/21 16:00**

**Matrix: Water**

**Date Received: 04/28/21 09:39**

<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			509356	05/12/21 13:58	LAR	TAL SL
Total/NA	Analysis	9315		1	512600	06/03/21 07:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509365	05/12/21 14:38	LAR	TAL SL
Total/NA	Analysis	9320		1	512417	06/01/21 13:01	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	512663	06/03/21 21:24	GRW	TAL SL

**Laboratory References:**

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

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
SDG: Crisp Co. Power

## Rad

### Prep Batch: 509356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	PrecSep-21	
400-202647-2	MW-D2-20210426	Total/NA	Water	PrecSep-21	
400-202647-3	MW-D3-20210426	Total/NA	Water	PrecSep-21	
400-202647-4	MW-D1-20210426	Total/NA	Water	PrecSep-21	
400-202647-5	MW-U1-20210426	Total/NA	Water	PrecSep-21	
MB 160-509356/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-509356/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
280-147998-M-2-B DU	Duplicate	Total/NA	Water	PrecSep-21	

### Prep Batch: 509365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-202647-1	DUP-16-20210426	Total/NA	Water	PrecSep_0	
400-202647-2	MW-D2-20210426	Total/NA	Water	PrecSep_0	
400-202647-3	MW-D3-20210426	Total/NA	Water	PrecSep_0	
400-202647-4	MW-D1-20210426	Total/NA	Water	PrecSep_0	
400-202647-5	MW-U1-20210426	Total/NA	Water	PrecSep_0	
MB 160-509365/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-509365/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
280-147998-M-2-C DU	Duplicate	Total/NA	Water	PrecSep_0	

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-509356/24-A**  
**Matrix: Water**  
**Analysis Batch: 512601**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 509356**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared		Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Prepared	Time	
Radium-226	0.09182	U	0.126	0.126	1.00	0.213	pCi/L	05/12/21 13:58	06/03/21 07:43	1	
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier	40 - 110					05/12/21 13:58	06/03/21 07:43	1	
	76.9										

**Lab Sample ID: LCS 160-509356/1-A**  
**Matrix: Water**  
**Analysis Batch: 512655**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 509356**

Analyte	LCS LCS		Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qual	Uncert. (2σ+/-)					
Radium-226			11.3	12.11		1.38	1.00	0.215	pCi/L	107	75 - 125
Carrier	LCS LCS		Limits								
Ba Carrier	%Yield	Qualifier	40 - 110								
	80.5										

**Lab Sample ID: 280-147998-M-2-B DU**  
**Matrix: Water**  
**Analysis Batch: 512655**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 509356**

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit	
	Result	Qual	Result	Qual	Uncert. (2σ+/-)						
Radium-226	0.380		0.5260		0.286	1.00	0.364	pCi/L	0.28	1	
Carrier	DU DU		Limits								
Ba Carrier	%Yield	Qualifier	40 - 110								
	72.4										

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

**Lab Sample ID: MB 160-509365/24-A**  
**Matrix: Water**  
**Analysis Batch: 512418**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 509365**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared		Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Prepared	Time	
Radium-228	-0.1657	U	0.240	0.240	1.00	0.465	pCi/L	05/12/21 14:38	06/01/21 13:19	1	
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier	40 - 110					05/12/21 14:38	06/01/21 13:19	1	
Y Carrier	76.9		40 - 110					05/12/21 14:38	06/01/21 13:19	1	
	87.1										

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

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

**Lab Sample ID: LCS 160-509365/1-A**  
**Matrix: Water**  
**Analysis Batch: 512417**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 509365**


Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	9.67	8.961		1.10	1.00	0.434	pCi/L	93	75 - 125	
<b>LCS LCS</b>										
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>							
Ba Carrier	80.5		40 - 110							
Y Carrier	89.0		40 - 110							

**Lab Sample ID: 280-147998-M-2-C DU**  
**Matrix: Water**  
**Analysis Batch: 512417**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 509365**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
										1
Radium-228	3.23		3.147		0.655	1.00	0.595	pCi/L	0.06	1
<b>DU DU</b>										
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>							
Ba Carrier	72.4		40 - 110							
Y Carrier	86.4		40 - 110							

**Chain of Custody Record**

<b>Client Information</b> Client Contact: <b>STEPHEN W. RANDALL</b> Phone: <b>478-328-6181</b> Company: <b>Geosyntec Consultants, Inc</b> Address: <b>1255 Roberts Blvd, NW Suite 200</b> City: <b>Kennesaw</b> State, Zip: <b>GA, 30144</b> Phone: <b>478-202-9500</b> Email: <b>dyffu@geosyntec.com</b> Project Name: <b>CCR App. II/IV GW Monitoring</b> Site: <b>CRISP Co. Powder</b>		Lab PM: <b>Whitmore, Cheyenne R</b> E-Mail: <b>cheyenne.whitmore@estamericainc.com</b> Carrier Tracking No: <b>1482-3808-3871</b> COC No: <b>400-83295-29334 1</b> Page: <b>Page 1 of 1</b> Job #:	
Due Date Requested: TAT Requested (days): <b>STANDARD</b> PO #: <b>478-202-9500</b> Purchase Order not required WO #: <b>40007960</b> Project #: <b>40007960</b> SSO#:		<b>Analysis Requested</b>  <b>400-202647 COC</b> Total Number of Containers:	
<b>Sample Identification</b> Sample ID: <b>DUP-16-20210426</b> Sample Time: <b>4/26/21 0800</b> Matrix: <b>Water</b>		Matrix: <b>Water</b> Sample Type (C=Comp, G=grab): <b>G</b> Sample Date: <b>4/26/21 0800</b> Sample Time: <b>1045</b> Matrix: <b>Water</b> Sample Type: <b>G</b> Sample Date: <b>4/26/21 1210</b> Sample Time: <b>1345</b> Matrix: <b>Water</b> Sample Type: <b>G</b> Sample Date: <b>4/24/21 1600</b> Matrix: <b>Water</b>	
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify): <b>LEVEL II</b> Empty Kit Relinquished by:		Special Instructions/Note: <b>PH-7.03</b> <b>PH-6.87</b> <b>PH-7.02</b> <b>PH-6.82</b> <b>PH-7.91</b> <b>LAST ITEM</b>	
Requisitioned by: <b>Stephen W. Randall</b> Date/Time: <b>4/27/21 1600</b> Company: <b>Geosyntec</b>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/OC Requirements:	
Requisitioned by: <b>BRUNDA W. WHITE</b> Date/Time: <b>4/28/21 939</b> Company:		Date of Shipment: <b>20Apr21</b> Weight: <b>10.00 LBS</b> DV: <b>0.00</b> SHIPPING: <b>0.00</b> SPECIAL: <b>0.00</b> HANDLING: <b>0.00</b> TOTAL: <b>0.00</b>	
Custody Seal Intact: <b>Custody Seal No.</b> Yes <input type="checkbox"/> No <input type="checkbox"/>		Sves: <b>PRIORITY OVERNIGHT</b> Master: <b>1482 3808 3860</b> TRK: <b>1482 3808 3871</b> <b>0.9 22.06 IR9</b>	



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-202647-2  
SDG Number: Crisp Co. Power

**Login Number: 202647**

**List Number: 1**

**Creator: Whitley, Adrian**

**List Source: Eurofins TestAmerica, Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2, 22.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-202647-2  
SDG Number: Crisp Co. Power

**Login Number: 202647**

**List Number: 2**

**Creator: Mazariegos, Leonel A**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 04/29/21 04:52 PM**

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

# Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-202647-2  
 SDG: Crisp Co. Power

## Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21 *
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

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



October 2021

## ANALYTICAL REPORT

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

Laboratory Job ID: 400-210296-1  
Laboratory Sample Delivery Group: Crisp County Power  
Client Project/Site: CCR App.III/IV GW Monitoring

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

Attn: Dawit Yifru



Authorized for release by:  
11/11/2021 2:25:58 PM

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

### LINKS

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

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

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

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# Case Narrative

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

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## Job ID: 400-210296-1

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### Laboratory: Eurofins TestAmerica, Pensacola

#### Narrative

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#### Job Narrative 400-210296-1

#### Metals

Method 6020: The ICV passed recovery/accuracy criteria which serves the ICV purpose of verifying the calibration standards. The replicate RPD for the elements were outside of the criteria for standards but within the criteria for field samples. Data has therefore been reported and narrated accordingly. Boron DUP-17-20211026 (400-210296-1), MW-D2-20211026 (400-210296-2), (LCS 400-553581/2-A ^5) and (MB 400-553581/1-A ^5)

Method 6020: The method blank for preparation batch 400-553581 and analytical batch 400-555348 contained boron above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

#### General Chemistry

Method SM 2540C: The sample duplicate (DUP) precision for analytical batch 400-554173 was outside control limits. Sample non-homogeneity is suspected.

Method SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-553748 was outside control limits. Sample matrix interference is suspected.

Method SM 4500 F C: The matrix spike (MS) recoveries for analytical batch 400-553748 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-554886 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

# Detection Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

## Client Sample ID: DUP-17-20211026

## Lab Sample ID: 400-210296-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	170		2.5	0.70	ug/L	5		6020	Total Recoverable
Calcium	130000		250	130	ug/L	5		6020	Total Recoverable
Boron	130	B	50	1.2	ug/L	5		6020	Total Recoverable
Total Dissolved Solids	400		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	7.2		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
pH	7.3	HF			SU	1		SM 4500 H+ B	Total/NA
Temperature	20.2	HF			Degrees C	1		SM 4500 H+ B	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

## Client Sample ID: MW-D2-20211026

## Lab Sample ID: 400-210296-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.2	J	2.5	1.0	ug/L	5		6020	Total Recoverable
Barium	170		2.5	0.70	ug/L	5		6020	Total Recoverable
Calcium	110000		250	130	ug/L	5		6020	Total Recoverable
Boron	110	B	50	1.2	ug/L	5		6020	Total Recoverable
Total Dissolved Solids	390		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	4.9		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
pH	7.5	HF			SU	1		SM 4500 H+ B	Total/NA
Temperature	20.4	HF			Degrees C	1		SM 4500 H+ B	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	7.70		1.00		SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-U1-20211026

## Lab Sample ID: 400-210296-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3		1.3	1.2	ug/L	5		6020	Total Recoverable
Chromium	1.6	J	2.5	1.0	ug/L	5		6020	Total Recoverable
Barium	2.4	J B	2.5	0.70	ug/L	5		6020	Total Recoverable
Calcium	36000		250	130	ug/L	5		6020	Total Recoverable
Boron	7.0	J	10	0.24	ug/L	1		6020	Total Recoverable
Total Dissolved Solids	86		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	1.7	J	2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
pH	8.1	HF			SU	1		SM 4500 H+ B	Total/NA
Temperature	20.1	HF			Degrees C	1		SM 4500 H+ B	Total/NA
Field pH	9.28		1.00		SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-D1-20211026

## Lab Sample ID: 400-210296-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	22	B	2.5	0.70	ug/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

# Detection Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

## Client Sample ID: MW-D1-20211026 (Continued)

## Lab Sample ID: 400-210296-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	91000		250	130	ug/L	5		6020	Total Recoverable
Boron	180		50	1.2	ug/L	5		6020	Total Recoverable
Total Dissolved Solids	270		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	2.5		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	J	0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
pH	7.8	HF			SU	1		SM 4500 H+ B	Total/NA
Temperature	20.2	HF			Degrees C	1		SM 4500 H+ B	Total/NA
Sulfate	22		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	8.38		1.00		SU	1		Field Sampling	Total/NA

## Client Sample ID: MW-D3-20211026

## Lab Sample ID: 400-210296-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	74	B	2.5	0.70	ug/L	5		6020	Total Recoverable
Calcium	100000		250	130	ug/L	5		6020	Total Recoverable
Boron	220		50	1.2	ug/L	5		6020	Total Recoverable
Total Dissolved Solids	330		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Chloride	3.1		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20	F1 F2	0.10	0.070	mg/L	1		SM 4500 F C	Total/NA
pH	7.4	HF			SU	1		SM 4500 H+ B	Total/NA
Temperature	20.0	HF			Degrees C	1		SM 4500 H+ B	Total/NA
Sulfate	22		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	8.11		1.00		SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

# Method Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	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 H+ B	pH	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

#### Protocol References:

EPA = US Environmental Protection Agency

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

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

#### Laboratory References:

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

# Sample Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-210296-1	DUP-17-20211026	Water	10/26/21 00:00	10/28/21 09:33
400-210296-2	MW-D2-20211026	Water	10/26/21 13:45	10/28/21 09:33
400-210296-3	MW-U1-20211026	Water	10/26/21 12:25	10/28/21 09:33
400-210296-4	MW-D1-20211026	Water	10/26/21 16:20	10/28/21 09:33
400-210296-5	MW-D3-20211026	Water	10/26/21 15:10	10/28/21 09:33

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



# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: DUP-17-20211026**

**Lab Sample ID: 400-210296-1**

Date Collected: 10/26/21 00:00

Matrix: Water

Date Received: 10/28/21 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/09/21 20:21	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/09/21 20:21	5
<b>Barium</b>	<b>170</b>		2.5	0.70	ug/L		10/28/21 17:00	11/09/21 20:21	5
<b>Calcium</b>	<b>130000</b>		250	130	ug/L		10/28/21 17:00	11/10/21 12:25	5
<b>Boron</b>	<b>130</b>	<b>B</b>	50	1.2	ug/L		10/28/21 17:00	11/10/21 12:25	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>400</b>		5.0	5.0	mg/L			11/01/21 16:20	1
<b>Chloride</b>	<b>7.2</b>		2.0	1.4	mg/L			11/08/21 01:47	1
<b>Fluoride</b>	<b>0.070</b>	<b>J</b>	0.10	0.070	mg/L			10/29/21 13:59	1
<b>pH</b>	<b>7.3</b>	<b>HF</b>			SU			10/29/21 08:49	1
<b>Temperature</b>	<b>20.2</b>	<b>HF</b>			Degrees C			10/29/21 08:49	1
<b>Sulfate</b>	<b>16</b>		5.0	1.4	mg/L			11/08/21 02:45	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: MW-D2-20211026**

**Lab Sample ID: 400-210296-2**

Date Collected: 10/26/21 13:45

Matrix: Water

Date Received: 10/28/21 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/09/21 20:36	5
<b>Chromium</b>	<b>1.2</b>	<b>J</b>	2.5	1.0	ug/L		10/28/21 17:00	11/09/21 20:36	5
<b>Barium</b>	<b>170</b>		2.5	0.70	ug/L		10/28/21 17:00	11/09/21 20:36	5
<b>Calcium</b>	<b>110000</b>		250	130	ug/L		10/28/21 17:00	11/10/21 12:35	5
<b>Boron</b>	<b>110</b>	<b>B</b>	50	1.2	ug/L		10/28/21 17:00	11/10/21 12:35	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Dissolved Solids</b>	<b>390</b>		5.0	5.0	mg/L			11/02/21 13:14	1
<b>Chloride</b>	<b>4.9</b>		2.0	1.4	mg/L			11/08/21 01:47	1
<b>Fluoride</b>	<b>0.070</b>	<b>J</b>	0.10	0.070	mg/L			10/29/21 13:55	1
<b>pH</b>	<b>7.5</b>	<b>HF</b>			SU			10/29/21 08:49	1
<b>Temperature</b>	<b>20.4</b>	<b>HF</b>			Degrees C			10/29/21 08:49	1
<b>Sulfate</b>	<b>16</b>		5.0	1.4	mg/L			11/08/21 02:45	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Field pH</b>	<b>7.70</b>		1.00		SU			10/26/21 12:45	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: MW-U1-20211026**

**Lab Sample ID: 400-210296-3**

Date Collected: 10/26/21 12:25

Matrix: Water

Date Received: 10/28/21 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3		1.3	1.2	ug/L		10/28/21 17:00	11/03/21 17:26	5
Chromium	1.6	J	2.5	1.0	ug/L		10/28/21 17:00	11/03/21 17:26	5
Barium	2.4	J B	2.5	0.70	ug/L		10/28/21 17:00	11/03/21 17:26	5
Calcium	36000		250	130	ug/L		10/28/21 17:00	11/03/21 17:26	5
Boron	7.0	J	10	0.24	ug/L		10/28/21 17:00	11/04/21 15:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	86		5.0	5.0	mg/L			11/02/21 13:14	1
Chloride	1.7	J	2.0	1.4	mg/L			11/08/21 01:47	1
Fluoride	ND		0.10	0.070	mg/L			10/29/21 13:52	1
pH	8.1	HF			SU			10/29/21 08:49	1
Temperature	20.1	HF			Degrees C			10/29/21 08:49	1
Sulfate	ND		5.0	1.4	mg/L			11/08/21 02:45	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	9.28		1.00		SU			10/26/21 11:25	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: MW-D1-20211026**

**Lab Sample ID: 400-210296-4**

Date Collected: 10/26/21 16:20

Matrix: Water

Date Received: 10/28/21 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/03/21 17:31	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/03/21 17:31	5
Barium	22	B	2.5	0.70	ug/L		10/28/21 17:00	11/03/21 17:31	5
Calcium	91000		250	130	ug/L		10/28/21 17:00	11/03/21 17:31	5
Boron	180		50	1.2	ug/L		10/28/21 17:00	11/04/21 15:37	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	270		5.0	5.0	mg/L			11/02/21 13:14	1
Chloride	2.5		2.0	1.4	mg/L			11/08/21 01:49	1
Fluoride	0.090	J	0.10	0.070	mg/L			10/29/21 13:49	1
pH	7.8	HF			SU			10/29/21 08:49	1
Temperature	20.2	HF			Degrees C			10/29/21 08:49	1
Sulfate	22		5.0	1.4	mg/L			11/08/21 02:45	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.38		1.00		SU			10/26/21 15:20	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: MW-D3-20211026**

**Lab Sample ID: 400-210296-5**

Date Collected: 10/26/21 15:10

Matrix: Water

Date Received: 10/28/21 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/03/21 17:36	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/03/21 17:36	5
Barium	74	B	2.5	0.70	ug/L		10/28/21 17:00	11/03/21 17:36	5
Calcium	100000		250	130	ug/L		10/28/21 17:00	11/03/21 17:36	5
Boron	220		50	1.2	ug/L		10/28/21 17:00	11/04/21 15:42	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	330		5.0	5.0	mg/L			11/02/21 13:14	1
Chloride	3.1		2.0	1.4	mg/L			11/08/21 01:49	1
Fluoride	0.20	F1 F2	0.10	0.070	mg/L			10/29/21 13:39	1
pH	7.4	HF			SU			10/29/21 08:49	1
Temperature	20.0	HF			Degrees C			10/29/21 08:49	1
Sulfate	22		5.0	1.4	mg/L			11/08/21 02:45	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.11		1.00		SU			10/26/21 14:10	1

# Definitions/Glossary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

## Qualifiers

### Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: DUP-17-20211026**  
**Date Collected: 10/26/21 00:00**  
**Date Received: 10/28/21 09:33**

**Lab Sample ID: 400-210296-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			553581	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	555249	11/09/21 20:21	KW	TAL PEN
Total Recoverable	Prep	3005A			553581	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	555348	11/10/21 12:25	KW	TAL PEN
Total/NA	Analysis	SM 2540C		1	554054	11/01/21 16:20	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	554885	11/08/21 01:47	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	553748	10/29/21 13:59	KAK	TAL PEN
Total/NA	Analysis	SM 4500 H+ B		1	553704	10/29/21 08:49	RLL	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	554886	11/08/21 02:45	DN1	TAL PEN

**Client Sample ID: MW-D2-20211026**  
**Date Collected: 10/26/21 13:45**  
**Date Received: 10/28/21 09:33**

**Lab Sample ID: 400-210296-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			553581	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	555249	11/09/21 20:36	KW	TAL PEN
Total Recoverable	Prep	3005A			553581	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	555348	11/10/21 12:35	KW	TAL PEN
Total/NA	Analysis	SM 2540C		1	554173	11/02/21 13:14	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	554885	11/08/21 01:47	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	553748	10/29/21 13:55	KAK	TAL PEN
Total/NA	Analysis	SM 4500 H+ B		1	553704	10/29/21 08:49	RLL	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	554886	11/08/21 02:45	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	553575	10/26/21 12:45	IDE	TAL PEN

**Client Sample ID: MW-U1-20211026**  
**Date Collected: 10/26/21 12:25**  
**Date Received: 10/28/21 09:33**

**Lab Sample ID: 400-210296-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	554488	11/03/21 17:26	KW	TAL PEN
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		1	554651	11/04/21 15:32	KW	TAL PEN
Total/NA	Analysis	SM 2540C		1	554173	11/02/21 13:14	VB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	554885	11/08/21 01:47	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	553748	10/29/21 13:52	KAK	TAL PEN
Total/NA	Analysis	SM 4500 H+ B		1	553704	10/29/21 08:49	RLL	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	554886	11/08/21 02:45	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	553575	10/26/21 11:25	IDE	TAL PEN

# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

**Client Sample ID: MW-D1-20211026**

**Lab Sample ID: 400-210296-4**

**Date Collected: 10/26/21 16:20**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	554488	11/03/21 17:31	KW	TAL PEN
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	554651	11/04/21 15:37	KW	TAL PEN
Total/NA	Analysis	SM 2540C		1	554173	11/02/21 13:14	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	554885	11/08/21 01:49	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	553748	10/29/21 13:49	KAK	TAL PEN
Total/NA	Analysis	SM 4500 H+ B		1	553704	10/29/21 08:49	RLL	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	554886	11/08/21 02:45	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	553575	10/26/21 15:20	IDE	TAL PEN

**Client Sample ID: MW-D3-20211026**

**Lab Sample ID: 400-210296-5**

**Date Collected: 10/26/21 15:10**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	554488	11/03/21 17:36	KW	TAL PEN
Total Recoverable	Prep	3005A			553582	10/28/21 17:00	NET	TAL PEN
Total Recoverable	Analysis	6020		5	554651	11/04/21 15:42	KW	TAL PEN
Total/NA	Analysis	SM 2540C		1	554173	11/02/21 13:14	VB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	554885	11/08/21 01:49	DN1	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	553748	10/29/21 13:39	KAK	TAL PEN
Total/NA	Analysis	SM 4500 H+ B		1	553704	10/29/21 08:49	RLL	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	554886	11/08/21 02:45	DN1	TAL PEN
Total/NA	Analysis	Field Sampling		1	553575	10/26/21 14:10	IDE	TAL PEN

**Laboratory References:**

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



# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

## Metals

### Prep Batch: 553581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total Recoverable	Water	3005A	
400-210296-2	MW-D2-20211026	Total Recoverable	Water	3005A	
MB 400-553581/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-553581/2-A ^5	Lab Control Sample	Total Recoverable	Water	3005A	
160-43706-B-7-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
160-43706-B-7-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
160-43710-A-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
160-43710-A-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

### Prep Batch: 553582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-3	MW-U1-20211026	Total Recoverable	Water	3005A	
400-210296-4	MW-D1-20211026	Total Recoverable	Water	3005A	
400-210296-5	MW-D3-20211026	Total Recoverable	Water	3005A	
MB 400-553582/1-A	Method Blank	Total Recoverable	Water	3005A	
MB 400-553582/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-553582/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 554488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-3	MW-U1-20211026	Total Recoverable	Water	6020	553582
400-210296-4	MW-D1-20211026	Total Recoverable	Water	6020	553582
400-210296-5	MW-D3-20211026	Total Recoverable	Water	6020	553582
MB 400-553582/1-A	Method Blank	Total Recoverable	Water	6020	553582
LCS 400-553582/2-A	Lab Control Sample	Total Recoverable	Water	6020	553582

### Analysis Batch: 554651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-3	MW-U1-20211026	Total Recoverable	Water	6020	553582
400-210296-4	MW-D1-20211026	Total Recoverable	Water	6020	553582
400-210296-5	MW-D3-20211026	Total Recoverable	Water	6020	553582
MB 400-553582/1-A ^5	Method Blank	Total Recoverable	Water	6020	553582

### Analysis Batch: 555249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total Recoverable	Water	6020	553581
400-210296-2	MW-D2-20211026	Total Recoverable	Water	6020	553581
MB 400-553581/1-A ^5	Method Blank	Total Recoverable	Water	6020	553581
LCS 400-553581/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	553581
160-43706-B-7-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	553581
160-43706-B-7-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	553581
160-43710-A-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	553581
160-43710-A-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	553581

### Analysis Batch: 555348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total Recoverable	Water	6020	553581
400-210296-2	MW-D2-20211026	Total Recoverable	Water	6020	553581
MB 400-553581/1-A ^5	Method Blank	Total Recoverable	Water	6020	553581
LCS 400-553581/2-A ^5	Lab Control Sample	Total Recoverable	Water	6020	553581

Eurofins TestAmerica, Pensacola

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

## General Chemistry

### Analysis Batch: 553704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	SM 4500 H+ B	
400-210296-2	MW-D2-20211026	Total/NA	Water	SM 4500 H+ B	
400-210296-3	MW-U1-20211026	Total/NA	Water	SM 4500 H+ B	
400-210296-4	MW-D1-20211026	Total/NA	Water	SM 4500 H+ B	
400-210296-5	MW-D3-20211026	Total/NA	Water	SM 4500 H+ B	
LCS 400-553704/4	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
400-210296-1 DU	DUP-17-20211026	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 553748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	SM 4500 F C	
400-210296-2	MW-D2-20211026	Total/NA	Water	SM 4500 F C	
400-210296-3	MW-U1-20211026	Total/NA	Water	SM 4500 F C	
400-210296-4	MW-D1-20211026	Total/NA	Water	SM 4500 F C	
400-210296-5	MW-D3-20211026	Total/NA	Water	SM 4500 F C	
MB 400-553748/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-553748/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-210296-5 MS	MW-D3-20211026	Total/NA	Water	SM 4500 F C	
400-210296-5 MSD	MW-D3-20211026	Total/NA	Water	SM 4500 F C	

### Analysis Batch: 554054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	SM 2540C	
MB 400-554054/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-554054/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-210473-G-5 DU	Duplicate	Total/NA	Water	SM 2540C	

### Analysis Batch: 554173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-2	MW-D2-20211026	Total/NA	Water	SM 2540C	
400-210296-3	MW-U1-20211026	Total/NA	Water	SM 2540C	
400-210296-4	MW-D1-20211026	Total/NA	Water	SM 2540C	
400-210296-5	MW-D3-20211026	Total/NA	Water	SM 2540C	
MB 400-554173/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-554173/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-210296-2 DU	MW-D2-20211026	Total/NA	Water	SM 2540C	

### Analysis Batch: 554885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	SM 4500 Cl- E	
400-210296-2	MW-D2-20211026	Total/NA	Water	SM 4500 Cl- E	
400-210296-3	MW-U1-20211026	Total/NA	Water	SM 4500 Cl- E	
400-210296-4	MW-D1-20211026	Total/NA	Water	SM 4500 Cl- E	
400-210296-5	MW-D3-20211026	Total/NA	Water	SM 4500 Cl- E	
MB 400-554885/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-554885/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-554885/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-210296-3 MS	MW-U1-20211026	Total/NA	Water	SM 4500 Cl- E	
400-210296-3 MSD	MW-U1-20211026	Total/NA	Water	SM 4500 Cl- E	

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
SDG: Crisp County Power

## General Chemistry

### Analysis Batch: 554886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	SM 4500 SO4 E	
400-210296-2	MW-D2-20211026	Total/NA	Water	SM 4500 SO4 E	
400-210296-3	MW-U1-20211026	Total/NA	Water	SM 4500 SO4 E	
400-210296-4	MW-D1-20211026	Total/NA	Water	SM 4500 SO4 E	
400-210296-5	MW-D3-20211026	Total/NA	Water	SM 4500 SO4 E	
MB 400-554886/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-554886/35	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-554886/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-210361-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-210361-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

## Field Service / Mobile Lab

### Analysis Batch: 553575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-2	MW-D2-20211026	Total/NA	Water	Field Sampling	
400-210296-3	MW-U1-20211026	Total/NA	Water	Field Sampling	
400-210296-4	MW-D1-20211026	Total/NA	Water	Field Sampling	
400-210296-5	MW-D3-20211026	Total/NA	Water	Field Sampling	

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

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

**Lab Sample ID: MB 400-553581/1-A ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/09/21 18:01	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/09/21 18:01	5
Barium	ND		2.5	0.70	ug/L		10/28/21 17:00	11/09/21 18:01	5
Calcium	ND		250	130	ug/L		10/28/21 17:00	11/09/21 18:01	5

**Lab Sample ID: MB 400-553581/1-A ^5**  
**Matrix: Water**  
**Analysis Batch: 555348**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/10/21 12:15	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/10/21 12:15	5
Barium	ND		2.5	0.70	ug/L		10/28/21 17:00	11/10/21 12:15	5
Calcium	ND		250	130	ug/L		10/28/21 17:00	11/10/21 12:15	5
Boron	4.29	J	50	1.2	ug/L		10/28/21 17:00	11/10/21 12:15	5

**Lab Sample ID: LCS 400-553581/2-A ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	51.1		ug/L		102	80 - 120
Chromium	50.0	51.4		ug/L		103	80 - 120
Barium	50.0	51.5		ug/L		103	80 - 120
Calcium	5000	4970		ug/L		99	80 - 120

**Lab Sample ID: LCS 400-553581/2-A ^5**  
**Matrix: Water**  
**Analysis Batch: 555348**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	50.8		ug/L		102	80 - 120
Chromium	50.0	50.7		ug/L		101	80 - 120
Barium	50.0	50.8		ug/L		102	80 - 120
Calcium	5000	4660		ug/L		93	80 - 120
Boron	100	100		ug/L		100	80 - 120

**Lab Sample ID: 160-43706-B-7-B MS ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		50.0	53.9		ug/L		108	75 - 125
Chromium	1.1	J	50.0	52.3		ug/L		102	75 - 125
Barium	34		50.0	87.4		ug/L		107	75 - 125
Calcium	22000		5000	27800	4	ug/L		118	75 - 125
Boron	21	J ^- *	100	105	^-	ug/L		84	75 - 125

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

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

**Lab Sample ID: 160-43706-B-7-C MSD ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Arsenic	ND		50.0	53.5		ug/L		107	75 - 125	1	20
Chromium	1.1	J	50.0	53.3		ug/L		104	75 - 125	2	20
Barium	34		50.0	92.3		ug/L		117	75 - 125	5	20
Calcium	22000		5000	28600	4	ug/L		134	75 - 125	3	20
Boron	21	J ^- *-	100	98.2	^-	ug/L		77	75 - 125	7	20

**Lab Sample ID: 160-43710-A-1-B MS ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Arsenic	ND	F1	50.0	ND	F1	ug/L		0	75 - 125		
Chromium	5.0	F1 F2	50.0	4.49	F1	ug/L		-1	75 - 125		
Barium	23	F1 F2	50.0	22.8	F1	ug/L		-0.9	75 - 125		
Calcium	100000	^5- E	5000	102000	^5- E 4	ug/L		-17	75 - 125		
Boron	170	*- ^- F1 F2	100	164	^- F1	ug/L		-8	75 - 125		

**Lab Sample ID: 160-43710-A-1-C MSD ^5**  
**Matrix: Water**  
**Analysis Batch: 555249**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553581**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Arsenic	ND	F1	50.0	54.8		ug/L		110	75 - 125	NC	20
Chromium	5.0	F1 F2	50.0	54.8	F2	ug/L		100	75 - 125	170	20
Barium	23	F1 F2	50.0	78.0	F2	ug/L		109	75 - 125	109	20
Calcium	100000	^5- E	5000	107000	^5- E 4	ug/L		77	75 - 125	4	20
Boron	170	*- ^- F1 F2	100	245	^- F1 F2	ug/L		73	75 - 125	39	20

**Lab Sample ID: MB 400-553582/1-A**  
**Matrix: Water**  
**Analysis Batch: 554488**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553582**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.3	1.2	ug/L		10/28/21 17:00	11/03/21 15:25	5
Chromium	ND		2.5	1.0	ug/L		10/28/21 17:00	11/03/21 15:25	5
Calcium	ND		250	130	ug/L		10/28/21 17:00	11/03/21 15:25	5

**Lab Sample ID: MB 400-553582/1-A ^5**  
**Matrix: Water**  
**Analysis Batch: 554651**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553582**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Barium	1.33	J	2.5	0.70	ug/L		10/28/21 17:00	11/04/21 15:27	5
Boron	ND		50	1.2	ug/L		10/28/21 17:00	11/04/21 15:27	5

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

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

**Lab Sample ID: LCS 400-553582/2-A**  
**Matrix: Water**  
**Analysis Batch: 554488**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 553582**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	50.0	51.2		ug/L		102	80 - 120
Chromium	50.0	53.0		ug/L		106	80 - 120
Barium	50.0	51.8		ug/L		104	80 - 120
Calcium	5000	5190		ug/L		104	80 - 120
Boron	100	109		ug/L		109	80 - 120

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

**Lab Sample ID: MB 400-554054/1**  
**Matrix: Water**  
**Analysis Batch: 554054**

**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			11/01/21 16:20	1

**Lab Sample ID: LCS 400-554054/2**  
**Matrix: Water**  
**Analysis Batch: 554054**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	293	288		mg/L		98	78 - 122

**Lab Sample ID: 400-210473-G-5 DU**  
**Matrix: Water**  
**Analysis Batch: 554054**

**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	ND		ND		mg/L		NC	5

**Lab Sample ID: MB 400-554173/1**  
**Matrix: Water**  
**Analysis Batch: 554173**

**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			11/02/21 13:14	1

**Lab Sample ID: LCS 400-554173/2**  
**Matrix: Water**  
**Analysis Batch: 554173**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	293	314		mg/L		107	78 - 122

**Lab Sample ID: 400-210296-2 DU**  
**Matrix: Water**  
**Analysis Batch: 554173**

**Client Sample ID: MW-D2-20211026**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	390		368	F3	mg/L		6	5

Eurofins TestAmerica, Pensacola

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

## Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-554885/6  
 Matrix: Water  
 Analysis Batch: 554885

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			11/08/21 01:45	1

Lab Sample ID: LCS 400-554885/7  
 Matrix: Water  
 Analysis Batch: 554885

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	29.8		mg/L		99	90 - 110

Lab Sample ID: MRL 400-554885/3  
 Matrix: Water  
 Analysis Batch: 554885

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.42	J	mg/L		71	50 - 150

Lab Sample ID: 400-210296-3 MS  
 Matrix: Water  
 Analysis Batch: 554885

Client Sample ID: MW-U1-20211026  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.7	J	20.0	22.3		mg/L		103	73 - 120

Lab Sample ID: 400-210296-3 MSD  
 Matrix: Water  
 Analysis Batch: 554885

Client Sample ID: MW-U1-20211026  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.7	J	20.0	22.2		mg/L		102	73 - 120	1	8

## Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-553748/3  
 Matrix: Water  
 Analysis Batch: 553748

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			10/29/21 13:23	1

Lab Sample ID: LCS 400-553748/6  
 Matrix: Water  
 Analysis Batch: 553748

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	5.44		mg/L		109	90 - 110

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

## Method: SM 4500 F C - Fluoride (Continued)

**Lab Sample ID: 400-210296-5 MS**  
**Matrix: Water**  
**Analysis Batch: 553748**

**Client Sample ID: MW-D3-20211026**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.20	F1 F2	1.00	0.660	F1	mg/L		46	75 - 125

**Lab Sample ID: 400-210296-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 553748**

**Client Sample ID: MW-D3-20211026**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.20	F1 F2	1.00	1.22	F2	mg/L		102	75 - 125	60	4

## Method: SM 4500 H+ B - pH

**Lab Sample ID: LCS 400-553704/4**  
**Matrix: Water**  
**Analysis Batch: 553704**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		99	98.6 - 101.4

**Lab Sample ID: 400-210296-1 DU**  
**Matrix: Water**  
**Analysis Batch: 553704**

**Client Sample ID: DUP-17-20211026**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.3	HF	7.5		SU		2	5
Temperature	20.2	HF	20.2		Degrees C		0	30

## Method: SM 4500 SO4 E - Sulfate, Total

**Lab Sample ID: MB 400-554886/6**  
**Matrix: Water**  
**Analysis Batch: 554886**

**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			11/08/21 02:37	1

**Lab Sample ID: LCS 400-554886/35**  
**Matrix: Water**  
**Analysis Batch: 554886**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	13.8		mg/L		92	90 - 110

**Lab Sample ID: MRL 400-554886/3**  
**Matrix: Water**  
**Analysis Batch: 554886**

**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

Eurofins TestAmerica, Pensacola



# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

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

**Lab Sample ID: 400-210361-A-1 MS**  
**Matrix: Water**  
**Analysis Batch: 554886**

**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	17	F1	10.0	21.6	F1	mg/L		45	77 - 128

**Lab Sample ID: 400-210361-A-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 554886**

**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	17	F1	10.0	21.0	F1	mg/L		40	77 - 128	2	5

- 1
- 2
- 3
- 4
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- 7
- 8
- 9
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- 11
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- 13
- 14

# Chain of Custody Record



<b>Client Information</b> Client Contact: <u>Dawit Yifru</u> Company: <u>Geosyntec Consultants, Inc.</u> Address: <u>1255 Roberts Blvd, NW Suite 200</u> City: <u>Kennesaw</u> State, Zip: <u>GA, 30144</u> Phone: _____ Email: <u>dyifru@geosyntec.com</u> Project Name: <u>CCR App. III/IV GW Monitoring Crisp Co</u> Site: <u>Crisp County Power</u>		Lab PM: <u>Whitmore, Cheyenne R</u> E-Mail: <u>Cheyenne.Whitmore@Eurofins.com</u> Carrier Tracking No(s): _____ State of Origin: _____ COC No: <u>400-105652-37619.1</u> Page: <u>Page 1 of 1</u> Job #: <u>210294</u>	
Due Date Requested: _____ TAT Requested (days): <u>STANDARD</u> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: _____ Purchase Order not required WO #: _____ Project #: <u>40007960</u> SSOW#: _____		<b>Analysis Requested</b> 9315 Ra226, 9320 Ra228 Ra226Ra228_GFPc - Radium 226 & Radium 228 SM4500_Cl_E - Chloride SM4500_SO4_E - Sulfate 2540C - Total Dissolved Solids 4500_F_C - Fluoride SM4500_H+ - pH & Temperature 6020 - AS,BA,CR,B,CA Field Sampling - Field pH	
<b>Sample Identification</b> Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____ M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Disposal (A fee may be) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____		Special Instructions/Note: PH - 7.70 PH - 9.28 PH - 8.38 PH - 8.11 N/A CC	
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <u>Canner Cain</u> <u>GEO</u> Company: <u>GEO</u> Date/Time: <u>10/27/21</u> <u>1200</u> Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____	
Custody Seal No.: <u>1830102</u> 1830103 Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks: <u>2.8, 1.9°C DR-9</u>		Received by: <u>[Signature]</u> Company: <u>EUR</u> Date/Time: <u>10/28/21 0933</u> Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Ver: 06/08/2021	



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-210296-1  
SDG Number: Crisp County Power

**Login Number: 210296**

**List Number: 1**

**Creator: Whitmire, Cheyenne R**

**List Source: Eurofins TestAmerica, Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1830102, 1830103
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.8 & 1.9°C, IR-9
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	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: CCR App.III/IV GW Monitoring

Job ID: 400-210296-1  
 SDG: Crisp County Power

## Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	11-30-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	12-31-21



## ANALYTICAL REPORT

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

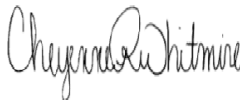
Laboratory Job ID: 400-210296-2

Laboratory Sample Delivery Group: Crisp Co. Power  
Client Project/Site: CCR App.III/IV GW Monitoring

**For:**

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

Attn: Dawit Yifru



Authorized for release by:  
11/29/2021 4:05:53 PM

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

[Cheyenne.Whitmire@Eurofinset.com](mailto:Cheyenne.Whitmire@Eurofinset.com)

### LINKS

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

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

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# Case Narrative

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

**Job ID: 400-210296-2**

**Laboratory: Eurofins TestAmerica, Pensacola**

## Narrative

### Job Narrative 400-210296-2

#### RAD

Method 9315: Radium 226 batch 534677. 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-17-20211026 (400-210296-1), MW-D2-20211026 (400-210296-2), MW-U1-20211026 (400-210296-3), MW-D1-20211026 (400-210296-4), MW-D3-20211026 (400-210296-5), (LCS 160-534677/1-A), (MB 160-534677/23-A), (480-191314-D-9-A), (480-191314-D-9-B MS) and (480-191314-C-9-A MSD)

Method 9320: Radium-228 prep batch 160-534796. 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-17-20211026 (400-210296-1), MW-D2-20211026 (400-210296-2), MW-U1-20211026 (400-210296-3), MW-D1-20211026 (400-210296-4), MW-D3-20211026 (400-210296-5), (LCS 160-534796/1-A), (MB 160-534796/23-A), (480-191314-D-9-C), (480-191314-D-9-D MS) and (480-191314-C-9-B MSD)



# Method Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

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

#### Protocol References:

None = None

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

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

#### Laboratory References:

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



# Sample Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-210296-1	DUP-17-20211026	Water	10/26/21 00:00	10/28/21 09:33
400-210296-2	MW-D2-20211026	Water	10/26/21 13:45	10/28/21 09:33
400-210296-3	MW-U1-20211026	Water	10/26/21 12:25	10/28/21 09:33
400-210296-4	MW-D1-20211026	Water	10/26/21 16:20	10/28/21 09:33
400-210296-5	MW-D3-20211026	Water	10/26/21 15:10	10/28/21 09:33

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

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: DUP-17-20211026**

**Lab Sample ID: 400-210296-1**

Date Collected: 10/26/21 00:00

Matrix: Water

Date Received: 10/28/21 09:33

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0601	U	0.136	0.136	1.00	0.243	pCi/L	11/02/21 10:46	11/24/21 10:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					11/02/21 10:46	11/24/21 10:17	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.591		0.252	0.257	1.00	0.351	pCi/L	11/02/21 11:34	11/22/21 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					11/02/21 11:34	11/22/21 13:42	1
Y Carrier	91.2		40 - 110					11/02/21 11:34	11/22/21 13:42	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.651		0.286	0.291	5.00	0.351	pCi/L		11/28/21 23:49	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D2-20211026**

**Lab Sample ID: 400-210296-2**

Date Collected: 10/26/21 13:45

Matrix: Water

Date Received: 10/28/21 09:33

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.372		0.170	0.173	1.00	0.202	pCi/L	11/02/21 10:46	11/24/21 10:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					11/02/21 10:46	11/24/21 10:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.440		0.258	0.261	1.00	0.389	pCi/L	11/02/21 11:34	11/22/21 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					11/02/21 11:34	11/22/21 13:42	1
Y Carrier	84.1		40 - 110					11/02/21 11:34	11/22/21 13:42	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.812		0.309	0.313	5.00	0.389	pCi/L		11/28/21 23:49	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-U1-20211026**

**Lab Sample ID: 400-210296-3**

Date Collected: 10/26/21 12:25

Matrix: Water

Date Received: 10/28/21 09:33

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.209	U	0.158	0.159	1.00	0.236	pCi/L	11/02/21 10:46	11/24/21 10:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/02/21 10:46	11/24/21 10:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.592		0.321	0.326	1.00	0.490	pCi/L	11/02/21 11:34	11/22/21 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/02/21 11:34	11/22/21 13:42	1
Y Carrier	86.0		40 - 110					11/02/21 11:34	11/22/21 13:42	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.801		0.358	0.363	5.00	0.490	pCi/L		11/28/21 23:49	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D1-20211026**

**Lab Sample ID: 400-210296-4**

Date Collected: 10/26/21 16:20

Matrix: Water

Date Received: 10/28/21 09:33

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.234	U	0.161	0.163	1.00	0.235	pCi/L	11/02/21 10:46	11/24/21 10:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/02/21 10:46	11/24/21 10:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.515		0.289	0.293	1.00	0.440	pCi/L	11/02/21 11:34	11/22/21 13:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/02/21 11:34	11/22/21 13:46	1
Y Carrier	88.6		40 - 110					11/02/21 11:34	11/22/21 13:46	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	0.749		0.331	0.335	5.00	0.440	pCi/L		11/28/21 23:49	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: MW-D3-20211026**

**Lab Sample ID: 400-210296-5**

Date Collected: 10/26/21 15:10

Matrix: Water

Date Received: 10/28/21 09:33

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.155	U	0.129	0.130	1.00	0.193	pCi/L	11/02/21 10:46	11/24/21 10:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/02/21 10:46	11/24/21 10:24	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.512		0.270	0.274	1.00	0.405	pCi/L	11/02/21 11:34	11/22/21 13:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/02/21 11:34	11/22/21 13:46	1
Y Carrier	88.6		40 - 110					11/02/21 11:34	11/22/21 13:46	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	0.666		0.299	0.303	5.00	0.405	pCi/L		11/28/21 23:49	1

# Definitions/Glossary

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

## 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: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

**Client Sample ID: DUP-17-20211026**

**Lab Sample ID: 400-210296-1**

**Date Collected: 10/26/21 00:00**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			534677	11/02/21 10:46	BMP	TAL SL
Total/NA	Analysis	9315		1	538449	11/24/21 10:17	FLC	TAL SL
Total/NA	Prep	PrecSep_0			534796	11/02/21 11:34	BMP	TAL SL
Total/NA	Analysis	9320		1	538004	11/22/21 13:42	EMH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	539030	11/28/21 23:49	MLK	TAL SL

**Client Sample ID: MW-D2-20211026**

**Lab Sample ID: 400-210296-2**

**Date Collected: 10/26/21 13:45**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			534677	11/02/21 10:46	BMP	TAL SL
Total/NA	Analysis	9315		1	538451	11/24/21 10:23	FLC	TAL SL
Total/NA	Prep	PrecSep_0			534796	11/02/21 11:34	BMP	TAL SL
Total/NA	Analysis	9320		1	538004	11/22/21 13:42	EMH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	539030	11/28/21 23:49	MLK	TAL SL

**Client Sample ID: MW-U1-20211026**

**Lab Sample ID: 400-210296-3**

**Date Collected: 10/26/21 12:25**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			534677	11/02/21 10:46	BMP	TAL SL
Total/NA	Analysis	9315		1	538451	11/24/21 10:23	FLC	TAL SL
Total/NA	Prep	PrecSep_0			534796	11/02/21 11:34	BMP	TAL SL
Total/NA	Analysis	9320		1	538004	11/22/21 13:42	EMH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	539030	11/28/21 23:49	MLK	TAL SL

**Client Sample ID: MW-D1-20211026**

**Lab Sample ID: 400-210296-4**

**Date Collected: 10/26/21 16:20**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			534677	11/02/21 10:46	BMP	TAL SL
Total/NA	Analysis	9315		1	538451	11/24/21 10:23	FLC	TAL SL
Total/NA	Prep	PrecSep_0			534796	11/02/21 11:34	BMP	TAL SL
Total/NA	Analysis	9320		1	538176	11/22/21 13:46	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	539030	11/28/21 23:49	MLK	TAL SL



# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

**Client Sample ID: MW-D3-20211026**

**Lab Sample ID: 400-210296-5**

**Date Collected: 10/26/21 15:10**

**Matrix: Water**

**Date Received: 10/28/21 09:33**

<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			534677	11/02/21 10:46	BMP	TAL SL
Total/NA	Analysis	9315		1	538451	11/24/21 10:24	FLC	TAL SL
Total/NA	Prep	PrecSep_0			534796	11/02/21 11:34	BMP	TAL SL
Total/NA	Analysis	9320		1	538176	11/22/21 13:46	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	539030	11/28/21 23:49	MLK	TAL SL

**Laboratory References:**

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

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

## Rad

### Prep Batch: 534677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	PrecSep-21	
400-210296-2	MW-D2-20211026	Total/NA	Water	PrecSep-21	
400-210296-3	MW-U1-20211026	Total/NA	Water	PrecSep-21	
400-210296-4	MW-D1-20211026	Total/NA	Water	PrecSep-21	
400-210296-5	MW-D3-20211026	Total/NA	Water	PrecSep-21	
MB 160-534677/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-534677/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
480-191314-C-9-A MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
480-191314-D-9-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	

### Prep Batch: 534796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-210296-1	DUP-17-20211026	Total/NA	Water	PrecSep_0	
400-210296-2	MW-D2-20211026	Total/NA	Water	PrecSep_0	
400-210296-3	MW-U1-20211026	Total/NA	Water	PrecSep_0	
400-210296-4	MW-D1-20211026	Total/NA	Water	PrecSep_0	
400-210296-5	MW-D3-20211026	Total/NA	Water	PrecSep_0	
MB 160-534796/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-534796/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
480-191314-C-9-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
480-191314-D-9-D MS	Matrix Spike	Total/NA	Water	PrecSep_0	

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
SDG: Crisp Co. Power

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-534677/23-A**  
**Matrix: Water**  
**Analysis Batch: 538451**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 534677**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1262	U	0.129	0.129	1.00	0.205	pCi/L	11/02/21 10:46	11/24/21 10:24	1
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					11/02/21 10:46	11/24/21 10:24	1

**Lab Sample ID: LCS 160-534677/1-A**  
**Matrix: Water**  
**Analysis Batch: 538449**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 534677**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.08		1.16	1.00	0.226	pCi/L	89	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	99.0		40 - 110						

**Lab Sample ID: 480-191314-C-9-A MSD**  
**Matrix: Water**  
**Analysis Batch: 538449**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 534677**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	Limit
						Uncert. (2σ+/-)							
Radium-226	0.176	U	11.3	9.917		1.15	1.00	0.212	pCi/L	86	75 - 138	0.06	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	95.0		40 - 110										

**Lab Sample ID: 480-191314-D-9-B MS**  
**Matrix: Water**  
**Analysis Batch: 538449**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 534677**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
						Uncert. (2σ+/-)					
Radium-226	0.176	U	11.3	10.05		1.18	1.00	0.262	pCi/L	87	75 - 138
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	97.5		40 - 110								

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

**Lab Sample ID: MB 160-534796/23-A**  
**Matrix: Water**  
**Analysis Batch: 538176**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 534796**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.4989		0.252	0.256	1.00	0.370	pCi/L	11/02/21 11:34	11/22/21 13:46	1

Eurofins TestAmerica, Pensacola

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

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

Carrier	MB MB		Limits	Prepared		Dil Fac
	%Yield	Qualifier		11/02/21 11:34	11/22/21 13:46	
Ba Carrier	105		40 - 110	11/02/21 11:34	11/22/21 13:46	1
Y Carrier	86.4		40 - 110	11/02/21 11:34	11/22/21 13:46	1

Lab Sample ID: LCS 160-534796/1-A  
 Matrix: Water  
 Analysis Batch: 538004

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 534796

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
									75	125
Radium-228	9.12	8.624		1.03	1.00	0.426	pCi/L	95	75 - 125	

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	99.0		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 480-191314-C-9-B MSD  
 Matrix: Water  
 Analysis Batch: 538004

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Total/NA  
 Prep Batch: 534796

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	Limit
											60	140	0.18	1
Radium-228	0.248	U	9.12	10.42		1.20	1.00	0.372	pCi/L	112	60 - 140	0.18	1	

Carrier	MSD MSD		Limits
	%Yield	Qualifier	
Ba Carrier	95.0		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: 480-191314-D-9-D MS  
 Matrix: Water  
 Analysis Batch: 538004

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 534796

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
											60	140
Radium-228	0.248	U	9.12	9.987		1.16	1.00	0.432	pCi/L	107	60 - 140	

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	97.5		40 - 110
Y Carrier	85.6		40 - 110

# Chain of Custody Record



<b>Client Information</b>		Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s): 400-105652-37619.1
Client Contact: Dawit Yifru		E-Mail: Cheyenne.Whitmire@Eurofins.com	Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.		PWSID:	Job #: 210294
Address: 1255 Roberts Blvd, NW Suite 200		<b>Analysis Requested</b>	
City: Kennesaw	TAT Requested (days): STANDARD	6020 - AS, BA, CR, B, CA	Field Sampling - Field pH
State, Zip: GA, 30144	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	4500_F_C - Fluoride	SM4500_H+ - pH & Temperature
Phone:	PO #: Purchase Order not required	SM4500_SO4_E - Sulfate	2540C - Total Dissolved Solids
Email: dyifru@geosyntec.com	WO #:	SM4500_Cl_E - Chloride	SM4500_GFP_C - Radium 226 & Radium 228
Project Name: CCR App. III/IV GW Monitoring Crisp Co	Project #: 40007960	9315_Ra226, 9320_Ra228	
Site: Crisp County Power	SSOW #:		
<b>Sample Identification</b>		Sample Date	Sample Time
Sample Type (C=Comp, G=Grab)		Sample Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)	
DUP-17-20211026	10/26/21	G	Water
MW-D2-20211026	1345		Water
MW-U1-20211026	1225		Water
MW-D1-20211026	1620		Water
MW-D3-20211026	1510		Water
<b>Sample Disposal (A fee may be)</b>		Special Instructions/Note:	
<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	400-210296 COC are retained longer than 1 month	
Special Instructions/QC Requirements:		Archive For _____ Months	
<b>Possible Hazard Identification</b>		Method of Shipment:	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B
<input type="checkbox"/> Deliverable Requested: I, II, III, IV, Other (specify)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological	
Empty Kit Relinquished by:		Date:	Time:
Relinquished by: <i>Crisp County Power</i>	Date: 10/27/21	Time: 1200	Company: GFO
Relinquished by:	Date/Time:	Date/Time:	Company:
Relinquished by:	Date/Time:	Date/Time:	Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.: 1830102	Cooler Temperature(s) °C and Other Remarks: 2.8, 1.9°C IR-9	Company: Eurofins



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-210296-2  
SDG Number: Crisp Co. Power

**Login Number: 210296**

**List Number: 1**

**Creator: Whitmire, Cheyenne R**

**List Source: Eurofins TestAmerica, Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1830102, 1830103
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.8 & 1.9°C, IR-9
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-210296-2  
SDG Number: Crisp Co. Power

**Login Number: 210296**

**List Number: 2**

**Creator: Johnson, Autumn R**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 10/29/21 05:34 PM**

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

# Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.  
 Project/Site: CCR App.III/IV GW Monitoring

Job ID: 400-210296-2  
 SDG: Crisp Co. Power

## Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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



## APPENDIX C

### Statistical Calculations and Time-series Graphs

April 2021

# Summary Report

Constituent: Antimony Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 48  
 Wells = 4  
 Minimum Value = 0.0005  
 Maximum Value = 0.0025  
 Mean Value = 0.002333  
 Median Value = 0.0025  
 Standard Deviation = 0.0005586  
 Coefficient of Variation = 0.2394  
 Skewness = -3.015

<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	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-D2	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-D3	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-U1 (bg)	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015

# Summary Report

Constituent: Antimony (mg/L) Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Arsenic Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 44  
 Wells = 4  
 Minimum Value = 0.00015  
 Maximum Value = 0.0016  
 Mean Value = 0.00112  
 Median Value = 0.0013  
 Standard Deviation = 0.0003364  
 Coefficient of Variation = 0.3003  
 Skewness = -1.436

<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	0.00025	0.0013	0.001234	0.0013	0.0002625	0.2127	-3.615
MW-D2	16	12	0.00027	0.0013	0.001133	0.0013	0.0003298	0.291	-1.728
MW-D3	16	2	0.00048	0.0016	0.0009369	0.000945	0.0003545	0.3784	0.3735
MW-U1 (bg)	16	14	0.00015	0.0013	0.001176	0.0013	0.0003445	0.2931	-2.388

# Summary Report

Constituent: Arsenic (mg/L) Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Barium Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 0  
 Wells = 4  
 Minimum Value = 0.0018  
 Maximum Value = 0.23  
 Mean Value = 0.07871  
 Median Value = 0.044  
 Standard Deviation = 0.07704  
 Coefficient of Variation = 0.9788  
 Skewness = 0.3965

<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	0	0.0095	0.027	0.01402	0.0125	0.005012	0.3576	1.553
MW-D2	16	0	0.087	0.19	0.1392	0.14	0.02422	0.174	-0.2202
MW-D3	16	0	0.061	0.23	0.1591	0.17	0.05343	0.3358	-0.4172
MW-U1 (bg)	16	0	0.0018	0.0062	0.0025	0.0022	0.001058	0.4231	2.919

# Summary Report

Constituent: Barium (mg/L) Analysis Run 6/22/2021 11:33 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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)



# Summary Report

Constituent: Beryllium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 48  
 Wells = 4  
 Minimum Value = 0.0004  
 Maximum Value = 0.0025  
 Mean Value = 0.001908  
 Median Value = 0.002  
 Standard Deviation = 0.0004802  
 Coefficient of Variation = 0.2516  
 Skewness = -2.499

<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	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-D2	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-D3	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-U1 (bg)	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499

# Summary Report

Constituent: Beryllium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Cadmium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 52  
 ND/Trace = 50  
 Wells = 4  
 Minimum Value = 0.000071  
 Maximum Value = 0.0025  
 Mean Value = 0.001049  
 Median Value = 0.001  
 Standard Deviation = 0.0004825  
 Coefficient of Variation = 0.46  
 Skewness = 1.61

<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	0.0002	0.0025	0.001054	0.001	0.0004875	0.4626	1.796
MW-D2	13	12	0.000075	0.0025	0.001044	0.001	0.0005066	0.4852	1.45
MW-D3	13	12	0.000071	0.0025	0.001044	0.001	0.0005073	0.4859	1.439
MW-U1 (bg)	13	13	0.0002	0.0025	0.001054	0.001	0.0004875	0.4626	1.796

# Summary Report

Constituent: Cadmium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Chromium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 56  
 ND/Trace = 39  
 Wells = 4  
 Minimum Value = 0.0005  
 Maximum Value = 0.0051  
 Mean Value = 0.002221  
 Median Value = 0.0025  
 Standard Deviation = 0.0007899  
 Coefficient of Variation = 0.3556  
 Skewness = 0.2214

<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	13	0.0005	0.0034	0.002421	0.0025	0.0006028	0.2489	-2.242
MW-D2	14	13	0.0005	0.0038	0.00245	0.0025	0.0006595	0.2692	-1.378
MW-D3	14	13	0.0005	0.0029	0.002386	0.0025	0.0005531	0.2318	-3.091
MW-U1 (bg)	14	0	0.0011	0.0051	0.001629	0.0014	0.001014	0.6227	3.16

# Summary Report

Constituent: Chromium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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)

# Summary Report

Constituent: Cobalt Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 47  
 Wells = 4  
 Minimum Value = 0.00035  
 Maximum Value = 0.0025  
 Mean Value = 0.002036  
 Median Value = 0.0025  
 Standard Deviation = 0.0007303  
 Coefficient of Variation = 0.3588  
 Skewness = -1.112

<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	0.0005	0.0025	0.002375	0.0025	0.0005	0.2105	-3.615
MW-D2	16	14	0.00047	0.0025	0.002279	0.0025	0.0006106	0.2679	-2.38
MW-D3	16	1	0.00035	0.0025	0.001238	0.00125	0.000487	0.3934	0.6297
MW-U1 (bg)	16	16	0.0005	0.0025	0.00225	0.0025	0.0006831	0.3036	-2.268

# Summary Report

Constituent: Cobalt (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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



# Summary Report

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 14  
 Wells = 4  
 Minimum Value = 0  
 Maximum Value = 5  
 Mean Value = 0.7143  
 Median Value = 0.4455  
 Standard Deviation = 1.151  
 Coefficient of Variation = 1.611  
 Skewness = 3.261

<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	3	0.0994	5	0.6817	0.411	1.176	1.725	3.366
MW-D2	16	4	0.0139	5	0.7796	0.4685	1.163	1.492	3.244
MW-D3	16	4	0.0501	5	1.13	0.5605	1.54	1.362	2.106
MW-U1 (bg)	16	3	0	0.615	0.2657	0.19	0.2195	0.8263	0.5104

# Summary Report

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Fluoride Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 1  
 Wells = 4  
 Minimum Value = 0.04  
 Maximum Value = 0.19  
 Mean Value = 0.07788  
 Median Value = 0.07  
 Standard Deviation = 0.02999  
 Coefficient of Variation = 0.3852  
 Skewness = 1.06

<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	0	0.04	0.12	0.07406	0.07	0.02275	0.3071	0.3889
MW-D2	16	0	0.04	0.12	0.06131	0.06	0.01746	0.2848	2.431
MW-D3	16	0	0.06	0.19	0.1144	0.11	0.02555	0.2234	1.102
MW-U1 (bg)	16	1	0.04	0.1	0.06175	0.06	0.01723	0.2791	1.177

# Summary Report

Constituent: Fluoride (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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)

# Summary Report

Constituent: Lead Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 44  
 Wells = 4  
 Minimum Value = 0.00025  
 Maximum Value = 0.0013  
 Mean Value = 0.001153  
 Median Value = 0.0013  
 Standard Deviation = 0.0003434  
 Coefficient of Variation = 0.298  
 Skewness = -1.985

<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	12	11	0.00025	0.0013	0.001171	0.0013	0.0003237	0.2764	-2.269
MW-D2	12	10	0.00025	0.0013	0.001068	0.0013	0.0004225	0.3955	-1.209
MW-D3	12	12	0.00025	0.0013	0.001213	0.0013	0.0003031	0.25	-3.015
MW-U1 (bg)	12	11	0.00025	0.0013	0.001158	0.0013	0.0003417	0.295	-2.029

# Summary Report

Constituent: Lead (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Lithium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 56  
 ND/Trace = 49  
 Wells = 4  
 Minimum Value = 0.00034  
 Maximum Value = 0.005  
 Mean Value = 0.002411  
 Median Value = 0.0025  
 Standard Deviation = 0.0008828  
 Coefficient of Variation = 0.3661  
 Skewness = 0.3137

<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	13	0.0005	0.005	0.002521	0.0025	0.0008894	0.3527	0.7892
MW-D2	14	12	0.0005	0.005	0.002479	0.0025	0.0009831	0.3966	0.4961
MW-D3	14	11	0.00048	0.005	0.002441	0.0025	0.00095	0.3891	0.7186
MW-U1 (bg)	14	13	0.00034	0.0025	0.002203	0.0025	0.000756	0.3432	-2.049

# Summary Report

Constituent: Lithium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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



# Summary Report

Constituent: Mercury Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 43  
 Wells = 4  
 Minimum Value = 0.000077  
 Maximum Value = 0.0002  
 Mean Value = 0.0001912  
 Median Value = 0.0002  
 Standard Deviation = 0.0000285  
 Coefficient of Variation = 0.1491  
 Skewness = -3.075

<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	12	11	0.000077	0.0002	0.0001897	0.0002	0.00003551	0.1871	-3.015
MW-D2	12	10	0.00011	0.0002	0.0001908	0.0002	0.0000261	0.1368	-2.787
MW-D3	12	11	0.00011	0.0002	0.0001925	0.0002	0.00002598	0.135	-3.015
MW-U1 (bg)	12	11	0.000099	0.0002	0.0001916	0.0002	0.00002916	0.1522	-3.015

# Summary Report

Constituent: Mercury (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Molybdenum Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 60  
 ND/Trace = 46  
 Wells = 4  
 Minimum Value = 0.0012  
 Maximum Value = 0.015  
 Mean Value = 0.007957  
 Median Value = 0.01  
 Standard Deviation = 0.003739  
 Coefficient of Variation = 0.4699  
 Skewness = -0.7246

<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	15	0.002	0.015	0.0098	0.01	0.002513	0.2564	-1.556
MW-D2	15	12	0.0012	0.015	0.008153	0.01	0.004158	0.51	-0.6656
MW-D3	15	4	0.0017	0.01	0.004873	0.0027	0.003642	0.7474	0.6422
MW-U1 (bg)	15	15	0.002	0.01	0.009	0.01	0.002646	0.294	-2.18

# Summary Report

Constituent: Molybdenum (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Selenium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 56  
 ND/Trace = 41  
 Wells = 4  
 Minimum Value = 0.00021  
 Maximum Value = 0.0028  
 Mean Value = 0.001087  
 Median Value = 0.0013  
 Standard Deviation = 0.0004544  
 Coefficient of Variation = 0.4182  
 Skewness = 0.1038

<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	13	0.00025	0.0013	0.001156	0.0013	0.0003671	0.3176	-2.049
MW-D2	14	11	0.00025	0.0013	0.001084	0.0013	0.0003904	0.3603	-1.377
MW-D3	14	10	0.00021	0.0028	0.001166	0.0013	0.0006352	0.5446	0.6934
MW-U1 (bg)	14	7	0.00039	0.0013	0.0009407	0.00103	0.0003845	0.4087	-0.1795

# Summary Report

Constituent: Selenium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Thallium Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 40  
 Wells = 4  
 Minimum Value = 0.000085  
 Maximum Value = 0.0005  
 Mean Value = 0.0003452  
 Median Value = 0.0005  
 Standard Deviation = 0.0001898  
 Coefficient of Variation = 0.5496  
 Skewness = -0.4126

<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	0.0001	0.0005	0.000475	0.0005	0.0001	0.2105	-3.615
MW-D2	16	6	0.000085	0.0005	0.0002656	0.00013	0.0001914	0.7207	0.4152
MW-D3	16	2	0.000095	0.0005	0.0001653	0.00012	0.0001318	0.7971	2.195
MW-U1 (bg)	16	16	0.0001	0.0005	0.000475	0.0005	0.0001	0.2105	-3.615

# Summary Report

Constituent: Thallium (mg/L) Analysis Run 6/22/2021 11:34 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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



# Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 6/22/2021, 11:47 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	MW-D2	Yes	0.00027	4/27/2020	NP (nrm)	NaN	16	0.001133	0.0003298	unknown	ShapiroWilk
Barium (mg/L)	MW-U1 (bg)	Yes	0.0062	11/19/2020	NP	NaN	16	0.0025	0.001058	In(x)	ShapiroWilk
Chromium (mg/L)	MW-U1 (bg)	Yes	0.0051	2/28/2017	NP	NaN	14	0.001629	0.001014	In(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-D2	Yes	0.0139	6/5/2018	NP	NaN	16	0.7796	1.163	In(x)	ShapiroWilk
Fluoride (mg/L)	MW-D2	Yes	0.12	4/26/2021	NP (nrm)	NaN	16	0.06131	0.01746	unknown	ShapiroWilk
Fluoride (mg/L)	MW-D3	Yes	0.06,0.19	7/17/2017...	NP	NaN	16	0.1144	0.02555	x^(1/3)	ShapiroWilk
Lithium (mg/L)	MW-D3	Yes	0.005,0.0...	3/22/2018...	NP (nrm)	NaN	14	0.002441	0.00095	unknown	ShapiroWilk
Thallium (mg/L)	MW-D3	Yes	0.0005,0....	11/19/202...	NP	NaN	16	0.000...	0.0001318	In(x)	ShapiroWilk

# Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 6/22/2021, 11:47 AM

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	16	0.001234	0.0002625	unknown	ShapiroWilk
<b>Arsenic (mg/L)</b>	<b>MW-D2</b>	<b>Yes</b>	<b>0.00027</b>	<b>4/27/2020</b>	<b>NP (nrm)</b>	<b>NaN</b>	<b>16</b>	<b>0.001133</b>	<b>0.0003298</b>	<b>unknown</b>	<b>ShapiroWilk</b>
Arsenic (mg/L)	MW-D3	No	n/a	n/a	NP	NaN	16	0.000...	0.0003545	x^(1/3)	ShapiroWilk
Arsenic (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	16	0.001176	0.0003445	unknown	ShapiroWilk
Barium (mg/L)	MW-D1	No	n/a	n/a	NP (nrm)	NaN	16	0.01402	0.005012	unknown	ShapiroWilk
Barium (mg/L)	MW-D2	No	n/a	n/a	NP	NaN	16	0.1392	0.02422	normal	ShapiroWilk
Barium (mg/L)	MW-D3	No	n/a	n/a	NP	NaN	16	0.1591	0.05343	x^2	ShapiroWilk
<b>Barium (mg/L)</b>	<b>MW-U1 (bg)</b>	<b>Yes</b>	<b>0.0062</b>	<b>11/19/2020</b>	<b>NP</b>	<b>NaN</b>	<b>16</b>	<b>0.0025</b>	<b>0.001058</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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	14	0.002421	0.0006028	unknown	ShapiroWilk
Chromium (mg/L)	MW-D2	n/a	n/a	n/a	NP (nrm)	NaN	14	0.00245	0.0006595	unknown	ShapiroWilk
Chromium (mg/L)	MW-D3	n/a	n/a	n/a	NP (nrm)	NaN	14	0.002386	0.0005531	unknown	ShapiroWilk
<b>Chromium (mg/L)</b>	<b>MW-U1 (bg)</b>	<b>Yes</b>	<b>0.0051</b>	<b>2/28/2017</b>	<b>NP</b>	<b>NaN</b>	<b>14</b>	<b>0.001629</b>	<b>0.001014</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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	16	0.6817	1.176	ln(x)	ShapiroWilk
<b>Combined Radium 226 + 228 (pCi/L)</b>	<b>MW-D2</b>	<b>Yes</b>	<b>0.0139</b>	<b>6/5/2018</b>	<b>NP</b>	<b>NaN</b>	<b>16</b>	<b>0.7796</b>	<b>1.163</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
Combined Radium 226 + 228 (pCi/L)	MW-D3	No	n/a	n/a	NP (nrm)	NaN	16	1.13	1.54	unknown	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-U1 (bg)	No	n/a	n/a	NP (nrm)	NaN	16	0.2657	0.2195	unknown	ShapiroWilk
Fluoride (mg/L)	MW-D1	No	n/a	n/a	NP	NaN	16	0.07406	0.02275	sqrt(x)	ShapiroWilk
<b>Fluoride (mg/L)</b>	<b>MW-D2</b>	<b>Yes</b>	<b>0.12</b>	<b>4/26/2021</b>	<b>NP (nrm)</b>	<b>NaN</b>	<b>16</b>	<b>0.06131</b>	<b>0.01746</b>	<b>unknown</b>	<b>ShapiroWilk</b>
<b>Fluoride (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.06,0.19</b>	<b>7/17/2017...</b>	<b>NP</b>	<b>NaN</b>	<b>16</b>	<b>0.1144</b>	<b>0.02555</b>	<b>x^(1/3)</b>	<b>ShapiroWilk</b>
Fluoride (mg/L)	MW-U1 (bg)	No	n/a	n/a	NP	NaN	16	0.06175	0.01723	ln(x)	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
<b>Lithium (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.005,0.0...</b>	<b>3/22/2018...</b>	<b>NP (nrm)</b>	<b>NaN</b>	<b>14</b>	<b>0.002441</b>	<b>0.00095</b>	<b>unknown</b>	<b>ShapiroWilk</b>
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

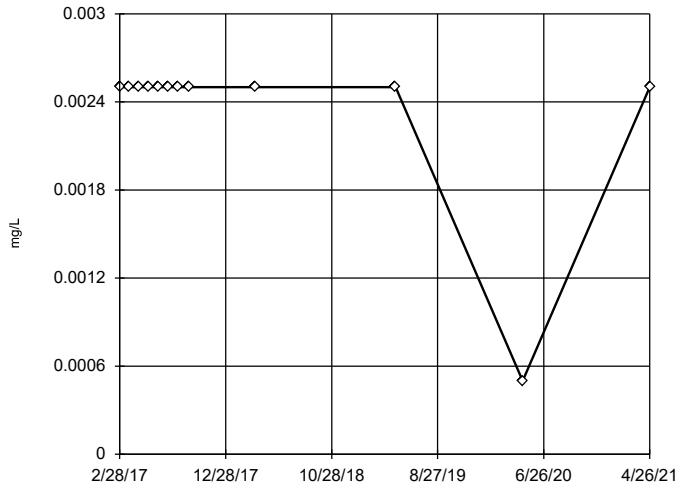
# Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 6/22/2021, 11:47 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
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
<b>Thallium (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.0005,0....</b>	<b>11/19/202...</b>	<b>NP</b>	<b>NaN</b>	<b>16</b>	<b>0.000...</b>	<b>0.0001318</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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

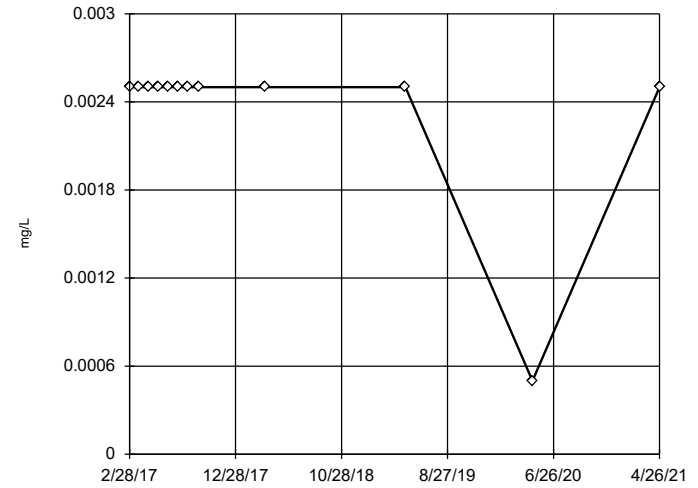


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were x\*6 transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D2

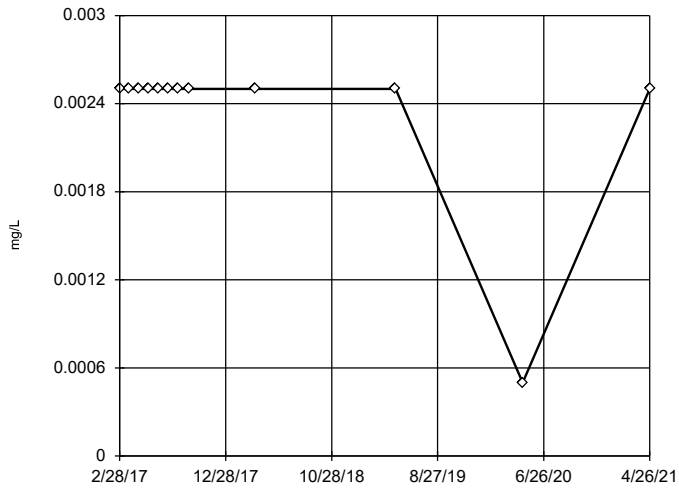


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were x\*6 transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D3

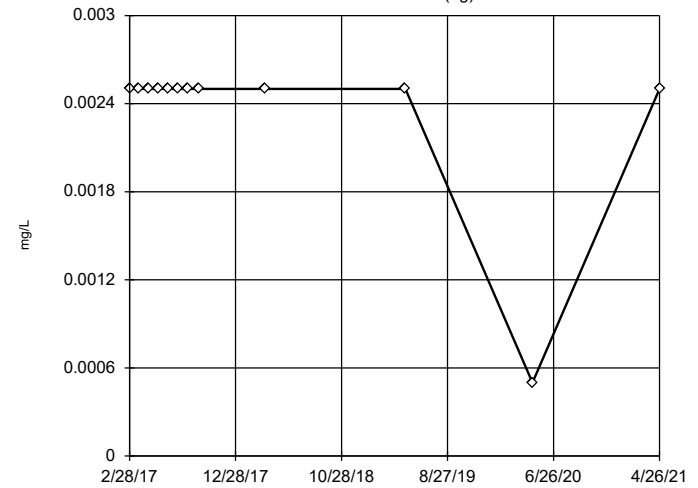


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were x\*6 transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

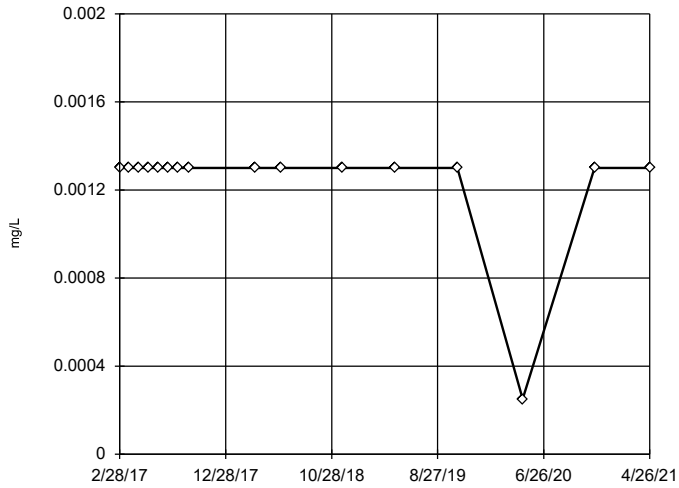
Constituent: Antimony Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-U1 (bg)

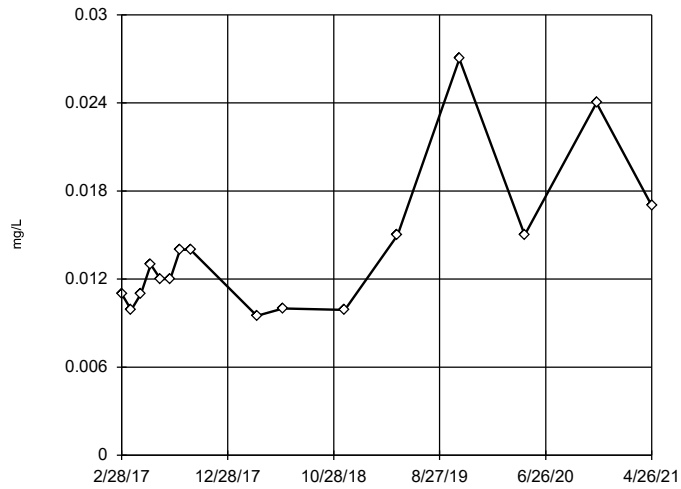


### Tukey's Outlier Screening MW-D1



### Tukey's Outlier Screening

MW-D1

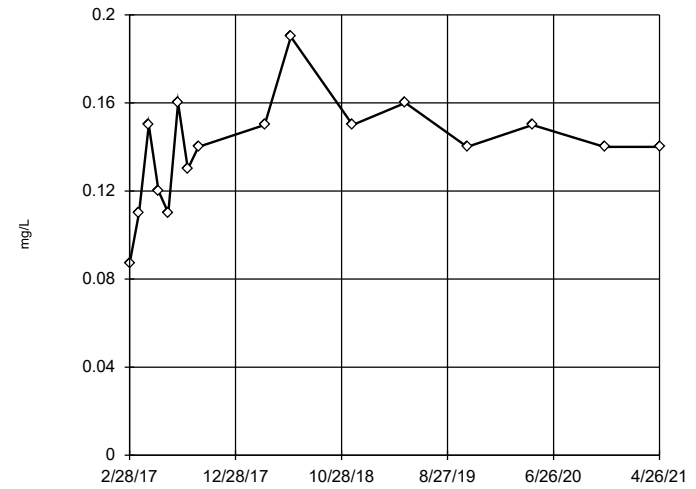


n = 16  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.04388, low cutoff = 0.003585, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D2

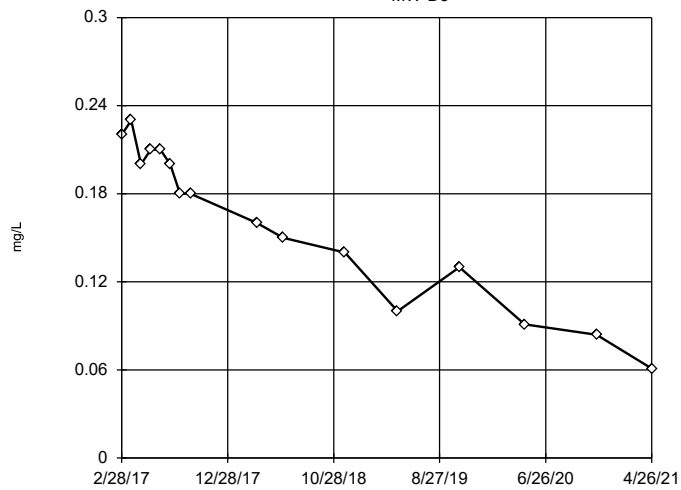


n = 16  
 No outliers found.  
 Tukey's method selected by user.  
 Ladder of Powers transformations did not improve normality; analysis run on raw data.  
 High cutoff = 0.225, low cutoff = 0.05, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D3

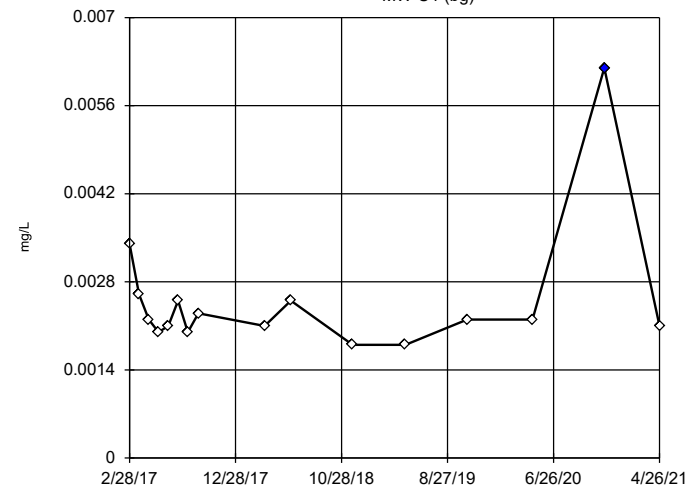


n = 16  
 No outliers found.  
 Tukey's method selected by user.  
 Data were square transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.3576, low cutoff = -0.269, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

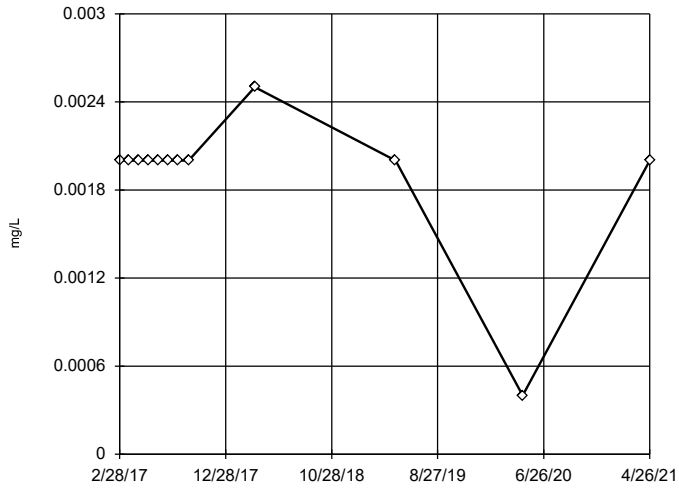
MW-U1 (bg)



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 = 0.004538, low cutoff = 0.001129, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

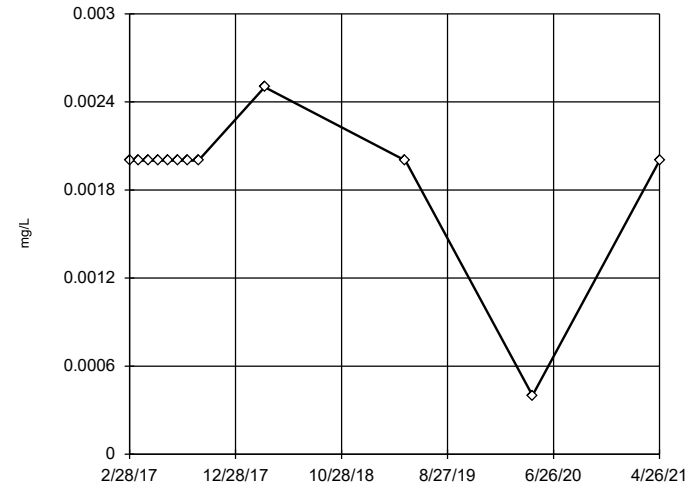
### Tukey's Outlier Screening MW-D1



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

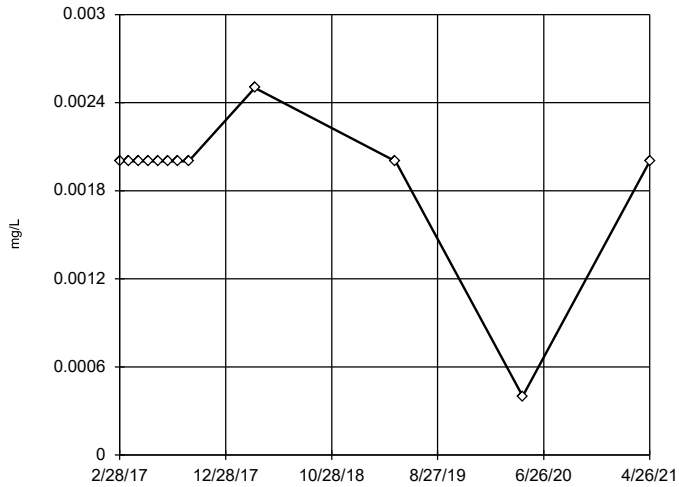
### Tukey's Outlier Screening MW-D2



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

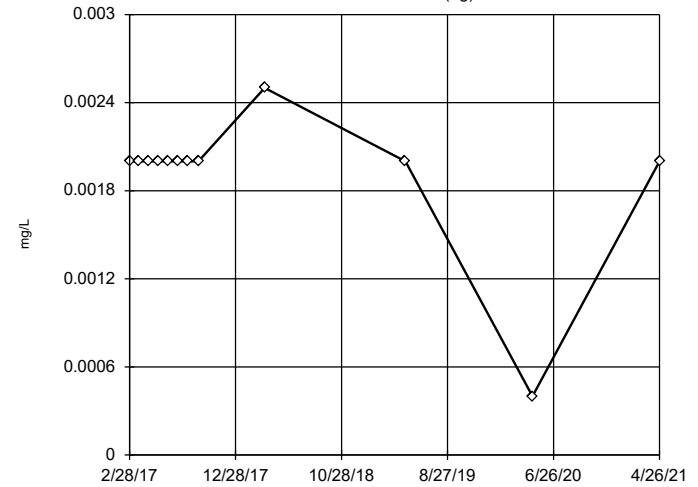
### Tukey's Outlier Screening MW-D3



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

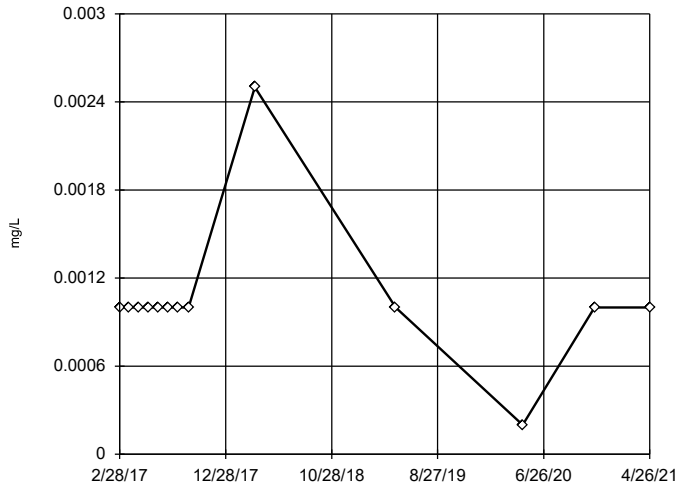
### Tukey's Outlier Screening MW-U1 (bg)



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

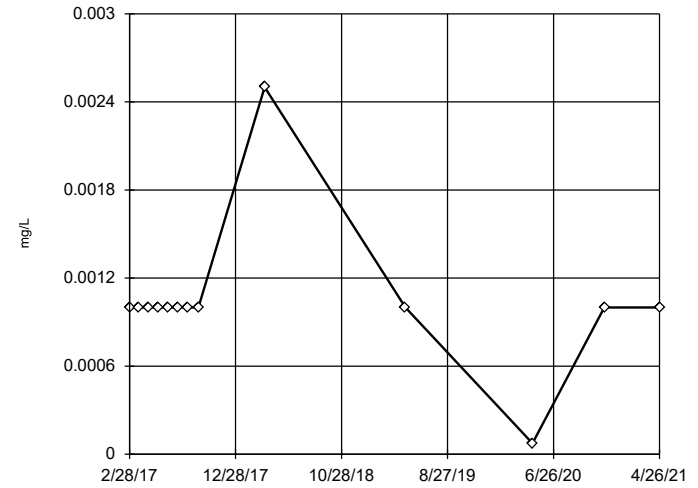
Tukey's Outlier Screening  
MW-D1



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

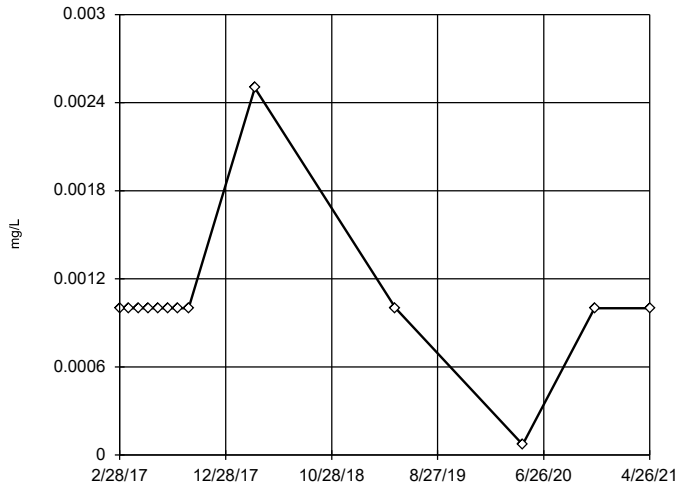
Tukey's Outlier Screening  
MW-D2



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

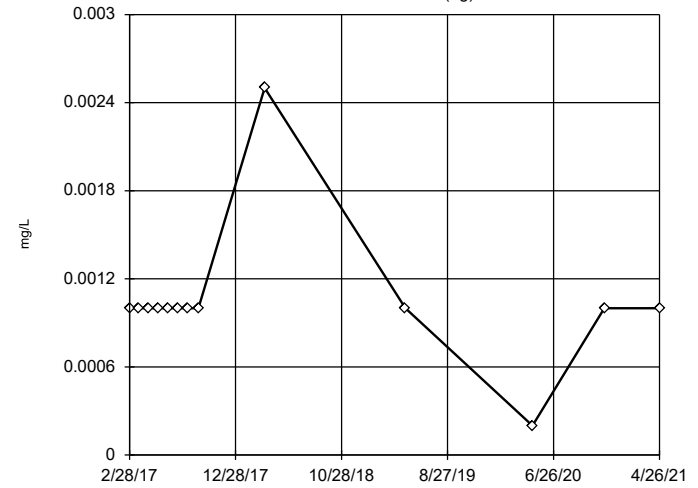
Tukey's Outlier Screening  
MW-D3



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening  
MW-U1 (bg)

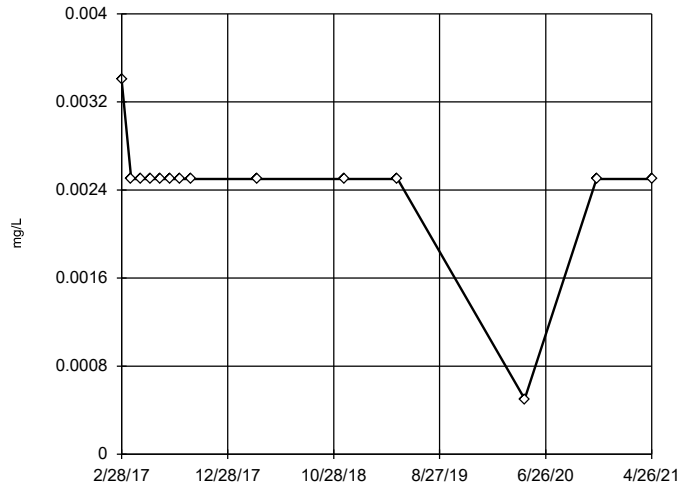


n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square root transformed to achieve best W statistic (graph shown in original units).  
The results were invalidated, because the lower and upper quartiles are equal.

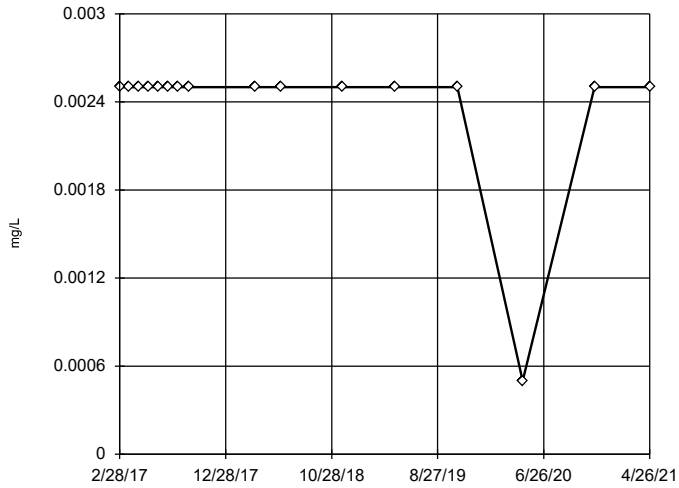
Constituent: Cadmium Analysis Run 6/22/2021 11:43 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10



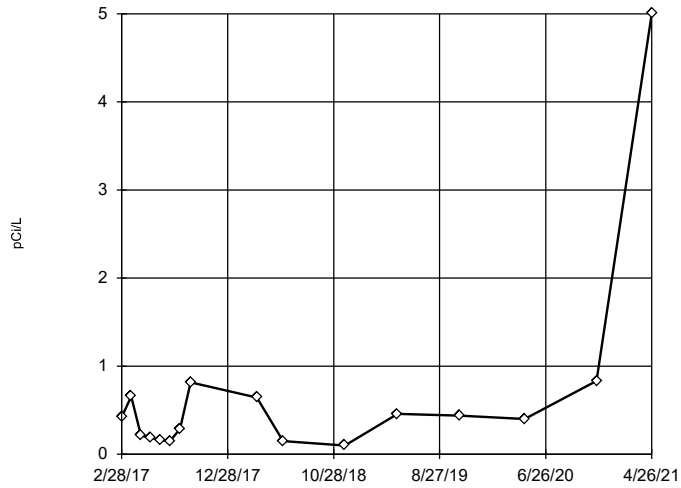
### Tukey's Outlier Screening MW-D1



Tukey's Outlier Screening  
MW-D1



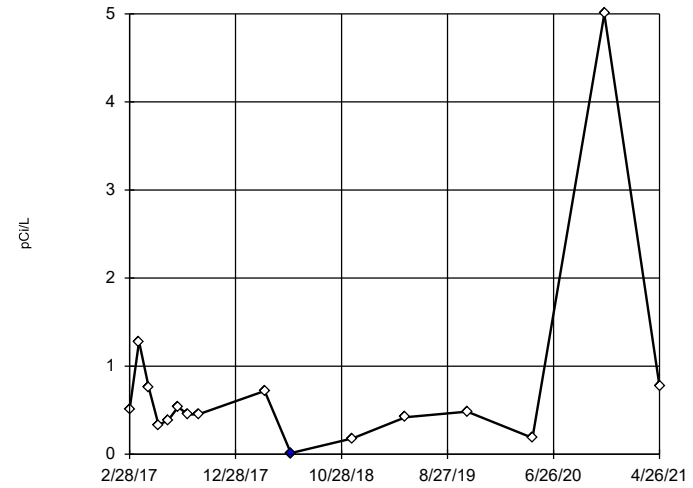
### Tukey's Outlier Screening MW-D1



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 = 35.89, low cutoff = 0.00308, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 thr  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

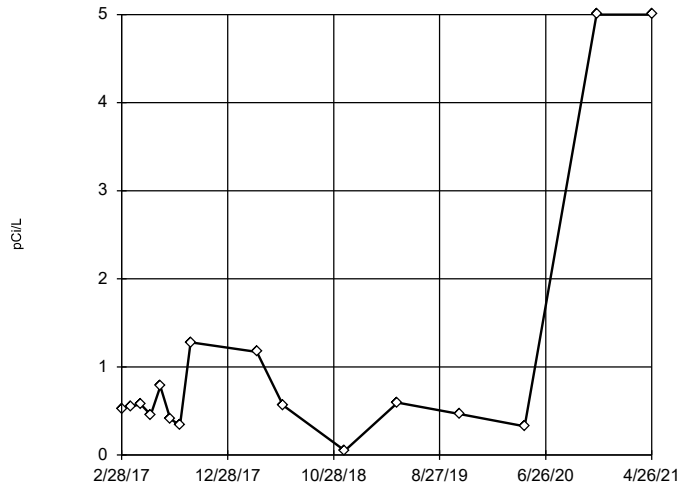
### Tukey's Outlier Screening MW-D2



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 = 6.309, low cutoff = 0.04192, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 thr  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

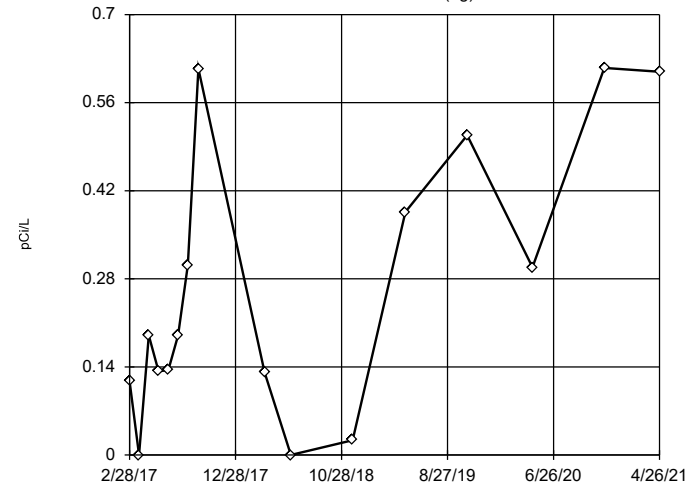
### Tukey's Outlier Screening MW-D3



n = 16  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 10.31, low cutoff = 0.04007, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 thr  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

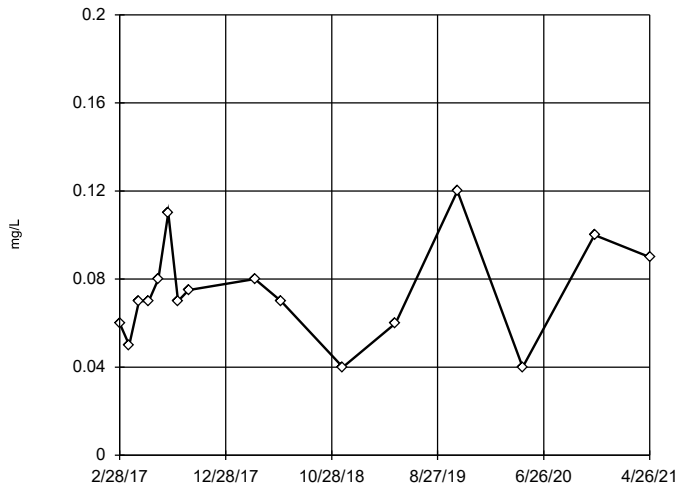
### Tukey's Outlier Screening MW-U1 (bg)



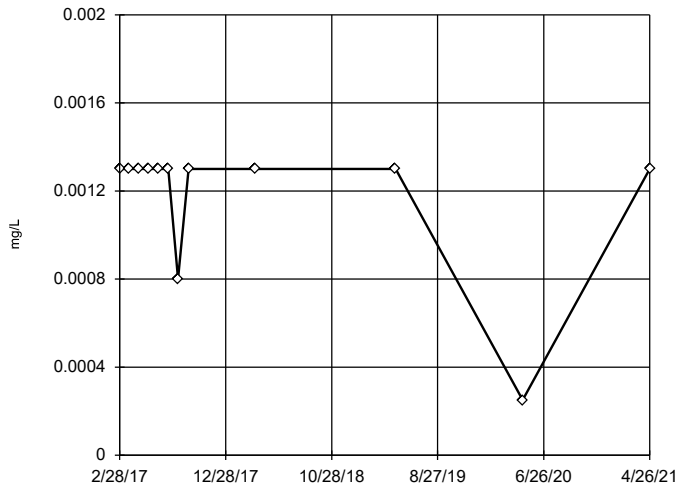
n = 16  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were square root transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 2.599, low cutoff = -0.3517, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 thr  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening MW-D1

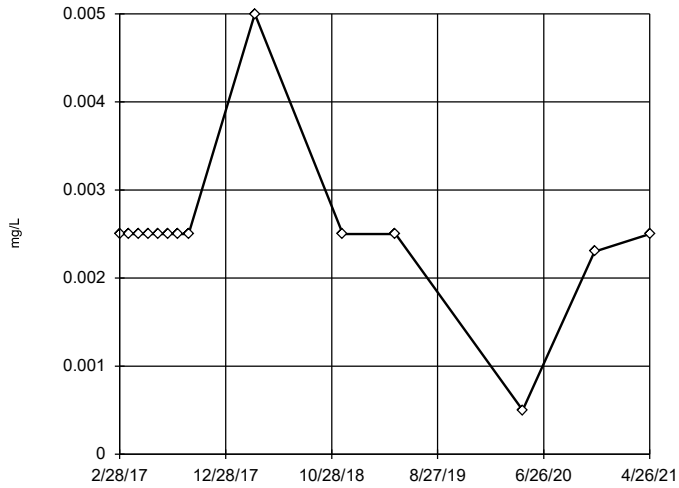


### Tukey's Outlier Screening MW-D1



### Tukey's Outlier Screening

MW-D1

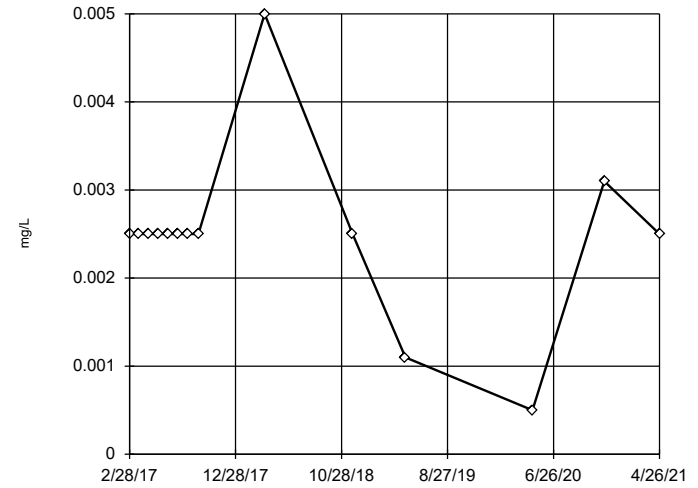


n = 14  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Ladder of Powers transformations did not improve normality; analysis run on raw data.  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D2

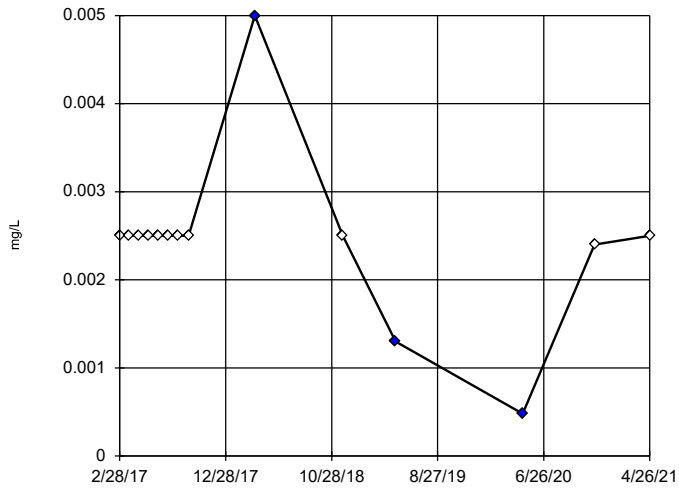


n = 14  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Ladder of Powers transformations did not improve normality; analysis run on raw data.  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D3

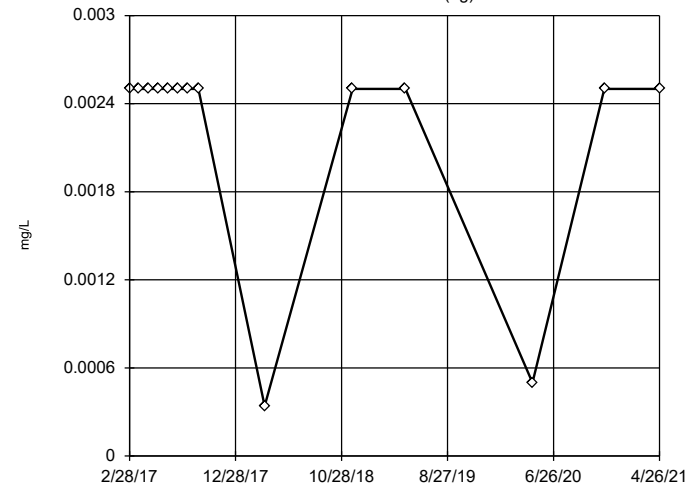


n = 14  
 Outliers are drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were square root transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.002654, low cutoff = 0.002302, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

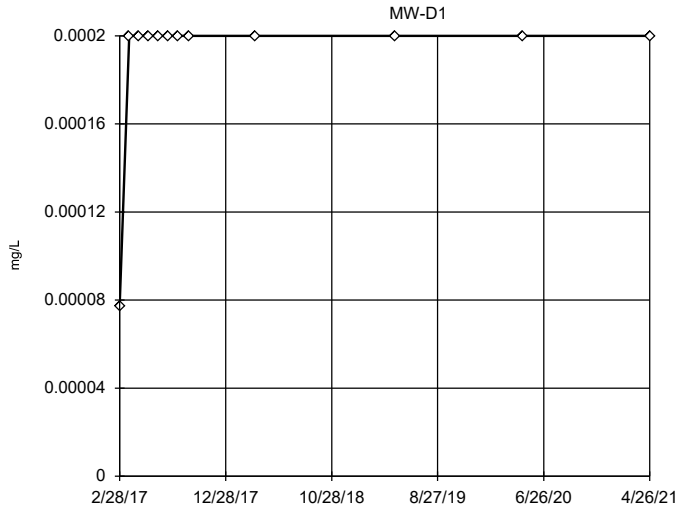
MW-U1 (bg)



n = 14  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

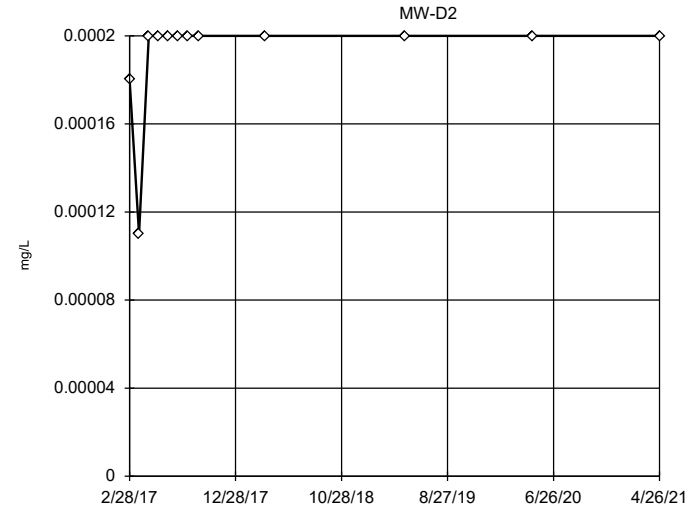
### Tukey's Outlier Screening



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

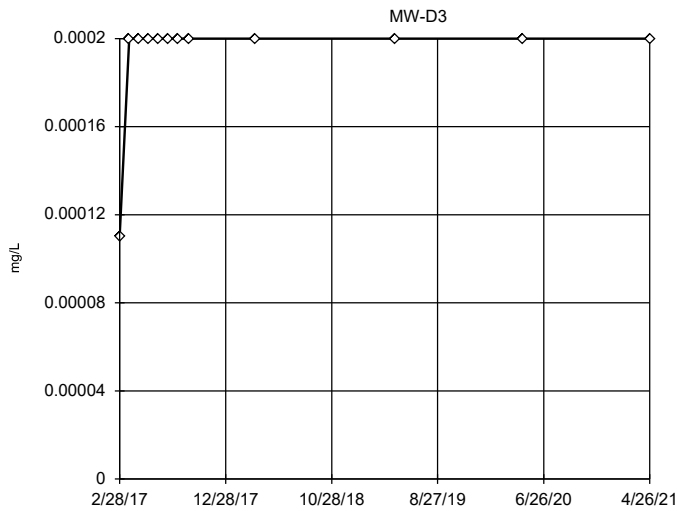
### Tukey's Outlier Screening



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were x^4 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 6/22/2021 11:44 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

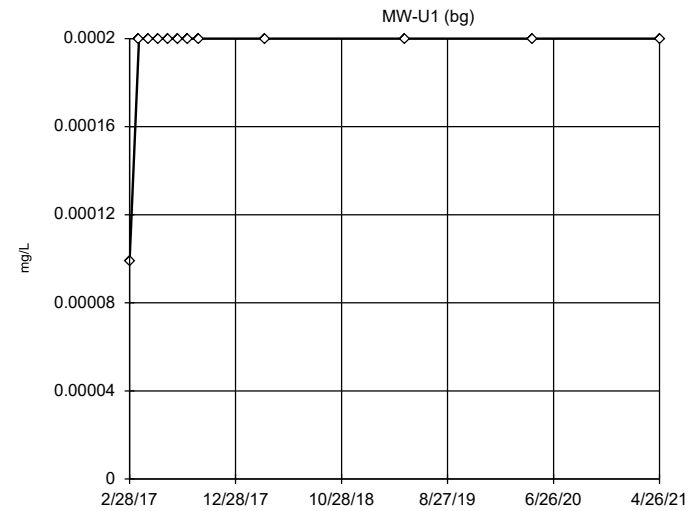
### Tukey's Outlier Screening



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

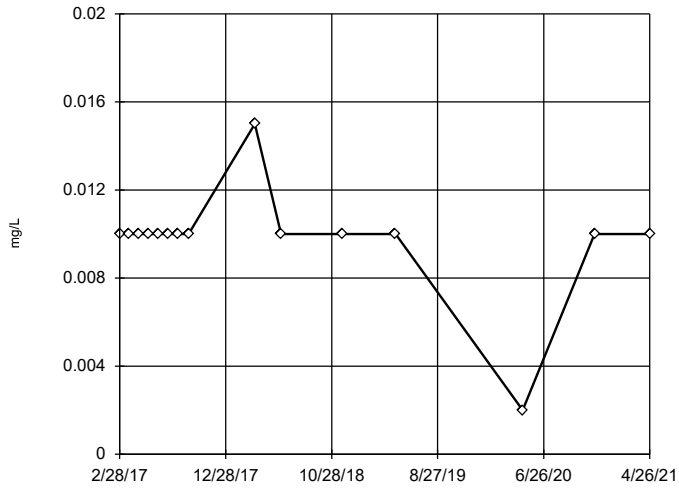


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D1

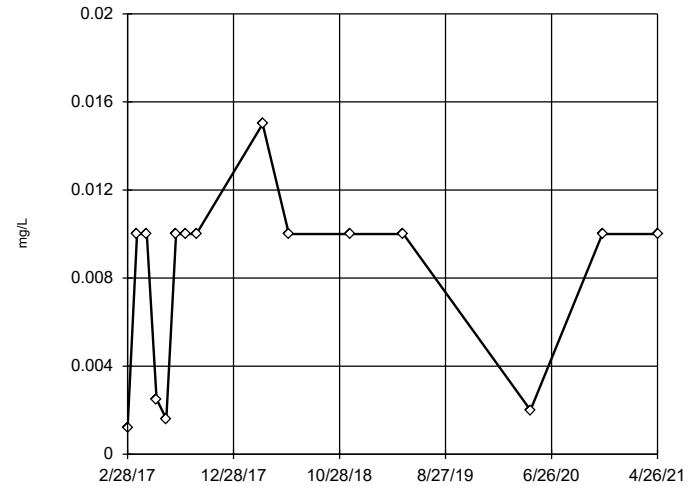


n = 15  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were square transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D2

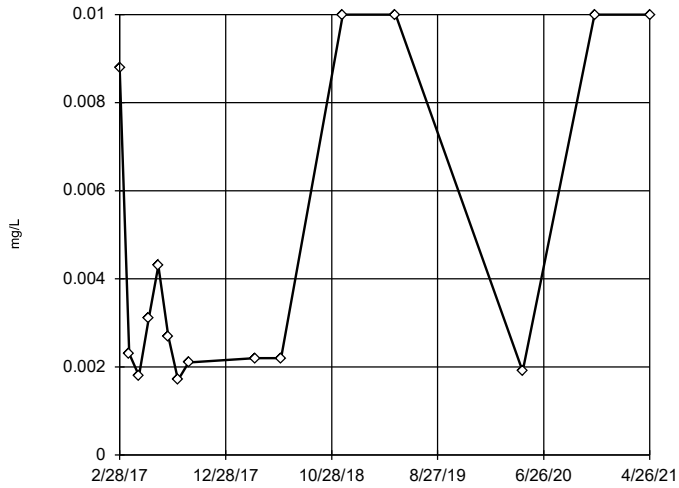


n = 15  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were square transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.01953, low cutoff = -0.01658, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D3

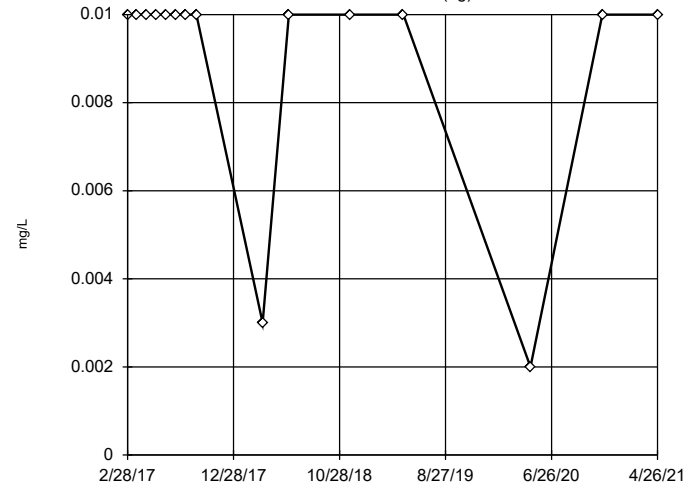


n = 15  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 1.08, low cutoff = 0.00001945, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-U1 (bg)

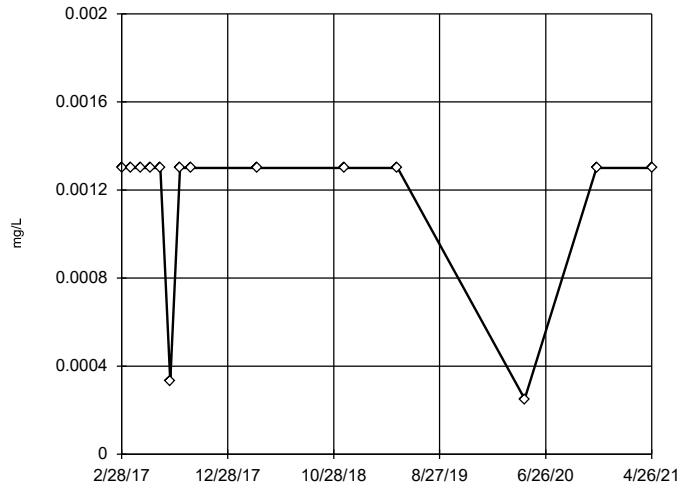


n = 15  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10



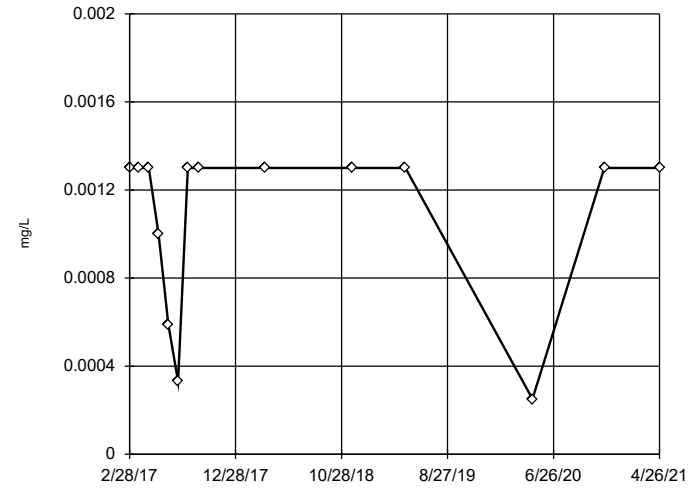
Tukey's Outlier Screening  
MW-D1



n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

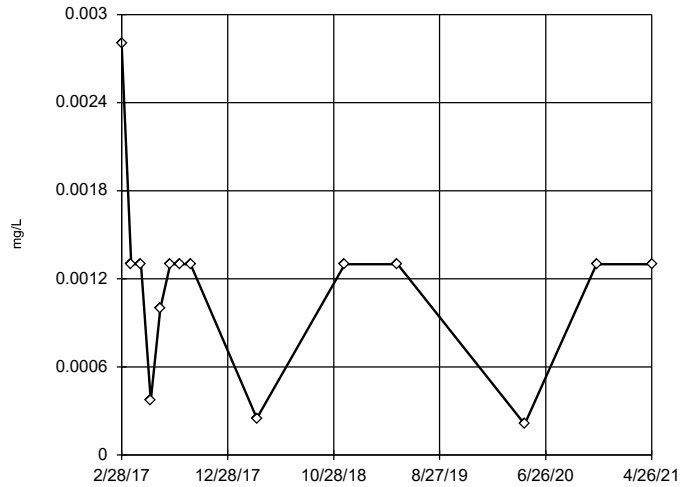
Tukey's Outlier Screening  
MW-D2



n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 0.002177, low cutoff = -0.001541, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

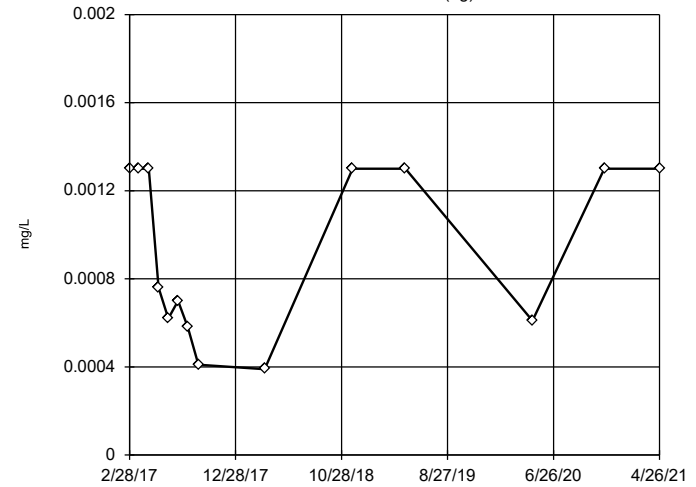
Tukey's Outlier Screening  
MW-D3



n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square root transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 0.004615, low cutoff = -0.00004161, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening  
MW-U1 (bg)

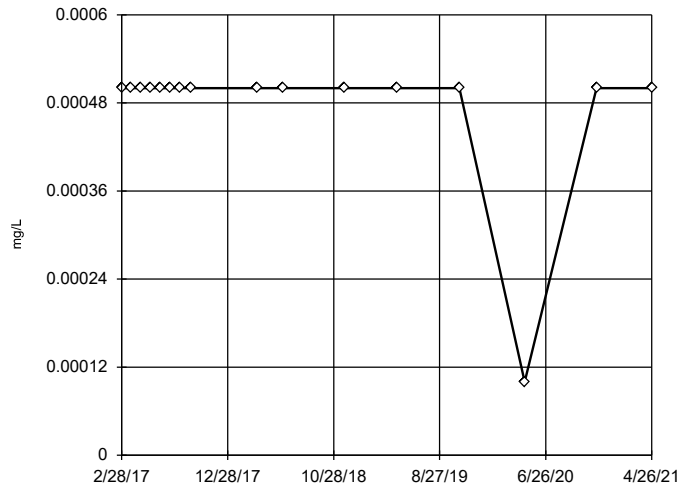


n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were natural log transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 0.01357, low cutoff = 0.00005698, based on IQR multiplier of 3.

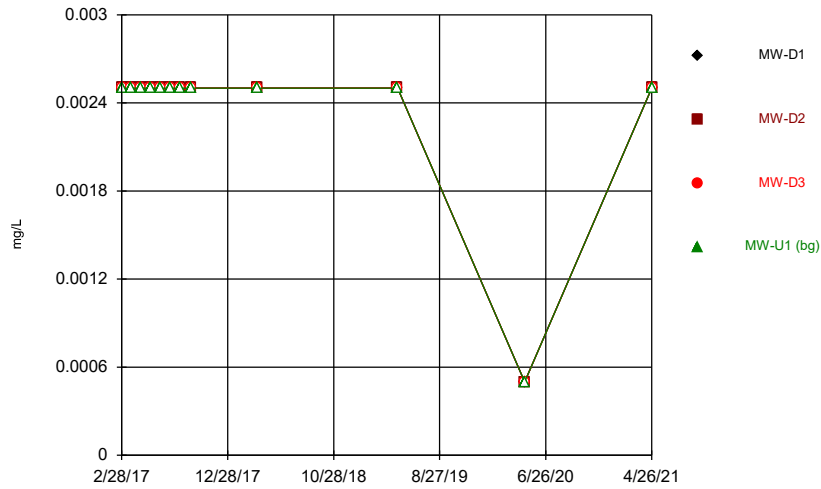
Constituent: Selenium Analysis Run 6/22/2021 11:45 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D1

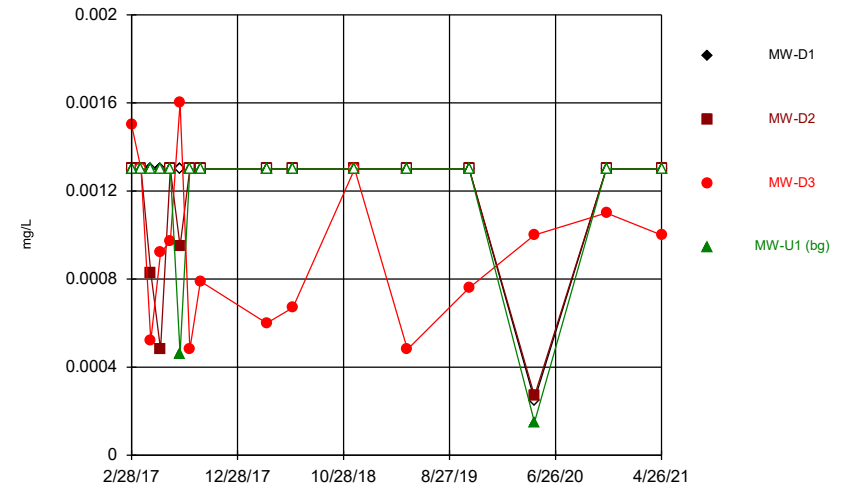


Time Series



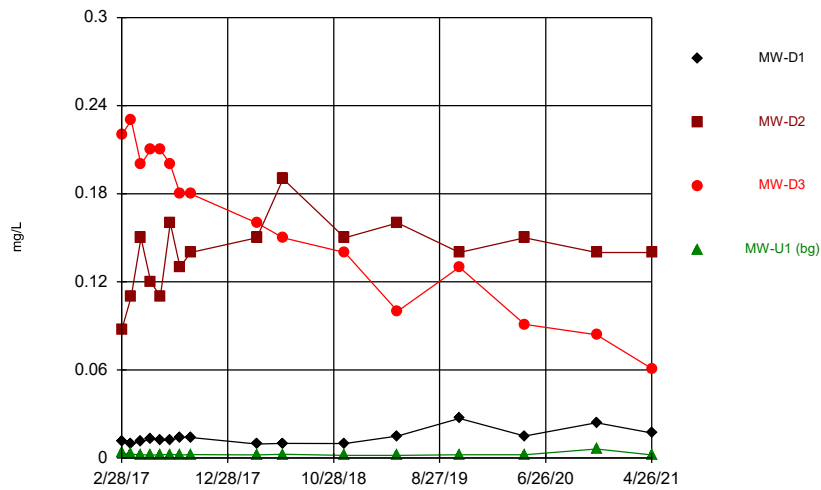
Constituent: Antimony Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



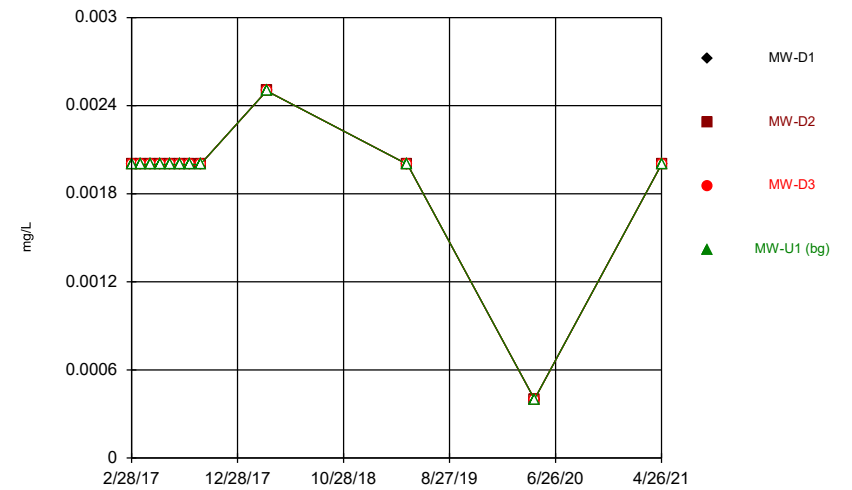
Constituent: Arsenic Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



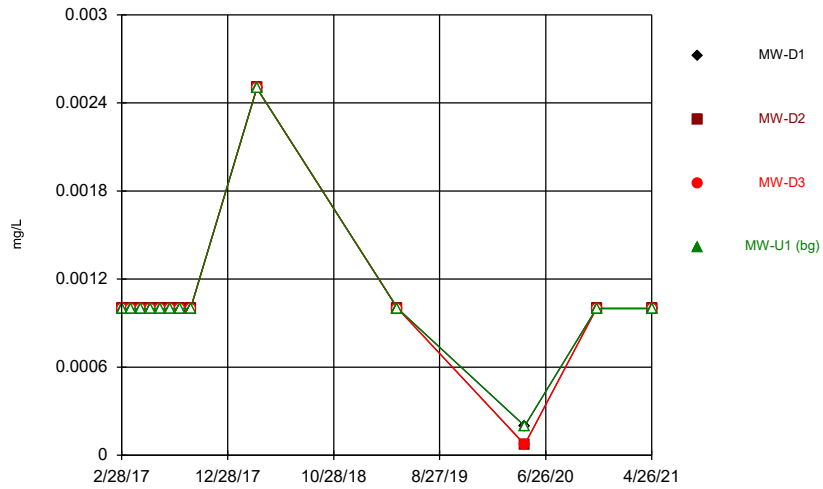
Constituent: Barium Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



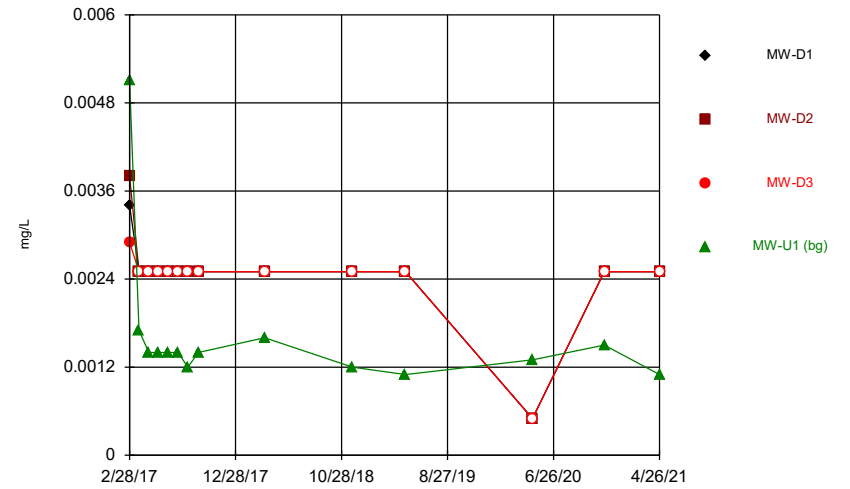
Constituent: Beryllium Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



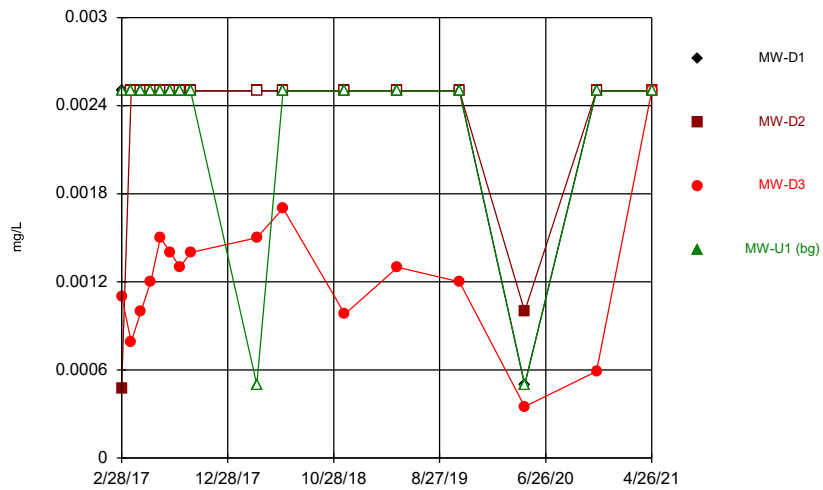
Constituent: Cadmium Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



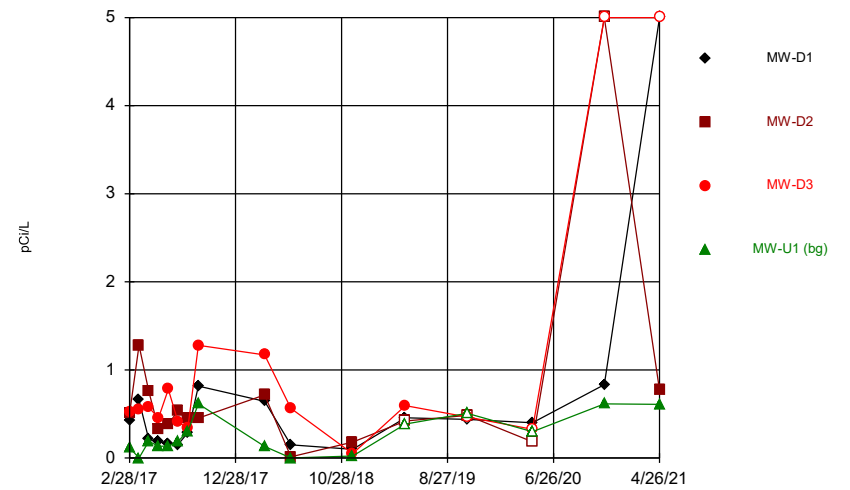
Constituent: Chromium Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



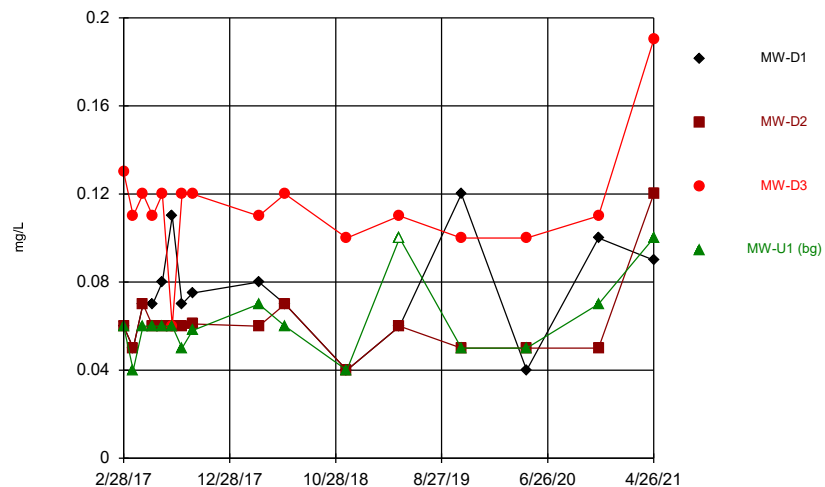
Constituent: Cobalt Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series

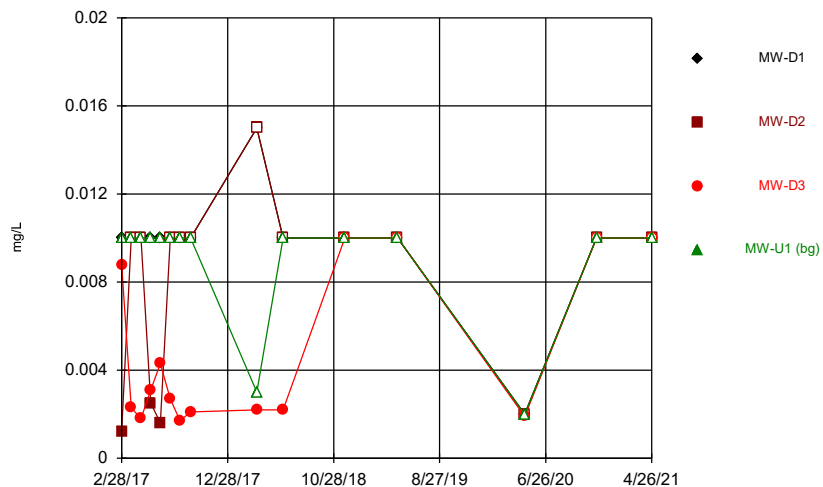


Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:37 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Time Series



Time Series

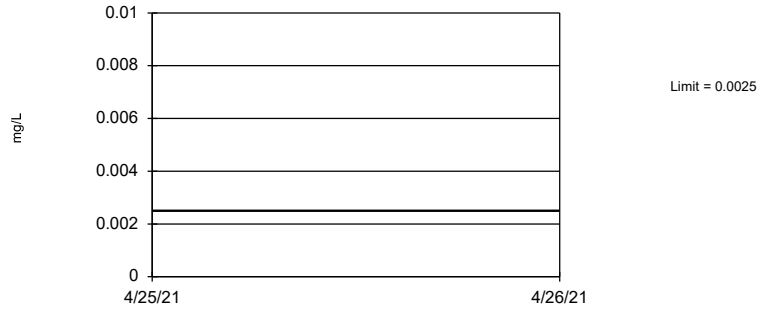


# Tolerance Limit

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 6/22/2021, 11:52 AM

<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	12	100	n/a	0.5404	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0013	n/a	n/a	n/a	16	87.5	n/a	0.4401	NP Inter(NDs)
Barium (mg/L)	n/a	0.0062	n/a	n/a	n/a	16	0	n/a	0.4401	NP Inter(normal...
Beryllium (mg/L)	n/a	0.002	n/a	n/a	n/a	12	100	n/a	0.5404	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.001	n/a	n/a	n/a	13	100	n/a	0.5133	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0051	n/a	n/a	n/a	14	0	n/a	0.4877	NP Inter(normal...
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	16	100	n/a	0.4401	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.148	n/a	n/a	n/a	16	18.75	No	0.01	Inter
Fluoride (mg/L)	n/a	0.1199	n/a	n/a	n/a	16	6.25	sqrt(x)	0.01	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	12	91.67	n/a	0.5404	NP Inter(NDs)
Lithium (mg/L)	n/a	0.0025	n/a	n/a	n/a	14	92.86	n/a	0.4877	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	12	91.67	n/a	0.5404	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	15	100	n/a	0.4633	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	n/a	n/a	n/a	14	50	n/a	0.4877	NP Inter(normal...
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	16	100	n/a	0.4401	NP Inter(NDs)

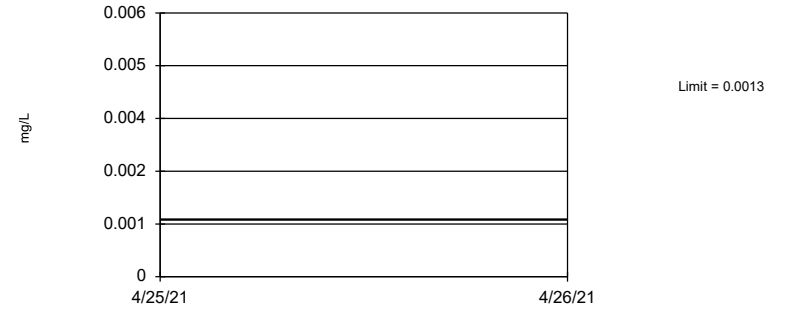
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Antimony Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

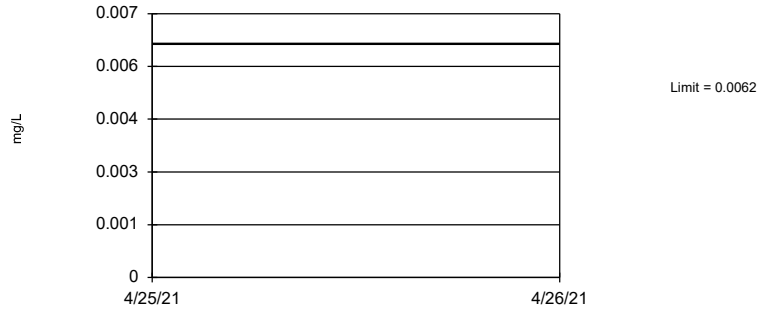
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 16 background values. 87.5% NDs. 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: Arsenic Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

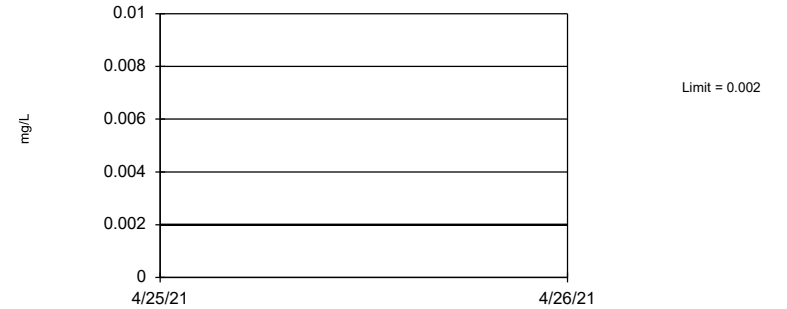
### Tolerance Limit Interwell Non-parametric



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. 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: Barium Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tolerance Limit Interwell Non-parametric

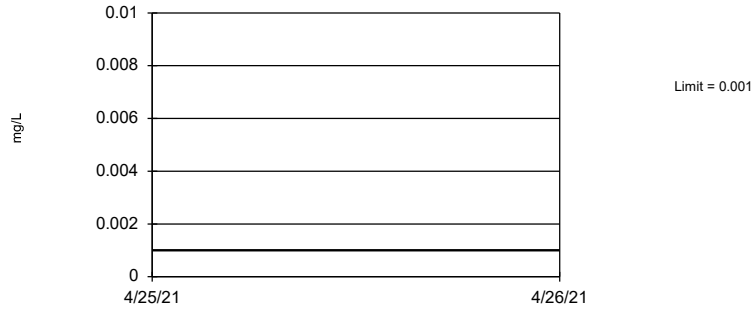


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Beryllium Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10



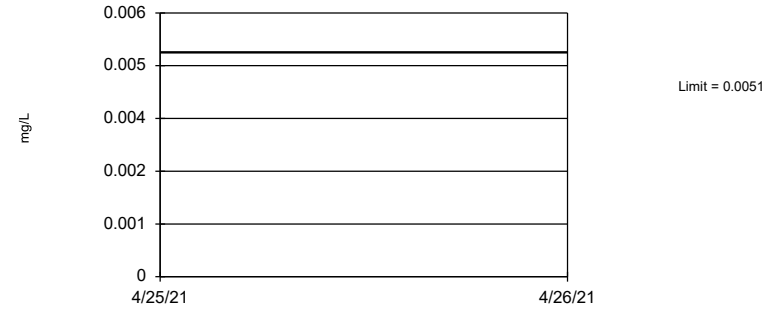
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. 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: Cadmium Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

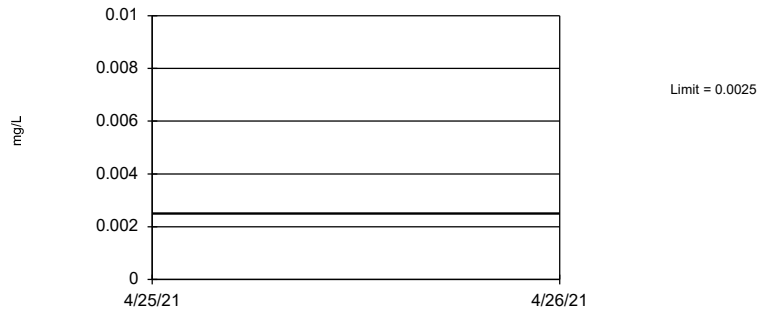
Tolerance Limit  
Interwell Non-parametric



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. Limit is highest of 14 background values. 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: Chromium Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

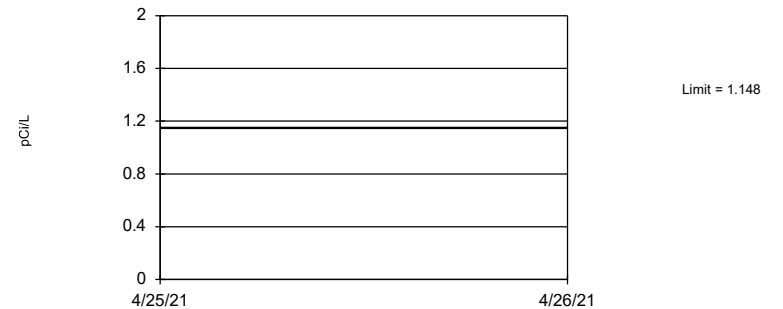
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. 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: Cobalt Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

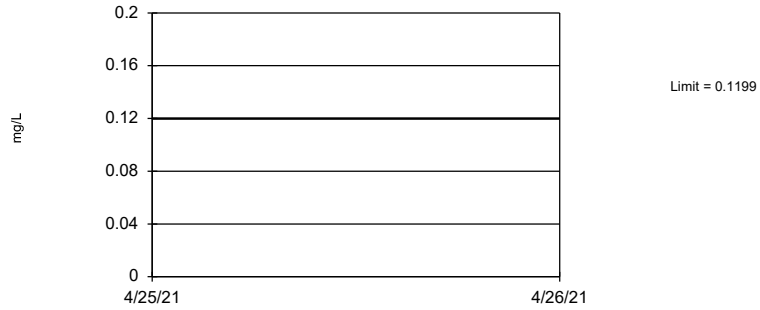
Tolerance Limit  
Interwell Parametric



95% coverage. Background Data Summary (after Cohen's Adjustment): Mean=0.317, Std. Dev.=0.2745, n=16, 18.75% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.844. Report alpha = 0.01.

Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 11:50 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

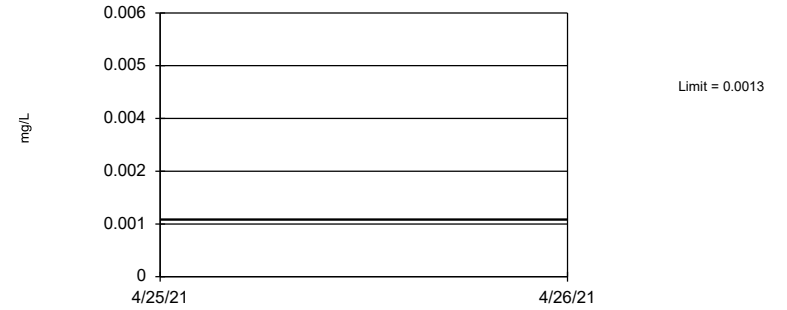
### Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary (based on square root transformation): Mean=0.2464, Std. Dev.=0.03299, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8644, critical = 0.844. Report alpha = 0.01.

Constituent: Fluoride Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

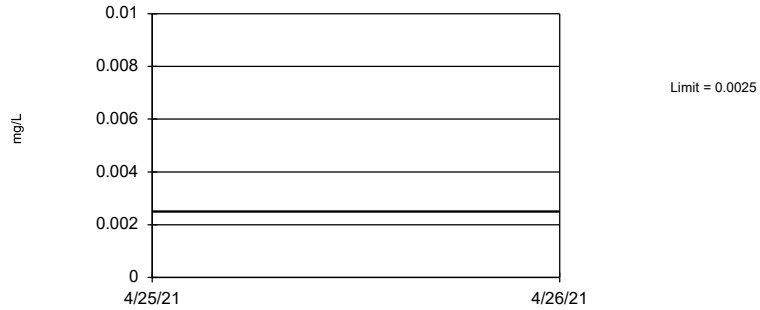
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 12 background values. 91.67% NDs. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Lead Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

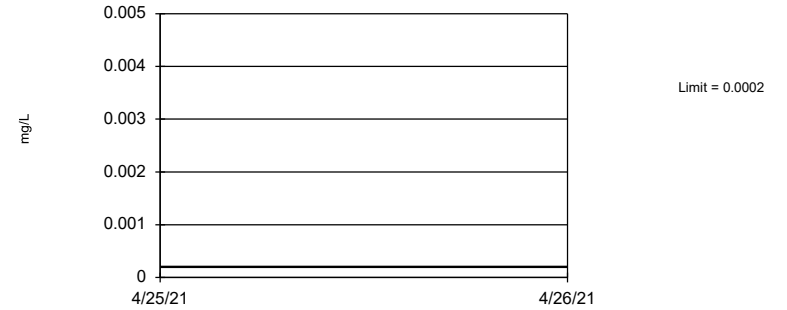
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 14 background values. 92.86% NDs. 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: Lithium Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 12 background values. 91.67% NDs. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Mercury Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

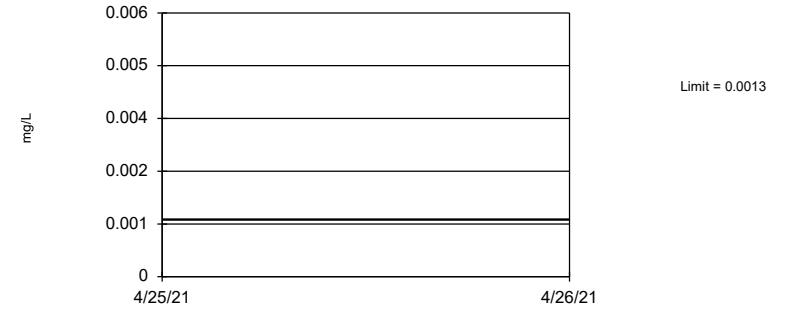
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 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: Molybdenum Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

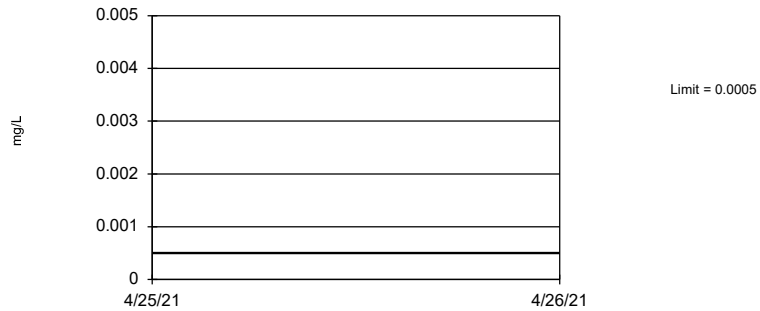
### Tolerance Limit Interwell Non-parametric



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. Limit is highest of 14 background values. 50% NDs. 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: Selenium Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. 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: Thallium Analysis Run 6/22/2021 11:51 AM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

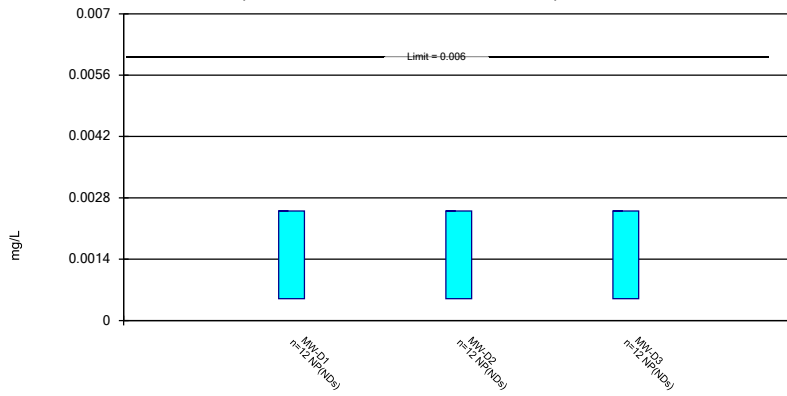
# Confidence Interval

CCPC Plant Crisp Ash Pond Site    Client: Geosyntec    Data: Sanitas\_Statistics Sampling Events 1 through 10    Printed 6/22/2021, 12:29 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-D1	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D2	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D3	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D1	0.0013	0.00025	0.01	No	16	100	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D2	0.0013	0.00083	0.01	No	16	75	No	0.01	NP (normality)
Arsenic (mg/L)	MW-D3	0.001168	0.0007062	0.01	No	16	12.5	No	0.01	Param.
Barium (mg/L)	MW-D1	0.017	0.01	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	MW-D2	0.1549	0.1234	2	No	16	0	No	0.01	Param.
Barium (mg/L)	MW-D3	0.1939	0.1244	2	No	16	0	No	0.01	Param.
Beryllium (mg/L)	MW-D1	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D2	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D3	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D1	0.0025	0.0002	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D2	0.0025	0.000075	0.005	No	13	92.31	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D3	0.0025	0.000071	0.005	No	13	92.31	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D1	0.0034	0.0005	0.1	No	14	92.86	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D2	0.0038	0.0005	0.1	No	14	92.86	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D3	0.0029	0.0005	0.1	No	14	92.86	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D1	0.0025	0.0005	0.0025	No	16	100	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D2	0.0025	0.001	0.0025	No	16	87.5	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D3	0.001555	0.0009213	0.0025	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-D1	0.816	0.153	5	No	16	18.75	No	0.01	NP (Cohens/xfrm)
Combined Radium 226 + 228 (pCi/L)	MW-D2	0.773	0.184	5	No	16	25	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-D3	1.28	0.339	5	No	16	25	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D1	0.08886	0.05926	4	No	16	0	No	0.01	Param.
Fluoride (mg/L)	MW-D2	0.061	0.05	4	No	16	0	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D3	0.13	0.1	4	No	16	0	No	0.01	NP (normality)
Lead (mg/L)	MW-D1	0.0013	0.0008	0.0013	No	12	91.67	No	0.01	NP (NDs)
Lead (mg/L)	MW-D2	0.0013	0.00037	0.0013	No	12	83.33	No	0.01	NP (NDs)
Lead (mg/L)	MW-D3	0.0013	0.00025	0.0013	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D1	0.005	0.0023	0.0025	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D2	0.0031	0.0011	0.0025	No	14	85.71	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D3	0.005	0.0024	0.0025	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D1	0.0002	0.000077	0.002	No	12	91.67	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D2	0.0002	0.00018	0.002	No	12	83.33	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D3	0.0002	0.00011	0.002	No	12	91.67	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D1	0.015	0.002	0.01	No	15	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D2	0.015	0.002	0.01	No	15	80	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D3	0.01	0.0019	0.01	No	15	26.67	No	0.01	NP (normality)
Selenium (mg/L)	MW-D1	0.0013	0.00033	0.05	No	14	92.86	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D2	0.0013	0.00059	0.05	No	14	78.57	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D3	0.0028	0.00037	0.05	No	14	71.43	No	0.01	NP (normality)
Thallium (mg/L)	MW-D1	0.0005	0.0001	0.002	No	16	100	No	0.01	NP (NDs)
Thallium (mg/L)	MW-D2	0.0005	0.00011	0.002	No	16	37.5	No	0.01	NP (normality)
Thallium (mg/L)	MW-D3	0.00017	0.0001	0.002	No	16	12.5	No	0.01	NP (normality)

### Non-Parametric Confidence Interval

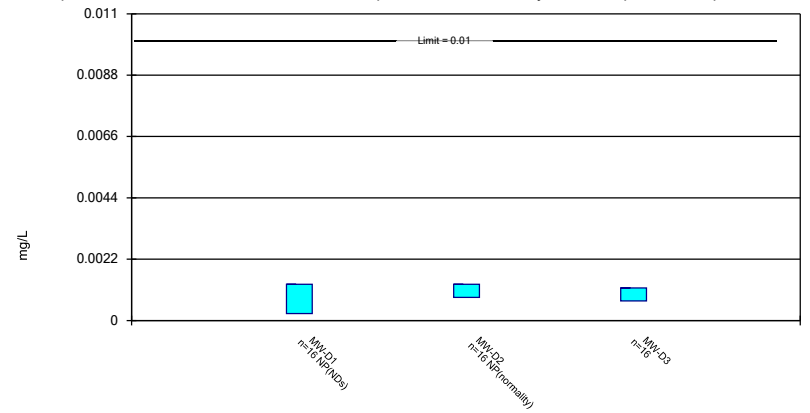
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 6/22/2021 12:27 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

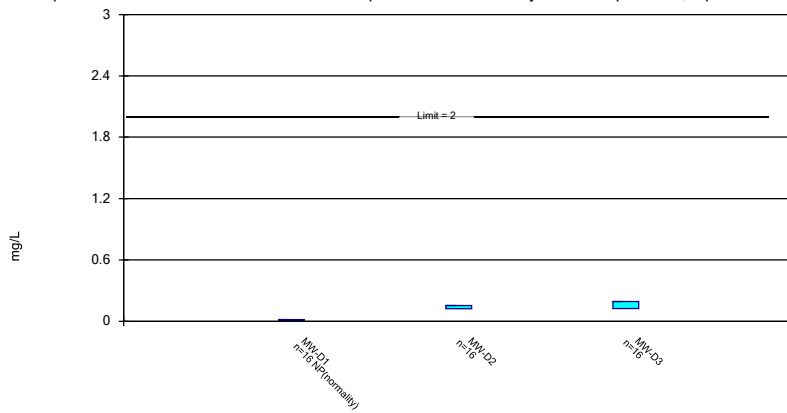
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 6/22/2021 12:27 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

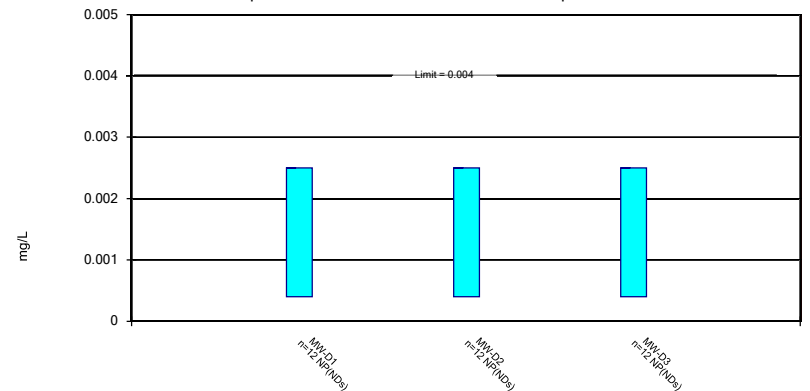
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 6/22/2021 12:27 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

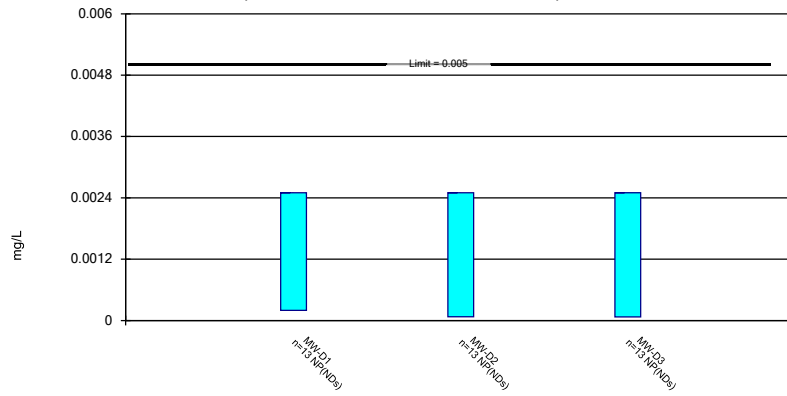
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 6/22/2021 12:27 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

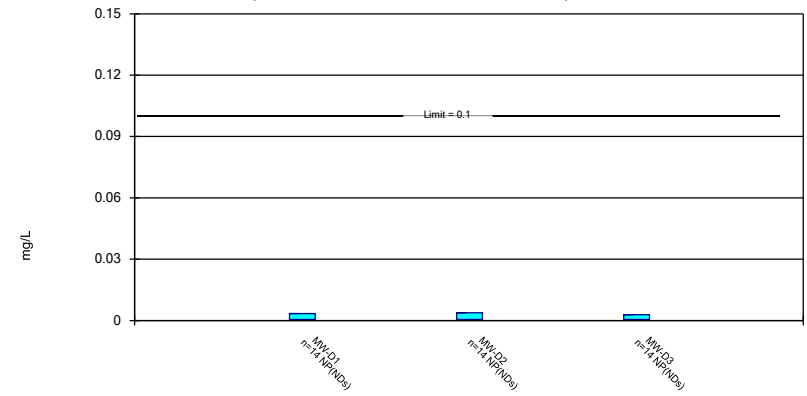
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

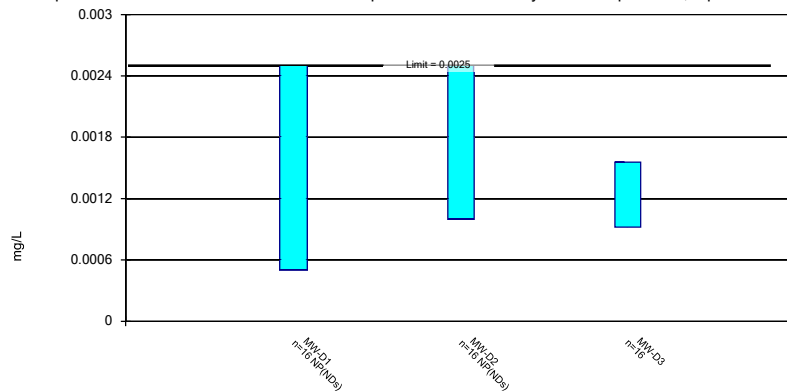
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

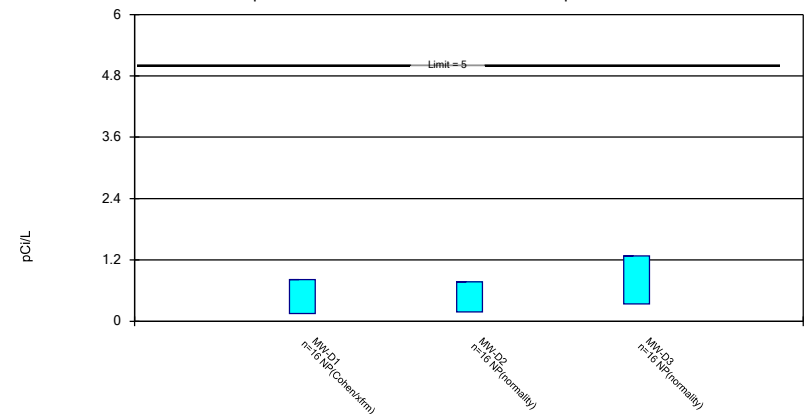
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

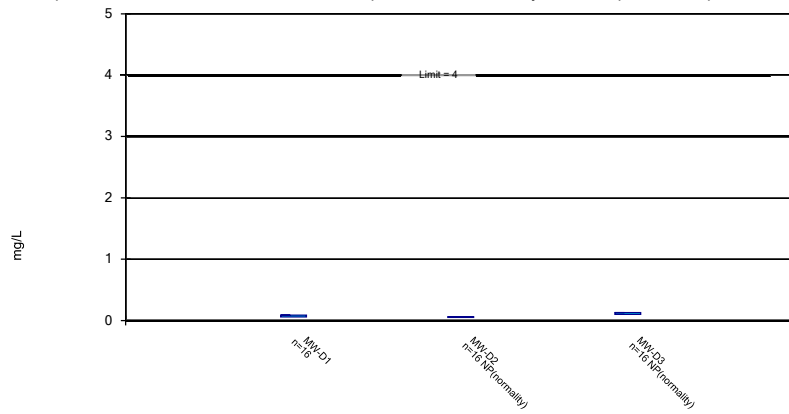
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Combined Radium 226 + 228 Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

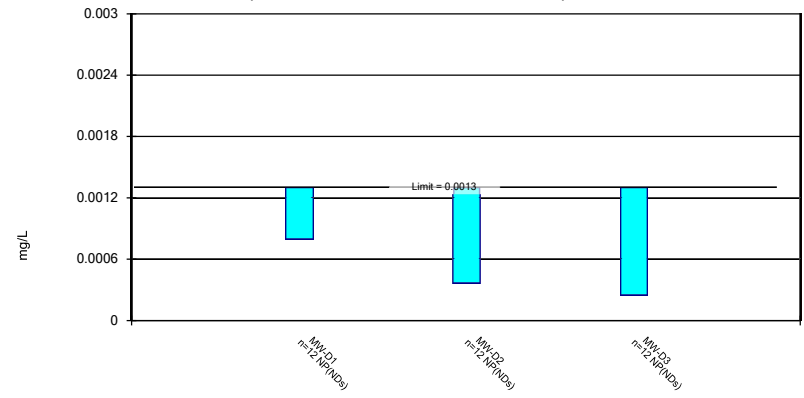
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

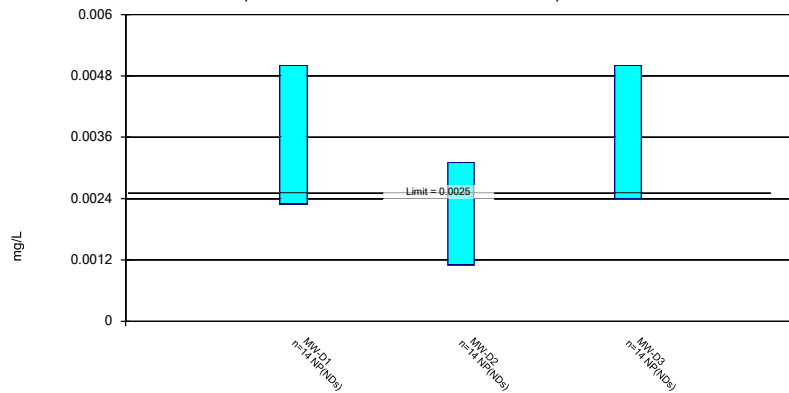
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

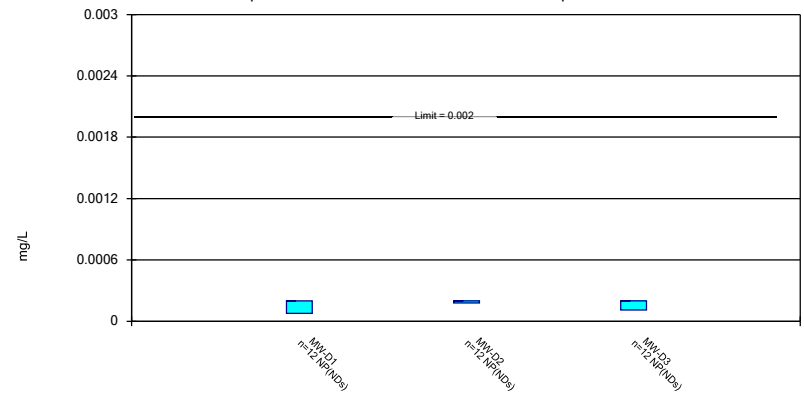
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

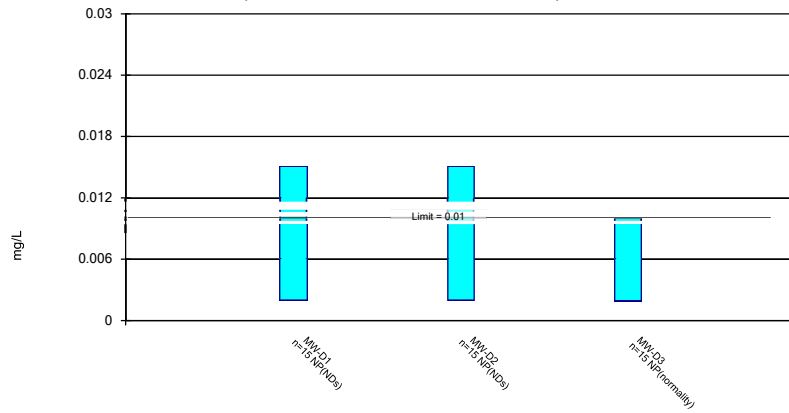
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

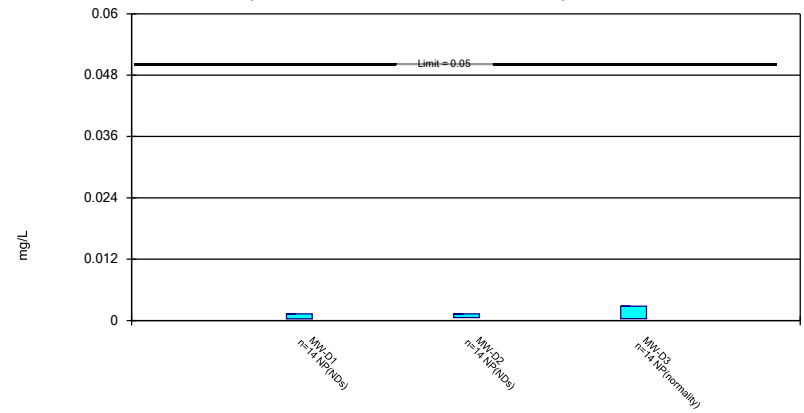
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

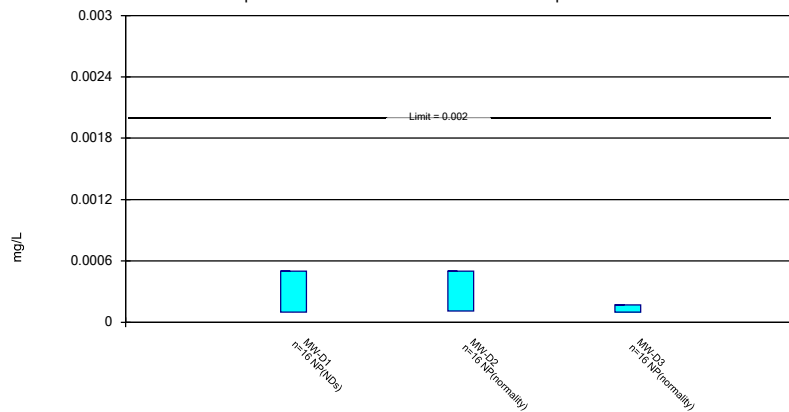
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
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 6/22/2021 12:28 PM View: Sampling Events 1 through 16  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10



October 2021

# Summary Report

Constituent: Antimony Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 48  
 Wells = 4  
 Minimum Value = 0.0005  
 Maximum Value = 0.0025  
 Mean Value = 0.002333  
 Median Value = 0.0025  
 Standard Deviation = 0.0005586  
 Coefficient of Variation = 0.2394  
 Skewness = -3.015

<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	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-D2	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-D3	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015
MW-U1 (bg)	12	12	0.0005	0.0025	0.002333	0.0025	0.0005774	0.2474	-3.015

# Summary Report

Constituent: Antimony (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Arsenic Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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For observations made between 2/28/2017 and 10/26/2021, a summary of the selected data set:

Observations = 68  
ND/Trace = 47  
Wells = 4  
Minimum Value = 0.00015  
Maximum Value = 0.0016  
Mean Value = 0.001131  
Median Value = 0.0013  
Standard Deviation = 0.000329  
Coefficient of Variation = 0.291  
Skewness = -1.531

<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	0.00025	0.0013	0.001238	0.0013	0.0002547	0.2057	-3.75
MW-D2	17	13	0.00027	0.0013	0.001143	0.0013	0.0003218	0.2816	-1.824
MW-D3	17	3	0.00048	0.0016	0.0009582	0.00097	0.0003544	0.3698	0.2325
MW-U1 (bg)	17	14	0.00015	0.0013	0.001183	0.0013	0.000335	0.2832	-2.496

# Summary Report

Constituent: Arsenic (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Barium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Ststistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 10/26/2021, a summary of the selected data set:

Observations = 68  
 ND/Trace = 0  
 Wells = 4  
 Minimum Value = 0.0018  
 Maximum Value = 0.23  
 Mean Value = 0.07803  
 Median Value = 0.044  
 Standard Deviation = 0.07642  
 Coefficient of Variation = 0.9794  
 Skewness = 0.4134

<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	0	0.0095	0.027	0.01449	0.013	0.005225	0.3606	1.234
MW-D2	17	0	0.087	0.19	0.141	0.14	0.02461	0.1746	-0.298
MW-D3	17	0	0.061	0.23	0.1541	0.16	0.0557	0.3614	-0.2957
MW-U1 (bg)	17	0	0.0018	0.0062	0.002494	0.0022	0.001024	0.4107	3.024

# Summary Report

Constituent: Barium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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)

# Summary Report

Constituent: Beryllium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
ND/Trace = 48  
Wells = 4  
Minimum Value = 0.0004  
Maximum Value = 0.0025  
Mean Value = 0.001908  
Median Value = 0.002  
Standard Deviation = 0.0004802  
Coefficient of Variation = 0.2516  
Skewness = -2.499

<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	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-D2	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-D3	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499
MW-U1 (bg)	12	12	0.0004	0.0025	0.001908	0.002	0.0004963	0.2601	-2.499



# Summary Report

Constituent: Beryllium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Cadmium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 52  
ND/Trace = 50  
Wells = 4  
Minimum Value = 0.000071  
Maximum Value = 0.0025  
Mean Value = 0.001049  
Median Value = 0.001  
Standard Deviation = 0.0004825  
Coefficient of Variation = 0.46  
Skewness = 1.61

<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	0.0002	0.0025	0.001054	0.001	0.0004875	0.4626	1.796
MW-D2	13	12	0.000075	0.0025	0.001044	0.001	0.0005066	0.4852	1.45
MW-D3	13	12	0.000071	0.0025	0.001044	0.001	0.0005073	0.4859	1.439
MW-U1 (bg)	13	13	0.0002	0.0025	0.001054	0.001	0.0004875	0.4626	1.796

# Summary Report

Constituent: Cadmium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Chromium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 10/26/2021, a summary of the selected data set:

Observations = 60  
 ND/Trace = 41  
 Wells = 4  
 Minimum Value = 0.0005  
 Maximum Value = 0.0051  
 Mean Value = 0.002203  
 Median Value = 0.0025  
 Standard Deviation = 0.0007798  
 Coefficient of Variation = 0.3539  
 Skewness = 0.2391

<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	0.0034	0.002427	0.0025	0.0005812	0.2395	-2.344
MW-D2	15	13	0.0005	0.0038	0.002367	0.0025	0.0007128	0.3012	-1.045
MW-D3	15	14	0.0005	0.0029	0.002393	0.0025	0.0005338	0.223	-3.228
MW-U1 (bg)	15	0	0.0011	0.0051	0.001627	0.0014	0.0009772	0.6007	3.277

# Summary Report

Constituent: Chromium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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)

# Summary Report

Constituent: Cobalt Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 47  
 Wells = 4  
 Minimum Value = 0.00035  
 Maximum Value = 0.0025  
 Mean Value = 0.002036  
 Median Value = 0.0025  
 Standard Deviation = 0.0007303  
 Coefficient of Variation = 0.3588  
 Skewness = -1.112

<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	0.0005	0.0025	0.002375	0.0025	0.0005	0.2105	-3.615
MW-D2	16	14	0.00047	0.0025	0.002279	0.0025	0.0006106	0.2679	-2.38
MW-D3	16	1	0.00035	0.0025	0.001238	0.00125	0.000487	0.3934	0.6297
MW-U1 (bg)	16	16	0.0005	0.0025	0.00225	0.0025	0.0006831	0.3036	-2.268

# Summary Report

Constituent: Cobalt (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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For observations made between 2/28/2017 and 10/26/2021, a summary of the selected data set:

Observations = 68  
ND/Trace = 14  
Wells = 4  
Minimum Value = 0  
Maximum Value = 5  
Mean Value = 0.7168  
Median Value = 0.455  
Standard Deviation = 1.116  
Coefficient of Variation = 1.557  
Skewness = 3.353

<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	3	0.0994	5	0.6857	0.421	1.139	1.661	3.458
MW-D2	17	4	0.0139	5	0.7815	0.484	1.126	1.441	3.338
MW-D3	17	4	0.0501	5	1.103	0.564	1.495	1.356	2.207
MW-U1 (bg)	17	3	0	0.801	0.2972	0.19	0.2491	0.8381	0.5732



# Summary Report

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Fluoride Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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For observations made between 2/28/2017 and 10/26/2021, a summary of the selected data set:

Observations = 68  
ND/Trace = 2  
Wells = 4  
Minimum Value = 0.04  
Maximum Value = 0.2  
Mean Value = 0.08006  
Median Value = 0.07  
Standard Deviation = 0.03277  
Coefficient of Variation = 0.4094  
Skewness = 1.345

<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	0	0.04	0.12	0.075	0.07	0.02236	0.2981	0.2766
MW-D2	17	0	0.04	0.12	0.06182	0.06	0.01704	0.2756	2.364
MW-D3	17	0	0.06	0.2	0.1194	0.11	0.0323	0.2705	1.224
MW-U1 (bg)	17	2	0.04	0.1	0.064	0.06	0.01909	0.2983	0.962

# Summary Report

Constituent: Fluoride (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Lead Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 44  
 Wells = 4  
 Minimum Value = 0.00025  
 Maximum Value = 0.0013  
 Mean Value = 0.001153  
 Median Value = 0.0013  
 Standard Deviation = 0.0003434  
 Coefficient of Variation = 0.298  
 Skewness = -1.985

<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	12	11	0.00025	0.0013	0.001171	0.0013	0.0003237	0.2764	-2.269
MW-D2	12	10	0.00025	0.0013	0.001068	0.0013	0.0004225	0.3955	-1.209
MW-D3	12	12	0.00025	0.0013	0.001213	0.0013	0.0003031	0.25	-3.015
MW-U1 (bg)	12	11	0.00025	0.0013	0.001158	0.0013	0.0003417	0.295	-2.029

# Summary Report

Constituent: Lead (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Lithium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 56  
 ND/Trace = 49  
 Wells = 4  
 Minimum Value = 0.00034  
 Maximum Value = 0.005  
 Mean Value = 0.002411  
 Median Value = 0.0025  
 Standard Deviation = 0.0008828  
 Coefficient of Variation = 0.3661  
 Skewness = 0.3137

<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	13	0.0005	0.005	0.002521	0.0025	0.0008894	0.3527	0.7892
MW-D2	14	12	0.0005	0.005	0.002479	0.0025	0.0009831	0.3966	0.4961
MW-D3	14	11	0.00048	0.005	0.002441	0.0025	0.00095	0.3891	0.7186
MW-U1 (bg)	14	13	0.00034	0.0025	0.002203	0.0025	0.000756	0.3432	-2.049

# Summary Report

Constituent: Lithium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Mercury Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 48  
 ND/Trace = 43  
 Wells = 4  
 Minimum Value = 0.000077  
 Maximum Value = 0.0002  
 Mean Value = 0.0001912  
 Median Value = 0.0002  
 Standard Deviation = 0.0000285  
 Coefficient of Variation = 0.1491  
 Skewness = -3.075

<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	12	11	0.000077	0.0002	0.0001897	0.0002	0.00003551	0.1871	-3.015
MW-D2	12	10	0.00011	0.0002	0.0001908	0.0002	0.0000261	0.1368	-2.787
MW-D3	12	11	0.00011	0.0002	0.0001925	0.0002	0.00002598	0.135	-3.015
MW-U1 (bg)	12	11	0.000099	0.0002	0.0001916	0.0002	0.00002916	0.1522	-3.015



# Summary Report

Constituent: Mercury (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Molybdenum Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 60  
 ND/Trace = 46  
 Wells = 4  
 Minimum Value = 0.0012  
 Maximum Value = 0.015  
 Mean Value = 0.007957  
 Median Value = 0.01  
 Standard Deviation = 0.003739  
 Coefficient of Variation = 0.4699  
 Skewness = -0.7246

<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	15	0.002	0.015	0.0098	0.01	0.002513	0.2564	-1.556
MW-D2	15	12	0.0012	0.015	0.008153	0.01	0.004158	0.51	-0.6656
MW-D3	15	4	0.0017	0.01	0.004873	0.0027	0.003642	0.7474	0.6422
MW-U1 (bg)	15	15	0.002	0.01	0.009	0.01	0.002646	0.294	-2.18

# Summary Report

Constituent: Molybdenum (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Selenium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 56  
 ND/Trace = 41  
 Wells = 4  
 Minimum Value = 0.00021  
 Maximum Value = 0.0028  
 Mean Value = 0.001087  
 Median Value = 0.0013  
 Standard Deviation = 0.0004544  
 Coefficient of Variation = 0.4182  
 Skewness = 0.1038

<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	13	0.00025	0.0013	0.001156	0.0013	0.0003671	0.3176	-2.049
MW-D2	14	11	0.00025	0.0013	0.001084	0.0013	0.0003904	0.3603	-1.377
MW-D3	14	10	0.00021	0.0028	0.001166	0.0013	0.0006352	0.5446	0.6934
MW-U1 (bg)	14	7	0.00039	0.0013	0.0009407	0.00103	0.0003845	0.4087	-0.1795

# Summary Report

Constituent: Selenium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

# Summary Report

Constituent: Thallium Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

For observations made between 2/28/2017 and 4/26/2021, a summary of the selected data set:

Observations = 64  
 ND/Trace = 40  
 Wells = 4  
 Minimum Value = 0.000085  
 Maximum Value = 0.0005  
 Mean Value = 0.0003452  
 Median Value = 0.0005  
 Standard Deviation = 0.0001898  
 Coefficient of Variation = 0.5496  
 Skewness = -0.4126

<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	0.0001	0.0005	0.000475	0.0005	0.0001	0.2105	-3.615
MW-D2	16	6	0.000085	0.0005	0.0002656	0.00013	0.0001914	0.7207	0.4152
MW-D3	16	2	0.000095	0.0005	0.0001653	0.00012	0.0001318	0.7971	2.195
MW-U1 (bg)	16	16	0.0001	0.0005	0.000475	0.0005	0.0001	0.2105	-3.615

# Summary Report

Constituent: Thallium (mg/L) Analysis Run 12/6/2021 3:30 PM View: Sanitas\_Statistics Sampling Events 1 through 17

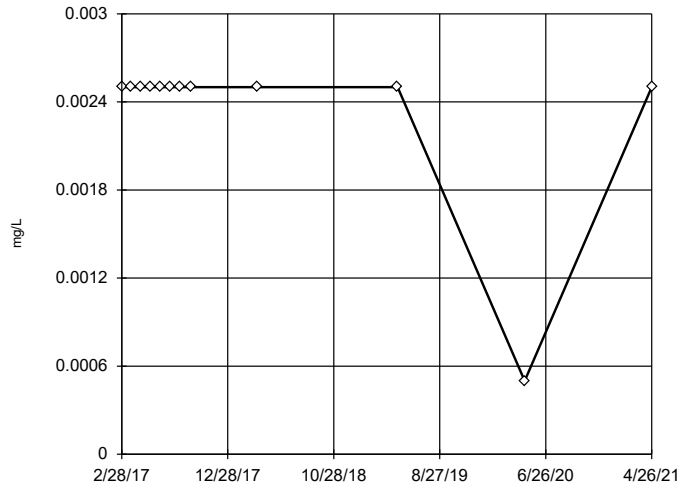
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

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	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

### Tukey's Outlier Screening

MW-D1



n = 12

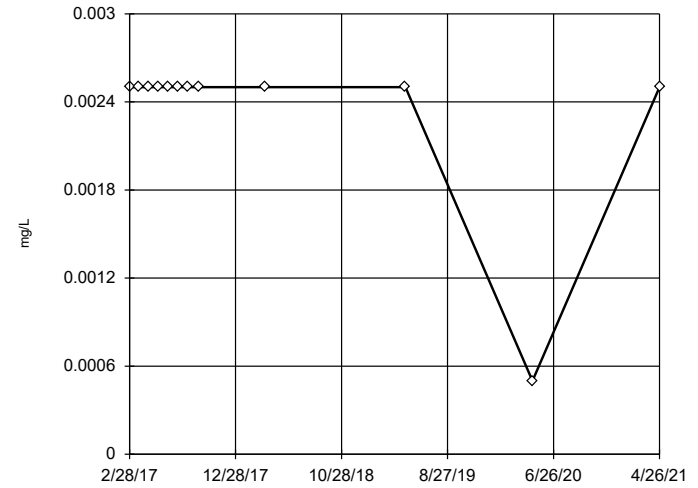
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

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.

### Tukey's Outlier Screening

MW-D2



n = 12

No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

Data were x\*6 transformed to achieve best W statistic (graph shown in original units).

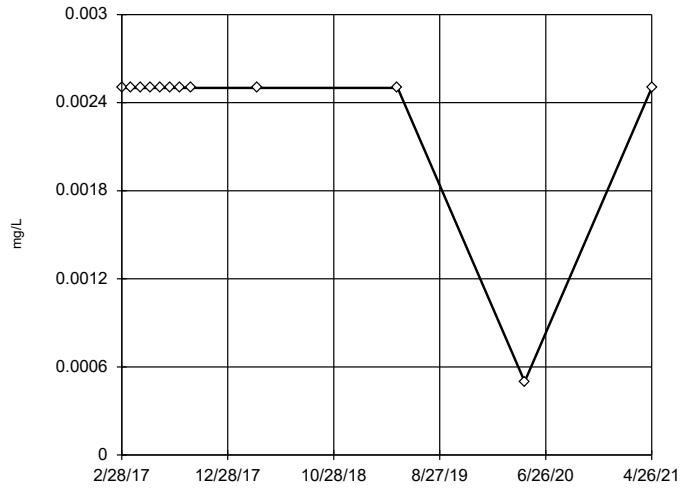
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Constituent: Antimony Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

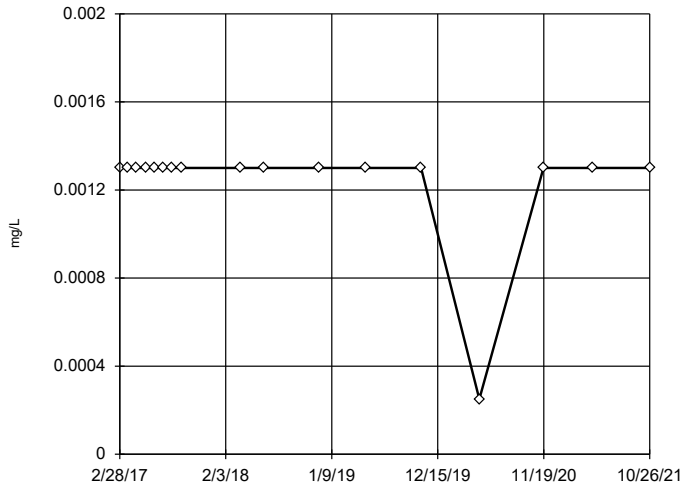
### Tukey's Outlier Screening

MW-D3





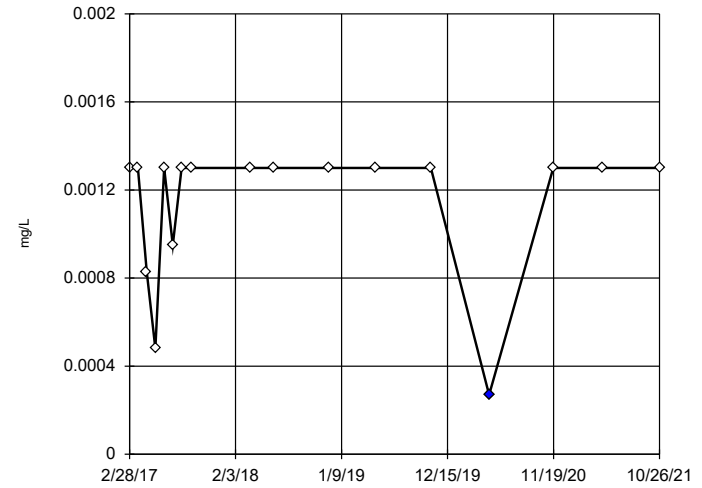
Tukey's Outlier Screening  
MW-D1



n = 17  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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: Arsenic Analysis Run 12/6/2021 4:13 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

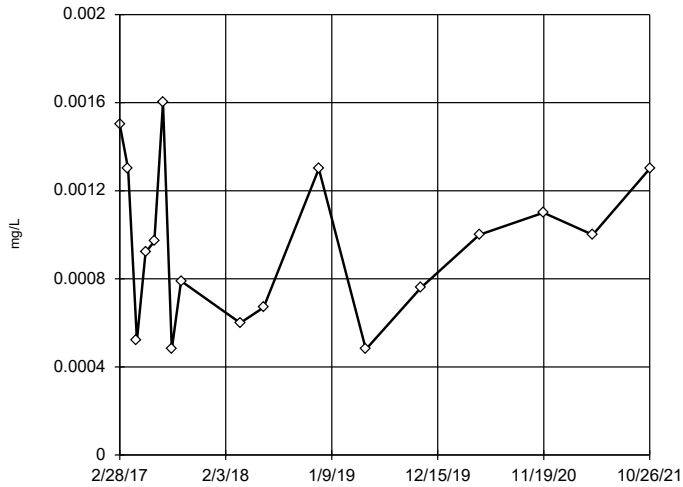
Tukey's Outlier Screening  
MW-D2



n = 17  
Outlier is drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 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

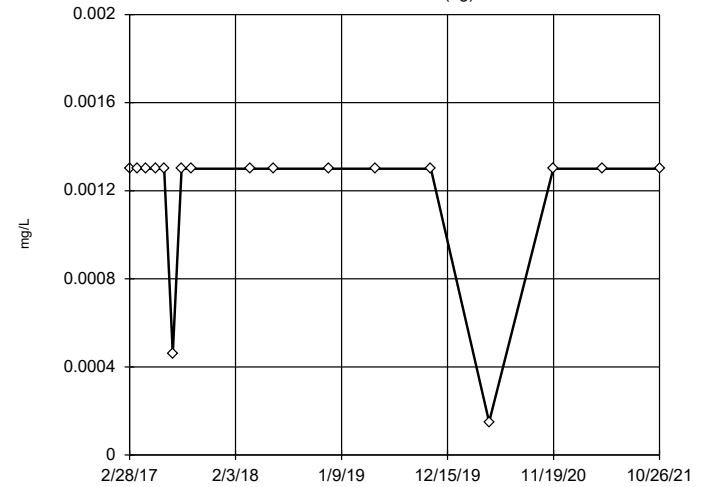
Tukey's Outlier Screening  
MW-D3



n = 17  
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 = 0.004713, low cutoff = -0.00005488, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 12/6/2021 4:13 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)

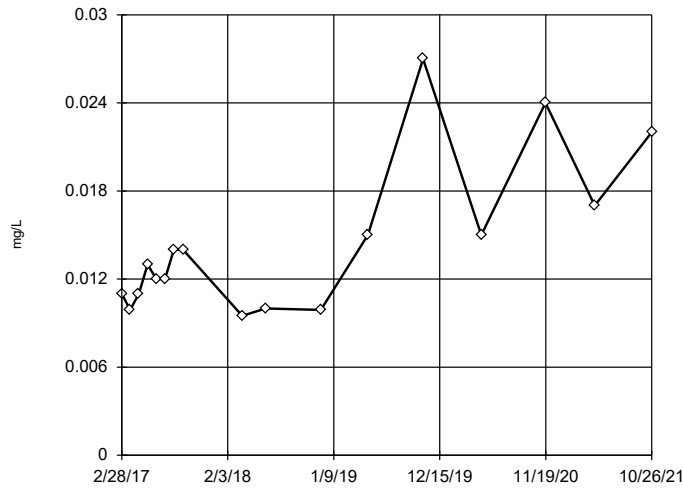


n = 17  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Ladder of Powers transformations did not improve normality; analysis run on raw data.  
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Arsenic Analysis Run 12/6/2021 4:13 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-D1



n = 17

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

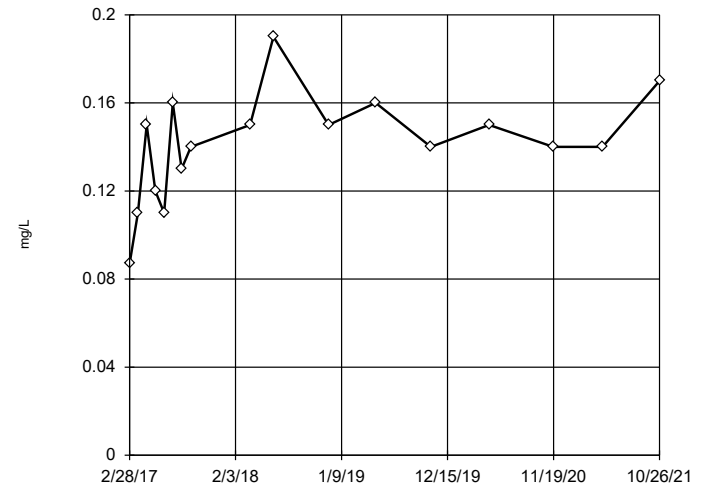
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.05636,  
low cutoff = 0.002971,  
based on IQR multiplier of 3.

Constituent: Barium Analysis Run 12/6/2021 4:13 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 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 12/6/2021 4:13 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

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

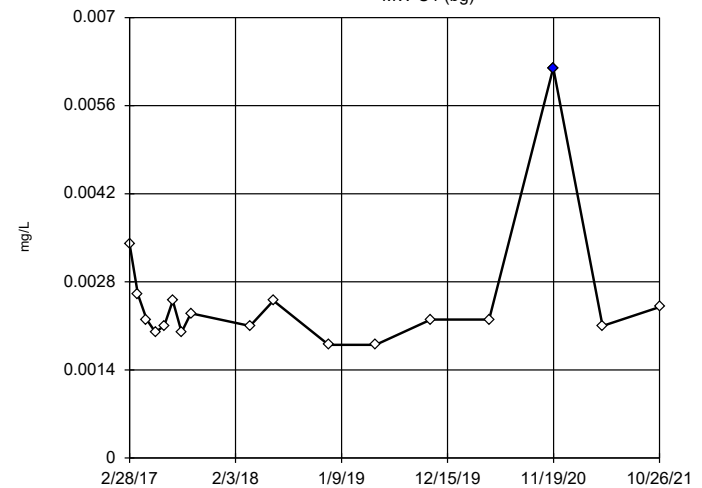
Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3752,  
low cutoff = -0.2993,  
based on IQR multiplier of 3.

Constituent: Barium Analysis Run 12/6/2021 4:13 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

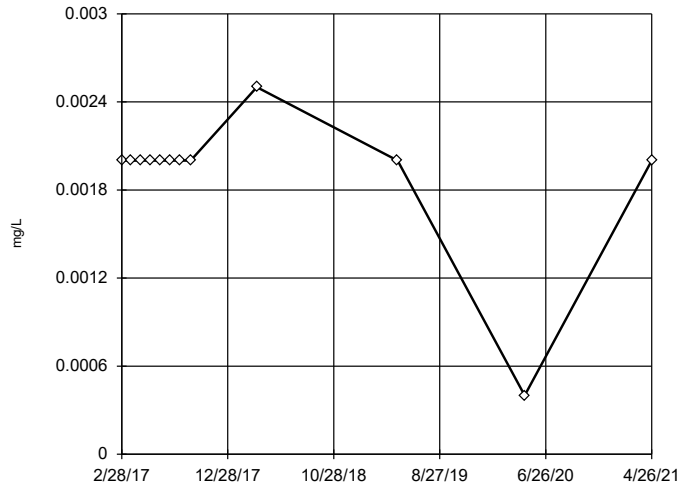
Outlier is drawn as solid.  
Tukey's method selected by user.

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

High cutoff = 0.004538,  
low cutoff = 0.001129,  
based on IQR multiplier of 3.

Constituent: Barium Analysis Run 12/6/2021 4:13 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

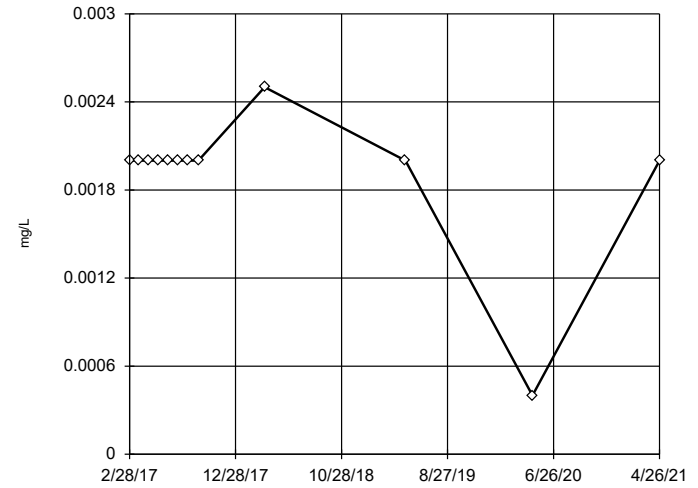
Tukey's Outlier Screening  
MW-D1



n = 12  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

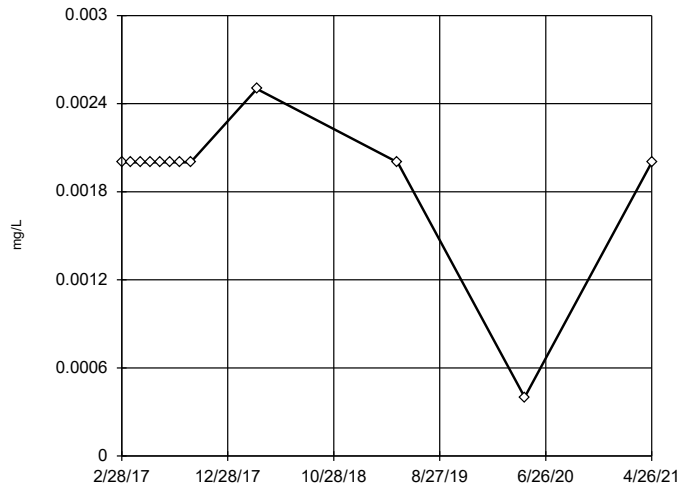
Tukey's Outlier Screening  
MW-D2



n = 12  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

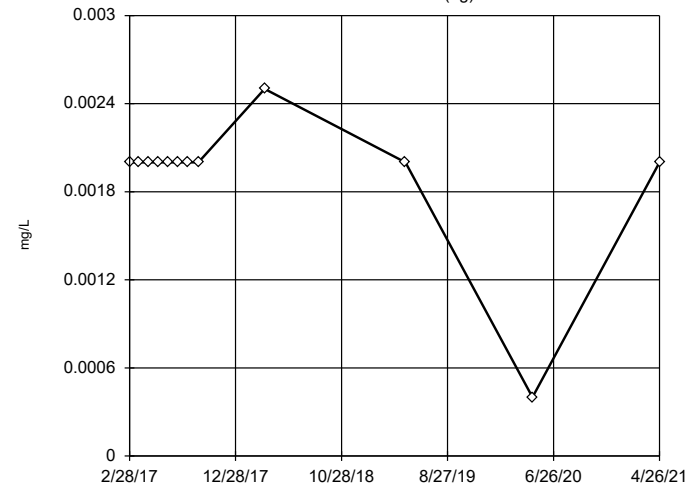
Tukey's Outlier Screening  
MW-D3



n = 12  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

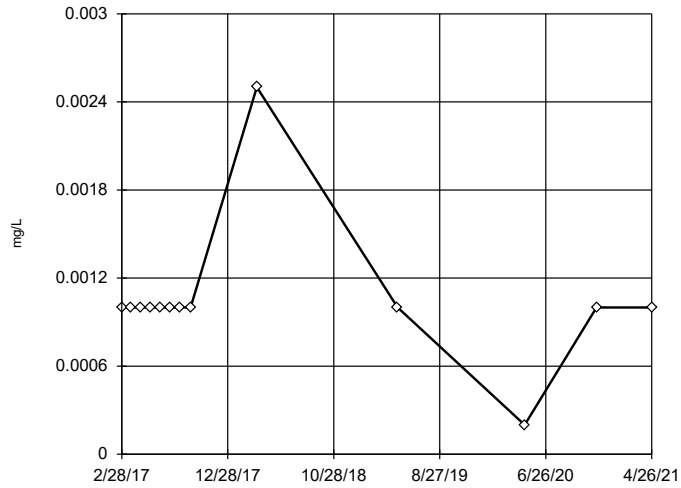
Tukey's Outlier Screening  
MW-U1 (bg)



n = 12  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

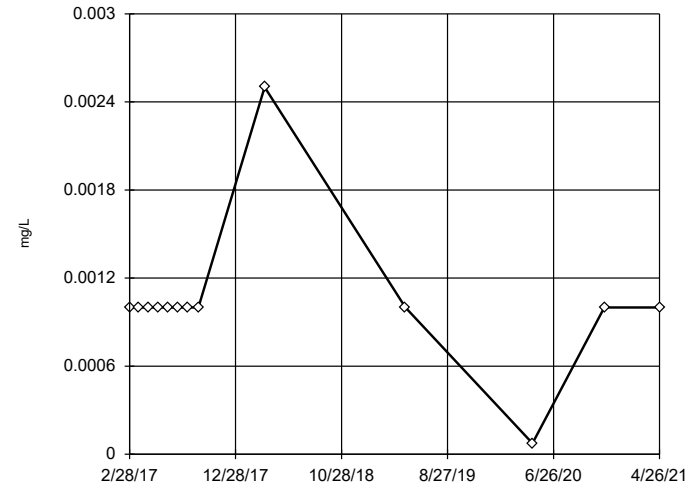
Tukey's Outlier Screening  
MW-D1



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

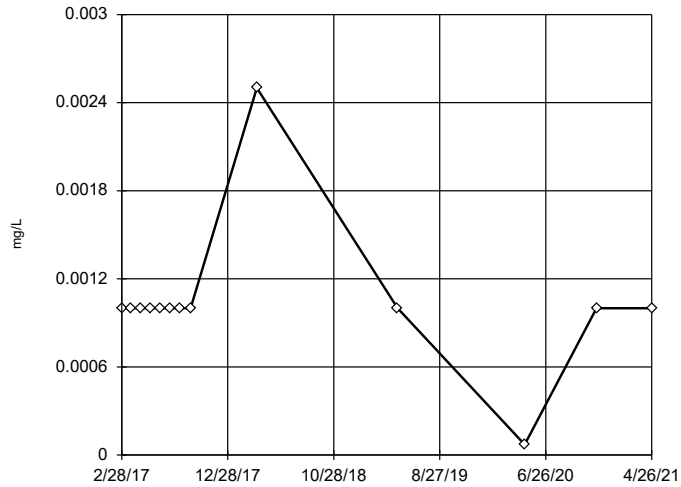
Tukey's Outlier Screening  
MW-D2



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

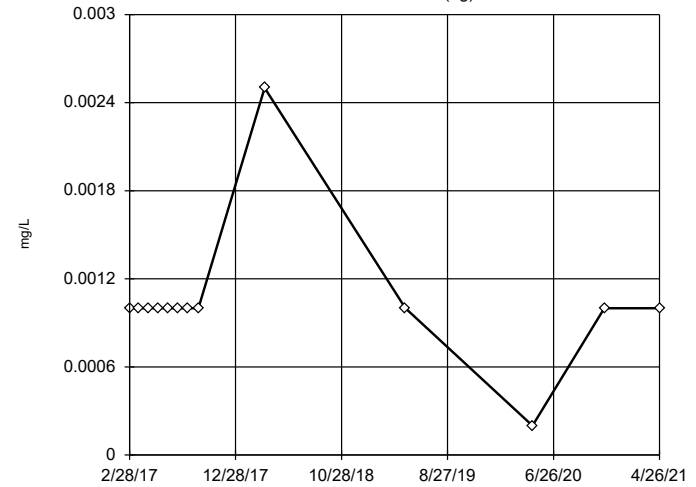
Tukey's Outlier Screening  
MW-D3



n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening  
MW-U1 (bg)



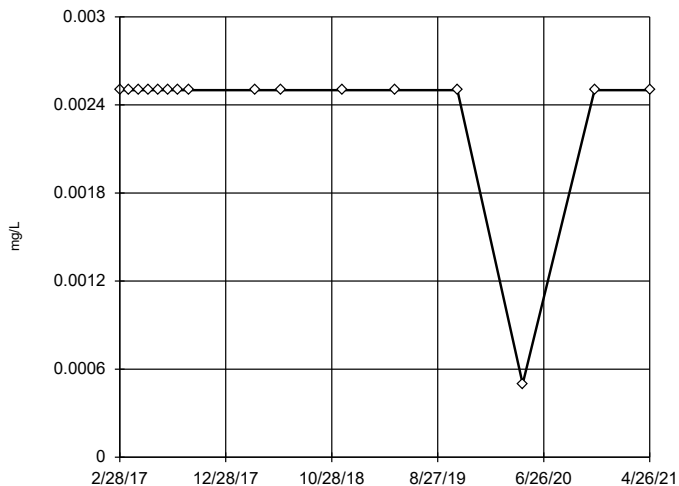
n = 13  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square root transformed to achieve best W statistic (graph shown in original units).  
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 thru  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

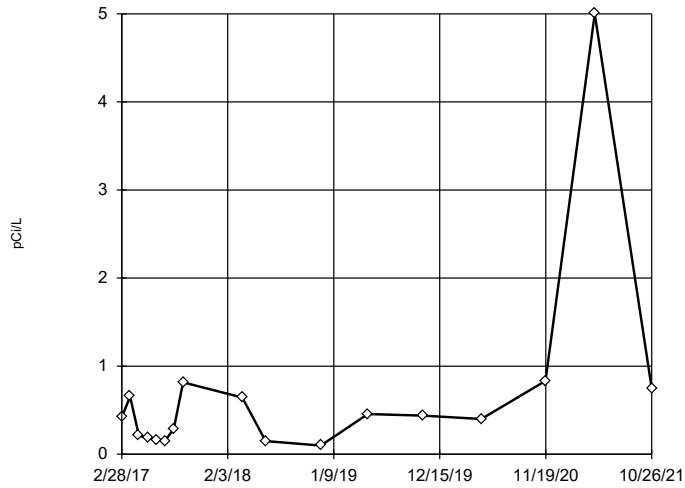


Tukey's Outlier Screening

MW-D1



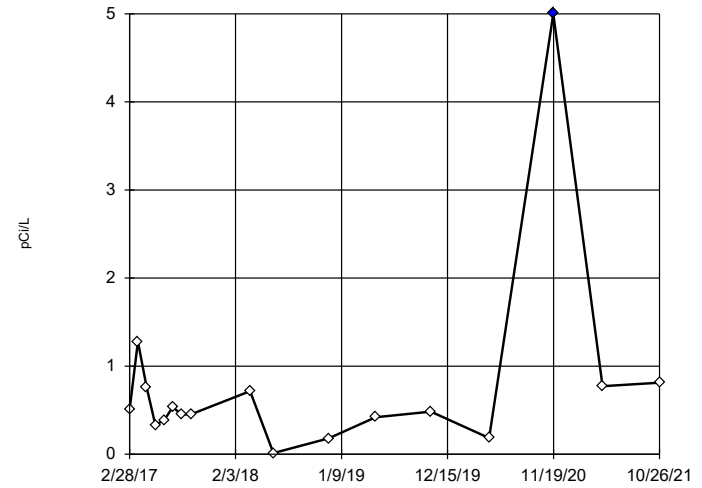
### Tukey's Outlier Screening MW-D1



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 = 48.7, low cutoff = 0.00245, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sam  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

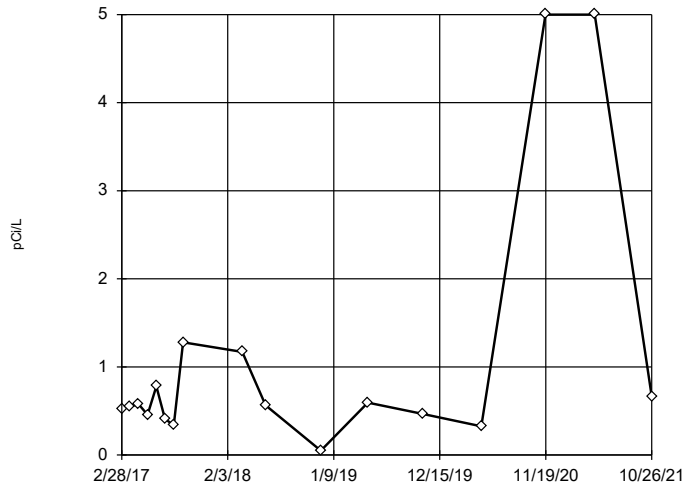
### Tukey's Outlier Screening MW-D2



n = 17  
 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 = 3.538, low cutoff = 0.001058, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sam  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

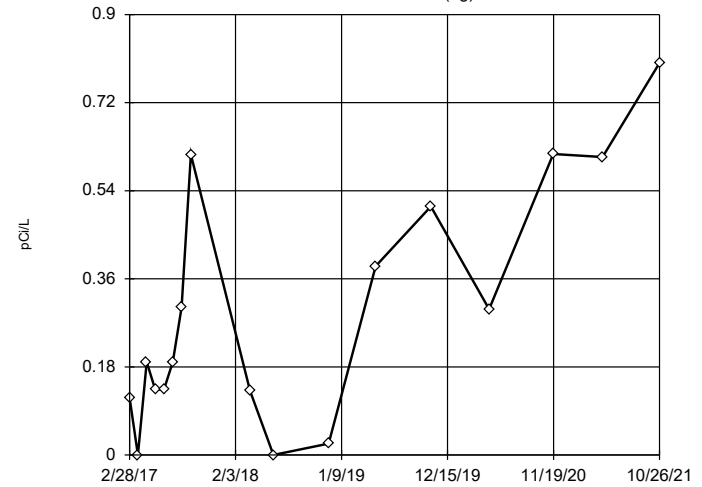
### Tukey's Outlier Screening MW-D3



n = 17  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normally test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 10.31, low cutoff = 0.04007, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sam  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening MW-U1 (bg)

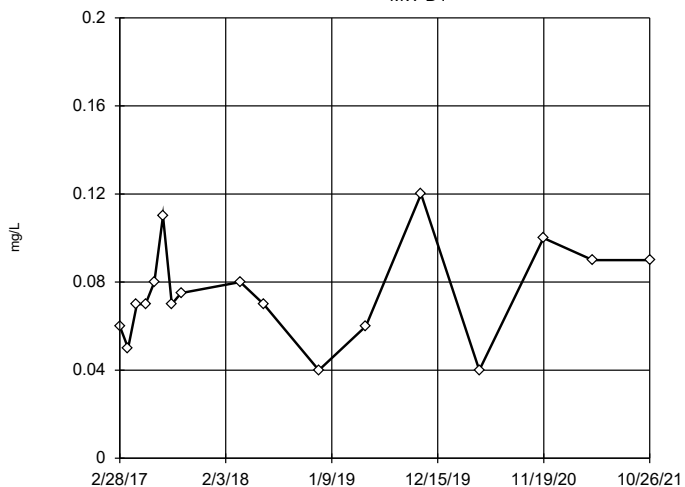


n = 17  
 No outliers found.  
 Tukey's method selected by user.  
 Data were square root transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 3.726, low cutoff = -0.6917, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Ststistics Sam  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D1

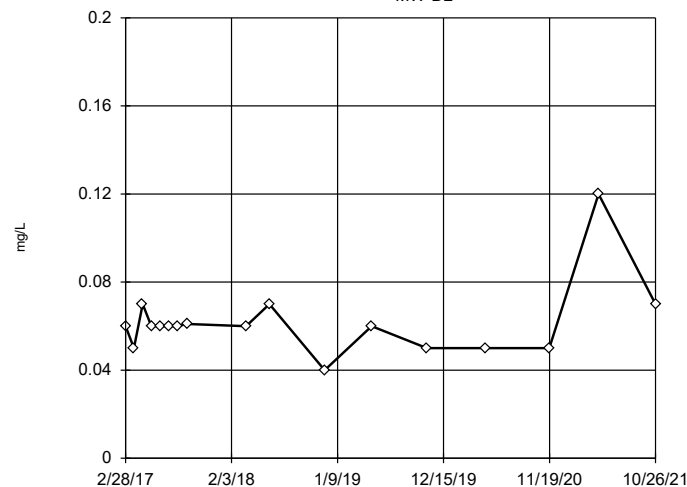


n = 17  
 No outliers found.  
 Tukey's method selected by user.  
 Data were square root transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.2164, low cutoff = 0.006367, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 12/6/2021 4:13 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

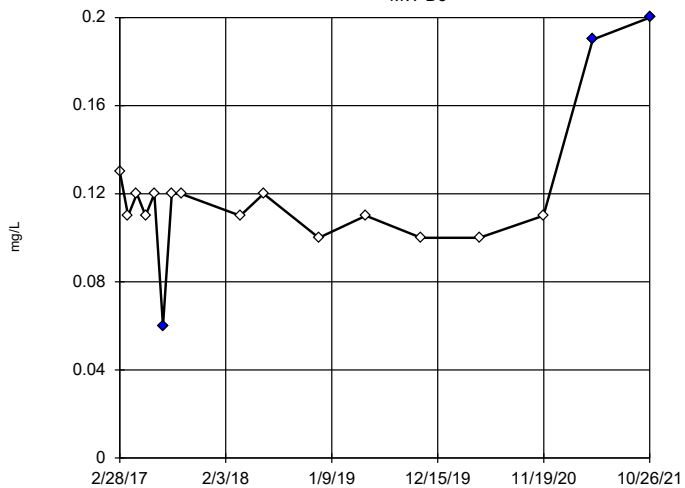


n = 17  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.1459, low cutoff = 0.0224, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 12/6/2021 4:13 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

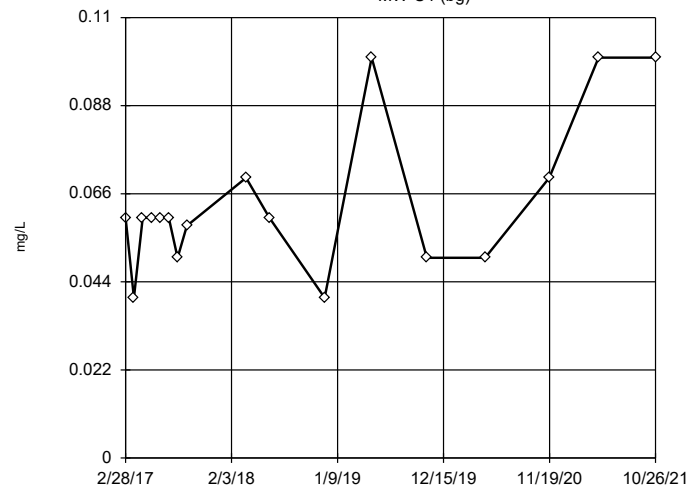


n = 17  
 Outliers are drawn as solid.  
 Tukey's method selected by user.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.1797, low cutoff = 0.07002, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 12/6/2021 4:13 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)



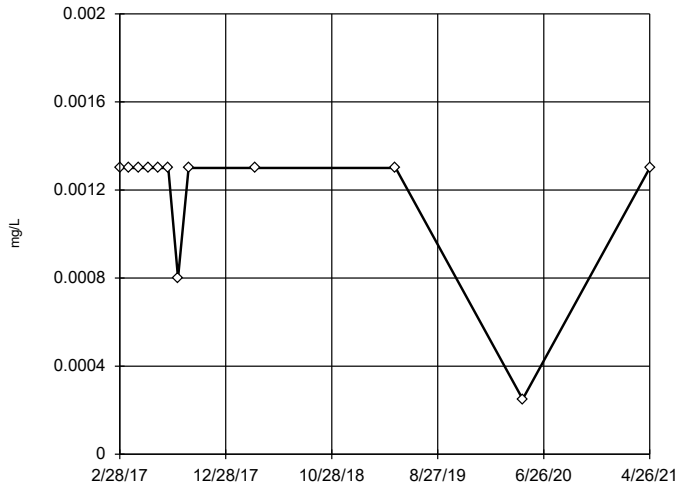
n = 17  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.1921, low cutoff = 0.01822, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 12/6/2021 4:13 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-D1

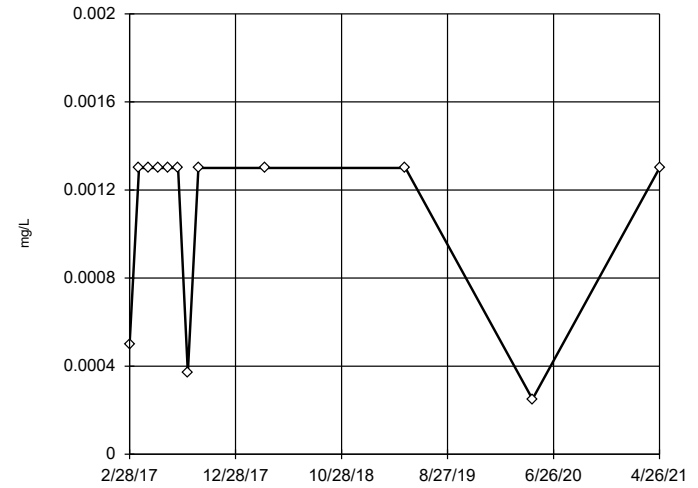


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were square transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 12/6/2021 4:13 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

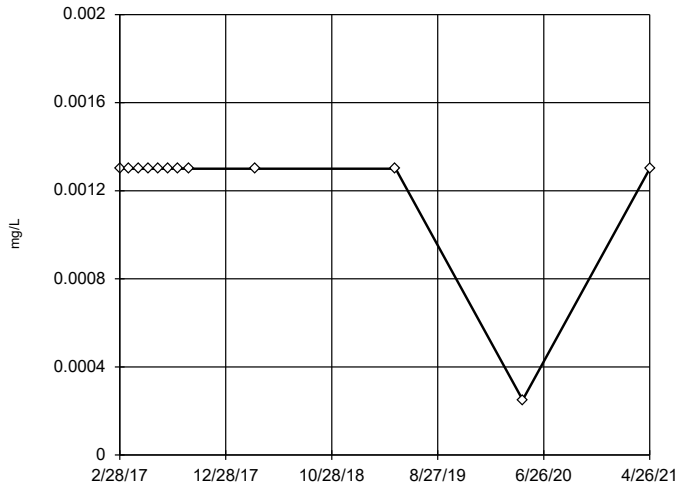


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 High cutoff = 0.00545, low cutoff = 0.0001923, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 12/6/2021 4:13 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

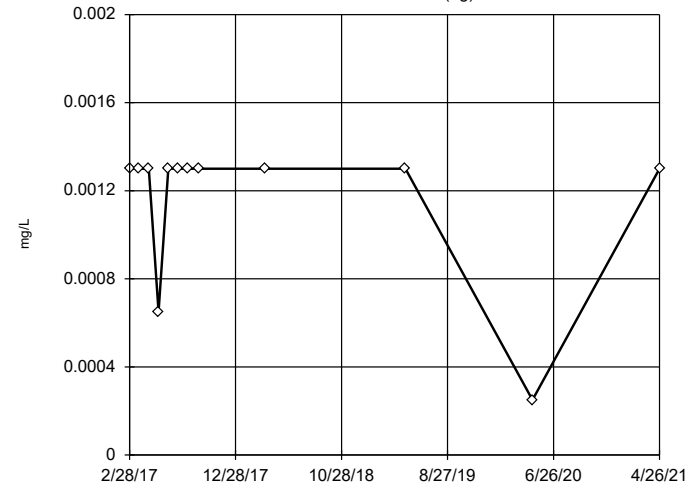


n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 Data were natural log transformed to achieve best W statistic (graph shown in original units).  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 12/6/2021 4:13 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

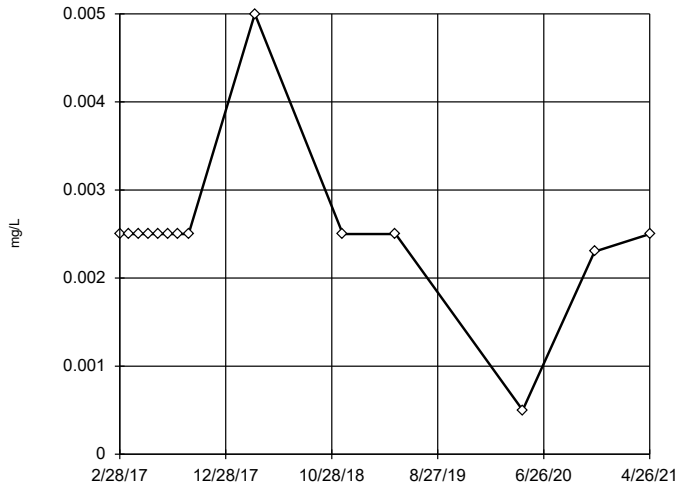
MW-U1 (bg)



n = 12  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
 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 12/6/2021 4:13 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

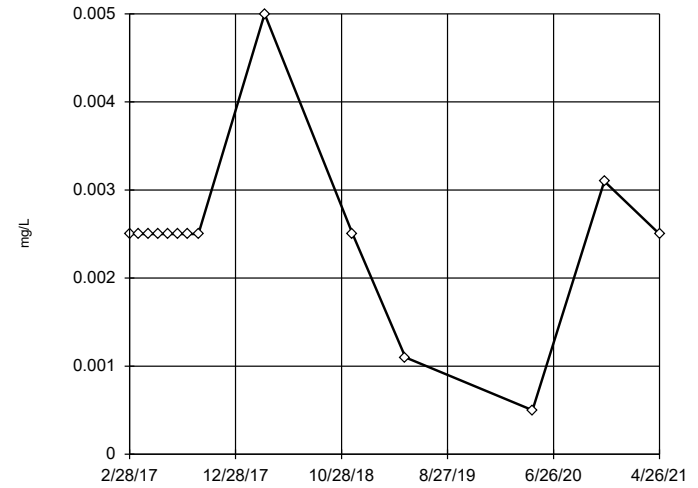
Tukey's Outlier Screening  
MW-D1



n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 through 14  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

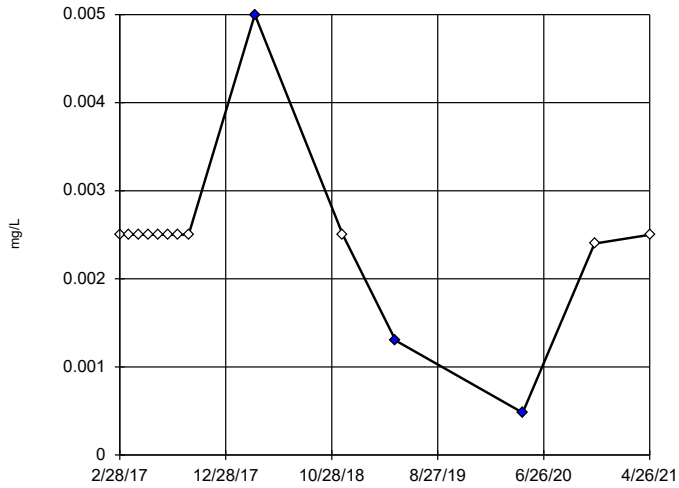
Tukey's Outlier Screening  
MW-D2



n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 through 14  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

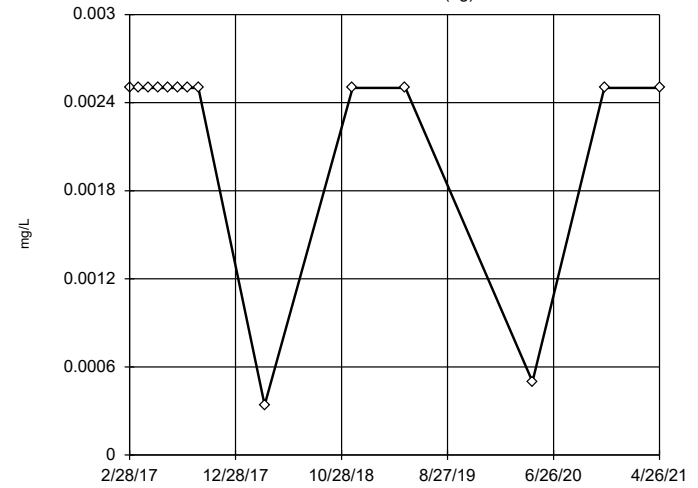
Tukey's Outlier Screening  
MW-D3



n = 14  
Outliers are drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square root transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 0.002654, low cutoff = 0.002302, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 through 14  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Tukey's Outlier Screening  
MW-U1 (bg)

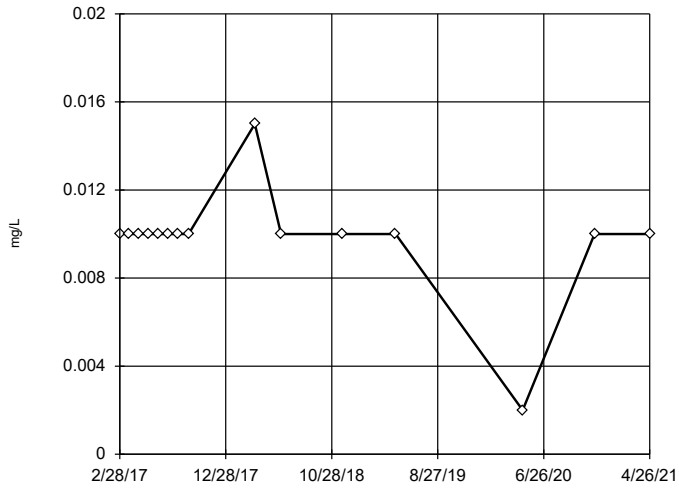


n = 14  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were natural log transformed to achieve best W statistic (graph shown in original units).  
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lithium Analysis Run 12/6/2021 4:13 PM View: Sanitas\_Statistics Sampling Events 1 through 14  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10



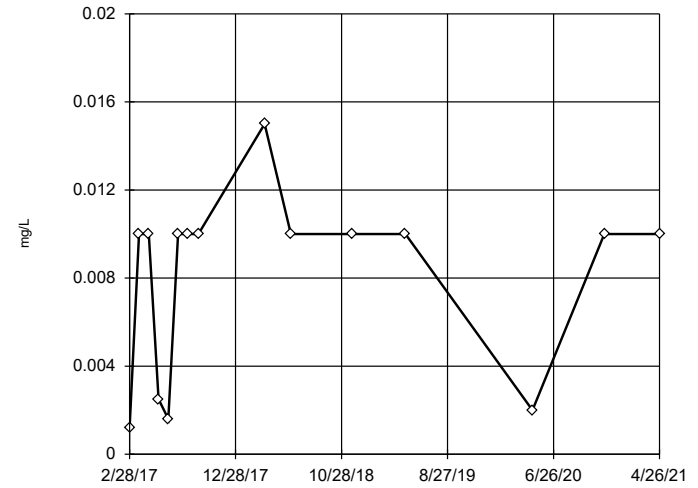
Tukey's Outlier Screening  
MW-D1



n = 15  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
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 12/6/2021 4:14 PM View: Sanitas\_Ststistics Sampling Events 1 th  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

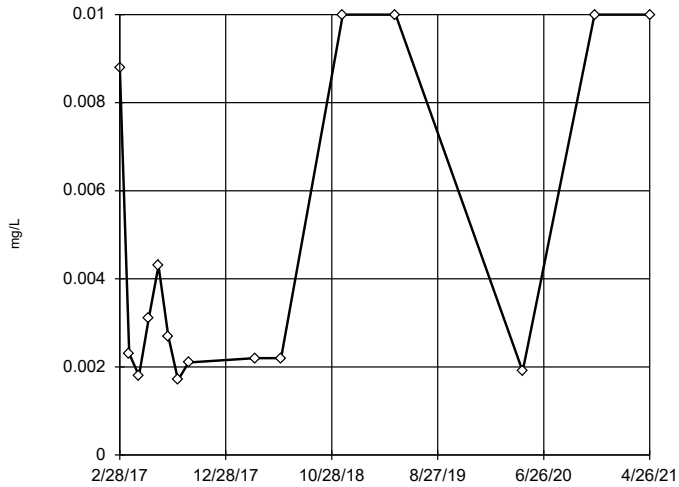
Tukey's Outlier Screening  
MW-D2



n = 15  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were square transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 0.01953, low cutoff = -0.01658, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 12/6/2021 4:14 PM View: Sanitas\_Ststistics Sampling Events 1 th  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

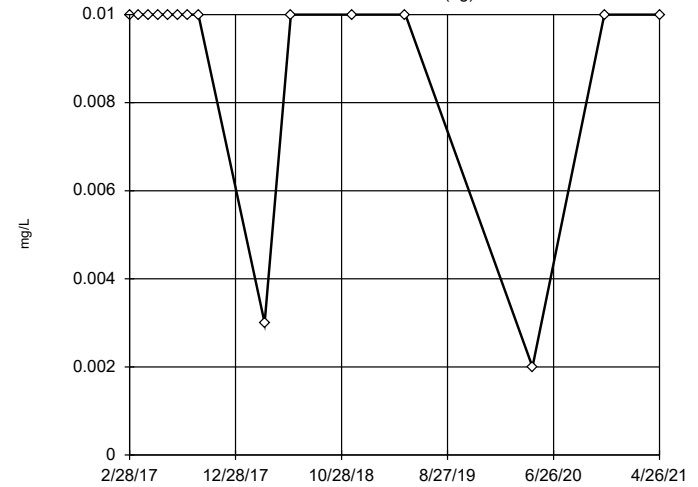
Tukey's Outlier Screening  
MW-D3



n = 15  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were natural log transformed to achieve best W statistic (graph shown in original units).  
High cutoff = 1.08, low cutoff = 0.00001945, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 12/6/2021 4:14 PM View: Sanitas\_Ststistics 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)

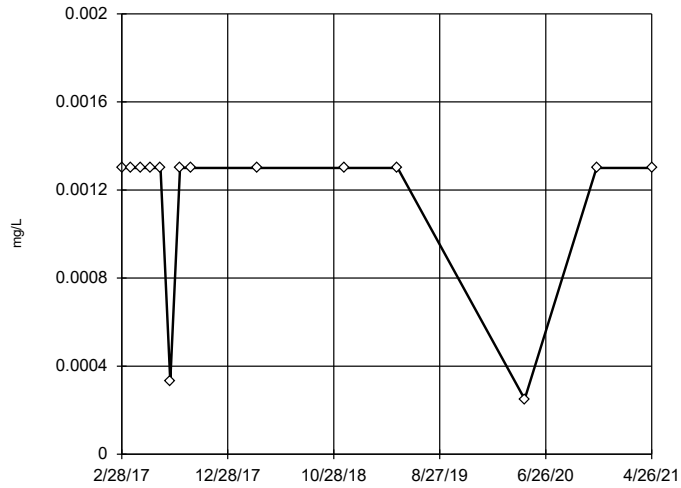


n = 15  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.  
Data were natural log transformed to achieve best W statistic (graph shown in original units).  
The results were invalidated, because the lower and upper quartiles are equal.

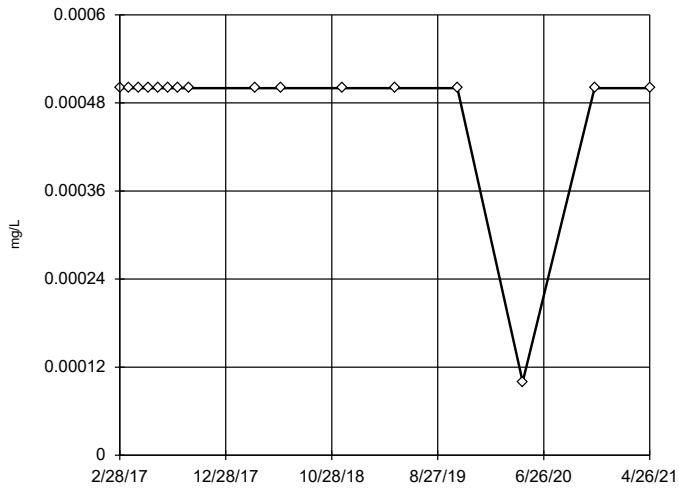
Constituent: Molybdenum Analysis Run 12/6/2021 4:14 PM View: Sanitas\_Ststistics Sampling Events 1 th  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tukey's Outlier Screening

MW-D1



Tukey's Outlier Screening  
MW-D1



# Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 12/6/2021, 4:22 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
<b>Arsenic (mg/L)</b>	<b>MW-D2</b>	<b>Yes</b>	<b>0.00027</b>	<b>4/27/2020</b>	<b>NP (nrm)</b>	<b>NaN</b>	<b>17</b>	<b>0.001143</b>	<b>0.0003218</b>	<b>unknown</b>	<b>ShapiroWilk</b>
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
<b>Barium (mg/L)</b>	<b>MW-U1 (bg)</b>	<b>Yes</b>	<b>0.0062</b>	<b>11/19/2020</b>	<b>NP</b>	<b>NaN</b>	<b>17</b>	<b>0.002494</b>	<b>0.001024</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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
<b>Chromium (mg/L)</b>	<b>MW-U1 (bg)</b>	<b>Yes</b>	<b>0.0051</b>	<b>2/28/2017</b>	<b>NP</b>	<b>NaN</b>	<b>15</b>	<b>0.001627</b>	<b>0.0009772</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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 2...	MW-D1	No	n/a	n/a	NP	NaN	17	0.6857	1.139	ln(x)	ShapiroWilk
<b>Combined Radium 2...</b>	<b>MW-D2</b>	<b>Yes</b>	<b>5</b>	<b>11/19/2020</b>	<b>NP</b>	<b>NaN</b>	<b>17</b>	<b>0.7815</b>	<b>1.126</b>	<b>x^(1/3)</b>	<b>ShapiroWilk</b>
Combined Radium 2...	MW-D3	No	n/a	n/a	NP (nrm)	NaN	17	1.103	1.495	unknown	ShapiroWilk
Combined Radium 2...	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
<b>Fluoride (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.06,0.19,0.2</b>	<b>7/17/2017,4/26/2021,10/26/2021</b>	<b>NP</b>	<b>NaN</b>	<b>17</b>	<b>0.1194</b>	<b>0.0323</b>	<b>ln(x)</b>	<b>ShapiroWilk</b>
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
<b>Lithium (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.005,0.0013,0.00048</b>	<b>3/22/2018,4/29/2019,4/27/2020</b>	<b>NP (nrm)</b>	<b>NaN</b>	<b>14</b>	<b>0.002441</b>	<b>0.00095</b>	<b>unknown</b>	<b>ShapiroWilk</b>
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

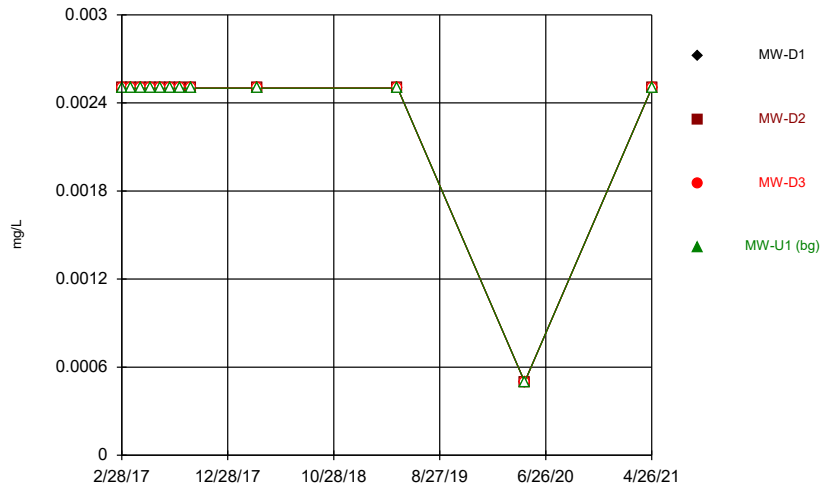
# Outlier Analysis

CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10 Printed 12/6/2021, 4:22 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
<b>Thallium (mg/L)</b>	<b>MW-D3</b>	<b>Yes</b>	<b>0.0005,0.0005</b>	<b>11/19/2020,4/26/2021</b>	<b>NP</b>	<b>NaN</b>	<b>16</b>	<b>0.000...</b>	<b>0.0001318</b>	<b>In(x)</b>	<b>ShapiroWilk</b>
Thallium (mg/L)	MW-U1 (bg)	n/a	n/a	n/a	NP (nrm)	NaN	16	0.000475	0.0001	unknown	ShapiroWilk

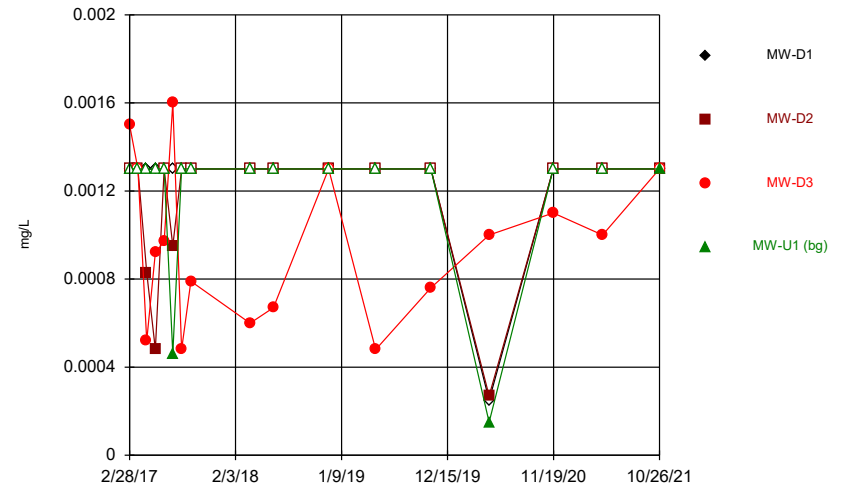


Time Series



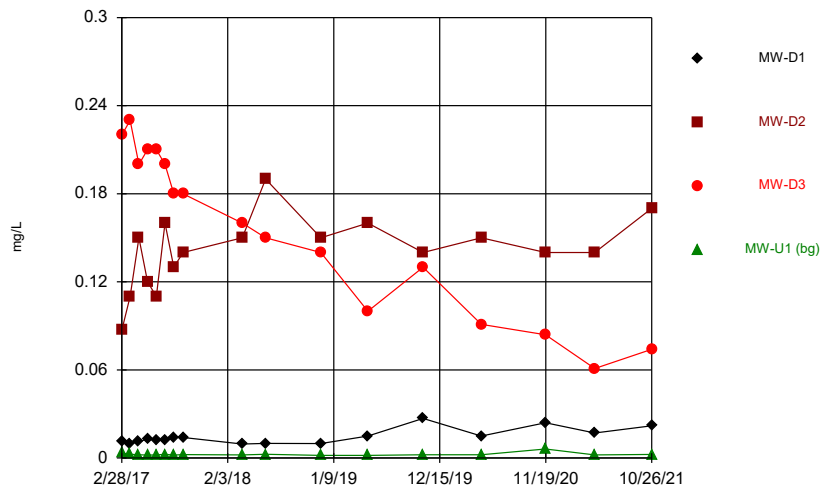
Constituent: Antimony Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



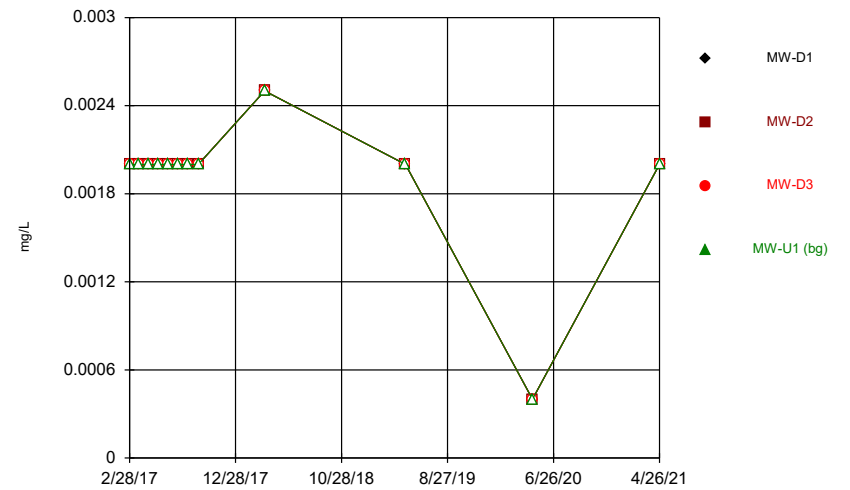
Constituent: Arsenic Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



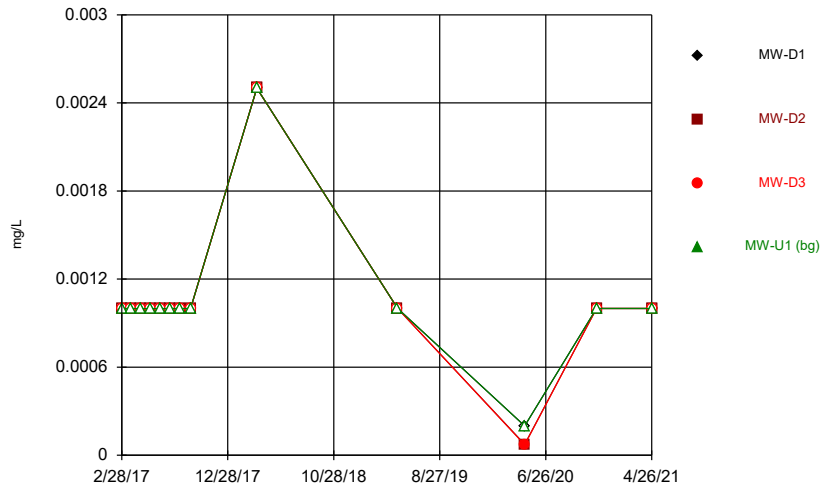
Constituent: Barium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



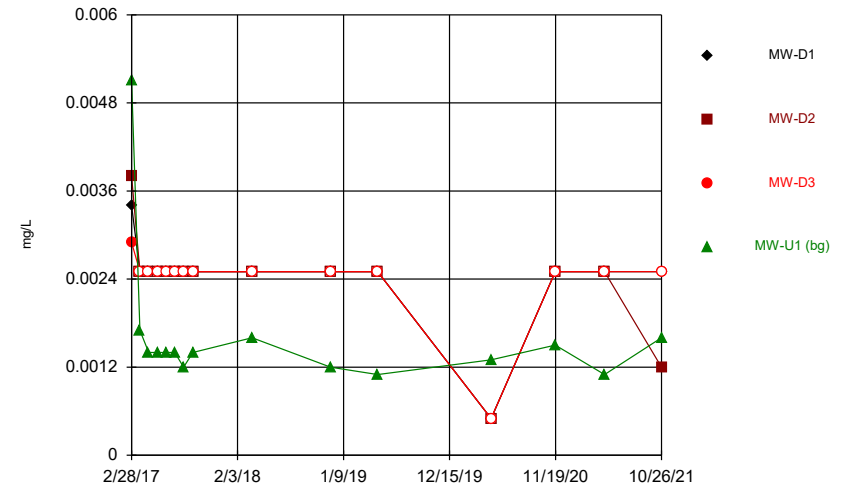
Constituent: Beryllium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



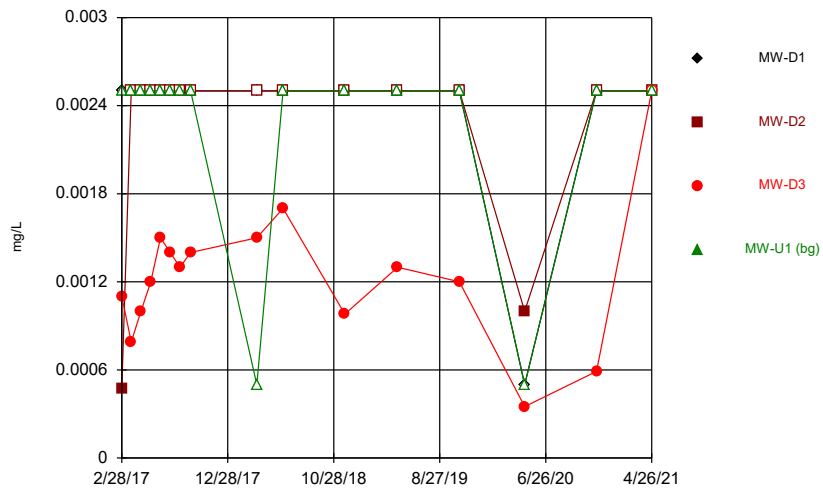
Constituent: Cadmium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



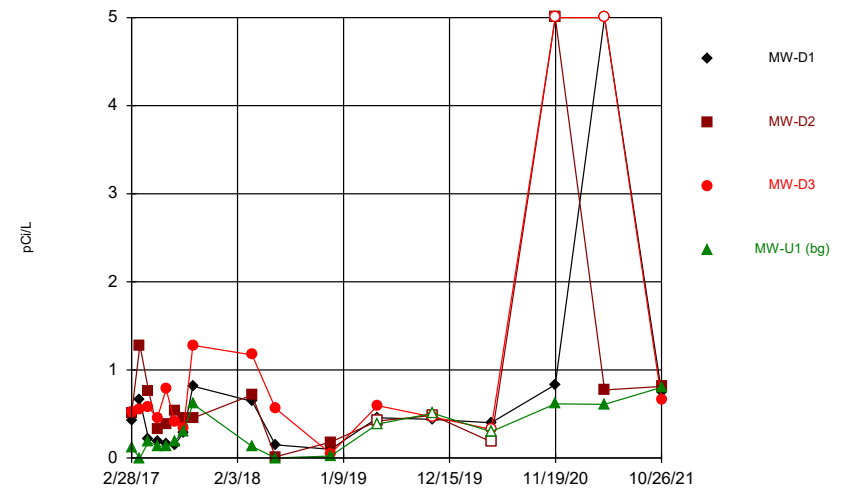
Constituent: Chromium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



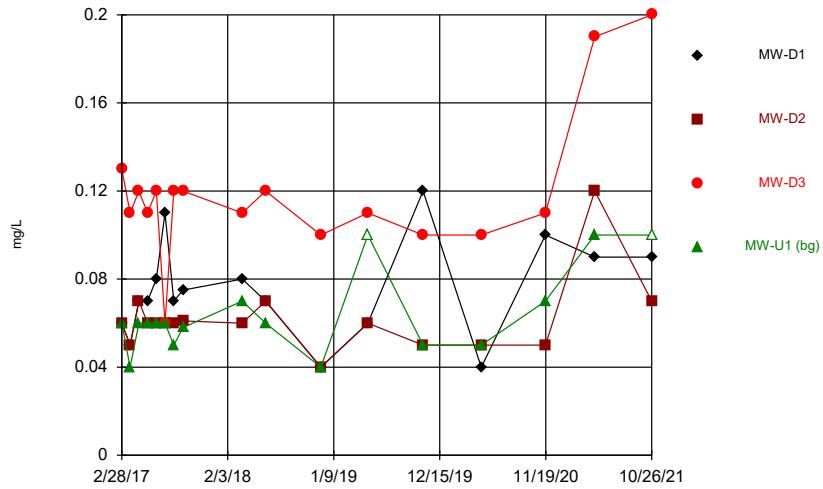
Constituent: Cobalt Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



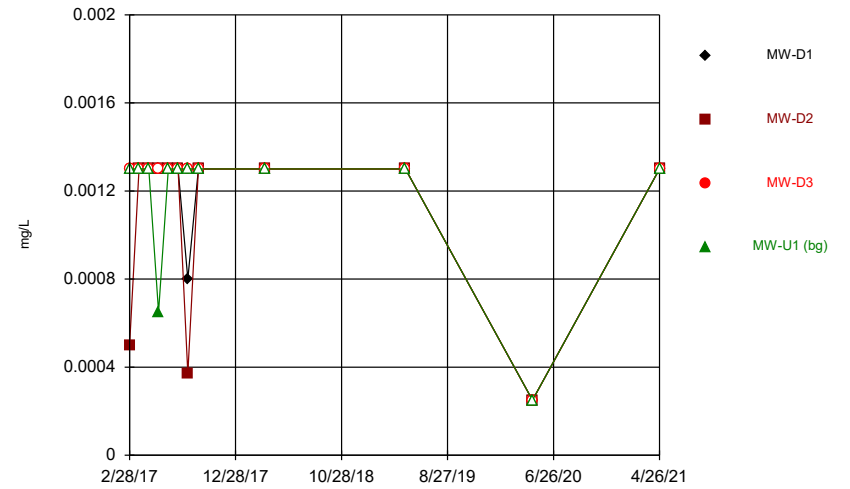
Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sam  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



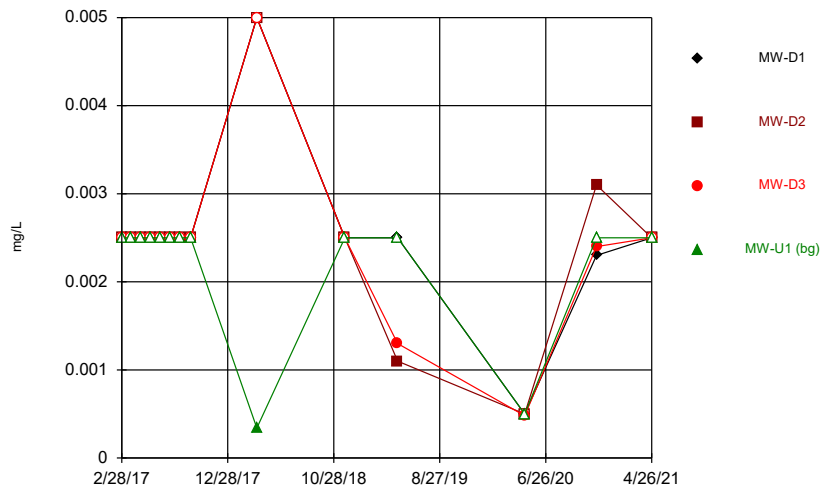
Constituent: Fluoride Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



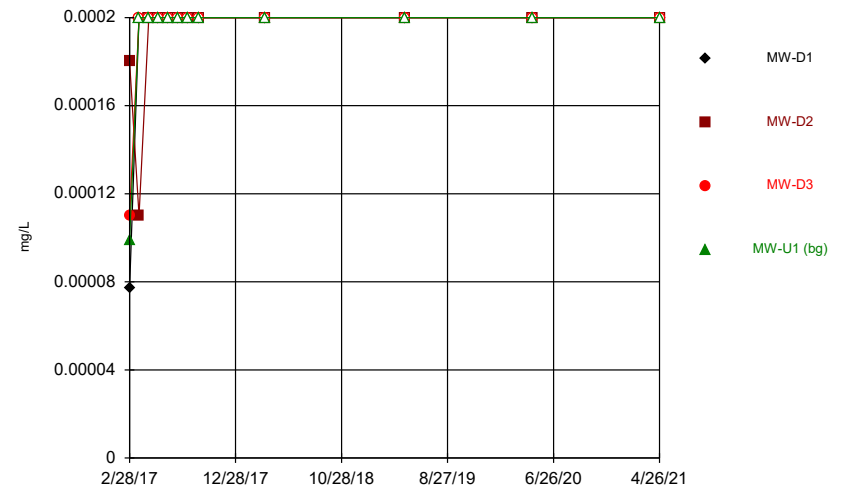
Constituent: Lead Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



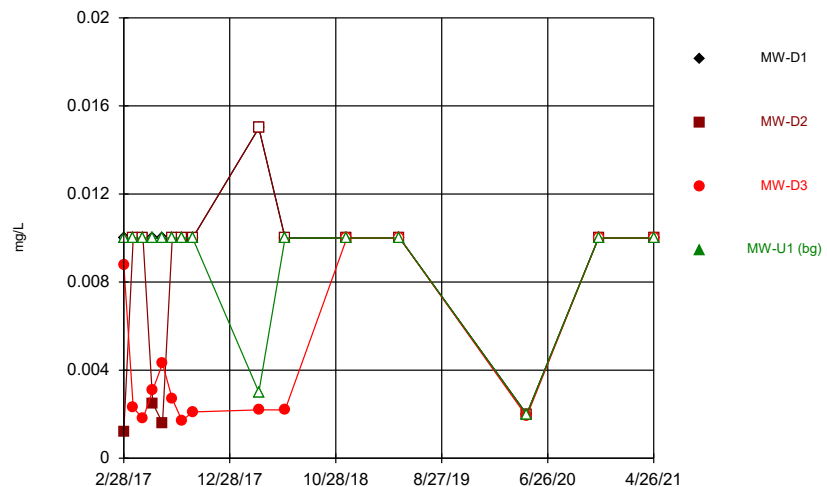
Constituent: Lithium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



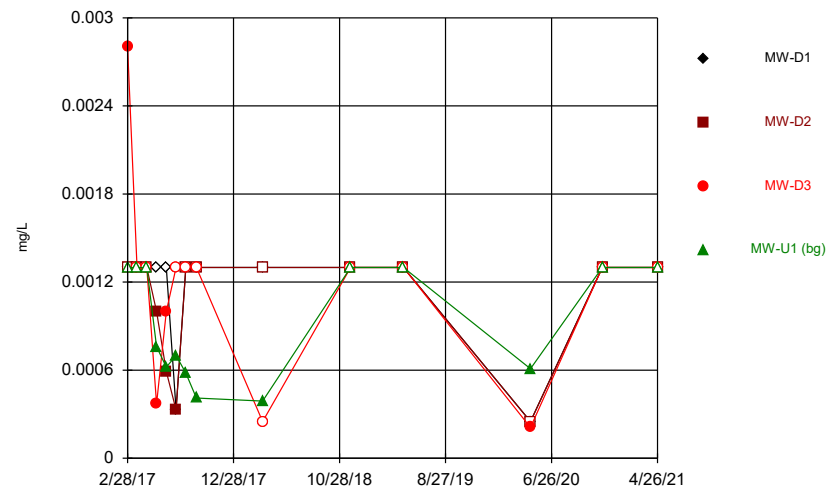
Constituent: Mercury Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Statistics Sampling Events 1 through 10  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



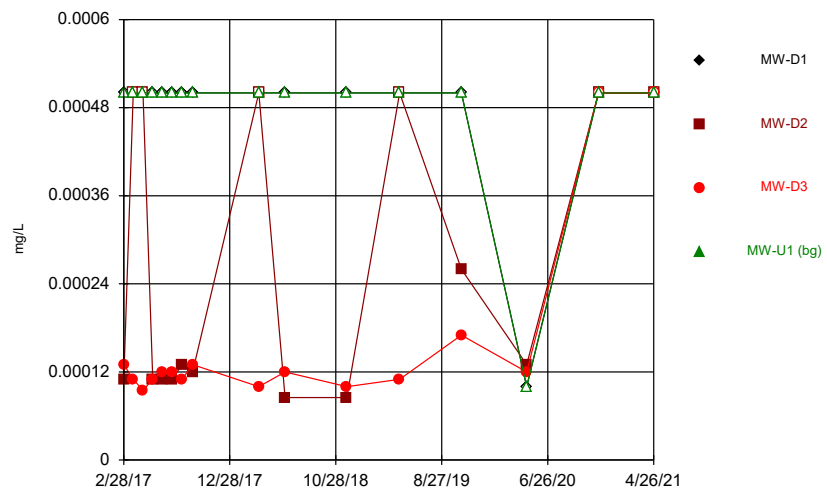
Constituent: Molybdenum Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Ststistics Sampling Events 1 th  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



Constituent: Selenium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Ststistics Sampling Events 1 throu  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

Time Series



Constituent: Thallium Analysis Run 12/6/2021 4:28 PM View: Sanitas\_Ststistics Sampling Events 1 through  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

# Upper Tolerance Limits Summary Table

CCPC Plant Crisp Ash Pond Site

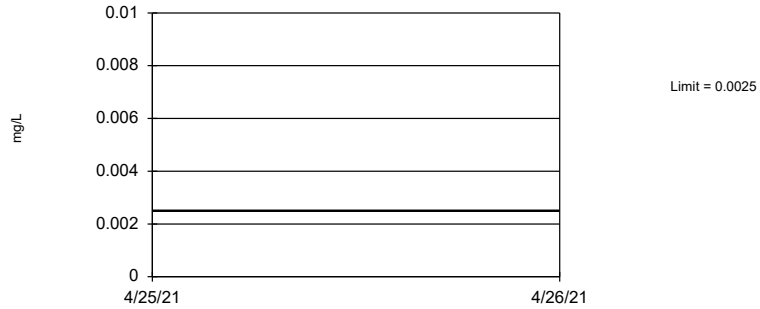
Client: Geosyntec

Data: Sanitas\_Statistics Sampling Events 1 through 10

Printed 12/6/2021, 4:32 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	12	100	n/a	0.5404	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0013	n/a	n/a	n/a	17	82.35	n/a	0.4181	NP Inter(NDs)
Barium (mg/L)	n/a	0.0062	n/a	n/a	n/a	17	0	n/a	0.4181	NP Inter(normality)
Beryllium (mg/L)	n/a	0.002	n/a	n/a	n/a	12	100	n/a	0.5404	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.001	n/a	n/a	n/a	13	100	n/a	0.5133	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0051	n/a	n/a	n/a	15	0	n/a	0.4633	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	16	100	n/a	0.4401	NP Inter(NDs)
Combined Radium 226 + ...	n/a	1.235	n/a	n/a	n/a	17	17.65	No	0.01	Inter
Fluoride (mg/L)	n/a	0.1279	n/a	n/a	n/a	17	11.76	sqrt(x)	0.01	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	12	91.67	n/a	0.5404	NP Inter(NDs)
Lithium (mg/L)	n/a	0.0025	n/a	n/a	n/a	14	92.86	n/a	0.4877	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	12	91.67	n/a	0.5404	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	15	100	n/a	0.4633	NP Inter(NDs)
Selenium (mg/L)	n/a	0.0013	n/a	n/a	n/a	14	50	n/a	0.4877	NP Inter(normality)
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	16	100	n/a	0.4401	NP Inter(NDs)

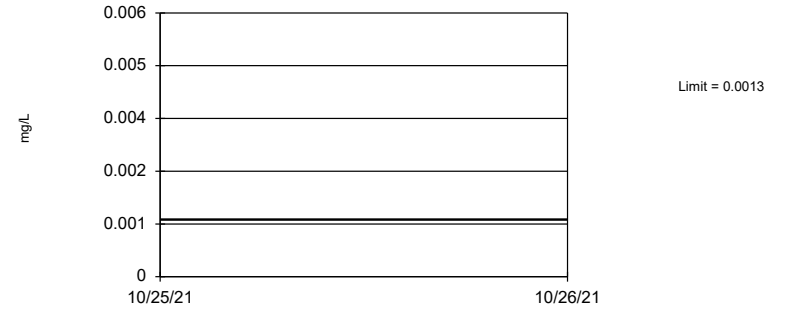
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Antimony Analysis Run 12/6/2021 4:31 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

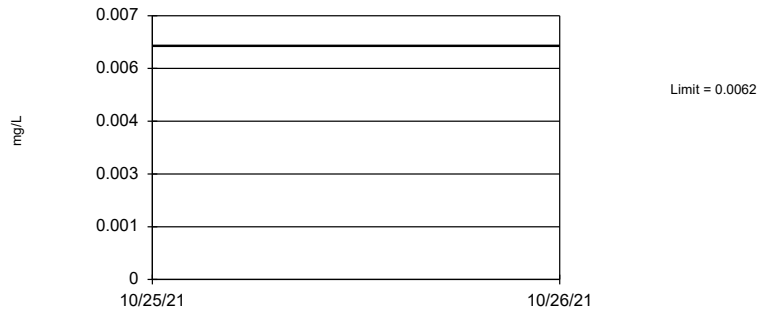
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 17 background values. 82.35% NDs. 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: Arsenic Analysis Run 12/6/2021 4:31 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

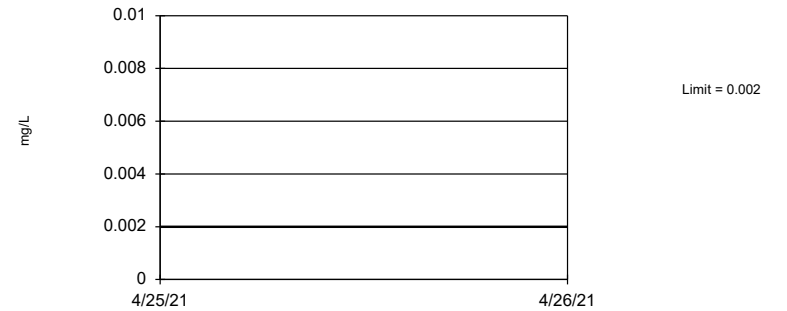
Tolerance Limit  
Interwell Non-parametric



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. Limit is highest of 17 background values. 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: Barium Analysis Run 12/6/2021 4:31 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

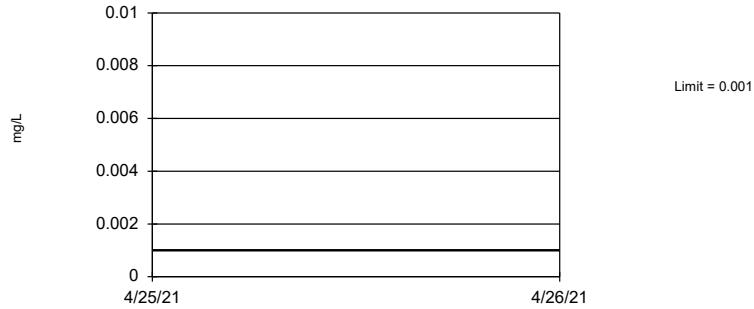
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Beryllium Analysis Run 12/6/2021 4:31 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

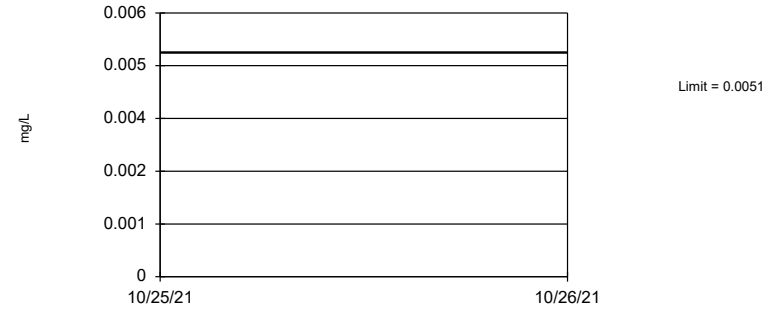
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. 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: Cadmium Analysis Run 12/6/2021 4:31 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

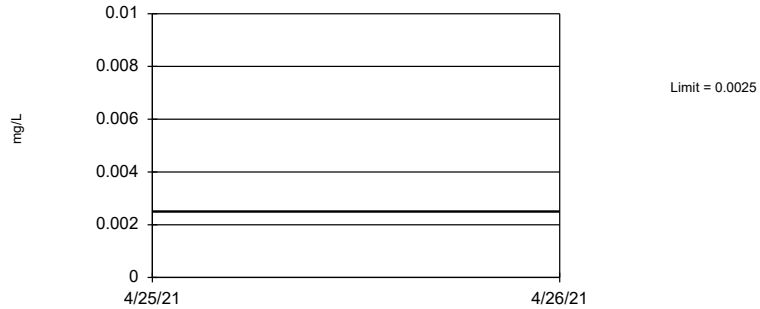
Tolerance Limit  
Interwell Non-parametric



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. Limit is highest of 15 background values. 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: Chromium Analysis Run 12/6/2021 4:31 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

Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. 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: Cobalt Analysis Run 12/6/2021 4:31 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

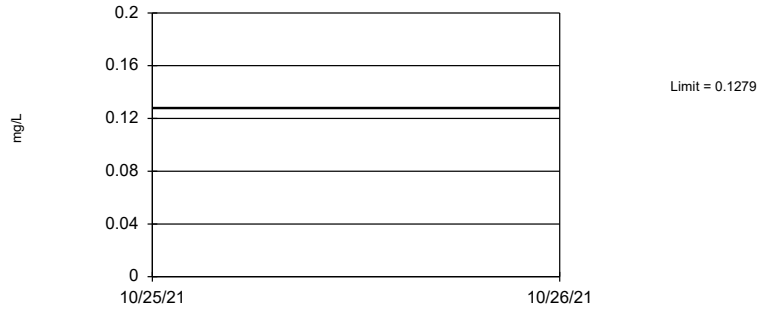
Tolerance Limit  
Interwell Parametric



95% coverage. Background Data Summary (after Cohen's Adjustment): Mean=0.3503, Std. Dev.=0.2986, n=17, 17.65% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.851. Report alpha = 0.01.

Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:31 PM View: Sanitas\_Statistics Sam  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

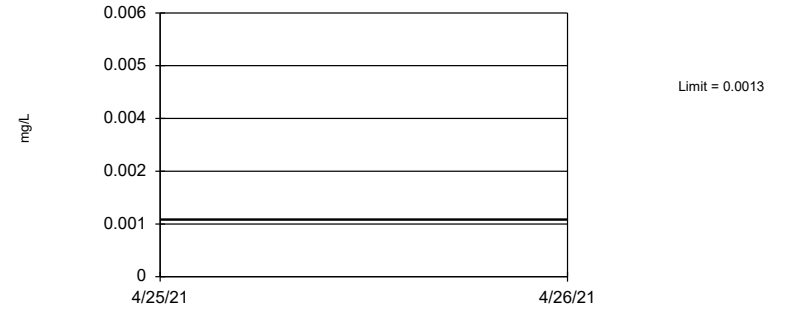
### Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary (based on square root transformation): Mean=0.2505, Std. Dev.=0.03615, n=17, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8609, critical = 0.851. Report alpha = 0.01.

Constituent: Fluoride Analysis Run 12/6/2021 4:32 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

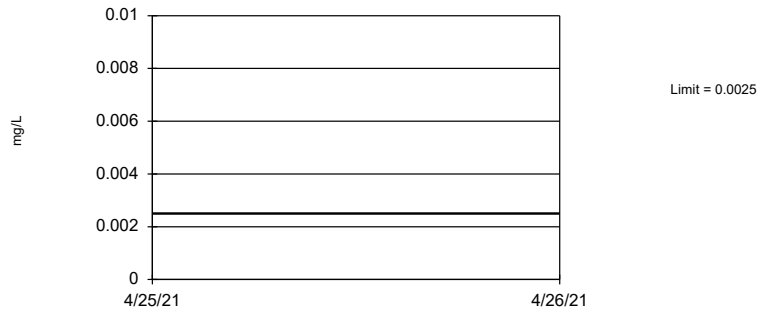
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 12 background values. 91.67% NDs. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Lead Analysis Run 12/6/2021 4:32 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

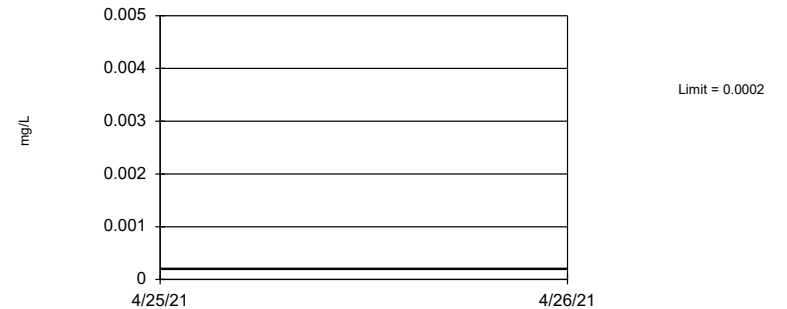
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 14 background values. 92.86% NDs. 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: Lithium Analysis Run 12/6/2021 4:32 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

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 12 background values. 91.67% NDs. 68.16% coverage at alpha=0.01; 77.93% coverage at alpha=0.05; 94.34% coverage at alpha=0.5. Report alpha = 0.5404.

Constituent: Mercury Analysis Run 12/6/2021 4:32 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



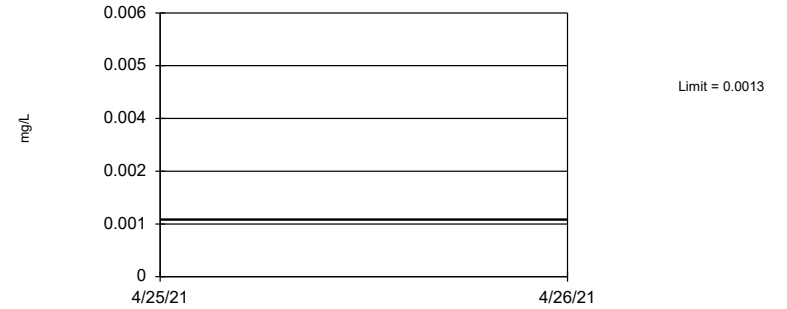
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 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: Molybdenum Analysis Run 12/6/2021 4:32 PM View: Sanitas\_Ststistics Sampling Events 1 th  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

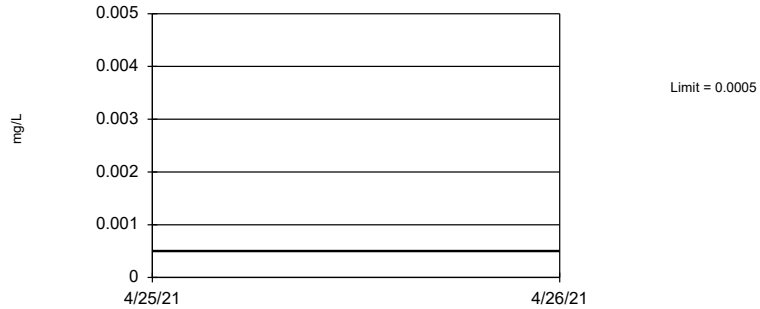
### Tolerance Limit Interwell Non-parametric



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. Limit is highest of 14 background values. 50% NDs. 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: Selenium Analysis Run 12/6/2021 4:32 PM View: Sanitas\_Ststistics Sampling Events 1 thro  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Tolerance Limit Interwell Non-parametric

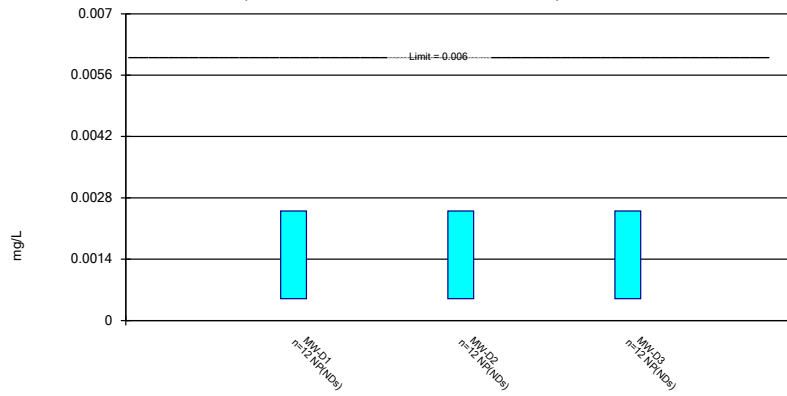


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 74.8% coverage at alpha=0.01; 83.01% coverage at alpha=0.05; 95.9% coverage at alpha=0.5. Report alpha = 0.4401.

Constituent: Thallium Analysis Run 12/6/2021 4:32 PM View: Sanitas\_Ststistics Sampling Events 1 thro  
CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

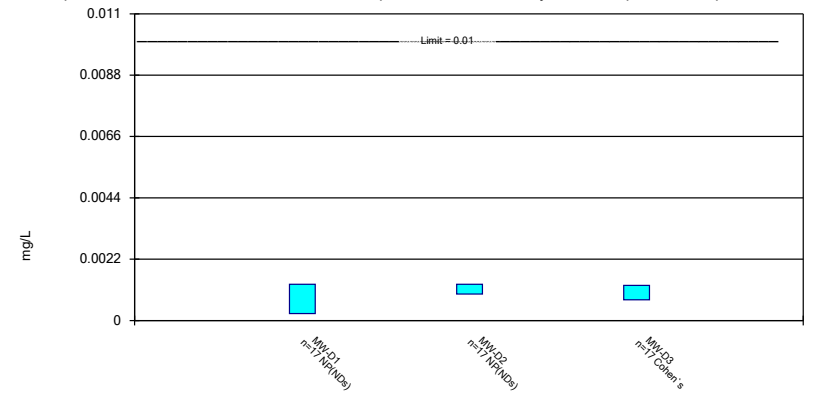
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics 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

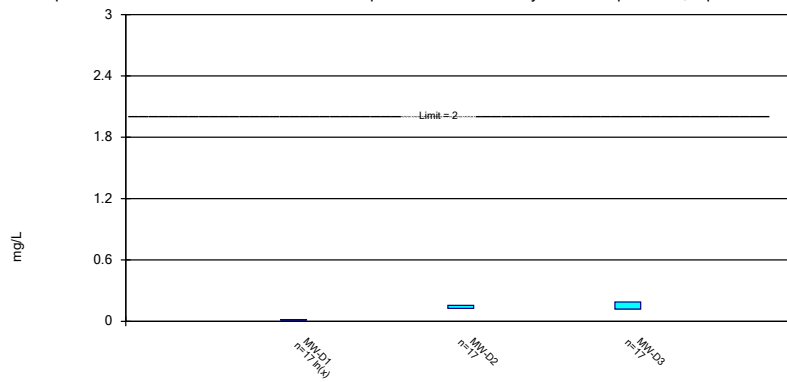
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 through 10  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Parametric Confidence Interval

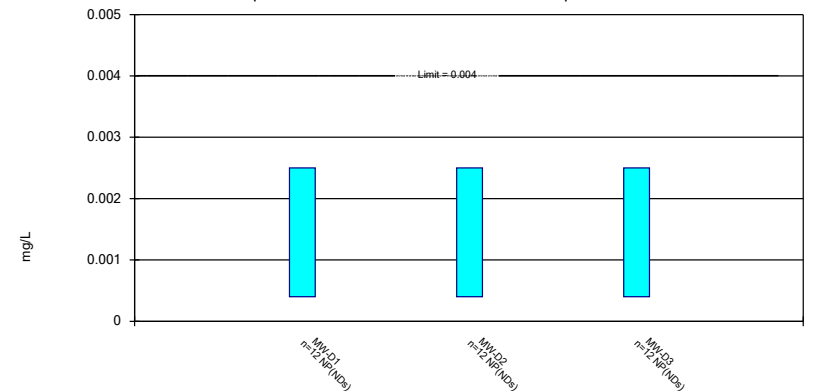
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics 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

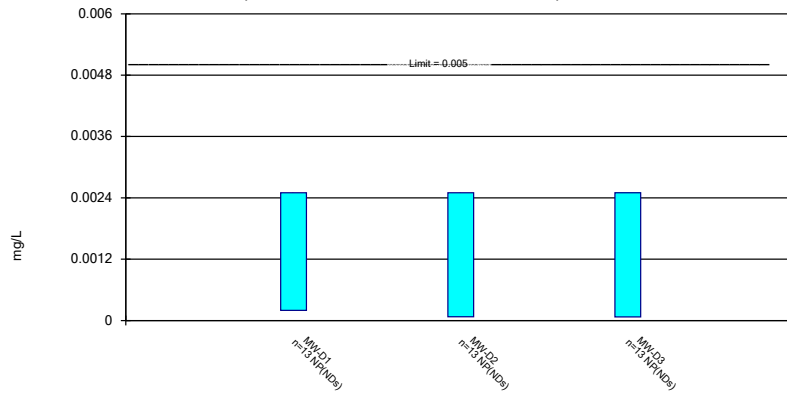
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics 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

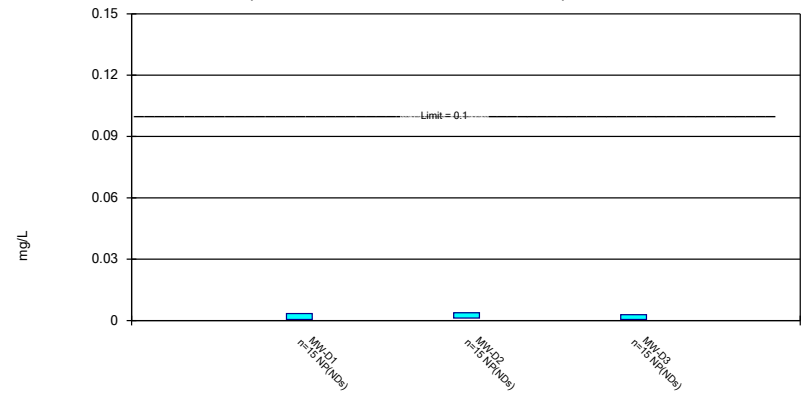
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 through 10  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Ststistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

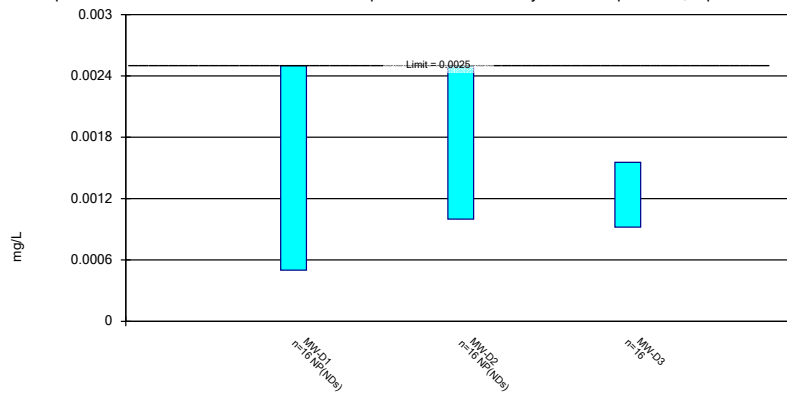
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 through 10  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Ststistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

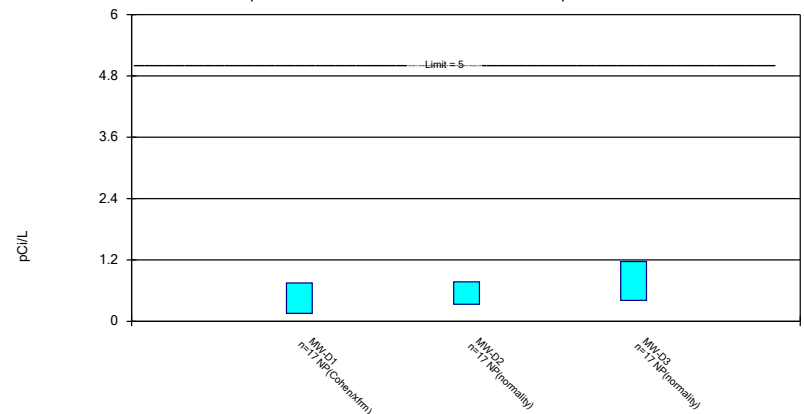
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 through 10  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Ststistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

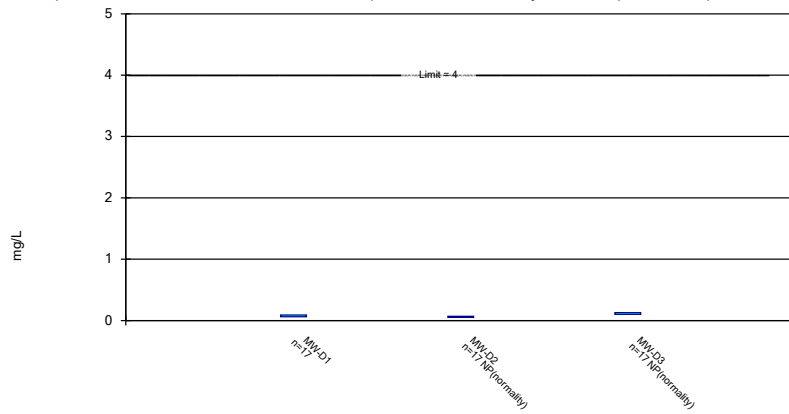
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Combined Radium 226 + 228 Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sam  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Ststistics Sampling Events 1 through 10

### Parametric and Non-Parametric (NP) Confidence Interval

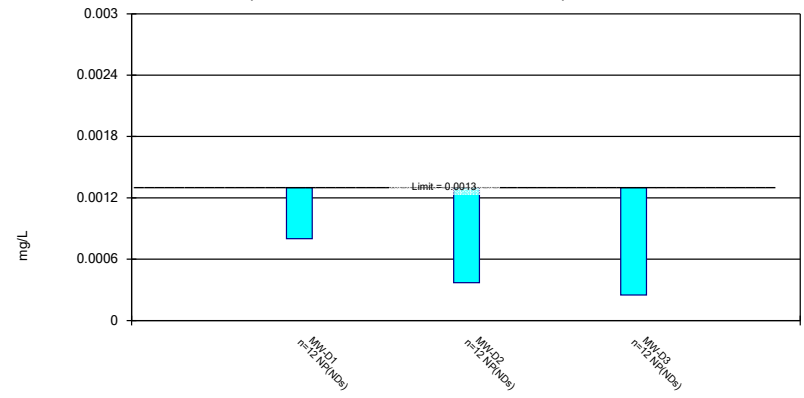
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/6/2021 4:36 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

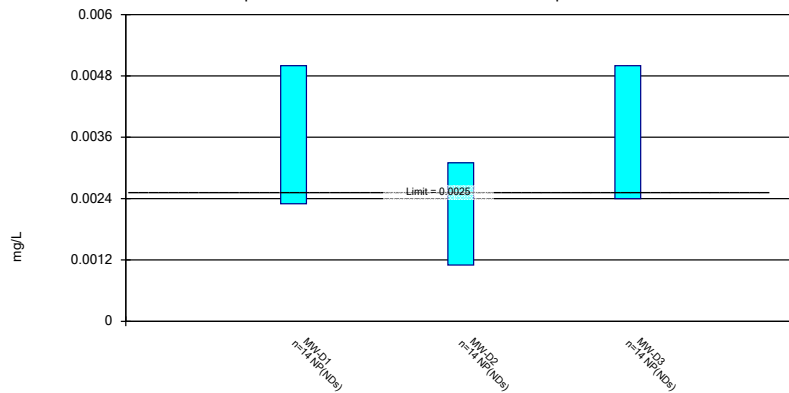
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 12/6/2021 4:36 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

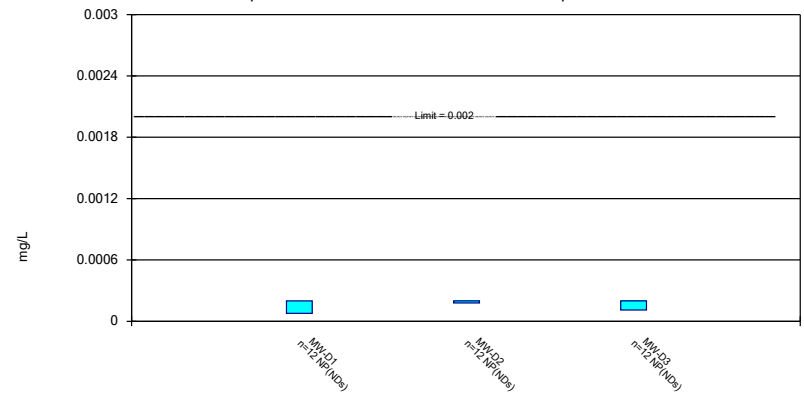
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 12/6/2021 4:36 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

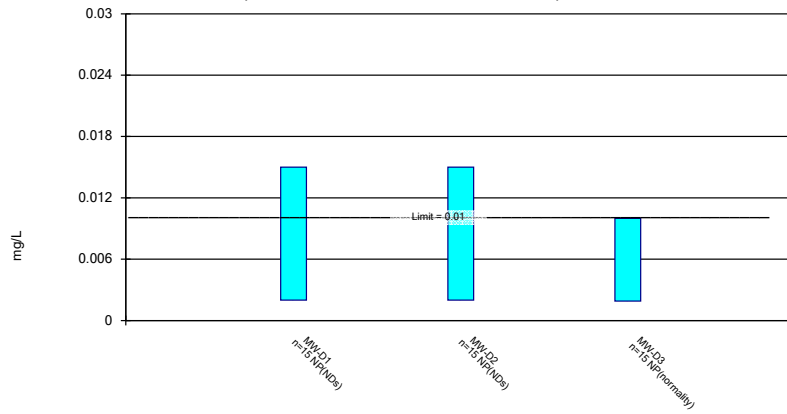
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 12/6/2021 4:36 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

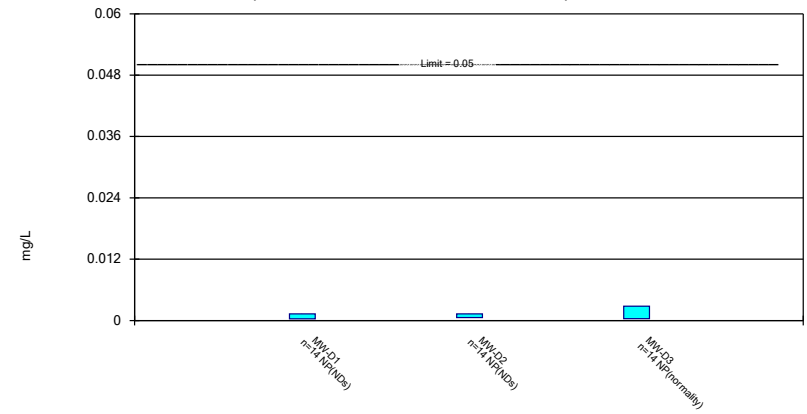
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 th  
 CCPC Plant Crisp Ash Pond Site Client: Geosyntec Data: Sanitas\_Statistics Sampling Events 1 through 10

### Non-Parametric Confidence Interval

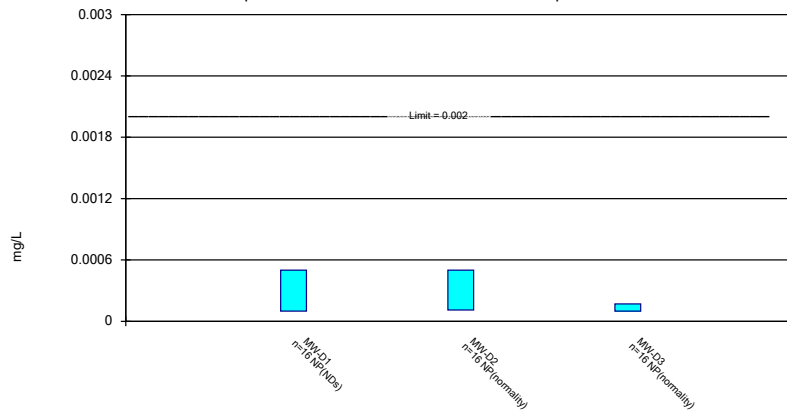
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 12/6/2021 4:36 PM View: Sanitas\_Ststistics Sampling Events 1 throu  
 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 12/6/2021 4:37 PM View: Sanitas\_Ststistics Sampling Events 1 through  
 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 12/6/2021, 4:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-D1	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D2	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	MW-D3	0.0025	0.0005	0.006	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D1	0.0013	0.00025	0.01	No	17	100	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D2	0.0013	0.00095	0.01	No	17	76.47	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-D3	0.001259	0.0007427	0.01	No	17	17.65	No	0.01	Param.
Barium (mg/L)	MW-D1	0.01681	0.01125	2	No	17	0	ln(x)	0.01	Param.
Barium (mg/L)	MW-D2	0.1564	0.1256	2	No	17	0	No	0.01	Param.
Barium (mg/L)	MW-D3	0.189	0.1192	2	No	17	0	No	0.01	Param.
Beryllium (mg/L)	MW-D1	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D2	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-D3	0.0025	0.0004	0.004	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D1	0.0025	0.0002	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D2	0.0025	0.000075	0.005	No	13	92.31	No	0.01	NP (NDs)
Cadmium (mg/L)	MW-D3	0.0025	0.000071	0.005	No	13	92.31	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D1	0.0034	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D2	0.0038	0.0012	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	MW-D3	0.0029	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D1	0.0025	0.0005	0.0025	No	16	100	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D2	0.0025	0.001	0.0025	No	16	87.5	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-D3	0.001555	0.0009213	0.0025	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-D1	0.749	0.156	5	No	17	17.65	No	0.01	NP (Cohens/xfrm)
Combined Radium 226 + 228 (pCi/L)	MW-D2	0.773	0.333	5	No	17	23.53	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-D3	1.17	0.409	5	No	17	23.53	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D1	0.08901	0.06099	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	MW-D2	0.07	0.05	4	No	17	0	No	0.01	NP (normality)
Fluoride (mg/L)	MW-D3	0.13	0.1	4	No	17	0	No	0.01	NP (normality)
Lead (mg/L)	MW-D1	0.0013	0.0008	0.0013	No	12	91.67	No	0.01	NP (NDs)
Lead (mg/L)	MW-D2	0.0013	0.00037	0.0013	No	12	83.33	No	0.01	NP (NDs)
Lead (mg/L)	MW-D3	0.0013	0.00025	0.0013	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D1	0.005	0.0023	0.0025	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D2	0.0031	0.0011	0.0025	No	14	85.71	No	0.01	NP (NDs)
Lithium (mg/L)	MW-D3	0.005	0.0024	0.0025	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D1	0.0002	0.000077	0.002	No	12	91.67	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D2	0.0002	0.00018	0.002	No	12	83.33	No	0.01	NP (NDs)
Mercury (mg/L)	MW-D3	0.0002	0.00011	0.002	No	12	91.67	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D1	0.015	0.002	0.01	No	15	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D2	0.015	0.002	0.01	No	15	80	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-D3	0.01	0.0019	0.01	No	15	26.67	No	0.01	NP (normality)
Selenium (mg/L)	MW-D1	0.0013	0.00033	0.05	No	14	92.86	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D2	0.0013	0.00059	0.05	No	14	78.57	No	0.01	NP (NDs)
Selenium (mg/L)	MW-D3	0.0028	0.00037	0.05	No	14	71.43	No	0.01	NP (normality)
Thallium (mg/L)	MW-D1	0.0005	0.0001	0.002	No	16	100	No	0.01	NP (NDs)
Thallium (mg/L)	MW-D2	0.0005	0.00011	0.002	No	16	37.5	No	0.01	NP (normality)
Thallium (mg/L)	MW-D3	0.00017	0.0001	0.002	No	16	12.5	No	0.01	NP (normality)