February 28, 2025
File No. 27224645.00

Mr. Chad Stobbe
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: 2024 Annual Water Quality Report
Faircast, Inc Foundry Sand Disposal Site
Permit No. 51-SDP-06-19C

Dear Chad:

SCS Engineers has completed the required groundwater monitoring and statistical evaluation at the Faircast, Inc Foundry Sand Disposal Site (Monofill) for the 2024 reporting year. Our services were performed in general accordance with the closure permit requirements for implementation of the Hydrologic Monitoring System Plan (HMSP), and subsequent permit amendments. Please find enclosed a copy of the 2024 Annual Water Quality Report for the Monofill.

If you have any questions about these reports, please contact us as noted below.

Sincerely,

Semir Omerovic
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SCS Engineers
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SO/KAJ/TCB

Copies: Tim Neumann – Faircast, Inc.
Larry Bentler – Faircast, Inc.

2024 Annual Water Quality Report

Faircast, Inc Foundry Sand Disposal Site
Solid Waste Permit No. 51-SDP-06-19C

Prepared for:

Faircast, Inc

SCS ENGINEERS

27224645.00 | February 2025

1690 All-State Court, Suite 100
West Des Moines, Iowa 50265
515-631-6160

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CERTIFICATION

Prepared by: _____ Date: 2/28/2025

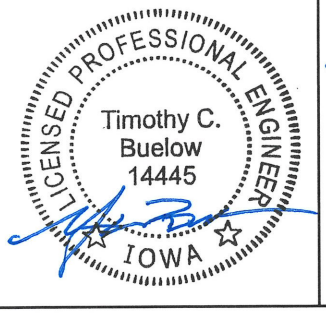
Typed: Semir Omerovic

Reviewed by: _____ Date: 2/28/2025

Typed: Timothy C. Buelow, P.E.

Certification page (115.26(8)"d")

An annual report summarizing the effect of the facility on groundwater and surface water quality shall be submitted to the department each year. The summary is to be prepared by an engineer registered in the state of Iowa.



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

_____ Date: 2/28/2025

Timothy C. Buelow, P.E.

License No. 14445

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal:

All except Appendix B-1.

EXECUTIVE SUMMARY

ES.1 PERIOD OF REPORT COVERAGE

SCS Engineers (SCS), on behalf of Faircast, Inc, has completed required groundwater sampling for the Faircast, Inc Foundry Sand Disposal Site (Monofill). The purpose of this Annual Water Quality Report (AWQR) is to document and statistically evaluate the December 2024 groundwater sampling results. This AWQR was prepared in accordance with the requirements of the site permit, and current requirements for implementation of the Hydrologic Monitoring System Plan (HMSP).

ES.2 REPORT PRIORITY

The following summarizes report priorities associated with groundwater compliance at the Monofill:

- Department review urgency: None.
- Department review impact on rules schedule: None.
- Actions or activities on hold pending Department review or comment: None.
- Actions and/or permit amendments needed: It is requested to move antimony, beryllium, and mercury to the five-year sampling frequency parameter list specified in IX. Special Condition 6.a. of Permit No. 51-SDP-06-19C as they have not been detected in any of the monitoring well samples to date.

ES.3 SITE STATUS AND APPLICABLE RULES

- Monofill Status: Closed, Closure Permit.
- Types of waste accepted: Foundry Sand.
- Applicable IAC rules: Not Applicable – requirements specified in Permit No. 56-SDP-06-19C.

ES.4 COMMENTS

The following summarizes points of special emphasis:

1. There were 25 prediction limit or double quantification rule indicated exceedances during this reporting period. Evaluation for verification will occur following the statistical evaluation of the spring 2025 sample analytical data – see Note 2 at the bottom of Table 1.
2. In accordance with the revised permit (Doc #103126), a number of sampling parameters were consistently measured as non-detect concentrations in the monitoring wells; therefore the parameters were discontinued from semi-annual sampling and will instead be sampled once every five years. These parameters include:
    - Organic constituents (Analytical Method 8260) – benzene, 2-butanone (MEK), chlorobenzene, chloroform, 1,2-dicloroethane, tetrachloroethene, vinyl chloride
    - Indicator parameters – phenols (Analytical Method 420.4) and formaldehyde (Analytical Method 8315A).

These parameters were last sampled in 2021 and are planned to be sampled again in 2026. If any of the parameters listed are detected, all parameters from that Analytical Method will be returned to the routine monitoring program.

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1.0 ACRONYMS/ABBREVIATIONS

AL = Action Level
CCV = Continuing Calibration Verification
CL = Control Limit - Mean plus Two Standard Deviations
DNR = Iowa Department of Natural Resources
DO = Dissolved Oxygen
GWPS = Groundwater Protection Standard
GWQAP = Groundwater Quality Assessment Plan
LEL = Lower Explosive Limit
LCL = Lower Confidence Limit
LCS = Laboratory Control Sample
LN = Lognormal
M+/-2SD = Mean Plus/Minus Two Standard Deviations
MCL = EPA Maximum Contaminant Level
MDL = Method Detection Limit
N = Normal
NC = No Change
NM = Not Measured
ORP = Oxidation-Reduction Potential
PL = Prediction Limit
QA = Quality Assurance
QC = Quality Control
RL = Reporting Limit
SWS = DNR Statewide Standard for a Protected Groundwater Source
SSI = Statistically Significant Increase Above Background
SSL = Statistically Significant Level Above Groundwater Protection Standard
SSS = Site-Specific Standard (Site-Specific GWPS)
TSS = Total Suspended Solids
UCL = Upper Confidence Limit
VOC = Volatile Organic Compound

2.0 SITE BACKGROUND

2.1 SITE LOCATION

The Faircast, Inc. Foundry Sand Disposal Monofill is depicted in **Figure 1**, Approved Monitoring Network. The Monofill property is located northwest of the intersection of North 23rd Street and West Grimes Avenue and is located in the NW ¼ of Section 27, Township 72 North, Range 10 West in Jefferson County, Iowa.

2.2 FACILITY

Background information regarding the Monofill was contained in the Hydrologic Monitoring System Plan (HMSP) dated April 3, 2020, (Doc # 97733) prepared by Terracon Consultants, Inc. According to the HSMP, the facility covers approximately 27.5 acres and had historically deposited approximately 302,000 cubic yards of spent foundry sand at the facility. The Monofill has been under a closure permit since June 30, 2020.

2.3 HYDROGEOLOGY OF THE SITE

Below is an excerpt of a description of the alluvial hydrogeology from the HMSP dated April 3, 2020, (Doc # 97733) prepared by Terracon Consultants, Inc.

> *Groundwater elevations around the Former Disposal Area were measured through four groundwater monitoring wells located at approximately 600-foot intervals. The monitoring wells were located at the base of the Former Disposal Area and extended into native soils. Groundwater elevations at the time of well installation ranged from 18 to 22 feet below grade. Groundwater elevations ranged from 3 to 15 feet below grade approximately one week after installation.*
>
> *Groundwater elevations within the Expansion Area were measured through eight groundwater piezometers located to the south and west of the Former Disposal Area. Groundwater evaluations encountered while drilling ranged from 3 to 25 feet below grade. Groundwater elevations range from 2 to 19 feet below grade approximately one week after piezometer installation.*

3.0 FIGURES DISCUSSION

The following figures are attached.

3.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Monofill property and hydrologic monitoring system plan (HMSP) network are depicted in **Figure 1**. **Figure 1** indicates the locations of each monitoring well and its respective monitoring program as of the beginning of this reporting period.

3.2 FIGURE 2 –GROUNDWATER CONTOURS

A groundwater contour map based on water levels measured in the water table aquifer during the December 2024 groundwater sampling event is included as **Figure 2**. **Figure 2** indicates a generally northwesterly groundwater flow direction.

4.0 QA/QC SUMMARY

Date indicates the date(s) of sampling.

4.1 DECEMBER 18, 2024 (2024 SAMPLING EVENT)

Based on the QA review, no samples were rejected as unusable due to QC failures. In general, the quality of the analytical data for this reporting period does not appear to have been compromised by analytical irregularities and results affected by QC anomalies are qualified with the appropriate data flags, which are listed in the laboratory report in Appendix B-1. Data validation documentation can be found in Appendix B-2.

5.0 DATA EVALUATION

Statistical evaluation in accordance with the Hydrologic Monitoring System Plan (HMSP) approved by DNR on May 13, 2020 (Doc #97733) and amended on October 25, 2021 (Doc #101504), was conducted for the groundwater analytical data collected during the 2024 sampling event. The statistical evaluation for samples collected during the 2024 sampling event is located in **Appendix D** of this report.

5.1 DATA EVALUATION

Groundwater monitoring for the Monofill consists of samples from one monitoring well along the south side (MW-6), one monitoring well along the southwest side (MW-7), one monitoring well along the northwest side (MW-8), one monitoring well along the north side (MW-9), and one monitoring well along the northeast side monitoring well (MW-10). The upgradient monitoring point MW-5 is located along the southeast side of the Monofill.

Monitoring well MW-9 total metals data from the 2024 sample was excluded from statistical consideration due to elevated levels of total suspended solids (TSS).

Exceedances of cobalt and manganese action levels were measured in downgradient monitoring well MW-9 in the 2024 sample analytical results. The cobalt concentration in monitoring well MW-8 was measured at 0.0028 mg/L in the 2024 sample analytical results, which exceeded the action level of 0.0021 mg/L; however, the concentration was lower than the level detected during the 2023 sample. Additionally, the concentration of manganese in monitoring well MW-8 was measured at 0.838 mg/L in the 2024 sample analytical results, which exceeded the action level of 0.3 mg/L; however, the detected concentration was lower than the level detected in the 2023 sample.

A total of 25 prediction limit or double quantification rule exceedances were indicated based on 2024 sample results as listed in **Table 1**. Eleven of the exceedances measured in the 2024 sample results were attributed to monitoring well MW-8.

5.2 TRENDING IN MONITORING WELLS

A statistically significant decreasing trends at a 99% confidence level (α=0.01) was identified in one monitoring well/constituent pair by Mann-Kendall analysis during this reporting period. A statistically significant increasing trend at a 99% confidence level (α=0.01) was identified in one monitoring well/constituent pair by Mann-Kendall analysis during this reporting period. The trend analysis is included in Attachment E of **Appendix D** of this report. The statistically significant trends were as follows:

Monitoring Point	Constituent	Trend
MW-8	Boron	Increasing
MW-10	Chloride	Decreasing

Although not necessarily statistically significant, the Mann-Kendall statistics can provide an indication of general trending in the data. Trend indications for wells in the monitoring program are shown in the table below. The statistics used to develop the general trending differ from the Mann-Kendall statistics used in the diagnostics section of the statistical evaluation in that a much lower trend threshold is applied for the general trending information (α=0.20 versus α=0.01). Trends classified as decreasing or increasing exhibited a statistically significant trend with 80% confidence using the most recent eight data points. Trends classified as stable did not exhibit a statistically

significant trend with 80% confidence using the eight most recent data points. A summary of Mann-Kendall statistics by constituent in each monitoring point is included in **Table 10** of this report.

Trending in Monitoring Wells				
Monitoring Well	**Decreasing Trends**	**Stable Trends**	**Increasing Trends**	**Number of Constituents Analyzed**
MW-5	0.00%	100.00%	0.00%	16
MW-6	5.26%	84.21%	10.53%	19
MW-7	5.88%	94.12%	0.00%	17
MW-8	0.00%	52.94%	47.06%	17
MW-9	11.76%	70.59%	17.65%	17
MW-10	25.00%	62.50%	12.50%	16
Site Wide	**7.84%**	**77.45%**	**14.71%**	**102**

(u) indicates an upgradient monitoring point.

Review of the Mann-Kendall statistics indicated that approximately 85% of the Mann-Kendall statistics were considered stable or decreasing following the 2024 annual statistical evaluation with two of the decreasing trends being pH. There were fourteen monitoring well/constituent pairs with generally increasing trends. The monitoring well/constituent pairs with increasing trends and decreasing pH trends are discussed in the following table.

Monitoring Well	Constituent Name	Comments
MW-6	Iron	Based on three actual detections and five non-detects. Highest concentration of 0.299 mg/L measured in 2024.
MW-6	Molybdenum	Based on seven actual detections and one non-detect. Highest concentration of 0.00608 mg/L measured in 2022.
MW-8	Arsenic	Based on four actual detections and four non-detects. Highest concentration of 0.00391 mg/L measured in 2024.
MW-8	Boron	Based on eight actual detections. Highest concentration of 0.602 mg/L measured in 2023.
MW-8	Cadmium	Based on one detection and seven non-detects. Highest concentration of 0.000241 mg/L measured in 2024.
MW-8	Cobalt	Based on five actual detections and 3 non-detects. Highest concentration of 0.00429 mg/L measured in 2023.
MW-8	Iron	Based on four actual detections and four non-detects. Highest concentration of 1.26 mg/L measured in 2024.
MW-8	Magnesium	Based on eight actual detections. Highest concentration of 124 mg/L measured in 2024.
MW-8	Manganese	Based on eight actual detections. Highest measurement of 1.98 mg/L measured in 2023.
MW-8	Sulfate	Based on eight actual detections. Highest concentration of 1440 mg/L measured in 2024.

Monitoring Well	Constituent Name	Comments
MW-9	Iron	Based on four actual detections and two non-detects. Highest concentration of 0.553 measured in 2023.
MW-9	Lead	Based on three actual detections and three non-detects. Highest concentration of 0.0092 mg/L was measured in 2023
MW-9	Manganese	Based on five actual detections and one non-detect. Highest concentration of 0.266 measured in 2023.
MW-9	pH (decreasing)	Based on eight measurements. Range of pH measurements between 6.68 and 7.81 S.U. Highest measurement of 7.81 S.U. measured in 2021.
MW-10	Boron	Based on four actual detections and three non-detects. Highest concentration of 0.303 mg/L measured in 2023.
MW-10	Molybdenum	Based on seven actual detections. Highest concentration of 0.00577 mg/L measured in 2022.
MW-10	pH (decreasing)	Based on eight measurements. Range of pH measurements between 6.29 and 8.6 S.U. Highest measurement of 8.6 S.U. measured in 2021.

Of the 15 increasing trends at 80% confidence level and the two decreasing trends for pH at 80% confidence level, none of the monitoring well/constituent pair trends were associated with the upgradient monitoring well. None of the monitoring well/constituent pairs found to be increasing at an 80% confidence level exceeded regulatory action levels for the respective constituent concentrations during the 2024 reporting period, with the exception of cobalt and manganese in monitoring well MW-8. The pH values of the two monitoring well/constituent pairs found to be decreasing at an 80% confidence level were all neutral to circumneutral. With the exception of monitoring well MW-8, a general stability of groundwater quality at the site was noted.

6.0 RECOMMENDATIONS

6.1 SITE IMPACT ON GROUNDWATER

Concentrations of the majority of analyzed parameters in groundwater at the Monofill were stable to decreasing. With the exception of monitoring well MW-8, a general stability of groundwater quality at the site was noted.

6.2 PROPOSED MONITORING

Anticipated groundwater sampling for the 2025 reporting period is shown in Table 2. It is requested to move antimony, beryllium, and mercury to the five-year sampling frequency parameter list specified in IX. Special Condition 6.a. of Permit No. 51-SDP-06-19C as they have not been detected in any of the monitoring well samples to date. No other changes to the monitoring program are recommended at this time.

6.3 PROPOSED MONITORING WELL CHANGES

Monitoring well performance is summarized in Table 4. No proposed changes to the monitoring wells are recommended at this time.

Tables

Table 1
Monitoring Program Summary
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Monitoring Well	Formation[1]	Current Monitoring Program	Change for Next Sampling Event	Prediction Limit/DQR Exceedances[2]	Total Number of Samples in Each Monitoring Program Since June 22, 2021		
					Routine	Supplemental	Remedial Action
MW-5	Clay/Sandy Clay	Background	None	N/A	8	-	-
MW-6	Sandy Clay	Detection	None	Aluminum, Iron, Lead, Manganese	8	-	-
MW-7	Sandy Clay	Detection	None	Aluminum, Arsenic, Iron, Lead, Specific Conductance	8	-	-
MW-8	Sandy Clay	Detection	None	Arsenic, Boron, Cadmium, Chloride, Cobalt, Iron, Magnesium, Manganese, Nickel, Specific Conductance, Sulfate	8	-	-
MW-9	Sandy Clay	Detection	None	Specific Conductance	8	-	-
MW-10	Sandy Clay	Detection	None	Boron, Iron, Manganese, Specific Conductance	8	-	-

Notes:
[1] Obtained from screened interval on boring logs.
[2] Detection monitoring statistical evaluation use predicition limits with a 1 of 2 retesting scheme and the Double Quantification Rule. The restesting event is the subsequent semi-annual compliance event. As this is the first statistical evaluation using these methods, the exceedances are only indicated at this time and not verified.
DQR: Double Quantification Rule.

Table 2
Monitoring Program Implementation Schedule
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents	
	12/18/2024	1st 2025 Semi-Annual Sampling Event	2nd 2025 Semi-Annual Sampling Event
MW-5	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids
MW-6	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids
MW-7	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids
MW-8	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids
MW-9	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids
MW-10	Aluminum, Ammonia-Nitrogen, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids	Aluminum, Ammonia-Nitrogen, Antimony*, Arsenic, Barium, Beryllium*, Boron, Cadmium, Chloride, Chromium, Cobalt, COD, Copper, Fluoride, Iron, Lead, Magnesium, Manganese, Mercury*, Molybdenum, Nickel, pH, Selenium, Silver, Sulfate, Thallium, Vanadium, Zinc, Total Organic Halogens, Total Suspended Solids

Notes:
COD - Chemical Oxygen Demand.
* - May be removed, pending DNR review of recommendation.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Compliance with:	**2022**	**2023**	**2024**	**2025**
HMSP Section 4.0 high and low water levels[1]	-	-	-	-
HMSP Section 4.0 changes in the hydrologic setting and flow paths[1]	-	-	-	-
HMSP Section 4.0 well depths	Completed	NR	Included	Scheduled
HMSP Section 4.0 well recharge rates[1]	-	-	-	-

Notes:
NR: Not reported.
[1] Sampling required once every five years, subject to the conditions in IX. Special Condition 6.a. of the site closure permit.

Table 4
Monitoring Well Performance and Maintenance Summary
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Well	Top of Casing	Top of Screen	Total Depth		Date of Measurement 12/18/2024	Maximum Depth Discrepancy (ft)
MW-5	773.50	756.50	27.0	Groundwater Level (ft)	16.72	-0.3
				Groundwater Elevation (Ft MSL)	756.78	
				Measured Well Depth (ft)	27.3	
				Submerged screen	Y	
MW-6	766.20	753.00	22.8	Groundwater Level (ft)	15.65	0.6
				Groundwater Elevation (Ft MSL)	750.55	
				Measured Well Depth (ft)	22.3	
				Submerged screen	N	
MW-7	765.10	748.20	26.9	Groundwater Level (ft)	20.20	-0.2
				Groundwater Elevation (Ft MSL)	744.90	
				Measured Well Depth (ft)	27.1	
				Submerged screen	N	
MW-8	737.50	723.50	22.0	Groundwater Level (ft)	6.85	-0.3
				Groundwater Elevation (Ft MSL)	730.65	
				Measured Well Depth (ft)	22.3	
				Submerged screen	Y	
MW-9	757.80	741.20	26.6	Groundwater Level (ft)	17.17	-0.6
				Groundwater Elevation (Ft MSL)	740.63	
				Measured Well Depth (ft)	27.3	
				Submerged screen	N	
MW-10	756.30	746.60	19.7	Groundwater Level (ft)	7.15	-0.6
				Groundwater Elevation (Ft MSL)	749.15	
				Measured Well Depth (ft)	20.3	
				Submerged screen	Y	

Comments:

1) Measured well depths were within 1.0 foot of the installed depth.

Table 5
Background and GWPS Summary
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	Action Level	Source
Inorganics										
Aluminum	mg/L	7	1	0.025 (1/2 RL)	0.11	0.03714	0.11	PL (NP)	-	-
Antimony	mg/L	7	0	0.001 (1/2 RL)	0.001 (1/2 RL)	0.001	< 0.002	DQR	0.006	MCL
Arsenic	mg/L	7	0	0.001 (1/2 RL)	0.001 (1/2 RL)	0.001	< 0.002	DQR	0.01	MCL
Barium	mg/L	7	7	0.411	0.549	0.4956	0.668	PL (P)	2.0	MCL
Beryllium	mg/L	7	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.0005	< 0.001	DQR	0.004	MCL
Boron	mg/L	7	1	0.05 (1/2 RL)	0.144	0.06343	0.144	PL (NP)	6.0	SWS
Cadmium	mg/L	7	0	0.00005 (1/2 RL)	0.0001 (1/2 RL)	7.1429E-05	< 0.0002	DQR	0.005	MCL
Chemical Oxygen Demand	mg/L	7	2	12.5 (1/2 RL)	64.5	22.07	64.5	PL (NP)	-	-
Chloride	mg/L	7	7	33.8	63.2	46.11	83.43	PL (P)	-	-
Chromium	mg/L	7	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.0025	< 0.005	DQR	0.1	MCL
Cobalt	mg/L	7	0	0.00025 (1/2 RL)	0.00025 (1/2 RL)	0.00025	< 0.0005	DQR	0.0021	SWS
Copper	mg/L	7	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.0025	< 0.005	DQR	1.3	MCL
Fluoride	mg/L	7	3	0.25 (1/2 RL)	0.7	0.5016	0.668	PL (NP)	-	-
Iron	mg/L	7	1	0.05 (1/2 RL)	0.101	0.05729	0.101	PL (NP)	-	-
Lead	mg/L	7	0	0.00025 (1/2 RL)	0.00025 (1/2 RL)	0.00025	< 0.0005	DQR	0.015	MCL
Magnesium	mg/L	7	7	19	40	22.96	40	PL (NP)	-	-
Manganese	mg/L	7	1	0.005 (1/2 RL)	0.0155	0.01	0.0155	PL (NP)	0.3	SWS
Mercury	mg/L	7	0	0.0001 (1/2 RL)	0.0001 (1/2 RL)	0.0001	< 0.0002	DQR	0.002	SWS
Molybdenum	mg/L	7	3	0.001 (1/2 RL)	0.0307	0.005973	0.0307	PL (NP)	0.04	SWS
Nickel	mg/L	7	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.0025	< 0.005	DQR	0.1	SWS
Nitrogen, Ammonia	mg/L	7	0	0.1 (1/2 RL)	0.25 (1/2 RL)	0.2071	< 0.5	DQR	30.0	HAL
pH	S.U.	11	11	6.67	7.87	7.261	8.249	PL (P)	-	-
Selenium	mg/L	7	1	0.0025 (1/2 RL)	0.0052	0.002886	0.0052	PL (NP)	0.05	MCL
Silver	mg/L	7	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.0005	< 0.001	DQR	0.1	SWS
Specific Conductance	uS/cm	8	8	427	690	587.4	833.4	PL (P)	-	-
Sulfate	mg/L	7	7	17.6	79.8	31.47	129	PL (P)	-	-
Thallium	mg/L	7	2	0.0005 (1/2 RL)	0.00317	0.001046	0.0032	PL (NP)	0.002	MCL
Total Organic Halogens	mg/L	7	1	0.02 (1/2 RL)	0.0706	0.02866	0.0706	PL (NP)	-	-
Vanadium	mg/L	7	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.0025	< 0.005	DQR	0.035	SWS
Zinc	mg/L	7	0	0.01 (1/2 RL)	0.01 (1/2 RL)	0.010	< 0.02	DQR	2.0	SWS

Notes:

1) Background levels based on calculated prediction limits or reporting limit, as applicable.

Acronyms/Abbreviations:

RL = Reporting Limit
GWPS = Groundwater Protection Standard
SSS = Site-Specific GWPS
SWS = Statewide Standard
SD = Standard Deviation
MCL = EPA Maximum Contaminant Level
PL = Prediction Limits
HAL = Health Advisory Level
DWA = Drinking Water Advisory

Comments:

1) **Water quality results and effectiveness of the statistical data evaluation criteria**: Statistical evaluations consist of prediction limits.
2) **Changes to the previous statistical method during reporting period:** None.

Table 6

Summary of Well/Detected Constituent Pairs With No Immediately Preceding Statistically Significant Increase Above Background

2024 Annual Water Quality Report

Faircast, Inc.

Permit No. 51-SDP-06-19C

2024 Sampling Event

Well	Constituent	Units	Most Recent Result	Background Standard
MW-6	Aluminum	mg/L	0.382	0.11
	Iron	mg/L	0.299	0.101
	Lead	mg/L	0.00137	<0.0005*
	Manganese	mg/L	0.0582	0.0155
MW-7	Aluminum	mg/L	0.293	0.11
	Arsenic	mg/L	0.00207	<0.002*
	Iron	mg/L	0.193	0.101
	Lead	mg/L	0.000937	<0.0005
	Specific Conductance	µS/cm	863	833.4
MW-8	Arsenic	mg/L	0.00391	<0.002*
	Boron	mg/L	0.476	0.144
	Cadmium	mg/L	0.000241	<0.0005*
	Chloride	mg/L	243	83.43
	Cobalt	mg/L	0.0028	<0.0005*
	Iron	mg/L	1.26	0.101
	Magnesium	mg/L	124	40
	Manganese	mg/L	0.838	0.0155
	Nickel	mg/L	0.00886	<0.005*
	Specific Conductance	µS/cm	4579	833.4
	Sulfate	mg/L	1440	129
MW-9	Specific Conductance	µS/cm	903	833.4
MW-10	Boron	mg/L	0.168	0.144
	Iron	mg/L	0.419	0.101
	Manganese	mg/L	0.018	0.0155
	Specific Conductance	µS/cm	835	833.4

Note: Table includes indicated prediction limit/DQR exceedances identified during the 2024 reporting period that were not identified as prediction limit exceedances in the previous year.

* - No prediction limit was calculated due to no detections in background monitoring well MW-5; therefore, the reporting limit was used as the background standard.

Comments:

1) **Problems with the current HMSP network:** None.
2) **Schedule to implement remedies:** Not applicable.
3) **Alternative constituent or sample frequency changes:** None.
4) **Significant changes to prediction limits:** None.

Table 7
Summary Table of Ongoing and Newly Identified Statistically Significant Increases Above Background
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Key

Denotes ongoing prediction limit exceedances (as applicable) that were identified as such during this reporting period and the previous reporting period.

Denotes newly identified prediction limit exceedances or double quantifications (as applicable) in the 2024 reporting period. Newly identified is defined as occurring at least once in the current reporting period but not in the immediately preceeding reporting period.

Well	Constituent	Units	Most Recent Result	Background Standard	Action Level/ Statewide Standard
MW-6	Aluminum	mg/L	0.382	0.11	-
	Iron	mg/L	0.299	0.101	-
	Lead	mg/L	0.00137	<0.0005*	0.015
	Manganese	mg/L	0.0582	0.0155	0.3
MW-7	Aluminum	mg/L	0.293	0.11	-
	Arsenic	mg/L	0.00207	<0.002*	0.01
	Iron	mg/L	0.193	0.101	-
	Lead	mg/L	0.000937	<0.0005	0.015
	Specific Conductance	µS/cm	863	833.4	-
MW-8	Arsenic	mg/L	0.00391	<0.002*	0.01
	Boron	mg/L	0.476	0.144	-
	Cadmium	mg/L	0.000241	<0.0005*	0.005
	Chloride	mg/L	243	83.43	-
	Cobalt	mg/L	0.0028	<0.0005*	0.0021
	Iron	mg/L	1.26	0.101	-
	Magnesium	mg/L	124	40	-
	Manganese	mg/L	0.838	0.0155	0.3
	Nickel	mg/L	0.00886	<0.005*	0.1
	Specific Conductance	µS/cm	4579	833.4	-
	Sulfate	mg/L	1440	129	-
MW-9	Specific Conductance	µS/cm	903	833.4	-
MW-10	Boron	mg/L	0.168	0.144	6.0
	Iron	mg/L	0.419	0.101	-
	Manganese	mg/L	0.018	0.0155	0.3
	Specific Conductance	µS/cm	835	833.4	-

Notes: The first statistical evaluation was completed during the 2024 reporting period; therefore all prediction limit exceedances are newly identified and not verified.
* - No prediction limit was calculated due to no detections in background monitoring well MW-5; therefore, the reporting limit was used as the background standard.

Comments:

1) **Problems with the current HMSP network:** None.
2) **Proposed remedies:** None.
3) **Alternative constituent or sample frequency changes:** None.
4) **Plume delineation strategies:** Not Applicable.
5) **Property owner notifications:** Not applicable.

Table 8
Summary of Groundwater Chemistry
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

The Summary of Groundwater Chemistry is located in Appendix C.

Table 9
Historical Control Limit and Action Level Exceedances
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

Key

	Statistically Significant Increase Above Background
X	Action Level Exceedance

Well	Constituent	2024
MW-6	Aluminum	
	Iron	
	Lead	
	Manganese	
MW-7	Aluminum	
	Arsenic	
	Iron	
	Lead	
	Specific Conductance	
MW-8	Arsenic	
	Boron	
	Cadmium	
	Chloride	
	Cobalt	**X**
	Iron	
	Magnesium	
	Manganese	**X**
	Nickel	
	Specific Conductance	
	Sulfate	
MW-9	Specific Conductance	
MW-10	Boron	
	Iron	
	Manganese	
	Specific Conductance	

Notes: Exceedances for upgradient monitoring wells not included.

Table 10
Groundwater Quality Assessment Plan Trend Analysis
2024 Annual Water Quality Report
Faircast, Inc.
Permit No. 51-SDP-06-19C

See Appendix E for Mann Kendall Trend Analysis.

Figures

HMSP Wells	Monitoring Program
MW-5	Background
MW-6	Detection
MW-7	Detection
MW-8	Detection
MW-9	Detection
MW-10	Detection

SCS ENGINEERS
environmental consultants and contractors

Approved Monitoring Network

Figure 1

Legend

- Appoximate Location of Monitoring Well
- Property Boundary

Faircast Foundry Sand Monofill
Fairfield, IA
Project No: 27224645.00
Drawing Date: February 2025

N W E S

0 50 100 200 300 Feet

Groundwater Contours

Figure 2

SCS ENGINEERS
environmental consultants and contractors

Legend

- Approximate Groundwater Contours Based on Field Measurments Taken December 18, 2024
- Appoximate Location of Monitoring Well
- Property Boundary

Faircast Foundry Sand Monofill
Fairfield, IA
Project No: 27224645.00
Drawing Date: February 2025

N W E S

0 50 100 200 300 Feet

Esri, CGIAR, USGS, Esri, TomTom, Garmin, Foursquare, FAO, METI/NASA, USGS, USDA NAIP, Iowa State University GIS Facility

Appendix A

Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-5**	Date:	**12/18/2024**
Gradient:	Up	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	27.3
Initial Static Water Level (feet):	16.72
Initial Groundwater Elevation (ft-amsl):	756.78
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
12:04 PM	Purging start time.						
12:07 PM	12.2	6.1	705.6	6.99	124.1	42.1	
12:10 PM	12.0	5.9	669.4	6.89	129.9	10.3	
12:13 PM	12.0	5.8	657.2	6.82	133.4	6.6	
12:16 PM	11.9	5.7	653.0	6.78	136.3	6.3	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	175.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	Peri cap is needed.	
Additional Comments:	Color: Cloudy Odor: None	

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-6**	Date:	**12/18/2024**
Gradient:	Down	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	22.3
Initial Static Water Level (feet):	15.65
Initial Groundwater Elevation (ft-amsl):	750.55
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
12:37 PM	Purging start time.						
12:40 PM	12.2	6.7	811.8	6.99	150.4	-753.7	
12:43 PM	12.3	6.9	785.0	6.94	149.3	101.2	
12:46 PM	12.3	7.1	749.7	6.89	149.8	72.7	
12:49 PM	12.5	7.1	743.0	6.86	151.3	52.6	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	166.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	Peri cap is needed.	

Additional Comments:	Color: Cloudy Odor: None Duplicate MW-D collected.

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-7**	Date:	**12/18/2024**
Gradient:	Down	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	27.1
Initial Static Water Level (feet):	20.20
Initial Groundwater Elevation (ft-amsl):	744.90
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
1:22 PM	Purging start time.						
1:25 PM	11.4	2.7	908.4	7.16	-58.2	11.2	
1:28 PM	11.5	1.4	891.7	7.16	-76.7	6.3	
1:31 PM	11.5	1.1	880.2	7.16	-84.1	7.1	
1:34 PM	11.6	1.1	863.0	7.14	-82.3	13.2	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.9
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	158.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	Peri cap is needed.	

Additional Comments:	Color: Clear/ Black particles Odor: Swampy

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-8**	Date:	**12/18/2024**
Gradient:	Down	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	22.3
Initial Static Water Level (feet):	6.85
Initial Groundwater Elevation (ft-amsl):	730.65
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:39 PM	Purging start time.						
2:42 PM	11.2	4.1	4520.8	6.55	65.3	8.5	
2:45 PM	10.7	3.0	4550.7	6.54	64.3	10.5	
2:48 PM	10.7	2.6	4577.1	6.55	63.9	10.5	
2:51 PM	10.8	2.3	4579.0	6.55	64.0	10.3	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	175.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	Peri cap is needed.	
Additional Comments:	Color: Clear Odor: None	

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-9**	Date:	**12/18/2024**
Gradient:	Down	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	27.3
Initial Static Water Level (feet):	17.17
Initial Groundwater Elevation (ft-amsl):	740.63
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:04 PM	Purging start time.						
2:07 PM	11.4	5.7	922.0	6.97	6.5	14.3	
2:10 PM	11.6	5.5	906.1	6.95	13.9	16.0	
2:13 PM	11.6	5.5	903.3	6.94	23.7	17.4	
2:16 PM	11.2	5.6	903.0	6.93	32.4	16.2	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	175.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	Peri cap is needed.	

Additional Comments:	Color: Cloudy Odor: Swampy Flow stopped during sample; peri tubing was adjusted; color of water changed. Peri tubing adjusted to different depth.

FORM FOR GROUNDWATER SAMPLING

Project:	**Faircast, Inc Foundry Sand Disposal Site**		
Monitoring Well/Piezometer ID:	**MW-10**	Date:	**12/18/2024**
Gradient:	Down	Sampler:	Cole Tesar

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	No	Well did not have a cap.
Litter/Standing Water?	No	

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	20.3
Initial Static Water Level (feet):	7.15
Initial Groundwater Elevation (ft-amsl):	749.15
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
11:32 AM	Purging start time.						
11:35 AM	11.6	5.0	1009.1	6.99	101.3	7.6	
11:38 AM	11.1	6.6	851.7	6.94	110.6	6.0	
11:41 AM	11.2	6.9	837.3	6.91	117.1	5.3	
11:44 AM	11.4	7.0	835.0	6.89	122.2	4.7	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	175.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	Well tag needed
If yes, explain:	New peri cap needed.	
Additional Comments:	Color: Clear Odor: None	

Appendix B-1

Laboratory Analytical Data Sheets

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Christine Collier
SCS Engineers
1690 All State Court
Suite 100
West Des Moines, Iowa 50265

Generated 1/17/2025 9:38:24 AM

JOB DESCRIPTION

Faircast Foundry Sand Site-Fall

JOB NUMBER

310-297530-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

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

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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

Table of Contents

Job ID: 310-297530-1 Eurofins Cedar Falls

Job Narrative
310-297530-1

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 12/19/2024 4:10 PM. 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 0.5°C.

HPLC/IC
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
Method 9020B_Calc: The following samples for batch 280-681458 (Total Organic Halides) were diluted to 2x due to the nature of the sample matrix based on Cl pre-screen test: MW-5 (310-297530-1), MW-6 (310-297530-2), MW-7 (310-297530-3), MW-8 (310-297530-4), MW-9 (310-297530-5), MW-10 (310-297530-6) and MW-D (310-297530-7). 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.

Sample Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-297530-1	MW-5	Water	12/18/24 12:04	12/19/24 16:10
310-297530-2	MW-6	Water	12/18/24 12:37	12/19/24 16:10
310-297530-3	MW-7	Water	12/18/24 13:22	12/19/24 16:10
310-297530-4	MW-8	Water	12/18/24 14:39	12/19/24 16:10
310-297530-5	MW-9	Water	12/18/24 14:04	12/19/24 16:10
310-297530-6	MW-10	Water	12/18/24 11:32	12/19/24 16:10
310-297530-7	MW-D	Water	12/18/24 12:37	12/19/24 16:10

Detection Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-5 — Lab Sample ID: 310-297530-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	33.8		5.00		mg/L	5		9056A	Total/NA
Sulfate	17.6		5.00		mg/L	5		9056A	Total/NA
Barium	0.507		0.00200		mg/L	1		6020B	Total/NA
Magnesium	19.1		0.500		mg/L	1		6020B	Total/NA
Thallium	0.00165	F1	0.00100		mg/L	1		6020B	Total/NA
Total Suspended Solids	3.13		1.88		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 310-297530-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26.5		5.00		mg/L	5		9056A	Total/NA
Sulfate	63.1		5.00		mg/L	5		9056A	Total/NA
Aluminum	0.382		0.0500		mg/L	1		6020B	Total/NA
Barium	0.203		0.00200		mg/L	1		6020B	Total/NA
Iron	0.299		0.100		mg/L	1		6020B	Total/NA
Lead	0.00137		0.000500		mg/L	1		6020B	Total/NA
Magnesium	15.4		0.500		mg/L	1		6020B	Total/NA
Manganese	0.0582		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	0.00296		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	52.4		3.00		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 310-297530-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20.9		5.00		mg/L	5		9056A	Total/NA
Sulfate	33.3		5.00		mg/L	5		9056A	Total/NA
Aluminum	0.293		0.0500		mg/L	1		6020B	Total/NA
Arsenic	0.00207		0.00200		mg/L	1		6020B	Total/NA
Barium	0.275		0.00200		mg/L	1		6020B	Total/NA
Iron	0.193		0.100		mg/L	1		6020B	Total/NA
Lead	0.000937		0.000500		mg/L	1		6020B	Total/NA
Magnesium	19.6		0.500		mg/L	1		6020B	Total/NA
Manganese	0.0122		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	0.00372		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	84.0		15.0		mg/L	1		I-3765-85	Total/NA
Chemical Oxygen Demand	41.5		25.0		mg/L	5		SM 5220D	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 310-297530-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	243		5.00		mg/L	5		9056A	Total/NA
Sulfate	1440		20.0		mg/L	20		9056A	Total/NA
Arsenic	0.00391		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0192		0.00200		mg/L	1		6020B	Total/NA
Boron	0.476		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.000241		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.00280		0.000500		mg/L	1		6020B	Total/NA
Iron	1.26		0.100		mg/L	1		6020B	Total/NA
Magnesium	124		2.00		mg/L	4		6020B	Total/NA
Manganese	0.838		0.0100		mg/L	1		6020B	Total/NA
Nickel	0.00885		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	9.00		1.88		mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-9 — Lab Sample ID: 310-297530-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.61		5.00		mg/L	5		9056A	Total/NA
Sulfate	73.3		5.00		mg/L	5		9056A	Total/NA
Aluminum	0.998		0.0500		mg/L	1		6020B	Total/NA
Arsenic	0.00273		0.00200		mg/L	1		6020B	Total/NA
Barium	0.121		0.00200		mg/L	1		6020B	Total/NA
Boron	0.170		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.000450		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.00790		0.000500		mg/L	1		6020B	Total/NA
Copper	0.0200		0.00500		mg/L	1		6020B	Total/NA
Iron	3.22		0.100		mg/L	1		6020B	Total/NA
Lead	0.0102		0.000500		mg/L	1		6020B	Total/NA
Magnesium	19.8		0.500		mg/L	1		6020B	Total/NA
Manganese	1.24		0.0100		mg/L	1		6020B	Total/NA
Nickel	0.0168		0.00500		mg/L	1		6020B	Total/NA
Vanadium	0.00604		0.00500		mg/L	1		6020B	Total/NA
Zinc	0.0275		0.0200		mg/L	1		6020B	Total/NA
Total Suspended Solids	335		15.0		mg/L	1		I-3765-85	Total/NA
Chemical Oxygen Demand	27.8		25.0		mg/L	5		SM 5220D	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 310-297530-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.19		5.00		mg/L	5		9056A	Total/NA
Sulfate	56.7		5.00		mg/L	5		9056A	Total/NA
Aluminum	0.0703		0.0500		mg/L	1		6020B	Total/NA
Barium	0.0548		0.00200		mg/L	1		6020B	Total/NA
Boron	0.168		0.100		mg/L	1		6020B	Total/NA
Iron	0.419		0.100		mg/L	1		6020B	Total/NA
Magnesium	21.6		0.500		mg/L	1		6020B	Total/NA
Manganese	0.0180		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	0.00504		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	5.88		1.88		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D — Lab Sample ID: 310-297530-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27.1		5.00		mg/L	5		9056A	Total/NA
Sulfate	65.3		5.00		mg/L	5		9056A	Total/NA
Aluminum	0.135		0.0500		mg/L	1		6020B	Total/NA
Barium	0.190		0.00200		mg/L	1		6020B	Total/NA
Iron	0.107		0.100		mg/L	1		6020B	Total/NA
Magnesium	15.5		0.500		mg/L	1		6020B	Total/NA
Manganese	0.0149		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	0.00342		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	19.8		1.88		mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-5
Lab Sample ID: 310-297530-1
Date Collected: 12/18/24 12:04
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.8**		5.00		mg/L			12/20/24 15:48	5
Fluoride	<1.00		1.00		mg/L			12/20/24 15:48	5
Sulfate	**17.6**		5.00		mg/L			12/20/24 15:48	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0500	F1	0.0500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Antimony	<0.00200	F1	0.00200		mg/L		12/26/24 09:00	12/30/24 17:26	1
Arsenic	<0.00200	F1	0.00200		mg/L		12/26/24 09:00	12/30/24 17:26	1
Barium	**0.507**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:26	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:31	1
Boron	<0.100	F1	0.100		mg/L		12/26/24 09:00	12/30/24 17:26	1
Cadmium	<0.000200	F1	0.000200		mg/L		12/26/24 09:00	12/30/24 17:26	1
Chromium	<0.00500	F1	0.00500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Cobalt	<0.000500	F1	0.000500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Copper	<0.00500	F1	0.00500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Iron	<0.100	F1	0.100		mg/L		12/26/24 09:00	12/30/24 17:26	1
Lead	<0.000500	F1	0.000500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Magnesium	**19.1**		0.500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Manganese	<0.0100	F1	0.0100		mg/L		12/26/24 09:00	12/30/24 17:26	1
Molybdenum	<0.00200	F1	0.00200		mg/L		12/26/24 09:00	12/30/24 17:26	1
Nickel	<0.00500	F1	0.00500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Selenium	<0.00500	F1	0.00500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Silver	<0.00100	F1	0.00100		mg/L		12/26/24 09:00	12/30/24 17:26	1
Thallium	**0.00165**	**F1**	0.00100		mg/L		12/26/24 09:00	12/30/24 17:26	1
Vanadium	<0.00500	F1	0.00500		mg/L		12/26/24 09:00	12/30/24 17:26	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/31/24 14:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:26	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**3.13**		1.88		mg/L			12/20/24 11:29	1
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L			12/26/24 09:18	5

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-6
Lab Sample ID: 310-297530-2
Date Collected: 12/18/24 12:37
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.5**		5.00		mg/L			12/20/24 16:04	5
Fluoride	<1.00		1.00		mg/L			12/20/24 16:04	5
Sulfate	**63.1**		5.00		mg/L			12/20/24 16:04	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.382**		0.0500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:45	1
Arsenic	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:45	1
Barium	**0.203**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:45	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:48	1
Boron	<0.100		0.100		mg/L		12/26/24 09:00	12/30/24 17:45	1
Cadmium	<0.000200		0.000200		mg/L		12/26/24 09:00	12/30/24 17:45	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Cobalt	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Iron	**0.299**		0.100		mg/L		12/26/24 09:00	12/30/24 17:45	1
Lead	**0.00137**		0.000500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Magnesium	**15.4**		0.500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Manganese	**0.0582**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:45	1
Molybdenum	**0.00296**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:45	1
Nickel	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:45	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:45	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:45	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/30/24 17:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:28	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**52.4**		3.00		mg/L			12/20/24 11:29	1
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L			12/26/24 09:18	5

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-7
Lab Sample ID: 310-297530-3
Date Collected: 12/18/24 13:22
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.9**		5.00		mg/L			12/20/24 16:20	5
Fluoride	<1.00		1.00		mg/L			12/20/24 16:20	5
Sulfate	**33.3**		5.00		mg/L			12/20/24 16:20	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.293**		0.0500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:47	1
Arsenic	**0.00207**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:47	1
Barium	**0.275**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:47	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:50	1
Boron	<0.100		0.100		mg/L		12/26/24 09:00	12/30/24 17:47	1
Cadmium	<0.000200		0.000200		mg/L		12/26/24 09:00	12/30/24 17:47	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Cobalt	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Iron	**0.193**		0.100		mg/L		12/26/24 09:00	12/30/24 17:47	1
Lead	**0.000937**		0.000500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Magnesium	**19.6**		0.500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Manganese	**0.0122**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:47	1
Molybdenum	**0.00372**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:47	1
Nickel	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:47	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:47	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:47	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/30/24 17:47	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:30	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**84.0**		15.0		mg/L			12/20/24 10:15	1
Chemical Oxygen Demand (SM 5220D)	**41.5**		25.0		mg/L			12/26/24 09:18	5

Client Sample ID: MW-8
Lab Sample ID: 310-297530-4
Date Collected: 12/18/24 14:39
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**243**		5.00		mg/L			12/20/24 17:06	5
Fluoride	<1.00		1.00		mg/L			12/20/24 17:06	5
Sulfate	**1440**		20.0		mg/L			12/21/24 09:01	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0500		0.0500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:50	1
Arsenic	**0.00391**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:50	1
Barium	**0.0192**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:50	1
Beryllium	<0.00400		0.00400		mg/L		12/26/24 09:00	12/31/24 14:53	4
Boron	**0.476**		0.100		mg/L		12/26/24 09:00	12/30/24 17:50	1
Cadmium	**0.000241**		0.000200		mg/L		12/26/24 09:00	12/30/24 17:50	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Cobalt	**0.00280**		0.000500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Iron	**1.26**		0.100		mg/L		12/26/24 09:00	12/30/24 17:50	1
Lead	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Magnesium	**124**		2.00		mg/L		12/26/24 09:00	01/02/25 13:49	4
Manganese	**0.838**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:50	1
Molybdenum	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:50	1
Nickel	**0.00885**		0.00500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:50	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:50	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:50	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/30/24 17:50	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:40	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**9.00**		1.88		mg/L			12/20/24 10:15	1
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L			12/26/24 09:18	5

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-9
Lab Sample ID: 310-297530-5

Date Collected: 12/18/24 14:04
Matrix: Water

Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.61**		5.00		mg/L			12/20/24 17:22	5
Fluoride	<1.00		1.00		mg/L			12/20/24 17:22	5
Sulfate	**73.3**		5.00		mg/L			12/20/24 17:22	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.998**		0.0500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:52	1
Arsenic	**0.00273**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:52	1
Barium	**0.121**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:52	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:55	1
Boron	**0.170**		0.100		mg/L		12/26/24 09:00	12/30/24 17:52	1
Cadmium	**0.000450**		0.000200		mg/L		12/26/24 09:00	12/30/24 17:52	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Cobalt	**0.00790**		0.000500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Copper	**0.0200**		0.00500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Iron	**3.22**		0.100		mg/L		12/26/24 09:00	12/30/24 17:52	1
Lead	**0.0102**		0.000500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Magnesium	**19.8**		0.500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Manganese	**1.24**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:52	1
Molybdenum	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:52	1
Nickel	**0.0168**		0.00500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:52	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:52	1
Vanadium	**0.00604**		0.00500		mg/L		12/26/24 09:00	12/30/24 17:52	1
Zinc	**0.0275**		0.0200		mg/L		12/26/24 09:00	12/30/24 17:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:40	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**335**		15.0		mg/L			12/20/24 10:15	1
Chemical Oxygen Demand (SM 5220D)	**27.8**		25.0		mg/L			12/26/24 09:18	5

Client Sample ID: MW-10
Lab Sample ID: 310-297530-6
Date Collected: 12/18/24 11:32
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.19**		5.00		mg/L			12/20/24 17:38	5
Fluoride	<1.00		1.00		mg/L			12/20/24 17:38	5
Sulfate	**56.7**		5.00		mg/L			12/20/24 17:38	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.0703**		0.0500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:55	1
Arsenic	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:55	1
Barium	**0.0548**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:55	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:57	1
Boron	**0.168**		0.100		mg/L		12/26/24 09:00	12/30/24 17:55	1
Cadmium	<0.000200		0.000200		mg/L		12/26/24 09:00	12/30/24 17:55	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Cobalt	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Iron	**0.419**		0.100		mg/L		12/26/24 09:00	12/30/24 17:55	1
Lead	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Magnesium	**21.6**		0.500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Manganese	**0.0180**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:55	1
Molybdenum	**0.00504**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:55	1
Nickel	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:55	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:55	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:55	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/30/24 17:55	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:42	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**5.88**		1.88		mg/L			12/20/24 11:29	1
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L			12/26/24 09:18	5

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-D
Lab Sample ID: 310-297530-7

Date Collected: 12/18/24 12:37
Matrix: Water
Date Received: 12/19/24 16:10

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.1**		5.00		mg/L			12/20/24 17:53	5
Fluoride	<1.00		1.00		mg/L			12/20/24 17:53	5
Sulfate	**65.3**		5.00		mg/L			12/20/24 17:53	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.135**		0.0500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:57	1
Arsenic	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:57	1
Barium	**0.190**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:57	1
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 15:00	1
Boron	<0.100		0.100		mg/L		12/26/24 09:00	12/30/24 17:57	1
Cadmium	<0.000200		0.000200		mg/L		12/26/24 09:00	12/30/24 17:57	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Cobalt	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Iron	**0.107**		0.100		mg/L		12/26/24 09:00	12/30/24 17:57	1
Lead	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Magnesium	**15.5**		0.500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Manganese	**0.0149**		0.0100		mg/L		12/26/24 09:00	12/30/24 17:57	1
Molybdenum	**0.00342**		0.00200		mg/L		12/26/24 09:00	12/30/24 17:57	1
Nickel	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:57	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:57	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:57	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/30/24 17:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen (EPA 350.1)	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:23	1
Total Organic Halogens (SW846 9020B)	<0.0600		0.0600		mg/L			01/15/25 12:54	1
Total Suspended Solids (USGS I-3765-85)	**19.8**		1.88		mg/L			12/20/24 10:15	1
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L			12/26/24 09:18	5

Definitions/Glossary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Qualifiers

Metals

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-443398/3
Matrix: Water
Analysis Batch: 443398

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			12/20/24 10:52	1
Fluoride	<0.200		0.200		mg/L			12/20/24 10:52	1
Sulfate	<1.00		1.00		mg/L			12/20/24 10:52	1

Lab Sample ID: LCS 310-443398/4
Matrix: Water
Analysis Batch: 443398

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.606		mg/L		96	90 - 110
Fluoride	2.00	2.037		mg/L		102	90 - 110
Sulfate	10.0	10.36		mg/L		104	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-443286/1-A
Matrix: Water
Analysis Batch: 443693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0500		0.0500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Antimony	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:21	1
Arsenic	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:21	1
Barium	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:21	1
Boron	<0.100		0.100		mg/L		12/26/24 09:00	12/30/24 17:21	1
Cadmium	<0.000200		0.000200		mg/L		12/26/24 09:00	12/30/24 17:21	1
Chromium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Cobalt	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Copper	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Iron	<0.100		0.100		mg/L		12/26/24 09:00	12/30/24 17:21	1
Lead	<0.000500		0.000500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Magnesium	<0.500		0.500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Manganese	<0.0100		0.0100		mg/L		12/26/24 09:00	12/30/24 17:21	1
Molybdenum	<0.00200		0.00200		mg/L		12/26/24 09:00	12/30/24 17:21	1
Nickel	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Selenium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:21	1
Silver	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:21	1
Thallium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/30/24 17:21	1
Vanadium	<0.00500		0.00500		mg/L		12/26/24 09:00	12/30/24 17:21	1

Lab Sample ID: MB 310-443286/1-A
Matrix: Water
Analysis Batch: 443803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00100		0.00100		mg/L		12/26/24 09:00	12/31/24 14:26	1
Zinc	<0.0200		0.0200		mg/L		12/26/24 09:00	12/31/24 14:26	1

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

Lab Sample ID: LCS 310-443286/2-A
Matrix: Water
Analysis Batch: 443693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	0.500	0.5269		mg/L		105	80 - 120
Antimony	0.500	0.5963	E	mg/L		119	80 - 120
Arsenic	0.500	0.5444		mg/L		109	80 - 120
Barium	0.250	0.2679		mg/L		107	80 - 120
Boron	0.500	0.4988		mg/L		100	80 - 120
Cadmium	0.250	0.2625		mg/L		105	80 - 120
Chromium	0.250	0.2632		mg/L		105	80 - 120
Cobalt	0.250	0.2753		mg/L		110	80 - 120
Copper	0.500	0.5363		mg/L		107	80 - 120
Iron	0.500	0.5382		mg/L		108	80 - 120
Lead	0.500	0.5456		mg/L		109	80 - 120
Magnesium	5.00	4.980		mg/L		100	80 - 120
Manganese	0.250	0.2477		mg/L		99	80 - 120
Molybdenum	0.500	0.5166		mg/L		103	80 - 120
Nickel	0.500	0.5469		mg/L		109	80 - 120
Selenium	1.00	1.012	E	mg/L		101	80 - 120
Silver	0.200	0.1729		mg/L		86	80 - 120
Thallium	0.250	0.2343		mg/L		94	80 - 120
Vanadium	0.250	0.2667		mg/L		107	80 - 120

Lab Sample ID: LCS 310-443286/2-A
Matrix: Water
Analysis Batch: 443803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.250	0.2473		mg/L		99	80 - 120
Zinc	0.500	0.4794		mg/L		96	80 - 120

Lab Sample ID: 310-297530-1 MS
Matrix: Water
Analysis Batch: 443693

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	<0.0500	F1	0.500	0.5610		mg/L		112	75 - 125
Antimony	<0.00200	F1	0.500	0.6255	E	mg/L		125	75 - 125
Arsenic	<0.00200	F1	0.500	0.5775		mg/L		115	75 - 125
Barium	0.507		0.250	0.7885		mg/L		113	75 - 125
Boron	<0.100	F1	0.500	0.5347		mg/L		107	75 - 125
Cadmium	<0.000200	F1	0.250	0.2717		mg/L		109	75 - 125
Chromium	<0.00500	F1	0.250	0.2747		mg/L		110	75 - 125
Cobalt	<0.000500	F1	0.250	0.2777		mg/L		111	75 - 125
Copper	<0.00500	F1	0.500	0.5382		mg/L		108	75 - 125
Iron	<0.100	F1	0.500	0.5918		mg/L		118	75 - 125
Lead	<0.000500	F1	0.500	0.5650		mg/L		113	75 - 125
Magnesium	19.1		5.00	24.12		mg/L		100	75 - 125
Manganese	<0.0100	F1	0.250	0.2765		mg/L		111	75 - 125
Molybdenum	<0.00200	F1	0.500	0.5389		mg/L		108	75 - 125
Nickel	<0.00500	F1	0.500	0.5581		mg/L		112	75 - 125
Selenium	<0.00500	F1	1.00	1.088	E	mg/L		108	75 - 125

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

Lab Sample ID: 310-297530-1 MS
Matrix: Water
Analysis Batch: 443693

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	<0.00100	F1	0.200	0.2620	F1	mg/L		131	75 - 125
Thallium	0.00165	F1	0.250	0.2275		mg/L		90	75 - 125
Vanadium	<0.00500	F1	0.250	0.2750		mg/L		110	75 - 125

Lab Sample ID: 310-297530-1 MS
Matrix: Water
Analysis Batch: 443803

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	<0.00100		0.250	0.2727		mg/L		109	75 - 125
Zinc	<0.0200		0.500	0.5101		mg/L		102	75 - 125

Lab Sample ID: 310-297530-1 MSD
Matrix: Water
Analysis Batch: 443693

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	<0.0500	F1	0.500	0.5575		mg/L		111	75 - 125	1	20
Antimony	<0.00200	F1	0.500	0.6241	E	mg/L		125	75 - 125	0	20
Arsenic	<0.00200	F1	0.500	0.5694		mg/L		114	75 - 125	1	20
Barium	0.507		0.250	0.7749		mg/L		107	75 - 125	2	20
Boron	<0.100	F1	0.500	0.5380		mg/L		108	75 - 125	1	20
Cadmium	<0.000200	F1	0.250	0.2684		mg/L		107	75 - 125	1	20
Chromium	<0.00500	F1	0.250	0.2697		mg/L		108	75 - 125	2	20
Cobalt	<0.000500	F1	0.250	0.2762		mg/L		110	75 - 125	1	20
Copper	<0.00500	F1	0.500	0.5281		mg/L		106	75 - 125	2	20
Iron	<0.100	F1	0.500	0.6039		mg/L		121	75 - 125	2	20
Lead	<0.000500	F1	0.500	0.5580		mg/L		112	75 - 125	1	20
Magnesium	19.1		5.00	23.91		mg/L		95	75 - 125	1	20
Manganese	<0.0100	F1	0.250	0.2709		mg/L		108	75 - 125	2	20
Molybdenum	<0.00200	F1	0.500	0.5406		mg/L		108	75 - 125	0	20
Nickel	<0.00500	F1	0.500	0.5577		mg/L		112	75 - 125	0	20
Selenium	<0.00500	F1	1.00	1.087	E	mg/L		108	75 - 125	0	20
Silver	<0.00100	F1	0.200	0.2963	F1	mg/L		148	75 - 125	12	20
Thallium	0.00165	F1	0.250	0.2308		mg/L		92	75 - 125	1	20
Vanadium	<0.00500	F1	0.250	0.2739		mg/L		110	75 - 125	0	20

Lab Sample ID: 310-297530-1 MSD
Matrix: Water
Analysis Batch: 443803

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 443286

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	<0.00100		0.250	0.2715		mg/L		109	75 - 125	0	20
Zinc	<0.0200		0.500	0.5008		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-443458/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443622
Prep Batch: 443458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		12/27/24 13:45	12/30/24 11:20	1

Lab Sample ID: LCS 310-443458/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443622
Prep Batch: 443458

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001684		mg/L		101	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-443809/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443869
Prep Batch: 443809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, Nitrogen	<0.500		0.500		mg/L		01/02/25 08:38	01/02/25 20:21	1

Lab Sample ID: LCS 310-443809/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443869
Prep Batch: 443809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, Nitrogen	4.00	4.042		mg/L		101	90 - 110

Lab Sample ID: 310-297530-7 MS
Client Sample ID: MW-D
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443869
Prep Batch: 443809

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, Nitrogen	<0.500		4.00	4.066		mg/L		102	90 - 110

Lab Sample ID: 310-297530-7 MSD
Client Sample ID: MW-D
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 443869
Prep Batch: 443809

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, Nitrogen	<0.500		4.00	3.869		mg/L		97	90 - 110	5	14

Method: 9020B - Organic Halides, Total (TOX)

Lab Sample ID: MB 280-681458/2
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 681458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Halogens	<0.0300		0.0300		mg/L			01/15/25 12:54	1

Method: 9020B - Organic Halides, Total (TOX) (Continued)

Lab Sample ID: LCS 280-681458/4
Matrix: Water
Analysis Batch: 681458

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Halogens			0.100	0.1033		mg/L		103	78 - 114		

Lab Sample ID: 310-297530-6 MS
Matrix: Water
Analysis Batch: 681458

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Halogens	<0.0600		0.100	0.09732		mg/L		81	78 - 114		

Lab Sample ID: 310-297530-6 MSD
Matrix: Water
Analysis Batch: 681458

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Halogens	<0.0600		0.100	0.09774		mg/L		81	78 - 114	0	23

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-443106/1
Matrix: Water
Analysis Batch: 443106

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00		mg/L			12/20/24 10:15	1

Lab Sample ID: LCS 310-443106/2
Matrix: Water
Analysis Batch: 443106

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	107.0		mg/L		107	81 - 116		

Lab Sample ID: MB 310-443134/1
Matrix: Water
Analysis Batch: 443134

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00		mg/L			12/20/24 11:29	1

Lab Sample ID: LCS 310-443134/2
Matrix: Water
Analysis Batch: 443134

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	105.0		mg/L		105	81 - 116		

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Method: SM 5220D - COD

Lab Sample ID: MB 310-443351/32
Matrix: Water
Analysis Batch: 443351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<5.00		5.00		mg/L			12/26/24 09:18	1

Lab Sample ID: MB 310-443351/60
Matrix: Water
Analysis Batch: 443351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<5.00		5.00		mg/L			12/26/24 09:18	1

Lab Sample ID: LCS 310-443351/33
Matrix: Water
Analysis Batch: 443351

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	128.9		mg/L		103	85 - 110

Lab Sample ID: LCS 310-443351/63
Matrix: Water
Analysis Batch: 443351

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	129.6		mg/L		103	85 - 110

QC Association Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

HPLC/IC

Analysis Batch: 443398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	9056A	
310-297530-2	MW-6	Total/NA	Water	9056A	
310-297530-3	MW-7	Total/NA	Water	9056A	
310-297530-4	MW-8	Total/NA	Water	9056A	
310-297530-4	MW-8	Total/NA	Water	9056A	
310-297530-5	MW-9	Total/NA	Water	9056A	
310-297530-6	MW-10	Total/NA	Water	9056A	
310-297530-7	MW-D	Total/NA	Water	9056A	
MB 310-443398/3	Method Blank	Total/NA	Water	9056A	
LCS 310-443398/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 443286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	3005A	
310-297530-2	MW-6	Total/NA	Water	3005A	
310-297530-3	MW-7	Total/NA	Water	3005A	
310-297530-4	MW-8	Total/NA	Water	3005A	
310-297530-5	MW-9	Total/NA	Water	3005A	
310-297530-6	MW-10	Total/NA	Water	3005A	
310-297530-7	MW-D	Total/NA	Water	3005A	
MB 310-443286/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-443286/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-297530-1 MS	MW-5	Total/NA	Water	3005A	
310-297530-1 MSD	MW-5	Total/NA	Water	3005A	

Prep Batch: 443458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	7470A	
310-297530-2	MW-6	Total/NA	Water	7470A	
310-297530-3	MW-7	Total/NA	Water	7470A	
310-297530-4	MW-8	Total/NA	Water	7470A	
310-297530-5	MW-9	Total/NA	Water	7470A	
310-297530-6	MW-10	Total/NA	Water	7470A	
310-297530-7	MW-D	Total/NA	Water	7470A	
MB 310-443458/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-443458/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 443622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	7470A	443458
310-297530-2	MW-6	Total/NA	Water	7470A	443458
310-297530-3	MW-7	Total/NA	Water	7470A	443458
310-297530-4	MW-8	Total/NA	Water	7470A	443458
310-297530-5	MW-9	Total/NA	Water	7470A	443458
310-297530-6	MW-10	Total/NA	Water	7470A	443458
310-297530-7	MW-D	Total/NA	Water	7470A	443458
MB 310-443458/1-A	Method Blank	Total/NA	Water	7470A	443458
LCS 310-443458/2-A	Lab Control Sample	Total/NA	Water	7470A	443458

Metals

Analysis Batch: 443693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	6020B	443286
310-297530-2	MW-6	Total/NA	Water	6020B	443286
310-297530-3	MW-7	Total/NA	Water	6020B	443286
310-297530-4	MW-8	Total/NA	Water	6020B	443286
310-297530-5	MW-9	Total/NA	Water	6020B	443286
310-297530-6	MW-10	Total/NA	Water	6020B	443286
310-297530-7	MW-D	Total/NA	Water	6020B	443286
MB 310-443286/1-A	Method Blank	Total/NA	Water	6020B	443286
LCS 310-443286/2-A	Lab Control Sample	Total/NA	Water	6020B	443286
310-297530-1 MS	MW-5	Total/NA	Water	6020B	443286
310-297530-1 MSD	MW-5	Total/NA	Water	6020B	443286

Analysis Batch: 443803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	6020B	443286
310-297530-2	MW-6	Total/NA	Water	6020B	443286
310-297530-3	MW-7	Total/NA	Water	6020B	443286
310-297530-4	MW-8	Total/NA	Water	6020B	443286
310-297530-5	MW-9	Total/NA	Water	6020B	443286
310-297530-6	MW-10	Total/NA	Water	6020B	443286
310-297530-7	MW-D	Total/NA	Water	6020B	443286
MB 310-443286/1-A	Method Blank	Total/NA	Water	6020B	443286
LCS 310-443286/2-A	Lab Control Sample	Total/NA	Water	6020B	443286
310-297530-1 MS	MW-5	Total/NA	Water	6020B	443286
310-297530-1 MSD	MW-5	Total/NA	Water	6020B	443286

Analysis Batch: 443888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-4	MW-8	Total/NA	Water	6020B	443286

General Chemistry

Analysis Batch: 443106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-3	MW-7	Total/NA	Water	I-3765-85	
310-297530-4	MW-8	Total/NA	Water	I-3765-85	
310-297530-5	MW-9	Total/NA	Water	I-3765-85	
310-297530-7	MW-D	Total/NA	Water	I-3765-85	
MB 310-443106/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-443106/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 443134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	I-3765-85	
310-297530-2	MW-6	Total/NA	Water	I-3765-85	
310-297530-6	MW-10	Total/NA	Water	I-3765-85	
MB 310-443134/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-443134/2	Lab Control Sample	Total/NA	Water	I-3765-85	

General Chemistry

Analysis Batch: 443351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	SM 5220D	
310-297530-2	MW-6	Total/NA	Water	SM 5220D	
310-297530-3	MW-7	Total/NA	Water	SM 5220D	
310-297530-4	MW-8	Total/NA	Water	SM 5220D	
310-297530-5	MW-9	Total/NA	Water	SM 5220D	
310-297530-6	MW-10	Total/NA	Water	SM 5220D	
310-297530-7	MW-D	Total/NA	Water	SM 5220D	
MB 310-443351/32	Method Blank	Total/NA	Water	SM 5220D	
MB 310-443351/60	Method Blank	Total/NA	Water	SM 5220D	
LCS 310-443351/33	Lab Control Sample	Total/NA	Water	SM 5220D	
LCS 310-443351/63	Lab Control Sample	Total/NA	Water	SM 5220D	

Prep Batch: 443809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	Distill/Ammonia	
310-297530-2	MW-6	Total/NA	Water	Distill/Ammonia	
310-297530-3	MW-7	Total/NA	Water	Distill/Ammonia	
310-297530-4	MW-8	Total/NA	Water	Distill/Ammonia	
310-297530-5	MW-9	Total/NA	Water	Distill/Ammonia	
310-297530-6	MW-10	Total/NA	Water	Distill/Ammonia	
310-297530-7	MW-D	Total/NA	Water	Distill/Ammonia	
MB 310-443809/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-443809/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
310-297530-7 MS	MW-D	Total/NA	Water	Distill/Ammonia	
310-297530-7 MSD	MW-D	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 443869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	350.1	443809
310-297530-2	MW-6	Total/NA	Water	350.1	443809
310-297530-3	MW-7	Total/NA	Water	350.1	443809
310-297530-4	MW-8	Total/NA	Water	350.1	443809
310-297530-5	MW-9	Total/NA	Water	350.1	443809
310-297530-6	MW-10	Total/NA	Water	350.1	443809
310-297530-7	MW-D	Total/NA	Water	350.1	443809
MB 310-443809/1-A	Method Blank	Total/NA	Water	350.1	443809
LCS 310-443809/2-A	Lab Control Sample	Total/NA	Water	350.1	443809
310-297530-7 MS	MW-D	Total/NA	Water	350.1	443809
310-297530-7 MSD	MW-D	Total/NA	Water	350.1	443809

Analysis Batch: 681458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-1	MW-5	Total/NA	Water	9020B	
310-297530-2	MW-6	Total/NA	Water	9020B	
310-297530-3	MW-7	Total/NA	Water	9020B	
310-297530-4	MW-8	Total/NA	Water	9020B	
310-297530-5	MW-9	Total/NA	Water	9020B	
310-297530-6	MW-10	Total/NA	Water	9020B	
310-297530-7	MW-D	Total/NA	Water	9020B	
MB 280-681458/2	Method Blank	Total/NA	Water	9020B	
LCS 280-681458/4	Lab Control Sample	Total/NA	Water	9020B	

General Chemistry (Continued)

Analysis Batch: 681458 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-297530-6 MS	MW-10	Total/NA	Water	9020B	
310-297530-6 MSD	MW-10	Total/NA	Water	9020B	

Client Sample ID: MW-5
Lab Sample ID: 310-297530-1

Date Collected: 12/18/24 12:04
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 15:48
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:26
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 14:31
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:41
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:26
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443134	HE7K	EET CF	12/20/24 11:29
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Client Sample ID: MW-6
Lab Sample ID: 310-297530-2

Date Collected: 12/18/24 12:37
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 16:04
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:45
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 14:48
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:43
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:28
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443134	HE7K	EET CF	12/20/24 11:29
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Client Sample ID: MW-7
Lab Sample ID: 310-297530-3

Date Collected: 12/18/24 13:22
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 16:20
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:47
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 14:50
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:46

Client Sample ID: MW-7
Lab Sample ID: 310-297530-3

Date Collected: 12/18/24 13:22
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:30
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443106	HE7K	EET CF	12/20/24 10:15
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Client Sample ID: MW-8
Lab Sample ID: 310-297530-4

Date Collected: 12/18/24 14:39
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 17:06
Total/NA	Analysis	9056A		20	443398	WZC8	EET CF	12/21/24 09:01
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:50
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		4	443803	NFT2	EET CF	12/31/24 14:53
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		4	443888	NFT2	EET CF	01/02/25 13:49
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:52
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:40
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443106	HE7K	EET CF	12/20/24 10:15
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Client Sample ID: MW-9
Lab Sample ID: 310-297530-5

Date Collected: 12/18/24 14:04
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 17:22
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:52
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 14:55
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:54
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:40
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443106	HE7K	EET CF	12/20/24 10:15
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Lab Chronicle

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Client Sample ID: MW-10
Lab Sample ID: 310-297530-6

Date Collected: 12/18/24 11:32
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 17:38
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:55
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 14:57
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:56
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:42
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443134	HE7K	EET CF	12/20/24 11:29
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Client Sample ID: MW-D
Lab Sample ID: 310-297530-7

Date Collected: 12/18/24 12:37
Matrix: Water
Date Received: 12/19/24 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	443398	WZC8	EET CF	12/20/24 17:53
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443693	NFT2	EET CF	12/30/24 17:57
Total/NA	Prep	3005A			443286	F5MW	EET CF	12/26/24 09:00
Total/NA	Analysis	6020B		1	443803	NFT2	EET CF	12/31/24 15:00
Total/NA	Prep	7470A			443458	QTZ5	EET CF	12/27/24 13:45
Total/NA	Analysis	7470A		1	443622	QTZ5	EET CF	12/30/24 11:58
Total/NA	Prep	Distill/Ammonia			443809	WZC8	EET CF	01/02/25 08:38
Total/NA	Analysis	350.1		1	443869	ZJX4	EET CF	01/02/25 20:23
Total/NA	Analysis	9020B		1	681458	CAI	EET DEN	01/15/25 12:54
Total/NA	Analysis	I-3765-85		1	443106	HE7K	EET CF	12/20/24 10:15
Total/NA	Analysis	SM 5220D		5	443351	HE7K	EET CF	12/26/24 09:18

Laboratory References:

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

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-26
A2LA	ISO/IEC 17025	2907.01	10-31-26
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	11-30-25
Arizona	State	AZ0713	12-20-25
Arkansas DEQ	State	19-047-0	04-21-25
California	State	2513	01-08-25 *
Colorado	Petroleum Storage Tank Program	2907.01 (A2LA)	10-31-26
Colorado	State	CO00026	06-30-25
Connecticut	State	PH-0686	09-30-26
Florida	NELAP	E87667-57	06-30-25
Georgia	State	4025	01-08-26
Illinois	NELAP	2000172024-9	05-31-25
Iowa	State	370	12-01-26
Kansas	NELAP	E-10166	04-30-25
Kentucky (WW)	State	KY98047	12-31-25
Louisiana	NELAP	30785	06-30-14 *
Louisiana (All)	NELAP	30785	06-30-25
Minnesota	NELAP	1788752	12-31-25
Nevada	State	CO00026	07-31-25
New Hampshire	NELAP	2053	04-28-25
New Jersey	NELAP	230001	06-30-25
New York	NELAP	59923	04-01-25
North Dakota	State	R-034	01-08-25 *
Oklahoma	NELAP	8614	08-31-25
Oregon	NELAP	4025	01-08-26
Pennsylvania	NELAP	013	07-31-25
South Carolina	State	72002001	01-08-24 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183	09-30-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO00026	07-31-25
Virginia	NELAP	460232	06-14-25
Washington	State	C583	08-03-25
West Virginia DEP	State	354	11-30-25
Wisconsin	State	999615430	08-31-25
Wyoming (UST)	A2LA	2907.01	10-31-26

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

Method Summary

Client: SCS Engineers
Job ID: 310-297530-1
Project/Site: Faircast Foundry Sand Site-Fall

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
9020B	Organic Halides, Total (TOX)	SW846	EET DEN
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 5220D	COD	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

EPA = US Environmental Protection Agency

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.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

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

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

eurofins | Environment Testing America

310-297530 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 12/19/24 TIME 1610 | Received By: XB

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☐ Yes ☒ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | 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): 0.5 | Corrected Temp (°C): 0.5

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) 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?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

TestAmerica Des Moines SC
214

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Cole Tesar	Lab PM: Miller, Samuel	Carrier Tracking No(s):	COC No: 310-101126-27361 1
Client Contact: Sean Marczewski	Phone: 641-844-4459	E-Mail: Samuel.Miller@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone: 515-418-0677(Tel)	PO #: 27221307 00			
Email: SMarczewski@scsengineers.com	WO #:			
Project Name: Faircast Foundry Sand Site-Fall	Project #: 31014120			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.
S - H2SO4
N - None
D - HNO3
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1, 5220D	9056A_ORGFM_28D - (MOD) Chloride, Fluoride and Sulfate	6020B, 7470A	L_3765_86 - TSS	9020B - TOX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	D	N	S		
MW-5	12/18/24	12:04	G	Water			X	X	X	X	X		
MW-6	12/18/24	12:37	G	Water			X	X	X	X	X		
MW-7	12/18/24	13:22	G	Water			X	X	X	X	X		
MW-8	12/18/24	14:39	G	Water			X	X	X	X	X		
MW-9	12/18/24	14:04	G	Water			X	X	X	X	X		
MW-10	12/18/24	11:32	G	Water			X	X	X	X	X		
MW-D	12/18/24	12:37	G	Water			X	X	X	X	X		

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Cole Tesar	12/19/24 12:00	SCS		12/19/24 12:00	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/19/24 1610	Company

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

Cooler Temperature(s) °C and Other Remarks: 2

Ver: 10/10/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Miller, Samuel	Carrier Tracking No(s): N/A	COC No: 310-79453.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Samuel.Miller@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note): State - Iowa		Job #: 310-297530-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 1/6/2025			Preservation Codes: -
City: Savannah	TAT Requested (days): N/A			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Faircast Foundry Sand Site-Fall	Project #: 31014120			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9020B/Carbon_Trap TOX	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-5 (310-297530-1)	12/18/24	12:04 Central	G	Water			X	1	
MW-6 (310-297530-2)	12/18/24	12:37 Central	G	Water			X	1	
MW-7 (310-297530-3)	12/18/24	13:22 Central	G	Water			X	1	
MW-8 (310-297530-4)	12/18/24	14:39 Central	G	Water			X	1	
MW-9 (310-297530-5)	12/18/24	14:04 Central	G	Water			X	1	
MW-10 (310-297530-6)	12/18/24	11:32 Central	G	Water			X	1	
MW-D (310-297530-7)	12/18/24	12:37 Central	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC 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 to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
T [illegible]	12 20 24 1405		[illegible]		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0/3.6

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-297530-1

Login Number: 297530

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Bunker, Xavier M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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	

Appendix B-2

Data Validation

Completed by: Semir Omerovic

Lab Report Date: 1/17/2025

Site Name: Faircast Foundry Sand Site-Fall

Lab Report Number: 310-297530-1

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Reporting Limits		X		Method 9020B_Calc: The following samples for batch 280-681458 (Total Organic Halides) were diluted to 2x due to the nature of the sample matrix based on Cl pre-screen test: MW-5 (310-297530-1), MW-6 (310-297530-2), MW-7 (310-297530-3), MW-8 (310-297530-4), MW-9 (310-297530-5), MW-10 (310-297530-6) and MW-D (310-297530-7). Elevated reporting limits (RLs) are provided.
Case Narrative	X			
Holding Times	X			
Analytical Sensitivty and Blanks				
Method Blank Detections	X			
Trip Blank Detections			X	
Accuracy				
ICV/CCV	X			
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates		X		The duplicate was collected from MW-6. All parameters had < 50% relative difference, with the exception of aluminum, iron, lead, manganese, and TSS.

Appendix C

Summary of Groundwater Chemistry

SCS ENGINEERS

Summary of Groundwater Chemistry

Faircast, Inc. 51-SDP-06-19C

Total Metals Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Aluminum, mg/L (CAS NO - 7429-90-5)	6/22/2021	< 0.05	< 0.05	< 0.05	< 0.05	**0.0538**	< 0.05
	10/6/2021	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	5/20/2022	< 0.05	< 0.05	< 0.05	< 0.05	**0.0758**	< 0.05
	10/27/2022	< 0.05	< 0.05	< 0.05	< 0.05	**0.0699**	< 0.05
	10/27/2022	N/A	< 0.05	N/A	N/A	N/A	N/A
	5/9/2023	**0.11**	< 0.05	**0.0608**	< 0.05	**0.17**	< 0.05
	5/9/2023	N/A	N/A	**0.334**	N/A	N/A	N/A
	11/10/2023	< 0.05	< 0.05	< 0.05	< 0.05	**0.108**	< 0.05
	11/10/2023	N/A	N/A	N/A	< 0.05	N/A	N/A
	12/18/2024	< 0.05	**0.135**	**0.293**	< 0.05	0.998	**0.0703**
	12/18/2024	N/A	**0.382**	N/A	N/A	N/A	N/A
Antimony, mg/L (CAS NO - 7440-36-0)	6/22/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/6/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/20/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/27/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/27/2022	N/A	< 0.002	N/A	N/A	N/A	N/A
	5/9/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/9/2023	N/A	N/A	< 0.002	N/A	N/A	N/A
	11/10/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/10/2023	N/A	N/A	N/A	< 0.002	N/A	N/A
	12/18/2024	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	12/18/2024	N/A	< 0.002	N/A	N/A	N/A	N/A
Arsenic, mg/L (CAS NO - 7440-38-2)	6/22/2021	< 0.002	< 0.002	**0.00245**	< 0.002	< 0.002	< 0.002
	10/6/2021	< 0.002	< 0.002	**0.00303**	< 0.002	< 0.002	< 0.002
	5/20/2022	< 0.002	< 0.002	**0.00232**	< 0.002	< 0.002	< 0.002
	10/27/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/27/2022	N/A	< 0.002	N/A	N/A	N/A	N/A
	5/9/2023	< 0.002	< 0.002	< 0.002	**0.00363**	< 0.002	< 0.002
	5/9/2023	N/A	N/A	< 0.002	N/A	N/A	N/A
	11/10/2023	< 0.002	< 0.002	< 0.002	**0.00268**	< 0.002	< 0.002
	11/10/2023	N/A	N/A	N/A	**0.00221**	N/A	N/A
	12/18/2024	< 0.002	< 0.002	**0.00207**	**0.00391**	0.00273	< 0.002
	12/18/2024	N/A	< 0.002	N/A	N/A	N/A	N/A
Barium, mg/L (CAS NO - 7440-39-3)	6/22/2021	**0.533**	**0.588**	**0.2**	**0.0259**	**0.0568**	**0.0779**
	10/6/2021	**0.45**	**0.477**	**0.188**	**0.0253**	**0.0448**	**0.07**
	5/20/2022	**0.549**	**0.612**	**0.359**	**0.0241**	**0.0566**	**0.0538**
	10/27/2022	**0.493**	**0.636**	**0.396**	**0.0305**	**0.0462**	**0.0624**
	10/27/2022	N/A	**0.572**	N/A	N/A	N/A	N/A
	5/9/2023	**0.411**	**0.488**	**0.094**	**0.0238**	**0.146**	**0.0847**
	5/9/2023	N/A	N/A	**0.102**	N/A	N/A	N/A
	11/10/2023	**0.526**	**0.483**	**0.328**	**0.0323**	**0.0629**	**0.0914**
	11/10/2023	N/A	N/A	N/A	**0.0298**	N/A	N/A
	12/18/2024	**0.507**	**0.19**	**0.275**	**0.0192**	0.121	**0.0548**
	12/18/2024	N/A	**0.203**	N/A	N/A	N/A	N/A
Beryllium, mg/L (CAS NO - 7440-41-7)	6/22/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/6/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/20/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	N/A	< 0.001	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	N/A
	11/10/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/10/2023	N/A	N/A	N/A	< 0.001	N/A	N/A
	12/18/2024	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001	< 0.001
	12/18/2024	N/A	< 0.001	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Boron, mg/L (CAS NO - 7440-42-8)	6/22/2021	< 0.1	< 0.1	< 0.1	**0.335**	**0.148**	< 0.1
	10/6/2021	< 0.1	< 0.1	< 0.1	**0.356**	**0.101**	< 0.1
	5/20/2022	< 0.1	< 0.1	< 0.1	**0.366**	**0.14**	< 0.1
	10/27/2022	< 0.1	< 0.1	< 0.1	**0.392**	< 0.1	**0.127**
	10/27/2022	N/A	< 0.1	N/A	N/A	N/A	N/A
	5/9/2023	< 0.1	< 0.1	< 0.1	**0.416**	**0.382**	**0.23**
	5/9/2023	N/A	N/A	< 0.1	N/A	N/A	N/A
	11/10/2023	**0.144**	**0.126**	**0.12**	**0.602**	**0.226**	**0.303**
	11/10/2023	N/A	N/A	N/A	**0.559**	N/A	N/A
	12/18/2024	< 0.1	< 0.1	< 0.1	**0.476**	0.17	**0.168**
	12/18/2024	N/A	< 0.1	N/A	N/A	N/A	N/A
Cadmium, mg/L (CAS NO - 7440-43-9)	6/22/2021	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
	10/6/2021	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
	5/20/2022	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
	10/27/2022	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
	10/27/2022	N/A	< 0.0001	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	5/9/2023	N/A	N/A	< 0.0002	N/A	N/A	N/A
	11/10/2023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	11/10/2023	N/A	N/A	N/A	< 0.0002	N/A	N/A
	12/18/2024	< 0.0002	< 0.0002	< 0.0002	**0.000241**	0.00045	< 0.0002
	12/18/2024	N/A	< 0.0002	N/A	N/A	N/A	N/A
Chromium, mg/L (CAS NO - 7440-47-3)	6/22/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/6/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/20/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	N/A	< 0.005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	N/A
	11/10/2023	< 0.005	**0.00778**	< 0.005	< 0.005	< 0.005	< 0.005
	11/10/2023	N/A	N/A	N/A	< 0.005	N/A	N/A
	12/18/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	12/18/2024	N/A	< 0.005	N/A	N/A	N/A	N/A
Cobalt, mg/L (CAS NO - 7440-48-4)	6/22/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10/6/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/20/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10/27/2022	< 0.0005	< 0.0005	< 0.0005	**0.00152**	< 0.0005	**0.000619**
	10/27/2022	N/A	< 0.0005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0005	< 0.0005	< 0.0005	**0.00399**	**0.00152**	< 0.0005
	5/9/2023	N/A	N/A	< 0.0005	N/A	N/A	N/A
	11/10/2023	< 0.0005	**0.000934**	< 0.0005	**0.00429**	**0.00113**	**0.000866**
	11/10/2023	N/A	N/A	N/A	**0.00353**	N/A	N/A
	12/18/2024	< 0.0005	< 0.0005	< 0.0005	**0.0028**	0.0079	< 0.0005
	12/18/2024	N/A	< 0.0005	N/A	N/A	N/A	N/A
Copper, mg/L (CAS NO - 7440-50-8)	6/22/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/6/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/20/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	N/A	< 0.005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	< 0.005	< 0.005	< 0.005	**0.00603**	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	N/A
	11/10/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/10/2023	N/A	N/A	N/A	< 0.005	N/A	N/A
	12/18/2024	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.005
	12/18/2024	N/A	< 0.005	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Iron, mg/L (CAS NO - 7439-89-6)	6/22/2021	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	10/6/2021	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	5/20/2022	< 0.1	< 0.1	< 0.1	< 0.1	**0.11**	< 0.1
	10/27/2022	< 0.1	< 0.1	< 0.1	< 0.1	**0.132**	< 0.1
	10/27/2022	N/A	< 0.1	N/A	N/A	N/A	N/A
	5/9/2023	**0.101**	< 0.1	< 0.1	**0.579**	**0.553**	< 0.1
	5/9/2023	N/A	N/A	**0.208**	N/A	N/A	N/A
	11/10/2023	< 0.1	**0.147**	< 0.1	**0.771**	**0.365**	< 0.1
	11/10/2023	N/A	N/A	N/A	**0.59**	N/A	N/A
	12/18/2024	< 0.1	**0.107**	**0.193**	**1.26**	3.22	**0.419**
	12/18/2024	N/A	**0.299**	N/A	N/A	N/A	N/A
Lead, mg/L (CAS NO - 7439-92-1)	6/22/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10/6/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/20/2022	< 0.0005	< 0.0005	< 0.0005	**0.00073**	< 0.0005	< 0.0005
	10/27/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000534**	< 0.0005
	10/27/2022	N/A	< 0.0005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0005	**0.000691**	< 0.0005	**0.00429**	**0.0092**	**0.000708**
	5/9/2023	N/A	N/A	**0.00122**	N/A	N/A	N/A
	11/10/2023	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000875**	< 0.0005
	11/10/2023	N/A	N/A	N/A	< 0.0005	N/A	N/A
	12/18/2024	< 0.0005	< 0.0005	**0.000937**	< 0.0005	0.0102	< 0.0005
	12/18/2024	N/A	**0.00137**	N/A	N/A	N/A	N/A
Magnesium, mg/L (CAS NO - 7439-95-4)	6/22/2021	**19.9**	**27.4**	**16.3**	**74.2**	**42.1**	**35.9**
	10/6/2021	**19**	**29**	**15.3**	**68.5**	**39**	**36.1**
	5/20/2022	**21.5**	**29.5**	**19.9**	**75.5**	**47.9**	**35.1**
	10/27/2022	**19.2**	**28.3**	**18.1**	**60.9**	**38.6**	**25.9**
	10/27/2022	N/A	**25.5**	N/A	N/A	N/A	N/A
	5/9/2023	**40**	**28.3**	**11.5**	**94.9**	**49.6**	**31.8**
	5/9/2023	N/A	N/A	**12**	N/A	N/A	N/A
	11/10/2023	**22**	**31.6**	**19.5**	**83.8**	**47.4**	**33.9**
	11/10/2023	N/A	N/A	N/A	**81.1**	N/A	N/A
	12/18/2024	**19.1**	**15.5**	**19.6**	**124**	19.8	**21.6**
	12/18/2024	N/A	**15.4**	N/A	N/A	N/A	N/A
Manganese, mg/L (CAS NO - 7439-96-5)	6/22/2021	< 0.01	**0.0103**	< 0.01	**0.402**	**0.0108**	**0.0383**
	10/6/2021	< 0.01	< 0.01	< 0.01	**0.629**	< 0.01	**0.08**
	5/20/2022	< 0.01	< 0.01	< 0.01	**0.0621**	**0.0188**	< 0.01
	10/27/2022	< 0.01	< 0.01	< 0.01	**0.965**	**0.0205**	**0.0635**
	10/27/2022	N/A	< 0.01	N/A	N/A	N/A	N/A
	5/9/2023	**0.0155**	< 0.01	< 0.01	**1.08**	**0.266**	**0.0959**
	5/9/2023	N/A	N/A	**0.0113**	N/A	N/A	N/A
	11/10/2023	< 0.01	< 0.01	< 0.01	**1.98**	**0.209**	**0.0828**
	11/10/2023	N/A	N/A	N/A	**1.72**	N/A	N/A
	12/18/2024	< 0.01	**0.0149**	**0.0122**	**0.838**	1.24	**0.018**
	12/18/2024	N/A	**0.0582**	N/A	N/A	N/A	N/A
Mercury, mg/L (CAS NO - 7439-97-6)	6/22/2021	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	10/6/2021	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	5/20/2022	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	10/27/2022	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	10/27/2022	N/A	< 0.0002	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	5/9/2023	N/A	N/A	< 0.0002	N/A	N/A	N/A
	11/10/2023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	11/10/2023	N/A	N/A	N/A	< 0.0002	N/A	N/A
	12/18/2024	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	12/18/2024	N/A	< 0.0002	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Molybdenum, mg/L (CAS NO - 7439-98-7)	6/22/2021	< 0.002	**0.00233**	**0.00475**	**0.00513**	**0.00456**	**0.00377**
	10/6/2021	< 0.002	**0.00256**	**0.00398**	**0.00551**	**0.00277**	**0.00428**
	5/20/2022	**0.0032**	**0.00224**	**0.00321**	**0.00305**	**0.00527**	**0.00447**
	10/27/2022	**0.0307**	< 0.002	**0.00598**	**0.00575**	**0.00283**	**0.00577**
	10/27/2022	N/A	**0.00608**	N/A	N/A	N/A	N/A
	5/9/2023	**0.00391**	**0.00275**	**0.0138**	**0.00267**	**0.00378**	**0.00511**
	5/9/2023	N/A	N/A	**0.0104**	N/A	N/A	N/A
	11/10/2023	< 0.002	**0.00423**	**0.00504**	**0.00441**	**0.00314**	**0.00531**
	11/10/2023	N/A	N/A	N/A	**0.00422**	N/A	N/A
	12/18/2024	< 0.002	**0.00342**	**0.00372**	< 0.002	< 0.002	**0.00504**
	12/18/2024	N/A	**0.00296**	N/A	N/A	N/A	N/A
Nickel, mg/L (CAS NO - 7440-02-0)	6/22/2021	< 0.005	< 0.005	< 0.005	**0.00677**	< 0.005	< 0.005
	10/6/2021	< 0.005	< 0.005	< 0.005	**0.00597**	< 0.005	< 0.005
	5/20/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	< 0.005	< 0.005	< 0.005	**0.00683**	< 0.005	< 0.005
	10/27/2022	N/A	< 0.005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	< 0.005	< 0.005	**0.00594**	< 0.005	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	N/A
	11/10/2023	< 0.005	< 0.005	< 0.005	**0.00847**	< 0.005	< 0.005
	11/10/2023	N/A	N/A	N/A	**0.0081**	N/A	N/A
	12/18/2024	< 0.005	< 0.005	< 0.005	**0.00885**	0.0168	< 0.005
	12/18/2024	N/A	< 0.005	N/A	N/A	N/A	N/A
Selenium, mg/L (CAS NO - 7782-49-2)	6/22/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/6/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/20/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	N/A	< 0.005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	N/A
	11/10/2023	**0.0052**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/10/2023	N/A	N/A	N/A	< 0.005	N/A	N/A
	12/18/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	12/18/2024	N/A	< 0.005	N/A	N/A	N/A	N/A
Silver, mg/L (CAS NO - 7440-22-4)	6/22/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/6/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/20/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	N/A	< 0.001	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	N/A
	11/10/2023	< 0.001	**0.00116**	< 0.001	< 0.001	< 0.001	< 0.001
	11/10/2023	N/A	N/A	N/A	< 0.001	N/A	N/A
	12/18/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	12/18/2024	N/A	< 0.001	N/A	N/A	N/A	N/A
Thallium, mg/L (CAS NO - 7440-28-0)	6/22/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/6/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/20/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/27/2022	N/A	< 0.001	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	N/A
	11/10/2023	**0.00317**	**0.00483**	< 0.001	< 0.001	< 0.001	< 0.001
	11/10/2023	N/A	N/A	N/A	< 0.001	N/A	N/A
	12/18/2024	**0.00165**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	12/18/2024	N/A	< 0.001	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Faircast, Inc. 51-SDP-06-19C

Total Metals Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Vanadium, mg/L (CAS NO - 7440-62-2)	6/22/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/6/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/20/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/27/2022	N/A	< 0.005	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	N/A
	11/10/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/10/2023	N/A	N/A	N/A	< 0.005	N/A	N/A
	12/18/2024	< 0.005	< 0.005	< 0.005	< 0.005	0.00604	< 0.005
	12/18/2024	N/A	< 0.005	N/A	N/A	N/A	N/A
Zinc, mg/L (CAS NO - 7440-66-6)	6/22/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	10/6/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/20/2022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	10/27/2022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	10/27/2022	N/A	< 0.02	N/A	N/A	N/A	N/A
	5/9/2023	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/9/2023	N/A	N/A	< 0.02	N/A	N/A	N/A
	11/10/2023	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/10/2023	N/A	N/A	N/A	< 0.02	N/A	N/A
	12/18/2024	< 0.02	< 0.02	< 0.02	< 0.02	0.0275	< 0.02
	12/18/2024	N/A	< 0.02	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/L (CAS NO - TSS)	6/22/2021	**2.5**	< 1.88	< 1.88	**7.5**	**6.25**	< 1.88
	10/6/2021	**2**	< 1.88	< 1.88	**1.88**	**4.25**	< 1.88
	5/20/2022	**2.63**	**6.5**	**5.13**	**8**	**45.6**	**3.87**
	10/27/2022	< 1.88	< 1.88	**12.5**	**9.87**	**518**	**3.13**
	10/27/2022	N/A	**2.5**	N/A	N/A	N/A	N/A
	5/9/2023	**20.3**	< 1.88	**6.12**	**5.37**	**16.9**	**2.38**
	5/9/2023	N/A	N/A	**7.62**	N/A	N/A	N/A
	11/10/2023	**3.75**	< 1.88	**3.38**	**20.6**	**65.9**	**5.13**
	11/10/2023	N/A	N/A	N/A	**21.4**	N/A	N/A
	12/18/2024	**3.13**	**19.8**	**84**	**9**	335	**5.88**
	12/18/2024	N/A	**52.4**	N/A	N/A	N/A	N/A

Note: * indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.
Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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Summary of Groundwater Chemistry

Faircast, Inc. 51-SDP-06-19C

Appendix I VOC Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	6/22/2021	< 1	< 1	< 1	< 1	< 1	< 1
	10/6/2021	< 1	< 1	< 1	< 1	< 1	< 1
2-Butanone, ug/L (CAS NO - 78-93-3)	6/22/2021	< 10	< 10	< 10	< 10	< 10	< 10
	10/6/2021	< 10	< 10	< 10	< 10	< 10	< 10
Benzene, ug/L (CAS NO - 71-43-2)	6/22/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/6/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene, ug/L (CAS NO - 108-90-7)	6/22/2021	< 1	< 1	< 1	< 1	< 1	< 1
	10/6/2021	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform, ug/L (CAS NO - 67-66-3)	6/22/2021	< 3	< 3	< 3	< 3	< 3	< 3
	10/6/2021	< 3	< 3	< 3	< 3	< 3	< 3
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	6/22/2021	< 1	< 1	< 1	< 1	< 1	< 1
	10/6/2021	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	6/22/2021	< 1	< 1	< 1	< 1	< 1	< 1
	10/6/2021	< 1	< 1	< 1	< 1	< 1	< 1

Note: * indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.
Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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Summary of Groundwater Chemistry

Faircast, Inc. 51-SDP-06-19C

Other Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
Chemical Oxygen Demand, mg/L (CAS NO - COD)	6/22/2021	**64.5**	**62.9**	**67.9**	**39.5**	**54.5**	**79.5**
	10/6/2021	< 25	**38.1**	**32.8**	< 25	**38.1**	**34.6**
	5/20/2022	< 25	< 25	< 25	< 25	< 25	< 25
	10/27/2022	< 25	**51.6**	< 25	< 25	< 25	< 25
	10/27/2022	N/A	< 25	N/A	N/A	N/A	N/A
	5/9/2023	**27.5**	< 25	< 25	**30.9**	**37.7**	**32.7**
	5/9/2023	N/A	N/A	**29.2**	N/A	N/A	N/A
	11/10/2023	< 25	< 25	**25**	< 25	**31.9**	**31.9**
	11/10/2023	N/A	N/A	N/A	< 25	N/A	N/A
	12/18/2024	< 25	< 25	**41.5**	< 25	**27.8**	< 25
	12/18/2024	N/A	< 25	N/A	N/A	N/A	N/A
Chloride, mg/L (CAS NO - 16887-00-6)	6/22/2021	**46.8**	**36.9**	**22.3**	**193**	**73.4**	**41.6**
	10/6/2021	**42.2**	**51.6**	**15.2**	**175**	**78.5**	**36.1**
	5/20/2022	**57.7**	**37.6**	**20.7**	**161**	**82.3**	**34.4**
	10/27/2022	**40.4**	**24.2**	**18.8**	**115**	**67.5**	**28.5**
	10/27/2022	N/A	**26.9**	N/A	N/A	N/A	N/A
	5/9/2023	**63.2**	**49.4**	**24.6**	**237**	**34**	**13.9**
	5/9/2023	N/A	N/A	**24.8**	N/A	N/A	N/A
	11/10/2023	**38.7**	**30.6**	**25.9**	**138**	**63.4**	**25.2**
	11/10/2023	N/A	N/A	N/A	**136**	N/A	N/A
	12/18/2024	**33.8**	**27.1**	**20.9**	**243**	**9.61**	**9.19**
	12/18/2024	N/A	**26.5**	N/A	N/A	N/A	N/A
Fluoride, mg/L (CAS NO - 16984-48-8)	6/22/2021	**0.581**	**0.765**	**1.15**	< 0.5	**0.644**	**0.706**
	10/6/2021	**0.668**	**0.963**	**1.37**	< 0.5	< 0.5	< 0.5
	5/20/2022	**0.512**	**0.747**	**1.08**	< 0.5	**0.623**	**0.542**
	10/27/2022	< 0.5	< 0.5	**0.986**	< 0.5	< 0.5	**1.01**
	10/27/2022	N/A	**0.653**	N/A	N/A	N/A	N/A
	5/9/2023	< 1	< 1	**1**	< 1	< 1	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	N/A
	11/10/2023	< 1	< 1	< 1	< 1	< 1	< 1
	11/10/2023	N/A	N/A	N/A	< 1	N/A	N/A
	12/18/2024	< 1	< 1	< 1	< 1	< 1	< 1
	12/18/2024	N/A	< 1	N/A	N/A	N/A	N/A
Formaldehyde, ug/L (CAS NO - 50-00-0)	8/26/2020	N/A	N/A	N/A	N/A	< 50	< 50
	12/1/2020	< 50	< 50	< 50	< 50	< 50	< 50
	3/3/2021	< 50	< 50	< 50	< 50	< 50	< 50
	6/22/2021	< 50	< 50	< 50	< 50	< 50	< 50
	10/6/2021	< 50	< 50	< 50	< 50	< 50	< 50
Nitrogen, Ammonia, mg/L (CAS NO - 7664-41-7)	6/22/2021	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
	10/6/2021	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
	5/20/2022	< 0.5	< 0.5	**0.532**	< 0.5	< 0.5	< 0.5
	10/27/2022	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/27/2022	N/A	< 0.5	N/A	N/A	N/A	N/A
	5/9/2023	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/9/2023	N/A	N/A	< 0.5	N/A	N/A	N/A
	11/10/2023	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/10/2023	N/A	N/A	N/A	< 0.5	N/A	N/A
	12/18/2024	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/18/2024	N/A	< 0.5	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Faircast, Inc. 51-SDP-06-19C

Other Constituents	Sample Date	MW-5 UPG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG
pH, S.U. (CAS NO - PH)	8/26/2020	**7.09**	**7.22**	**7.63**	**6.96**	**7.28**	**7.21**
	9/2/2020	**7.24**	**7.26**	**7.74**	**7**	N/A	N/A
	12/1/2020	**7.24**	**7.32**	**7.83**	**7.06**	**7.32**	**7.22**
	12/2/2020	**7.3**	**7.35**	**7.84**	**7.04**	N/A	N/A
	3/3/2021	**7.4**	**7.6**	**8.28**	**7.36**	**7.81**	**7.59**
	6/22/2021	**7.87**	**8.01**	**8.39**	**7.34**	**7.6**	**8.6**
	10/6/2021	**7.5**	**7.62**	**8.1**	**7.02**	**7.57**	**7.3**
	5/20/2022	**7.05**	**7.25**	**8.62**	**7.07**	**7.06**	**6.88**
	10/27/2022	**6.67**	**7.03**	**7.53**	**6.68**	**6.68**	**6.72**
	5/9/2023	**7.72**	**7.39**	**6.72**	**6.72**	**7.22**	**6.89**
	12/18/2024	**6.79**	**6.87**	**7.13**	**6.55**	**6.93**	**6.29**
Specific Conductance, uS/cm (CAS NO - SC)	8/26/2020	**690**	**662**	**493**	**2802**	**1159**	**808**
	9/2/2020	**599**	**660**	**472**	**2668**	N/A	N/A
	12/1/2020	-6100	-13800	-40600	**1400**	-13400	-14200
	12/2/2020	-13600	-13000	-38500	**1600**	N/A	N/A
	3/3/2021	**596.7**	**664.9**	**474.9**	**2786**	**1317**	**1218**
	6/22/2021	**584.3**	**689**	**527.7**	**2180**	**1386**	**1027**
	10/6/2021	**547.1**	**815**	**477**	**2489**	**1103**	**992**
	5/20/2022	**602**	**701**	**542**	27	**1430**	**929**
	10/27/2022	**427**	**520**	**392**	**1763**	**847**	**526**
	5/9/2023	24	24	**224**	**1774**	**1631**	**745**
	12/18/2024	**653**	**743**	**863**	**4579**	**903**	**835**
Sulfate, mg/L (CAS NO - 14808-79-8)	6/22/2021	**24.5**	**22.9**	**29.7**	**897**	**187**	**94.1**
	10/6/2021	**20.9**	**35.4**	**26.2**	**899**	**142**	**90.8**
	5/20/2022	**38.6**	**24.6**	**24.3**	**964**	**206**	**77.1**
	10/27/2022	**20.2**	**15**	**20.4**	**737**	**226**	**68.5**
	10/27/2022	N/A	**16.1**	N/A	N/A	N/A	N/A
	5/9/2023	**79.8**	**43.7**	**45.9**	**1280**	**419**	**57**
	5/9/2023	N/A	N/A	**41.3**	N/A	N/A	N/A
	11/10/2023	**18.7**	**24.4**	**27**	**905**	**190**	**71.4**
	11/10/2023	N/A	N/A	N/A	**896**	N/A	N/A
	12/18/2024	**17.6**	**65.3**	**33.3**	**1440**	**73.3**	**56.7**
	12/18/2024	N/A	**63.1**	N/A	N/A	N/A	N/A
Total Organic Halogens, mg/L (CAS NO - TOX)	8/26/2020	N/A	N/A	N/A	N/A	**0.0651**	**0.0649**
	12/1/2020	< 0.04	< 0.04	< 0.04	**0.255**	**0.124**	**0.0969**
	6/22/2021	< 0.04	< 0.04	< 0.04	**0.0933**	**0.133**	< 0.04
	10/6/2021	< 0.04	**0.0482**	**0.0773**	**0.168**	**0.149**	< 0.04
	10/27/2022	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
	10/27/2022	N/A	< 0.04	N/A	N/A	N/A	N/A
	5/9/2023	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
	5/9/2023	N/A	N/A	< 0.04	N/A	N/A	N/A
	11/10/2023	**0.0706**	**0.103**	**0.151**	**0.0746**	**0.0704**	< 0.04
	11/10/2023	N/A	N/A	N/A	**0.0494**	N/A	N/A
	12/18/2024	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
	12/18/2024	N/A	< 0.06	N/A	N/A	N/A	N/A
Total Phenols, mg/L (CAS NO - 64743-03-9)	6/22/2021	< 0.0184	< 0.018	< 0.0184	< 0.018	< 0.0184	< 0.0196
	10/6/2021	< 0.0212	< 0.02	< 0.02	< 0.0184	< 0.0188	< 0.0188

Note: * indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.
Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

Appendix D

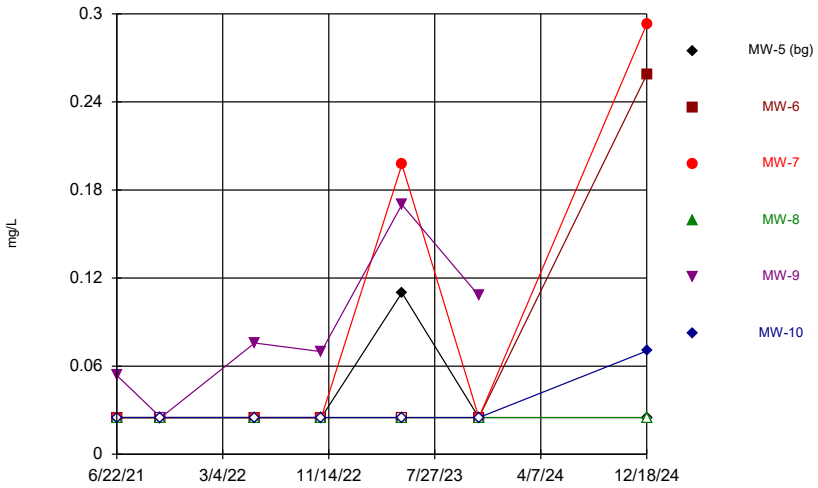
Statistical Report

Attachment A

Time Series Graphs

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

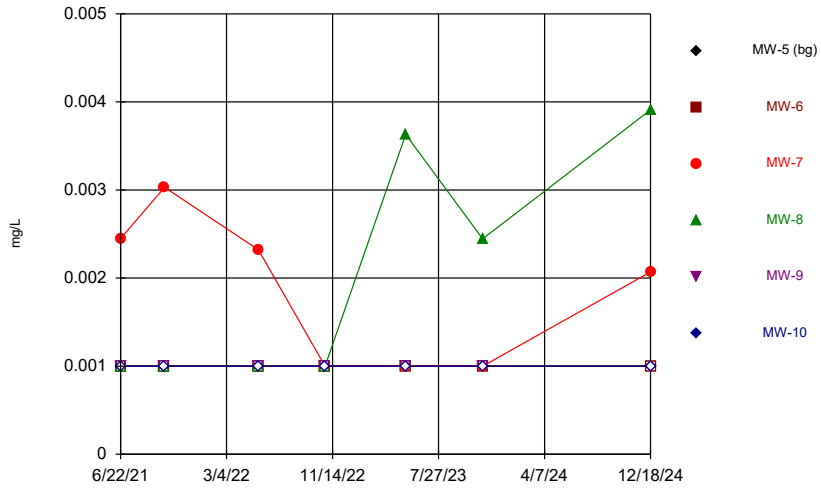
Time Series



Constituent: Aluminum Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

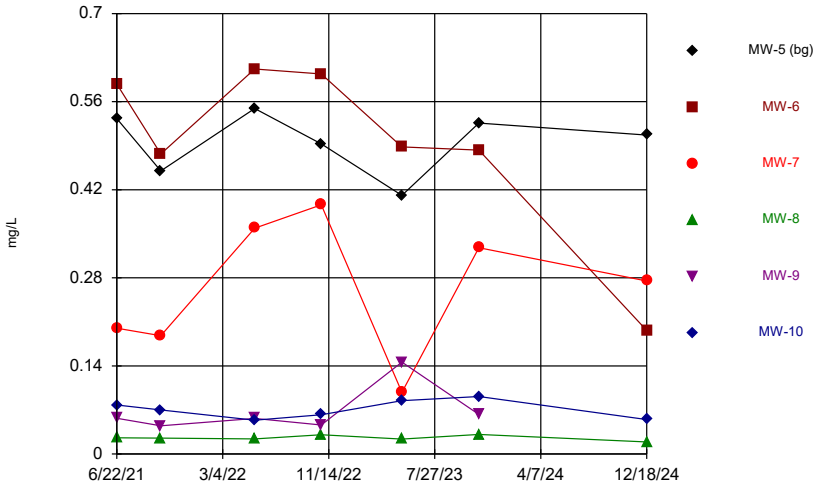
Time Series



Constituent: Arsenic Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

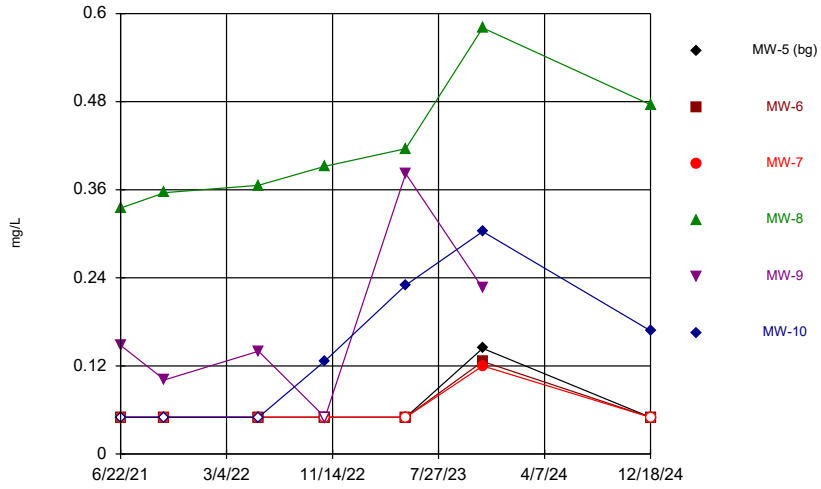
Time Series



Constituent: Barium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Boron Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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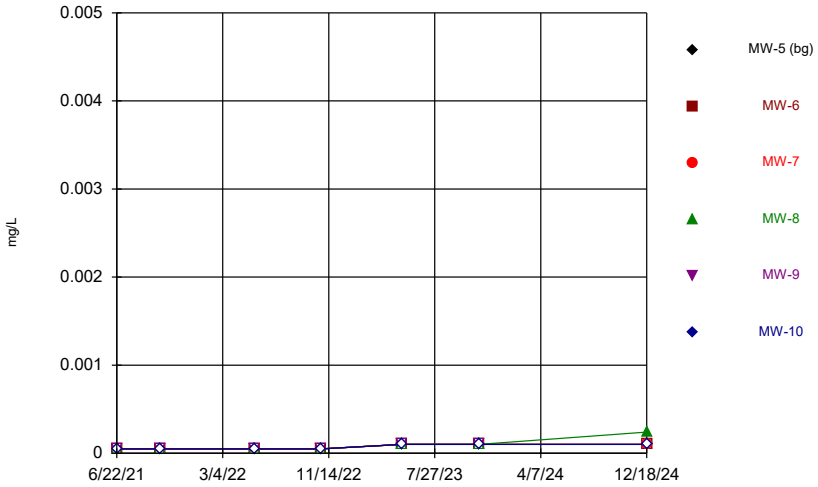
Hollow symbols indicate censored values.

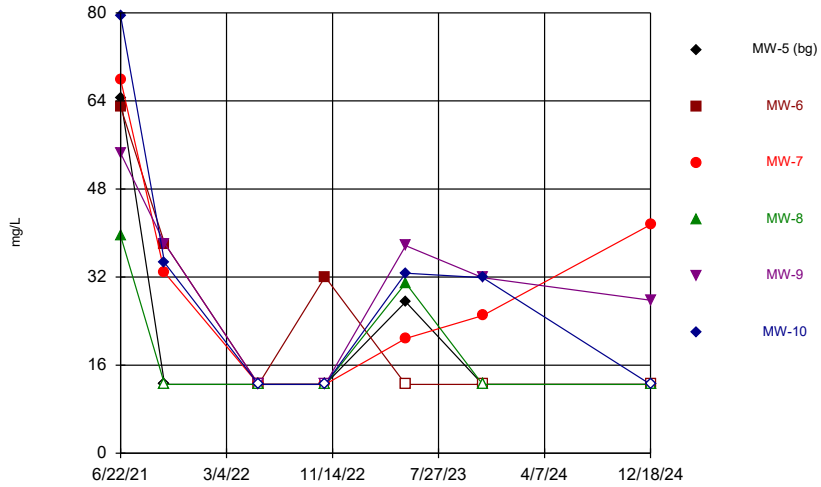
Time Series



Constituent: Cadmium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

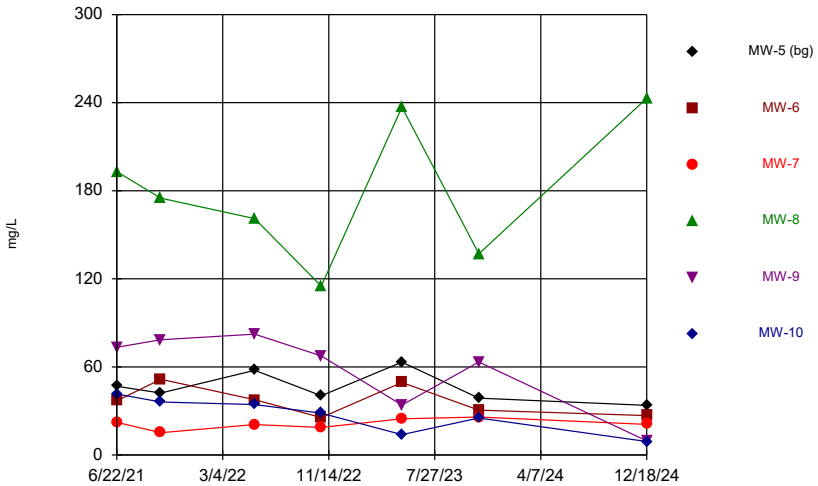
Time Series



Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

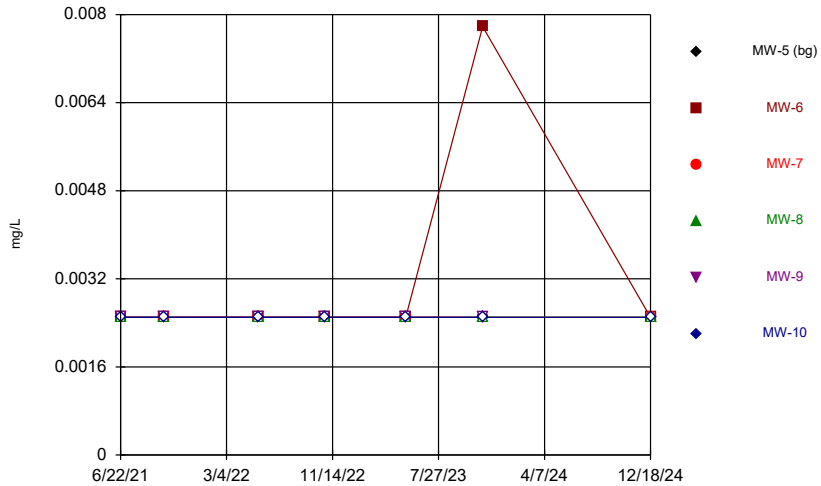
Time Series



Constituent: Chloride Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

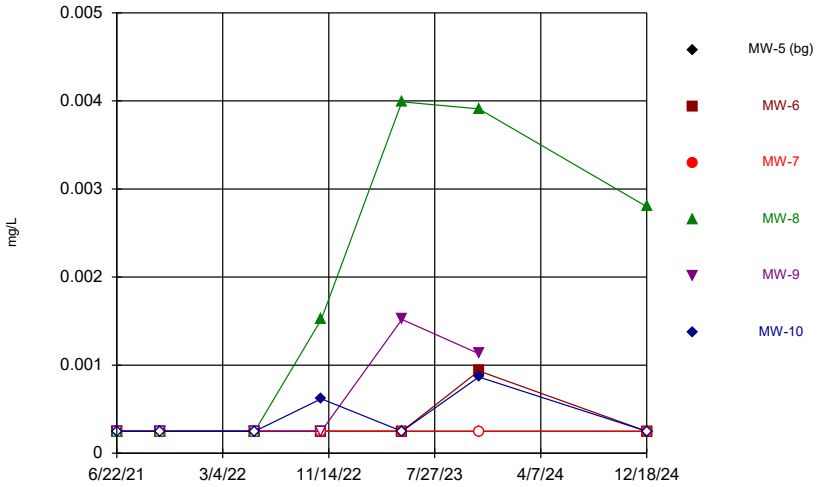
Time Series



Constituent: Chromium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

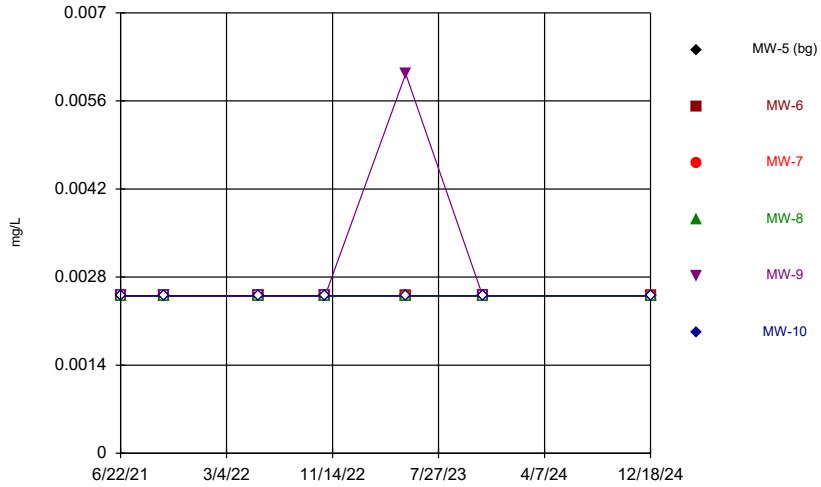
Time Series



Constituent: Cobalt Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

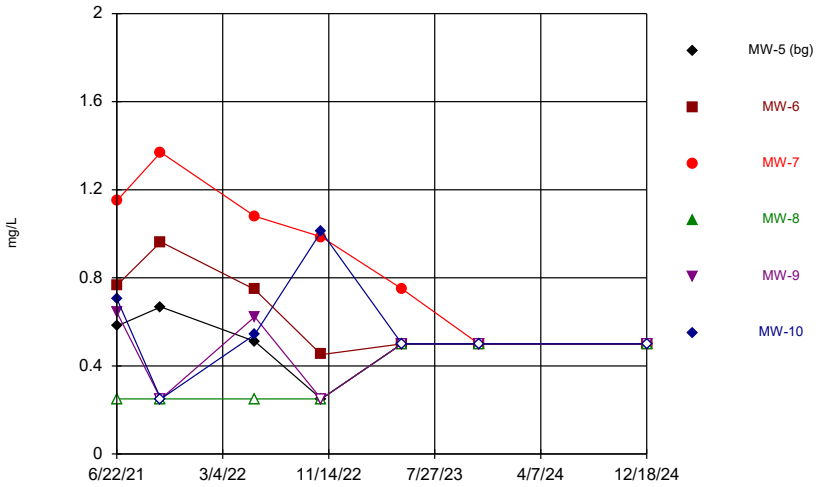
Time Series



Constituent: Copper Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

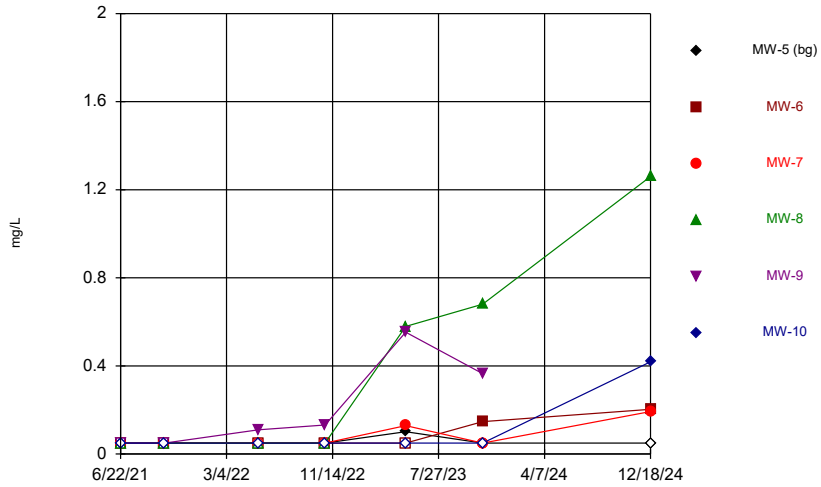
Time Series



Constituent: Fluoride Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

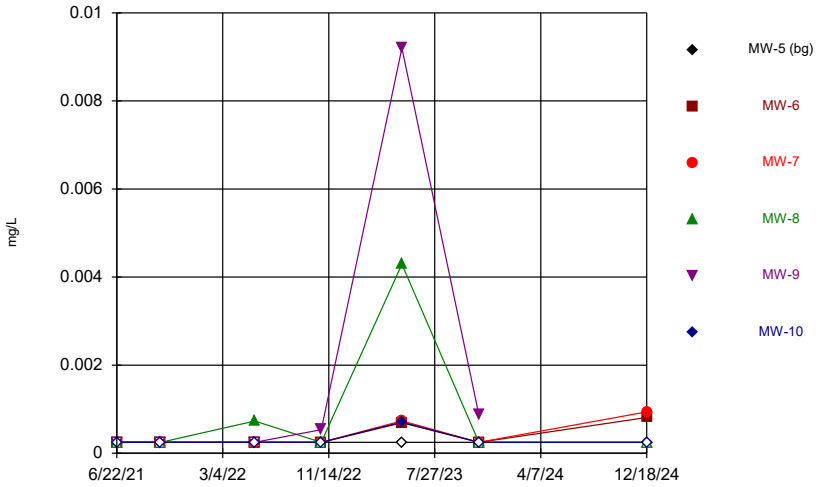
Time Series



Constituent: Iron Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

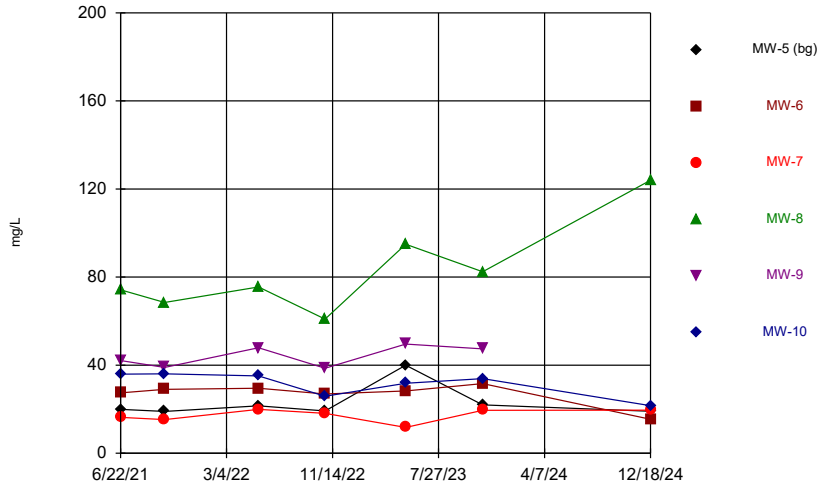
Time Series



Constituent: Lead Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

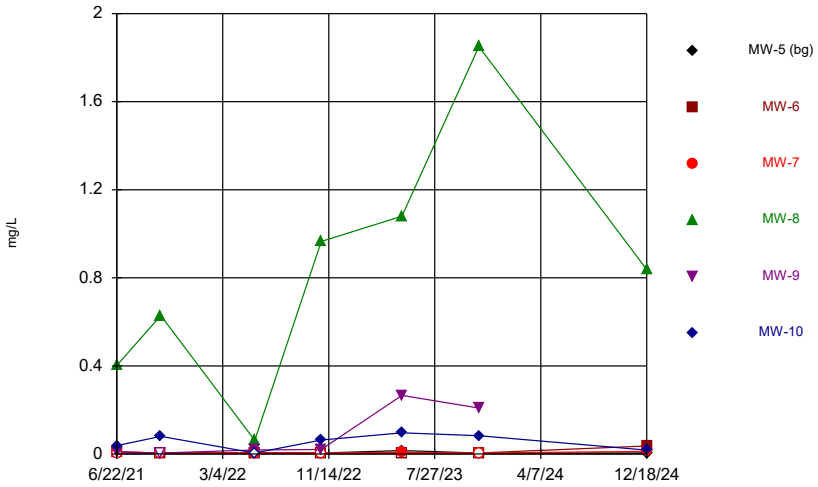
Time Series



Constituent: Magnesium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

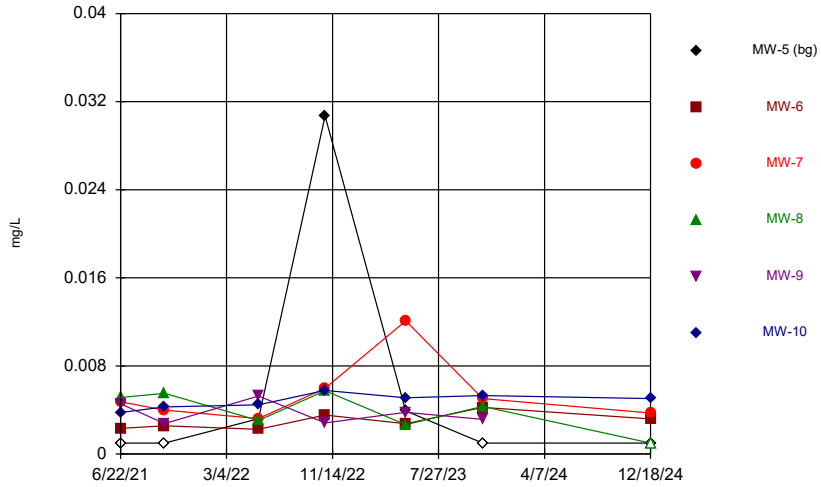
Time Series



Constituent: Manganese Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

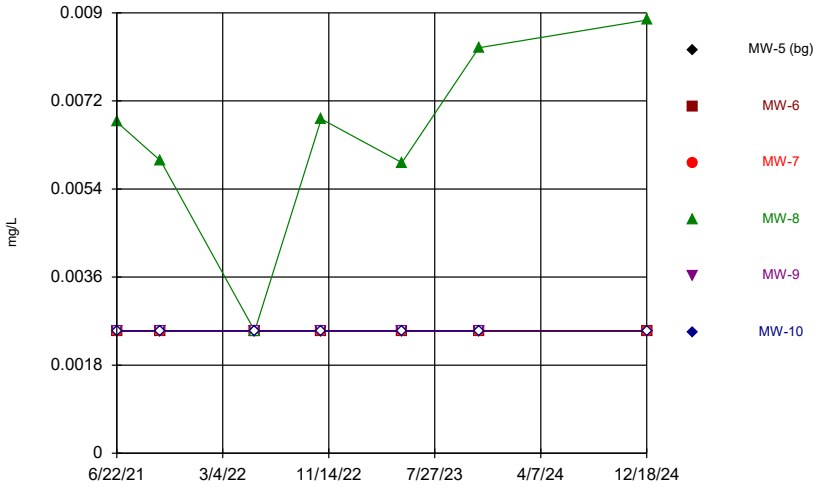
Time Series



Constituent: Molybdenum Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

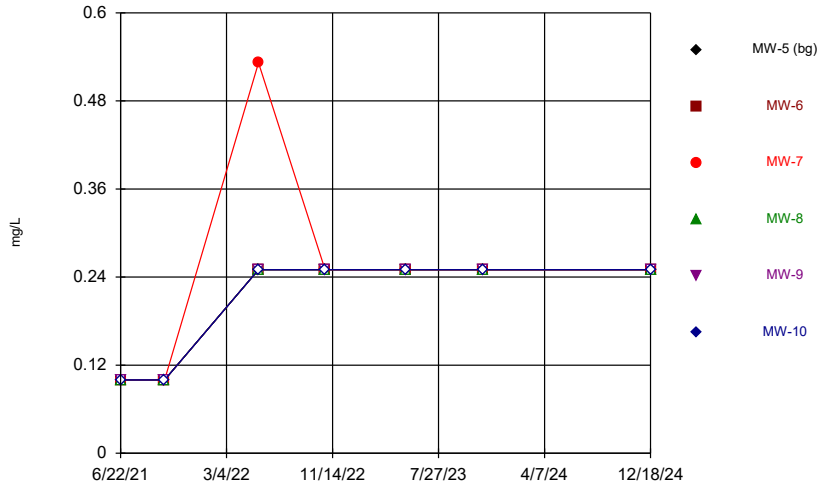
Time Series



Constituent: Nickel Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

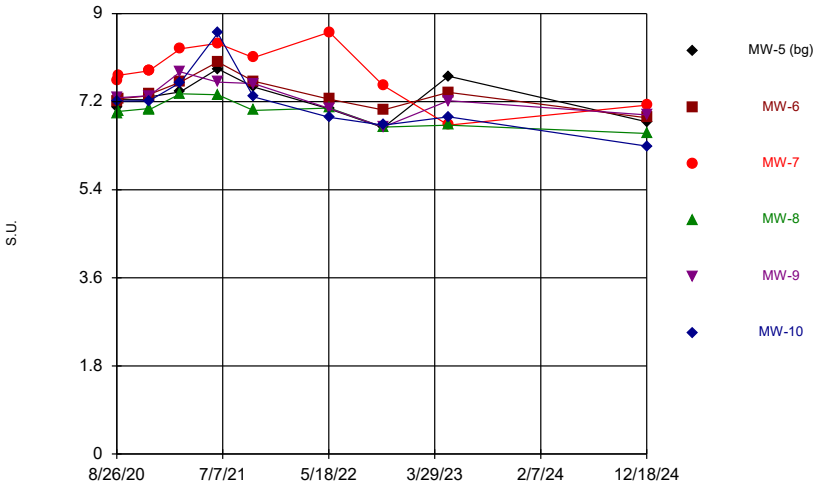
Time Series



Constituent: Nitrogen, Ammonia Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

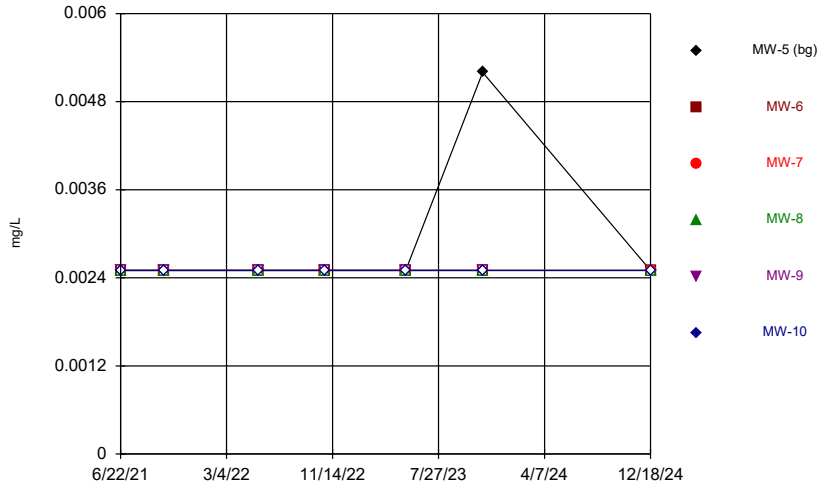
Time Series



Constituent: pH Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

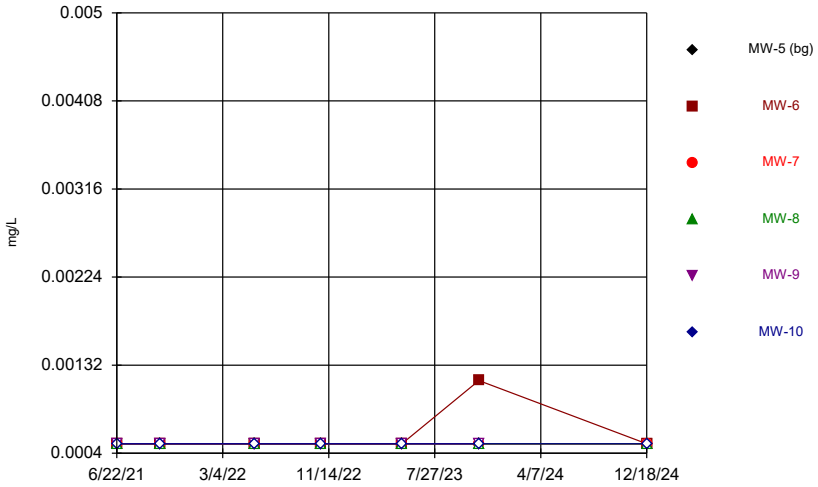
Time Series



Constituent: Selenium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

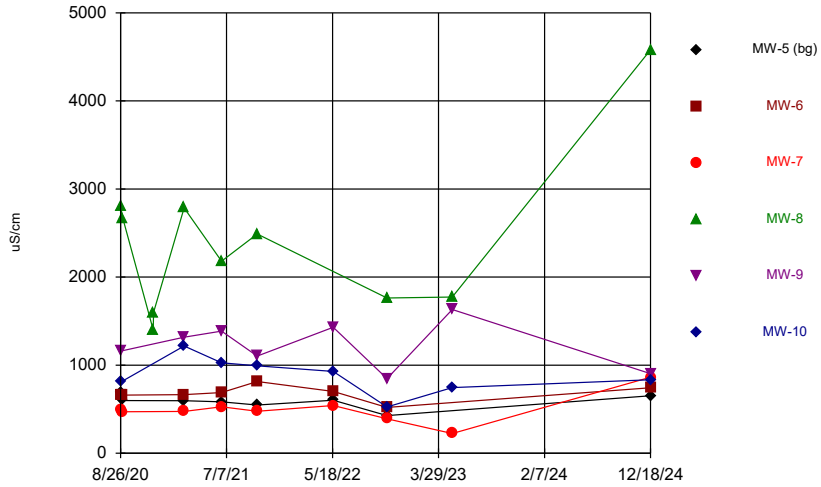
Time Series



Constituent: Silver Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

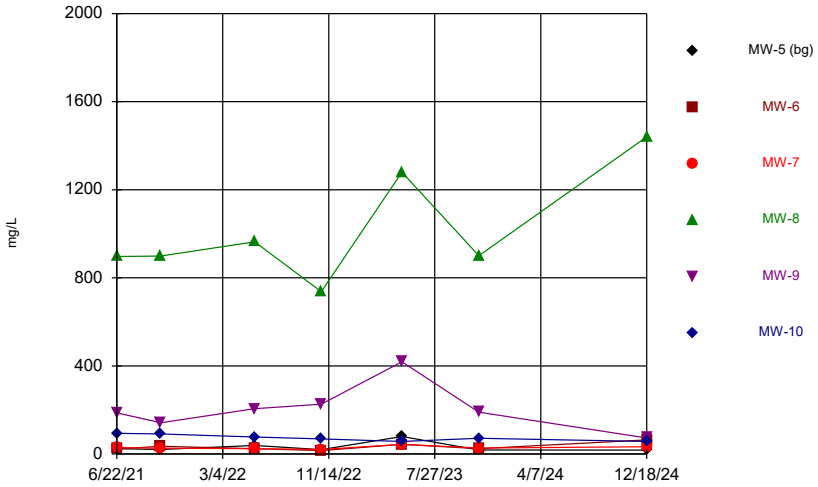
Time Series



Constituent: Specific Conductance Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

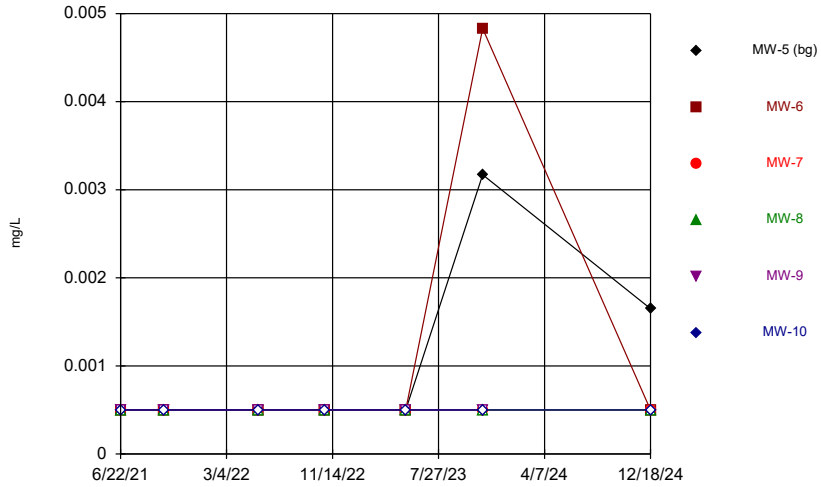
Time Series



Constituent: Sulfate Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

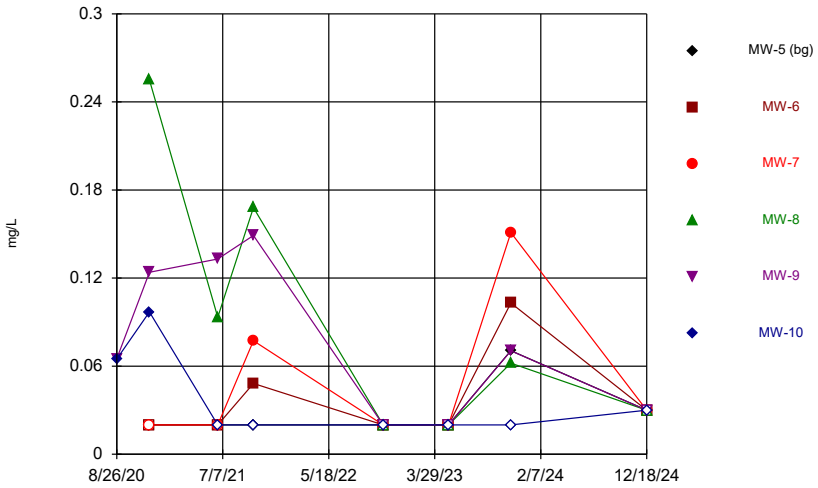
Time Series



Constituent: Thallium Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Time Series



Constituent: Total Organic Halogens Analysis Run 2/18/2025 3:07 PM View: 2024AWQR-Time_Series

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Attachment B

Outliers

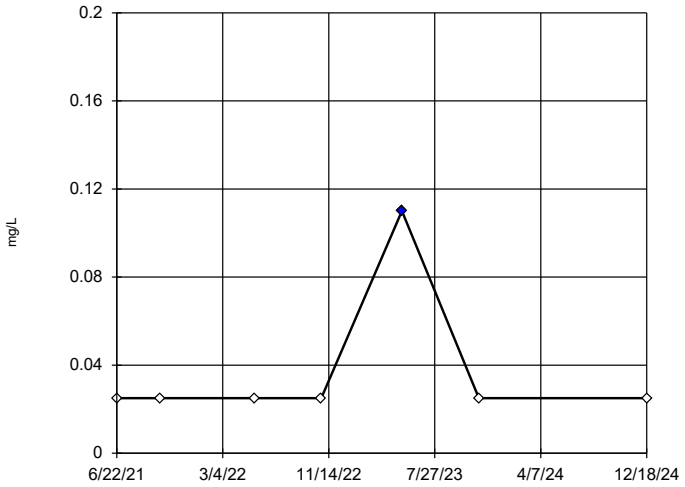
BG Outlier Analysis

Faircast Inc. Client: SCS Engineers Data: Faircast Inc Printed 2/18/2025, 1:15 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Aluminum (mg/L)	**MW-5 (bg)**	**Yes**	**0.11**	**5/9/2023**	**OH**	**NaN**	**7**	**0.03714**	**0.03213**	**n/a**	**n/a**
Barium (mg/L)	MW-5 (bg)	No	n/a	n/a	EPA/OH	0.05	7	0.4956	0.04924	normal	ShapiroWilk
Boron (mg/L)	**MW-5 (bg)**	**Yes**	**0.144**	**11/10/2023**	**OH**	**NaN**	**7**	**0.06343**	**0.03553**	**n/a**	**n/a**
Chemical Oxygen Demand (mg/L)	MW-5 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	7	22.07	19.53	unknown	ShapiroWilk
Chloride (mg/L)	MW-5 (bg)	No	n/a	n/a	EPA/OH	0.05	7	46.11	10.66	normal	ShapiroWilk
Fluoride (mg/L)	MW-5 (bg)	No	n/a	n/a	Dixon/OH	0.01	7	0.5016	0.1274	normal	ShapiroWilk
Iron (mg/L)	**MW-5 (bg)**	**Yes**	**0.101**	**5/9/2023**	**OH**	**NaN**	**7**	**0.05729**	**0.01928**	**n/a**	**n/a**
Magnesium (mg/L)	**MW-5 (bg)**	**Yes**	**40**	**5/9/2023**	**Dixon/OH**	**0.01**	**7**	**22.96**	**7.61**	**normal**	**ShapiroWilk**
Manganese (mg/L)	**MW-5 (bg)**	**Yes**	**0.0155**	**5/9/2023**	**OH**	**NaN**	**7**	**0.0065**	**0.003969**	**n/a**	**n/a**
Molybdenum (mg/L)	**MW-5 (bg)**	**Yes**	**0.0307**	**10/27/2022**	**NP (nrm)/OH**	**NaN**	**7**	**0.005973**	**0.01097**	**unknown**	**ShapiroWilk**
pH (S.U.)	MW-5 (bg)	No	n/a	n/a	EPA/OH	0.05	11	7.261	0.3613	normal	ShapiroWilk
Selenium (mg/L)	**MW-5 (bg)**	**Yes**	**0.0052**	**11/10/2023**	**OH**	**NaN**	**7**	**0.002886**	**0.001021**	**n/a**	**n/a**
Specific Conductance (uS/cm)	MW-5 (bg)	No	n/a	n/a	Dixon/OH	0.01	8	587.4	78.03	normal	ShapiroWilk
Sulfate (mg/L)	**MW-5 (bg)**	**Yes**	**38.6,79.8**	**5/20/2022,5/9/2023**	**Dixon/OH**	**0.01**	**7**	**31.47**	**22.47**	**normal**	**ShapiroWilk**
Thallium (mg/L)	MW-5 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	7	0.001046	0.00103	unknown	ShapiroWilk
Total Organic Halogens (mg/L)	**MW-5 (bg)**	**Yes**	**0.0706**	**11/10/2023**	**OH**	**NaN**	**7**	**0.02866**	**0.01887**	**n/a**	**n/a**

Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

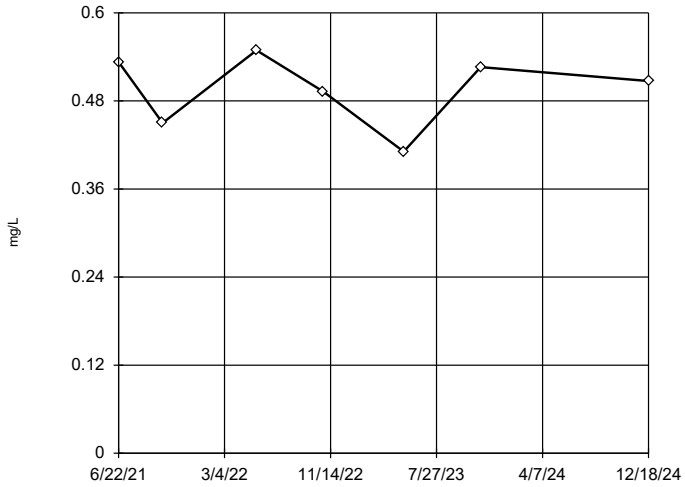
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Aluminum Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

EPA Screening (suspected outliers for Dixon's Test)

MW-5 (bg)



n = 7

Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.4956, std. dev. 0.04924, critical Tn 1.938

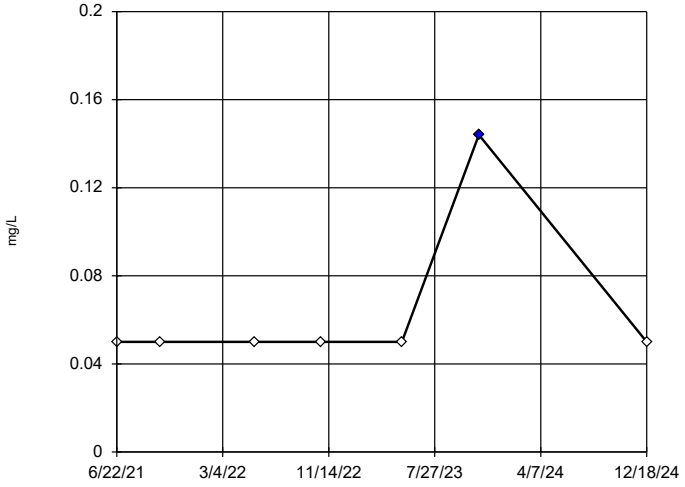
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9217
Critical = 0.73
The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

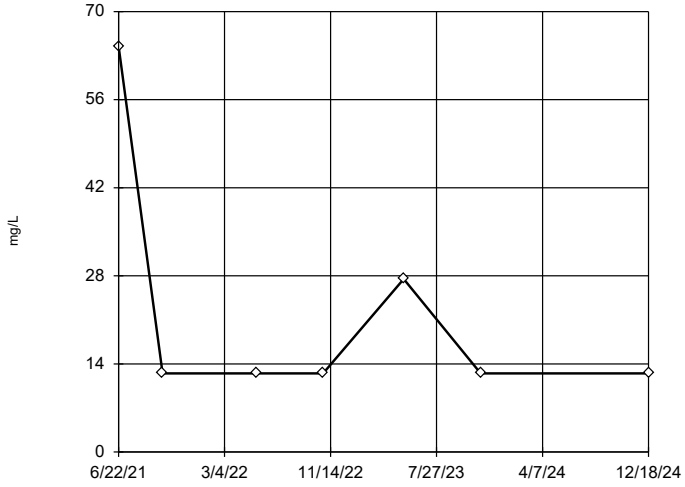
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Boron Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



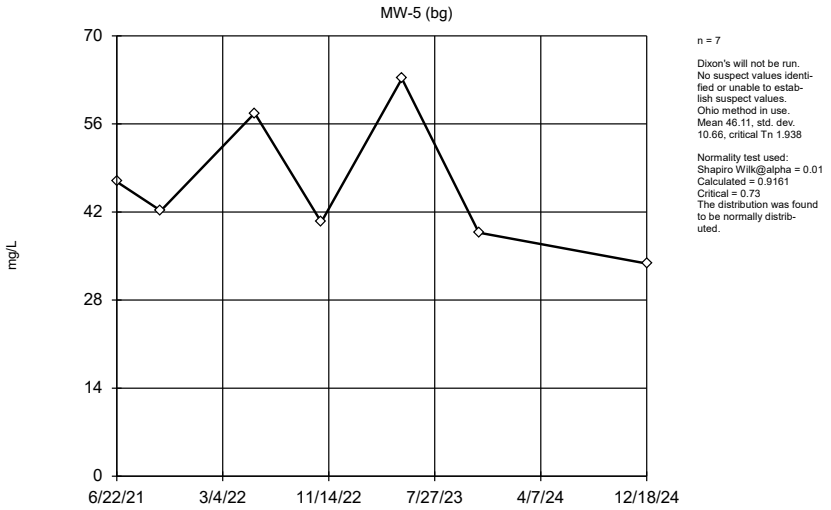
n = 7

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 72.5, low cutoff = -32.5, based on IQR multiplier of 3.

Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

EPA Screening (suspected outliers for Dixon's Test)



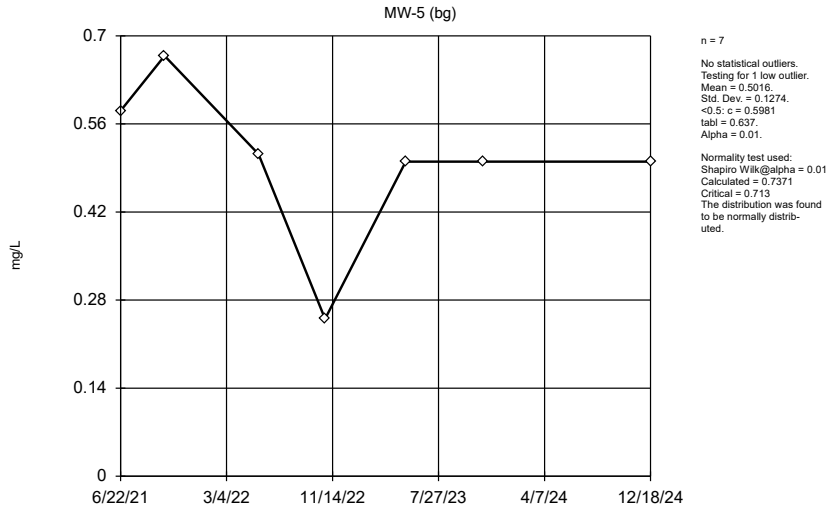
n = 7

Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 46.11, std. dev. 10.66, critical Tn 1.938

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9161
Critical = 0.73
The distribution was found to be normally distributed.

Constituent: Chloride Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



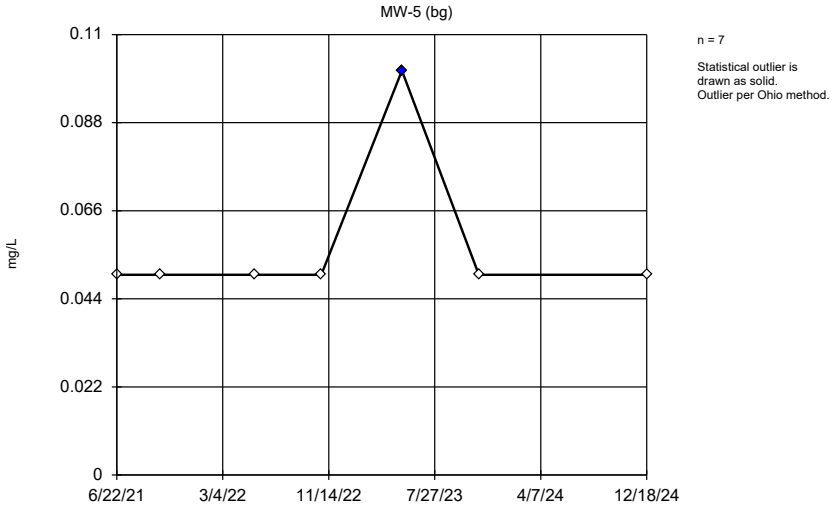
n = 7

No statistical outliers.
Testing for 1 low outlier.
Mean = 0.5016.
Std. Dev. = 0.1274.
<0.5: c = 0.5981
tabl = 0.637.
Alpha = 0.01.

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.7371
Critical = 0.713
The distribution was found to be normally distributed.

Constituent: Fluoride Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Ohio EPA 0715 Outlier Algorithm

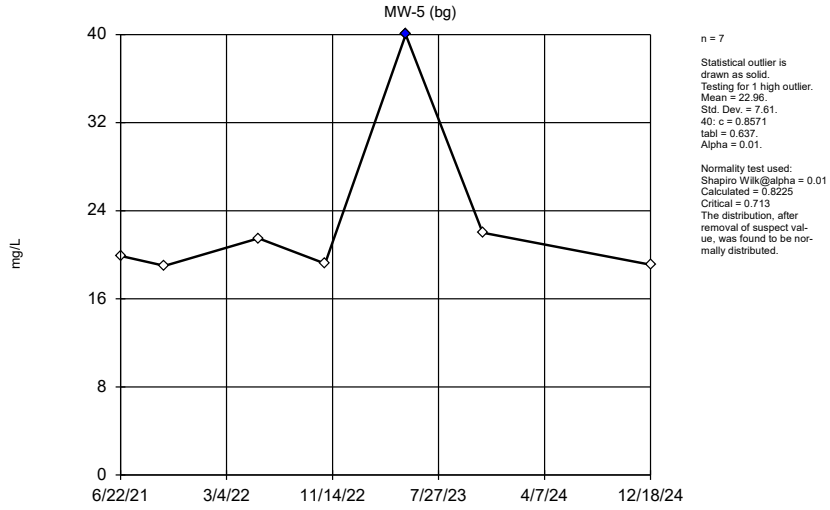


n = 7

Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Iron Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



n = 7

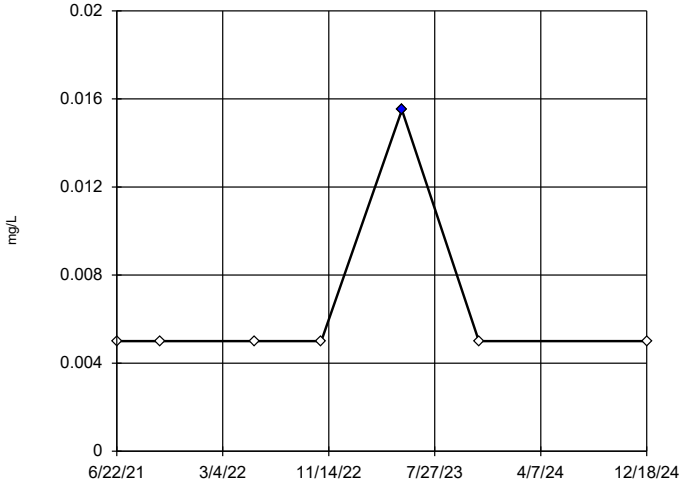
Statistical outlier is drawn as solid.
Testing for 1 high outlier.
Mean = 22.96.
Std. Dev. = 7.61.
40: c = 0.8571
tabl = 0.637.
Alpha = 0.01.

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.8225
Critical = 0.713
The distribution, after removal of suspect value, was found to be normally distributed.

Constituent: Magnesium Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



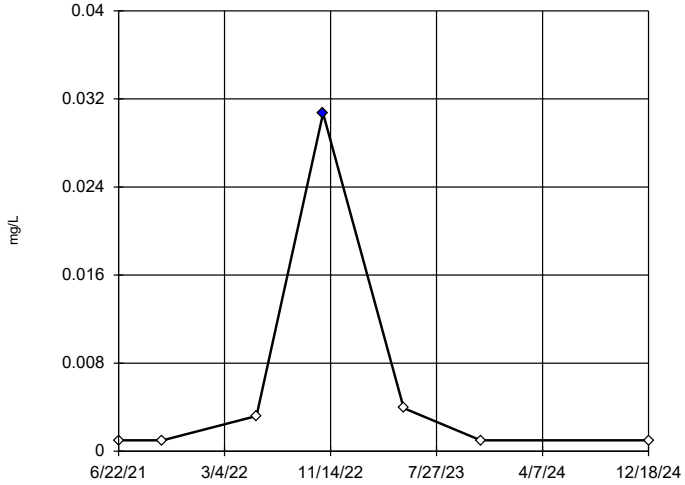
n = 7

Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Manganese Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

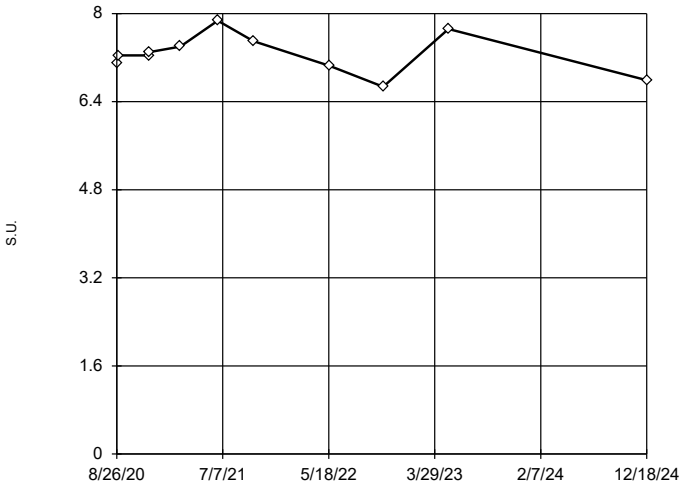
Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.01264, low cutoff = -0.00773, based on IQR multiplier of 3.

Constituent: Molybdenum Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

EPA Screening (suspected outliers for Dixon's Test)

MW-5 (bg)



n = 11

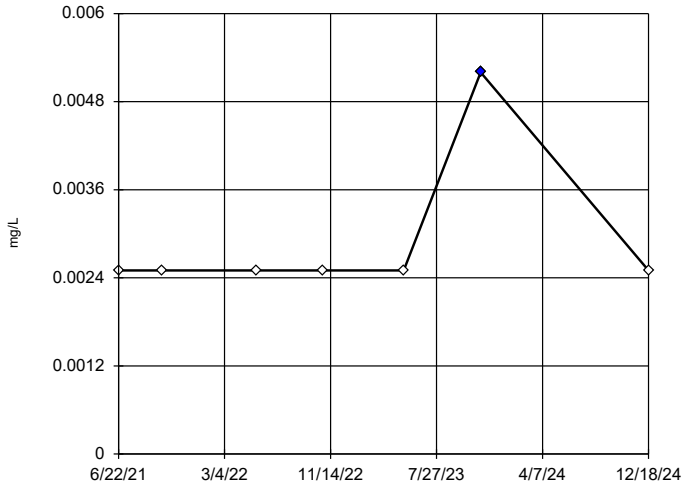
Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 7.261, std. dev. 0.3613, critical Tn 2.234

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9793
Critical = 0.792
The distribution was found to be normally distributed.

Constituent: pH Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



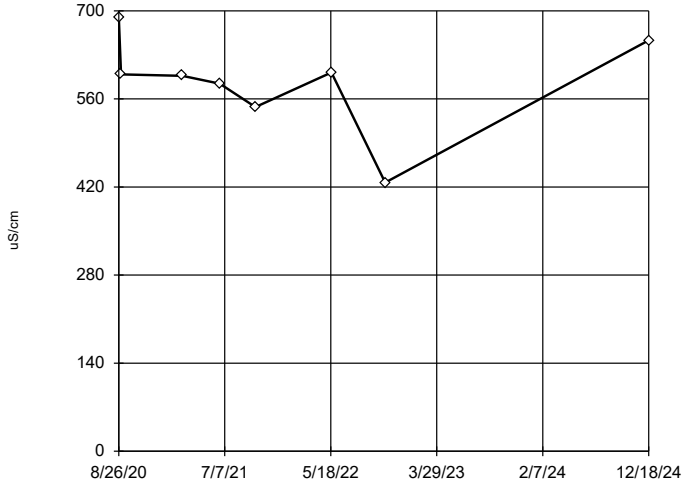
n = 7

Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Selenium Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 8

No statistical outliers.
Testing for 1 low outlier.
Mean = 587.4.
Std. Dev. = 78.03.
427: c = 0.5314
tabl = 0.683.
Alpha = 0.01.

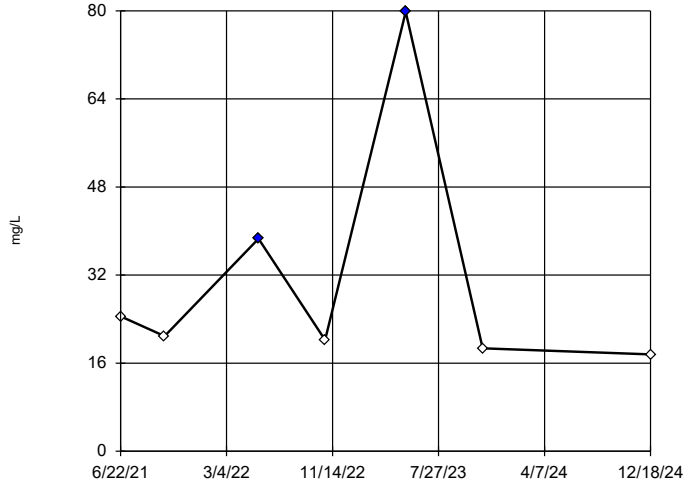
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9254
Critical = 0.73
The distribution was found to be normally distrib-uted.

Constituent: Specific Conductance Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

Statistical outliers are drawn as solid.
Testing for 2 high outliers.
Mean = 31.47.
Std. Dev. = 22.47.
38.6: c = 0.6714
tabl = 0.637.
Alpha = 0.01.

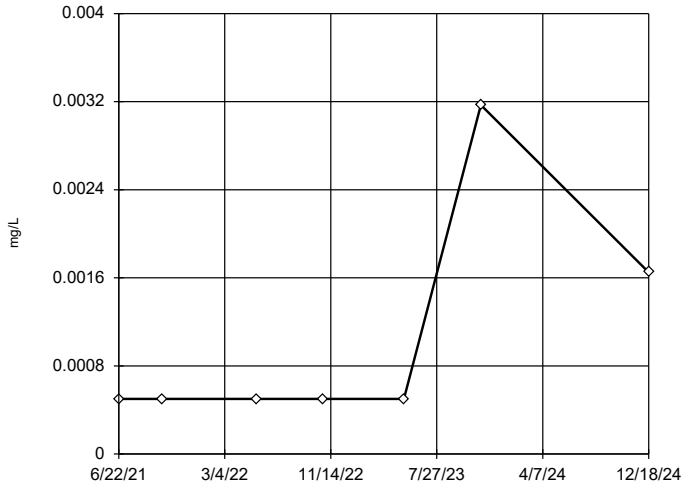
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9408
Critical = 0.686
The distribution, after removal of suspect val-ues, was found to be nor-mally distributed.

Constituent: Sulfate Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

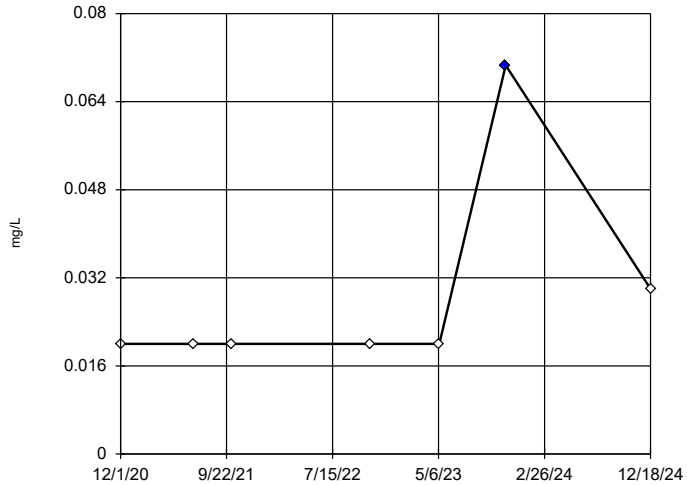
High cutoff = 0.0051, low cutoff = -0.00295, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

MW-5 (bg)



n = 7

Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Total Organic Halogens Analysis Run 2/18/2025 1:12 PM View: 2024AWQR-BG_Outliers
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Attachment C

Prediction Limits

Prediction Limit

Faircast Inc. Client: SCS Engineers Data: Faircast Inc Printed 2/18/2025, 3:11 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	%NDs	Transform	Alpha	Method
Aluminum (mg/L)	**MW-6**	**0.11**	**n/a**	**12/18/2024**	**0.2585**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Aluminum (mg/L)	**MW-7**	**0.11**	**n/a**	**12/18/2024**	**0.293**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Aluminum (mg/L)	MW-10	0.11	n/a	12/18/2024	0.0703	No	7	MW-5	85.71	n/a	0.02115	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-6	0.668	n/a	12/18/2024	0.1965	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Barium (mg/L)	MW-7	0.668	n/a	12/18/2024	0.275	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Barium (mg/L)	MW-8	0.668	n/a	12/18/2024	0.0192	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Barium (mg/L)	MW-10	0.668	n/a	12/18/2024	0.0548	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Boron (mg/L)	**MW-8**	**0.144**	**n/a**	**12/18/2024**	**0.476**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**MW-10**	**0.144**	**n/a**	**12/18/2024**	**0.168**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Chemical Oxygen Demand (mg/L)	MW-7	64.5	n/a	12/18/2024	41.5	No	7	MW-5	71.43	n/a	0.02115	NP Inter (NDs) 1 of 2
Chemical Oxygen Demand (mg/L)	MW-9	64.5	n/a	12/18/2024	27.8	No	7	MW-5	71.43	n/a	0.02115	NP Inter (NDs) 1 of 2
Chloride (mg/L)	MW-6	83.43	n/a	12/18/2024	26.8	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Chloride (mg/L)	MW-7	83.43	n/a	12/18/2024	20.9	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Chloride (mg/L)	**MW-8**	**83.43**	**n/a**	**12/18/2024**	**243**	**Yes**	**7**	**MW-5**	**0**	**No**	**0.0006583**	**Param Inter 1 of 2**
Chloride (mg/L)	MW-9	83.43	n/a	12/18/2024	9.61	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Chloride (mg/L)	MW-10	83.43	n/a	12/18/2024	9.19	No	7	MW-5	0	No	0.0006583	Param Inter 1 of 2
Iron (mg/L)	**MW-6**	**0.101**	**n/a**	**12/18/2024**	**0.203**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Iron (mg/L)	**MW-7**	**0.101**	**n/a**	**12/18/2024**	**0.193**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Iron (mg/L)	**MW-8**	**0.101**	**n/a**	**12/18/2024**	**1.26**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Iron (mg/L)	**MW-10**	**0.101**	**n/a**	**12/18/2024**	**0.419**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Magnesium (mg/L)	MW-6	40	n/a	12/18/2024	15.45	No	7	MW-5	0	n/a	0.02115	NP Inter (normality) ...
Magnesium (mg/L)	MW-7	40	n/a	12/18/2024	19.6	No	7	MW-5	0	n/a	0.02115	NP Inter (normality) ...
Magnesium (mg/L)	**MW-8**	**40**	**n/a**	**12/18/2024**	**124**	**Yes**	**7**	**MW-5**	**0**	**n/a**	**0.02115**	**NP Inter (normality) ...**
Magnesium (mg/L)	MW-10	40	n/a	12/18/2024	21.6	No	7	MW-5	0	n/a	0.02115	NP Inter (normality) ...
Manganese (mg/L)	**MW-6**	**0.0155**	**n/a**	**12/18/2024**	**0.03655**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Manganese (mg/L)	MW-7	0.0155	n/a	12/18/2024	0.0122	No	7	MW-5	85.71	n/a	0.02115	NP Inter (NDs) 1 of 2
Manganese (mg/L)	**MW-8**	**0.0155**	**n/a**	**12/18/2024**	**0.838**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Manganese (mg/L)	**MW-10**	**0.0155**	**n/a**	**12/18/2024**	**0.018**	**Yes**	**7**	**MW-5**	**85.71**	**n/a**	**0.02115**	**NP Inter (NDs) 1 of 2**
Molybdenum (mg/L)	MW-6	0.0307	n/a	12/18/2024	0.00319	No	7	MW-5	57.14	n/a	0.02115	NP Inter (NDs) 1 of 2
Molybdenum (mg/L)	MW-7	0.0307	n/a	12/18/2024	0.00372	No	7	MW-5	57.14	n/a	0.02115	NP Inter (NDs) 1 of 2
Molybdenum (mg/L)	MW-10	0.0307	n/a	12/18/2024	0.00504	No	7	MW-5	57.14	n/a	0.02115	NP Inter (NDs) 1 of 2
pH (S.U.)	MW-6	8.249	6.273	12/18/2024	6.87	No	11	MW-5	0	No	0.0003291	Param Inter 1 of 2
pH (S.U.)	MW-7	8.249	6.273	12/18/2024	7.13	No	11	MW-5	0	No	0.0003291	Param Inter 1 of 2
pH (S.U.)	MW-8	8.249	6.273	12/18/2024	6.55	No	11	MW-5	0	No	0.0003291	Param Inter 1 of 2
pH (S.U.)	MW-9	8.249	6.273	12/18/2024	6.93	No	11	MW-5	0	No	0.0003291	Param Inter 1 of 2
pH (S.U.)	MW-10	8.249	6.273	12/18/2024	6.29	No	11	MW-5	0	No	0.0003291	Param Inter 1 of 2
Specific Conductance (uS/cm)	MW-6	833.4	n/a	12/18/2024	743	No	8	MW-5	0	No	0.0006583	Param Inter 1 of 2
Specific Conductance (uS/cm)	**MW-7**	**833.4**	**n/a**	**12/18/2024**	**863**	**Yes**	**8**	**MW-5**	**0**	**No**	**0.0006583**	**Param Inter 1 of 2**
Specific Conductance (uS/cm)	**MW-8**	**833.4**	**n/a**	**12/18/2024**	**4579**	**Yes**	**8**	**MW-5**	**0**	**No**	**0.0006583**	**Param Inter 1 of 2**
Specific Conductance (uS/cm)	**MW-9**	**833.4**	**n/a**	**12/18/2024**	**903**	**Yes**	**8**	**MW-5**	**0**	**No**	**0.0006583**	**Param Inter 1 of 2**
Specific Conductance (uS/cm)	**MW-10**	**833.4**	**n/a**	**12/18/2024**	**835**	**Yes**	**8**	**MW-5**	**0**	**No**	**0.0006583**	**Param Inter 1 of 2**
Sulfate (mg/L)	MW-6	129	n/a	12/18/2024	64.2	No	7	MW-5	0	sqrt(x)	0.0006583	Param Inter 1 of 2
Sulfate (mg/L)	MW-7	129	n/a	12/18/2024	33.3	No	7	MW-5	0	sqrt(x)	0.0006583	Param Inter 1 of 2
Sulfate (mg/L)	**MW-8**	**129**	**n/a**	**12/18/2024**	**1440**	**Yes**	**7**	**MW-5**	**0**	**sqrt(x)**	**0.0006583**	**Param Inter 1 of 2**
Sulfate (mg/L)	MW-9	129	n/a	12/18/2024	73.3	No	7	MW-5	0	sqrt(x)	0.0006583	Param Inter 1 of 2
Sulfate (mg/L)	MW-10	129	n/a	12/18/2024	56.7	No	7	MW-5	0	sqrt(x)	0.0006583	Param Inter 1 of 2

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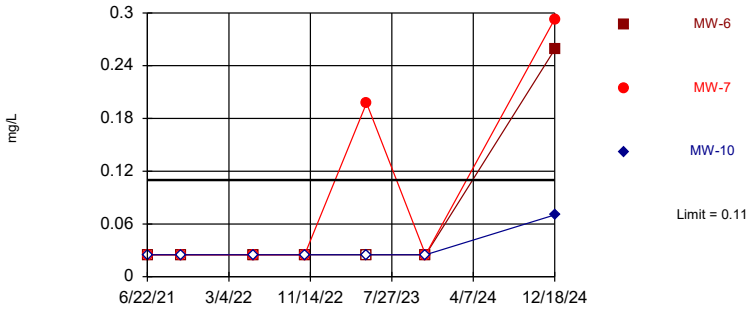
Hollow symbols indicate censored values.

Exceeds Limit: MW-6, MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 3 points to limit. Assumes 2 future values.

Constituent: Aluminum Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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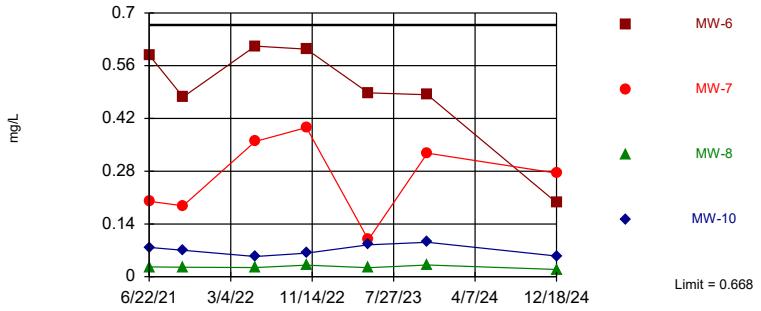
Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=0.4956, Std. Dev.=0.04924, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9217, critical = 0.73. Kappa = 3.502 (c=16, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.003287. Individual comparison alpha = 0.0006583. Comparing 4 points to limit. Assumes 1 future value.

Constituent: Barium Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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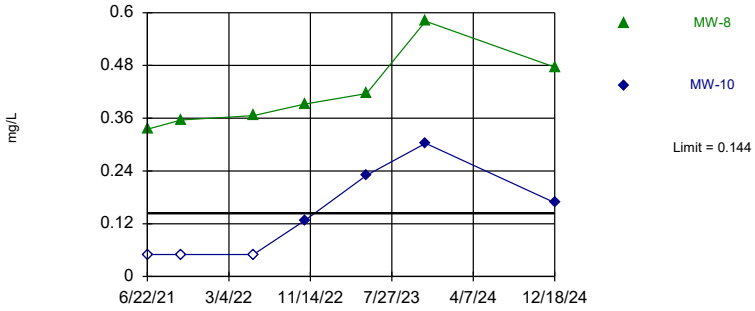
Hollow symbols indicate censored values.

Exceeds Limit: MW-8, MW-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 2 points to limit. Assumes 3 future values.

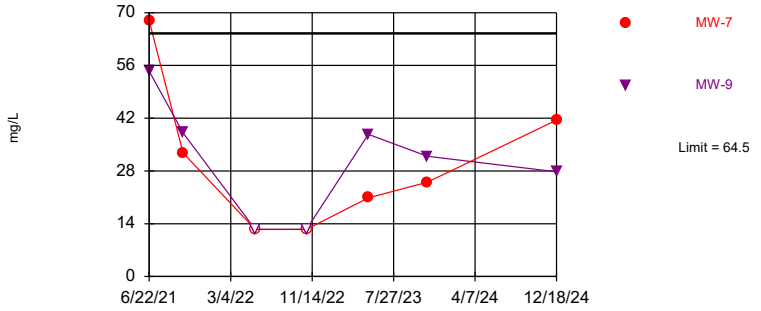
Constituent: Boron Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



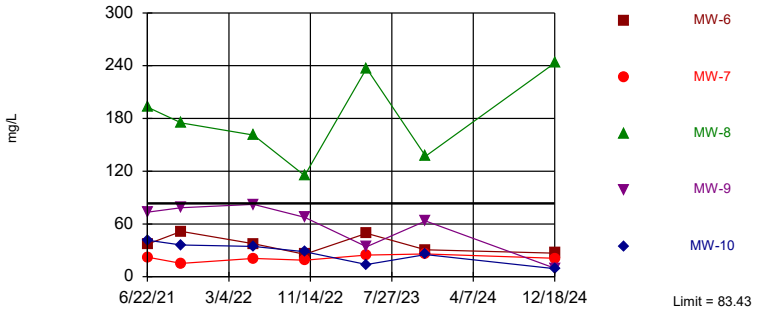
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 71.43% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 2 points to limit. Assumes 3 future values.

Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Exceeds Limit: MW-8

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=46.11, Std. Dev.=10.66, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9161, critical = 0.73. Kappa = 3.502 (c=16, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.003287. Individual comparison alpha = 0.0006583. Comparing 5 points to limit.

Constituent: Chloride Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

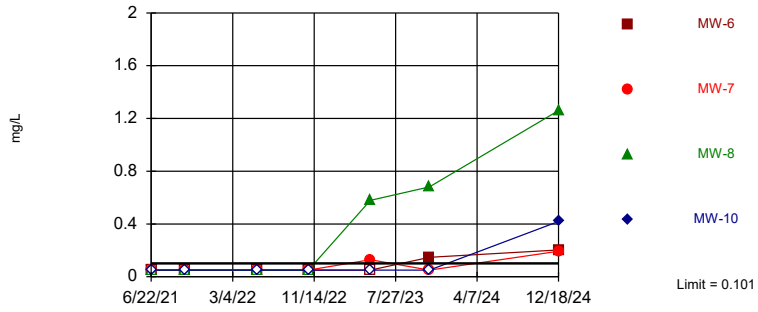
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Exceeds Limit: MW-6, MW-7, MW-8, MW-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 4 points to limit. Assumes 1 future value.

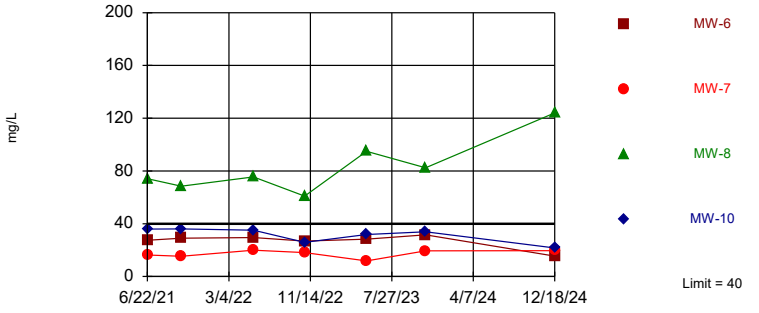
Constituent: Iron Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Exceeds Limit: MW-8

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 7 background values. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 4 points to limit. Assumes 1 future value.

Constituent: Magnesium Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

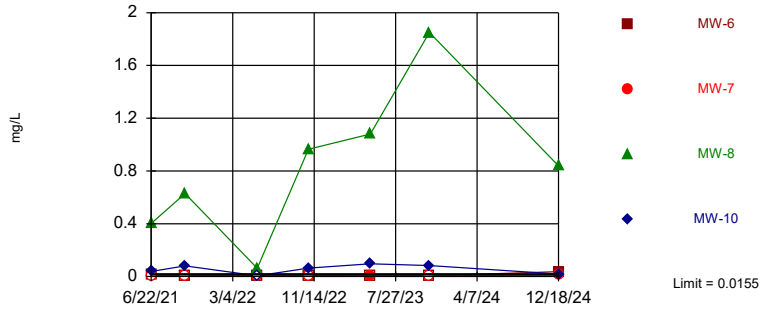
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Exceeds Limit: MW-6, MW-8, MW-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 4 points to limit. Assumes 1 future value.

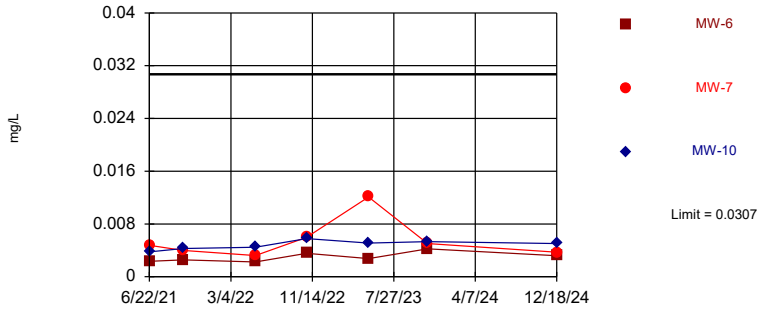
Constituent: Manganese Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Annual per-constituent alpha = 0.1925. Individual comparison alpha = 0.02115 (1 of 2). Comparing 3 points to limit. Assumes 2 future values.

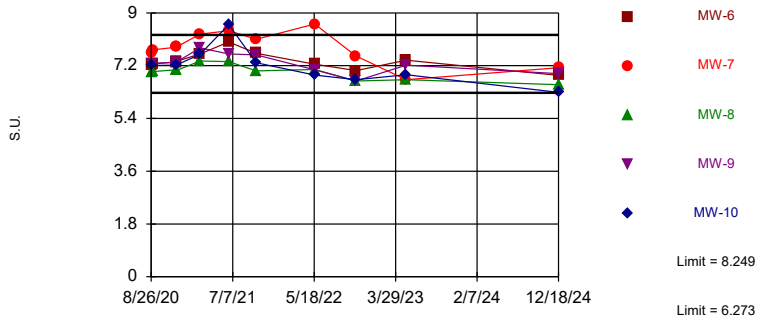
Constituent: Molybdenum Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Within Limits

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=7.261, Std. Dev.=0.3613, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9793, critical = 0.792. Kappa = 2.734 (c=16, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.003287. Individual comparison alpha = 0.0003291. Comparing 5 points to limit.

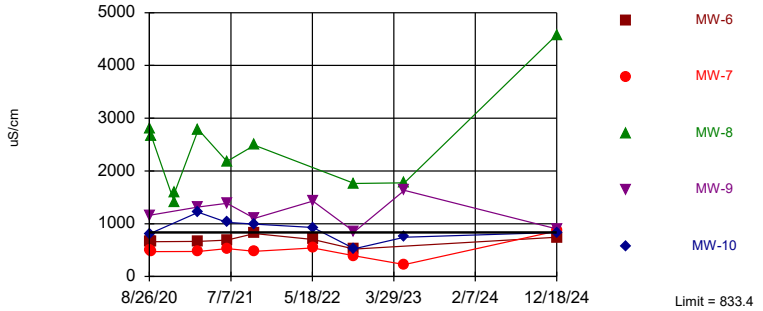
Constituent: pH Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Exceeds Limit: MW-7, MW-8, MW-9, MW-10

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=587.4, Std. Dev.=78.03, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9002, critical = 0.749. Kappa = 3.152 (c=16, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.003287. Individual comparison alpha = 0.0006583. Comparing 5 points to limit.

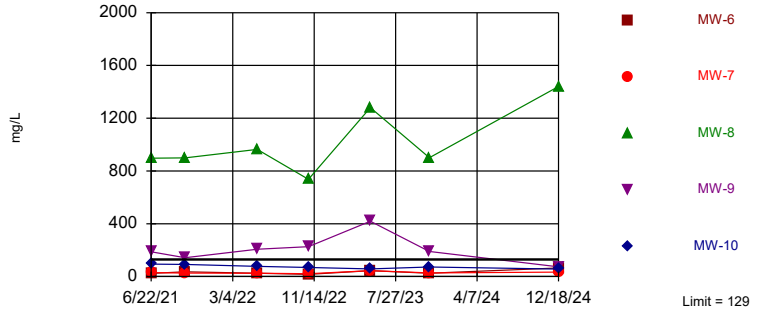
Constituent: Specific Conductance Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Exceeds Limit: MW-8

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=5.383, Std. Dev.=1.706, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7379, critical = 0.73. Kappa = 3.502 (c=16, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.003287. Individual comparison alpha = 0.0006583. Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 2/18/2025 3:10 PM View: 2024AWQR-Interwell_PL

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Attachment D

Trend Test (α=0.01)

Trend Test

Faircast Inc. Client: SCS Engineers Data: Faircast Inc Printed 2/18/2025, 4:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Aluminum (mg/L)	MW-5 (bg)	0	2	18	No	7	85.71	0.01	NP
Aluminum (mg/L)	MW-6	0	6	18	No	7	85.71	0.01	NP
Aluminum (mg/L)	MW-7	0	9	18	No	7	71.43	0.01	NP
Aluminum (mg/L)	MW-9	0.03669	9	14	No	6	16.67	0.01	NP
Aluminum (mg/L)	MW-10	0	6	18	No	7	85.71	0.01	NP
Arsenic (mg/L)	MW-7	-0.0002997	-10	-18	No	7	42.86	0.01	NP
Arsenic (mg/L)	MW-8	0.0008331	13	18	No	7	57.14	0.01	NP
Barium (mg/L)	MW-5 (bg)	-0.007443	-3	-18	No	7	0	0.01	NP
Barium (mg/L)	MW-6	-0.08736	-9	-18	No	7	0	0.01	NP
Barium (mg/L)	MW-7	0.02147	1	18	No	7	0	0.01	NP
Barium (mg/L)	MW-8	-0.001117	-5	-18	No	7	0	0.01	NP
Barium (mg/L)	MW-9	0.004266	5	14	No	6	0	0.01	NP
Barium (mg/L)	MW-10	0.0003871	1	18	No	7	0	0.01	NP
Boron (mg/L)	MW-5 (bg)	0	4	18	No	7	85.71	0.01	NP
Boron (mg/L)	MW-6	0	4	18	No	7	85.71	0.01	NP
Boron (mg/L)	MW-7	0	4	18	No	7	85.71	0.01	NP
Boron (mg/L)	**MW-8**	**0.04258**	**19**	**18**	**Yes**	**7**	**0**	**0.01**	**NP**
Boron (mg/L)	MW-9	0.05824	3	14	No	6	16.67	0.01	NP
Boron (mg/L)	MW-10	0.07281	14	18	No	7	42.86	0.01	NP
Cadmium (mg/L)	MW-8	0.00003147	14	18	No	7	85.71	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-5 (bg)	0	-5	-18	No	7	71.43	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-6	-12.21	-13	-18	No	7	57.14	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-7	0	0	18	No	7	28.57	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-8	0	-5	-18	No	7	71.43	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-9	-3.704	-8	-18	No	7	28.57	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-10	-6.9	-10	-18	No	7	42.86	0.01	NP
Chloride (mg/L)	MW-5 (bg)	-3.077	-9	-18	No	7	0	0.01	NP
Chloride (mg/L)	MW-6	-3.433	-7	-18	No	7	0	0.01	NP
Chloride (mg/L)	MW-7	1.509	7	18	No	7	0	0.01	NP
Chloride (mg/L)	MW-8	3.718	1	18	No	7	0	0.01	NP
Chloride (mg/L)	MW-9	-15.11	-13	-18	No	7	0	0.01	NP
Chloride (mg/L)	**MW-10**	**-9.001**	**-19**	**-18**	**Yes**	**7**	**0**	**0.01**	**NP**
Chromium (mg/L)	MW-6	0	4	18	No	7	85.71	0.01	NP
Cobalt (mg/L)	MW-6	0	4	18	No	7	85.71	0.01	NP
Cobalt (mg/L)	MW-8	0.000987	12	18	No	7	42.86	0.01	NP
Cobalt (mg/L)	MW-9	0.0003688	7	14	No	6	66.67	0.01	NP
Cobalt (mg/L)	MW-10	0	5	18	No	7	71.43	0.01	NP
Copper (mg/L)	MW-9	0	3	14	No	6	83.33	0.01	NP
Fluoride (mg/L)	MW-5 (bg)	-0.02319	-10	-18	No	7	57.14	0.01	NP
Fluoride (mg/L)	MW-6	-0.1111	-10	-18	No	7	42.86	0.01	NP
Fluoride (mg/L)	MW-7	-0.2716	-18	-18	No	7	28.57	0.01	NP
Fluoride (mg/L)	MW-9	0	-3	-18	No	7	71.43	0.01	NP
Fluoride (mg/L)	MW-10	-0.01626	-4	-18	No	7	57.14	0.01	NP
Iron (mg/L)	MW-5 (bg)	0	2	18	No	7	85.71	0.01	NP
Iron (mg/L)	MW-6	0.04065	11	18	No	7	71.43	0.01	NP
Iron (mg/L)	MW-7	0	9	18	No	7	71.43	0.01	NP
Iron (mg/L)	MW-8	0.3329	15	18	No	7	57.14	0.01	NP
Iron (mg/L)	MW-9	0.132	12	14	No	6	33.33	0.01	NP
Iron (mg/L)	MW-10	0	6	18	No	7	85.71	0.01	NP
Lead (mg/L)	MW-6	0	9	18	No	7	71.43	0.01	NP

Trend Test

Faircast Inc. Client: SCS Engineers Data: Faircast Inc Printed 2/18/2025, 4:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Lead (mg/L)	MW-7	0	9	18	No	7	71.43	0.01	NP
Lead (mg/L)	MW-8	0	1	18	No	7	71.43	0.01	NP
Lead (mg/L)	MW-9	0.0002982	10	14	No	6	50	0.01	NP
Lead (mg/L)	MW-10	0	2	18	No	7	85.71	0.01	NP
Magnesium (mg/L)	MW-5 (bg)	0.1891	3	18	No	7	0	0.01	NP
Magnesium (mg/L)	MW-6	-0.3709	-1	-18	No	7	0	0.01	NP
Magnesium (mg/L)	MW-7	0.9447	5	18	No	7	0	0.01	NP
Magnesium (mg/L)	MW-8	11.31	11	18	No	7	0	0.01	NP
Magnesium (mg/L)	MW-9	2.221	3	14	No	6	0	0.01	NP
Magnesium (mg/L)	MW-10	-2.181	-13	-18	No	7	0	0.01	NP
Manganese (mg/L)	MW-5 (bg)	0	2	18	No	7	85.71	0.01	NP
Manganese (mg/L)	MW-6	0	1	18	No	7	71.43	0.01	NP
Manganese (mg/L)	MW-7	0	9	18	No	7	71.43	0.01	NP
Manganese (mg/L)	MW-8	0.3177	11	18	No	7	0	0.01	NP
Manganese (mg/L)	MW-9	0.08306	11	14	No	6	16.67	0.01	NP
Manganese (mg/L)	MW-10	0.005032	3	18	No	7	14.29	0.01	NP
Molybdenum (mg/L)	MW-5 (bg)	0	1	18	No	7	57.14	0.01	NP
Molybdenum (mg/L)	MW-6	0.0003677	11	18	No	7	0	0.01	NP
Molybdenum (mg/L)	MW-7	0.0001215	1	18	No	7	0	0.01	NP
Molybdenum (mg/L)	MW-8	-0.001035	-9	-18	No	7	14.29	0.01	NP
Molybdenum (mg/L)	MW-9	-0.000415	-1	-14	No	6	0	0.01	NP
Molybdenum (mg/L)	MW-10	0.0004914	11	18	No	7	0	0.01	NP
Nickel (mg/L)	MW-8	0.0008132	9	18	No	7	14.29	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-7	0	6	18	No	7	85.71	0.01	NP
pH (S.U.)	MW-5 (bg)	0.05594	2	34	No	11	0	0.01	NP
pH (S.U.)	MW-6	-0.00584	-1	-34	No	11	0	0.01	NP
pH (S.U.)	MW-7	-0.04609	-1	-34	No	11	0	0.01	NP
pH (S.U.)	MW-8	-0.1044	-13	-34	No	11	0	0.01	NP
pH (S.U.)	MW-9	-0.1785	-16	-25	No	9	0	0.01	NP
pH (S.U.)	MW-10	-0.2308	-16	-25	No	9	0	0.01	NP
Selenium (mg/L)	MW-5 (bg)	0	4	18	No	7	85.71	0.01	NP
Silver (mg/L)	MW-6	0	4	18	No	7	85.71	0.01	NP
Specific Conductance (uS/cm)	MW-5 (bg)	-44.13	-8	-21	No	8	0	0.01	NP
Specific Conductance (uS/cm)	MW-6	17.51	10	21	No	8	0	0.01	NP
Specific Conductance (uS/cm)	MW-7	4.053	2	25	No	9	0	0.01	NP
Specific Conductance (uS/cm)	MW-8	20.7	1	30	No	10	0	0.01	NP
Specific Conductance (uS/cm)	MW-9	-12.12	0	21	No	8	0	0.01	NP
Specific Conductance (uS/cm)	MW-10	-104.7	-12	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-5 (bg)	-1.212	-9	-18	No	7	0	0.01	NP
Sulfate (mg/L)	MW-6	8.523	7	18	No	7	0	0.01	NP
Sulfate (mg/L)	MW-7	1.031	3	18	No	7	0	0.01	NP
Sulfate (mg/L)	MW-8	105	11	18	No	7	0	0.01	NP
Sulfate (mg/L)	MW-9	1.257	1	18	No	7	0	0.01	NP
Sulfate (mg/L)	MW-10	-11.36	-17	-18	No	7	0	0.01	NP
Thallium (mg/L)	MW-5 (bg)	0	9	18	No	7	71.43	0.01	NP
Thallium (mg/L)	MW-6	0	4	18	No	7	85.71	0.01	NP
Total Organic Halogens (mg/L)	MW-5 (bg)	0	9	18	No	7	85.71	0.01	NP
Total Organic Halogens (mg/L)	MW-6	0.00247	7	18	No	7	71.43	0.01	NP
Total Organic Halogens (mg/L)	MW-7	0.00247	7	18	No	7	71.43	0.01	NP
Total Organic Halogens (mg/L)	MW-8	-0.04309	-10	-18	No	7	42.86	0.01	NP

Trend Test

Faircast Inc. Client: SCS Engineers Data: Faircast Inc Printed 2/18/2025, 4:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Total Organic Halogens (mg/L)	MW-9	-0.01746	-5	-21	No	8	37.5	0.01	NP
Total Organic Halogens (mg/L)	MW-10	0	-6	-21	No	8	75	0.01	NP

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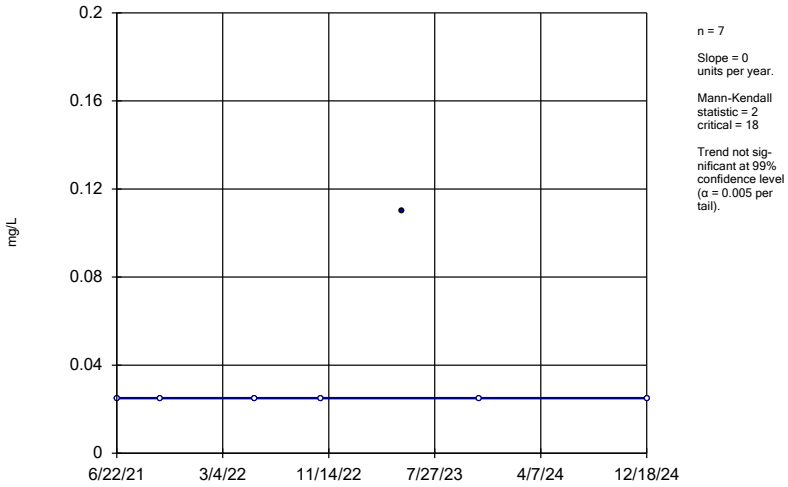
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 18

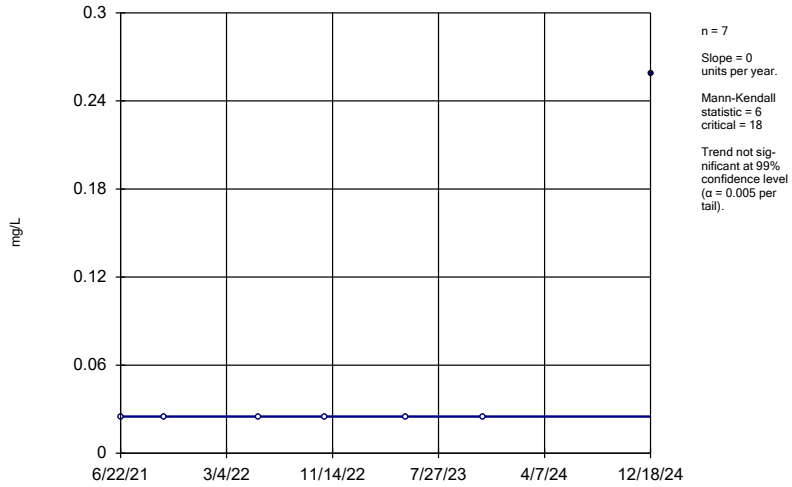
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Aluminum Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 18

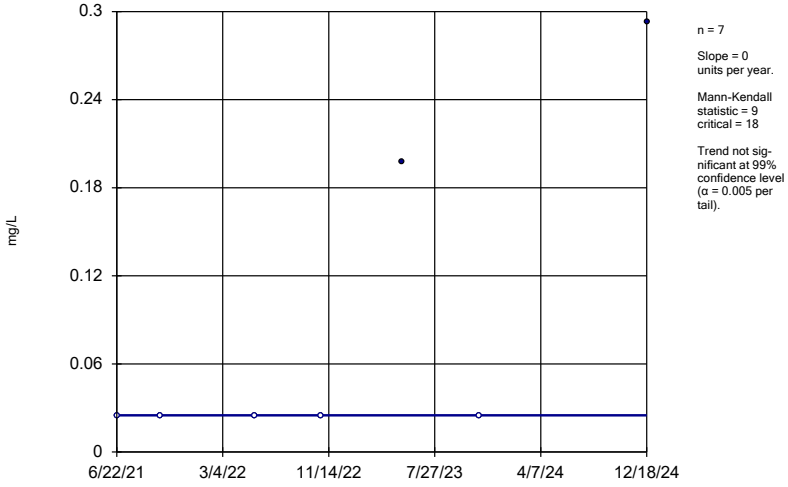
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Aluminum Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 18

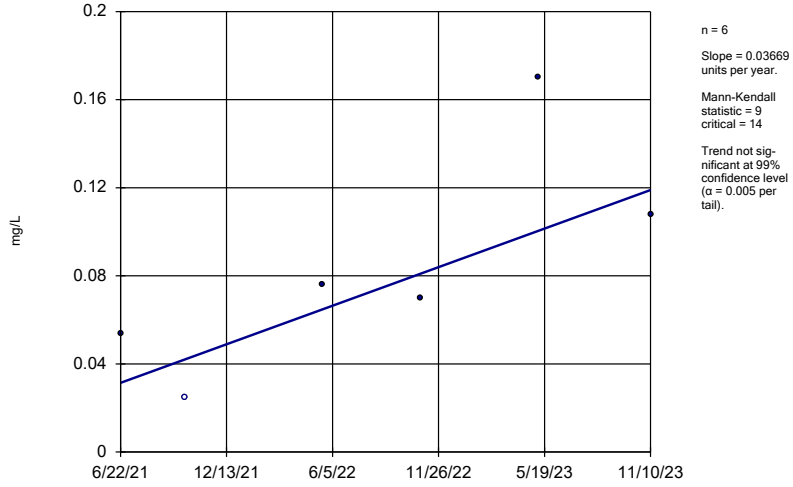
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Aluminum Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 6

Slope = 0.03669 units per year.

Mann-Kendall statistic = 9
critical = 14

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Aluminum Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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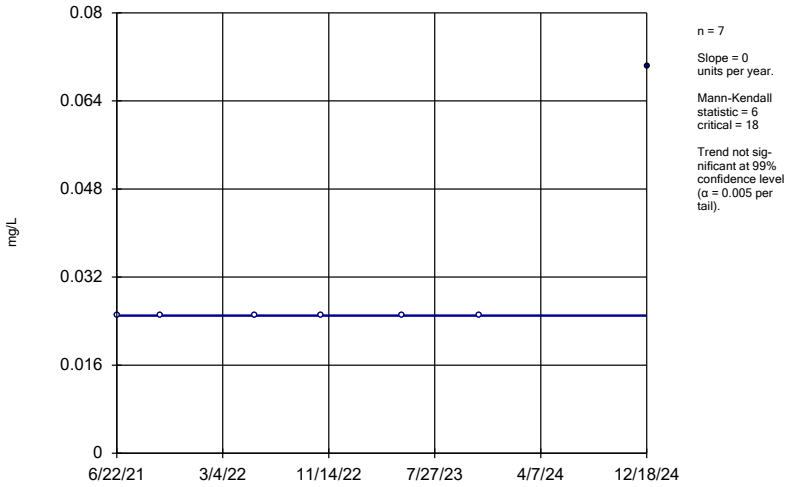
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10

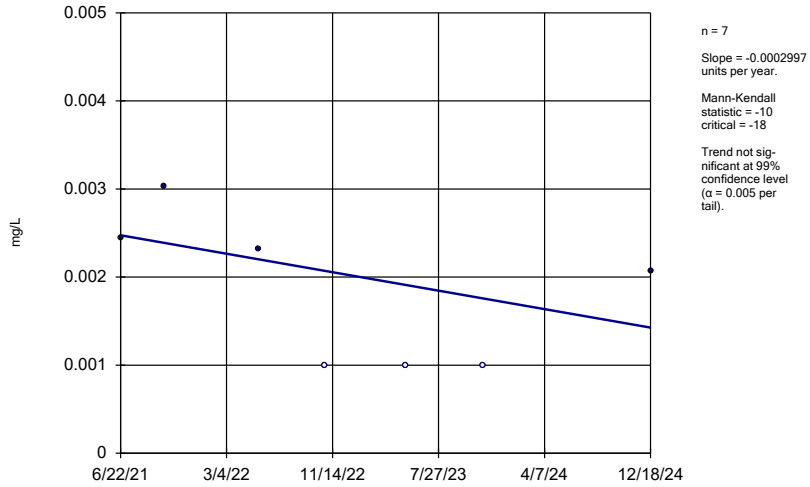


Constituent: Aluminum Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



Constituent: Arsenic Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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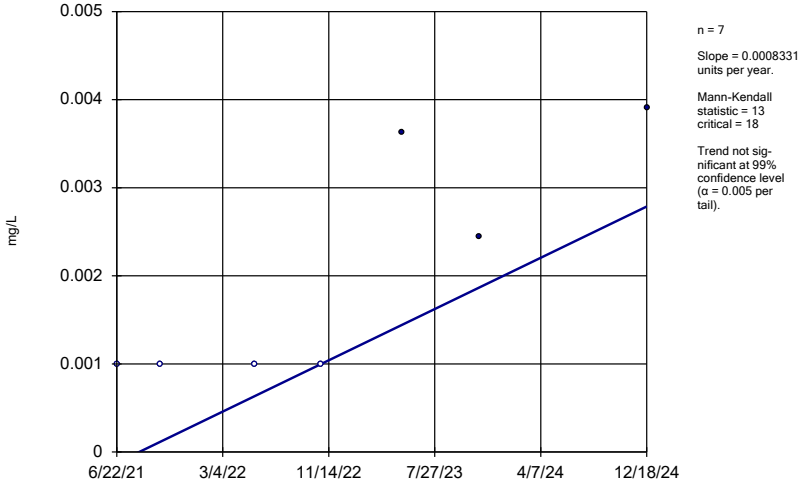
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8

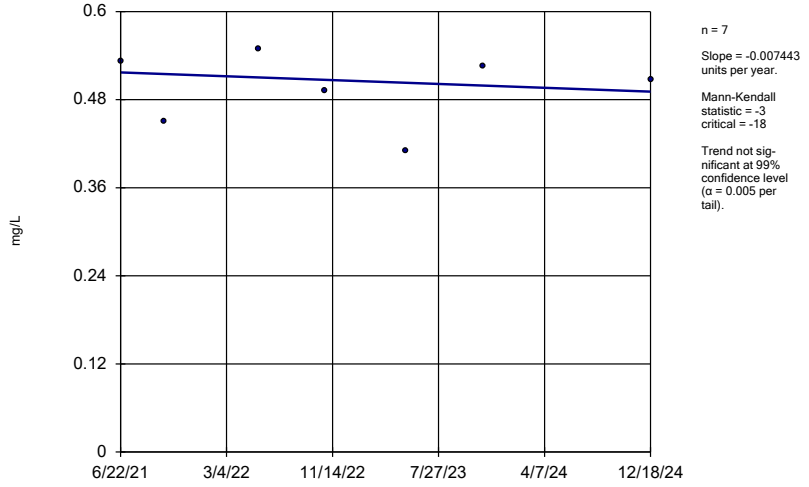


Constituent: Arsenic Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

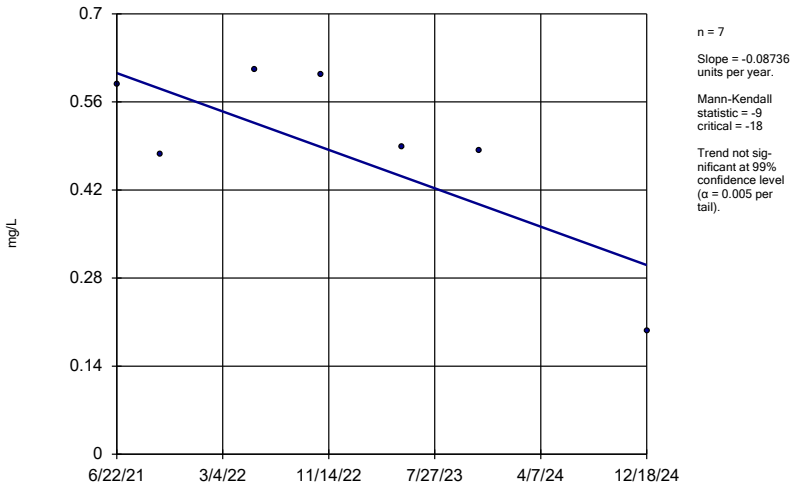
MW-5 (bg)



Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-6



n = 7

Slope = -0.08736 units per year.

Mann-Kendall statistic = -9
critical = -18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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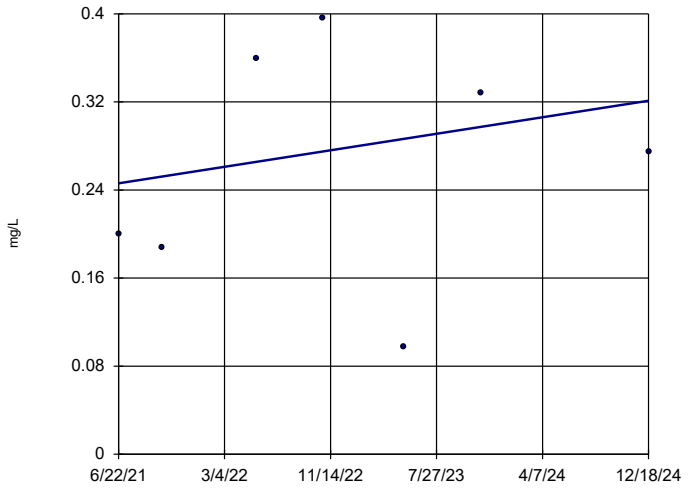
Sen's Slope Estimator

MW-7



n = 7

Slope = 0.02147 units per year.

Mann-Kendall statistic = 1
critical = 18

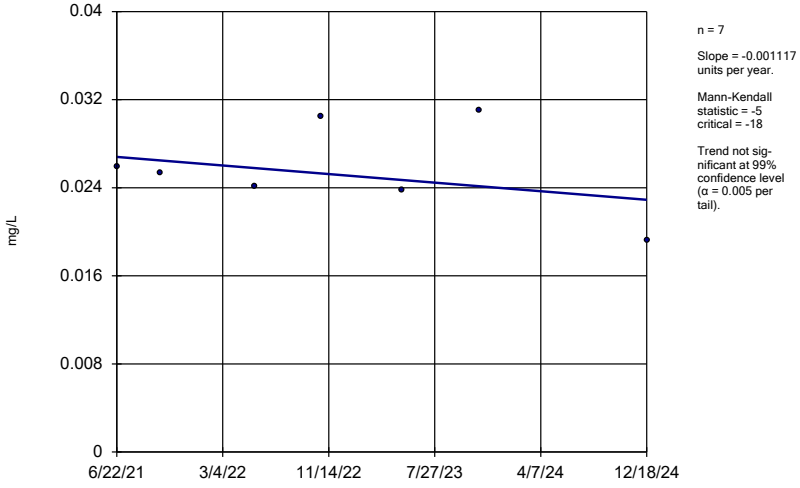
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 7

Slope = -0.001117 units per year.

Mann-Kendall statistic = -5
critical = -18

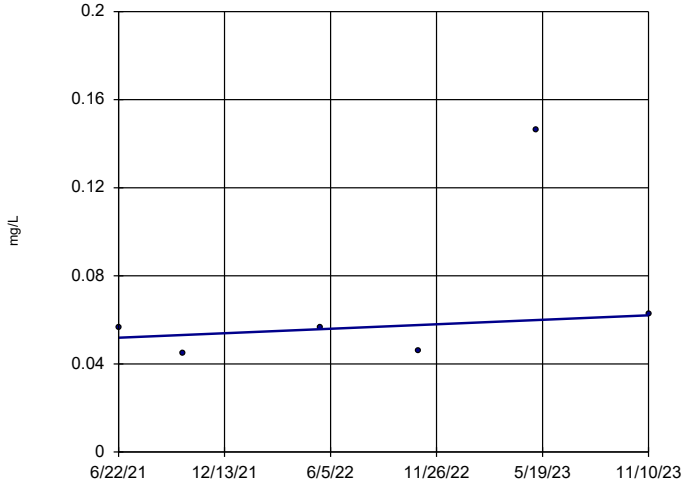
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9



n = 6

Slope = 0.004266 units per year.

Mann-Kendall statistic = 5
critical = 14

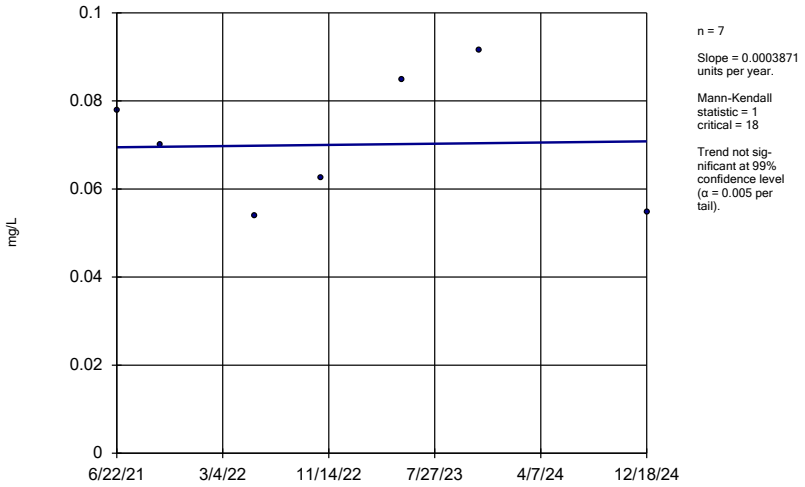
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-10



Constituent: Barium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

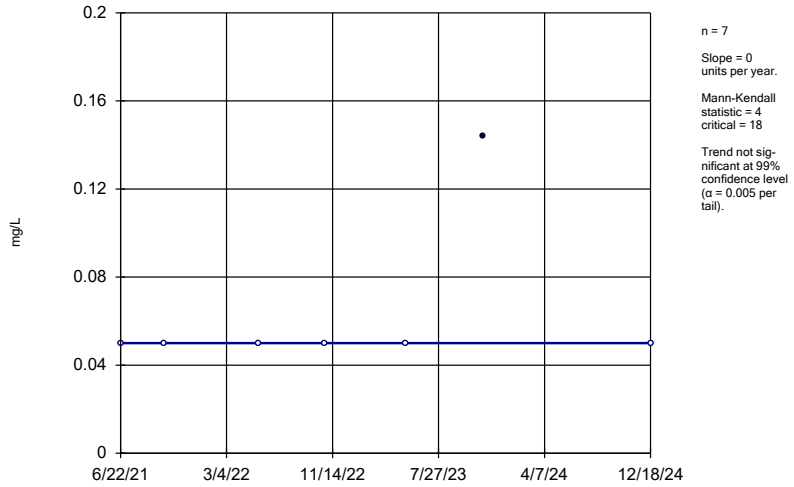
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

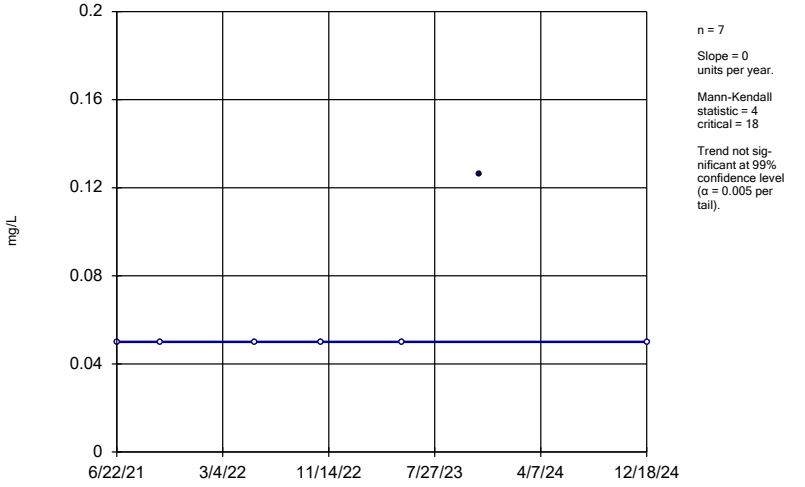
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

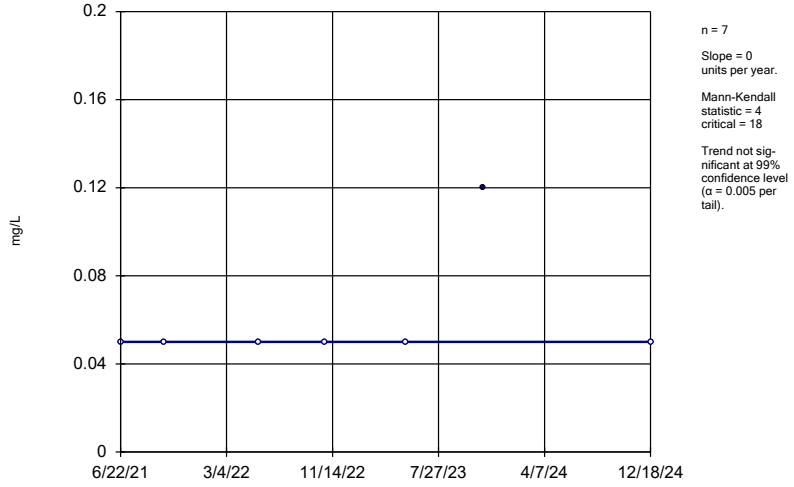
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



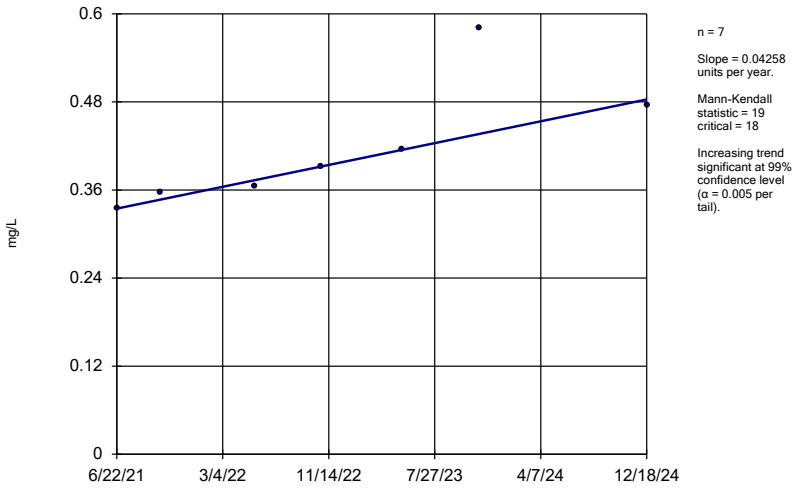
Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 7

Slope = 0.04258 units per year.

Mann-Kendall statistic = 19
critical = 18

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

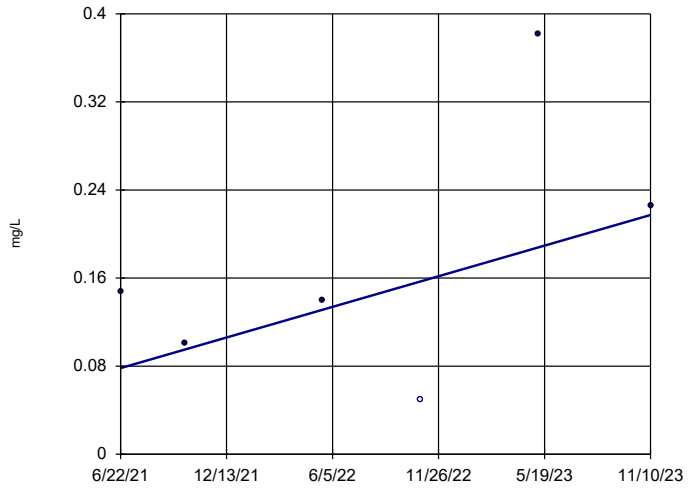
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 6

Slope = 0.05824 units per year.

Mann-Kendall statistic = 3
critical = 14

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

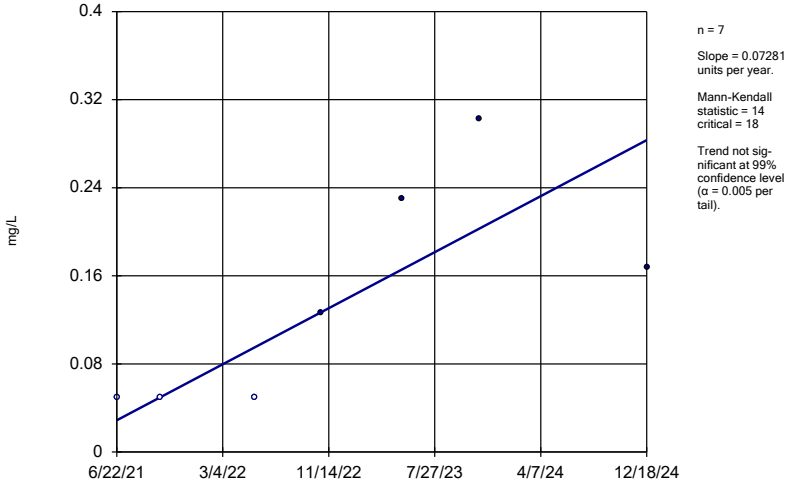
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



n = 7

Slope = 0.07281 units per year.

Mann-Kendall statistic = 14
critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

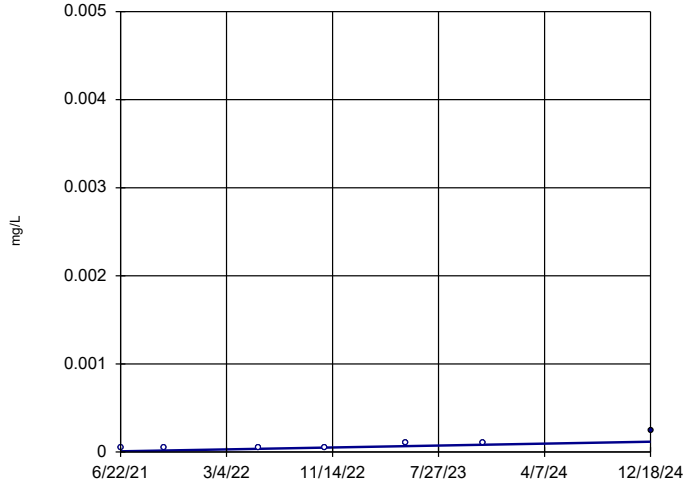
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = 0.00003147 units per year.

Mann-Kendall statistic = 14
critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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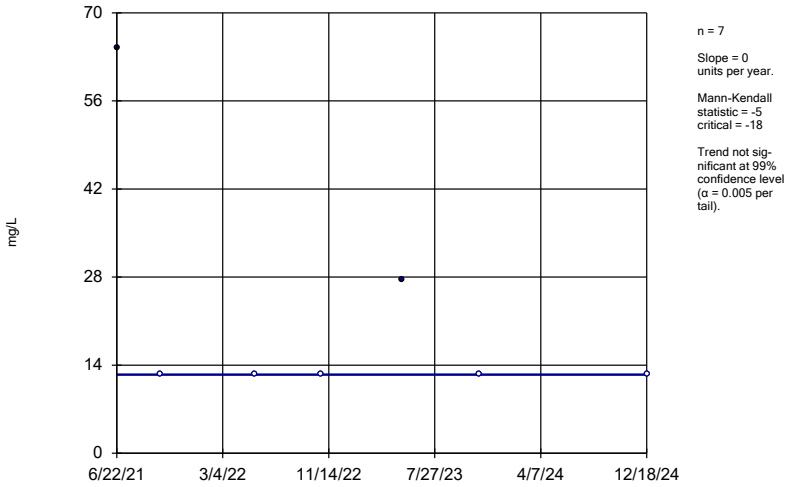
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)

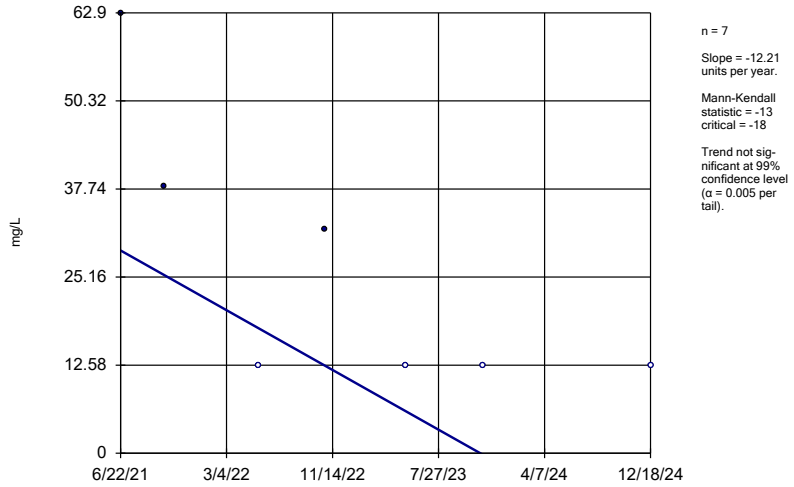


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6

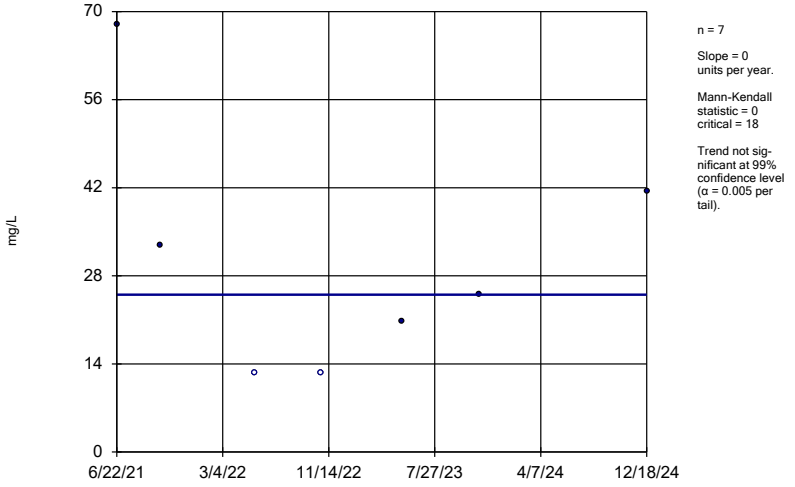


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7

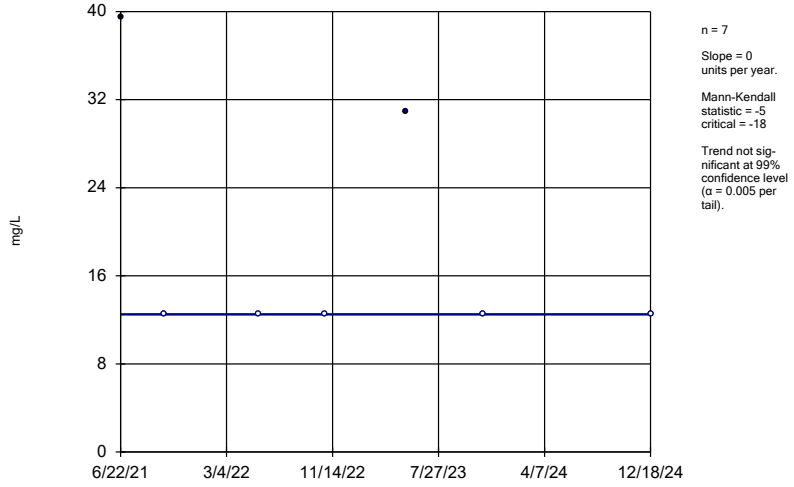


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8

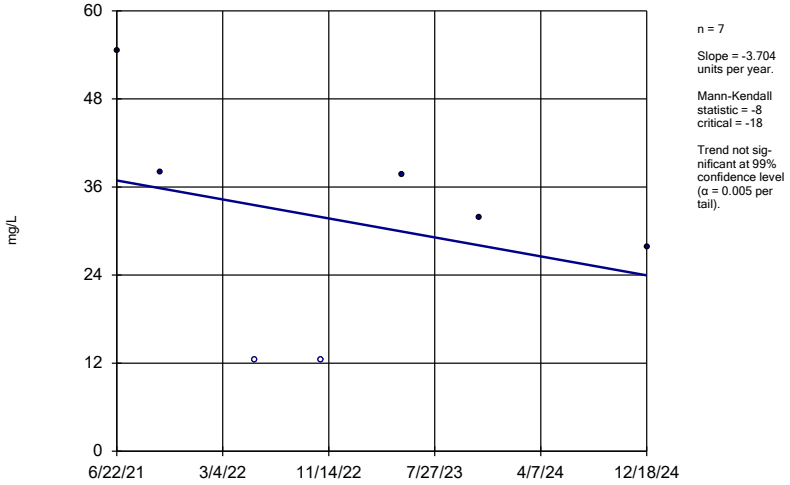


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9

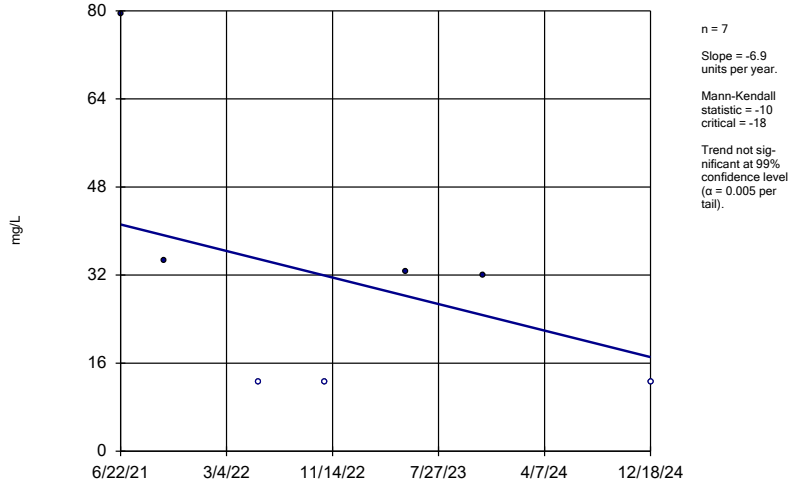


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10

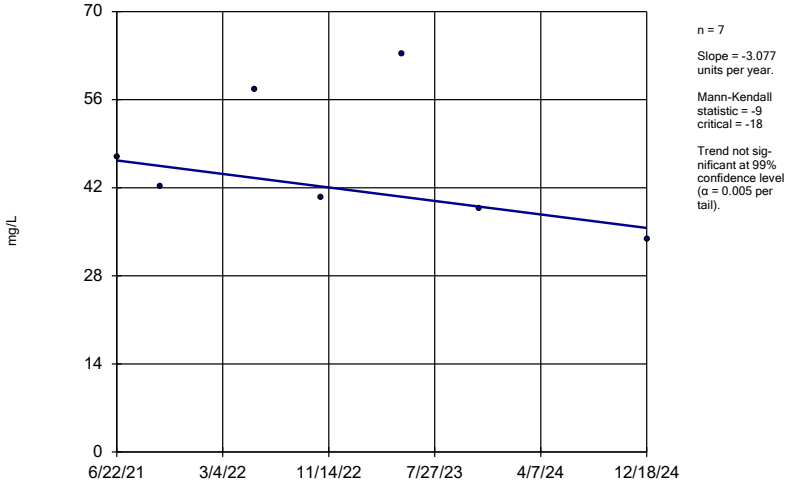


Constituent: Chemical Oxygen Demand Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-5 (bg)

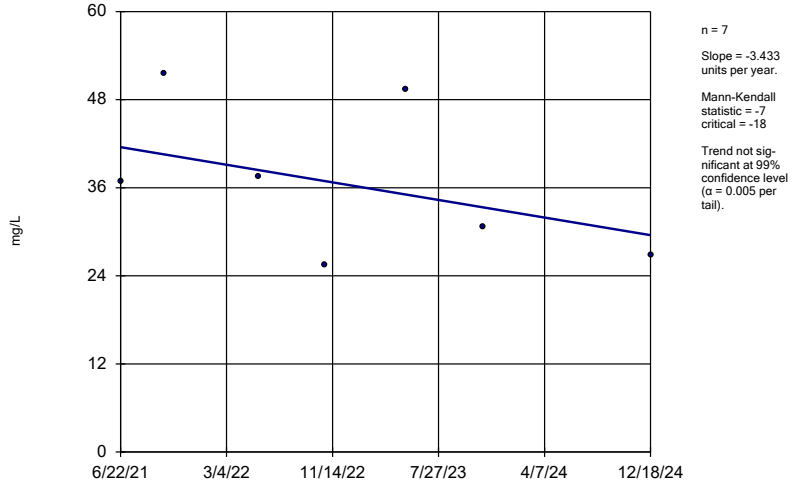


Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

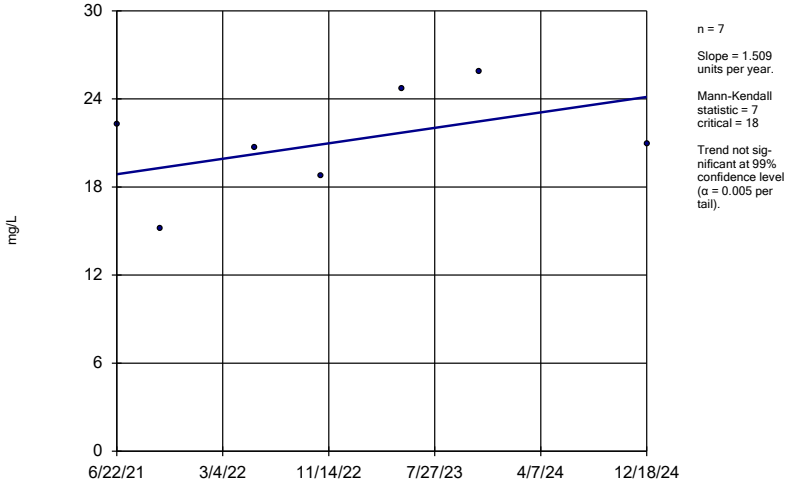
MW-6



Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-7



n = 7

Slope = 1.509 units per year.

Mann-Kendall statistic = 7 critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

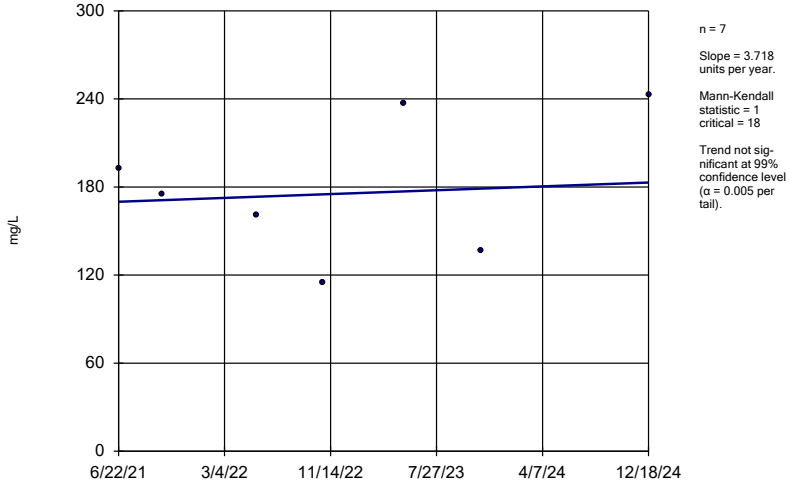
Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 7

Slope = 3.718 units per year.

Mann-Kendall statistic = 1 critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

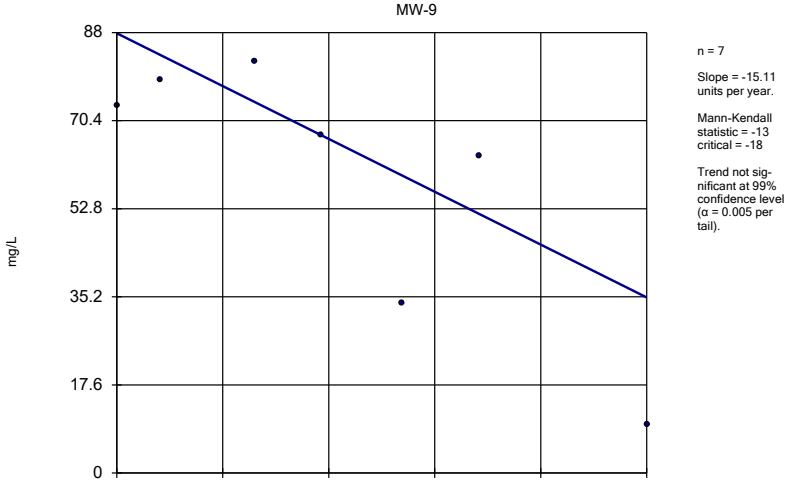
Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9



n = 7

Slope = -15.11 units per year.

Mann-Kendall statistic = -13 critical = -18

Trend not significant at 99% confidence level (α = 0.005 per tail).

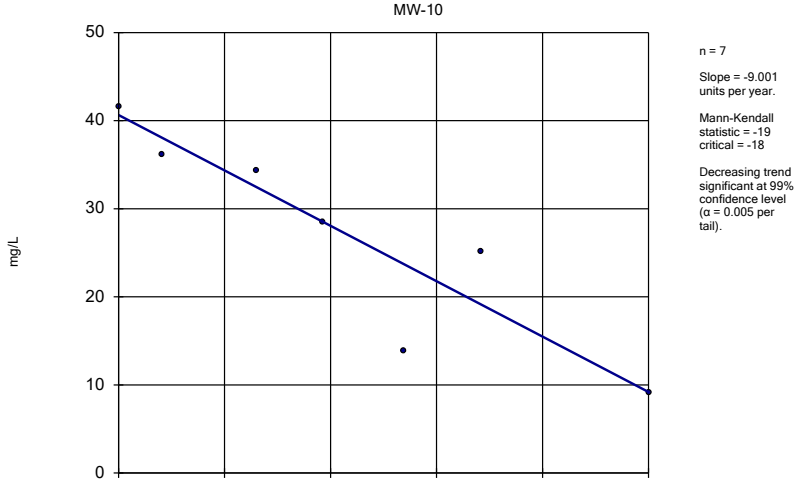
Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-10



n = 7

Slope = -9.001 units per year.

Mann-Kendall statistic = -19 critical = -18

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

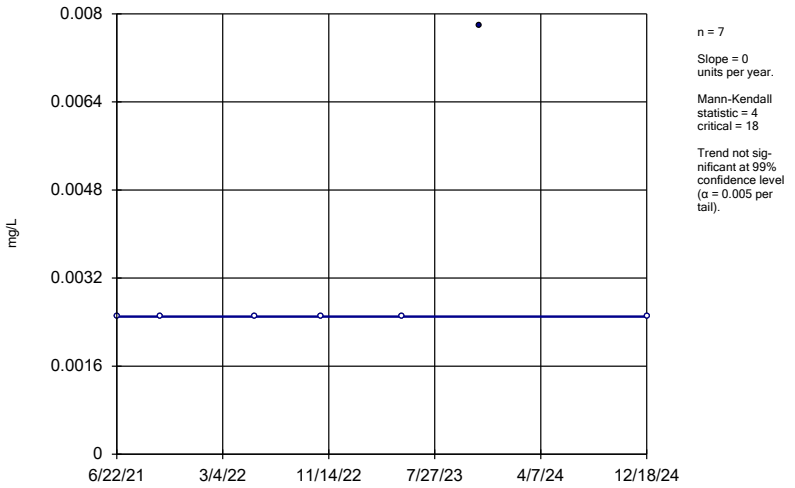
Constituent: Chloride Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6

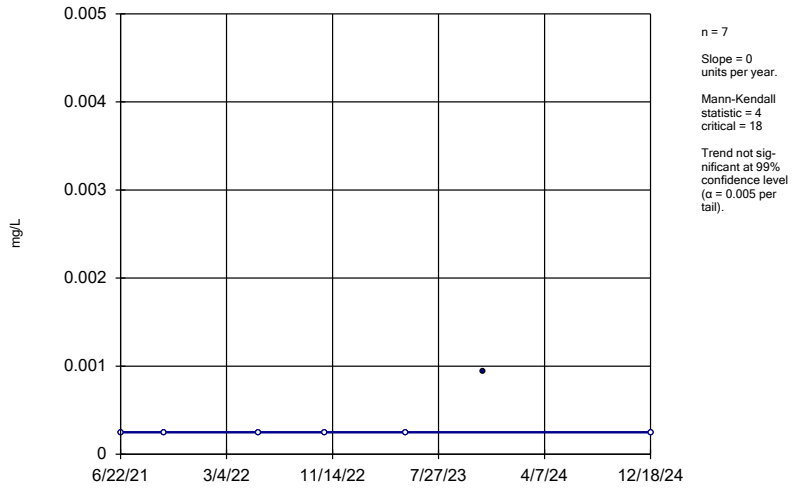


Constituent: Chromium Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6

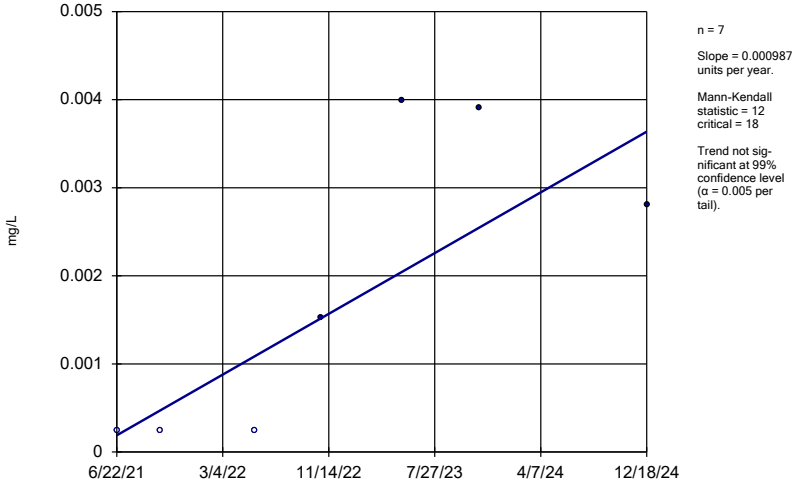


Constituent: Cobalt Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8

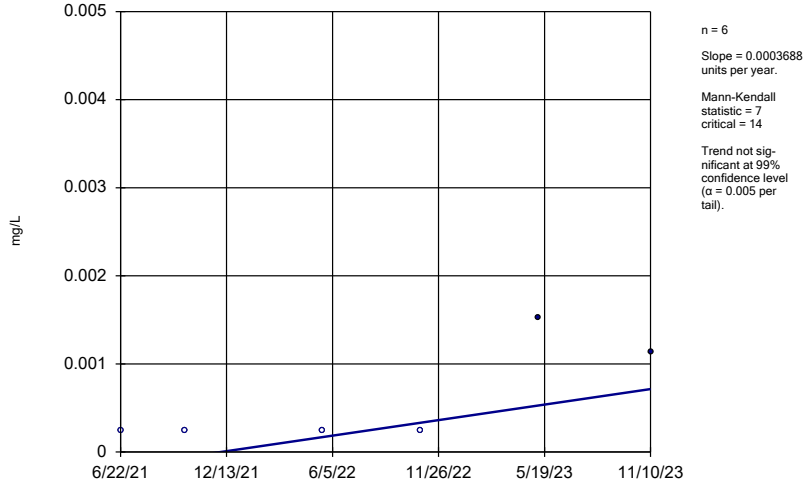


Constituent: Cobalt Analysis Run 2/18/2025 4:12 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9

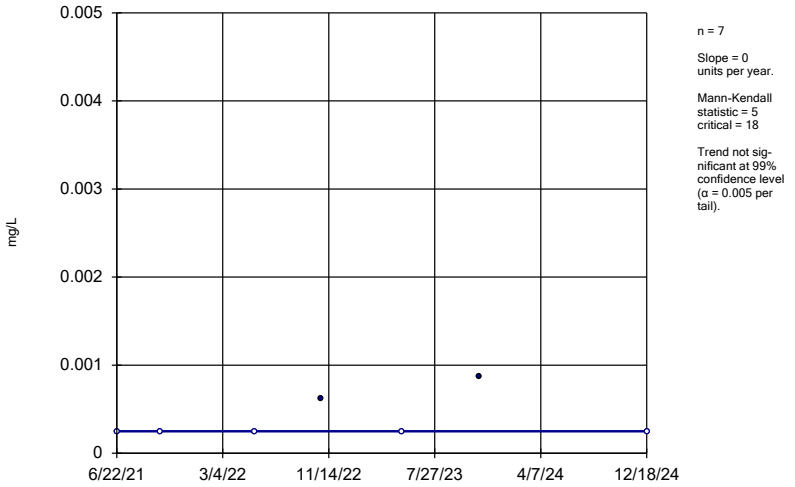


Constituent: Cobalt Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 18

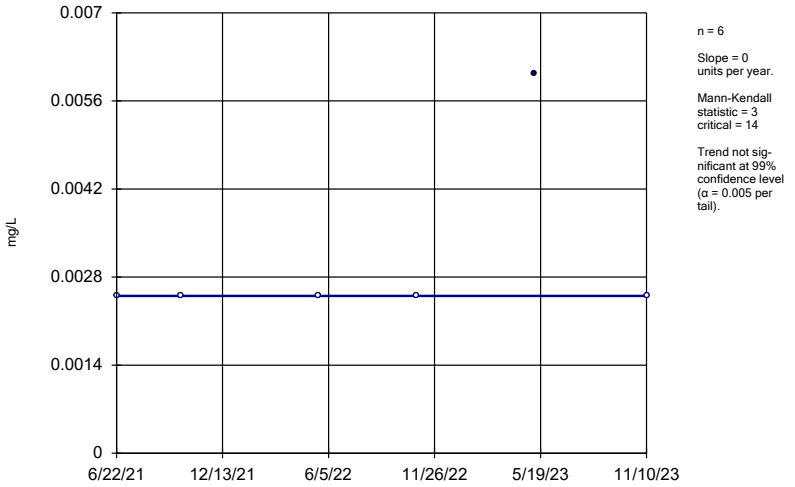
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 6

Slope = 0 units per year.

Mann-Kendall statistic = 3
critical = 14

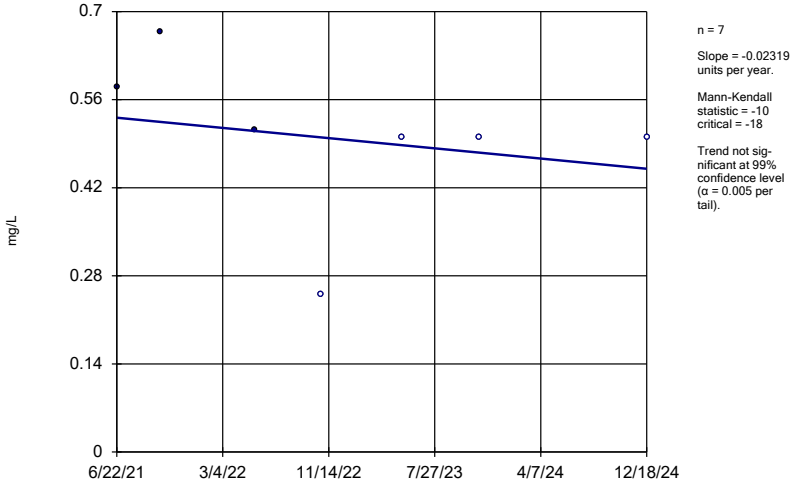
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = -0.02319 units per year.

Mann-Kendall statistic = -10
critical = -18

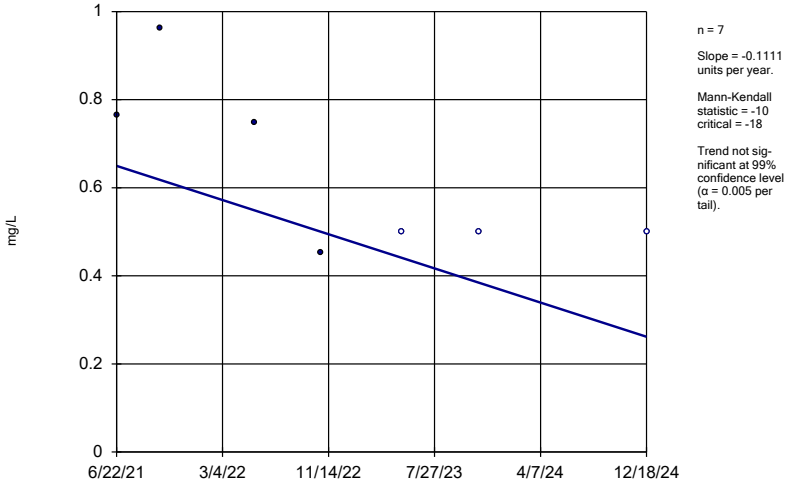
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = -0.1111 units per year.

Mann-Kendall statistic = -10
critical = -18

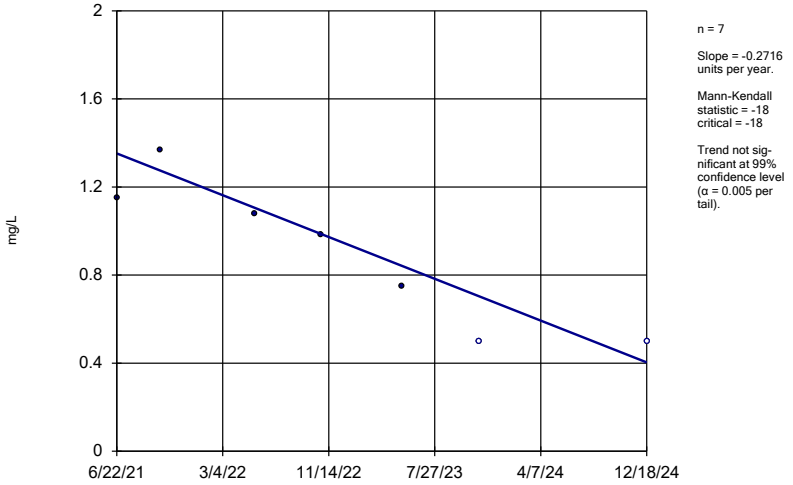
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = -0.2716 units per year.

Mann-Kendall statistic = -18
critical = -18

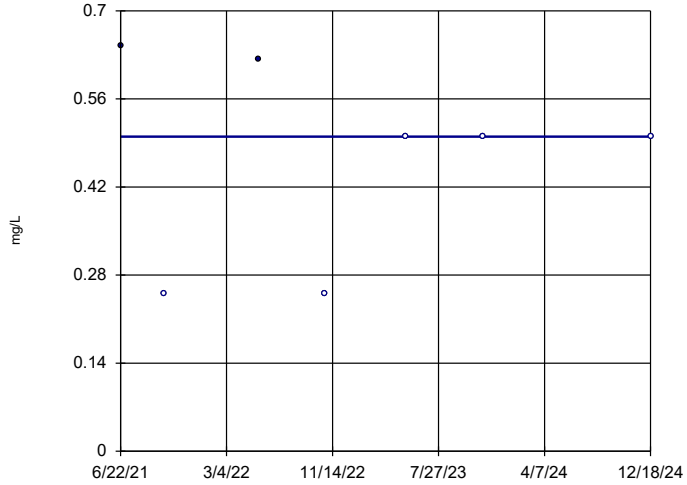
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = -3
critical = -18

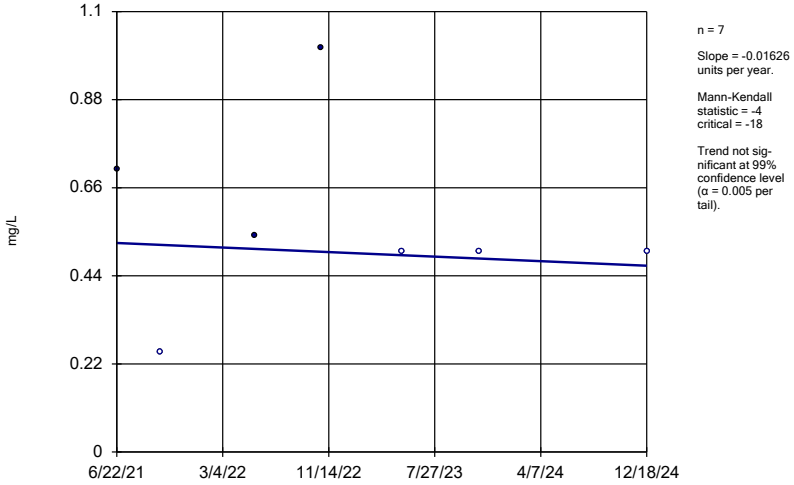
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



n = 7

Slope = -0.01626 units per year.

Mann-Kendall statistic = -4
critical = -18

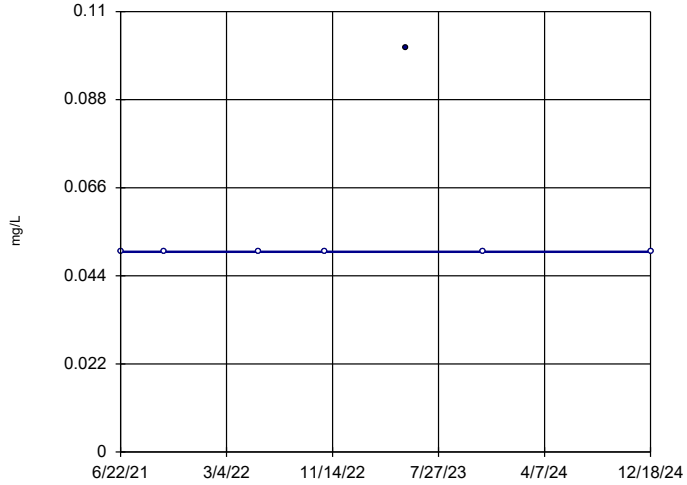
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 18

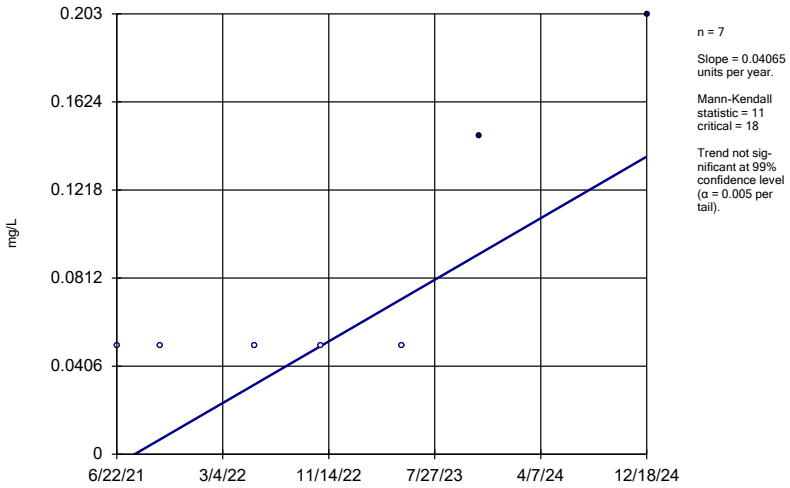
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = 0.04065 units per year.

Mann-Kendall statistic = 11
critical = 18

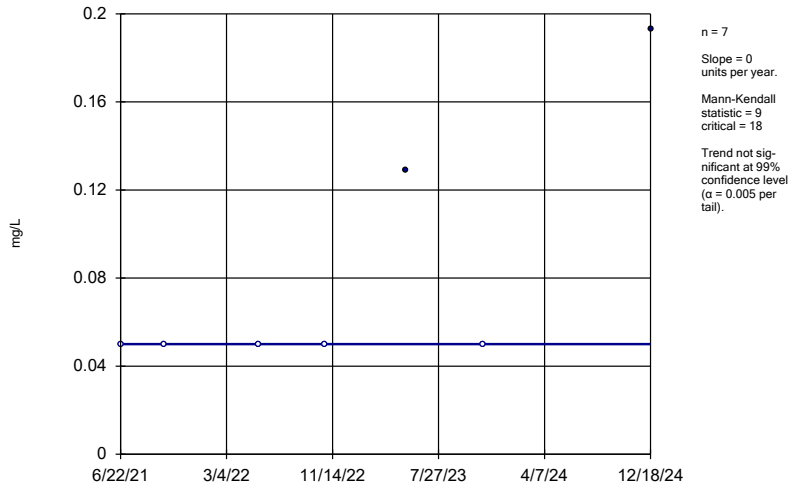
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 18

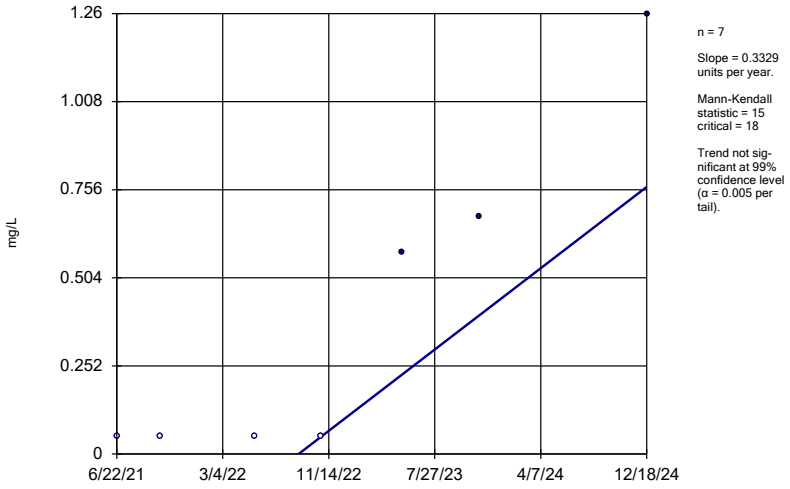
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = 0.3329 units per year.

Mann-Kendall statistic = 15
critical = 18

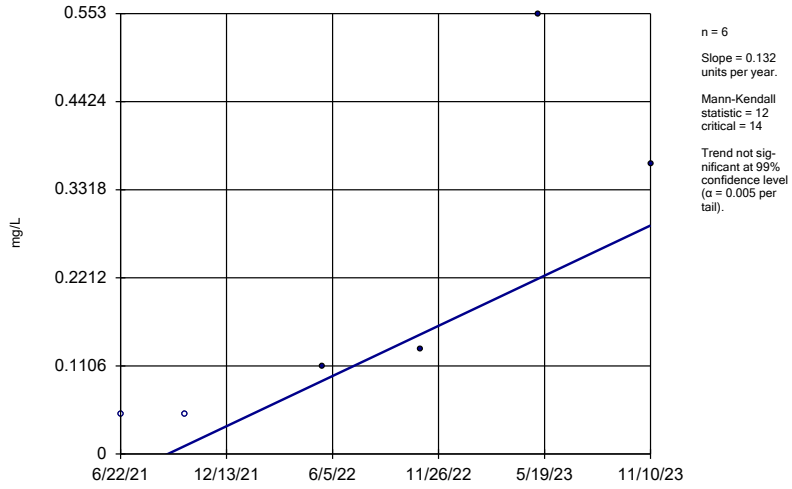
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 6

Slope = 0.132 units per year.

Mann-Kendall statistic = 12
critical = 14

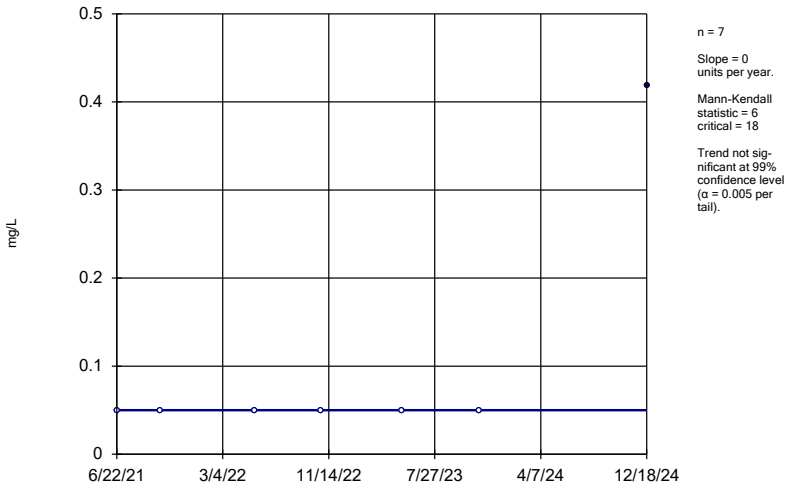
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



n = 7

Slope = 0
units per year.

Mann-Kendall
statistic = 6
critical = 18

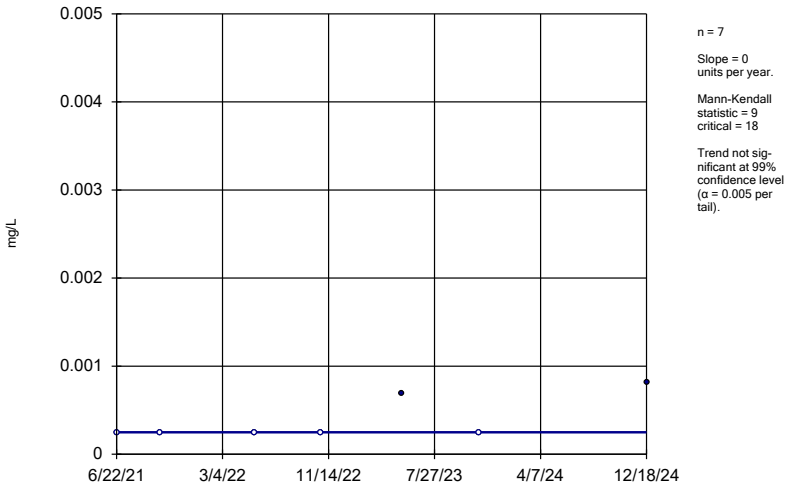
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Iron Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = 0
units per year.

Mann-Kendall
statistic = 9
critical = 18

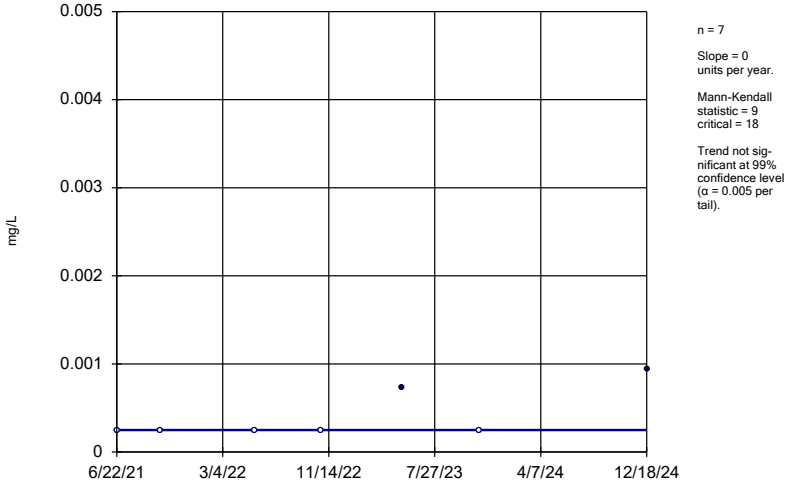
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lead Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0
units per year.

Mann-Kendall
statistic = 9
critical = 18

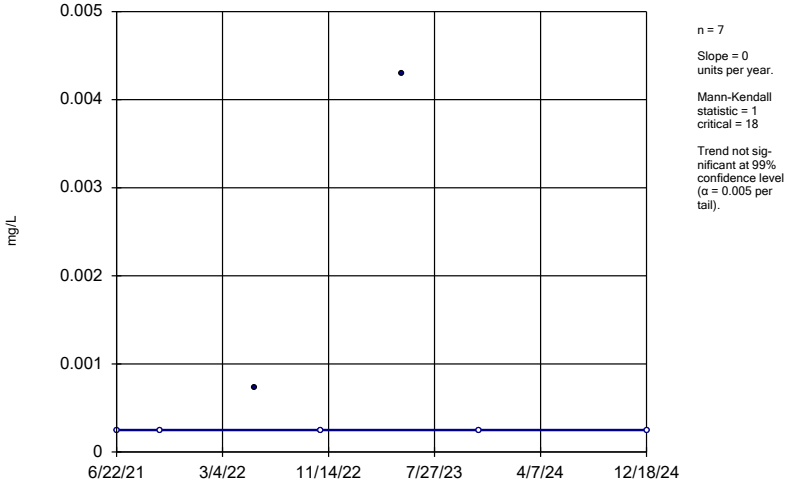
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lead Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 18

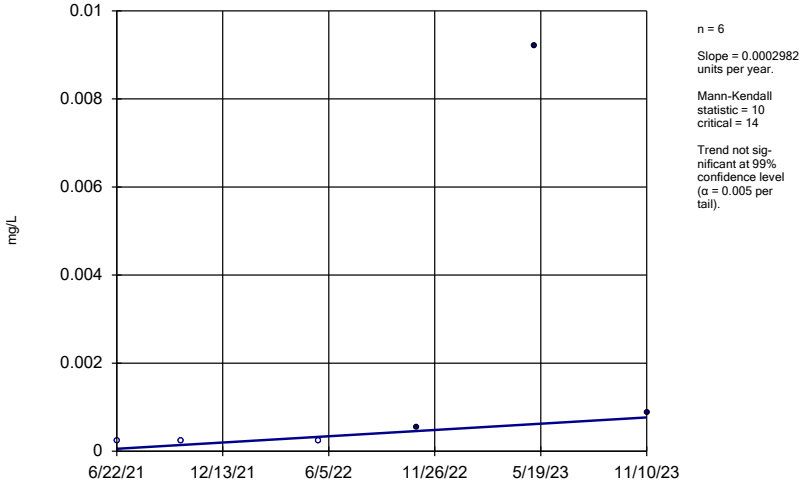
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lead Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9

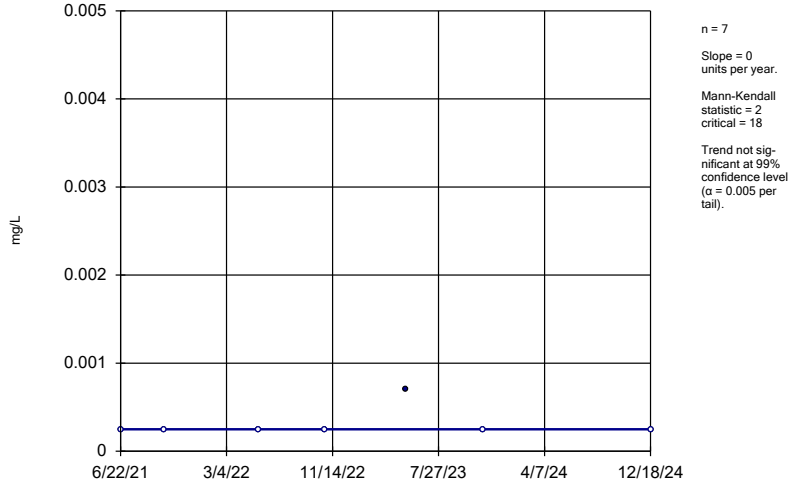


Constituent: Lead Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10

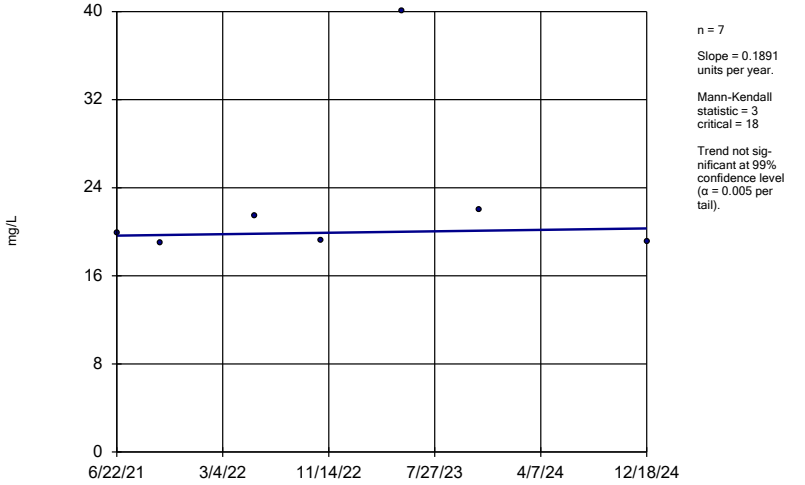


Constituent: Lead Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-5 (bg)

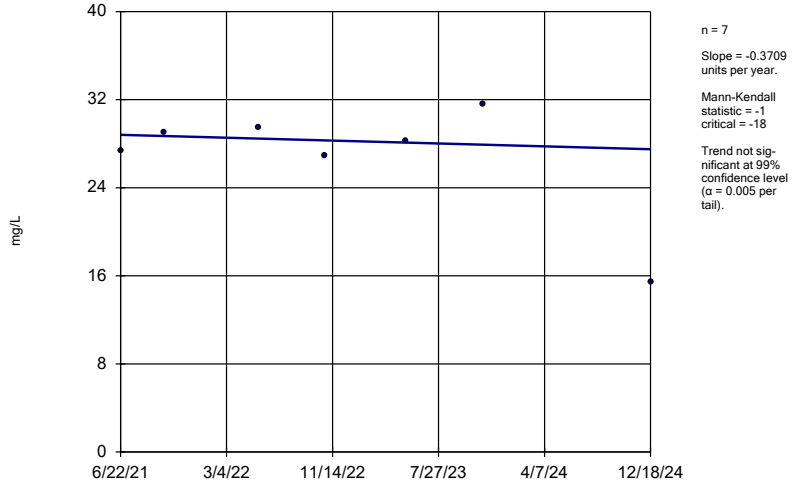


Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

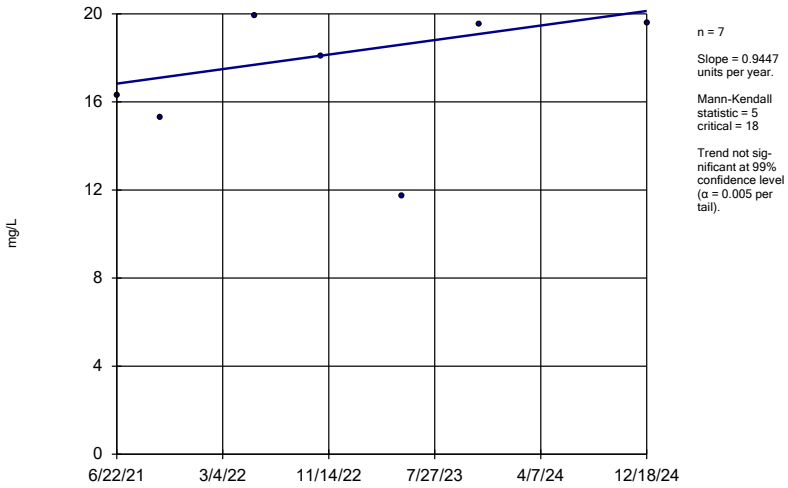
MW-6



Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-7

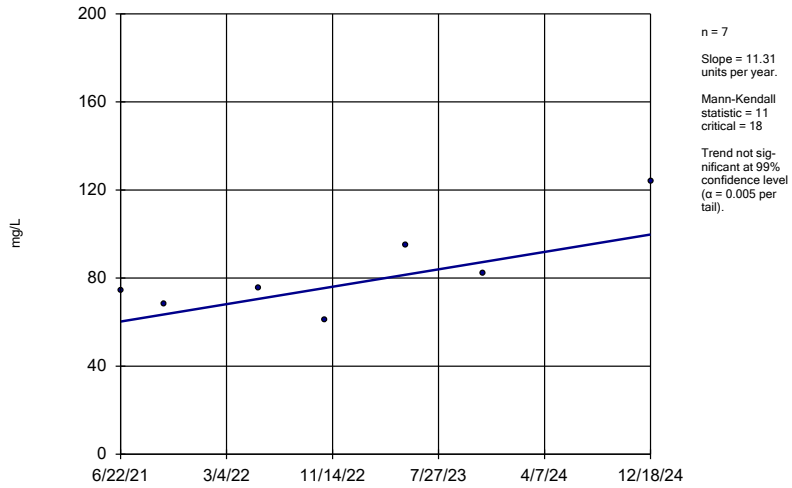


Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8

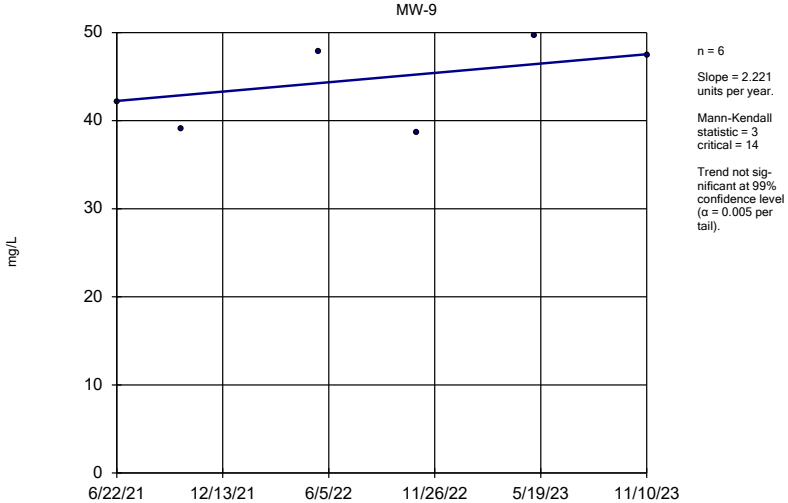


Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9

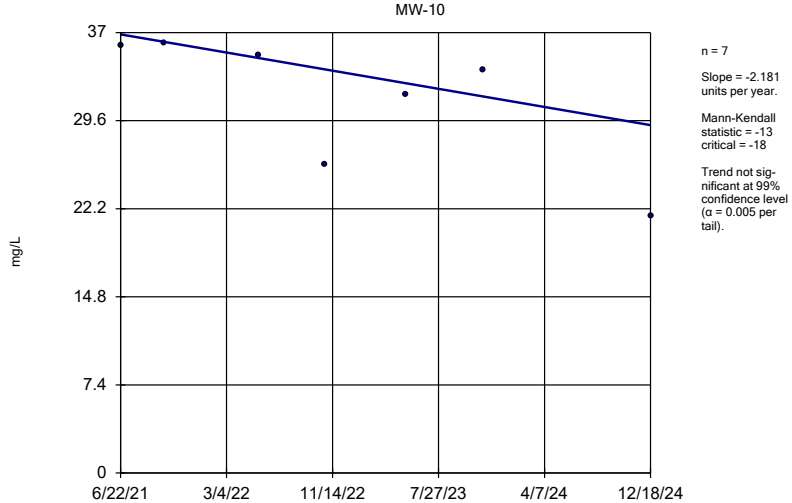


Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-10

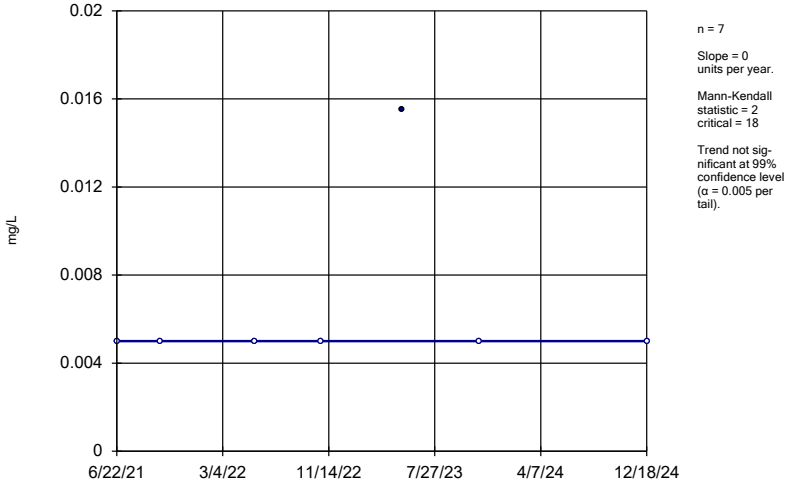


Constituent: Magnesium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 18

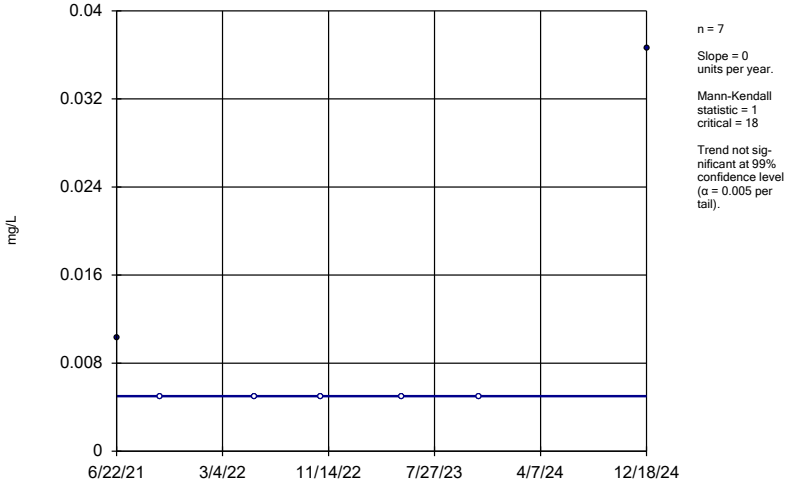
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 18

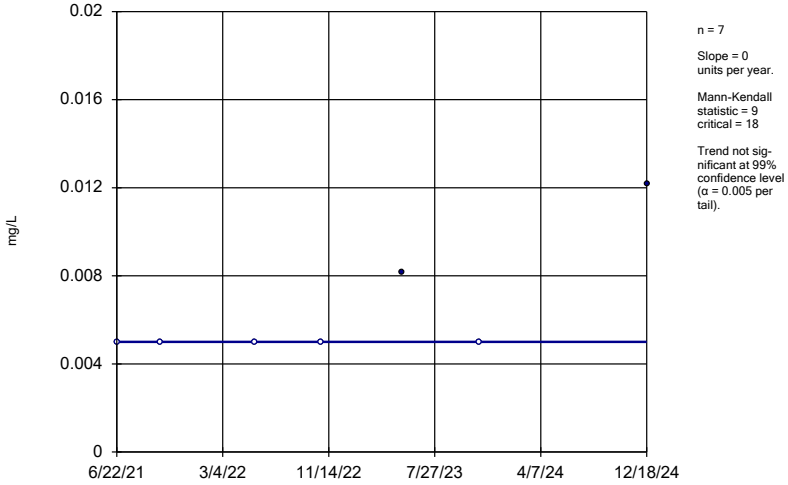
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 18

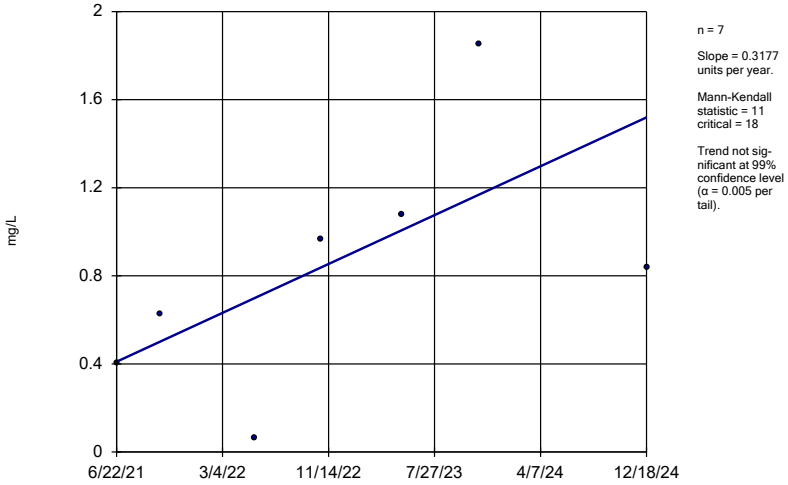
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 7

Slope = 0.3177 units per year.

Mann-Kendall statistic = 11
critical = 18

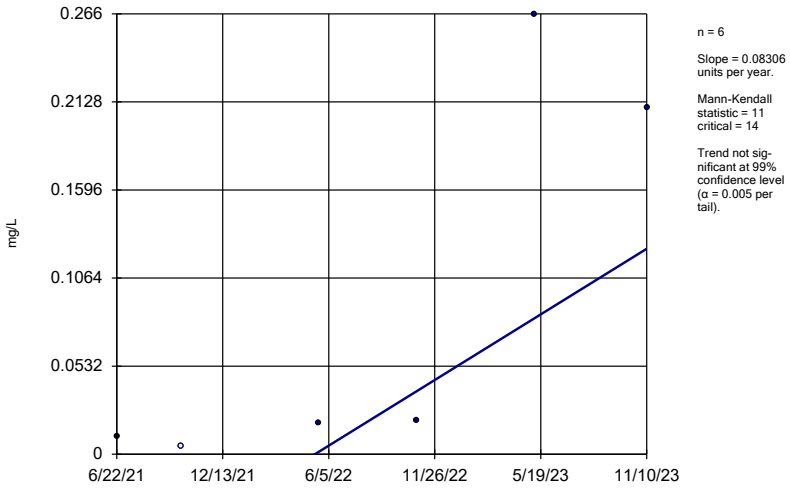
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9



n = 6

Slope = 0.08306 units per year.

Mann-Kendall statistic = 11
critical = 14

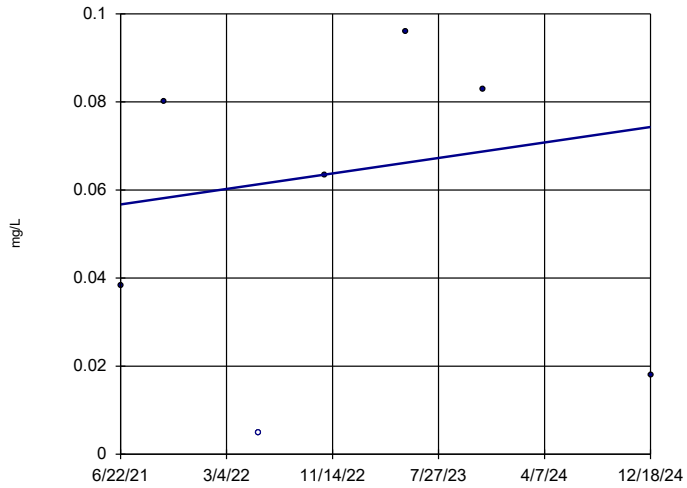
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



n = 7

Slope = 0.005032 units per year.

Mann-Kendall statistic = 3
critical = 18

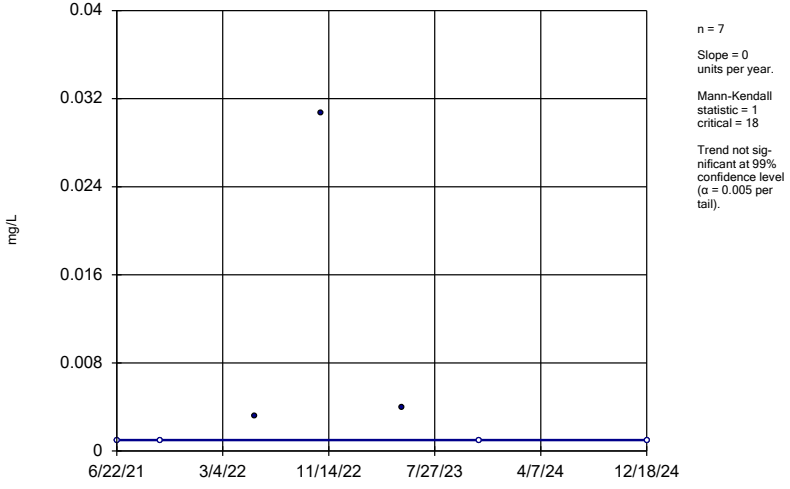
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Manganese Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 18

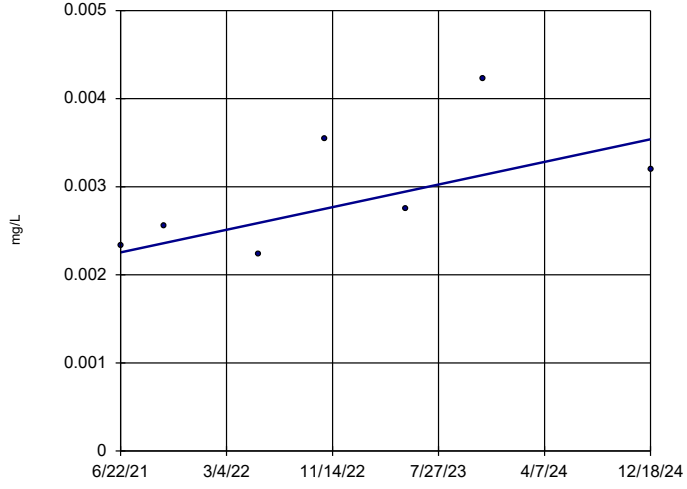
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-6



n = 7

Slope = 0.0003677 units per year.

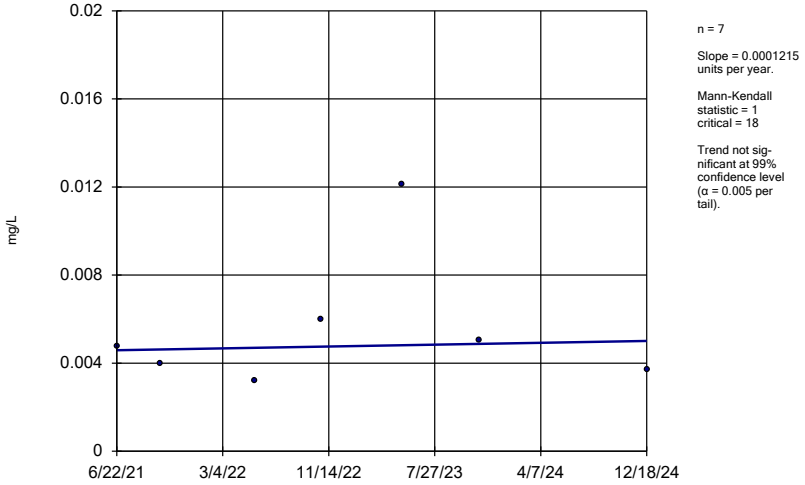
Mann-Kendall statistic = 11
critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-7



n = 7

Slope = 0.0001215 units per year.

Mann-Kendall statistic = 1
critical = 18

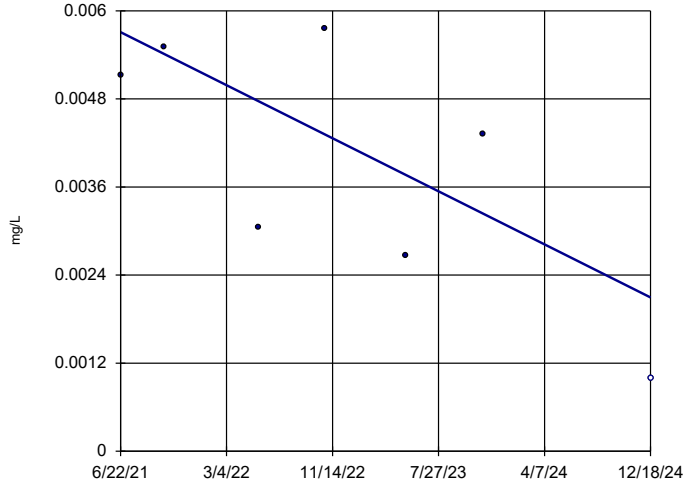
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = -0.001035 units per year.

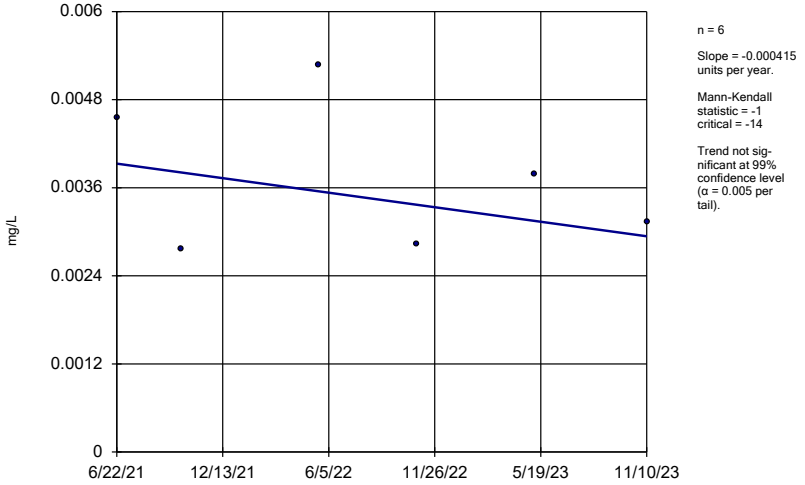
Mann-Kendall statistic = -9
critical = -18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-9



n = 6

Slope = -0.000415 units per year.

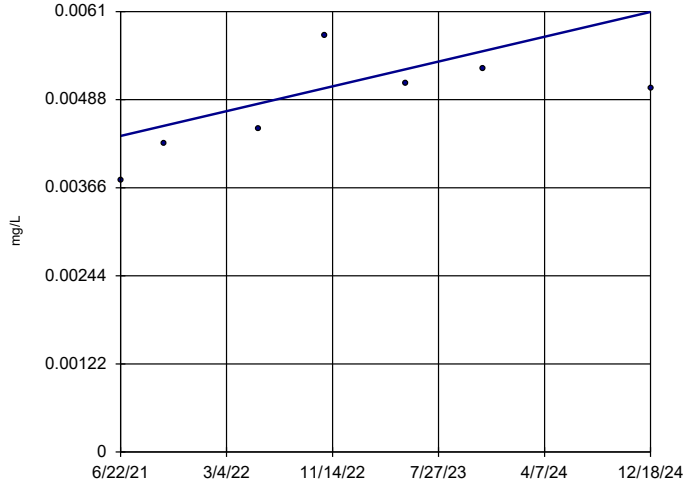
Mann-Kendall statistic = -1
critical = -14

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-10



n = 7

Slope = 0.0004914 units per year.

Mann-Kendall statistic = 11
critical = 18

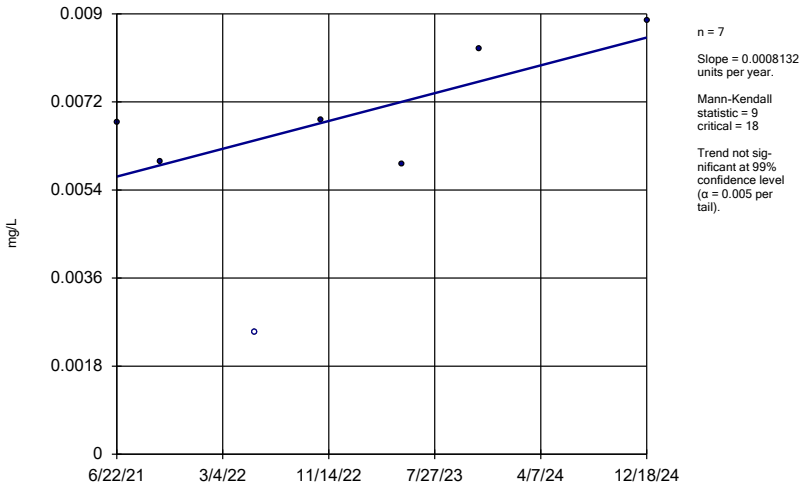
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = 0.0008132 units per year.

Mann-Kendall statistic = 9
critical = 18

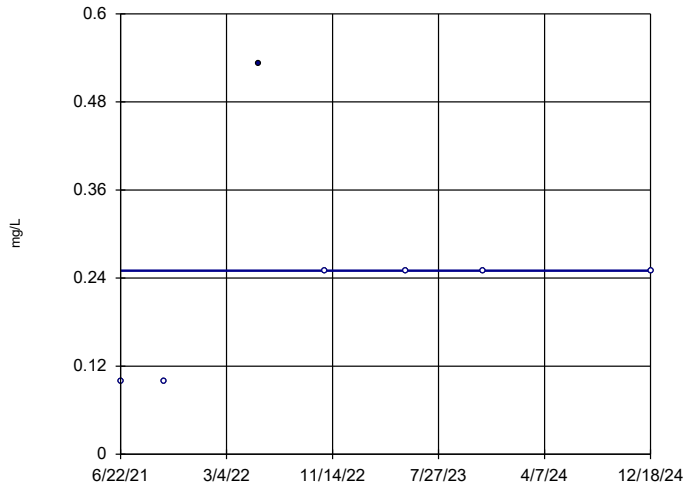
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 6
critical = 18

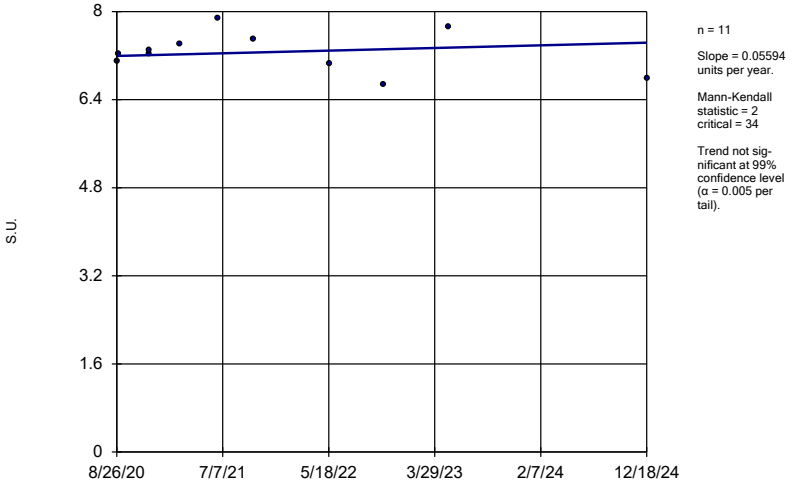
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nitrogen, Ammonia Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-5 (bg)



n = 11

Slope = 0.05594 units per year.

Mann-Kendall statistic = 2
critical = 34

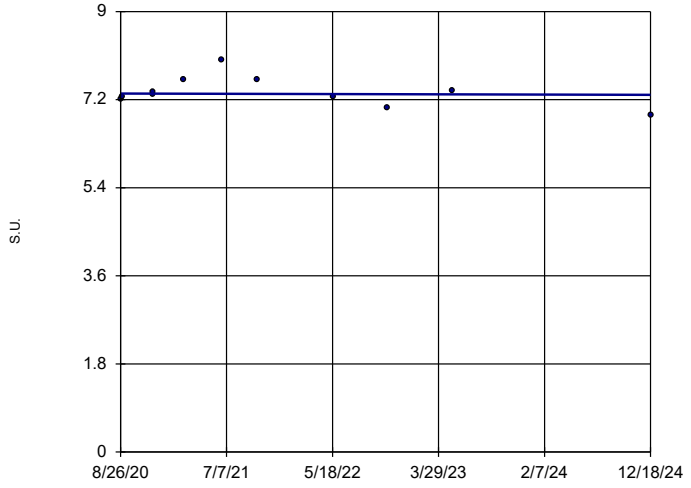
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-6



n = 11

Slope = -0.00584 units per year.

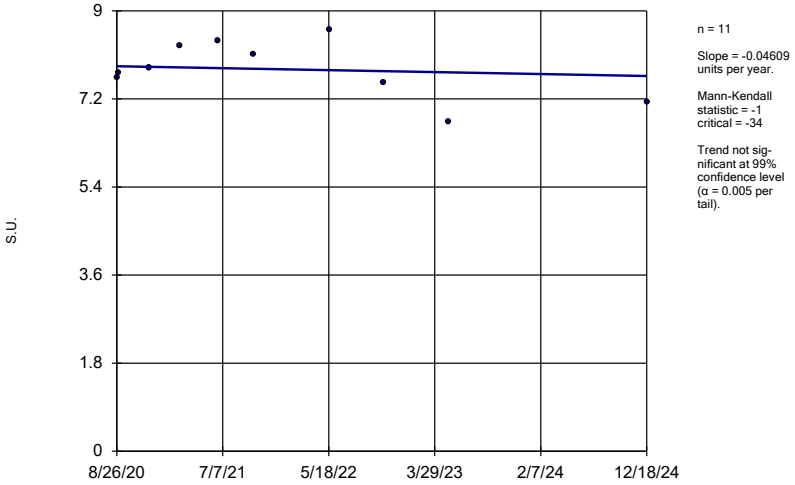
Mann-Kendall statistic = -1
critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-7



n = 11

Slope = -0.04609 units per year.

Mann-Kendall statistic = -1
critical = -34

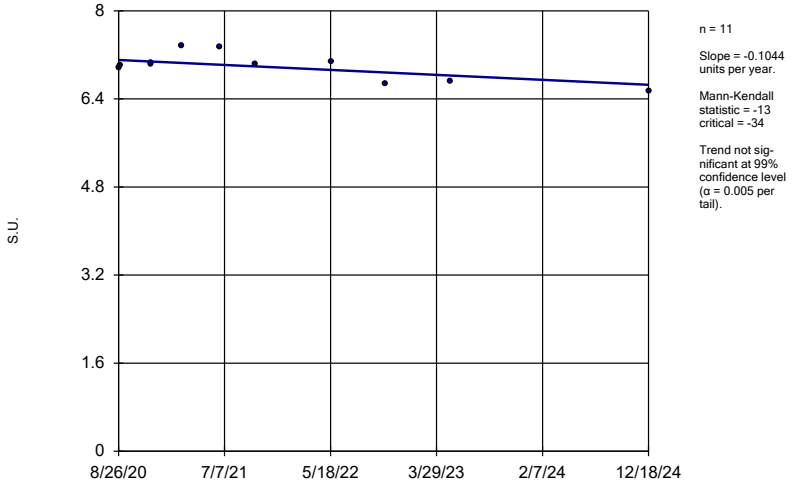
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 11

Slope = -0.1044 units per year.

Mann-Kendall statistic = -13
critical = -34

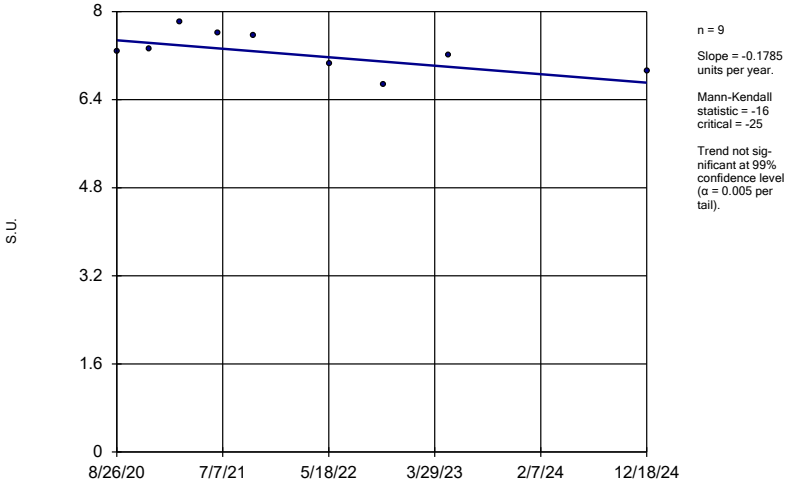
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9



n = 9

Slope = -0.1785 units per year.

Mann-Kendall statistic = -16
critical = -25

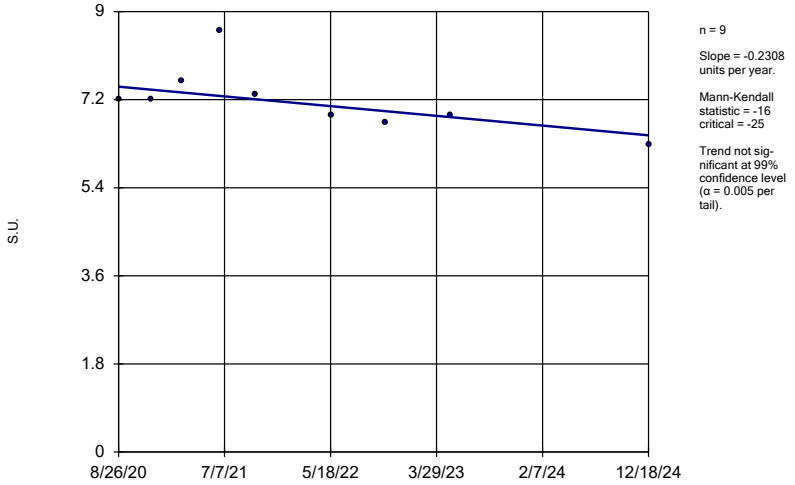
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-10



n = 9

Slope = -0.2308 units per year.

Mann-Kendall statistic = -16
critical = -25

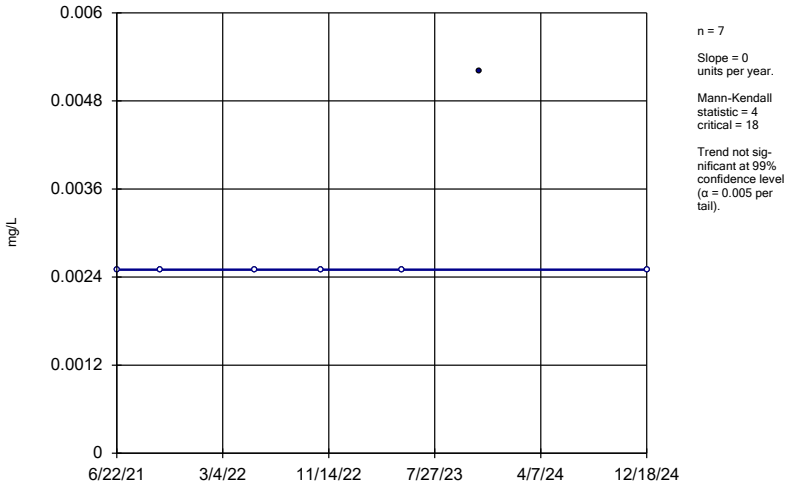
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)

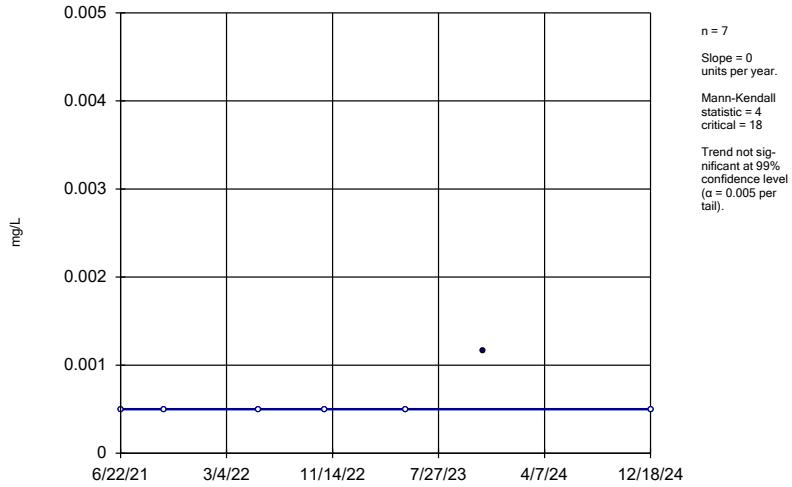


Constituent: Selenium Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6

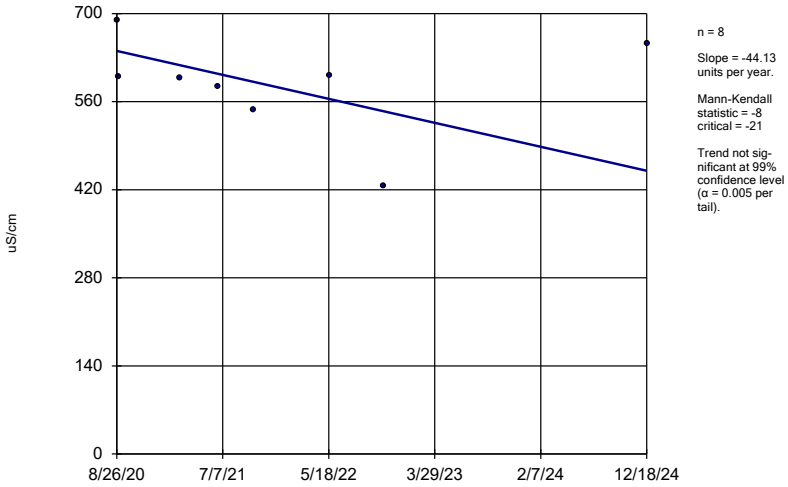


Constituent: Silver Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-5 (bg)

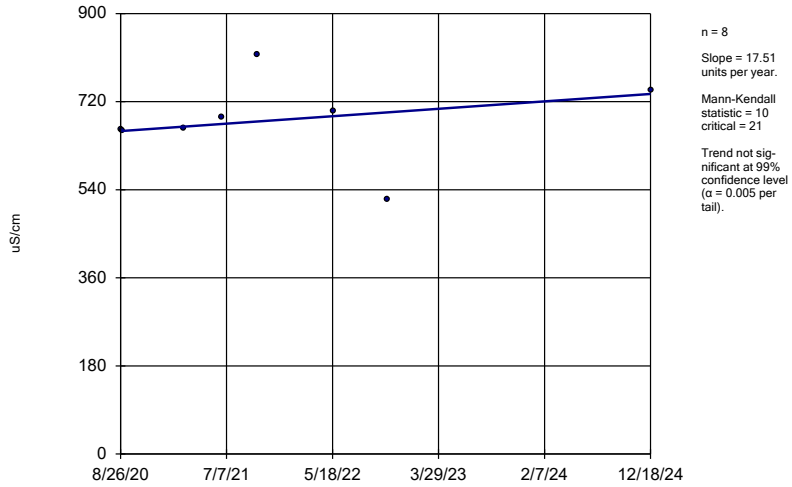


Constituent: Specific Conductance Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

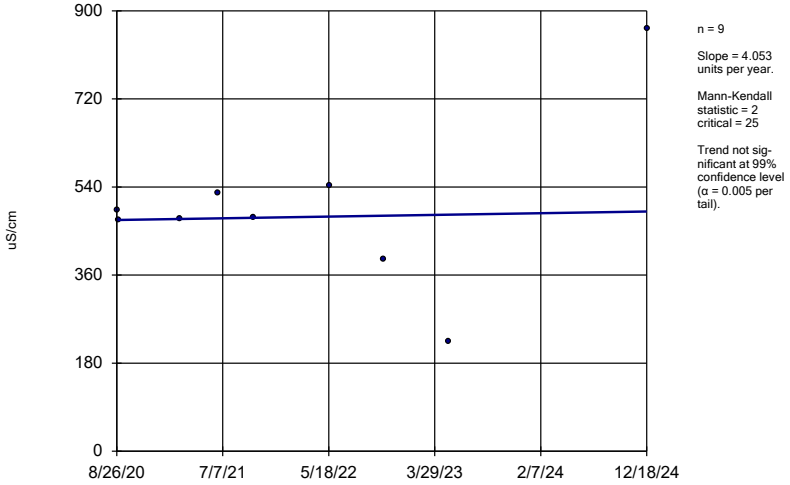
MW-6



Constituent: Specific Conductance Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-7

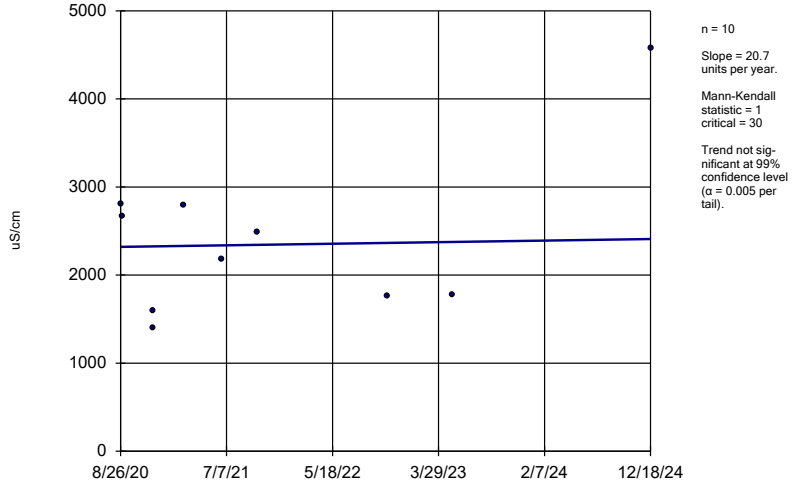


Constituent: Specific Conductance Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8

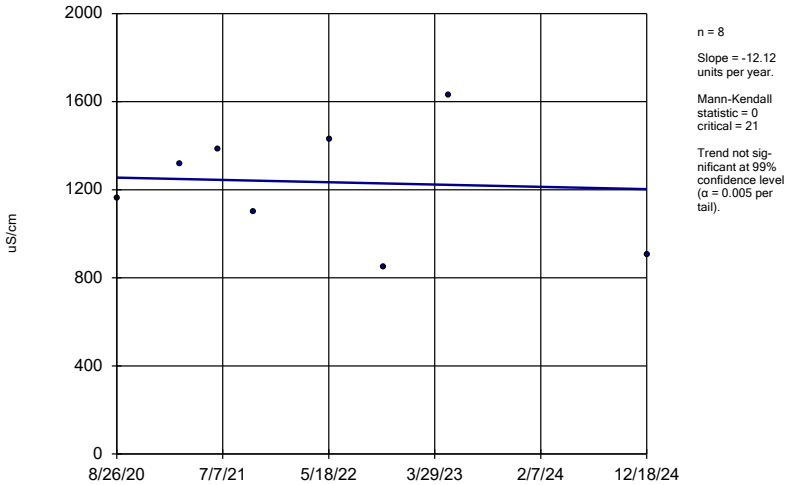


Constituent: Specific Conductance Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9

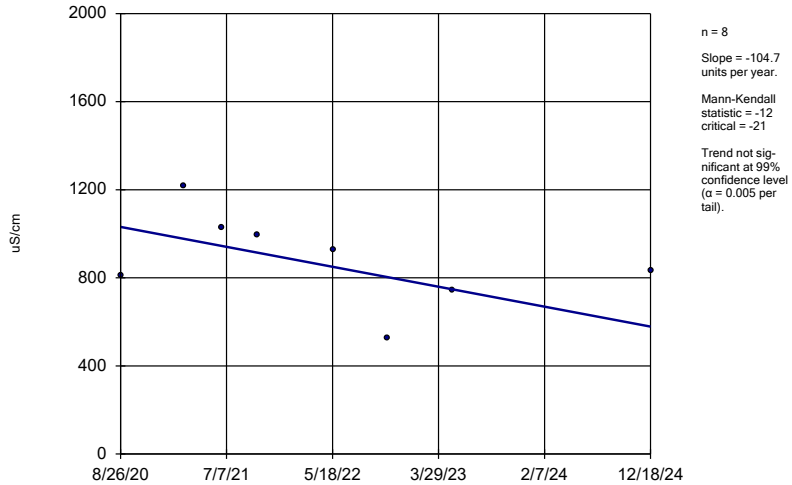


Constituent: Specific Conductance Analysis Run 2/18/2025 4:13 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

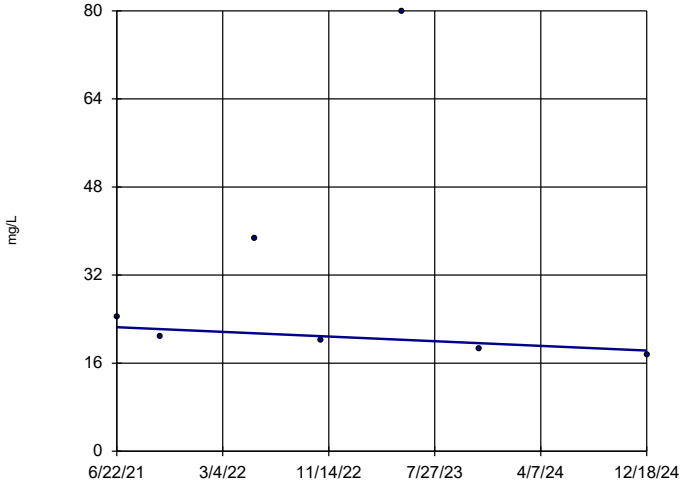
MW-10



Constituent: Specific Conductance Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = -1.212 units per year.

Mann-Kendall statistic = -9
critical = -18

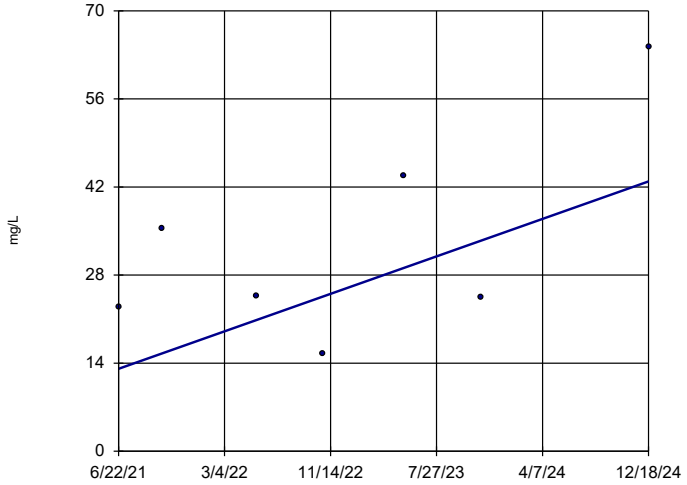
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-6



n = 7

Slope = 8.523 units per year.

Mann-Kendall statistic = 7
critical = 18

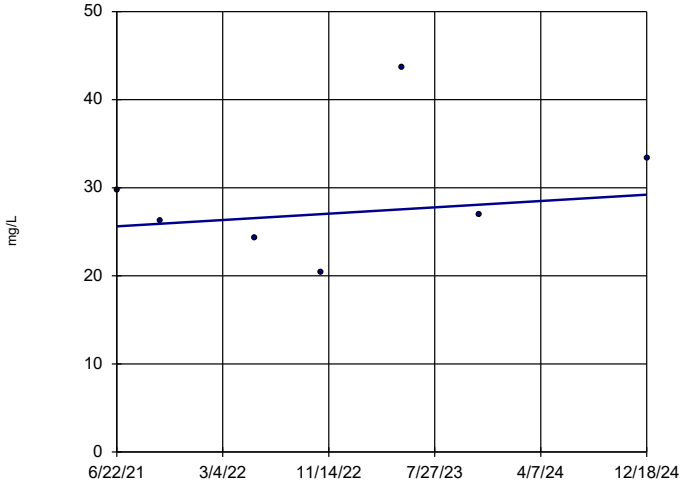
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-7



n = 7

Slope = 1.031 units per year.

Mann-Kendall statistic = 3
critical = 18

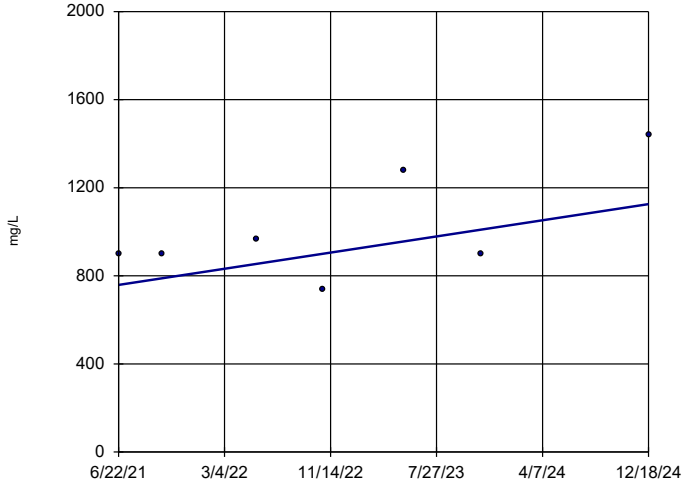
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-8



n = 7

Slope = 105 units per year.

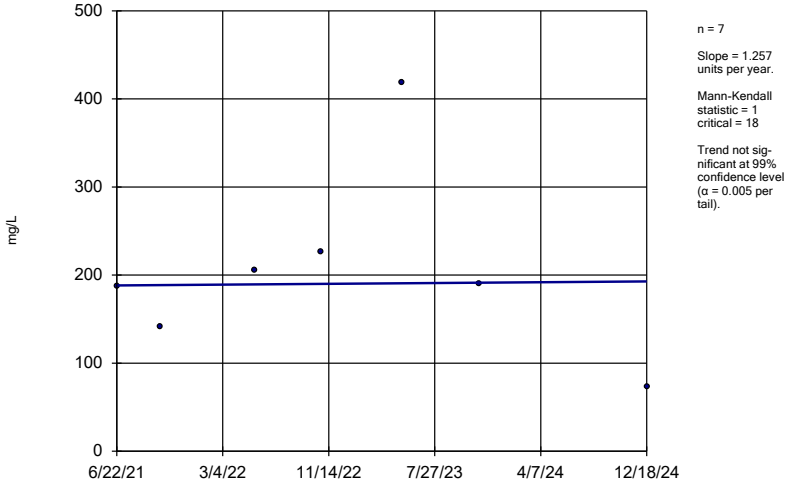
Mann-Kendall statistic = 11
critical = 18

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-9

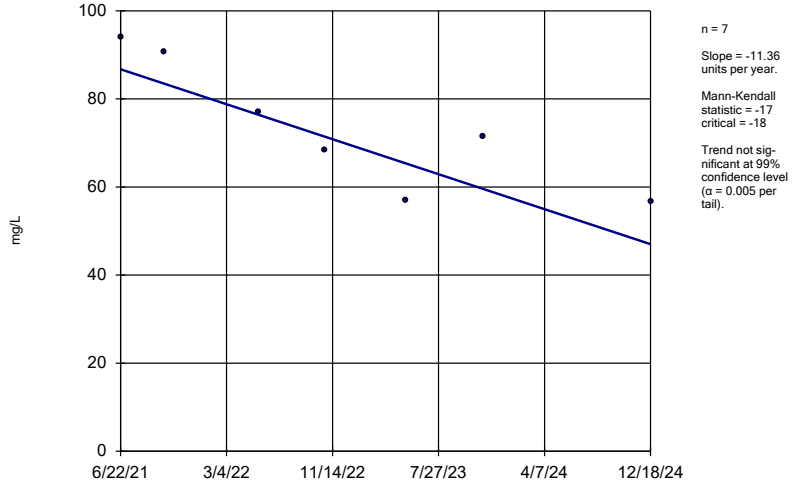


Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sen's Slope Estimator

MW-10



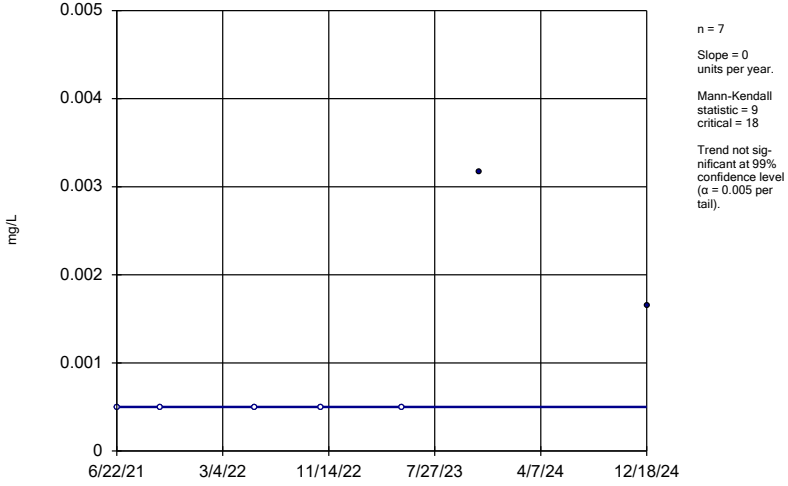
Constituent: Sulfate Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



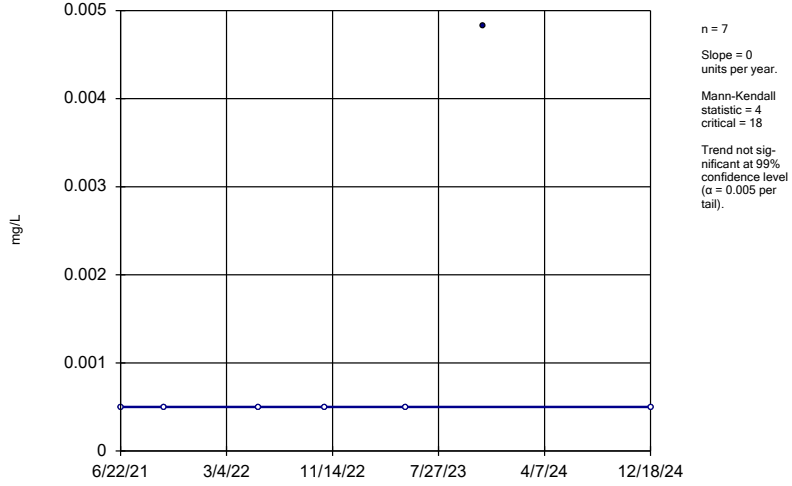
Constituent: Thallium Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



Constituent: Thallium Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends

Faircast Inc. Client: SCS Engineers Data: Faircast Inc

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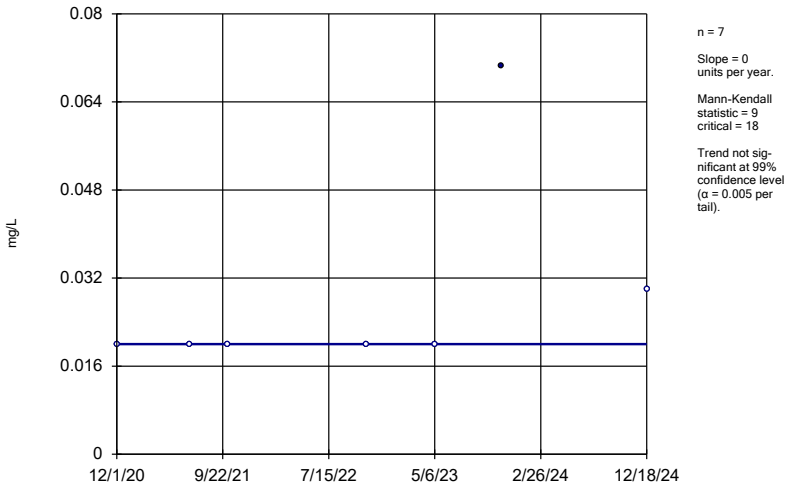
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5 (bg)



n = 7

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 18

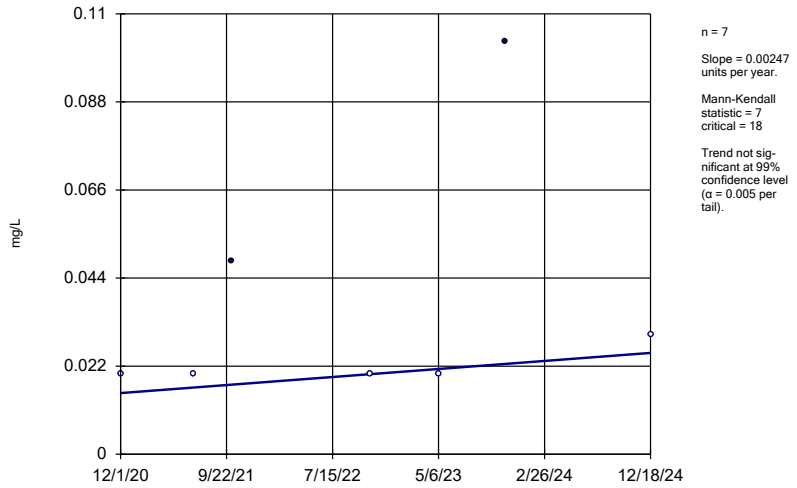
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-6



n = 7

Slope = 0.00247 units per year.

Mann-Kendall statistic = 7
critical = 18

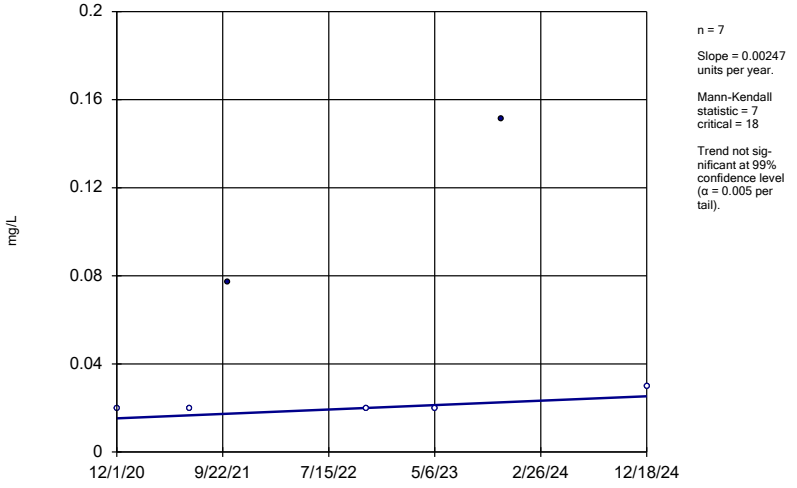
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 7

Slope = 0.00247 units per year.

Mann-Kendall statistic = 7
critical = 18

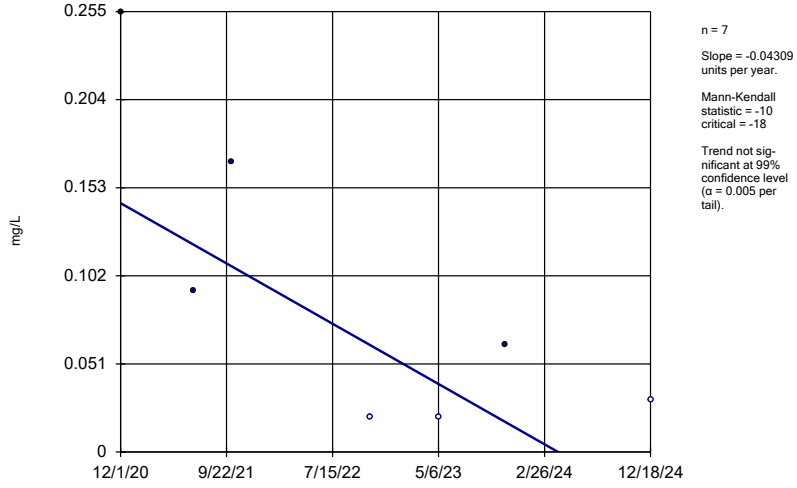
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-8



n = 7

Slope = -0.04309 units per year.

Mann-Kendall statistic = -10
critical = -18

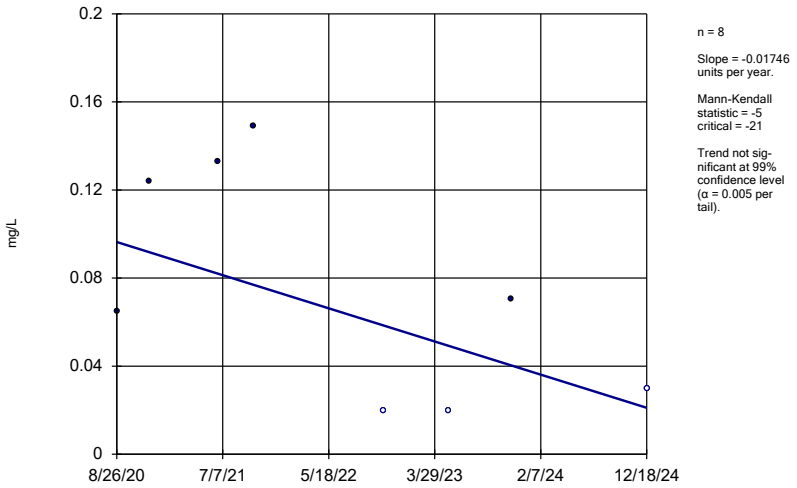
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9

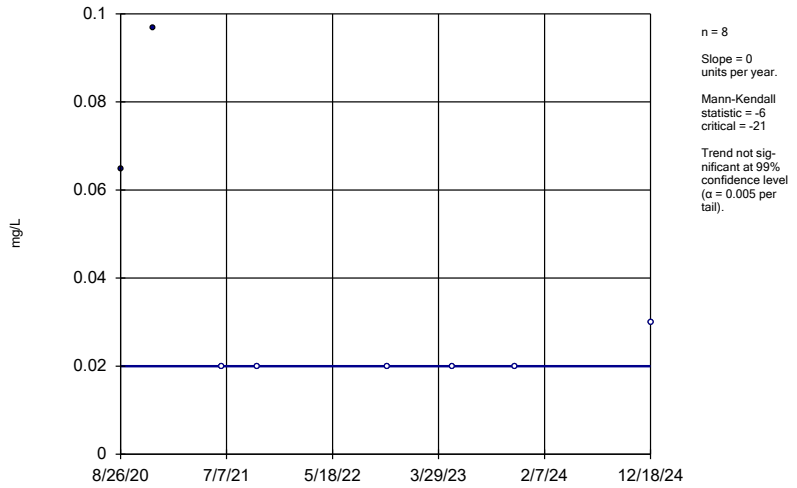


Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-10



Constituent: Total Organic Halogens Analysis Run 2/18/2025 4:14 PM View: 2024AWQR-Trends
Faircast Inc. Client: SCS Engineers Data: Faircast Inc

Appendix E

Mann-Kendall Trend Table

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-5	Aluminum		2	
	Barium		-3	
	Boron		4	
	Chemical Oxygen Demand		-5	
	Chloride		-9	
	Fluoride		-10	
	Iron		2	
	Magnesium		3	
	Manganese		2	
	Molybdenum		1	
	pH		2	
	Selenium		4	
	Specific Conductance		-8	
	Sulfate		-9	
	Thallium		9	
	Total Organic Halogens		9	
MW-6	Aluminum		6	
	Barium		-9	
	Boron		4	
	Chemical Oxygen Demand	-13		
	Chloride		-7	
	Chromium		4	
	Cobalt		4	
	Fluoride		-10	
	Iron			11
	Lead		9	
	Magnesium		-1	
	Manganese		1	
	Molybdenum			11
	pH		-1	
	Silver		4	
	Specific Conductance		10	
	Sulfate		7	
	Thallium		4	
	Total Organic Halogens		7	
MW-7	Aluminum		9	
	Arsenic		-10	
	Barium		1	
	Boron		4	
	Chemical Oxygen Demand		0	
	Chloride		7	
	Fluoride	-18		
	Iron		9	
	Lead		9	
	Magnesium		5	
	Manganese		9	
	Molybdenum		1	
	Nitrogen, Ammonia		6	
	pH		-1	
	Specific Conductance		2	
	Sulfate		3	
	Total Organic Halogens		7	

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-8	Arsenic			13
	Barium		-5	
	Boron			19
	Cadmium			14
	Chemical Oxygen Demand		-5	
	Chloride		1	
	Cobalt			12
	Iron			15
	Lead		1	
	Magnesium			11
	Manganese			11
	Molybdenum		-9	
	Nickel		9	
	pH		-13	
	Specific Conductance		1	
	Sulfate			11
	Total Organic Halogens		-10	
MW-9	Aluminum		9	
	Barium		5	
	Boron		3	
	Chemical Oxygen Demand		-8	
	Chloride	-13		
	Cobalt		7	
	Copper		3	
	Fluoride		-3	
	Iron			12
	Lead			10
	Magnesium		3	
	Manganese			11
	Molybdenum		-1	
	pH	-16		
	Specific Conductance		0	
	Sulfate		1	
	Total Organic Halogens		-5	
MW-10	Aluminum		6	
	Barium		1	
	Boron			14
	Chemical Oxygen Demand		-10	
	Chloride	-19		
	Cobalt		5	
	Fluoride		-4	
	Iron		6	
	Lead		2	
	Magnesium	-13		
	Manganese		3	
	Molybdenum			11
	pH	-16		
	Specific Conductance		-12	
	Sulfate	-17		
	Total Organic Halogens		-6	