

REPORT

Annual Coal Combustion Residuals Groundwater Monitoring and Corrective Action Report - 2024

Nebraska Public Power District, Gerald Gentleman Station

Submitted to:

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GLA21457062.5798-005-RPT-0

January 31, 2025

Executive Summary

This report presents the results from groundwater monitoring that occurred at Nebraska Public Power District's Gerald Gentleman Station in 2024 to meet the requirements of the United States Environmental Protection Agency's Coal Combustion Residuals Rule (40 Code of Federal Regulations 257.90 through 257.98). The facility entered 2024 under a detection monitoring program and remains in detection monitoring based on the results of sampling and analysis events conducted in the second quarter (Q2) and fourth quarter (Q4) of 2024.

No potential exceedances were identified during the Q2 2024 detection monitoring sampling event. A potential exceedance was identified for sulfate at APMW-11 during the Q4 2024 detection monitoring sampling event. Confirmatory re-sampling for the parameter will occur during the next semi-annual sampling event in Q2 2025.

A verified statistically significant increase was identified for chloride at APMW-6 during the Q2 2024 and Q4 2024 sampling events. The verified statistically significant increase was originally identified following the Q4 2021 sampling event. A previously prepared successful alternative source demonstration was reviewed for ongoing applicability for the verified statistically significant increase after the Q4 2024 and Q2 2024 sampling events. The conclusions of the previous ASD remain valid, therefore Gerald Gentleman Station will remain in detection monitoring for the first semi-annual detection monitoring event of 2025, to be conducted in Q2 2025.

As described in the Groundwater Monitoring System Certification (Golder Associates Inc. [GAI] 2017a) and the Groundwater Monitoring Statistical Methods Certification (GAI 2017b), the groundwater monitoring and analytical procedures meet the general requirements of the Coal Combustion Residuals Rule, and modifications to the monitoring network and sampling program are not recommended at this time.

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1.0 INTRODUCTION

WSP USA Inc. (WSP) has prepared this report describing the 2024 groundwater sampling and comparative statistical analysis for Nebraska Public Power District's (NPPD) Gerald Gentleman Station (GGS) in Sutherland, Nebraska. This report was written to meet the requirements for groundwater monitoring and corrective action within the United States Environmental Protection Agency's Coal Combustion Residuals (CCR) Rule, 40 Code of Federal Regulations (CFR) 257.90 to 257.98.

1.1 Facility Information

GGS is located approximately 5 miles south of Sutherland, Nebraska, and 1.2 miles south of Sutherland Reservoir. The ash disposal facility at GGS is situated in the NW 1/4, NE ½, Section 30 of Township 13N, Range 33 W, in Lincoln County, Nebraska. NPPD began operating GGS in 1979 as a coal-fired electrical generation facility. GGS is both owned and operated by NPPD. The plant, with a generation capacity of 1,365 megawatts of power, uses a low-sulfur coal from Wyoming's Powder River Basin. The active CCR landfill at the site contains fly ash and bottom ash.

1.2 Purpose

The federal CCR Rule established specific requirements for reporting of groundwater monitoring and corrective actions in 40 CFR 257.90. Per part (e) of 40 CFR 257.90, no later than January 31, 2018, and annually thereafter, owners or operators of CCR units must prepare an annual groundwater monitoring and corrective action report.

2.0 GROUNDWATER MONITORING NETWORK PROGRAM STATUS

The groundwater monitoring network for the active CCR landfill at GGS consists of 14 monitoring wells, as shown in Figure 1 and Figure 2. The four upgradient wells are APMW-5, APMW-15, APMW-16A, and APMW-17 and are indicated by the inclusion of "(U)" throughout the text. The ten downgradient monitoring wells are APMW-4, APMW-6, APMW-8A, APMW-10, APMW-11, APMW-12, APMW-13, APMW-14, APMW-18, and APMW-19.

2.1 Completed Key Actions 2024

The following key actions were completed in 2024:

- The 2023 annual CCR groundwater monitoring and corrective action report was completed and placed within the operating record and on NPPD's publicly accessible CCR website (WSP 2024).
- Detection monitoring samples were collected in June and December 2024 and analyzed for the Appendix III constituent list associated with the federal CCR Rule.
- Additional samples were collected from APMW-4 and APMW-11 in June and December for separate state reporting requirements and analyzed for the Appendix IV parameters.
- Comparative statistical analysis was completed for the second quarter (Q2) 2024 and fourth quarter (Q4) 2024 detection monitoring events, collected in June and December 2024, respectively.

2.2 Installation and Decommissioning of Monitoring Wells

No monitoring wells associated with the ash disposal facility groundwater quality monitoring network were installed or decommissioned at GGS in 2024.

2.3 **Problems and Resolutions**

Sampling Problems and Resolutions

During the Q2 2024 sampling event, the groundwater level at APMW-5 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level not being recorded. However, enough water was present for a sample to be collected for laboratory analysis.

During the Q4 2024 sampling event, the groundwater level at APMW-15 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level not being able to be recorded for the monitoring event. However, enough water was present at APMW-15 (U) for proper purging to occur and for a sample to be collected for laboratory analysis. Additionally, wells APMW-5 (U) and APMW-4 were dry during the Q4 2024 sampling event, preventing collection of groundwater levels and analytical sampling at both wells. NPPD will continue to monitor APMW-5 (U), APMW-15 (U), and APMW-4 during future sampling events.

Analytical Problems and Resolutions

Beginning in 2023, a difference was noted in the provided reporting limit for fluoride across the collected samples. In correspondence with Eurofins Environment Testing Cedar Falls, the laboratory noted that during a recent reevaluation and certification of the minimum detectable levels (MDLs) for the laboratory instrument using method SW 9056A for fluoride, the undiluted MDL for fluoride increased from 0.044 mg/L to 0.075 mg/L. This change in MDL resulted in a concurrent increase in the undiluted reporting limit, given as the practical quantitation limit, from 0.10 mg/L to 0.20 mg/L. Samples were analyzed using a similar dilution factor to prior results, resulting in nondetects reported as ND < 1.000 mg/L for the collected samples. Associated results are not considered statistical increases, based on the difference in results stemming from changes to the laboratory reporting limits. The associated results and any impacts stemming from the change in reporting limits will continue to be reviewed for future samples.

With the Q4 2024 results, Eurofins Environment Testing Cedar Falls has updated the reporting method for fluoride to SM4500 F C-2011. Results for the Q4 2024 monitoring event have been reported without dilutions at the stated reporting limit of 0.100 mg/L. The Q4 2024 results and any impacts associated with the change in methodology and reporting limits will continue to be monitored for future samples.

2.4 Proposed Key Activities for 2025

The following key activities are expected to be completed in 2025:

- The 2024 annual monitoring report will be finalized and placed on the publicly accessible CCR website and in the site operating record.
- Detection monitoring sampling events and associated comparative statistical analysis are planned to occur in Q2 and Q4 2025.

3.0 GROUNDWATER MONITORING ANALYTICAL PROGRAM STATUS

Analytical activities associated with the groundwater monitoring program are described below.

3.1 Samples Collected

GGS staff collected monitoring samples for the CCR detection monitoring program in May and December 2024. Specific dates for each sample are provided on the tables included as Appendix A.

Additional samples were collected at APMW-4 and APMW-11 in support of separate, Nebraska-specific reporting requirements. The analyses are not required as part of the detection monitoring program. The collected results have been included on the tables in Appendix A.

3.1.1 Groundwater Elevation and Flow Rate

Groundwater elevations were measured in 13 of the 14 wells during the Q2 2024 sampling event and 11 of the 14 wells during the Q4 2024 event prior to purging. During the Q2 2024 sampling event, the groundwater level at APMW-5 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level not being recorded, but enough water was present for a sample to be collected for laboratory analysis. APMW-5 (U) and APMW-4 were dry during the Q4 2024 monitoring event, with both groundwater levels and samples for laboratory analyses unable to be collected. During Q4 sampling, the groundwater level at APMW-15 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level at APMW-15 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level at APMW-15 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level not being recorded, but enough water was present for a sample to be collected for laboratory analysis. Groundwater level at APMW-15 (U) was below the level of the dedicated low-flow pump, resulting in a groundwater level not being recorded, but enough water was present for a sample to be collected for laboratory analysis. Groundwater elevation measurements can be found in the tables included as Appendix A for each location. Groundwater elevations and interpolated groundwater contours are shown in Figure 1 for the May 2024 (Q2 2024) detection monitoring sampling event. Groundwater elevations and interpolated groundwater contours are shown in Figure 2 for the December 2024 (Q4 2024) detection monitoring sampling event.

The groundwater flow rate across the facility was estimated with the equation $V_s = k \times i/n_e$, where:

- V_s is the groundwater flow rate, in feet per day (ft/day)
- k is the hydraulic conductivity, estimated from slug testing results from system wells, in ft/day
- *i* is the hydraulic gradient, calculated based on groundwater elevations for each monitoring event, in feet per feet (ft/ft)
- n_e is the effective porosity, a unitless parameter, estimated to be 0.25 for site soils

Hydraulic conductivity values at the site range from 0.14 to 19 ft/day, based on slug test data reported in *Design and Construction of a Groundwater Monitoring Network, Final Report*, issued in September 1991 by Woodward-Clyde Consultants. According to the 1991 report, a hydraulic conductivity value of 0.14 ft/day represents the Ogallala Formation silts. Values of 16 and 19 ft/day were reported for Ogallala Formation sands. Both 0.14 and 19 ft/day have been used to estimate the range of hydraulic conductivities present at GGS. The effective porosity estimate listed above is based on typical values for sands and silts, as presented in *Applied Hydrogeology* (Fetter 1994).

Based on the range of site values for hydraulic conductivity, the estimated effective porosity, and calculated hydraulic gradient based on water level readings, the average groundwater flow rate for June 2024 was estimated between 4.2×10^{-4} to 8.4×10^{-2} ft/day, based on average gradient values from APMW-15, APMW-16A, and APMW-17 as the upgradient reference points. The average groundwater flow rate from wells with recorded groundwater elevations in December 2024 was estimated between 6.9×10^{-4} to 1.0×10^{-1} ft/day. Gradients for the December 2024 monitoring event were calculated from APMW-16A and APMW-17, based on not being able to collect a water level at APMW-15 during the monitoring event.

3.2 Monitoring Data (Analytical Results)

Analytical results for the CCR Rule Appendix III detection monitoring events in May 2024 and December 2024 are shown in the tables included as Appendix A.

3.3 Comparative Statistical Analysis

A description of the steps taken for comparative statistical analysis is summarized below with the results presented in the tables included as Appendix B.

Comparative statistical analysis is conducted following each detection monitoring event, consisting of the Appendix III parameters (USEPA 2015). For both Shewhart-CUSUM limits and non-parametric prediction limits (NP-PL), the comparative statistical analysis consists of a comparison of detection monitoring results collected during the period of interest to the statistical limit calculated from the baseline data collection period. For well-constituent pairs with increasing trends identified during the baseline period, an alternative trend test, as described by the Electric Power Research Institute (EPRI 2015) has been used to determine compliance. For well-constituent pairs with decreasing trends identified for the baseline period, a Sen's Slope test was used to assess the compliance results. At present, no well-constituent pairs have either increasing or decreasing trends within the baseline period and no alternative methods for trend analysis have been used within this report. Additional information on the methods used for the comparative statistical analysis can be found in the Groundwater Monitoring Statistical Methods Certification (GAI 2017b).

The following definitions will be used in discussion of the comparative statistical analysis:

- Elevated CUSUM Defined as when the calculated CUSUM value is greater than the Shewhart-CUSUM limit established by the baseline statistical analysis, but the analytical result does not exceed the Shewhart-CUSUM limit. An elevated CUSUM is an indication that concentrations are gradually increasing and that the analytical results may exceed the Shewhart-CUSUM limit in the future. For elevated CUSUMs in the case of two-tailed analysis for field-measured pH, the CUSUM value may also be below the lower Shewhart-CUSUM limit established by the baseline statistical analysis.
- Potential Exceedance Defined as an initial elevated CUSUM or an initial analytical result that exceeds the Shewhart-CUSUM limit or non-parametric statistical limit established by the baseline statistical analysis. Confirmatory re-sampling will determine if the potential exceedance is a false-positive or a verified statistically significant increase (SSI). Non-detect results that exceed either the Shewhart-CUSUM limit or the nonparametric statistical limit are not considered potential exceedances.
- False-positive Defined as an analytical result that exceeds the statistical limit that can clearly be attributed to laboratory error, changes in analytical precision, or is invalidated through confirmatory re-sampling.
 False-positives are not used in calculations of any subsequent CUSUM values.
- Confirmatory re-sampling Designated as the next scheduled sampling event.
- Verified SSI Interpreted as two consecutive exceedances (the original sample and the confirmatory resample for analytical results, or two consecutive elevated CUSUMs) for the same constituent at the same well.

Results of the statistical analysis for the Q2 2024 and Q4 2024 detection monitoring events are shown on the tables included as Appendix B. For reporting purposes, compliance samples with non-detect results are shown at the practical quantitation limit (PQL) on the tables included as Appendix B.

3.3.1 Potential Exceedances

No potential exceedances were identified during the Q2 2024 detection monitoring event.

For Q4 2024 detection monitoring sampling events, a potential exceedance was identified for sulfate at APMW-11. A confirmatory re-sample will be collected prior to or during the next semi-annual sampling event in Q2 2025.

3.3.2 False-Positives

No false positives were identified during the Q2 2024 or Q4 2024 detection monitoring sampling events.

3.3.3 Verified SSIs

No new verified SSIs were identified during either the Q2 2024 or Q4 2024 detection monitoring sampling events. During both monitoring events, chloride was identified as a verified SSI at APMW-6, which was initially verified during the Q4 2021 sampling event.

As discussed in Section 2.3, reported fluoride values beginning with the Q2 2023 sampling event through the Q2 2024 sampling event reflect a change in the reporting limit based on revised method certifications for the analytical laboratory. As the reported values for the Q2 2024 sampling events are associated with non-detect analytical results with consistent analytical methodology and dilution factors to past results, non-detect results above the statistical limits are not considered exceedances for either upgradient or downgradient locations.

3.4 **Program Transitions**

Beginning in Q4 2017, the groundwater monitoring program at GGS transitioned from the baseline period to detection monitoring. During the baseline period, eight independent samples from each well within the program were collected and analyzed for the constituents listed in Appendix III and Appendix IV of the CCR rule prior to October 17, 2017, as specified in 40 CFR 257.94(b), with the previously reported exceptions of APMW-5 (U) and APMW-4 due to lack of precipitation (GAI 2018).

3.4.1 Detection Monitoring

Samples for the detection monitoring program are collected on a semi-annual basis, beginning with the sample collected in November 2017. NPPD collected semi-annual samples for the detection monitoring program in Q2 and Q4 2024.

3.4.2 Alternative Source Demonstrations

Resulting from the verified SSI for chloride at APMW-6 during the Q2 2024 detection monitoring, the previously prepared ASD was reviewed for ongoing applicability. As specified in 40 CFR 257.94, the conclusions were found to remain applicable within 90 days of identification of each of the SSIs, and the CCR unit remained in detection monitoring for the Q4 2024 detection monitoring event.

Based on the Q4 2024 verified SSI for chloride at APMW-6, the previously completed ASD was again reviewed for continued applicability. The conclusions of the previous ASD were found to remain valid, therefore NPPD will remain in detection monitoring (See Appendix C).

3.4.3 Assessment Monitoring

The current groundwater monitoring program at GGS is not in assessment monitoring. Assessment monitoring has not been triggered as described in 40 CFR 257.95.

3.4.4 Corrective Measures and Assessment

The current groundwater monitoring program at GGS does not indicate the need for corrective measures. An assessment of corrective measures, as described in 40 CFR 257.96, has not been required. No ASDs for Appendix IV parameters have been made. No corrective actions are required at this time.

4.0 RECOMMENDATIONS AND CLOSING

This report presents the results from the Q2 2024 and Q4 2024 detection monitoring events of the CCR program and the associated comparative statistical analysis. The groundwater monitoring and analytical procedures implemented at GGS meet the requirements of the CCR Rule and are consistent with the approach described in Groundwater Monitoring System Certification (GAI 2017a) and the Groundwater Monitoring Statistical Methods Certification (GAI 2017b). Modifications to the monitoring network and sampling program are not recommended at this time, and the program will remain in detection monitoring for the Q2 2025 detection monitoring event.

Signature Page

WSP USA Inc.

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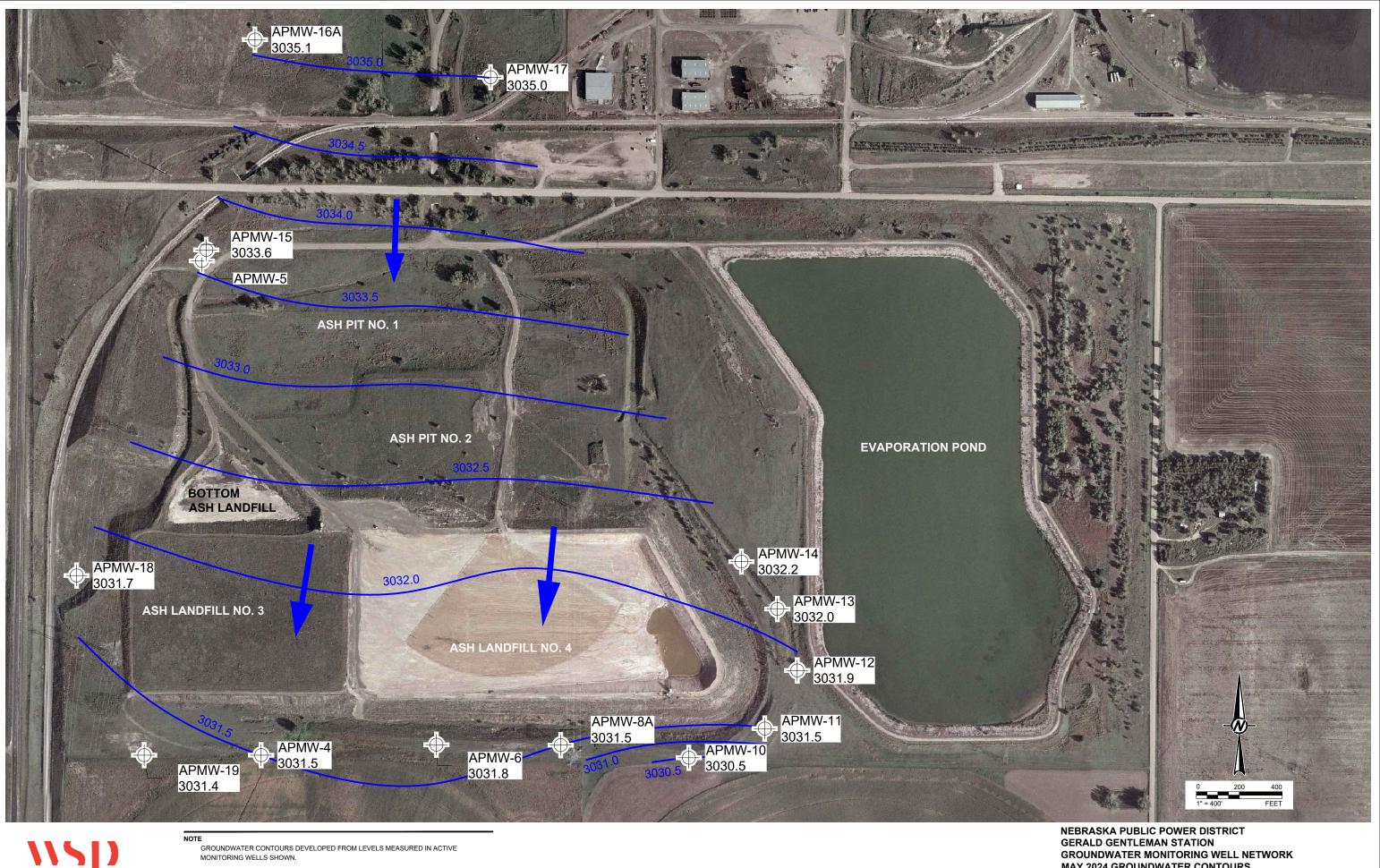
Jacob J. Sauer, PE Assistant Vice President

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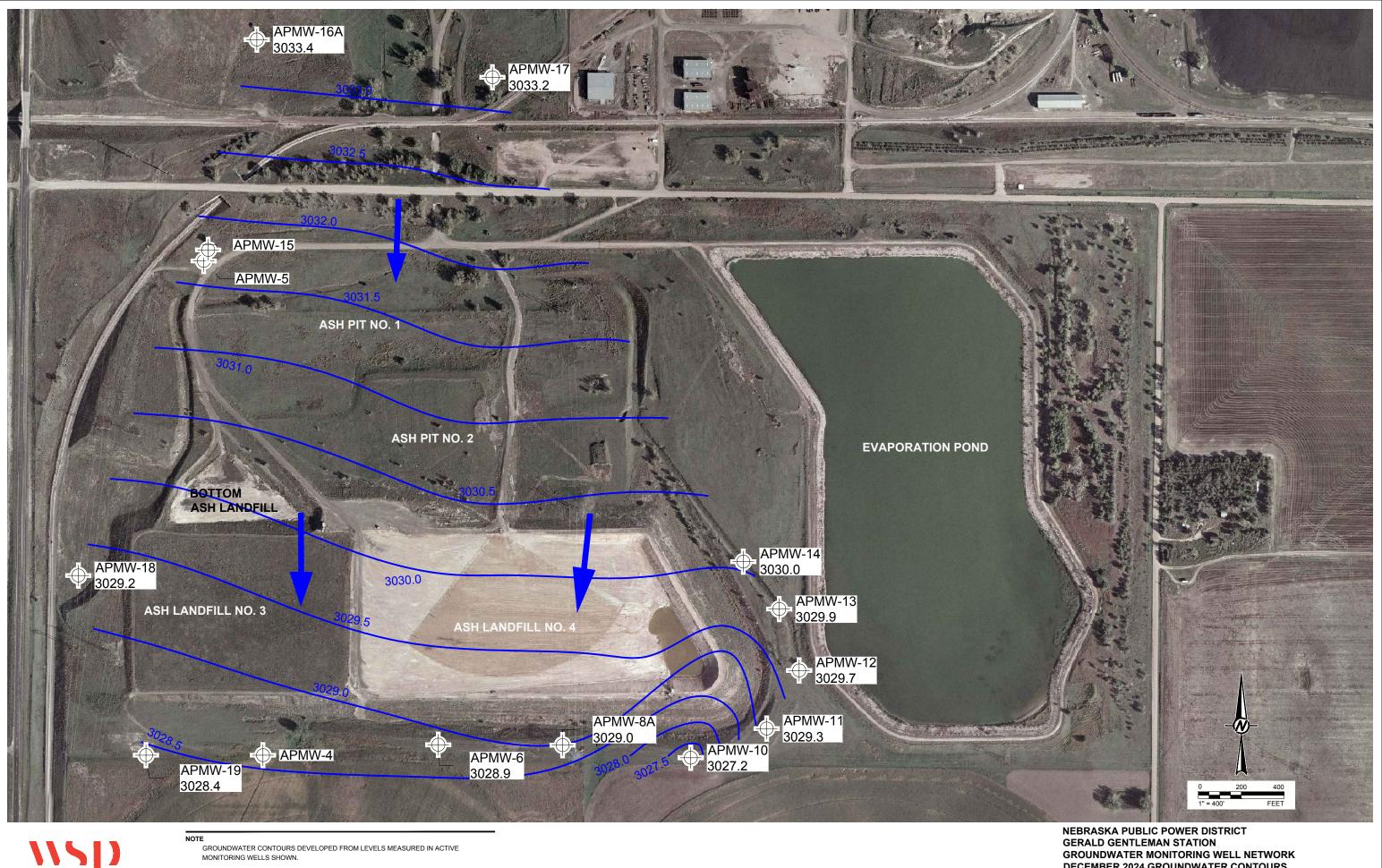
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Figures



GROUNDWATER CONTOURS DEVELOPED FROM LEVELS MEASURED IN ACTIVE MONITORING WELLS SHOWN.

GROUNDWATER MONITORING WELL NETWORK MAY 2024 GROUNDWATER CONTOURS FIGURE 1



GROUNDWATER CONTOURS DEVELOPED FROM LEVELS MEASURED IN ACTIVE MONITORING WELLS SHOWN.

NEBRASKA PUBLIC POWER DISTRICT GERALD GENTLEMAN STATION **GROUNDWATER MONITORING WELL NETWORK** DECEMBER 2024 GROUNDWATER CONTOURS FIGURE 2

APPENDIX A

Monitoring Data

Table 1. Data Summary Table - APMW-5 (Upgradient)

Analidaa		5/6/2024	12/3/2024	5/6/2024	12/3/2024	
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²		
Water Elevation	ft amsl	*	***	*	***	
Appendix III						
Boron, Total	mg/L	< 0.100				
Calcium, Total	mg/L	47.8				
Chloride	mg/L	8.7				
Fluoride	mg/L	< 1.00				
pH, Field	pH units	*				
Sulfate	mg/L	31.4				
Total Dissolved Solids	mg/L	238				
Appendix IV						
Antimony, Total	mg/L					
Arsenic, Total	mg/L			0.0054		
Barium, Total	mg/L					
Beryllium, Total	mg/L					
Cadmium, Total	mg/L					
Chromium, Total	mg/L					
Cobalt, Total	mg/L					
Fluoride	mg/L					
Lead, Total	mg/L					
Lithium, Total	mg/L					
Mercury, Total	mg/L					
Molybdenum, Total	mg/L					
Radium-226	pCi/L					
Radium-228	pCi/L					
Radium-226 + Radium-228	pCi/L					
Selenium, Total	mg/L			< 0.005		
Thallium, Total	mg/L					

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

2. Additional parameters collected for separate, Nebraska-specific permit reporting requirements.

*** APMW-5 was dry during the Q4 2022 sampling event, preventing collection of a sample. See text for details.

* Field parameters were unable to be collected during sampling of APMW-5 during the Q2 2024 sampling event. See text for further discussion.

*** APMW-5 was dry during the Q4 2024 sampling event, preventing collection of a sample. See text for details.



Table 2. Data Summary Table - APMW-15 (Upgradient)

Analytes		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3034.23	*	3034.23	*
Appendix III					
Boron, Total	mg/L	0.118	0.102		
Calcium, Total	mg/L	99.7	105		
Chloride	mg/L	20.1	29.1		
Fluoride	mg/L	< 1.000	0.278		
pH, Field	pH units	7.23	7.52		
Sulfate	mg/L	113	141		
Total Dissolved Solids	mg/L	478	564		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00273	0.00266
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			< 0.00500	0.00514
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

2. Additional parameters collected for separate, Nebraska-specific permit reporting requirements.

* During the Q4 2024 monitoring event, the groundwater level at APMW-15 was below the top of the dedicated pump. However, enough volume was present to allow appropriate purging and collection of an analytical sample.

Table 3. Data Summary Table - APMW-16A (Upgradient)

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3035.1	3033.36	3035.1	3033.36
Appendix III					
Boron, Total	mg/L	0.128	0.13		
Calcium, Total	mg/L	106	113		
Chloride	mg/L	29.6	30.6		
Fluoride	mg/L	< 1.000	0.345		
pH, Field	pH units	7.03	7.11		
Sulfate	mg/L	161	160		
Total Dissolved Solids	mg/L	576	604		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00277	0.00274
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			< 0.00500	< 0.00500
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 4. Data Summary Table - APMW-17 (Upgradient)

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3035.03	3033.24	3035.03	3033.24
Appendix III					
Boron, Total	mg/L	< 0.100	< 0.100		
Calcium, Total	mg/L	119	117		
Chloride	mg/L	29.4	33.5		
Fluoride	mg/L	< 1.000	0.22		
pH, Field	pH units	7.07	7.14		
Sulfate	mg/L	132	131		
Total Dissolved Solids	mg/L	494	514		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00237	0.0023
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.00698	0.00842
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 5. Data Summary Table - APMW-4

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3031.52	***	3031.52	***
Appendix III					
Boron, Total	mg/L	< 0.100			
Calcium, Total	mg/L	51.5			
Chloride	mg/L	42.5			
Fluoride	mg/L	< 1.000			
pH, Field	pH units	7.68			
Sulfate	mg/L	26.6			
Total Dissolved Solids	mg/L	246			
Appendix IV					
Antimony, Total	mg/L			< 0.002	
Arsenic, Total	mg/L			0.00445	
Barium, Total	mg/L			0.0748	
Beryllium, Total	mg/L			< 0.001	
Cadmium, Total	mg/L			< 0.0002	
Chromium, Total	mg/L			< 0.005	
Cobalt, Total	mg/L			< 0.0005	
Fluoride	mg/L			< 1.000	
Lead, Total	mg/L			< 0.0005	
Lithium, Total	mg/L			0.0135	
Mercury, Total	mg/L			< 0.0002	
Molybdenum, Total	mg/L			0.0057	
Radium-226	pCi/L			0.172 ± 0.102	
Radium-228	pCi/L			1.02 ± 0.462	
Radium-226 + Radium-228	pCi/L			1.19 ± 0.473	
Selenium, Total	mg/L			0.0147	
Thallium, Total	mg/L			< 0.001	

Legend:

---. Not analyzed

ft amsl, feet above mean sea level

mg/L, milligrams per liter

pCi/L, picocuries per liter

U, Result is less than the sample detection limit (varies by sample for radiological results).

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

2. Beginning with the Q2 2023 sampling event, additional samples have been collected at APMW-4 for separate, Nebraska-specific permit reporting requirements.

*** APMW-4 was dry during the Q4 2024 sampling event, preventing collection of a sample. See text for details.

Table 6. Data Summary Table - APMW-6

Analysis		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3031.75	3028.92	3031.75	3028.92
Appendix III					
Boron, Total	mg/L	< 0.100	< 0.1000		
Calcium, Total	mg/L	54.8	50.8		
Chloride	mg/L	30.3	31.4		
Fluoride	mg/L	< 1.000	0.317		
pH, Field	pH units	7.5	7.54		
Sulfate	mg/L	25.9	27		
Total Dissolved Solids	mg/L	258	318		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00419	0.00411
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.00506	0.00574
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 7. Data Summary Table - APMW-8A

Analidaa		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3031.47	3029.05	3031.47	3029.05
Appendix III					
Boron, Total	mg/L	< 0.100	< 0.100		
Calcium, Total	mg/L	121	77		
Chloride	mg/L	73.6	84.6		
Fluoride	mg/L	< 1.000	0.232		
pH, Field	pH units	7.17	7.32		
Sulfate	mg/L	136	34.3		
Total Dissolved Solids	mg/L	520	338		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00324	0.00275
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.0191	0.0164
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 8. Data Summary Table - APMW-10

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3030.49	3027.19	3030.49	3027.19
Appendix III					
Boron, Total	mg/L	< 0.100	< 0.100		
Calcium, Total	mg/L	57.4	50.5		
Chloride	mg/L	22.5	23.6		
Fluoride	mg/L	< 1.000	0.275		
pH, Field	pH units	7.46	7.67		
Sulfate	mg/L	43.8	44.8		
Total Dissolved Solids	mg/L	286	280		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.0029	0.00321
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.00568	0.0076
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 9. Data Summary Table - APMW-11

		5/6/2024	12/3/2024	5/6/2024	12/3/2024	
Analytes	Units	Detection Monitoring ¹		Additional State Program Samples ²		
Water Elevation	ft amsl	3031.54	3029.26	3031.54	3029.26	
Appendix III						
Boron, Total	mg/L	< 0.100	< 0.100			
Calcium, Total	mg/L	80.5	73.5			
Chloride	mg/L	31.7	37.6			
Fluoride	mg/L	< 1.000	0.279			
pH, Field	pH units	7.32	7.42			
Sulfate	mg/L	58.4	56			
Total Dissolved Solids	mg/L	352	348			
Appendix IV						
Antimony, Total	mg/L			< 0.002	< 0.002	
Arsenic, Total	mg/L			< 0.002	< 0.002	
Barium, Total	mg/L			0.195	0.21	
Beryllium, Total	mg/L			< 0.001	< 0.001	
Cadmium, Total	mg/L			< 0.0002	< 0.0002	
Chromium, Total	mg/L			< 0.005	< 0.005	
Cobalt, Total	mg/L			< 0.0005	< 0.0005	
Fluoride	mg/L			< 1.000	0.287	
Lead, Total	mg/L			< 0.0005	< 0.0005	
Lithium, Total	mg/L			0.0144	0.0152	
Mercury, Total	mg/L			< 0.0002	< 0.0002	
Molybdenum, Total	mg/L			0.00235	0.0025	
Radium-226	pCi/L			0.0304 ± 0.0840	0.174 U ± 0.115	
Radium-228	pCi/L			0.260 ± 0.335	0.151 ± 0.373	
Radium-226 + Radium-228	pCi/L			0.290 ± 0.345	0.325 ± 0.390	
Selenium, Total	mg/L			0.0128	0.0171	
Thallium, Total	mg/L			< 0.001	< 0.001	

Legend:

---. Not analyzed

ft amsl, feet above mean sea level

mg/L, milligrams per liter

pCi/L, picocuries per liter

U, Result is less than the sample detection limit (varies by sample for radiological results).

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

2. Beginning with the Q2 2023 sampling event, additional samples have been collected at APMW-11 for separate, Nebraskaspecific permit reporting requirements.

Table 10. Data Summary Table - APMW-12

Angleden		5/7/2024	12/4/2024	5/7/2024	12/4/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3031.91	3029.74	3031.91	3029.74
Appendix III					
Boron, Total	mg/L	0.262	0.261		
Calcium, Total	mg/L	165	152		
Chloride	mg/L	159	149		
Fluoride	mg/L	< 1.000	0.117		
pH, Field	pH units	6.88	7.00		
Sulfate	mg/L	270	264		
Total Dissolved Solids	mg/L	992	972		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00224	0.00229
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			< 0.00500	0.00644
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 11. Data Summary Table - APMW-13

		5/7/2024	12/4/2024	5/7/2024	12/4/2024
Analytes	Units	Detection Monitoring ¹		Additional State Program Required Samples ²	
Water Elevation	ft amsl	3032.05	3029.9	3032.05	3029.9
Appendix III					
Boron, Total	mg/L	0.252	0.292		
Calcium, Total	mg/L	160	139		
Chloride	mg/L	141	117		
Fluoride	mg/L	< 1.000	0.169		
pH, Field	pH units	6.9	7.02		
Sulfate	mg/L	256	226		
Total Dissolved Solids	mg/L	962	920		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00257	0.00266
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			< 0.00500	< 0.00500
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.

Table 12. Data Summary Table - APMW-14

		5/7/2024	12/4/2024	5/7/2024	12/4/2024
Analytes	Units	Detection N	Monitoring ¹		tate Program Samples ²
Water Elevation	ft amsl	3032.15	3030.05	3032.15	3030.05
Appendix III					
Boron, Total	mg/L	0.225	0.193		
Calcium, Total	mg/L	164	147		
Chloride	mg/L	133	115		
Fluoride	mg/L	< 1.000	0.166		
pH, Field	pH units	6.91	7.04		
Sulfate	mg/L	193	169		
Total Dissolved Solids	mg/L	878	794		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00226	0.00226
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			< 0.005	0.00567
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring

Program monitors all constituents found in Appendix III.

Table 13. Data Summary Table - APMW-18

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection M	onitoring ¹		State Program d Samples ²
Water Elevation	ft amsl	3031.71	3029.25	3031.71	3029.25
Appendix III					
Boron, Total	mg/L	< 0.100	<0.100		
Calcium, Total	mg/L	82.8	89.7		
Chloride	mg/L	66.5	116		
Fluoride	mg/L	< 1.000	0.214		
pH, Field	pH units	7.29	7.36		
Sulfate	mg/L	44.5	23.6		
Total Dissolved Solids	mg/L	382	404		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00256	0.0023
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.00576	0.00725
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter pCi/L, picocuries per liter

NOTES:

 As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring Program monitors all constituents found in Appendix III.
 Additional parameters collected for separate, Nebraska-specific permit reporting requirements.

Table 14. Data Summary Table - APMW-19

		5/6/2024	12/3/2024	5/6/2024	12/3/2024
Analytes	Units	Detection M	lonitoring ¹		tate Program Samples ²
Water Elevation	ft amsl	3031.36	3028.44	3031.36	3028.44
Appendix III					
Boron, Total	mg/L	< 0.100	< 0.100		
Calcium, Total	mg/L	84	68.4		
Chloride	mg/L	35.7	31.8		
Fluoride	mg/L	< 1.000	0.266		
pH, Field	pH units	7.27	7.35		
Sulfate	mg/L	86.1	63.7		
Total Dissolved Solids	mg/L	416	374		
Appendix IV					
Antimony, Total	mg/L				
Arsenic, Total	mg/L			0.00362	0.00368
Barium, Total	mg/L				
Beryllium, Total	mg/L				
Cadmium, Total	mg/L				
Chromium, Total	mg/L				
Cobalt, Total	mg/L				
Fluoride	mg/L				
Lead, Total	mg/L				
Lithium, Total	mg/L				
Mercury, Total	mg/L				
Molybdenum, Total	mg/L				
Radium-226	pCi/L				
Radium-228	pCi/L				
Radium-226 + Radium-228	pCi/L				
Selenium, Total	mg/L			0.0106	0.00961
Thallium, Total	mg/L				

Legend:

---. Not analyzed ft amsl, feet above mean sea level mg/L, milligrams per liter

pCi/L, picocuries per liter

NOTES:

1. As indicated by the CCR rule (40 CFR 257.94), the Detection Monitoring

Program monitors all constituents found in Appendix III.

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3019 Venture	Way	

Cedar Falls, IA 50613

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Chain of Custody Record

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Doug

Environment Testing

Phone (319) 277-2401 Phone (319) 277-2425													C. 6.36.	1						
Client Information	Sampler: Dເບ	Sampler: Doug Harris Lab PM: Hummel, Ma							fatthew									COC No: 310-70847-1539	0.1	
Client Contact: Doug Harris		Phone: E-Mail:								state of State of Nebra								Page: Page 1 of 2		
^{Company:} Nebraska Public Power District		Analysis Requested											_	Job #:						
Address 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Request	ed:			1			ate			Т					П	ri.	Preservation Code	es: M - Hexane	
City: Sutherland	TAT Requested (da	ays):						d Sulf										A - HCL B - NaOH	N - None O - AsNaO2	
State, Zip: NE, 69165	Compliance Project	t A Vor	4 No.		-			de an									199	C - Zn Acetate D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone: 308-530-1124	PO #:	1 1 103			-	Selenium		, Fluor									2	F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4 T - TSP Dodecat	abydrat
Email: ddharri@nppd.com	WO #				or No)			Chlorlde, Fluoride and Sulfate									I.	H - Ascorbic Acid 1 - Ice J - DI Water	U - Acetone V - MCAA	injuru:
Project Name: Gerald Gentleman Station Ash Pites	Project #: 31007155				o (Yes	Calclum,	SM4500_H										Le l	K - EDTA L - EDA	W - pH 4-5 Y - Trizma Z - other (specify	y)
Site: GGS	SSOW#:				ample	Boron,	d, SM4	28D - (I									of con	Other:		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)		Field Filte	20A - Arsenic	TDS 2540C_Calcd,	9056A_ORGFM_28D - (MOD)	pH SM4500_H+								Total Number o	Special Ins	structions/No	ote:
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APMW-17	5-6-24	1027	G	Water)	1	1	1								Sec.			
APMW-15	5-6-24	1122	G	Water																
APMW-5	5-6-24	1145	G	Water													2			
APMW-18	5-6-24	1232	G	Water					1											
APMW-19	5-6-24	1337	G	Water													a lite			
APMW-4	5-6-24	1428	G	Water																
APMW-6	5-6-24	1532	G	Water					1								100			
APMW-8A	5-6-24	1627	G-	Water													100			
APMW-10	5-6-24	1742	G	Water					1											
APMW-11	5-6-24	1832	G	Water		2	V	7	V								100			
Rossible Hazard Identification Non-Hazard Flammable Skin Irritant Deliverable Requested: 1, II, III, IV, Other (specify)	Poison B 🛄 Unkn	own	Radiologica	1	_	\square_R	eturn	To C	lien	t		Dispo	s ed if sal By		ples a			d longer than 1	month) Months	
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Custody Seals Intact: Custody Seal No.:						Cooler Temperature(s) [®] C and Other Remarks:														

Eurofins Cedar Falls 3019 Venture Way

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Chain of Custody Record

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Environment Testing

Cedar Falls,	IA 50613
Phone (319)	277-2401 Phone (319) 277-2425

Client Information	Sampler: Doc	19 4/1	Shirle	ev .1					Carrie	r Trackir	g No(s):			COC No: 310-70847-15390.2				
Client Contact:	Sampler: Doc Phone: 308	- 5 20	-1174	E-Mail			-	tour	ofiner	18.000		State Nebr	of Origin				Page: Page 2 of 2	
Doug Harris Company:	300	060-	ey. I noi	Analysis Request										-	Job #:			
Nebraska Public Power District	Due Date Requeste				An	alysis		lues	tea			1	Preservation Codes	5:				
6089 S Hwy 25 Geraid Gentleman Station South							Sulfate								120	A - HCL	M - Hexane N - None	
City: Sutherland	TAT Requested (da	iys):						s pue								3	B - NaOH C - Zn Acetate	0 - AsNaO2 P - Na2O4S
State, Zip: NE, 69165	Compliance Projec	t: ∆Yes /	No					ride									E - NaHSO4	Q - Na2SO3 R - Na2S2O3
Phone	PO #:					Selenium		, Fluo									G - Amchlor	S - H2SO4 T - TSP Dodecahydrate
308 - 530 - 1124 Email:	WO #:				(oN			loride								13	I - Ice	U - Acetone V - MCAA
ddharri@nppd.com	Project #:				es or	Calclum,		D) CH								SIOL	J - DI Water K - EDTA	W - pH 4-5 Y - Trizma
Project Name: Gerald Gentleman Station	31007155				Yes o			ŪW)								containers	L - EDA Other:	Z - other (specify)
Site: GGS	SSOW#:				Samp	Boro	g	280								of 1		
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APMW-13	5-7-24	1037	G W	ater		1	1	1	5							68		
APMW-14	5-7-24	1122	G W	/ater				1	1							16		
Duplicate	5-6-24	1640	G W	/ater		1	V	a	V	_								
				/ater									_			270		
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Possible Hazard Identification	oison B 🔲 Unki	nown	Radiological				Returr						sal By				hive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)					Sp	ecial	Instr	uctio	ns/Q	C Req	uireme	ents:						
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					Cooler Temperature(s) °C and Other Remarks:													
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TestAmerica Omaha SC 268

eurofins Environment Testing

3019 Venture Way Cedar Falls, IA 50613 Phone (319) 277-2401 Phone (319) 277-2425

Phone: Book Same of Dage: Page: Page: Doug Harris Base of Dage: Page: Page: Page: Doug Harris Matthew.Hummel@et.eurofinsus.com Job #: Page: P		Sampler:		nnie	Lab PN Humr		atthe	wR					Carrie	r Trackir	g No(s):			310-92182-22930.1	
Sample Monification Sample Matrix Matrix Matrix Matrix Matrix Sign Product Contract Product Contrac	Client Information	Phone:		State of Orig										Page:					
Sample Monification Sample Matrix Matrix Matrix Matrix Matrix Sign Product Contract Product Contrac	Doug Harris	308-	ımme	nmel@et.eurofinsus.com															
Barrier Barrier Due Das frequentation Due Das frequentation All Requested (density) String for damage <	Company:			PWSID:						Ап	alvsi	is Re	ques	ted				JOD #.	
State 34 March 26 Grand Gentleman Station South AT Requested Station South AT Requested Station South	Address:	Due Date Requeste	d:		_	198					Ť		İΠ				3		
Aff Recursted Gays: Aff Recursted Gays:<	6089 S Hwy 25 Gerald Gentleman Station South					E.												A - HCL N	
Company	City:	TAT Requested (day	ys):															B - NaOH O	- AsNaO2
Name P is							cay											D - Nitric Acid	
Processor	NE, 69165	Compliance Project	t: ∆Yes ∆	No	_	题	v de										18		
addition (1) addition (1) <td< td=""><td>Phone:</td><td></td><td>222</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>G - Amchior T</td><td> TSP Dodecahydrate </td></td<>	Phone:		222															G - Amchior T	 TSP Dodecahydrate
App mw-++ 5-6-24 IG45 G Water V			JZ3)			Î			orlde								20	I-lce V	
App mw-++ 5-6-24 IG45 G Water V	ddharri@nppd.com	1				No)	FPC	P	E								2	J - DI Water W	V - pH 4-5
App mw-++ 5-6-24 IG45 G Water V	Project Name:					Ye	26 (G	28 (0	ĝ			8					tain	1 504	
App mw-++ 5-6-24 IG45 G Water V	GGS CCR & Landfill Assessment Monitoring		_			(Yet	ш-2:	2-E	Š								COU	Other:	
App mw-++ 5-6-24 IG45 G Water V	She: GGS					Sar	adiu	adiu	-28L								5		
App mw-++ 5-6-24 IG45 G Water V				Sample Ma	atrix	nsn NSN	6 - R	8	GFM	ş							bđr		
App mw-++ 5-6-24 IG45 G Water V				Type (w	water,	a life	3a22	Ra22	В,	. 747			6 (Nu		
App mw-++ 5-6-24 IG45 G Water V				(C=comp, O=w	aste/oil,	eld	15.1	120	156A	1208							otal	Special Instr	nuctione/Note:
AP mW-++ 5-6-24 1645 G Water V	Sample Identification	Sample Date	Time	Contraction of the local division of the loc		E a	A	10000		August 1	52458	10.5 (64	10050	3832	10 000	See also	X	Special Hist	fuctions/Note:
A much 9-6-24 84) G Water V <td></td> <td>~</td> <td>~</td> <td>the second second</td> <td></td> <td>Δ</td> <td>D</td> <td></td> <td>1</td> <td>U</td> <td></td> <td>-</td> <td>1000</td> <td></td> <td>1000</td> <td>100717520</td> <td>P</td> <td></td> <td></td>		~	~	the second second		Δ	D		1	U		-	1000		1000	100717520	P		
Mater Valer Valer <td< td=""><td>APMW-4</td><td>5-6-24</td><td>1645</td><td>G M</td><td>ater</td><td></td><td>V</td><td>V</td><td>V</td><td>\mathbf{V}</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	APMW-4	5-6-24	1645	G M	ater		V	V	V	\mathbf{V}									
Mater Valer Valer <td< td=""><td>A P MW-11</td><td></td><td></td><td></td><td>ater</td><td></td><td>V</td><td>V</td><td>V</td><td>V</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	A P MW-11				ater		V	V	V	V									
Mater Valer Valer <td< td=""><td></td><td></td><td></td><td></td><td>ater</td><td></td><td>-</td><td>V</td><td></td><td>$\overline{\mathbf{v}}$</td><td></td><td></td><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>					ater		-	V		$\overline{\mathbf{v}}$			12						
Prossible Hazard Identification Poison B Unknown Radiological Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Relinquished by: Date/Time: Company Custody Seals Intact: Custody Seal No.:: Company	Duplicate	5-6-24	1851		-	-			V	4		-	-			_	43,6		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:				V	ater		-	-		-			-				122		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:													_			_	1485		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:																			
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:																			
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:							-		-			+	-		-		107		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date: 1/1/2/ Time: /000 Method of Shipment: /0/2/ Months Relinquished by: Date/Time: Company Received by: Date/Time: Company Custody Seal Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: Company							-	-	-			-	_		-	-	100		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:																		-	
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:																	100		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:				ł			+	-	-	1							19		
Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Deliverable Requested: 1, II, III, IV, Other (specify) Date:							1_								comple		tain	ed longer than 1 m	nonth)
Deliverable Requested: I, II, III, IV, Other (specify) Date: 0/1/2/ Time: 000 Method of Shipment / 0/2/ Empty Kit Relinquished by: Date/Time: Company Received by: Date/Time: Company Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: Company Cooler Temperature(s) °C and Other Remarks:	Possible Hazard Identification					Sa													
Deliverable Requested: 1, 11, 11, 11, 10, Other (specify) Date: 4/1/2/ Time: / DOO Method of Shipment / Dot Empty Kit Relinquished by: Date/Time: Company Received by: Date/Time: Company Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: Company	Non-Hazard Flammable Skin Irritant Poi	son B 🔛 Unkr	nown	Radiological	-							quiren	_	usar by	LaD		AIG		
Relinquished by: Date/Time: Date/Time: Company Relinquished by: Date/Time: Company Date/Time: Date/Time: Company Date/Time: Date/Time: Company Relinquished by: Date/Time: Company Relinquished by: Date/Time: Company Received by: Date/Time: Company Received by: Date/Time: Company Could y Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:	Deliverable Requested: I, II, III, IV, Other (specify)					J						quiron							
Relinquished by: Date/Time: Date/Time: Company Relinquished by: Date/Time: Company Date/Time: Date/Time: Company Date/Time: Date/Time: Company Relinquished by: Date/Time: Company Relinquished by: Date/Time: Company Received by: Date/Time: Company Received by: Date/Time: Company Could y Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:	Empty Kit Relinquished by:		Date: 4	1-16.24		Time	1	0	0	0				Method			2	~	0
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Relinquished by: Date/Time: Company Received by: Date/Time: Company Custody Seals Intact: Custody Seals No.: Cooler Temperature(s) °C and Other Remarks: Cooler Temperature(s) °C and Other Remarks:	Joughn Harris					PD	Rec	eived	by:			_		-	Date	/Time:			Company
Relinquished by: Date/Time: Company Necessory Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:	Relinquished by:	Date/ I ime:																	0
Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:	Relinquished by:	Date/Time:		Com	pany		Rec	ceived	by:						Date	/Time:			company
Custody Seals Intact: Custody Seal No.					_		Cor	oler To	mpera	aturo/e	s) °C an	d Other	Remar	(S:			-		
							000				., o un						-		

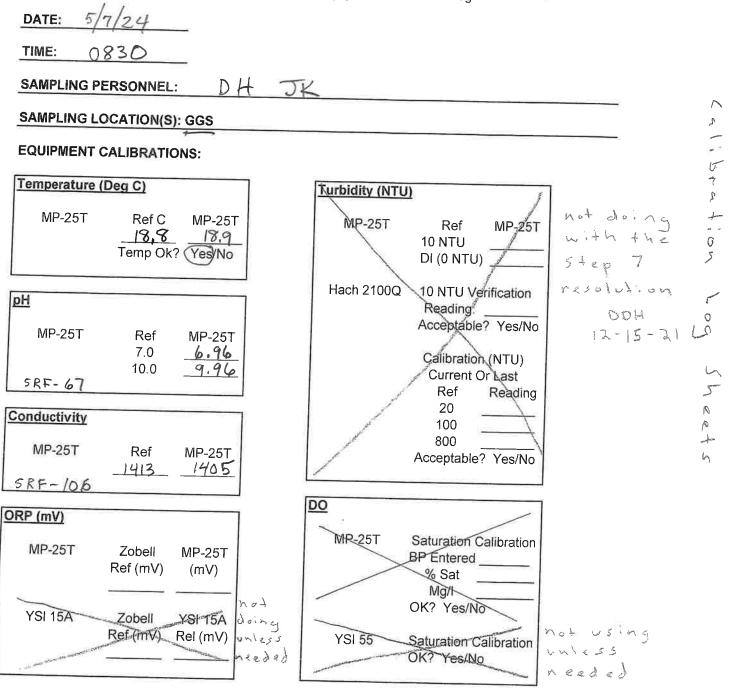
Nebraska Public Power District - Gerald Gentleman Station Monitoring Well Equipment Calibration Log

DATE:	5/6/24
	//
TIME:	0730

SAMPLING PERSONNEL: DH JK 2 SAMPLING LOCATION(S): GGS EQUIPMENT CALIBRATIONS: 5194 1:04 Temperature (Deg C) Turbidity (NTU) not duing MP-25T Ref C **MP-25T** MP-25T MP-25T Ref 19,97 19.97 with the 10 NTU Temp Ok? (Yes)No DI (0 NTU) Step 1 resolution Hach 2100Q 10 NTU Verification pН Reading. DDH Acceptable? Yes/No 12-15-21 MP-25T MP-25T Ref 7.0 6,98 Calibration (NTU) 10.0 9.98 Current Or Last 5RF-69 Ref Reading RRT 20 Conductivity 100 800 **MP-25T** Ref **MP-25T** Acceptable? Yes/No 1413 1407 SRF-104 DO ORP (mV) **MR-25T** Saturation Calibration **MP-25T** Zobell **MP-25T** BP Entered Ref (mV) (mV)% Sat Mg/I not OK? Yes/No YSI 15A Zobell doing YSI T5A not using Ref (mV) Rel (mV) unless **YSI 55** Saturation Calibration UNIE 55 reded OK? Yes/No needed

Sprinkles early . Windy OBSERVATIONS/FIELD NOTES DURING SAMPLING EVENT:

Nebraska Public Power District - Gerald Gentleman Station Monitoring Well Equipment Calibration Log



WEATHER CONDITIONS: Sunny & Windy

OBSERVATIONS/FIELD NOTES DURING SAMPLING EVENT:

WELL PURGING-FIELD QUALITY MEASUREMENTS FORM

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Well Numbe Field Persor Sampling O Identify MP	nnel rganization_ TOC	MW- <u>16</u> Dou	_NPPD	its _Date_ <u>5</u> JWK							Depth to <u>18.0 / 98.0</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>96.72</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	βH	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Started pumping @ 0900
0910	87.98	230	200		13,06	838.6	7.04	/	/	/	
0915					13.14	841.6	7.03	/	/	/	
0920						1	7.03		/	/	-
0925					13,28	850,4	7.04	1	/	/	
0930					13.30	850,0	7.03	/	/	190	Ecosense ORP15A
0932	87,98	3									500 ml unpreserved
0935	2										250 ml preserved
0938											500 ml unpreserved 250 ml preserved 250 ml unpreserved
					-			-			
Bottle Regu	alor 100 oci		-								
	25-5	-									

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Well Numbe Field Persor Sampling O Identify MP	rganization_ TOC	Vame) MWDou Dou		its. _Date JWK 11_js_0		<u></u>					Depth to <u>76.01</u> <u>96.0</u> of Screen <i>Top</i> Bottom Pump Intake at (<i>ft. below MP</i>) <u>92.73</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WINDY Started pumping at 0955
1005	84,36	230'	200	/	13.91	753.9	7.06	/	/	/	
1010					13.77	752.8	7.06	/	/	/	
1015					13,60	751,7	7.06	/	/	/	n
1020					13.61	751.0	7.08	/	/	/	
1025					13,78	750.5	7,07	/	/	187	Ecosense ORP15A
1027	84.3*	7									500 ml unpreserved
1030											250 ml preserved
1032											500 ml unpreserved 250 ml preserved 250 ml unpreserved
Bottle Regul	ator 100 psi	5									

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Well Number Field Person Sampling O Identify MP	nel_ rganization_ TOC	MW- <u>15</u> Dol	ig Harris NPPD	Date 5	-6-24 K						Depth to 88.0/ 108.7 of Screen Top Bottom Pump Intake at (ft. below MP) 107.7 Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WINDY Started pumping at 1055
1100	104.23	230'	200	/	14.45	751,2	7.20	/	/		
1105					14,56	749.2	7.22		/	-	
1110					14.29	746.7	7.23	and the second second	/	/	9
1115					14.29	746.9	7.23	/	Participant -	-	
1120					14,56	747.2	7.23	/	/	159	Ecosense ORP-15A
1122	104.30)									500 preserved
1125											250 unpreserved
1127											500 preserved 250 unpreserved 250 preserved
		-									
					-		5	-			
Bottle Regul											×

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Vater epth elow MP t)	Pump Dial Setting	Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	1 1	
		- 1	10				(intu)				Comments
				purg s ji		1-3 enou	The second se	iliz Wat	a-110	5	get samples
			*	See	wat	er	evel	no.	t e		
d	ge+	5	amp		101	an	+ici			u	e would
					due	10	2 0	vat-	er l	ev	
~											250 ml Unpreserved
											250 ml Unpreserved
r 100 psi						-					
No Bu SI	μω μ i. οω	ter ter bos	leve umps	- d = 1 fead	evel vat	bei	23-	рин 7 с	P P Pm	2	setting irrigation yet
e	100 psi N 15 B J	No wa But in Slow	100 psi No water But it p Slow but	100 psi No water leve But it pumpsi Slow but s	100 psi No water level - 1 But it pumped u Slow but stead	No water level - level But it pumped water Slow but steady	No water level - level be But it pumped water Slow but steady	No water level - level below But it pumped water 23- Slow but steady	No water level - level below pun But it pumped water 23-7 a	No water level - level below pump But it pumped water 23-7 CPM	d get samples - not anticipated u due to water lev

Page _____ of ____

WELL PURGING-FIELD QUALITY MEASUREMENTS FORM

Identify MP	TOC	MW- 18 Dou Dou		its. Date 5- TWK (is 04							Depth to <u>1043/124,8</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>122,04</u> Purging Device (pump type)Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (m!/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рH	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WINDY Started pumping at 1200
1210	113.92	. 230'		/	14.75	621,4	7.28	1	/	1	
1215				.,		1	7,29	1	/	//	
1220					117.0	1	7.29		/	1	
1225					14.94	604.7	7.29	1	1	/	
1230	2				14.94	605,4	7.29	/	1	148	Ecosense ORPISA
1232	114.05	5									500 ml unpreserved
1235	1.12										250ml preserved
1237											500 ml unpreserved 250 ml unpreserved 250 ml unpreserved
				_							
									-		
			-								
	1	-	-								
Bottle Regul	25-5 24-(

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Identify MP	rganization_		GGS Ash P g Harris; _NPPD	its. _Date <i>S</i> - JWK	-6-24						Depth to <u>127.</u> / <u>/47.0</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>/44.2</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)		Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	10	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Windy Started pumping @ 1305
1315	137.40	230	200		15.23	632.7	7,30		1	1	
1320							7.26	1	1	/	
1325							7.26	v 1	/	/	
1330					15.31	632.8	7.26	/	1	1	
1335					15,30	633.0	7,27	/	/	162	Ecosense ORP15A
1337	137,52	8									500 ml Unpreserved
1340											250 ml Preserved
1342											500 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
Bottle Regul	ator 100 psi	,									

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Location (Si Well Numbe Field Persor Sampling O Identify MP Well Conditi	TOC	AW- 4 Dou		its. _Date_5- JK AIL is		, w	6. 6. 6.				Depth to <u>III-O / I3I-O</u> of Screen Top Bottom Pump Intake at (ft. below MP) Purging Device (pump type) Micropurge Bladder Pump
Time	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WINDY Started pumping@1355
1405	128.35	230'	120		16.13	404.8	7.60	/		/	
1410						398,9		1	/	1	
1415					16.38	395.8	7,68	1	1	1	-
1420					A 5 2	393.5			1	1	
(425					16.32	397.3	7.68	[1	148	Ecosense ORPISA
1428	No Readi	ng	- wate Belo	r lev.	el dro	sped					500ml Unpreserved 250ml Preserved
1436											250 ml unpreserved
1645										/	1000 Pres. Assessment
1710	>					Assess	ment	Moni	itorine		1000 Preserved Assessment
1720						Sa	mpl	25			250 Unpreserved Assessment
1730											250 Preserved Assessment
Bottie Regul	29-6 23-7										

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Field Persor Sampling O Identify MP	ite/Facility N er <u>A</u> PI nnel_ rganization_ TOC ons/Field O	Dou	g Harris NPPD		-6-24 0K						Depth to <u>110.0/129.9</u> of Screen Top Bottom Pump Intake at (ft. below MP) / 28.9 Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WINDY Started pumping @ 1455
1505	121,70	230'	200		14,22	428.3	7,39	1	1	Januar	
1510							7.52		sector	a marine a	
1515					13.73	391.4	7.51	1	1 mm		
1520					13.84	398,6	7.51	/		1	
1525					13.83	404.5	7.51	/	/	/	Ecosense ORPISA
1530					13.79	408,8	7.50	1	1	159	
1532	122,40										500 ml Unpreserved
1535											250 ml Unpreserved 250 ml Preserved
1538											250 ml Unpreserved
		1		-	-						
Bottle Regula	ator 100 psi	5							-		

More variability in WQ parameterpH at this well.

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Well Numbe Field Persor Sampling O Identify MP	rganization_ TOC	NW- <u>8 A</u> Dou	g Harris _NPPD	its. _Date_5 JWK		t					Depth to <u>104,7/_12.4.7</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>122.8</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)		Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping @ 1555
1605	113,13	230'	200		14.43	831.7	7,14	1	1	1	
1610						\$27,7		1	/	1	
1615					14.24	827.0	7.16	1	1	1/	4
1620					14,20	824.7	7.17	/	1		
1625					14.22	-822,4	7.17	/	/	146	Ecosense ORP15A
1627	113.27										500 m Unpreserved
1632											250 ml preserved
1635	-										250 ml Unpreserved
1640	>										500 ml Unpreserved - Duplicate
1643	3										250 ml Preserved-duplicate
1641											500 ml Unpreserved-Duplicate 250 ml Preserved-duplicate 250 ml Unpreserved-Duplicate
Bottle Regul	ator 100 psi										

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Well Numbe Field Persor Sampling O Identify MP	er <u>A</u> PN nnel rganization_ TOC	lame)(/IWDou Dou	g Harris NPPD	its _Date5- _5₩K (_75_0)			•, ;, ;,				Depth to <u>9/.0 / 130.27</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>129.27</u> Purging Device (pump type) Micropurge Bladder Pump
Clock Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Started pamping@ 1710
1720	121.25	2,30'	200		13,70	433.8	7.44	/	/	/	
1725				(2)			7.45			/	
1730			-				7.44		International States	/	17
1735							7,47		au ration and a second	/	
1740					13,43	430,1	7.46			151	Ecosense ORPISA
1742	121.96		-								500 ml Unpreserved
1745	-										250ml Preserved
1747								-			500 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
Bottle Regul	ator 100 psi										
	24-6										

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Identify MP	TOC	ame)(/WDou 		its. _Date_5- JWK // js 0			Depth to <u>96.0/115.74</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>114.74</u> Purging Device (pump type) Micropurge Bladder Pump							
Time (24hr)			Purge Rate (ml/min)	Cum. Volume Purged (ml)		Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping @ 1800			
1810	105.82	230'	200	/	13.18	562.5	7.30	/	/					
1815					13.15	559,3	7.32	/	/	/				
1820					13,12	553.6	7,30	/	/	/				
1825					13,06	553.5	7,31		/	/				
1830					13.00	552,4	7.32	/	/	152	EcoSense ORPISA			
1832	105.98	\$									500 ml Unpreserved			
1835											250 m Preserved			
1838											250 ml Unpreserved			
	1841									7	1,000 Preserved Assessment			
	1846	>									1,000 Preserved Assessment			
	1851			Ass	ess me	nt m	lon: to	rina			250 Preserved Assessment			
	1854	1			ampl			-	1		250 Unpreserved Assessment			
		1857	7						\backslash		Dupl. 1000 ml Preserved Assessment			
		1902	2								Dupl. 1000 ml Preserved Assessment			
Bottle Regula	alor 100 psi	190									Dupl, 250 ml Preserved Assessment			
	24-6										Dupl, 250 ml Unpreserved Assessment			

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Field Persor Sampling O Identify MP	nel rganization_ TOC	ame) AW2 Dou	g Harris NPPD	its Date 5 JWK All is	-7-24 OK	· · · · · · · · · · · · · · · · · · ·					Depth to <u>28, 01 109,82</u> of Screen Top Bottom Pump Intake at (ft. below MP) 108,92 Purging Device (pump type) Micropurge Bladder Pump
Time	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рH	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments WIND 30-40+ Started pumping @ 0915
0925	99.83	230'	200	/	13,20	1529	6,88	/	/	1	
0930	1					1496		1		1	
0935							6.89		/		7
0940					13.30	1496	6,88	/	1	/	
0945								1	1	210	EcoSense ORPISA
		4									
0947	99,84	F									500 ml Unpreserved
0950											250 ml Preserved
0952											500 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
				-							
			-	-						-	
	<u> </u>									-	
Bottle Regula	25-5			-						-	

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1.0

Location (S	ite/Facility N	lame)	GGS Ash P	ite			·····				
Well Numbe	er <u>A</u> PN	AW- 13	000710111	Date 5	-7-24	1					Depth to 95.0 / 115.95 of Screen Top Bottom
Field Perso	nnel	Dou	ig Harris	JWK	1						Pump Intake at (ft. below MP) <u>114.95</u> Purging Device (pump type) Micropurge Bladder Pump
Identify MP	rganization_ TOC		_NPPD				97 1				Purging Device (pump type)Micropurge Bladder Pump
Well Condit	ons/Field O	bservations:	All	IS OK							11/10/50/
Clock	Water	Pump Dial	Purge	Cum.	Temp. (C)	Spec.	pН	Turbidity	DO (mg/l)	ORP (mV)	Comments
	Depth below MP (ft)	Setting	Rate (ml/min)	Volume Purged (ml)		Conduct. (us/cm)		(ntu)			Started pumping @ 1005
1015	104.25	230'	200	X	13,38	1415	6.89	/	1	1	
1020				а. Т	13.35	1445	6,90	1	1	1	
1025					13.37	1442	6.90	/	/		
1030					13,38	1440	6.91	/	1	/	
1035					13,43	1441	6,90	1	/	174	EcoSense ORPISA
		-									
1037	104.37	2									500 ml Unpreserved
1040											500 ml Unpreserved 250 ml Preserved
1042											250 ml Unpreserved
Bottle Regul	ator 100 psi										
CPM 2	24-6										

<u>x</u>

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identity MP	IUC	lame)(MWDou 		its _Date_5- ΤωΚ 1 is 0 K	7-24						Depth to 90.1 / 109.95 of Screen Top Bottom Pump Intake at (ft. below MP) 108.95 Purging Device (pump type) Micropurge Bladder Pump
Clock Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping at 1052
1100	99.32	230'	200	X	13.75	1241	6.92	/	/	1	
1105							6.92	/	1	1	
1110							6.90	/	/	1	14
1115					13,79	1324	6.90		/	2	
1120					13.79	1319	6.91	1		171	EcoSense ORPISA
1122	99.35	5									500 ml Unpreserved
1125											250 ml Preserved
112-											500 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
Bottle Regu	ator 100 psi	-									

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

5 6

Attn: Doug Harris Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165

Generated 7/2/2024 1:24:14 PM Revision 1

JOB DESCRIPTION

Gerald Gentleman Station CCR & Landfill

JOB NUMBER

310-280659-1

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613



See page two for job notes and contact information.



Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Authorized for release by Matthew Hummel, Project Manager I <u>Matthew.Hummel@et.eurofinsus.com</u> (319)595-2010 Generated 7/2/2024 1:24:14 PM Revision 1

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Eurofins Cedar Falls

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Job ID: 310-280659-1

Job Narrative 310-280659-1

REVISION

The report being provided is a revision of the original report sent on 5/16/2024. The report (revision 1) is being revised due to: After issuing the report the client noticed a clerical error for the collection dates for samples: APMW-12, APMW-13, and APMW-14. The collections dates were corrected in this version of the report.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to
 demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the
 method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/8/2024 8:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.6°C.

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: APMW-16A (310-280659-1), APMW-17 (310-280659-2), APMW-15 (310-280659-3), APMW-5 (310-280659-4), APMW-18 (310-280659-5), APMW-19 (310-280659-6), APMW-4 (310-280659-7), APMW-6 (310-280659-8), APMW-8A (310-280659-9), APMW-10 (310-280659-10), APMW-11 (310-280659-11), APMW-12 (310-280659-12), APMW-13 (310-280659-13), APMW-14 (310-280659-15). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

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

Sample Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280659-

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280659-1	APMW-16A	Water	05/06/24 09:32	05/08/24 08:35
310-280659-2	APMW-17	Water	05/06/24 10:27	05/08/24 08:35
310-280659-3	APMW-15	Water	05/06/24 11:22	05/08/24 08:35
310-280659-4	APMW-5	Water	05/06/24 11:45	05/08/24 08:35
310-280659-5	APMW-18	Water	05/06/24 12:32	05/08/24 08:35
310-280659-6	APMW-19	Water	05/06/24 13:37	05/08/24 08:35
310-280659-7	APMW-4	Water	05/06/24 14:28	05/08/24 08:35
310-280659-8	APMW-6	Water	05/06/24 15:32	05/08/24 08:35
310-280659-9	APMW-8A	Water	05/06/24 16:27	05/08/24 08:35
310-280659-10	APMW-10	Water	05/06/24 17:42	05/08/24 08:35
310-280659-11	APMW-11	Water	05/06/24 18:32	05/08/24 08:35
310-280659-12	APMW-12	Water	05/07/24 09:47	05/08/24 08:35
310-280659-13	APMW-13	Water	05/07/24 10:37	05/08/24 08:35
310-280659-14	APMW-14	Water	05/07/24 11:22	05/08/24 08:35
310-280659-15	Duplicate	Water	05/06/24 16:40	05/08/24 08:35

Detection Summary

RL

5.00

5.00

0.100

0.500

50.0

1.0

RL

5.00

5.00

0.500

50.0

1.0

0.00200

0.00500

0.00200

MDL Unit

mg/L

SU

SU

MDL Unit

Result Qualifier

29.6

161

0.00277

0.128

106

576

29.4

132

119

494

7.7 HF

0.00237

0.00698

7.5 HF

Result Qualifier

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-16A

Client Sample ID: APMW-17

Client Sample ID: APMW-15

Analyte

Chloride

Sulfate

Arsenic

Boron

pН

Calcium

Analyte

Chloride

Sulfate

Arsenic

Calcium

Selenium

pН

Total Dissolved Solids

Total Dissolved Solids

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Lab Sample ID: 310-280659-1

Dil Fac D Method

5

5

1

1

1

1

1

Dil Fac D

5

5

1

1

1

1

1

9056A

9056A

6020B

6020B

6020B

Method

9056A

9056A

6020B

6020B

6020B

SM 2540C

SM 4500 H+ B

SM 2540C

SM 4500 H+ B

Lab Sample ID: 310-280659-2

5

Lab Sample ID: 310-280659-3

Lab Sample ID: 310-280659-4

Lab Sample ID: 310-280659-5

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Chloride	20.1	5.00	mg/L	5	9056A	Total/NA
Sulfate	113	5.00	mg/L	5	9056A	Total/NA
Arsenic	0.00273	0.00200	mg/L	1	6020B	Total/NA
Boron	0.118	0.100	mg/L	1	6020B	Total/NA
Calcium	99.7	0.500	mg/L	1	6020B	Total/NA
Total Dissolved Solids	478	50.0	mg/L	1	SM 2540C	Total/NA
pН	7.9 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW-5

Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D Method	Prep Type
Chloride	8.70	5.00		mg/L	5	9056A	Total/NA
Sulfate	31.4	5.00		mg/L	5	9056A	Total/NA
Arsenic	0.00540	0.00200		mg/L	1	6020B	Total/NA
Calcium	47.8	0.500		mg/L	1	6020B	Total/NA
Total Dissolved Solids	238	50.0		mg/L	1	SM 2540C	Total/NA
рН	8.2 HF	1.0		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW-18

Analyte	Result Qualifier	RL	MDL U	Jnit	Dil Fac	D	Method	Prep Type
Chloride	66.5	5.00	m	ng/L	5	_	9056A	Total/NA
Sulfate	44.5	5.00	m	ng/L	5		9056A	Total/NA
Arsenic	0.00256	0.00200	m	ng/L	1		6020B	Total/NA
Calcium	82.8	0.500	m	ng/L	1		6020B	Total/NA
Selenium	0.00576	0.00500	m	ng/L	1		6020B	Total/NA
Total Dissolved Solids	382	50.0	m	ng/L	1		SM 2540C	Total/NA
рН	7.7 HF	1.0	S	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

RL

5.00

5.00

0.500

50.0

1.0

RL

5.00

5.00

0.500

50.0

1.0

0.00200

0.00500

0.00200

0.00500

MDL Unit

mg/L

SU

SU

MDL Unit

Result Qualifier

35.7

86.1

84.0

416

42.5

26.6

51.5

246

8.0 HF

0.00429

0.0142

7.7 HF

Result Qualifier

0.0106

0.00362

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-19

Client Sample ID: APMW-4

Client Sample ID: APMW-6

Analyte

Chloride

Sulfate

Arsenic

Calcium

Selenium

Analyte

Chloride

Sulfate

Arsenic

Calcium

Selenium

pН

Total Dissolved Solids

pН

Total Dissolved Solids

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Lab Sample ID: 310-280659-6

Dil Fac D Method

5

5

1

1

1

1

1

Dil Fac D

5

5

1

1

1

1

1

9056A

9056A

6020B

6020B

6020B

Method

9056A

9056A

6020B

6020B

6020B

SM 2540C

SM 4500 H+ B

SM 2540C

SM 4500 H+ B

Lab Sample ID: 310-280659-7

	5
	8
	8 9

Lab Sample ID: 310-280659-8

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Chloride	30.3	5.00	mg/L	5	9056A	Total/NA
Sulfate	25.9	5.00	mg/L	5	9056A	Total/NA
Arsenic	0.00419	0.00200	mg/L	1	6020B	Total/NA
Calcium	54.8	0.500	mg/L	1	6020B	Total/NA
Selenium	0.00506	0.00500	mg/L	1	6020B	Total/NA
Total Dissolved Solids	258	50.0	mg/L	1	SM 2540C	Total/NA
pН	7.9 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW-8A

Lab Sample ID: 310-280659-9

Lab Sample ID: 310-280659-10

Analyte	Result Qu	ualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	73.6	5.00		mg/L	5	_	9056A	Total/NA
Sulfate	136	5.00		mg/L	5		9056A	Total/NA
Arsenic	0.00324	0.00200		mg/L	1		6020B	Total/NA
Calcium	121	0.500		mg/L	1		6020B	Total/NA
Selenium	0.0191	0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	520	50.0		mg/L	1		SM 2540C	Total/NA
pН	7.6 HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: APMW-10

Analyte	Result Qualifier	RL	MDL Uni	it Dil I	ac D	Method	Prep Type
Chloride	22.5	5.00	mg/	/L	5	9056A	Total/NA
Sulfate	43.8	5.00	mg/	/L	5	9056A	Total/NA
Arsenic	0.00290	0.00200	mg/	/L	1	6020B	Total/NA
Calcium	57.4	0.500	mg/	/L	1	6020B	Total/NA
Selenium	0.00568	0.00500	mg/	/L	1	6020B	Total/NA
Total Dissolved Solids	286	50.0	mg/	/L	1	SM 2540C	Total/NA
рН	7.8 HF	1.0	SU		1	SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

RL

5.00

5.00

0.500

50.0

1.0

RL

5.00

5.00

0.100

0.500

50.0

1.0

0.00200

0.00500

MDL Unit

mg/L

SU

SU

MDL Unit

Result Qualifier

31.7

58.4

80.5

352

159

270

0.00224

0.262

165

992

7.4 HF

7.9 HF

7.7 HF

Result Qualifier

0.0132

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-11

Analyte

Chloride

Sulfate

Calcium

Selenium

Analyte

Chloride

Sulfate

Arsenic

Calcium

Boron

pН

pН

pН

Total Dissolved Solids

Total Dissolved Solids

Job II	D: 310-2806	659-1
--------	-------------	-------

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Lab Sample ID: 310-280659-11

Dil Fac D Method

5

5

1

1

1

1

5

5

1

1

1

1

1

Dil Fac D Method

9056A

9056A

6020B

6020B

9056A

9056A

6020B

6020B

6020B

SM 2540C

SM 4500 H+ B

Lab Sample ID: 310-280659-13

Lab Sample ID: 310-280659-14

SM 4500 H+ B

SM 2540C

SM 4500 H+ B

Lab Sample ID: 310-280659-12

5

Client Sample ID: APMW-13

Client Sample ID: APMW-12

Analyte	Result Qu	ualifier RL	MDL U	Jnit	Dil Fac	D Method	Prep Type
Chloride	141	5.00	m	ng/L	5	9056A	Total/NA
Sulfate	256	5.00	m	ng/L	5	9056A	Total/NA
Arsenic	0.00257	0.00200	m	ng/L	1	6020B	Total/NA
Boron	0.252	0.100	m	ng/L	1	6020B	Total/NA
Calcium	160	0.500	m	ng/L	1	6020B	Total/NA
Total Dissolved Solids	962	50.0	m	ng/L	1	SM 2540C	Total/NA
pН	7.6 HF	=	S	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW-14

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Chloride	133	5.00	mg/L	5	9056A	Total/NA
Sulfate	193	5.00	mg/L	5	9056A	Total/NA
Arsenic	0.00226	0.00200	mg/L	1	6020B	Total/NA
Boron	0.225	0.100	mg/L	1	6020B	Total/NA
Calcium	164	0.500	mg/L	1	6020B	Total/NA
Total Dissolved Solids	878	50.0	mg/L	1	SM 2540C	Total/NA
рН	7.5 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: Duplicate

Client Sample ID: Dupl	icate				Lab Sam	ple ID: 310)-280659-15
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	72.1	5.00		mg/L	5	9056A	Total/NA
Sulfate	136	5.00		mg/L	5	9056A	Total/NA
Arsenic	0.00323	0.00200		mg/L	1	6020B	Total/NA
Calcium	122	0.500		mg/L	1	6020B	Total/NA
Selenium	0.0192	0.00500		mg/L	1	6020B	Total/NA
Total Dissolved Solids	548	50.0		mg/L	1	SM 2540C	Total/NA

1.0

SU

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Total/NA

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-16A Date Collected: 05/06/24 09:32 Date Received: 05/08/24 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.6		5.00		mg/L			05/13/24 18:47	5
Fluoride	<1.00		1.00		mg/L			05/13/24 18:47	5
Sulfate	161		5.00		mg/L			05/13/24 18:47	Ę
Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00277		0.00200		mg/L		05/09/24 09:30	05/13/24 20:44	
Boron	0.128		0.100		mg/L		05/09/24 09:30	05/13/24 20:44	
Calcium	106		0.500		mg/L		05/09/24 09:30	05/14/24 15:26	
Selenium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 20:44	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids (SM 2540C)	576		50.0		mg/L			05/09/24 16:16	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
pH (SM 4500 H+ B)	7.5	HF	1.0		SU			05/08/24 10:32	

Matrix: Water

Lab Sample ID: 310-280659-1

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-17 Date Collected: 05/06/24 10:27 Date Received: 05/08/24 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.4		5.00		mg/L			05/13/24 19:24	5
Fluoride	<1.00		1.00		mg/L			05/13/24 19:24	5
Sulfate	132		5.00		mg/L			05/13/24 19:24	Ę
Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00237		0.00200		mg/L		05/09/24 09:30	05/13/24 21:03	
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:03	
Calcium	119		0.500		mg/L		05/09/24 09:30	05/14/24 15:32	
Selenium	0.00698		0.00500		mg/L		05/09/24 09:30	05/13/24 21:03	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids (SM 2540C)	494		50.0		mg/L			05/09/24 16:16	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			05/08/24 10:33	

Matrix: Water

Lab Sample ID: 310-280659-2

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-15 Date Collected: 05/06/24 11:22 Date Received: 05/08/24 08:35

Method:

Analyte Chloride

Fluoride Sulfate

Method: Analyte Arsenic Boron Calcium Selenium

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
20.1		5.00		mg/L			05/13/24 20:02	5	
<1.00		1.00		mg/L			05/13/24 20:02	5	
113		5.00		mg/L			05/13/24 20:02	5	
: SW846 6020B - Metals (ICP/MS)									
	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
0.00273		0.00200		mg/L		05/09/24 09:30	05/13/24 21:05	1	
0.118		0.100		mg/L		05/09/24 09:30	05/13/24 21:05	1	
0.118 99.7		0.100 0.500		mg/L mg/L		05/09/24 09:30 05/09/24 09:30		1 1	

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	478		50.0		mg/L			05/09/24 16:16	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			05/08/24 10:34	1	

Matrix: Water

Lab Sample ID: 310-280659-3

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-5 Date Collected: 05/06/24 11:45 Date Received: 05/08/24 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.70		5.00		mg/L			05/13/24 20:15	5
Fluoride	<1.00		1.00		mg/L			05/13/24 20:15	5
Sulfate	31.4		5.00		mg/L			05/13/24 20:15	5
_ Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	· · ·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00540		0.00200		mg/L		05/09/24 09:30	05/13/24 21:08	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:08	1
Calcium	47.8		0.500		mg/L		05/09/24 09:30	05/14/24 15:36	1
Selenium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 21:08	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	238		50.0		mg/L			05/09/24 16:16	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	8.2	HF	1.0		SU			05/08/24 10:35	1

Matrix: Water

Lab Sample ID: 310-280659-4

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-18 Date Collected: 05/06/24 12:32 Date Received: 05/08/24 08:35

=									
Method: SW846 9056A - Anions	s, Ion Chro	matograpl	ny						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.5		5.00		mg/L			05/13/24 20:28	Ę
Fluoride	<1.00		1.00		mg/L			05/13/24 20:28	5
Sulfate	44.5		5.00		mg/L			05/13/24 20:28	Ę
Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	0.00256		0.00200		mg/L		05/09/24 09:30	05/13/24 21:10	
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:10	1
Calcium	82.8		0.500		mg/L		05/09/24 09:30	05/14/24 15:39	
Selenium	0.00576		0.00500		mg/L		05/09/24 09:30	05/13/24 21:10	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids (SM 2540C)	382		50.0		mg/L			05/09/24 16:16	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			05/08/24 10:36	

Matrix: Water

Lab Sample ID: 310-280659-5

2 3 4 5 6 7 8 9

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-19 Date Collected: 05/06/24 13:37 Date Received: 05/08/24 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.7		5.00		mg/L			05/13/24 20:41	
Fluoride	<1.00		1.00		mg/L			05/13/24 20:41	Ę
Sulfate	86.1		5.00		mg/L			05/13/24 20:41	Ę
Method: SW846 6020	B - Metals (ICP/MS)	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Method: SW846 6020					iiig/ L				
Method: SW846 6020 Analyte	B - Metals (ICP/MS) Result	Qualifier		MDL	Unit	<u>D</u>	Prepared 05/09/24 09:30	Analyzed	Dil Fac
Method: SW846 6020 Analyte Arsenic	B - Metals (ICP/MS)	Qualifier	RL	MDL	Unit mg/L	<u>D</u>	· · · · · · · · · · · · · · · · · · ·	05/13/24 21:12	Dil Fac
Method: SW846 6020	B - Metals (ICP/MS) Result 0.00362	Qualifier	RL	MDL	Unit	D	05/09/24 09:30	05/13/24 21:12 05/13/24 21:12	Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	416		50.0		mg/L			05/09/24 16:16	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			05/08/24 10:37	1	-

5

6

Matrix: Water

Lab Sample ID: 310-280659-6

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-4 Date Collected: 05/06/24 14:28 Date Received: 05/08/24 08:35

Job I	D: 31	0-280	0659-1

6

Lab Sample ID: 310-280659-7 Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride 5.00 05/13/24 20:53 42.5 mg/L 5 Fluoride 5 <1.00 1.00 05/13/24 20:53 mg/L Sulfate 26.6 5.00 mg/L 05/13/24 20:53 5 Method: SW846 6020B - Metals (ICP/MS) MDL Unit Analyte Result Qualifier RL D Prepared Dil Fac Analyzed 0.00200 05/09/24 09:30 05/13/24 21:14 Arsenic 0.00429 mg/L 1 Boron <0.100 0.100 mg/L 05/09/24 09:30 05/13/24 21:14 1 0.500 mg/L 05/09/24 09:30 05/14/24 16:24 Calcium 51.5 1 0.00500 05/09/24 09:30 05/13/24 21:14 **Selenium** 0.0142 mg/L 1 **General Chemistry** Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac Total Dissolved Solids (SM 2540C) 246 50.0 mg/L 05/09/24 16:16 1 RL Analyte **Result Qualifier** RL Unit D Prepared Analyzed Dil Fac pH (SM 4500 H+ B) 8.0 HF 1.0 SU 05/08/24 10:46 1

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-6 Date Collected: 05/06/24 15:32 Date Received: 05/08/24 08:35

Job ID: 310-280659-1

 Lab Sample ID: 310-280659-8 Matrix: Water
 3

 D
 Prepared
 Analyzed
 Dil Fac
 5

Method: SW846 9056A - Anion	s, Ion Chro	matograp	hy							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	30.3		5.00		mg/L			05/13/24 21:06	5	
Fluoride	<1.00		1.00		mg/L			05/13/24 21:06	5	6
Sulfate	25.9		5.00		mg/L			05/13/24 21:06	5	
Method: SW846 6020B - Metals	(ICP/MS)									
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	0
Arsenic	0.00419		0.00200		mg/L		05/09/24 09:30	05/13/24 21:16	1	0
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:16	1	
Calcium	54.8		0.500		mg/L		05/09/24 09:30	05/14/24 16:26	1	9
Selenium	0.00506		0.00500		mg/L		05/09/24 09:30	05/13/24 21:16	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	258		50.0		mg/L			05/09/24 16:16	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			05/08/24 10:42	1	

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-8A Date Collected: 05/06/24 16:27 Date Received: 05/08/24 08:35

 Method: SW846 9056A - Anions	, Ion Chro	matograp	hy						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.6		5.00		mg/L			05/13/24 21:18	5
Fluoride	<1.00		1.00		mg/L			05/13/24 21:18	5
Sulfate	136		5.00		mg/L			05/13/24 21:18	5
	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00324		0.00200		mg/L		05/09/24 09:30	05/13/24 21:19	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:19	1
Calcium	121		0.500		mg/L		05/09/24 09:30	05/14/24 16:28	1
Selenium	0.0191		0.00500		mg/L		05/09/24 09:30	05/13/24 21:19	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	520		50.0		mg/L			05/09/24 16:16	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.6	HF	1.0		SU			05/08/24 10:45	1

Job ID: 310-280659-1

Matrix: Water

Lab Sample ID: 310-280659-9

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-10 Date Collected: 05/06/24 17:42 Date Received: 05/08/24 08:35

pH (SM 4500 H+ B)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.5		5.00		mg/L			05/13/24 21:32	5
Fluoride	<1.00		1.00		mg/L			05/13/24 21:32	5
Sulfate	43.8		5.00		mg/L			05/13/24 21:32	5
_ Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00290		0.00200		mg/L		05/09/24 09:30	05/13/24 21:21	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:21	1
Calcium	57.4		0.500		mg/L		05/09/24 09:30	05/14/24 16:31	1
Selenium	0.00568		0.00500		mg/L		05/09/24 09:30	05/13/24 21:21	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	286		50.0		mg/L			05/09/24 16:16	1
Analyte	D	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

1.0

7.8 HF

SU

Job ID: 310-280659-1

Matrix: Water

Lab Sample ID: 310-280659-10

05/08/24 10:43

1

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-11 Date Collected: 05/06/24 18:32 Date Received: 05/08/24 08:35

Analyte

pH (SM 4500 H+ B)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.7		5.00		mg/L			05/13/24 21:45	5
Fluoride	<1.00		1.00		mg/L			05/13/24 21:45	5
Sulfate	58.4		5.00		mg/L			05/13/24 21:45	5
- Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/09/24 09:30	05/13/24 21:23	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:23	1
Calcium	80.5		0.500		mg/L		05/09/24 09:30	05/14/24 16:33	1
Selenium	0.0132		0.00500		mg/L		05/09/24 09:30	05/13/24 21:23	1
_ General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	352		50.0		mg/L			05/09/24 16:16	1

RL

1.0

RL Unit

SU

D

Prepared

Result Qualifier

7.7 HF

Job ID: 310-280659-1

Matrix: Water

Lab Sample ID: 310-280659-11

Dil Fac

1

Analyzed

05/08/24 10:47

RL

5.00

1.00

5.00

RL

0.00200

0.100

0.500

RL

RL

1.0

50.0

0.00500

MDL Unit

MDL Unit

MDL

RL Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

Unit

mg/L

SU

D

D

D

D

Prepared

Prepared

05/09/24 09:30

Prepared

Prepared

05/09/24 09:30 05/13/24 21:36

05/09/24 09:30 05/14/24 16:37

05/09/24 09:30 05/13/24 21:36

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Method: SW846 9056A - Anions, Ion Chromatography

Result Qualifier

Result Qualifier

Result Qualifier

Result Qualifier

7.4 HF

159

270

<1.00

0.00224

< 0.00500

0.262

165

992

Client Sample ID: APMW-12 Date Collected: 05/07/24 09:47 Date Received: 05/08/24 08:35

Method: SW846 6020B - Metals (ICP/MS)

Analyte

Chloride

Fluoride

Sulfate

Analyte

Arsenic

Calcium

Selenium

Analyte

Analyte

General Chemistry

pH (SM 4500 H+ B)

Total Dissolved Solids (SM 2540C)

Boron

Analyzed

05/13/24 21:58

05/13/24 21:58

05/13/24 21:58

Analyzed

05/13/24 21:36

Analyzed

05/09/24 16:16

Analyzed

05/08/24 10:42

Job ID: 310-280659-1

Lab Sample ID: 310-280659-12 **Matrix: Water**

6

Dil Fac

Dil Fac

Dil Fac

Dil Fac

5

5

5

1

1

1

1

1

1

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-13 Date Collected: 05/07/24 10:37 Date Received: 05/08/24 08:35

Job	ID: 310-280659-	·1

Lab Sample ID: 310-280659-13 Matrix: Water

Method: SW846 9056A - Anions	s, Ion Chrc	omatograph	าง							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	141		5.00		mg/L			05/13/24 22:38	5	
Fluoride	<1.00		1.00		mg/L			05/13/24 22:38	5	6
Sulfate	256		5.00		mg/L			05/13/24 22:38	5	
_ Method: SW846 6020B - Metals	(ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	0
Arsenic	0.00257		0.00200		mg/L		05/09/24 09:30	05/13/24 21:38	1	0
Boron	0.252		0.100		mg/L		05/09/24 09:30	05/13/24 21:38	1	
Calcium	160		0.500		mg/L		05/09/24 09:30	05/14/24 16:39	1	9
Selenium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 21:38	1	10
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	962		50.0		mg/L			05/09/24 16:16	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
pH (SM 4500 H+ B)	7.6	HF	1.0		SU			05/08/24 10:39	1	

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-14 Date Collected: 05/07/24 11:22 Date Received: 05/08/24 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		5.00		mg/L			05/13/24 22:52	
Fluoride	<1.00		1.00		mg/L			05/13/24 22:52	:
Sulfate	193		5.00		mg/L			05/13/24 22:52	Ę
Method: SW846 6020	B - Metals (ICP/MS)	Qualifier		MDL	Ū	D	Prepared		Dil Fa
Method: SW846 6020B Analyte	B - Metals (ICP/MS) Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Method: SW846 6020B Analyte	B - Metals (ICP/MS)			MDL	Ū	<u>D</u>	Prepared 05/09/24 09:30	Analyzed	
Method: SW846 6020E Analyte Arsenic	B - Metals (ICP/MS) Result		RL	MDL	Unit	D	05/09/24 09:30	Analyzed	
	B - Metals (ICP/MS) Result 0.00226		RL 0.00200	MDL	Unit mg/L	D	05/09/24 09:30 05/09/24 09:30	Analyzed 05/13/24 21:41	Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	878		50.0		mg/L			05/09/24 16:16	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	

Matrix: Water

Lab Sample ID: 310-280659-14

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: Duplicate Date Collected: 05/06/24 16:40 Date Received: 05/08/24 08:35

Method: SW846 9056A - Anions	, Ion Chro	matograph	ıy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.1		5.00		mg/L			05/13/24 23:05	5
Fluoride	<1.00		1.00		mg/L			05/13/24 23:05	5
Sulfate	136		5.00		mg/L			05/13/24 23:05	5
Method: SW846 6020B - Metals	(ICP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00323		0.00200		mg/L		05/09/24 09:30	05/13/24 21:43	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 21:43	1
Calcium	122		0.500		mg/L		05/09/24 09:30	05/14/24 16:44	1
Selenium	0.0192		0.00500		mg/L		05/09/24 09:30	05/13/24 21:43	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	548		50.0		mg/L			05/09/24 16:16	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			05/08/24 10:44	1

Matrix: Water

Job ID: 310-280659-1

Lab Sample ID: 310-280659-15

Eurofins Cedar Falls

5 6

Qualifiers

HPLC/IC	
Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
Metals	
Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
General Che	emistry
Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
~ -	

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

Job ID: 310-280659-1

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

7 8 9 10 11

Client Sample ID: APMW-16A Prep Type: Total/NA

Client Sample ID: APMW-16A

Prep Type: Total/NA

lotal/NA	

Lab Sample ID: MB 310-421564/3	
Matrix: Water	
Analysis Batch: 421564	

	MB	MB					
Analyte	Result (Qualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00	1.00	mg/L			05/13/24 18:21	1
Fluoride	<0.200	0.200	mg/L			05/13/24 18:21	1
Sulfate	<1.00	1.00	mg/L			05/13/24 18:21	1

Lab Sample ID: LCS 310-421564/4 Matrix: Water Analysis Batch: 421564

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 10.0	9.967		mg/L		100	90 - 110	
Fluoride	2.00	2.156		mg/L		108	90 - 110	
Sulfate	10.0	10.56		mg/L		106	90 - 110	

Lab Sample ID: 310-280659-1 MS Matrix: Water Analysis Batch: 421564

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	29.6		25.0	52.70		mg/L		92	80 - 120	
Fluoride	<1.00		5.00	5.234		mg/L		105	80 - 120	
Sulfate	161		25.0	179.4	4	mg/L		75	80 - 120	

Lab Sample ID: 310-280659-1 MSD Matrix: Water

Analysis Batch: 421564

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	29.6		25.0	53.70		mg/L		96	80 - 120	2	15
Fluoride	<1.00		5.00	5.373		mg/L		107	80 - 120	3	15
Sulfate	161		25.0	180.0	4	mg/L		78	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-42106 Matrix: Water Analysis Batch: 421541	62/1-A							le ID: Method Prep Type: To Prep Batch: 4	otal/NA
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/09/24 09:30	05/13/24 20:39	1
Boron	<0.100		0.100		mg/L		05/09/24 09:30	05/13/24 20:39	1
Selenium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 20:39	1
Lab Sample ID: MB 310-42106 Matrix: Water Analysis Batch: 421633	62/1-A							le ID: Method Prep Type: To Prep Batch: 4	otal/NA
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.500		0.500		mg/L		05/09/24 09:30	05/14/24 15:21	1

Lab Sample ID: LCS 310-421062/2-A

Lab Sample ID: LCS 310-421062/2-A

Lab Sample ID: 310-280659-1 MS

Matrix: Water

Matrix: Water

Matrix: Water

Analyte

Arsenic

Selenium

Analyte

Calcium

Analyte

Arsenic

Selenium

Boron

Boron

Analysis Batch: 421541

Analysis Batch: 421633

Analysis Batch: 421541

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

LCS LCS

LCS LCS

MS MS

Result Qualifier

Result Qualifier

0.1979

0.1928

0.3736

2.006

0.2027

0.3123

0.3792

Result Qualifier

Unit

mg/L

mg/L

mg/L

Unit

mg/L

Unit

mg/L

mg/L

mg/L

Spike

Added

0.200

0.200

0.400

Spike

Added

Sample Sample

0.00277

< 0.00500

0.128

Result Qualifier

2.00

Spike

Added

0.200

0.200

0.400

Prep Type: Total/NA

Prep Batch: 421062

Prep Type: Total/NA

Prep Batch: 421062

Client Sample ID: Lab Control Sample

%Rec

Limits

80 - 120

80 - 120

80 - 120

%Rec

Limits

80 - 120

Client Sample ID: Lab Control Sample

D %Rec

D %Rec

100

94

99

96

93

8

Prep Type: Total/NA **Prep Batch: 421062** %Rec Limits D %Rec 100 75 - 125 92 75 - 125

Client Sample ID: APMW-16A

Prep Type: Total/NA

75 - 125

Client Sample ID: APMW-16A

Lab Sample ID: 310-280659 Matrix: Water	-1 WS							Slient S	ample ID: APM Prep Type: To	
Analysis Batch: 421633									Prep Batch: 4	
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Calcium	106		2.00	111.9	4	mg/L		278	75 - 125	

Matrix: Water Analysis Batch: 421541									Prep Ty Prep Ba	-	
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.00277		0.200	0.2043		mg/L		101	75 - 125	1	20
Boron	0.128		0.200	0.3123		mg/L		92	75 - 125	0	20
Selenium	<0.00500		0.400	0.3824		mg/L		95	75 - 125	1	20

Lab Sample ID: 310-280659-1 MSD **Matrix: Water** Analysis Batch: 121633

Analysis Batch: 421633									Prep Ba	atch: 42	21062
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	106		2.00	115.4	4	mg/L		450	75 - 125	3	20

Lab Sample ID: 310-280659-11 DU **Client Sample ID: APMW-11** Matrix: Water Prep Type: Total/NA Analysis Batch: 421541 Prep Batch: 421062 Sample Sample DU DU RPD Analyte **Result Qualifier** Result Qualifier Unit D RPD Limit <0.00200 NC Arsenic < 0.00200 mg/L <0.100 NC Boron < 0.100 mg/L

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20

20

pН

pH

QC Sample Results

Job ID: 310-280659-1

RPD

06

RPD

Analyzed

2

Project/Site: Gerald Gentleman Station CCR & Landfill Method: 6020B - Metals (ICP/MS) (Continued) Lab Sample ID: 310-280659-11 DU **Client Sample ID: APMW-11 Matrix: Water** Analysis Batch: 421541 **Prep Batch: 421062** DU DU Sample Sample Analyte **Result Qualifier Result Qualifier** Unit D Selenium 0.0132 0 01310 mg/L Lab Sample ID: 310-280659-11 DU **Client Sample ID: APMW-11** Matrix: Water Prep Type: Total/NA Analysis Batch: 421695 **Prep Batch: 421062** Sample Sample DU DU Analyte **Result Qualifier Result Qualifier** Unit D Calcium 80.5 81.98 mg/L Method: SM 2540C - Solids, Total Dissolved (TDS) Lab Sample ID: MB 310-421218/1 **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 421218 MB MB Analyte **Result Qualifier** RL MDL Unit D Prepared 50.0 05/09/24 16:16 Total Dissolved Solids <50.0 mg/L Lab Sample ID: LCS 310-421218/2 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA** Analysis Batch: 421218 Spike LCS LCS %Rec Added Analyte **Result Qualifier** Unit D %Rec Limits **Total Dissolved Solids** 1000 932.0 mg/L 93 90 - 110 Lab Sample ID: 310-280659-7 DU **Client Sample ID: APMW-4 Matrix: Water** Prep Type: Total/NA Analysis Batch: 421218 DU DU Sample Sample **Result Qualifier** Analyte **Result Qualifier** Unit D Total Dissolved Solids 246 240.0 mg/L Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-420986/28 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA** Analysis Batch: 420986 Spike LCS LCS %Rec Added **Result Qualifier** Limits Analyte Unit D %Rec

7.00 SU 101 98 - 102 7.1 Lab Sample ID: 310-280659-13 DU **Client Sample ID: APMW-13** Matrix: Water Prep Type: Total/NA Analysis Batch: 420986 Sample Sample DU DU RPD Analyte **Result Qualifier Result Qualifier** Unit RPD Limit D 7.6 HF 7.6 SU 0.1 20

Prep Type: Total/NA

RPD

Limit

RPD

Limit

Dil Fac

RPD

Limit

20

RPD

2

20

20

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill Job ID: 310-280659-1

9

HPLC/IC

Analysis Batch: 421564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
310-280659-1	APMW-16A	Total/NA	Water	9056A	
310-280659-2	APMW-17	Total/NA	Water	9056A	
310-280659-3	APMW-15	Total/NA	Water	9056A	
310-280659-4	APMW-5	Total/NA	Water	9056A	
310-280659-5	APMW-18	Total/NA	Water	9056A	
310-280659-6	APMW-19	Total/NA	Water	9056A	
310-280659-7	APMW-4	Total/NA	Water	9056A	
310-280659-8	APMW-6	Total/NA	Water	9056A	
310-280659-9	APMW-8A	Total/NA	Water	9056A	
310-280659-10	APMW-10	Total/NA	Water	9056A	
310-280659-11	APMW-11	Total/NA	Water	9056A	
310-280659-12	APMW-12	Total/NA	Water	9056A	
310-280659-13	APMW-13	Total/NA	Water	9056A	
310-280659-14	APMW-14	Total/NA	Water	9056A	
310-280659-15	Duplicate	Total/NA	Water	9056A	
MB 310-421564/3	Method Blank	Total/NA	Water	9056A	
LCS 310-421564/4	Lab Control Sample	Total/NA	Water	9056A	
310-280659-1 MS	APMW-16A	Total/NA	Water	9056A	
310-280659-1 MSD	APMW-16A	Total/NA	Water	9056A	

Prep Batch: 421062

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-280659-1	APMW-16A	Total/NA	Water	3005A	
310-280659-2	APMW-17	Total/NA	Water	3005A	
310-280659-3	APMW-15	Total/NA	Water	3005A	
310-280659-4	APMW-5	Total/NA	Water	3005A	
310-280659-5	APMW-18	Total/NA	Water	3005A	
310-280659-6	APMW-19	Total/NA	Water	3005A	
310-280659-7	APMW-4	Total/NA	Water	3005A	
310-280659-8	APMW-6	Total/NA	Water	3005A	
310-280659-9	APMW-8A	Total/NA	Water	3005A	
310-280659-10	APMW-10	Total/NA	Water	3005A	
310-280659-11	APMW-11	Total/NA	Water	3005A	
310-280659-12	APMW-12	Total/NA	Water	3005A	
310-280659-13	APMW-13	Total/NA	Water	3005A	
310-280659-14	APMW-14	Total/NA	Water	3005A	
310-280659-15	Duplicate	Total/NA	Water	3005A	
MB 310-421062/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-280659-1 MS	APMW-16A	Total/NA	Water	3005A	
310-280659-1 MSD	APMW-16A	Total/NA	Water	3005A	
310-280659-11 DU	APMW-11	Total/NA	Water	3005A	

Analysis Batch: 421541

Lab Sample ID 310-280659-1	Client Sample ID	Prep Type Total/NA	Matrix Water	Method 6020B	Prep Batch 421062
310-280659-2	APMW-17	Total/NA	Water	6020B	421062
310-280659-3	APMW-15	Total/NA	Water	6020B	421062
310-280659-4	APMW-5	Total/NA	Water	6020B	421062

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Metals (Continued)

Analysis Batch: 421541 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280659-5	APMW-18	Total/NA	Water	6020B	421062
310-280659-6	APMW-19	Total/NA	Water	6020B	421062
310-280659-7	APMW-4	Total/NA	Water	6020B	421062
310-280659-8	APMW-6	Total/NA	Water	6020B	421062
310-280659-9	APMW-8A	Total/NA	Water	6020B	421062
310-280659-10	APMW-10	Total/NA	Water	6020B	421062
310-280659-11	APMW-11	Total/NA	Water	6020B	421062
310-280659-12	APMW-12	Total/NA	Water	6020B	421062
310-280659-13	APMW-13	Total/NA	Water	6020B	421062
310-280659-14	APMW-14	Total/NA	Water	6020B	421062
310-280659-15	Duplicate	Total/NA	Water	6020B	421062
MB 310-421062/1-A	Method Blank	Total/NA	Water	6020B	421062
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	6020B	421062
310-280659-1 MS	APMW-16A	Total/NA	Water	6020B	421062
310-280659-1 MSD	APMW-16A	Total/NA	Water	6020B	421062
310-280659-11 DU	APMW-11	Total/NA	Water	6020B	421062
Analysis Batch: 421	633				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280659-1		Total/NA	Water	6020B	421062

		1100 1900	matrix	mounou	i i op Buton
310-280659-1	APMW-16A	Total/NA	Water	6020B	421062
310-280659-2	APMW-17	Total/NA	Water	6020B	421062
310-280659-3	APMW-15	Total/NA	Water	6020B	421062
310-280659-4	APMW-5	Total/NA	Water	6020B	421062
310-280659-5	APMW-18	Total/NA	Water	6020B	421062
310-280659-6	APMW-19	Total/NA	Water	6020B	421062
MB 310-421062/1-A	Method Blank	Total/NA	Water	6020B	421062
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	6020B	421062
310-280659-1 MS	APMW-16A	Total/NA	Water	6020B	421062
310-280659-1 MSD	APMW-16A	Total/NA	Water	6020B	421062

Analysis Batch: 421695

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-280659-7	APMW-4	Total/NA	Water	6020B	421062
310-280659-8	APMW-6	Total/NA	Water	6020B	421062
310-280659-9	APMW-8A	Total/NA	Water	6020B	421062
310-280659-10	APMW-10	Total/NA	Water	6020B	421062
310-280659-11	APMW-11	Total/NA	Water	6020B	421062
310-280659-12	APMW-12	Total/NA	Water	6020B	421062
310-280659-13	APMW-13	Total/NA	Water	6020B	421062
310-280659-14	APMW-14	Total/NA	Water	6020B	421062
310-280659-15	Duplicate	Total/NA	Water	6020B	421062
310-280659-11 DU	APMW-11	Total/NA	Water	6020B	421062

General Chemistry

Analysis Batch: 420986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
310-280659-1	APMW-16A	Total/NA	Water	SM 4500 H+ B
310-280659-2	APMW-17	Total/NA	Water	SM 4500 H+ B
310-280659-3	APMW-15	Total/NA	Water	SM 4500 H+ B
310-280659-4	APMW-5	Total/NA	Water	SM 4500 H+ B

Eurofins Cedar Falls

Job ID: 310-280659-1

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

General Chemistry (Continued)

Analysis Batch: 420986 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-280659-5	APMW-18	Total/NA	Water	SM 4500 H+ B	
310-280659-6	APMW-19	Total/NA	Water	SM 4500 H+ B	
310-280659-7	APMW-4	Total/NA	Water	SM 4500 H+ B	
310-280659-8	APMW-6	Total/NA	Water	SM 4500 H+ B	
310-280659-9	APMW-8A	Total/NA	Water	SM 4500 H+ B	
310-280659-10	APMW-10	Total/NA	Water	SM 4500 H+ B	
310-280659-11	APMW-11	Total/NA	Water	SM 4500 H+ B	
310-280659-12	APMW-12	Total/NA	Water	SM 4500 H+ B	
310-280659-13	APMW-13	Total/NA	Water	SM 4500 H+ B	
310-280659-14	APMW-14	Total/NA	Water	SM 4500 H+ B	
310-280659-15	Duplicate	Total/NA	Water	SM 4500 H+ B	
LCS 310-420986/28	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-280659-13 DU	APMW-13	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 421218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
310-280659-1	APMW-16A	Total/NA	Water	SM 2540C		
310-280659-2	APMW-17	Total/NA	Water	SM 2540C		
310-280659-3	APMW-15	Total/NA	Water	SM 2540C		
310-280659-4	APMW-5	Total/NA	Water	SM 2540C		
310-280659-5	APMW-18	Total/NA	Water	SM 2540C		
310-280659-6	APMW-19	Total/NA	Water	SM 2540C		
310-280659-7	APMW-4	Total/NA	Water	SM 2540C		
310-280659-8	APMW-6	Total/NA	Water	SM 2540C		
310-280659-9	APMW-8A	Total/NA	Water	SM 2540C		
310-280659-10	APMW-10	Total/NA	Water	SM 2540C		
310-280659-11	APMW-11	Total/NA	Water	SM 2540C		
310-280659-12	APMW-12	Total/NA	Water	SM 2540C		
310-280659-13	APMW-13	Total/NA	Water	SM 2540C		
310-280659-14	APMW-14	Total/NA	Water	SM 2540C		
310-280659-15	Duplicate	Total/NA	Water	SM 2540C		
MB 310-421218/1	Method Blank	Total/NA	Water	SM 2540C		
LCS 310-421218/2	Lab Control Sample	Total/NA	Water	SM 2540C		
310-280659-7 DU	APMW-4	Total/NA	Water	SM 2540C		

Job ID: 310-280659-1

Client Sample ID: APMW-16A Date Collected: 05/06/24 09:32 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
ер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
I/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 18:47
/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
I/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 20:44
/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
'NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:26
I/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:32

Client Sample ID: APMW-17 Date Collected: 05/06/24 10:27 Date Received: 05/08/24 08:35

	Batch	Batch	Batch				Prepared			
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed		
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 19:24		
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30		
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:03		
lotal/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30		
Total/NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:32		
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16		
lotal/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:33		

Client Sample ID: APMW-15

Date Collected: 05/06/24 11:22 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 20:02
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:05
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:34
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:34

Client Sample ID: APMW-5 Date Collected: 05/06/24 11:45 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 20:15
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:08
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:36

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Matrix: Water

Matrix: Water

Lab Sample ID: 310-280659-1 Matrix: Water

Lab Sample ID: 310-280659-2

Lab Sample ID: 310-280659-3

Lab Sample ID: 310-280659-4

Matrix: Water

Client Sample ID: APMW-5 Date Collected: 05/06/24 11:45 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:35

Client Sample ID: APMW-18 Date Collected: 05/06/24 12:32 Date Received: 05/08/24 08:35

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 20:28
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:10
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:39
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:36

Client Sample ID: APMW-19 Date Collected: 05/06/24 13:37 Date Received: 05/08/24 08:35

-	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 20:41
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:12
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421633	DHM5	EET CF	05/14/24 15:41
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:37

Client Sample ID: APMW-4 Date Collected: 05/06/24 14:28

Date Received: 05/08/24 08:35

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 20:53
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:14
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:24
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:46

Matrix: Water

Lab Sample ID: 310-280659-4

Lab Sample ID: 310-280659-5

Lab Sample ID: 310-280659-6

Lab Sample ID: 310-280659-7

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: APMW-6 Date Collected: 05/06/24 15:32 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
rep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
al/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 21:06
al/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
al/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:16
al/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:26
al/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
'NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:42

Client Sample ID: APMW-8A Date Collected: 05/06/24 16:27

Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 21:18
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:19
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:28
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:45

Client Sample ID: APMW-10

Date Collected: 05/06/24 17:42 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 21:32
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:21
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:31
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:43

Client Sample ID: APMW-11 Date Collected: 05/06/24 18:32 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 21:45
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:23
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:33

Eurofins Cedar Falls

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 310-280659-8 Matrix: Water

Lab Sample ID: 310-280659-9

Lab Sample ID: 310-280659-10

Lab Sample ID: 310-280659-11

Dilution

Factor

Dilution

Factor

5

1

1

Run

Run

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Batch

Batch

9056A

3005A

6020B

3005A

6020B

SM 2540C

Method

Method

SM 2540C

SM 4500 H+ B

Client Sample ID: APMW-11

Client Sample ID: APMW-12

Date Collected: 05/07/24 09:47

Date Received: 05/08/24 08:35

Batch

Туре

Analysis

Analysis

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Date Collected: 05/06/24 18:32

Date Received: 05/08/24 08:35

Prep Type

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 310-280659-11

Lab Sample ID: 310-280659-12

Lab Sample ID: 310-280659-14

Prepared

or Analyzed

05/09/24 16:16

05/08/24 10:47

Prepared

or Analyzed

05/13/24 21:58

10

421062 KM3E EET CF 05/09/24 09:30 1 421541 DHM5 EET CF 05/13/24 21:36 421062 KM3E EET CF 05/09/24 09:30 421695 NFT2 05/14/24 16:37 1 EET CF EET CF 05/09/24 16:16 1 421218 ENB7 SM 4500 H+ B 420986 W9YR EET CF 05/08/24 10:42 1 Lab Sample ID: 310-280659-13

Client Sample ID: APMW-13 Date Collected: 05/07/24 10:37 Date Received: 05/08/24 08:35

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 22:38
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:38
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:39
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:39

Client Sample ID: APMW-14 Date Collected: 05/07/24 11:22

Date Received: 05/08/24 08:35

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 22:52
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:41
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:42
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:45

Eurofins Cedar Falls

Batch

Batch

Number Analyst

421564 QTZ5

Number Analyst

421218 ENB7

420986 W9YR

Lab

Lab

EET CF

EET CF

EET CF

Job	ID:	31	0-28	065	9-1
000	ıю.	0.1	20	000	0

Lab Sample ID: 310-280659-15 Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421564	QTZ5	EET CF	05/13/24 23:05
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:43
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:44
Total/NA	Analysis	SM 2540C		1	421218	ENB7	EET CF	05/09/24 16:16
Total/NA	Analysis	SM 4500 H+ B		1	420986	W9YR	EET CF	05/08/24 10:44

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	05-27-24

Eurofins Cedar Falls

Job ID: 310-280659-1

Method Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	рН	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

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:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



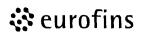
Environment Testing America



310-280659 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client: NPPD		0			
City/State:		state NF	Project:		
Receipt Information					
	те -8-24	TIME 835	Received B	y: NU	
Delivery Type: Delivery Type:	🗌 FedEx		FedEx Gr	ound 🛛 🗌 US Mail	🗌 Spee-Dee
Lab C	iourier 🗌 Lab Fi	eld Services	Client Dro	p-off 🛛 🗌 Other:	
Condition of Cooler/Conta	iners				, , , , , , , , , , , , , , , , , , , ,
Sample(s) received in Co	oler? Pes	🗌 No	If yes: Coo	oler ID:	
Multiple Coolers?	¥	🗌 No	<i>If yes:</i> Coo	oler # of	
Cooler Custody Seals Pre	esent? 🗌 Yes	2 No	If yes: Coo	pler custody seals intact	? 🗌 Yes 🔲
Sample Custody Seals P No	resent? 🗌 Yes	ZON0	<i>If yes:</i> San	nple custody seals intac	ct? Yes
Trip Blank Present?	🗌 Yes		<i>lf yes:</i> Whi	ch VOA samples are in	cooler? ↓
		(
Temperature Record		······		······	
Coolant: Wet ice	🗌 Blue ice	🗌 Dry ice	e 🗌 Other	:] NONE
Thermometer ID:	\times		Correction I	Factor (°C):	
Temp Blank Temperature	e – If no temp blank, o	or temp blank te	mperature above	criteria, proceed to Sample	Container Temperature
Uncorrected Temp (°C):	<u> </u>	9	Corrected T	emp (°C): 0-9	
Sample Container Tempe					
Container(s) used:	CONTAINER 1			CONTAINER 2	
Uncorrected Temp (°C):					
Corrected Temp (°C):		4	······		
Exceptions Noted			· · · · · · · · · · · · · · · · · · ·	I	······································
 If temperature exceed a) If yes: Is there ex 				iy of sampling? 🗌 Ye 🗌 Ye	
2) If temperature is <0°0 (e.g., bulging septa, t				of sample containers is Ye	
NOTE If yes, contact P Additional Comments	M before proceedir	ng If no, proc	eed with login		
Common Comm			**************************************		
	<u> </u>				<u></u>
L					



Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information		·	۲. ۱		
Client: NPPD			·····		
City/State:		STATE NF	Project:		
Receipt Information	······································		<u>l.</u>	t	a}
	те -8-24	TIME 835	Received B	y: <u>NU</u>	
Delivery Type: Delivery Type:	🗌 FedEx		FedEx Gro	ound US	Mail Spee-Dee
Lab C	ourier 🗌 Lab Fi	eld Services	Client Dro	p-off 🛛 🗌 Oth	er:
Condition of Cooler/Conta	iners	·····			Y +
Sample(s) received in Co	oler?	🗌 No	If yes: Coo	ler ID:	······································
Multiple Coolers?	A Yes	□ No		ler # <u>2</u> of	
Cooler Custody Seals Pre	esent? 🗌 Yes	PNO	<i>If yes:</i> Coo	ler custody seals	intact? Ves
Sample Custody Seals P No	resent? 🗌 Yes	R No	<i>If yes:</i> San	nple custody seals	intact? Yes
Trip Blank Present?	🗌 Yes	200	<i>If yes:</i> Whi	ch VOA samples a	are in cooler? ↓
		(
		<u></u>			
Temperature Record	1 4		n 1	غاند	4 41 /
Coolant: Vet ice	Blue ice	🗌 Dry ice) 🗌 Other		
(Thermometer ID:	\times		Correction F		Ð
Temp Blank Temperature	e – If no temp blank, o	or temp blank te	mperature above	criteria, proceed to Sa	ample Contáiner Temperature
Uncorrected Temp (°C):	1.6		Corrected T	emp (°C):	1.6
Sample Container Tempe			<u> </u>		4 ¹ / ₂ , 170
Container(s) used:	CONTAINER 1			CONTAINER 2	
Uncorrected Temp (°C):					
Corrected Temp (°C):					
Exceptions Noted	-1 - 2 ^{- 1}	ц. ¹ 'з	4	*	fai e i t
 If temperature exceed a) If yes: Is there ev 				y of sampling? [[Yes No Yes No
 If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) 					
NOTE: If yes, contact Pl Additional Comments	<u>M before proceedin</u>	g. If no, proce	eed with login		
			l		1 i
<u> </u>					
l		······		· · · · · · · · · · · · · · · · · · ·	

Irofins Cedar Falls	3019 Venture Way	ar Falls IA 50613
Eurof	3019 Vel	Cedar Fa

Chain of Custody Record

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Environment Testing
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² hone (319) 277-2401 Phone (319) 277-2425			ž,	
Client Information	Sampler Doug Harris	Lab PM Hummel Matthew	Carrier Tracking No(s)	COC № 310-70847-15390 1
Client Contact: Doug Harris	Phone 308.530 - 1124	E-Mail Shirley Thompson@et.eurofinsus com	State of Origin. Nebraska	Page Page 1 of 2
Sompany Nebraska Public Power District				Job #
Address 5089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested			eservation Coc
ziy Sutherland	TAT Requested (days)	lu2 bn		noc NaOH Zn Acetate
state Zp VE 69165	Compliance Project: Δ Yes Δ No			E NaHSO4 C Na2CO3 E NaHSO4 C Na2SO3 E MAOU
Thome 308-530 -1124	PO#-	muinel		Amchlor Ascorbic Acid
mail. Jdharn@nppd com	#OM	(0) +1 +1	5.	lce Di Water
roject Name Gerald Gentleman Station Ash Pites	Project # 31007155	4200 ⁻ H Csici	อน)ชุม	A A
site: GGS	#MOSS	RD (N Borot	01 00	Other
Samole Identification	Sample Type Sample C=comp. Samole Date Time G=crab)	Matrix Matrix (www.mer Sasolid. Sasolid. Danagerool. Sasolid. Danagerool. Sasolid. S	nedmuk istoT	Special Instructions/Note
	X	N N OXX		
apmw-16A	5-6-24 0932 G	Water X X X		
APMW 17	1027	Water) (/		
APMW-15	121	Water		
APMW-5	1 219	Water		
APMW 18	5-6-24 1232 G	Water		
APMW-19	-24 1337	Water		
4PMW-4	5-6-24 1428 G	Water		
9-MM45	5-6-241532 G	Water		
APMW-8A	-6-24 1627	Water		
APMW 10	2717	Water		
APMW-11	5-6-24 1832 G	Water & J & J		
Possible Hazard Identification	Poison BRadiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Client To Client Mon	assessed if samples are retaine Disposal By Lab	starned longer than 1 month) Archive For Months
ested I II III IV Other (specify)		Requirem		
Empty Kit Relinquished by	Date 4.16-	2 V Time 1000	Method of Shipment: /	
relinquisteepy	Date/Time Date/Time	Company Received by	. 5-	S & S Company
		Company Received by	Date/Time.	Company
kelinquished by	Date/Time	Company Received by	Date/Time	Company
Custody Seals Intact: Custody Seal No. Δ Yes Δ No		Cooler Temperature(s) ^o C and Other Remarks	emarks	
		1 12 12 14	7 8 9 1(Ver 01/16/2019
		23		

lls		
Cedar Fall	Vay	A 50613
Eurofins (3019 Venture Way	Cedar Falls 1

Chain of Custody Record

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Phone (319) 277-2401 Phone (319) 277-2425				
Client Information	Sampler Doug Harris	Lab PM Thompson Shirley J	Carrier Tracking No(s)	COC No 310-70847-15390 2
Client Contact Doug Harns	Phone 308 - 530 -1124	E-Mail Shirley Thompson@et.eurofinsus.com	State of Origin: Nebraska	Page 2 of 2
Company Nebraska Public Power District		Analysis Requested	equested	# qor
Address. 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested.			8
	TAT Requested (days)-	ijns pu		B NaOH None B NaOH O AsNaO2 C-Zn Acetate D Na2OAS
State Zp NE 69165	Compliance Project: Δ Yes Δ No			L O K
Phone 308 - 530 - 1124	PO#	muinal		
Email ddharri@nppd com	#OM	ю) өс шп	L9	Ice C
Project Name Gerald Gentleman Station	Project # 31007155	es or	enlein	
Site GGS	SSOW#	cd Boron Cd	0100	Other
	Sample Type Sample (C≈comp,	Matrix Attrix Segular Matrix Segular Matrix	nedmuX lefo]	Shecial Instructions/Note
	Preserva			
APMW-12	5	XX		
APMW-13	1037 1	Water		
APMW-14	1122 9	Water		
Duplicate	1640 6-	Water www.		
		Water		
Possible Hazard (Mentification		Samole Disposal (A fee may be	Samole Disposal (A fee may be assessed if samples are retained longer than 1 month)	ed longer than 1 month)
Non-Hazard	Poison B Unknown Radiological	Return To Client	Disposal By Lab	Archive For Months
V Other (specify)		Special Instructions/QC Requirements	ents	
Empty Kit Relinquished by	Date 4-16-2	V Time 1,000		12
Reinquished by	Date/Time Con	Company Received by	Date/Time:	S35 Company
		Company Received by	Date/Time	Company
Relinquished by	Date/Time Con	Company Received by	Date/Time	Company
Custody Seals Intact. Custody Seal No		Cooler Temperature(s) °C and Other Remarks	Remarks	
		1 1 1	2 8 9 1	Ver 01/16/2019
		1 2 3 4	7 3 9	- 2 3 4 5 6

Client: Nebraska Public Power District

Login Number: 280659 List Number: 1 Creator: Costello, Mackenzie K

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

Job Number: 310-280659-1

List Source: Eurofins Cedar Falls



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

5

Attn: Doug Harris Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165 Generated 5/16/2024 4:32:05 PM

JOB DESCRIPTION

Gerald Gentleman Station CCR & Landfill

JOB NUMBER

310-280705-1

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613



Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Authorized for release by Matthew Hummel, Project Manager I <u>Matthew.Hummel@et.eurofinsus.com</u> (319)595-2010 Generated

5/16/2024 4:32:05 PM

Eurofins Cedar Falls is a laboratory within Eurofins Environment Testing North Central, LLC, a company within Eurofins Environment Testing Group of Companies

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Job ID: 310-280705-1

Eurofins Cedar Falls

Job Narrative 310-280705-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/8/2024 8:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: APMW-4 (310-280705-1), APMW-11 (310-280705-2) and Duplicate (310-280705-3). Elevated reporting limits (RLs) are provided.

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

Metals

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

Sample Summary

Collected

05/06/24 16:45

05/06/24 18:41

05/06/24 18:57

Received

05/08/24 08:35

05/08/24 08:35

05/08/24 08:35

Matrix

Water

Water

Water

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID

APMW-4

APMW-11

Duplicate

Lab Sample ID

310-280705-1

310-280705-2

310-280705-3

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	4
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	5
	J
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	9

Detection Summary

RL

0.00200

0.00200

0.0100

0.00200

0.00500

RL

0.00200

0.00200

0.00500

0.0100

MDL Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

MDL Unit

Result Qualifier

Result Qualifier

0.00445

0.0748

0.0135

0.00570

0.0147

0.195

0.0144

0.00235

0.0133

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Client Sample ID: APMW-4

Analyte

Arsenic

Barium

Lithium

Molybdenum

Selenium

Analyte

Barium

Lithium

Molybdenum

Selenium

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Lab Sample ID: 310-280705-1

Lab Sample ID: 310-280705-2

Dil Fac D Method

1

1

1

1

1

Dil Fac D

1

1

1

1

6020B

6020B

6020B

6020B

6020B

Method

6020B

6020B

6020B

6020B

5
8
9

Total/NA 9 Total/NA 10 2: 310-280705-3 Prep Type 11

Client Sample ID: Duplicate

Client Sample ID: APMW-11

Lab Sample ID: 310-280705-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	0.193		0.00200		mg/L	1	6020B	Total/NA
Lithium	0.0145		0.0100		mg/L	1	6020B	Total/NA
Molybdenum	0.00232		0.00200		mg/L	1	6020B	Total/NA
Selenium	0.0128		0.00500		mg/L	1	6020B	Total/NA

Job ID: 310-280705-1

Lab Sample ID: 310-280705-1 Matrix: Water

Date Collected: 05/06/24 16:45 Date Received: 05/08/24 08:35

Client Sample ID: APMW-4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<1.00		1.00		mg/L			05/10/24 19:36	5
Method: SW846 6020B - M	ietals (ICP/MS)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ntimony	<0.00200		0.00200		mg/L		05/09/24 09:30	05/14/24 16:55	1
rsenic	0.00445		0.00200		mg/L		05/09/24 09:30	05/13/24 21:45	1
Barium	0.0748		0.00200		mg/L		05/09/24 09:30	05/13/24 21:45	1
Beryllium	<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:45	1
Cadmium	<0.000200		0.000200		mg/L		05/09/24 09:30	05/14/24 16:55	1
Chromium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 21:45	1
Cobalt	<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:45	1
_ead	<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:45	1
Lithium	0.0135		0.0100		mg/L		05/09/24 09:30	05/13/24 21:45	1
Molybdenum	0.00570		0.00200		mg/L		05/09/24 09:30	05/14/24 16:55	1
Selenium	0.0147		0.00500		mg/L		05/09/24 09:30	05/13/24 21:45	1
Thallium	<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:45	1
Method: SW846 7470A - M	• • •								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 7470A - Me Analyte Mercury	• • •	Qualifier	RL	MDL	Unit mg/L	<u>D</u>	Prepared 05/09/24 12:20	-	Analyzed 05/13/24 16:35

Job ID: 310-280705-1

Lab Sample ID: 310-280705-2 Matrix: Water

Date Collected: 05/06/24 18:41 Date Received: 05/08/24 08:35

Client Sample ID: APMW-11

	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
<1.00		1.00		mg/L			05/10/24 19:48	5	Ī
letals (ICP/MS)									1
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
<0.00200		0.00200		mg/L		05/09/24 09:30	05/14/24 16:57	1	
<0.00200		0.00200		mg/L		05/09/24 09:30	05/13/24 21:47	1	
0.195		0.00200		mg/L		05/09/24 09:30	05/13/24 21:47	1	
<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:47	1	1
<0.000200		0.000200		mg/L		05/09/24 09:30	05/14/24 16:57	1	
<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 21:47	1	Ĩ
<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:47	1	
<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:47	1	
0.0144		0.0100		mg/L		05/09/24 09:30	05/13/24 21:47	1	
0.00235		0.00200		mg/L		05/09/24 09:30	05/14/24 16:57	1	
0.0133		0.00500		mg/L		05/09/24 09:30	05/13/24 21:47	1	
<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:47	1	
lercury (CVAA)									
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
-	Result <0.00200	Result Qualifier <0.00200	Result Qualifier RL <0.00200	Result Qualifier RL MDL <0.00200	Result Qualifier RL MDL Unit <0.00200	Result Qualifier RL MDL Unit D <0.00200	Result Qualifier RL MDL Unit D Prepared <0.00200	Result Qualifier RL MDL Unit D Prepared Analyzed <0.00200	Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <0.00200

Lab Sample ID: 310-280705-3 Matrix: Water

Date Collected: 05/06/24 18:57 Date Received: 05/08/24 08:35

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Client Sample ID: Duplicate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<1.00		1.00		mg/L			05/10/24 20:00	5
Method: SW846 6020B - N	Motole (ICD/MS)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ntimony	<0.00200		0.00200		mg/L		05/09/24 09:30	05/14/24 16:59	1
rsenic	<0.00200	1	0.00200		mg/L		05/09/24 09:30	05/13/24 21:49	1
arium	0.193	,	0.00200		mg/L		05/09/24 09:30	05/13/24 21:49	1
eryllium	<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:49	1
admium	<0.000200		0.000200		mg/L		05/09/24 09:30	05/14/24 16:59	1
hromium	<0.00500		0.00500		mg/L		05/09/24 09:30	05/13/24 21:49	1
obalt	<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:49	1
ead	<0.000500		0.000500		mg/L		05/09/24 09:30	05/13/24 21:49	1
ithium	0.0145	,	0.0100		mg/L		05/09/24 09:30	05/13/24 21:49	1
lolybdenum	0.00232		0.00200		mg/L		05/09/24 09:30	05/14/24 16:59	1
elenium	0.0128	r.	0.00500		mg/L		05/09/24 09:30	05/13/24 21:49	1
hallium	<0.00100		0.00100		mg/L		05/09/24 09:30	05/13/24 21:49	1
Method: SW846 7470A - N									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Definitions/Glossary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280705-1

Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	5
CFU	Colony Forming Unit	J
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)	8
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	9
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	13
NC	Not Calculated	IJ
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	

Job ID: 310-280705-1

Lab Sample ID: MB 310-421417/3										Client Sa	mple ID: Metho	d Blank
Matrix: Water											Prep Type:	
Analysis Batch: 421417											Trop Type.	i o tui i i i
	MB	МВ										
Analyte		Qualifier	RL		мы	Unit		D	Р	repared	Analyzed	Dil Fac
Fluoride	<0.200	Quanner	0.200			mg/L				repareu	05/10/24 15:09	
	~0.200		0.200			mg/∟					03/10/24 13:09	1
Lab Sample ID: LCS 310-421417/4								CI	ient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Total/N/
Analysis Batch: 421417												
			Spike	LCS	LCS	;					%Rec	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Fluoride			2.00	2.019			mg/L		—	101	90 - 110	
lethod: 6020B - Metals (ICP/MS	5)											
Lab Sample ID: MB 310-421062/1-A										Client Sa	mple ID: Metho	d Blan
Matrix: Water											Prep Type:	Total/N/
Analysis Batch: 421541											Prep Batch	
	МВ	МВ									-	
Analyte	Result	Qualifier	RL		MDL	Unit		D	P	repared	Analyzed	Dil Fa
Arsenic	<0.00200		0.00200			mg/L		· _ ·	05/0	9/24 09:30	05/13/24 20:39	
Barium	<0.00200		0.00200			mg/L			05/0	9/24 09:30	05/13/24 20:39	
Beryllium	<0.00100		0.00100			mg/L			05/0	9/24 09:30	05/13/24 20:39	
Chromium	<0.00500		0.00500			mg/L				9/24 09:30	05/13/24 20:39	
Cobalt	< 0.000500		0.000500			mg/L				9/24 09:30	05/13/24 20:39	
Lead	< 0.000500		0.000500			mg/L				9/24 09:30	05/13/24 20:39	
Lithium	<0.000300		0.0100			mg/L				9/24 09:30	05/13/24 20:39	
	<0.00200					-				9/24 09:30	05/13/24 20:39	
Molybdenum Selenium	<0.00200		0.00200 0.00500			mg/L				9/24 09:30 9/24 09:30	05/13/24 20:39	
Thallium	<0.00300		0.00500			mg/L				9/24 09:30 9/24 09:30	05/13/24 20:39	
manum	<0.00100		0.00100			mg/L			05/0	9/24 09.30	03/13/24 20.39	
Lab Sample ID: MB 310-421062/1-A										Client Sa	mple ID: Metho	d Blan
Matrix: Water											Prep Type:	
Analysis Batch: 421633											Prep Batch	
	МВ	МВ										
Analyte		Qualifier	RL		мы	Unit		D	Р	repared	Analyzed	Dil Fa
Cadmium	<0.000200	quantor	0.000200			mg/L		· - ·		9/24 09:30	05/14/24 15:21	
						0						
Lab Sample ID: MB 310-421062/1-A										Client Sa	mple ID: Metho	d Blan
Matrix: Water											Prep Type:	Total/N
Analysis Batch: 421844											Prep Batch	42106
-	MB	МВ										
Analyte	Result	Qualifier	RL		MDL	Unit		D	Р	repared	Analyzed	Dil Fa
Antimony	<0.00200		0.00200			mg/L		· _ ·	05/0	9/24 09:30	05/15/24 19:50	
Lab Sample ID: LCS 310-421062/2-A								CI	ient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Total/N/
Analysis Batch: 421541											Prep Batch	: 42106
			Spike	LCS	LCS	;					%Rec	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Arsenic	·		0.200	0.1979			mg/L		_	99	80 - 120	
Barium			0.100	0.09758			mg/L			98	80 - 120	
							-					

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	0.200	0.1979		mg/L		99	80 - 120	
Barium	0.100	0.09758		mg/L		98	80 - 120	
Beryllium	0.100	0.08693		mg/L		87	80 - 120	
Chromium	0.100	0.09869		mg/L		99	80 - 120	

QC Sample Results

Job ID: 310-280705-1

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

Lab Sample ID: LCS 310-421062/2-A					Client	t Sample	ID: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 421541							Prep Batch: 421062
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cobalt	0.100	0.09962		mg/L		100	80 - 120
Lead	0.200	0.2131		mg/L		107	80 - 120
Lithium	0.200	0.1945		mg/L		97	80 - 120
Molybdenum	0.200	0.1686		mg/L		84	80 - 120
Selenium	0.400	0.3736		mg/L		93	80 - 120
Thallium	0.100	0.1090		mg/L		109	80 - 120
Matrix: Water Analysis Batch: 421633	Spike	LCS	LCS				Prep Type: Total/NA Prep Batch: 421062 %Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cadmium	0.100	0.09992		mg/L		100	80 - 120
 Lab Sample ID: LCS 310-421062/2-A				Ū	Client	t Sample	D: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 421844							Prep Batch: 421062
-	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.200	0.2159		mg/L		108	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-421176/1-A Matrix: Water Analysis Batch: 421518							Client Sa	imple ID: Metho Prep Type: ⁻ Prep Batch	Total/NA
Analyte	MB Result <0.000200	MB Qualifier		 MDL Uni	-	<u>D</u>	Prepared	Analyzed	Dil Fac
Lab Sample ID: LCS 310-421176/2-A Matrix: Water Analysis Batch: 421518						Cli	ent Sample	ID: Lab Control Prep Type: ⁻	Total/NA
Analyte			Spike Added	LCS Qualifier	Unit		D %Rec	Prep Batch %Rec Limits	. 421170

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280705-1

HPLC/IC

Analysis Batch: 421417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280705-1	APMW-4	Total/NA	Water	9056A	
310-280705-2	APMW-11	Total/NA	Water	9056A	
310-280705-3	Duplicate	Total/NA	Water	9056A	
MB 310-421417/3	Method Blank	Total/NA	Water	9056A	
LCS 310-421417/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 421062

Lab Sample ID	Client Sample ID	Ргер Туре		Method	Prep Batch
310-280705-1	APMW-4	Total/NA	Water	3005A	
310-280705-2	APMW-11	Total/NA	Water	3005A	
310-280705-3	Duplicate	Total/NA	Water	3005A	
MB 310-421062/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 421176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280705-1	APMW-4	Total/NA	Water	7470A	
310-280705-2	APMW-11	Total/NA	Water	7470A	
310-280705-3	Duplicate	Total/NA	Water	7470A	
MB 310-421176/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-421176/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 421518

Lab Sample ID 310-280705-1	Client Sample ID	Prep Type	Matrix Water	Method	Prep Batch 421176
310-280705-2	APMW-11	Total/NA	Water	7470A	421176
310-280705-3	Duplicate	Total/NA	Water	7470A	421176
MB 310-421176/1-A	Method Blank	Total/NA	Water	7470A	421176
LCS 310-421176/2-A	Lab Control Sample	Total/NA	Water	7470A	421176

Analysis Batch: 421541

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-280705-1	APMW-4	Total/NA	Water	6020B	421062
310-280705-2	APMW-11	Total/NA	Water	6020B	421062
310-280705-3	Duplicate	Total/NA	Water	6020B	421062
MB 310-421062/1-A	Method Blank	Total/NA	Water	6020B	421062
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	6020B	421062

Analysis Batch: 421633

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 310-421062/1-A	Method Blank	Total/NA	Water	6020B	421062
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	6020B	421062

Analysis Batch: 421695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280705-1	APMW-4	Total/NA	Water	6020B	421062
310-280705-2	APMW-11	Total/NA	Water	6020B	421062
310-280705-3	Duplicate	Total/NA	Water	6020B	421062

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill Job ID: 310-280705-1

Metals

Analysis Batch: 421844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-421062/1-A	Method Blank	Total/NA	Water	6020B	421062
LCS 310-421062/2-A	Lab Control Sample	Total/NA	Water	6020B	421062

Dilution

Factor

5

1

1

Run

Batch

Number

421417

421062 KM3E

421541 DHM5

421062 KM3E

421695 NFT2

421176 A6US

Analyst

QTZ5

Lab

EET CF

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Batch

Method

9056A

3005A

6020B

3005A

6020B

7470A

Batch

Туре

Prep

Prep

Prep

Client Sample ID: APMW-11

Date Collected: 05/06/24 18:41

Date Received: 05/08/24 08:35

Analysis

Analysis

Analysis

Analysis

Client Sample ID: APMW-4

Date Collected: 05/06/24 16:45

Date Received: 05/08/24 08:35

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix: Water

Matrix: Water

Lab Sample ID: 310-280705-1

Lab Sample ID: 310-280705-2

Prepared

or Analyzed

05/10/24 19:36

05/09/24 09:30

05/13/24 21:45

05/09/24 09:30

05/14/24 16:55

05/09/24 12:20 05/13/24 16:35

10

7470A 1 421518 A6US 1 Batch Dilution Batch Method Run Factor Number Analy:

Batch Batch Prepared Method Number Analyst Туре or Analyzed Prep Type Lab 05/10/24 19:48 9056A 421417 QTZ5 Total/NA Analysis 5 EET CF Total/NA 3005A 421062 KM3E EET CF 05/09/24 09:30 Prep 6020B Total/NA Analysis 1 421541 DHM5 EET CF 05/13/24 21:47 Total/NA 3005A 421062 KM3E EET CF 05/09/24 09:30 Prep Total/NA Analysis 6020B 1 421695 NFT2 EET CF 05/14/24 16:57 Total/NA Prep 7470A 421176 A6US EET CF 05/09/24 12:20 Total/NA Analysis 7470A 1 421518 A6US EET CF 05/13/24 16:37

Client Sample ID: Duplicate Date Collected: 05/06/24 18:57

Date Received: 05/08/24 08:35

Lab Sample ID: 310-280705-3

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	421417	QTZ5	EET CF	05/10/24 20:00
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421541	DHM5	EET CF	05/13/24 21:49
Total/NA	Prep	3005A			421062	KM3E	EET CF	05/09/24 09:30
Total/NA	Analysis	6020B		1	421695	NFT2	EET CF	05/14/24 16:59
Total/NA	Prep	7470A			421176	A6US	EET CF	05/09/24 12:20
Total/NA	Analysis	7470A		1	421518	A6US	EET CF	05/13/24 16:40

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill Job ID: 310-280705-1

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-24

Method Summary

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

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Method Description

Metals (ICP/MS)

Mercury (CVAA)

Anions, Ion Chromatography

Preparation, Total Metals

Preparation, Mercury

Method

9056A

6020B

7470A

3005A

7470A

Protocol References:

Laboratory References:

Laboratory

EET CF

EET CF

EET CF

EET CF

EET CF

Protocol SW846

SW846

SW846

SW846

SW846

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12 13 14



Environment Testing America



310-280705 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information	š
Client: Nebraska Kublic Pour	
City/State:	Project:
Receipt Information	
Date/Time Date Received: 5824	Received By:
Delivery Type: DUPS Delivery Type:	🗍 FedEx Ground 🛛 🗍 US Mail 🔹 Spee-Dee
🗌 Lab Courier 🔲 Lab Field Service	es 🗌 Client Drop-off 🛛 🗌 Other:
Condition of Cooler/Containers	1
Sample(s) received in Cooler?	<i>If yes:</i> Cooler ID:
Multiple Coolers?	If yes: Cooler # of
Cooler Custody Seals Present? Yes No No	If yes: Cooler custody seals intact? Yes
Sample Custody Seals Present? Yes No	If yes: Sample custody seals intact? Yes
Trip Blank Present?	If yes: Which VOA samples are in cooler? 1
Temperature Record	
Coolant: 🛛 Wet ice 🗌 Blue ice 🗌 Dry i	ice Other: NONE
Thermometer ID:	Correction Factor (°C): +0.0
• Temp Blank Temperature - If no temp blank, or temp blank	temperature above criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C):	Corrected Temp (°C):
Sample Container Temperature	
Container(s) used:	nC CONTAINER 2
Uncorrected Temp 3.1	
Corrected Temp (°C):	
Exceptions Noted	
 If temperature exceeds criteria, was sample(s) re a) If yes: Is there evidence that the chilling proc 	
(e.g., bulging septa, broken/cracked bottles, froz	•
NOTE. If yes, contact PM before proceeding. If no, pr Additional Comments	oceed with login

Eurofins Cedar Falls	3019 Venture Way	Cedar Falls IA 50613
Eurofins C	3019 Venture V	

Chain of Custody Record

T the radian of

C eurofins

Direct Test of the second	Constraint Constr	Client Information	Sampler Davg Harris	Lab PM Hummel Matthew R	Carrier Tracking No(s)	COC № 310-92182-22930 1
Defect Analysis	Date: Analysis <	Client Contact Doug Harris	K11-085	E-Mail Matthew Hummel@et eurofinsus com	State of Origin	Page Page 1 of 1
Conference Conference <thconference< th=""> Conference Conferen</thconference<>	Getterment Batron Such	Company Nebraska Public Power District			equested	Job #
Плавновие было Плавно	Полнование плании	Address. 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested			
Волицион Портисти волицион	Основност Умение Соновност Умение Соновност Умение Основност Умение	City Sutherland	TAT Requested (days)			NaOH Zn Acetate Nitrio Acet
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Montane <	Montang Process Service Service Service Service Service	ne 3-530-1124(Tel)	Po#. 4500255598 (2023)	Keb 12		Amchlor T Ascorbic Acid U
Promote Stanple Matrix Stanple	Reserver the finance Propriets Propolitits Propriets Propriets </td <td>Email ddharri@nppd com</td> <td># OM</td> <td>ко) грс) грс)</td> <td></td> <td>I Ice V J Di Water W K EDTA</td>	Email ddharri@nppd com	# OM	ко) грс) грс)		I Ice V J Di Water W K EDTA
Store Sample Matrix Matrix <td>Bits Sample Data Sample Data</td> <td>ect Name S CCR & Landfill Assessment Monitoring</td> <td>Project # 31007155</td> <td>-558 (G -558 (G</td> <td></td> <td></td>	Bits Sample Data	ect Name S CCR & Landfill Assessment Monitoring	Project # 31007155	-558 (G -558 (G		
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				Cooler Temperature(s) °C and Other F	Remarks.	

Client: Nebraska Public Power District

Login Number: 280705

List Number: 1 Creator: Homolar, Dana J

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

List Source: Eurofins Cedar Falls



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

5

Attn: Doug Harris Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165 Generated 6/5/2024 4:18:21 PM

JOB DESCRIPTION

Gerald Gentleman Station CCR & Landfill

JOB NUMBER

310-280705-2

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613



See page two for job notes and contact information.



Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Authorized for release by Matthew Hummel, Project Manager I <u>Matthew.Hummel@et.eurofinsus.com</u> (319)595-2010 Generated

6/5/2024 4:18:21 PM

1

5

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Tracer Carrier Summary 2	21

ar Falls

Job ID: 310-280705-2

Eurofins Cedar Falls

Job Narrative 310-280705-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/8/2024 8:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

Gas Flow Proportional Counter

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

Rad

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

Sample Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280705-1	APMW-4	Water	05/06/24 16:45	05/08/24 08:35
310-280705-2	APMW-11	Water	05/06/24 18:41	05/08/24 08:35
310-280705-3	Duplicate	Water	05/06/24 18:57	05/08/24 08:35

Client: Nebraska Public Power District	Job ID: 310-280705-2	
Project/Site: Gerald Gentleman Station CCR & Landfill		
Client Sample ID: APMW-4	Lab Sample ID: 310-280705-1	
No Detections.		
Client Sample ID: APMW-11	Lab Sample ID: 310-280705-2	1
No Detections.		
Client Sample ID: Duplicate	Lab Sample ID: 310-280705-3	
No Detections.		

Client Sample Results

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280705-2

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Lab Sample ID: 310-280705-1

Client Sample ID: APMW-4 Date Collected: 05/06/24 16:45

Method: SW846 9	315 - Radium-2	26 (GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172		0.101	0.102	1.00	0.129	pCi/L	05/13/24 10:09	06/04/24 23:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		30 - 110					05/13/24 10:09	06/04/24 23:18	1

Count Total Uncert. Uncert. Analyte Result Qualifier (2**σ**+/-) (2**σ+/-**) RL MDC Unit Prepared Analyzed Dil Fac Radium-228 1.02 0.452 0.462 1.00 0.608 pCi/L 05/13/24 10:14 05/31/24 12:13 1 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 91.0 30 - 110 05/13/24 10:14 05/31/24 12:13 1 81.9 30 - 110 05/13/24 10:14 05/31/24 12:13 1 Y Carrier

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

			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium	1.19		0.463	0.473	5.00	0.608	pCi/L		06/05/24 11:11	1	
226 + 228											

Eurofins Cedar Falls

Client Sample Results

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280705-2

Lab Sample ID: 310-280705-2

Client Sample ID: APMW-11 Date Collected: 05/06/24 18:41

Date	Received:	05/08/24	08:35

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fa
Radium-226	0.0304	U	0.0839	0.0840	1.00	0.155	pCi/L	05/13/24 10:09	06/04/24 23:18	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fa
Ba Carrier	92.0		30 - 110					05/13/24 10:09	06/04/24 23:18	

Method: SW846 9320 - Radium-228 (GFPC)

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.260	U	0.334	0.335	1.00	0.556	pCi/L	05/13/24 10:14	05/31/24 12:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		30 - 110					05/13/24 10:14	05/31/24 12:13	1
Y Carrier	84.9		30 - 110					05/13/24 10:14	05/31/24 12:13	1

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

			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium 226 + 228	0.290	U	0.344	0.345	5.00	0.556	pCi/L		06/05/24 11:11	1	

Matrix: Water

5 6

Client Sample Results

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Job ID: 310-280705-2

Lab Sample ID: 310-280705-3

Client Sample ID: Duplicate Date Collected: 05/06/24 18:57

Date Received: 05/08/24 08:35

Method: SW846 9	315 - Radium-2	26 (GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0831	U	0.0860	0.0864	1.00	0.136	pCi/L	05/13/24 10:09	06/04/24 23:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		30 - 110					05/13/24 10:09	06/04/24 23:18	1

Method: SW846 9320 - Radium-228 (GFPC)

			Count Uncert.	Total Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Radium-228	0.0572		0.314	0.314	1.00			05/13/24 10:14	05/31/24 12:13	1	
	0.0012	0	0.011	0.011	1.00	0.071	POIL	00/10/21 10:11	00/01/21 12:10	•	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac	
Ba Carrier	96.8		30 - 110					05/13/24 10:14	05/31/24 12:13	1	
Y Carrier	82.2		30 - 110					05/13/24 10:14	05/31/24 12:13	1	

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

			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
Combined Radium 226	0.140	U	0.326	0.326	5.00	0.571	pCi/L		06/05/24 11:11	1	
+ 228											

Matrix: Water

5 6

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Qualifiers

R

Rad		
Qualifier	Qualifier Description	4
U	Result is less than the sample detection limit.	
Glossary		5
Abbreviation	These commonly used abbreviations may or may not be present in this report.	6
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	7
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	0
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	0
Dil Fac	Dilution Factor	9
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)	13
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	

Job ID: 310-280705-2

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID	: MB 160	-061407/1	I-A							Client Sa	mple ID: Metho	
Matrix: Water											Prep Type: 7	
Analysis Batch	1: 664625										Prep Batch:	66140
				Count	Total							
		MB	МВ	Uncert.	Uncert.							
Analyte		Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC			Prepared	Analyzed	Dil Fa
Radium-226		0.02375	U	0.0739	0.0740	1.00	0.140	pCi/L	05/	13/24 10:09	06/04/24 23:24	
		МВ	МВ									
Carrier		%Yield	Qualifier	Limits						Prepared	Analyzed	Dil Fa
Ba Carrier		92.8		30 - 110					05/	/13/24 10:09	06/04/24 23:24	
Lab Sample ID	: LCS 160	0-661407	/2-A						Clier	t Sample I	D: Lab Control	Sample
Matrix: Water											Prep Type: ⁻	
Analysis Batch	: 664625										Prep Batch:	
-						Total					•	
			Spike	LCS	LCS	Uncert.					%Rec	
Analyte			Added	Result	Qual	(2 σ+/-)	RL	MDC	Unit	%Rec	Limits	
Radium-226			11.3	10.80		1.17	1.00	0.134	pCi/L	95	75 - 125	
	LCS	LCS										
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	91.8		30 - 110	-								
Lab Sample ID										Client Sa	mple ID: Metho Prep Type: ⁻	
Lab Sample ID Matrix: Water	: MB 160	- 661408 /1								Client Sa		Total/N/
Lab Sample ID Matrix: Water	: MB 160	- 661408 /1		Count	Total					Client Sa	Prep Type:	Total/N/
Lab Sample ID Matrix: Water	: MB 160	- 661408 /1		Count Uncert.	Total Uncert.					Client Sa	Prep Type:	Total/NA
Lab Sample ID Matrix: Water Analysis Batch Analyte	: MB 160	-661408/1 MB Result	MB Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit		Prepared	Prep Type: Prep Batch: Analyzed	Total/N <i>I</i> : 661408
Lab Sample ID Matrix: Water Analysis Batch Analyte	: MB 160	-661408/1 MB	I-A MB	Uncert.	Uncert.	RL 1.00	MDC 0.587				Prep Type: ⁻ Prep Batch:	Total/NA : 661408
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228	: MB 160	-661408/1 MB Result 0.4504 <i>MB</i>	MB Qualifier U MB	Uncert. (2σ+/-) 0.376	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14	Prep Type: Prep Batch: Analyzed 05/31/24 12:17	Total/N/
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier	: MB 160	-661408/1 MB Result 0.4504 <i>MB</i> %Yield	MB Qualifier U	Uncert. (2σ+/-) 0.376 Limits	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14 Prepared	Prep Type: Prep Batch: Analyzed 05/31/24 12:17 Analyzed	Dil Fac
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier	: MB 160	-661408/1 MB Result 0.4504 <i>MB</i> %Yield 92.8	MB Qualifier U MB	Uncert. (2σ+/-) 0.376 Limits 30 - 110	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14 Prepared /13/24 10:14	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17	Dil Fac Dil Fac 1 Dil Fac
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier	: MB 160	-661408/1 MB Result 0.4504 <i>MB</i> %Yield	MB Qualifier U MB	Uncert. (2σ+/-) 0.376 Limits	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14 Prepared	Prep Type: Prep Batch: Analyzed 05/31/24 12:17 Analyzed	Dil Fa
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier	: MB 160 1: 664147	-661408/1 MB Result 0.4504 <i>MB</i> %Yield 92.8 81.5	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.376 Limits 30 - 110	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14 Prepared /13/24 10:14 /13/24 10:14	Prep Type: Prep Batch: 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 D: Lab Control	Total/NA 661402 Dil Fa Dil Fa
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.376 Limits 30 - 110	Uncert. (2σ+/-)				05/	Prepared 13/24 10:14 Prepared /13/24 10:14 /13/24 10:14	Prep Type: T Prep Batch: 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: T	Total/NA : 661408 Dil Fau Dil Fau Dil Fau Sample Total/NA
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.376 Limits 30 - 110	Uncert. (2σ+/-)	1.00			05/	Prepared 13/24 10:14 Prepared /13/24 10:14 /13/24 10:14	Prep Type: Prep Batch: 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 D: Lab Control	Total/NA : 661408 Dil Fau Dil Fau Dil Fau Sample Total/NA
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier	Uncert. (2σ+/-) 0.376 Limits 30 - 110 30 - 110	Uncert. (2σ+/-) 0.379				05/	Prepared 13/24 10:14 Prepared /13/24 10:14 /13/24 10:14	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 Prep Type: Prep Type: Prep Batch:	Total/NA : 661408 Dil Fac Dil Fac Dil Fac
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike	Uncert. (2σ+/-) 0.376 Limits 30 - 110 30 - 110 LCS	Uncert. (2σ+/-) 0.379	1.00 Total Uncert.	0.587	pCi/L	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared 13/24 10:14 13/24 10:14 13/24 10:14 It Sample I	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: Prep Batch: %Rec	Total/NA : 661408 Dil Fac Dil Fac Dil Fac
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike Added	Uncert. (2σ+/-) 0.376 <i>Limits</i> 30 - 110 30 - 110 LCS Result	Uncert. (2σ+/-) 0.379	Total Uncert. (2σ+/-)	0.587	pCi/L MDC	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared (13/24 10:14 (13/24 10:14 ht Sample I %Rec	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: - Prep Batch: %Rec Limits	Total/NA : 661408 Dil Fac Dil Fac Dil Fac
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte	: MB 160 1: 664147 	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike	Uncert. (2σ+/-) 0.376 Limits 30 - 110 30 - 110 LCS	Uncert. (2σ+/-) 0.379	1.00 Total Uncert.	0.587	pCi/L	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared 13/24 10:14 13/24 10:14 13/24 10:14 It Sample I	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: Prep Batch: %Rec	Total/NA : 661408 Dil Fau Dil Fau Dil Fau Sample Total/NA
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte	: MB 160 1: 664147 : LCS 160 1: 664147	-661408/1 MB Result 0.4504 MB %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike Added	Uncert. (2σ+/-) 0.376 <i>Limits</i> 30 - 110 30 - 110 LCS Result	Uncert. (2σ+/-) 0.379	Total Uncert. (2σ+/-)	0.587	pCi/L MDC	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared (13/24 10:14 (13/24 10:14 ht Sample I %Rec	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: - Prep Batch: %Rec Limits	Total/NA : 661408 Dil Fac Dil Fac Dil Fac
Ba Carrier Y Carrier	: MB 160 1: 664147 : LCS 160 1: 664147 LCS %Yield	-661408/1 MB Result 0.4504 <i>MB</i> %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike Added 8.89	Uncert. (2σ+/-) 0.376 <i>Limits</i> 30 - 110 30 - 110 LCS Result	Uncert. (2σ+/-) 0.379	Total Uncert. (2σ+/-)	0.587	pCi/L MDC	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared (13/24 10:14 (13/24 10:14 ht Sample I %Rec	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: - Prep Batch: %Rec Limits	Total/NA : 661408 Dil Fac 1 Dil Fac 1 Sample Total/NA
Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228 Carrier Ba Carrier Y Carrier Lab Sample ID Matrix: Water Analysis Batch Analyte Radium-228	: MB 160 1: 664147 : LCS 160 1: 664147 <i>LCS</i>	-661408/1 MB Result 0.4504 <i>MB</i> %Yield 92.8 81.5 0-661408/	MB Qualifier U MB Qualifier /2-A Spike Added 8.89	Uncert. (2σ+/-) 0.376 <i>Limits</i> 30 - 110 30 - 110 LCS Result	Uncert. (2σ+/-) 0.379	Total Uncert. (2σ+/-)	0.587	pCi/L MDC	05/ 05/ 05/ Clien	Prepared 13/24 10:14 Prepared (13/24 10:14 (13/24 10:14 ht Sample I %Rec	Analyzed 05/31/24 12:17 Analyzed 05/31/24 12:17 05/31/24 12:17 05/31/24 12:17 D: Lab Control Prep Type: - Prep Batch: %Rec Limits	Total/NA : 661408 Dil Fau Dil Fau Dil Fau Sample Total/NA

QC Association Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill Job ID: 310-280705-2

Rad

Prep Batch: 661407

Lab Sample ID **Client Sample ID** Method Prep Batch Prep Type Matrix 310-280705-1 APMW-4 Total/NA Water PrecSep-21 310-280705-2 APMW-11 Total/NA Water PrecSep-21 Total/NA 310-280705-3 Duplicate Water PrecSep-21 MB 160-661407/1-A Method Blank Total/NA Water PrecSep-21 LCS 160-661407/2-A Lab Control Sample Total/NA Water PrecSep-21 Prep Batch: 661408 Lab Sample ID **Client Sample ID** Prep Type Matrix Method Prep Batch 310-280705-1 APMW-4 Total/NA Water PrecSep_0 310-280705-2 APMW-11 Total/NA PrecSep_0 Water 310-280705-3 Duplicate Total/NA Water PrecSep_0 PrecSep_0 MB 160-661408/1-A Method Blank Total/NA Water LCS 160-661408/2-A Lab Control Sample Total/NA Water PrecSep_0

Dilution

Factor

1

1

1

Run

Batch

661407

Number Analyst

664627 SCB

661408 KAK

664149 SCB

664851 FLC

KAK

Lab

EET SL

EET SL

EET SL

EET SL

EET SL

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Batch

9315

9320

Method

PrecSep-21

PrecSep_0

Ra226_Ra228

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Matrix: Water

Matrix: Water

Lab Sample ID: 310-280705-1

Lab Sample ID: 310-280705-2

Prepared

or Analyzed

05/13/24 10:09

06/04/24 23:18

05/13/24 10:14

05/31/24 12:13

06/05/24 11:11

	5
	8
	9
-	

Lab Sample ID: 310-280705-3

Matrix: Water

Date Collected:	05/06/24 18:41
Date Received:	05/08/24 08:35

Client Sample ID: APMW-11

Client Sample ID: APMW-4

Date Collected: 05/06/24 16:45

Date Received: 05/08/24 08:35

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

	Batch	Batch		Dilution	Batch			Prepared	Í
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Total/NA	Prep	PrecSep-21			661407	KAK	EET SL	05/13/24 10:09	
Total/NA	Analysis	9315		1	664627	SCB	EET SL	06/04/24 23:18	
Total/NA	Prep	PrecSep_0			661408	KAK	EET SL	05/13/24 10:14	
Total/NA	Analysis	9320		1	664149	SCB	EET SL	05/31/24 12:13	
Total/NA	Analysis	Ra226_Ra228		1	664851	FLC	EET SL	06/05/24 11:11	

Client Sample ID: Duplicate Date Collected: 05/06/24 18:57 Date Received: 05/08/24 08:35

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	PrecSep-21			661407	KAK	EET SL	05/13/24 10:09
Total/NA	Analysis	9315		1	664627	SCB	EET SL	06/04/24 23:18
Total/NA	Prep	PrecSep_0			661408	KAK	EET SL	05/13/24 10:14
Total/NA	Analysis	9320		1	664149	SCB	EET SL	05/31/24 12:13
Total/NA	Analysis	Ra226_Ra228		1	664851	FLC	EET SL	06/05/24 11:11

Laboratory References:

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

Accreditation/Certification Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
H - RadChem Recognition	State	n/a	06-30-24
llinois	NELAP	200023	11-30-24
owa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
₋ouisiana	NELAP	04080	06-30-22 *
₋ouisiana (All)	NELAP	04080	06-30-24
ouisiana (DW)	State	LA011	12-31-24
<i>l</i> aryland	State	310	09-30-24
lassachusetts	State	M-MO054	06-30-24
/II - RadChem Recognition	State	9005	06-30-24
lissouri	State	780	06-30-25
levada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Dklahoma	NELAP	9997	08-31-24
Dregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
- Texas	NELAP	T104704193	07-31-24
JS Fish & Wildlife	US Federal Programs	058448	07-31-24
JSDA	US Federal Programs	P330-17-00028	05-18-26
Jtah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Vashington	State	C592	08-30-24
Vest Virginia DEP	State	381	10-31-24

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

Method Summary

Client: Nebraska Public Power District Project/Site: Gerald Gentleman Station CCR & Landfill

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

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



Environment Testing America



310-280705 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information	\$
Client: Nebraska Kublic Power	
City/State:	Project:
Receipt Information	
Date/Time DATE TIME Received: 5824	Received By:
Delivery Type: 🖉 UPS 🛛 FedEx	🗍 FedEx Ground 🛛 US Mail 🔹 Spee-Dee
🗌 Lab Courier 🔲 Lab Field Service:	s 🗌 Client Drop-off
Condition of Cooler/Containers	
Sample(s) received in Cooler?	If yes: Cooler ID:
Multiple Coolers?	If yes: Cooler # of
Cooler Custody Seals Present? Yes No No	If yes: Cooler custody seals intact? Yes
Sample Custody Seals Present? Yes AN®	If yes: Sample custody seals intact? Yes
Trip Blank Present?	If yes: Which VOA samples are in cooler? 1
Temperature Record	
Coolant: 🛛 Wet ice 🗌 Blue ice 🗌 Dry ic	ce 🔲 Other: 🗍 NONE
Thermometer ID:	Correction Factor (°C): $+$ 0.3
• Temp Blank Temperature - If no temp blank, or temp blank	temperature above criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C):	Corrected Temp (°C):
Sample Container Temperature	
Container(s) used:	CONTAINER 2
Uncorrected Temp 3.1	
Corrected Temp (°C):	
Exceptions Noted	
 If temperature exceeds criteria, was sample(s) rec a) If yes: Is there evidence that the chilling proce 	· · ·
(e.g., bulging septa, broken/cracked bottles, froze	•
NOTE. If yes, contact PM before proceeding. If no, pro Additional Comments	ceed with login

Eurof**PagedarCodf** 21

6/5/2024

Chain of Custody Record

I STATER CRAN. S.

C eurofins

Pience Pience Pience District De Date Requested Gentleman Staton South Tri Requested (days) Sessment Montoning South MUL-H 5-6-24 MUL-H 5-6-2-24 MUL-H 5-6-7 MUL-H 5-6-7	Particle Particle Particle Particle Particle 1 Detect 1 Detect 1 Detect 2 S 2 S - 1 / 2 V Non-operation 2 P S - 2 - 2 / 2	Client Information	Sampler Davg Harris	Lab PM Hummel Matthew R	Carrier Tracking No(s)	COC No 310-92182-22930 1
Повенся <	Обрани (собрания (собрания (собрания (собрания)) Обрания (собрания) Обрания О	Client Contact: Douter Harris	20-10	E-Mail Matthew Hummel@at eurofineus com	State of Origin	Page Page 1 of 1
Conference Proteins Conference	Contraction Description Contract Report of the contract of the contr	Company Company Nebrasa Public Power District	PWSID.	1 //>	quested	# qor
Полнование и Порис Полнов	M. Machander flagman M. Machander flagman In Machander flagman Example of the structure flagman In Multi-L Example of the structure flagman In Multi-L Example of the structure flagman MUL-L Example of the structure structure flagm	Address. 5089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested			
Совящание и болга: Соминание и болга: Сомина	Compare Project Compare Pr	City Sutherland	TAT Requested (days)	,		NaOH Zn Acetate
^{00.4} ^{00.4}	Second function Second form	state Zp NE 69165	Yes	(eca)		Nitric Acid NaHSO4 R MeOH
Операти взеление и взеление в	Work Work <t< td=""><td>Phone 308-530-1124(Tel)</td><td>PO #. 4500255598 (2023)</td><td>Kep 12</td><td></td><td>Amchlor T Ascorbic Acid 11</td></t<>	Phone 308-530-1124(Tel)	PO #. 4500255598 (2023)	Kep 12		Amchlor T Ascorbic Acid 11
Sessement Montoring Tonget # Sessement Montoring Tonget # Sources Sessement Montoring Sources Sample Data Sample Matrix	Полование половой Полова Полование половой Полование полование половой Полование полование половой Полование полование половой Полование полование полование полование пол	Email ddharri@nppd com	# CM	FPC) FPC)	5	J DI Water W
Simple Dire Sample Dire Sample Dire Sample Dire Mutrix Control Contro Contro Control </td <td>Stoore Stoore Stoore<</td> <td>Project Name GGS CCR & Landfill Assessment Monitoring</td> <td>Project # 31007155</td> <td>328 (G 528 (G</td> <td></td> <td>L EDA Z</td>	Stoore Stoore<	Project Name GGS CCR & Landfill Assessment Monitoring	Project # 31007155	328 (G 528 (G		L EDA Z
MMU-Li Sample Data Sample Data <t< td=""><td>Политися Паки в совета Паки в совет</td><td>She OS</td><td>#MOSS</td><td>Y) O2 -muibe -muibe</td><td></td><td></td></t<>	Политися Паки в совета Паки в совет	She OS	#MOSS	Y) O2 -muibe -muibe		
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3019 Venture Way Cedar Falls, IA 50613 Phone: 319-277-2401 Fax: 319-277-2425	U	Chain e	of Cus	Chain of Custody Record	ecord							😵 eurofins	ofins Environment Testing
Client Information (Sub Contract Lab)	Sampler			Lab P Hum	M: mel, Matth	lew R				Carrier Tracking No(s)		COC No: 310-72188.1	38.1
Client Contact Shipping/Receiving	Phone:			E-Mai Mattl	E-Mail: Matthew.Hummel@et.eurofinsus.com	nel@et	eurofins	sus.con	State of Origin	higin: ka		Page: Page 1 of 1	
Company TestAmerica Laboratories, Inc.					Accreditations Required (See note) NELAP - Oregon	ns Requir Oregon	ed (See n	ote):				Job # 310-280705-2	705-2
Address 13715 Rider Trail North, ,	Due Date Requested: 5/30/2024	:pa					⋖	nalysi	Analysis Requested			Preserva	Preservation Codes:
cuy stath City State. Zip. MO, 63045	TAT Requested (days):	1 y s):			C) - 21 day								
Phone 314-298-8566(Tel) 314-298-8757(Fax)	# #				****								
Email:	# OM				(ON							8.	
Project Name: Gerald Gentleman Station CCR & Landfill	Project #: 31007155				10 88							neniati	
Site	SSOW#				v) as				_			of con	
Samole Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=orab)	Matrix (www.er. S=solid. Oewasholi.	Perform MS/Pro Perform MS/Pro 215_Rs226/Pro	3320_Ra228_GI 3320_Ra228/Pre 36Cay	822-mulbes					retan Number	Snarial Instructions (Note:
		X	Preserva	Preservation Code:	X	5		54.5.5			No. of Street		
APMW-4 (310-280705-1)	5/6/24	16:45 Central		Water	Ê	××	×					2	
APMW-11 (310-280705-2)	5/6/24	18:41 Central		Water	Ê	×	×					2	
Duplicate (310-280705-3)	5/6/24	18:57 Central		Water	×	×	×					2	
												S.C.M.	
							+						
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyle & accreditation compliance upon our subcontract laboratories. This samples hipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Orgin listed above for sampless/mets/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central. LLC places the ownership of method, analyzed accreditation compliance upon our subcontract laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting north Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting north Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting north Central. LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.	ronment Testing North Centr isted above for analysis/tests orth Central, LLC attention inr	al, LLC places /matrix being a	the ownership analyzed, the s all requested a	of method, anal amples must be ccreditations are	lyte & accrec shipped bac current to d	itation col	npliance urofins E	upon our nvironme ed Chain	subcontract laborant Testing North C of Custody attestir	I I Itories. This entral, LLC Ia Ig to said cor	sample ship sboratory or npliance to E	ment is forwarde ther instructions urofins Environn	d under chain-of-custody. will be provided. Any cha hent Testing North Central
Possible Hazard Identification					Samp	le Disp	osal (A	fee m	iy be assesse	d if samp	les are re	tained longe	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliven	iverable Rank: 3	2		Specia	Return To Client al Instructions/QC	To Cliel ctions/C	nt DC Req	Client Disposal By Lab Special Instructions/QC Requirements:	By Lab	<u>ן</u>	Archive For	Months
Empty Kit Relinquished by:		Date:			Time:				Me	Method of Shipment	ment:		
Relinquished by:	Date/Time:	1020	0	Company		Received by		1		Dat	Date/Time:		Company
Relinquished by:	Date/Time:			Company	Re	Received		5	+	0	I ANN-	0 20240900	900 Company
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Custody Seals Intact: Custody Seal No.:					ð	olor Tom		100 00 V	Coller Temperature(c) ⁰ C and Other Benneder				

Client: Nebraska Public Power District

Login Number: 280705

List Number: 1 Creator: Homolar, Dana J

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

Job Number: 310-280705-2

List Source: Eurofins Cedar Falls

Client: Nebraska Public Power District

Login Number: 280705 List Number: 2

Creator: Pinette, Meadow L

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 310-280705-2

List Source: Eurofins St. Louis

List Creation: 05/10/24 02:24 PM

Prep Type: Total/NA

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

			Percent Yield (Acceptance Limits)	
		Ва		
Lab Sample ID	Client Sample ID	(30-110)		Ę
310-280705-1	APMW-4	91.0		
310-280705-2	APMW-11	92.0		
310-280705-3	Duplicate	96.8		
LCS 160-661407/2-A	Lab Control Sample	91.8		
MB 160-661407/1-A	Method Blank	92.8		
Tracer/Carrier Legend				8
Ba = Ba Carrier				0
Aethod: 9320 - Rad	dium-228 (GFPC)			
Aatrix: Water	. , ,		Prep Type: Total/NA	

				Percent Yield (Acceptance Limits)	
		Ва	Y		
Lab Sample ID	Client Sample ID	(30-110)	(30-110)		
310-280705-1	APMW-4	91.0	81.9		- 12
310-280705-2	APMW-11	92.0	84.9		
310-280705-3	Duplicate	96.8	82.2		13
LCS 160-661408/2-A	Lab Control Sample	91.8	81.5		
MB 160-661408/1-A	Method Blank	92.8	81.5		
Tracer/Carrier Legend					45
Ba = Ba Carrier					15

Y = Y Carrier

Eurofins Cedar Falls 3019 Venture Way

Chain of Custody Record

💸 eurofins Environment Testing

Cedar Falls, IA 50613 Phone (319) 277-2401 Phone (319) 277-2425

Client Information	Sampler:	g Ha	mris	Lab Pl Calh	^{M:} oun, C	onne	r M				Сапі	er Tracki	ng No(s):		COC No: 310-98036-26680.	1
Client Contact:	Phone: 308 ~	520	- 1134					aurof	incue	com	State	of Origi	n:			Page: Page 1 of 2	
Doug Harris Company:	996	اپ ر پ	PWSID:	Conr	ier.ca	noun	were	50101			_					Job #:	
Nebraska Public Power District Address:	Due Date Requeste	d:			102		T		Ana	lysis R	eques	sted	-1-	T-T	033	Preservation Codes	:
6089 S Hwy 25 Gerald Gentleman Station South															The second	D - HNO3 N - None	
City: Sutherland	TAT Requested (da	ys):			NUS			a									
State, Zip: NE, 69165	Compliance Projec	t: ∆Yes ∆	No			ε		Sulfat									
Phone: 308-530-1124(Tel)	PO #. 4500266733				(0	Selenium		loride,	1 d								
Email: ddharri@nppd.com	WO #:				s or N	Calclum, §		de, Fiu	+						E		
Project Name: GGS Ash Pit Detection Monitoring	Project #: 31007155				o (Yo	n, Calc	±	Chlor	معمد معلم						containe		
Site: Gerald Gentleman Station	SSOW#:				Sampl SD (Y	, Boron,	M4500	9056A_ORGFM_28D - Chloride, Fluoride, Sulfate	00						0		
			Sample	Matrix	tered .	Arsenic,	Calcd, Si	RGFM	5						Total Number		
		Sample	Type (C≃comp,	(W=water, S=solid, O=wastefoil,	III Pla	6020B - A	2540C_C	56A_0	٤						tal N		
Sample Identification	Sample Date	Time	G=grab) a			A	Annual Contra	COLUMN TWO IS NOT	N	54-058 (S	100 162	12:50	(1) (2)	1000	1º	Special Inst	tructions/Note:
	12 3 011		ADDREASS CONTROLS	Water	m			N ×	×		1	Salation and State	100.00		r		Print March
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APMW 17	12-3-24	1132		Water	\mathbb{H}	N	$\overline{\mathbf{\nabla}}$	X	\sim	++	-	+	-	++	8		
APMW15	12-3-24	1205	G	Water		X	1m		A			+	-		0.0	9	
APMW-5	1.a. A. A.11			Water	\mathbb{H}		57	$\overline{\mathbf{v}}$			+	++		++	12 (2)	0	
APMW 18	12-3-24		G	Water	┼┼	17	X	N	$\frac{1}{1}$					++	0		
APMW 19	12-3-24	1347	G			1×	X	A	\cap					++	100	2	
APMW-4				Water	11	E	-	E,			_			+	19	0	
APMW 6	12-3-24		G	Water	11-	X	X	X	X	-	_		-	++	19	5	
APMW 8A	12-3-24		G	Water	44	X	X	X	X	_	_		_				
APMW 10	12-3-24			Water	44-	X	X	X	X	_		$\left \right $		14	12		
APMW 11	12-3-24	1737	G	Water	Ц	X	X	X	X				feam		ratai	ned longer than 1 i	month)
Possible Hazard Identification	son B 🛄 Unki	nown	Radiologica	1	s				Client			iosal B				chive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)					S	pecia	l Instr	ructio	ons/Q0	Require	ments:						
Empty Kit Relinquished by:		Date:			Time							Metho	d of Shi				Сотрапу
Relinquished on Songlas D Harris	Date/Time:	24 12	130	NPP	D'	_	eived						_	ate/Time:			
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Relinquished by:	Date/Time:			Company			ceived						Da	ate/Time:			Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No						Cod	oler Te	mpera	ature(s)	°C and Oth	ar Remai	'ks:					Ver: 05/06/2024

Eurofins	Cedar	Falls
3019 Venture	Way	

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Chain of Custody Record

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A. A. A.	eurofins	

Environment Testing

Cedar Falls, IA 50613 Phone (319) 277-2401 Phone (319) 277-2425

Client Information								un, Conner M					cking No	o(s):		COC No: 310-98036-26680.	2
Client Information	Phone:	J 114	5.9 × 4.	E-	-Mail:						St	ate of Or	igin:			Page:	
Doug Harris	308-	-330-	1124	С	onner.	Calho	un@et	euro	finsus	com						Page 2 of 2	
Company: Nebraska Public Power District			PWSID:						An	alysis F	Requ	ested				Job #,	
Address: 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Requeste	ed:													10 M	Preservation Code D - HNO3	s:
City	TAT Requested (da	iys):			8	63									1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N - None	
Sutherland					100	闣									1		
State, Zip: NE, 69165	Compliance Projec	t:∆Yes ⊿	A No		- Series		ε	Sulfate									
Phone: 308-530-1124(Tel)	PO #: 4500266733				10		euin	ide,						11	1212		
Email:	4300200733 WO #:				- lê			lon		11					423		
ddharri@nppd.com				_	s of	log		de, F		11					2		
Project Name: GGS Ash Pit Detection Monitoring	Project # 31007155				le (Ye	(es or	La Cal	Chlorl							containers		
site: Gerald Gentle Man Station	SSOW#:				Samp	Uasy	6020B - Arsenic, Boron, Calcium, Selenium 2540C_Calcd- TDS	9056A_ORGFM_28D - Chloride, Fluoride,							5		
			Sample	Matrix	181	WSW	6020B - Arsenic, B 2540C_Calcd- TDS	RGFN	Hd ++						Total Number		
		Sample	Type (C=comp,	(W=water S=solid, O=wastelo		tor		6A_0	SM4500_H+-						N IS		
Sample Identification	Sample Date	Time	G=grab)	T=Tiseue, A	=Air)	but	602 254	905	SM	_					Ĩ	Special ins	tructions/Note:
The second s	> <	\succ	Preservat	ion Code	e: 🗙	\mathbb{N}^{D}	N	Nº.	N		100		1022	ed and	X	Contraction of the second	No.
APMW 12	12-4-24	0942	G	Water	r		XX	X	X						The second		
APMW 13	12-4-24	1042	G	Water	r		$\langle X$	X	X								
APMW 14	12-4-24		G	Water	r	6	$\times \times$	X	X								
Duplicate	12-3-24	1355	G	Wate	r		XX	X	X						100		
				Water	r												
															100		
															1.54		
	1														1		
												_			10.00		
Possible Hazard Identification						Sam				fee may l	be as	sessed	l if san	nples are		ned longer than 1	
	son B 🗖 Unki	nown	Radiological	_		Sper			Clien	t C Require	Di	sposal	By Lab)	Arc	hive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)								uucu	0113/02	orrequire				1 i	_		
Empty Kit Relinquished by:	la cor	Date:		Company		ime:	Received	l by:				Met		hipment: Date/Time:			Company
Relinquished by oughin A Harrin	Date/Time:	24 1				>						_		Date/Time:			Company
nguished by: Date/Time: Company																	
Relinquished by: Date/Time: Company					Received by: Date/Time: Company												
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) ^o C and Other Remarks:				harks:										

Eurofins Cedar Falls 3019 Venture Way

Chain of Custody Record

CONTRACT OF	TO 100	1. C. C. C. C.	
(The Suij	10.00	化作用 机口口	1 D

🔅 eurofins

Environment Testing

Cedar Falls, IA 50613 Phone (319) 277-2401 Phone (319) 277-2425

	Sampler:	PM:	, Conner M						Carrier Tracking No(s):					COC N 310-9	o: 8039-260	681-1							
Client Information	Sampler: Doug Phone: 308 -	114	1113	E-Ma		Conne						Sta	te of Or	igin:				Page:	5005-200	0011			
Doug Harris	308 -	530	-1124	Соп	ner Ca	alhou	n@et	eurof	์เกรนะ	s,com		1				_		Page	1 of 1			_	
Company: Nebraska Public Power District			PWSID:						An	nalysi	s R	eque	sted					Job #:					
Address:	Due Date Requeste	d:			前間	100					Т	Ť	T				202	Prese	rvation C	odes:			
6089 S Hwy 25 Gerald Gentleman Station South	TAT Requested (da	wa):			12												15	N - Nor					
city: Sutherland	TAT Requested (da	ys).															8						
State, Zip:	Compliance Project	· A Var A	No		12	decay							1				19						
NE, 69165 Phone:	PO #:	L. A les d			主義	day d	1 1																
308-530-1124(Tel)	4500266733				6		1.0	qe									105.4	1					
Email:	WO #:				N LO	Radium-226 (GFPC) - 21	D2	- (MOD) Fluorlde									5						
ddharri@nppd.com Project Name:	Project #:	- (es	GF	(GF) E									Le c	Other:								
GGS Ash Pit Assessment Monitoring	31007155				la (1-226	1-228	W)									1	Other:					
Site: Gerald Gentleman Station							Radium-228 (GFPC)	9056A_ORGFM_28D									1 2	5					
			Sample	Matrix	ered	26 - 1	28 - 1	GFA	70A							100	Mumhae						
			Туре	(W=water, S=solid,	Ĩ	Ra2	Ra2	A_0	B, 74								No.						
Sample Mentification	Sample Date	Sample Time	(C=comp, G=grab)	O=weste/oil, T=Tissue, A=Alr		9315_Ra226 -	9320_Ra228 -	9056	6020B, 7470A								Total	5	Special	Instru	uctions	/Note	e:
Sample Identification		\times		ion Code.	X	< D		N :		Constant of the	10				30		>			-			
APMW -11	12-3-24	1744	G	Water	Π	>	X	×	X								TAX INC.						
APMW -11 Duplicate	12-3-24	1800	G	Water		Y	4	¥	×														_
				Water													1 and	100					
				Water													11111	il.					
																						_	
																	2002			_			
																				_			
																	1						
			1					-				_										_	
					Ц									1.2				in orthe	ngor 4k -		onthi		
Possible Hazard Identification			e nya wa	4	1						ay b		esse posal			es are		rchive F	nger tha	n i M	ontn) Month	ç	
Non-Hazard Flammable Skin Irritant Poi	son B 🔛 Unkr	nown	Radiologica	l		Return To Client					uire	_	_	by Li	aD		A	cnive r	JI		WORT	3	
Deliverable Requested: I, II, III, IV, Other (specify)					ľ	opeci	at mot	ruono	/11.5/ 0		uno												
Empty Kit Relinquished by:		Date:			Tim	100 million							Me	thod of	Shipn	· · · · ·			_				
Relinquished by ough A Hcernie	Date/Time: 12-4-24 1230 NPPD) Re	ceived	by:								/Time:					ompany			
Relinquished by:	Date/Time: Company				Received by:				Date/Time:							Company							
Relinquished by:	Date/Time: Company				Received by: Date/Time: Company																		
Custody Seals Intact: Custody Seal No.:							ooler Te	empera	ature(s	s) °C and	Othe	er Rema	arks:										
Δ Yes Δ No						_	_													1	Ver: 05/0	6/202	:4

Nebraska Public Power District - Gerald Gentleman Station Monitoring Well Equipment Calibration Log

DATE: 12	- 3 - 24	-		
TIME: O	805			
SAMPLING PI	ERSONNEL:		Γ K	
SAMPLING LO				$\overline{\gamma}$
EQUIPMENT				
EQUIFWENT	ALIBRATIU	N5:		U.
Temperature (Deg C)	7	Turbidity (NTU)	? \$
MP-25T	Ref C 22.6 Temp Ok?	MP-25T ステ, 6) Yes/No	MP-25T Ref MP-25T Not do. 10 NTU DI (0 NTU)	ng to he o
ELOSense	ORP 15			
рH			Hach 2100Q 10 NTU Verification Reading.	1 0
MP-25T	Ref 7 0 10 0	MP-25T 7, 02	Çalibration (NTU)	-216
SRF-72	10.0	10,00	Current Or Last Ref Reading	5
Conductivity			20	R R
MP-25T	Ref	MP-25T	800 Acceptable? Yes/No	to
5RF - 97		1.5.11	1	
ORP (mV)			DO	
MP-25T .	Zobell Ref (mV)	MP-25T (mV)	MP-25T Saturation Calibration BP Entered % Sat	
YSI 15A	Zobell	KSI 15A doing	Mg/t OK? Yes/No	
and and a set of a set of the	Ref (mV)	Rel (mV) (v ~ 1 2 5 5		

WEATHER CONDITIONS: Cold - 15 Flast night - see APMW-164 Notes - frozen OBSERVATIONS/FIELD NOTES DURING SAMPLING EVENT: Temperature - use Ecosense ORP 15A ORP- use 45I Ecosense ORP 15A - OK to 235 -see manual page for calibration

Nebraska Public Power District - Gerald Gentleman Station Monitoring Well Equipment Calibration Log

DATE: 12-4-24	
TIME: 08/0	
SAMPLING PERSONNEL:	H JK
SAMPLING LOCATION(S): GGS	۲ ۲
EQUIPMENT CALIBRATIONS:	
Temperature (Deg C)	Turbidity (NTU)
MP-25T Ref C MP-25T	10 NTU with the 0
Hq	Hach 2100Q 10 NTU Verification Reading Acceptable? Yes/No
MP-25T Ref MP-25T 7.0 7.05 10.0 10.00	Calibration (NTU) Current Or Last Ref Reading
Conductivity	
MP-25T Ref MP-25T	800 Acceptable? Yes/No
58F-102	
ORP (mV)	DO
MP-25T Zobell MP-25T Ref (mV) (mV)	MR-25T Saturation Calibration BP Entered % Sat
YSI 15A Zobell YSI 15A	Not OK? Yes/No Not VSIDE
Ref.(mV) Rel (mV)	VALZES YSI 55 Saturation Calibration

WEATHER CONDITIONS: Windy & Sunny

OBSERVATIONS/FIELD NOTES DURING SAMPLING EVENT: Calibrated ORP --- YSI Ecosense ORP 15A - OK to 235 Temperature - checked OK w/ 35I Ecosense ORP 15A

Well Numbe Field Person Sampling O Identify MP	nnel rganization_ TOC	/W- <u>/6</u> Dou	g Harris _NPPD	ts Date! TWK [] [3 g		.4					Depth to 78.0/ 98.0 of Screen Top Bottom Pump Intake at (ft. below MP) 96,72 Purging Device (pump type) Micropurge Bladder Pump
Time		Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping at 1008 Survey Cold 280
1015	89,72	220'	200		12.01	914.6	7.12	/	1	1	
1020				(a.		919,9		"/		1	
1025					12,15	921.0	7.12		/	1	2
1030					12.20	924,5	7.11	/	1	1	
1035					12.13	925.2	7.11		/	174	EcoSense ORP15A
1037	89.72	a 									500 ml Unpreserved
1040											250 ml Preserved
1043											250 ml Unpreserved
											1 this was the only
Bottle Regula	ator 100 psi										well that was a
	25-5	-									
			rubin es ; i samp by	g at a lig hand	the prore eve t	top ed mt - pum	of 15 15	thold F OK	we wa last	II c ler nigl ced	L problem + warmed up later asing was frozen from the last it - got it thawed small torches in the future

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<u>x</u>

Identity IVIE	100	ame)(/WDou Dou	GGS Ash Pi g Harris NPPD	ts. Date JWK All is		4					Depth to <u>76.0 / 96.0</u> of Screen <i>Top Bottom</i> Pump Intake at (<i>ft. below MP</i>) <u>92.73</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Sunny 40° Started pumping at 1102
1110	86.15	220'	200	/	12,21	821.2	7.14	1	/	1	
1115					12.32	817.6	7,14	1	1	/	
1120					12,40	813.8	7.12	1	1	1	
1125	-					810,3			/	/	
1130					12,46	806.0	7.14	1	_/_	175	Ecosense ORP15A
1132	86,15								1		500 ml Unpreserved
1135					1						250 ml Preserved
1137											500 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
Down Dros											
CPM 2	25-5	5									

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Well Numb Field Perso Sampling C Identify MP	TOC	ame)C AWDou Dou		Its Date TWK	2-3-2 K	4					Depth to <u>\$8.0/ 108.7</u> of Screen Top Bottom Pump Intake at (<i>ft. below MP</i>)_ <u>107.7</u> Purging Device (pump type)Micropurge Bladder Pump
Clock Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments No Well Level Reading Took a few WO readings
1155		7		-	11.71	579,1	7,96	1	1	/	
1156					11.79	584,8	7.92	/	/	/	
115)						7.88		/	/	
1158	5				11,93	640.0	7.73				
1159					11.97	706;3	7.52		/	165	Ecosense PRP15A
1205		•									250 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
1215	-										250 ml Preserved
1220	>										250 ml Unpreserved
								-			
					6						
Bottle Requ	ator 100 psi										

-purge not completely normal as water was low and we were concerned about getling enough water for sample

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activity iv	(Site/Facility N ber APN sonnel Organization IP TOC ditions/Field O			its _Date_/2 FWK	2-3-2	-4 W	elt u	Jasé	zry		Depth to of Screen Top Bottom Pump Intake at (ft. below MP) Purging Device (pump type)Micropurge Bladder Pump
Clock Time (24hr)			Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)		pH			ORP (mV)	Comments No Water Sample
											well dry
						/					
									_		
	¥.			-/						-	
			/						_		
		/									
							_				
Bottle Re	gulator 100 psi										

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identify MP	TOC	ame)(/IWDou Dou		lts. _Date[: K	2-3-24 <						Depth to 104.8/124.8 of Screen Top Bottom Pump Intake at (ft. below MP) 12.2.04 Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)			Purge Rate (ml/min)	Cum. Volume Purged (ml)	1	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Sunny 45° breezy Started pumping at 1222
1230	116.38	220	200		13.23	735,3	7,35	1	1	1	
1235				×		731.6		1	1	1	
1240					13.40	728,3	7.35	1	1	1	
1245					and the second se	728,2	a second second second			1	
12.50	1				13,53	729,0	7.36		(153	Ecosense ORP 15A
1257	116.64	1									500 Unpreserved
1255											250 Preserved
125											250 Unpreserved 250 Preserved 250 Unpreserved
Bottle Regu	25-5 24-6										

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dentify MP	TOC	lame) MWDou Dou		its. _Date_ 12 Τωκ Α((_ i							F	Depth to <u>127.1/ 147.9 of Screen</u> <i>Top Bottom</i> Pump Intake at <i>(ft. below MP)</i> <u>144,2</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)		Comments 54° Sunny, Wind Humidity 35%
1325	140.32	2 220'	200	-	13.98	619,4	7.47	/	1	1		
1330					14.03	601,0	7,34	(1	/		
1335					14.01	601.8	7.34	1	1	1		
1340					14.06	603.6	7.36	/	1	1		
1345					14.10	605.2	7,35	1	1	(71		ECOSENSE ORPISA
1347	140.44	ų ~										500 ml Unpreserved
1350												250 ml preserved
1352				-								500 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
1355										Dupli	cate	500 ml Unpreserved
1358										Dupli	cate	250 ml Preserved
1400							-			Dupli	icate	500 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
		-										1/**
Bottle Regul	ator 100 psi	1										

Page _____ of _____

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Well Num Field Pers	Site/Facility N ber A Pl onnel Organization	NW- 4	GGS Ash P	Its. Date	2-3-2	4	-				[Depth to 111.01 131.0 of Screen Top Bottom Pump Intake at (ft. below MP)
identity w	F IOC						-				F	Purging Device (pump type)Micropurge Bladder Pump
Well Cond	litions/Field O	bservations:										
	/	\										/
Clock Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рн	Turbidity (ntu)	DO (mg/l)	ORP (mV)		comments Out of water
												No samples
									/			No samples Well dry
					-				/			J
	-					<u></u>	-					
		÷						X				- hopeful that this well will have water next spring for a sample - after winter recovery
					_		\rightarrow					well will have water
							4	\rightarrow				next spring for a
					_						-	Sample - after
	*				/	1		_				winter recovery
<u> </u>										×		
	_			-/						\sim		-it was dry in the fall of 2023 and then we got samples from it Q2 2024
				/						+>	$\langle -$	of doa's and frien we
		-	/								$\overline{\langle}$	1 (2) 7074
Bottle Reg	gulator 100 psi	-/		-							^	IF SA GEAL
CPM 2			1			سفحيصاني				_		
	/											
												·

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Well Numbe Field Persor Sampling O Identify MP	nnel rganization TOC	AW- 6	g Harris NPPD	Date	2-3-2 0K	4						Depth to 10.0/ 129.9 of Screen Top Bottom Pump Intake at (ft. below MP) 28,9 Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (m!/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)		Comments Sun & Wind 50° Started pemping @1\$33
1440	124.53	220'	200		13.93	458.5	7.50	1	1	/		
1445					13.86	454.9	7.52	1,	/	/		
14 50					13,87	455.0	7152	/	/	1		
1455					13.85	451.6	7.55	1	1			
1500					13,84	453,0	7.54	/	/	/68		Ecosense ORPISA
1502	124.95	- a							_		-	500 ml Unpreserved
1505	. ×				0							250 ml preserved
1507												500 ml Unpreserved 250 ml preserved 250 ml Unpreserved
									-			
-	1											
CPM 2	54	0										

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Identify MP	TOC	lame) MW BA Doc			2-3-24 900d			(6	2			Depth to <u>104,71 124,7</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>122,8</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)		Comments Start pumping at 1530
1540	115.55	220'	200		13.90	645.1	7.30	/	1	1		
1545				0		644.8		/	1	/		
1550					13.84	649.8	7.31	1	1	1		
1555	-				13.87	653.3	7.33	1	1	/		
1600					13,86	654.5	7,32	-/-	1	164		Ecosense ORPISA
1602	115,64	<i>i</i>									~	500 ml Unpreserved
1605	202 8 7											250 ml Preserved
1607											-	500 ml Unpreserved 250 ml Preserved 250 ml Unpreserved
Bottle Regul	ator 100 psi											
Contained of the second second	24-1	9										

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Well Numbe Field Persor Sampling O Identify MP	er <u>A</u> PN nnel rganization TOC	ame)(//WDou Dou	g Harris NPPD	its	2-3-24 K						Depth to <u>91.01 130.27</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>129.27</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)		U U	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping @ 1622 Sunny, light preeze
1630	22.53	220'	200		13.05	442.5	7.68	1	1	1	
1635				10	12.99	436.7	7.67	1	1	/	
1640						441.4	the second s		1	1	
1645					12.91	4467	7.68	1	1	1	
1650						443.9			1	169	Ecosense ORP15A
1652	124,59										500ml Un preserved
1655	12										250 ml Preserved
1657											500ml Un preserved 250 ml Preserved 250 ml Unpreserved
					-						
Bottle Regul	ator 100 psi									_	
CPM 2 (9	24-4	2			1				1		

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Location (Si Well Number Field Person Sampling O Identify MP Well Conditi	erPN nnel rganization_ TOC	иwД Dou	GGS Ash Pi g Harris NPPD	ts Date 12 TWK All is	-3-24 OK				5000-00-00-00-00-00-00-00-00-00-00-00-00		ŀ	Depth to 96.0 / <u>115.74</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>114.74</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)	Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рH	Turbidity (ntu)	DO (mg/l)	ORP (mV)		Started pumping at 1707 - Sunset, 45 deg.
1715	107.88	220'	200		12.16	59.4.2	7,43	1	1	1		
1720						599.0	and the second second	1	1	1		
1725						586.7		1	/	1		
1730						592.3		1	/	1		
1735					12.04	593.8	7.42	/	1	178		Ecosense ORP 15A
1737	108,10	0.										500 me Unpreserved
1740												250 ml Unpreserved 250 ml Preserved
1742	-											250 ml Unpreserved
174												Assessment 1000 ml Preserved
1750												Assessment 1000 ml Preserved
1755												Assessment 250 ml Preserved
1758												Assessment 250 ml Unpreserved
		1800								Duplic	ate	Assessment 1,000 ml Preserved
		1805								Dupli	cate	Assessment 1,000 ml Preserved
Bottle Regul	alor 100 pei	1810								Duplie	cate	Assessment 250 ml Preserved
	24-6									Buplie	ate	Assessment 250 ml Unpreserved

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Well Numbe Field Persor Sampling Or Identify MP	r <u>A</u> PN Inel ganization_ TOC	ame)(IW 2 Doug	g Harris NPPD	its _Date TWK All_is	12-4-2 OK	4					Depth to <u>88.0 / 109.82</u> of Screen Top Bottom Pump Intake at (ft. below MP) <u>108.92</u> Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)			Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping at 0912 Sunny 32° Breezy Trimmer Free
0920	102.00	220'	200		- 11.44	1589	7.01	1	1	1	, , , , , , , , , , , , , , , , , , , ,
0925				-	11.70	1546	7.00	1	/	/	
0930					11.67	1536	7.01	1	1	/	
0935					11.77	1533	7,00	1	/	1	
0940					11.92	1518	7.00	1	/	215	VSI Ecosense ORP15A
0942	102,03	3									250 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
0945											250 ml Preserved
0948											250 ml Unpreserved
									-		
Bottle Regula	ator 100 psi		1								
A A	25-5	8								6	

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Vell Numbe Field Persor Sampling O dentify MP	nel rganization_ TOC	AW- 13 Dou	ig Harris NPPD	Date <u>12-</u> TWK							Depth to 95.01 115.95 of Screen Top Bottom Pump Intake at (ft. below MP) 114.95 Purging Device (pump type) Micropurge Bladder Pump
well Conditi	ons/Field Ot	bservations:	<u>+</u> 1	150	8						
Time (24hr)		Pump Dial Setting	Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	рН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping @ 1013 Sun/Breeze 40°
1020		220'	200	m	-11.76	1423	7.03	1	1	1	
1025					12,07	1446	7.02	1	1	1	
1030					12,10	1447	7.02	1	1	1	
1035					12,22	1446	7.02	1	1	1	
1040					12.28	1455	7.02	1	1	206	
1042	106,45										- 500 ml Unpreserved
1045											250 ml Preserved
1048											250 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
									_		<u></u>
CPM 2	24-6	0									

Page___of__

Well Numbe Field Persor Sampling O Identify MP	r <u>A</u> PN nnel rganization_ TOC	ame)(//WDou 	g Harris	Its. _Date_12 TWK K	2-4-24 K						Depth to <u>90.1 / /09.95</u> of Screen Top Bottom Pump Intake at (ft. below MP) 108.95 Purging Device (pump type) Micropurge Bladder Pump
Time (24hr)	Water Depth below MP (ft)		Purge Rate (ml/min)	Cum. Volume Purged (ml)	Temp. (C)	Spec. Conduct. (us/cm)	pН	Turbidity (ntu)	DO (mg/l)	ORP (mV)	Comments Started pumping at 1106 Sunny & Breezy
1115		220	200		12,59	12.08	7.02	1	1	1	
1120				н		1246		1	1	1	
1125					12,63	1.	7.04	1	1	1	
1130					12.69	1250	7.04	/	/	1	
1135					12,68	1258	7.04	1		187	
1137	101.45										- 500 ml Unpreserved
-1140											250 ml Preserved
1143					_						250 ml Unpreserved 250 ml Unpreserved 250 ml Unpreserved
	I			-	_						
Bottle Regul	ator 100 psi	5									

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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Attn: Doug Harris Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165 Generated 12/13/2024 2:08:24 PM

JOB DESCRIPTION

GGS Ash Pit Detection Monitoring

JOB NUMBER

310-296492-1

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613





Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated 12/13/2024 2:08:24 PM

Authorized for release by Conner Calhoun, Client Service Manager Conner.Calhoun@et.eurofinsus.com (319)277-2401

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Job ID: 310-296492-1

Eurofins Cedar Falls

Job Narrative 310-296492-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
 situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
 specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/5/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.4°C and 5.9°C.

Metals

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

General Chemistry

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

Sample Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

.lob	١D·	310-296492-1
000		010 200102 1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-296492-1	APMW 16A	Water	12/03/24 10:37	12/05/24 09:00
310-296492-2	APMW 17	Water	12/03/24 11:32	12/05/24 09:00
310-296492-3	APMW 15	Water	12/03/24 12:05	12/05/24 09:00
310-296492-4	APMW 18	Water	12/03/24 12:52	12/05/24 09:00
310-296492-5	APMW 19	Water	12/03/24 13:47	12/05/24 09:00
310-296492-6	APMW 6	Water	12/03/24 15:02	12/05/24 09:00
310-296492-7	APMW 8A	Water	12/03/24 16:02	12/05/24 09:00
310-296492-8	APMW 10	Water	12/03/24 16:52	12/05/24 09:00
310-296492-9	APMW 11	Water	12/03/24 17:37	12/05/24 09:00
310-296492-10	APMW 12	Water	12/04/24 09:42	12/05/24 09:00
310-296492-11	APMW 13	Water	12/04/24 10:42	12/05/24 09:00
310-296492-12	APMW 14	Water	12/04/24 11:37	12/05/24 09:00
310-296492-13	Duplicate	Water	12/03/24 13:55	12/05/24 09:00

RL

0.00200

0.100

0.500

0.100

25.0

50.0

2.00

1.0

Result Qualifier

0.00274

0.130

0.345

113

160

604

30.6

7.5 HF

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

Client Sample ID: APMW 16A

Analyte

Arsenic

Boron

Calcium

Fluoride

Sulfate

Chloride

Analyte Arsenic Calcium Selenium Fluoride Sulfate

Chloride pН

pН

Total Dissolved Solids

Total Dissolved Solids

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Dil Fac D Method

1

1

1

1

5

1

1

1

6020B

6020B

6020B

D516-16

SM 2540C

4500 F C-2011

SM 4500 CI- E

SM 4500 H+ B

Lab Sample ID: 310-296492-3

Lab Sample ID: 310-296492-4

Lab Sample ID: 310-296492-5

Lab Sample ID: 310-296492-1 5 Lab Sample ID: 310-296492-2

Result	Qualifier RI	_ MDL	Unit	Dil Fac	D	Method	Prep Type	9
0.00230	0.00200		mg/L	1	_	6020B	Total/NA	
117	0.500)	mg/L	1		6020B	Total/NA	
0.00842	0.00500)	mg/L	1		6020B	Total/NA	
0.220	0.100)	mg/L	1		4500 F C-2011	Total/NA	
131	25.0)	mg/L	5		D516-16	Total/NA	
514	50.0)	mg/L	1		SM 2540C	Total/NA	
33.5	2.00)	mg/L	1		SM 4500 CI- E	Total/NA	
7.7	HF 1.0)	SU	1		SM 4500 H+ B	Total/NA	13

MDL Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

SU

Client Sample ID: APMW 15

Client Sample ID: APMW 17

Analyte	Result Qualifie	er RL	MDL Unit	Dil Fac	Method	Prep Type
Arsenic	0.00266	0.00200	mg/L		6020B	Total/NA
Boron	0.102	0.100	mg/L	1	6020B	Total/NA
Calcium	105	0.500	mg/L	1	6020B	Total/NA
Selenium	0.00514	0.00500	mg/L	1	6020B	Total/NA
Fluoride	0.278	0.100	mg/L	1	4500 F C-2011	Total/NA
Sulfate	141	25.0	mg/L	5	D516-16	Total/NA
Total Dissolved Solids	564	50.0	mg/L	1	SM 2540C	Total/NA
Chloride	29.1	2.00	mg/L	1	SM 4500 CI- E	Total/NA
рН	7.6 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW 18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00230		0.00200		mg/L	1	_	6020B	Total/NA
Calcium	89.7		0.500		mg/L	1		6020B	Total/NA
Selenium	0.00725		0.00500		mg/L	1		6020B	Total/NA
Fluoride	0.214		0.100		mg/L	1		4500 F C-2011	Total/NA
Sulfate	23.6		10.0		mg/L	2		D516-16	Total/NA
Total Dissolved Solids	404		50.0		mg/L	1		SM 2540C	Total/NA
Chloride	116		20.0		mg/L	10		SM 4500 CI- E	Total/NA
рН	7.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: APMW 19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00368		0.00200		mg/L	1	_	6020B	Total/NA
Calcium	68.4		0.500		mg/L	1		6020B	Total/NA
Selenium	0.00961		0.00500		mg/L	1		6020B	Total/NA
Fluoride	0.266		0.100		mg/L	1		4500 F C-2011	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

Client Sample ID: APMW 19 (Continued)

Analyte Sulfate	Result	Qualifier	RL	MDL	Unit mg/L	<u>Dil Fac</u>	Method D516-16	Prep Type Total/NA
Total Dissolved Solids	374		50.0		mg/L	1	SM 2540C	Total/NA
Chloride	31.8		2.00		mg/L	1	SM 4500 CI- E	Total/NA
pH	7.7	HF	1.0		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW 6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Meth	od	Prep Type
Arsenic	0.00411		0.00200		mg/L	1	6020	В	Total/NA
Calcium	50.8		0.500		mg/L	1	6020	В	Total/NA
Selenium	0.00574		0.00500		mg/L	1	6020	В	Total/NA
Fluoride	0.317		0.100		mg/L	1	4500	F C-2011	Total/NA
Sulfate	27.0		5.00		mg/L	1	D516	-16	Total/NA
Total Dissolved Solids	318		50.0		mg/L	1	SM 2	540C	Total/NA
Chloride	31.4		2.00		mg/L	1	SM 4	500 CI- E	Total/NA
рН	7.9	HF	1.0		SU	1	SM 4	500 H+ B	Total/NA

Client Sample ID: APMW 8A

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Arsenic	0.00275		0.00200		mg/L	1	6020B	Total/NA
Calcium	77.0		0.500		mg/L	1	6020B	Total/NA
Selenium	0.0164		0.00500		mg/L	1	6020B	Total/NA
Fluoride	0.232		0.100		mg/L	1	4500 F C-2011	Total/NA
Sulfate	34.3		25.0		mg/L	5	D516-16	Total/NA
Total Dissolved Solids	338		50.0		mg/L	1	SM 2540C	Total/NA
Chloride	84.6		4.00		mg/L	2	SM 4500 CI- E	Total/NA
pН	7.7	HF	1.0		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW 10

Analyte Result Qualifier MDL Unit Dil Fac D Method RL Prep Type Arsenic 0.00321 0.00200 mg/L 1 6020B Total/NA Calcium 50.5 6020B Total/NA 0.500 1 mg/L Selenium 0.00760 0.00500 mg/L 1 6020B Total/NA 4500 F C-2011 Fluoride 0.275 0.100 Total/NA mg/L 1 2 D516-16 Sulfate 44.8 10.0 mg/L Total/NA Total Dissolved Solids SM 2540C Total/NA 280 50.0 mg/L 1 Chloride 23.6 2.00 mg/L 1 SM 4500 CI- E Total/NA pН 7.9 HF 1.0 SU 1 SM 4500 H+ B Total/NA

Client Sample ID: APMW 11

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac	D Method	Prep Type
Calcium	73.5	0.500	mg/L	1	6020B	Total/NA
Selenium	0.0182	0.00500	mg/L	1	6020B	Total/NA
Fluoride	0.279	0.100	mg/L	1	4500 F C-2011	Total/NA
Sulfate	56.0	10.0	mg/L	2	D516-16	Total/NA
Total Dissolved Solids	348	50.0	mg/L	1	SM 2540C	Total/NA
Chloride	37.6	2.00	mg/L	1	SM 4500 CI- E	Total/NA
рН	7.7 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Job ID: 310-296492-1

Lab Sample ID: 310-296492-5

Lab Sample ID: 310-296492-7

Lab Sample ID: 310-296492-8

Lab Sample ID: 310-296492-9

13

Client Sample ID: APMW 12

5

Lab Sample ID: 310-296492-10

Lab Sample ID: 310-296492-11

Lab Sample ID: 310-296492-12

Lab Sample ID: 310-296492-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Arsenic	0.00229		0.00200		mg/L	1	6020B	Total/NA
Boron	0.261		0.100		mg/L	1	6020B	Total/NA
Calcium	152		0.500		mg/L	1	6020B	Total/NA
Selenium	0.00644		0.00500		mg/L	1	6020B	Total/NA
Fluoride	0.117		0.100		mg/L	1	4500 F C-2011	Total/NA
Sulfate	264		50.0		mg/L	10	D516-16	Total/NA
Total Dissolved Solids	972		50.0		mg/L	1	SM 2540C	Total/NA
Chloride	149		20.0		mg/L	10	SM 4500 CI- E	Total/NA
pH	7.4	HF	1.0		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: APMW 13

Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type	
0.00266		0.00200		mg/L	1	6020B	Total/NA	- 1
0.292		0.100		mg/L	1	6020B	Total/NA	
139		0.500		mg/L	1	6020B	Total/NA	
0.169		0.100		mg/L	1	4500 F C-2011	Total/NA	
226		50.0		mg/L	10	D516-16	Total/NA	
920		50.0		mg/L	1	SM 2540C	Total/NA	
117		20.0		mg/L	10	SM 4500 CI- E	Total/NA	
7.4	HF	1.0		SU	1	SM 4500 H+ B	Total/NA	
	0.00266 0.292 139 0.169 226 920 117	0.292 139 0.169 226 920 117	0.00266 0.00200 0.292 0.100 139 0.500 0.169 0.100 226 50.0 920 50.0 117 20.0	0.00266 0.00200 0.292 0.100 139 0.500 0.169 0.100 226 50.0 920 50.0 117 20.0	0.00266 0.00200 mg/L 0.292 0.100 mg/L 139 0.500 mg/L 0.169 0.100 mg/L 226 50.0 mg/L 920 50.0 mg/L 117 20.0 mg/L	0.00266 0.00200 mg/L 1 0.292 0.100 mg/L 1 139 0.500 mg/L 1 0.169 0.100 mg/L 1 226 50.0 mg/L 10 920 50.0 mg/L 1 117 20.0 mg/L 10	0.00266 0.00200 mg/L 1 6020B 0.292 0.100 mg/L 1 6020B 139 0.500 mg/L 1 6020B 0.169 0.100 mg/L 1 6020B 226 50.0 mg/L 1 4500 F C-2011 226 50.0 mg/L 10 D516-16 920 50.0 mg/L 1 SM 2540C 117 20.0 mg/L 10 SM 4500 CI- E	0.00266 0.00200 mg/L 1 6020B Total/NA 0.292 0.100 mg/L 1 6020B Total/NA 139 0.500 mg/L 1 6020B Total/NA 0.169 0.100 mg/L 1 6020B Total/NA 226 50.0 mg/L 1 4500 F C-2011 Total/NA 920 50.0 mg/L 10 D516-16 Total/NA 117 20.0 mg/L 10 SM 4500 CI- E Total/NA

Client Sample ID: APMW 14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00226		0.00200		mg/L	1	_	6020B	Total/NA
Boron	0.193		0.100		mg/L	1		6020B	Total/NA
Calcium	147		0.500		mg/L	1		6020B	Total/NA
Selenium	0.00567		0.00500		mg/L	1		6020B	Total/NA
Fluoride	0.166		0.100		mg/L	1		4500 F C-2011	Total/NA
Sulfate	169		50.0		mg/L	10		D516-16	Total/NA
Total Dissolved Solids	794		50.0		mg/L	1		SM 2540C	Total/NA
Chloride	115		20.0		mg/L	10		SM 4500 CI- E	Total/NA
pH	7.4	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Duplicate

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00393		0.00200		mg/L	1	_	6020B	Total/NA
Calcium	70.6		0.500		mg/L	1		6020B	Total/NA
Selenium	0.00983		0.00500		mg/L	1		6020B	Total/NA
Fluoride	0.247		0.100		mg/L	1		4500 F C-2011	Total/NA
Sulfate	66.7		10.0		mg/L	2		D516-16	Total/NA
Total Dissolved Solids	372		50.0		mg/L	1		SM 2540C	Total/NA
Chloride	29.9		2.00		mg/L	1		SM 4500 CI- E	Total/NA
pН	7.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: APMW 16A

Date Collected: 12/03/24 10:37 Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	CP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00274		0.00200		mg/L		12/06/24 09:00	12/11/24 16:48	1
Boron	0.130		0.100		mg/L		12/06/24 09:00	12/11/24 16:48	1
Calcium	113		0.500		mg/L		12/06/24 09:00	12/11/24 16:48	1
Selenium	<0.00500		0.00500		mg/L		12/06/24 09:00	12/11/24 16:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.345		0.100		mg/L			12/13/24 10:42	1
Sulfate (ASTM D516-16)	160		25.0		mg/L			12/10/24 15:29	5
Total Dissolved Solids (SM 2540C)	604		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	30.6		2.00		mg/L			12/09/24 14:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.5	HF	1.0		SU			12/05/24 12:27	1

Job ID: 310-296492-1

Lab Sample ID: 310-296492-1

Matrix: Water

Client Sample ID: APMW 17 Date Collected: 12/03/24 11:32

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00230		0.00200		mg/L		12/06/24 09:00	12/11/24 16:50	1
Boron	<0.100		0.100		mg/L		12/06/24 09:00	12/11/24 16:50	1
Calcium	117		0.500		mg/L		12/06/24 09:00	12/11/24 16:50	1
Selenium	0.00842		0.00500		mg/L		12/06/24 09:00	12/11/24 16:50	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.220		0.100		mg/L			12/13/24 10:51	1
Sulfate (ASTM D516-16)	131		25.0		mg/L			12/10/24 15:29	5
Total Dissolved Solids (SM 2540C)	514		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	33.5		2.00		mg/L			12/09/24 14:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:24	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-2

2 3 4 5 6 7 8 9 10

Client Sample ID: APMW 15 Date Collected: 12/03/24 12:05

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00266		0.00200		mg/L		12/06/24 09:00	12/11/24 16:52	1
Boron	0.102		0.100		mg/L		12/06/24 09:00	12/11/24 16:52	1
Calcium	105		0.500		mg/L		12/06/24 09:00	12/11/24 16:52	1
Selenium	0.00514		0.00500		mg/L		12/06/24 09:00	12/11/24 16:52	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.278		0.100		mg/L			12/13/24 10:55	1
Sulfate (ASTM D516-16)	141		25.0		mg/L			12/10/24 15:30	5
Total Dissolved Solids (SM 2540C)	564		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 Cl- E)	29.1		2.00		mg/L			12/09/24 14:14	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.6	HF	1.0		SU			12/05/24 12:18	

Matrix: Water

Job ID: 310-296492-1

Lab Sample ID: 310-296492-3

Client Sample ID: APMW 18 Date Collected: 12/03/24 12:52

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00230		0.00200		mg/L		12/06/24 09:00	12/11/24 16:55	1
Boron	<0.100		0.100		mg/L		12/06/24 09:00	12/11/24 16:55	1
Calcium	89.7		0.500		mg/L		12/06/24 09:00	12/11/24 16:55	1
Selenium	0.00725		0.00500		mg/L		12/06/24 09:00	12/11/24 16:55	1
– General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.214		0.100		mg/L			12/13/24 10:58	1
Sulfate (ASTM D516-16)	23.6		10.0		mg/L			12/10/24 15:30	2
Total Dissolved Solids (SM 2540C)	404		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	116		20.0		mg/L			12/09/24 14:14	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:26	1

Lab Sample ID: 310-296492-4

Job ID: 310-296492-1

Matrix: Water

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Client Sample ID: APMW 19 Date Collected: 12/03/24 13:47

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00368		0.00200		mg/L		12/10/24 09:30	12/12/24 12:48	1
Boron	<0.100	F1	0.100		mg/L		12/10/24 09:30	12/12/24 12:48	1
Calcium	68.4		0.500		mg/L		12/10/24 09:30	12/12/24 12:48	1
Selenium	0.00961		0.00500		mg/L		12/10/24 09:30	12/12/24 12:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.266		0.100		mg/L			12/13/24 11:08	1
Sulfate (ASTM D516-16)	63.7		25.0		mg/L			12/10/24 15:32	5
Total Dissolved Solids (SM 2540C)	374		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	31.8		2.00		mg/L			12/09/24 14:15	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:20	1

Job ID: 310-296492-1

Lab Sample ID: 310-296492-5

Matrix: Water

Client Sample ID: APMW 6 Date Collected: 12/03/24 15:02

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00411		0.00200		mg/L		12/10/24 09:30	12/12/24 13:11	1
Boron	<0.100		0.100		mg/L		12/10/24 09:30	12/12/24 13:11	1
Calcium	50.8		0.500		mg/L		12/10/24 09:30	12/12/24 13:11	1
Selenium	0.00574		0.00500		mg/L		12/10/24 09:30	12/12/24 13:11	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.317		0.100		mg/L			12/13/24 11:11	1
Sulfate (ASTM D516-16)	27.0		5.00		mg/L			12/10/24 15:32	1
Total Dissolved Solids (SM 2540C)	318		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	31.4		2.00		mg/L			12/09/24 14:15	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			12/05/24 12:17	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-6

Client Sample ID: APMW 8A

Date Collected: 12/03/24 16:02 Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00275		0.00200		mg/L		12/10/24 09:30	12/12/24 13:14	1
Boron	<0.100		0.100		mg/L		12/10/24 09:30	12/12/24 13:14	1
Calcium	77.0		0.500		mg/L		12/10/24 09:30	12/12/24 13:14	1
Selenium	0.0164		0.00500		mg/L		12/10/24 09:30	12/12/24 13:14	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.232		0.100		mg/L			12/13/24 11:14	1
Sulfate (ASTM D516-16)	34.3		25.0		mg/L			12/10/24 15:33	5
Total Dissolved Solids (SM 2540C)	338		50.0		mg/L			12/05/24 16:35	1
Chloride (SM 4500 CI- E)	84.6		4.00		mg/L			12/09/24 14:15	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:16	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-7

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Client Sample ID: APMW 10 Date Collected: 12/03/24 16:52

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00321		0.00200		mg/L		12/10/24 09:30	12/12/24 13:17	1
Boron	<0.100		0.100		mg/L		12/10/24 09:30	12/12/24 13:17	1
Calcium	50.5		0.500		mg/L		12/10/24 09:30	12/12/24 13:17	1
Selenium	0.00760		0.00500		mg/L		12/10/24 09:30	12/12/24 13:17	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.275		0.100		mg/L			12/13/24 11:17	1
Sulfate (ASTM D516-16)	44.8		10.0		mg/L			12/10/24 15:33	2
Total Dissolved Solids (SM 2540C)	280		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	23.6		2.00		mg/L			12/11/24 16:23	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			12/05/24 12:21	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-8

Client Sample ID: APMW 11 Date Collected: 12/03/24 17:37

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	CP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		12/10/24 09:30	12/12/24 13:20	1
Boron	<0.100		0.100		mg/L		12/10/24 09:30	12/12/24 13:20	1
Calcium	73.5		0.500		mg/L		12/10/24 09:30	12/12/24 13:20	1
Selenium	0.0182		0.00500		mg/L		12/10/24 09:30	12/12/24 13:20	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.279		0.100		mg/L			12/13/24 11:20	1
Sulfate (ASTM D516-16)	56.0		10.0		mg/L			12/10/24 15:33	2
Total Dissolved Solids (SM 2540C)	348		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	37.6		2.00		mg/L			12/11/24 16:24	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:19	1

Job ID: 310-296492-1

Lab Sample ID: 310-296492-9

Matrix: Water

Client Sample ID: APMW 12 Date Collected: 12/04/24 09:42

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00229		0.00200		mg/L		12/10/24 09:30	12/12/24 13:23	1
Boron	0.261		0.100		mg/L		12/10/24 09:30	12/12/24 13:23	1
Calcium	152		0.500		mg/L		12/10/24 09:30	12/12/24 13:23	1
Selenium	0.00644		0.00500		mg/L		12/10/24 09:30	12/12/24 13:23	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.117		0.100		mg/L			12/13/24 11:24	1
Sulfate (ASTM D516-16)	264		50.0		mg/L			12/10/24 15:34	10
Total Dissolved Solids (SM 2540C)	972		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	149		20.0		mg/L			12/11/24 16:24	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.4	HF	1.0		SU			12/05/24 12:29	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-10

Client Sample ID: APMW 13 Date Collected: 12/04/24 10:42

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	CP/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00266		0.00200		mg/L		12/10/24 09:30	12/12/24 13:26	1
Boron	0.292		0.100		mg/L		12/10/24 09:30	12/12/24 13:26	1
Calcium	139		0.500		mg/L		12/10/24 09:30	12/12/24 13:26	1
Selenium	<0.00500		0.00500		mg/L		12/10/24 09:30	12/12/24 13:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.169		0.100		mg/L			12/13/24 11:27	1
Sulfate (ASTM D516-16)	226		50.0		mg/L			12/10/24 15:34	10
Total Dissolved Solids (SM 2540C)	920		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	117		20.0		mg/L			12/11/24 16:25	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.4	HF	1.0		SU			12/05/24 12:31	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-11

Client Sample ID: APMW 14 Date Collected: 12/04/24 11:37

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00226		0.00200		mg/L		12/10/24 09:30	12/12/24 13:28	1
Boron	0.193		0.100		mg/L		12/10/24 09:30	12/12/24 13:28	1
Calcium	147		0.500		mg/L		12/10/24 09:30	12/12/24 13:28	1
Selenium	0.00567		0.00500		mg/L		12/10/24 09:30	12/12/24 13:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.166		0.100		mg/L			12/13/24 11:30	1
Sulfate (ASTM D516-16)	169		50.0		mg/L			12/10/24 15:35	10
Total Dissolved Solids (SM 2540C)	794		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	115		20.0		mg/L			12/11/24 16:25	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.4	HF	1.0		SU			12/05/24 12:30	1

Job ID: 310-296492-1

Lab Sample ID: 310-296492-12

Matrix: Water

Client Sample ID: Duplicate Date Collected: 12/03/24 13:55

Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (IC	P/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00393		0.00200		mg/L		12/10/24 09:30	12/12/24 13:31	1
Boron	<0.100		0.100		mg/L		12/10/24 09:30	12/12/24 13:31	1
Calcium	70.6		0.500		mg/L		12/10/24 09:30	12/12/24 13:31	1
Selenium	0.00983		0.00500		mg/L		12/10/24 09:30	12/12/24 13:31	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.247		0.100		mg/L			12/13/24 11:33	1
Sulfate (ASTM D516-16)	66.7		10.0		mg/L			12/10/24 15:35	2
Total Dissolved Solids (SM 2540C)	372		50.0		mg/L			12/06/24 17:28	1
Chloride (SM 4500 CI- E)	29.9		2.00		mg/L			12/11/24 16:27	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0		SU			12/05/24 12:28	1

Job ID: 310-296492-1

Matrix: Water

Lab Sample ID: 310-296492-13

Qualifiers

Qualifier Description	
MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not	
applicable.	5
MS and/or MSD recovery exceeds control limits.	
mistry	
Qualifier Description	
Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.	7
	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. MS and/or MSD recovery exceeds control limits. mistry Qualifier Description

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
ф.	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	

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-441684/1-A										Client Sa	ample ID: Metho	d Blank
Matrix: Water											Prep Type:	Fotal/NA
Analysis Batch: 442277											Prep Batch	441684
	MB	MB										
Analyte	Result	Qualifier	RL		MDL	Unit		D	Pi	repared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200			mg/L			12/0	6/24 09:00	12/11/24 15:38	1
Boron	<0.100		0.100			mg/L			12/0	6/24 09:00	12/11/24 15:38	1
Calcium	<0.500		0.500			mg/L			12/0	6/24 09:00	12/11/24 15:38	1
Selenium	<0.00500		0.00500			mg/L			12/0	6/24 09:00	12/11/24 15:38	1
Lab Sample ID: LCS 310-441684/2-A								C	ient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Fotal/NA
Analysis Batch: 442277											Prep Batch	441684
			Spike	LCS	LCS						%Rec	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Arsenic			0.200	0.2120			mg/L			106	80 - 120	
Boron			0.200	0.1894			mg/L			95	80 - 120	
Calcium			2.00	1.919			mg/L			96	80 - 120	
Selenium			0.400	0.3983			mg/L			100	80 - 120	
Lab Sample ID: MB 310-442005/1-A Matrix: Water Analysis Batch: 442386	мв	МВ								Chefft Sa	ample ID: Metho Prep Type: ⁻ Prep Batch	Fotal/NA
Analyte	Result	Qualifier	RL		MDL	Unit		D	Pi	repared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200			mg/L			12/10	0/24 09:30	12/12/24 12:42	1
Boron	<0.100		0.100			mg/L			12/10	0/24 09:30	12/12/24 12:42	1
Calcium	<0.500		0.500			mg/L			12/10	0/24 09:30	12/12/24 12:42	1
Selenium	<0.00500		0.00500			mg/L			12/10	0/24 09:30	12/12/24 12:42	1
Lab Sample ID: LCS 310-442005/2-A Matrix: Water Analysis Batch: 442386			Spike	LCS	LCS			CI	lient	Sample	ID: Lab Control Prep Type: ⁻ Prep Batch %Rec	Fotal/NA
Matrix: Water Analysis Batch: 442386			Spike Added	LCS Result			Unit	CI	l ient D	Sample %Rec	Prep Type: ⁻ Prep Batch	Fotal/NA
Matrix: Water Analysis Batch: 442386 ^{Analyte}			-				Unit mg/L	CI			Prep Type: [*] Prep Batch %Rec	Fotal/NA
Matrix: Water Analysis Batch: 442386 Analyte			Added	Result				CI		%Rec	Prep Type: [•] Prep Batch %Rec Limits	Fotal/NA
Matrix: Water Analysis Batch: 442386 Analyte Arsenic Boron			Added 0.200	Result 0.1964			mg/L	CI		% Rec	Prep Type: " Prep Batch %Rec Limits 80 - 120	Fotal/NA
Matrix: Water Analysis Batch: 442386 Analyte Arsenic Boron Calcium			Added 0.200 0.200	Result 0.1964 0.1819			mg/L mg/L	CI		%Rec 98 91	Prep Type: Prep Batch %Rec Limits 80 - 120 80 - 120	Fotal/NA
Matrix: Water			Added 0.200 0.200 2.00	Result 0.1964 0.1819 1.788			mg/L mg/L mg/L	CI		%Rec 98 91 89 98	Prep Type: Prep Batch %Rec Limits 80 - 120 80 - 120 80 - 120	Fotal/NA : 442005 _
Matrix: Water Analysis Batch: 442386 Analyte Arsenic Boron Calcium Selenium			Added 0.200 0.200 2.00	Result 0.1964 0.1819 1.788			mg/L mg/L mg/L	CI		%Rec 98 91 89 98	Prep Type: Prep Batch %Rec Limits 80 - 120 80 - 120 80 - 120 80 - 120	Fotal/NA : 442005

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Arsenic	0.00368		0.200	0.2076		mg/L		102	75 - 125
Boron	<0.100	F1	0.200	0.2541	F1	mg/L		127	75 - 125
Calcium	68.4		2.00	69.99	4	mg/L		80	75 - 125
Selenium	0.00961		0.400	0.4087		mg/L		100	75 - 125

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Job ID: 310-296492-1

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

Lab Sample ID: 310-296492-5 Matrix: Water Analysis Batch: 442386	MSD							Clie		ID: APN Type: Tot Batch: 4	tal/NA
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.00368		0.200	0.2077		mg/L		102	75 - 125	0	20
Boron	<0.100	F1	0.200	0.2559	F1	mg/L		128	75 - 125	1	20
Calcium	68.4		2.00	69.58	4	mg/L		60	75 - 125	1	20
Selenium	0.00961		0.400	0.4072		mg/L		99	75 - 125	0	20

Method: 4500 F C-2011 - Fluoride (Ion-selective Electrode)

Matrix: Water Analysis Batch: 442471														Type: To	
· ······		МВ	ИВ												
Analyte	R	esult (Qualifier		RL		MDL	Unit		D	Р	repared	Analyz	ed	Dil Fa
Fluoride	<(0.100			0.100			mg/L					12/13/24	10:35	
- Lab Sample ID: LCS 310-442471/18										CI	ient	Sample	ID: Lab Co	ontrol S	Sample
Matrix: Water													Prep 1	Type: To	otal/NA
Analysis Batch: 442471															
				Spike		LCS	LCS						%Rec		
Analyte				Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Fluoride				2.00		1.993			mg/L			100	90 - 110		
Lab Sample ID: 310-296492-1 MS												Clier	it Sample I	D: APM	IW 16A
Matrix: Water													Prep 1	Type: To	otal/NA
Analysis Batch: 442471															
	Sample	•		Spike		MS	MS						%Rec		
Analyte	Result	Qualif	ier	Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Fluoride	0.345			1.00		1.220			mg/L			88	75 - 125		
Lab Sample ID: 310-296492-1 MSD												Clier	it Sample I	D: APM	IW 16A
Matrix: Water													Prep 1	Type: To	otal/N/
Analysis Batch: 442471															
	Sample	•		Spike			MSD						%Rec		RPD
Analyte	Result	Qualif	ier	Added		Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limi
Fluoride	0.345			1.00		1.196			mg/L			85	75 - 125	2	20
Method: D516-16 - Sulfate															
Lab Sample ID: MB 310-442139/16												Client S	ample ID:	Method	l Blank
Matrix: Water														Type: To	
Analysis Batch: 442139															
-		MB	ИВ												
Analyte	R	esult	Qualifier		RL		MDL	Unit		D	P	repared	Analyz	ed	Dil Fa
		<5.00			5.00			mg/L					12/10/24		

Matrix: Water						- C	Prep Type: Total/NA
Analysis Batch: 442139							
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Sulfate	10.0	9.944		mg/L		99	85 - 115

Matrix: Water

Analysis Batch: 442017

Job ID: 310-296492-1

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

Matrix: Water Analysis Batch: 441708													ricp	Туре: То	
Analysis Batch. 441700		мв	MB												
Analyte	R		Qualifier		RL		MDL	Unit		D	P	repared	Analy	zed	Dil Fa
Total Dissolved Solids		<50.0			50.0			mg/L					12/05/24		-
Lab Sample ID: LCS 310-441708/2										Cli	ent	Sample	D: Lab C	ontrol S	Sampl
Matrix: Water													Prep	Type: To	otal/N
Analysis Batch: 441708															
				Spike			LCS				_	~~ -	%Rec		
Analyte				Added 1000		Result	Qual	ifier	Unit		<u>D</u>	%Rec	Limits		
Total Dissolved Solids				1000		1008			mg/L			101	88 - 110		
Lab Sample ID: 310-296492-1 DU												Clier	nt Sample	ID: APM	IW 16
Matrix: Water													Prep	Type: To	otal/N
Analysis Batch: 441708															
	Sample	Samp	ole			DU	DU								RF
Analyte	Result	Quali	fier			Result	Qual	ifier	Unit		D			RPD	Lin
Total Dissolved Solids	604					604.0			mg/L					0	
Lab Sample ID: MB 310-441856/1												Client S	Sample ID:	Method	l Blar
Matrix: Water														Type: To	
Analysis Batch: 441856															
-		МВ	МВ												
Analyte	R	esult	Qualifier		RL		MDL	Unit		D	P	repared	Analy	zed	Dil F
Total Dissolved Solids	<	<50.0			50.0			mg/L					12/06/24	17:28	
Lab Sample ID: LCS 310-441856/2										Cli	ent	Sample	BID: Lab C	ontrol S	Samp
Matrix: Water														Type: To	
Analysis Batch: 441856															
				Spike		LCS	LCS						%Rec		
Analyte				Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Total Dissolved Solids				1000		986.0			mg/L			99	88 - 110		
Lab Sample ID: 310-296492-8 DU												Clie	ent Sampl	e ID: AP	ww ·
Matrix: Water												- in		Type: To	
Analysis Batch: 441856														.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Sample	Samp	ole			DU	DU								RF
	Result	-				Result		ifier	Unit		D			RPD	Lin
Analyte						274.0			mg/L		_			2	
Analyte	280														

ent	Sam	pie	ID:	weth	oa	віапк	1
		Pr	ep '	Type:	То	tal/NA	۱.

	MB	мв							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.00		2.00		mg/L			12/09/24 14:09	1

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

Lab Sample ID: LCS 310-442017/14							Clien	t Sample	e ID: Lab Co	ntrol S	ample
Matrix: Water							Clien	t Sample	Prep Ty		
Analysis Batch: 442017									Fiebily	pe. 10	
Analysis Datch. 442017			Spike	201	LCS				%Rec		
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Chloride			10.0	10.67	Quaimer			107	90 - 110		
			10.0	10.07		mg/L		107	90 - 110		
Lab Sample ID: MB 310-442249/16 Matrix: Water								Client S	Sample ID: N Prep Ty		
Analysis Batch: 442249										·	
		MB MB									
Analyte	R	esult Qualifier		RL	MDL Unit		DF	Prepared	Analyze	d	Dil Fac
Chloride	<	<2.00		2.00	mg/L				12/11/24 10	6:22	1
- Lab Sample ID: LCS 310-442249/14							Clien	t Sample	e ID: Lab Co	ntrol S	ample
Matrix: Water							Shell	Counple	Prep Ty		
									Fieh I)	pe. 10	
Analysis Batch: 442249			Spike	1.00	LCS				%Rec		
Amelia			-			1114	-	0/ D = =			
Analyte			Added		Qualifier	Unit	<u>D</u>	%Rec	Limits		
Chloride			10.0	9.797		mg/L		98	90 - 110		
Lab Sample ID: 310-296492-8 MS								Cli	ent Sample I	D: API	MW 10
Matrix: Water									Prep Ty	pe: To	tal/NA
Analysis Batch: 442249										·	
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	23.6		10.0	31.68		mg/L		81	73 - 110		
Lab Sample ID: 310-296492-8 MSD								CI	ent Sample I		MW 10
Matrix: Water								011	Prep Ty		
									Fiebily	pe. 10	
Analysis Batch: 442249	Somela	Sample	Spike	MED	MSD				%Rec		RPD
Analyta	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Analyte					Quaimer					1	
Chloride	23.6		10.0	31.86		mg/L		83	73 - 110	1	14
Method: SM 4500 H+ B - pH											
Lab Sample ID: LCS 310-441668/1							Clien	t Sample	e ID: Lab Co	ntrol S	ample
Matrix: Water							onen	Coumpi	Prep Ty		
Analysis Batch: 441668									Fiebily	pe. 10	
Analysis Batch. 441000			Spike	1.09	LCS				%Rec		
Analyta			Added		Qualifier	Unit		% Baa	Limits		
Analyte			7.00		Quaimer	SU	D	%Rec 101	98 - 102		
- - 			7.00	7.1		30		101	30 - 102		
Lab Sample ID: LCS 310-441668/28							Clien	t Sample	e ID: Lab Co	ntrol S	ample
Matrix: Water								-	Prep Ty		
Analysis Batch: 441668											
-			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 310-296492-2 DU Matrix: Water							Client Samp Prej	ole ID: APM o Type: To	
Analysis Batch: 441668									
	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
pH	7.7	HF	 7.7		SU			0.1	20

Metals

310-296492-10

310-296492-11

310-296492-12

310-296492-13

MB 310-442005/1-A

LCS 310-442005/2-A

Prep Batch: 441684

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	3005A	
310-296492-2	APMW 17	Total/NA	Water	3005A	
310-296492-3	APMW 15	Total/NA	Water	3005A	
310-296492-4	APMW 18	Total/NA	Water	3005A	
MB 310-441684/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-441684/2-A	Lab Control Sample	Total/NA	Water	3005A	
Prep Batch: 442005					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
Lab Sample ID 310-296492-5	Client Sample ID APMW 19	Prep Type Total/NA	Matrix Water	Method 3005A	Prep Batch
	· · · · · · · · · · · · · · · · · · ·				Prep Batch
310-296492-5	APMW 19	Total/NA	Water	3005A	Prep Batch
310-296492-5 310-296492-6	APMW 19 APMW 6	Total/NA Total/NA	Water Water	3005A 3005A	Prep Batch

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Water

Water

Water

Water

Water

Water

Water

Water

3005A

3005A

3005A

3005A

3005A

3005A

3005A

3005A

310-296492-5 MS	APMW 19
310-296492-5 MSD	APMW 19
Analysis Batch: 442277	

APMW 12

APMW 13

APMW 14

Duplicate

Method Blank

Lab Control Sample

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	6020B	441684
310-296492-2	APMW 17	Total/NA	Water	6020B	441684
310-296492-3	APMW 15	Total/NA	Water	6020B	441684
310-296492-4	APMW 18	Total/NA	Water	6020B	441684
MB 310-441684/1-A	Method Blank	Total/NA	Water	6020B	441684
LCS 310-441684/2-A	Lab Control Sample	Total/NA	Water	6020B	441684

Analysis Batch: 442386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296492-5	APMW 19	Total/NA	Water	6020B	442005
310-296492-6	APMW 6	Total/NA	Water	6020B	442005
310-296492-7	APMW 8A	Total/NA	Water	6020B	442005
310-296492-8	APMW 10	Total/NA	Water	6020B	442005
310-296492-9	APMW 11	Total/NA	Water	6020B	442005
310-296492-10	APMW 12	Total/NA	Water	6020B	442005
310-296492-11	APMW 13	Total/NA	Water	6020B	442005
310-296492-12	APMW 14	Total/NA	Water	6020B	442005
310-296492-13	Duplicate	Total/NA	Water	6020B	442005
MB 310-442005/1-A	Method Blank	Total/NA	Water	6020B	442005
LCS 310-442005/2-A	Lab Control Sample	Total/NA	Water	6020B	442005
310-296492-5 MS	APMW 19	Total/NA	Water	6020B	442005
310-296492-5 MSD	APMW 19	Total/NA	Water	6020B	442005

General Chemistry

Analysis Batch: 441668

General Chemistry	/				
Analysis Batch: 44166	38				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	SM 4500 H+ B	
310-296492-2	APMW 17	Total/NA	Water	SM 4500 H+ B	7
310-296492-3	APMW 15	Total/NA	Water	SM 4500 H+ B	
310-296492-4	APMW 18	Total/NA	Water	SM 4500 H+ B	
310-296492-5	APMW 19	Total/NA	Water	SM 4500 H+ B	
310-296492-6	APMW 6	Total/NA	Water	SM 4500 H+ B	
310-296492-7	APMW 8A	Total/NA	Water	SM 4500 H+ B	
310-296492-8	APMW 10	Total/NA	Water	SM 4500 H+ B	
310-296492-9	APMW 11	Total/NA	Water	SM 4500 H+ B	7
310-296492-10	APMW 12	Total/NA	Water	SM 4500 H+ B	
310-296492-11	APMW 13	Total/NA	Water	SM 4500 H+ B	1
310-296492-12	APMW 14	Total/NA	Water	SM 4500 H+ B	
310-296492-13	Duplicate	Total/NA	Water	SM 4500 H+ B	
LCS 310-441668/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-441668/28	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-296492-2 DU	APMW 17	Total/NA	Water	SM 4500 H+ B	
Analysis Batch: 44170	18				1
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	SM 2540C	
310-296492-2	APMW 17	Total/NA	Water	SM 2540C	
310-296492-3	APMW 15	Total/NA	Water	SM 2540C	

310-296492-4	APMW 18	Total/NA	Water	SM 2540C
310-296492-5	APMW 19	Total/NA	Water	SM 2540C
310-296492-6	APMW 6	Total/NA	Water	SM 2540C
310-296492-7	APMW 8A	Total/NA	Water	SM 2540C
MB 310-441708/1	Method Blank	Total/NA	Water	SM 2540C
LCS 310-441708/2	Lab Control Sample	Total/NA	Water	SM 2540C
310-296492-1 DU	APMW 16A	Total/NA	Water	SM 2540C

Analysis Batch: 441856

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-8	APMW 10	Total/NA	Water	SM 2540C	
310-296492-9	APMW 11	Total/NA	Water	SM 2540C	
310-296492-10	APMW 12	Total/NA	Water	SM 2540C	
310-296492-11	APMW 13	Total/NA	Water	SM 2540C	
310-296492-12	APMW 14	Total/NA	Water	SM 2540C	
310-296492-13	Duplicate	Total/NA	Water	SM 2540C	
MB 310-441856/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-441856/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-296492-8 DU	APMW 10	Total/NA	Water	SM 2540C	

Analysis Batch: 442017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	SM 4500 CI- E	
310-296492-2	APMW 17	Total/NA	Water	SM 4500 CI- E	
310-296492-3	APMW 15	Total/NA	Water	SM 4500 CI- E	
310-296492-4	APMW 18	Total/NA	Water	SM 4500 CI- E	
310-296492-5	APMW 19	Total/NA	Water	SM 4500 CI- E	
310-296492-6	APMW 6	Total/NA	Water	SM 4500 CI- E	
310-296492-7	APMW 8A	Total/NA	Water	SM 4500 CI- E	

Eurofins Cedar Falls

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

General Chemistry (Continued)

Analysis Batch: 442017 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 310-442017/16	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 310-442017/14	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 442139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	D516-16	
310-296492-2	APMW 17	Total/NA	Water	D516-16	
310-296492-3	APMW 15	Total/NA	Water	D516-16	
310-296492-4	APMW 18	Total/NA	Water	D516-16	
310-296492-5	APMW 19	Total/NA	Water	D516-16	
310-296492-6	APMW 6	Total/NA	Water	D516-16	
310-296492-7	APMW 8A	Total/NA	Water	D516-16	
310-296492-8	APMW 10	Total/NA	Water	D516-16	
310-296492-9	APMW 11	Total/NA	Water	D516-16	
310-296492-10	APMW 12	Total/NA	Water	D516-16	
310-296492-11	APMW 13	Total/NA	Water	D516-16	
310-296492-12	APMW 14	Total/NA	Water	D516-16	
310-296492-13	Duplicate	Total/NA	Water	D516-16	
MB 310-442139/16	Method Blank	Total/NA	Water	D516-16	
LCS 310-442139/14	Lab Control Sample	Total/NA	Water	D516-16	

Analysis Batch: 442249

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-8	APMW 10	Total/NA	Water	SM 4500 CI- E	
310-296492-9	APMW 11	Total/NA	Water	SM 4500 CI- E	
310-296492-10	APMW 12	Total/NA	Water	SM 4500 CI- E	
310-296492-11	APMW 13	Total/NA	Water	SM 4500 CI- E	
310-296492-12	APMW 14	Total/NA	Water	SM 4500 CI- E	
310-296492-13	Duplicate	Total/NA	Water	SM 4500 CI- E	
MB 310-442249/16	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 310-442249/14	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
310-296492-8 MS	APMW 10	Total/NA	Water	SM 4500 CI- E	
310-296492-8 MSD	APMW 10	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 442471

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-296492-1	APMW 16A	Total/NA	Water	4500 F C-2011	
310-296492-2	APMW 17	Total/NA	Water	4500 F C-2011	
310-296492-3	APMW 15	Total/NA	Water	4500 F C-2011	
310-296492-4	APMW 18	Total/NA	Water	4500 F C-2011	
310-296492-5	APMW 19	Total/NA	Water	4500 F C-2011	
310-296492-6	APMW 6	Total/NA	Water	4500 F C-2011	
310-296492-7	APMW 8A	Total/NA	Water	4500 F C-2011	
310-296492-8	APMW 10	Total/NA	Water	4500 F C-2011	
310-296492-9	APMW 11	Total/NA	Water	4500 F C-2011	
310-296492-10	APMW 12	Total/NA	Water	4500 F C-2011	
310-296492-11	APMW 13	Total/NA	Water	4500 F C-2011	
310-296492-12	APMW 14	Total/NA	Water	4500 F C-2011	
310-296492-13	Duplicate	Total/NA	Water	4500 F C-2011	
MB 310-442471/17	Method Blank	Total/NA	Water	4500 F C-2011	
LCS 310-442471/18	Lab Control Sample	Total/NA	Water	4500 F C-2011	

Eurofins Cedar Falls

Job ID: 310-296492-1

QC Association Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

Job ID: 310-296492-1

General Chemistry (Continued)

Analysis Batch: 442471 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296492-1 MS	APMW 16A	Total/NA	Water	4500 F C-2011	
310-296492-1 MSD	APMW 16A	Total/NA	Water	4500 F C-2011	

Lab Sample ID: 310-296492-1 Matrix: Water

Lab Sample ID: 310-296492-2

Date Collected: 12/03/24 10:37 Date Received: 12/05/24 09:00

Client Sample ID: APMW 16A

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			441684	F5MW	EET CF	12/06/24 09:00
Total/NA	Analysis	6020B		1	442277	NFT2	EET CF	12/11/24 16:48
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 10:42
Total/NA	Analysis	D516-16		5	442139	ENB7	EET CF	12/10/24 15:29
otal/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		1	442017	ENB7	EET CF	12/09/24 14:12
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:27

Client Sample ID: APMW 17

Date Collected: 12/03/24 11:32 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			441684	F5MW	EET CF	12/06/24 09:00
Total/NA	Analysis	6020B		1	442277	NFT2	EET CF	12/11/24 16:50
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 10:51
Total/NA	Analysis	D516-16		5	442139	ENB7	EET CF	12/10/24 15:29
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		1	442017	ENB7	EET CF	12/09/24 14:12
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:24

Client Sample ID: APMW 15

Date Collected: 12/03/24 12:05 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			441684	F5MW	EET CF	12/06/24 09:00
Total/NA	Analysis	6020B		1	442277	NFT2	EET CF	12/11/24 16:52
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 10:55
Total/NA	Analysis	D516-16		5	442139	ENB7	EET CF	12/10/24 15:30
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		1	442017	ENB7	EET CF	12/09/24 14:14
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:18

Client Sample ID: APMW 18

Date Collected: 12/03/24 12:52 Date Received: 12/05/24 09:00

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			441684	F5MW	EET CF	12/06/24 09:00
Total/NA	Analysis	6020B		1	442277	NFT2	EET CF	12/11/24 16:55
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 10:58
Total/NA	Analysis	D516-16		2	442139	ENB7	EET CF	12/10/24 15:30

Lab Sample ID: 310-296492-3

Lab Sample ID: 310-296492-4

Matrix: Water

Matrix: Water

Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		10	442017	ENB7	EET CF	12/09/24 14:14
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:26

Client Sample ID: APMW 19

Date Collected: 12/03/24 13:47 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 12:48
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:08
Total/NA	Analysis	D516-16		5	442139	ENB7	EET CF	12/10/24 15:32
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		1	442017	ENB7	EET CF	12/09/24 14:15
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:20

Client Sample ID: APMW 6

Date Collected: 12/03/24 15:02

Date Received: 12/05/24 09:00 Г

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:11
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:11
Total/NA	Analysis	D516-16		1	442139	ENB7	EET CF	12/10/24 15:32
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		1	442017	ENB7	EET CF	12/09/24 14:15
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:17

Client Sample ID: APMW 8A Date Collected: 12/03/24 16:02 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:14
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:14
Total/NA	Analysis	D516-16		5	442139	ENB7	EET CF	12/10/24 15:33
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 CI- E		2	442017	ENB7	EET CF	12/09/24 14:15
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:16

Job ID: 310-296492-1

Lab Sample ID: 310-296492-4 Matrix: Water

Lab Sample ID: 310-296492-5

Matrix: Water

Lab Sample ID: 310-296492-6

Lab Sample ID: 310-296492-7

Matrix: Water

Matrix: Water

Lab Sample ID: 310-296492-8

Client Sample ID: APMW 10 Date Collected: 12/03/24 16:52 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
lotal/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
lotal/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:17
lotal/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:17
lotal/NA	Analysis	D516-16		2	442139	ENB7	EET CF	12/10/24 15:33
lotal/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
lotal/NA	Analysis	SM 4500 CI- E		1	442249	ENB7	EET CF	12/11/24 16:23
lotal/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:21

Lab Sample ID: 310-296492-9

Lab Sample ID: 310-296492-10

Lab Sample ID: 310-296492-11

Matrix: Water

Matrix: Water

Date Collected: 12/03/24 17:37 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:20
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:20
īotal/NA	Analysis	D516-16		2	442139	ENB7	EET CF	12/10/24 15:33
īotal/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
Total/NA	Analysis	SM 4500 CI- E		1	442249	ENB7	EET CF	12/11/24 16:24
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:19

Client Sample ID: APMW 12

Date Collected: 12/04/24 09:42 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:23
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:24
Total/NA	Analysis	D516-16		10	442139	ENB7	EET CF	12/10/24 15:34
Total/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
Total/NA	Analysis	SM 4500 CI- E		10	442249	ENB7	EET CF	12/11/24 16:24
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:29

Client Sample ID: APMW 13 Date Collected: 12/04/24 10:42

Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:26
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:27
Total/NA	Analysis	D516-16		10	442139	ENB7	EET CF	12/10/24 15:34

Eurofins Cedar Falls

Date R	eceived:	12/05/24	09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
Total/NA	Analysis	SM 4500 CI- E		10	442249	ENB7	EET CF	12/11/24 16:25
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:31

Client Sample ID: APMW 14

Date Collected: 12/04/24 11:37 Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
lotal/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
lotal/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:28
lotal/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:30
otal/NA	Analysis	D516-16		10	442139	ENB7	EET CF	12/10/24 15:35
lotal/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
lotal/NA	Analysis	SM 4500 CI- E		10	442249	ENB7	EET CF	12/11/24 16:25
īotal/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:30

Client Sample ID: Duplicate

Date Collected: 12/03/24 13:55

Date Received: 12/05/24 09:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			442005	F5MW	EET CF	12/10/24 09:30
Total/NA	Analysis	6020B		1	442386	NFT2	EET CF	12/12/24 13:31
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:33
Total/NA	Analysis	D516-16		2	442139	ENB7	EET CF	12/10/24 15:35
Total/NA	Analysis	SM 2540C		1	441856	XJ7V	EET CF	12/06/24 17:28
Total/NA	Analysis	SM 4500 CI- E		1	442249	ENB7	EET CF	12/11/24 16:27
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:28

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Matrix: Water

Matrix: Water

Lab Sample ID: 310-296492-11

Lab Sample ID: 310-296492-12

2 3 4 5 6 7 8 9 10 11

Lab Sample ID: 310-296492-13

Accreditation/Certification Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring Job ID: 310-296492-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-25

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Detection Monitoring

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
4500 F C-2011	Fluoride (Ion-selective Electrode)	SM	EET CF
D516-16	Sulfate	ASTM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 CI- E	Chloride, Total	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

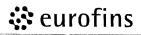
ASTM = ASTM International

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:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



-Environment-Testing---America



310-296492 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information	
Client: Nebraska Public Power	
City/State: CITS 4 then land STATE	Project:
Receipt information	<u> </u>
Date/Time DATE TIME Received:	Received By: ρH
Delivery Type: DUPS DedEx	FedEx Ground US Mail Spee-Dee
Lab Courier Lab Field Services	Client Drop-off
Condition of Cooler/Containers	
Sample(s) received in Cooler?	If yes: Cooler ID:
Multiple Coolers?	If yes: Cooler # of
Cooler Custody Seals Present? Yes No No	If yes: Cooler custody seals intact? Yes
Sample Custody Seals Present? Yes No No	If yes: Sample custody seals intact? Yes
Trip Blank Present? Yes No	If yes: Which VOA samples are in cooler? 1
Temperature Record 197	ξ τη γ.
Coolant: Wet ice Blue ice Dry ice	e 🗌 Other: 🗌 NONE
Thermometer ID: P	Correction Factor (°C):
3	mperature above criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C):	Corrected Temp (°C):
Sample Container Temperature	
Container(s) used:	CONTAINER 2
Uncorrected Temp (°C):	
Corrected Temp (°C):	
Exceptions Noted	e fiere of the
 If temperature exceeds criteria, was sample(s) rece a) If yes: Is there evidence that the chilling process 	
 If temperature is <0°C, are there obvious signs that (e.g., bulging septa, broken/cracked bottles, frozen 	t the integrity of sample containers is compromised?
	,
NOTE: If yes, contact PM before proceeding If no, proceeding	eed with login
	,
NOTE: If yes, contact PM before proceeding If no, proceeding	eed with login
NOTE: If yes, contact PM before proceeding If no, proceeding	eed with login



Environment Testing America Place COC scanning label here

Client Information	
Client: Nebraska Public Power	
City/State: Sytherland STATE	Project:
Receipt Information	
Date/Time DATE TIME GOU	Received By: PH
Delivery Type: 🗹 UPS 🛛 FedEx	🗌 FedEx Ground 🛛 US Mail 🔹 Spee-Dee
🗌 Lab Courier 🔲 Lab Field Servic	ces Client Drop-off
Condition of Cooler/Containers	
Sample(s) received in Cooler? Yes .No	If yes: Cooler ID:
Multiple Coolers?	If yes: Cooler # 2 of 2
Cooler Custody Seals Present? Yes No	If yes: Cooler custody seals intact? Yes
Sample Custody Seals Present? Yes No	If yes: Sample custody seals intact? Yes
Trip Blank Present?	If yes: Which VOA samples are in cooler? 1
Temperature Record	
Coolant: 🗹 Wet ice 🗌 Blue ice 🗌 Dry	ice Other: NONE
Thermometer ID:	Correction Factor (°C):
Temp Blank Temperature – If no temp blank, or temp blan	k temperature above criteria, proceed to Sample Container Temperature
Uncorrected Temp (°C):	Corrected Temp (°C): 4, 9
Sample Container Temperature CONTAINER 1	CONTAINER 2
Container(s) used:	
Uncorrected Temp (°C):	
Corrected Temp (°C):	
Exceptions Noted	· · · · · · · · · · · · · · · · · · ·
Exceptions Noted	
 If temperature exceeds criteria, was sample(s) real If yes: Is there evidence that the chilling pro 	. , -
 If temperature exceeds criteria, was sample(s) real a) If yes: Is there evidence that the chilling pro 	cess began?
 If temperature exceeds criteria, was sample(s) real of the properties of the content of the conten	cess began? Yes No that the integrity of sample containers is compromised? zen solid?) Yes No
 If temperature exceeds criteria, was sample(s) real of the properties of the chilling pro	cess began? Yes No that the integrity of sample containers is compromised? zen solid?) Yes No
 If temperature exceeds criteria, was sample(s) real of the properties of the content of the conten	acess began? Yes No that the integrity of sample containers is compromised? zen solid?) Yes No
 If temperature exceeds criteria, was sample(s) real of the properties of the content of the conten	acess began? Yes No that the integrity of sample containers is compromised? zen solid?) Yes No
 If temperature exceeds criteria, was sample(s) real of the properties of the constraint o	acess began? Yes No that the integrity of sample containers is compromised? zen solid?) Yes No

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613 Phone (319) 277-2401 Phone (319) 277-2425	0	hain c	of Cus	Chain of Custody Record	cord				🔅 eurofins		Environment Testing
Client Information	Sampler	9 H 2	~ ~ ~	Lab PM Calhot	n Conner	Þ		Carrier Tracking No(s)	COC No 310-9803	COC No 310-98036-26680 1	
Client Contact: Doug Harris	Phone 308	530	741		- Calhoun	E-Mail ⁻ Conner Calhoun@et.eurofinsus com		State of Origin	Page 1 of 2	f 2	
Company Nebraska Public Power Distnct			DISWA			Ana	Analysis Requested	ted	-# doL		
Address. 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested.								Preservation Codes	tion Codes	
City Sutherland	TAT Requested (days) ⁻	's)-				ć			None None		
State Zp NE, 69165	Compliance Project:	∆ Yes	∆ No		u						
Phone [.] 308-530-1124(Tel)	PO # 4500266733			10		oride, i					
Email ddharri@nppd com	# OM			NICI	\mathcal{O}				E		
Project Name: GGS Ash Pit Detection Monitoring	Project #: 31007155			001.0		Chlorid			enistr		
site Gerald Constantion Station	SSOW#:			dmeS	411	- 082_			of col		
		Sample	Sample Type (C=comp,	Matrix (W=wator S=solid. O=wate/oil.	MGNI moh i 2013 - Arsenic	40С_Саіса, 5 2 <i>Р Г</i> 5			tedmuń lejo		
Sample Identification	Sample Date	ĭ	G=grab) Preserva	BT=Tissue, A=Air) (fion Code:	⁰⁹ G	06 z				ecial Instr	Special Instructions/Note
APMW 16A	12-3-24	1037	U	Water		X X X					
APMW 17	12 3 - 24	1132	U	Water	*	XXX					
APMW15	12-3-24	1205	C	Water	X	$X \times X$,	
APMW 5-				Water							
APMW 18	12.3~ 24	1252	9	Water	X	XXX					
APMW 19	HE- 3-24	1347	৩	Water	X	X X X					
APMW-4				Water			1				
APMW 6	12-3-24	1502	Ŀ	Water	X	XXX					
APMW 8A	12-3-24	1602	G	Water	\times	× × ×					
APMW 10	12-3-24	1652	G	Water	X	XXX					
APMW 11	12-3-24	1737	ს	Water	\prec	XXXX					
Possible Hazard Identification	Poison B Unknown		Radiological	1	Sample	le Disposal (A f e Return To Client	e may be asses	assessed if samples Disposal By Lab	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	than 1 m	onth) Months
V Other (specify)	1)		Special li	structions/QC	Special Instructions/QC Requirements				
Empty Kit Relinquished by		Date			Time			Method of Shipment	tt.		
Relinquished to grand have Herrin	Date/Time 「メーソースイ	4 I 2	30	Company NPP[Receiv	Received by WH		Date/Time:	12-5-21	en e	Company
Keiinquished by	nate/ I ime			Company	vereived by	fu by					fraduo
Relinquished by	Date/Time:			Company	Received by	ed by		Date/Time	ne.	<u> </u>	Company
Custody Seals Intact: Custody Seal No					Cooler	. Temperature(s) °(Cooler Temperature(s) °C and Other Remarks.				
										~	Ver 05/06/2024

- Mirofins Cedar Falls 2018 Venture Way Cedar Falls IA 50613 Phone (319) 277-2401 Phone (319) 277-2425	Chain of Custody Record	stody Rec	ord		🔅 eurofins	Environment Testing
	JOUS HErri	S Calhoun	Conner M	Carrier Tracking No(s)-	COC No 310-98036-26680	30 2
	30-1121		E-Mail Conner Calhoun@et.eurofinsus com	State of Origin	Page Page 2 of 2	
blic Power District	(IISMd		Analysis Requested	equested	Job #	
man Station South	Due Date Requested				Preservation Codes	des
	TAT Requested (days).				N None	
ip 3165	Compliance Project: 🛆 Yes 🛆 No					
⊭ 530-1124(Tel)	Po # 4500266733	(c				
	# OM	or N			ţ	
tion Monitoring	Project # 31007155	еу) е			ទេកនៅរ	
le man Station	SSOW#	lqms2	, Boror DS 28D (•	of con	
	Sample	beretili ble	17-6916 Агеано 7-63162-2064 МАЗРО-Адд На +H_0036М		redmuk leic	
Sample Identification	Sample Date Time G=grab)	BT=Tissue, A=Air) ation Code:	Z ³⁰			Special Instructions/Note
APMW 12	12-4-24 0942 G	Water	XXXX			
APMW 13	1042	Water	XXXX		- <i>M</i>	
APMW 14	1137	Water	XXX			
Duplicate	4 1355	Water	XXXX			
		Water				
Possible Hazard Identrification	on B		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if samples are r	retained longer than 1 Archive For	(month) Months
/ Other (specify)	implantio		Special Instructions/QC Requirements	ients		
Empty Kit Relinquished by	Date	Time	0	Method of Shipment:		
N Harris	Date/Time 12-4-24 1330	Company PYS	Received by:	Date/Time		Company
		Сотралу	Received by ⁻	Date/Time		Company
Relinquished by	Date/Time	Company	Received by	Date/Time [.]		Company
Custody Seals Intact. Custody Seal No			Cooler Temperature(s) °C and Other Remarks	Remarks		
ΔYes ΔNo						Ver 05/06/2024

3,

Client: Nebraska Public Power District

Login Number: 296492 List Number: 1

Creator: Hirsch, Preston

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

Job Number: 310-296492-1

List Source: Eurofins Cedar Falls



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Doug Harris Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165 Generated 1/15/2025 10:31:03 AM Revision 2

JOB DESCRIPTION

GGS Ash Pit Assessment Monitoring NPPD Gerald Gentleman Station CCR

JOB NUMBER

310-296505-1

Eurofins Cedar Falls 3019 Venture Way Cedar Falls IA 50613



Eurofins Cedar Falls

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorization

Authorized for release by Conner Calhoun, Client Service Manager Conner.Calhoun@et.eurofinsus.com (319)277-2401 Generated 1/15/2025 10:31:03 AM Revision 2 1

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Job ID: 310-296505-1

Eurofins Cedar Falls

Job Narrative 310-296505-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
 situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
 specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/5/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C.

Metals

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

General Chemistry

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

Job ID: 310-296505-2

Eurofins Cedar Falls

Job Narrative 310-296505-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
 situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
 specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/5/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C.

Gas Flow Proportional Counter

Method 9315_Ra226: Radium-226 prep batch 160-692618

Insufficient sample volume was available to perform a sample duplicate for the following samples: CCR APMW 11 (310-296505-1) and CCR Duplicate (310-296505-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 9320_Ra228: Radium-228 prep batch 160-692619

Insufficient sample volume was available to perform a sample duplicate for the following samples: CCR APMW 11 (310-296505-1) and CCR Duplicate (310-296505-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

Rad

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

Job ID: 310-296505-3

Eurofins Cedar Falls

Job Narrative 310-296505-3

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these
 situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise
 specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/5/2024 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C.

Metals

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

Sample Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Job ID: 310-296505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-296505-1	CCR APMW 11	Ground Water	12/03/24 17:44	12/05/24 09:00
310-296505-2	CCR Duplicate	Ground Water	12/03/24 18:00	12/05/24 09:00

Detection Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Client Sample ID: CCR APMW 11

Lab Sample ID: 310-296505-1

Lab Sample ID: 310-296505-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	0.210		0.00200		mg/L	1	6020B	Total/NA
Lithium	0.0152		0.0100		mg/L	1	6020B	Total/NA
Molybdenum	0.00250		0.00200		mg/L	1	6020B	Total/NA
Selenium	0.0171		0.00500		mg/L	1	6020B	Total/NA
Fluoride	0.287		0.100		mg/L	1	4500 F C-2011	Total/NA
Total Dissolved Solids	420		50.0		mg/L	1	SM 2540C	Total/NA
рН	7.8	HF	1.0		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: CCR Duplicate

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Barium	0.211	0.00200	mg/L	1	6020B	Total/NA
Lithium	0.0145	0.0100	mg/L	1	6020B	Total/NA
Molybdenum	0.00227	0.00200	mg/L	1	6020B	Total/NA
Selenium	0.0177	0.00500	mg/L	1	6020B	Total/NA
Fluoride	0.279	0.100	mg/L	1	4500 F C-2011	Total/NA
Total Dissolved Solids	382	50.0	mg/L	1	SM 2540C	Total/NA
рН	7.7 HF	1.0	SU	1	SM 4500 H+ B	Total/NA

RL

0.00200

0.00200

0.00200

0.00100

0.000200

0.00500

0.000500

0.000500

0.0100

0.00200

0.00500

0.00100

Result Qualifier

<0.00200

< 0.00200

< 0.00100

< 0.000200

< 0.00500

< 0.000500

<0.000500

0.0152

0.00250

0.0171

< 0.00100

0.210

MDL Unit

mg/L

Client Sample ID: CCR APMW 11 Date Collected: 12/03/24 17:44 Date Received: 12/05/24 09:00

Method: SW846 6020B - Metals (ICP/MS)

Analyte

Arsenic

Barium

Beryllium

Cadmium

Chromium

Cobalt

Lithium

Selenium

Thallium

Molybdenum

Lead

Antimony

Lab Sample ID: 310-296505-1 Matrix: Ground Water

01/14/25 09:00 01/14/25 16:10

01/14/25 09:00 01/14/25 16:10

01/14/25 09:00 01/14/25 16:10

01/14/25 09:00 01/14/25 16:10

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01/14/25 09:00 01/14/25 16:10

01/14/25 09:00 01/14/25 16:10

Analyzed

Prepared

D

Dil Fac

1

1

1

1

1

1

1

1

1

1

1

1

11 12 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/16/24 10:30	12/16/24 17:14	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011)	0.287		0.100		mg/L			12/11/24 16:13	1
Total Dissolved Solids (SM 2540C)	420		50.0		mg/L			12/05/24 16:35	1
Analysia	Pocult	Qualifier	RL	RI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	quanner			0		rioparoa	7 maiy 20a	Biii ao

Method: SW846 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.174		0.115	0.116	1.00	0.159	pCi/L	12/09/24 09:23	01/04/25 12:59	1
Carrier Ba Carrier	% Yield 88.5	Qualifier	Limits					Prepared 12/09/24 09:23	Analyzed 01/04/25 12:59	Dil Fac

Method: SW846 9320 - Radium-228 (GFPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2 σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.151	U	0.373	0.374	1.00	0.660	pCi/L	12/09/24 09:28	12/30/24 13:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		30 - 110					12/09/24 09:28	12/30/24 13:55	1
Y Carrier	86.0		30 - 110					12/09/24 09:28	12/30/24 13:55	1

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

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.325	U	0.390	0.392	5.00	0.660	pCi/L		01/08/25 09:24	1

Client Sample Results

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Client Sample ID: CCR Duplicate Date Collected: 12/03/24 18:00 Date Received: 12/05/24 09:00

Job ID: 310-296505-1

Lab Sample ID: 310-296505-2 **Matrix: Ground Water**

nalyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ntimony		<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 16:13	1
rsenic		<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 16:13	1
Barium		0.211		0.00200		mg/L		01/14/25 09:00	01/14/25 16:13	1
Beryllium		<0.00100		0.00100		mg/L		01/14/25 09:00	01/14/25 16:13	1
Cadmium		<0.000200		0.000200		mg/L		01/14/25 09:00	01/14/25 16:13	1
Chromium		<0.00500		0.00500		mg/L		01/14/25 09:00	01/14/25 16:13	1
Cobalt		<0.000500		0.000500		mg/L		01/14/25 09:00	01/14/25 16:13	1
Lead		<0.000500		0.000500		mg/L		01/14/25 09:00	01/14/25 16:13	1
Lithium		0.0145		0.0100		mg/L		01/14/25 09:00	01/14/25 16:13	1
Volybdenum		0.00227		0.00200		mg/L		01/14/25 09:00	01/14/25 16:13	1
Selenium		0.0177		0.00500		mg/L		01/14/25 09:00	01/14/25 16:13	1
Thallium		<0.00100		0.00100		mg/L		01/14/25 09:00	01/14/25 16:13	1
Method: SW846 7470A -	- Merc	ury (CVAA)								
Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury		<0.000200		0.000200		mg/L		12/16/24 10:30	12/16/24 17:16	1
General Chemistry										
Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C-2011))	0.279		0.100		mg/L			12/13/24 11:37	1
Total Dissolved Solids (SM 2	2540C) 382		50.0		mg/L			12/05/24 16:35	1
Analvte		Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	Radiu	7.7			RL	Unit SU	<u>D</u>	Prepared	Analyzed 12/05/24 12:33	Dil Fac 1
oH (SM 4500 H+ B) Method: SW846 9315 - F		7.7 m-226 (GFPC	HF C) Count Uncert.	Total Uncert.		SU	<u> </u>		12/05/24 12:33	1
DH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R	Result	7.7 m-226 (GFPC	HF C) Count Uncert. (2σ+/-)	1.0 Total Uncert. (2σ+/-)	RL I	SU MDC Unit		Prepared	12/05/24 12:33 Analyzed	1 Dil Fac
Radium-226	Result 0.179	7.7 m-226 (GFPC Qualifier	HF C) Count Uncert. (2σ+/-) 0.108	Total Uncert.	RL I	SU		Prepared 12/09/24 09:23	Analyzed 01/04/25 12:59	1 Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 Carrier %	Result 0.179 %Yield	7.7 m-226 (GFPC Qualifier	HF C) Count Uncert. (2σ+/-) 0.108	1.0 Total Uncert. (2σ+/-)	RL I	SU MDC Unit		Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59 Analyzed	Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte Radium-226	Result 0.179	7.7 m-226 (GFPC Qualifier	HF C) Count Uncert. (2σ+/-) 0.108	1.0 Total Uncert. (2σ+/-)	RL I	SU MDC Unit		Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59	1 Dil Fac
PH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 Carrier % Ba Carrier	Result 0.179 %Yield 83.0	7.7 m-226 (GFPC Qualifier	HF C) Count Uncert. (2σ+/-) 0.108 Limits 30 - 110	Total Uncert. (2σ+/-) 0.109	RL I	SU MDC Unit		Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59 Analyzed	Dil Fac
Analyte R Radium-226 2 Ba Carrier 9 Radium-226 2 Radium-226 2 Radium-200 2 Radium-2	Result 0.179 %Yield 83.0	7.7 m-226 (GFPC Qualifier Qualifier m-228 (GFPC	HF C) Count Uncert. (2σ+/-) 0.108 Limits 30 - 110 C) Count	Total Uncert. (2σ+/-) 0.109	RL I	SU MDC Unit		Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59 Analyzed	Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 (Carrier % Ba Carrier Method: SW846 9320 - F	Result 0.179 %Yield 83.0 Radiu	7.7 m-226 (GFPC Qualifier Qualifier m-228 (GFPC	HF C) Count Uncert. $(2\sigma+/-)$ 0.108 Limits 30 - 110 C) Count Uncert.	Total Uncert. (2σ+/-) 0.109	RL I 1.00 0	SU MDC Unit .141 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59	1 Dil Fac 1 Dil Fac 1
oH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 (Carrier % Ba Carrier Method: SW846 9320 - F Analyte R	Result 0.179 %Yield 83.0 Radiu Result	7.7 m-226 (GFPC Qualifier Qualifier m-228 (GFPC	HF C) Count Uncert. (2σ+/-) 0.108 Limits 30 - 110 C) Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0	SU MDC Unit .141 pCi/L MDC Unit		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59	Dil Fac 1 Dil Fac 1 Dil Fac
Analyte R Radium-226 (Carrier % Ba Carrier Method: SW846 9320 - F	Result 0.179 %Yield 83.0 Radiu	7.7 m-226 (GFPC Qualifier Qualifier m-228 (GFPC	HF C) Count Uncert. $(2\sigma+/-)$ 0.108 Limits 30 - 110 C) Count Uncert.	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0	SU MDC Unit .141 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59	1 Dil Fac 1 Dil Fac 1
PH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 0 Carrier % Ba Carrier % Method: SW846 9320 - F R Analyte R Radium-228 R	Result 0.179 %Yield 83.0 Radiu Result 0.504	7.7 m-226 (GFPC Qualifier M-228 (GFPC Qualifier U Qualifier	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435 Limits	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0	SU MDC Unit .141 pCi/L MDC Unit		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed	1 Dil Fac 1 Dil Fac 1 Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 (Carrier % Ba Carrier Method: SW846 9320 - F Analyte R Radium-228 Carrier % Ba Carrier %	Result 0.179 %Yield 83.0 Radiu 0.504 %Yield 83.0	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435 Limits 30 - 110	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0	SU MDC Unit .141 pCi/L MDC Unit		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed 12/30/24 13:55	Dil Fac 1 Dil Fac 1 Dil Fac
DH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 0 Carrier % Ba Carrier % Method: SW846 9320 - F R Analyte R Radium-228 % Carrier % Ba Carrier %	Result 0.179 %Yield 83.0 Radiu Result 0.504 %Yield	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0	SU MDC Unit .141 pCi/L MDC Unit		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed	1 Dil Fac 1 Dil Fac 1 Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 0 Carrier % Ba Carrier % Method: SW846 9320 - F R Analyte R Carrier % Method: SW846 9320 - F % Analyte R Carrier % Ba Carrier % Carrier % Ba Carrier % Carrier % Carrier % Y Carrier %	Result 0.179 %Yield 83.0 Radiu Result 0.504 %Yield 83.0 85.2	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435 Limits 30 - 110 30 - 110 30 - 110 30 - 110	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0 RL 0	SU MDC Unit .141 pCi/L MDC Unit .681 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed 12/30/24 13:55	1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac
Analyte R Radium-226 Carrier % Method: SW846 9315 - F Radium-226 Carrier % Method: SW846 9320 - F Analyte R Radium-228 Carrier % Ba Carrier % Carrier %	Result 0.179 %Yield 83.0 Radiu Result 0.504 %Yield 83.0 85.2	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435 Limits 30 - 110 30 - 110 30 - 110 30 - 110	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0 RL 0	SU MDC Unit .141 pCi/L MDC Unit .681 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed 12/30/24 13:55	1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 (Carrier % Ba Carrier Method: SW846 9320 - F Analyte R Radium-228 Carrier %	Result 0.179 %Yield 83.0 Radiu Result 0.504 %Yield 83.0 85.2	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier 228 - Combin	HF C) Count Uncert. $(2\sigma + l -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + l -)$ 0.435 Limits 30 - 110 30 - 110 ao - 110 ao - 110 ao - 110 ao - 110	Total Uncert. (2σ+/-) 0.109	RL 1 1.00 0 RL 0	SU MDC Unit .141 pCi/L MDC Unit .681 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed 12/30/24 13:55	1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac
pH (SM 4500 H+ B) Method: SW846 9315 - F Analyte R Radium-226 0 Carrier % Ba Carrier % Method: SW846 9320 - F R Analyte R Radium-228 % Carrier % Ba Carrier % Method: TAL-STL Ra226 %	Result 0.179 %Yield 83.0 Radiu Result 0.504 %Yield 83.0 85.2 6_Ra2	7.7 m-226 (GFPC Qualifier m-228 (GFPC Qualifier U Qualifier 228 - Combin	HF C) Count Uncert. $(2\sigma + / -)$ 0.108 Limits 30 - 110 C) Count Uncert. $(2\sigma + / -)$ 0.435 Limits 30 - 110 30 - 110 30 - 110 wed Radiu Count	Total Uncert. (2σ+/-) 0.109 Total Uncert. (2σ+/-) 0.438	RL I 1.00 0 RL I 1.00 0 Radium-22	SU MDC Unit .141 pCi/L MDC Unit .681 pCi/L		Prepared 12/09/24 09:23 Prepared 12/09/24 09:23 Prepared 12/09/24 09:28 Prepared 12/09/24 09:28	Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 01/04/25 12:59 Analyzed 12/30/24 13:55 Analyzed 12/30/24 13:55	Dil Fac1Dil Fac1Dil Fac1Dil Fac1111111

Qualifiers

General Che Qualifier	Mistry Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time
<mark>Rad</mark> Qualifier	Qualifier Description
	Result is less than the sample detection limit.
-	
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¢.	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-444522/1-A Matrix: Water Analysis Batch: 444671

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 15:41	1
Arsenic	<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 15:41	1
Barium	<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 15:41	1
Beryllium	<0.00100		0.00100		mg/L		01/14/25 09:00	01/14/25 15:41	1
Cadmium	<0.000200		0.000200		mg/L		01/14/25 09:00	01/14/25 15:41	1
Chromium	<0.00500		0.00500		mg/L		01/14/25 09:00	01/14/25 15:41	1
Cobalt	<0.000500		0.000500		mg/L		01/14/25 09:00	01/14/25 15:41	1
Lead	<0.000500		0.000500		mg/L		01/14/25 09:00	01/14/25 15:41	1
Lithium	<0.0100		0.0100		mg/L		01/14/25 09:00	01/14/25 15:41	1
Molybdenum	<0.00200		0.00200		mg/L		01/14/25 09:00	01/14/25 15:41	1
Selenium	<0.00500		0.00500		mg/L		01/14/25 09:00	01/14/25 15:41	1
Thallium	<0.00100		0.00100		mg/L		01/14/25 09:00	01/14/25 15:41	1

Lab Sample ID: LCS 310-444522/2-A Matrix: Water Analysis Batch: 444671

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 444522

Job ID: 310-296505-1

Prep Type: Total/NA

Prep Batch: 444522

Client Sample ID: Method Blank

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.200	0.2066		mg/L		103	80 - 120	
Arsenic	0.200	0.1974		mg/L		99	80 - 120	
Barium	0.100	0.1060		mg/L		106	80 - 120	
Beryllium	0.100	0.1002		mg/L		100	80 - 120	
Cadmium	0.100	0.1012		mg/L		101	80 - 120	
Chromium	0.100	0.1044		mg/L		104	80 - 120	
Cobalt	0.100	0.09677		mg/L		97	80 - 120	
Lead	0.200	0.2050		mg/L		102	80 - 120	
Lithium	0.200	0.1895		mg/L		95	80 - 120	
Molybdenum	0.200	0.1993		mg/L		100	80 - 120	
Selenium	0.400	0.3804		mg/L		95	80 - 120	
Thallium	0.100	0.09368		mg/L		94	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-44 Matrix: Water Analysis Batch: 442626		МВ					Clie		ole ID: Method Prep Type: To Prep Batch:	otal/NA
Analyte	Result	Qualifier	RI	_	MDL Unit	D	Р	repared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200)	mg/L		12/1	6/24 10:30	12/16/24 16:21	1
Lab Sample ID: LCS 310-4 Matrix: Water Analysis Batch: 442626	42497/2-A		0	1.00	1.00	Client	t Sai		Lab Control S Prep Type: To Prep Batch:	otal/NA
		:	Spike	LCS	LCS				%Rec	
Analyte		А	dded	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury		0.0	00167	0.001481		mg/L		89	80 - 120	

QC Sample Results

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring Job ID: 310-296505-1

Method: 4500 F C-2011 - Fluoride (Ion-selective Electrode)

								Clie	ent Sam	ple ID: Metho	
Matrix: Water										Prep Type:	Total/N
Analysis Batch: 442273											
	MB	MB									
Analyte	Result	Qualifier	R	-	MDL	Unit	D) P	repared	Analyzed	Dil Fa
Fluoride	<0.100		0.10)		mg/L				12/11/24 15:14	ł
Lab Sample ID: LCS 310-442273/29							Clier	nt Sa	mple ID:	: Lab Control	Sampl
Matrix: Water										Prep Type:	
Analysis Batch: 442273											
			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	t Qual	ifier	Unit	D	%Rec	Limits	
Fluoride			2.00	2.043	3		mg/L		102	90 - 110	
Lab Sample ID: MB 310-442471/17								Clie	ent Sam	ple ID: Metho	nd Blan
Matrix: Water								UII	un oum	Prep Type:	
Analysis Batch: 442471										пер туре.	
	MB	мв									
Analyte		Qualifier	R		MDL	Unit	D) P	repared	Analyzed	Dil Fa
Fluoride	<0.100	Quanner	0.10			mg/L			repared	- <u>12/13/24 10:35</u>	
	-0.100		0.10	5		mg/L				12/13/24 10.30	,
Lab Sample ID: LCS 310-442471/18 Matrix: Water							Clier	nt Sa	mple ID:	Lab Control Prep Type:	
Analysis Batch: 442471											
· ·			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	t Qual	ifier	Unit	D	%Rec	Limits	
Fluoride			2.00	1.993	3		mg/L		100	90 - 110	
lethod: SM 2540C - Solids, To	otal D	issolve	d (TDS)								
Lab Sample ID: MB 310-441708/1 Matrix: Water	otal D	issolve	d (TDS)					Clie		ple ID: Metho Prep Type: `	
Lab Sample ID: MB 310-441708/1 Matrix: Water			d (TDS)					Clie			
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708	МВ	МВ			MDL	Unit			ent Sam	Prep Type:	Total/N
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte	MB Result				MDL		<u>_</u>			Prep Type:	Total/N
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte	МВ	МВ				Unit mg/L			ent Sam	Prep Type:	Total/N
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte	MB Result	МВ					D	<u>)</u> P	ent Sam	Prep Type:	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids	MB Result	МВ					D	<u>)</u> P	ent Sam	Prep Type: <u>Analyzed</u> 12/05/24 16:35	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2	MB Result	МВ					D	<u>)</u> P	ent Sam	Prep Type: <u>Analyzed</u> 12/05/24 16:38 Lab Control	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water	MB Result	МВ					D	<u>)</u> P	ent Sam	Prep Type: <u>Analyzed</u> 12/05/24 16:38 Lab Control	Dil Fa
Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water	MB Result	МВ		LCS		mg/L	D	<u>)</u> P	ent Sam	Prep Type: Analyzed 12/05/24 16:38 Lab Control Prep Type:	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte	MB Result	МВ		LCS	E LCS	mg/L	Clier	nt Sa	ent Sam repared mple ID:	Prep Type: * Analyzed 12/05/24 16:35 Lab Control Prep Type: * %Rec	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids	MB Result	МВ	RI 50.1 Spike Added	LCS	E LCS	mg/L	Clier	nt Sa	ent Sam repared mple ID: <u>%Rec</u>	Prep Type: * Analyzed 12/05/24 16:35 Lab Control Prep Type: * %Rec Limits	Dil Fa
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Method: SM 4500 H+ B - pH	MB Result <50.0	МВ	RI 50.1 Spike Added	LCS	E LCS	mg/L	Clier Unit mg/L	D P nt Sa D	ent Sam repared mple ID: <u>%Rec</u> 101	Analyzed 12/05/24 16:35 Lab Control Prep Type: `` %Rec Limits 88 - 110	Total/N
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Analyte Total Dissolved Solids Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-441668/28	MB Result <50.0	МВ	RI 50.1 Spike Added	LCS	E LCS	mg/L	Clier Unit mg/L	D P nt Sa D	ent Sam repared mple ID: <u>%Rec</u> 101	Prep Type: * Analyzed 12/05/24 16:38 Lab Control Prep Type: * %Rec Limits 88 - 110 Lab Control Lab Control	Total/N/ Dil Fa Sampl Total/N/ Sampl
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Analyte Total Dissolved Solids Analyte Total Dissolved Solids Analyte Total Dissolved Solids	MB Result <50.0	МВ	RI 50.1 Spike Added	LCS	E LCS	mg/L	Clier Unit mg/L	D P nt Sa D	ent Sam repared mple ID: <u>%Rec</u> 101	Analyzed 12/05/24 16:35 Lab Control Prep Type: `` %Rec Limits 88 - 110	Total/N/ Dil Fa Sampl Total/N/ Sampl
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-441668/28	MB Result <50.0	МВ	RI 50.1 	LCS Result 1008	ELCS	mg/L	Clier Unit mg/L	D P nt Sa D	ent Sam repared mple ID: <u>%Rec</u> 101	Prep Type: Analyzed 12/05/24 16:35 Lab Control Prep Type: %Rec Limits 88 - 110 Lab Control Prep Type:	Total/N/ Dil Fa Sampl Total/N/ Sampl
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-441668/28 Matrix: Water Analysis Batch: 441668	MB Result <50.0	МВ	Spike Added Spike	D LCS Result 1008	ELCS	ifier	Clier Unit mg/L Clier	p P nt Sa D nt Sa	ent Sam Prepared mple ID: <u>%Rec</u> 101 -	Prep Type: * Analyzed 12/05/24 16:38 Lab Control Prep Type: * %Rec Limits 88 - 110 Lab Control Prep Type: * %Rec %Rec	Total/N/ Dil Fa Sampl Total/N/ Sampl
Lab Sample ID: MB 310-441708/1 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Lab Sample ID: LCS 310-441708/2 Matrix: Water Analysis Batch: 441708 Analyte Total Dissolved Solids Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-441668/28 Matrix: Water	MB Result <50.0	МВ	RI 50.1 	D LCS Result 1008	E LCS	ifier	Clier Unit mg/L	D P nt Sa D	ent Sam repared mple ID: <u>%Rec</u> 101	Prep Type: Analyzed 12/05/24 16:35 Lab Control Prep Type: %Rec Limits 88 - 110 Lab Control Prep Type:	Total/N/ Dil Fa Sampl Total/N/ Sampl

QC Sample Results

Job ID: 310-296505-1

Method: 9315 - Radium-226 (GFPC)

Ba Carrier

Y Carrier

94.2

83.7

30 ₋ 110 30 ₋ 110

Lab Sample Matrix: Wat										ple ID: Metho Prep Type: 1	
Analysis Ba		'88								Prep Batch:	
				Count	Total						
		MB	MB	Uncert.	Uncert.						
Analyte		Result	Qualifier	(2 σ+/-)	(2 σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226		0.0000	U	0.0552	0.0552	1.00	0.117	pCi/L	12/09/24 09:2	3 01/04/25 12:47	1
		MB	МВ								
Carrier		%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier		94.2		30 - 110					12/09/24 09:2	3 01/04/25 12:47	1
Lab Sample	D: LCS	160-692	618/2-A					Cli	ent Sample ID	: Lab Control	Sample
Matrix: Wat										Prep Type: 1	
Analysis Ba		'88								Prep Batch:	
•						Total				•	
			Spike	LCS	LCS	Uncert.				%Rec	
Analyte			Added	Result	Qual	(2 σ+/-)	RL	MDC	Unit %Rec	Limits	
Radium-226			9.58	9.002		0.990	1.00	0.130	pCi/L 94	75 - 125	
	LCS	LCS									
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	92.5		30 - 110	_							
Lab Sample Matrix: Wat Analysis Ba	er		Spike	LCSD	LCSD	Total Uncert.				Control Sam Prep Type: T Prep Batch: %Rec	otal/NA
Analyte			Added	Result		(2σ+/-)	RL	MDC	Unit %Rec	Limits RE	
Radium-226			9.58	8.813		0.979	1.00	0.171		75 - 125 0	
	LCSD	LCSD									
Carrier		Qualifier	Limits								
Ba Carrier	90.5		30 - 110	_							
Aethod: 93	320 - Ra	dium-2	28 (GFPC	;)							
Lab Sample				,					Client San	ple ID: Metho	d Blant
Matrix: Wat		50-0520	10/1-74						Sherit Gall	Prep Type: 1	
Analysis Ba		68								Prep Batch:	
				Count	Total					. Top Batom	502010
		МВ	МВ	Uncert.	Uncert.						
Analyte			Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228		0.02737		0.265	0.265	1.00	0.491		12/09/24 09:2		
Naululli-220			•								
Naulum-220											
Carrier		МВ		Limits					Prepared	Analyzed	Dil Fac

Prepared	Analyzed	Dil Fac
12/09/24 09:28	12/30/24 11:55	1
12/09/24 09:28	12/30/24 11:55	1

QC Sample Results

Job ID: 310-296505-1

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

Analysis Ba	atch: 6958	68				Total					Prep Bat	tch: 69	92619	
			Spike	LCS		Uncert.					%Rec			
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC		%Rec	Limits			
Radium-228			8.22	9.542		1.30	1.00	0.574	pCi/L	116	75 - 125			
	LCS	LCS												
Carrier	%Yield	Qualifier	Limits											
Ba Carrier	92.5		30 - 110											
VOamian			00 110											
Y Carrier	82.2		30 - 110											
													_	
Lab Sample	e ID: LCSI) 160-6926						Client S	ample	ID: Lab	Control S			
Lab Sample Matrix: Wat	e ID: LCSE er							Client S	ample	ID: Lab	Prep Typ	e: Tot	al/NA	
-	e ID: LCSE er					Totol		Client S	ample	ID: Lab		e: Tot	al/NA	
Lab Sample Matrix: Wat	e ID: LCSE er		619/3-A			Total		Client S	ample	ID: Lab	Prep Typ Prep Bat	e: Tot	al/NA 92619	
Lab Sample Matrix: Wat Analysis Ba	e ID: LCSE er		619/3-A Spike	LCSD Result		Uncert.					Prep Typ Prep Bat %Rec	e: Tot tch: 69	al/NA 92619 RER	
Lab Sample Matrix: Wat Analysis Ba Analyte	e ID: LCSE er		619/3-A Spike Added	Result		Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	Prep Typ Prep Bat %Rec Limits	e: Tot tch: 69	al/NA 92619 RER Limit	
Matrix: Wat	e ID: LCSE er atch: 6958	368	619/3-A Spike			Uncert.		MDC			Prep Typ Prep Bat %Rec	e: Tot tch: 69	al/NA 92619 RER	
Lab Sample Matrix: Wat Analysis Ba Analyte	e ID: LCSE er atch: 6958		619/3-A Spike Added	Result		Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	Prep Typ Prep Bat %Rec Limits	e: Tot tch: 69	al/NA 92619 RER Limit	
Lab Sample Matrix: Wat Analysis Ba Analyte Radium-228 Carrier	E ID: LCSE er atch: 6958 	368	Spike Added 8.22	Result		Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	Prep Typ Prep Bat %Rec Limits	e: Tot tch: 69	al/NA 92619 RER Limit	
Lab Sample Matrix: Wat Analysis Ba Analyte Radium-228	e ID: LCSE er atch: 6958 	368 	Spike Added 8.22	Result		Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	Prep Typ Prep Bat %Rec Limits	e: Tot tch: 69	al/NA 92619 RER Limit	

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Water

Water

Matrix

Water

Water

Matrix

Water

Water

Ground Water

Ground Water

Ground Water

Ground Water

Ground Water

Ground Water

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Client Sample ID

Lab Control Sample

Client Sample ID

Lab Control Sample

Client Sample ID

CCR APMW 11

CCR Duplicate

Method Blank

Lab Control Sample

CCR APMW 11

CCR Duplicate

Method Blank

CCR APMW 11

CCR Duplicate

Method Blank

Metals

Prep Batch: 442497

Lab Sample ID

310-296505-1

310-296505-2

Lab Sample ID

310-296505-1

310-296505-2

Lab Sample ID

310-296505-1

310-296505-2

MB 310-444522/1-A

LCS 310-444522/2-A

Analysis Batch: 444671

MB 310-442497/1-A

LCS 310-442497/2-A

Prep Batch: 444522

MB 310-442497/1-A

LCS 310-442497/2-A

Analysis Batch: 442626

Prep Batch

Prep Batch

442497

442497

442497

442497

Prep Batch

Method

7470A

7470A

7470A

7470A

Method

7470A

7470A

7470A

7470A

Method

3005A

3005A

3005A

3005A

12 13 14

Lab Sample ID 310-296505-1	Client Sample ID CCR APMW 11	Prep Type Total/NA	Matrix Ground Water	Method 6020B	Prep Batch 444522
310-296505-2	CCR Duplicate	Total/NA	Ground Water	6020B	444522
MB 310-444522/1-A	Method Blank	Total/NA	Water	6020B	444522
LCS 310-444522/2-A	Lab Control Sample	Total/NA	Water	6020B	444522

General Chemistry

Analysis Batch: 441668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296505-1	CCR APMW 11	Total/NA	Ground Water	SM 4500 H+ B	
310-296505-2	CCR Duplicate	Total/NA	Ground Water	SM 4500 H+ B	
LCS 310-441668/28	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 441708

Lab Sample ID 310-296505-1	Client Sample ID CCR APMW 11	Prep Type Total/NA	Matrix Ground Water	Method SM 2540C	Prep Batch
310-296505-2	CCR Duplicate	Total/NA	Ground Water	SM 2540C	
MB 310-441708/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-441708/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 442273

Lab Sample ID 310-296505-1	Client Sample ID	Prep Type Total/NA	Matrix Ground Water	Method 4500 F C-2011	Prep Batch
MB 310-442273/28	Method Blank	Total/NA	Water	4500 F C-2011	
LCS 310-442273/29	Lab Control Sample	Total/NA	Water	4500 F C-2011	
Analysis Batch: 4424	71				

Lab Sample ID **Client Sample ID** Prep Type Matrix Method Prep Batch Total/NA Ground Water 4500 F C-2011 310-296505-2 CCR Duplicate Method Blank MB 310-442471/17 Total/NA Water 4500 F C-2011

QC Association Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Job ID: 310-296505-1

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General Chemistry (Continued)

Analysis Batch: 442471 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-442471/18	Lab Control Sample	Total/NA	Water	4500 F C-2011	

Rad

Prep Batch: 692618

Lab Sample ID 310-296505-1	Client Sample ID CCR APMW 11	Prep Type Total/NA	Matrix Ground Water	Method PrecSep-21	Prep Batch
310-296505-2	CCR Duplicate	Total/NA	Ground Water	PrecSep-21	
MB 160-692618/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-692618/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-692618/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
Prep Batch: 692619					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-296505-1	CCR APMW 11	Total/NA	Ground Water	PrecSep_0	
310-296505-2	CCR Duplicate	Total/NA	Ground Water	PrecSep 0	

310-290303-1		IOIal/INA	Ground Water	Flecsep_0
310-296505-2	CCR Duplicate	Total/NA	Ground Water	PrecSep_0
MB 160-692619/1-A	Method Blank	Total/NA	Water	PrecSep_0
LCS 160-692619/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0
LCSD 160-692619/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0



Client Sample ID: CCR APMW 11 Date Collected: 12/03/24 17:44 Date Received: 12/05/24 09:00

Lab Sample ID: 310-296505-1

Matrix: Ground Water

5 6

10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			444522	F5MW	EET CF	01/14/25 09:00
Total/NA	Analysis	6020B		1	444671	NFT2	EET CF	01/14/25 16:10
Total/NA	Prep	7470A			442497	QTZ5	EET CF	12/16/24 10:30
Total/NA	Analysis	7470A		1	442626	QTZ5	EET CF	12/16/24 17:14
Total/NA	Analysis	4500 F C-2011		1	442273	WZC8	EET CF	12/11/24 16:13
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:32
Total/NA	Prep	PrecSep-21			692618	BCE	EET SL	12/09/24 09:23
Total/NA	Analysis	9315		1	696789	FLC	EET SL	01/04/25 12:59
Total/NA	Prep	PrecSep_0			692619	BCE	EET SL	12/09/24 09:28
Total/NA	Analysis	9320		1	695719	CMM	EET SL	12/30/24 13:55
Total/NA	Analysis	Ra226_Ra228		1	697191	SCB	EET SL	01/08/25 09:24

Client Sample ID: CCR Duplicate Date Collected: 12/03/24 18:00 Date Received: 12/05/24 09:00

Lab Sample ID: 310-296505-2 Matrix: Ground Water

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			444522	F5MW	EET CF	01/14/25 09:00
Total/NA	Analysis	6020B		1	444671	NFT2	EET CF	01/14/25 16:13
Total/NA	Prep	7470A			442497	QTZ5	EET CF	12/16/24 10:30
Total/NA	Analysis	7470A		1	442626	QTZ5	EET CF	12/16/24 17:16
Total/NA	Analysis	4500 F C-2011		1	442471	WZC8	EET CF	12/13/24 11:37
Total/NA	Analysis	SM 2540C		1	441708	XJ7V	EET CF	12/05/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	441668	W9YR	EET CF	12/05/24 12:33
Total/NA	Prep	PrecSep-21			692618	BCE	EET SL	12/09/24 09:23
Total/NA	Analysis	9315		1	696789	FLC	EET SL	01/04/25 12:59
Total/NA	Prep	PrecSep_0			692619	BCE	EET SL	12/09/24 09:28
Total/NA	Analysis	9320		1	695719	CMM	EET SL	12/30/24 13:55
Total/NA	Analysis	Ra226_Ra228		1	697191	SCB	EET SL	01/08/25 09:24

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401 EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

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Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-25

Laboratory: Eurofins St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
H - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
owa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-24 *
Oklahoma	NELAP	9997	12-31-24 *
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

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

Method Summary

Client: Nebraska Public Power District Project/Site: GGS Ash Pit Assessment Monitoring

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
4500 F C-2011	Fluoride (Ion-selective Electrode)	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
9315	Radium-226 (GFPC)	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

None = None

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.

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401 EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Environment Testing America



310-296505 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information				·
Client: Nebrazka PD)			
City/State:	STATE	Project:		
Receipt Information				······
Date/Time PATE 529	TIME	Received By:		
Delivery Type: 💭 UPS 🤺 🗍 FedE	Ēx	E FedEx Ground	🗌 US Mail	🗌 Spee-Dee
Lab Courier 🗌 Lab	Field Services	Client Drop-off	Other:	
Condition of Cooler/Containers				
Sample(s) received in Cooler?	s 🗌 No	If yes: Cooler ID:		
Multiple Coolers?		If yes: Cooler #		
Cooler Custody Seals Present? X Ye	s 🗌 No	If yes: Cooler custo	dy seals intact?	Yes
Sample Custody Seals Present? Ye	s 🖉 No	If yes: Sample custo	ody seals intact?[Yes 🗌
Trip Blank Present?	s 💢 No	If yes: Which VOA	samples are in co	oler? ↓
Temperature Record				
Coolant: 🕅 Wet ice 🗌 Blue ice	🗌 Dry ice	e 🗌 Other:	🗆 N	ONE
Thermometer ID:		Correction Factor (°C		
• Temp Blank Temperature - If no temp blank	, or temp blank te	mperature above criteria, pro	oceed to Sample Con	tainer Temperature
Uncorrected Temp (°C).		Corrected Temp (°C)	:01	
Sample Container Temperature				
Container(s) used:			<u>IER 2</u>	
Uncorrected Temp (°C):	, di Addina dan kacamatan kata kata kata kata kata kata kata			
Corrected Temp (°C):				
Exceptions Noted				
 If temperature exceeds criteria, was s a) If yes: Is there evidence that the 			oling?	□ No □ No
 If temperature is <0°C, are there obv (e.g., bulging septa, broken/cracked 	bottles, frozen	solid?)	e containers is co Yes	mpromised?
NOTE If yes, contact PM before proceed	ing If no, proce	ed with login		
Additional Comments				,
			۱.	
	•			

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, 1A 50613 Phone (319) 277-2401 Phone (319) 277-2425	0	Chain (ain of Custody Record	tody R	ecord								🔅 eurofins	IS Environment Testing	sting
Client Information	Sampler Dour	Ţ	5015	Lab F Calh	M: oun, Conr	er M			Ğ	Carrier Tracking No(s)	g No(s):		COC No: 310-98039-26681 1	3681 1	
client contact Doug Harris	Phone: 305	20 10 10	10		E-Mait: Conner Calhoun@et.eurofinsus.com	n@et.e	surofins	us.com	Sta	State of Origin:			Page: Page 1 of 1		
Company Nebraska Public Power District			-DISW4					nalysi	Analysis Requested	sted			Job #:		
Address: 6089 S Hwy 25 Gerald Gentleman Station South	Due Date Requested:	÷			А÷.								Preservation Codes: D - HNO3	odes:	
City Sutherland	TAT Requested (days):	ys):			ΛI								N - None		
State, Zip ⁻ NE, 69165	Compliance Project:	∆ Yes	∆ No		v deca										
Phone: 308-530-1124(Tel)	PO #: 4500266733				<u>.</u>		өр								
Emait: ddharri@nppd com	# 0M				- (on		Huor!						81		
Project Name: GGS Ash Pit Assessment Monitoring	Project #: 31007155				10 88		(aow)						enlatr		
Site. Gerald Gentleman Station	SSOW#.				v) as		- 28D - (of Other		
ala Identification	Samula Data	Sample Time	Sample Type (C=comp,	Matrix (w=water S=solid, O=waste/oil,	1315_Partor MSM m1015 1315_Partor MSM m215 1315_Partor MSM	9320_Ra228 - R	M70990_A380			·····			Total Number Se CC.	Special Instructions/Note:	
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				Water											
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					Samp	le Disp	osal (1	l fee ma	y be asse	ssed if s	amples	are ref	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	n 1 month)	
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Relinquished by Relinquished by	- 4	1 42	330	company どう	ריך ^{גי}	Received by	il H				Date/Time:	те: Ш	bop yer?		
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Custody Seals Intact: Custody Seal No					8	oler Temı	perature() °C and I	Cooler Temperature(s) °C and Other Remarks	S.					
														Ver 05/06/2024]

ł,

Client: Nebraska Public Power District

Login Number: 296505 List Number: 1 Creator: Hirsch, Preston

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

List Source: Eurofins Cedar Falls

Job Number: 310-296505-1

Method: 9315 - Radium-226 (GFPC) **Matrix: Ground Water** Prep Type: Total/NA Percent Yield (Acceptance Limits) Ва (30-110) Lab Sample ID **Client Sample ID** 310-296505-1 CCR APMW 11 88.5 310-296505-2 CCR Duplicate 83.0 Tracer/Carrier Legend Ba = Ba Carrier Method: 9315 - Radium-226 (GFPC) **Matrix: Water** Prep Type: Total/NA Percent Yield (Acceptance Limits) Ва Lab Sample ID **Client Sample ID** (30-110)LCS 160-692618/2-A Lab Control Sample 92.5 LCSD 160-692618/3-A Lab Control Sample Dup 90.5 MB 160-692618/1-A Method Blank 94.2 **Tracer/Carrier Legend** Ba = Ba Carrier Method: 9320 - Radium-228 (GFPC) **Matrix: Ground Water** Prep Type: Total/NA 15 Percent Yield (Acceptance Limits) Υ Ва (30-110) (30-110) Lab Sample ID **Client Sample ID** CCR APMW 11 310-296505-1 88.5 86.0 310-296505-2 CCR Duplicate 83.0 85.2 **Tracer/Carrier Legend** Ba = Ba Carrier Y = Y Carrier Method: 9320 - Radium-228 (GFPC) **Matrix: Water** Prep Type: Total/NA Percent Vield (Acceptance Limite)

				Percent field (Acceptance Linnis)
		Ва	Y	
Lab Sample ID	Client Sample ID	(30-110)	(30-110)	
LCS 160-692619/2-A	Lab Control Sample	92.5	82.2	
LCSD 160-692619/3-A	Lab Control Sample Dup	90.5	83.7	
MB 160-692619/1-A	Method Blank	94.2	83.7	

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

APPENDIX B

Comparative Statistical Results

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitorin g Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	***		
Calcium, Total	mg/L	CUSUM	120.2	47.8	71.5	Yes	***		
Chloride	mg/L	CUSUM	108.1	8.7	35.7	Yes	***		
Fluoride	mg/L	CUSUM	1.785	< 1.00	0.787	Yes	***		
pH, Field	pH units	NP-PL	7.23, 9.71	*			***		
Sulfate	mg/L	CUSUM	76.9	31.4	42.1	Yes	***		
Total Dissolved Solids	mg/L	CUSUM	653	238	385.8	Yes	***		

Table 1: Comparative Statistics - APMW-5 (Upgradient)

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

* Field parameters were unable to be collected during sampling of APMW-5 during the Q2 2024 sampling event. See text for further discussion.

*** APMW-5 was dry during the Q4 2024 sampling event. See text for details.

Table 2: Comparative Statistics - APMW-15 (Upgradient)

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	0.118		Yes	0.102		Yes
Calcium, Total	mg/L	CUSUM	145.0	99.7	105.8	Yes	105.0	106	Yes
Chloride	mg/L	CUSUM	40.4	20.1	34.0	Yes	29.1	34.0	Yes
Fluoride	mg/L	NP-PL	0.716	< 1.000		Yes *	0.278		Yes
pH, Field	pH units	CUSUM	6.24, 8.15	7.23	7.20, 7.35	Yes	7.52	7.20, 7.43	Yes
Sulfate ¹	mg/L	CUSUM	209	113	138	Yes	141	138	Yes
Total Dissolved Solids	mg/L	CUSUM	853	478	585	Yes	564	585	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

* See text for discussion of non-detects greater than the statistical

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	0.128		Yes	0.13		Yes
Calcium, Total ¹	mg/L	CUSUM	199.3	106	133.6	Yes	113.0	133.5	Yes
Chloride ¹	mg/L	CUSUM	126.2	29.6	56.4	Yes	30.6	56.2	Yes
Fluoride	mg/L	NP-PL	1.490	< 1.000		Yes	0.345		Yes
pH, Field	pH units	CUSUM	6.08, 8.00	7.03	7.04, 7.04	Yes	7.11	7.04, 7.04	Yes
Sulfate ¹	mg/L	CUSUM	278	161	194	Yes	160	193	Yes
Total Dissolved Solids ¹	mg/L	CUSUM	1046	576	715	Yes	604	714	Yes

Table 3: Comparative Statistics - APMW-16A (Upgradient)

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

1. Seasonality was detected in the baseline period. Statistical limits may vary slightly between monitoring events due to

deseasonalization of the data or if seasonality is not identified in the full data set (i.e. the baseline period and any comparative points).

Table 4: Comparative Statistics - APMW-17 (Upgradient)

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	184	119	140	Yes	117	140	Yes
Chloride	mg/L	CUSUM	59.0	29.4	42.5	Yes	33.5	42.5	Yes
Fluoride	mg/L	NP-PL	1.070	< 1.00		Yes	0.22		Yes
pH, Field	pH units	CUSUM	5.99, 7.88	7.07	7.12, 7.31	Yes	7.14	7.12, 7.12	Yes
Sulfate	mg/L	CUSUM	225	132	142	Yes	131	142	Yes
Total Dissolved Solids	mg/L	CUSUM	927	494	589	Yes	514	589	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

Table 5: Comparative Statistics - APMW-4

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	***		
Calcium, Total	mg/L	CUSUM	64.3	51.5	55.1	Yes	***		
Chloride	mg/L	CUSUM	51.4	42.5	41.3	Yes	***		
Fluoride	mg/L	NP-PL	0.569	< 1.000		Yes **	***		
pH, Field	pH units	CUSUM	6.21, 9.02	7.68	7.60, 7.70	Yes	***		
Sulfate	mg/L	CUSUM	40.5	26.6	28.0	Yes	***		
Total Dissolved Solids	mg/L	CUSUM	428	246	306	Yes	***		

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

* Two sets of results were collected for fluoride for the CCR and

Nebraska-specific sampling programs. Statistical analysis has

** See text for discussion of non-detects greater than the statistical limit and changes to the reporting limit for Fluoride.

*** APMW-4 was dry during the Q4 2024 sampling event. See text for details.

Table 6: Comparative Statistics - APMW-6

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	65.7	54.8	52.428	Yes	50.8	52.4	Yes
Chloride	mg/L	CUSUM	20.4	30.3	81.7	No - Verified Exceedance	31.4	100.3	No - Verified Exceedance
Fluoride	mg/L	NP-PL	0.713	< 1.000		Yes *	0.317		Yes
pH, Field	pH units	CUSUM	6.24, 8.62	7.5	7.43, 7.43	Yes	7.54	7.43, 7.43	Yes
Sulfate	mg/L	CUSUM	38.4	25.9	28.1	Yes	27.0	28.1	Yes
Total Dissolved Solids	mg/L	CUSUM	414	258	291	Yes	318	291	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

* See text for discussion of non-detects greater than the statistical limit and changes to the reporting limit for Fluoride.

Table 7: Comparative Statistics - APMW-8A

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitorin g Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	175.6	121.0	105.7	Yes	77	105.7	Yes
Chloride	mg/L	CUSUM	104.9	73.6	81.7	Yes	84.6	81.7	Yes
Fluoride	mg/L	NP-PL	13.700	< 1.000		Yes	0.232		Yes
pH, Field	pH units	CUSUM	5.86, 8.61	7.17	7.23, 7.23	Yes	7.32	7.23, 7.23	Yes
Sulfate	mg/L	CUSUM	244.9	136.0	97.4	Yes	34.3	90.5	Yes
Total Dissolved Solids	mg/L	CUSUM	850	520	536	Yes	338	536	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

		Statistical Method	Statistical Limit	Detection Monitorin g Result	CUSUM Value	Within Limit?	Detection Monitorin g Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	78.3	57.4	62.5	Yes	50.5	62.5	Yes
Chloride	mg/L	CUSUM	63.8	22.5	38.1	Yes	23.6	38.1	Yes
Fluoride	mg/L	NP-PL	3.780	< 1.000		Yes	0.275		Yes
pH, Field	pH units	CUSUM	5.95, 8.89	7.46	7.42, 7.42	Yes	7.67	7.42, 7.42	Yes
Sulfate	mg/L	CUSUM	72.4	43.8	46.1	Yes	44.8	46.1	Yes
Total Dissolved Solids	mg/L	CUSUM	489	286	358	Yes	280	358	Yes

Table 8: Comparative Statistics - APMW-10

Notes:

NP-PL: Non-Parametric Prediction Limit

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	101.7	80.5	81.6	Yes	73.5	81.6	Yes
Chloride	mg/L	CUSUM	137.0	31.7	74.2	Yes	37.6	74.16	Yes
Fluoride	mg/L	NP-PL	6.96	< 1.000 *		Yes	0.283 *		Yes
pH, Field	pH units	CUSUM	6.89, 7.83	7.32	7.36, 7.36	Yes	7.42	7.36, 7.36	Yes
Sulfate	mg/L	CUSUM	75.0	58.4	71.1	Yes	56.0	82.7	No - Potential Exceedance
Total Dissolved Solids	mg/L	CUSUM	622	352	438	Yes	348	438	Yes

Table 9: Comparative Statistics - APMW-11

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

* Two sets of results were collected for fluoride for the CCR and Nebraska-specific sampling programs. Statistical analysis has been conducted on the average of both results, based on recommendations from the Unified Guidance (USEPA 2009).

Table 10: Comparative Statistics - APMW-12

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitorin g Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/7/2024			12/4/2024	
Boron, Total	mg/L	CUSUM	0.389	0.262	0.283	Yes	0.261	0.283	Yes
Calcium, Total	mg/L	CUSUM	203	165	166	Yes	152	166	Yes
Chloride	mg/L	CUSUM	272	159	163	Yes	149	163	Yes
Fluoride	mg/L	NP-PL	21.300	< 1.000		Yes	0.117		Yes
pH, Field	pH units	CUSUM	6.28, 7.66	6.88	6.97, 6.97	Yes	7.00	6.97, 6.97	Yes
Sulfate	mg/L	CUSUM	383	270	302	Yes	264	302	Yes
Total Dissolved Solids	mg/L	CUSUM	1602	992	1108	Yes	972	1108	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

Table 11: Comparative Statistics - APMW-13

		Statistical Method	Statistical Limit	Detection Monitorin g Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/7/2024			12/4/2024	
Boron, Total	mg/L	CUSUM	0.449	0.252	0.314	Yes	0.292	0.314	Yes
Calcium, Total	mg/L	CUSUM	196	160	148	Yes	139	148	Yes
Chloride	mg/L	CUSUM	190	141	141	Yes	117	141	Yes
Fluoride	mg/L	NP-PL	8.250	< 1.000		Yes	0.169		Yes
pH, Field	pH units	CUSUM	6.05, 8.11	6.9	7.08, 7.08	Yes	7.02	7.08, 7.08	Yes
Sulfate	mg/L	CUSUM	362	256	264	Yes	226	264	Yes
Total Dissolved Solids	mg/L	CUSUM	1215	962	1026	Yes	920	1026	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

Table 12: Comparative Statistics - APMW-14

		Statistical Method	Statistical Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units			5/7/2024			12/4/2024		
Boron, Total	mg/L	CUSUM	0.382	0.225	0.261	Yes	0.193	0.261	Yes
Calcium, Total	mg/L	CUSUM	195	164	158	Yes	147	158	Yes
Chloride	mg/L	CUSUM	207	133	135	Yes	115	135	Yes
Fluoride	mg/L	NP-PL	19.200	< 1.000		Yes	0.166		Yes
pH, Field	pH units	CUSUM	6.03, 8.44	6.91	7.17, 7.17	Yes	7.04	7.17, 7.17	Yes
Sulfate	mg/L	CUSUM	272	193	217	Yes	169	217	Yes
Total Dissolved Solids	mg/L	CUSUM	1240	878	949	Yes	794	949	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

Table 13: Comparative Statistics - APMW-18

		Statistica I Method	Statistica I Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	103.7	82.8	94.1	Yes	89.7	97.3	Yes
Chloride	mg/L	CUSUM	160.4	66.5	126.1	Yes	116.0	160.1	Yes
Fluoride	mg/L	NP-PL	1.740	< 1.000		Yes	0.214		Yes
pH, Field	pH units	CUSUM	5.99, 8.01	7.29	7.33, 7.33	Yes	7.36	7.33, 7.33	Yes
Sulfate	mg/L	CUSUM	147.7	44.5	38.3	Yes	23.6	38.3	Yes
Total Dissolved Solids	mg/L	CUSUM	638	382	401	Yes	404	401	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

Table 14: Comparative Statistics - APMW-19

		Statistica I Method	Statistica I Limit	Detection Monitoring Result	CUSUM Value	Within Limit?	Detection Monitoring Result	CUSUM Value	Within Limit?
Detection Monitoring Analytes	Units				5/6/2024			12/3/2024	
Boron, Total	mg/L	NP-PL	0.200	< 0.100		Yes	< 0.100		Yes
Calcium, Total	mg/L	CUSUM	142.9	84.0	85.3	Yes	68.4	85.3	Yes
Chloride	mg/L	CUSUM	71.7	35.7	40.0	Yes	31.8	40.0	Yes
Fluoride	mg/L	NP-PL	0.665	< 1.000		Yes *	0.266		Yes
pH, Field	pH units	CUSUM	6.25, 8.29	7.27	7.27, 7.27	Yes	7.35	7.27, 7.27	Yes
Sulfate	mg/L	CUSUM	191.2	86.1	84.3	Yes	63.7	84.3	Yes
Total Dissolved Solids	mg/L	CUSUM	645	416	468	Yes	374	468	Yes

Notes:

NP-PL: Non-Parametric Prediction Limit

CUSUM: Parametric Shewhart-CUSUM Control Chart

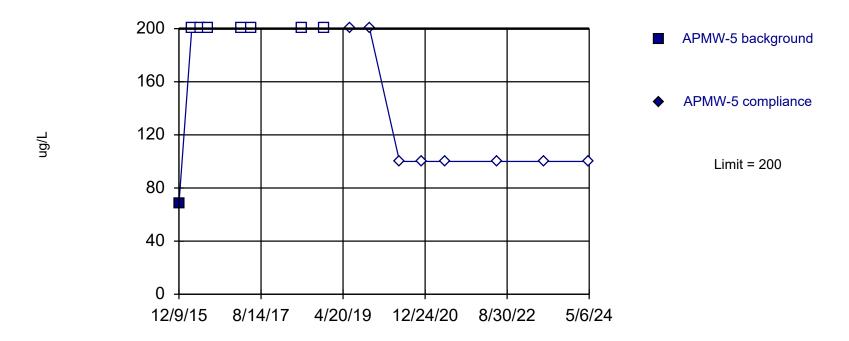
* See text for discussion of non-detects greater than the statistical limit and changes to the reporting limit for Fluoride.

Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

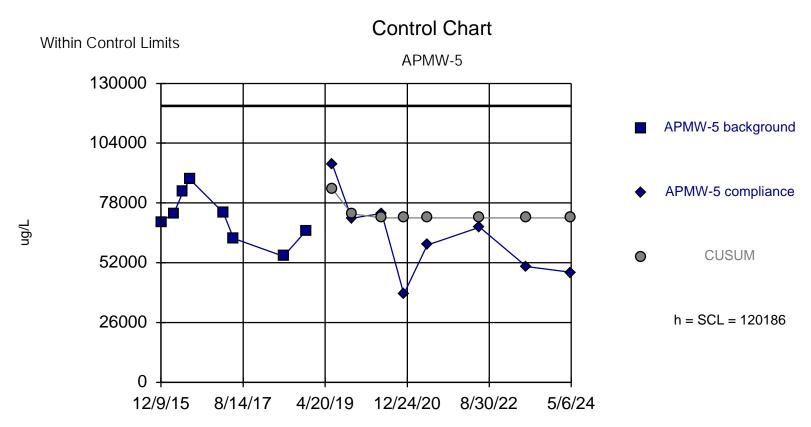
Prediction Limit

Intrawell Non-parametric



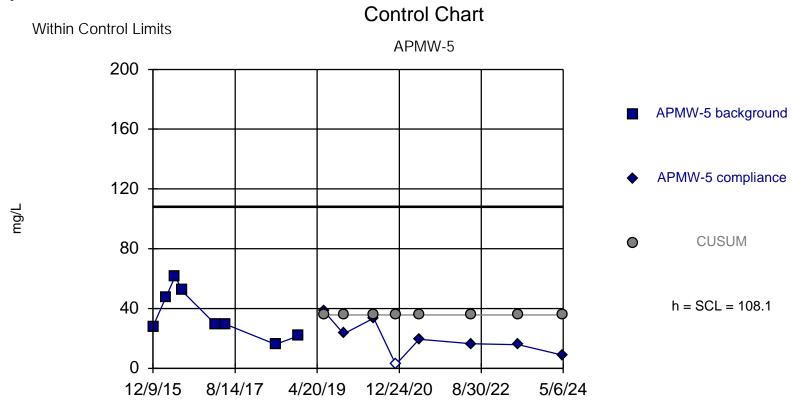
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:04 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



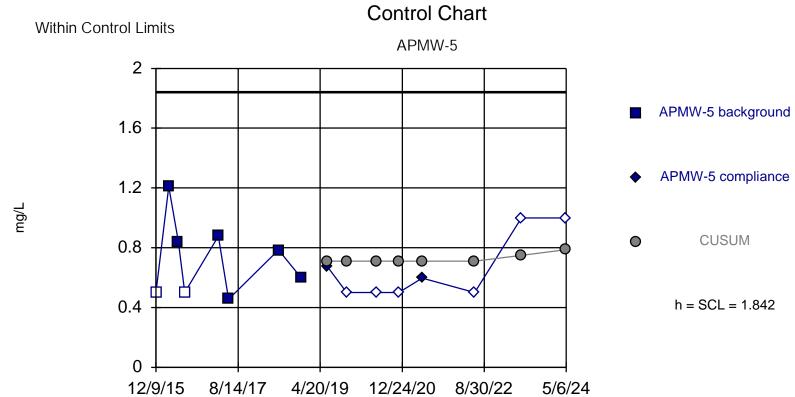
Background Data Summary: Mean=71450, Std. Dev.=10830, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9804, critical = 0.818. Report alpha = 0.00978. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 7/1/2024 10:41 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.



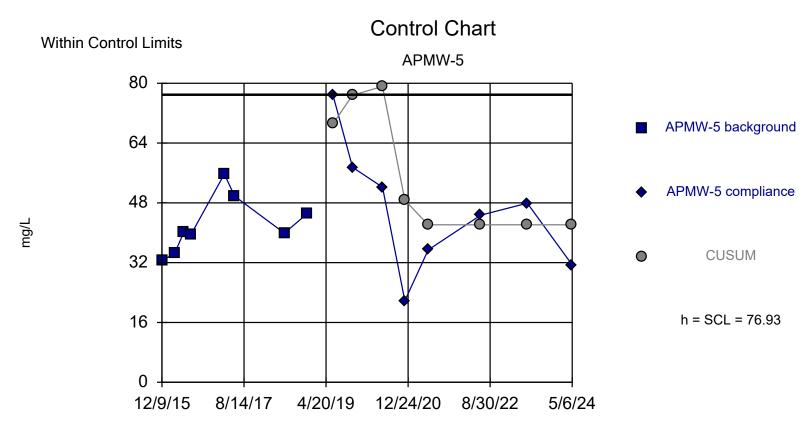
Background Data Summary: Mean=35.74, Std. Dev.=16.08, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9191, critical = 0.818. Report alpha = 0.00978. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Chloride Analysis Run 7/1/2024 10:41 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.



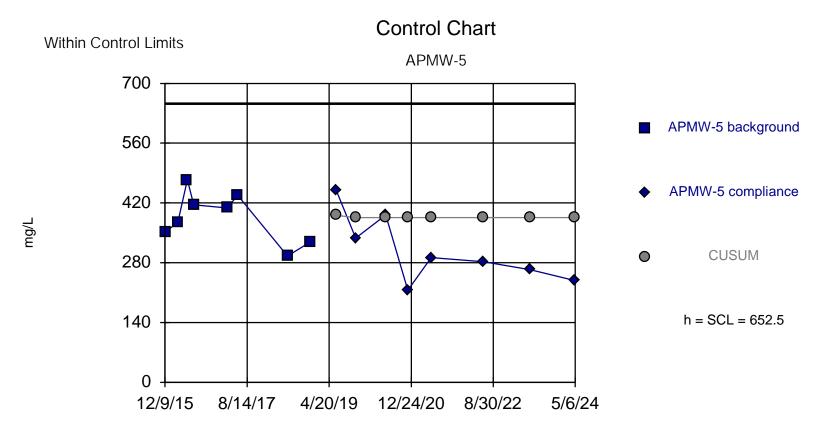
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.7101, Std. Dev.=0.2515, n=8, 25% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8971, critical = 0.818. Report alpha = 0.00978. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Fluoride Analysis Run 7/1/2024 10:41 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=42.14, Std. Dev.=7.731, n=8. Exceedance nullified by following point per option settings. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9474, critical = 0.818. Report alpha = 0.009486. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Sulfate Analysis Run 1/27/2025 10:36 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



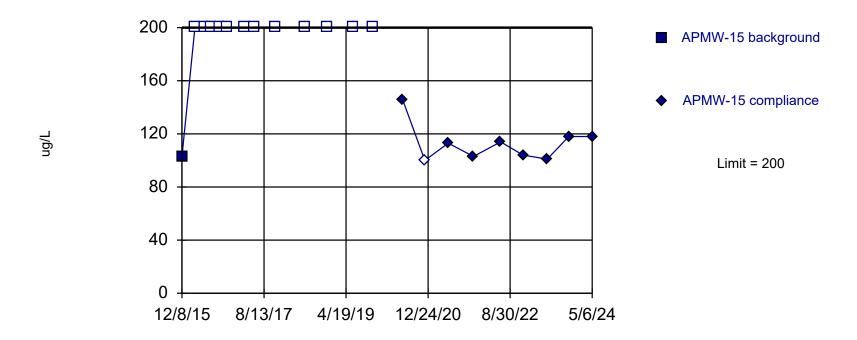
Background Data Summary: Mean=385.8, Std. Dev.=59.28, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9843, critical = 0.818. Report alpha = 0.00978. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 10:41 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

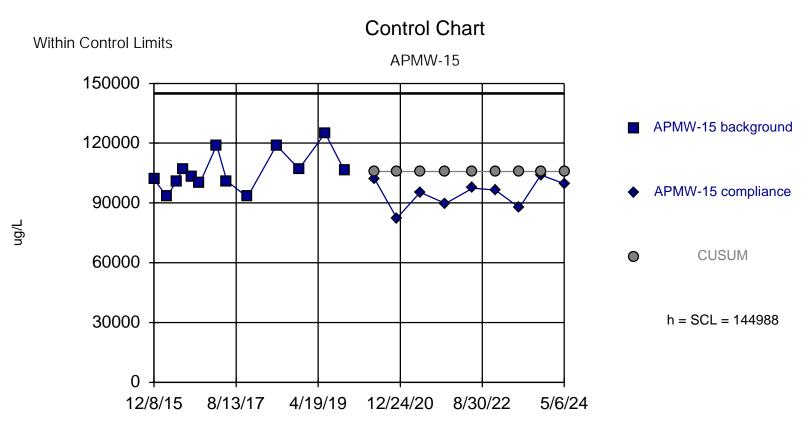
Prediction Limit

Intrawell Non-parametric



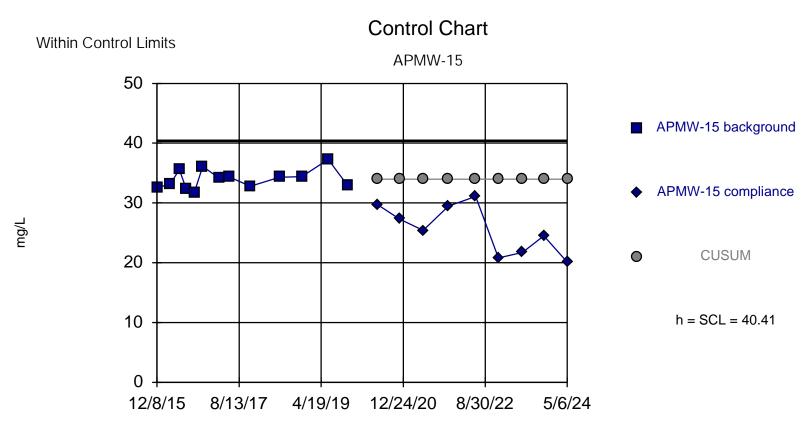
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:11 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=105838, Std. Dev.=9787, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9071, critical = 0.866. Report alpha = 0.005166. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 6/27/2024 1:23 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



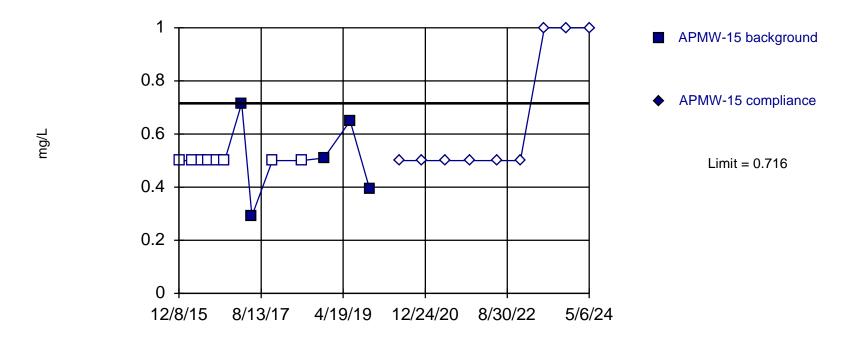
Background Data Summary: Mean=33.98, Std. Dev.=1.608, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9375, critical = 0.866. Report alpha = 0.005166. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 6/27/2024 1:23 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

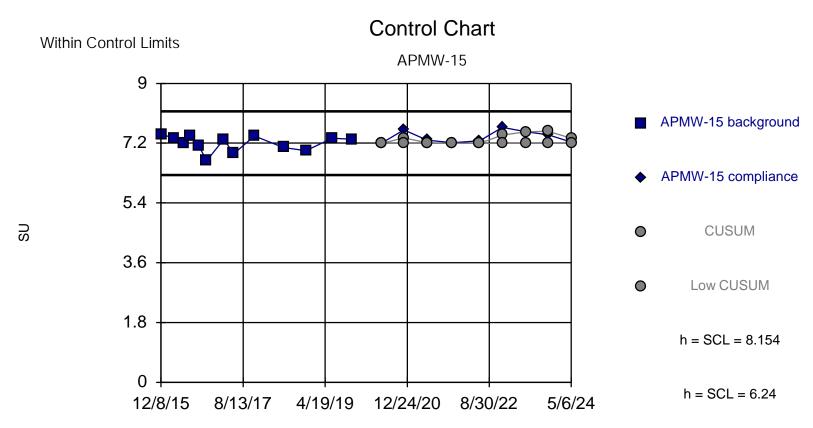
Prediction Limit

Intrawell Non-parametric



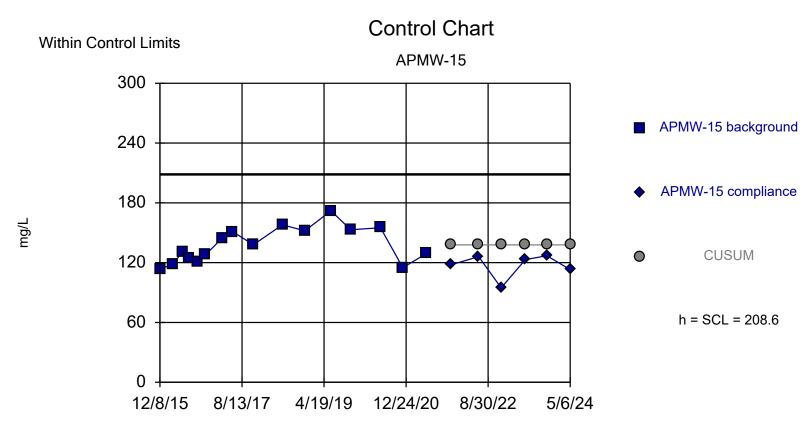
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 6/27/2024 1:34 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



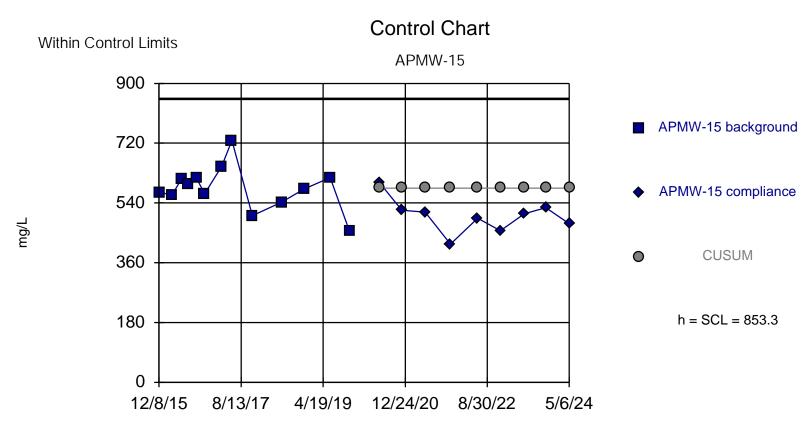
Background Data Summary: Mean=7.197, Std. Dev.=0.2393, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9057, critical = 0.866. Report alpha = 0.00522. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:19 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=137.8, Std. Dev.=17.71, n=16. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.939, critical = 0.887. Report alpha = 0.008456. Dates ending 5/24/2021 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:10 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



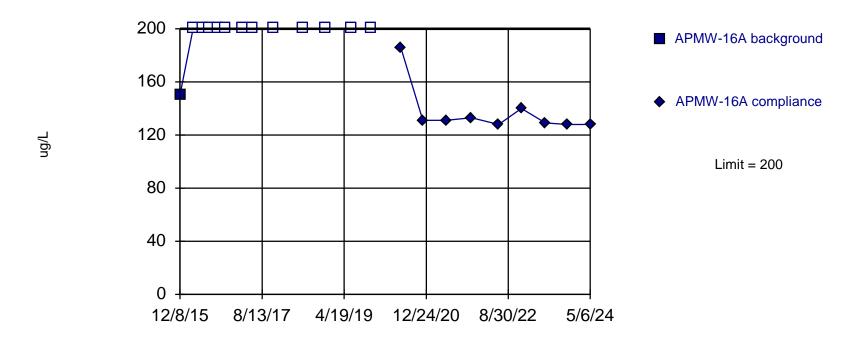
Background Data Summary: Mean=584.6, Std. Dev.=67.16, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9651, critical = 0.866. Report alpha = 0.005244. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 6/27/2024 1:23 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

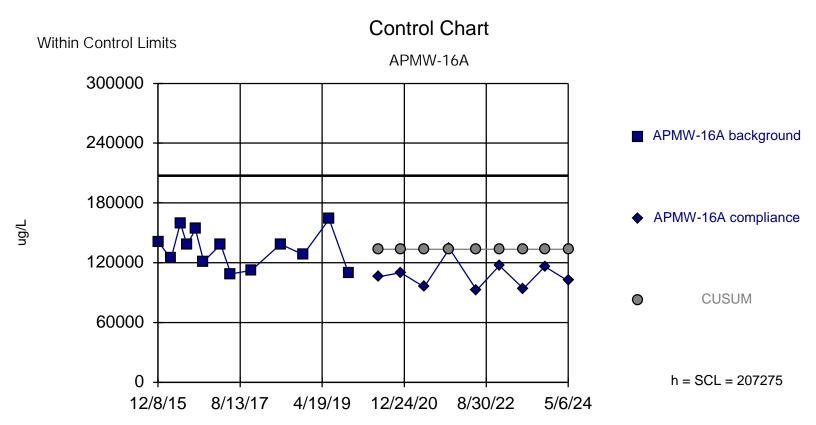
Prediction Limit

Intrawell Non-parametric



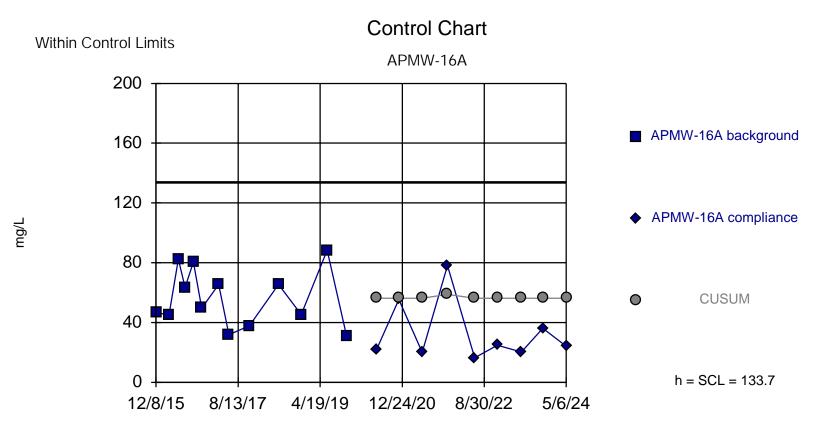
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 6/27/2024 2:02 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=133631, Std. Dev.=18411, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9413, critical = 0.866. Report alpha = 0.00516. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 6/27/2024 3:47 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



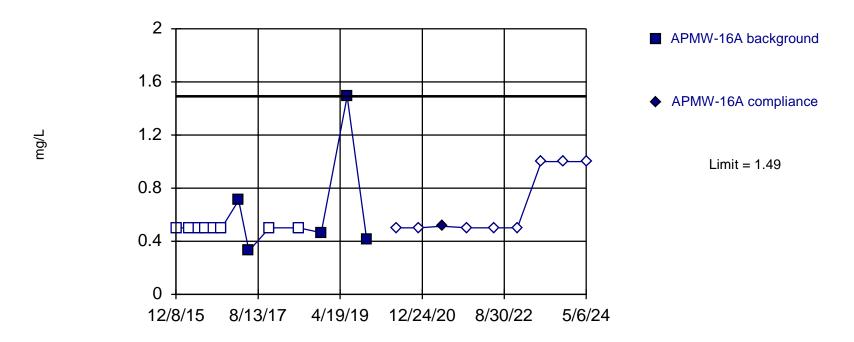
Background Data Summary: Mean=56.37, Std. Dev.=19.34, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9288, critical = 0.866. Report alpha = 0.00516. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 6/27/2024 3:47 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

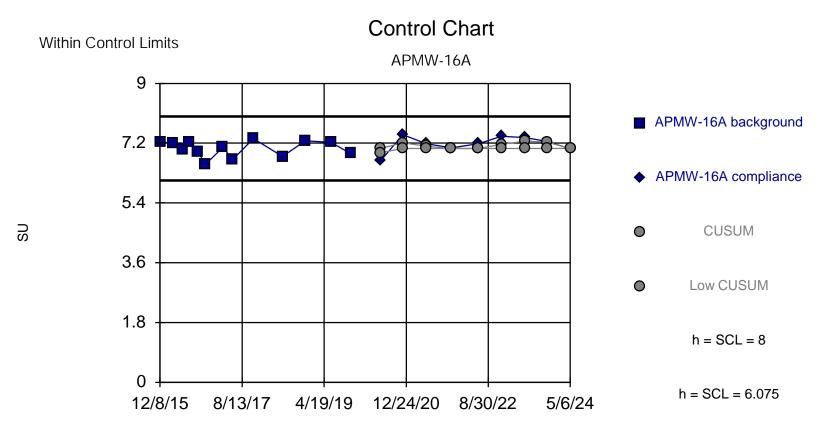
Prediction Limit

Intrawell Non-parametric



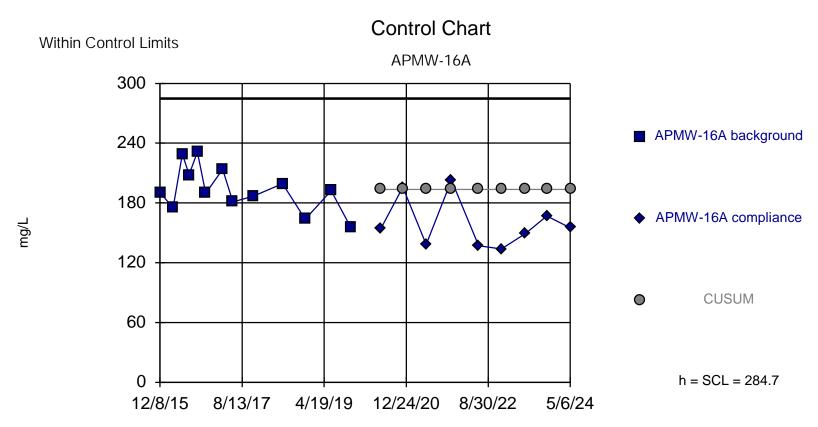
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 6/27/2024 2:02 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



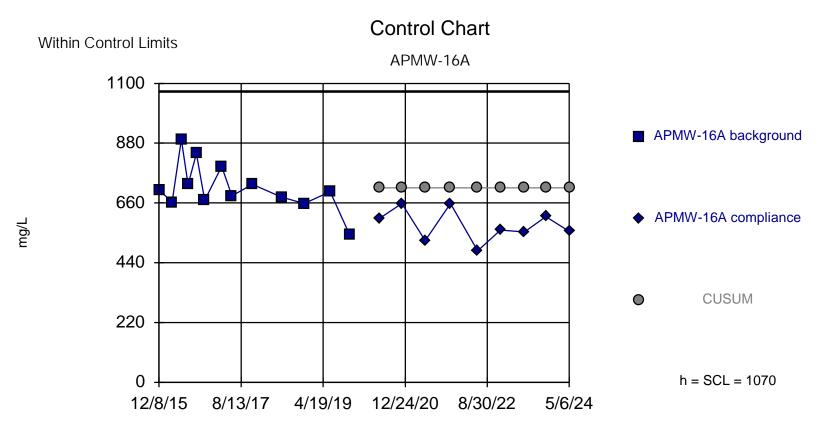
Background Data Summary: Mean=7.038, Std. Dev.=0.2406, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9309, critical = 0.866. Report alpha = 0.00522. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:22 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=193.6, Std. Dev.=22.77, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9683, critical = 0.866. Report alpha = 0.00516. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 6/27/2024 3:47 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



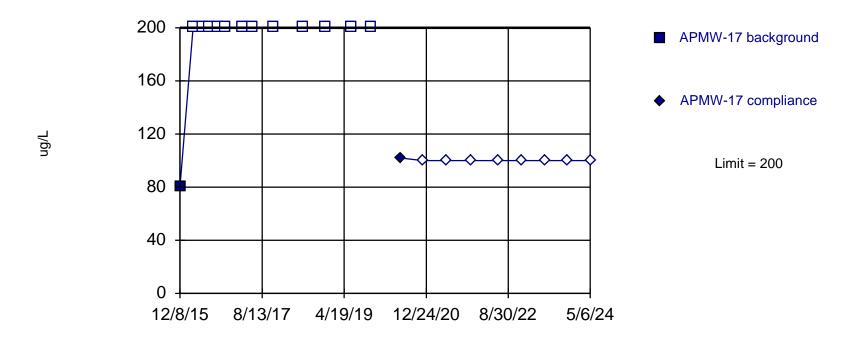
Background Data Summary: Mean=715.1, Std. Dev.=88.81, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9342, critical = 0.866. Report alpha = 0.00516. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 6/27/2024 3:47 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

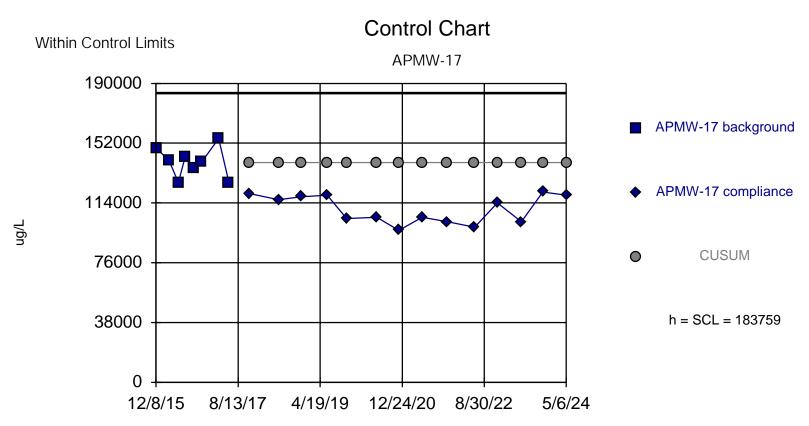
Prediction Limit

Intrawell Non-parametric



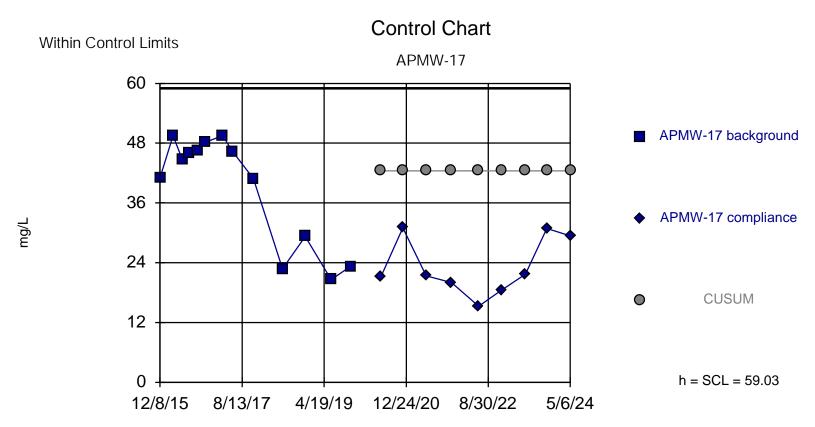
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 7/1/2024 10:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=139750, Std. Dev.=9780, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9472, critical = 0.818. Report alpha = 0.01473. Dates ending 6/5/2017 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 7/1/2024 10:51 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

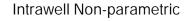


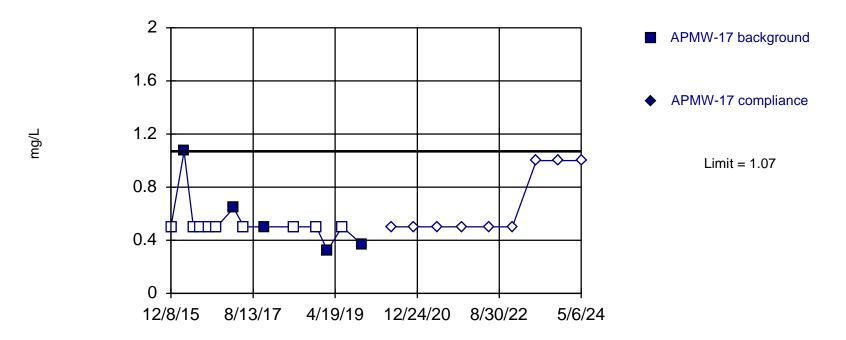
Background Data Summary (based on x⁴ transformation): Mean=3247075, Std. Dev.=2223138, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8771, critical = 0.866. Report alpha = 0.00548. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 10:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

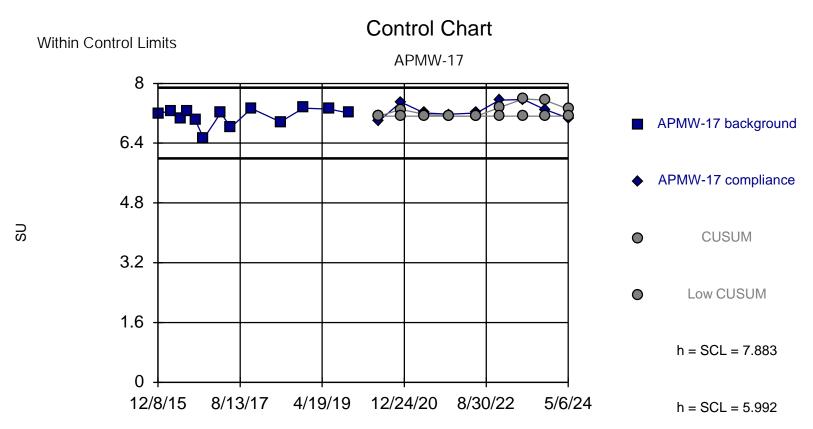
Prediction Limit





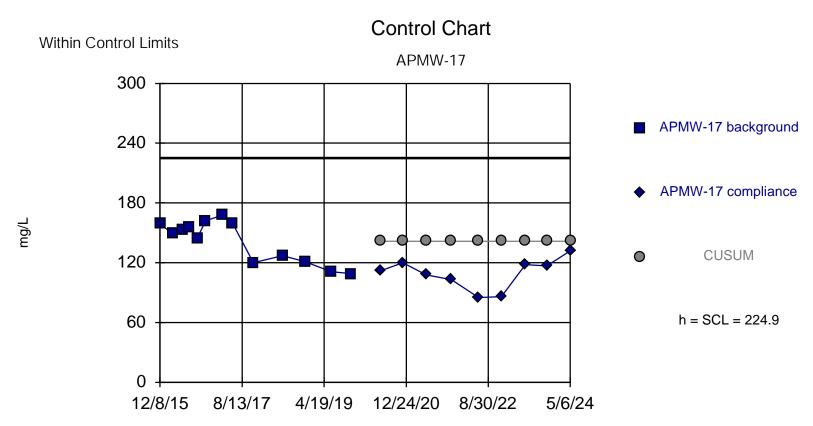
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 10:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



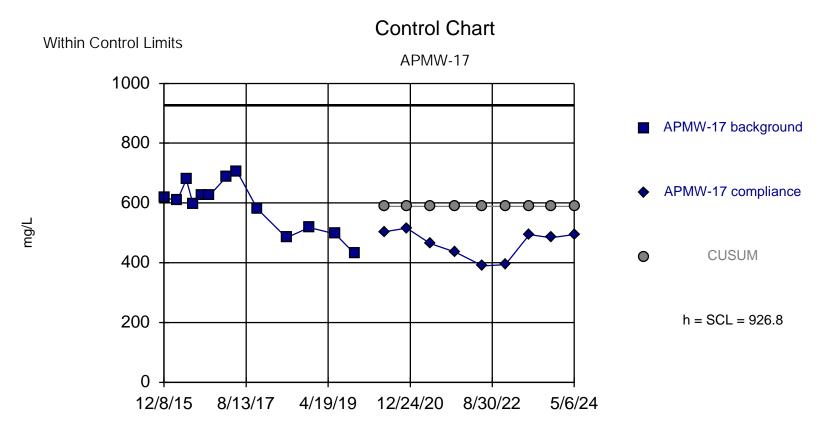
Background Data Summary (based on x⁴ transformation): Mean=2575, Std. Dev.=321.6, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8721, critical = 0.866. Report alpha = 0.00522. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:26 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=141.5, Std. Dev.=20.87, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8872, critical = 0.866. Report alpha = 0.00548. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 7/1/2024 10:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



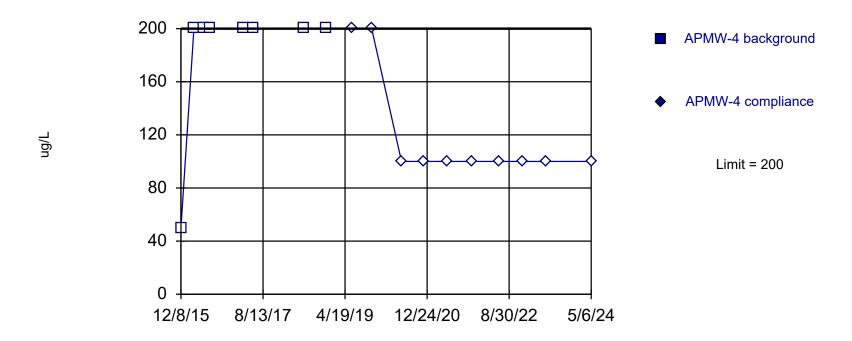
Background Data Summary: Mean=588.9, Std. Dev.=84.47, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9463, critical = 0.866. Report alpha = 0.00548. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 10:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

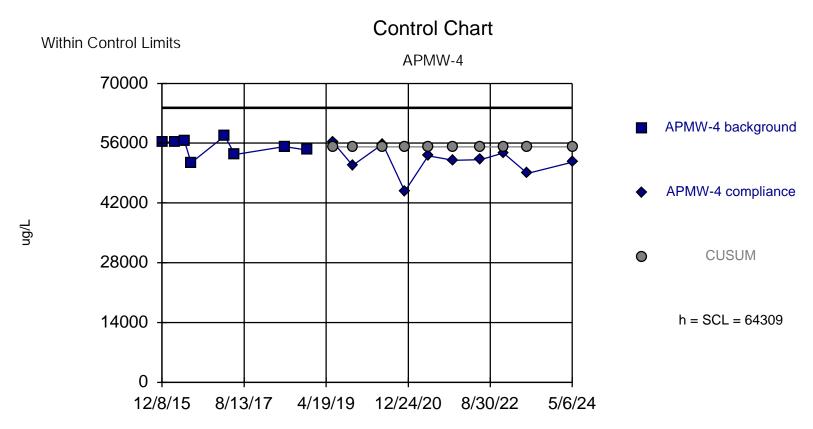
Prediction Limit

Intrawell Non-parametric



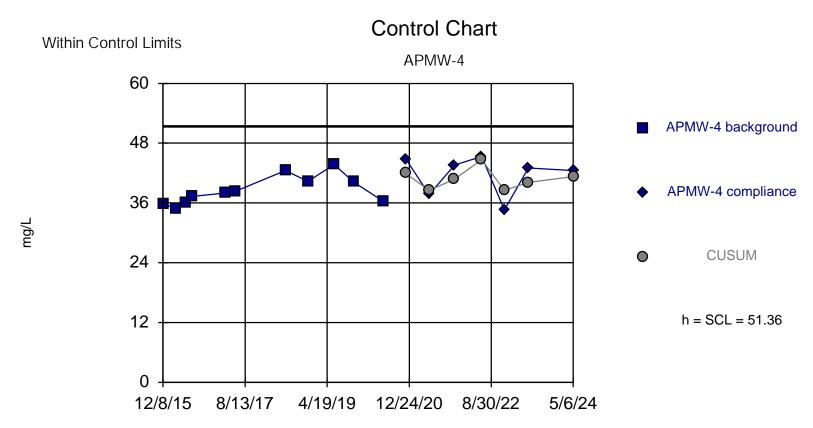
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:16 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=55138, Std. Dev.=2038, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9457, critical = 0.818. Report alpha = 0.01144. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 7/1/2024 11:27 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



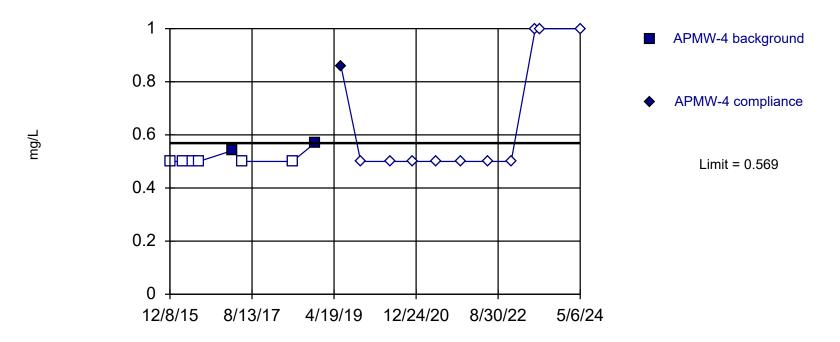
Background Data Summary: Mean=38.5, Std. Dev.=2.859, n=11. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9332, critical = 0.85. Report alpha = 0.004268. Dates ending 6/16/2020 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Chloride Analysis Run 7/1/2024 11:22 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

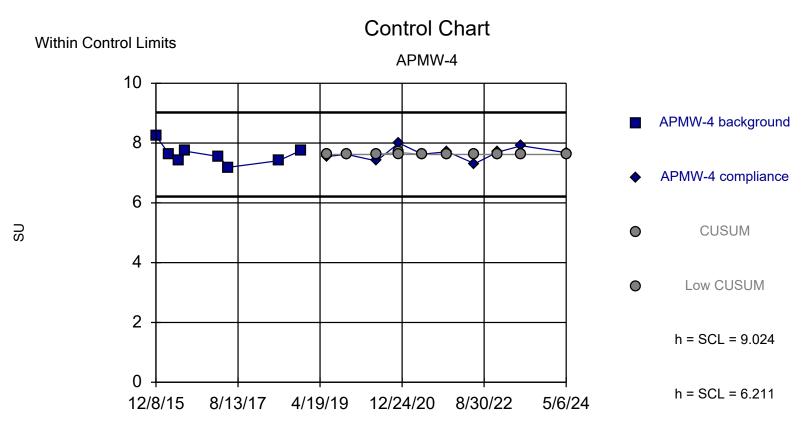
Prediction Limit

Intrawell Non-parametric



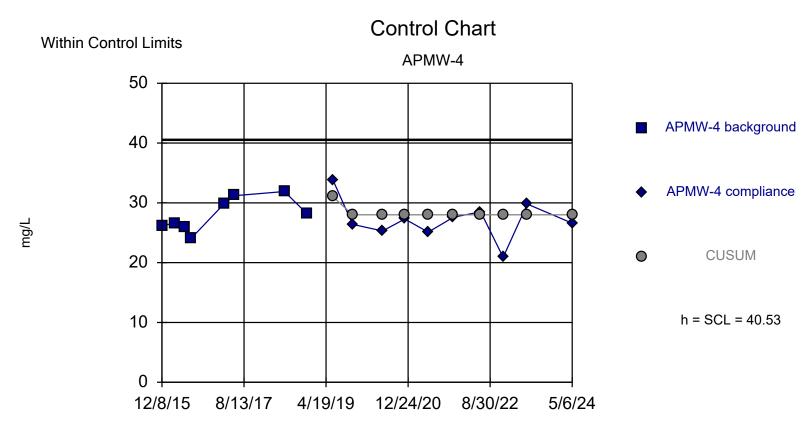
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/2/2024 5:46 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



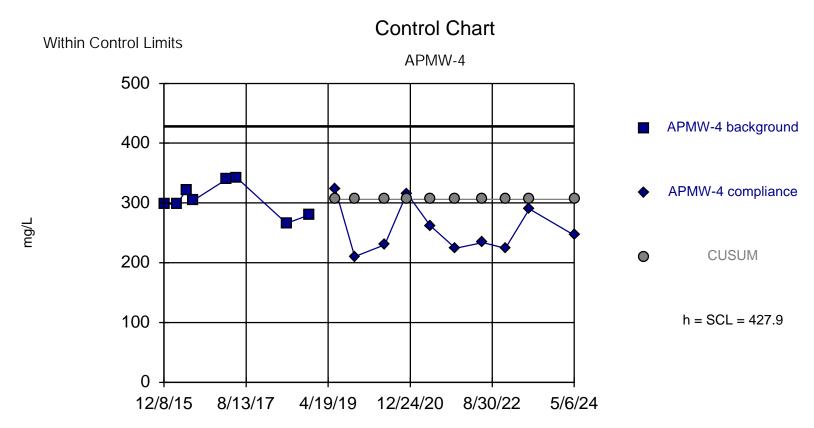
Background Data Summary: Mean=7.618, Std. Dev.=0.3125, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9369, critical = 0.818. Report alpha = 0.01131. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 5:38 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



Background Data Summary: Mean=28, Std. Dev.=2.785, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9444, critical = 0.818. Report alpha = 0.03603. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Sulfate Analysis Run 1/25/2025 11:17 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



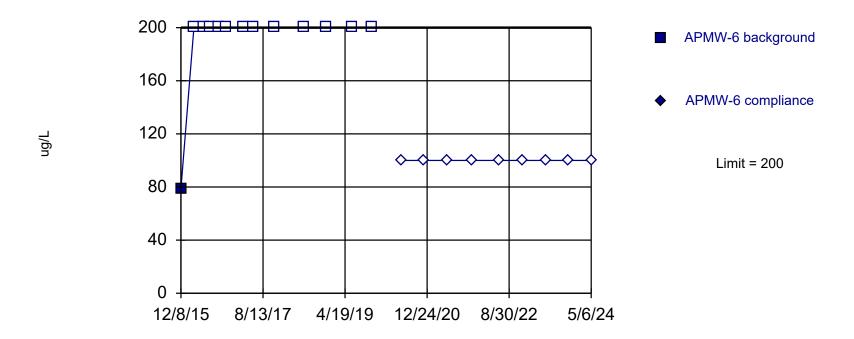
Background Data Summary: Mean=306.3, Std. Dev.=27.03, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9442, critical = 0.818. Report alpha = 0.01144. Dates ending 11/27/2018 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 11:27 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

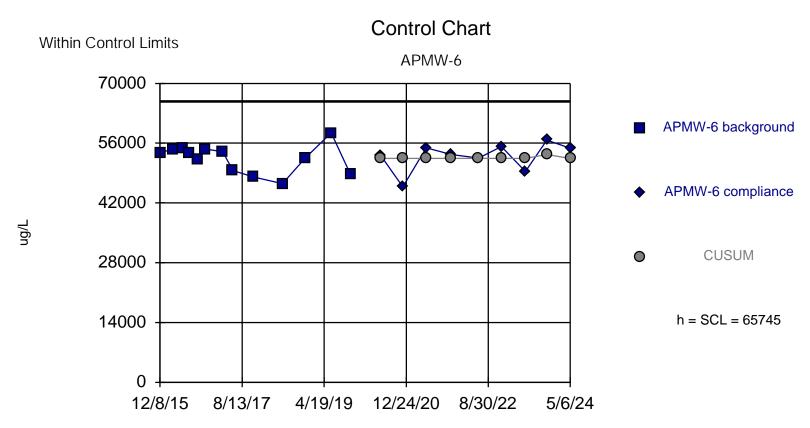
Prediction Limit

Intrawell Non-parametric



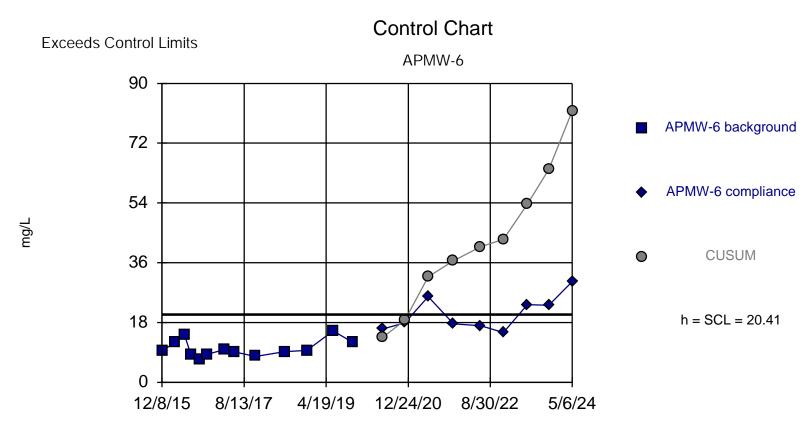
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:20 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=52400, Std. Dev.=3336, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9431, critical = 0.866. Report alpha = 0.005464. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/1/2024 11:43 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



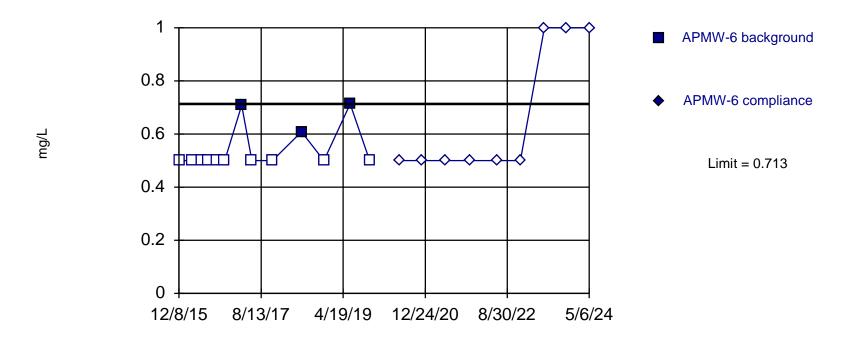
Background Data Summary: Mean=10.21, Std. Dev.=2.551, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8941, critical = 0.866. Report alpha = 0.005464. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 11:43 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

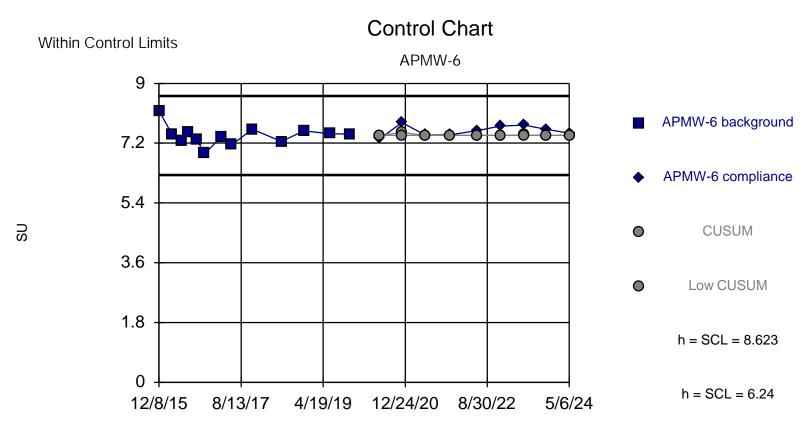
Prediction Limit

Intrawell Non-parametric



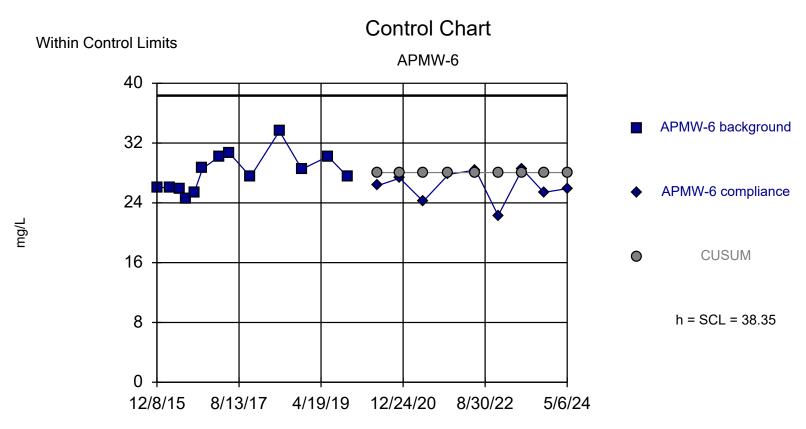
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 11:43 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



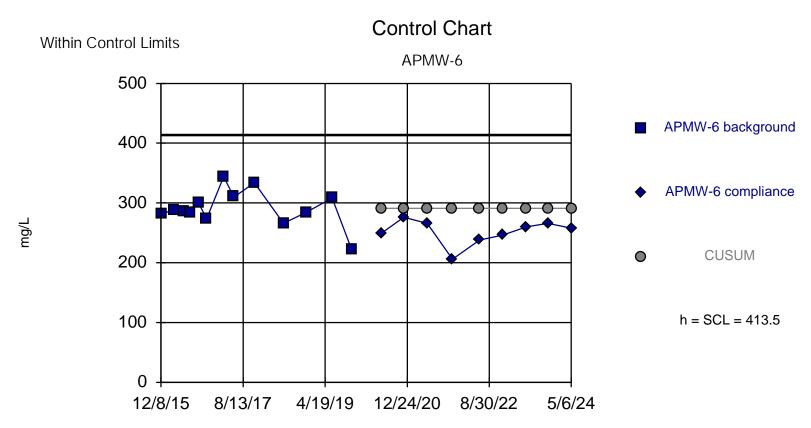
Background Data Summary: Mean=7.432, Std. Dev.=0.298, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9114, critical = 0.866. Report alpha = 0.005146. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:34 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=28.05, Std. Dev.=2.576, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9413, critical = 0.866. Report alpha = 0.01989. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:19 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



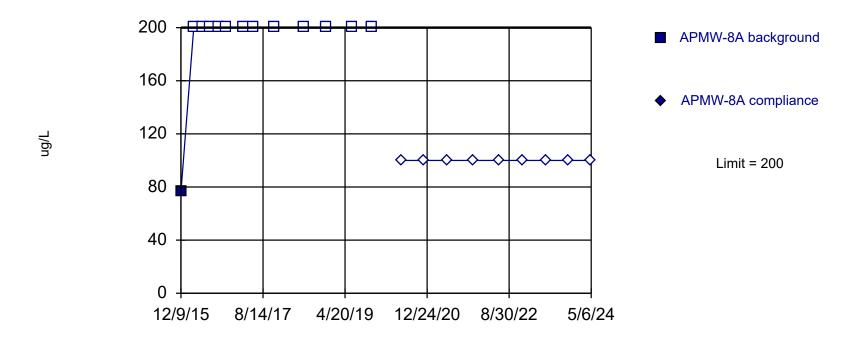
Background Data Summary: Mean=290.9, Std. Dev.=30.66, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9423, critical = 0.866. Report alpha = 0.005464. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 11:43 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

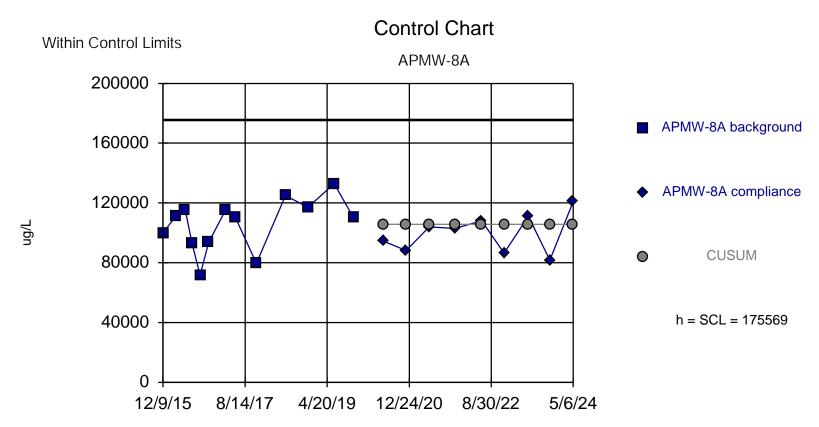
Prediction Limit

Intrawell Non-parametric



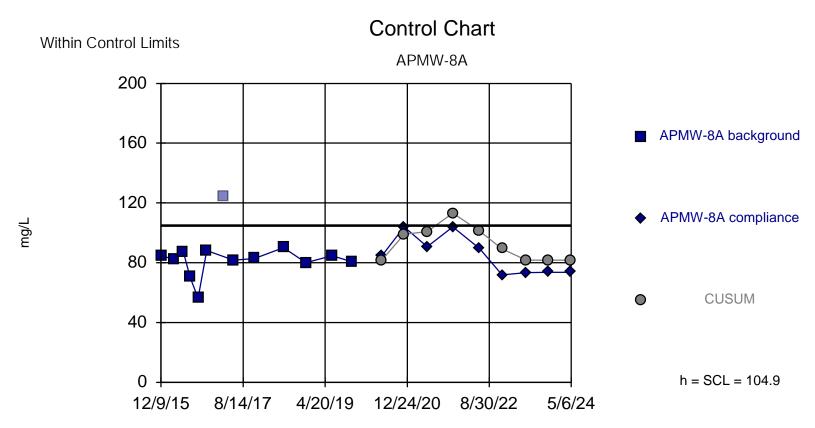
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:24 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=105685, Std. Dev.=17471, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9544, critical = 0.866. Report alpha = 0.005184. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/1/2024 11:58 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



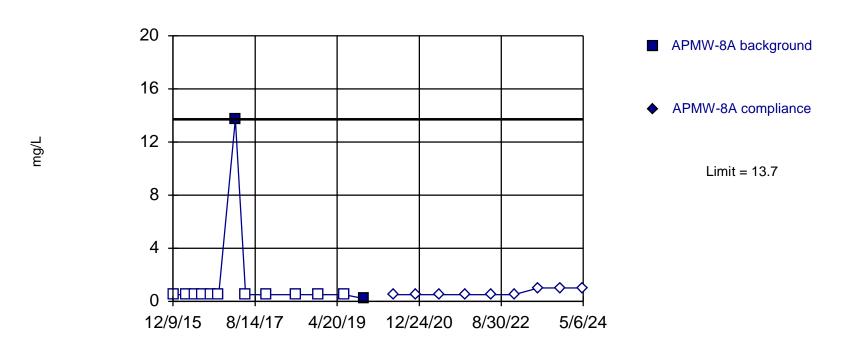
Background Data Summary (based on cube transformation): Mean=545530, Std. Dev.=151922, n=12. Exceedance nullified by following point per option settings. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8793, critical = 0.859. Report alpha = 0.006026. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 3:10 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

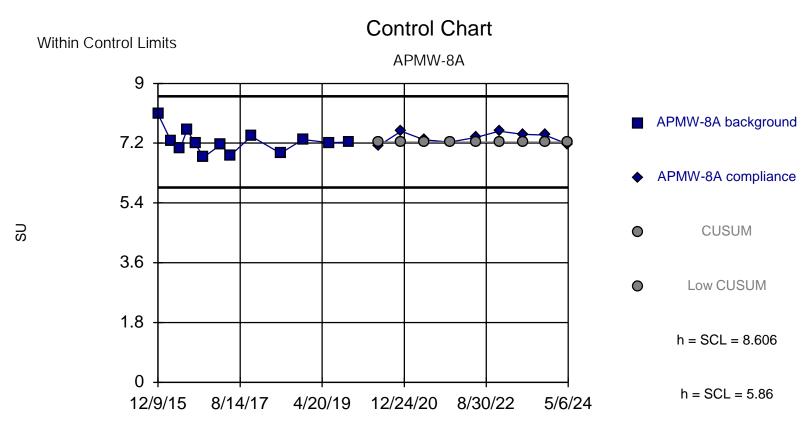
Prediction Limit

Intrawell Non-parametric



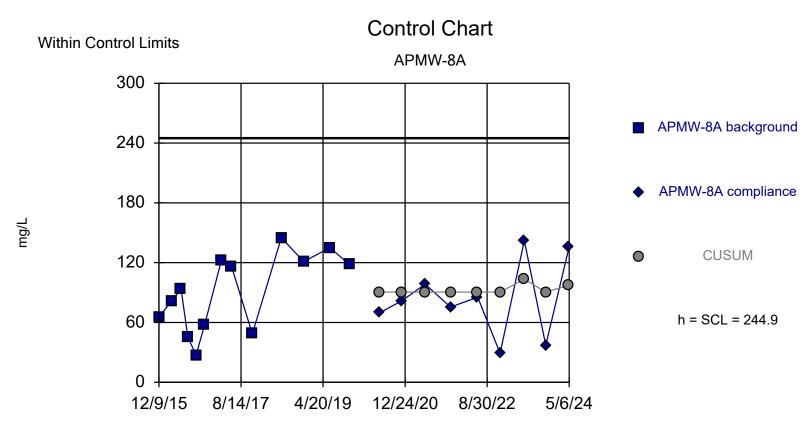
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 11:58 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



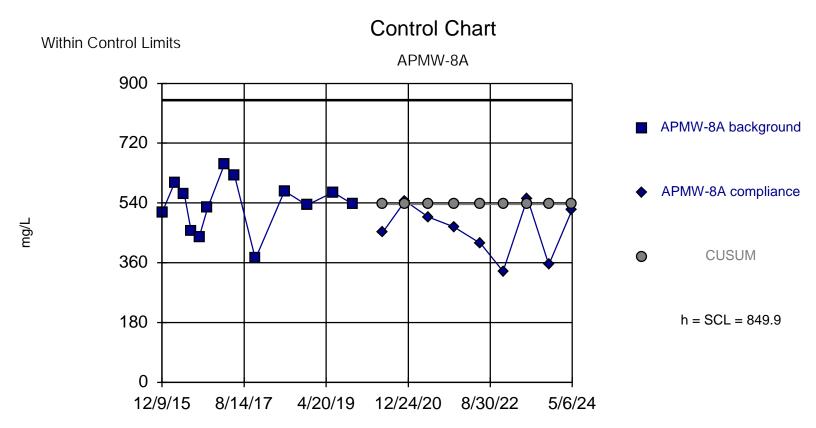
Background Data Summary: Mean=7.233, Std. Dev.=0.3432, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9148, critical = 0.866. Report alpha = 0.005146. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=90.45, Std. Dev.=38.62, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9319, critical = 0.866. Report alpha = 0.01989. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:24 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



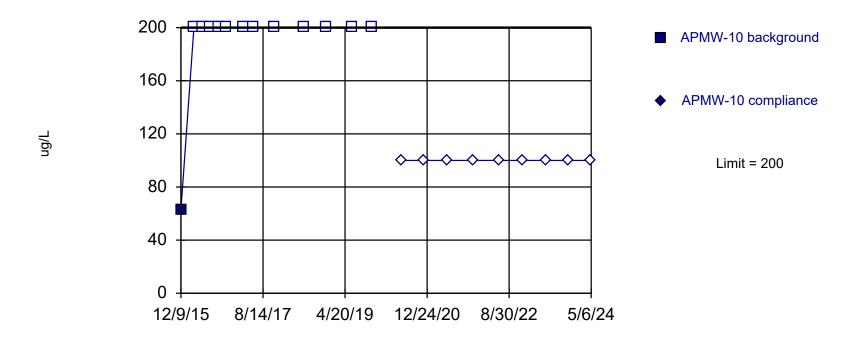
Background Data Summary: Mean=535.7, Std. Dev.=78.54, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9652, critical = 0.866. Report alpha = 0.00515. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 3:12 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

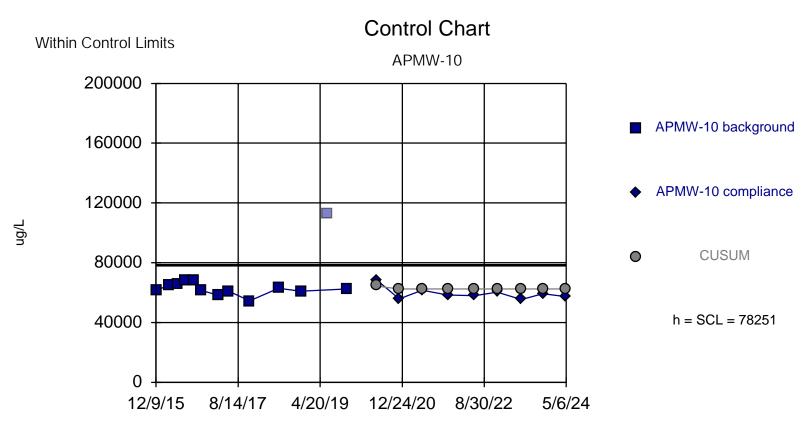
Prediction Limit

Intrawell Non-parametric



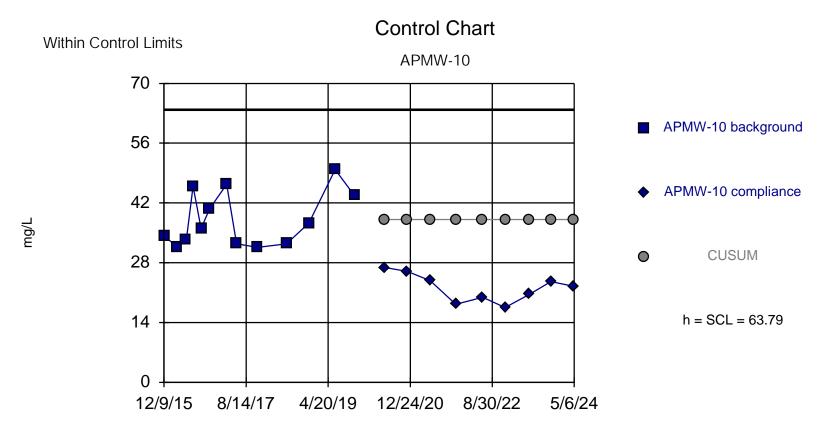
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:28 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=62525, Std. Dev.=3931, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.956, critical = 0.859. Report alpha = 0.00624. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/1/2024 3:18 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



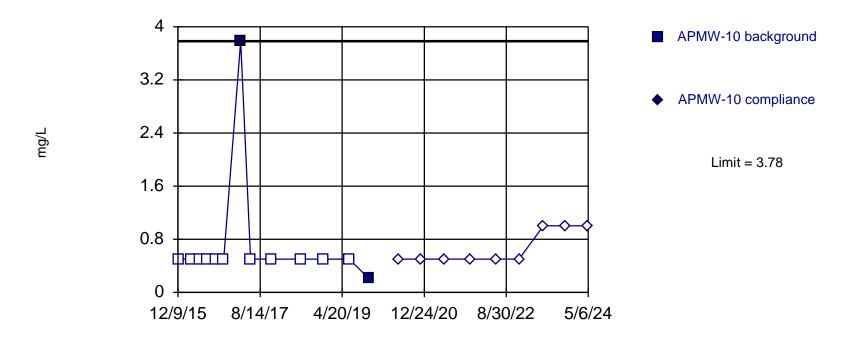
Background Data Summary: Mean=38.12, Std. Dev.=6.416, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8726, critical = 0.866. Report alpha = 0.005204. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 3:20 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

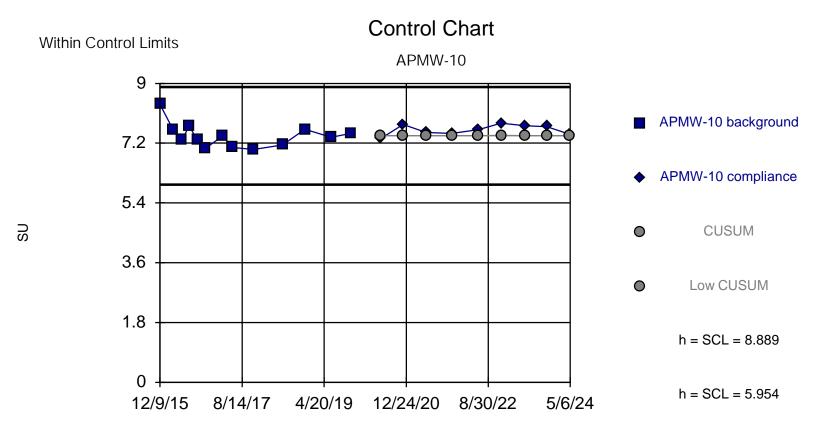
Prediction Limit

Intrawell Non-parametric



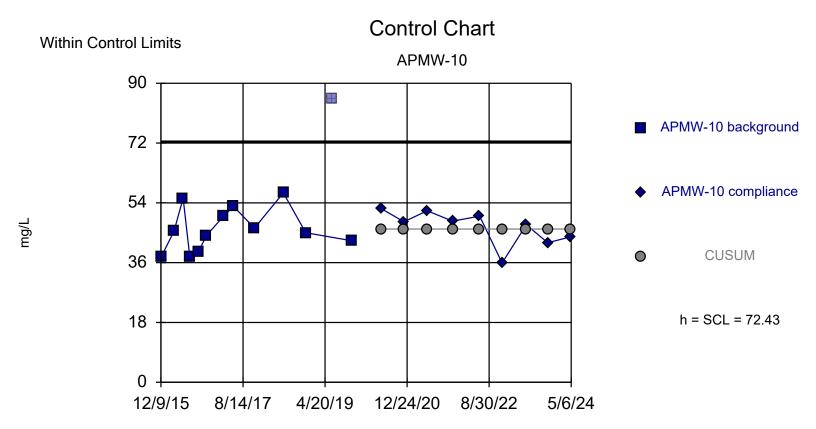
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 3:20 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



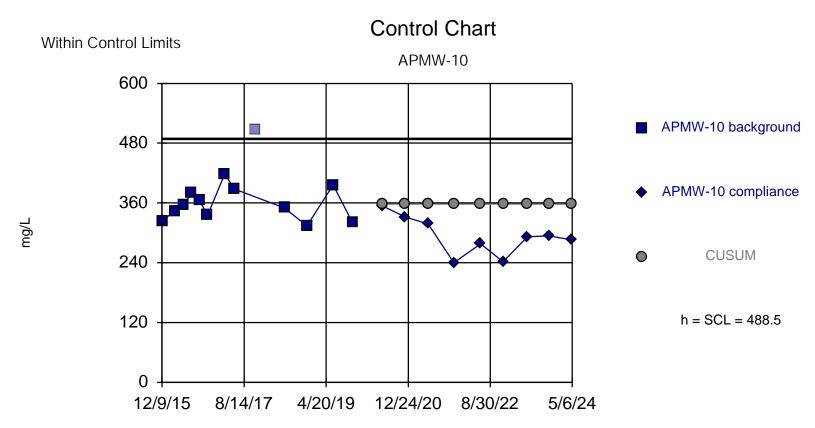
Background Data Summary: Mean=7.422, Std. Dev.=0.3669, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8842, critical = 0.866. Report alpha = 0.005146. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:39 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=46.11, Std. Dev.=6.58, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9379, critical = 0.859. Report alpha = 0.02258. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:27 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



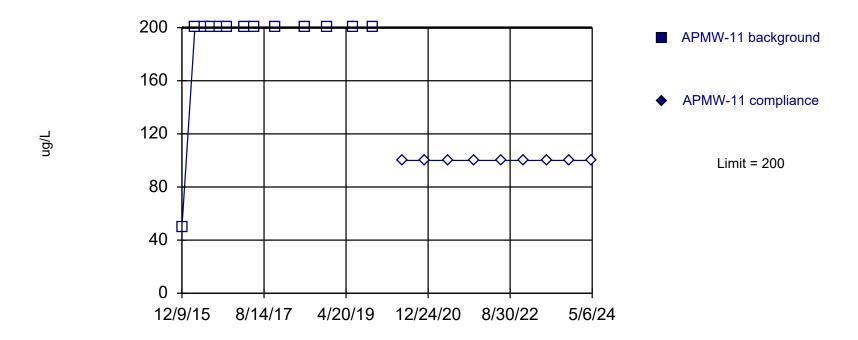
Background Data Summary: Mean=357.7, Std. Dev.=32.72, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9618, critical = 0.859. Report alpha = 0.006188. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 3:26 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

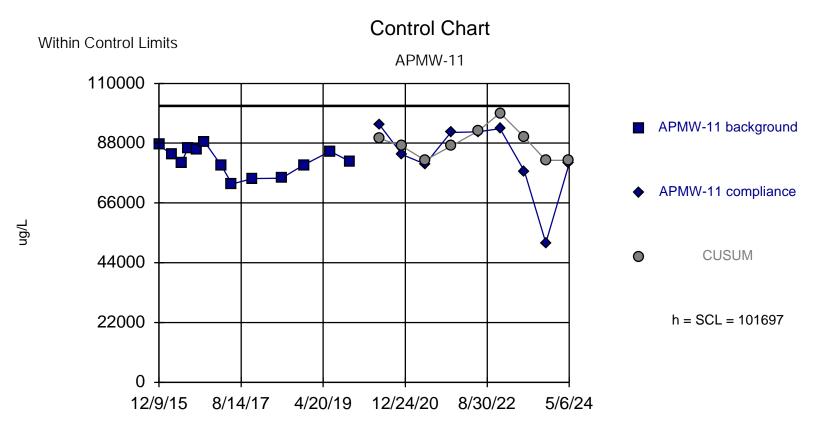
Prediction Limit

Intrawell Non-parametric



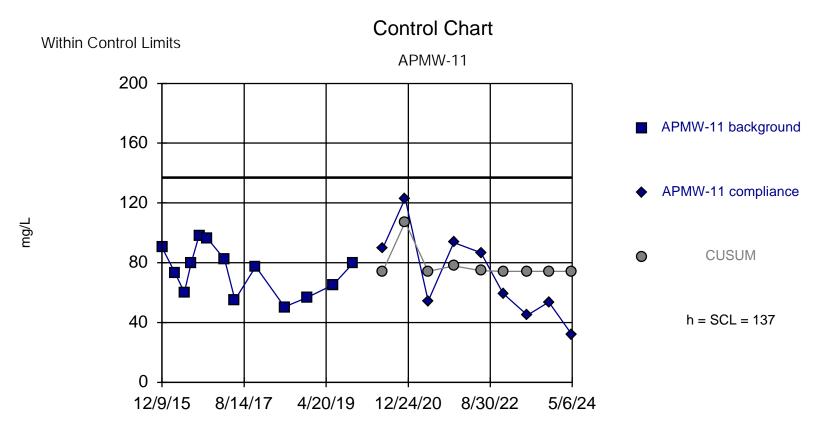
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values (n = 13) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:30 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=81646, Std. Dev.=5013, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9374, critical = 0.866. Report alpha = 0.005388. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/1/2024 3:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

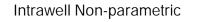


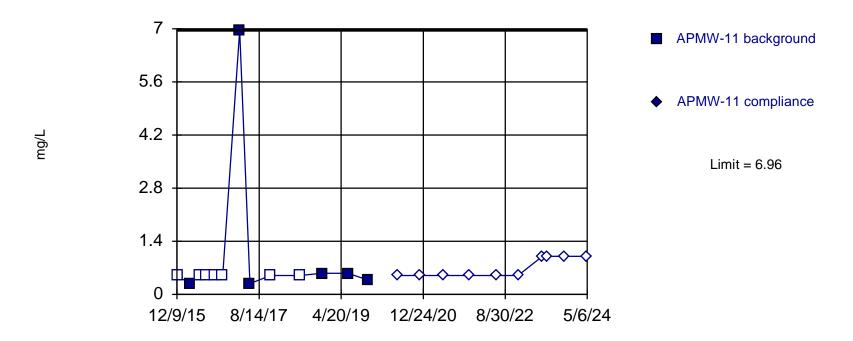
Background Data Summary: Mean=74.16, Std. Dev.=15.7, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9499, critical = 0.866. Report alpha = 0.005388. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 3:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

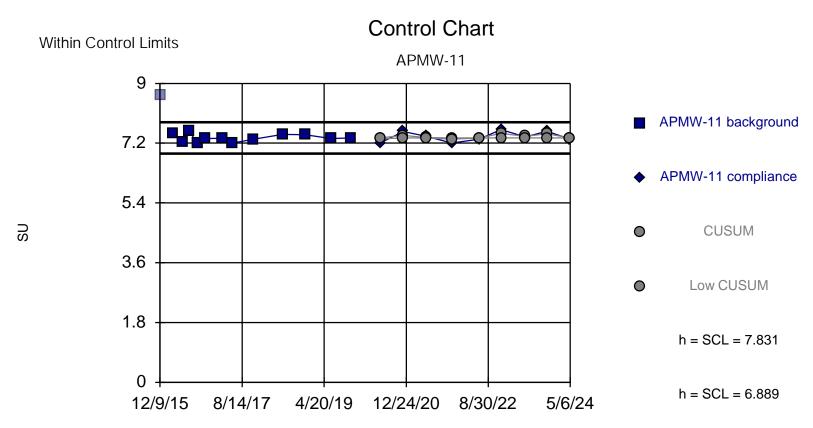
Prediction Limit





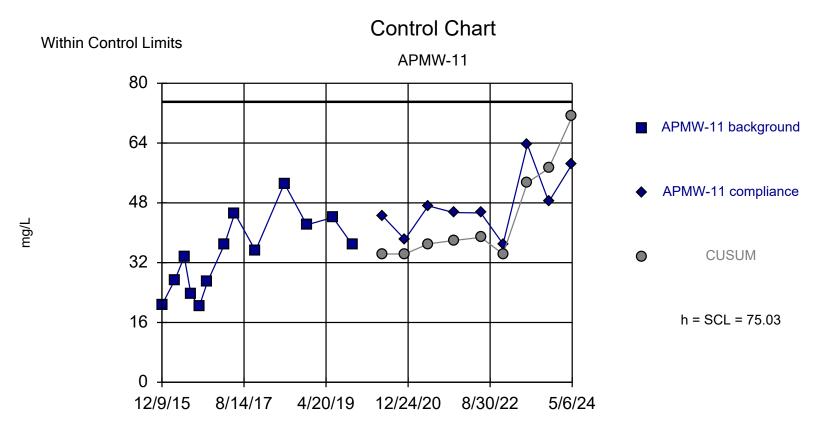
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 3:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



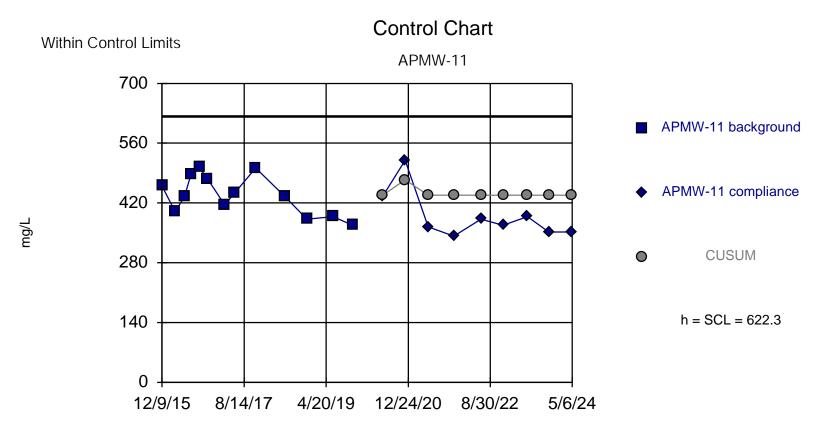
Background Data Summary: Mean=7.36, Std. Dev.=0.1177, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9429, critical = 0.859. Report alpha = 0.005986. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:41 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



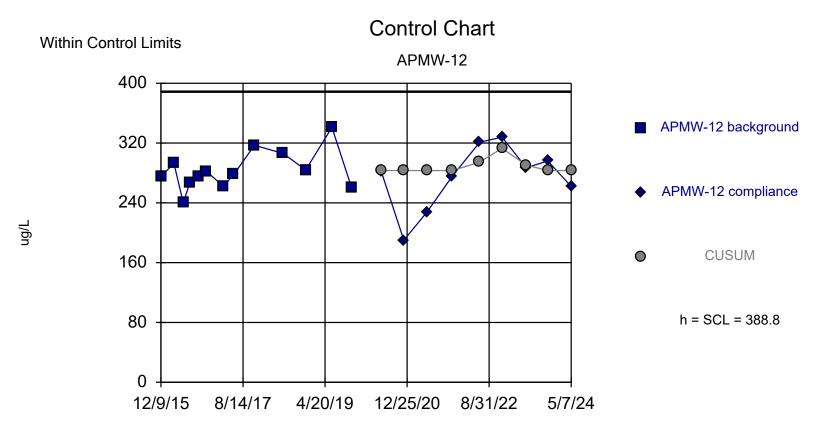
Background Data Summary: Mean=34.31, Std. Dev.=10.18, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9592, critical = 0.866. Report alpha = 0.02015. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:31 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



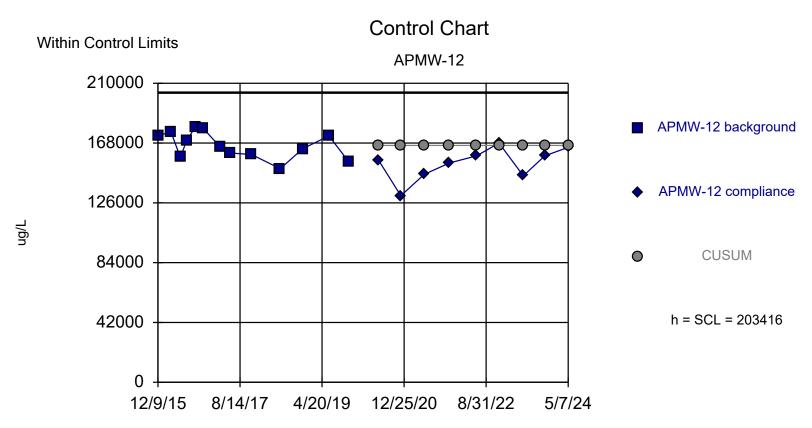
Background Data Summary: Mean=438.3, Std. Dev.=46.01, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.949, critical = 0.866. Report alpha = 0.005388. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 3:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



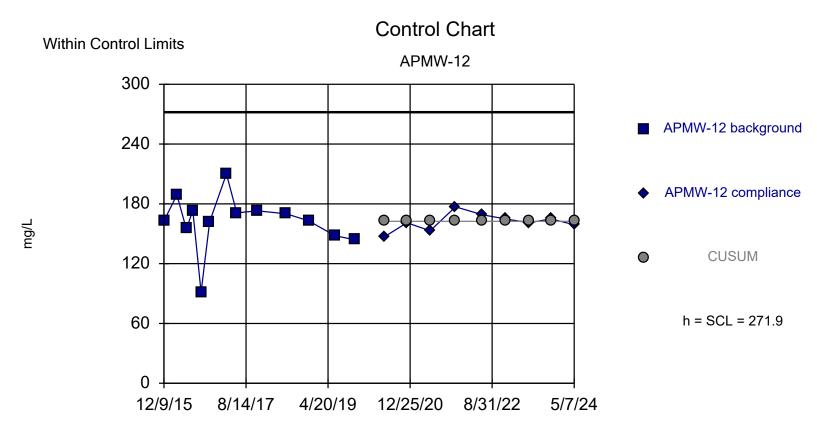
Background Data Summary: Mean=283.2, Std. Dev.=26.4, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9565, critical = 0.866. Report alpha = 0.01962. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 11:36 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=166308, Std. Dev.=9277, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9542, critical = 0.866. Report alpha = 0.005402. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/2/2024 6:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



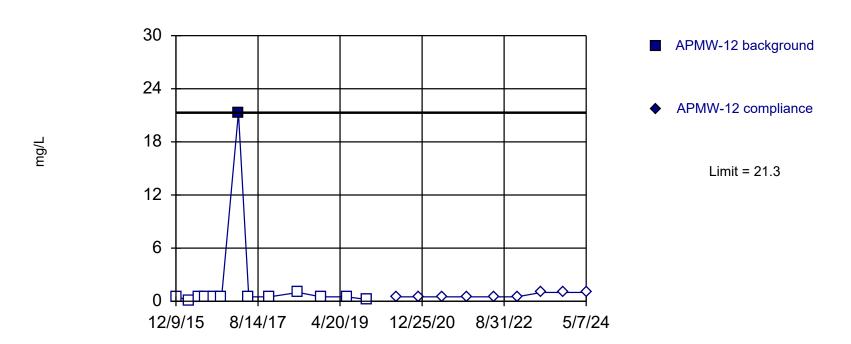
Background Data Summary: Mean=162.5, Std. Dev.=27.37, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8823, critical = 0.866. Report alpha = 0.005402. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/2/2024 6:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program Sanitas $^{\text{m}}$ v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

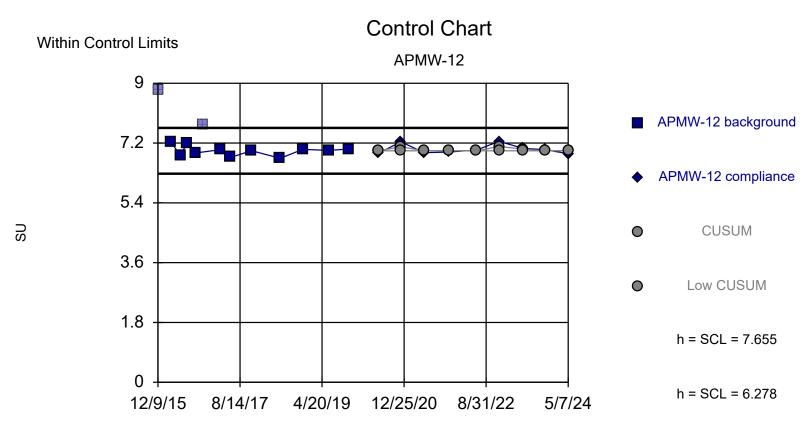
Prediction Limit

Intrawell Non-parametric



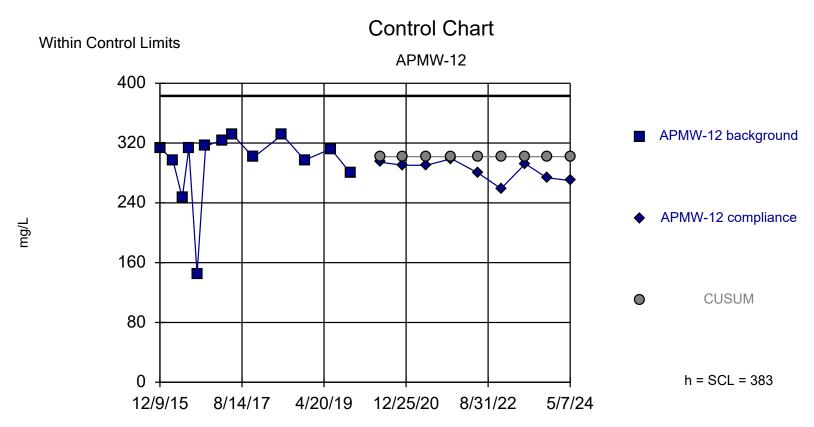
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/2/2024 6:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



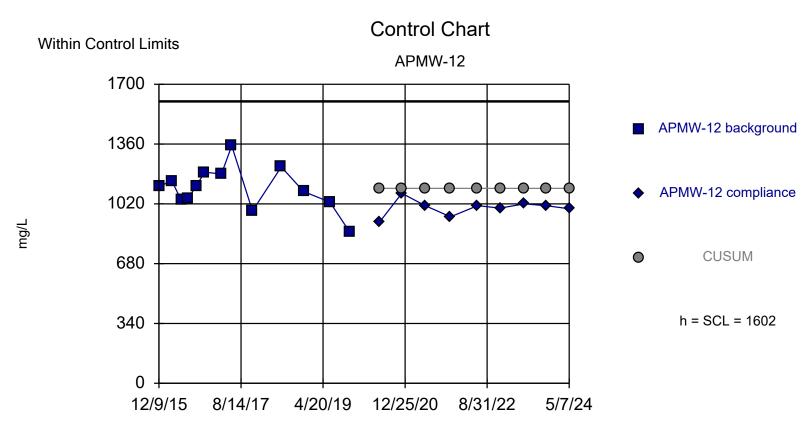
Background Data Summary: Mean=6.966, Std. Dev.=0.153, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9483, critical = 0.85. Report alpha = 0.005244. Dates ending 11/6/2019 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 6:11 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



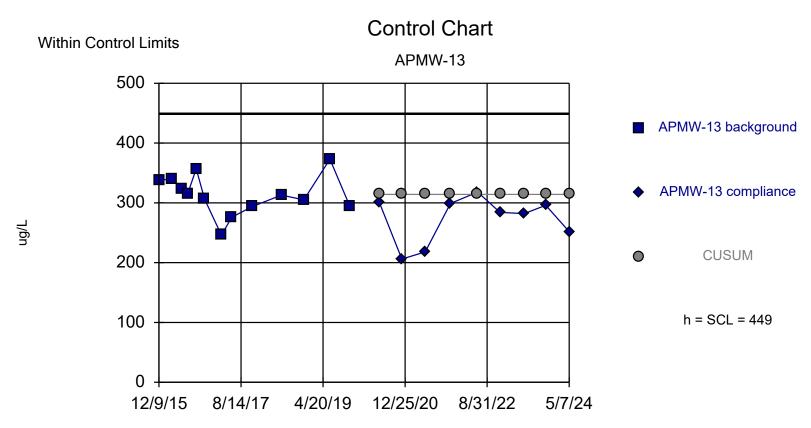
Background Data Summary (based on x⁴ transformation): Mean=8.3e9, Std. Dev.=3.3e9, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9018, critical = 0.866. Report alpha = 0.01985. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:39 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



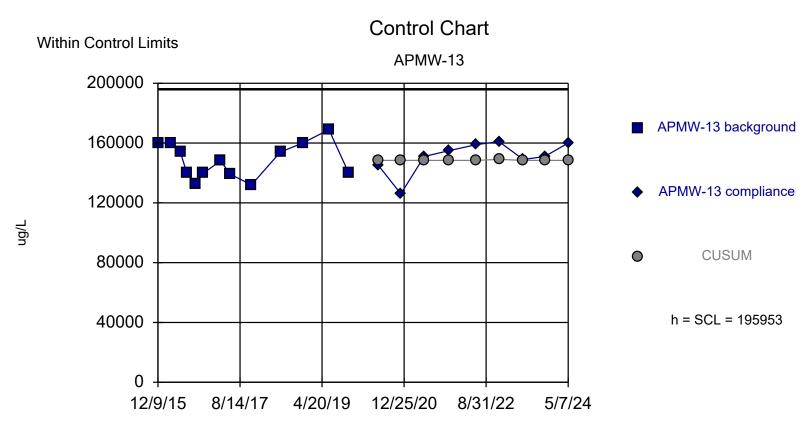
Background Data Summary: Mean=1108, Std. Dev.=123.5, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9869, critical = 0.866. Report alpha = 0.005402. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/2/2024 6:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



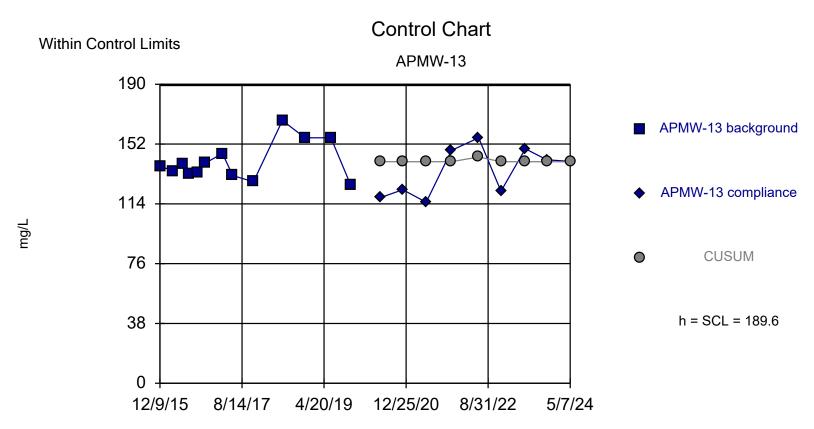
Background Data Summary: Mean=314.1, Std. Dev.=33.74, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9859, critical = 0.866. Report alpha = 0.01981. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 11:58 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=148385, Std. Dev.=11892, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.923, critical = 0.866. Report alpha = 0.005312. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/2/2024 6:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



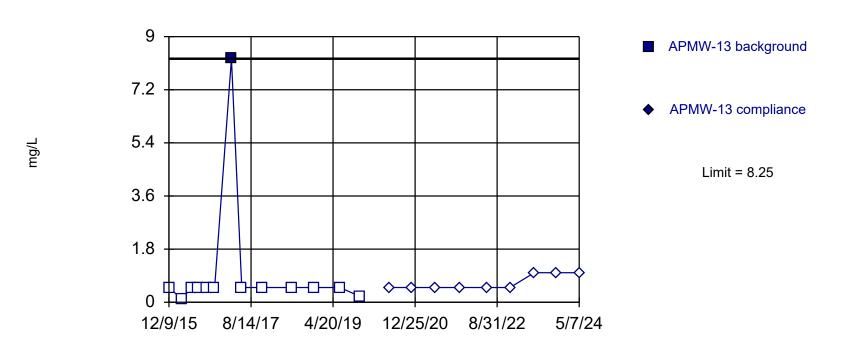
Background Data Summary: Mean=140.8, Std. Dev.=12.21, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9021, critical = 0.866. Report alpha = 0.005312. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/2/2024 6:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program Sanitas $^{\text{m}}$ v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

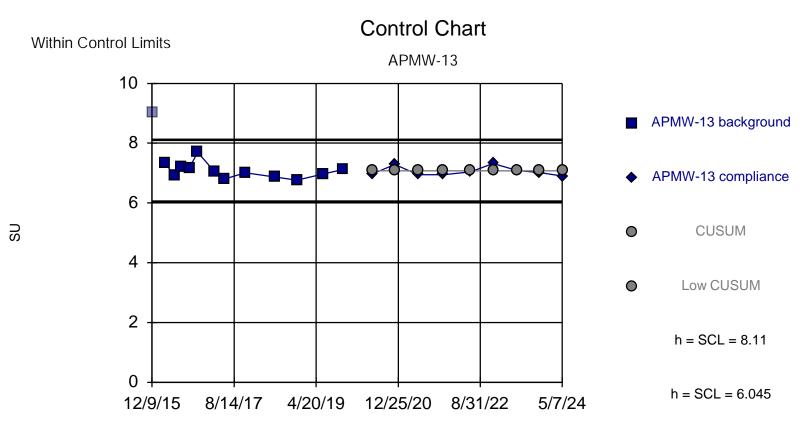
Prediction Limit

Intrawell Non-parametric



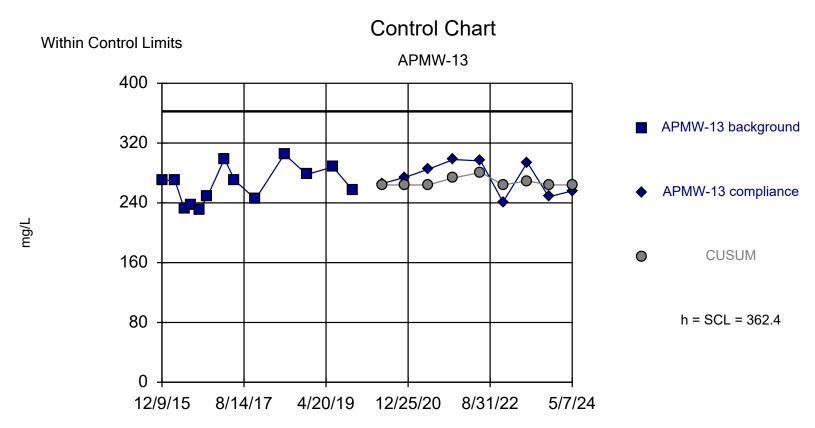
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/2/2024 6:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



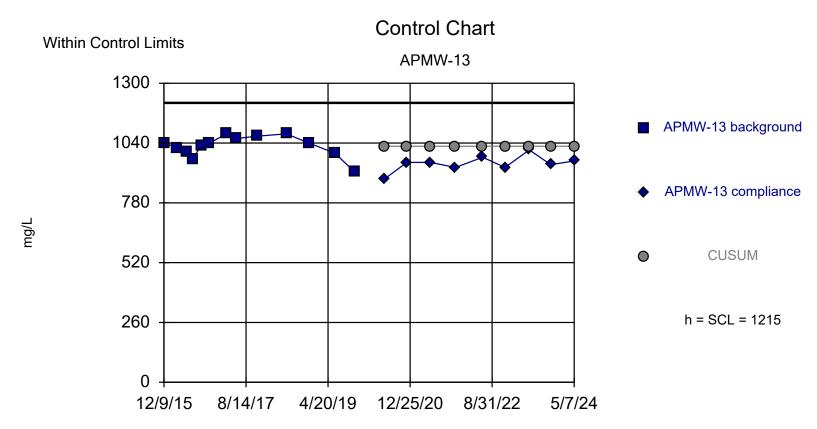
Background Data Summary: Mean=7.078, Std. Dev.=0.258, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.924, critical = 0.859. Report alpha = 0.006122. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:45 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



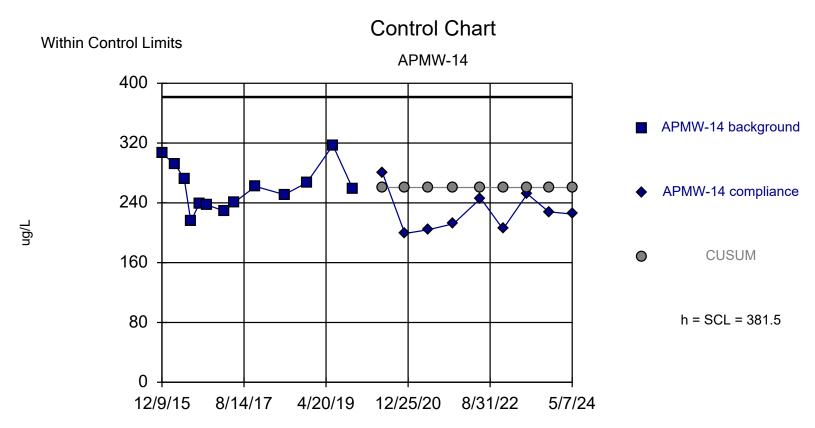
Background Data Summary: Mean=263.9, Std. Dev.=24.63, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9506, critical = 0.866. Report alpha = 0.01985. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:55 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



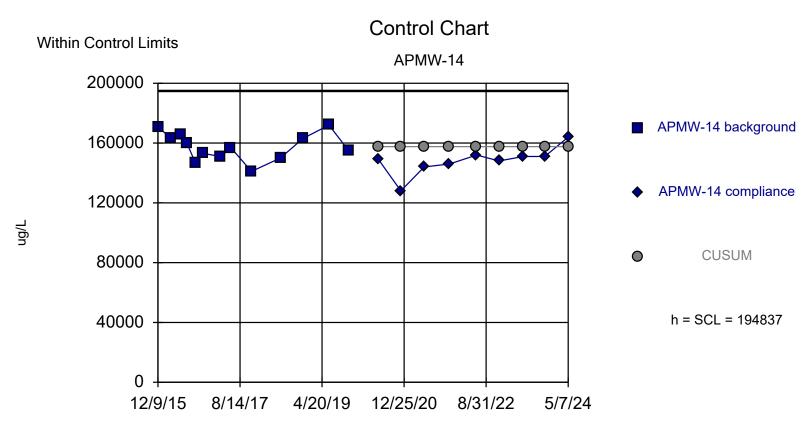
Background Data Summary: Mean=1026, Std. Dev.=47.08, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9114, critical = 0.866. Report alpha = 0.005312. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/2/2024 6:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



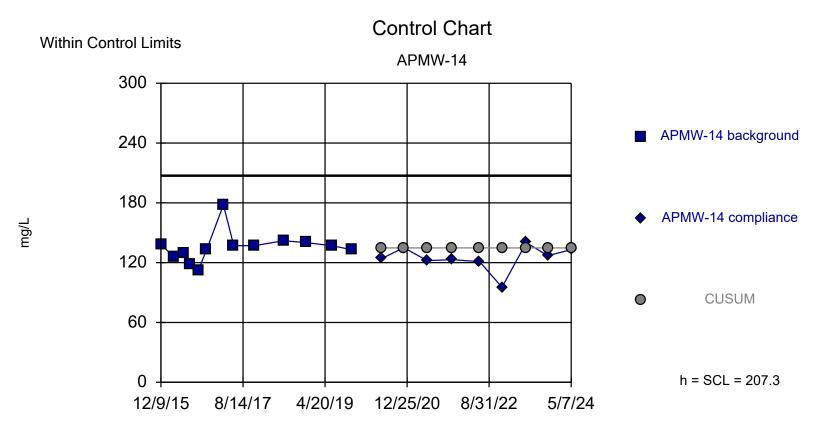
Background Data Summary: Mean=260.5, Std. Dev.=30.25, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9589, critical = 0.866. Report alpha = 0.01981. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 12:00 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=157615, Std. Dev.=9305, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9774, critical = 0.866. Report alpha = 0.005332. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/2/2024 6:29 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



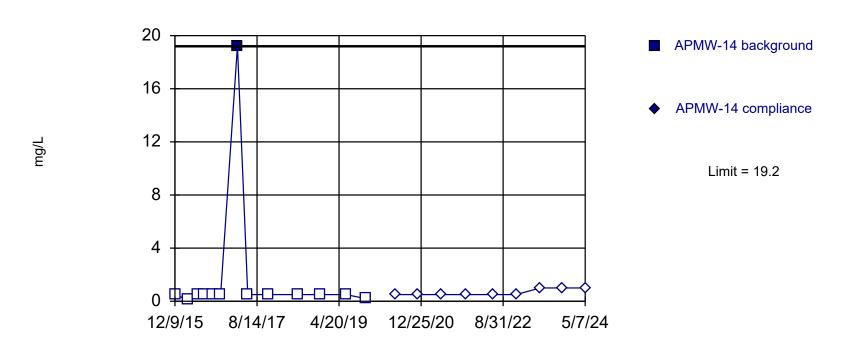
Background Data Summary (based on natural log transformation): Mean=4.904, Std. Dev.=0.1076, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8695, critical = 0.866. Report alpha = 0.005332. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/2/2024 6:29 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program Sanitas $^{\text{m}}$ v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

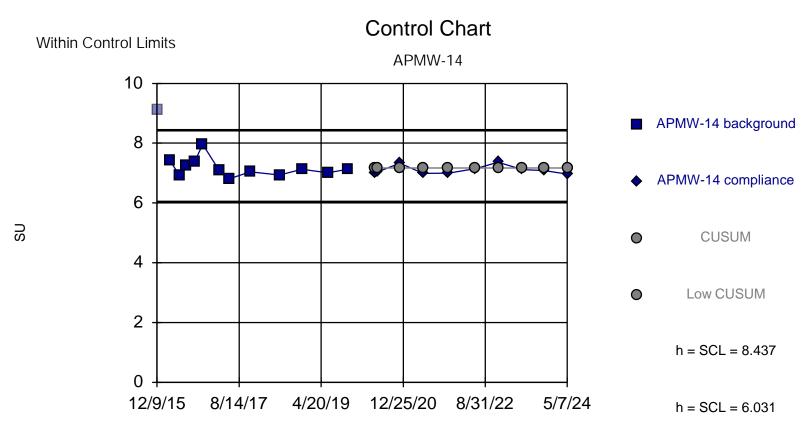
Prediction Limit

Intrawell Non-parametric



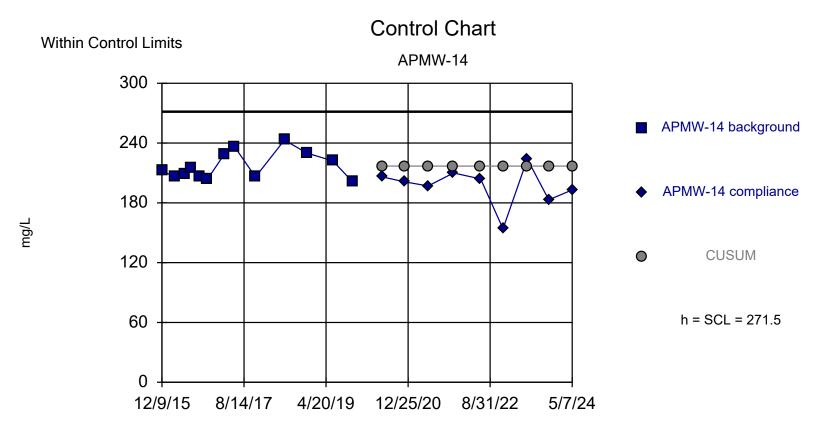
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/2/2024 6:29 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program



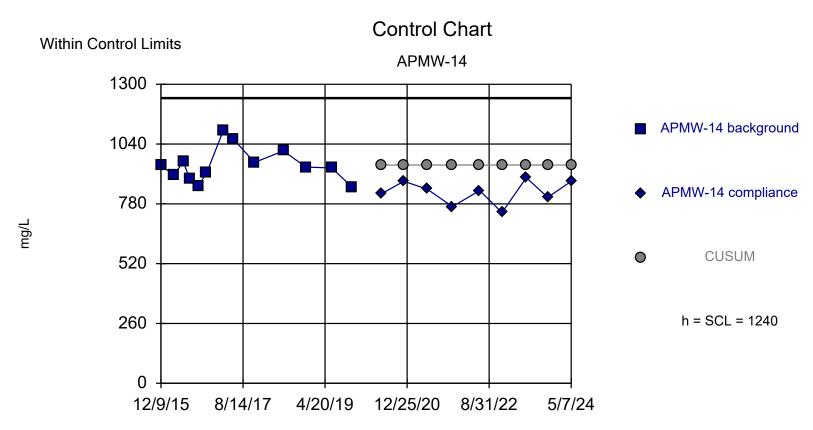
Background Data Summary (based on cube root transformation): Mean=1.928, Std. Dev.=0.02694, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8605, critical = 0.859. Report alpha = 0.006568. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:55 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=216.9, Std. Dev.=13.65, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8994, critical = 0.866. Report alpha = 0.01963. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 12:01 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



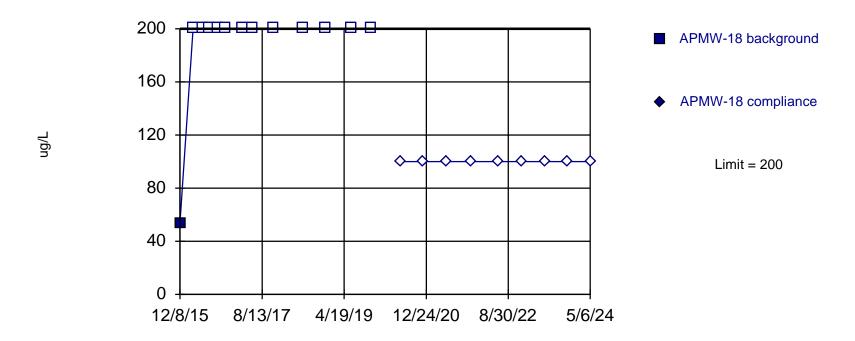
Background Data Summary: Mean=948.8, Std. Dev.=72.74, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9344, critical = 0.866. Report alpha = 0.005332. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/2/2024 6:29 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEE-AM-Program Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

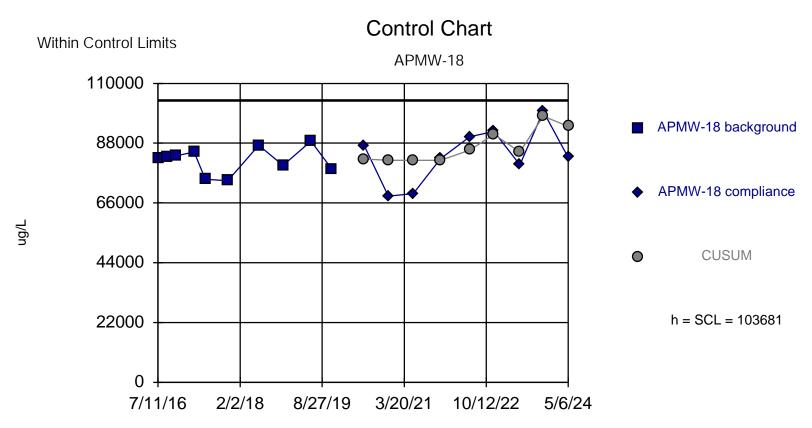
Prediction Limit

Intrawell Non-parametric



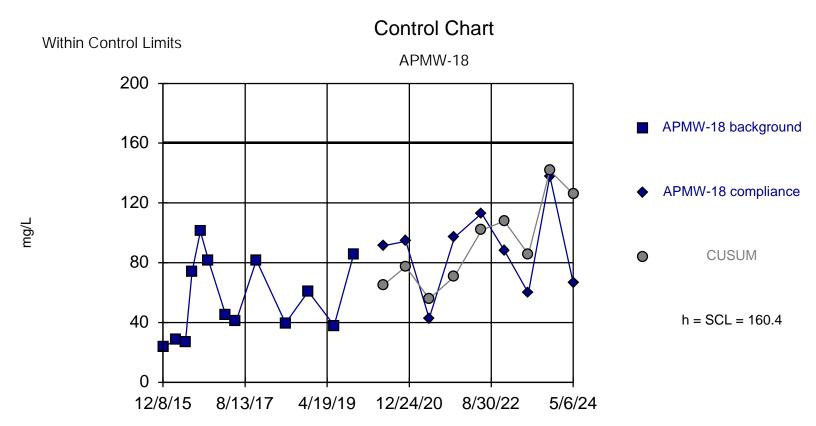
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 7/1/2024 4:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=81680, Std. Dev.=4889, n=10. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9537, critical = 0.842. Report alpha = 0.006358. Dates ending 11/5/2019 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 7/2/2024 9:41 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



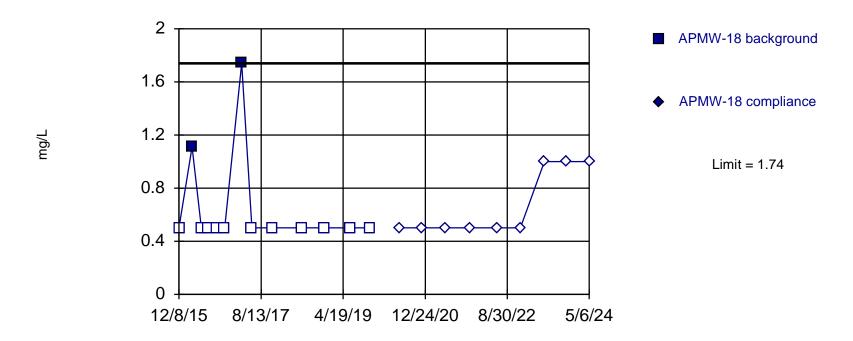
Background Data Summary: Mean=55.84, Std. Dev.=26.14, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9088, critical = 0.866. Report alpha = 0.005446. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/1/2024 4:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

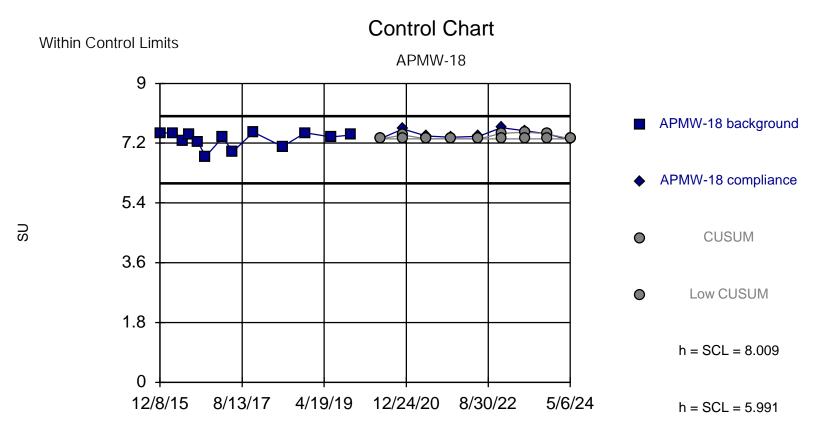
Prediction Limit

Intrawell Non-parametric



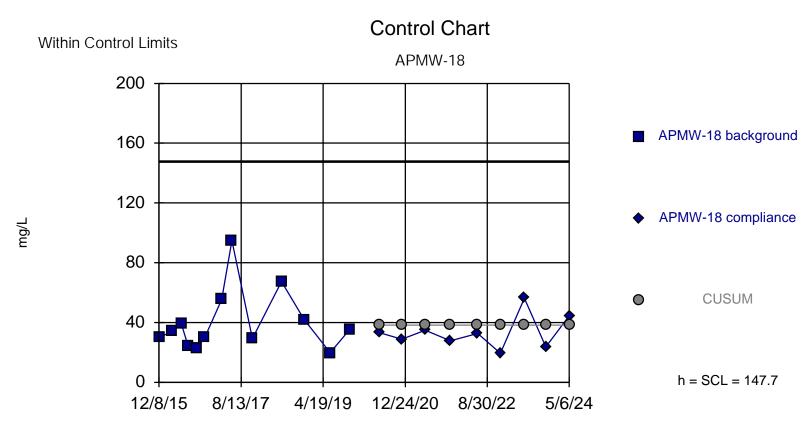
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/1/2024 4:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



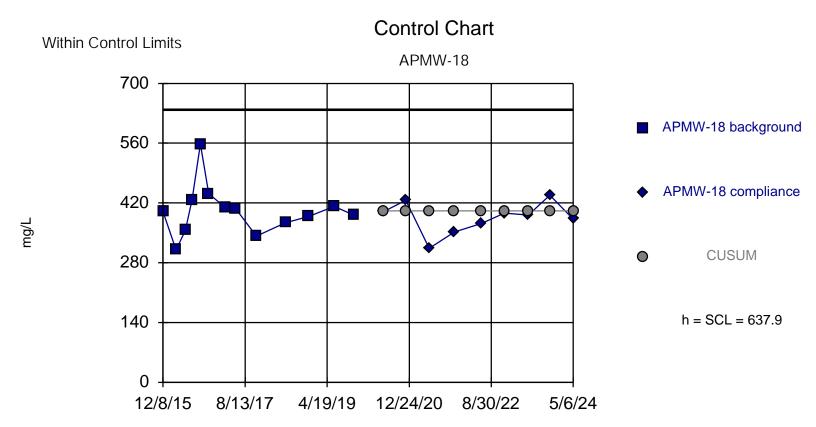
Background Data Summary (based on x⁶ transformation): Mean=155040, Std. Dev.=27197, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8703, critical = 0.866. Report alpha = 0.00531. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:53 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary (based on square root transformation): Mean=6.19, Std. Dev.=1.491, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8874, critical = 0.866. Report alpha = 0.00515. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 7/1/2024 4:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



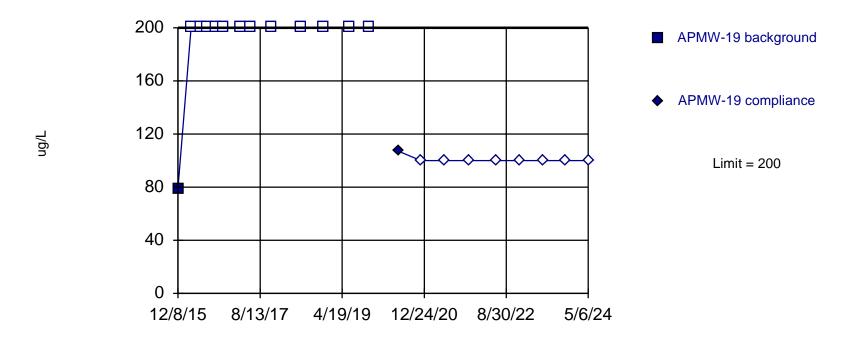
Background Data Summary: Mean=401.2, Std. Dev.=59.18, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8861, critical = 0.866. Report alpha = 0.00515. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/1/2024 4:36 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

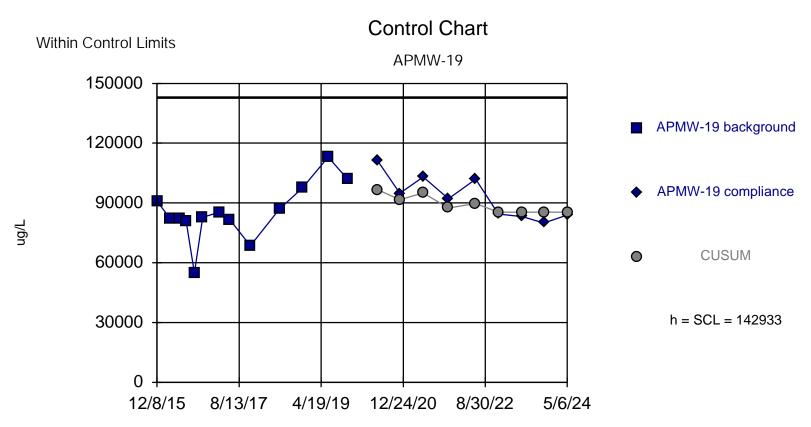
Prediction Limit

Intrawell Non-parametric



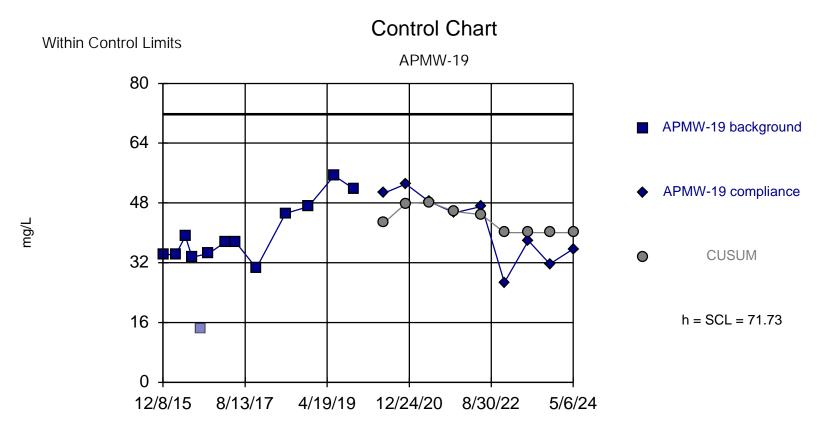
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 7/2/2024 9:46 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=85323, Std. Dev.=14403, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9453, critical = 0.866. Report alpha = 0.005198. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 7/2/2024 9:46 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



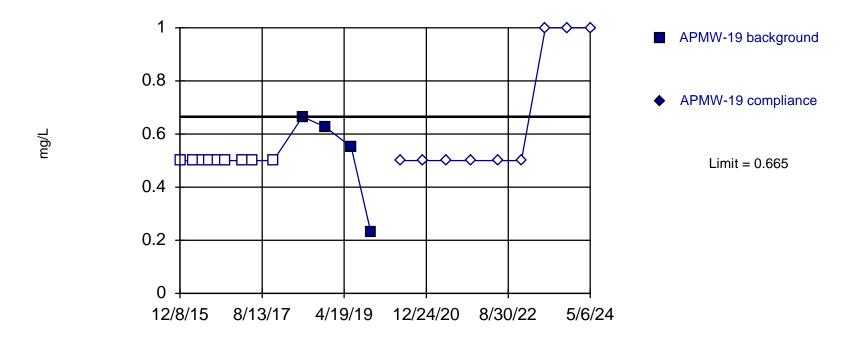
Background Data Summary: Mean=40.03, Std. Dev.=7.925, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8899, critical = 0.859. Report alpha = 0.006032. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 7/2/2024 9:52 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.19 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

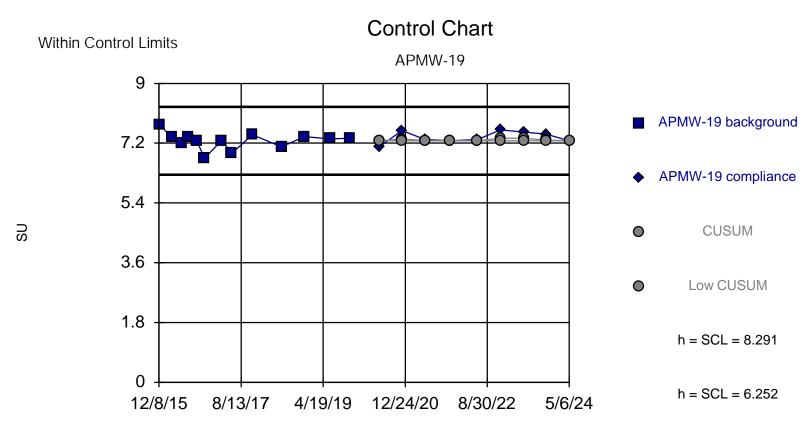
Prediction Limit

Intrawell Non-parametric



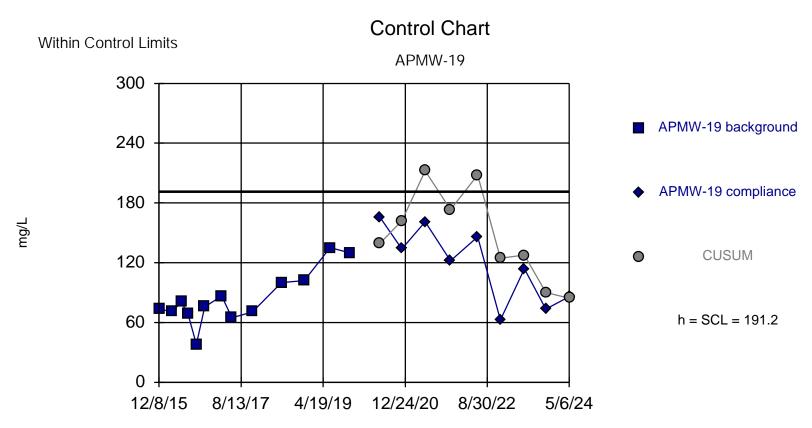
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 7/2/2024 9:46 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



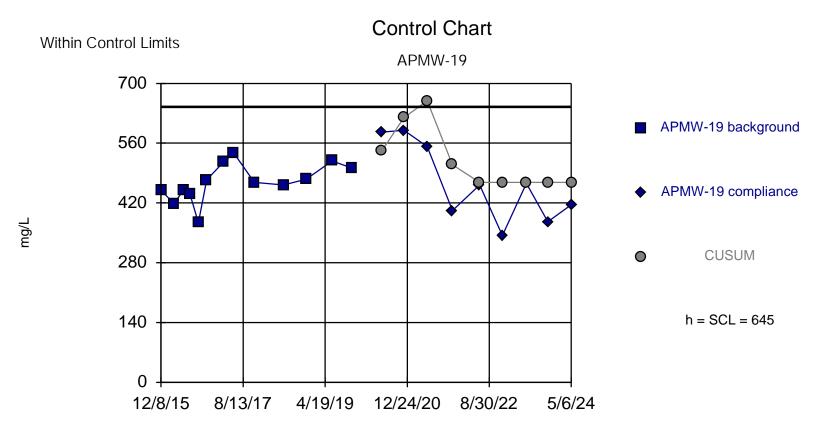
Background Data Summary: Mean=7.272, Std. Dev.=0.2548, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9316, critical = 0.866. Report alpha = 0.005062. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 7/2/2024 2:56 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=84.34, Std. Dev.=26.71, n=13. Exceedance nullified by following point per option settings. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9224, critical = 0.866. Report alpha = 0.005286. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 7/2/2024 9:46 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



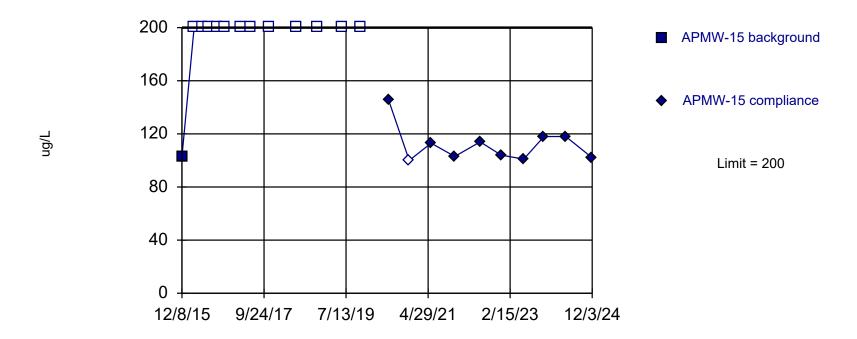
Background Data Summary: Mean=468, Std. Dev.=44.24, n=13. Exceedance nullified by following point per option settings. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9679, critical = 0.866. Report alpha = 0.005286. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 7/2/2024 9:46 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

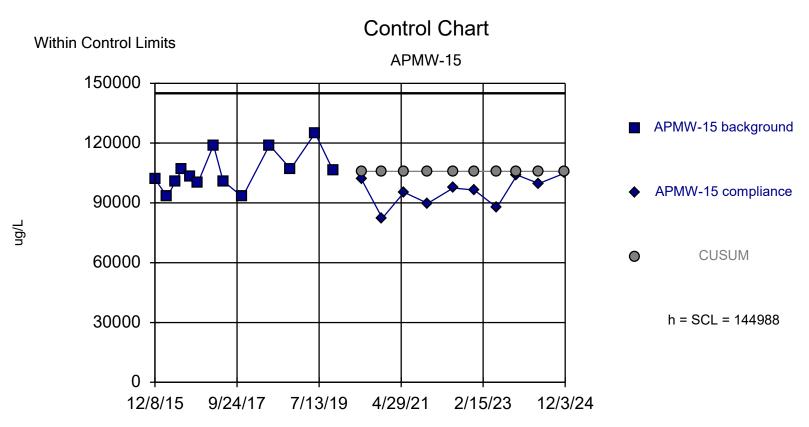
Prediction Limit

Intrawell Non-parametric



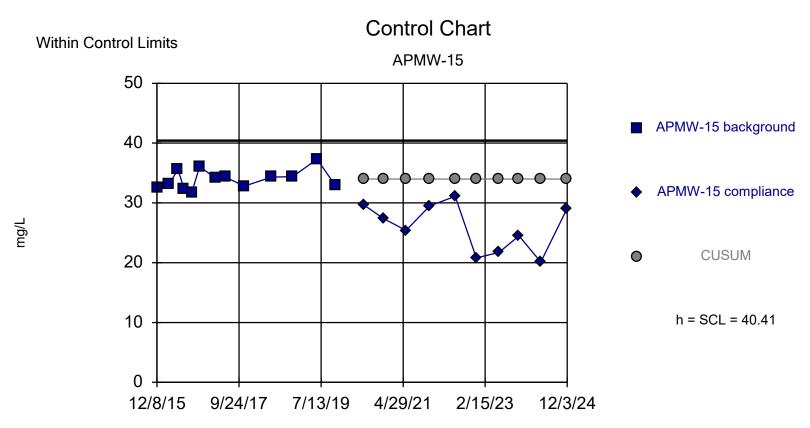
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:12 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=105838, Std. Dev.=9787, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9071, critical = 0.866. Report alpha = 0.005956. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 3:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



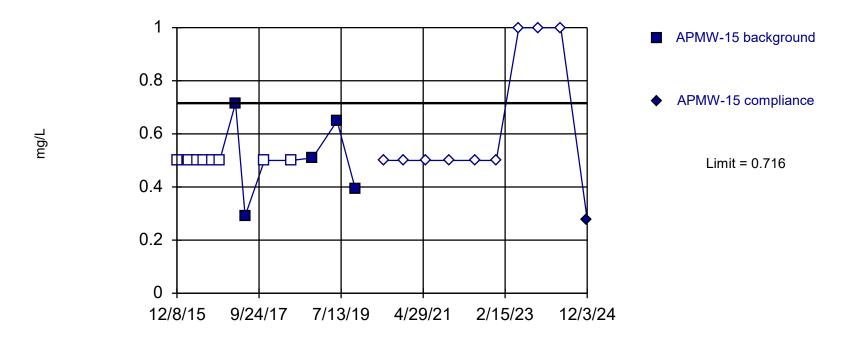
Background Data Summary: Mean=33.98, Std. Dev.=1.608, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9375, critical = 0.866. Report alpha = 0.005956. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 3:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

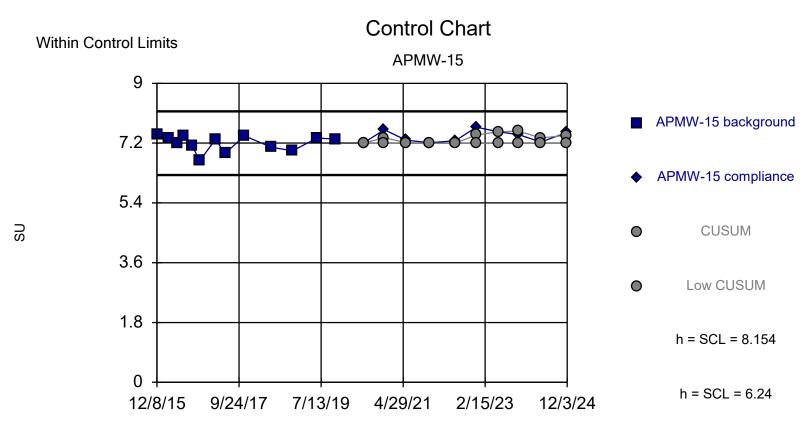
Prediction Limit

Intrawell Non-parametric



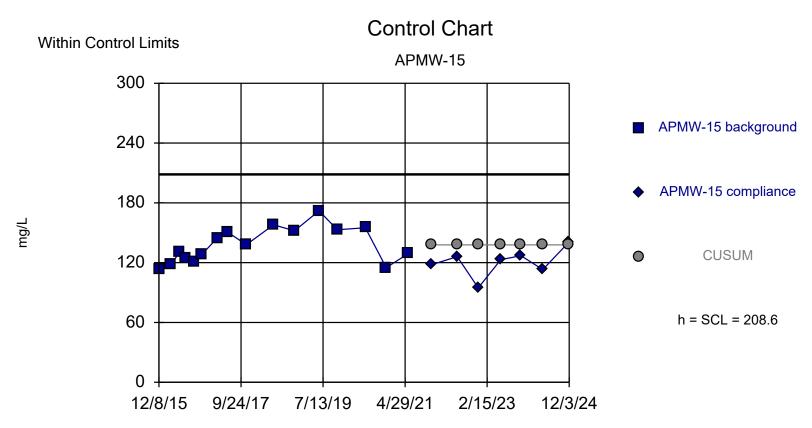
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 3:16 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



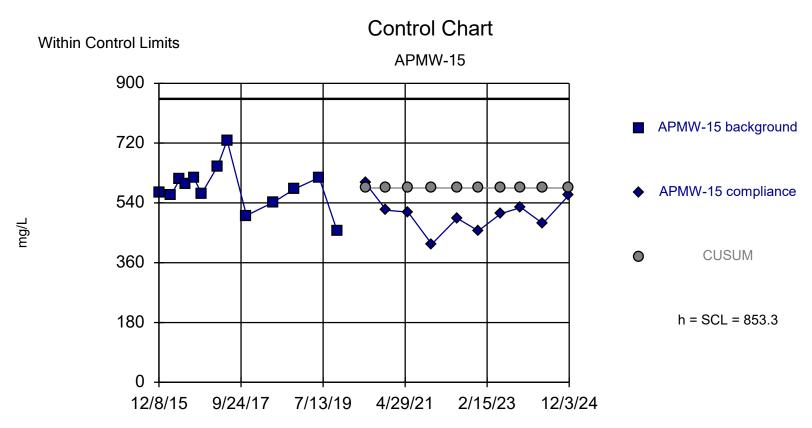
Background Data Summary: Mean=7.197, Std. Dev.=0.2393, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9057, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:05 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=137.8, Std. Dev.=17.71, n=16. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.939, critical = 0.887. Report alpha = 0.01034. Dates ending 5/24/2021 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:10 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]

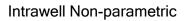


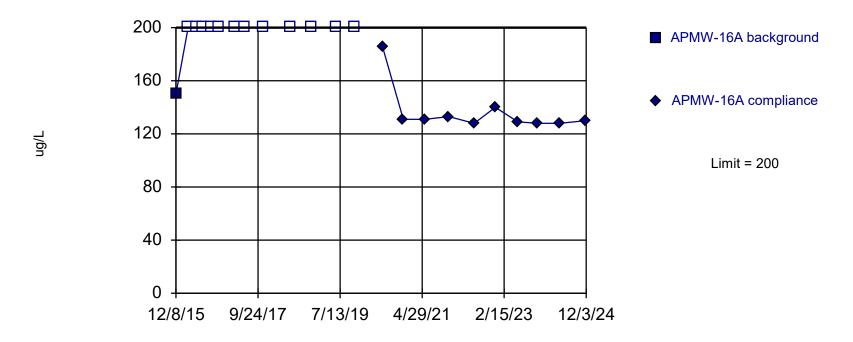
Background Data Summary: Mean=584.6, Std. Dev.=67.16, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9651, critical = 0.866. Report alpha = 0.005716. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 3:14 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

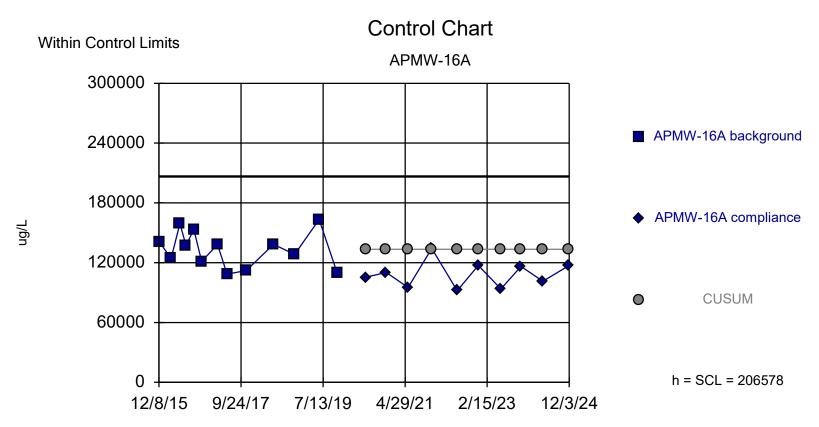
Prediction Limit





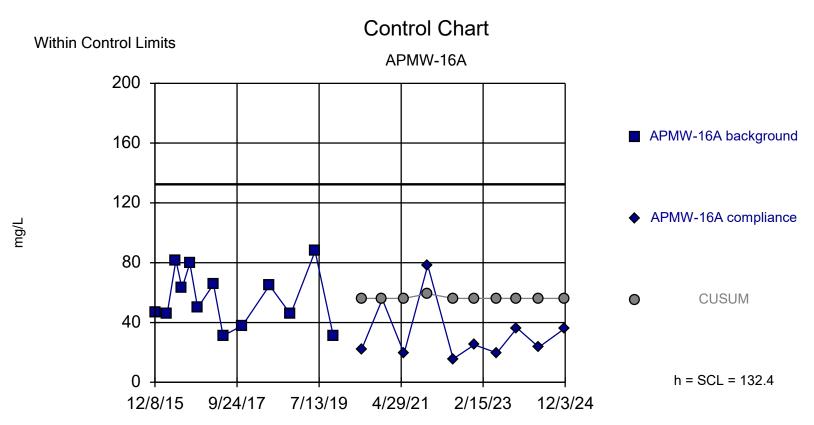
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/23/2025 3:03 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=133456, Std. Dev.=18280, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9448, critical = 0.866. Report alpha = 0.005798. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 3:24 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



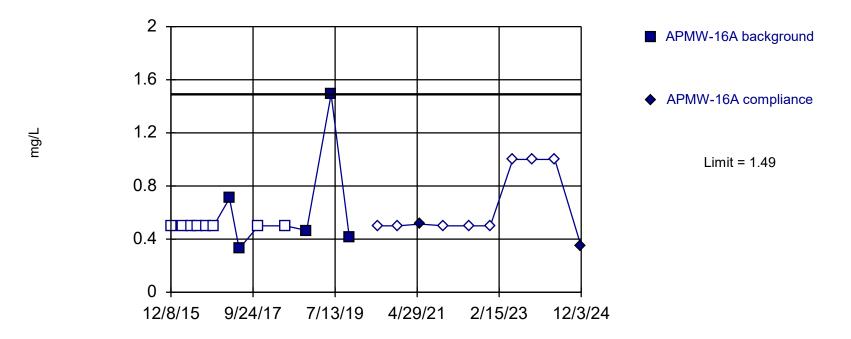
Background Data Summary: Mean=56.15, Std. Dev.=19.06, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9315, critical = 0.866. Report alpha = 0.005798. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 3:26 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

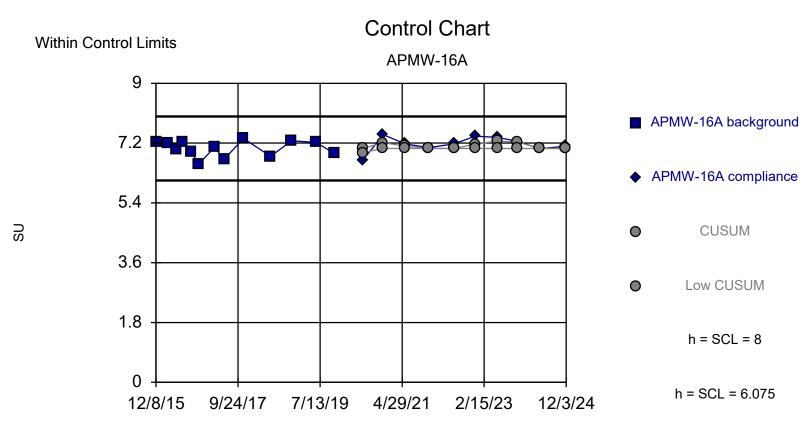
Prediction Limit





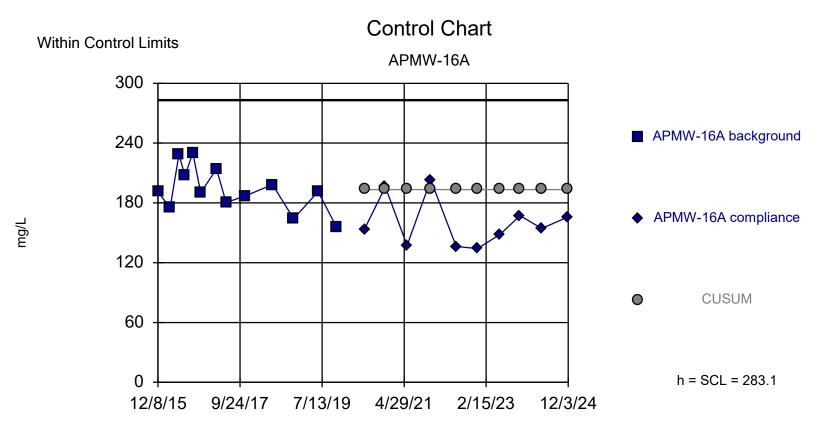
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 3:27 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



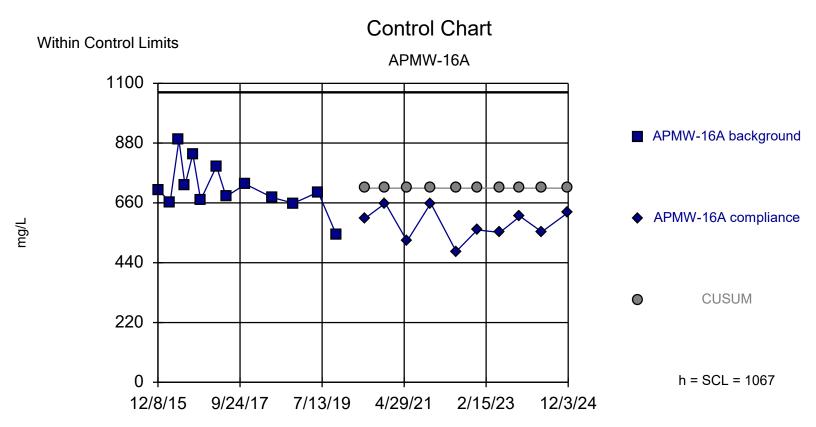
Background Data Summary: Mean=7.038, Std. Dev.=0.2406, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9309, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:06 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=193.4, Std. Dev.=22.44, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9667, critical = 0.866. Report alpha = 0.005798. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/23/2025 3:29 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

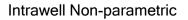


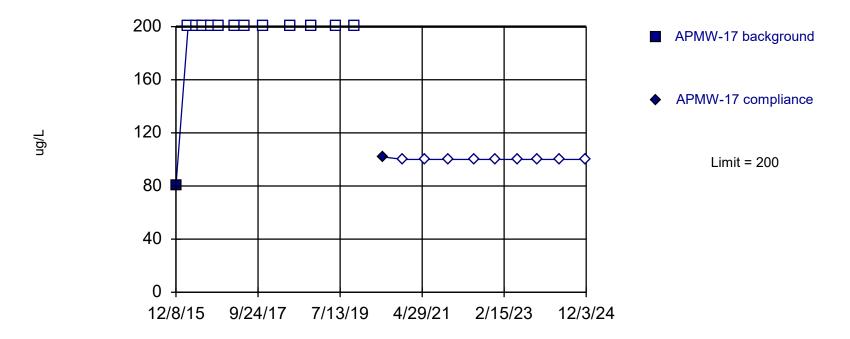
Background Data Summary: Mean=714.3, Std. Dev.=88.16, n=13. Data were deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.933, critical = 0.866. Report alpha = 0.005798. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 3:30 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

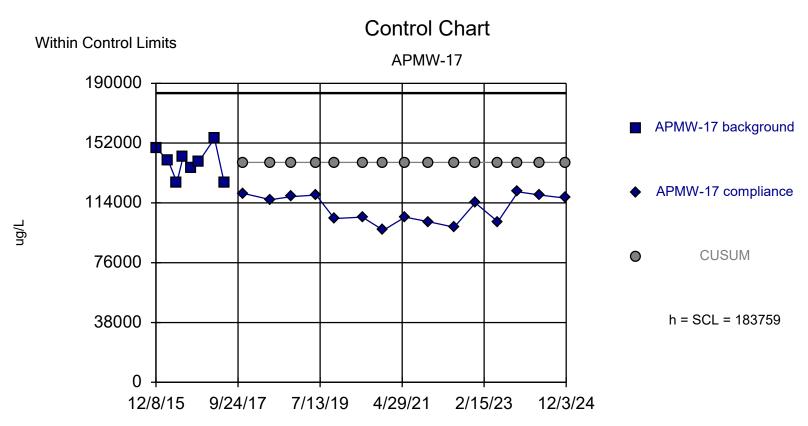
Prediction Limit





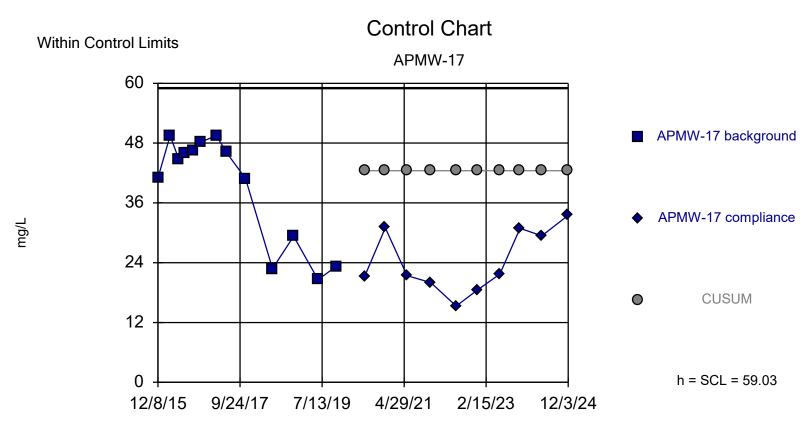
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/23/2025 3:33 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=139750, Std. Dev.=9780, n=8. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9472, critical = 0.818. Report alpha = 0.01593. Dates ending 6/5/2017 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 1/23/2025 3:33 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

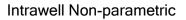


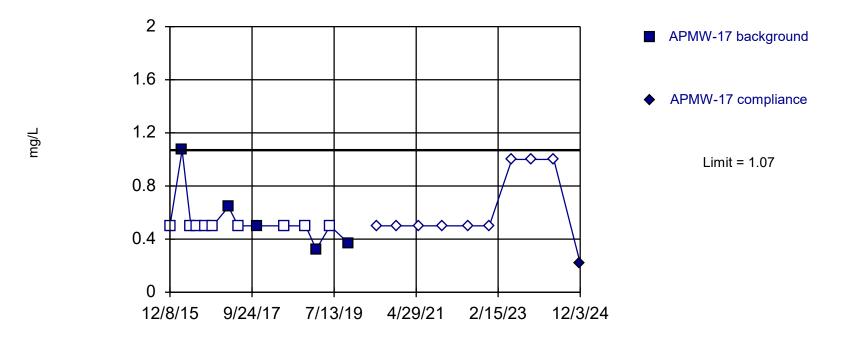
Background Data Summary (based on x⁴ transformation): Mean=3247075, Std. Dev.=2223138, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8771, critical = 0.866. Report alpha = 0.005576. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 3:35 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit



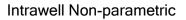


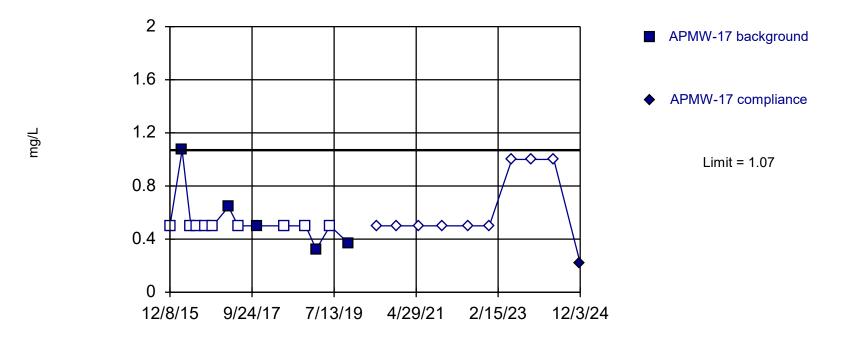
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 3:40 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

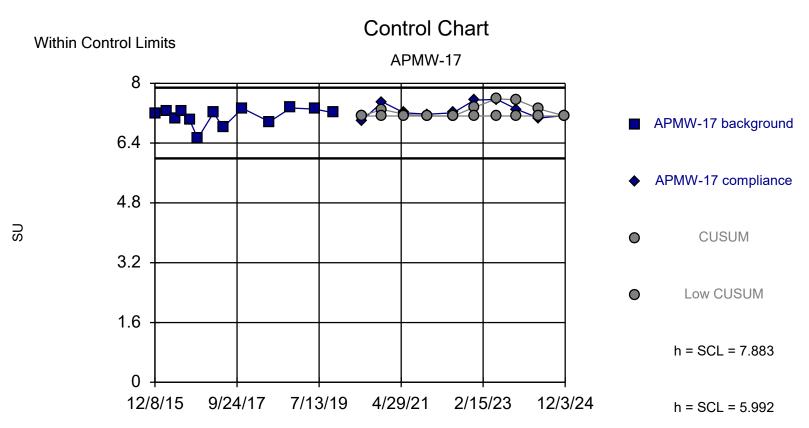
Prediction Limit





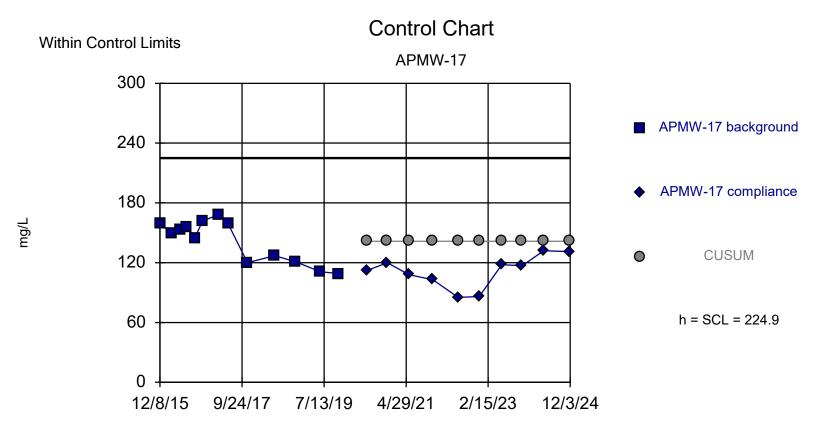
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 3:40 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



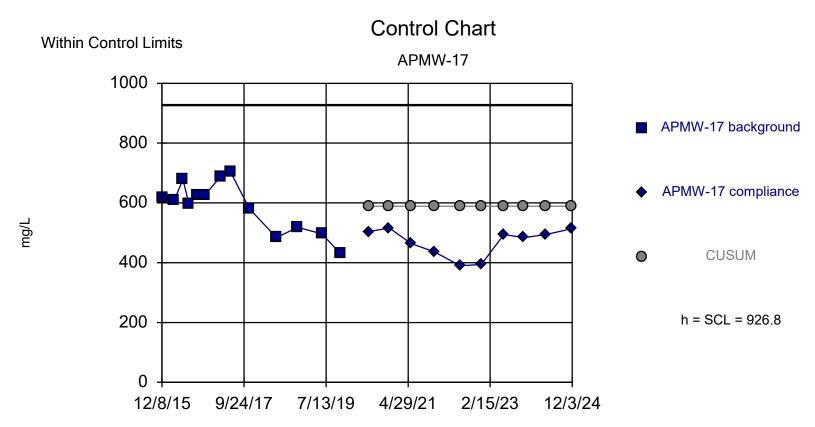
Background Data Summary (based on x⁴ transformation): Mean=2575, Std. Dev.=321.6, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8721, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:06 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=141.5, Std. Dev.=20.87, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8872, critical = 0.866. Report alpha = 0.005654. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/23/2025 3:43 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



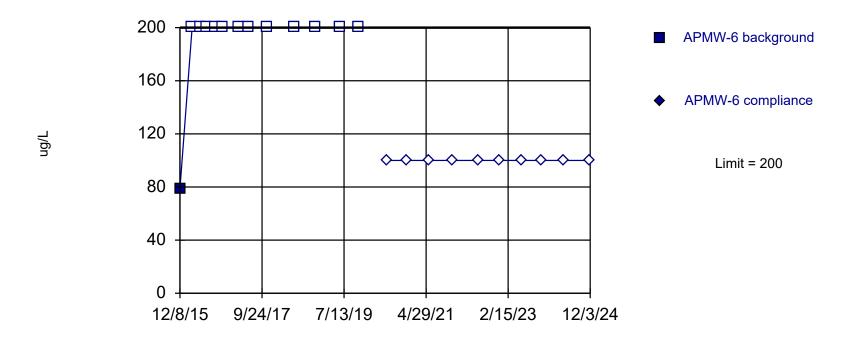
Background Data Summary: Mean=588.9, Std. Dev.=84.47, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9463, critical = 0.866. Report alpha = 0.005654. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 3:44 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

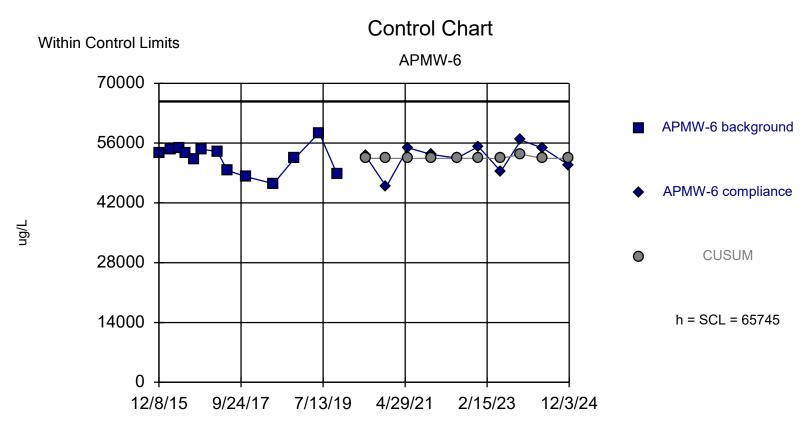
Prediction Limit

Intrawell Non-parametric



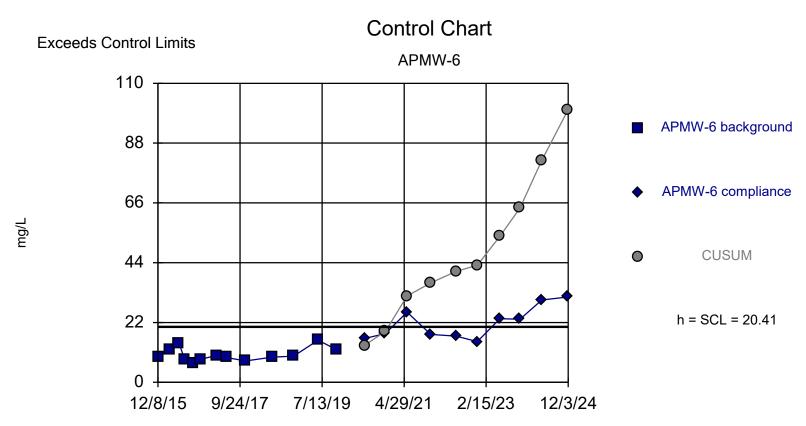
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:21 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=52400, Std. Dev.=3336, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9431, critical = 0.866. Report alpha = 0.005528. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:55 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



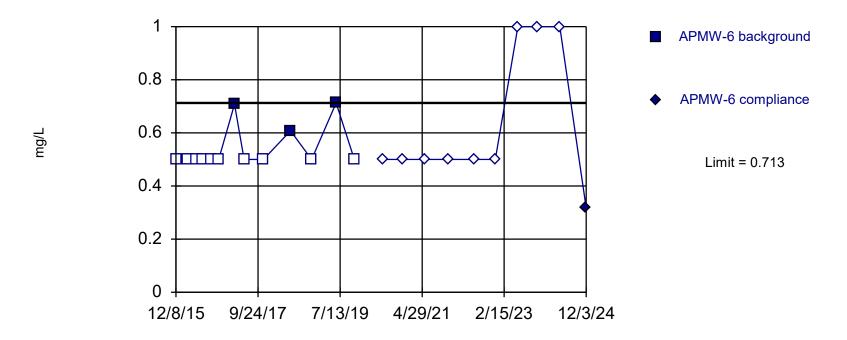
Background Data Summary: Mean=10.21, Std. Dev.=2.551, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8941, critical = 0.866. Report alpha = 0.005528. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:56 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

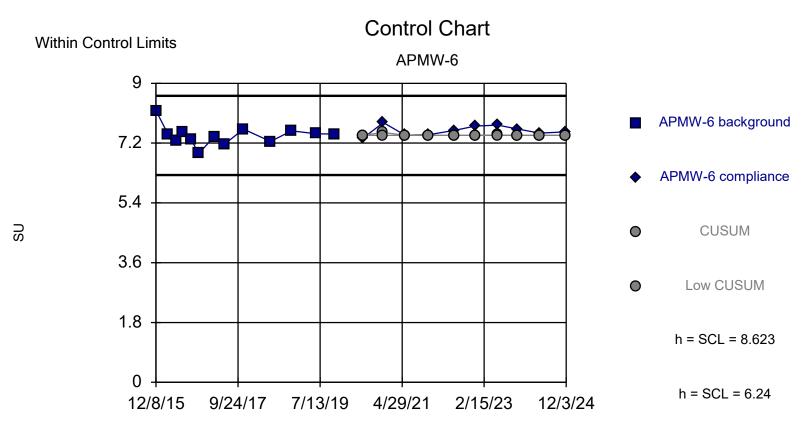
Prediction Limit

Intrawell Non-parametric



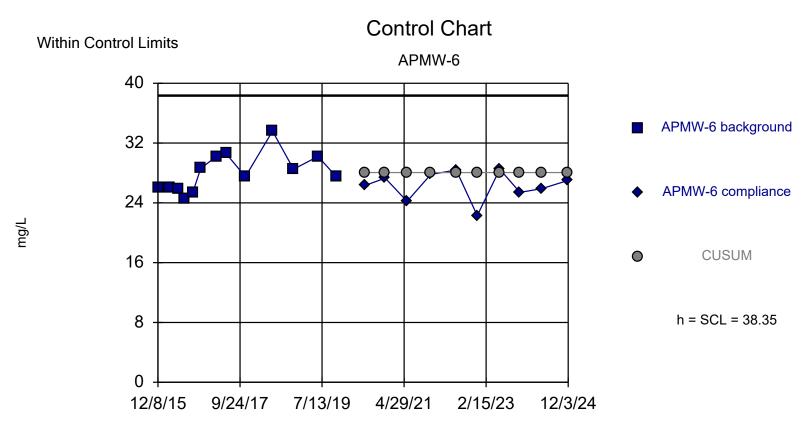
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:56 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



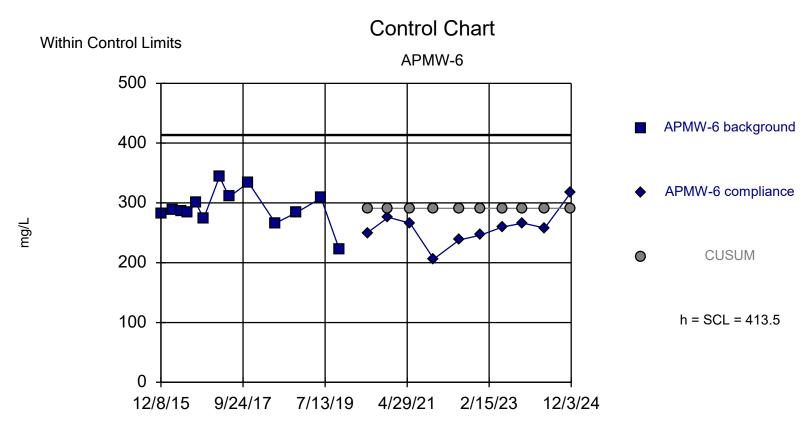
Background Data Summary: Mean=7.432, Std. Dev.=0.298, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9114, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:07 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=28.05, Std. Dev.=2.576, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9413, critical = 0.866. Report alpha = 0.02237. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:19 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



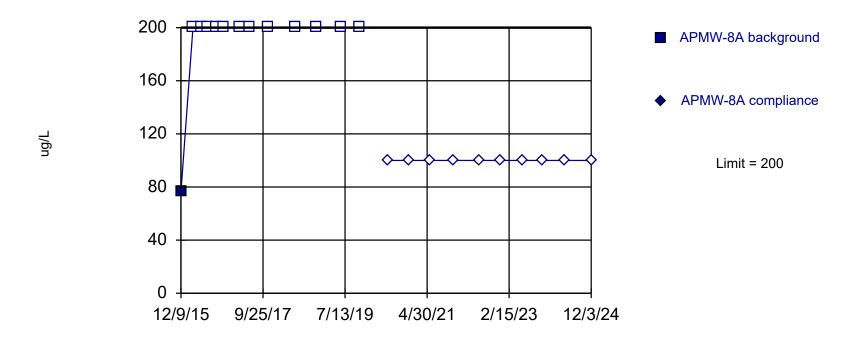
Background Data Summary: Mean=290.9, Std. Dev.=30.66, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9423, critical = 0.866. Report alpha = 0.005692. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:58 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

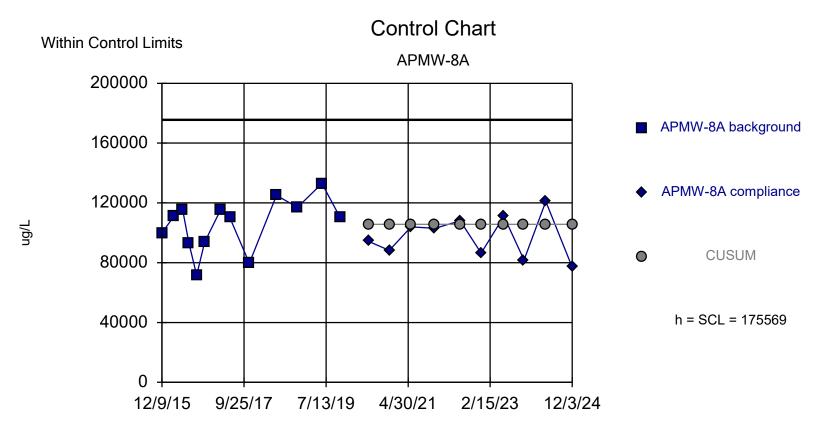
Prediction Limit

Intrawell Non-parametric



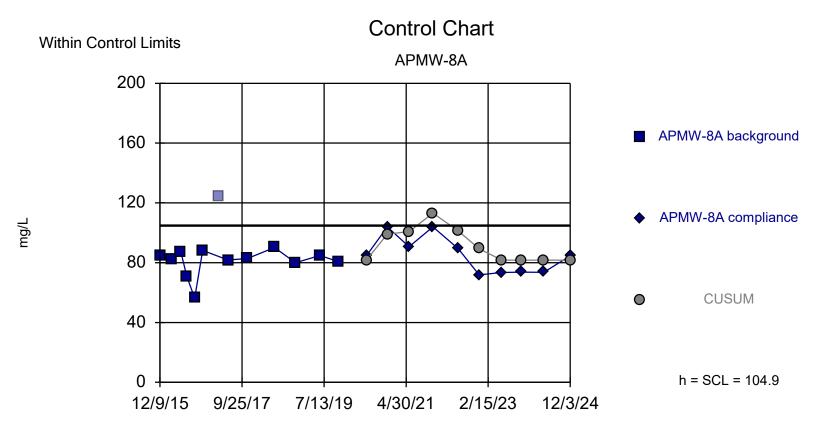
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:23 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=105685, Std. Dev.=17471, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9544, critical = 0.866. Report alpha = 0.005648. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:50 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

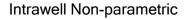


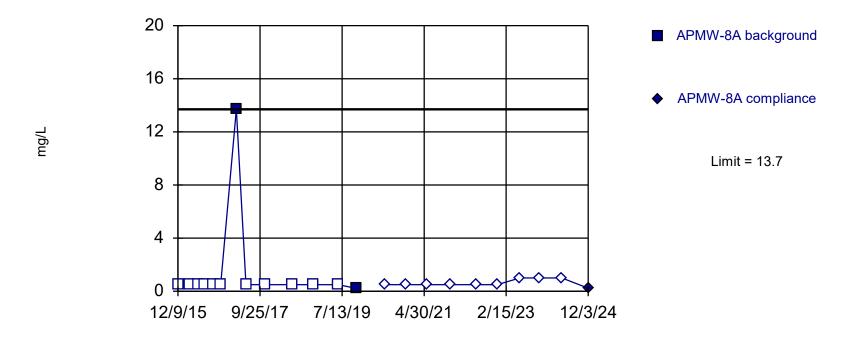
Background Data Summary (based on cube transformation): Mean=545530, Std. Dev.=151922, n=12. Exceedance nullified by following point per option settings. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8793, critical = 0.859. Report alpha = 0.006616. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:51 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

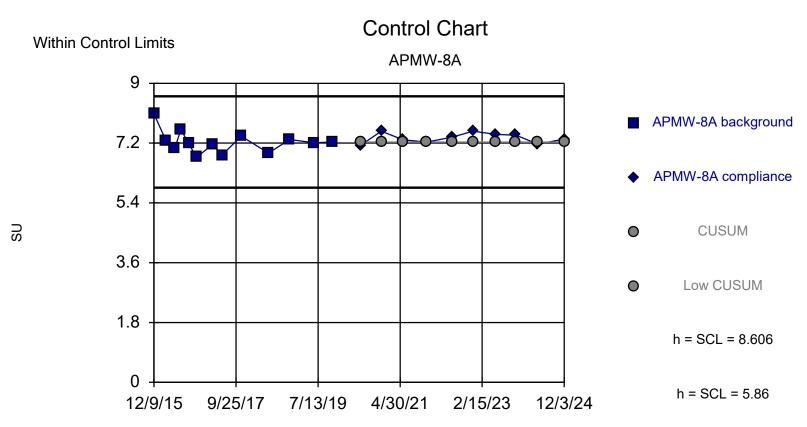
Prediction Limit





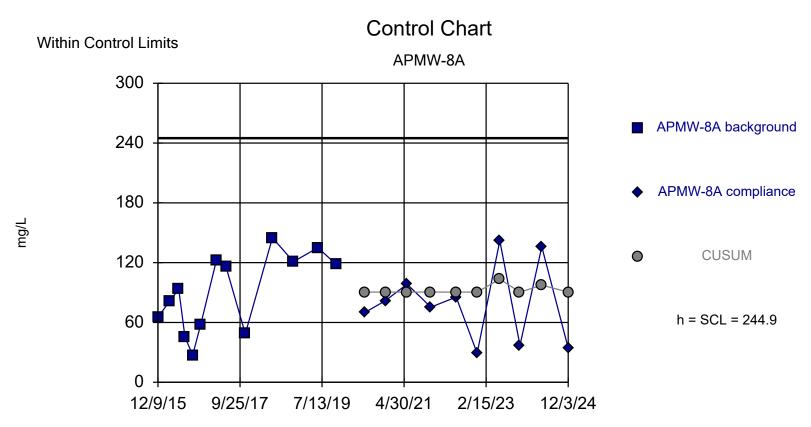
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:51 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



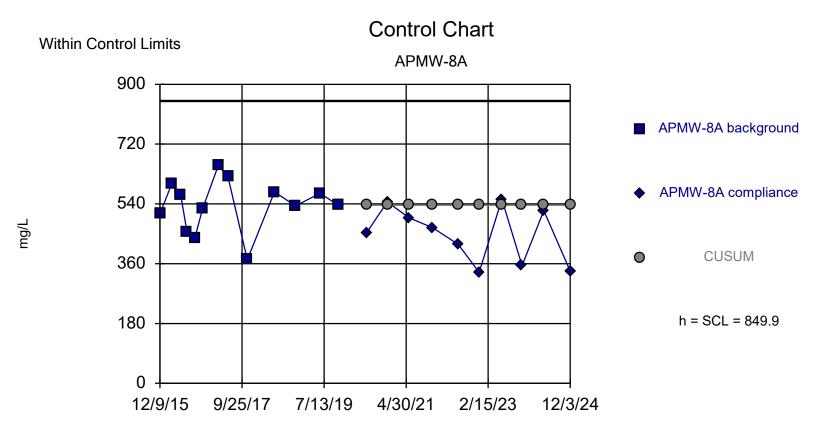
Background Data Summary: Mean=7.233, Std. Dev.=0.3432, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9148, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=90.45, Std. Dev.=38.62, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9319, critical = 0.866. Report alpha = 0.02188. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:25 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



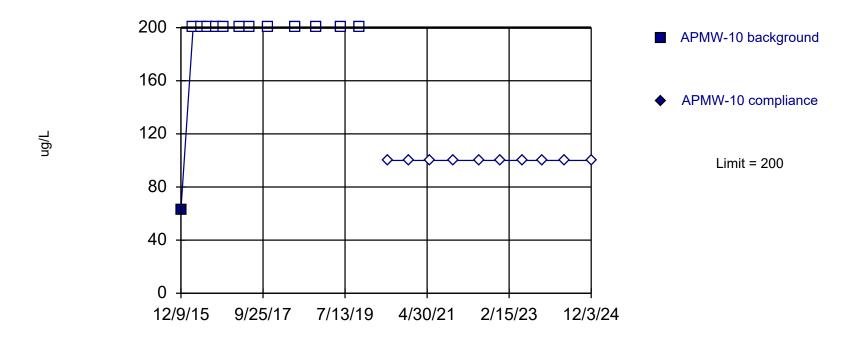
Background Data Summary: Mean=535.7, Std. Dev.=78.54, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9652, critical = 0.866. Report alpha = 0.005528. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:53 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

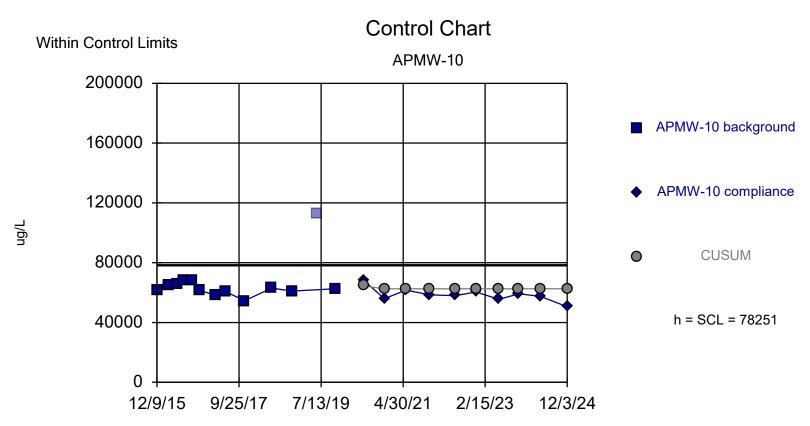
Prediction Limit

Intrawell Non-parametric



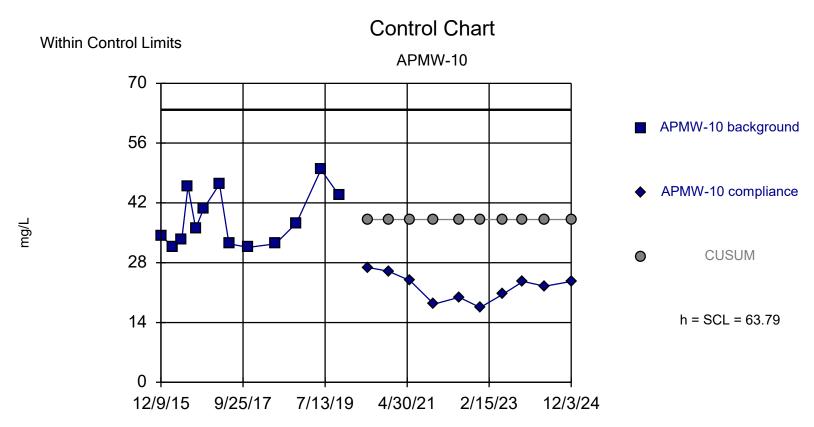
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:28 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=62525, Std. Dev.=3931, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.956, critical = 0.859. Report alpha = 0.006716. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 1:58 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

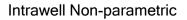


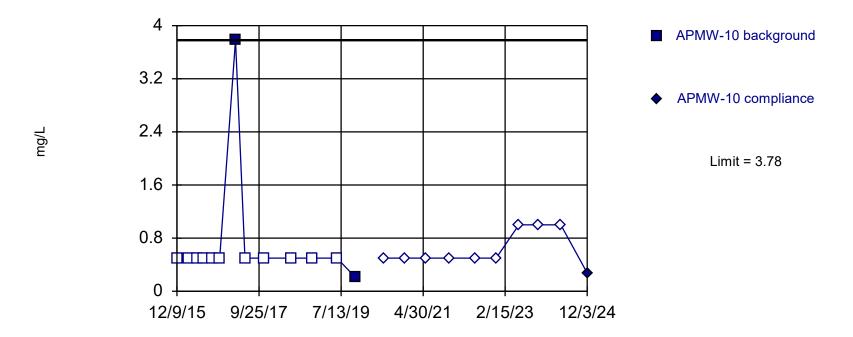
Background Data Summary: Mean=38.12, Std. Dev.=6.416, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8726, critical = 0.866. Report alpha = 0.005542. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:00 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

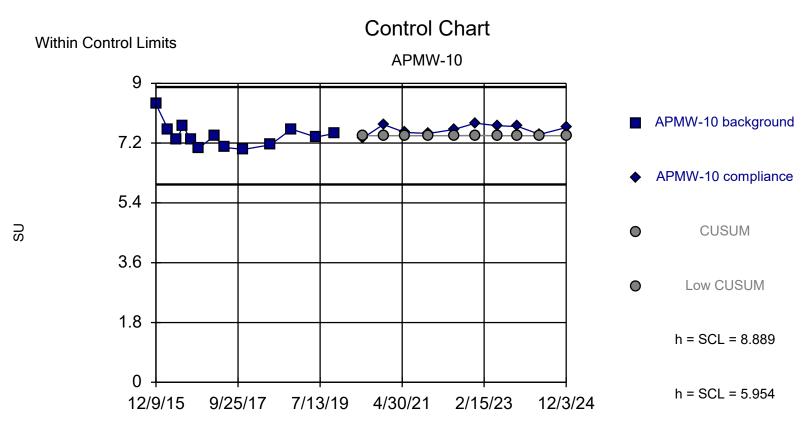
Prediction Limit





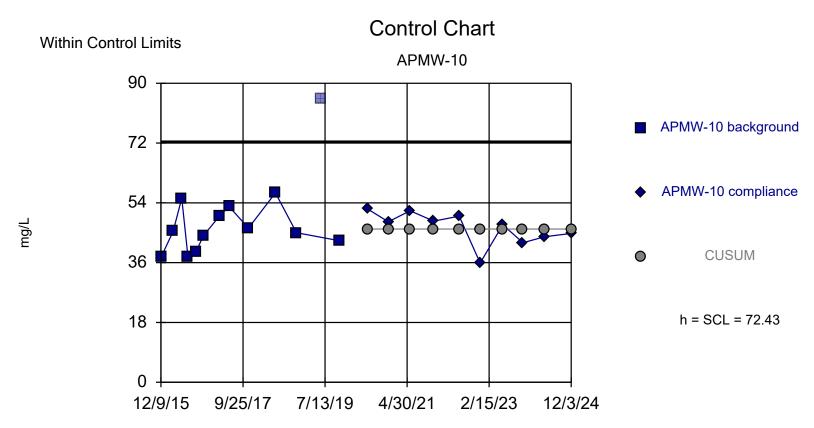
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:00 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



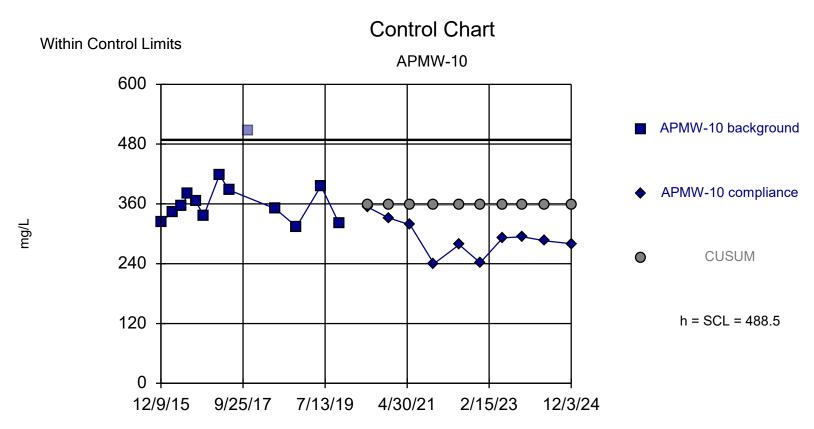
Background Data Summary: Mean=7.422, Std. Dev.=0.3669, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8842, critical = 0.866. Report alpha = 0.005634. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:08 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=46.11, Std. Dev.=6.58, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9379, critical = 0.859. Report alpha = 0.02539. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:27 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



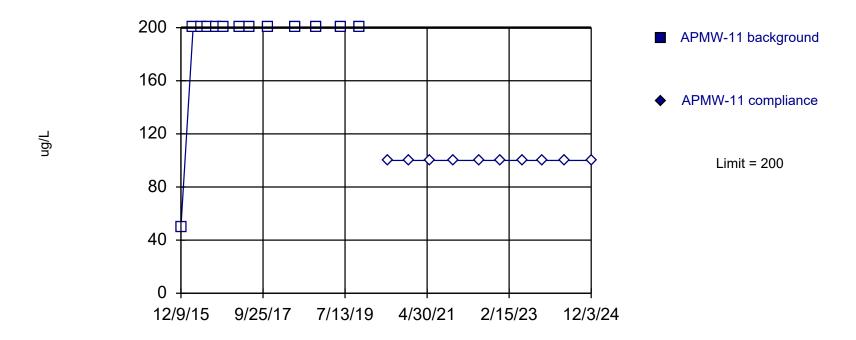
Background Data Summary: Mean=357.7, Std. Dev.=32.72, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9618, critical = 0.859. Report alpha = 0.006558. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:04 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

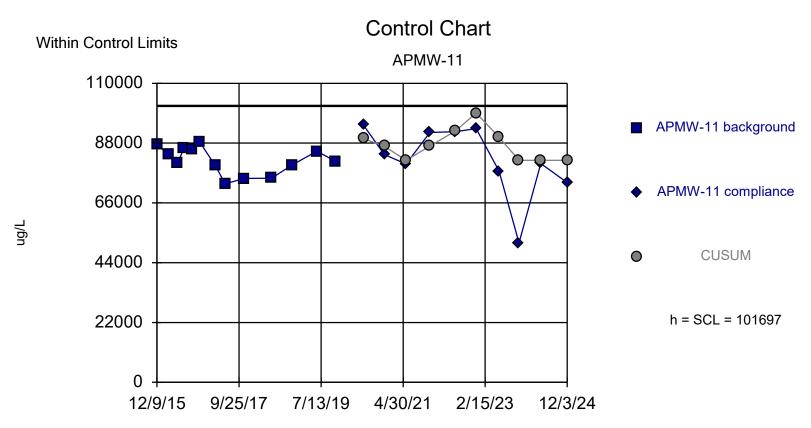
Prediction Limit

Intrawell Non-parametric



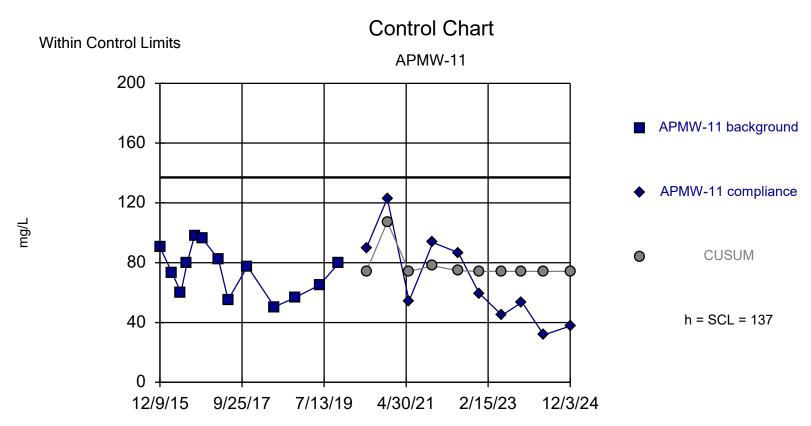
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values (n = 13) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/25/2025 11:30 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=81646, Std. Dev.=5013, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9374, critical = 0.866. Report alpha = 0.005598. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:12 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

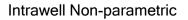


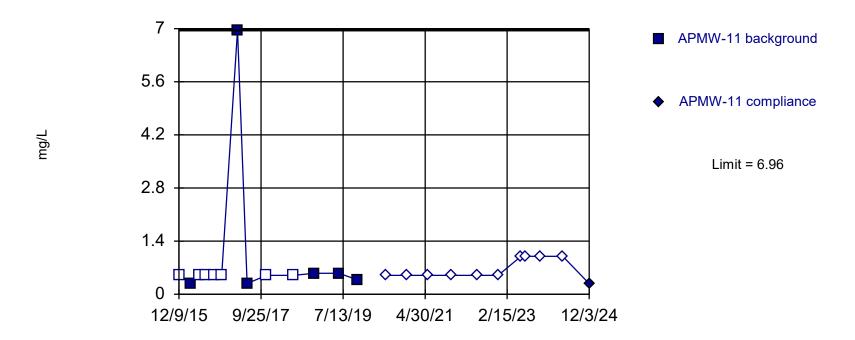
Background Data Summary: Mean=74.16, Std. Dev.=15.7, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9499, critical = 0.866. Report alpha = 0.005598. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:12 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

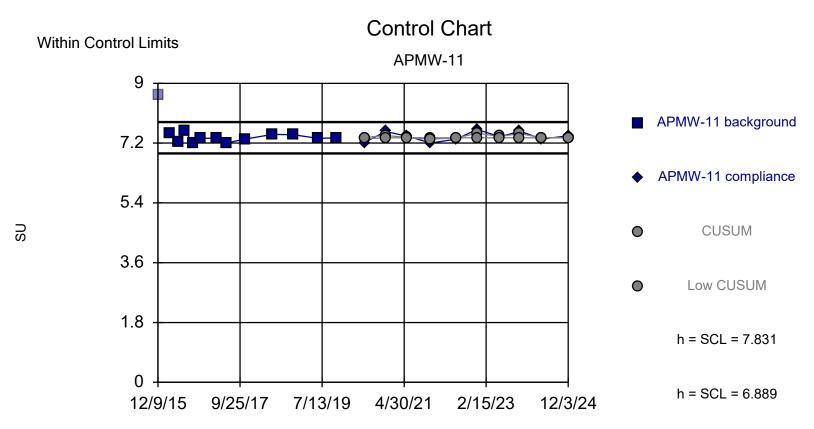
Prediction Limit





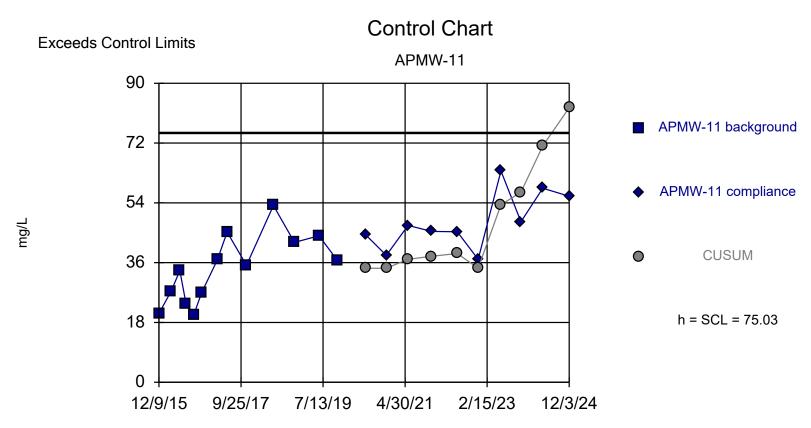
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:13 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



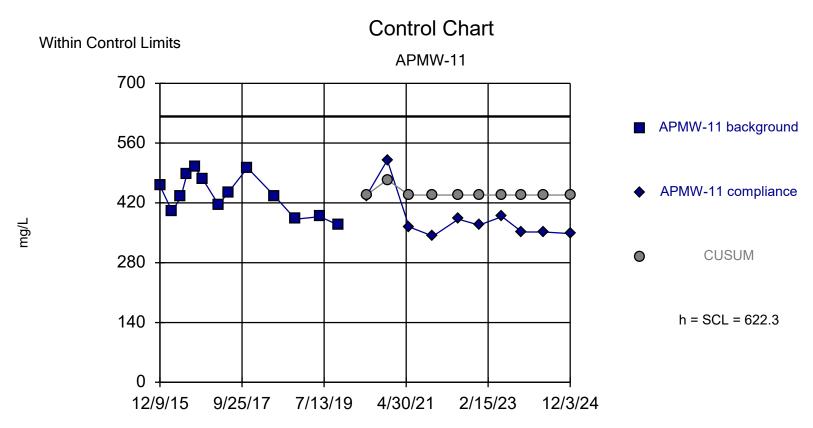
Background Data Summary: Mean=7.36, Std. Dev.=0.1177, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9429, critical = 0.859. Report alpha = 0.0067. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:09 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



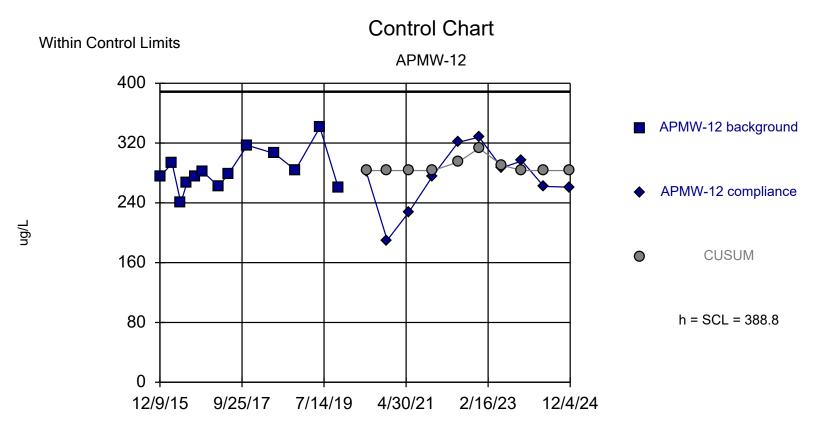
Background Data Summary: Mean=34.31, Std. Dev.=10.18, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9592, critical = 0.866. Report alpha = 0.02199. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:31 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



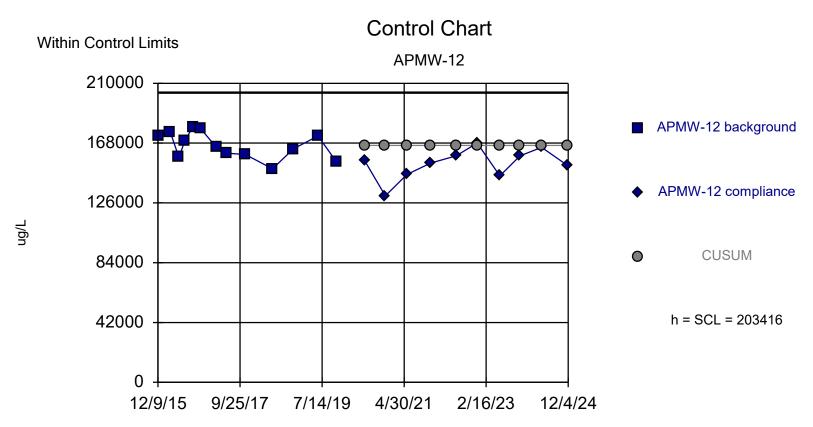
Background Data Summary: Mean=438.3, Std. Dev.=46.01, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.949, critical = 0.866. Report alpha = 0.005608. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:15 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



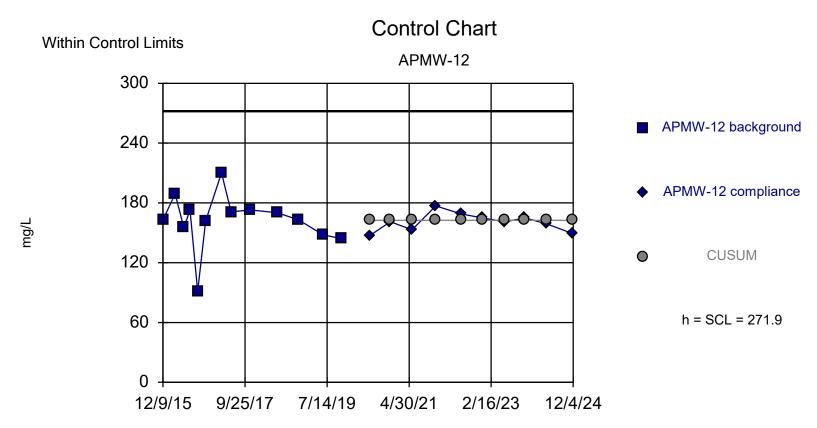
Background Data Summary: Mean=283.2, Std. Dev.=26.4, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9565, critical = 0.866. Report alpha = 0.0222. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 11:37 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=166308, Std. Dev.=9277, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9542, critical = 0.866. Report alpha = 0.005608. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:19 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

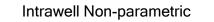


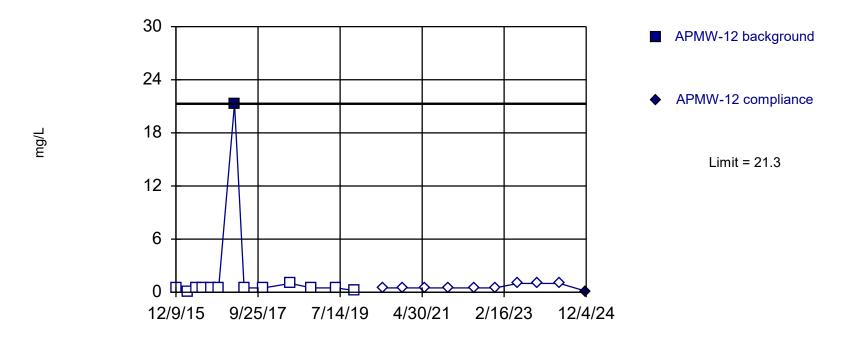
Background Data Summary: Mean=162.5, Std. Dev.=27.37, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8823, critical = 0.866. Report alpha = 0.005608. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:20 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

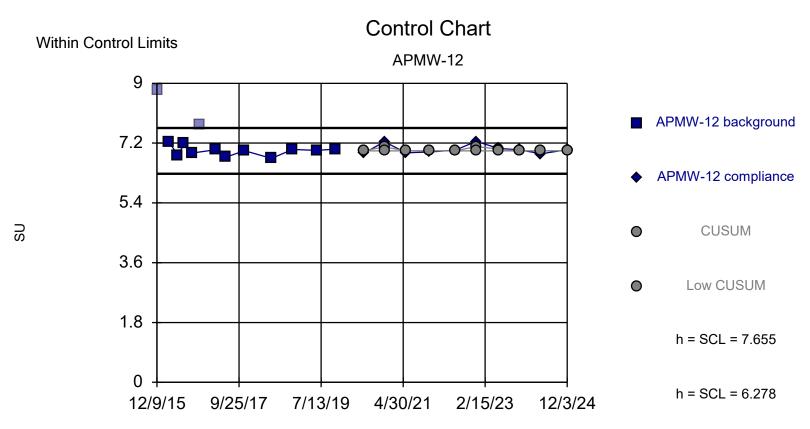
Prediction Limit





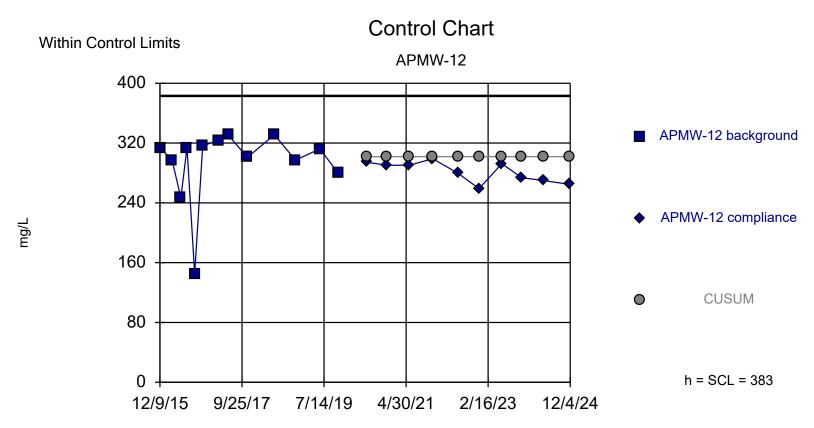
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:20 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



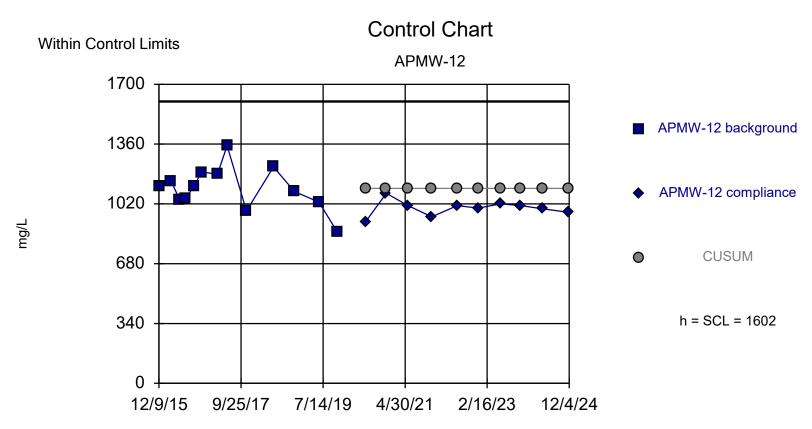
Background Data Summary: Mean=6.966, Std. Dev.=0.153, n=11. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9483, critical = 0.85. Report alpha = 0.005564. Dates ending 11/6/2019 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:17 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



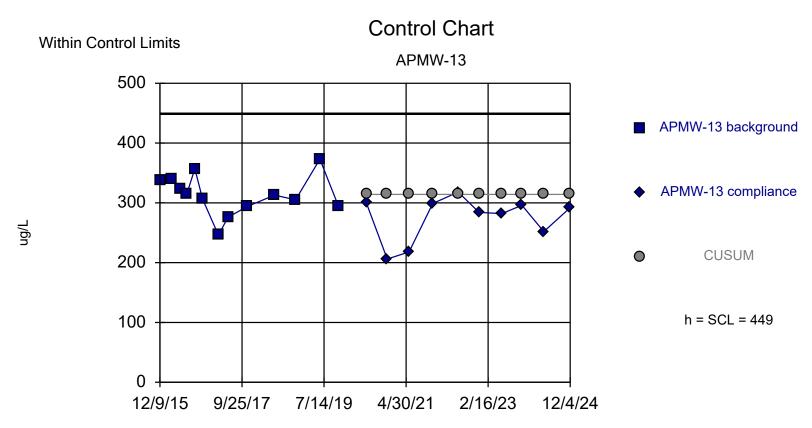
Background Data Summary (based on x⁴ transformation): Mean=8.3e9, Std. Dev.=3.3e9, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9018, critical = 0.866. Report alpha = 0.02199. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:35 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



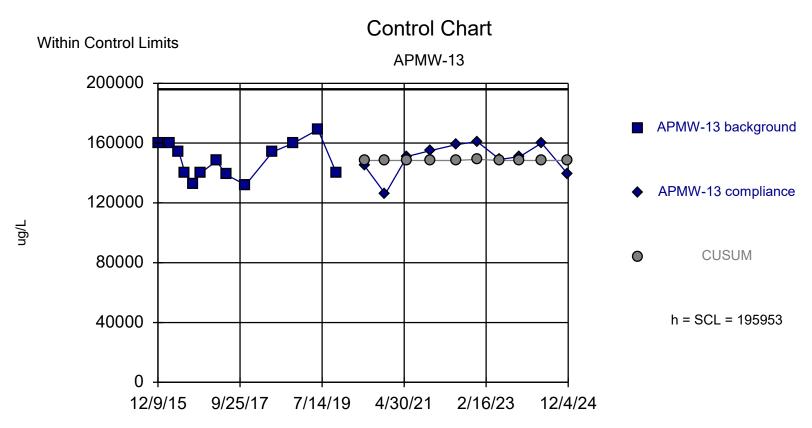
Background Data Summary: Mean=1108, Std. Dev.=123.5, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9869, critical = 0.866. Report alpha = 0.005884. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:22 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



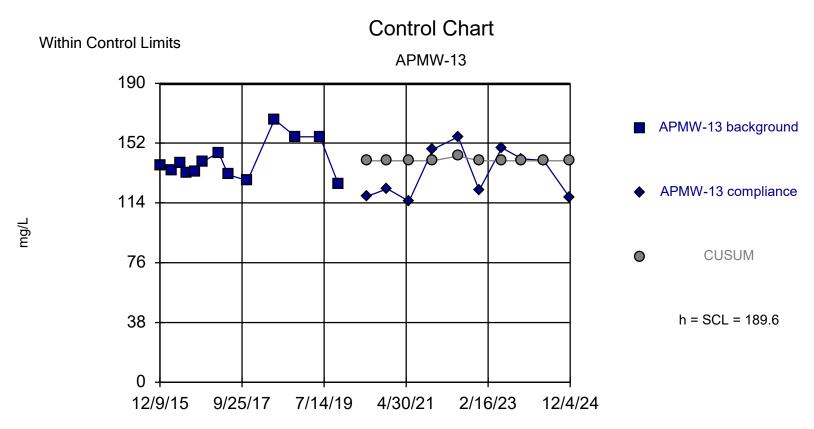
Background Data Summary: Mean=314.1, Std. Dev.=33.74, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9859, critical = 0.866. Report alpha = 0.02231. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 11:57 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=148385, Std. Dev.=11892, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.923, critical = 0.866. Report alpha = 0.005664. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:25 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

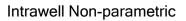


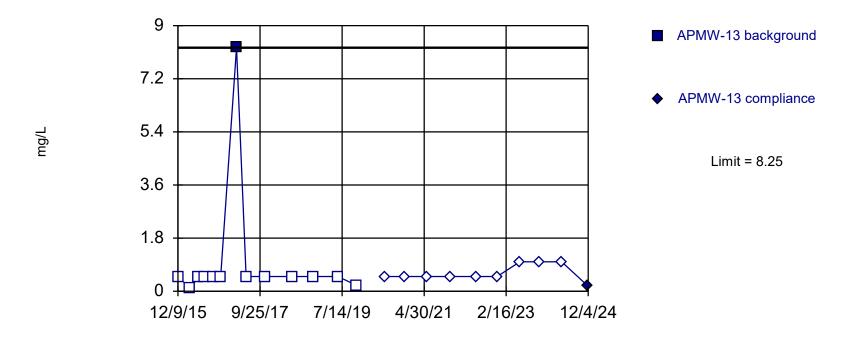
Background Data Summary: Mean=140.8, Std. Dev.=12.21, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9021, critical = 0.866. Report alpha = 0.005664. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:26 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

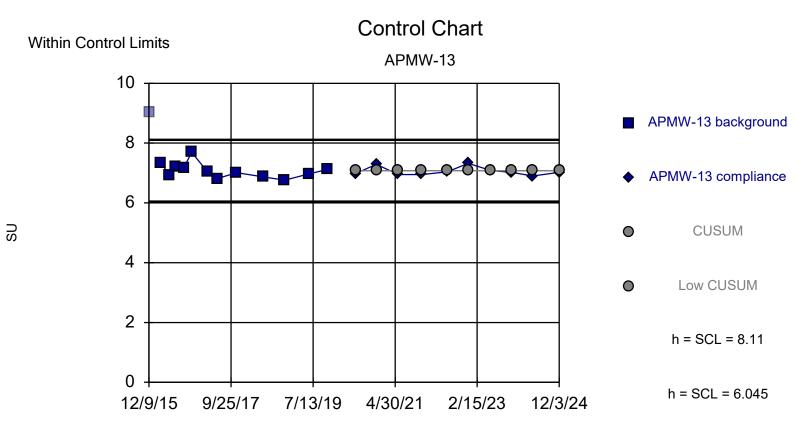
Prediction Limit





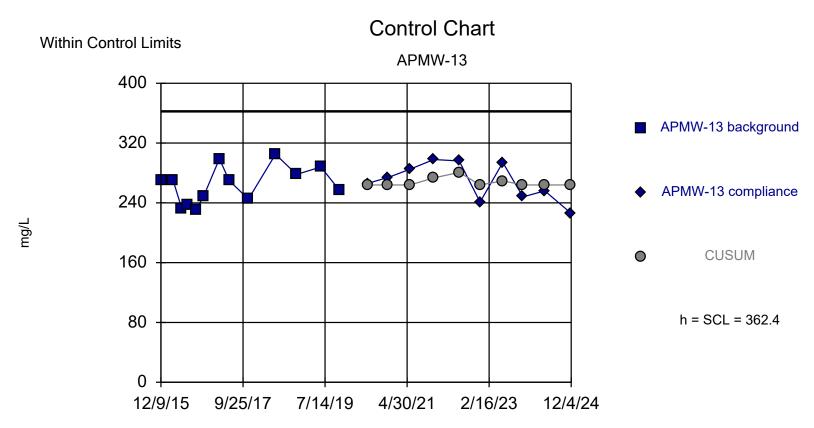
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:26 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



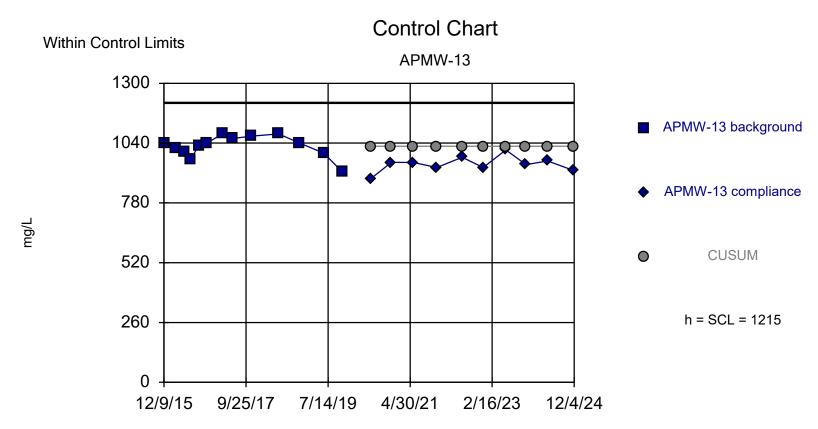
Background Data Summary: Mean=7.078, Std. Dev.=0.258, n=12. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.924, critical = 0.859. Report alpha = 0.0067. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:18 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



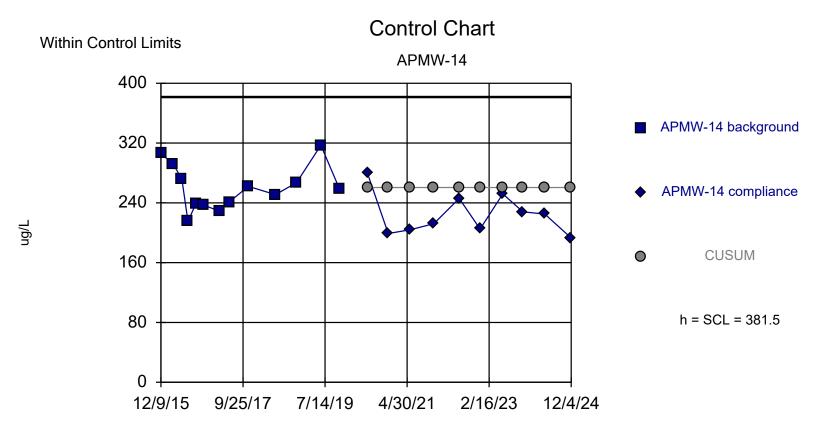
Background Data Summary: Mean=263.9, Std. Dev.=24.63, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9506, critical = 0.866. Report alpha = 0.02231. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 11:56 AM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



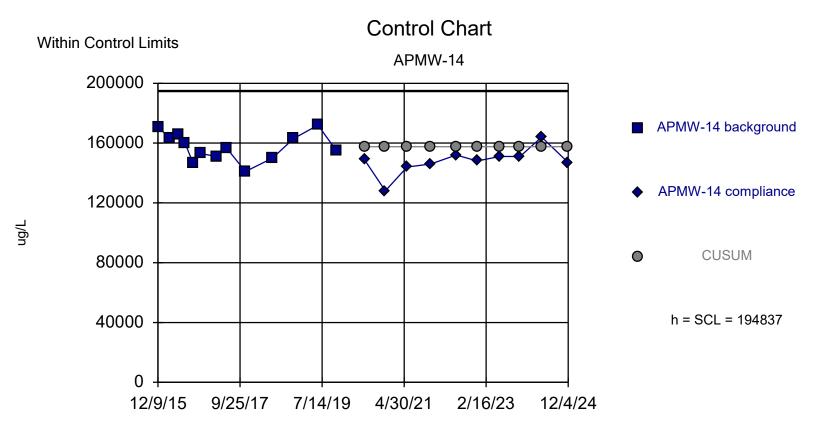
Background Data Summary: Mean=1026, Std. Dev.=47.08, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9114, critical = 0.866. Report alpha = 0.005664. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:28 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



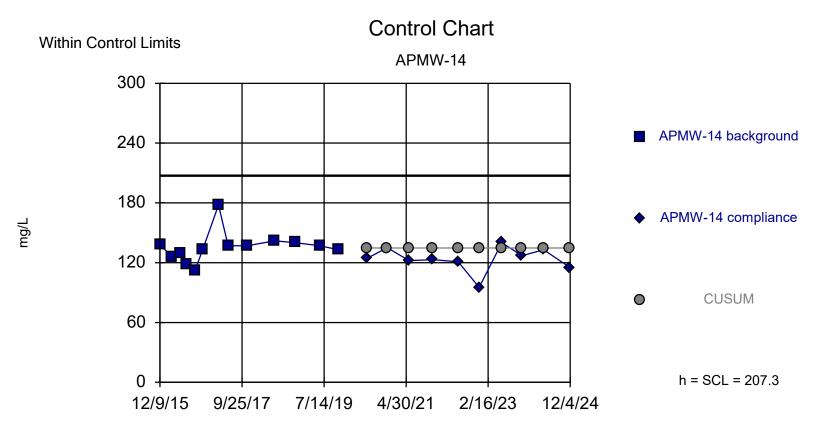
Background Data Summary: Mean=260.5, Std. Dev.=30.25, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9589, critical = 0.866. Report alpha = 0.02218. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Boron Analysis Run 1/25/2025 12:00 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



Background Data Summary: Mean=157615, Std. Dev.=9305, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9774, critical = 0.866. Report alpha = 0.005664. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:31 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

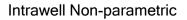


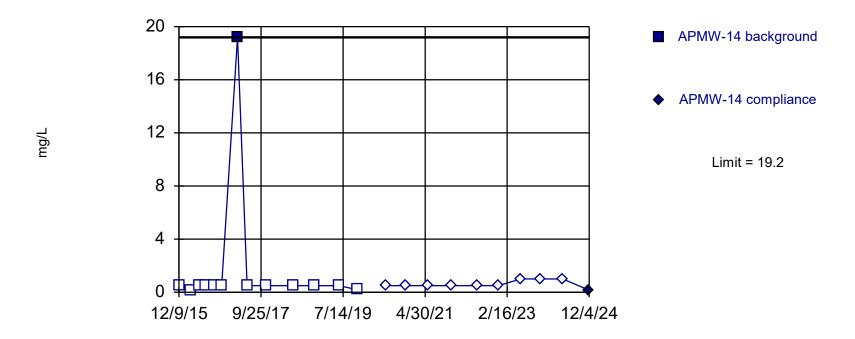
Background Data Summary (based on natural log transformation): Mean=4.904, Std. Dev.=0.1076, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8695, critical = 0.866. Report alpha = 0.005664. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:31 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

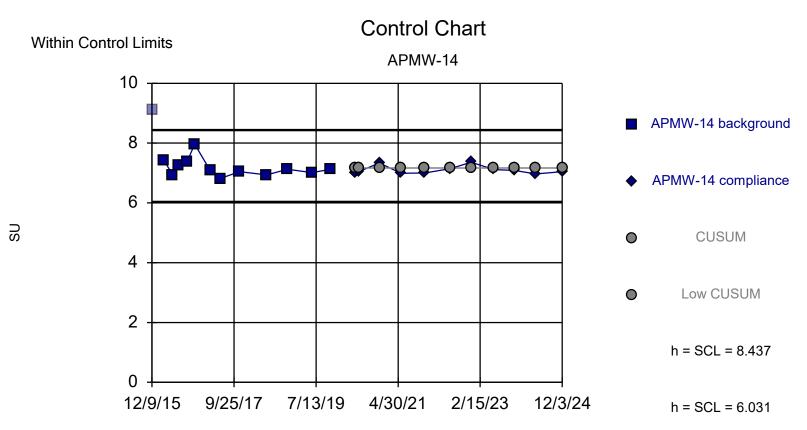
Prediction Limit





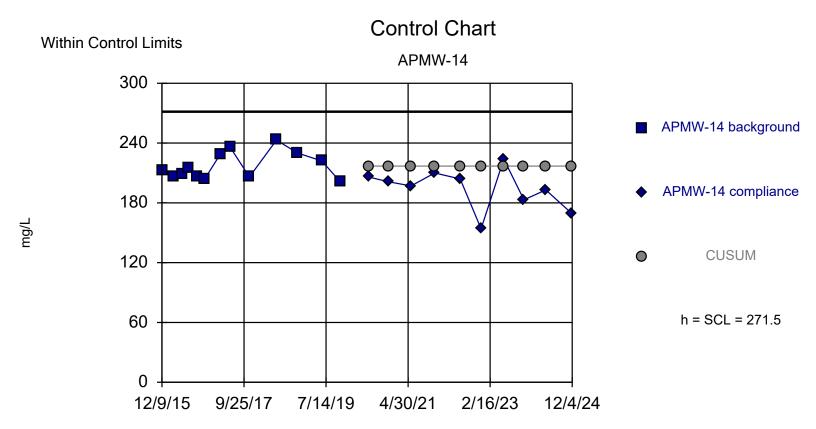
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:32 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



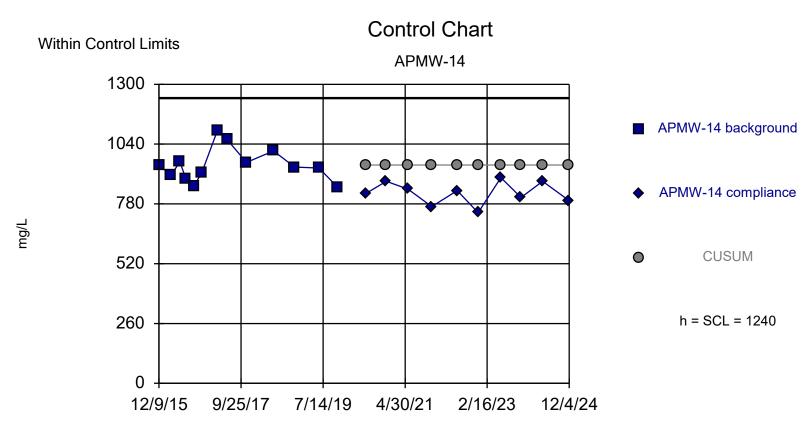
Background Data Summary (based on cube root transformation): Mean=1.928, Std. Dev.=0.02694, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8605, critical = 0.859. Report alpha = 0.00708. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:23 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=216.9, Std. Dev.=13.65, n=13. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8994, critical = 0.866. Report alpha = 0.02218. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/25/2025 12:01 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024_CCRParameters (2)[IN USE BY C1DBL33]



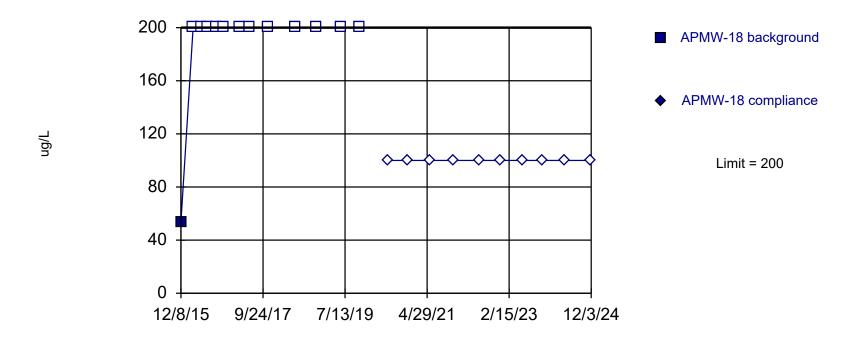
Background Data Summary: Mean=948.8, Std. Dev.=72.74, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9344, critical = 0.866. Report alpha = 0.0057. Dates ending 11/6/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:34 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas $^{\text{m}}$ v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

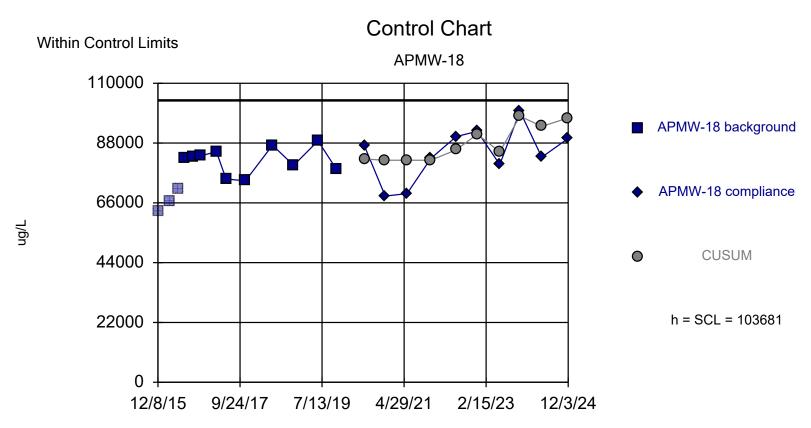
Prediction Limit

Intrawell Non-parametric



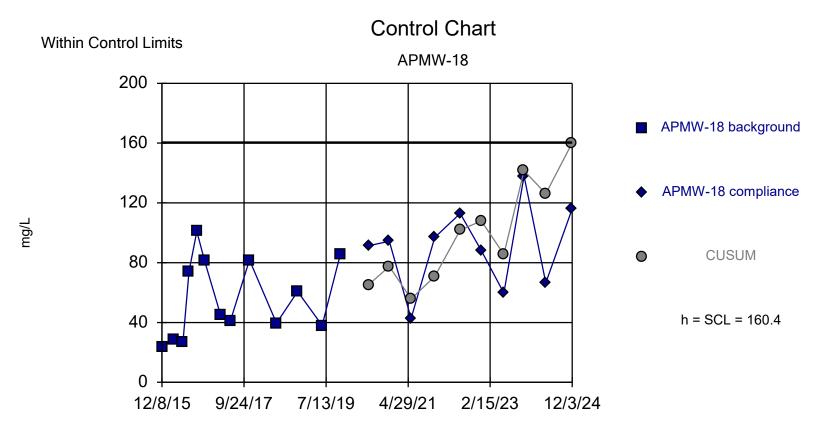
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/24/2025 12:39 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=81680, Std. Dev.=4889, n=10. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9537, critical = 0.842. Report alpha = 0.006882. Dates ending 11/5/2019 used for control stats. Standardized h=4.5, SCL=4.5.

Constituent: Calcium Analysis Run 1/24/2025 12:41 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



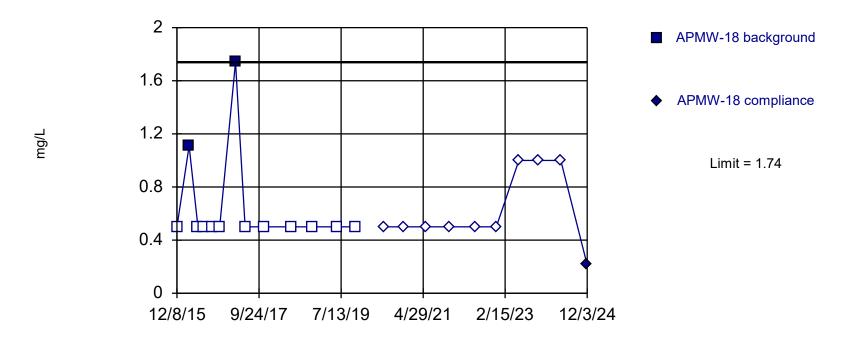
Background Data Summary: Mean=55.84, Std. Dev.=26.14, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9088, critical = 0.866. Report alpha = 0.005736. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:37 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

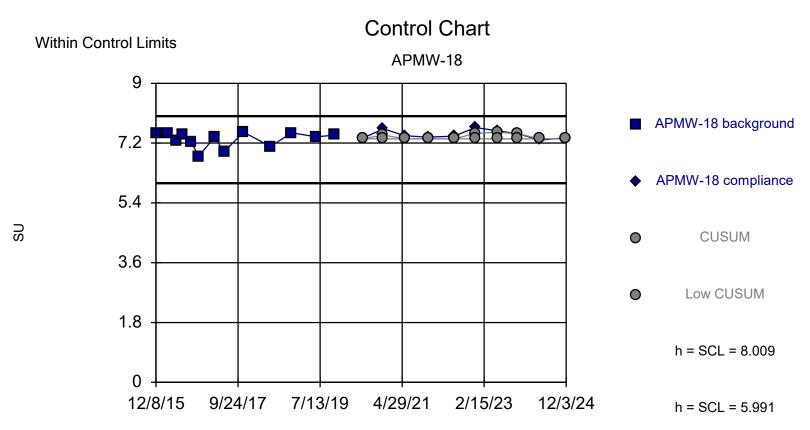
Prediction Limit

Intrawell Non-parametric



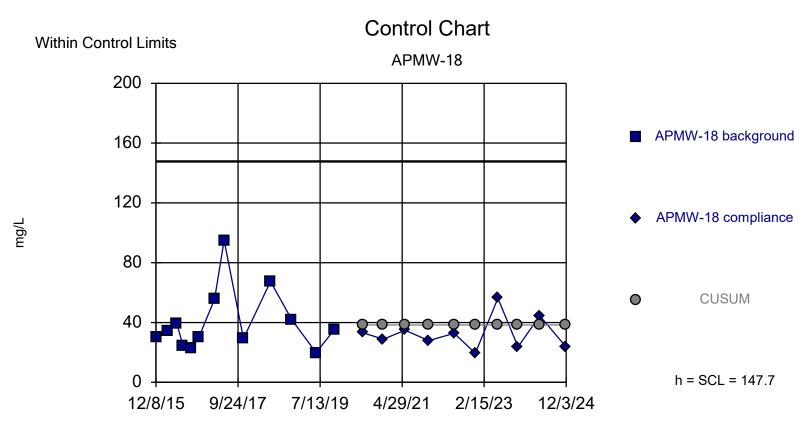
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:38 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



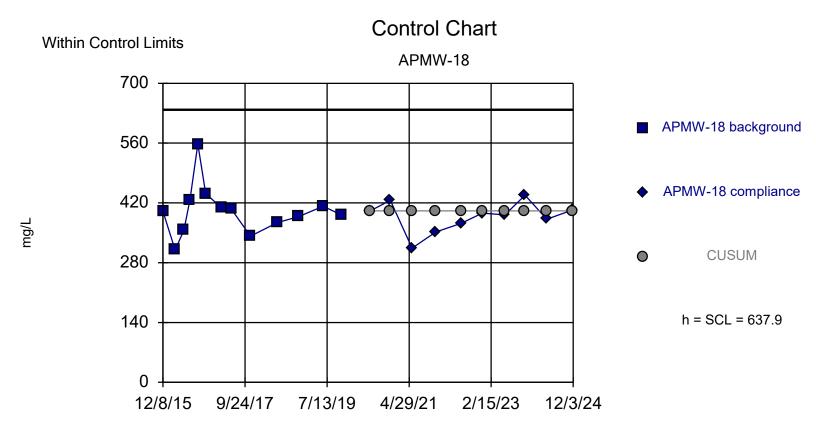
Background Data Summary (based on x⁶ transformation): Mean=155040, Std. Dev.=27197, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8703, critical = 0.866. Report alpha = 0.00567. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:22 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary (based on square root transformation): Mean=6.19, Std. Dev.=1.491, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8874, critical = 0.866. Report alpha = 0.005488. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/23/2025 2:39 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

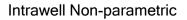


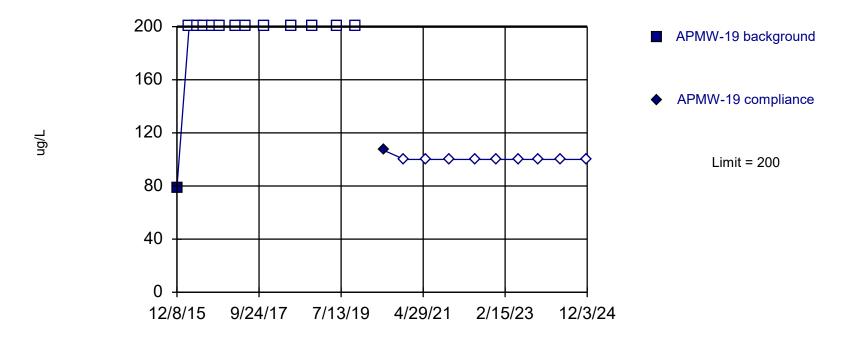
Background Data Summary: Mean=401.2, Std. Dev.=59.18, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8861, critical = 0.866. Report alpha = 0.005488. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:39 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

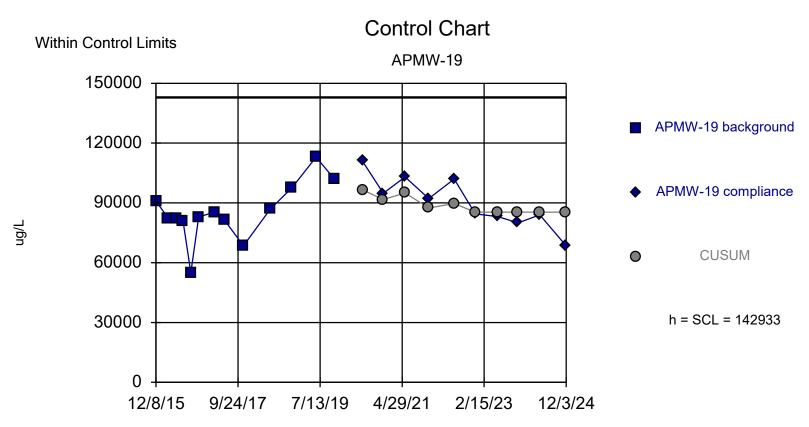
Prediction Limit





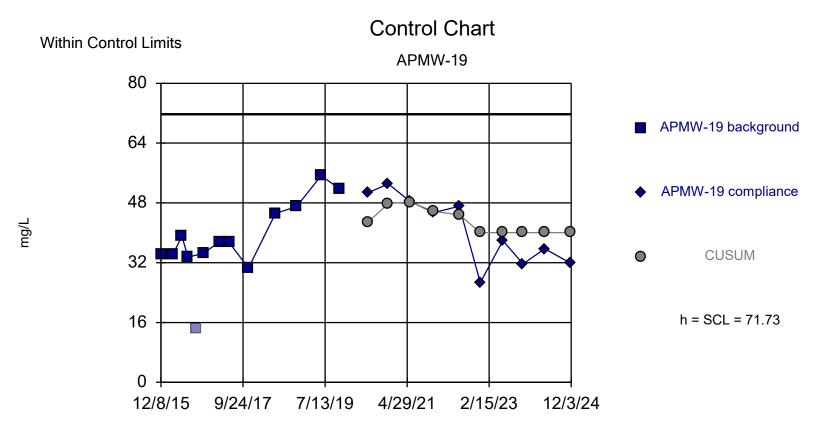
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 1/23/2025 2:41 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=85323, Std. Dev.=14403, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9453, critical = 0.866. Report alpha = 0.005658. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Calcium Analysis Run 1/23/2025 2:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



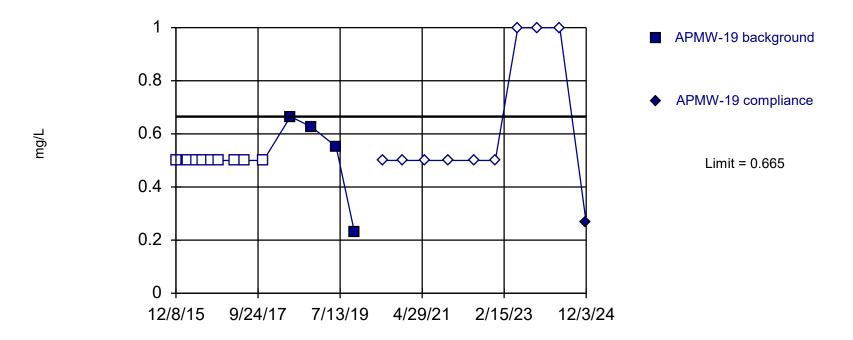
Background Data Summary: Mean=40.03, Std. Dev.=7.925, n=12. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8899, critical = 0.859. Report alpha = 0.006566. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Chloride Analysis Run 1/23/2025 2:42 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram Sanitas[™] v.10.0.24 Sanitas software licensed to Golder Associates. UG Hollow symbols indicate censored values.

Within Limit

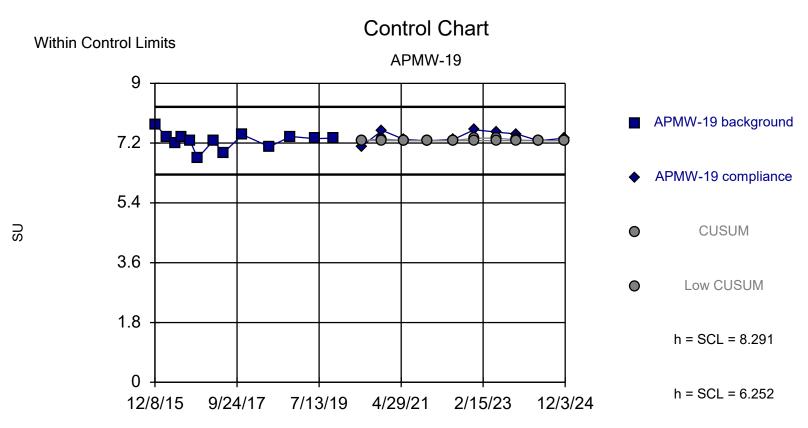
Prediction Limit

Intrawell Non-parametric



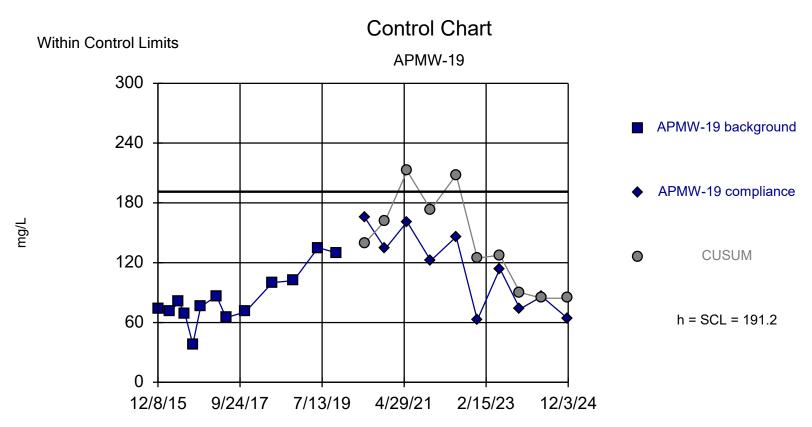
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2). Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 1/23/2025 2:43 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



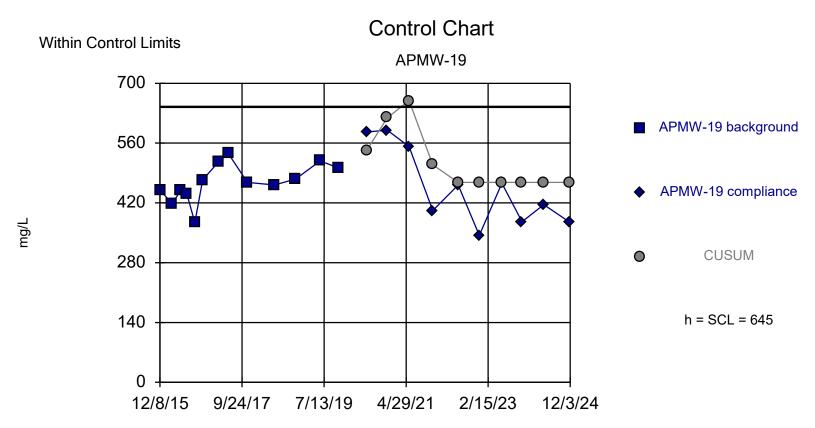
Background Data Summary: Mean=7.272, Std. Dev.=0.2548, n=13. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9316, critical = 0.866. Report alpha = 0.00567. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: pH, Field-Measured Analysis Run 1/23/2025 5:22 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=84.34, Std. Dev.=26.71, n=13. Exceedance nullified by following point per option settings. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9224, critical = 0.866. Report alpha = 0.005576. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Sulfate Analysis Run 1/23/2025 2:46 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram



Background Data Summary: Mean=468, Std. Dev.=44.24, n=13. Exceedance nullified by following point per option settings. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9679, critical = 0.866. Report alpha = 0.005576. Dates ending 11/5/2019 used for control stats. Standardized h=4, SCL=4.

Constituent: Total Dissolved Solids Analysis Run 1/23/2025 2:47 PM Gerald Gentleman Station Client: NPPD Data: NPPD-GGS_Q22024-NDEEProgram

APPENDIX C

Alternative Source Demonstrations

SOLDER

REPORT

Alternative Source Demonstration for Chloride at APMW-6

Nebraska Public Power District

Submitted to:

Nebraska Public Power District

Gerald Gentleman Station, 6089 South Highway 25, Sutherland, Nebraska 69165

Submitted by:

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31404512.000-004-RPT-0

October 26, 2022

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APPENDICES

APPENDIX A Historical Concentrations of Appendix III and Selected Appendix IV Analytes

APPENDIX B

Eurofins TestAmerica Laboratory Report for Irrigation Water Samples

1.0 INTRODUCTION

On behalf of Nebraska Public Power District (NPPD), Golder Associates USA Inc. (Golder), a member of WSP, performed a statistical evaluation of groundwater quality from the second quarter groundwater detection monitoring event in 2022 (Q2 2022) at the Gerald Gentleman Station (GGS or Site) ash landfill (or CCR Unit), located at 6089 South Highway 25, Sutherland, Lincoln County, Nebraska. The statistical evaluation was performed in accordance with the Site Sampling and Analysis Plan (Golder 2019a), which was developed in compliance with applicable provisions of 40 Code of Federal Regulations (CFR) Part 257, "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities; Final Rule" (CCR Final Rule), as amended, and corresponding regulations under Nebraska Administrative Code (NAC) Title 132, Chapter 7 (Integrated Solid Waste Management Regulations, Groundwater Monitoring and Remedial Action).

Statistical analyses of the Appendix III detection monitoring data for chloride in groundwater at the downgradient monitoring well APMW-6 indicated a potential exceedance of the statistical limit based on the parametric Cumulative Summation analysis (CUSUM) in the Q2 2021 sampling results, which was subsequently verified as evidence of a statistically significant increase (SSI) after the Q4 2021 event and again after the Q2 2022 results. Although determination of an SSI generally indicates that the groundwater monitoring program should transition from detection monitoring to assessment monitoring, both 40 CFR §257.94(e)(2) and NAC Title 132, Ch. 7, 004.03 allow the owner or operator (i.e., NPPD) 90 days from the date of determination (October 26, 2022) to demonstrate a source other than the CCR Unit, or another condition, caused the potential SSI for chloride at APMW-6.

Golder's review of the hydrological and geologic conditions at the Site indicated the potential for the SSI to have resulted from a source other than the CCR Unit. To assess potential chloride sources and the natural variability of chloride concentrations in groundwater, Golder reviewed analytical results of previously collected CCR-impacted water samples from the ash landfills, evaporation pond, surface water from the Sutherland Reservoir, surface waters from nearby agricultural areas, and groundwater samples. Based upon this assessment and in accordance with provisions of the CCR Final Rule, the NAC, and the site SAP (Golder 2019a), Golder prepared this Alternative Source Demonstration (ASD) for the CCR Unit. This ASD includes an evaluation of geological, hydrogeological, and chemical information regarding ash, surface water, and groundwater obtained from surface waters and monitoring wells installed within and adjacent to the CCR Unit.

This ASD conforms to the requirements of 40 CFR §257.94(e)(2) and NAC Title 132, Ch.7, 004.03 and provides the basis for concluding that the apparent SSI for chloride in groundwater at APMW-6 are not a result of a release from the CCR unit. The following sections provide a summary of the GGS CCR Unit, analytical and geochemical assessment results, a conceptual site model, and lines of evidence demonstrating an alternative source is responsible for the chloride SSI in groundwater at APMW-6.

2.0 BACKGROUND

2.1 Description of Waste Disposal Area

The ash landfill at GGS is located southwest of the plant's generation facility, in the northern one-half of Section 30, Township 13N, Range 33W. The ash disposal facility consists of Ash Landfill Nos. 1, 2, 3, and 4 and the bottom ash landfill. Ash Landfill Nos.1 and 2 are closed, and Ash Landfill Nos. 3 and 4 are active (Figure 1). The bottom ash landfill was closed in October 2018.

Fly ash is currently disposed at Ash Landfill No. 4 and in the east cell of Ash Landfill No. 3. The liner design at Ash Landfill No. 4 consists of a 60-mil high density polyethylene (HDPE) geomembrane over compacted subgrade. Prior to geomembrane installation, the existing subgrade was scored to a depth of at least 6 inches and compacted to 95 percent of its maximum dry density (standard Proctor). Smooth HDPE geomembrane was placed on the bottom of the ash landfill and textured HDPE geomembrane was placed on the side slopes. Construction quality assurance for the geomembrane installation was performed by Golder Construction Services and completed on November 15, 1994. There is no leachate collection system (LCS) at Ash Landfill No. 4.

The original liner at Ash Landfill No. 3 consisted of 2 feet of soil compacted to 95 percent of the standard Proctor maximum dry density. The average permeability of the liner was 1.2×10^{-8} centimeters per second (cm/sec). Ash Landfill No. 3 was previously closed in 1995 with 2.0 to 7.5 feet of soil cover. This cover was removed and the historically placed CCR was covered with a new liner in 2015. The new liner system at Ash Landfill No. 3 consists of a prepared subgrade overlain by a geosynthetic clay liner and 60-mil linear low-density polyethylene (LLDPE) geomembrane. Ash Landfill No. 3 also has a 1-foot LCS sand layer that reports to two sumps. Construction of the new Ash Landfill No. 3 liner system was completed in November 2015.

To the east of the ash landfill, plant process water, such as boiler blowdown, is managed in a 50-acre evaporation pond, as shown in Figure 1. CCR materials are not stored within the evaporation pond, and the facility is not regulated under the CCR rule. The bottom of the approximately 8 to 10 feet deep evaporation pond consists of re-compacted native soils.

2.2 Site Geology

The geologic sequence near the ash landfill was summarized by Woodward-Clyde in 1991. In the report, soil boring data from nine boreholes (APMW-1, APMW-2, APMW-3, APMW-4, APMW-5, EPMW-1, EPMW-2, EPMW-3, and EPMW-4) were used to characterize the Site geology. The geologic sequence, from top to bottom, was described as follows:

- 4 to 5 feet of topsoil and/or fill
- 20 to 35 feet of eolian silty sands
- 8 to 10 feet of silty clay paleosol at the top of the Ogallala Formation
- 25 to 35 feet of Ogallala Formation silts
- approximately 50 feet of Ogallala Formation sands or Ogallala Formation silts and clays, to the bottoms of the boreholes

The topsoil layer consists of stiff, dark brown, low to medium plasticity silty clay directly overlying the eolian silts and sands. Thickness of topsoil ranges from 0 to 4 feet. The fill material consists of stiff, dark brown, low plasticity sandy silty clay with trace gravel and other debris. Fill thickness ranges from 0 to 5 feet.

The eolian silts and sands (Quaternary Period) consist of loose to medium dense, tan, very fine-grained, well-rounded, and well-sorted sandy silts and silty sands. The thickness of this unit ranges from 17 feet (APMW-5) to 34 feet (EPMW-2). Materials with a bimodal texture (two distinct grain sizes) are present in the lower part of this unit. The eolian silts and sands are interpreted as wind-blown dune sand deposits.

The Ogallala Formation (Tertiary Period) was encountered in each of the nine boreholes at a depth beginning at 16 to 38 feet below ground surface (ft bgs) and extending to the bottom of the boreholes (109 to 133 ft bgs). The Ogallala Formation near the ash landfill may be separated into three general stratigraphic units:

- upper silty clay paleosol unit
- middle clayey or sandy silt unit
- Iower unit of either predominantly sand and gravel or an equivalent unit of predominantly silt and clay

The top of the Ogallala Formation is represented by a widespread paleosol (a previous soil horizon) that consists of a very stiff, reddish-brown to buff, low plasticity, silty clay to clayey silt with abundant calcareous nodules, calcareous matrix, and interbedded layers of caliche up to 1-foot thick. The thickness of the initial paleosol is about 8 to 10 feet, but the presence of interbedded caliche layers continues into the middle and lower Ogallala units.

The middle Ogallala Formation unit consists of a stiff to very stiff, buff-white to reddish-brown, low plasticity, clayey silt to sandy silt with abundant calcareous nodules, matrix, and caliche layers. Scattered occurrences of calcareously cemented siltstone layers from 0.5- to 1-foot thick are present in the lower part of this unit. The thickness of this middle unit ranges from about 25 to 35 feet. The clayey silts and sandy silts of this unit were possibly deposited as overbank or floodplain deposits in an alluvial depositional system.

There are two distinct lithofacies recognized in the lower Ogallala Formation unit. This unit is present for about 45 to 50 feet in the borings. One lithofacies consists of dense to very dense, reddish-brown, fine-grained silty sands grading into medium- and coarse-grained, poorly-graded sands with some fine gravels and some calcareously cemented sandstone beds (0.5- to 1-foot thick). This lithofacies was primarily encountered in borings on the northern side of the ash landfill (APMW-1, APMW-2, APMW-5, and EPMW-1; Woodward-Clyde 1991).

The second lithofacies recognized in the lower unit consists of stiff to hard, reddish-brown, low plasticity clayey or sandy silts with some calcareously-cemented siltstone beds. This lithofacies was encountered in borings on the southern side of the ash landfill (APMW-3, APMW-4, EPMW-2, EPMW-3, and EPMW-4; Woodward-Clyde 1991).

The lithologic differences and areal distribution of the two lower units suggest that the units were deposited in two separate facies of an alluvial system. The sand and gravel unit are possibly a series of longitudinal bars, channels, and channel-fill deposits, while the silt and clay unit is possibly a series of upper channel fills, overbank, or floodplain deposits (Woodward-Clyde 1991).

2.3 Site Hydrogeology

Based on observations made during logging of soil borings and findings of the Nebraska Water Survey Paper No. 70 (Goeke et al. 1992), the unsaturated geologic units underlying the ash landfill area consist of topsoil (0 to 4 feet thick), eolian silts and sands (15 to 25 feet thick), Ogallala Formation silts (40 to 50 feet thick), and Ogallala Formation sands and gravels (unsaturated portion of this unit is approximately 20 to 25 feet thick). Beneath these units lies 10 feet or more of saturated Ogallala Formation sands and gravels. Based on the Site observations, the thickness of the vadose zone ranges from approximately 90 to 100 feet.

The saturated geologic units underlying the ash landfill area consist of Ogallala Formation silts and sands that extend to the bottom of the aquifer. The Ogallala Formation is underlain by the White River Group, which is composed of the Brule and Chadron formations. The bedrock formations of the White River Group are not considered to be an important potential source of water, and therefore their surface is considered to form the base

of the aquifer and is regarded as the lower drilling limit for irrigation wells in the agricultural region near the Site. Underlying the White River Group is the impermeable Pierre Shale (Goeke et al. 1992).

Available groundwater elevation data indicate that groundwater beneath GGS flows from north to south (Figure 1). The groundwater gradient is controlled by the Sutherland Reservoir, an approximately 3,200-acre open water body located 1.5 miles north of the ash landfill that is used as a source of condenser cooling water for GGS (McMahon et al. 2010). Since groundwater level monitoring began in 1996, regular water level fluctuations have been observed in the monitoring wells located around the ash landfill. These fluctuations are attributed to seasonal trends in water consumption or recharge and precipitation patterns. From the time-series plot of historical water levels in each monitoring well (Figure 2), long-term changes in water levels between 1996 and 2022 are apparent. In general, water levels rose approximately 1.5 feet between 1996 and 2000 before declining between 9 to 10 feet between 2000 and 2009. The cause of the decline is not clear, but possible explanations include a regional response to the drought being experienced by parts of the western United States and/or a change in the amount of groundwater used for irrigation in the area around the Site. Between 2009 and 2022 water levels have continued to show seasonal variability, with seasonal maximums occurring in the spring and seasonal minimums occurring in the fall with no apparent long-term increasing or decreasing trend.

Groundwater flow velocity ranges from 5.0×10^{-4} to 6.7×10^{-2} per day (ft/day) and was estimated based on the following site-specific hydrogeologic data:

- estimated site hydraulic conductivities range from 0.14 ft/day to 19 ft/day (Woodward-Clyde 1991)
- an average horizontal hydraulic gradient of 0.00091 feet per foot (ft/ft) from the potentiometric surface shown in Figure 1
- an average effective porosity for Ogallala Formation sands and silts of 25 percent (Fetter 1994)

Two agricultural field are present immediately to the south of the ash landfills. Historical aerial imagery (Figure 3) showed that there was no center-pivot irrigation system prior to 2004. By 2006, a center-pivot irrigation system was installed, and aerial images from 2006, 2012, and 2020 indicates that irrigation water from that center-pivot was crossing the property boundary of GGS, as delineated by the greener foliage compared to the unirrigated land. The greener foliage along the southern edge of the ash landfills also indicates that the irrigation runoff discharges north towards GGS, into the ditch at that location.

Photographs of the southern property boundary indicate taken August 2, 2022, indicate two drainages are present from the agricultural area onto GGS property (Figure 4A and 4B), though no runoff was observed in the drainages. On August 11, 2022, NPPD observed irrigation water from the center pivot spraying across the property boundary (Figure 4C).

2.4 Groundwater Monitoring Network

Design of the ash landfill groundwater monitoring program considered the size, disposal and operational history, anticipated groundwater flow direction, and saturated thickness of the uppermost aquifer. Based on these factors, a monitoring well network that consists of four upgradient (background) monitoring wells and ten downgradient monitoring wells was installed around the ash landfill. The monitoring wells are listed in Table 1 and presented in Figure 1.

Table 1: Monitoring Well Network

Location	Upgradient (Background) Monitoring Wells	Downgradient Monitoring Wells
Ash Landfill	APMW-5, APMW-15, APMW-16A, APMW-17	APMW-4, APMW-6, APMW-8A, APMW-10, APMW-11, APMW-12, APMW-13, APMW-14, APMW-18, APMW-19

The four upgradient monitoring wells included in the groundwater monitoring program are used to represent the background groundwater quality, including potential variability. The ten downgradient wells were installed along the western, southern, and eastern boundaries of the active ash landfill. The depths of the monitoring wells were selected such that the monitoring wells are screened in the Ogallala Formation to yield groundwater samples that are representative of water quality in the uppermost water-bearing zone.

2.5 Groundwater Monitoring Program

Between March 1996 and December 2015, groundwater samples were collected for arsenic, selenium, and sulfate measurement twice a year from the 10 GGS monitoring wells administered under the Nebraska Department of Environment and Energy (NDEE) monitoring program (APMW-5, APMW-15, APMW-4, APMW-6, APMW-8A, APMW-10, APMW-11, APMW-12, APMW-13, and APMW-14). In June 2005, boron measurements were added to the analyte list. In 2015, four additional monitoring wells were installed to support the federal CCR monitoring program (APMW-16A, APMW-17, APMW-18, and APMW-19) and have been incorporated into the NDEE monitoring program.

For APMW-6, the current baseline for chloride was calculated using 13 independent groundwater samples collected between December 2015 and November 2019. Statistically valid baseline values were developed for each constituent at each monitoring well (Golder 2017 and Golder 2019a).

2.5.1 Chloride Concentration Trends

Chloride concentrations in the upgradient and downgradient groundwater are shown in Appendix A, Figure A4. Chloride concentrations in upgradient groundwater (from the four upgradient monitoring wells) ranged from less than 5.0 to 93.8 milligrams per liter (mg/L) between December 2015 and June 2022. Chloride concentrations varied between 7.02 to 210 mg/L in downgradient groundwater wells (based on the 10 downgradient monitoring wells) over the same period.

During the current baseline dates for APMW-6 (December 2015 to November 2019), chloride concentrations in groundwater at APMW-6 remained relatively steady compared to other downgradient wells, with values ranging between 7.0 and 15.5 mg/L in the 13 samples representing the current baseline period. A concentration of 20.4 mg/L was calculated as the parametric CUSUM statistical limit for chloride at APMW-6.

The Q2 2021 detection monitoring event reported a chloride concentration of 25.8 mg/L in groundwater at APMW-6 with a parametric CUSUM value of 31.7 mg/L, both exceeding the statistical limit of 20.4 mg/L. The exceedance was verified in Q4 2021 when the reported chloride concentration was 17.6 mg/L with a parametric CUSUM value of 36.6 mg/L exceeded the statistical allowance of 20.4 mg/L. A successful alternative source demonstration report was prepared for the elevated chloride at APMW-6 and submitted to NDEE on April 28, 2022 (Golder 2022) and accepted by NDEE on July 8, 2022 (NDEE 2022).

The Q2 2022 detection monitoring event reported a chloride concentration of 17.0 mg/L, which resulted in a parametric CUSUM value of 40.8 mg/L, which continued to exceed the statistical allowance of 20.4 mg/L.

2.6 Review of Sampling and Laboratory Testing Procedures

As part of the ASD, a review was conducted of the sampling and laboratory testing procedures used throughout baseline monitoring and detection monitoring to date, along with the collected results. Golder found that the analytical methodologies used were consistent with the stated objectives of the sampling program. No anomalies were found within the sampling and laboratory testing procedures and the collected results are considered valid.

Additionally, a review of the statistical assessment methods and associated results found the procedures followed during baseline and detection monitoring to be consistent with the stated procedures listed in the published Groundwater Monitoring Statistical Methods Certification (Golder 2017). Calculated limits were found to be consistent with the chosen statistical procedures as described in the Sampling and Analysis Plan (Golder 2019a) and recommended methodology found within the Unified Guidance (Environmental Protection Agency [EPA] 2009).

3.0 DATA SOURCES USED IN ALTERNATIVE SOURCE REVIEW

To assess groundwater downgradient of the GGS CCR facilities, Golder reviewed previously collected data and performed supplemental assessment activities. The following sections summarize the supplemental assessment activities.

3.1 Groundwater

3.1.1 On-site Groundwater Monitoring Data

NPPD GGS field personnel routinely collect groundwater samples from 14 monitoring wells around the ash landfill at GGS and submit them for chemical analysis. The following datasets were available to characterize the groundwater in the vicinity of the ash landfills:

- NDEE and CCR monitoring programs: As described in Section 2.5, the ongoing groundwater monitoring samples were collected between 1996 and 2022, and analyzed for field parameters, major cations, major anions, and select dissolved metals.
- Supplemental sampling in First Quarter (Q1) 2019: In February 2019, an additional set of groundwater samples were collected from eight of the 14 wells (APMW-5, APMW-17, APMW-4, APMW-8A, APMW-18, APMW-19, APMW-12, and APMW-14) to support the Q4 2018 ASD for fluoride at APMW-19 (Golder 2019b). These samples were analyzed for field parameters, major cations, major anions, and select dissolved metals. In addition, detection monitoring groundwater samples collected in Q4 2019 and Q2 2021 also had an expanded analyte list, including field parameters, major cations, major anions, and select dissolved metals.

3.1.2 Upgradient Off-site Monitoring Data

As discussed in Section 2.3, upgradient groundwater is sourced from the Sutherland Reservoir, which is fed by the Sutherland Canal with water from North Platte and South Platte Rivers. The following data sources were used to constrain the range of potential water qualities upgradient of GGS and the ash landfill:

 North Platte and South Platte Rivers: The United States Geological Survey (USGS) monitored South Platte River chemistry at Roscoe, Nebraska between 1975 and 2013 (USGS 2016a). The monitoring location at Roscoe, Nebraska is less than one mile downstream of where South Platte River water is diverted into the Sutherland Canal. The USGS also characterized North Platte River water between 1972 and 2011 at Keystone, Nebraska, immediately downstream of Lake Ogallala, where North Platte River water is diverted into the Sutherland Canal (USGS 2016b).

- Sutherland Reservoir and Canal: Surface water samples were collected from the Sutherland Reservoir and Sutherland Canal on October 28, 2019, to assess the source of regional groundwater at the site. These samples were analyzed for field parameters, major cations, major anions, and select dissolved metals (Golder 2019b). In addition to samples collected by NPPD personnel, seven water samples were collected from the center of the Sutherland Reservoir by the USGS between August 2005 and December 2006 (USGS 2016c and USGS 2016d).
- Shallow Groundwater around the Sutherland Reservoir: Between September 2005 and May 2007, the USGS collected 14 shallow groundwater samples from 12 wells less than one mile from the perimeter of Sutherland Reservoir (USGS 2016e).
- Upgradient Wells: In Q2 2021, NPPD personnel collected groundwater samples from wells north and east of GGS to characterize the regional groundwater. The wells included potable water wells (PW #1, PW #2, and PW #3), livestock watering wells (livestock well), and operating wells (OW-20, OW-21, OW-22, OW-23, OW-24, OW-25, and OW-36, as shown in Figure 5. The samples were analyzed for field parameters, major cations, major anions, and select dissolved metals.

3.2 Irrigation Water

Two types of irrigation water are identified as potentially important: center pivot spray and irrigation runoff. Center pivot spray is irrigation water that is sprayed directly onto GGS property without touching agricultural soil by the irrigation system near the southern property boundary (Figure 4c). Historical aerial imagery indicates that this irrigation system was installed in 2006 (Figure 3). NPPD was able to collect two samples of center pivot spray on August 11, 2022, with one sample collected from a tire depression in the ground and one sample caught directly in a bucket as the water sprayed onto the Site. Samples were sent to Eurofins Cedar Fall for water quality analysis, including field parameters, major cations, major anions, and select dissolved metals (Results in Appendix B). These samples were collected to characterize the water quality of the center pivot spray as it flows and infiltrates on the ground in the area of APMW-6.

Irrigation water runoff is surface water that flows through agricultural soils prior to traveling onto the Site through drainages into the ditch immediately south of the CCR unit and immediately upgradient of multiple downgradient monitoring wells, including APMW-4, APMW-6, APMW-8A, APMW-10, and APMW-11. Three indications that irrigation runoff is occurring include:

- 1) Historical aerial images from 2012 and 2020 showing green vegetation in the ditch outside of the range of the center pivot spray.
- 2) Deep drainages at low points between the agricultural fields and the ditch south of the CCR unit (Figure 4A and 4B).
- 3) Corn shucks in the ditch on NPPD property (Figure 4C).

NPPD field personnel monitored the drainages and ditch for irrigation water runoff to characterize the water quality of this flow. Unfortunately, no irrigation water runoff was observed in the drainages and ditch. Ongoing monitoring will continue until irrigation water runoff samples can be collected.

3.3 Evaporation Pond

In Q1 2019 and Q4 2020, surface water samples were collected from the evaporation pond. The samples were analyzed for field parameters, major cations, major anions, and select dissolved metals.

3.4 Coal Combustion Residuals Contact Water

To characterize the potential for the material in the ash landfill to release contaminants, NPPD GGS field personnel retrieved sump water from the Ash Landfill No. 3 LCS, and pond water in direct contact with CCR materials in Ash Landfill No.4 on October 28, 2019. These sample were analyzed for the same suite of parameters as the groundwater: field parameters, major cations, major anions, and select dissolved metals (Golder 2019b).

3.5 Geochemical Methods

The geochemical analysis of groundwater and surface water samples included field parameters, major cations and anions, and dissolved metals. Conductivity, pH, and temperature were measured in the field using a handheld meter. The pH of each sample was also measured in the laboratory. Major anions analyzed included chloride, sulfate, and bicarbonate and major cations included calcium, magnesium, potassium, and sodium.

The laboratory analyzed the ash landfill pond and sump water, onsite and off-site groundwater, and surface water (evaporation pond, Sutherland Reservoir, and Sutherland Canal) samples using the following methods:

- pH following SM 4500 H+ B (2017)
- alkalinity following Standard Method (SM) 2320B Alkalinity by Titration (2005)
- chloride, fluoride, and sulfate following USEPA SW846 9056A Determination of Inorganic Anions by Ion Chromatography Revision 1 (February 2007)
- ammonia following USEPA 350.1 Determination of Ammonia Nitrogen by Automated Colorimetry, Revision 2 (August 1993)
- total Kjeldahl nitrogen following USEPA 351.2 Determination of Total Kjeldahl Nitrogen by Semi-Automated Colorimetry, Revision 2 (August 1993)
- total nitrate-nitrite nitrogen following USEPA 353.2 Determination of Nitrate-Nitrite Nitrogen by Automated Colorimetry, Revision 2 (August 1993)
- antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, lead, lithium, magnesium, molybdenum, potassium, selenium, sodium, and thallium following USEPA SW-846 6020A (November 2004)

4.0 DATA EVALUATION

Historical concentrations of Appendix III analytes and selected Appendix IV analytes in groundwater at GGS, including analytes that are typically indicators of potential CCR seepage (e.g., arsenic, barium, molybdenum, and selenium), are presented in time series plots in Appendix A. The plots include the results of the supplemental samples that were collected in Q1 2019 to support the Q4 2018 ASD for fluoride at APMW-19 (Golder 2019b).

Sampling for the Appendix IV analytes concluded with the end of baseline monitoring in Q2 2017, which means there is a gap of six quarters in the data plots until the supplemental sampling results are shown in Q1 2019.

Figure 6 presents a Piper diagram with relative major ion chemistry for the monitoring well groundwater samples (only for samples analyzed for all major cations and anions; Q4 2017, Q1 2019, Q4 2019, and Q2 2021), offsite upgradient groundwater (NPPD and USGS sampled wells), regional groundwater sources (Sutherland Reservoir, Sutherland Canal, and North and South Platte River), irrigation waters from the center pivot spray, evaporation pond water, and coal ash impacted waters (Ash Landfill No. 3 sump water and Ash Landfill No. 4 surface pond water). The groundwater at the upgradient monitoring wells was dominated by calcium and bicarbonate. Samples from the downgradient monitoring wells were also majority calcium and bicarbonate ions, with the exception of a single sample (Q1 2019) from APMW-12 that was dominated by calcium and sulfate. The Sutherland Reservoir and Canal water, along with the average North and South Platte River waters are generally dominated by calcium, sodium, bicarbonate, and sulfate. Irrigation waters from the center pivot spray were dominated by calcium and bicarbonate. Sample bicarbonate. The evaporation pond water contained majority sodium and sulfate ions. The Ash Landfill No. 3 sump water sample was primarily sodium and bicarbonate, while the Ash Landfill No. 4 pond water was dominated by sodium and sulfate.

4.1 **Potential Chloride Sources**

Several potential sources, other than the active CCR Units, can contribute chloride to local groundwater at GGS, including outflows from the Sutherland Reservoir into regional groundwater, irrigation water runoff and center pivot spray from across southern property boundary, seepage from the evaporation pond, and seepage from historical deposits of fly ash that remain at GGS. These four potential sources of chloride to groundwater are described in this section.

4.1.1 Regional Groundwater from Sutherland Reservoir

As described in Section 2.3, the groundwater gradient in the area around the ash landfill shows groundwater flows from north to south, rather than from south to north in the direction of the South Platte River. The groundwater flow direction appears to be based on both the groundwater recharge provided by the Sutherland Reservoir to the north of GGS and groundwater extraction by irrigation wells located south of GGS that are pumped seasonally and used to support local agriculture. The Sutherland Reservoir is fed by the Sutherland Canal, which delivers water from both the North and South Platte Rivers for use as condenser cooling water at GGS.

The USGS collected 37 samples for chloride concentration analysis from the South Platte River at Roscoe, Nebraska between 1975 and 2013 (USGS 2016a). Chloride concentrations in the South Platte River ranged from 28 to 140 mg/L. The USGS collected 26 samples for chloride concentration analysis from the North Platte River at Keystone, Nebraska between 1972 and 2011 (USGS 2016b). Chloride concentrations in the North Platte River ranged from 16 to 24 mg/L.

The chloride concentrations of the Sutherland Reservoir and Sutherland Canal samples collected by NPPD field staff in October 2019 were 21.9 and 20.9 mg/L, respectively (Section 3.1.2). The six Sutherland Reservoir samples the USGS collected between August 2005 and December 2006 had chloride concentrations that ranged from 23.4 to 27.2 mg/L (USGS 2016c and USGS 2016d). The chloride concentrations in the Sutherland Reservoir and Sutherland Canal at the times of sampling (2005, 2006, and 2019) were more similar to concentrations observed in the North Platte River and lower than concentrations observed in the South Platte River.

Chloride concentrations in the North Platte River, South Platte River, and Sutherland Reservoir were sufficiently high enough to be regarded as a source of the elevated concentrations measured in groundwater at the upgradient monitoring wells at the Site and the elevated concentrations measured in downgradient groundwater at APMW-6, APMW-8A, and APMW-18. The groundwater from APMW-6 has the lowest chloride concentrations of any upgradient or downgradient CCR monitoring well (Figure 7 and Appendix A Figure A4). While the small increases in chloride concentrations at APMW-6 were only observed during detection monitoring (25.8 mg/L in Q2 2021, 17.6 mg/L in Q4 2021 which triggered the SSI, and 17.0 in Q2 2022), elevated concentrations at APMW-8A (56.3 mg/L to 124 mg/L) and APMW-18 (23.7 mg/L to 101 mg/L) were observed during the baseline and detection monitoring periods. The groundwater samples collected by the USGS and NPPD immediately around the Sutherland Reservoir (less than 1 mile) also support the hypothesis that the reservoir is the source of the elevated chloride concentrations at the Site (USGS 2016e). These shallow groundwater samples (10 collected by the USGS and 11 samples collected by NPPD) had chloride concentrations of between 21.9 and 36.1 mg/L, which is similar to the 5 to 93.8 mg/L chloride concentration range measured in groundwater at the GGS upgradient monitoring wells (APMW-5, APMW-15, APMW-16A, and APMW-17) between December 2015 and June 2022.

Figure 7 displays a box and whisker plot of the chloride concentrations from the GGS monitoring well network and samples of possible chloride sources at the Site. The plot indicates that groundwater-containing elevated chloride concentrations has been traveling across the Site, including past the upgradient monitoring wells, and has only recently started reaching downgradient monitoring wells.

McMahon et al. (2010) details the southernly flow of surface water from the Sutherland Canal and Sutherland Reservoir to the surrounding groundwater near GGS. Their analysis indicated that the front "edge" of Sutherland Reservoir water was in the approximate area of the CCR landfills, though the low density of wells sampled around the CCR landfills limited the resolution in that area.

4.1.2 Irrigation Water

As discussed in Section 2.3, historical ariel imagery (Figure 3) and site photographs (Figure 4) indicate that irrigation water runoff and center pivot spray are crossing the southern property boundary at GGS and flowing into the ditch immediately south of Ash Landfill No. 3 and No. 4. Ponded water in that ditch could infiltrate to groundwater and would have the potential to impact the wells located south of the ash landfills (APMW-4, APMW-6, APMW-8A, APMW-10, and APMW-11).

Chloride concentrations in center pivot irrigation water samples (Section 3.2) were elevated over concentrations recently observed in APMW-6 (17.0 to 25.8 mg/L between Q2 2021 and Q2 2022). On the piper diagram (Figure 6), groundwater from APMW-6 does have a similar signature (calcium bicarbonate dominant) to irrigation waters.

While two samples were collected and analyzed to represent center pivot spray water quality, NPPD field personnel did not observe irrigation water runoff to sample during the spring and summer of 2022.

4.1.3 Evaporation Pond

Although the evaporation pond is located to the east of APMW-6, and side-gradient in terms of groundwater flow (i.e., seepage from the evaporation pond would be unlikely to impact groundwater at monitoring well APMW-6), evaporation pond water quality was evaluated as a potential source in this section as it contains water related to GGS plant operations.

Groundwater quality at the three downgradient monitoring wells located around the evaporation pond (i.e., APMW-12, APMW-13, and APMW-14) indicates that process water discharged from the GGS plant and stored in the evaporation pond has migrated to groundwater. Historical monitoring results show that elevated concentrations of boron (Figure A2), chloride (Figure A4), sulfate (Figure A8), and TDS (Figure A9), which are elements that are typically associated with CCR, were detected in groundwater at these three monitoring wells closest to the evaporation pond compared to the upgradient monitoring wells.

Based on the slight differences in water quality between the groundwater at the monitoring wells APMW-12, APMW-13 and APMW-14 and the evaporation pond, mixing between the evaporation pond water and the upgradient groundwater likely occurs and groundwater at the monitoring wells is not entirely composed of seepage from the evaporation pond. This mixing reaction is supported by the Piper diagram in Figure 6, which shows samples from monitoring wells APMW-12 and APMW-14 plot on a mixing line between the evaporation pond and upgradient groundwater end-member data points.

During the Q4 2020 sampling of the evaporation pond surface water, the chloride concentration was 259 mg/L. Based on the similarities in water quality between the evaporation pond and adjacent groundwater monitoring wells (APMW-12, APMW-13, and APMW-14), the evaporation pond is considered a potential source of chloride to groundwater at GGS. However, it is unlikely the evaporation pond influenced groundwater quality at APMW-6, which is side gradient to groundwater flow underneath the evaporation pond (Figure 1).

4.1.4 Historical Ash Landfills

Historical deposits of fly ash present at GGS in the closed soil-lined Ash Landfills Nos. 1 and 2 may release soluble constituents to groundwater as the seepage generated by infiltrating precipitation interacts with the ash. While it was not feasible to collect a sample of seepage from Ash Landfills Nos. 1 and 2 directly, ash-impacted waters collected from Ash Landfill No. 3 sump and Ash Landfill No. 4 pond (Section 3.4) had chloride concentrations of 69 and 463 mg/L, respectively, and are assumed to represent potential ash impacted waters from closed ash landfills. At these concentrations, ash impacted seepage has the potential to increase chloride concentrations in downgradient wells, including APMW-6.

A ternary plot comparing sodium, potassium, and sulfate (Figure 8) reveals that ash impacted waters (i.e., contact water) have higher relative sodium abundances and lower relative potassium and sulfate abundances compared to the upgradient and downgradient groundwater. If infiltrating precipitation was leaching chloride from the closed fly ash storage facilities, the relative concentrations of sodium would increase considerably in the groundwater and would be more similar to the ash impacted waters, but this elevated sodium signature was not observed in any of the samples collected from the downgradient groundwater monitoring wells.

In addition to the elevated levels of chloride in the ash-impacted waters, boron was also identified as a primary CCR indicator based on high concentrations in sump water from Ash Landfill No. 3 (18.3 mg/L) and pond water from Ash Landfill No.4 (13.8 mg/L). Boron concentrations in groundwater at the upgradient and downgradient CCR Unit monitoring wells are presented in Appendix A, Figure A2. All upgradient and downgradient CCR Unit monitoring wells, with the exception of monitoring wells near the evaporation pond that may be influenced by process waters, have boron concentrations below the practical quantitation limit (PQL) (typically less than 0.2 mg/L). If seepage from the ash landfills were impacting groundwater and causing the chloride SSI, boron concentrations would be expected to be increasing.

5.0 EVIDENCE OF AN ALTERNATIVE SOURCE

Based on the testing results and list of potential alternate sources of chloride presented in this report, primary lines of evidence and conclusions drawn from the evidence used to support this ASD are provided in Table 2.

Key Line of Evidence	Supporting Evidence	Description
Lack of Primary CCR Indicators	Boron concentrations in groundwater	Boron (Figure A2) is a primary CCR indicator based on high concentrations in sump water from Ash Landfill No. 3 (18.3 mg/L) and pond water from Ash Landfill No.4 (13.8 mg/L). All upgradient and downgradient CCR unit monitoring wells, with the exception of monitoring wells near the evaporation pond that may be influenced by process waters, have boron concentrations below the PQL (typically <0.2 mg/L).
	Sodium concentrations in CCR impacted waters	The relative abundance of sodium in CCR impacted waters would indicate that high sodium concentrations would also be expected in groundwater if chloride was from CCR materials (Figure 8). Relative increases in sodium were not observed in monitoring wells at the Site, suggesting an alternative source of elevated chloride in groundwater at APMW-6
Groundwater Geochemistry	Elevated and variable chloride concentrations in upgradient monitoring wells	Chloride concentrations in groundwater at upgradient monitoring wells APMW-5, APMW-16A, and APMW-17 were elevated compared to chloride concentrations at monitoring well APMW-6 throughout the baseline monitoring period. Since the CCR unit cannot influence the chloride groundwater concentration in the upgradient wells, the only explanation is that there is an alternate source of chloride present in groundwater across the Site.
	Relative ion abundances in groundwater differs from ash landfill water	As presented in the Piper plot (Figure 6), relative differences in major ion concentrations show a distinct dissimilarity between the ash-impacted sump and pond waters and the downgradient groundwater samples, including from APMW-6. The geochemical properties of the downgradient groundwater samples are not consistent with seepage from the CCR unit.
Engineering Controls	Both Active CCR Landfill are Lined	The liner system at Ash Landfill No. 3 consists of a prepared subgrade overlain by a geosynthetic clay liner and 60-mil linear low-density polyethylene (LLDPE) geomembrane. Ash Landfill No. 3 also has a 1-foot LCS sand layer that reports to two sumps.
		The liner design at Ash Landfill No. 4 consists of a 60-mil high density polyethylene (HDPE) geomembrane over compacted subgrade.

Key Line of Evidence	Supporting Evidence	Description
		Liner system are less likely to release seepage and impact groundwater.
Local Sources of Chloride	Hydrogeology	The North and South Platte Rivers, which are ultimately the source of groundwater recharge that occurs from the Sutherland Reservoir located approximately 1.5 miles north of the ash landfill, have chloride concentrations between 16 and 140 mg/L. Samples from shallow wells near the Sutherland Reservoir and upgradient wells (Figures 6 and 7) indicate that groundwater with elevated chloride is migrating south through the Site (McMahon et al. 2010). Chloride concentrations in groundwater at APMW-6 were lower than other nearby wells, indicating that APMW-6 is the last of the downgradient monitoring wells to be affected by the higher chloride groundwater migrating south (Figure 7 and Appendix A Figure A4).
	Drainages from agricultural lands flow into the ditch immediately upgradient of APMW-6	Irrigation waters spraying directly onto GGS property near APMW-6 had sufficiently elevated chloride concentrations (32 to 34 mg/L) to be a potential source of chloride in groundwater downgradient of the ash landfills. Additional study is needed to understand the water quality, frequency, and magnitude of irrigation water runoff events.

6.0 CONCEPTUAL SITE MODEL

Golder developed a conceptual site model (CSM) that is presented graphically in Figure 9 to frame and support the ASD assessment approach. The CSM presents the GGS site layout, a summary of the geologic and hydrogeologic information, and a discussion of groundwater monitoring data, which together lays the groundwork for consideration and development of the ASD. Additionally, the CSM summarizes the findings of literature research that suggest certain naturally occurring groundwater conditions observed in Nebraska are present at the Site and may contribute to naturally elevated chloride concentrations in groundwater around the ash landfill.

7.0 CONCLUSIONS

In accordance with §257.95(g)(3) and NAC Title 132, Ch.7, 004.03, this ASD has been prepared in response the identification of an SSI for chloride at monitoring well APMW-6 following the Q2 2022 sampling event for the ash landfill at Gerald Gentleman Station.

A review of historical analytical results indicates that the elevated chloride concentrations in groundwater at APMW-6 were not the result of seepage from the ash landfill but can be attributed to chloride in regional groundwater from the Sutherland Reservoir or in infiltrating surficial flows of irrigation water from agricultural lands immediately to the south of the GGS property. Therefore, no further action (i.e., transition to Assessment Monitoring) is warranted, and the Gerald Gentleman Station ash landfill will remain in detection monitoring.

Signature Page

Golder Associates USA Inc.

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Emily Sportsman Senior Geochemist



Jacob Sauer, PE(NE, CO) Senior Lead Consultant

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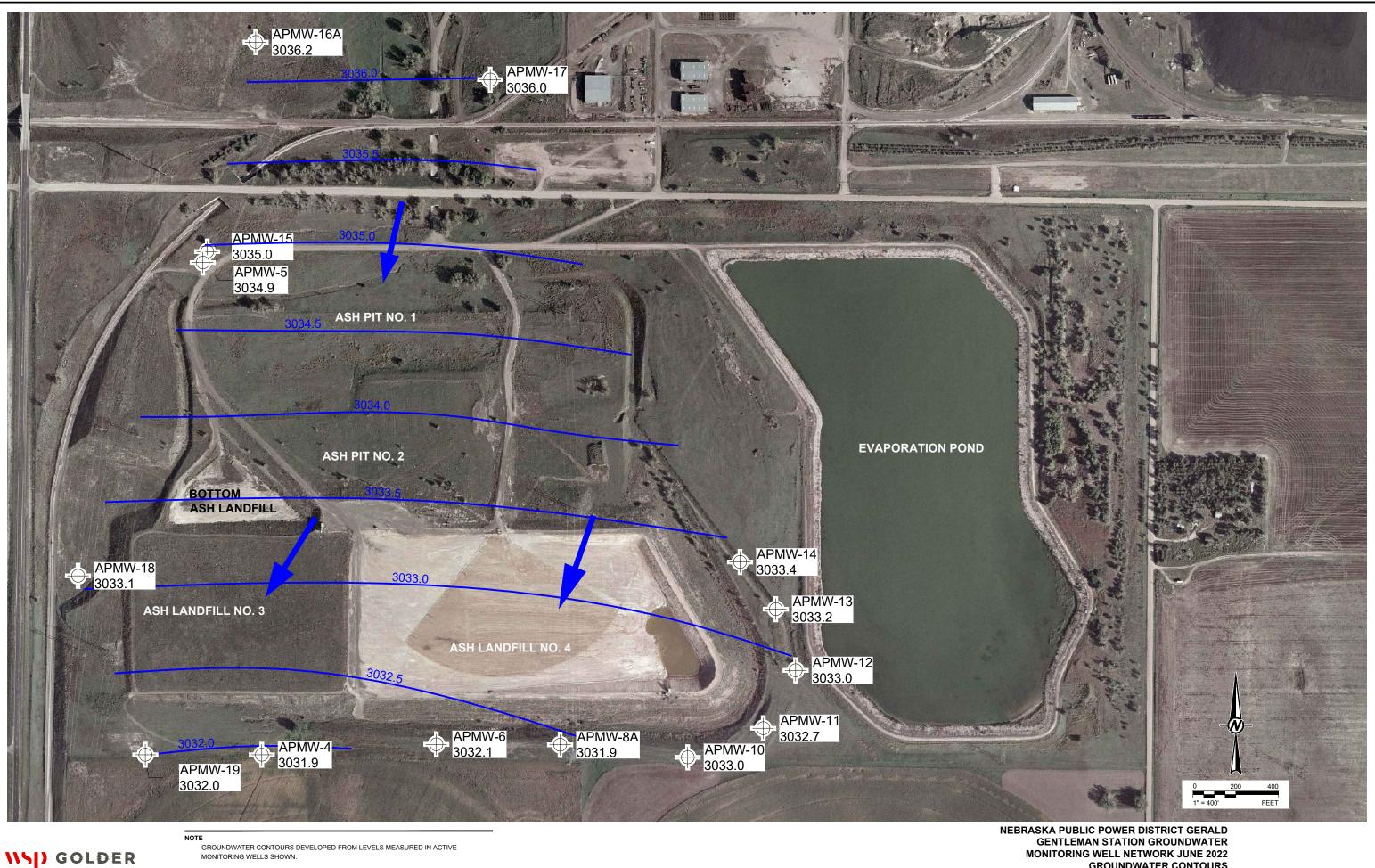
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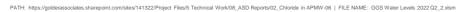
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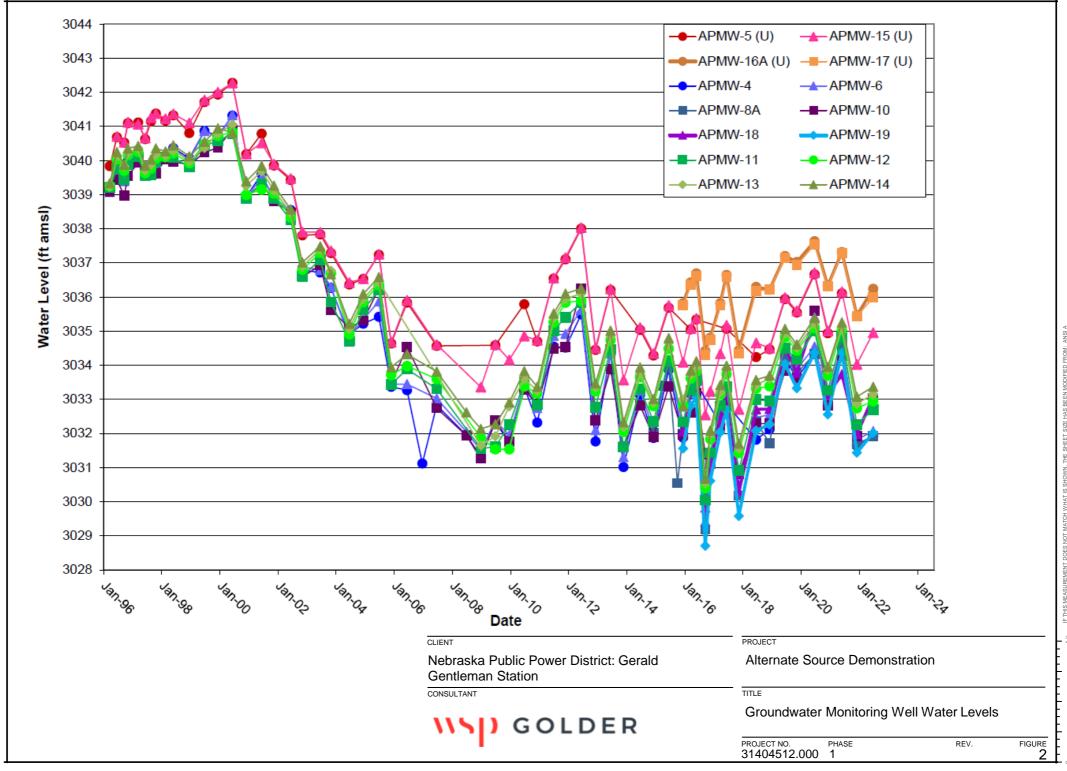
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Figures



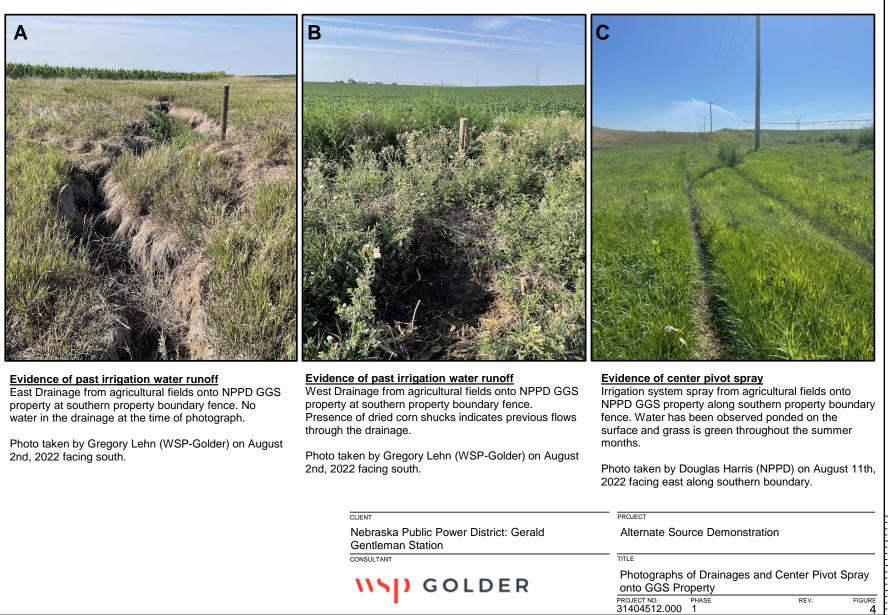
NEBRASKA PUBLIC POWER DISTRICT GERALD GENTLEMAN STATION GROUNDWATER MONITORING WELL NETWORK JUNE 2022 GROUNDWATER CONTOURS FIGURE 1





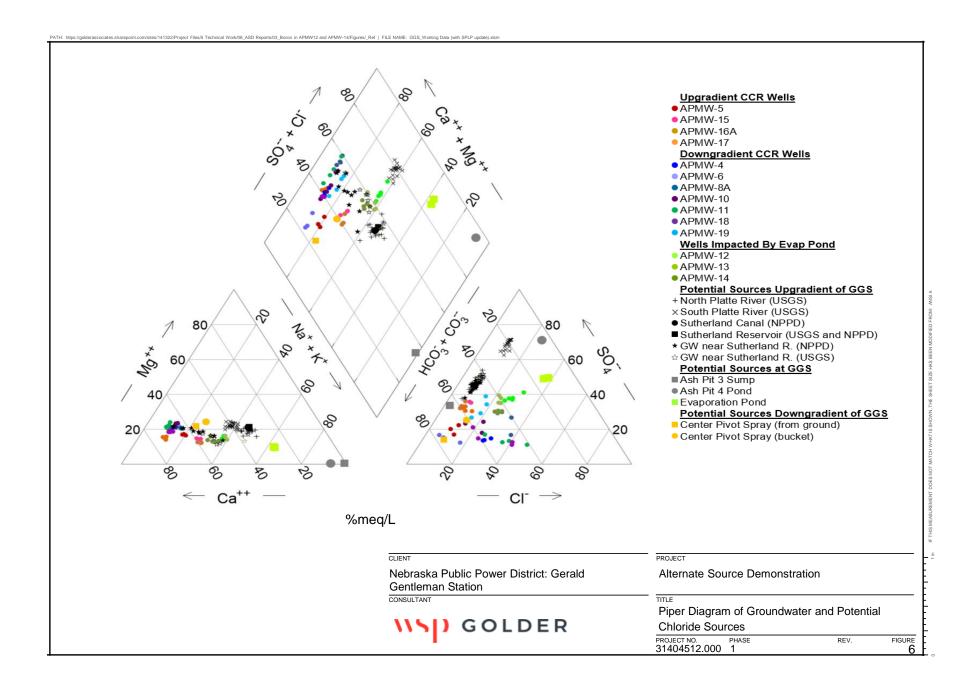


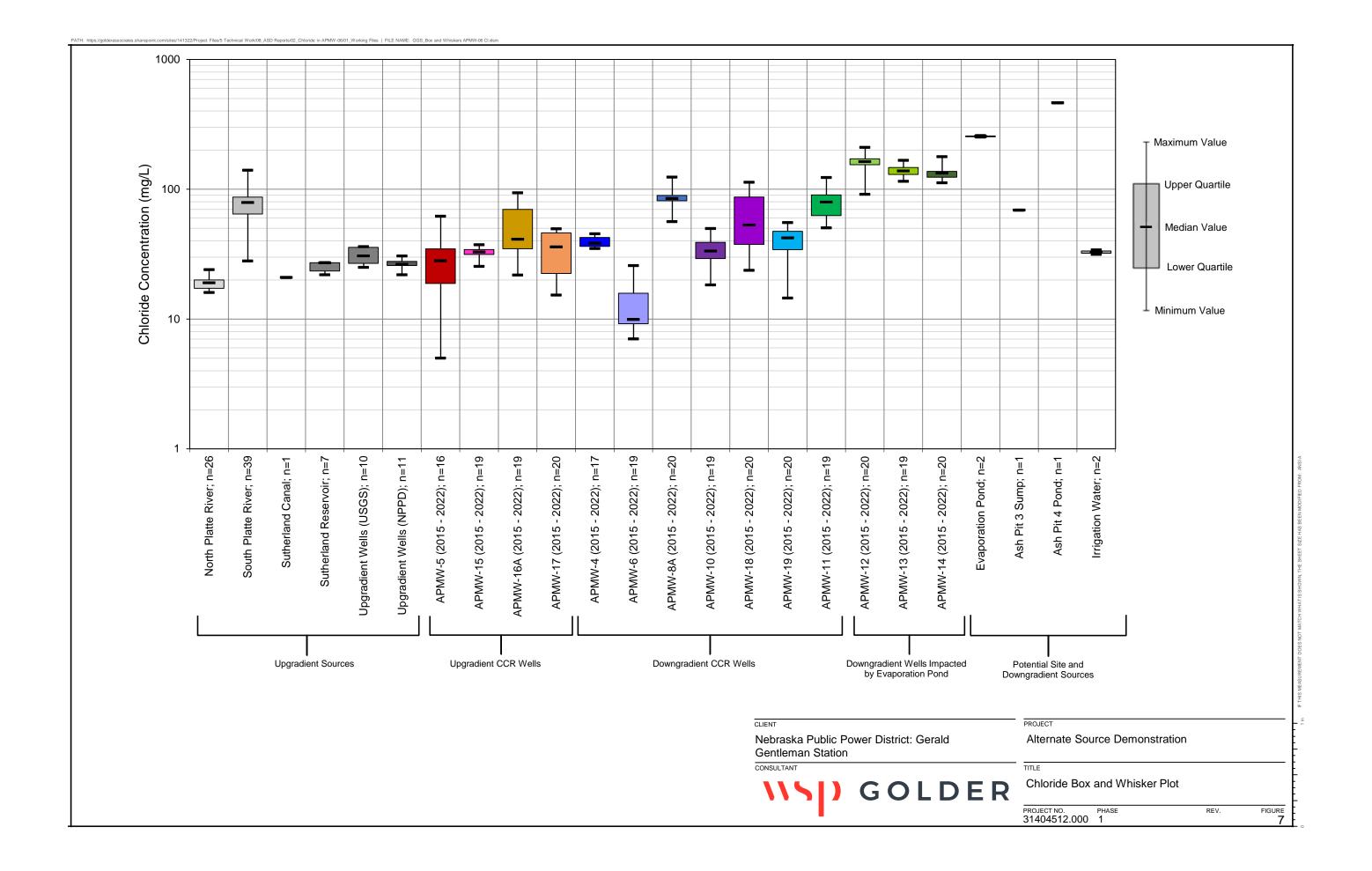
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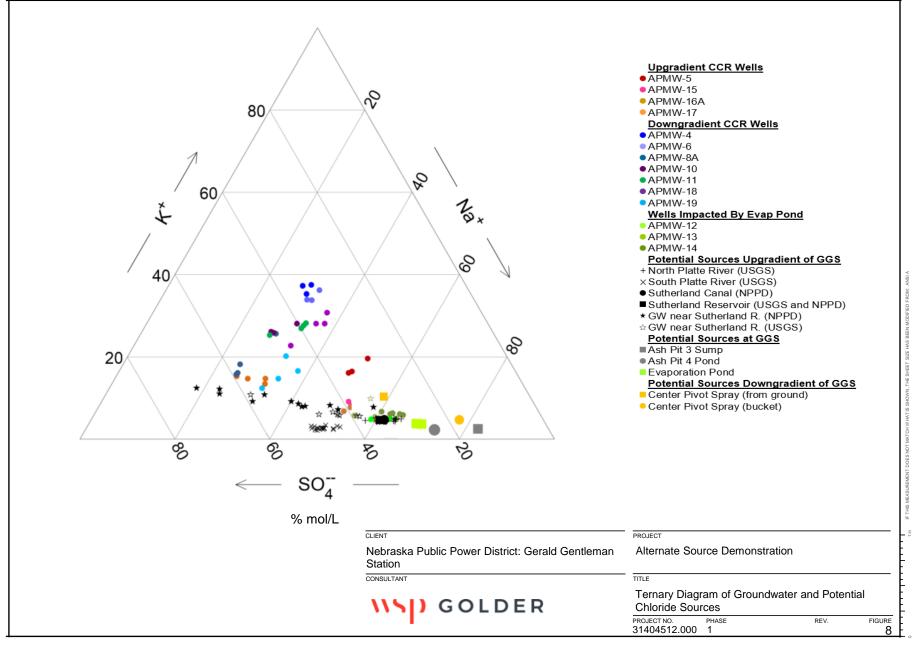


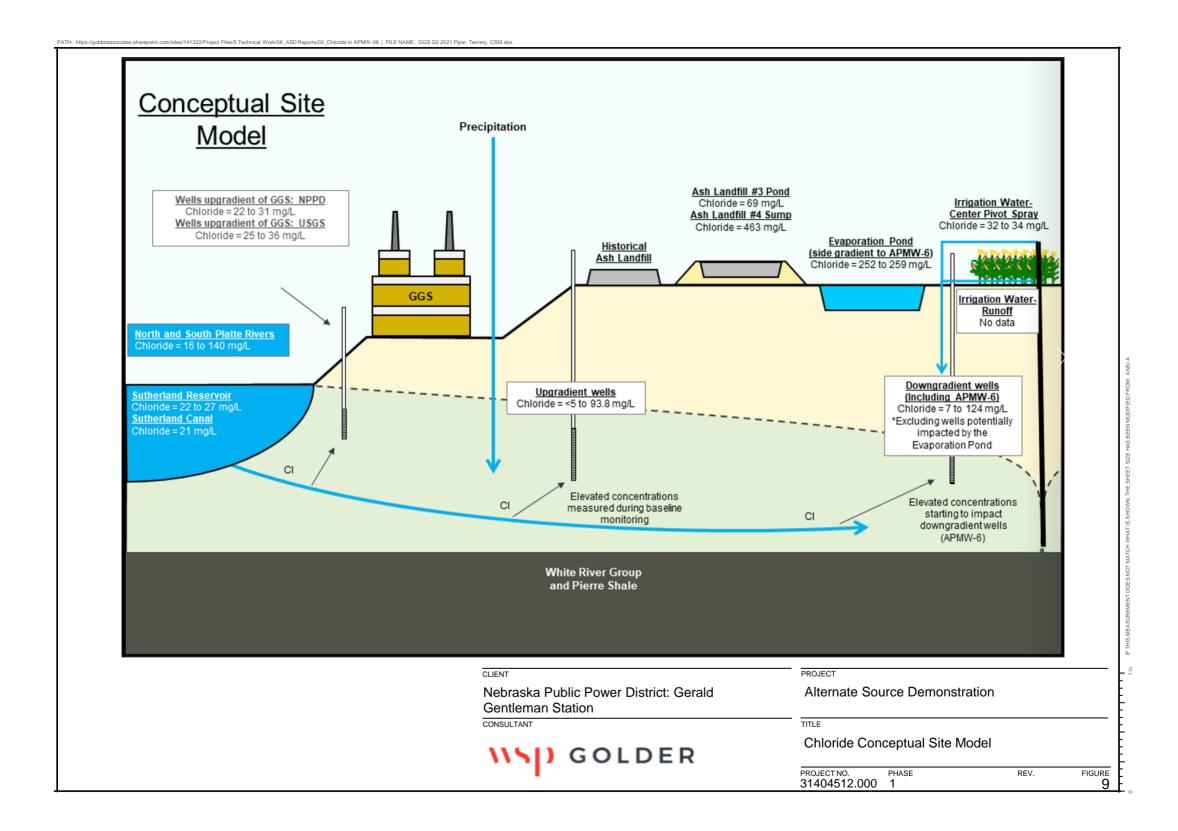
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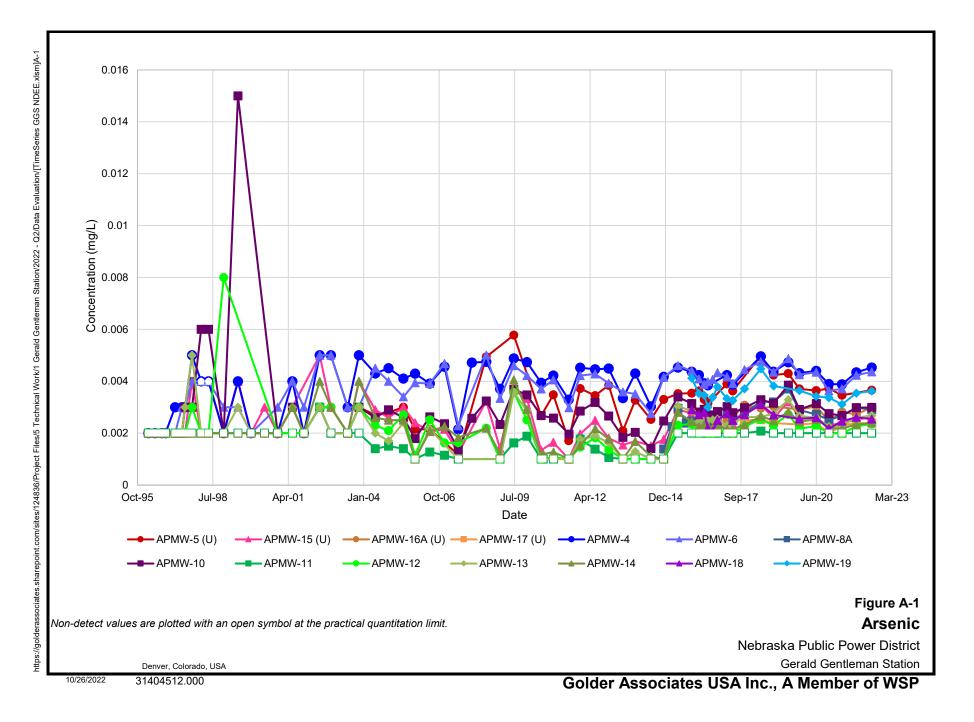


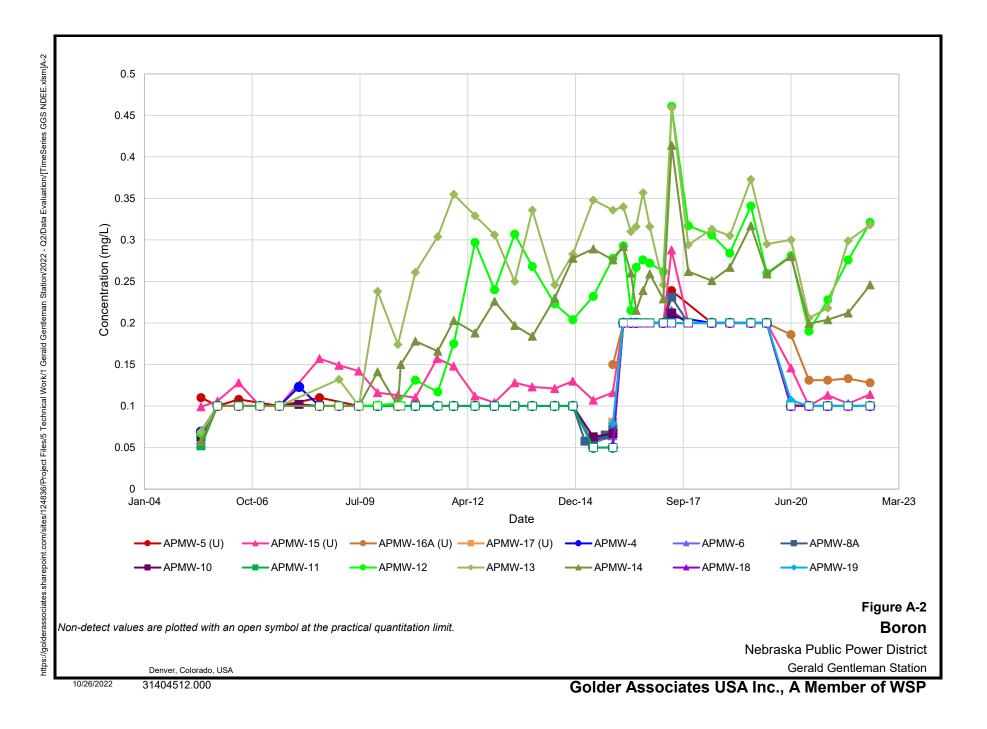


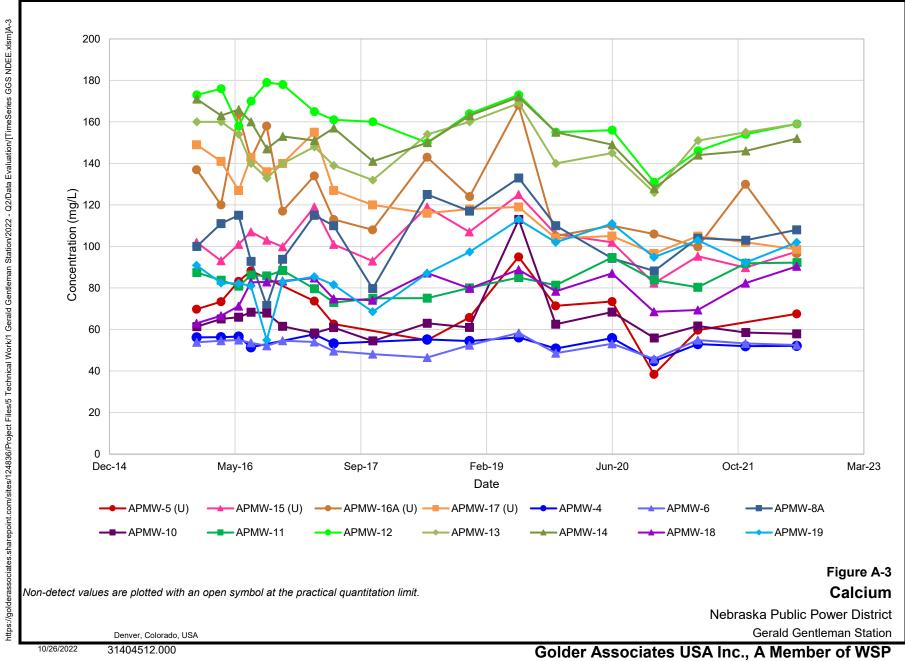


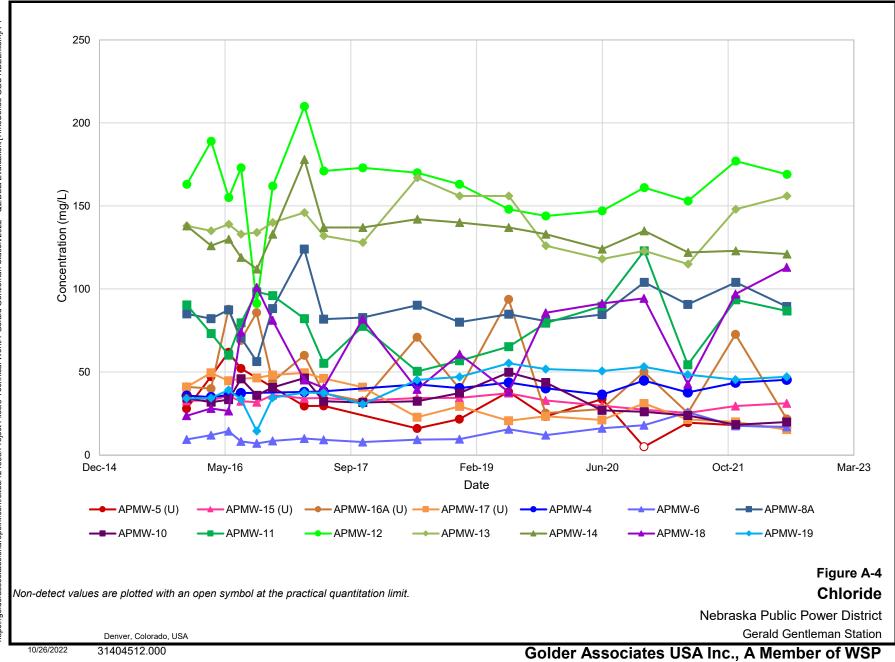
APPENDIX A

Historical Concentrations of Appendix III and Selected Appendix IV Analytes

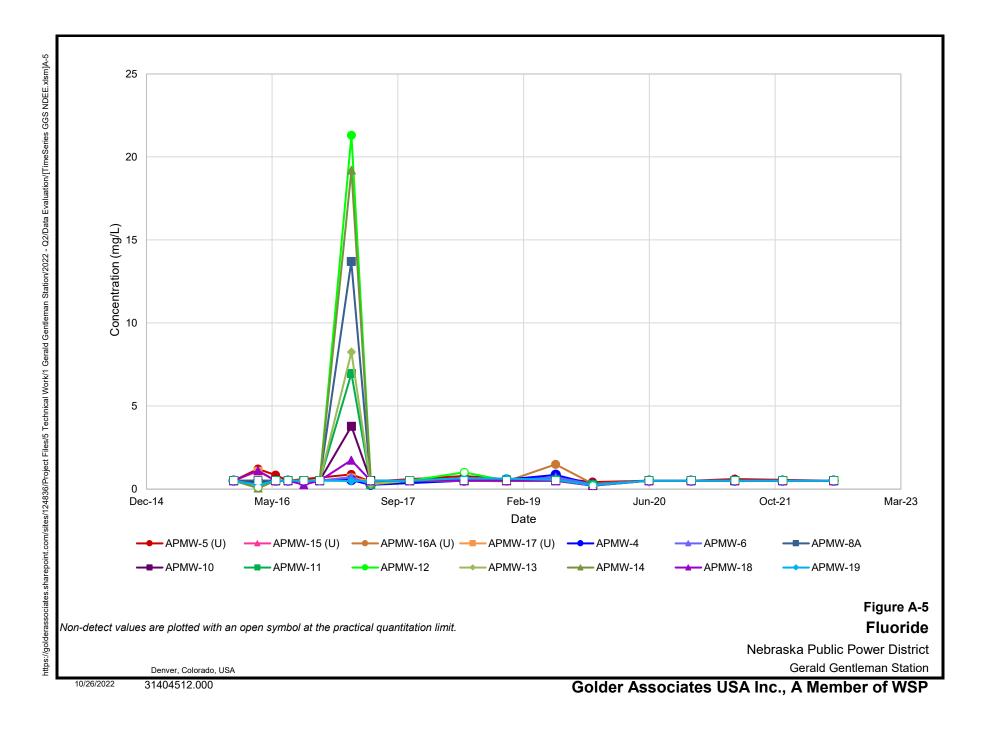


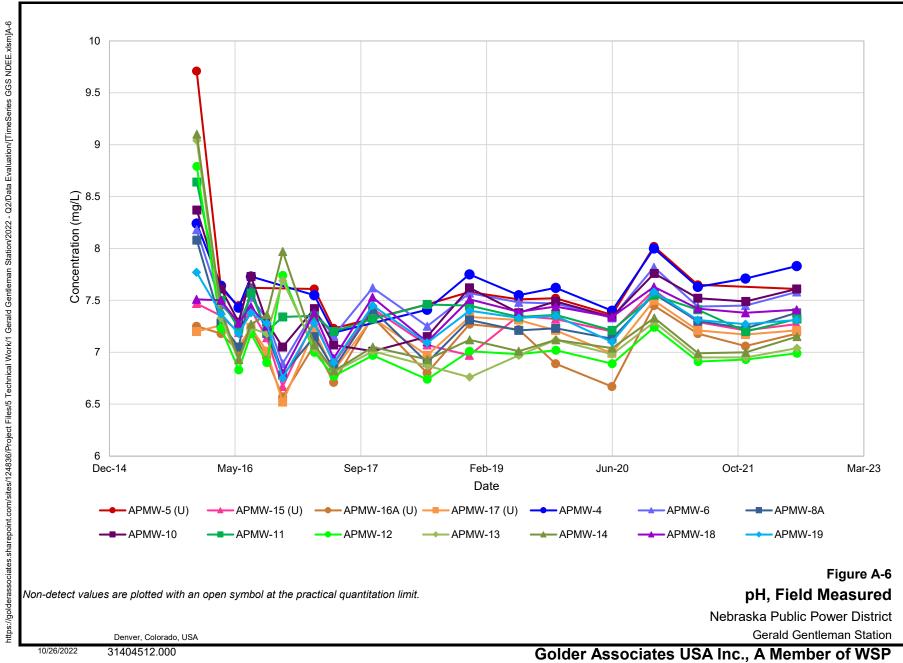


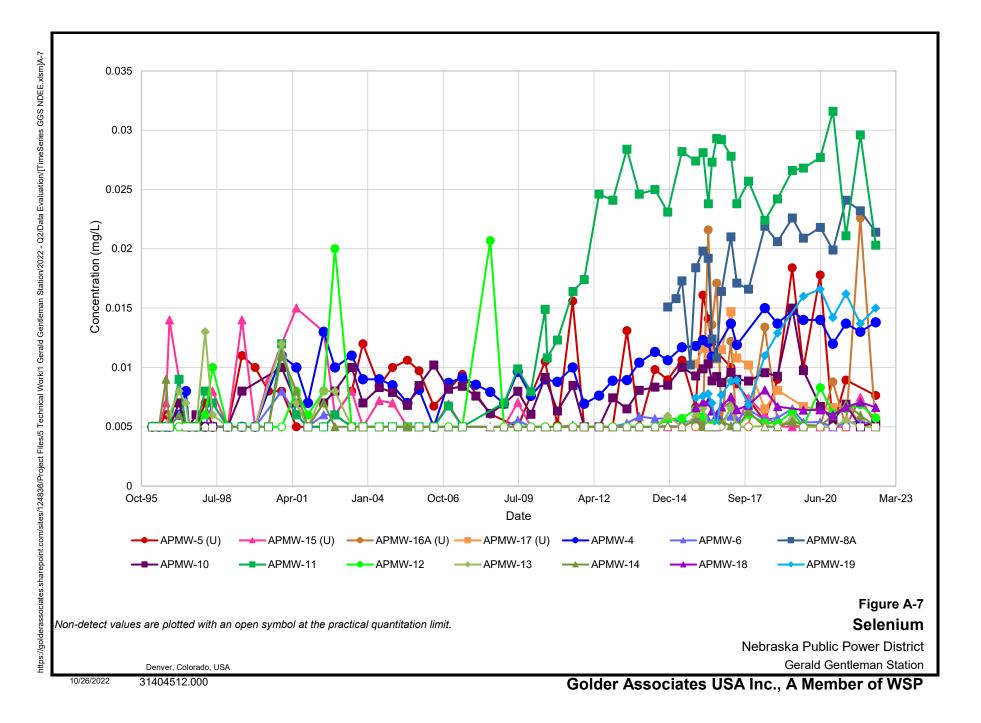


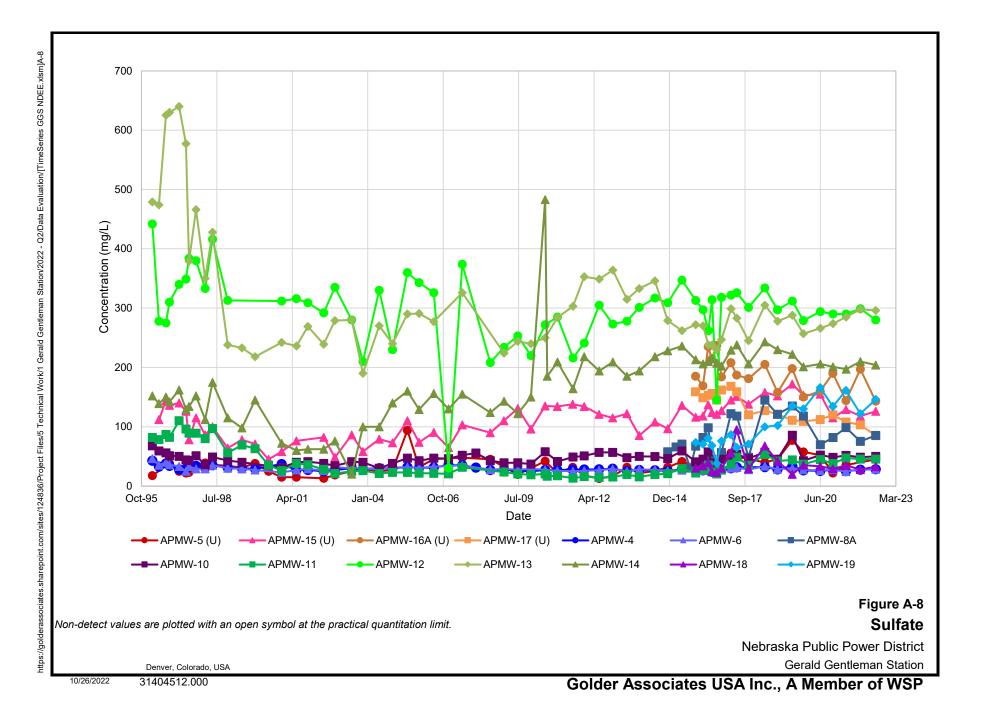


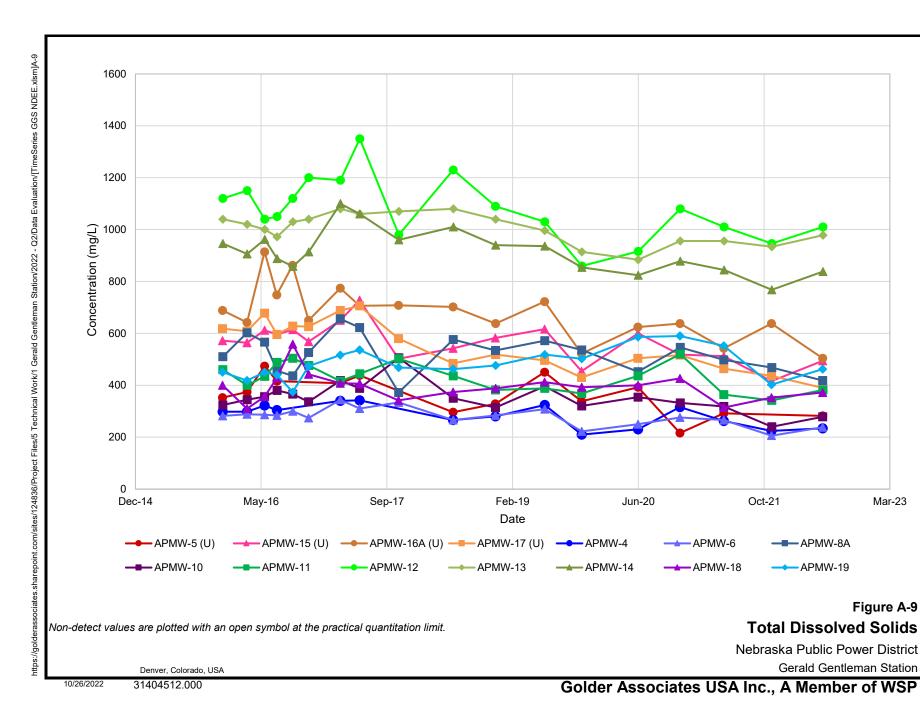
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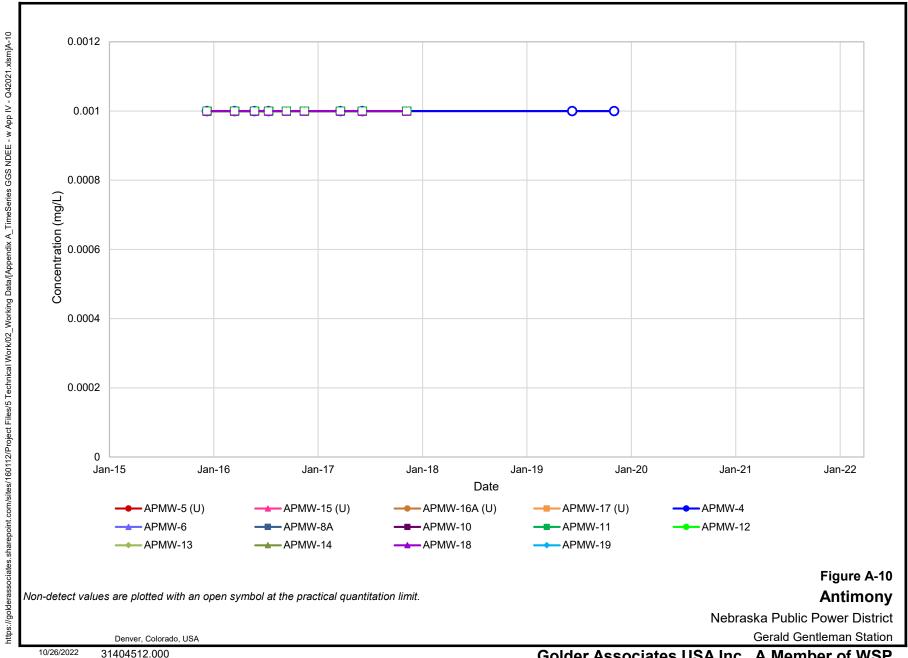


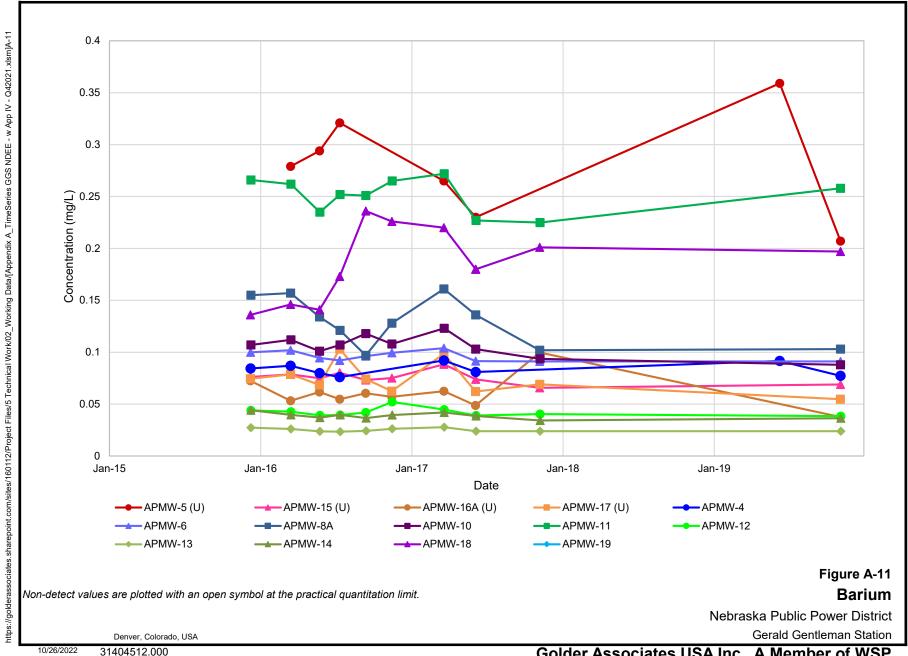




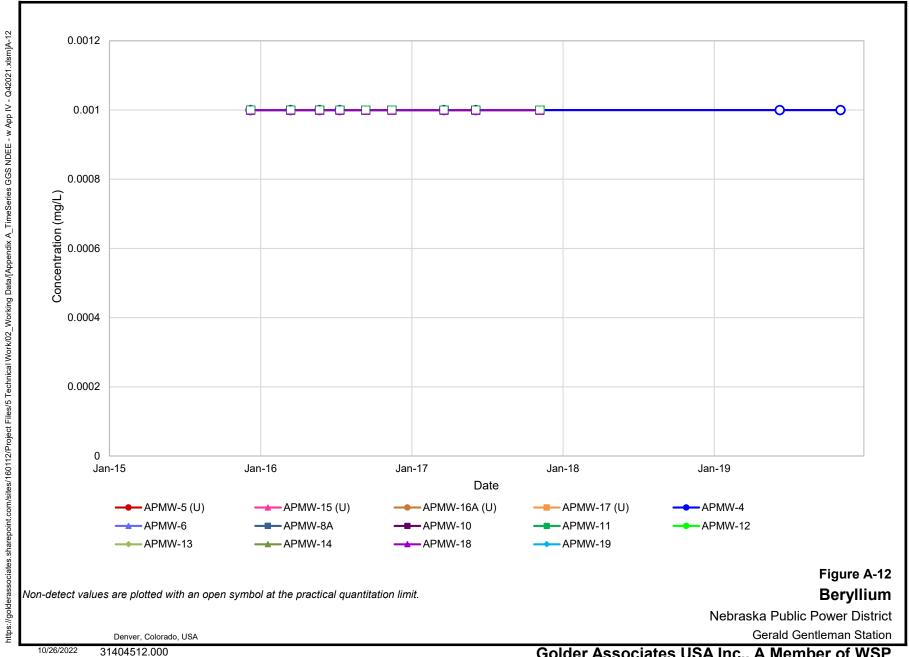


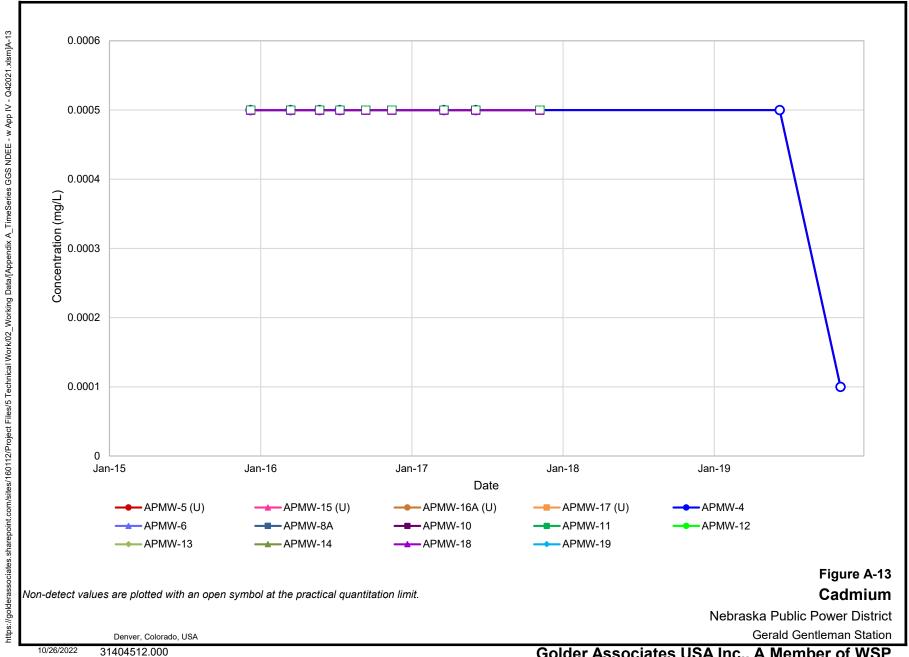


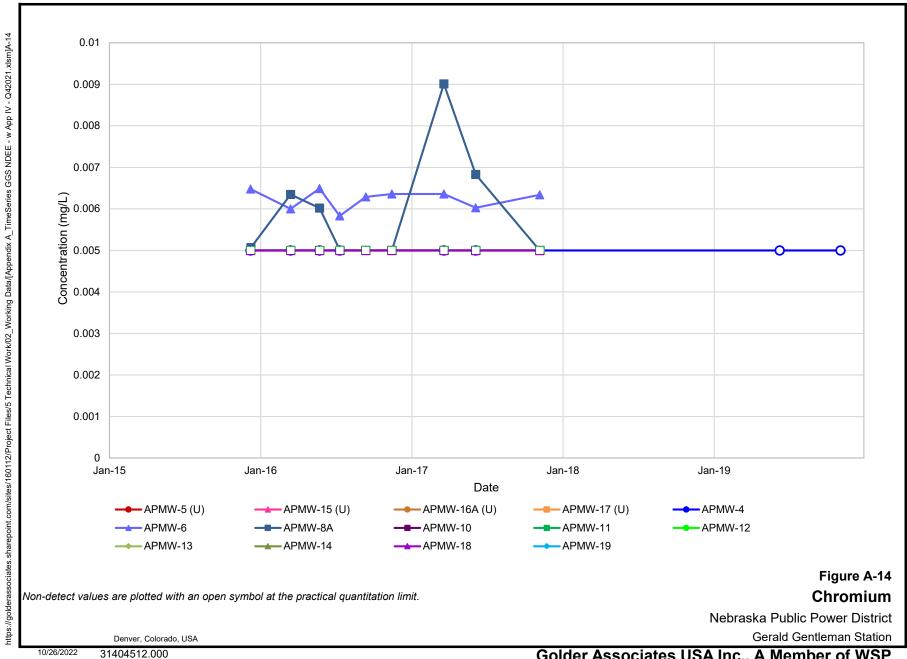


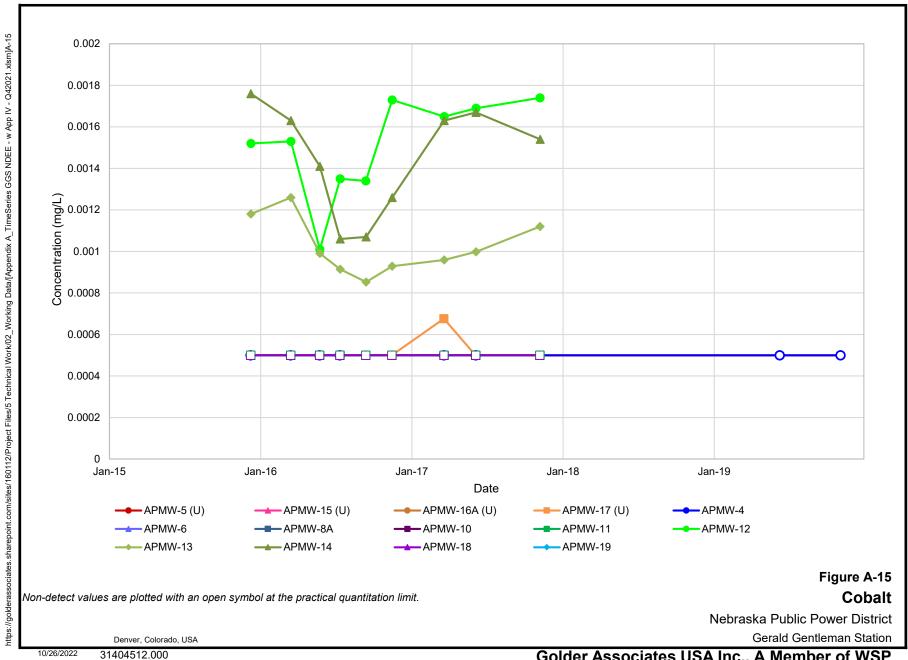


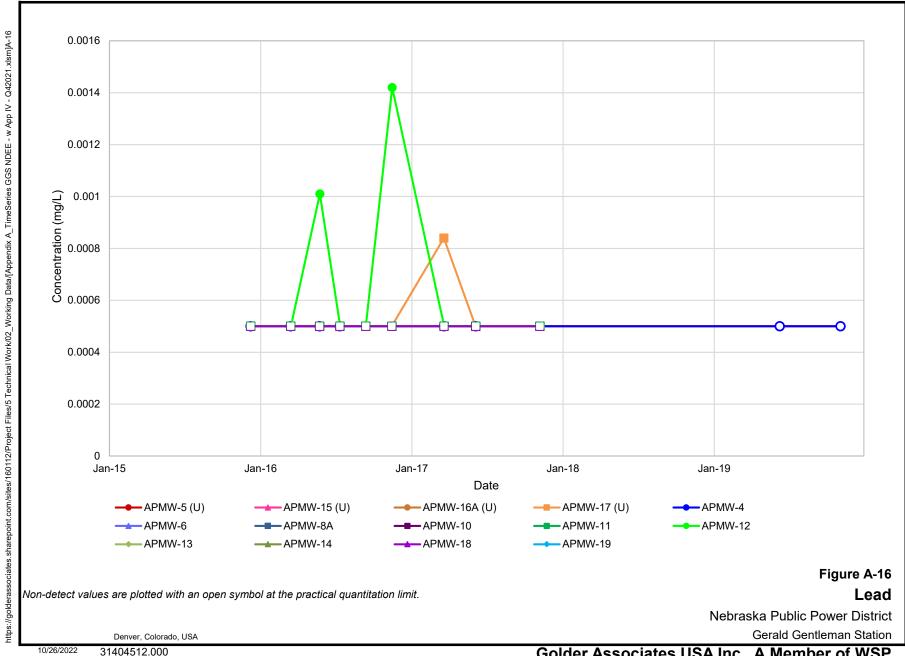
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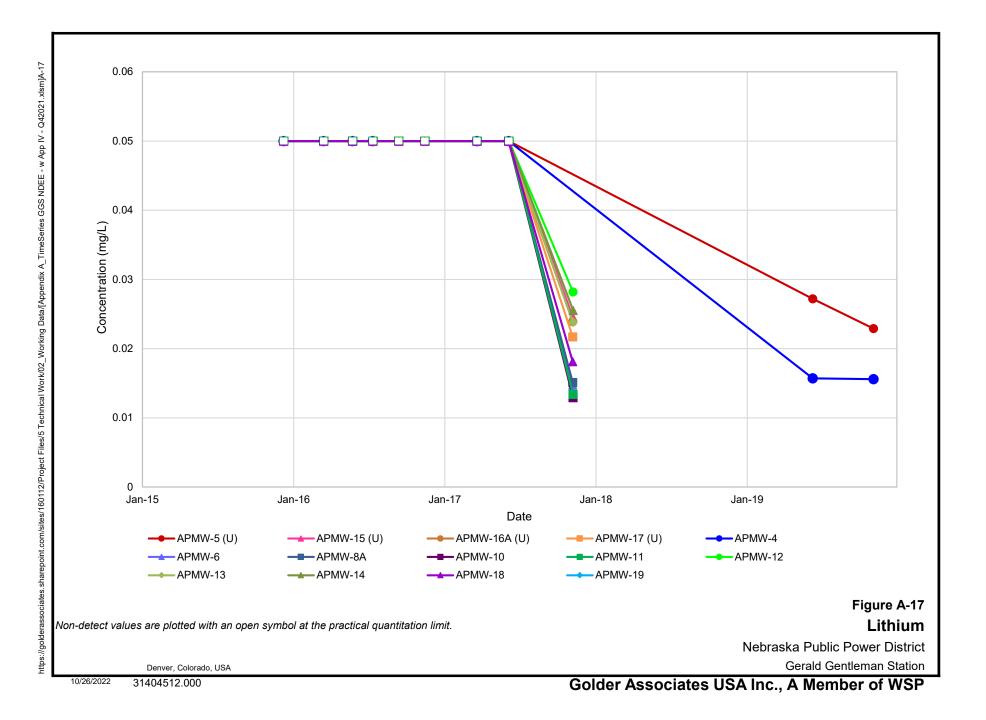


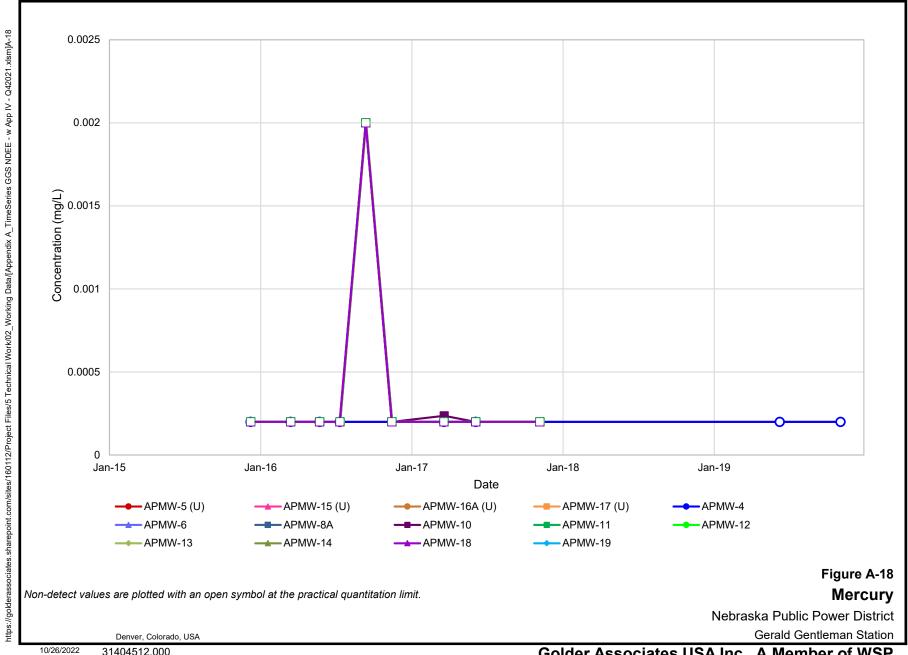




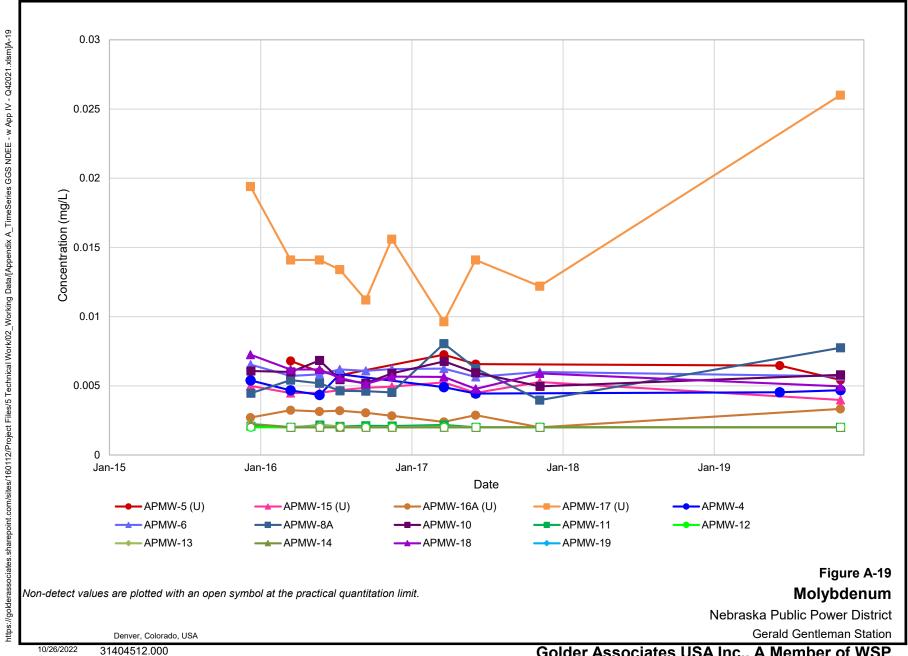


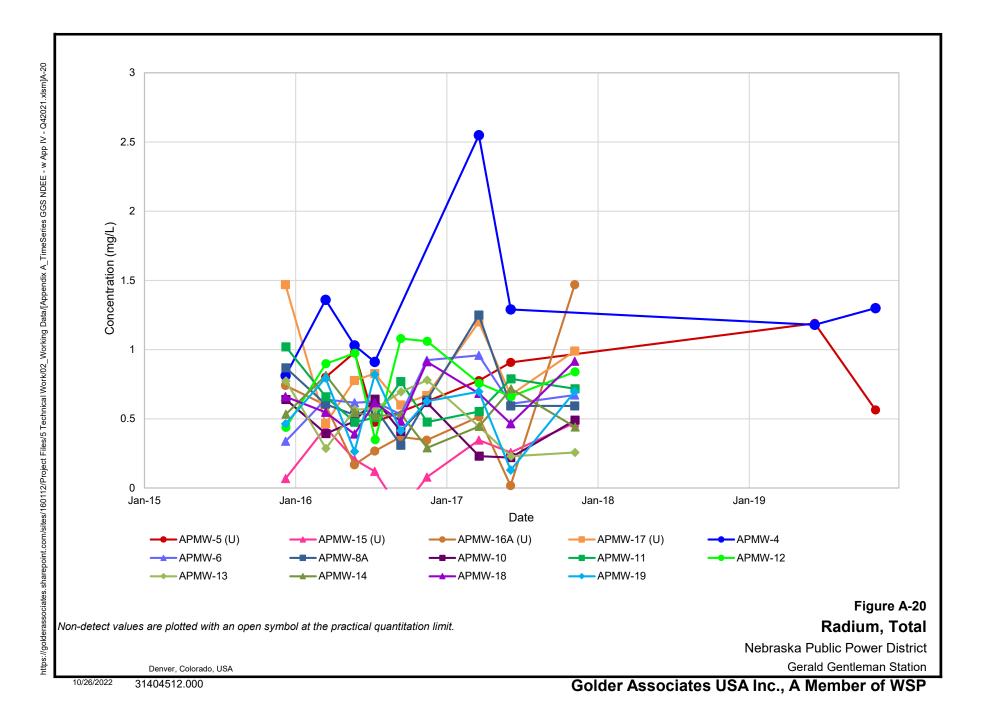


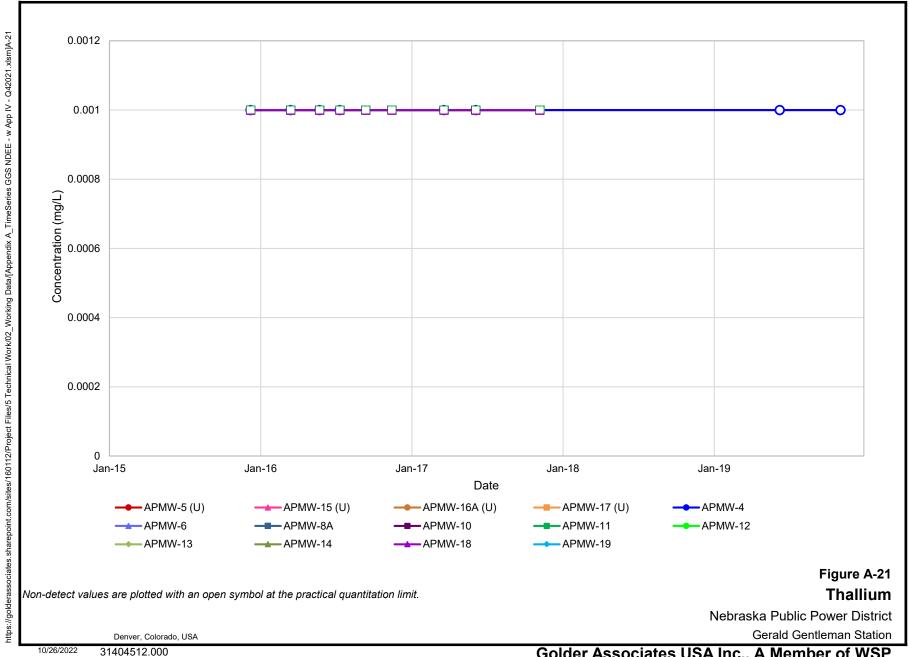




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APPENDIX B

Eurofins TestAmerica Laboratory Report for Irrigation Water Samples

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Environment Testing America

ANALYTICAL REPORT

Eurofins Cedar Falls 3019 Venture Way Cedar Falls, IA 50613 Tel: (319)277-2401

Laboratory Job ID: 310-237917-1

Client Project/Site: Irrigation Runoff

For:

Nebraska Public Power District 6089 S Hwy 25 Gerald Gentleman Station South Sutherland, Nebraska 69165

Attn: Doug Harris

Richar

Authorized for release by: 8/24/2022 3:50:48 PM Brian Graettinger, Lab Director (319)595-2012 Brian.Graettinger@et.eurofinsus.com

Designee for

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

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

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Job ID: 310-237917-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-237917-1

Case Narrative

Comments

No additional comments.

Receipt

The samples were received on 8/12/2022 8:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -1.6° C.

HPLC/IC

Method 9056A: The following samples were diluted due to the nature of the sample matrix: Road Track (310-237917-1) and Pivot Bucket (310-237917-2). Elevated reporting limits (RLs) are provided.

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

Metals

Method 6020A: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: Road Track (310-237917-1).

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

General Chemistry

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

Sample Summary

Client: Nebraska Public Power District Project/Site: Irrigation Runoff

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-237917-1	Road Track	Water	08/11/22 11:00	08/12/22 08:35
310-237917-2	Pivot Bucket	Water	08/11/22 11:05	08/12/22 08:35

Client Sample ID: Road Track

Lab Sample ID: 310-237917-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Chloride	31.5		5.00		mg/L	5	9056A	Total/NA
Sulfate	61.7		5.00		mg/L	5	9056A	Total/NA
Barium	0.0228		0.00200		mg/L	1	6020A	Total/NA
Boron	0.166	*+	0.100		mg/L	1	6020A	Total/NA
Calcium	71.7		2.00		mg/L	4	6020A	Total/NA
Lithium	0.0464		0.0100		mg/L	1	6020A	Total/NA
Magnesium	16.8		2.00		mg/L	4	6020A	Total/NA
Potassium	8.28		0.500		mg/L	1	6020A	Total/NA
Sodium	28.2		1.00		mg/L	1	6020A	Total/NA
Total Kjeldahl Nitrogen	4.66		1.00		mg/L	1	351.2	Total/NA
Nitrate Nitrite as N	1.69		0.100		mg/L	1	353.2	Total/NA
Alkalinity as CaCO3 to pH 4.5	356		25.0		mg/L	1	SM 2320B	Total/NA
pH	8.1	HF	0.1		SU	1	SM 4500 H+ B	Total/NA

Client Sample ID: Pivot Bucket

Lab Sample ID: 310-237917-2

Analyte	Result	Qualifier RL	MDL U	Jnit	Dil Fac	D	Method	Prep Type
Chloride	34.1	5.00	n	ng/L	5	_	9056A	Total/NA
Sulfate	82.8	5.00	n	ng/L	5		9056A	Total/NA
Barium	0.377	0.00200	n	ng/L	1		6020A	Total/NA
Calcium	156	0.500	n	ng/L	1		6020A	Total/NA
Cobalt	0.000798	0.000500	n	ng/L	1		6020A	Total/NA
Lithium	0.0108	0.0100	n	ng/L	1		6020A	Total/NA
Magnesium	45.0	0.500	n	ng/L	1		6020A	Total/NA
Molybdenum	0.00401	0.00200	n	ng/L	1		6020A	Total/NA
Potassium	8.65	0.500	n	ng/L	1		6020A	Total/NA
Sodium	86.7	1.00	n	ng/L	1		6020A	Total/NA
Ammonia as N	0.690	0.500	n	ng/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	3.74	1.00	n	ng/L	1		351.2	Total/NA
Nitrate Nitrite as N	3.89	0.100	n	ng/L	1		353.2	Total/NA
Alkalinity as CaCO3 to pH 4.5	209	10.0	n	ng/L	1		SM 2320B	Total/NA
рН	8.2	HF 0.1	S	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Road Track Date Collected: 08/11/22 11:00

Date Received: 08/12/22 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.5		5.00		mg/L			08/22/22 15:34	5
Fluoride	<0.500		0.500		mg/L			08/22/22 15:34	5
Sulfate	61.7		5.00		mg/L			08/22/22 15:34	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		08/16/22 08:30	08/18/22 17:47	1
Arsenic	<0.00200		0.00200		mg/L		08/16/22 08:30	08/18/22 17:47	1
Barium	0.0228		0.00200		mg/L		08/16/22 08:30	08/18/22 17:47	1
Beryllium	<0.00400		0.00400		mg/L		08/16/22 08:30	08/19/22 16:31	4
Boron	0.166	*+	0.100		mg/L		08/16/22 08:30	08/18/22 17:47	1
Cadmium	<0.000100		0.000100		mg/L		08/16/22 08:30	08/18/22 17:47	1
Calcium	71.7		2.00		mg/L		08/16/22 08:30	08/19/22 16:31	4
Chromium	<0.00500		0.00500		mg/L		08/16/22 08:30	08/18/22 17:47	1
Cobalt	<0.000500		0.000500		mg/L		08/16/22 08:30	08/18/22 17:47	1
_ead	<0.000500		0.000500		mg/L		08/16/22 08:30	08/18/22 17:47	1
Lithium	0.0464		0.0100		mg/L		08/16/22 08:30	08/18/22 17:47	1
Magnesium	16.8		2.00		mg/L		08/16/22 08:30	08/19/22 16:31	4
Molybdenum	<0.00200		0.00200		mg/L		08/16/22 08:30	08/18/22 17:47	1
Potassium	8.28		0.500		mg/L		08/16/22 08:30	08/18/22 17:47	1
Selenium	<0.00500		0.00500		mg/L		08/16/22 08:30	08/18/22 17:47	1
Sodium	28.2		1.00		mg/L		08/16/22 08:30	08/18/22 17:47	1
Thallium	<0.00100		0.00100		mg/L		08/16/22 08:30	08/18/22 17:47	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		08/22/22 14:34	08/23/22 12:41	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	<0.500		0.500		mg/L		08/18/22 09:51	08/18/22 20:31	1
Total Kjeldahl Nitrogen	4.66		1.00		mg/L		08/17/22 07:00	08/17/22 19:01	1
Nitrate Nitrite as N	1.69		0.100		mg/L			08/16/22 20:12	1
Alkalinity as CaCO3 to pH 4.5	356		25.0		mg/L			08/15/22 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8 1	HF	0.1		SU			08/12/22 15:15	1

Lab Sample ID: 310-237917-1

Matrix: Water

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Client Sample ID: Pivot Bucket Date Collected: 08/11/22 11:05

Date Received: 08/12/22 08:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.1		5.00		mg/L			08/22/22 15:49	5
Fluoride	<0.500		0.500		mg/L			08/22/22 15:49	5
Sulfate	82.8		5.00		mg/L			08/22/22 15:49	5
Method: 6020A - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		08/16/22 08:30	08/18/22 18:03	1
Arsenic	<0.00200		0.00200		mg/L		08/16/22 08:30	08/18/22 18:03	1
Barium	0.377		0.00200		mg/L		08/16/22 08:30	08/18/22 18:03	1
Beryllium	<0.00100		0.00100		mg/L		08/16/22 08:30	08/19/22 16:34	1
Boron	<0.100	*+	0.100		mg/L		08/16/22 08:30	08/18/22 18:03	1
Cadmium	<0.000100		0.000100		mg/L		08/16/22 08:30	08/18/22 18:03	1
Calcium	156		0.500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Chromium	<0.00500		0.00500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Cobalt	0.000798		0.000500		mg/L		08/16/22 08:30	08/18/22 18:03	1
ead	<0.000500		0.000500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Lithium	0.0108		0.0100		mg/L		08/16/22 08:30	08/18/22 18:03	1
Magnesium	45.0		0.500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Molybdenum	0.00401		0.00200		mg/L		08/16/22 08:30	08/18/22 18:03	1
Potassium	8.65		0.500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Selenium	<0.00500		0.00500		mg/L		08/16/22 08:30	08/18/22 18:03	1
Sodium	86.7		1.00		mg/L		08/16/22 08:30	08/18/22 18:03	1
Thallium	<0.00100		0.00100		mg/L		08/16/22 08:30	08/18/22 18:03	1
Method: 7470A - Mercury (CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		08/22/22 14:38	08/23/22 12:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.690		0.500		mg/L		08/18/22 09:51	08/18/22 20:32	1
Fotal Kjeldahl Nitrogen	3.74		1.00		mg/L		08/17/22 07:00	08/17/22 19:02	1
Nitrate Nitrite as N	3.89		0.100		mg/L			08/16/22 20:13	1
Alkalinity as CaCO3 to pH 4.5	209		10.0		mg/L			08/15/22 08:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.2	HF	0.1		SU			08/12/22 15:21	1

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Lab Sample ID: 310-237917-2 Matrix: Water

Client: Nebraska Public Power District Project/Site: Irrigation Runoff

Qualifiers

TEQ

TNTC

Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Quantiero		
Metals		
Qualifier	Qualifier Description	
*+	LCS and/or LCSD is outside acceptance limits, high biased.	
General Chen	nistry	5
Qualifier	Qualifier Description	
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.	
Glossary		7
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	8
%R	Percent Recovery	
CFL	Contains Free Liquid	Q
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)	

Lab Sample ID: MB 310-363601/3

Prep Type: Total/NA

Prep Type: Total/NA Prep Batch: 362614

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Method: 9056A - Anions, Ion Chromatography

Matrix: Water								Prep Type: 7	Total/NA
Analysis Batch: 363601									
	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			08/22/22 10:23	1
Fluoride	<0.100		0.100		mg/L			08/22/22 10:23	1
Sulfate	<1.00		1.00		mg/L			08/22/22 10:23	1

Lab Sample ID: LCS 310-363601/4 Matrix: Water

Analysis Batch: 363601								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10.0	10.06		mg/L		101	90 - 110	
Fluoride	2.00	2.035		mg/L		102	90 _ 110	
Sulfate	10.0	10.08		mg/L		101	90 - 110	

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-362614/1-A
Matrix: Water
Analysis Batch: 362935

MB MB Result Qualifier RL MDL Unit D Prepared Dil Fac Analyte Analyzed 08/17/22 14:51 Antimony < 0.00200 0.00200 mg/L 08/16/22 08:30 1 < 0.00200 0.00200 08/16/22 08:30 08/17/22 14:51 Arsenic mg/L 1 08/17/22 14:51 Barium < 0.00200 0.00200 mg/L 08/16/22 08:30 1 <0.00100 08/16/22 08:30 08/17/22 14:51 Beryllium 0.00100 mg/L 1 08/16/22 08:30 08/17/22 14:51 Boron <0.100 0.100 mg/L 1 Cadmium 08/16/22 08:30 08/17/22 14:51 <0.000100 0.000100 mg/L 1 Calcium 08/17/22 14:51 < 0.500 0.500 mg/L 08/16/22 08:30 1 < 0.00500 0.00500 08/16/22 08:30 08/17/22 14:51 Chromium mg/L 1 0.000500 Cobalt < 0.000500 08/17/22 14:51 mg/L 08/16/22 08:30 1 Lead <0.000500 0.000500 08/16/22 08:30 08/17/22 14:51 mg/L 1 08/17/22 14:51 Magnesium <0 500 0.500 mg/L 08/16/22 08:30 1 Molybdenum <0.00200 0.00200 08/16/22 08:30 08/17/22 14:51 mg/L Potassium 08/16/22 08:30 08/17/22 14:51 < 0.500 0.500 mg/L 1 Selenium < 0.00500 0.00500 mg/L 08/16/22 08:30 08/17/22 14:51 1 Sodium <1.00 1.00 08/16/22 08:30 08/17/22 14:51 mg/L 1 < 0.00100 0.00100 08/17/22 14:51 Thallium mg/L 08/16/22 08:30 1

Lab Sample ID: MB 310-362614/1-A Matrix: Water									•	Client Sa	mple ID: Metho Prep Type:	
Analysis Batch: 363247											Prep Batch	: 362614
	МВ	MB										
Analyte	Result	Qualifier	1	RL	MDL	Unit		D	Pr	epared	Analyzed	Dil Fac
Lithium	<0.0100		0.01	00		mg/L		(08/16	/22 08:30	08/19/22 16:24	1
Lab Sample ID: LCS 310-362614/2-A								Cli	ent	Sample	D: Lab Control	I Sample
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 362935											Prep Batch	: 362614
			Spike	LC	S LCS						%Rec	
Analyte			Added	Resu	t Qua	lifier	Unit		D	%Rec	Limits	
Antimony			0.200	0.235	5		mg/L			118	80 - 120	

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

Lab Sample ID: LCS 310-362614/2-A Matrix: Water				Client	t Sample	ID: Lab Control Sample Prep Type: Total/NA
Analysis Batch: 362935						Prep Batch: 362614
	Spike	LCS LC	S			%Rec
Analyte	Added	Result Qu	alifier Unit	D	%Rec	Limits
Arsenic	0.200	0.2068	mg/L		103	80 - 120
Barium	0.100	0.1131	mg/L		113	80 - 120
Beryllium	0.100	0.1097	mg/L		110	80 - 120
Cadmium	0.100	0.1050	mg/L		105	80 - 120
Calcium	2.00	1.612	mg/L		81	80 - 120
Chromium	0.100	0.1047	mg/L		105	80 - 120
Cobalt	0.100	0.1036	mg/L		104	80 - 120
Lead	0.200	0.2116	mg/L		106	80 - 120
Magnesium	2.00	2.050	mg/L		102	80 - 120
Molybdenum	0.200	0.2236	mg/L		112	80 - 120
Potassium	2.00	2.059	mg/L		103	80 - 120
Selenium	0.400	0.3907	mg/L		98	80 - 120
Sodium	2.00	2.207	mg/L		110	80 - 120
Thallium	0.200	0.2293	mg/L		115	80 - 120
- Lab Sample ID: LCS 310-362614/2-A				Client	t Sample	ID: Lab Control Sample
Matrix: Water						Prep Type: Total/NA
Analysis Batch: 363247						Prep Batch: 362614
•	Snike		· c			%Rec

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lithium	0.200	0.2192		mg/L		110	80 - 120	

Lab Sample ID: LCS Matrix: Water	310-362614/2-A					Client	Sample		ontrol Sample Type: Total/NA
Analysis Batch: 363	73	Spike	LCS	LCS				Prep %Rec	Batch: 362614
Analyte		Added		Qualifier	Unit	D	%Rec	Limits	
Boron		0.200	0.2190		mg/L		109	80 - 120	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-363323/1-A Matrix: Water Analysis Batch: 363477	мв	мв								Client Sa	Imple ID: Metho Prep Type: Prep Batch	Total/NA
Analyte		Qualifier		RL	MDL	Unit		D	Р	repared	Analyzed	Dil Fac
Mercury	<0.000200		0.0002	200		mg/L		_	08/2	2/22 14:34	08/23/22 11:44	1
Lab Sample ID: LCS 310-363323/2-A								с	lient	Sample I	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 363477											Prep Batch	: 363323
			Spike	LCS	LCS						%Rec	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Mercury			0.00167	0.001689			mg/L			101	80 - 120	

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Lab Sample ID: MB 310-363324/1-A

Lab Sample ID: LCS 310-363324/2-A

Lab Sample ID: 310-237917-2 MS

Matrix: Water

Matrix: Water

Matrix: Water

Analyte

Mercury

Analyte

Mercury

Analyte

Mercury

Analysis Batch: 363477

Analysis Batch: 363477

Analysis Batch: 363477

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

MB MB

<0.000200

Sample Sample

<0.000200

Result Qualifier

Result Qualifier

RL

0.000200

Spike

Added

0.00167

Spike

Added

0.00167

MDL Unit

LCS LCS

MS MS

Result Qualifier

0.001697

0.001664

Result Qualifier

mg/L

Unit

mg/L

Unit

mg/L

D

Prepared

08/22/22 14:38

%Rec

102

100

D

D

Job ID: 310-237917-1

Prep Type: Total/NA

Prep Batch: 363324

Prep Type: Total/NA

Prep Batch: 363324

Prep Type: Total/NA

Client Sample ID: Method Blank

Analyzed

08/23/22 12:44

Client Sample ID: Lab Control Sample

%Rec

Limits

80 - 120

80 - 120

8

Dil Fac

1

Prep Batch: 363324 %Rec %Rec Limits

Client Sample ID: Pivot Bucket

Client Samp	le ID:	Pivot	Bucket
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Lab Sample ID: 310-237917-2 MSD Matrix: Water								Client	Sample ID: Prep 1	Pivot B ype: To	
Analysis Batch: 363477									Prep I	Batch: 3	63324
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury <	0.000200		0.00167	0.001669		mg/L		100	80 - 120	0	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-363012/1-A										Client Sa	mple ID: Metho	od Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 363102											Prep Batch	: 363012
	MB	МВ										
Analyte	Result	Qualifier		RL	MDL	Unit		D	Р	repared	Analyzed	Dil Fac
Ammonia as N	<0.500		0	.500		mg/L		·	08/1	8/22 09:51	08/18/22 20:09	1
-												
Lab Sample ID: LCS 310-363012/2-A								CI	lient	Sample	ID: Lab Control	Sample
Lab Sample ID: LCS 310-363012/2-A Matrix: Water								CI	lient	Sample	ID: Lab Control Prep Type:	
								CI	lient	Sample		Total/NA
Matrix: Water			Spike	LCS	LCS			CI	lient	Sample	Prep Type:	Total/NA
Matrix: Water			Spike Added	LCS Result			Unit	CI	lient D	Sample %Rec	Prep Type: Prep Batch	Total/NA

Lab Sample ID: MB 310-362810/1-A Matrix: Water Analysis Batch: 362944							Client Sa	mple ID: Metho Prep Type: [*] Prep Batch	Total/NA
	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	<1.00		1.00		mg/L		08/17/22 07:00	08/17/22 18:34	1

Job ID: 310-237917-1

Method: 351.2 - Nitrogen, Total Kj											
Lab Sample ID: LCS 310-362810/2-A Matrix: Water								Clier	nt Sample	e ID: Lab Contro Prep Type:	
Analysis Batch: 362944										Prep Batch	
-			Spike		LCS	LCS				%Rec	
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	
Total Kjeldahl Nitrogen			4.01		4.054		mg/L		101	90 - 110	
lethod: 353.2 - Nitrogen, Nitrate-	Nitrite										
Lab Sample ID: MB 310-362793/43									Client S	Sample ID: Metho	od Blan
Matrix: Water										Prep Type:	Total/N
Analysis Batch: 362793											
Avela		MB							D	A	DH 5.
Analyte	<0.100	Qualifier		RL 0.100		MDL Unit mg/L		D	Prepared	Analyzed 08/16/22 19:56	Dil Fa
	<0.100			0.100		mg/∟				00/10/22 19:50	
Lab Sample ID: LCS 310-362793/44								Clier	nt Sample	e ID: Lab Contro	I Sampl
Matrix: Water										Prep Type:	-
Analysis Batch: 362793											
			Spike		LCS	LCS				%Rec	
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	
Nitrate Nitrite as N			5.32		5.674		mg/L		107	90 - 110	
lethod: SM 2320B - Alkalinity											
Lab Sample ID: MB 310-362556/1 Matrix: Water									Client	Sample ID: Metho Prep Type:	
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556		MB				MDI Unit		P		Prep Type:	Total/N
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte	Result	MB Qualifier		RL		MDL Unit		<u>D</u>	Client S	Prep Type: Analyzed	Total/N
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte				RL 5.00		MDL Unit mg/L		<u>D</u>		Prep Type:	Total/N
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2	Result								Prepared	Prep Type: Analyzed	Total/N Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2	Result								Prepared	Prep Type: 	Total/N Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water	Result		Spike		LCS	LCS			Prepared	Prep Type: 	Total/N Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte	Result		Added		LCS Result	mg/L			Prepared nt Sample <u>%Rec</u>	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits	Total/NA Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte	Result				LCS	LCS	Unit mg/L		Prepared	Prep Type: <u>Analyzed</u> 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec	Total/N Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5	Result		Added		LCS Result	LCS			Prepared nt Sample <u>%Rec</u>	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits	Total/N Dil Fa
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH	Result		Added		LCS Result	LCS		Clier	Prepared nt Sample <u>%Rec</u> 100	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits	Total/N Dil Fa I Sampl Total/N
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1	Result		Added		LCS Result	LCS		Clier	Prepared nt Sample <u>%Rec</u> 100	Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110	Total/N Dil Fa I Sampl Total/N I Sampl
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5	Result		Added		LCS Result	LCS		Clier	Prepared nt Sample <u>%Rec</u> 100	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110 e ID: Lab Contro	Total/N. Dil Fa I Sampl Total/N.
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water	Result		Added		LCS Result 997.5	LCS		Clier	Prepared nt Sample <u>%Rec</u> 100	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110 e ID: Lab Contro	Total/N. Dil Fa I Sampl Total/N.
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water Analysis Batch: 362509 Analyte	Result		Added 1000 Spike Added		LCS Result 997.5 LCS Result	LCS Qualifier	mg/L Unit	Clier	Prepared at Sample <u>%Rec</u> 100 at Sample <u>%Rec</u>	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110 e ID: Lab Contro Prep Type: %Rec Limits	Total/N/ Dil Fa I Sampl Total/N/
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water Analysis Batch: 362509 Analyte	Result		Added 1000 Spike		LCS Result 997.5	LCS Qualifier	mg/L	Clier D Clier	Prepared t Sample <u>%Rec</u> 100 t Sample	Prep Type: Analyzed 08/15/22 08:30 Prep Type: %Rec Limits 90 - 110 Prep Type: %Rec Kec	Total/N/ Dil Fa I Sampl Total/N/
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water Analysis Batch: 362509 Analyte pH Lab Sample ID: LCS 310-362509/25 Matrix: Water	Result		Added 1000 Spike Added		LCS Result 997.5 LCS Result	LCS Qualifier	mg/L Unit	Clier Clier	Prepared at Sample %Rec 100 at Sample %Rec 100	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110 e ID: Lab Contro Prep Type: %Rec Limits	Total/N Dil Fa I Sampl Total/N I Sampl I Sampl I Sampl
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water Analysis Batch: 362509 Analyte pH Lab Sample ID: LCS 310-362509/25 Matrix: Water	Result		Added 1000 Spike Added 7.00		LCS Result 997.5 LCS Result 7.0	LCS Qualifier LCS Qualifier	mg/L Unit	Clier Clier	Prepared at Sample %Rec 100 at Sample %Rec 100	Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110	Total/N/
Lab Sample ID: MB 310-362556/1 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Lab Sample ID: LCS 310-362556/2 Matrix: Water Analysis Batch: 362556 Analyte Alkalinity as CaCO3 to pH 4.5 Method: SM 4500 H+ B - pH Lab Sample ID: LCS 310-362509/1 Matrix: Water Analysis Batch: 362509 Analyte pH	Result		Added 1000 Spike Added		LCS Result 997.5 LCS Result 7.0	LCS Qualifier	mg/L Unit	Clier Clier	Prepared at Sample %Rec 100 at Sample %Rec 100	Prep Type: Analyzed 08/15/22 08:30 e ID: Lab Contro Prep Type: %Rec Limits 90 - 110 e ID: Lab Contro Prep Type: %Rec Limits 98 - 102 e ID: Lab Contro	Total/N/

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 310-237917-1 Matrix: Water Analysis Batch: 362509	DU						Client Sample ID: Prep Ty		
	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
pH	8.1	HF	 8.0		SU			0.5	20

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Water

Water

Water

Water

Client: Nebraska Public Power District Project/Site: Irrigation Runoff

Client Sample ID

Road Track

Pivot Bucket

Method Blank

Lab Control Sample

HPLC/IC

Lab Sample ID

310-237917-1

310-237917-2

MB 310-363601/3

LCS 310-363601/4

Analysis Batch: 363601

Prep Batch

Prep Batch

Prep Batch

Prep Batch

Prep Batch

362614

362614

362614

362614

Prep Batch

Prep Batch

Prep Batch

362614

362614

362614

362614

362614

Method

9056A

9056A

9056A

9056A

Method

3005A

3005A

3005A

3005A

Method

6020A

6020A

Method

6020A

6020A

Method

6020A

6020A

6020A

6020A

Method

6020A

Method

7470A

7470A

7470A

Method

7470A

7470A

7470A

7470A

7470A

9

ep Batch: 362614			
Lab Sample ID	Client Sample ID	Prep Type	Matrix
310-237917-1	Road Track	Total/NA	Water
310-237917-2	Pivot Bucket	Total/NA	Water
MB 310-362614/1-A	Method Blank	Total/NA	Water
LCS 310-362614/2-A	Lab Control Sample	Total/NA	Water
Analysis Batch: 36293	5		
Lab Sample ID	Client Sample ID	Prep Type	Matrix
MB 310-362614/1-A	Method Blank	Total/NA	Water
LCS 310-362614/2-A	Lab Control Sample	Total/NA	Water
Analysis Batch: 36315	2		
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix
310-237917-1	Road Track	Total/NA	Water
310-237917-2	Pivot Bucket	Total/NA	Water
Analysis Batch: 36324	7		
Lab Sample ID	Client Sample ID	Prep Type	Matrix
310-237917-1	Road Track	Total/NA	Water
310-237917-2	Pivot Bucket	Total/NA	Water
MB 310-362614/1-A	Method Blank	Total/NA	Water
LCS 310-362614/2-A	Lab Control Sample	Total/NA	Water
Analysis Batch: 36327	3		
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix
LCS 310-362614/2-A	Lab Control Sample	Total/NA	Water
Prep Batch: 363323			
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix
310-237917-1	Road Track	Total/NA	Water
MB 310-363323/1-A	Method Blank	Total/NA	Water
LCS 310-363323/2-A	Lab Control Sample	Total/NA	Water
Prep Batch: 363324			
Lab Sample ID	Client Sample ID	Prep Type	Matrix
310-237917-2	Pivot Bucket	Total/NA	Water
MB 310-363324/1-A	Method Blank	Total/NA	Water
LCS 310-363324/2-A	Lab Control Sample	Total/NA	Water
	Pivot Bucket	Total/NA	Water
310-237917-2 MS		Total/NA	Water

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Water

Water

Water

Water

Water

Water

Water

Water

Client Sample ID

Road Track

Pivot Bucket

Method Blank

Method Blank

Pivot Bucket

Pivot Bucket

Lab Control Sample

Lab Control Sample

Metals

Lab Sample ID

310-237917-1

310-237917-2

MB 310-363323/1-A

MB 310-363324/1-A

LCS 310-363323/2-A

LCS 310-363324/2-A

310-237917-2 MS

310-237917-2 MSD

General Chemistry

Analysis Batch: 363477

Prep Batch

363323

363324

363323

363324

363323

363324

363324

363324

Method

7470A

7470A

7470A

7470A

7470A

7470A

7470A

7470A

9

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
310-237917-1	Road Track	Total/NA	Water	SM 4500 H+ B	
310-237917-2	Pivot Bucket	Total/NA	Water	SM 4500 H+ B	
LCS 310-362509/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-362509/25	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-237917-1 DU	Road Track	Total/NA	Water	SM 4500 H+ B	
nalysis Batch: 36255	6				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
310-237917-1	Road Track	Total/NA	Water	SM 2320B	· · ·
310-237917-2	Pivot Bucket	Total/NA	Water	SM 2320B	
MB 310-362556/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-362556/2	Lab Control Sample	Total/NA	Water	SM 2320B	
nalysis Batch: 36279	3				
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
310-237917-1	Road Track	Total/NA	Water	353.2	
310-237917-2	Pivot Bucket	Total/NA	Water	353.2	
MB 310-362793/43	Method Blank	Total/NA	Water	353.2	
CS 310-362793/44	Lab Control Sample	Total/NA	Water	353.2	
rep Batch: 362810					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
310-237917-1	Road Track	Total/NA	Water	351.2	·
10-237917-2	Pivot Bucket	Total/NA	Water	351.2	
MB 310-362810/1-A	Method Blank	Total/NA	Water	351.2	
CS 310-362810/2-A	Lab Control Sample	Total/NA	Water	351.2	
nalysis Batch: 36294	4				
_ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Bate
310-237917-1	Road Track	Total/NA	Water	351.2	36281
310-237917-2	Pivot Bucket	Total/NA	Water	351.2	36281
MB 310-362810/1-A	Method Blank	Total/NA	Water	351.2	36281
CS 310-362810/2-A	Lab Control Sample	Total/NA	Water	351.2	36282

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
310-237917-1	Road Track	Total/NA	Water	Distill/Ammonia	
310-237917-2	Pivot Bucket	Total/NA	Water	Distill/Ammonia	

General Chemistry (Continued)

Prep Batch: 363012 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
MB 310-363012/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-363012/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 363102

Lab Sample ID 310-237917-1	Client Sample ID	Prep Type	Matrix Water	Method	Prep Batch 363012
310-237917-1	Pivot Bucket	Total/NA	Water	350.1	363012
MB 310-363012/1-A	Method Blank	Total/NA	Water	350.1	363012
LCS 310-363012/2-A	Lab Control Sample	Total/NA	Water	350.1	363012

Job ID: 310-237917-1

Dilution

Factor

5

1

4

1

1

1

1

1

1

Run

Batch

363601

Number Analyst

362614 QTZ5

363152 A6US

362614 QTZ5

363247 A6US

363323 XXW3

363477 XXW3

363012 ENB7

363102 ZJX4

362810 W9YR

362944 ZJX4

362793 ZJX4

362556 MAQ3

362509 N7RT

DHM5

Lab

EET CF

Batch

Туре

Prep

Prep

Prep

Prep

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Analysis

Batch

Method

9056A

3005A

6020A

3005A

6020A

7470A

7470A

350.1

351.2

351.2

353.2

SM 2320B

Distill/Ammonia

Prep Type

Total/NA

Lab Sample ID: 310-237917-1 Matrix: Water

Prepared

or Analyzed

08/16/22 08:30

08/18/22 17:47

08/16/22 08:30

08/19/22 16:31

08/22/22 14:34

08/23/22 12:41

08/18/22 09:51

08/18/22 20:31

08/17/22 07:00

08/17/22 19:01

08/16/22 20:12

08/15/22 08:30

08/12/22 15:15

Lab Sample ID: 310-237917-2

Matrix: Water

 Total/NA
 Analysis
 SM 4500 H+ B

 Client Sample ID: Pivot Bucket

 Date Collected:
 08/11/22
 11:05

 Date Received:
 08/12/22
 08:35

_	Batch	Batch		Dilution	Batch			Prepared
Ргер Туре	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	9056A		5	363601	DHM5	EET CF	08/22/22 15:49
Total/NA	Prep	3005A			362614	QTZ5	EET CF	08/16/22 08:30
Total/NA	Analysis	6020A		1	363152	A6US	EET CF	08/18/22 18:03
Total/NA	Prep	3005A			362614	QTZ5	EET CF	08/16/22 08:30
Total/NA	Analysis	6020A		1	363247	A6US	EET CF	08/19/22 16:34
Total/NA	Prep	7470A			363324	XXW3	EET CF	08/22/22 14:38
Total/NA	Analysis	7470A		1	363477	XXW3	EET CF	08/23/22 12:48
Total/NA	Prep	Distill/Ammonia			363012	ENB7	EET CF	08/18/22 09:51
Total/NA	Analysis	350.1		1	363102	ZJX4	EET CF	08/18/22 20:32
Total/NA	Prep	351.2			362810	W9YR	EET CF	08/17/22 07:00
Total/NA	Analysis	351.2		1	362944	ZJX4	EET CF	08/17/22 19:02
Total/NA	Analysis	353.2		1	362793	ZJX4	EET CF	08/16/22 20:13
Total/NA	Analysis	SM 2320B		1	362556	MAQ3	EET CF	08/15/22 08:30
Total/NA	Analysis	SM 4500 H+ B		1	362509	N7RT	EET CF	08/12/22 15:21

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-22
Georgia	State	IA100001 (OR)	09-29-22
Illinois	NELAP	200024	11-29-22
lowa	State	007	12-01-21 *
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-22
Oregon	NELAP	IA100001	09-29-22

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

Client: Nebraska Public Power District Project/Site: Irrigation Runoff

ethod	Method Description	Protocol	Laboratory
)56A	Anions, Ion Chromatography	SW846	EET CF
020A	Metals (ICP/MS)	SW846	EET CF
470A	Mercury (CVAA)	SW846	EET CF
50.1	Nitrogen, Ammonia	MCAWW	EET CF
51.2	Nitrogen, Total Kjeldahl	MCAWW	EET CF
53.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET CF
M 2320B	Alkalinity	SM	EET CF
M 4500 H+ B	рН	SM	EET CF
005A	Preparation, Total Metals	SW846	EET CF
51.2	Nitrogen, Total Kjeldahl	MCAWW	EET CF
470A	Preparation, Mercury	SW846	EET CF
istill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

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

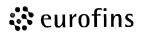
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

12 13

8/24/2022



Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information							
Client: Nebrus Kn Public Pour							
City/State: CITY Suther land STATE	Project:						
Receipt Information	A						
Date/TimeDATETIMEReceived:§ - 1222835	Received By:						
Delivery Type: 🗹 UPS 🛛 FedEx	FedEx Ground US Mail Spee-Dee						
Lab Courier 🗌 Lab Field Se	rvices Client Drop-off Other:						
Condition of Cooler/Containers	L						
Sample(s) received in Cooler?	No If yes: Cooler ID:						
Multiple Coolers?							
Cooler Custody Seals Present? Yes I No	No If yes: Cooler custody seals intact?						
Sample Custody Seals Present? Yes Yo	No If yes: Sample custody seals intact? Yes						
Trip Blank Present?	No If yes: Which VOA samples are in cooler? 1						
Temperature Record							
Coolant: 🗹 Wet ice 🗌 Blue ice 🗍 I	Dry ice Other: NONE						
Thermometer ID: Correction Factor (°C):							
• Temp Blank Temperature - If no temp blank, or temp	plank temperature above criteria, proceed to Sample Container Temperature						
Uncorrected Temp (°C): - 1, 6	Corrected Temp (°C): $-/, 6$						
Sample Container Temperature							
Container(s) used:	CONTAINER 2						
Uncorrected Temp (°C):							
Corrected Temp (°C):							
Exceptions Noted							
 If temperature exceeds criteria, was sample(s a) If yes: Is there evidence that the chilling 	· · · · · · · · · · · · · · · · · · ·						
(e.g., bulging septa, broken/cracked bottles,							
Note. If yes, contact PM before proceeding. If no	p, proceed with login						
Additional Comments							

Chain of Custody Record

じょう ひょう

ร้ร eurofins Erviorment America

Phone (319) 277-2401 Phone (319) 277-2425													
	Sampler Doug Harris			Lab PM:	Choire P			Carrier Tracking No(s)	king No(s) ⁻		COC No:		—
Client Contact				науе	Hayes, Shawn M	_							-
	708-530-1124			E-Mail Shaw	ь-ман Shawn Hayes@et.eurofinsus.com	et.eurofins	us.com	State of Origin:	iu:		Page: Page 1 of 1		
ka Public Power District			-DISMd				Analvsis F	Analvsis Reguested			Job #:		т
Address. 6089 S Hwy 25 Gerald Gentleman Station	Due Date Requested										Preservation Codes		
city Sutherland	TAT Requested (days):	s):				ļe,					A - HCL B - NaOH C Zn Acetate	M Hexane N - None O - AsNaO2	
State, Zip: NE 69165	Compliance Project:	∆ Yes	x No		4itrite	js)lu2 ,					D Nitric Acid E - NaHSO4		
Phone: 308-530-1124	Po #: 4500245807					,9birol				· · · · · · · · · · · · · · · · · · ·	F - MeOH G - Amchlor H - Accordic Acid		
ε	# OM				(0)	ilə, ebi					I - Ice J - Di Water		
	Project # 31007155				4 10 96						K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
	:#MOSS				N) QS						Other		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=qrab)	Matrix (wewater S=solid, O=waste/oli, BT=Tissue, A=Air)	Field Filtered Perform MSM 350 1 Amonia,	s A0747 , A0208 23208 Alkalinity Hq +H_0024M8				19dmuN lefoT	Special I	Special Instructions/Note	1
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Road Track	22-11-3	1/60	৩	Water	\times	イメ							
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ant	Poison B		Radiologica		Sample	le Disposal (A † Return To Client	(A fee may I ^{Xient}	Disposal By Lab	f samples a v Lab	ire retaine	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Careform To Client Disposal By Lab Archive For Mon	1 month) 	
ested I, II III IV, C					Special	Instruction	Special Instructions/QC Requirements	ments.					
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Custody Seals Intact: Custody Seal No Δ Yes Δ No					Coole	er Temperatu	Cooler Temperature(s) °C and Other Remarks:	sr Remarks:					· · · · ·
					-							Ver [.] 01/16/2019	1

Client: Nebraska Public Power District

Login Number: 237917 List Number: 1

Creator: Costello, Mackenzie K

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

List Source: Eurofins Cedar Falls

GOLDER

golder.com



August 8, 2024

Project No. GLA21457062.5798

Nebraska Public Power District Gerald Gentleman Station 6089 South Highway 25 Sutherland, Nebraska 69165

ALTERNATIVE SOURCE DEMONSTRATION REVIEW – Q2 2024 MONITORING EVENT

1.0 INTRODUCTION

Following the second quarter (Q2 2024) coal combustion residuals detection monitoring event, a previously identified verified statistically significant increase was identified at Gerald Gentleman Station for chloride at APMW-6. Chloride was initially identified as a verified statistically significant increase following the fourth quarter (Q4) 2021 monitoring event.

An alternative source demonstration was previously prepared for the verified statistically significant increase for chloride at APMW-6 following the Q2 2022 monitoring event, which was been reviewed following the subsequent monitoring events. This alternative sourced demonstration is included as an attachment to this document. The previously prepared ASD was reviewed for ongoing applicability in the context of the current monitoring event.

2.0 APMW-6 CHLORIDE

During the Q2 2024 monitoring event, chloride at APMW-6 was reported at a concentration of 30.3 mg/L, with a CUSUM value of 81.7 mg/L, exceeding the Shewhart-CUSUM statistical limit of 20.4 mg/L. Chloride concentrations from the upgradient, unimpacted wells (APMW-5, APMW-15, APMW-16A, and APMW-17) ranged from 8.7 mg/L to 29.6 mg/L for the same monitoring event. While the collected upgradient data for the current event is slightly lower than the current result for APMW-6, the range of values over time at the upgradient wells reaffirms the presence of higher chloride concentrations upgradient of the unit.

Further, as discussed within the prior alternative source demonstration, concentrations of chloride in the Sutherland Reservoir continue to remain elevated and serve as an influence on the groundwater upgradient of the CCR unit. As such, the CCR unit is not the source of the verified statistically significant increase in chloride at APMW-6.

3.0 CLOSING

Based on our review of the previously collected information as presented in the Q2 2022 alternative source demonstrations, and the data associated with the current event, the verified statistically significant increase

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identified during the Q2 2024 event for chloride at APMW-6 is not an indication of a release from the CCR unit. The identified conclusions within the previously completed alternative source demonstrations remain true, and Gerald Gentleman Station is recommended to remain in detection monitoring for the next scheduled coal combustion residuals monitoring event, scheduled for Q4 2024.

WSP USA Inc.

In C. Huts

Erin L. Hunter, PhD, PE Lead Consultant, Civil Engineer

ELH/JJS

1/Sc

Jacob J. Sauer, PE Associate Vice President, Civil Engineer

https://wsponline.sharepoint.com/sites/global-nppd2023gwqualityrep/project files/5 technical work/ggs/2024 - q4/ccr report/app c - asds and reviews/reference/app c-x_asd_reviewletter-q22024.docx



DRAFT

January 25, 2025

Project No. GLA21457062.5798

Nebraska Public Power District Gerald Gentleman Station 6089 South Highway 25 Sutherland, Nebraska 69165

ALTERNATIVE SOURCE DEMONSTRATION REVIEW – Q4 2024 MONITORING EVENT

1.0 INTRODUCTION

Following the fourth quarter (Q4 2024) coal combustion residuals detection monitoring event, a previously identified verified statistically significant increase was identified at Gerald Gentleman Station for chloride at APMW-6. Chloride was initially identified as a verified statistically significant increase following the fourth quarter (Q4) 2021 monitoring event.

An alternative source demonstration was previously prepared for the verified statistically significant increase for chloride at APMW-6 following the second quarter (Q2) 2022 monitoring event, which was subsequently reviewed following the subsequent monitoring events. This alternative sourced demonstration is included as an attachment to this document. The previously prepared ASD was reviewed for ongoing applicability in the context of the current monitoring event.

2.0 APMW-6 CHLORIDE

During the Q4 2024 monitoring event, chloride at APMW-6 was reported at a concentration of 31.4 mg/L, with a CUSUM value of 100.3 mg/L, exceeding the Shewhart-CUSUM statistical limit of 20.4 mg/L. Chloride concentrations from the upgradient, unimpacted wells (APMW-15, APMW-16A, and APMW-17) ranged from 29.1 mg/L to 33.5 mg/L for the same monitoring event. The collected upgradient data for the current event reaffirms the presence of equal or higher chloride concentrations upgradient of the unit.

Further, as discussed within the prior alternative source demonstration, concentrations of chloride in the Sutherland Reservoir continue to remain elevated and serve as an influence on the groundwater upgradient of the CCR unit. As such, the CCR unit is not the source of the verified statistically significant increase in chloride at APMW-6.

3.0 CLOSING

Based on our review of the previously collected information as presented in the Q2 2022 alternative source demonstrations, and the data associated with the current event, the verified statistically significant increase

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identified during the Q4 2024 event for chloride at APMW-6 is not an indication of a release from the CCR unit. The identified conclusions within the previously completed alternative source demonstrations remain true, and Gerald Gentleman Station is recommended to remain in detection monitoring for the next scheduled coal combustion residuals monitoring event, scheduled for Q2 2025.

WSP USA Inc.

DRAFT

DRAFT

Erin L. Hunter, PhD, PE Lead Consultant, Civil Engineer

ELH/JJS

Jacob J. Sauer, PE Associate Vice President, Civil Engineer

https://wsponline.sharepoint.com/sites/global-nppd2023gwqualityrep/project files/5 technical work/ggs/2024 - q4/ccr report/app c - asds and reviews/reference/app c-x_asd_reviewletter-q42024.docx

