

**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**PART VI
GROUNDWATER MONITORING AND
CORRECTIVE ACTION PLAN**

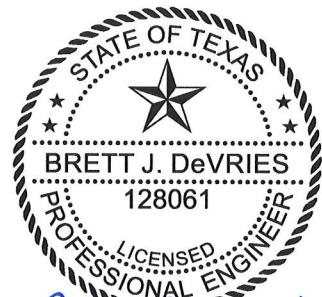
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Brett J. DeVries 10/2/23

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1 PE CERTIFICATION



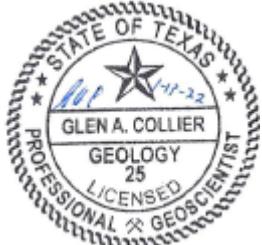
Brett DeVries 10/2/23

I, Brett DeVries, Ph.D., P.E. and Glen Collier, P.G., hereby certify that the groundwater monitoring system Sandy Creek Energy Station Coal Combustion Residual Waste Management Facility meets the requirements in 30 TAC §352.911 (40 CFR §257.93). This certification is based on investigated available geologic and hydrogeologic information within the Landfill Registration Boundary. This Plan was prepared by or under my supervision. I am a duly licensed Professional Engineer or Professional Geologist under the laws of the State of Texas.

(printed or typed name)

License number 128061

My license renewal date is 9/30/2024



Glen A. Collier, P.G.
(printed or typed name)

License number 25

My license renewal date is 12/30/2023

monitored during the first eight quarters and the first semiannual detection monitoring event include 18 inorganic compounds, total dissolved solids, radium-226, and radium-228. The constituents monitored in subsequent events and during the June 2021 semiannual detection monitoring event include Appendix III constituents only. Initial background monitoring for monitoring wells MW-1, MW-2, MW-3, and BW-1 commenced in December 2015 and was completed in August 2017. Monitoring wells MW-4 and MW-5 completed background monitoring in November 2022. Therefore, all wells are now in detection monitoring. A Background Update Report for monitoring wells BW-1, MW-1, MW-2, and MW-3, which also contains a Background Evaluation Report for wells MW-4 MW5, is included as Appendix VI.E None of the wells are in assessment monitoring at the time of developing this Registration Application. A discussion of constituents and exceedances in Landfill monitoring wells is included in Appendix VI.D.

The First Semiannual Groundwater Monitoring Report for 2020 is included as Appendix VI.C. Historical groundwater sampling results for all six wells are also provided in Appendix VI.C.

7.3 GROUNDWATER MONITORING SYSTEM (30 TAC §352.911 [40 CFR §257.91])

As required by 40 CFR §257.91, the groundwater monitoring system will consist of a sufficient number of appropriately located wells to yield groundwater samples from the uppermost aquifer that represent the quality of background groundwater and the quality of groundwater passing the point of compliance.

Previously described Stratum II is the uppermost water bearing zone beneath the Landfill Registration Boundary. Based on the boring logs for the monitoring wells, the thickness of the water bearing zone within Stratum II (i.e., the zone with sand or gypsum lenses or iron oxide staining) ranges from eight to 18 feet thick beneath the facility.

Water levels measured periodically from 2010 to the present indicate a general south-southwesterly direction to groundwater movement in Stratum II. The velocity of groundwater moving through Stratum II has been calculated to range from 67 to 86 feet per year.

Based on the thickness of the uppermost water-bearing zone, groundwater flow direction, and groundwater velocity, the groundwater monitoring system consists of a sufficient number of appropriately located wells to yield representative samples of groundwater passing beneath the Landfill.

As required by 40 CFR §257.94 and §257.95, Landfill Owner/Operator will conduct detection monitoring at all groundwater monitoring wells in detection status as well as assessment monitoring at all groundwater monitoring wells in assessment status when applicable. Furthermore, Landfill Owner/Operator will comply with all requirements involving §257.94 and §257.95 as provided in Appendix VI.A.5.3. Detection monitoring constituents are listed on Table VI,C-1 in Appendix I.A.

Installation of the groundwater monitoring system will be phased to correspond to subcell development and waste placement. As shown on Drawing VI-2, well MW-6 will be installed prior

to waste placement in Subcell 3D and MW-7 will be installed prior to waste placement in Subcell 3F.

7.4 ASSESSMENT OF CORRECTIVE MEASURES (30 TAC §352.961 [40 CFR §257.96])

Within 90 days of finding that any of the Appendix IV constituents have been detected at a statistically significant level above a Groundwater Protection Standards (GWPS), Landfill Owner/Operator will initiate an assessment of corrective measures immediately. This assessment will be completed within 90 days of initiating the assessment and may be extended for no longer than 60 days. Any extension to complete the assessment of corrective measures will be based on a site-specific demonstration. The assessment will be included in the annual groundwater monitoring and corrective action report required by 40 CFR §257.90(e), in addition to the certification by a qualified professional engineer.

Unless preceded by an Alternative Source Demonstration showing that the statistically significant increase (SSI) is not attributable to the Landfill, the assessment will analyze the effectiveness of potential corrective measures, including performance, reliability, ease of implementation, and potential impacts. The assessment will also discuss the control of exposure to residual contamination, time required to begin and complete the remedy, costs of remedy implementation, and any institutional requirements that may substantially affect implementation of the remedy or remedies.

At least 30 days prior to selecting a remedy, Landfill Owner/Operator will discuss the results of the assessment of corrective measures in a public meeting with interested and affected parties. The Landfill Owner/Operator of the Landfill must comply with the recordkeeping requirements specified in 40 CFR §257.105(h), the notification requirements specified in 40 CFR §257.106(h), and the Internet requirements specified in 40 CFR §257.107(h).

Within 30 days of completing the assessment of corrective measures required by this section, and before implementation of the remedy, Landfill Owner/Operator will submit an amendment application, on forms prescribed by the Executive Director, in accordance with §352.131. Landfill Owner/Operator will provide any additional information as the Executive Director may require that compliance with §352.131 be demonstrated. The application will include, at a minimum:

- Documentation that characterizes the nature and extent of the release, both vertically and horizontally, and meets the applicable requirements of §352.951,
- The completed assessment of corrective measures,
- The proposed selection of remedy required by §352.971,
- A comparison of the Appendix III constituents with a statistically significant increase over the background value, and the corresponding background value at each monitoring well,
- A comparison of the Appendix IV constituents and the corresponding groundwater protection standard meeting the requirements of §352.951(b) at each monitoring well,

- A proposed timeline for the submission of the corrective action effectiveness report required by §352.991, and
- A signed affidavit certifying that the owner or operator has complied with the applicable notification requirements of §352.951.

7.5 SELECTION OF REMEDY (30 TAC §352.971 [40 CFR §257.97])

Based on the results of the corrective measures assessment, Landfill Owner/Operator must as soon as feasible, select a remedy that, at a minimum, meets the remedy standards in 40 CFR §257.97(b). When selecting a remedy, the Landfill Owner/Operator will consider the evaluation factors presented in 40 CFR §257.97(c). Once a remedy is selected, in accordance with 40 CFR §257.97(d), the Landfill Owner/Operator will specify a schedule(s) for implementing and completing remedial activities, while also considering the factors that may affect remedial activities listed in §257.97(d). Landfill Owner/Operator will prepare a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, in accordance with 40 CFR §257.97(e), Landfill Owner/Operator must prepare a final report describing the selected remedy and how it meets the standards specified in 40 CFR §257.97(b). The final remedy selection will be achieved through issuance of the registration amendment required under §352.961.

7.6 IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (30 TAC §352.981 [40 CFR §257.98])

The Landfill Owner/Operator will implement a corrective action groundwater monitoring program within 90 days of selection of a remedy and follow the schedule specified for the selected remedy. The corrective action is considered complete when the concentrations of all constituents are shown to be at or below GWPSs for a period of three consecutive years. Landfill Owner/Operator will also take any interim measures necessary to ensure the protection of human health and the environment. Interim measures will, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of the approved remedy.

Prior to returning to detection monitoring or assessment monitoring, Landfill Owner/Operator will submit documentation that demonstrates that the requirements of this section have been fulfilled, and the remedy has been achieved for the impacted property. The documentation submitted will include at a minimum:

- All analytical data prepared and presented in accordance with §352.931 that demonstrates achievement of the remedy,
- A narrative discussion, in accordance with 40 CFR §257.98(c)(1)-(3), of how the requirements of this section have been fulfilled for the impacted property, and
- A description of the volume and final disposal location, and a copy of any waste manifests or other documentation of disposition, for waste or environmental media which were removed from the impacted property.

The Landfill Owner/Operator may return to either detection monitoring or assessment monitoring only after satisfying the conditions of this section, and after obtaining written approval from the Executive Director. All coal combustion residuals managed under a remedy required under §352.971, or an interim measure required under this section, will be managed in a manner that complies with all applicable United States Resource Conservation and Recovery Act and state requirements.

7.7 CORRECTIVE ACTION EFFECTIVENESS REPORT (30 TAC §352.991)

If the Landfill is performing corrective action, a corrective action effectiveness report will be submitted to the TCEQ following each reporting period.

APPENDIX VI.A

GROUNDWATER MONITORING SAMPLING AND ANALYSIS PROGRAM



**SANDY CREEK ENERGY STATION
COAL COMBUSTION RESIDUAL WASTE MANAGEMENT FACILITY
REGISTRATION APPLICATION
TCEQ REGISTRATION NO. CCR107
McLENNAN COUNTY, TEXAS**

**APPENDIX VI.A
GROUNDWATER SAMPLING AND ANALYSIS PLAN**

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- 5-1 Groundwater Monitoring Constituents



1 PE CERTIFICATION



Brett DeVries 10/2/23

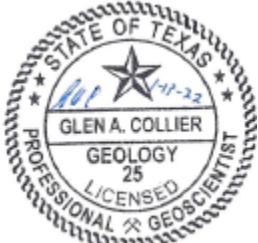
I, Brett DeVries, Ph.D., P.E. and Glen Collier, P.G, hereby certify that the statistical method, as described in this Plan, is appropriate for evaluating the groundwater monitoring data for the Sandy Creek Energy Station Coal Combustion Residual Waste Management Facility. This Plan was prepared by or under my supervision. I am a duly licensed Professional Engineer or Professional Geologist under the laws of the State of Texas.

(printed or typed name)

Brett DeVries, Ph.D., P.E.

License number 128061

My license renewal date is 9/30/2024



Glen A. Collier, P.G.

(printed or typed name)

License number 25

My license renewal date is 12/30/2023

5.2 MONITORING FREQUENCY

Eight (8) background samples will be obtained quarterly. This interval is estimated to be sufficient to obtain "statistically independent" samples and allow for seasonal variation.

After the completion of background monitoring, the monitoring wells will be sampled twice a year at roughly 6-month intervals for the constituents listed in Appendix III. An effort will be made to perform the semiannual sampling consistently in the same (2) months each year.

Monitoring wells BW-1, MW-1, MW-2, and MW-3 completed the eight (8) background samples in August 2017; and at the time of developing this Registration Application, MW-4 and 5 have completed three of the background samples.

5.3 STATISTICAL METHODS (30 TAC §352.931 [40 CFR §257.93(g)])

During detection monitoring, a well is sampled for the required Appendix III constituents. Statistical evaluation of detection monitoring results of a well shall be performed to determine whether a statistically significant increase (SSI) has occurred by comparing detection monitoring results to historical background data from the same well (intrawell comparison), provided that the earlier data from the well represent background groundwater quality not affected by waste-management activities. If the well is already affected by waste management activities or a potential SSI has occurred, then detection monitoring results from the well shall be compared to background data from upgradient wells (in the absence of spatial variation) or other wells that are not affected (interwell comparison). Each monitored constituent shall be evaluated for evidence of spatial variation. When possible, results from detection monitoring shall be evaluated using intrawell comparisons, to avoid statistical complications due to natural spatial variation.

Statistical analysis will be performed on each of the Appendix III constituents that are detected in downgradient wells, using methods cited above that are appropriate for the distribution of the concentration values of the constituents. Statistical analysis will commence upon completion of the first detection monitoring event for each downgradient well.

A Statistically Significant Increase (SSI) will be determined using procedures as described above and outlined in §257.93(g) and (h). The analysis will be aided by an electronic database used in conjunction with software suited to statistical analysis of groundwater monitoring data. An unconfirmed SSI can be verified by resampling within sixty (60) days of determining the unconfirmed SSI.

If there is a reasonable cause to think that a source other than the Landfill caused the SSI or that the SSI resulted from error in sampling, analysis, or statistical evaluation, or from natural variation in groundwater quality, then a report demonstrating the alternate source may be issued. In accordance with TAC §352.951(d), to pursue an Alternate Source Demonstration (ASD), the intention for must be made in writing to the executive director of the TCEQ within 14 days of determining an SSI over background limit. The ASD will be submitted within 90 days of determining an SSI.

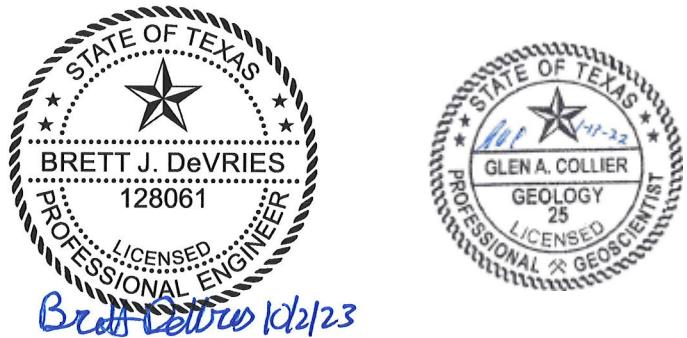
Unless an ASD is completed in accordance with §257.94(e)(2), assessment monitoring will be implemented in accordance with §257.93(h) and §257.95 whenever a SSI has been confirmed for one or more of the Appendix III constituents. In accordance with §257.95(b), within ninety (90) days of confirming an SSI, and annually thereafter, each well will be sampled for all Appendix IV constituents, in addition to the routinely sampled Appendix III constituents. Any constituent(s) detected as a result of the Appendix IV analysis will continue to be analyzed during subsequent semiannual events in accordance with §257.95(d)(1). Eight (8) semiannual samples from each well will be collected and analyzed for the detected Appendix IV constituents to establish background levels for the additional Appendix IV constituent(s). In accordance with §257.95(e), if all of the Appendix III and IV constituents fall below statistical background levels for two (2) consecutive events, normal detection monitoring of Appendix III constituents will resume. If concentrations of any constituents remain above background levels, assessment monitoring will continue in accordance with §257.95(f).

If one or more of the Appendix III or IV constituents exceeds the background statistical level established by eight (8) events, one of following two (2) procedures will be implemented:

- (1) Procedures listed in §257.95(g) will be followed, including implement Assessment of Corrective Measures as detailed in §257.96 and subsequent actions detailed in §257.97 and §257.98. The nature and extent of any release will be characterized. At least one (1) additional monitoring well will be installed between the monitoring well with the SSI and the Landfill Registration Boundary.
- (2) Demonstrate a source other than the Landfill is the cause of the SSI in accordance with §257.97 257.95(g)(3)(ii).

APPENDIX VI.D

CONSTITUENTS AND EXCEEDANCES DISCUSSION



APPENDIX VI.D – CONSTITUENTS AND EXCEEDANCES DISCUSSION

DISCUSSION OF CONSTITUENTS AND EXCEEDANCES IN GROUNDWATER

During background monitoring, several exceedances of Environmental Protection Agency's (EPA's) primary Maximum Contaminant Levels (MCLs) were reported by the laboratory. Of particular note was the May 11, 2016, sampling event for MW-1, during which arsenic, beryllium, chromium, lead, and selenium exceeded their respective MCLs. Additionally, as of the date of this Registration Application, for the Appendix IV parameters plus boron, the event for MW-1 produced the highest site-wide concentrations for seven of the sixteen analytes. A review of field parameters collected at the time of sampling shows that for the May 11, 2016, event, turbidity in monitoring well MW-1 was greater than 800 nephelometric turbidity units (NTUs). While analytical results for subsequent sampling events were not similarly elevated, turbidity in samples from well MW-1 has been sporadically excessive. Similar fluctuations in turbidity were noted for monitoring well BW-1, and, to a lesser degree, for MW-2 and MW-3. In August 21 and 22, 2023, monitoring wells MW-1, MW-2, MW-3, and BW-1 were re-developed using a Waterra Hydrolift pump in order to remove suspended material that was thought to result in high turbidity and elevated concentrations of some parameters. After re-development to the point of <10 NTUs, the four wells were sampled for Appendix III and IV constituents. The laboratory report for MW-1 showed only one analyte, selenium, at a concentration greater than its MCL. Selenium was reported at 0.0801 mg/L, which is slightly above its MCL of 0.05. Unquantifiable (J-flag) concentrations of 0.007 mg/L antimony were reported for wells MW-1, MW-2, and BW-1. The MCL for antimony is 0.006 mg/L. No other exceedance of MCLs was reported for any of the constituents in any of the four wells. The data indicate high turbidity from suspended solids contributed significantly to many of the elevated metals concentrations. All historical groundwater monitoring data for the Landfill is tabulated in Appendix VI.C.

Appendix VI.E contains *Background Evaluation Report Update for Groundwater Monitoring Wells MW-1, MW-2, MW-3, and BW-1 and Background Evaluation Report for MW-4 and MW-5*. For the reports, data resulting from the May 11, 2016, sampling of well MW-1 have been eliminated from the statistical database as outliers. The designation of outlier is based on excessive turbidity and anomalous laboratory results compared to other groundwater monitoring events. The results of sampling wells MW-1, MW-2, and MW-3, and BW-1 on August 22, 2023, after well re-development, have been added to the statistical database.

REGIONAL INVESTIGATION

Throughout groundwater monitoring at the Landfill, selenium has been consistently reported above its MCL in monitoring wells MW-1 and MW-5. Excluding the sampling event for well MW-1 on May 11, 2016, other metals have been detected, though generally not above MCLs. Most of the detections have been sporadic, however, lithium, barium, boron, and fluoride have been reported in every monitoring well at the Landfill. Regional data were investigated to better understand the geochemical character of shallow groundwater in the Cretaceous Ozan Formation, the host groundwater-bearing unit monitored at the Landfill. The most relevant data is in records of the Municipal Solid Waste (MSW) Division of the TCEQ. Seven MSW landfills were identified as located on an outcrop of the Ozan. Groundwater monitoring reports reveal that naturally occurring metals are common in the shallow Ozan groundwater at the MSW landfills. Barium is present at all seven of the MSW sites. Six of the seven landfills reported detectable arsenic. Four of the MSW landfills reported concentrations of selenium. The data, summarized on Table 1 below, illustrate that naturally-occurring metals are to be expected in shallow groundwater of the Ozan Formation.

Table 1. Metals in Shallow Groundwater of the Cretaceous Ozan Formation

Landfill Permit Number	Metals Detected														
	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
MSW 692B	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
MSW 1209B	No	Yes	Yes	No	No	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
MSW 1745B	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
MSW 1646A	Yes	No	Yes	No	No	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes
MSW 42D	No	Yes	Yes	No	No	No	Yes	Yes	No	Yes	No	No	No	Yes	No
MSW 2358	No	Yes	Yes	No	No	No	Yes	No	No	Yes	No	Yes	No	Yes	No
MSW 1895A	No	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes

SELENIUM

The two groundwater monitoring wells that have shown consistently elevated selenium, MW-1 and MW-5, are located on opposite sides of the Landfill. Based on the groundwater flow paths illustrated on Drawing VI-2, well MW-5 is not directly downgradient from existing Landfill cells containing waste and is not likely to have been impacted by a release from the Landfill. While MW-1 is downgradient of a portion of an active cell, similar selenium concentrations at these two widely-spaced wells suggest a source other than the Landfill.

BORON

Statistical limits for boron have been addressed in Appendix VI.E in *Background Evaluation Report Update for Groundwater Monitoring Wells MW-1, MW-2, MW-3, and BW-1 and Background Evaluation Report for MW-4 and MW-5*. Statistical limits for recently completed background monitoring wells resulted in the Landfill's highest statistical limit for boron in MW-4, a down gradient well located over 1200 feet from existing waste (Cell 1). This distance is greater than the groundwater flow distance based on the groundwater flow calculations in Part VI, Section 6.2 since construction of Cell 1 in 2010 (approx. 884 feet). The data indicate the boron concentrations represent natural fluctuations in groundwater chemistry. Statistical limits for boron in Landfill monitoring wells are shown on Table 2.

Table 2. Statistical Limits for Boron in Site Monitoring Wells

Well	Position	Statistical Limit (mg/L)
BW-1	upgradient	4.837
MW-1	downgradient	1.661
MW-2	downgradient	3.533
MW-3	downgradient	1.565
MW-4	downgradient	6.58
MW-5	downgradient	4.5

RADIUM

With the afore-mentioned elimination of the May 11, 2016 sampling event from the MW-1 statistical database, all wells have reported combined radium-226 and radium-228 greater than the limit of 5 picocuries per liter (pCi/L). The sampling event for MW-4 and MW-5 on March 17, 2022, was anomalously elevated and is probably due to laboratory error. Therefore, the radium concentrations from that event are considered outliers and have been eliminated from the groundwater monitoring statistical database. All other exceedances of combined radium in site groundwater monitoring wells are considered to be naturally occurring, reflecting variable and fluctuating groundwater chemistry in shallow Ozan Formation groundwater.

COAL PILE RUNOFF WATER

In considering a possible source for constituents in groundwater, runoff water draining the coal pile was sampled and compared to results of groundwater monitoring at the Landfill. Analysis indicates that coal pile runoff water contains no concentrations of constituents that might possibly adversely impact groundwater. The laboratory results are summarized on Table 3.

Table 3. Laboratory Results of Coal Pile Runoff Water

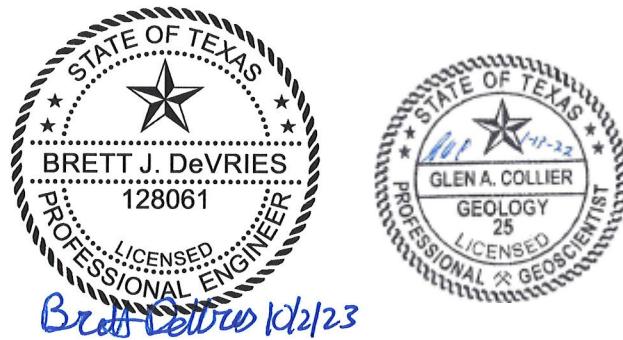
Analyte	Units	MCL	Result
Boron	mg/L	n/a	0.520
Calcium	mg/L	n/a	127 OI
Chloride	mg/L	n/a	189
pH at 25 °C	Std. Units	n/a	7.59
Sulfate	mg/L	n/a	453
Total Dissolved Solids	mg/L	n/a	1150
Fluoride	mg/L	4	0.833
Antimony	mg/L	0.006	<0.00430
Arsenic	mg/L	0.01	<0.00440
Barium	mg/L	2	1.04 OI
Beryllium	mg/L	0.004	<0.00330
Cadmium	mg/L	0.005	<0.000479
Chromium	mg/L	0.1	0.00590 J
Cobalt	mg/L	n/a	0.00131 J
Lead	mg/L	0.15	<0.00299
Lithium	mg/L	n/a	0.0426
Mercury	mg/L	0.002	<0.000100
Molybdenum	mg/L	n/a	0.00938
Selenium	mg/L	0.05	<0.00735
Thallium	mg/L	0.002	<0.00431
Radium-226	pCi/L	n/a	1.72 ± 0.641
Radium-228	pCi/L	n/a	0.809 ± 0.714
Combined Radium	pCi/L	5	2.529
n/a = no MCL; OI = matrix interference; J = not quantified			

CONCLUSION

It is our conclusion that concentrations of monitored constituents, including those above MCLs, result from natural variations and reflect typical geochemistry of shallow Ozan groundwater. In the opinion of SCS, there is no indication of a release and no evidence of an impact to groundwater from the Landfill.

APPENDIX VI.E

BACKGROUND EVALUATION REPORT UPDATE FOR GROUNDWATER MONITORING WELLS MW-1, MW-2, MW-3, AND BW-1 AND BACKGROUND EVALUATION REPORT FOR MW-4 AND MW-5



Background Evaluation Report Update for Groundwater Monitoring Wells MW-1, MW-2, MW-3, and BW-1 and Background Evaluation Report for MW-4 and MW-5

Sandy Creek Energy Station
McLennan County, Texas

Prepared for:

Sandy Creek Energy Station
2161 Rattlesnake Road
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SCS ENGINEERS

Project No. 16222027.00 | September, 2023

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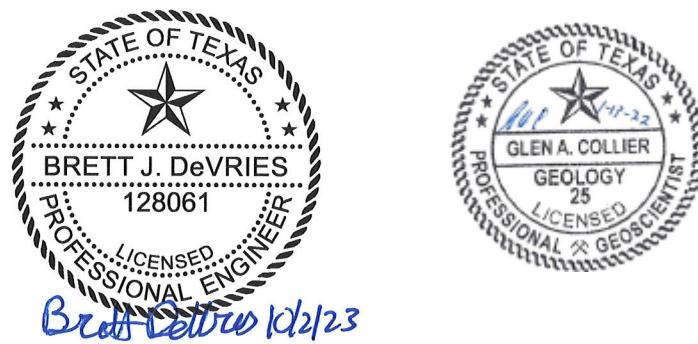
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2.0	Background Data Evaluation	2

Figures

Figure 1 Groundwater Gradient and Monitoring Well Location Map

Appendices

- Appendix A Background Data for Appendix III and IV Constituents
- Appendix B Summary Statistics and Intermediate Computations
- Appendix C Statistical Analysis Charts
 - 1. Time Series
 - 2. Outlier Charts
 - 3. Sen's Slope Estimate
 - 4. Control Charts



1.0 GROUNDWATER MONITORING SUMMARY

The current groundwater monitoring system at the SCES landfill consists of six wells (see Table 1 below). One (BW-1) is upgradient and five (MW-1, -2, -3, -4, & -5) are downgradient. All wells are currently in detection monitoring. Figure 1 shows monitoring well locations at SCES.

Table 1 – Sandy Creek Energy Station Groundwater Monitoring System

Well ID (U/D) ¹	Status	Top of Casing Elevation (ft msl) ²	Well Depth (ft, bgs) ²	Screen Interval (ft, bgs) ²
BW-1 (U)	Detection	485.57	38.63	28.30-38.30
MW-1 (D)	Detection	465.87	34.23	23.90-33.90
MW-2 (D)	Detection	442.15	19.63	9.30-19.30
MW-3 (D)	Detection	430.06	16.23	5.98-15.98
MW-4 (D)	Detection	436.91	30.3	20.00-30.00
MW-5 (D)	Detection	454.52	35.3	25.00-35.00

1 (U) = upgradient, (D) = downgradient; 2 Top of Casing Elevation, Well Depth, and Screen Interval information obtained from Table 1 – Monitoring Well and Piezometer Construction Details and Groundwater Elevations prepared by Geosyntec Consultants, dated March 11, 2016; ft msl = feet above mean sea level; ft bgs = feet below ground surface

2.0 BACKGROUND DATA EVALUATION

Statistical analysis for the site groundwater monitoring program has been conducted in general accordance with 40 CFR §257.93(f)(3 and 4)(g) and the Groundwater Sampling and Analysis Plan. The groundwater statistics software Sanitas® was used for the background analysis. The analysis for this Background Evaluation Report (BER) Update included the use of time series charts and Sen's Slope estimator for significant trend confidence level data. Copies of the time series charts and Sen's Slope estimator charts are included with this report. Groundwater monitoring wells included in this evaluation are:

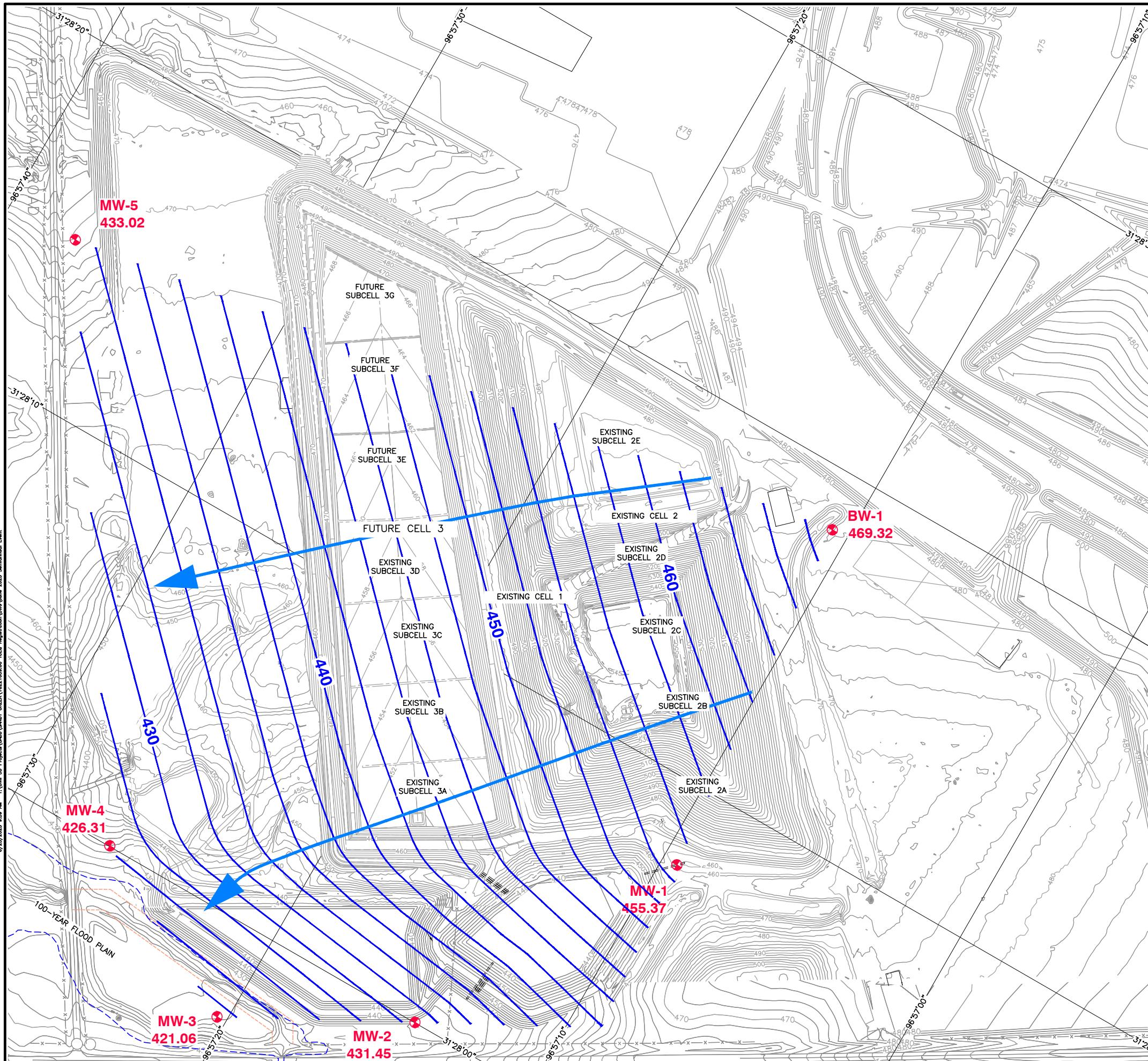
MW-1, MW2, MW-3, MW-4, MW-5, and BW-1

BER limits for MW-1, MW-2, MW-3, and BW-1 were calculated with the goal of maximizing the size of background data pools and including the most recent possible data, while ensuring that background data pools do not contain outliers or significant increasing trends. This report serves as the initial evaluation of background data for monitoring wells MW-4 and MW-5, as these wells have completed their eighth background monitoring event in November 2022.

Based on these analyses, the data for the above-referenced groundwater monitoring wells are representative of background groundwater concentrations that are unaffected by waste management activities or other sources of contamination. The conclusions regarding non-impact are printed on each individual Sen's Slope analysis chart, i.e. "Trend not significant at 98% confidence level". On certain Sen's Slope analysis charts, a significant trend is noted where the slope of the trend line is negative. In this scenario, the lack of any increasing trend is interpreted to be consistent with no impact from the landfill.

Outlier screening was performed using Sanitas® settings consistent with the EPA Statistical Analysis of Groundwater Monitoring Data at CCR Facilities, Unified Guidance (March 2009). Several outliers were removed from background data sets before calculation of statistical limits; these outliers are indicated on the tables in Appendix A, and outlier charts are included in Appendix C for constituent-well pairs where outliers were identified. Certain background datasets could not be statistically screened for outliers due to non-normality and/or a high percentage of non-detects; these datasets were visually screened for outliers. The outcome of all outlier screening—both statistical and visual—is indicated in the Appendix A tables. Outlier charts are included in Appendix C for constituent well pairs where outliers were identified.

Figure 1: Groundwater Contour and Monitoring Well Location Map



FOR INFORMATION PURPOSES ONLY

CLIENT	DRAWING TITLE	DESCRIPTION		BY
		FEV	DATE	
SCS ENGINEERS STEARNIS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 1801 CENTRAL DRIVE, SUITE 650, BEDFORD, TX 76021 PH (817) 571-2288 FAX NO. (817) 571-2188	GROUNDWATER CONTOUR MAP			
CADD FILE: JUNE 2023 SEMIANNUAL EVENT	PROJECT TITLE			
DATE: 6/2023	FIRST SEMIANNUAL GROUNDWATER MONITORING REPORT JUNE 2023 SAMPLING EVENT			
SCALE: AS SHOWN				
DRAWING NO.				

Appendix A: Background Data for Appendix III and IV Constituents

Table 1: Background Data for Appendix III and IV Constituents

Date	Monitoring Well MW-1 Sampling Results																				
	Lithium (mg/L)	Arsenic (mg/L)	Barium	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
12/14/2015	0.43	<0.0050	0.044	<0.0010	1.2	<0.0010	454*	0.0073	<0.0025	<0.0050	<0.010	0.16	<0.0010	<0.00050	<0.00020	4090	7.6	253	<0.30	2090	2.13
2/25/2016	0.39	<0.0050	0.033	<0.0010	1.4	<0.0010	520	0.0074	<0.0025	0.0084	<0.010	0.2	<0.0010	<0.00050	<0.00020	4060	7.5	236	<0.30	2190	2.382
5/11/2016	0.78	0.12	1	0.029	2.6	<0.0020	1030	0.69	0.087	0.21	<0.020	0.039	<0.0010	0.00089	<0.00020	5260	7.2	402	<0.30	2580	12.33
8/16/2016	0.41	<0.0050	0.022	<0.0010	1.3	<0.0010	535	<0.0050	<0.0025	<0.0050	<0.010	0.13	<0.0010	<0.00050	<0.00020	3880	6.8	239	0.35	2300	3.883
11/17/2016	0.37	<0.0050	0.018	<0.0010	1.2	<0.0010	542	<0.0050	<0.0025	<0.0050	<0.020	0.16	<0.0010	<0.00050	<0.00020	3720	7	216	<0.30	2130	2.828
2/23/2017	0.44	<0.010	<0.20*	<0.0050	1.3	<0.0050	531	<0.010	<0.010	<0.0050	<0.010	0.066	<0.0010	<0.00050	<0.00020	3980	7	223	<0.30	2350	2.923
6/7/2017	0.36	<0.0050	0.019	<0.0010	1.2	<0.0010	530	<0.0050	<0.0025	<0.0050	<0.020	0.15	<0.0010	<0.00050	<0.00020	3680	7.5	203	<0.30	2010	1.3*
8/24/2017	0.395	<0.0050	0.02	<0.0010	1.2	<0.0010	518	<0.0050	<0.0025	<0.0050	<0.020	0.17	<0.0010	<0.00050	<0.00020	4550	7.1	241	0.4	2620	2.267
12/20/2017	0.38	<0.0060	0.017	<0.0010	1.3	<0.0050	548	<0.0070	<0.0025	<0.010	<0.030	0.18	<0.0010	<0.00050	<0.00020	4250	7.4	248	1.1	2340	3.72
6/21/2018	n/a	n/a	n/a	n/a	1.25	n/a	587*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4270	7.38	247	0.3	2530	n/a
12/13/2018	n/a	n/a	n/a	n/a	1.35	n/a	515	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4100	7.52	241	0.585	2570	n/a
6/24/2019	n/a	n/a	n/a	n/a	1.1	n/a	492	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4030	7.2	169	0.73	2430	n/a
12/10/2019	n/a	0.000667	n/a	n/a	1.1	n/a	534	n/a	n/a	n/a	n/a	0.0809	n/a	n/a	n/a	3720	7.43	192	0.236	2420	2.12
4/8/2020	n/a	n/a	n/a	n/a	1.3	n/a	524	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4330	7.1	152	<0.20	2430	n/a
11/10/2020	n/a	n/a	n/a	n/a	1.18	n/a	539	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4060	7.2	168	0.26	2350	n/a
6/22/2021	n/a	n/a	n/a	n/a	1.1	n/a	510	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3830	7.19	161	<0.20	2470	n/a
12/15/2021	n/a	n/a	n/a	n/a	1.16	n/a	534	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3940	7.15	144	0.271	2360	n/a
5/10/2022	n/a	n/a	n/a	n/a	1.17	n/a	521	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4090	7.24	161	n/a	2460	n/a
11/22/2022	n/a	n/a	n/a	n/a	1.3	n/a	512	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3960	7.13	145	0.336	2500	n/a
6/1/2023	n/a	n/a	n/a	n/a	1.17	n/a	491	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4750	7.44	153	1.2	2730	n/a
8/22/2023	0.382	<0.0050	0.0105	<0.0010	1.12	<0.0050	506	<0.0050	<0.0050	0.0047	<0.020	0.0801	0.0074	<0.00050	<0.00020	4310	7.37	132	0.581	2340	3.33

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

<2 Indicates sampling event included in a previous BER

Table 1: Background Data for Appendix III and IV Constituents

		Monitoring Well MW-2 Sampling Results																			
Date	Lithium (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
12/14/2015	0.69	<0.0050	0.031	<0.0010	1.9	<0.0010	569*	<0.0050	0.0061	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	8520	6.7	1890	0.98	2810	4.17
2/25/2016	0.74	0.014*	0.038	<0.0010	2.4	<0.0010	697	<0.0050	<0.011	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	8070	7.3	2080	<0.30	2890	3.427
5/11/2016	0.87	0.0059	0.027	<0.0010	2.2	<0.0010	613	<0.0050	0.0079	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	9930	6.7	2340	<0.30	3010	3.989
8/16/2016	0.84	<0.0050	0.021	<0.0010	2.1	<0.0010	680	<0.0050	0.0084	<0.0050	<0.010	<0.010	<0.0020	<0.0010	<0.00020	7870	6.7	2440	0.64	3080	3.517
11/17/2016	0.82	0.0059	0.024	<0.0010	1.9	<0.0010	701	<0.0050	0.0064	<0.0050	0.024	<0.010	<0.0010	<0.00050	<0.00020	9680	6.7	2140	0.35	2770	4.083
2/23/2017	0.8	<0.010	<0.20*	<0.0050	1.9	<0.0050	646	<0.010	<0.010	<0.0050	<0.010	<0.020	<0.0010	<0.00050	<0.00020	9630	6.9	2320	0.46	3110	5.79
6/7/2017	0.75	<0.0050	0.016	<0.0010	1.9	<0.0010	640	<0.0050	0.0051	<0.0050	<0.020	<0.010	<0.0010	<0.00050	<0.00020	14200*	7.5	2420	1.3	2970	4.164
8/24/2017	0.729	<0.010	0.017	<0.0010	1.9	<0.0020	664	<0.0050	0.0065	<0.010	<0.020	0.026	<0.0010	<0.00050	<0.00020	9600	6.8	2520	0.32	3710	4.9
12/20/2017	0.74	<0.012	0.022	<0.0010	2.2	<0.010	716	<0.014	0.0072	<0.020	<0.030	<0.040	<0.0010	<0.00050	<0.00020	9600	7.2	2590	<0.50	3100	5.015
6/21/2018	n/a	n/a	n/a	n/a	1.9	n/a	706	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10200	7.09	2840	<0.6	3400	n/a
12/13/2018	n/a	n/a	n/a	n/a	2.58	n/a	690	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10500	6.71	2740	0.618	3220	n/a
6/24/2019	n/a	n/a	n/a	n/a	1.7	n/a	656	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9560	7	2420	<0.18	3480	n/a
12/10/2019	n/a	0.00219	n/a	n/a	1.48	n/a	660	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	8120	6.93	2180	0.229	2620	2.23*
4/8/2020	n/a	n/a	n/a	n/a	1.9	n/a	650	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9820	6.8	2410	<0.20	3120	n/a
11/10/2020	n/a	n/a	n/a	n/a	2.13	n/a	715	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9670	6.8	2350	<0.20	2830	n/a
6/22/2021	n/a	n/a	n/a	n/a	1.83	n/a	704	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9500	6.82	2780	<0.20	3370	n/a
12/15/2021	n/a	n/a	n/a	n/a	2.02	n/a	656	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8780	6.83	2350	0.254	2970	n/a
5/10/2022	n/a	n/a	n/a	n/a	2.28	n/a	630	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8900	6.93	2370	n/a	3040	n/a
11/22/2022	n/a	n/a	n/a	n/a	2.39	n/a	687	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10500	6.74	2700	0.341	3420	n/a
6/1/2023	n/a	n/a	n/a	n/a	1.29	n/a	509*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12800*	7.35	2810	0.944	3760	n/a
8/22/2023	0.512*	<0.0050	0.0194	<0.0010	1.4	<0.0050	650	<0.0050	<0.0050	<0.020	<0.010	<0.020	0.0077	<0.00050	<0.00020	7700	6.74	1550*	0.577	2290	4.686

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

<2 Indicates sampling event included in a previous BER

Table 1: Background Data for Appendix III and IV Constituents

Monitoring Well MW-3 Sampling Results																					
Date	Lithium (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
12/14/2015	<0.050*	<0.0050	0.021	<0.0010	0.35*	<0.0010	67.6*	<0.0050	<0.0025	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	586*	7.2	12.3*	0.62	135*	1.733*
2/25/2016	0.85	0.0061	0.052	<0.0010	1.2	<0.0010	479	<0.0050	0.0098	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	5400	7	347	0.9*	2430*	4.28
5/11/2016	0.65	<0.0050	0.024	<0.0010	1.1	<0.0010	465	<0.0050	0.0059	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	5440	6.5	349	<0.30	2330*	3.16
8/16/2016	0.98	<0.0050	0.018	<0.0010	1.2	<0.0010	505	<0.0050	0.006	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	5680	7.3	381	<0.30	2950	5.991
11/17/2016	0.94	<0.0050	0.028	<0.0010	1.1	<0.0010	494	<0.0050	0.0068	<0.0050	<0.020	<0.010	<0.0010	<0.00050	<0.00020	5420	6.6	322	<0.30	2420*	6.102
2/23/2017	0.7	<0.010	<0.20*	<0.0050	1.1	<0.0050	389	<0.010	<0.010	<0.0050	<0.010	<0.020	<0.0010	<0.00050	<0.00020	2900*	7	202	0.45	1450*	3.831
6/7/2017	0.62	<0.0050	0.015	<0.0010	1.2	<0.0010	486	<0.0050	0.0058	<0.0050	<0.020	<0.010	<0.0010	<0.00050	<0.00020	4740	7.1	327	0.57	2260*	3.701
8/24/2017	1.03	<0.010	0.014	<0.0010	1.1	<0.0020	519	<0.0050	0.0084	<0.010	<0.020	<0.020	<0.0010	<0.00050	<0.00020	6160	6.5	401	<0.30	2890	5.67
12/20/2017	0.92	<0.0060	0.034	<0.0010	1.3	<0.0050	563	<0.0070	0.0086	<0.010	<0.030	<0.020	<0.0010	<0.00050	<0.00020	5790	6.8	380	0.61	2830	3.396
6/21/2018	n/a	n/a	n/a	n/a	1.13	n/a	526	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6090	6.76	396	<0.3	3160	n/a
12/13/2018	n/a	n/a	n/a	n/a	1.08	n/a	327*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3520*	6.61	206	0.662	1790*	n/a
6/24/2019	n/a	n/a	n/a	n/a	0.99	n/a	452	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5740	6.6	306	<0.18	3130	n/a
12/10/2019	n/a	0.0024	n/a	n/a	1.26	n/a	572	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	5830	6.67	345	0.137*	3140	3.31
4/8/2020	n/a	n/a	n/a	n/a	1.1	n/a	530	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5980	6.5	307	<0.20	3020	n/a
11/10/2020	n/a	n/a	n/a	n/a	3.07*	n/a	597	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6920	7.1	1160*	<0.20	2950	n/a
6/22/2021	n/a	n/a	n/a	n/a	1.02	n/a	469	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5080	6.77	300	<0.20	3170	n/a
12/15/2021	n/a	n/a	n/a	n/a	1.24	n/a	518	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5500	6.54	318	<0.50	2970	n/a
5/10/2022	n/a	n/a	n/a	n/a	1.07	n/a	420	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5060	6.66	299	n/a	2760	n/a
11/22/2022	n/a	n/a	n/a	n/a	1.61*	n/a	589	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6560	6.56	295	0.225*	3130	n/a
6/1/2023	n/a	n/a	n/a	n/a	1.18	n/a	491	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7840*	7.11	293	1*	3430	n/a
8/22/2023	1.12	0.0468*	0.0111	<0.0010	1.13	<0.0050	533	<0.0050	0.0043	0.0072	<0.010	<0.020	<0.0010	<0.00050	<0.00020	5610	6.71	287	0.476	3120	3.746

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

<2 Indicates sampling event included in a previous BER

Table 1: Background Data for Appendix III and IV Constituents

Monitoring Well BW-1 Sampling Results																					
Date	Lithium (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
12/14/2015	0.7	<0.0050	0.17*	<0.0010	1.8*	<0.0010	465*	0.015	0.0026	<0.0050	<0.010	<0.010	<0.0010	0.00073	<0.00020	4900*	9.5*	727*	<0.30	2130*	2.03*
2/25/2016	0.71	0.015*	0.055	<0.0010	3.5	<0.0010	586	0.0053	0.0035	0.0069	<0.010	<0.010	<0.0010	<0.00050	<0.00020	6420	7.4	1050	0.67	2690	2.707*
5/11/2016	0.79	0.0084	0.04	<0.0010	4	<0.0010	566	0.011	0.0035	0.0091	<0.010	<0.010	<0.0010	<0.00050	<0.00020	6360	7	1120	0.32	2610	5.2
8/16/2016	0.78	0.0064	0.04	<0.0010	3.7	<0.0010	566	0.0073	0.0029	<0.0050	<0.010	<0.010	<0.0010	<0.00050	<0.00020	6280	7.2	1130	0.94	2720	4.03
11/17/2016	0.74	0.0066	0.023	<0.0010	2.8	<0.0010	548	<0.0050	<0.0025	<0.0050	0.022	<0.010	<0.0010	<0.00050	<0.00020	6400	6.8	991	0.85	2590	3.545
2/23/2017	0.73	<0.010	<0.20*	<0.0050	3.1	<0.0050	532	<0.010	<0.010	<0.0050	<0.010	<0.020	<0.0010	<0.00050	<0.00020	6280	7.2	1080	<0.30	2760	4.886
6/7/2017	0.79	<0.0050	0.026	<0.0010	3.8	<0.0010	539	<0.0050	<0.0025	<0.0050	<0.020	<0.010	<0.0010	<0.00050	<0.00020	7320	7.7*	1020	<0.30	2220*	4.49
8/24/2017	0.738	<0.010	0.037	<0.0010	3.4	<0.0020	531	<0.0050	<0.0050	<0.010	<0.020	<0.020	<0.0010	<0.00050	<0.00020	7260	7.1	1160	0.37	2870	4.38
12/20/2017	0.73	<0.0060	0.044	<0.0010	3.5	<0.0050	658	<0.0070	0.0034	<0.010	<0.030	<0.020	<0.0010	<0.00050	<0.00020	6140	7.2	1030	<0.50	2620	4.2
6/21/2018	n/a	n/a	n/a	n/a	3.31	n/a	610	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6640	7.22	1200	<0.3	3030	n/a
12/13/2018	n/a	n/a	n/a	n/a	3.25	n/a	637	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6400	7.1	1120	0.586	2780	n/a
6/24/2019	n/a	n/a	n/a	n/a	3.1	n/a	564	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6380	7.1	1160	0.9	2930	n/a
12/10/2019	n/a	0.00236	n/a	n/a	2.98	n/a	591	n/a	n/a	n/a	n/a	<0.010	n/a	n/a	n/a	6300	7.11	1150	0.309	2830	4.34
4/8/2020	n/a	n/a	n/a	n/a	3.7	n/a	545	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6660	6.9	1070	<0.20	2760	n/a
11/10/2020	n/a	n/a	n/a	n/a	3.14	n/a	612	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6000	7.1	1170	<0.20	2710	n/a
6/22/2021	n/a	n/a	n/a	n/a	3.39	n/a	607	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6560	7.05	1290	0.512	3170	n/a
12/15/2021	n/a	n/a	n/a	n/a	3.36	n/a	616	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6380	6.92	1140	<0.50	2820	n/a
5/10/2022	n/a	n/a	n/a	n/a	3.26	n/a	623	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6530	7.01	1110	<0.50	2810	n/a
11/22/2022	n/a	n/a	n/a	n/a	3.33	n/a	619	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6460	6.9	1210	0.3	3090	n/a
6/1/2023	n/a	n/a	n/a	n/a	3.44	n/a	528	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8660*	7.53	1210	0.864	3220	n/a
8/22/2023	0.741	0.0112	0.0168	<0.0050	2.88	<0.0050	539	0.0028	<0.0050	<0.020	<0.010	<0.020	0.00766	<0.00050	<0.00020	6250	7.18	1050	<0.50	2740	3.94

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

<2 Indicates sampling event included in a previous BER

Table 1: Background Data for Appendix III and IV Constituents

		Monitoring Well MW-4 Sampling Results																				
Date		Lithium (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
3/24/2021	0.74	<0.010	0.025	<0.0050	4.1	<0.0050	463	<0.010	0.0036	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	6080	7.4	544	0.38	3060	2.97	
6/22/2021	0.742	0.0104	0.0227	<0.0050	4.94	<0.0050	418	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	5830	7.23	1100	<0.50	3080	4.327	
9/17/2021	0.593	<0.010	0.0236	<0.0050	5.35	<0.0050	431	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	6390	7.46	978	0.34	2940	2.8	
12/15/2021	0.614	<0.010	0.0224	<0.0050	5.15	<0.0050	417	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	6120	7.23	1020	<0.50	3110	3.91	
3/17/2022	0.59	<0.010	0.0175	<0.0050	5.26	<0.0050	404	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	6240	6.93	1120	0.341	2970	10.36*	
5/10/2022	0.593	<0.010	0.0174	<0.0050	5.01	<0.0050	456	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	<0.00020	6450	7.96	1060	<0.50	2960	4.88	
9/8/2022	0.654	<0.010	0.0208	<0.0050	4.11	<0.0050	512	<0.010	<0.020	<0.0050	<0.010	<0.020	<0.060	<0.010	0.000283	6570	7.09	827	0.286	2880	4.95	
11/22/2022	0.589	<0.010	0.0164	<0.0050	5.21	<0.0050	492	<0.010	<0.020	<0.0050	<0.010	0.0325	<0.060	<0.010	0.000283	6330	7.71	935	0.406	2900	4.96	
6/1/2023	n/a**	n/a**	n/a**	n/a**	4.97**	n/a**	372**	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**	1560**	7.84**	300**	0.285**	792**	n/a**		

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

** Indicates constituent was sampled during the event, but not included in background analysis

<2

Indicates sampling event included in a previous BER

Table 1: Background Data for Appendix III and IV Constituents

Date	Monitoring Well MW-5 Sampling Results																				
	Lithium (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Selenium (mg/L)	Antimony (mg/L)	Thallium (mg/L)	Mercury (mg/L)	Total Dissolved Solids (mg/L)	pH (Std Units)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Combined Radium (pCi/L)
3/24/2021	0.73	<0.010	0.024	<0.0050	2.7	<0.0050	535	<0.010	<0.020	<0.0050	<0.010	0.4	<0.060	<0.010	<0.00020	7760	7.2	1190	0.22	3400	3.64
6/22/2021	0.807	<0.010	0.0218	<0.0050	2.6	<0.0050	466	<0.010	<0.020	<0.0050	<0.010	0.441	<0.060	<0.010	<0.00020	7960	7.23	1290	<0.50	3570	4.316
9/17/2021	0.685	<0.010	0.0199	<0.0050	2.85	<0.0050	507	<0.010	<0.020	<0.0050	<0.010	0.404	<0.060	<0.010	<0.00020	7650	7.27	1250	0.378	3290	3.84
12/15/2021	0.75	<0.010	0.0225	<0.0050	3.13	<0.0050	513	<0.010	<0.020	<0.0050	<0.010	0.359	<0.060	<0.010	<0.00020	7000	7.16	1330	0.265	3590	4.83
3/17/2022	0.76	<0.010	0.0155	<0.0050	3.18	<0.0050	561	<0.010	<0.020	<0.0050	<0.010	0.369	<0.060	<0.010	<0.00020	7260	6.96	1310	<0.50	3470	11.46*
5/10/2022	0.768	<0.010	0.0181	<0.0050	3.2	<0.0050	575	<0.010	<0.020	<0.0050	<0.010	0.266	<0.060	<0.010	<0.00020	8330	6.91	1600	<0.50	3610	5.96
9/8/2022	0.636	<0.010	0.0153	<0.0050	2.49	<0.0050	555	<0.010	<0.020	<0.0050	<0.010	0.42	<0.060	<0.010	0.000374	7140	7.07	1140	0.284	3240	3.99
11/22/2022	0.638	<0.010	0.0168	<0.0050	3.32	<0.0050	508	<0.010	<0.020	<0.0050	<0.010	0.415	<0.060	<0.010	0.000374	7610	7.56	1250	0.504	3340	6.05
6/1/2023	n/a**	n/a**	n/a**	n/a**	2.6**	n/a**	470**	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**	n/a**	9160**	7.86**	1280**	1.14**	3740**	n/a**

* Indicates data point is an outlier and not plotted on prediction/control chart; outlier chart is included

** Indicates constituent was sampled during the event, but not included in background analysis

<2

Indicates sampling event included in a previous BER

Appendix B: Summary Statistics and Intermediate Computations

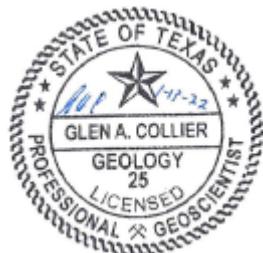


Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Statistical Limit (2017)	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	MW-1	19	1.225	0.087	2.6	1.661	N/A	Shapiro Wilk
Calcium	mg/L	MW-1	17	523.3	16.04	1030	603.5	N/A	Shapiro Wilk
Chloride	mg/L	MW-1	19	**	**	402	253^	**	Shapiro Wilk
pH at 25°C	Std. Units	MW-1	19	7.257	0.215	6.1-8.3	6.2-8.3	N/A	Shapiro Wilk
Sulfate	mg/L	MW-1	19	2383	183.2	3402	3299	N/A	Shapiro Wilk
TDS	mg/L	MW-1	19	4068	275.3	6765	5444	N/A	Shapiro Wilk
Fluoride	mg/L	MW-1	18	**	**	0.4	1.2	**	Shapiro Wilk
Lithium	ug/L	MW-1	9	395.2	27.8	780	529.2	N/A	Shapiro Wilk
Mercury	ug/L	MW-1	9	**	**	0.2	0.2	**	***
Antimony	ug/L	MW-1	9	**	**	1	7.4^	**	***
Arsenic	ug/L	MW-1	10	**	**	120	5^	**	***
Barium	ug/L	MW-1	8	22.94	10.58	1000	75.86	N/A	Shapiro Wilk
Beryllium	ug/L	MW-1	9	**	**	29	1	**	***
Cadmium	ug/L	MW-1	9	**	**	1	2	**	***
Chromium	ug/L	MW-1	9	**	**	690	7.4^	**	***
Cobalt	ug/L	MW-1	9	**	**	87	5	**	***
Lead	ug/L	MW-1	9	**	**	210	10	**	***
Molybdenum	ug/L	MW-1	9	**	**	20	20	**	***
Selenium	ug/L	MW-1	10	137.7	46.7	253.5	371.1	N/A	Shapiro Wilk
Thallium	ug/L	MW-1	9	**	**	0.89	0.5	**	***
Combined Radium	pCi/L	MW-1	9	2.843	0.677	12.33	6.229	N/A	Shapiro Wilk

N, Mean, and Standard Deviation data (when available) were taken from Sanitas control chart information

* Denotes that the statistical limit is assumed to be the current Practical Quantitation Limit (PQL) because all data are non-detects or below the current PQL

** Indicates no information due to all data are non-detects, non-detects equal to or exceed 50%, or Shapiro Wilk confirms data non-normal

*** Normality test not performed because Sanitas found data to be non-normal

◊ No mean or standard deviation are noted because the data required both a power transformation and Cohen's adjustment

N/A No transformation and/or distribution performed because Sanitas found data to be normal

^ Highest of background values

PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation
 KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Statistical Limit (2017)	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	MW-2	20	1.995	0.3075	2.4	3.533	N/A	Shapiro Wilk
Calcium	mg/L	MW-2	18	672.8	30.85	874.4	827.1	N/A	Shapiro Wilk
Chloride	mg/L	MW-2	20	2435	255	3336	3709	**	Shapiro Wilk
pH at 25°C	Std. Units	MW-2	20	**	**	6.7-7.5	6.7-7.5	**	Shapiro Wilk
Sulfate	mg/L	MW-2	20	3134	307.4	4635	4671	N/A	Shapiro Wilk
TDS	mg/L	MW-2	18	9358	803	23969	13374	N/A	Shapiro Wilk
Fluoride	mg/L	MW-2	19	**	**	2.831	1.3^	**	Shapiro Wilk
Lithium	ug/L	MW-2	9	775.4	59.5	1090	1073	N/A	Shapiro Wilk
Mercury	ug/L	MW-2	10	**	**	0.2	0.2	**	***
Antimony	ug/L	MW-2	10	**	**	1	7.7^	**	***
Arsenic	ug/L	MW-2	10	**	**	14	5.9^	**	***
Barium	ug/L	MW-2	9	23.93	7.08	529.9	59.34	N/A	Shapiro Wilk
Beryllium	ug/L	MW-2	10	**	**	1	1	**	***
Cadmium	ug/L	MW-2	10	**	**	2	2	**	***
Chromium	ug/L	MW-2	10	**	**	5	5	**	***
Cobalt	ug/L	MW-2	10	6.26	1.2	21.89	12.25	KM	Shapiro Wilk
Lead	ug/L	MW-2	10	**	**	10	10	**	***
Molybdenum	ug/L	MW-2	10	**	**	24	24^	**	***
Selenium	ug/L	MW-2	11	**	**	26	26^	**	***
Thallium	ug/L	MW-2	10	**	**	0.5	0.5	**	***
Combined Radium	pCi/L	MW-2	10	4.374	0.7257	8.09	8.003	N/A	Shapiro Wilk

N, Mean, and Standard Deviation data (when available) were taken from Sanitas control chart information

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** Indicates no information due to all data are non-detects, non-detects equal to or exceed 50%, or Shapiro Wilk confirms data non-normal

*** Normality test not performed because Sanitas found data to be non-normal

◊ No mean or standard deviation are noted because the data required both a power transformation and Cohen's adjustment

N/A No transformation and/or distribution performed because Sanitas found data to be normal

^ Highest of background values

PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation
KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Statistical Limit (2017)	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	MW-3	17	1.139	0.085	1.2	1.565	N/A	Shapiro Wilk
Calcium	mg/L	MW-3	18	504.3	38.63	688.1	697.5	N/A	Shapiro Wilk
Chloride	mg/L	MW-3	18	320.8	54.98	606.9	595.7	N/A	Shapiro Wilk
pH at 25°C	Std. Units	MW-3	20	**	**	5.71-8.09	6.5^7.3^	**	Shapiro Wilk
Sulfate	mg/L	MW-3	13	3041	177	4447	3926	N/A	Shapiro Wilk
TDS	mg/L	MW-3	16	5712	559	9375	8507	N/A	Shapiro Wilk
Fluoride	mg/L	MW-3	15	**	**	2.201	0.662	**	***
Lithium	ug/L	MW-3	9	867.8	176	2336	1748	N/A	Shapiro Wilk
Mercury	ug/L	MW-3	10	**	**	0.2	0.2	**	***
Antimony	ug/L	MW-3	10	**	**	1	1	**	***
Arsenic	ug/L	MW-3	10	**	**	6.1	6.1^	**	***
Barium	ug/L	MW-3	9	24.12	12.71	324.1	87.67	N/A	Shapiro Wilk
Beryllium	ug/L	MW-3	10	**	**	1	1	**	***
Cadmium	ug/L	MW-3	10	**	**	2	2	**	***
Chromium	ug/L	MW-3	10	**	**	5	5	**	***
Cobalt	ug/L	MW-3	10	6.95	1.7	20.18	15.5	KM	Shapiro Wilk
Lead	ug/L	MW-3	10	**	**	10	10	**	***
Molybdenum	ug/L	MW-3	10	**	**	20	10	**	***
Selenium	ug/L	MW-3	11	**	**	20	20	**	***
Thallium	ug/L	MW-3	10	**	**	0.5	0.5	**	***
Combined Radium	pCi/L	MW-3	10	1.618	0.139	11.97	12.39	CRT	Shapiro Wilk

N, Mean, and Standard Deviation data (when available) were taken from Sanitas control chart information

* Denotes that the statistical limit is assumed to be the current Practical Quantitation Limit (PQL) because all data are non-detects or below the current PQL

** Indicates no information due to all data are non-detects, non-detects equal to or exceed 50%, or Shapiro Wilk confirms data non-normal

*** Normality test not performed because Sanitas found data to be non-normal

◊ No mean or standard deviation are noted because the data required both a power transformation and Cohen's adjustment

N/A No transformation and/or distribution performed because Sanitas found data to be normal

^ Highest of background values

PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation
KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Statistical Limit (2017)	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	BW-1	19	3.372	0.293	6.787	4.837	N/A	Shapiro Wilk
Calcium	mg/L	BW-1	19	581.2	31.45	723.7	738.4	N/A	Shapiro Wilk
Chloride	mg/L	BW-1	19	1127	75.11	1540	1502	N/A	Shapiro Wilk
pH at 25°C	Std. Units	BW-1	18	7.102	0.178	6.8-9.5	6.2-7.9	**	Shapiro Wilk
Sulfate	mg/L	BW-1	18	2834	187.2	3884	3770	N/A	Shapiro Wilk
TDS	mg/L	BW-1	18	**	**	10119	7320	**	Shapiro Wilk
Fluoride	mg/L	BW-1	20	**	**	2.356	0.94^	**	Shapiro Wilk
Lithium	ug/L	BW-1	10	744.9	31.7	924.4	903.6	N/A	Shapiro Wilk
Mercury	ug/L	BW-1	10	**	**	0.2	0.2	**	***
Antimony	ug/L	BW-1	10	**	**	1	7.6^	**	***
Arsenic	ug/L	BW-1	10	**	**	26.45	11.2^	**	***
Barium	ug/L	BW-1	8	35.23	12.48	456.2	97.64	N/A	Shapiro Wilk
Beryllium	ug/L	BW-1	10	**	**	1	1	**	***
Cadmium	ug/L	BW-1	10	**	**	2	2	**	***
Chromium	ug/L	BW-1	10	75.2	22.3	29.12	34.9	SRT & KM	Shapiro Wilk
Cobalt	ug/L	BW-1	10	**	**	40.52	5	**	***
Lead	ug/L	BW-1	10	**	**	9.1	10	**	***
Molybdenum	ug/L	BW-1	10	**	**	22	22^	**	***
Selenium	ug/L	BW-1	11	**	**	20	20	**	***
Thallium	ug/L	BW-1	10	**	**	0.73	0.73^	**	***
Combined Radium	pCi/L	BW-1	9	4.34	0.496	9.354	6.815	N/A	Shapiro Wilk

N, Mean, and Standard Deviation data (when available) were taken from Sanitas control chart information

* Denotes that the statistical limit is assumed to be the current Practical Quantitation Limit (PQL) because all data are non-detects or below the current PQL

** Indicates no information due to all data are non-detects, non-detects equal to or exceed 50%, or Shapiro Wilk confirms data non-normal

*** Normality test not performed because Sanitas found data to be non-normal

◊ No mean or standard deviation are noted because the data required both a power transformation and Cohen's adjustment

N/A No transformation and/or distribution performed because Sanitas found data to be normal

^ Highest of background values

PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation

KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	MW-4	8	120.2	33.13	6.58	CT	Shapiro Wilk
Calcium	mg/L	MW-4	8	449.1	38.54	641.8	N/A	Shapiro Wilk
Chloride	mg/L	MW-4	8	948	188.7	1892	N/A	Shapiro Wilk
pH at 25°C	Std. Units	MW-4	8	7.38	0.335	5.7-9.1	N/A	Shapiro Wilk
Sulfate	mg/L	MW-4	8	2988	85.65	3416	N/A	Shapiro Wilk
TDS	mg/L	MW-4	8	6251	236.2	7432	N/A	Shapiro Wilk
Fluoride	mg/L	MW-4	8	0.35	0.04	0.55	KM	Shapiro Wilk
Lithium	ug/L	MW-4	8	**	**	742	**	Shapiro Wilk
Mercury	ug/L	MW-4	8	**	**	0.283^	**	***
Antimony	ug/L	MW-4	8	**	**	6	**	***
Arsenic	ug/L	MW-4	8	**	**	10.4^	**	***
Barium	ug/L	MW-4	8	20.7	3.2	37	N/A	Shapiro Wilk
Beryllium	ug/L	MW-4	8	**	**	5	**	***
Cadmium	ug/L	MW-4	8	**	**	5	**	***
Chromium	ug/L	MW-4	8	**	**	10	**	***
Cobalt	ug/L	MW-4	8	**	**	20*	**	***
Lead	ug/L	MW-4	8	**	**	5	**	***
Molybdenum	ug/L	MW-4	8	**	**	10	**	***
Selenium	ug/L	MW-4	8	**	**	32.5	**	***
Thallium	ug/L	MW-4	8	**	**	2	**	***
Combined Radium	pCi/L	MW-4	7	4.114	0.924	8.734	N/A	Shapiro Wilk

N, Mean, and Standard Deviation data (when available) were taken from Sanitas control chart information

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PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation

KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

Table 2: Summary Statistics and Intermediate Computations

Constituent	Units	Well	N	Mean	Standard Deviation	Proposed Statistical Limit	Data Transformation/Distribution	Normality Test
Boron	mg/L	MW-5	8	2.93	0.314	4.5	N/A	Shapiro Wilk
Calcium	mg/L	MW-5	8	527.5	35.82	706.6	N/A	Shapiro Wilk
Chloride	mg/L	MW-5	8	1295	138.2	1986	N/A	Shapiro Wilk
pH at 25°C	Std. Units	MW-5	8	7.17	0.203	6.2-8.2	N/A	Shapiro Wilk
Sulfate	mg/L	MW-5	8	3439	143.1	4154	N/A	Shapiro Wilk
TDS	mg/L	MW-5	8	7589	443.5	9806	N/A	Shapiro Wilk
Fluoride	mg/L	MW-5	8	1.2	0.27	1.139	In/KM	Shapiro Wilk
Lithium	ug/L	MW-5	8	722	62.6	1035	N/A	Shapiro Wilk
Mercury	ug/L	MW-5	8	**	**	0.374^	**	***
Antimony	ug/L	MW-5	8	**	**	6	**	***
Arsenic	ug/L	MW-5	8	**	**	10	**	***
Barium	ug/L	MW-5	8	19.2	3.3	35.8	N/A	Shapiro Wilk
Beryllium	ug/L	MW-5	8	**	**	5	**	***
Cadmium	ug/L	MW-5	8	**	**	5	**	***
Chromium	ug/L	MW-5	8	**	**	10	**	***
Cobalt	ug/L	MW-5	8	**	**	20	**	***
Lead	ug/L	MW-5	8	**	**	5	**	***
Molybdenum	ug/L	MW-5	8	**	**	10	**	***
Selenium	ug/L	MW-5	8	384.3	54.7	657.7	N/A	Shapiro Wilk
Thallium	ug/L	MW-5	8	**	**	2	**	***
Combined Radium	pCi/L	MW-5	7	4.66	0.994	9.632	N/A	Shapiro Wilk

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^ Highest of background values

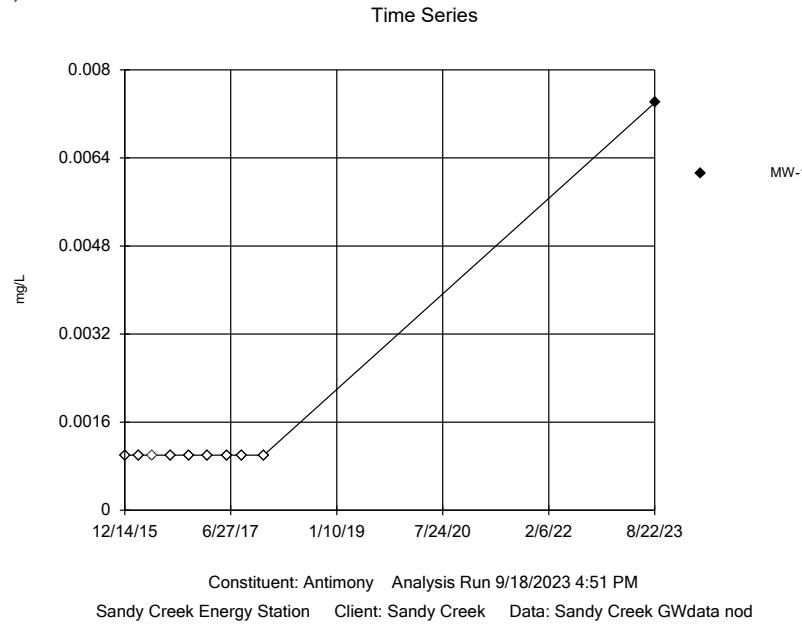
PT = Power Transformation; CA = Cohen's Adjustment; SRT = Square Root Transformation; CT = Cube Transformation

KM = Kaplan-Meier Adjustment; CRT = Cube Root Transformation; In = Natural Log Transformation; TDS = Total Dissolved Solids

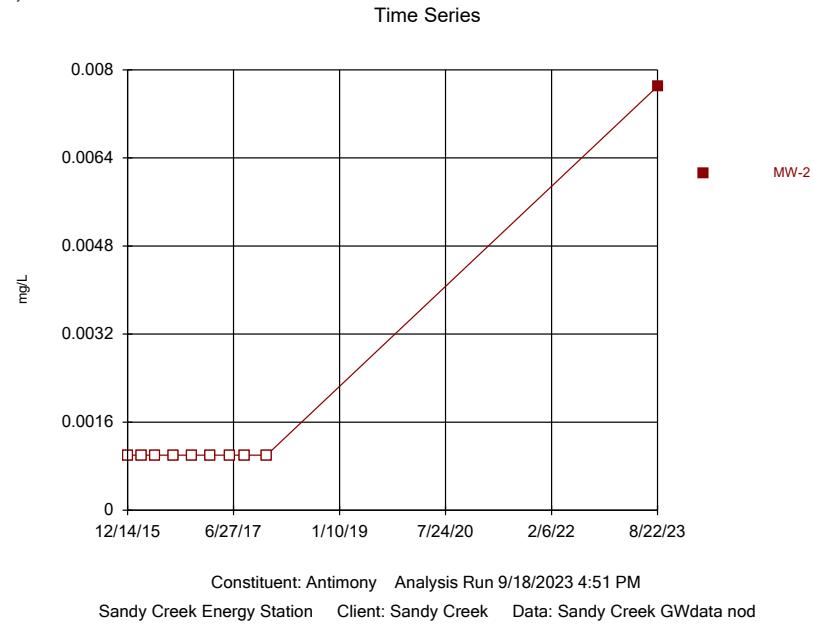
Appendix C: Statistical Analysis Charts

1. Time Series
2. Outlier Charts
3. Sen's Slope Estimate
4. Control Charts

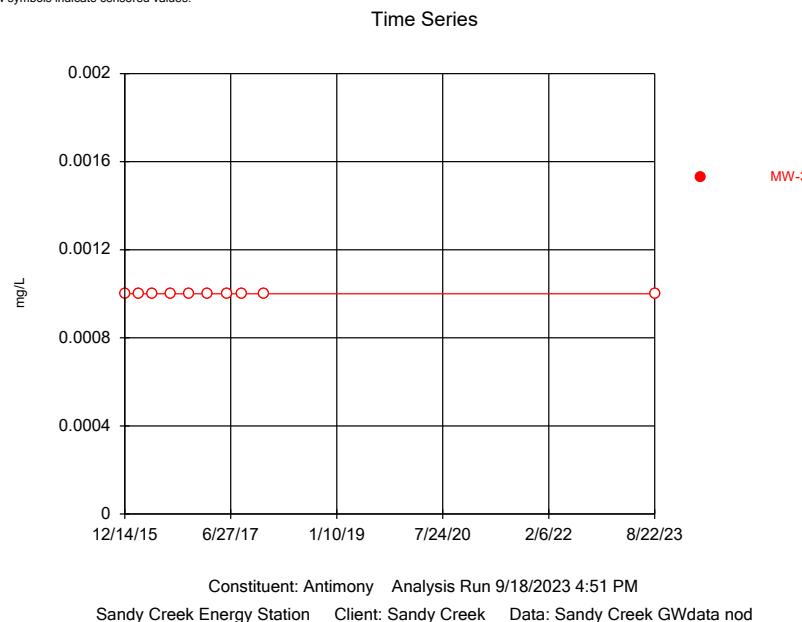
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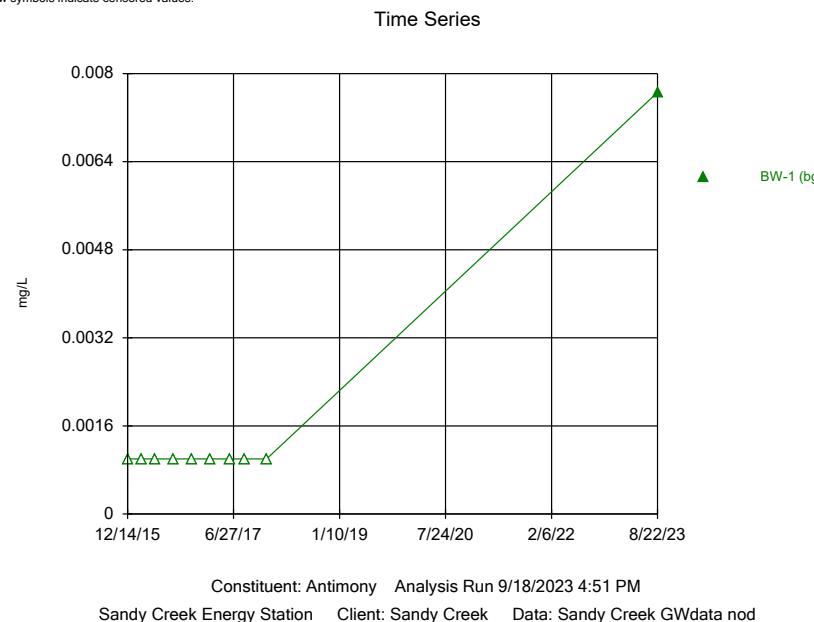
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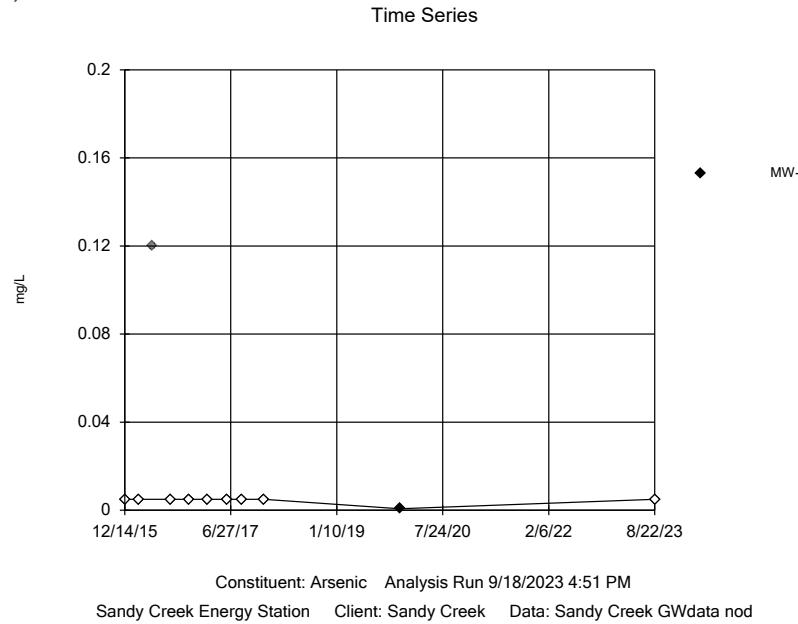
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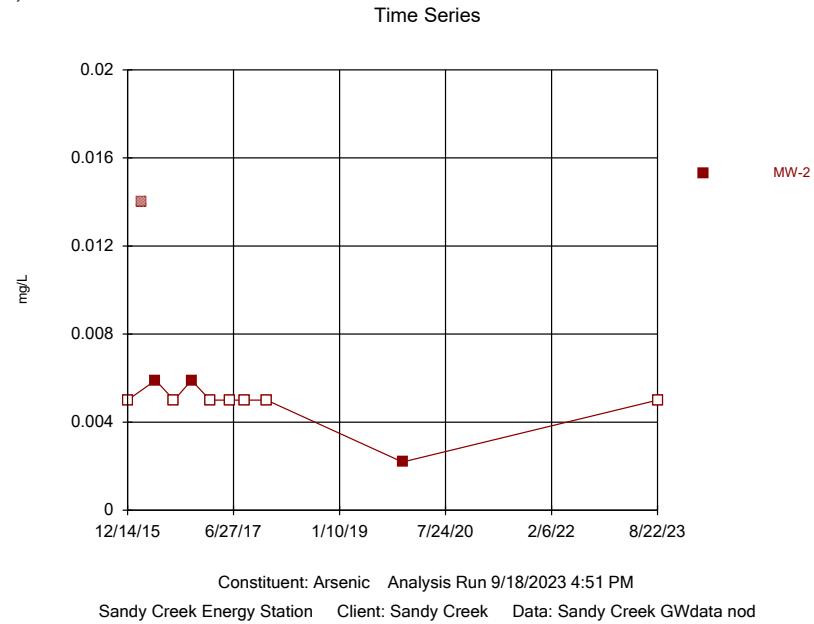
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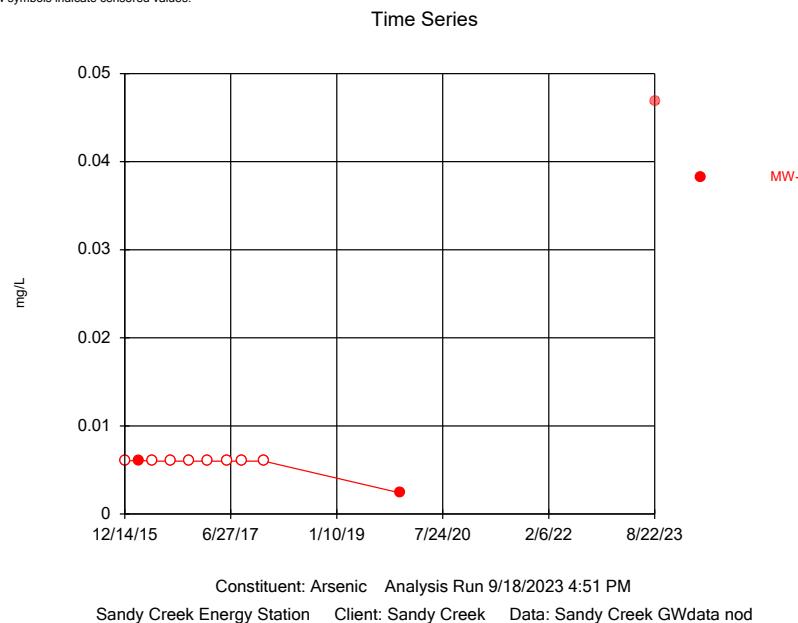
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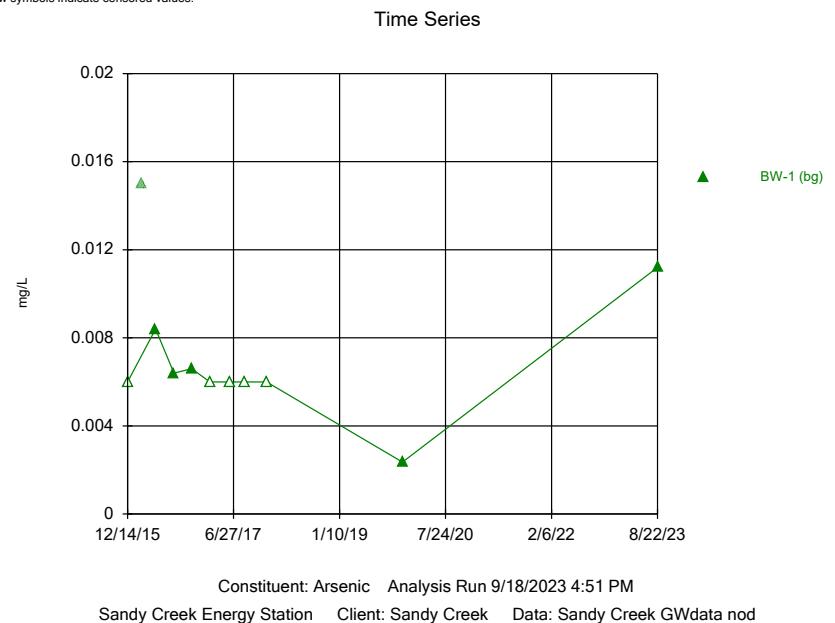
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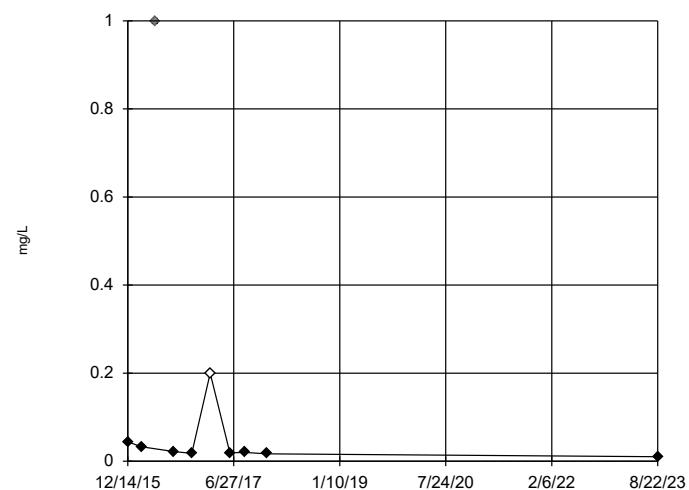
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Time Series

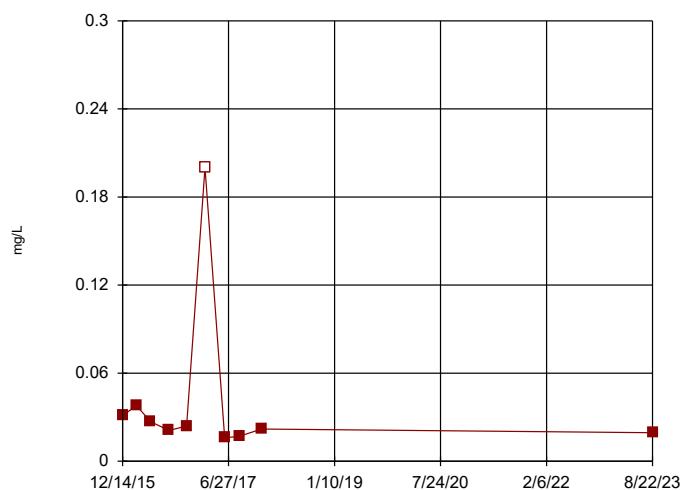


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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

Time Series



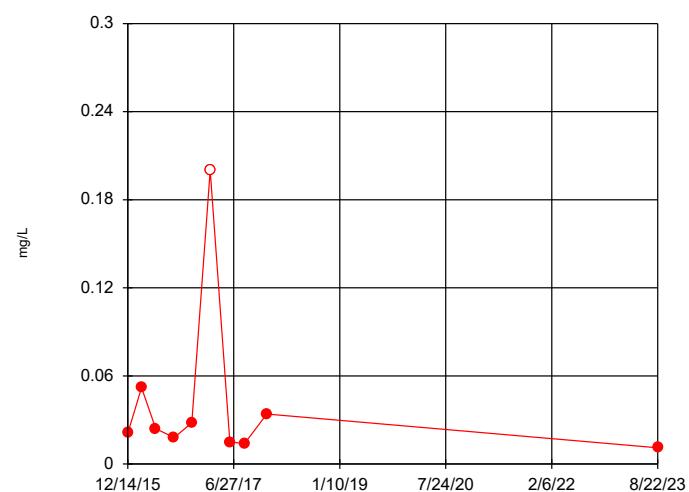
Constituent: Barium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

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Time Series



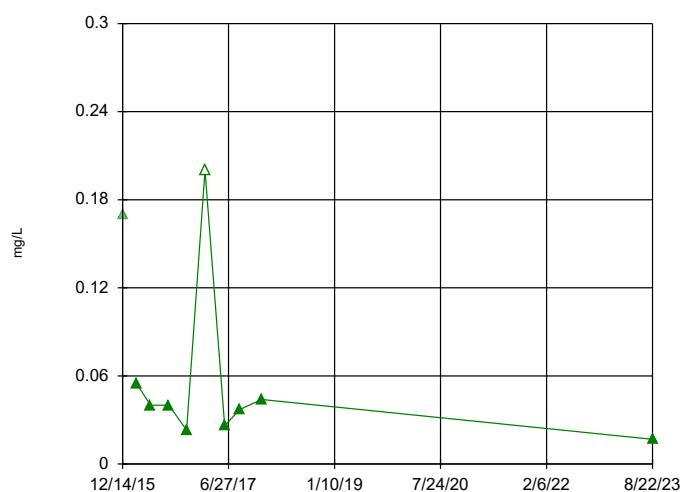
Constituent: Barium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

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Time Series

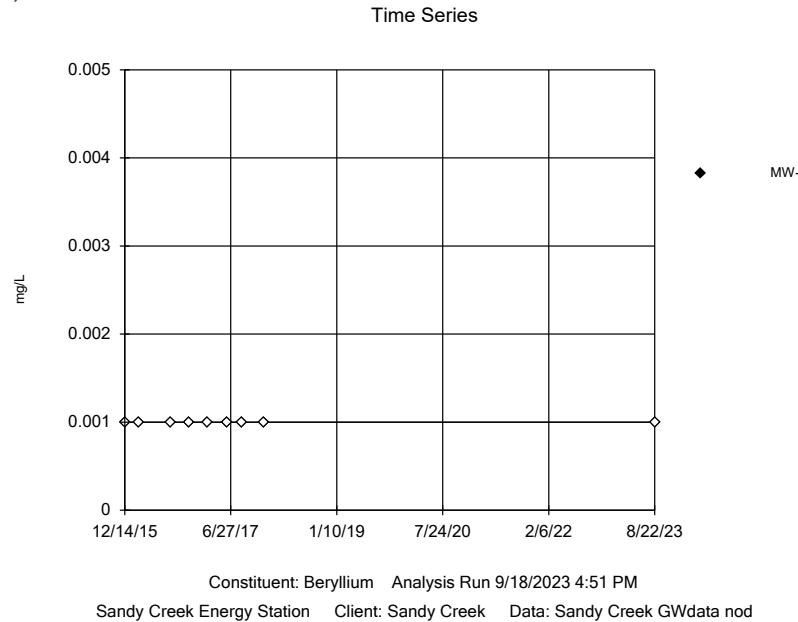


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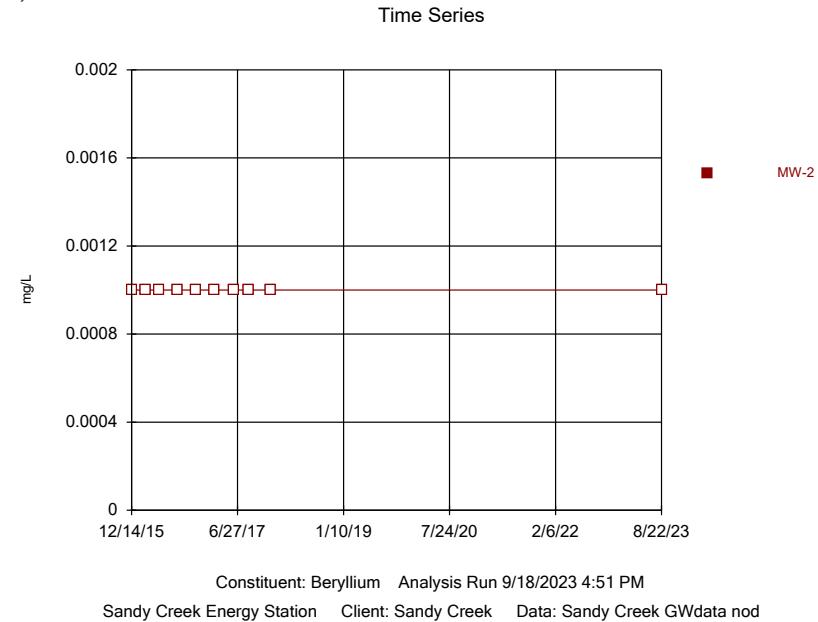
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BW-1 (bg)

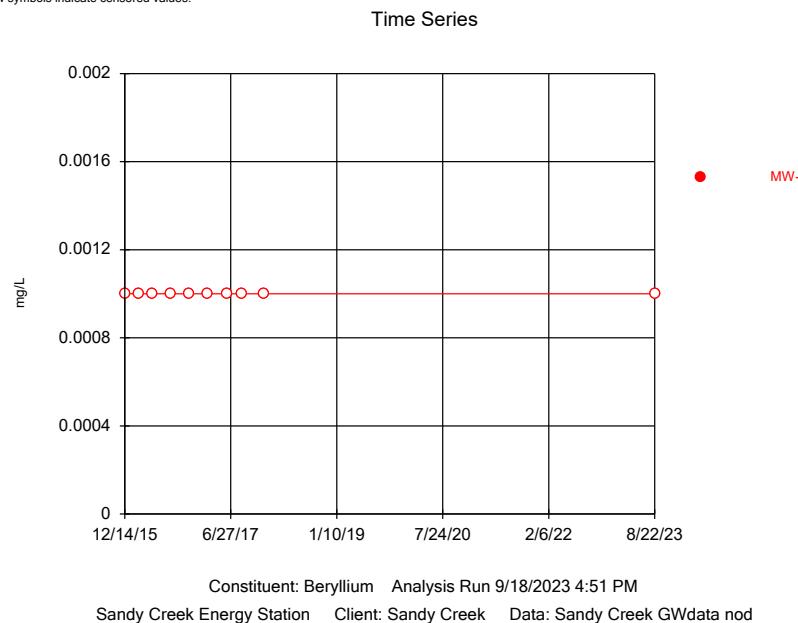
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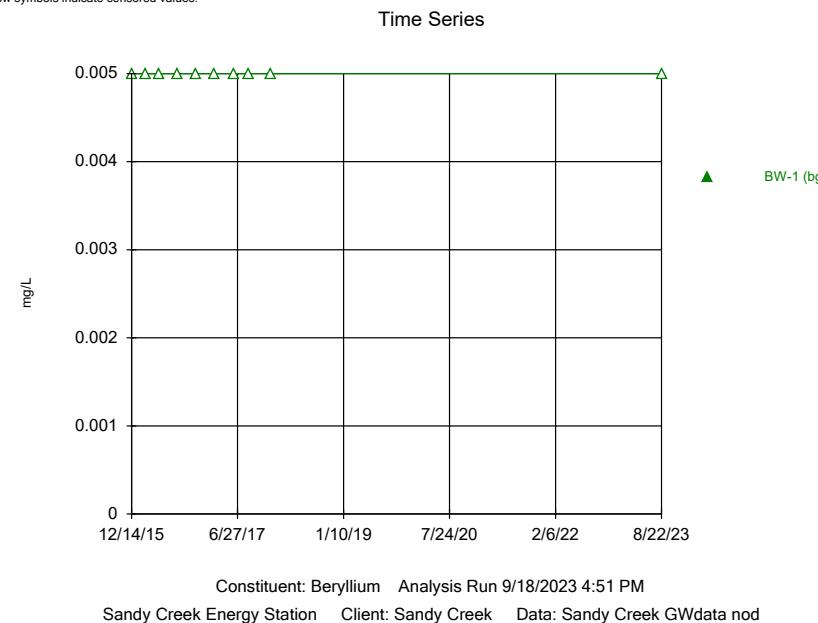
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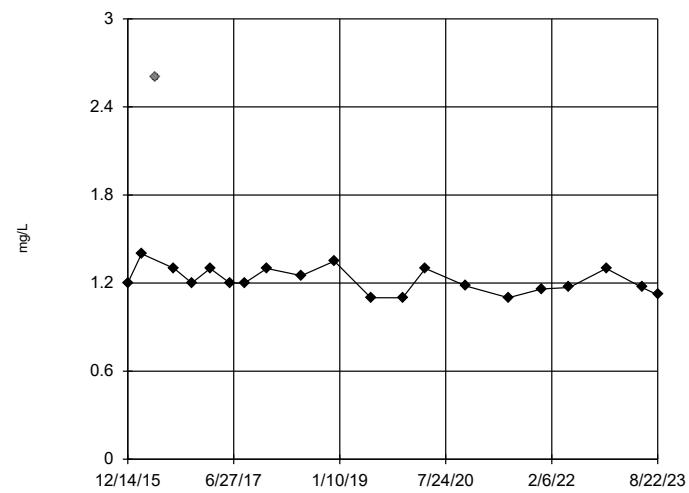
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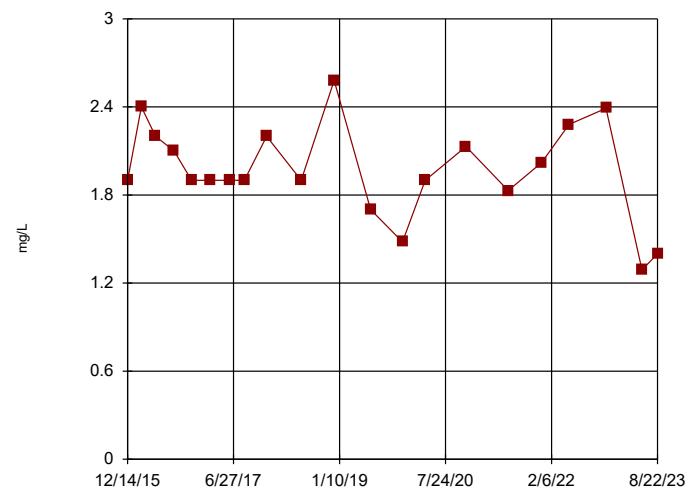
Time Series



Constituent: Boron Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

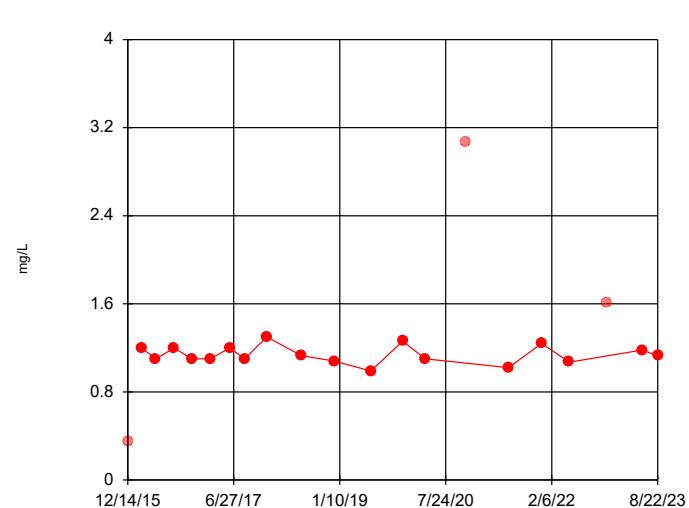


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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

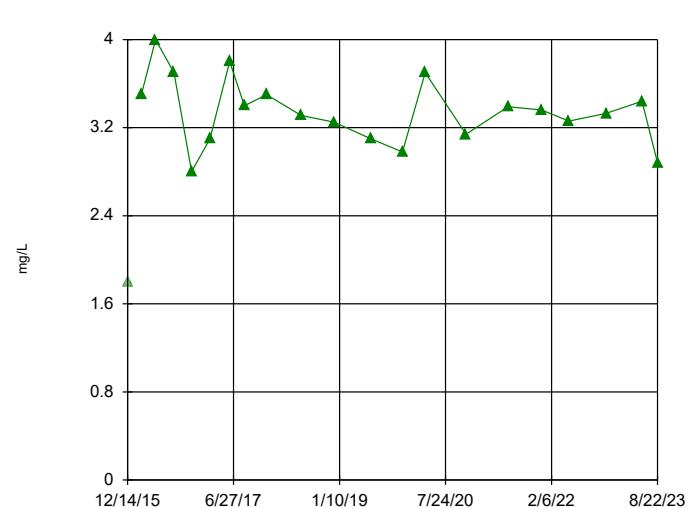
Time Series



Constituent: Boron Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

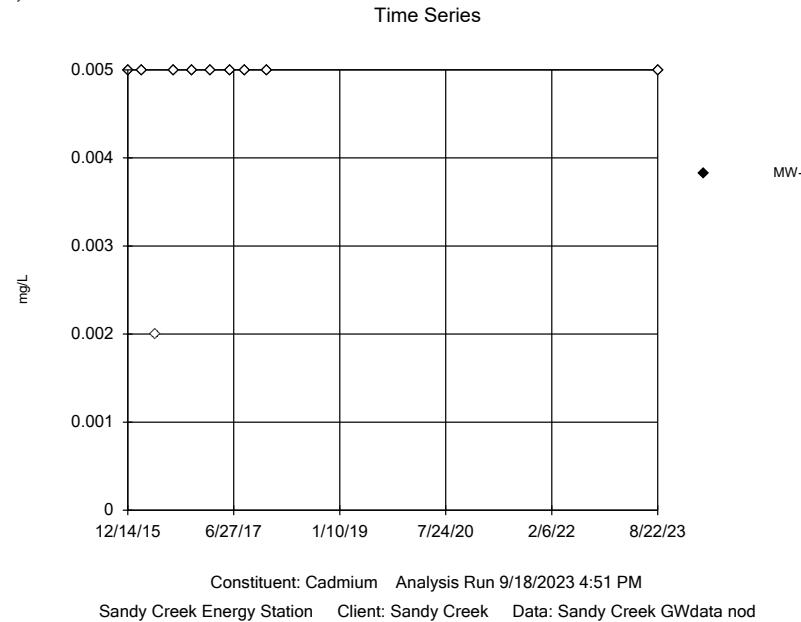


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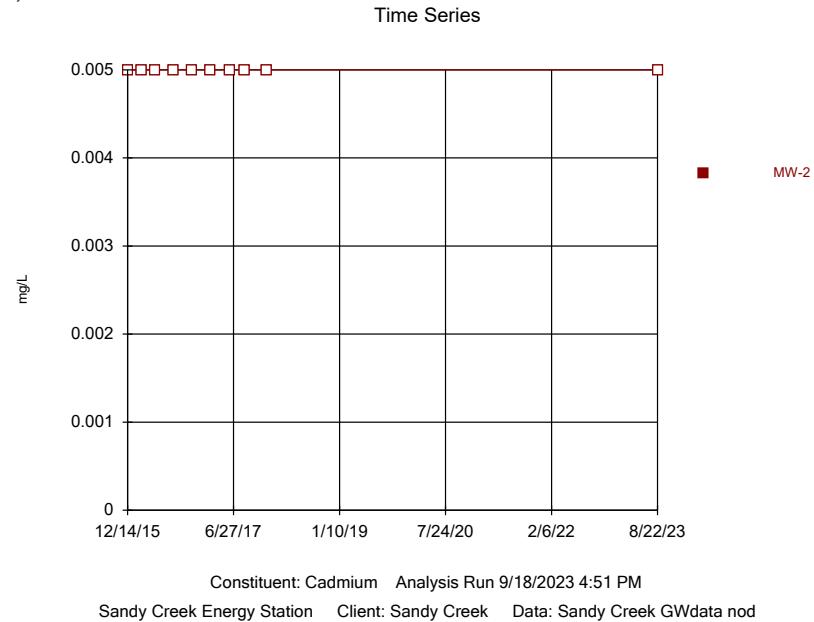
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BW-1 (bg)

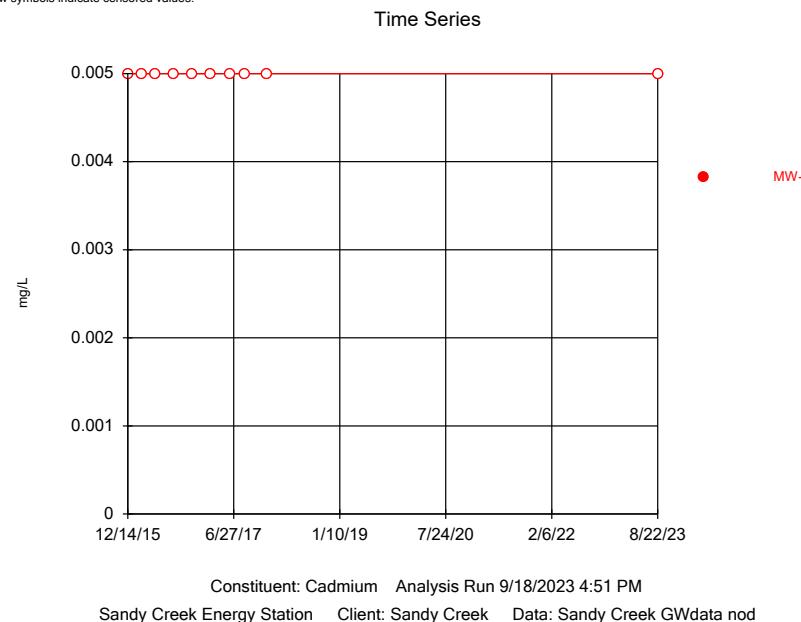
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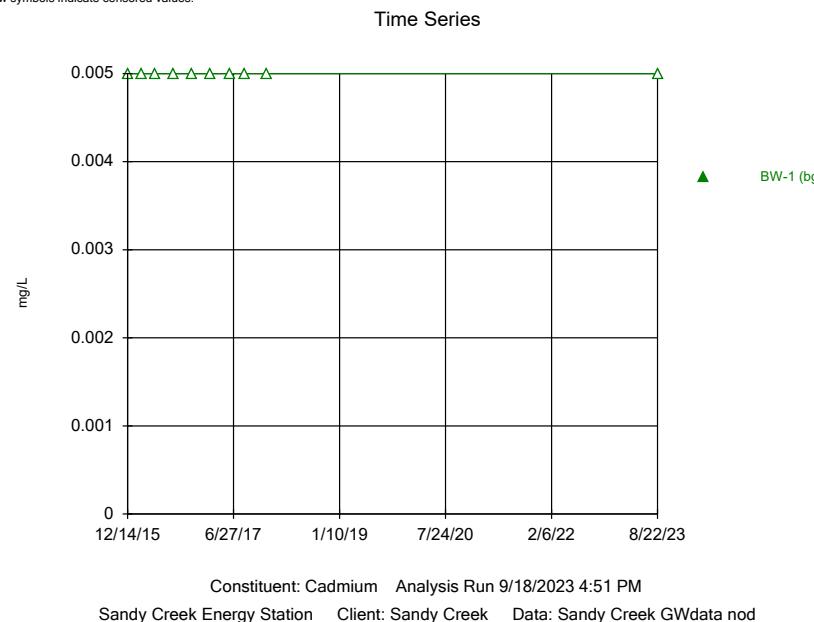
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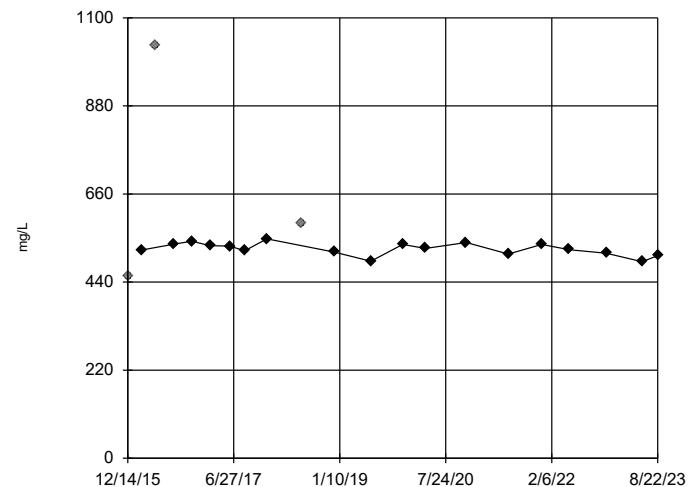
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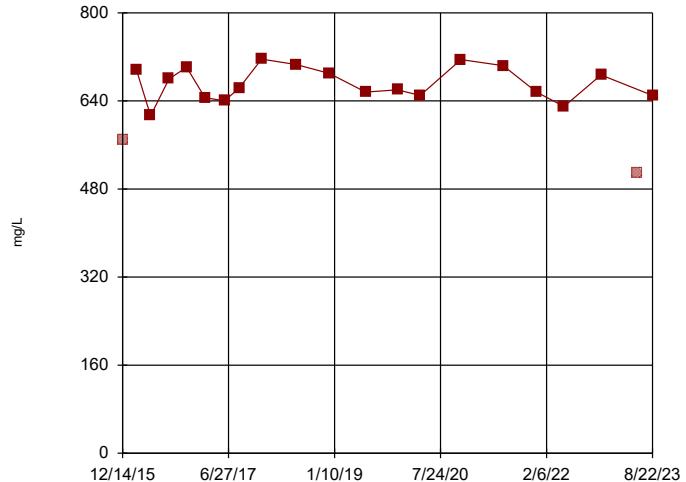
Time Series



Constituent: Calcium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

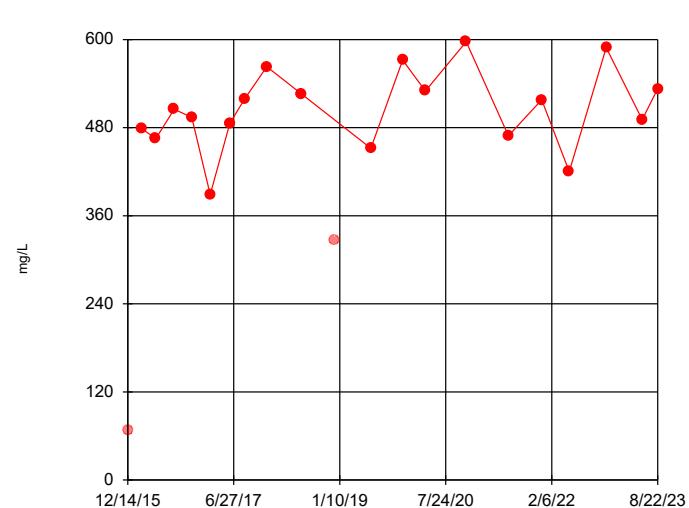
Time Series



Constituent: Calcium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

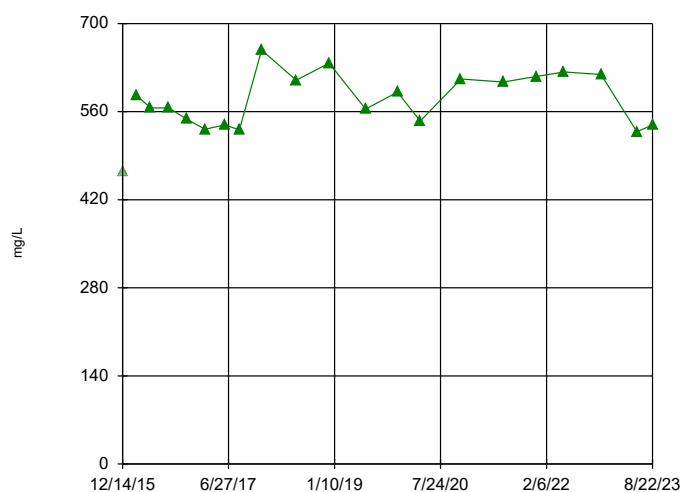
Time Series



Constituent: Calcium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

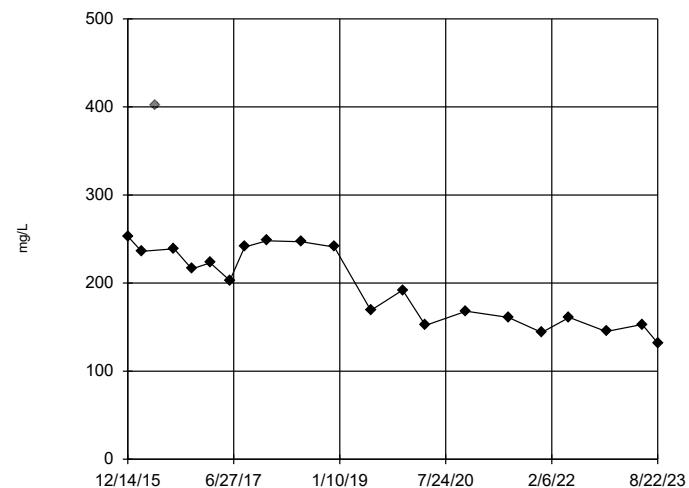
Time Series



Constituent: Calcium Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

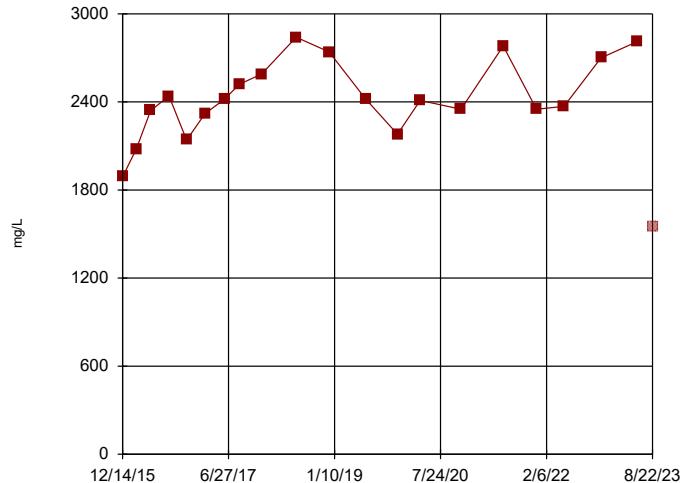


MW-1

Constituent: Chloride Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

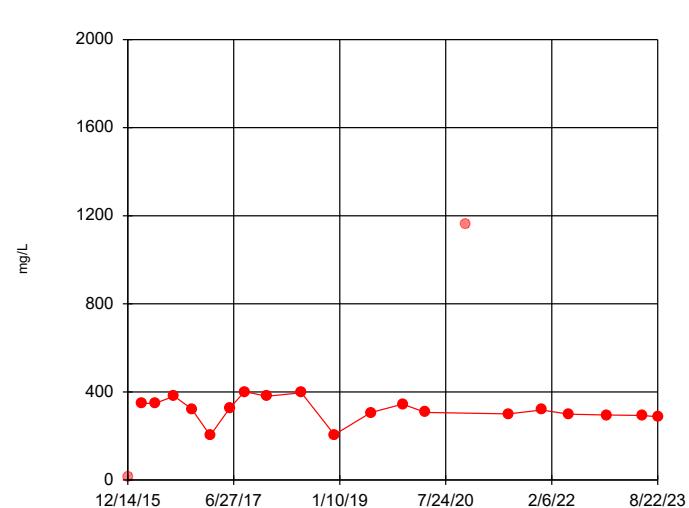


MW-2

Constituent: Chloride Analysis Run 9/18/2023 4:51 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

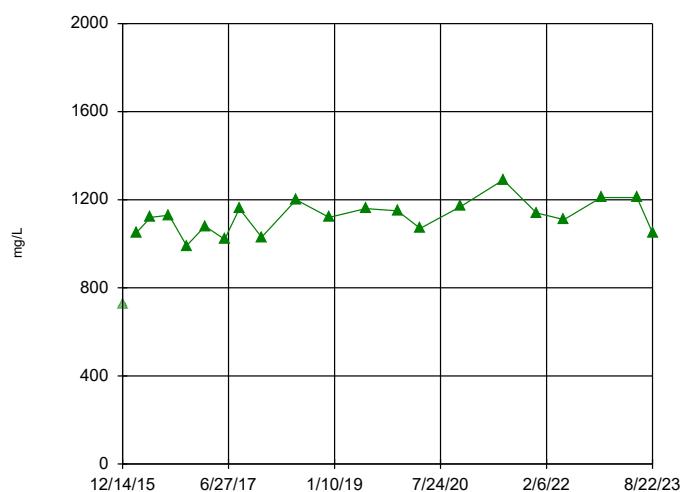


MW-3

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Time Series

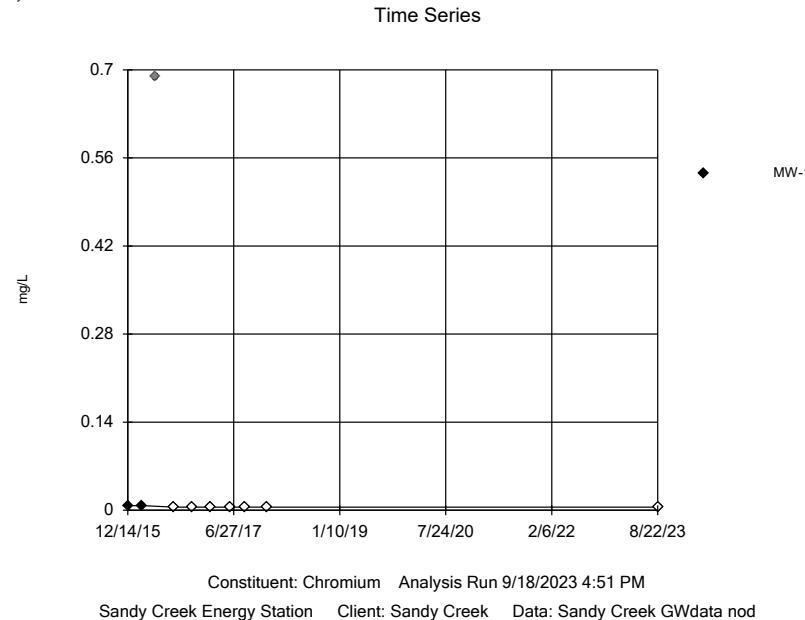


BW-1 (bg)

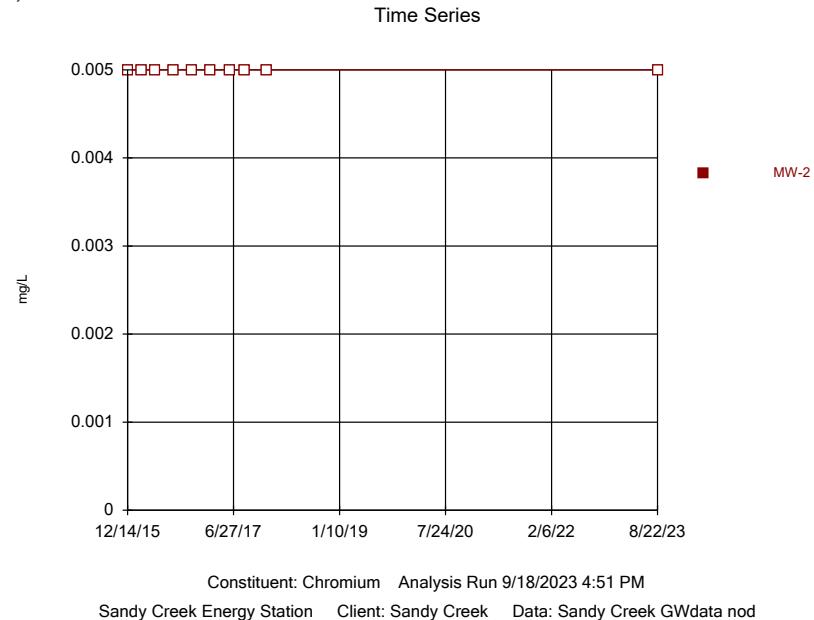
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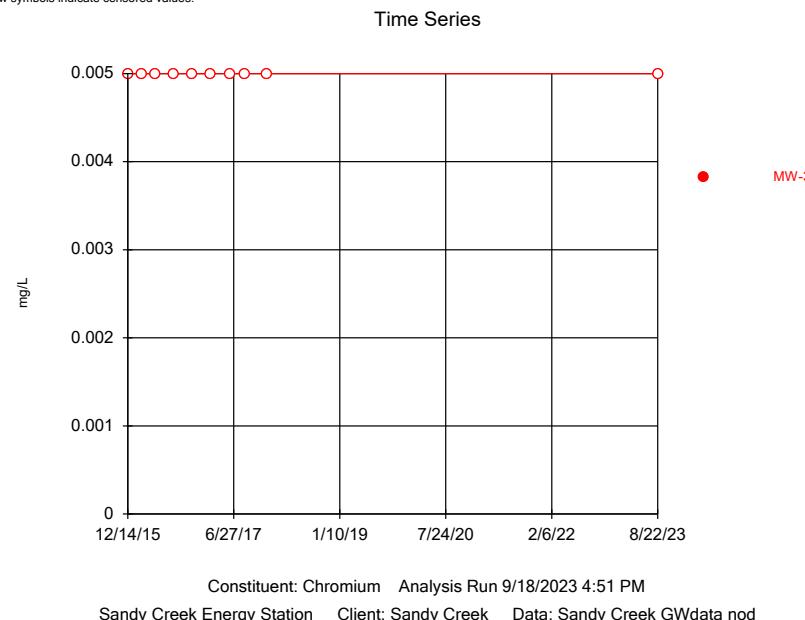
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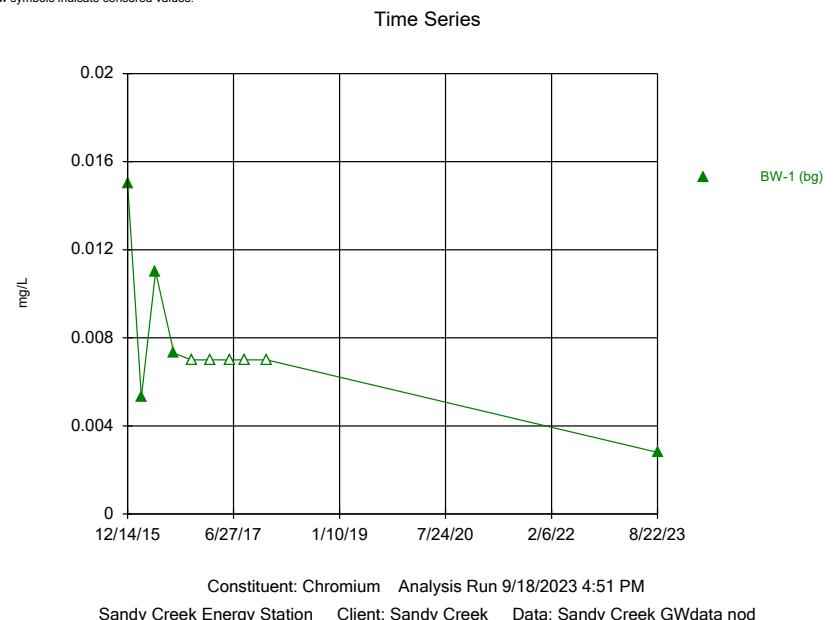
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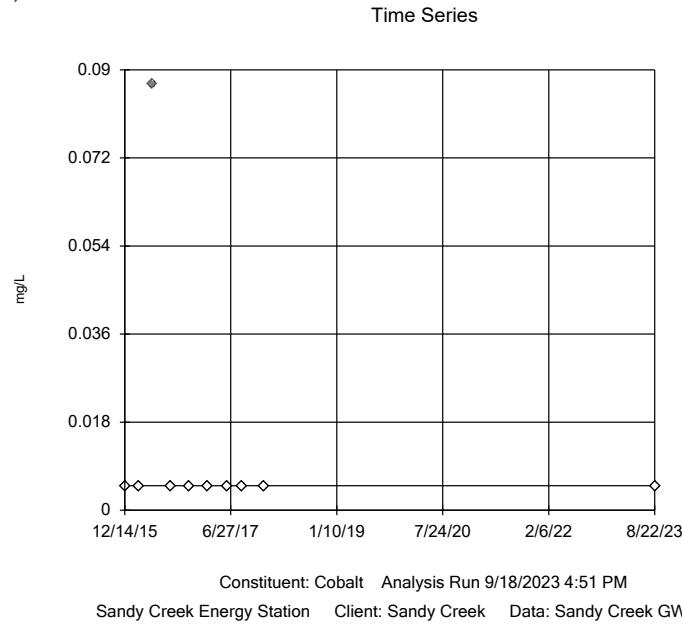
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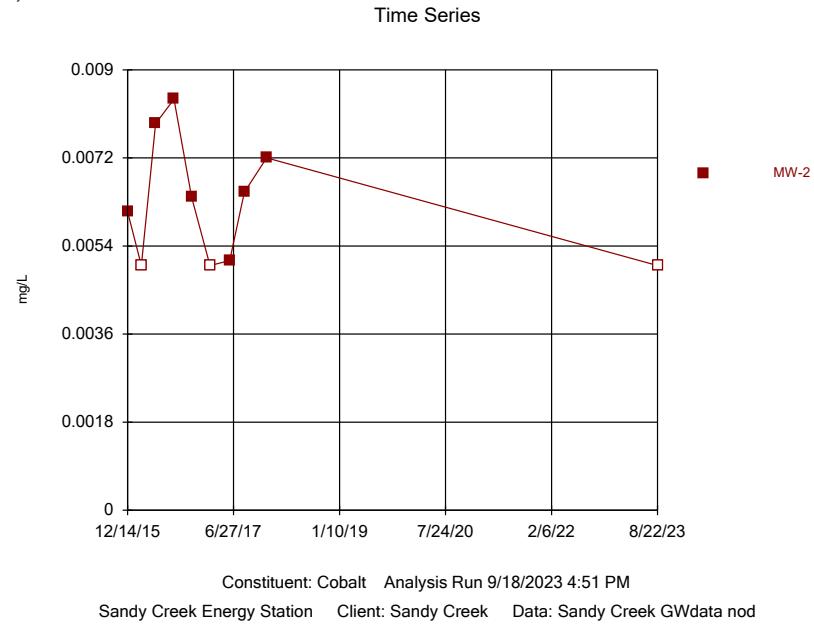
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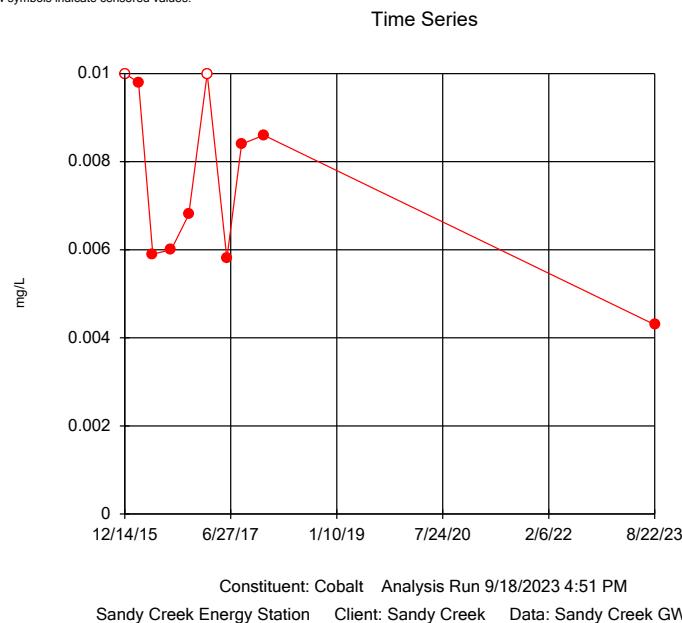
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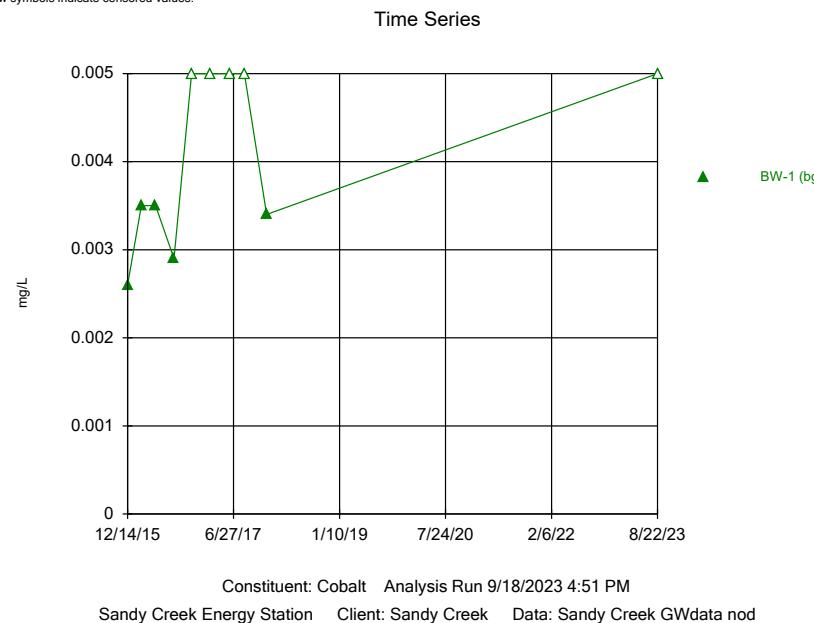
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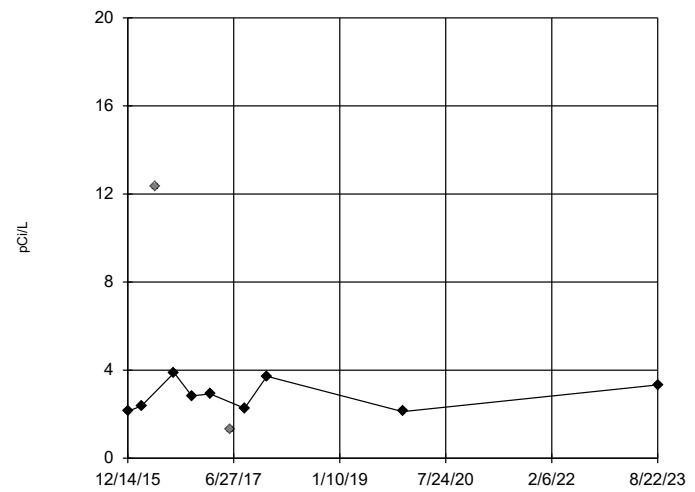
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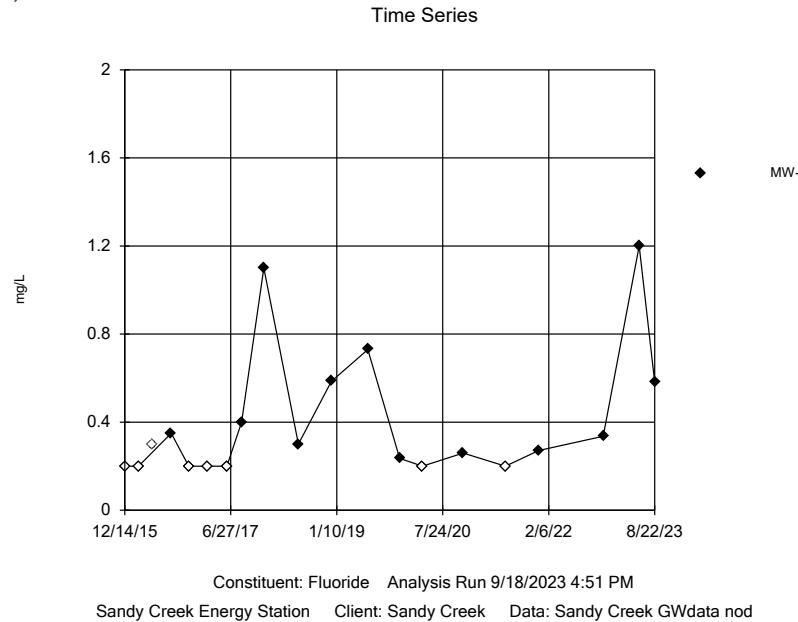
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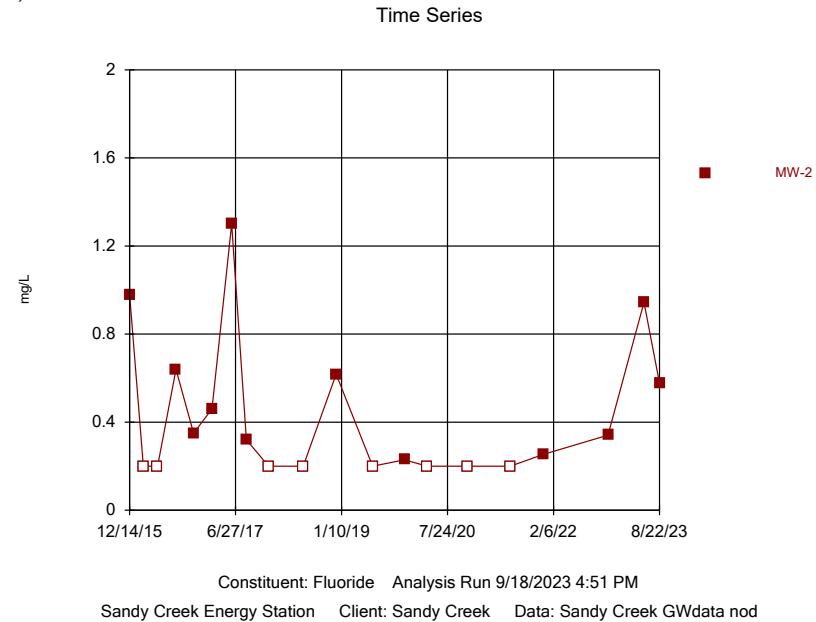
Time Series



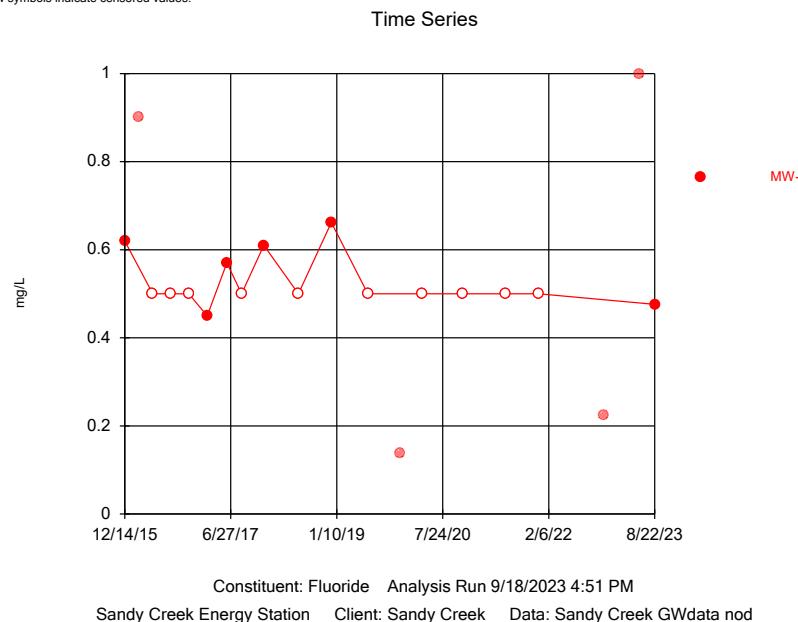
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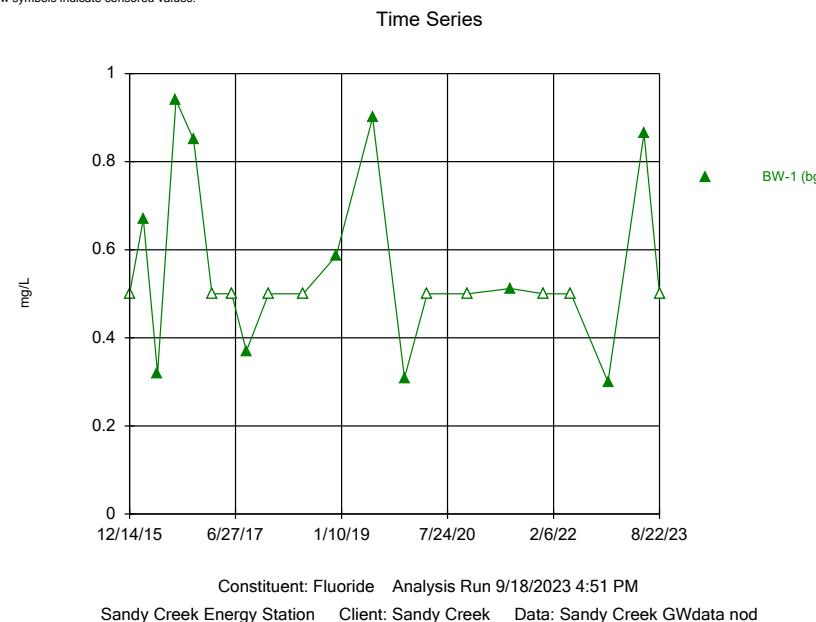
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Hollow symbols indicate censored values.



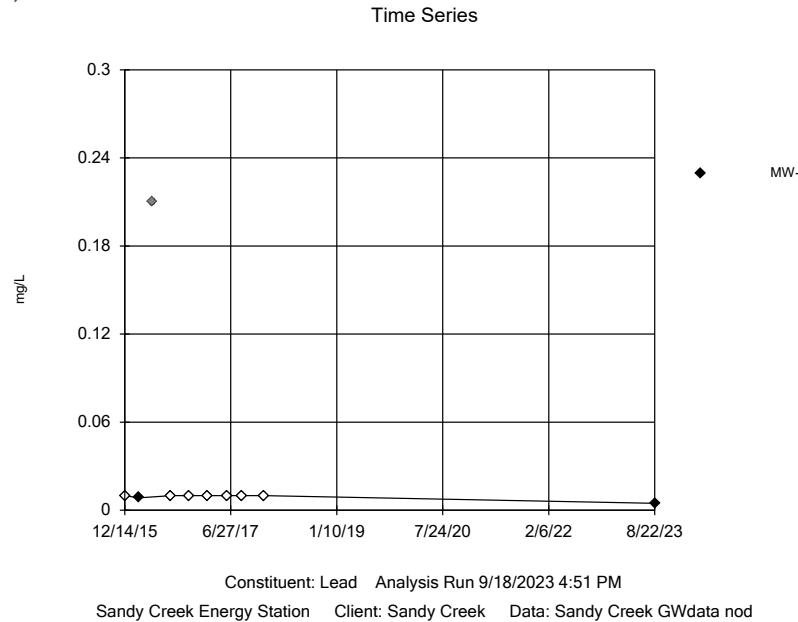
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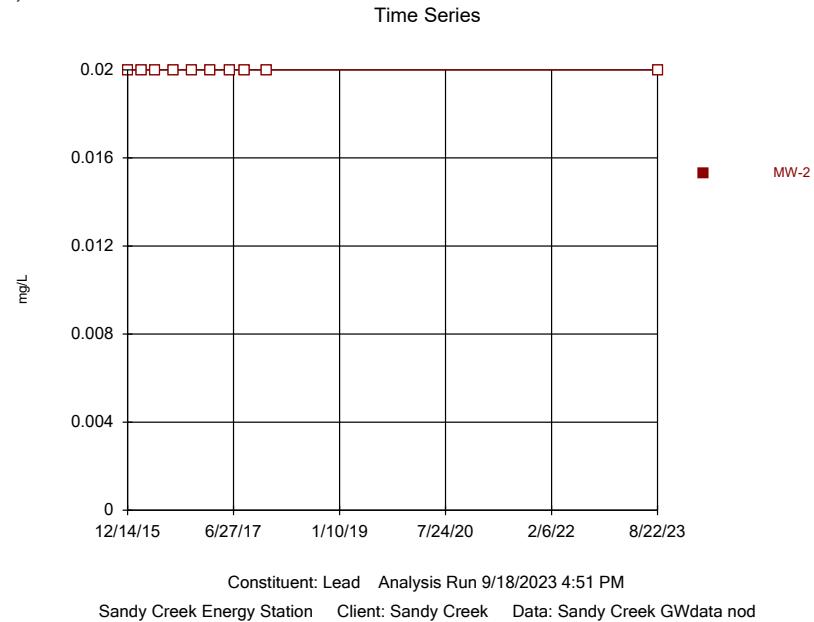
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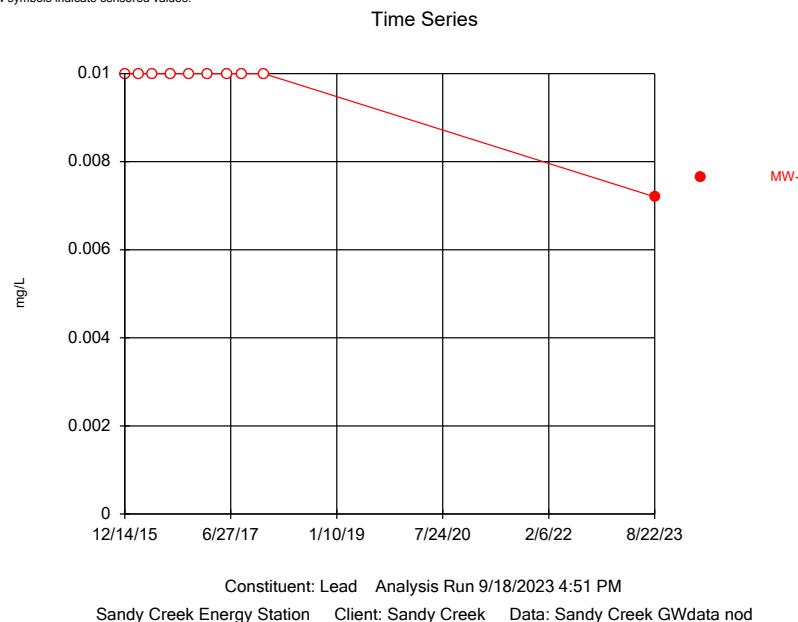
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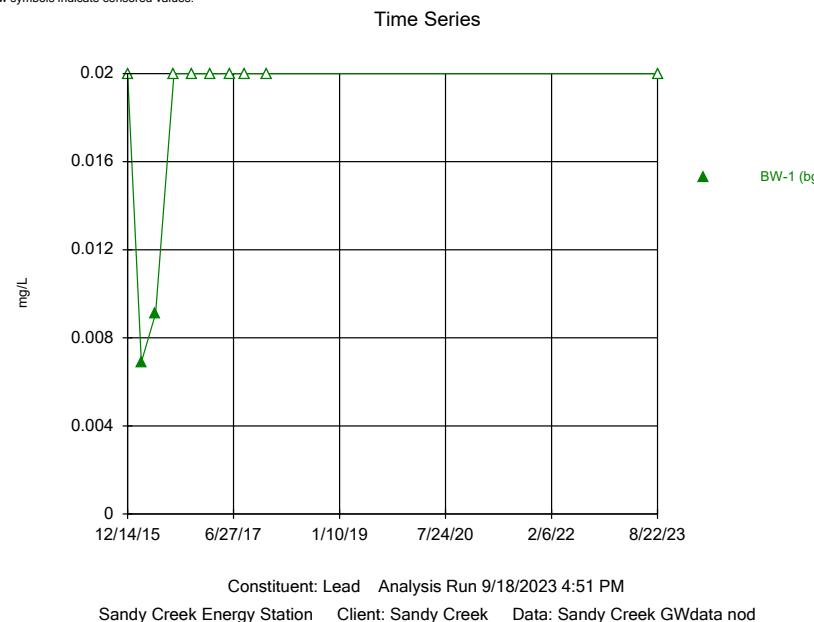
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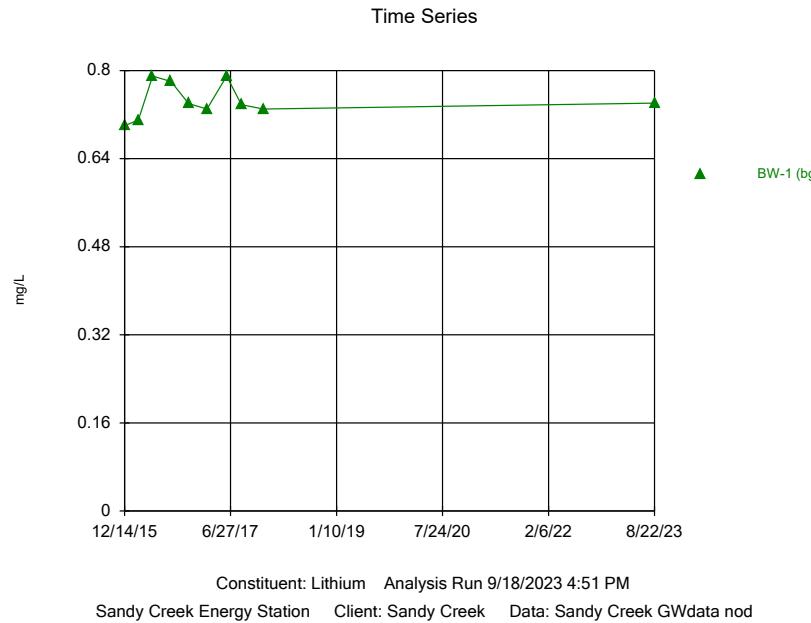
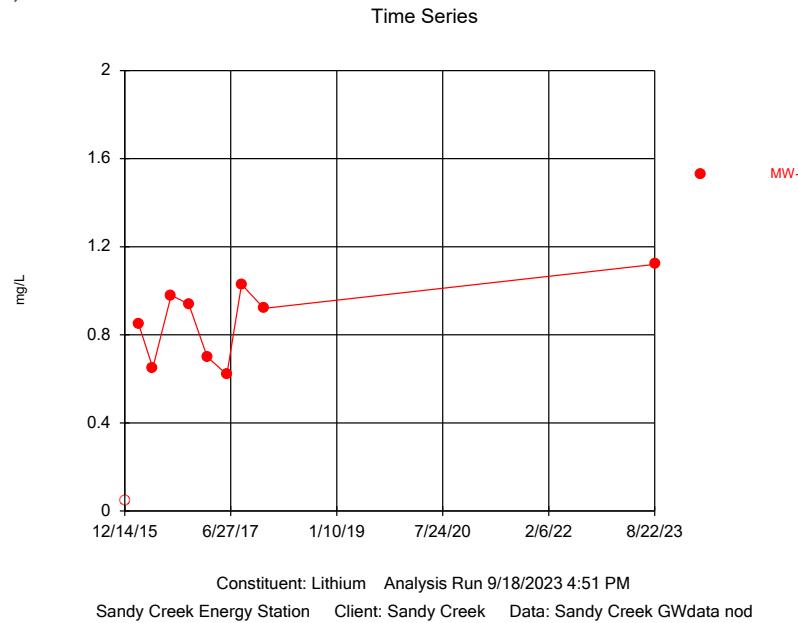
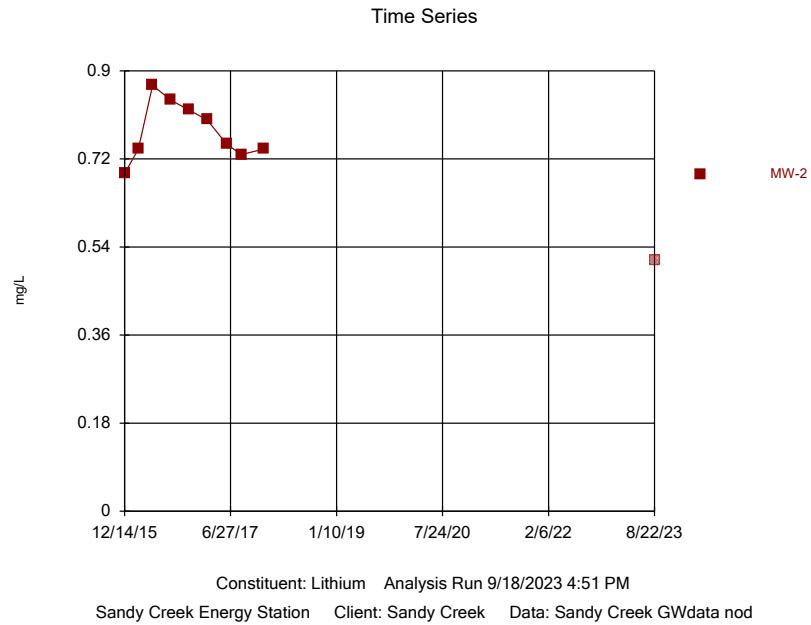
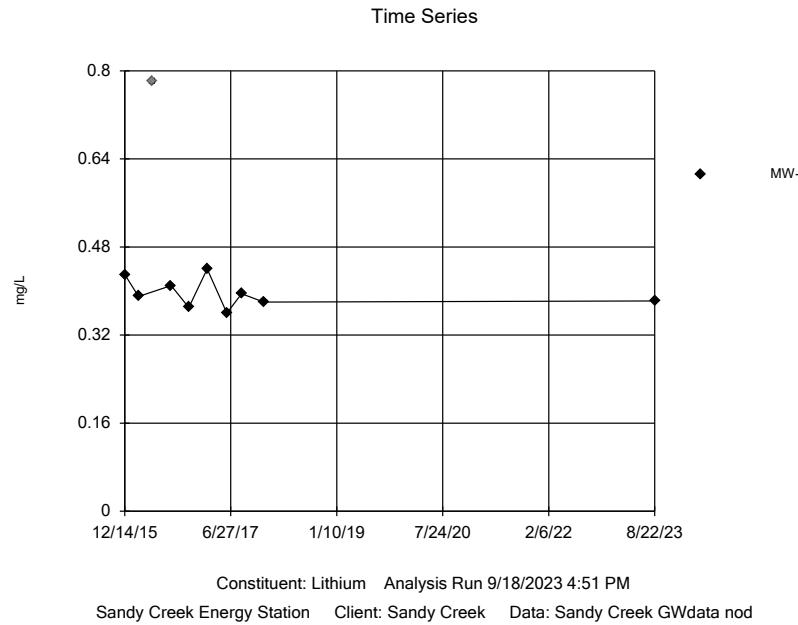


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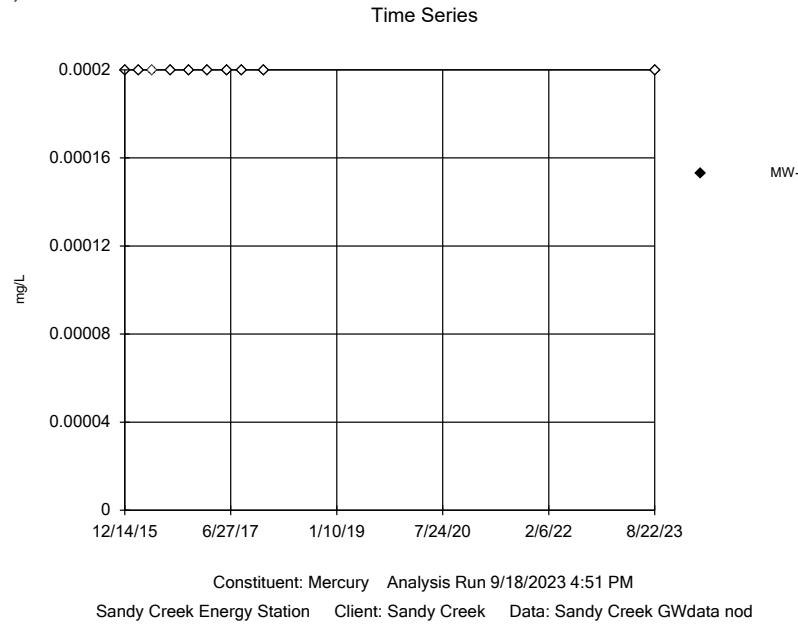


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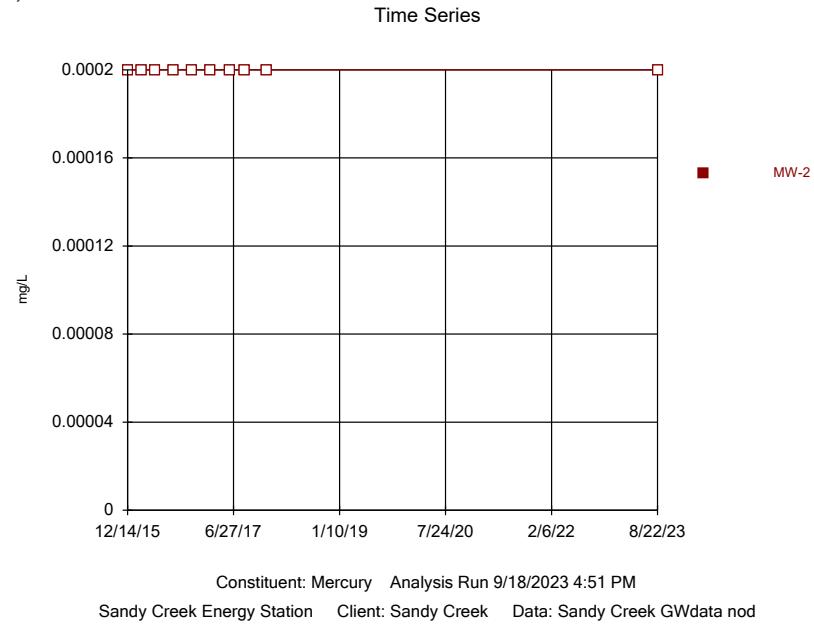




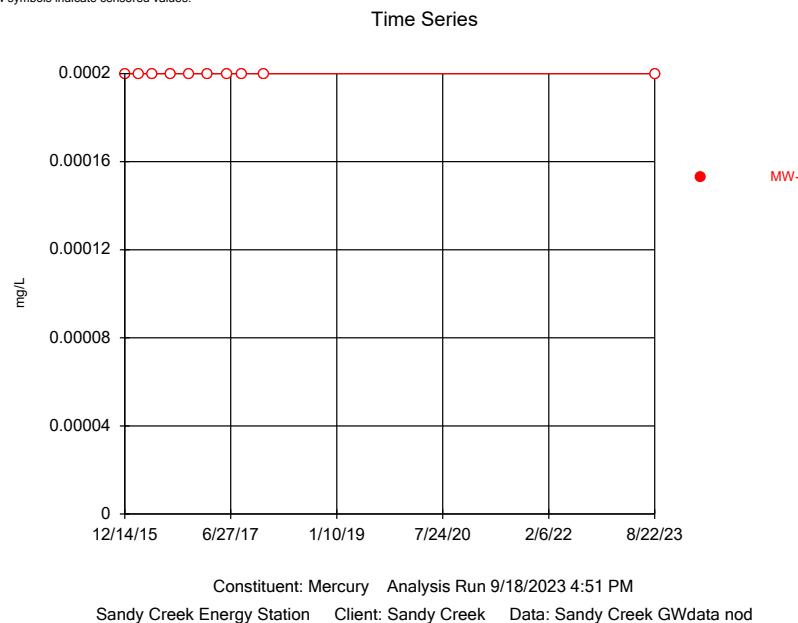
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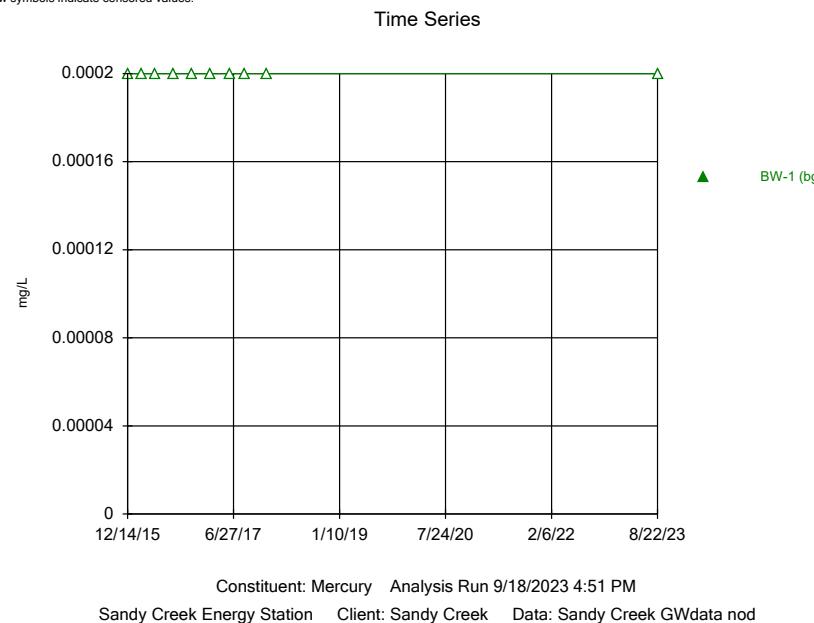
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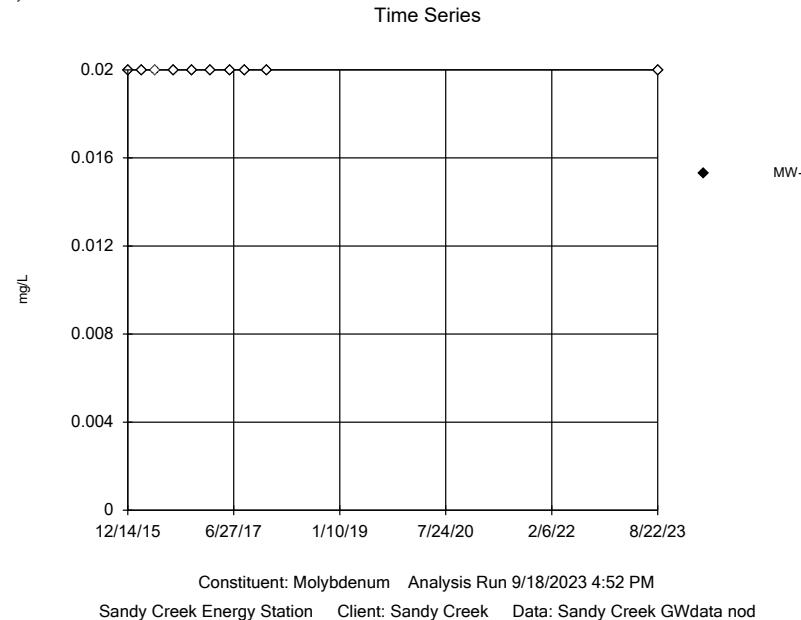
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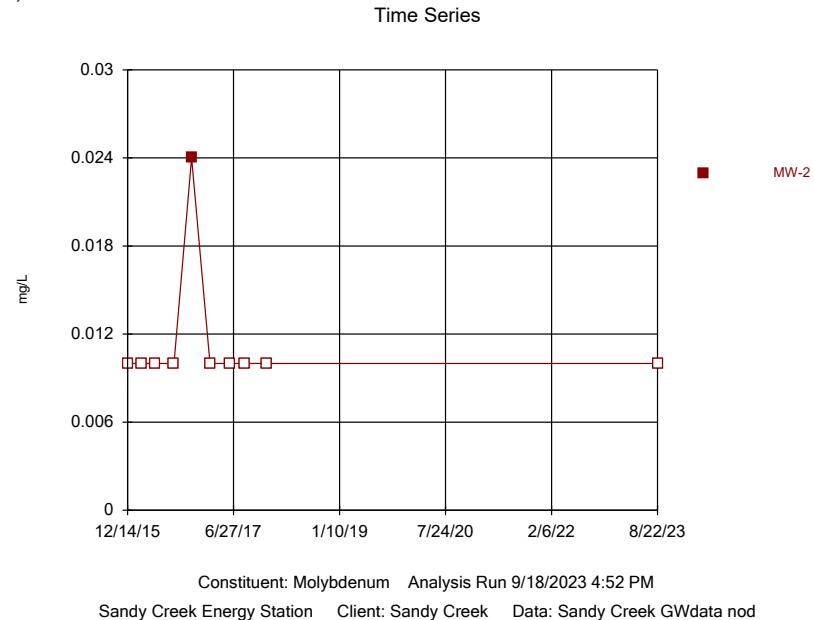
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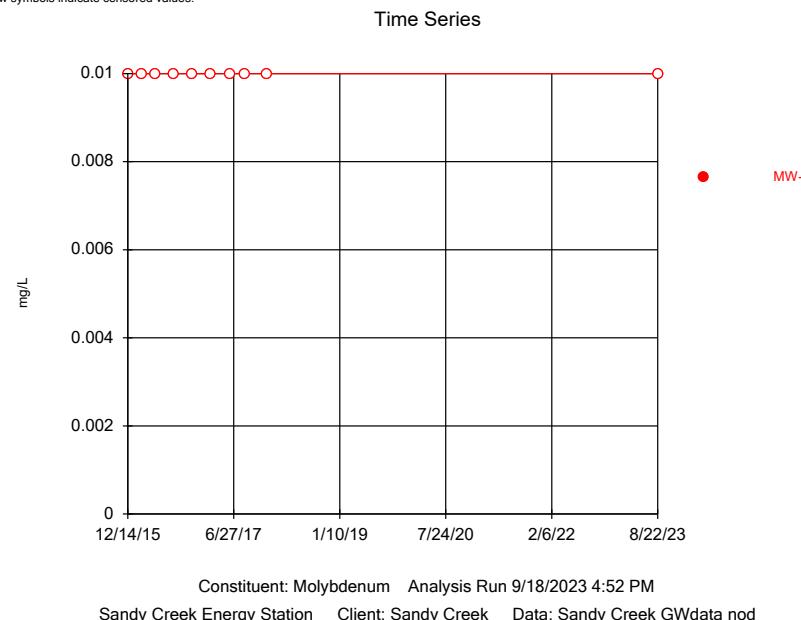
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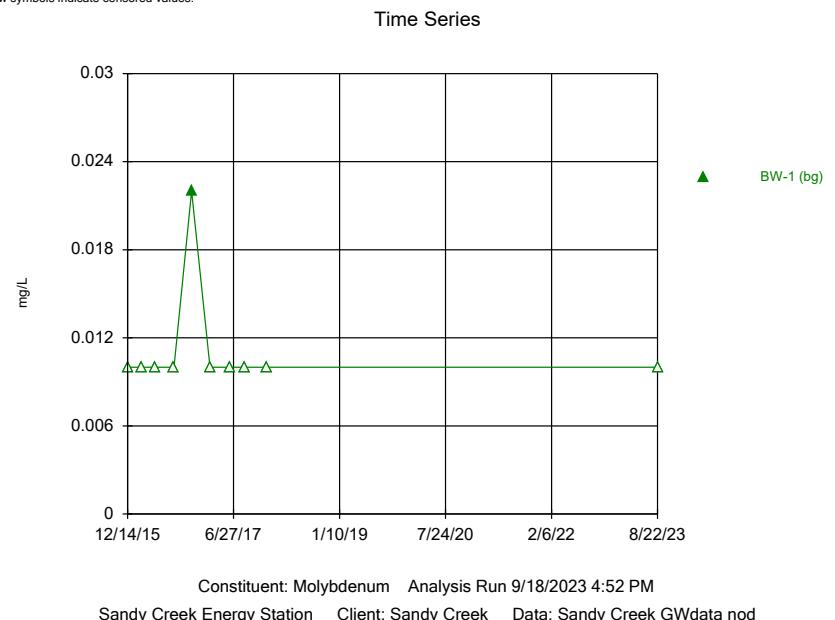
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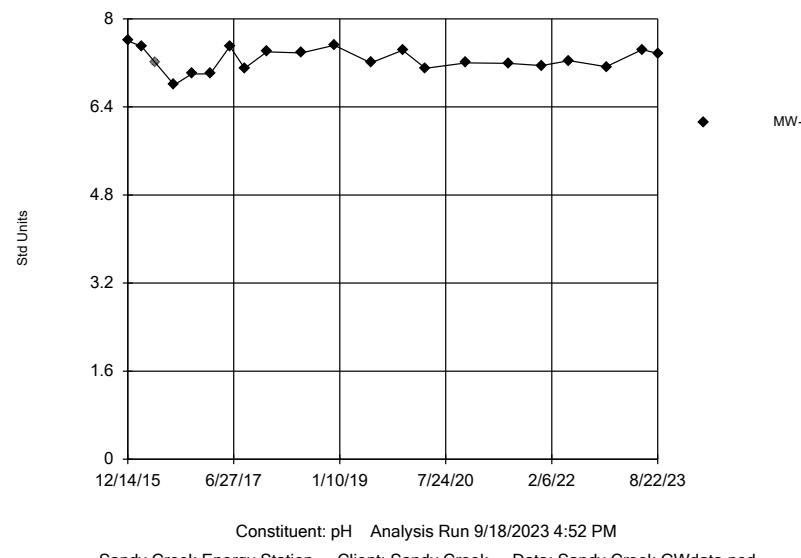
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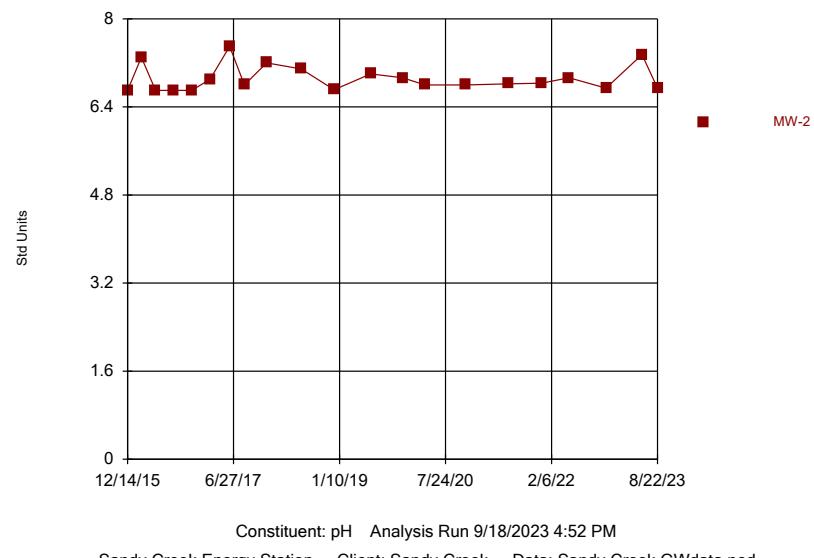


Time Series

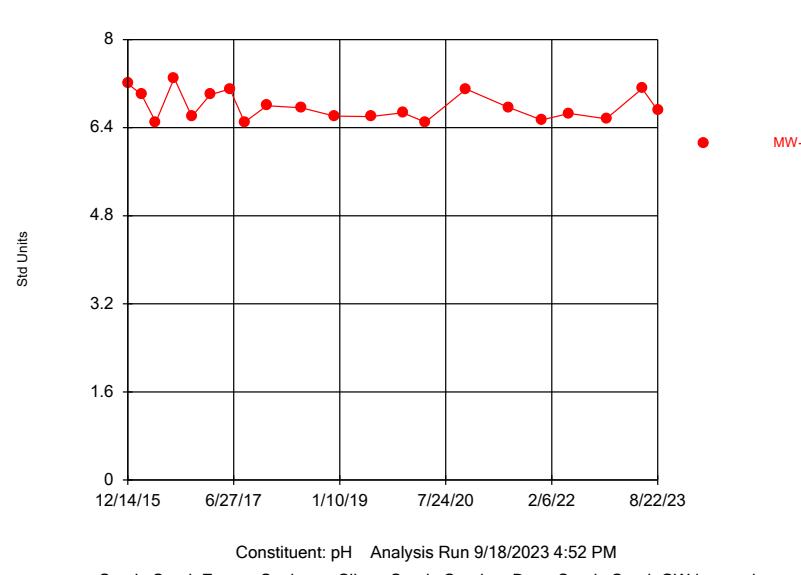


MW-1

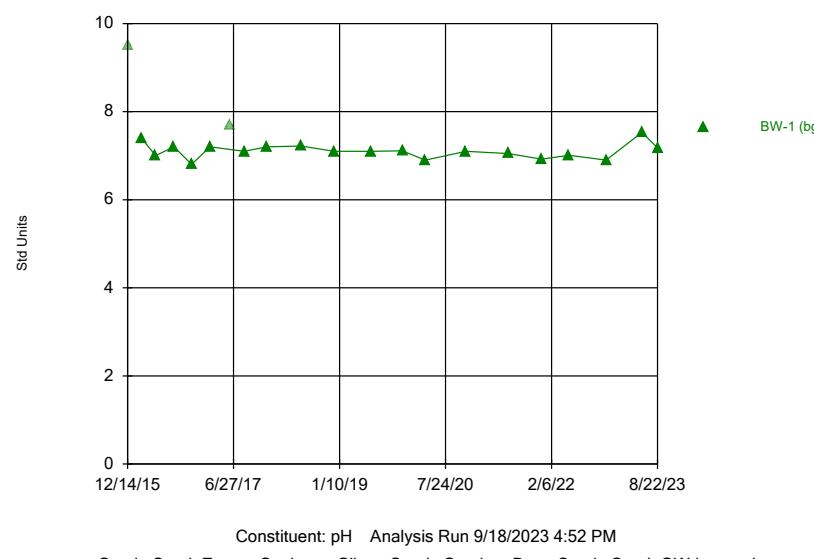
Time Series



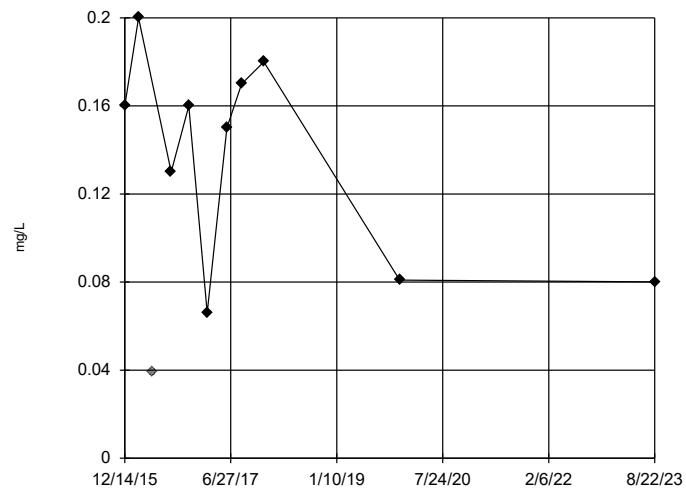
Time Series



Time Series

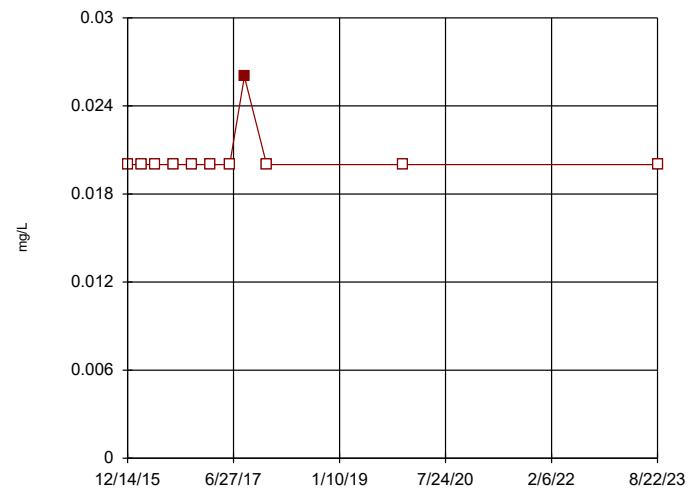


Time Series



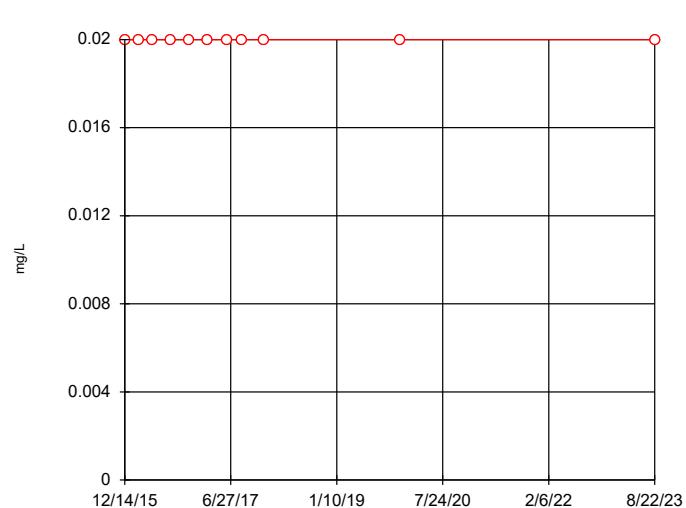
Constituent: Selenium Analysis Run 9/18/2023 4:52 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series



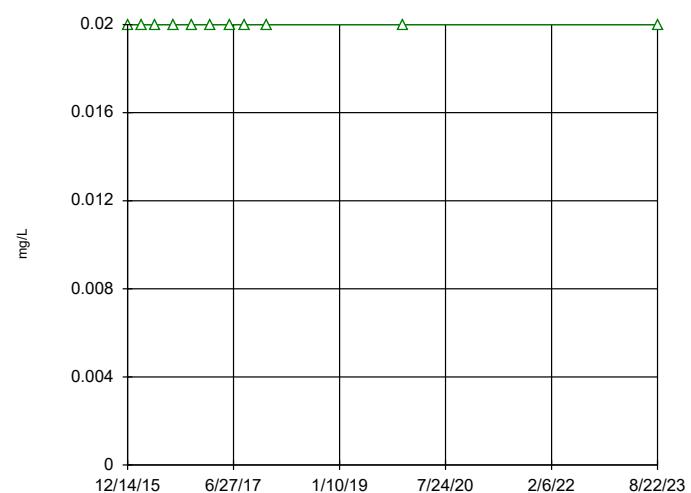
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Time Series



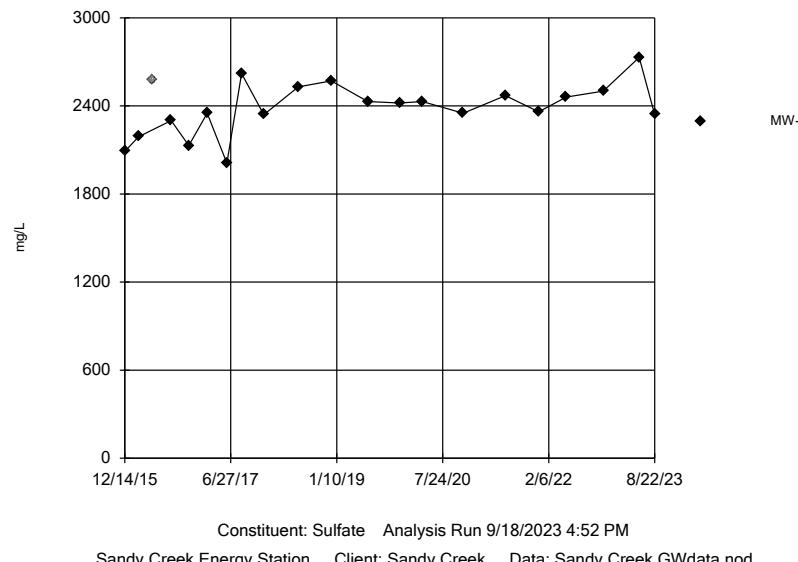
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series



Constituent: Selenium Analysis Run 9/18/2023 4:52 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

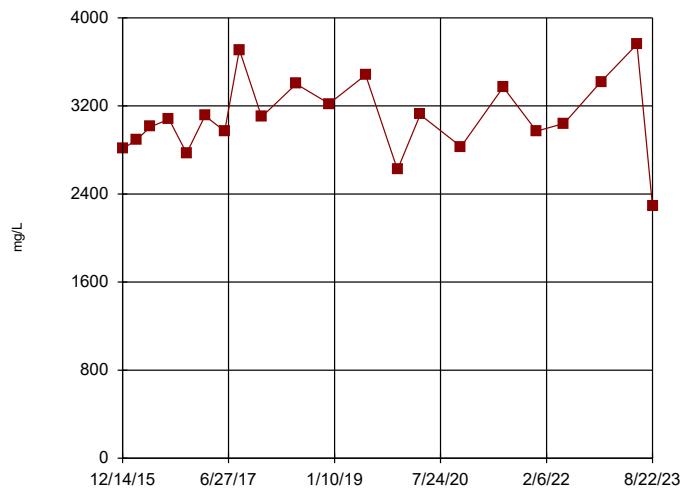


MW-1

Constituent: Sulfate Analysis Run 9/18/2023 4:52 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

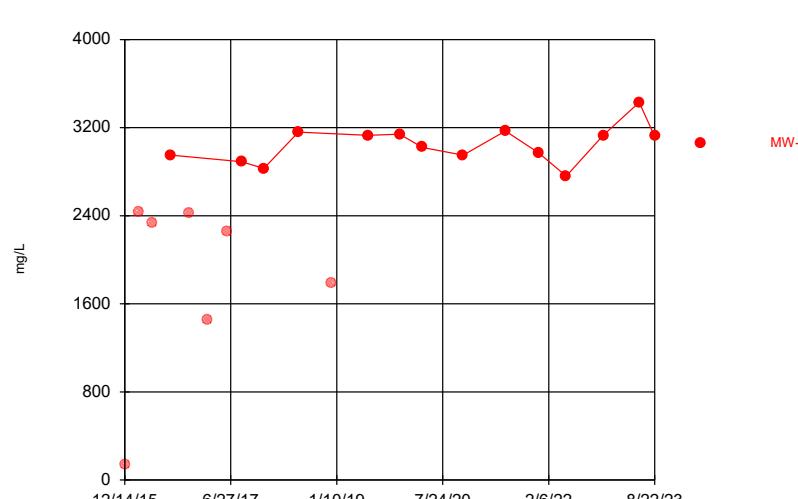


MW-2

Constituent: Sulfate Analysis Run 9/18/2023 4:52 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

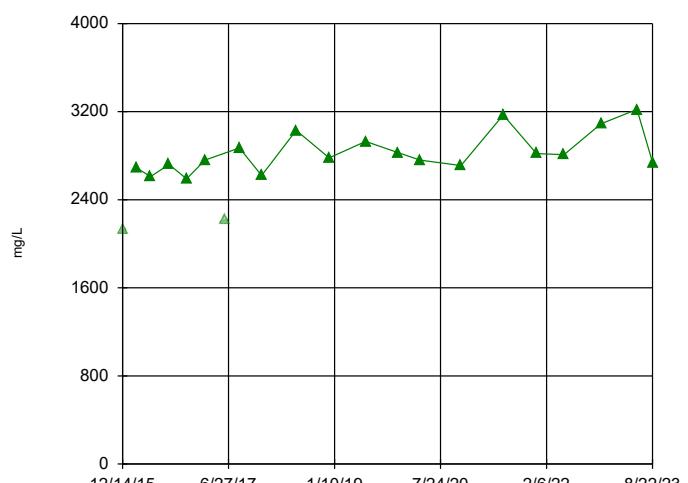


MW-3

Constituent: Sulfate Analysis Run 9/18/2023 4:52 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Time Series

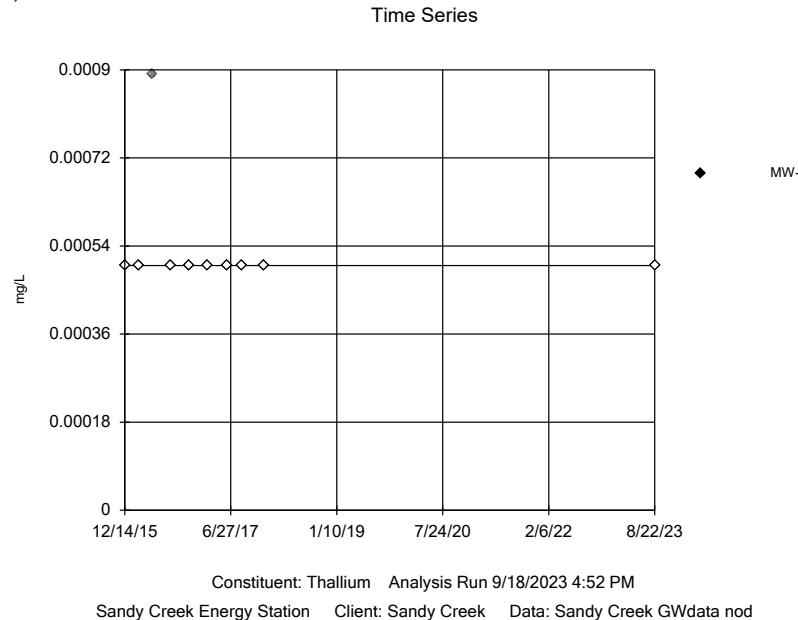


BW-1 (bg)

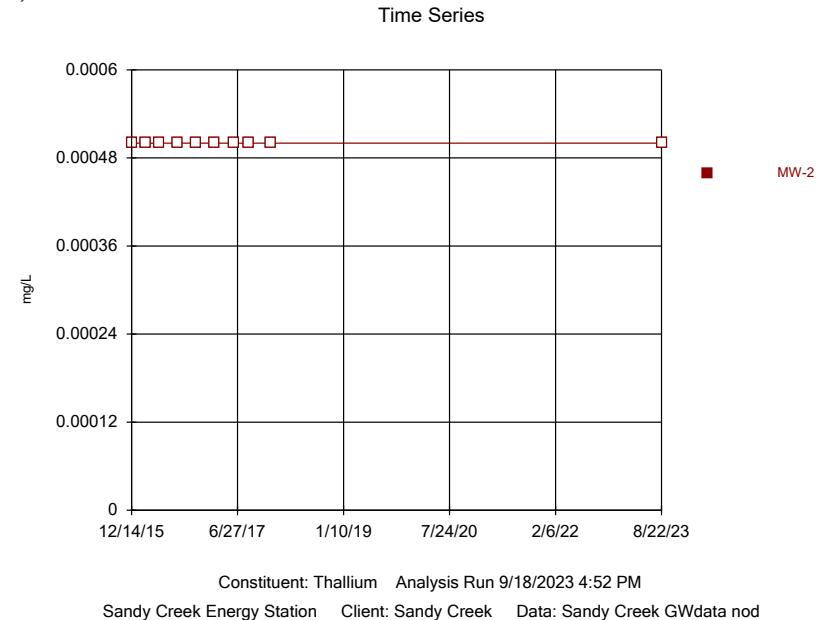
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

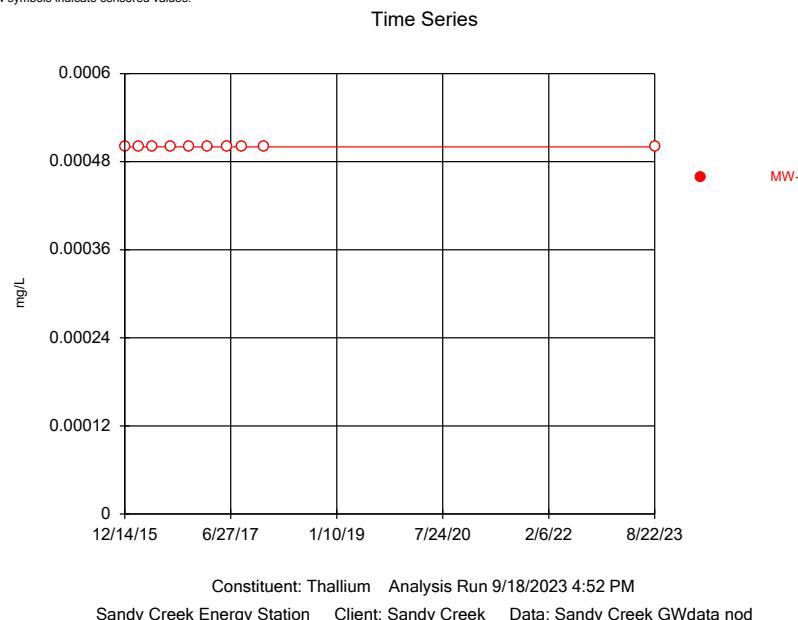
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Hollow symbols indicate censored values.



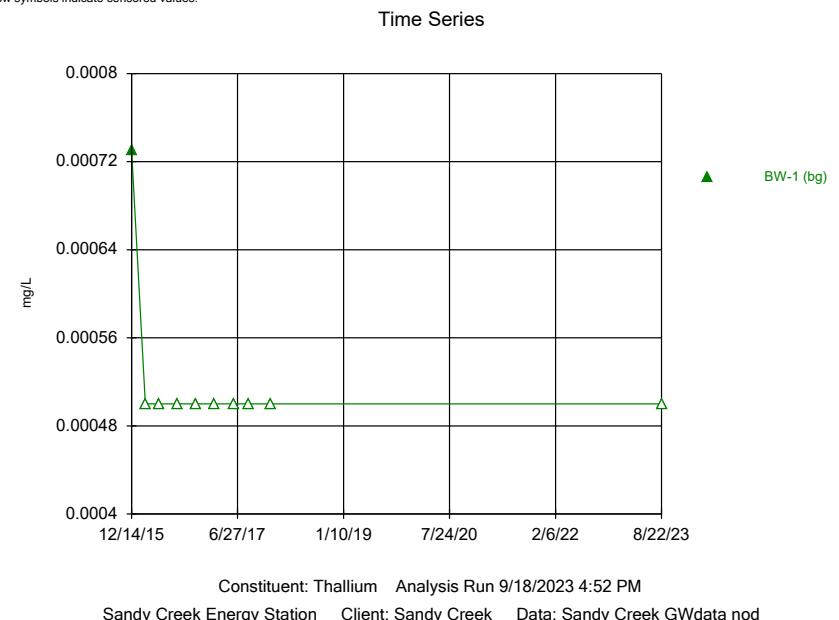
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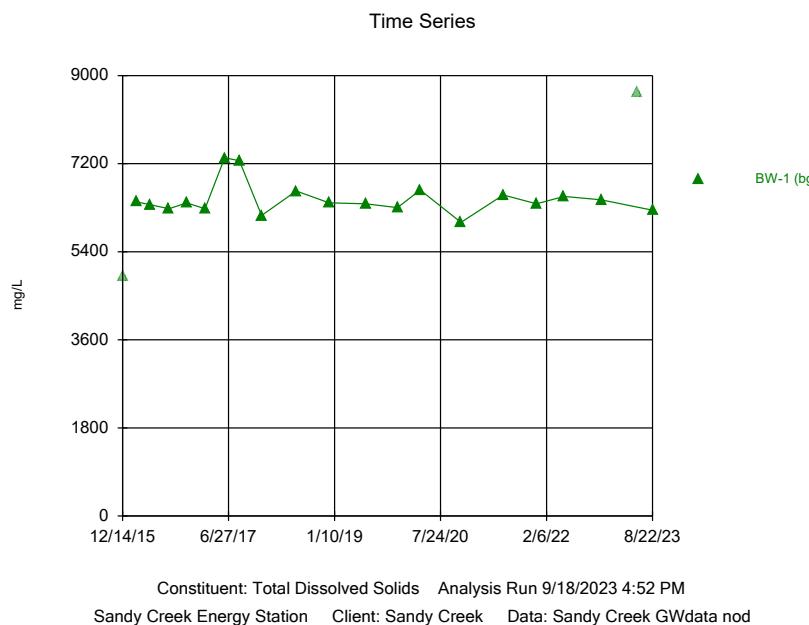
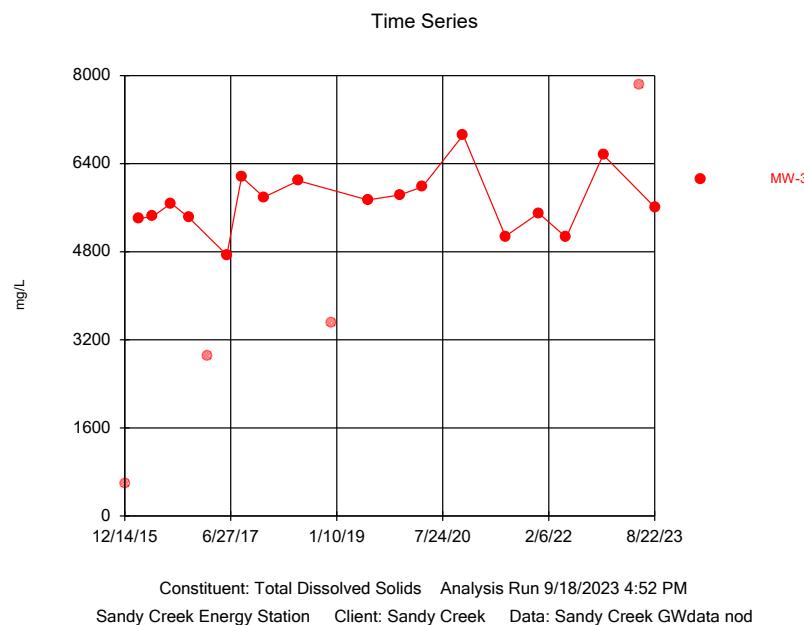
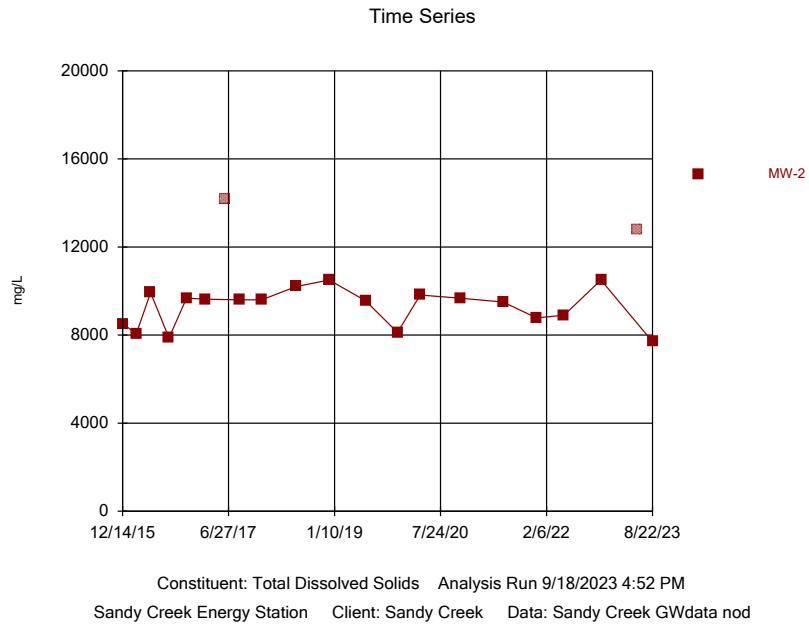
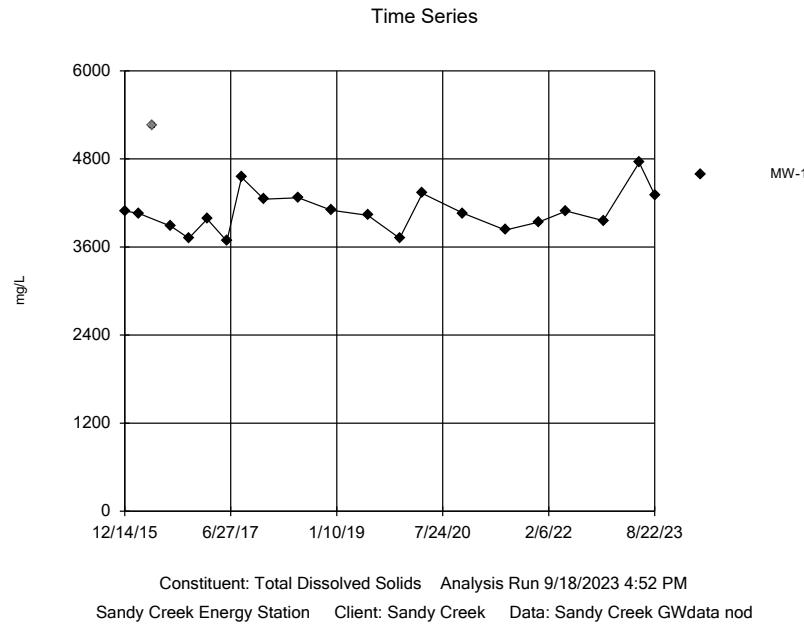


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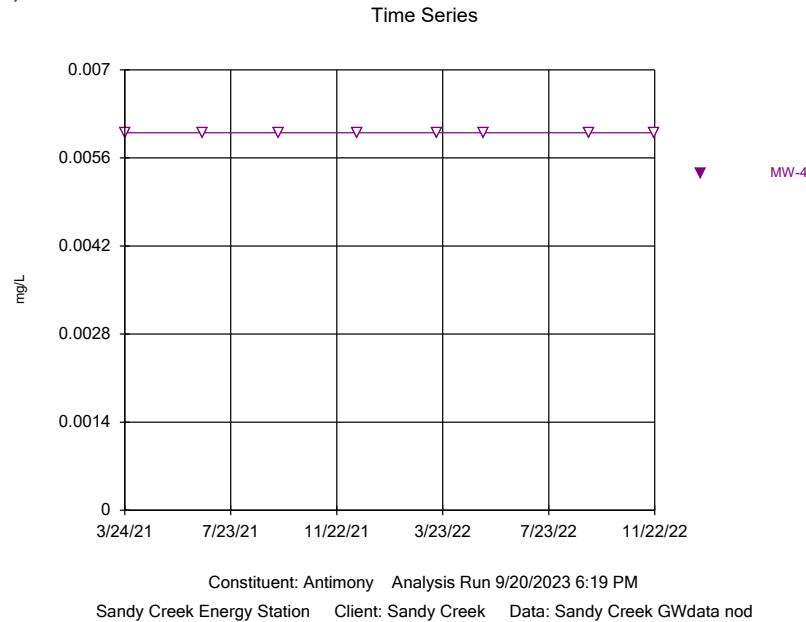


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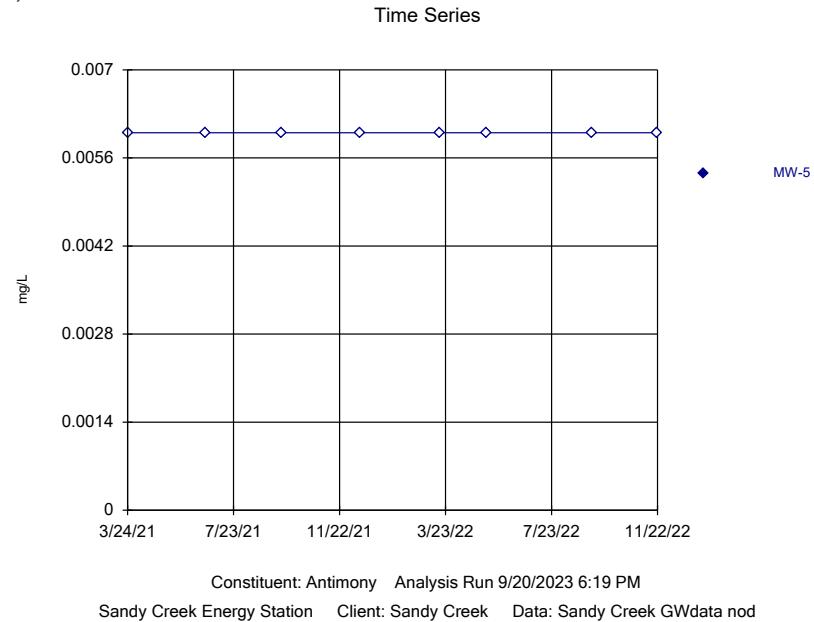




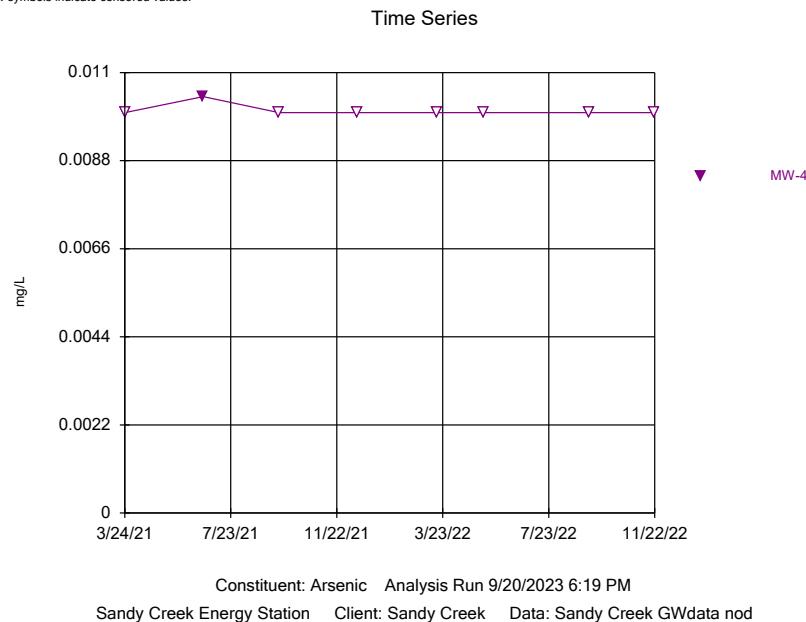
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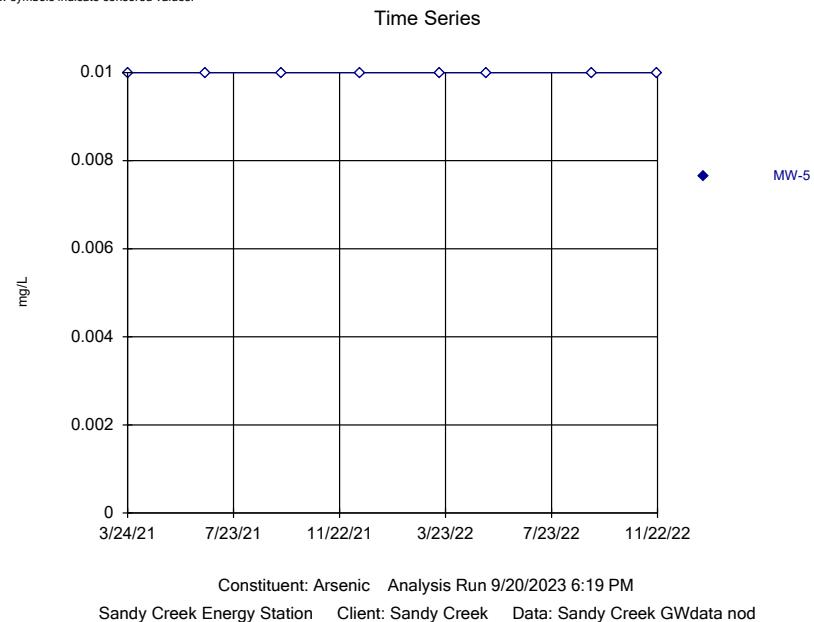
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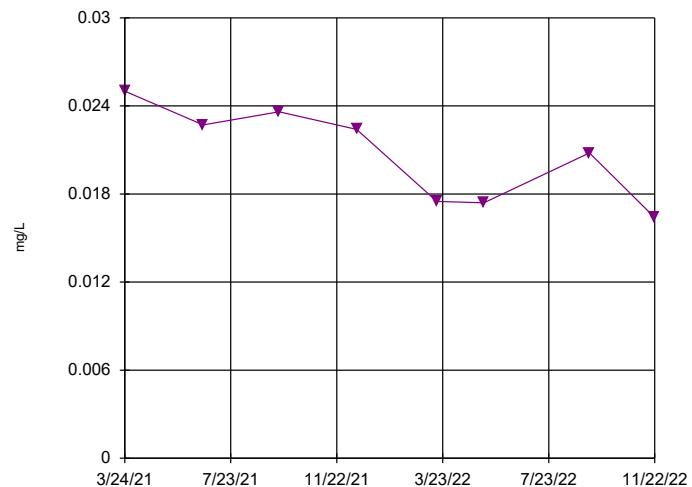
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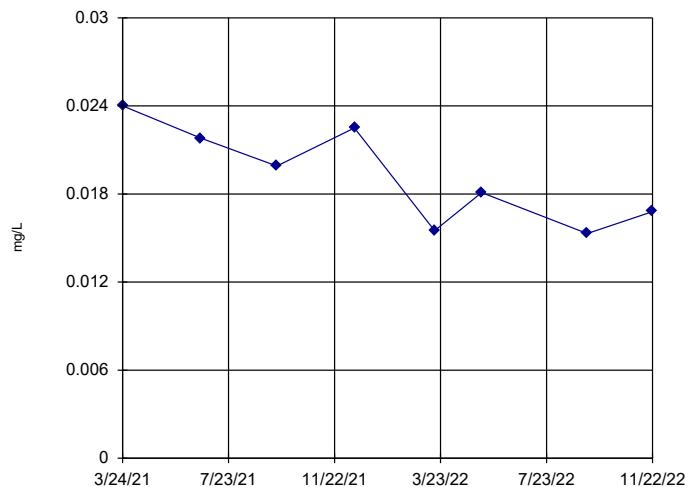
Time Series



Constituent: Barium Analysis Run 9/20/2023 6:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

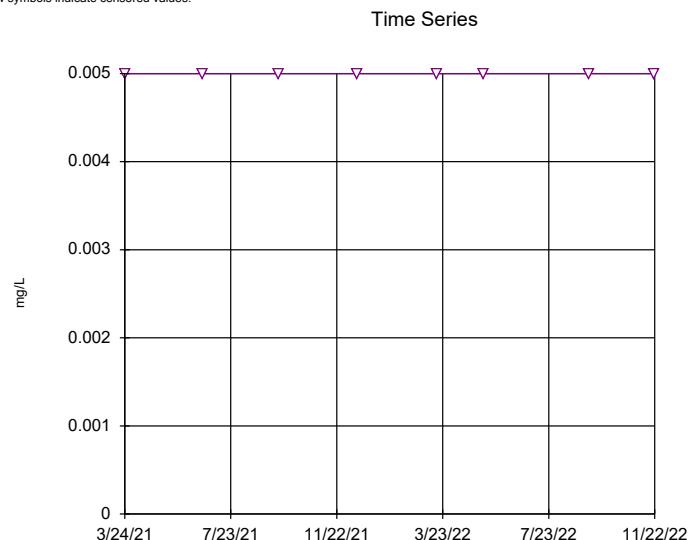
Time Series



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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

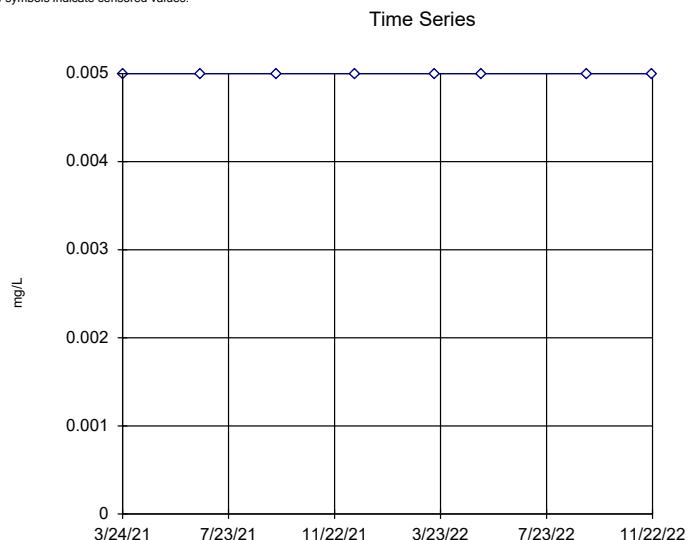
Time Series



Constituent: Beryllium Analysis Run 9/20/2023 6:19 PM

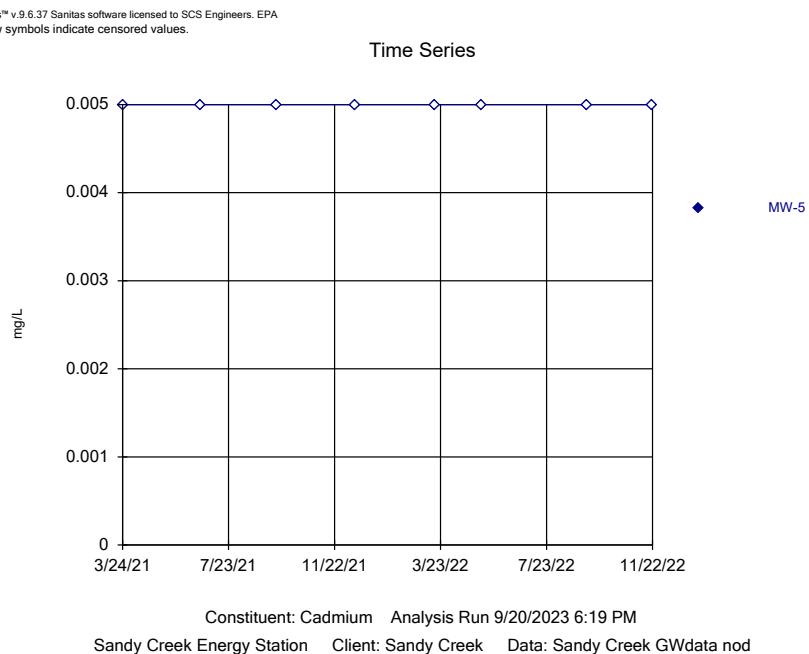
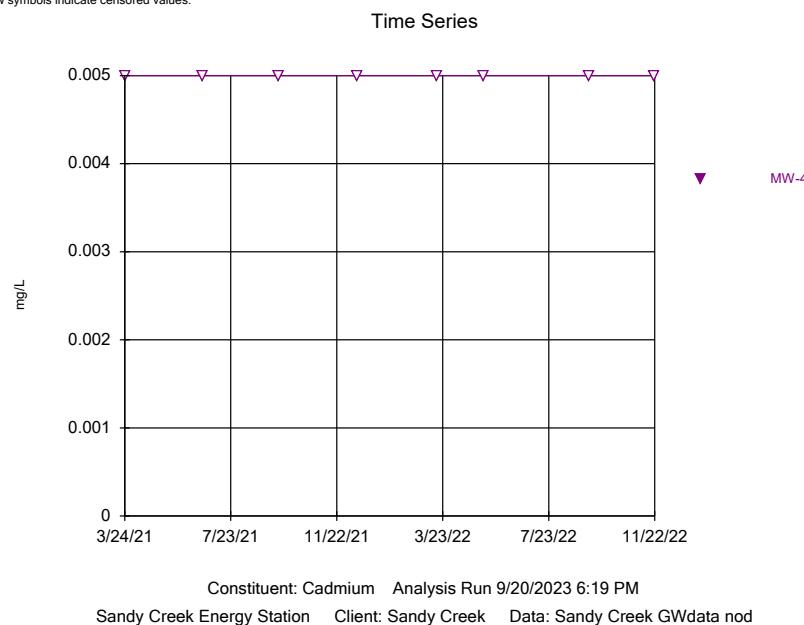
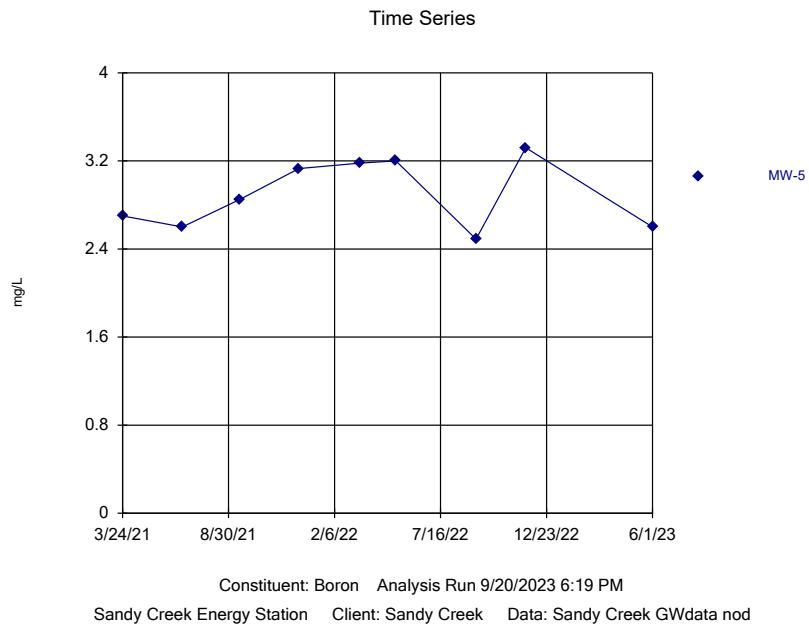
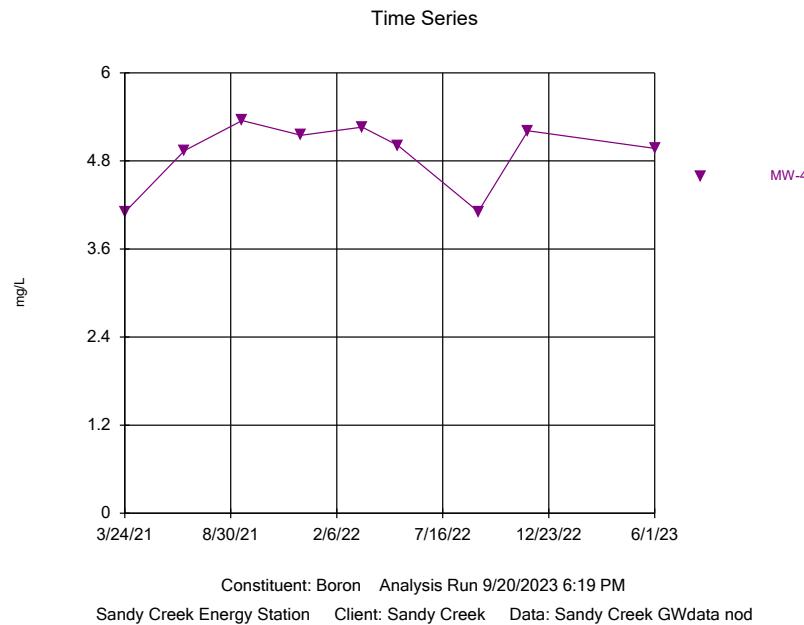
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

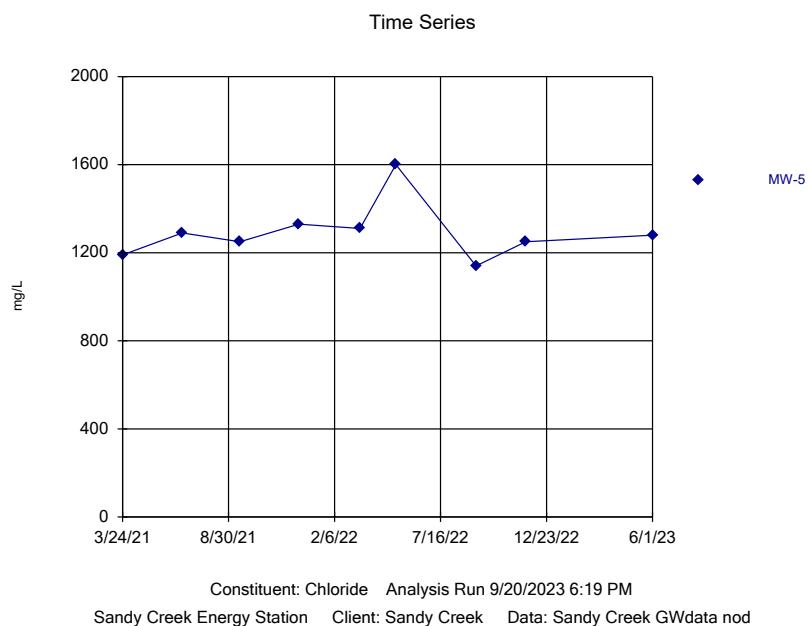
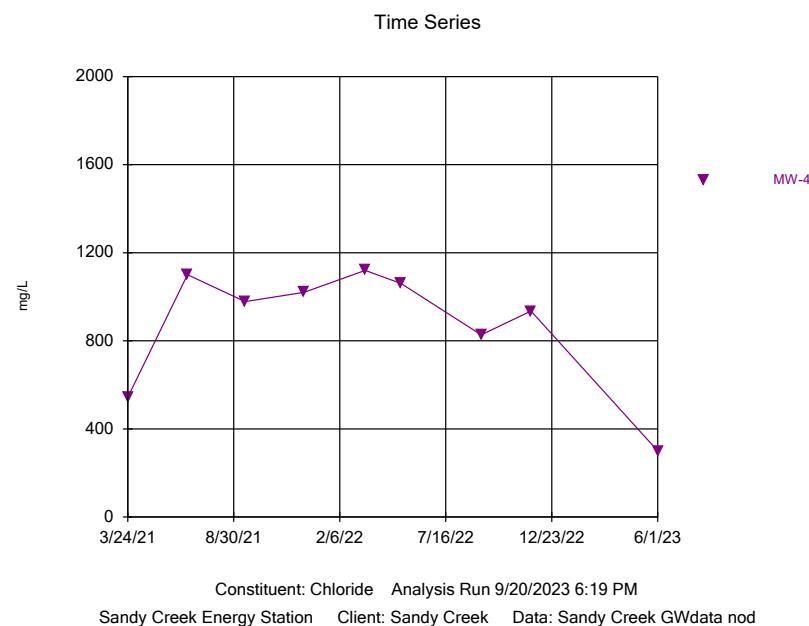
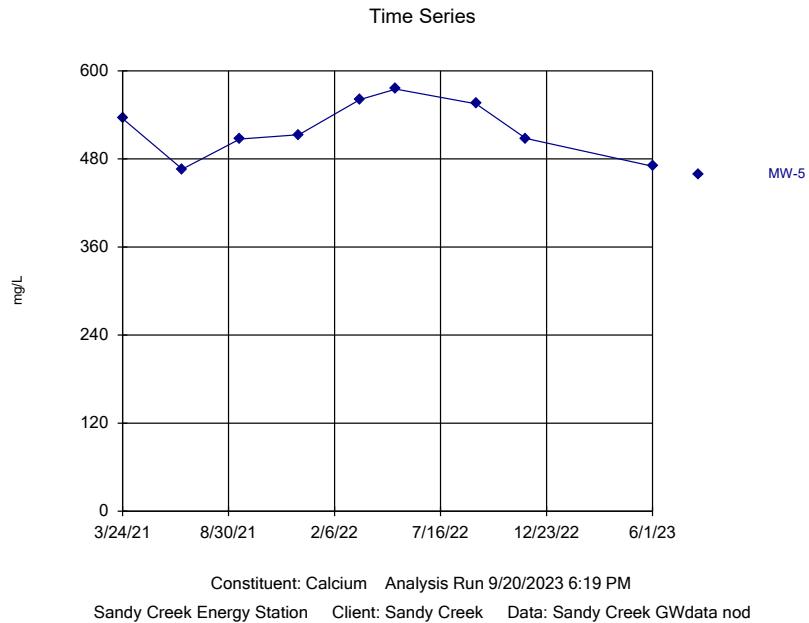
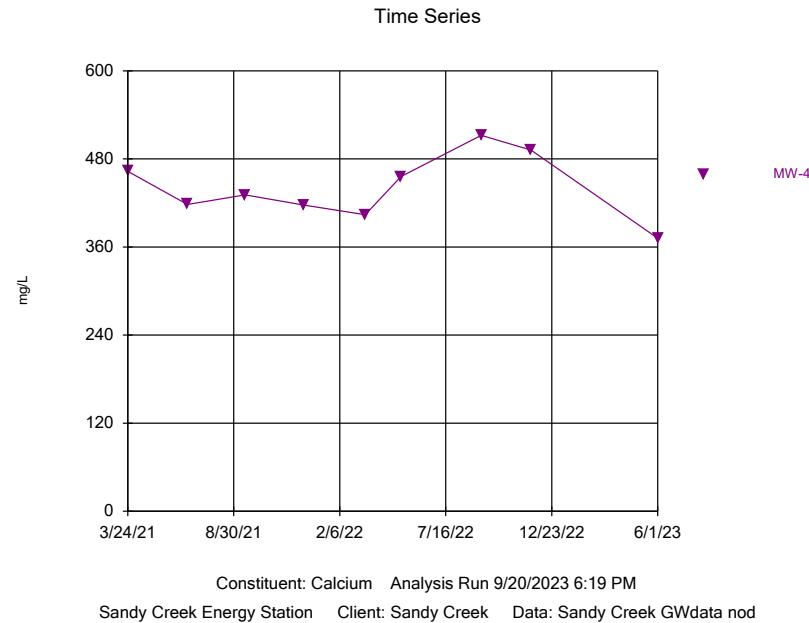
Time Series



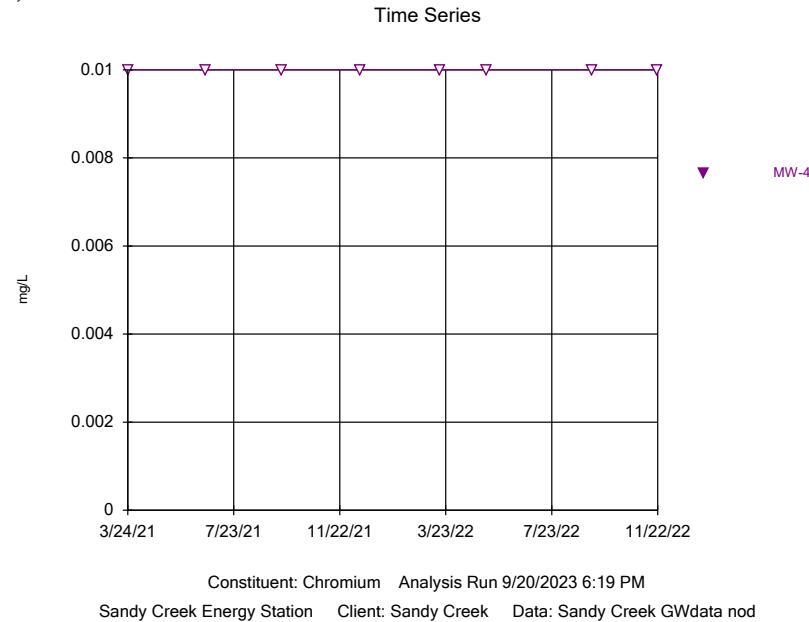
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

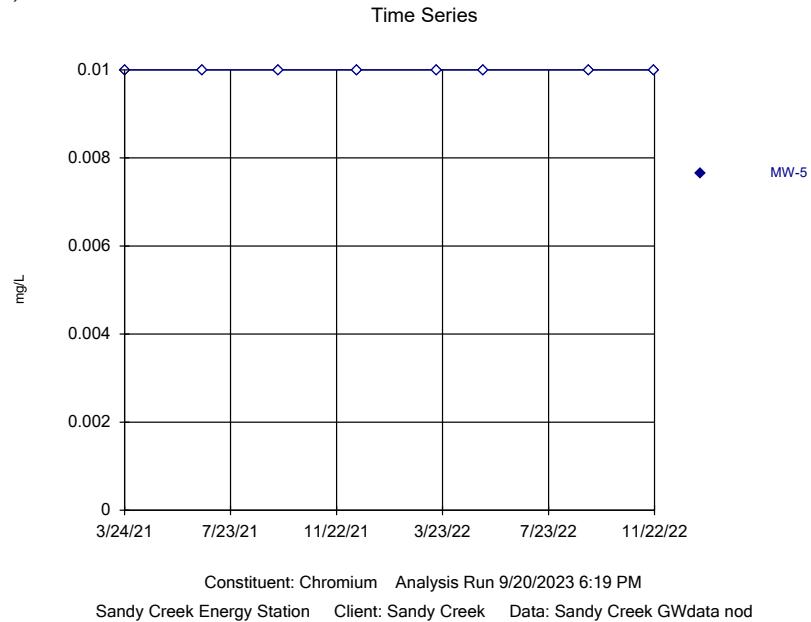




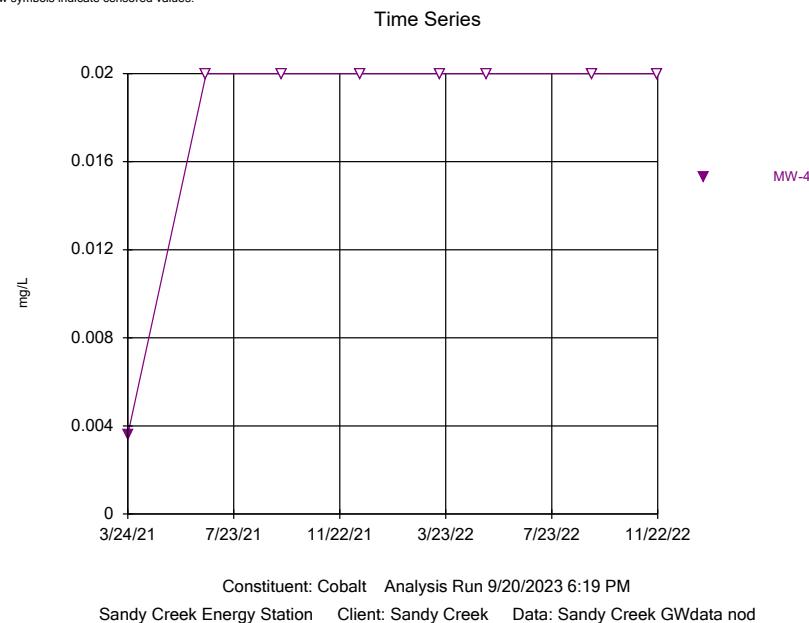
Sanitas™ v.9.6.37 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.



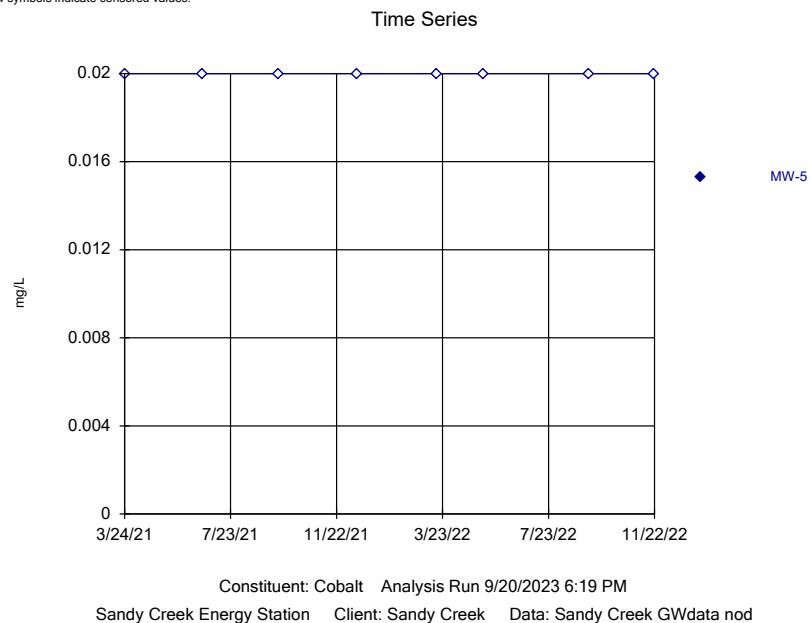
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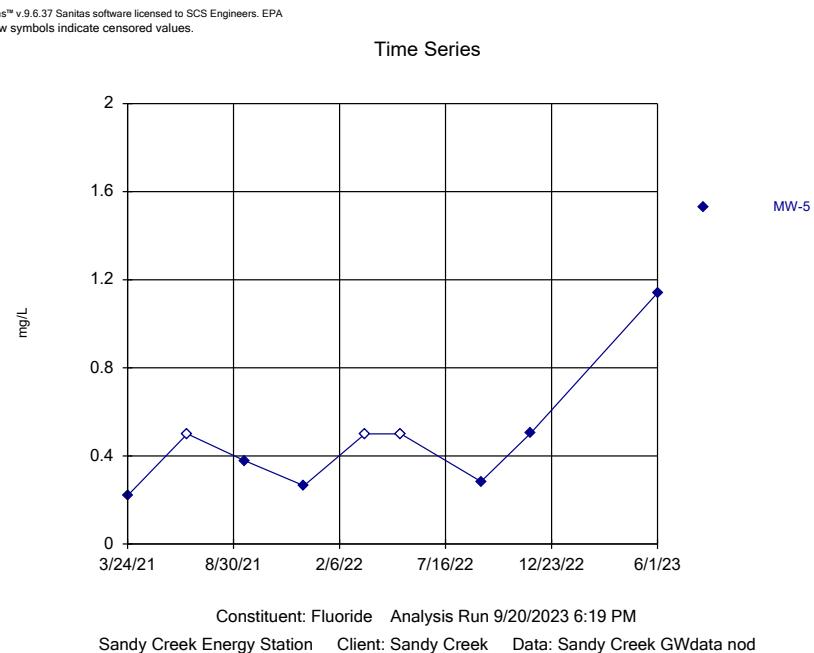
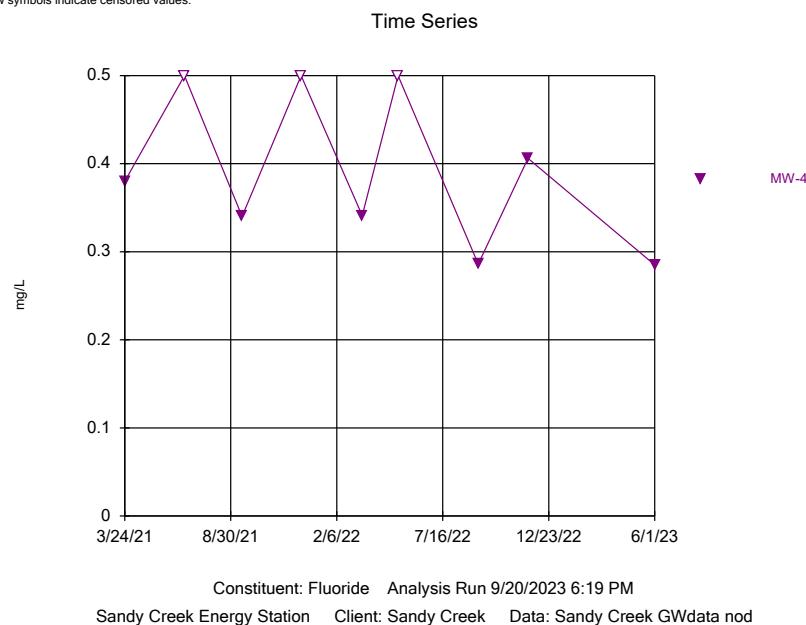
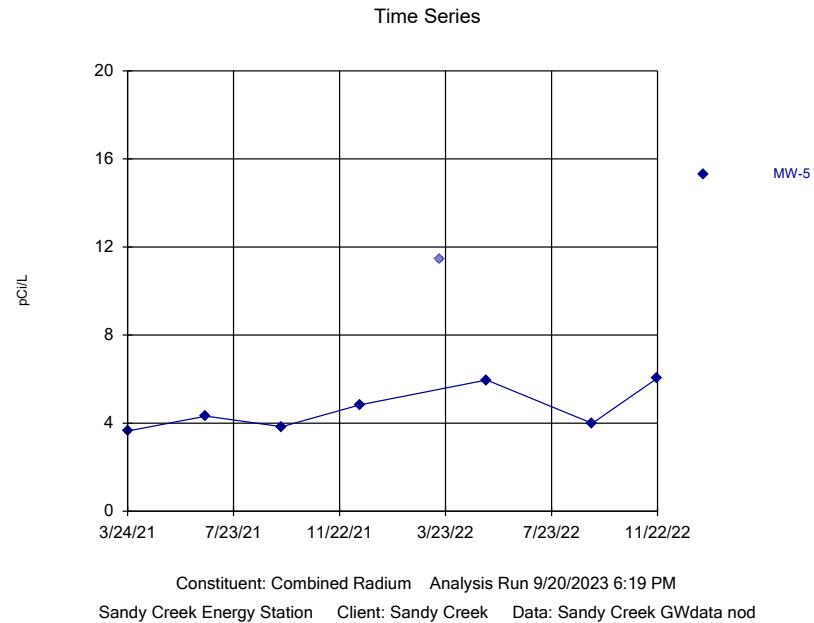
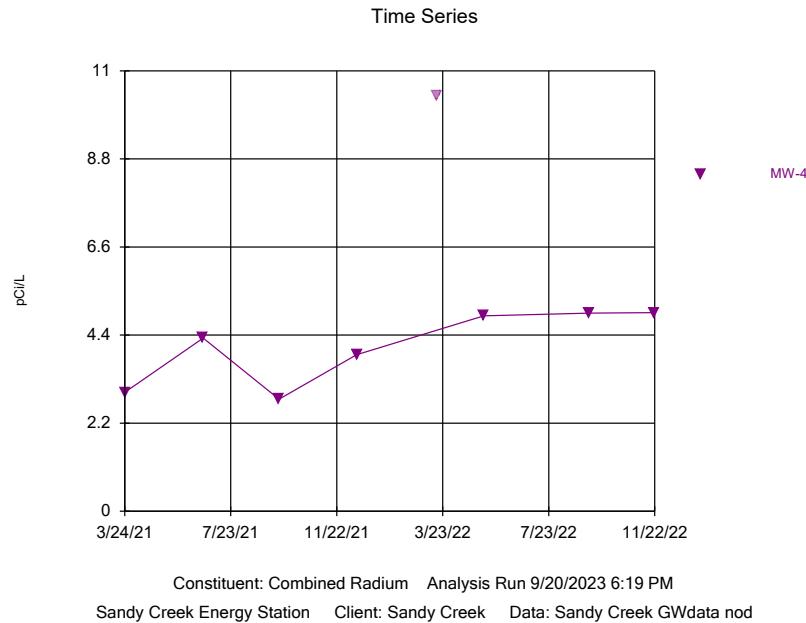


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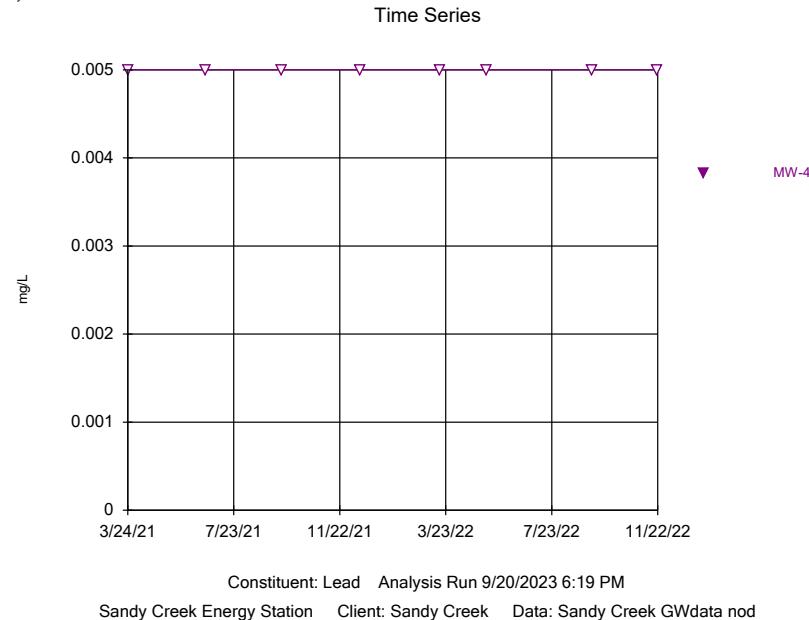


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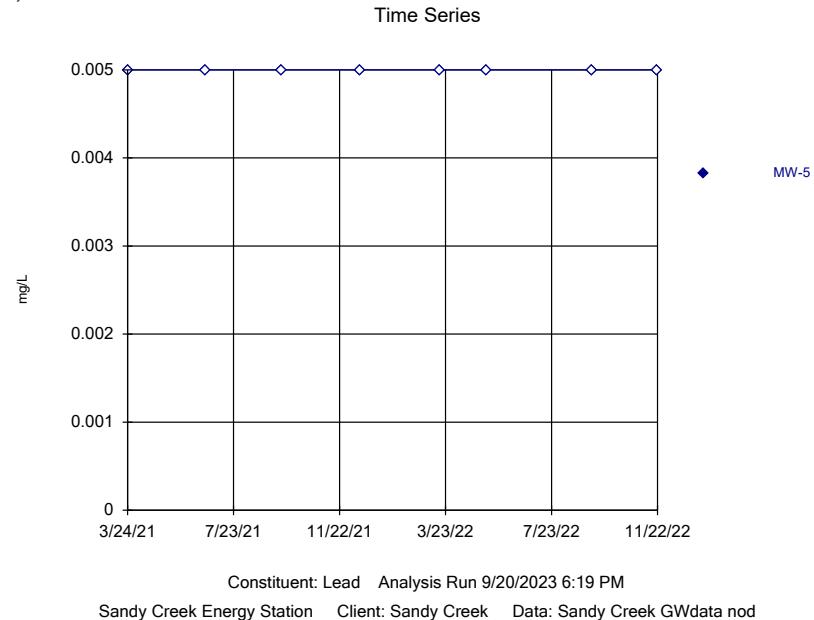




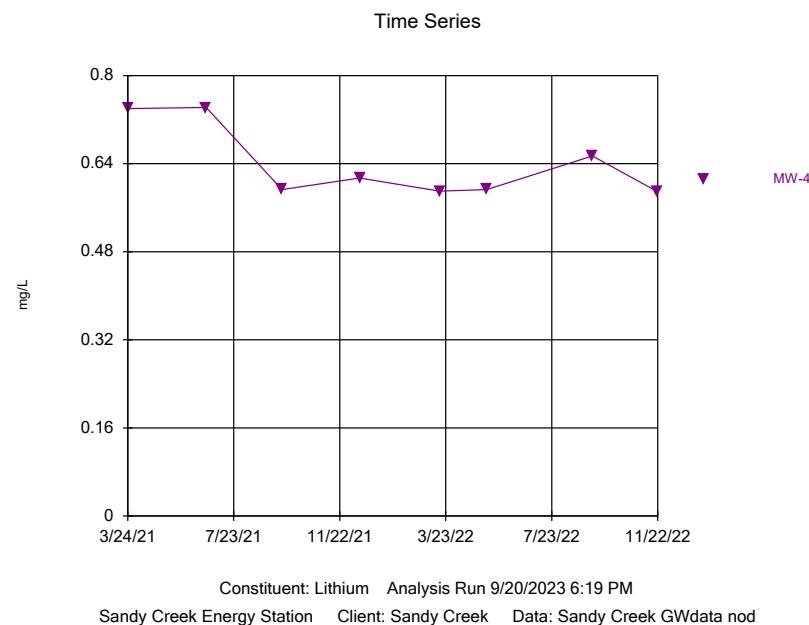
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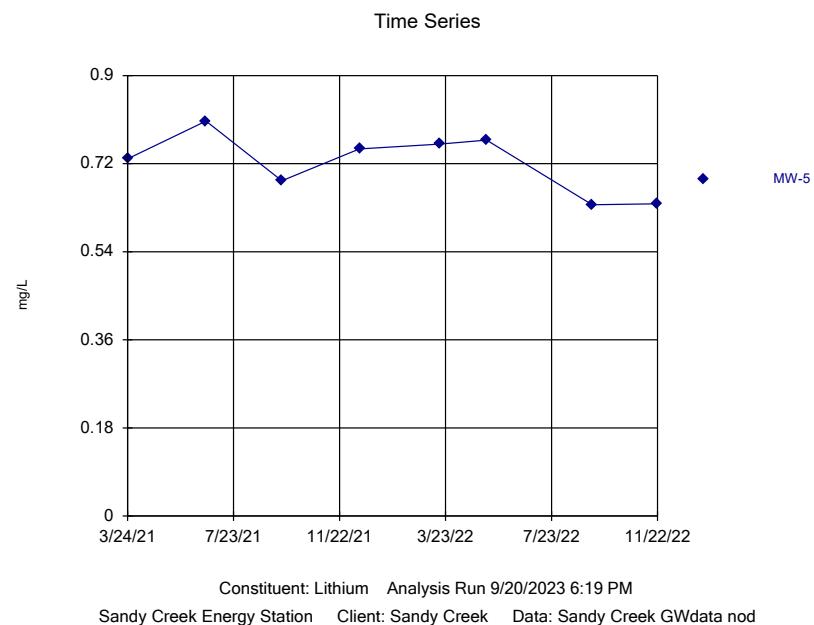
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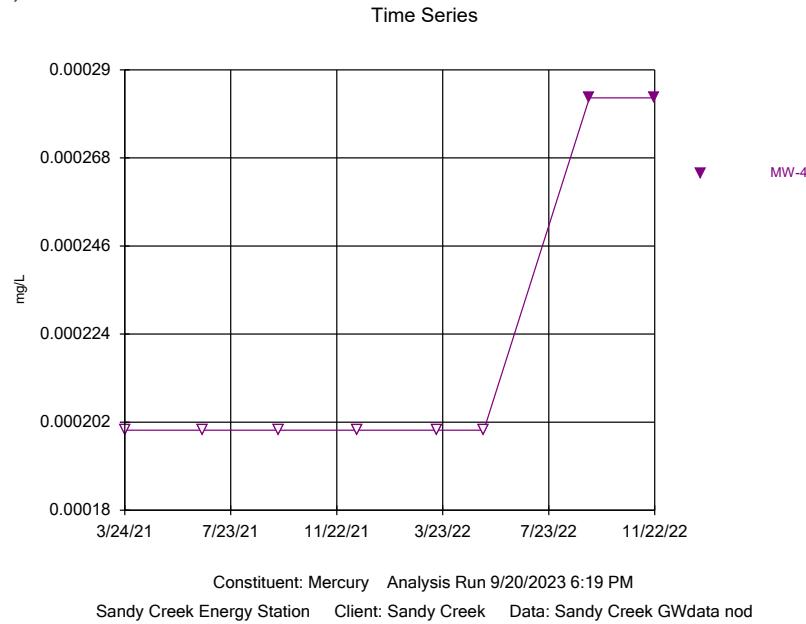
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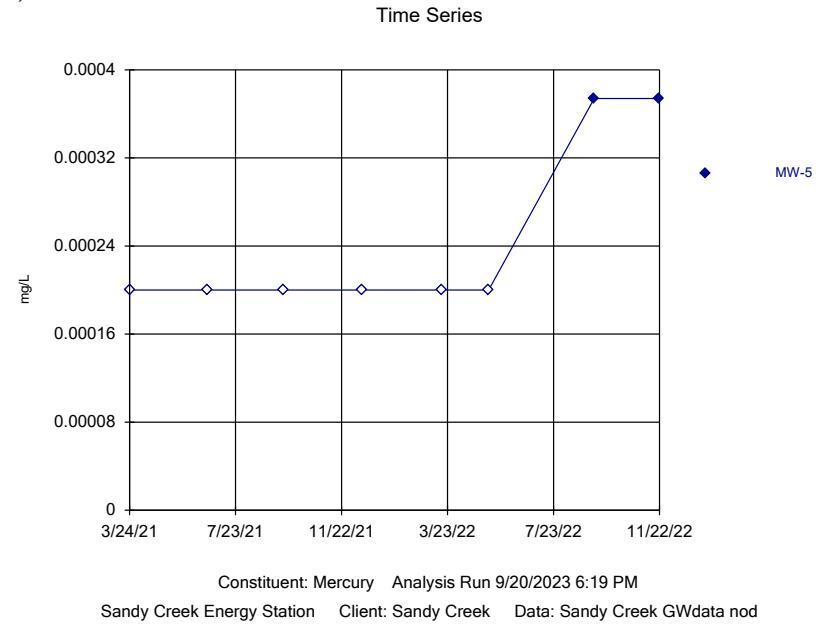
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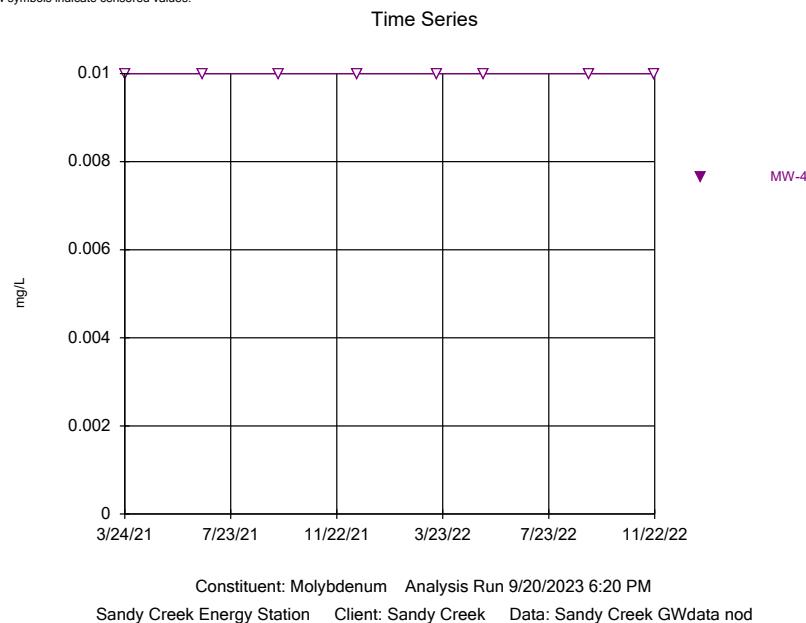
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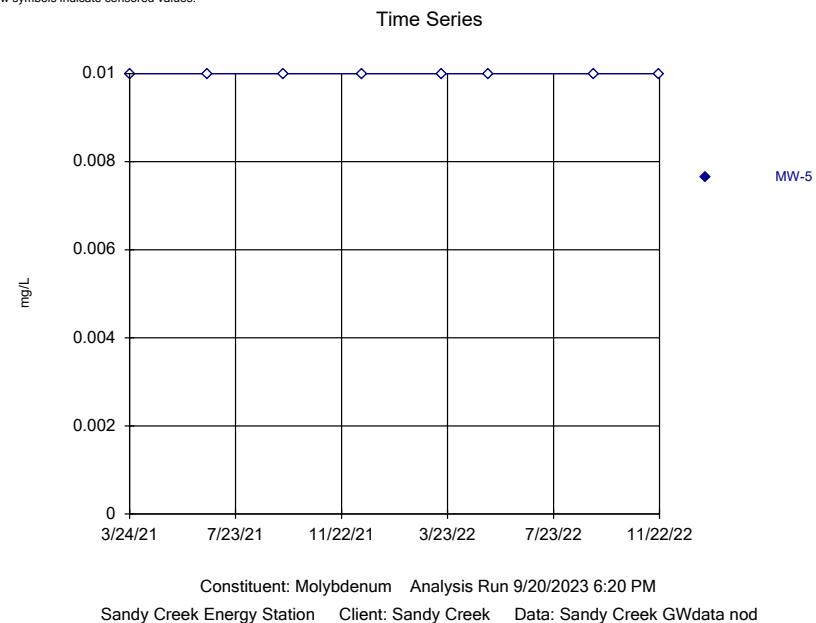
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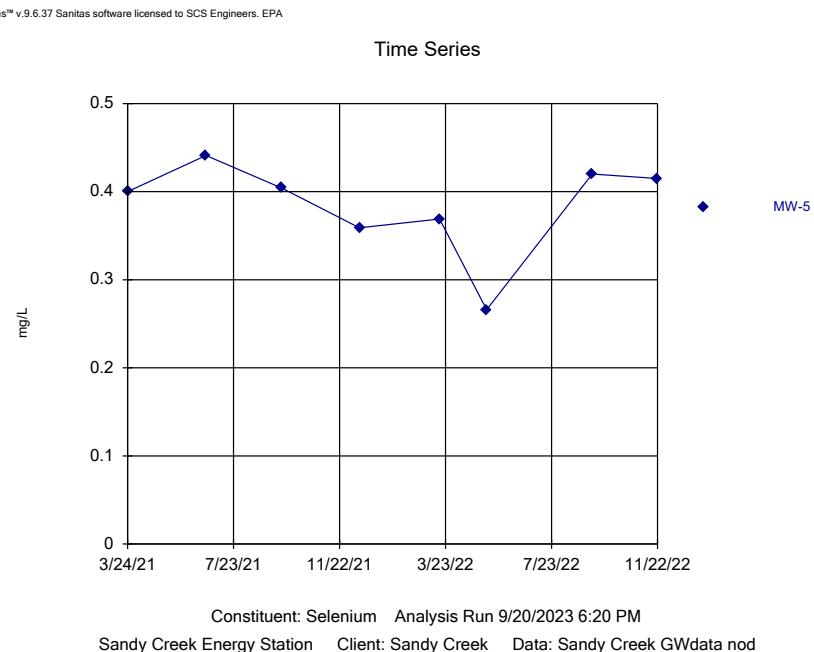
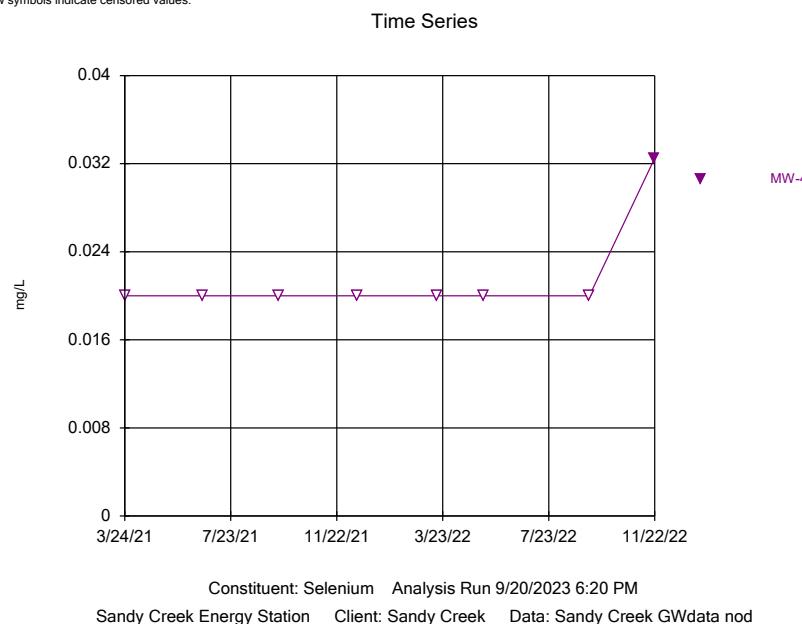
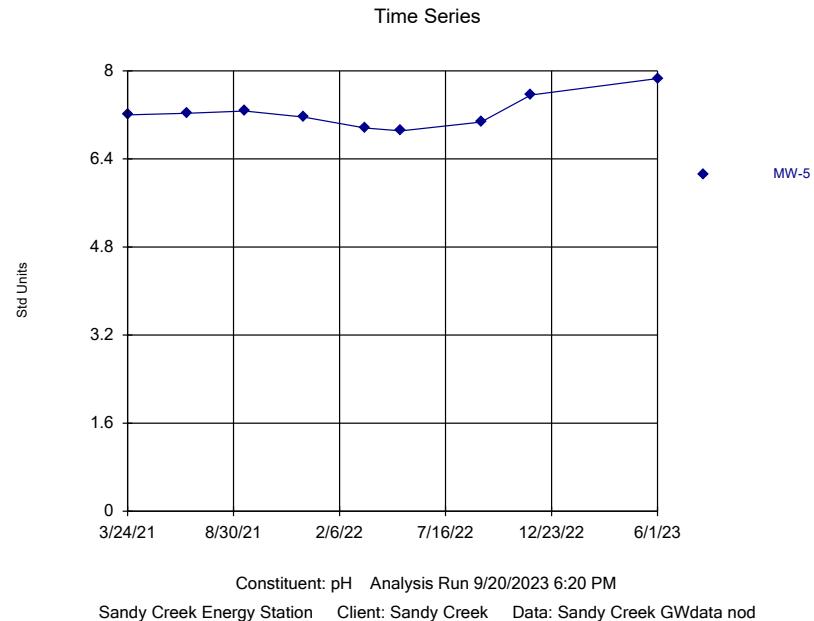
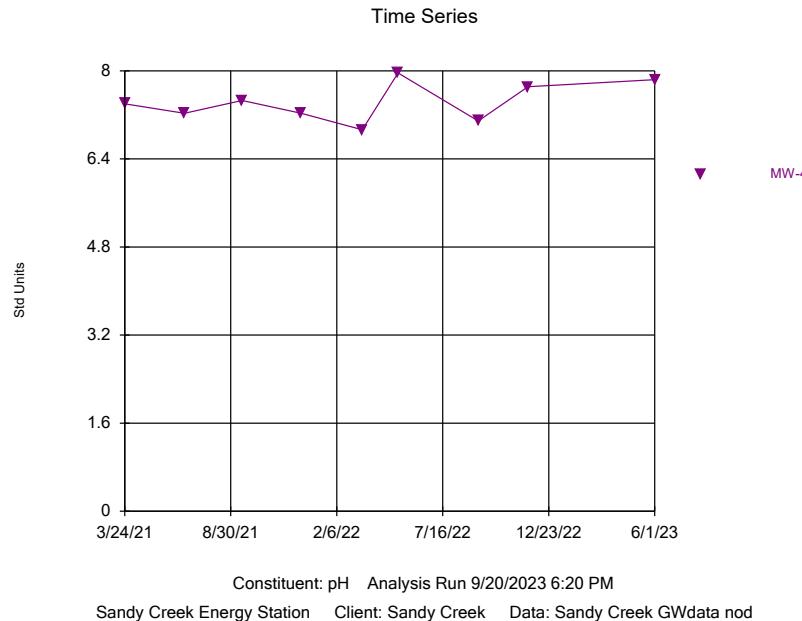


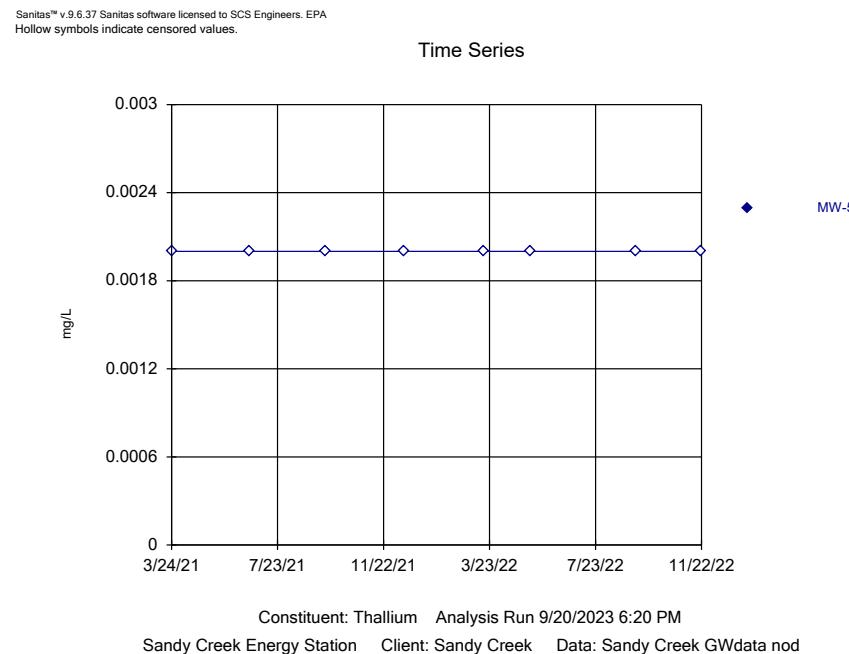
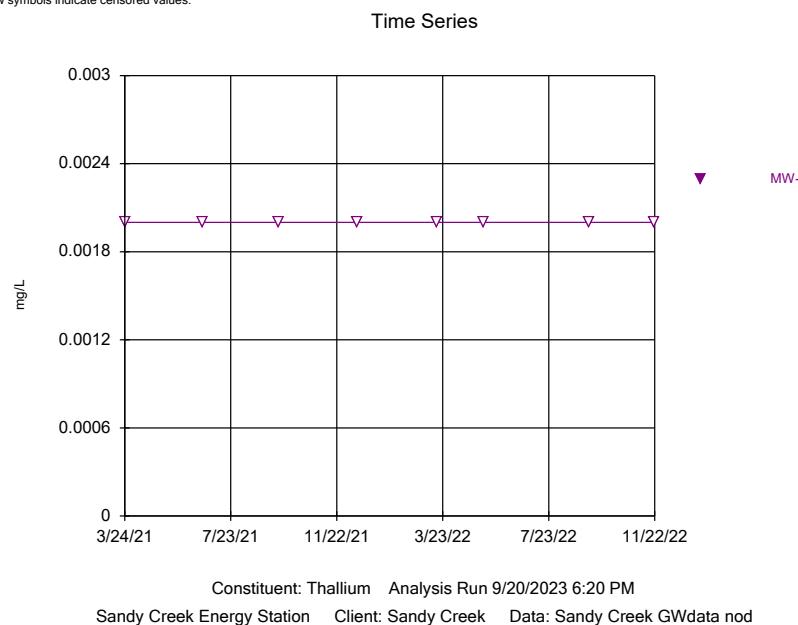
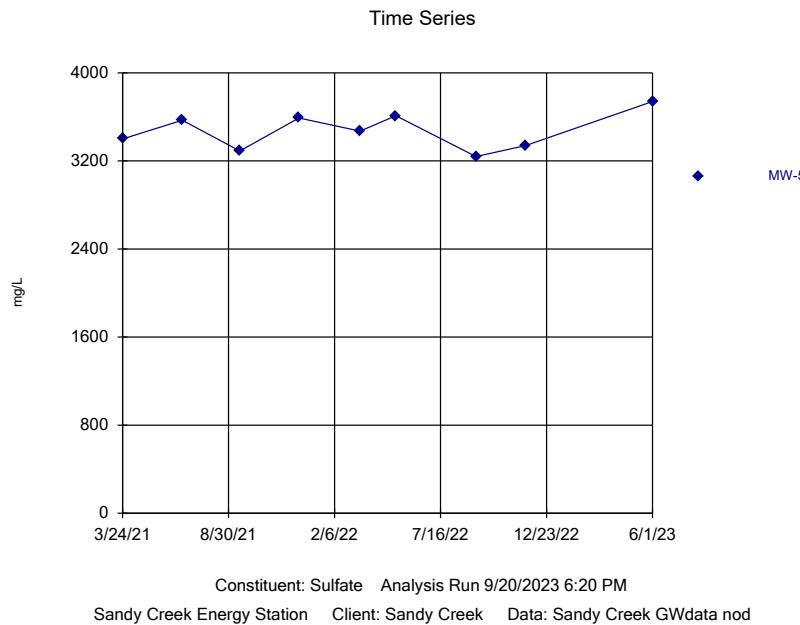
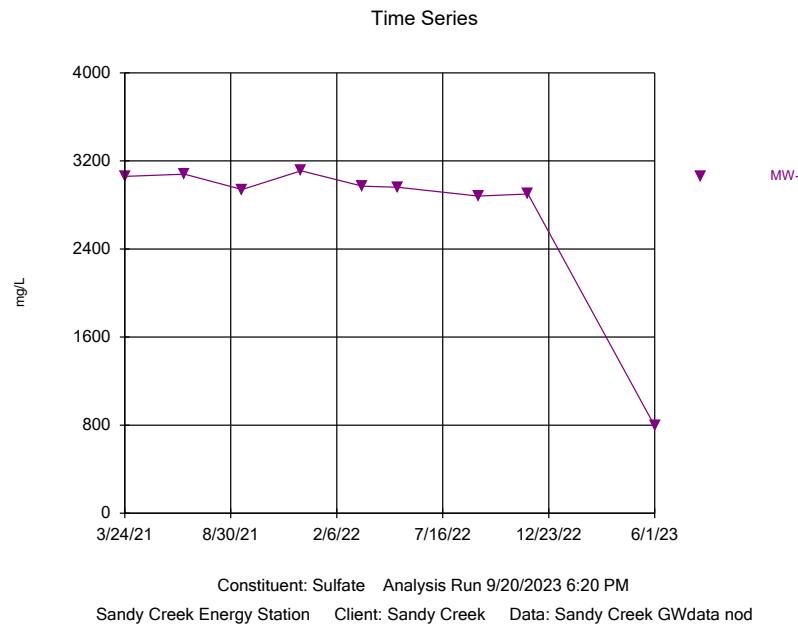
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Hollow symbols indicate censored values.

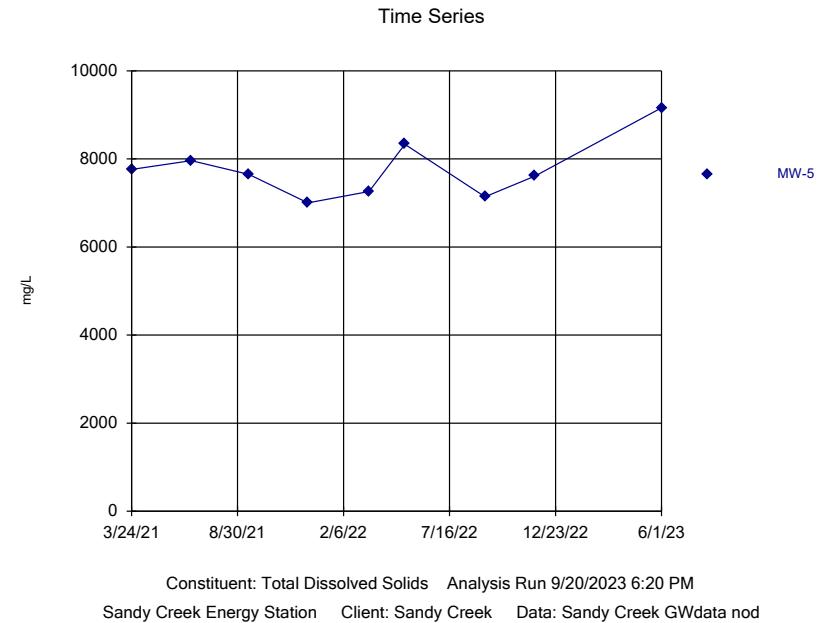
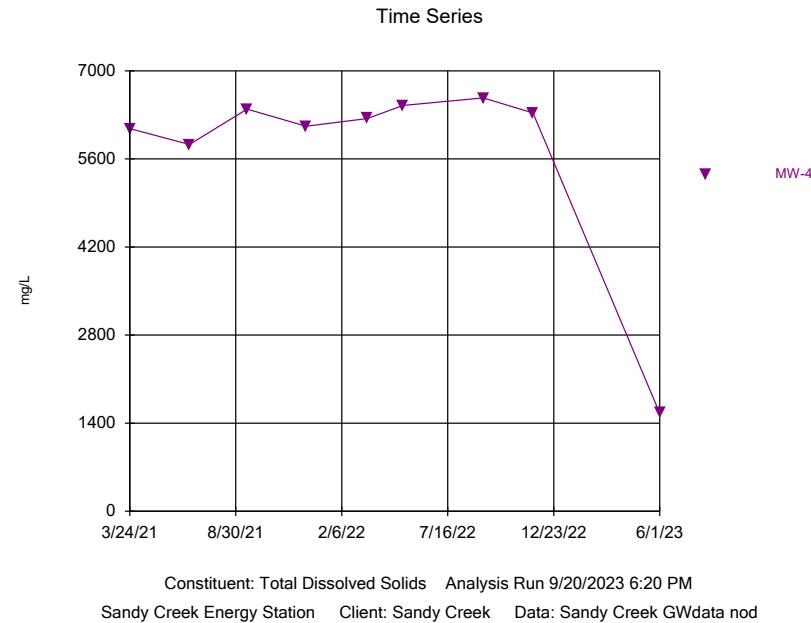


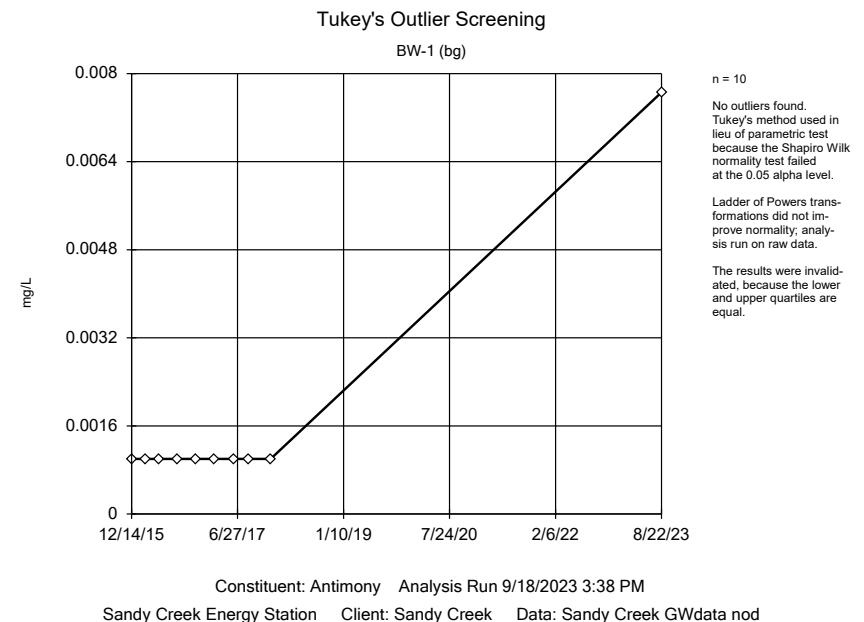
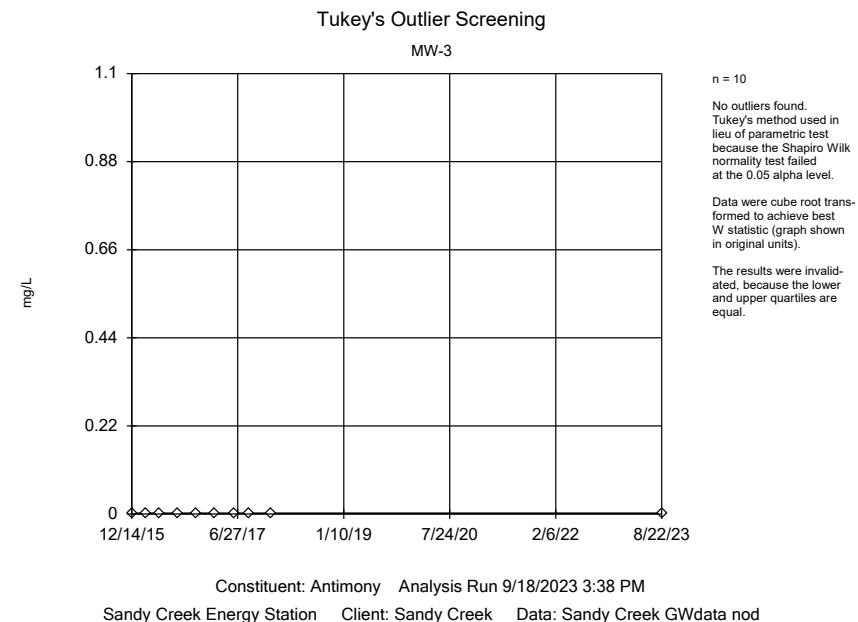
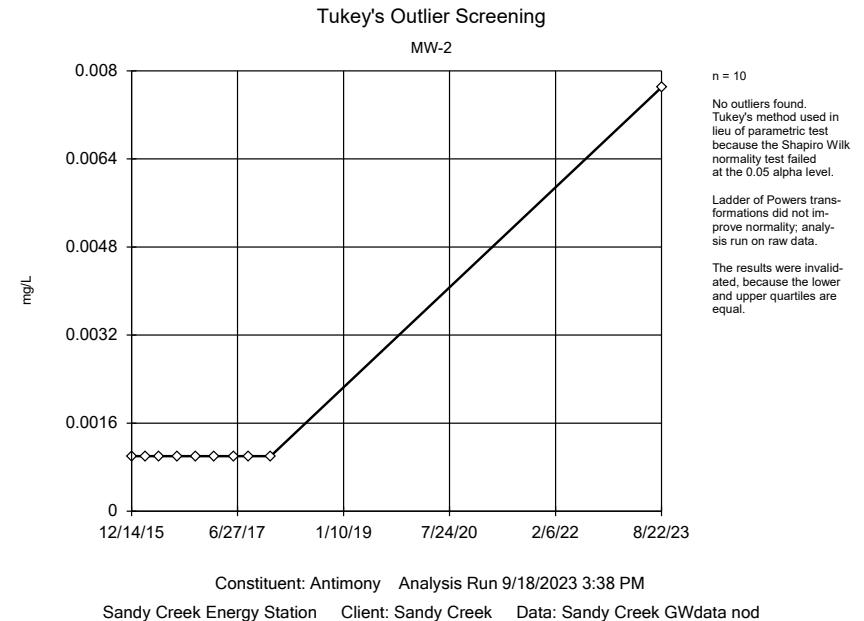
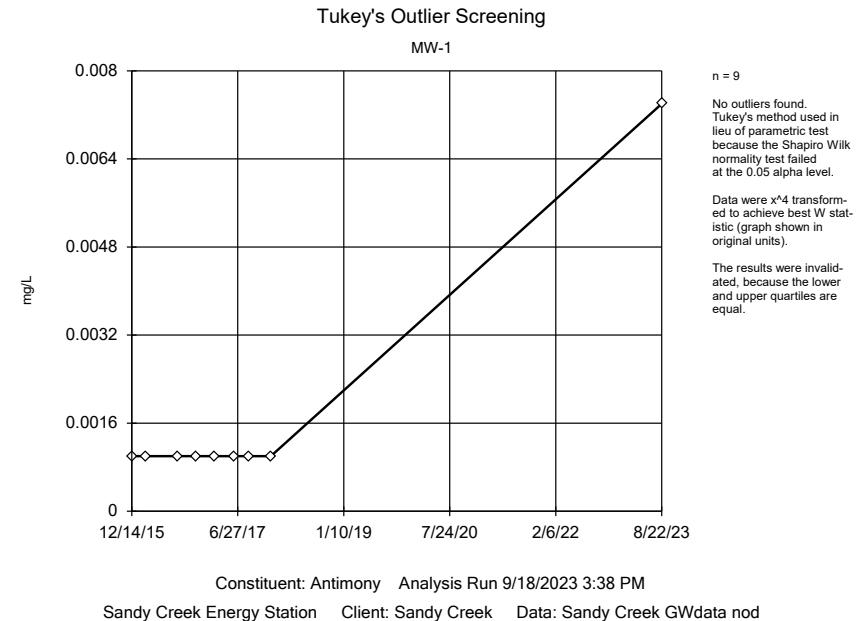
Sanitas™ v.9.6.37 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.











Tukey's Outlier Screening

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.001
2/25/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	0.0074

Tukey's Outlier Screening

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.001
2/25/2016	<0.001
5/11/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	0.0077

Tukey's Outlier Screening

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

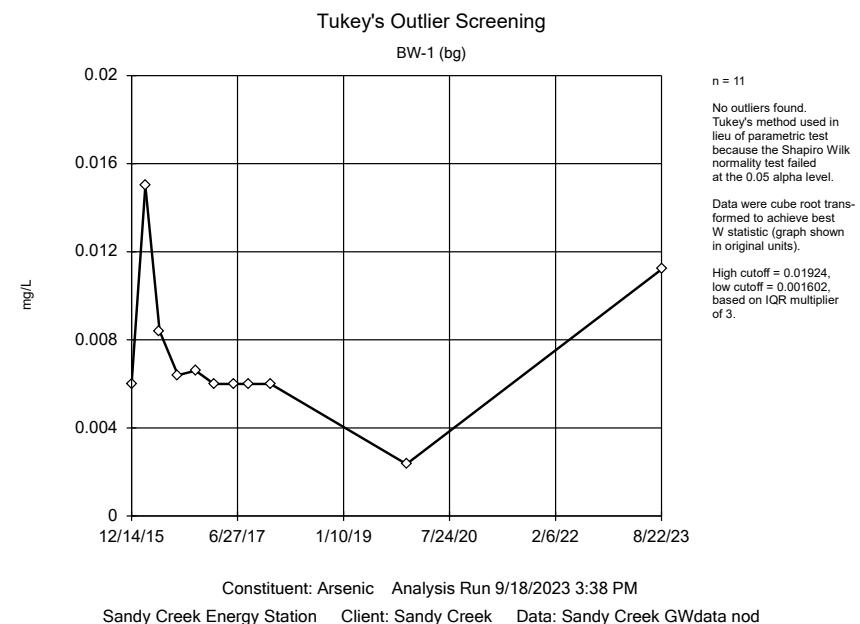
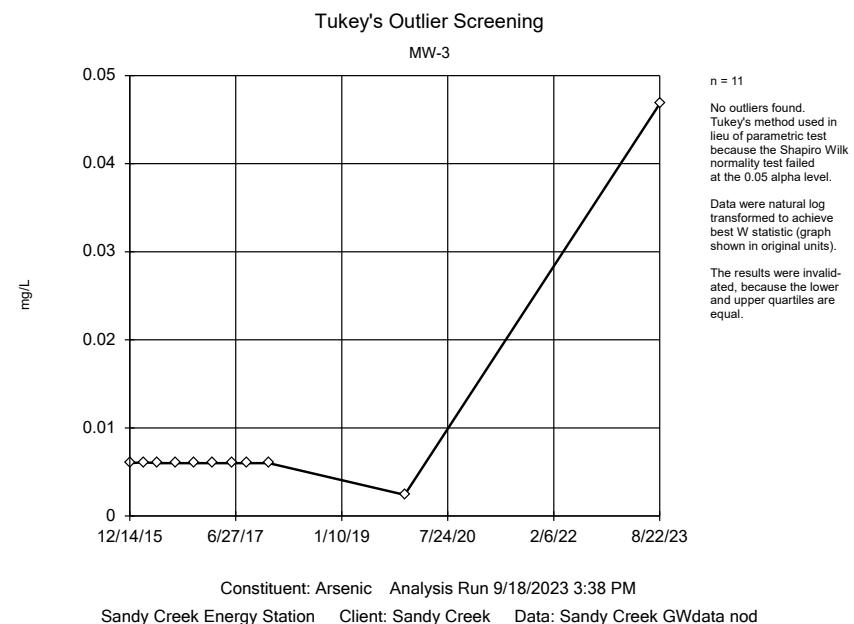
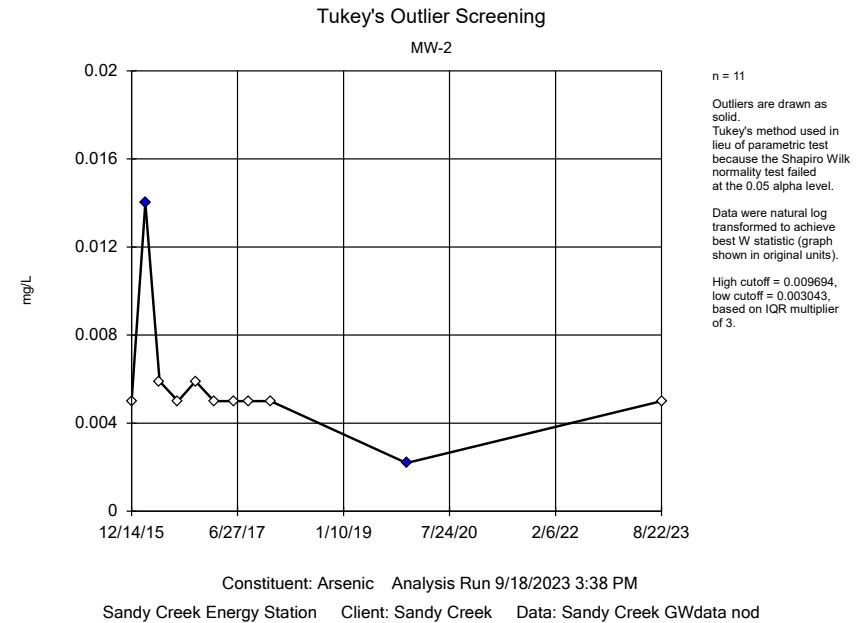
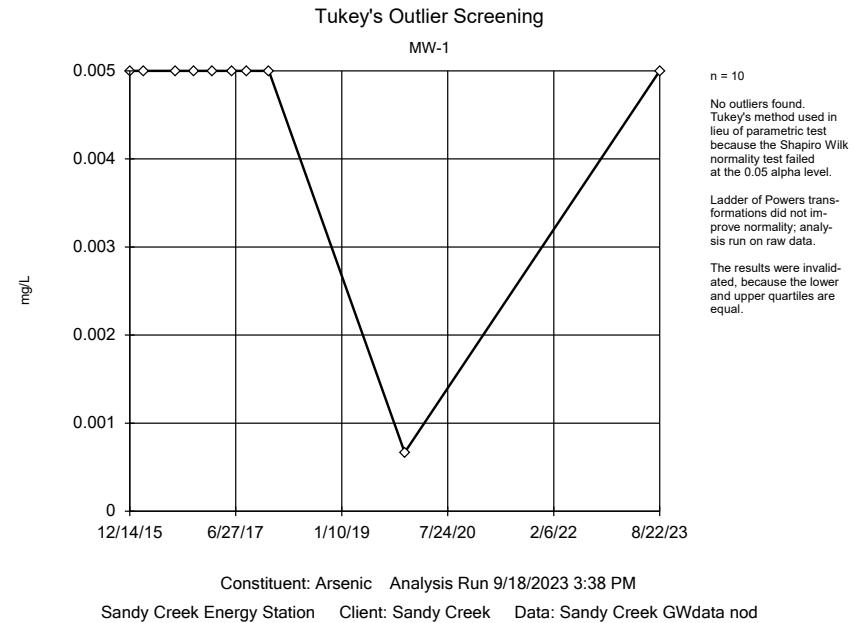
12/14/2015	<0.001
2/25/2016	<0.001
5/11/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	<0.001

Tukey's Outlier Screening

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)
12/14/2015	<0.001
2/25/2016	<0.001
5/11/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	0.00766



Tukey's Outlier Screening

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.005
2/25/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
12/10/2019	0.000667
8/22/2023	<0.005

Tukey's Outlier Screening

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.005
2/25/2016 0.014 (O)
5/11/2016 0.0059
8/16/2016 <0.005
11/17/2016 0.0059
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
12/10/2019 0.00219 (O)
8/22/2023 <0.005

Tukey's Outlier Screening

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.006
2/25/2016 0.0061
5/11/2016 <0.006
8/16/2016 <0.006
11/17/2016 <0.006
2/23/2017 <0.006
6/7/2017 <0.006
8/24/2017 <0.006
12/20/2017 <0.006
12/10/2019 0.0024
8/22/2023 0.0468

Tukey's Outlier Screening

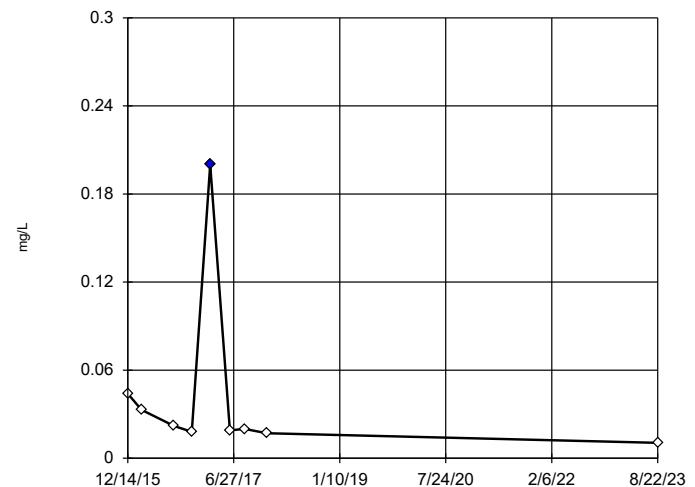
Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	
12/14/2015	<0.006
2/25/2016	0.015
5/11/2016	0.0084
8/16/2016	0.0064
11/17/2016	0.0066
2/23/2017	<0.006
6/7/2017	<0.006
8/24/2017	<0.006
12/20/2017	<0.006
12/10/2019	0.00236
8/22/2023	0.0112

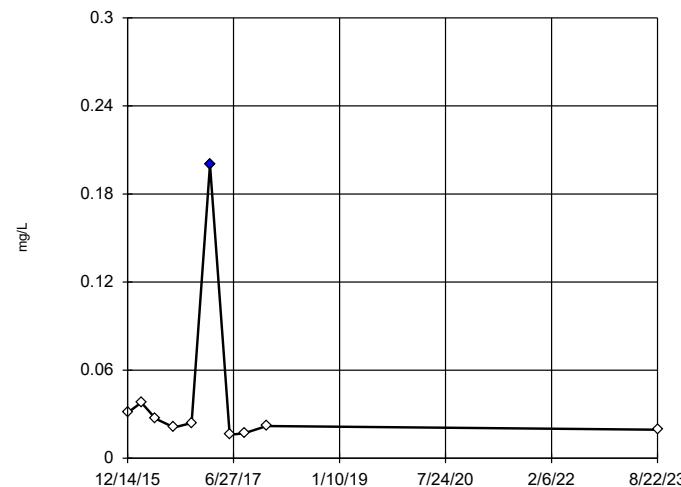
EPA 1989 Outlier Screening

MW-1



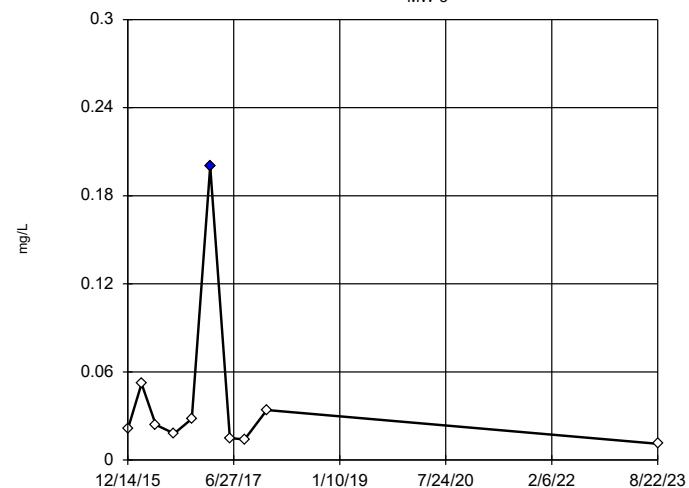
EPA 1989 Outlier Screening

MW-2



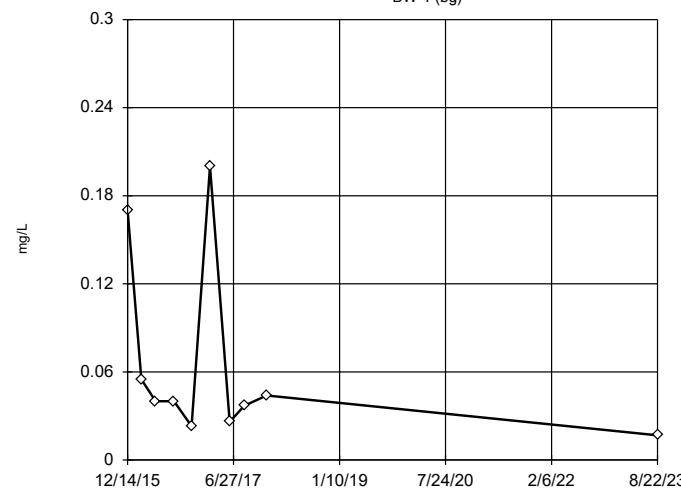
EPA 1989 Outlier Screening

MW-3



EPA 1989 Outlier Screening

BW-1 (bg)



EPA 1989 Outlier Screening

Constituent: Barium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn	Tn
12/14/2015	0.044	0.5699
2/25/2016	0.033	0.2324
8/16/2016	0.022	-0.2432
11/17/2016	0.018	-0.4786
2/23/2017	<0.2 (O)	2.346 (O)
6/7/2017	0.019	-0.4151
8/24/2017	0.02	-0.355
12/20/2017	0.017	-0.5456
8/22/2023	0.0105	-1.111
		-1.608

EPA 1989 Outlier Screening

Constituent: Barium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn
12/14/2015	0.031	0.1078
2/25/2016	0.038	0.3858
5/11/2016	0.027	-0.08084
8/16/2016	0.021	-0.424
11/17/2016	0.024	-0.2417
2/23/2017	<0.2 (O)	2.654 (O)
6/7/2017	0.016	-0.7953
8/24/2017	0.017	-0.7126
12/20/2017	0.022	-0.3605
8/22/2023	0.0194	-0.5322
		-0.6191

EPA 1989 Outlier Screening

Constituent: Barium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3	Tn	Tn
12/14/2015	0.021	-0.3023
2/25/2016	0.052	0.7812
5/11/2016	0.024	-0.1428
8/16/2016	0.018	-0.4865
11/17/2016	0.028	0.04146
2/23/2017	<0.2 (O)	2.391 (O)
6/7/2017	0.015	-0.7044
8/24/2017	0.014	-0.7869
12/20/2017	0.034	0.2735
8/22/2023	0.0111	-1.064
		-1.388

EPA 1989 Outlier Screening

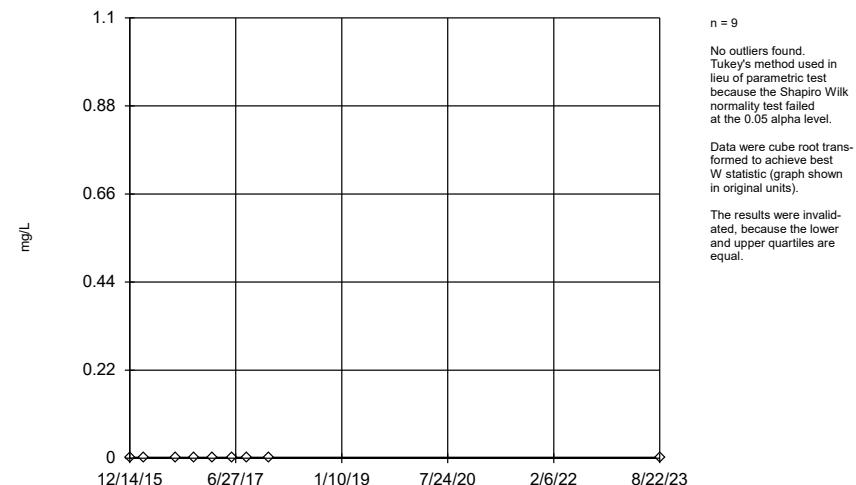
Constituent: Barium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	Tn
12/14/2015	0.17
2/25/2016	0.055
5/11/2016	0.04
8/16/2016	0.04
11/17/2016	0.023
2/23/2017	<0.2
6/7/2017	0.026
8/24/2017	0.037
12/20/2017	0.044
8/22/2023	0.0168
	-1.272

Tukey's Outlier Screening

MW-1

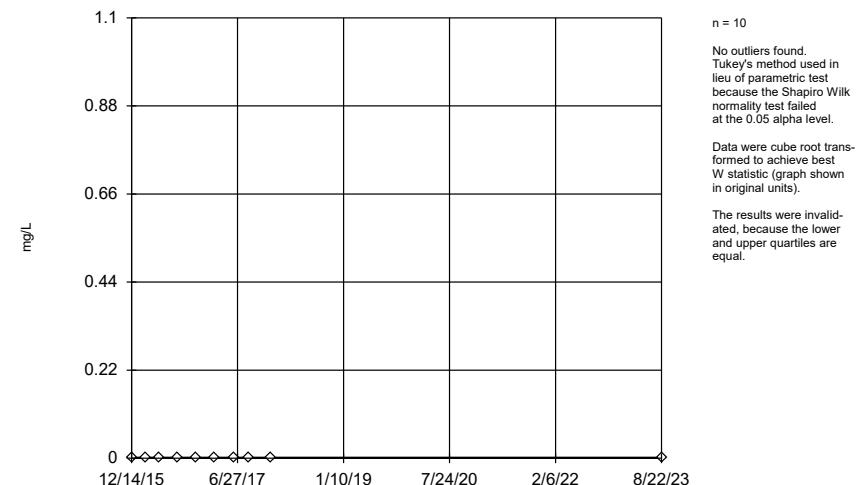


Constituent: Beryllium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-2

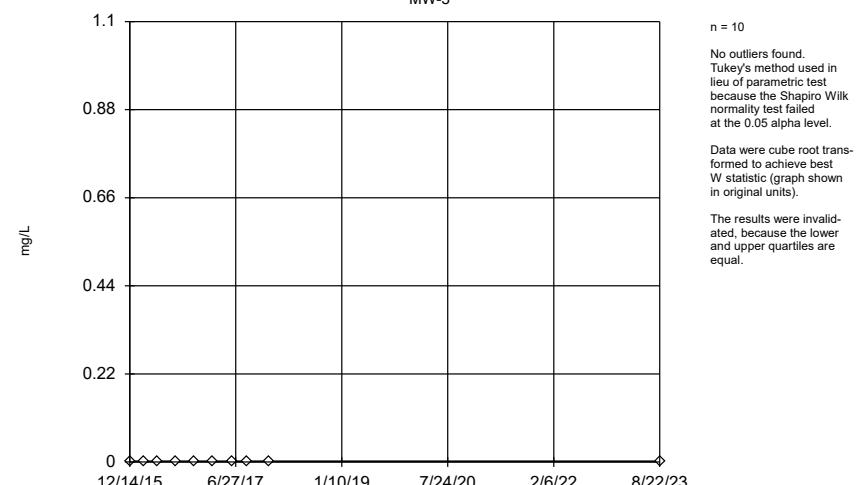


Constituent: Beryllium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-3

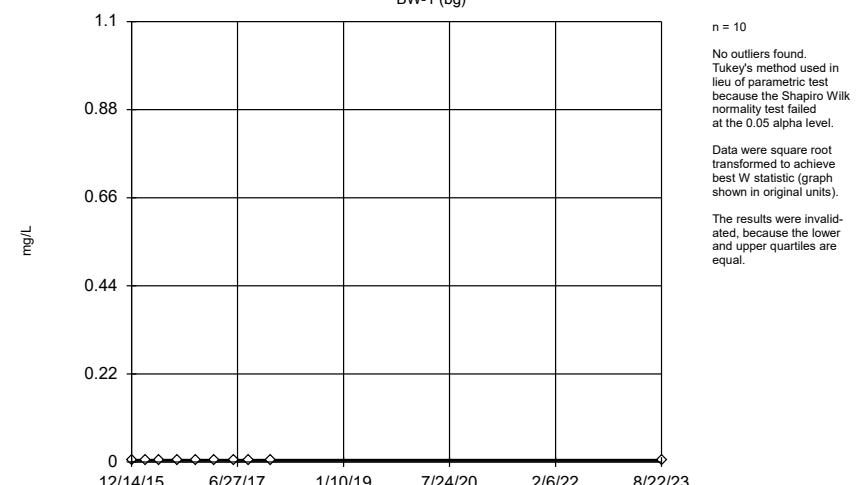


Constituent: Beryllium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

BW-1 (bg)



Constituent: Beryllium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.001
2/25/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	<0.001

Tukey's Outlier Screening

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.001
2/25/2016	<0.001
5/11/2016	<0.001
8/16/2016	<0.001
11/17/2016	<0.001
2/23/2017	<0.001
6/7/2017	<0.001
8/24/2017	<0.001
12/20/2017	<0.001
8/22/2023	<0.001

Tukey's Outlier Screening

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 <0.001

Tukey's Outlier Screening

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 3:43 PM

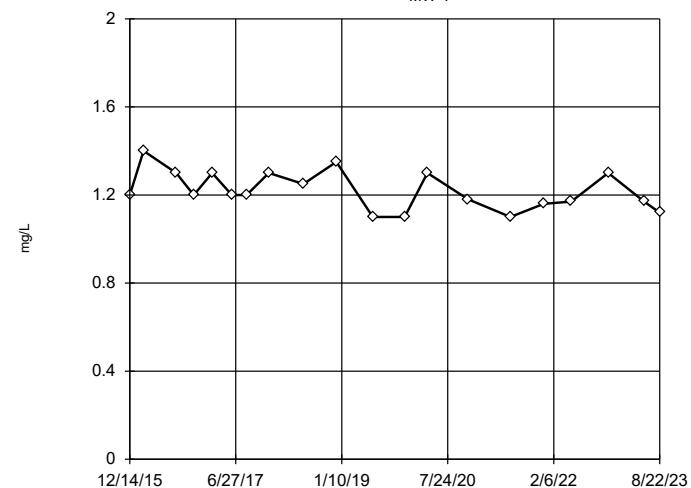
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)

12/14/2015	<0.005
2/25/2016	<0.005
5/11/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

EPA 1989 Outlier Screening

MW-1

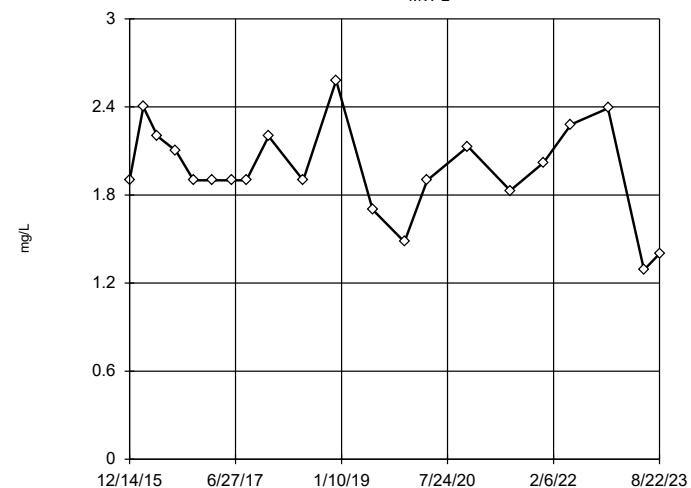


n = 20
No statistical outliers.
Mean 1.22, std. dev. 0.08802,
critical Tn 2.557.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9311
Critical = 0.905
The distribution was found
to be normally distributed.

EPA 1989 Outlier Screening

MW-2

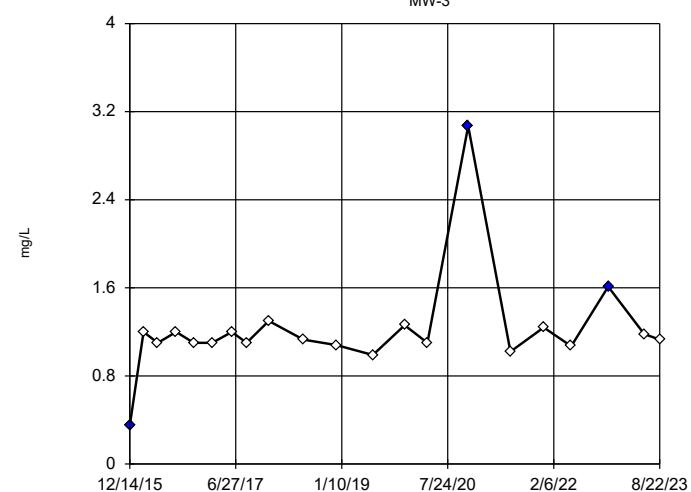


n = 21
No statistical outliers.
Mean 1.967, std. dev. 0.3267, critical Tn 2.58.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9564
Critical = 0.908
The distribution was found
to be normally distributed.

EPA 1989 Outlier Screening

MW-3

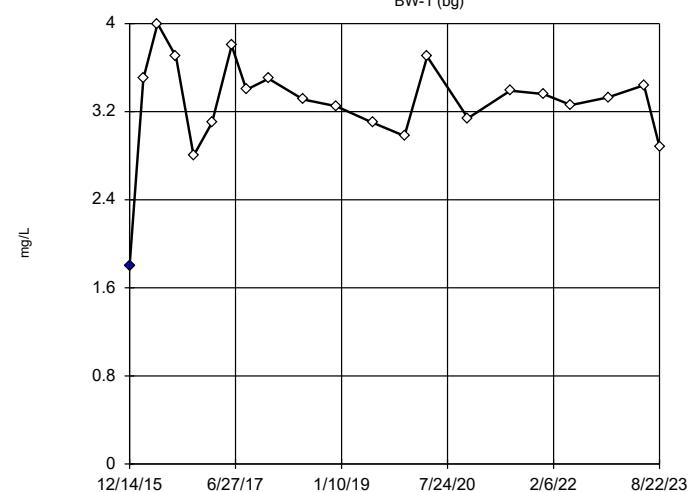


n = 21
Statistical outliers are drawn as solid.
Mean 1.216, std. dev. 0.4778, critical Tn 2.58.
After removing suspect data: mean 1.259, std. dev. 0.446, Tn 2.557;
mean 1.24, std. dev. 0.1346, Tn 2.532; mean 1.139, std. dev. 0.0926, Tn 2.504.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9606
Critical = 0.897
The distribution, after
removal of suspect val-
ues, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

BW-1 (bg)



n = 21
Statistical outlier is
drawn as solid.
Mean 3.273, std. dev.
0.4503, critical Tn 2.58.
After removing suspect
data: mean 3.347, std.
dev. 0.3058, Tn 2.557.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9833
Critical = 0.905
The distribution, after
removal of suspect val-
ues, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

Constituent: Boron (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	1.2
2/25/2016	1.4
8/16/2016	1.3
11/17/2016	1.2
2/23/2017	1.3
6/7/2017	1.2
8/24/2017	1.2
12/20/2017	1.3
6/21/2018	1.25
12/13/2018	1.35
6/24/2019	1.1
12/10/2019	1.1
4/8/2020	1.3
11/10/2020	1.18
6/22/2021	1.1
12/15/2021	1.16
5/10/2022	1.17
11/22/2022	1.3
6/1/2023	1.17
8/22/2023	1.12
	-0.1965
	1.955
	0.9205
	-0.1965
	0.9205
	-0.1965
	0.9205
	0.3732
	1.447
	-1.411
	-1.411
	0.9205
	-0.431
	-1.411
	-0.6696
	-0.5498
	0.9205
	-0.5498
	-1.159

EPA 1989 Outlier Screening

Constituent: Boron (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn
12/14/2015	1.9
2/25/2016	2.4
5/11/2016	2.2
8/16/2016	2.1
11/17/2016	1.9
2/23/2017	1.9
6/7/2017	1.9
8/24/2017	1.9
12/20/2017	2.2
6/21/2018	1.9
12/13/2018	2.58
6/24/2019	1.7
12/10/2019	1.48
4/8/2020	1.9
11/10/2020	2.13
6/22/2021	1.83
12/15/2021	2.02
5/10/2022	2.28
11/22/2022	2.39
6/1/2023	1.29
8/22/2023	1.4
	-0.1165
	1.216
	0.7199
	0.4545
	-0.1165
	-0.1165
	-0.1165
	1.629
	-0.7511
	-1.542
	-0.1165
	0.5354
	-0.3307
	0.2329
	0.9236
	1.192
	-2.326
	-1.859

EPA 1989 Outlier Screening

Constituent: Boron (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

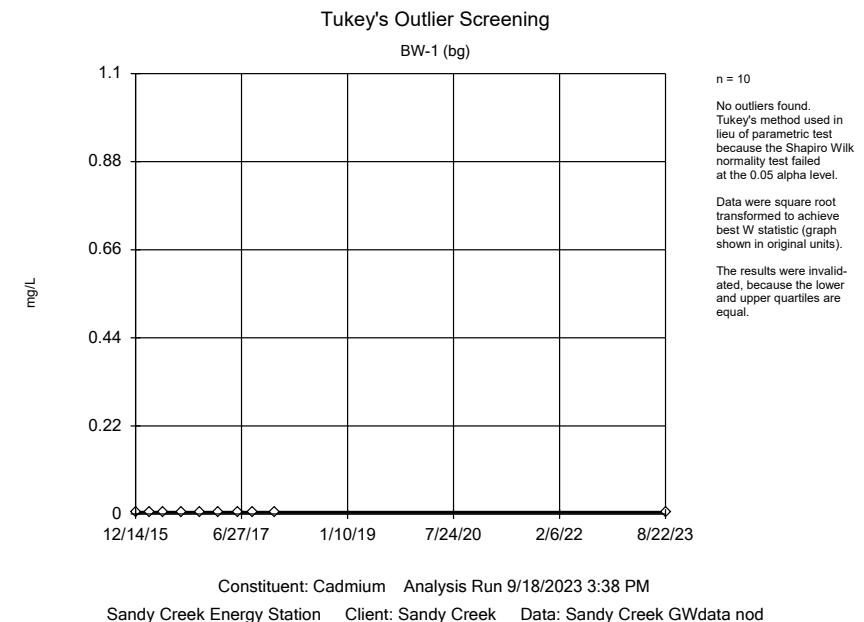
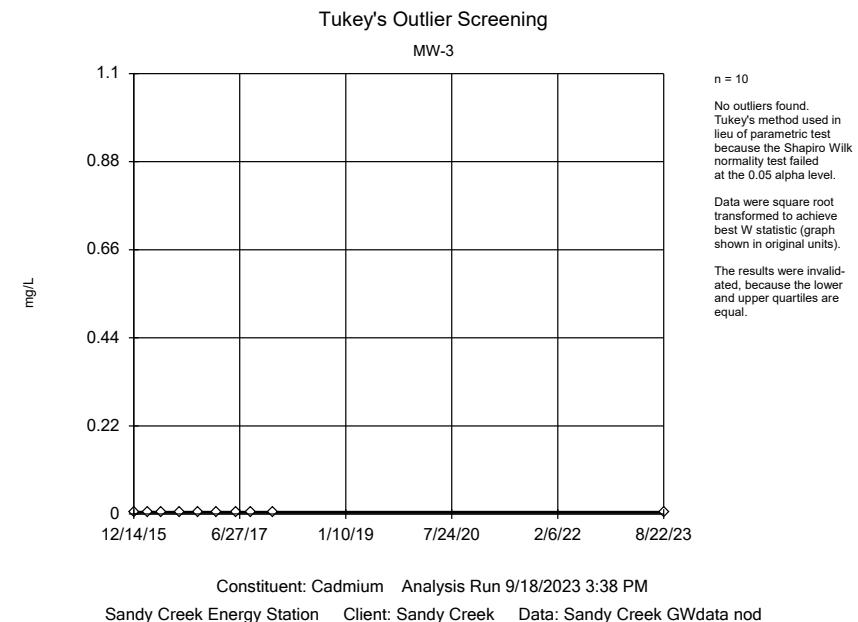
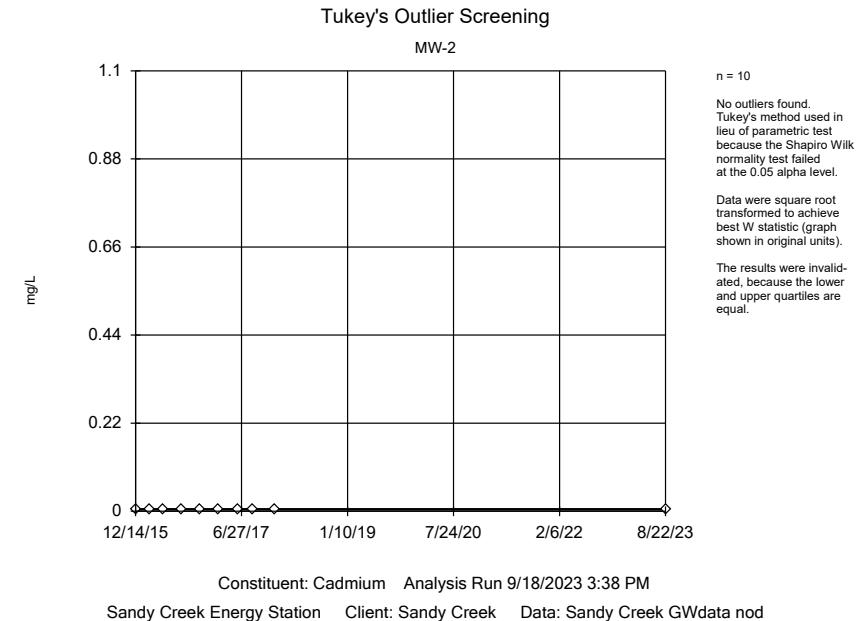
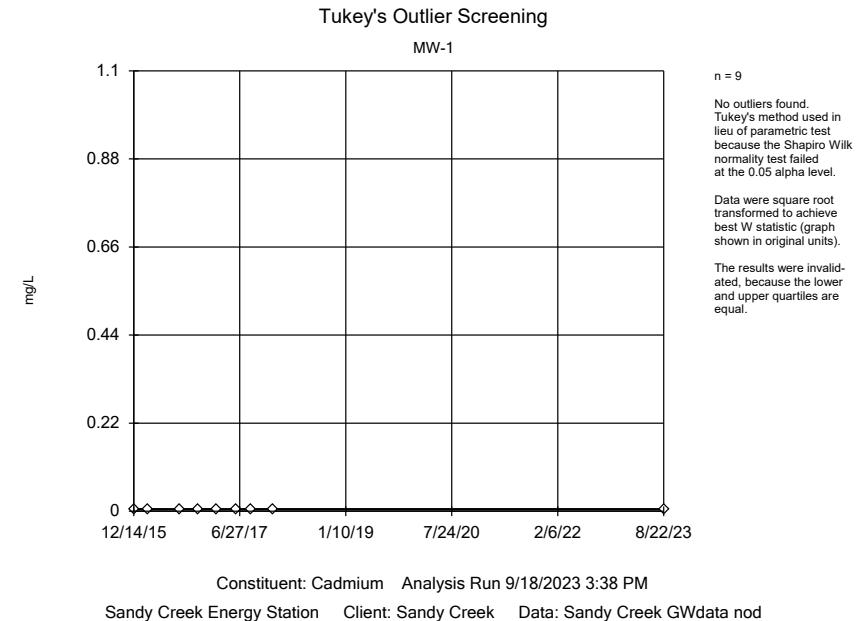
MW-3	Tn	Tn	Tn	Tn
12/14/2015	0.35 (O)	-3.298 (O)		
2/25/2016	1.2	0.1304	-0.05132	0.3417
5/11/2016	1.1	-0.1117	-0.4115	-0.4754
8/16/2016	1.2	0.1304	-0.05132	0.3417
11/17/2016	1.1	-0.1117	-0.4115	-0.4754
2/23/2017	1.1	-0.1117	-0.4115	-0.4754
6/7/2017	1.2	0.1304	-0.05132	0.3417
8/24/2017	1.1	-0.1117	-0.4115	-0.4754
12/20/2017	1.3	0.3531	0.2801	1.093
6/21/2018	1.13	-0.03682	-0.3001	-0.2227
12/13/2018	1.08	-0.1627	-0.4875	-0.6477
6/24/2019	0.99	-0.4048	-0.8477	-1.465
12/10/2019	1.26	0.2661	0.1507	0.7999
4/8/2020	1.1	-0.1117	-0.4115	-0.4754
11/10/2020	3.07 (O)	2.744	3.838 (O)	
6/22/2021	1.02	-0.3218	-0.7241	-1.184
12/15/2021	1.24	0.2216	0.08443	0.6497
5/10/2022	1.07	-0.1886	-0.526	-0.735
11/22/2022	1.61 (O)	0.9481	1.165	3.102 (O)
6/1/2023	1.18	0.08364	-0.1209	0.1839
8/22/2023	1.13	-0.03682	-0.3001	-0.2227
				-0.07412

EPA 1989 Outlier Screening

Constituent: Boron (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn	Tn
12/14/2015	1.8 (O)	-3.64 (O)	
2/25/2016	3.5	0.4837	0.533
5/11/2016	4	1.312	1.996
8/16/2016	3.7	0.8283	1.142
11/17/2016	2.8	-0.9001	-1.912
2/23/2017	3.1	-0.2689	-0.7965
6/7/2017	3.8	0.9937	1.434
8/24/2017	3.4	0.304	0.2155
12/20/2017	3.5	0.4837	0.533
6/21/2018	3.31	0.1376	-0.07844
12/13/2018	3.25	0.02416	-0.2789
6/24/2019	3.1	-0.2689	-0.7965
12/10/2019	2.98	-0.5137	-1.229
4/8/2020	3.7	0.8283	1.142
11/10/2020	3.14	-0.1894	-0.6561
6/22/2021	3.39	0.2857	0.1832
12/15/2021	3.36	0.2306	0.08581
5/10/2022	3.26	0.04321	-0.2452
11/22/2022	3.33	0.175	-0.01245
6/1/2023	3.44	0.3765	0.3436
8/22/2023	2.88	-0.7254	-1.603



Tukey's Outlier Screening

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.005
2/25/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

Tukey's Outlier Screening

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.005
2/25/2016	<0.005
5/11/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

Tukey's Outlier Screening

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.005
2/25/2016	<0.005
5/11/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

Tukey's Outlier Screening

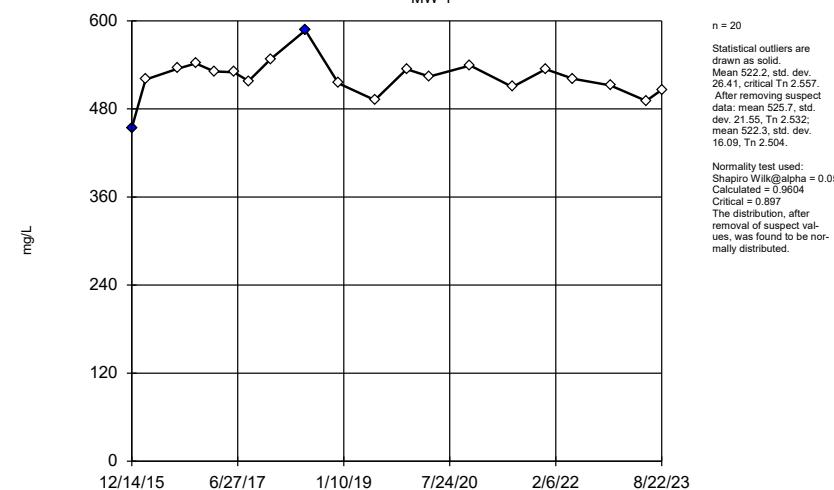
Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)
12/14/2015	<0.005
2/25/2016	<0.005
5/11/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

EPA 1989 Outlier Screening

MW-1

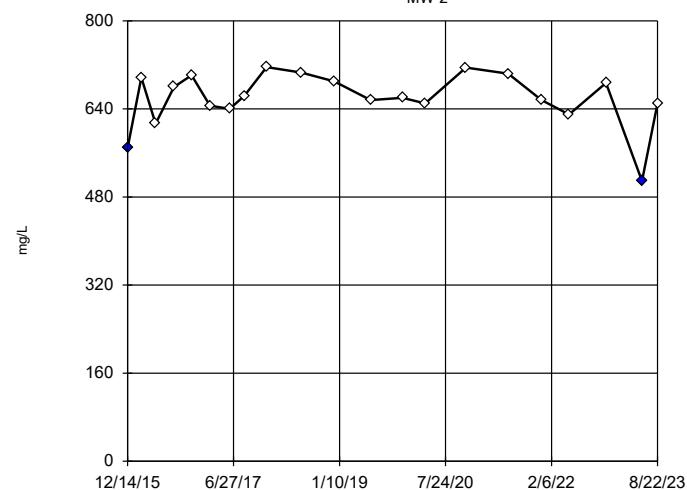


Constituent: Calcium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

MW-2

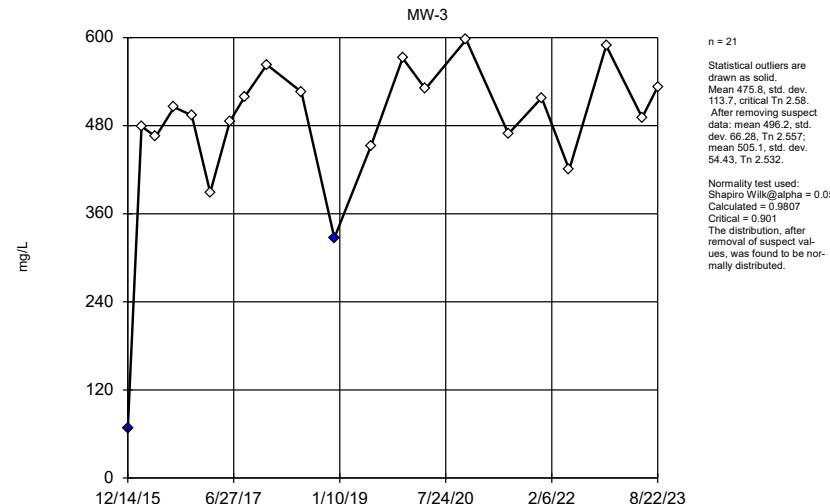


Constituent: Calcium Analysis Run 9/18/2023 3:38 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

MW-3

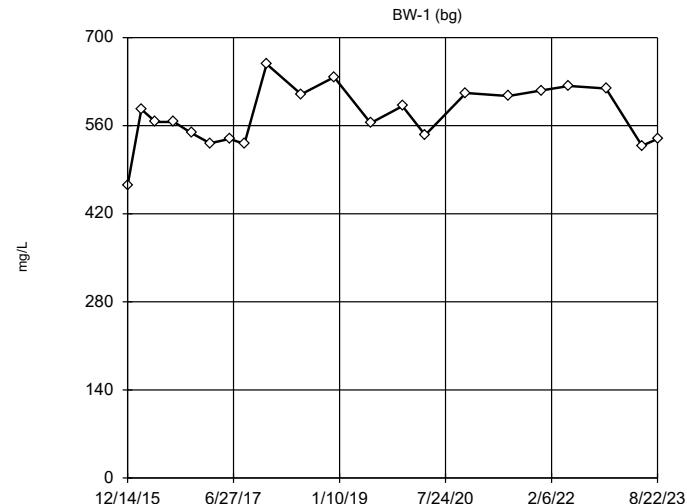


Constituent: Calcium Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

BW-1 (bg)



Constituent: Calcium Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn	Tn	Tn
12/14/2015	454 (O)	-2.713 (O)	
2/25/2016	520	-0.05666	-0.2523
8/16/2016	535	0.4999	0.4516
11/17/2016	542	0.7543	0.7734
2/23/2017	531	0.353	0.2659
6/7/2017	530	0.3161	0.2192
8/24/2017	518	-0.1321	-0.3476
12/20/2017	548	0.9697	1.046
6/21/2018	587 (O)	2.315	2.748 (O)
12/13/2018	515	-0.2457	-0.4914
6/24/2019	492	-1.14	-1.622
12/10/2019	534	0.4633	0.4053
4/8/2020	524	0.0933	-0.06259
11/10/2020	539	0.6456	0.636
6/22/2021	510	-0.4367	-0.7329
12/15/2021	534	0.4633	0.4053
5/10/2022	521	-0.01906	-0.2047
11/22/2022	512	-0.3601	-0.636
6/1/2023	491	-1.18	-1.673
8/22/2023	506	-0.5908	-0.9278
			-1.009

EPA 1989 Outlier Screening

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn	Tn
12/14/2015	569 (O)	-1.774	-2.718 (O)
2/25/2016	697	0.7283	0.8035
5/11/2016	613	-0.8554	-1.425
8/16/2016	680	0.4238	0.3749
11/17/2016	701	0.7989	0.9028
2/23/2017	646	-0.2087	-0.5153
6/7/2017	640	-0.3238	-0.6772
8/24/2017	664	0.1302	-0.03831
12/20/2017	716	1.06	1.27
6/21/2018	706	0.8866	1.026
12/13/2018	690	0.6039	0.6283
6/24/2019	656	-0.0193	-0.2487
12/10/2019	660	0.05567	-0.1432
4/8/2020	650	-0.1326	-0.4081
11/10/2020	715	1.043	1.246
6/22/2021	704	0.8516	0.9769
12/15/2021	656	-0.0193	-0.2487
5/10/2022	630	-0.518	-0.9505
11/22/2022	687	0.5501	0.5527
6/1/2023	509 (O)	-3.148 (O)	0.5187
8/22/2023	650	-0.1326	-0.4081
			-0.698

EPA 1989 Outlier Screening

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

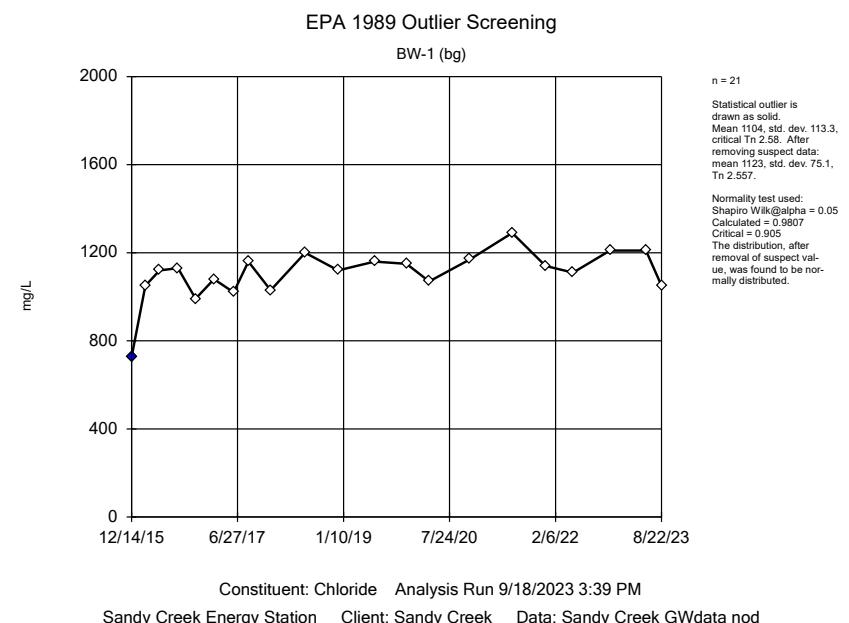
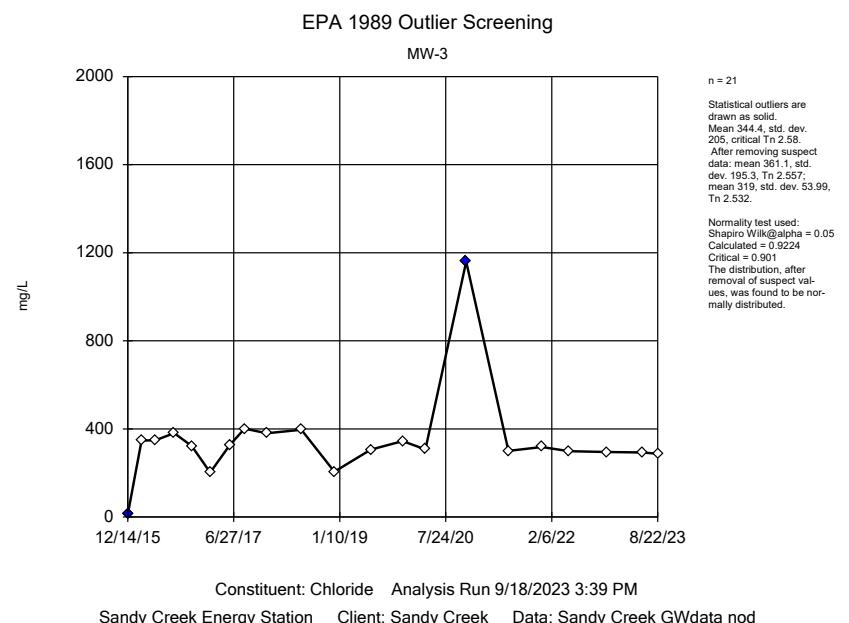
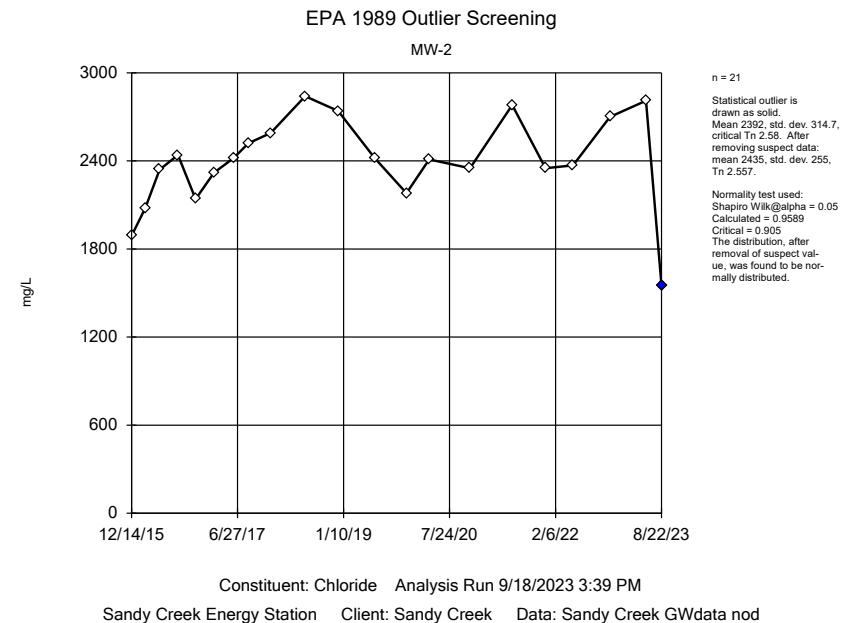
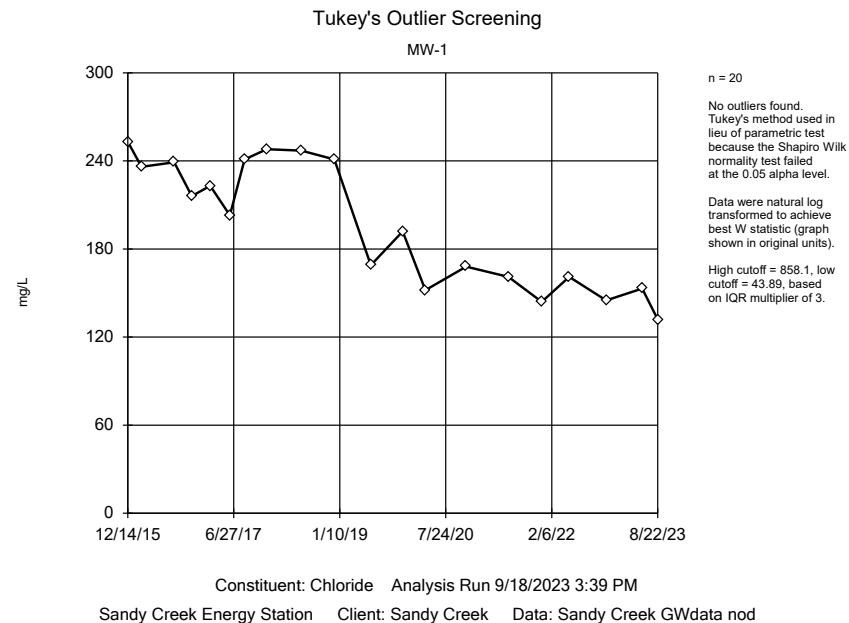
MW-3	Tn	Tn	Tn
12/14/2015	67.6 (O)	-4.152 (O)	
2/25/2016	479	0.1506	-0.1802
5/11/2016	465	0.0854	-0.3862
8/16/2016	505	0.2667	0.1869
11/17/2016	494	0.2183	0.03396
2/23/2017	389	-0.3067	-1.626
6/7/2017	486	0.1825	-0.07943
8/24/2017	519	0.3268	0.3768
12/20/2017	563	0.5056	0.942
6/21/2018	526	0.3562	0.4699
12/13/2018	327 (O)	-0.6882	-2.831 (O)
6/24/2019	452	0.0231	-0.5831
12/10/2019	572	0.5404	1.052
4/8/2020	530	0.3729	0.5225
11/10/2020	597	0.6344	1.349
6/22/2021	469	0.1042	-0.3267
12/15/2021	518	0.3226	0.3634
5/10/2022	420	-0.1382	-1.093
11/22/2022	589	0.6048	1.256
6/1/2023	491	0.2049	-0.008342
8/22/2023	533	0.3853	0.5617
			0.5388

EPA 1989 Outlier Screening

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	Tn
12/14/2015	465
2/25/2016	586
5/11/2016	566
8/16/2016	566
11/17/2016	548
2/23/2017	532
6/7/2017	539
8/24/2017	531
12/20/2017	658
6/21/2018	610
12/13/2018	637
6/24/2019	564
12/10/2019	591
4/8/2020	545
11/10/2020	612
6/22/2021	607
12/15/2021	616
5/10/2022	623
11/22/2022	619
6/1/2023	528
8/22/2023	539



Tukey's Outlier Screening

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	253
2/25/2016	236
8/16/2016	239
11/17/2016	216
2/23/2017	223
6/7/2017	203
8/24/2017	241
12/20/2017	248
6/21/2018	247
12/13/2018	241
6/24/2019	169
12/10/2019	192
4/8/2020	152
11/10/2020	168
6/22/2021	161
12/15/2021	144
5/10/2022	161
11/22/2022	145
6/1/2023	153
8/22/2023	132

EPA 1989 Outlier Screening

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn
12/14/2015	1890	-1.591
2/25/2016	2080	-0.9185
5/11/2016	2340	-0.0914
8/16/2016	2440	0.2025
11/17/2016	2140	-0.7188
2/23/2017	2320	-0.1517
6/7/2017	2420	0.1447
8/24/2017	2520	0.429
12/20/2017	2590	0.6214
6/21/2018	2840	1.268
12/13/2018	2740	1.017
6/24/2019	2420	0.1447
12/10/2019	2180	-0.5887
4/8/2020	2410	0.1156
11/10/2020	2350	-0.06145
6/22/2021	2780	1.119
12/15/2021	2350	-0.06145
5/10/2022	2370	-0.001941
11/22/2022	2700	0.9135
6/1/2023	2810	1.194
8/22/2023	1550 (O)	-2.984 (O)

EPA 1989 Outlier Screening

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

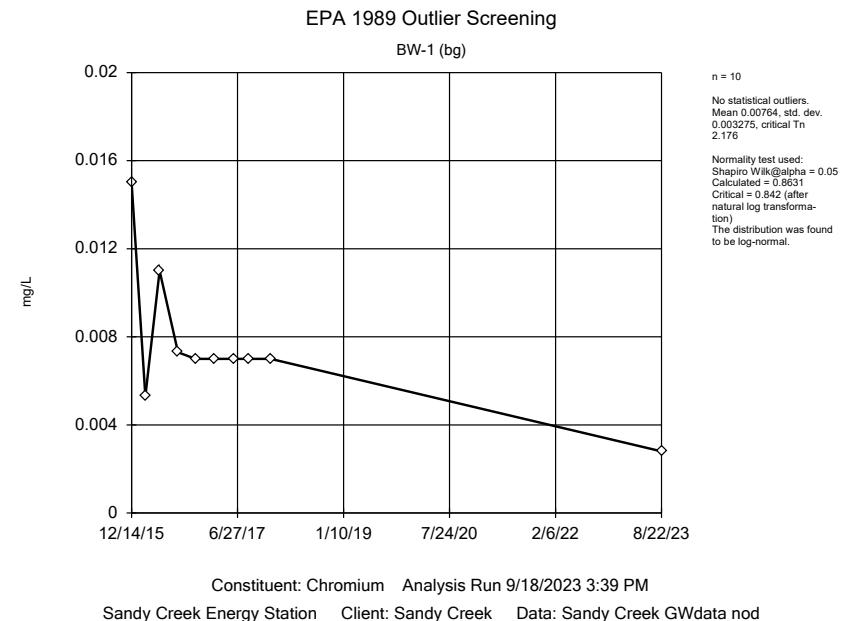
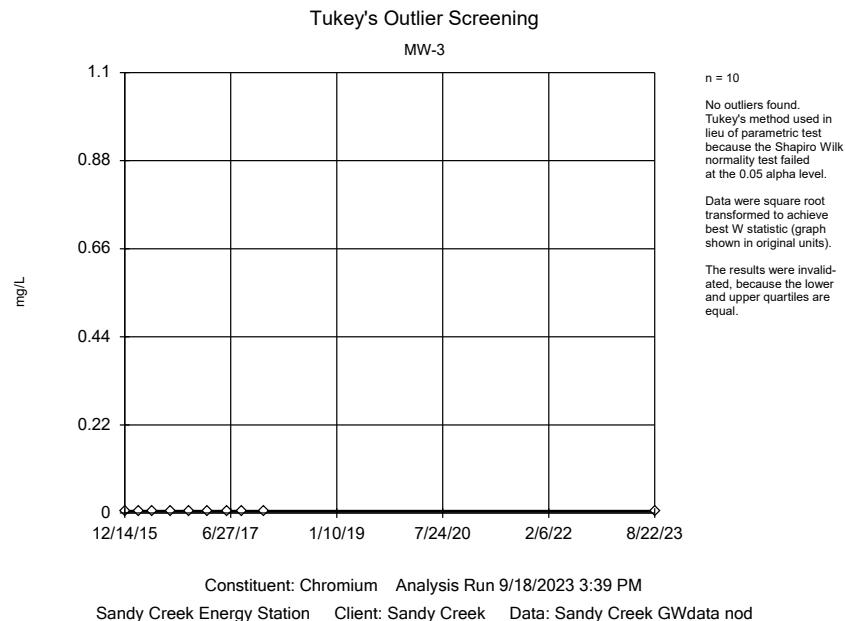
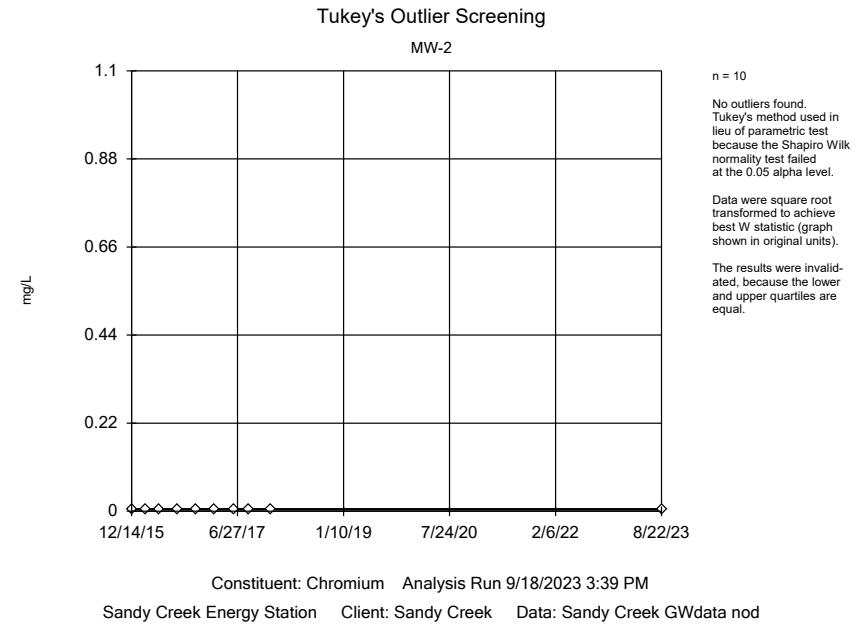
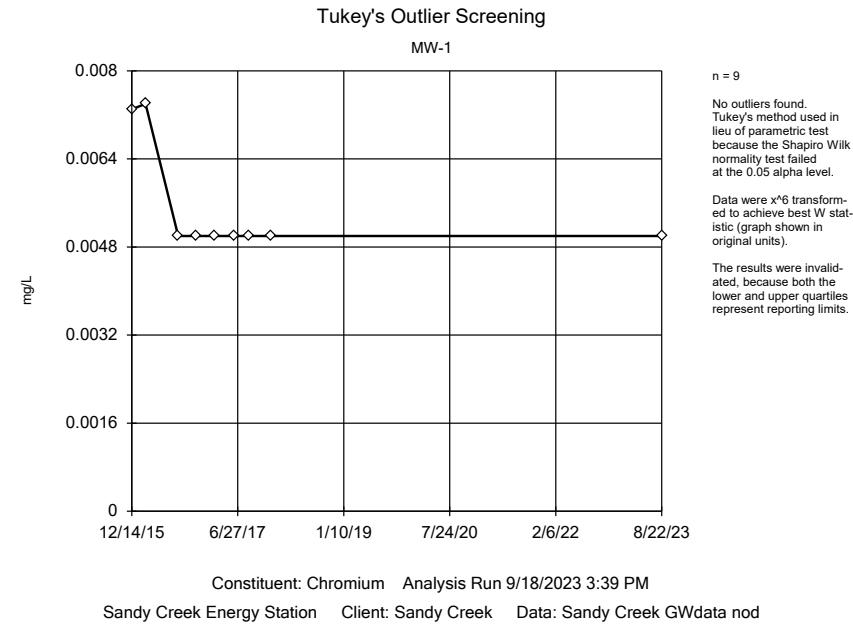
MW-3	Tn	Tn	Tn
12/14/2015	12.3 (O)	-3.96 (O)	
2/25/2016	347	0.2408	0.09913
5/11/2016	349	0.248	0.1159
8/16/2016	381	0.3583	0.3717
11/17/2016	322	0.1467	-0.1189
2/23/2017	202	-0.4398	-1.478
6/7/2017	327	0.1661	-0.07394
8/24/2017	401	0.4227	0.5208
12/20/2017	380	0.355	0.364
6/21/2018	396	0.4069	0.4842
12/13/2018	206	-0.4151	-1.421
6/24/2019	306	0.08261	-0.2675
12/10/2019	345	0.2335	0.08228
4/8/2020	307	0.08671	-0.2579
11/10/2020	1160 (O)	1.759	3.618 (O)
6/22/2021	300	0.0577	-0.3252
12/15/2021	318	0.131	-0.1553
5/10/2022	299	0.0535	-0.3349
11/22/2022	295	0.03656	-0.3742
6/1/2023	293	0.028	-0.394
8/22/2023	287	0.001981	-0.4543

EPA 1989 Outlier Screening

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn	Tn
12/14/2015	727 (O)	-3.594 (O)	
2/25/2016	1050	-0.3883	-0.9757
5/11/2016	1120	0.1744	-0.009002
8/16/2016	1130	0.252	0.1241
11/17/2016	991	-0.8926	-1.842
2/23/2017	1080	-0.1427	-0.5537
6/7/2017	1020	-0.6411	-1.41
8/24/2017	1160	0.4804	0.5166
12/20/2017	1030	-0.556	-1.264
6/21/2018	1200	0.776	1.024
12/13/2018	1120	0.1744	-0.009002
6/24/2019	1160	0.4804	0.5166
12/10/2019	1150	0.4049	0.3869
4/8/2020	1070	-0.2238	-0.6931
11/10/2020	1170	0.5553	0.6452
6/22/2021	1290	1.407	2.108
12/15/2021	1140	0.3288	0.2561
5/10/2022	1110	0.09625	-0.1433
11/22/2022	1210	0.8484	1.149
6/1/2023	1210	0.8484	1.149
8/22/2023	1050	-0.3883	-0.9757



Tukey's Outlier Screening

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 0.0073
2/25/2016 0.0074
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Tukey's Outlier Screening

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.005
2/25/2016	<0.005
5/11/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

Tukey's Outlier Screening

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

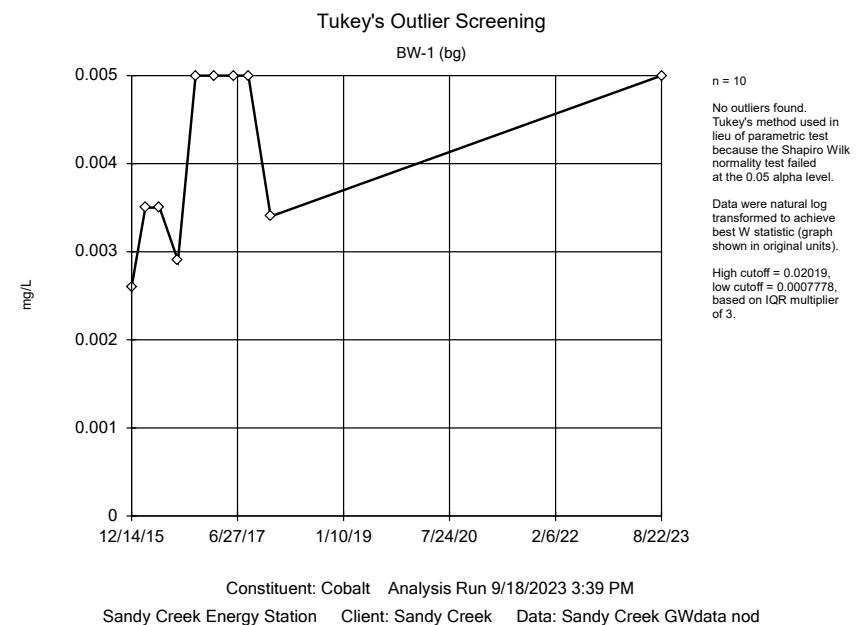
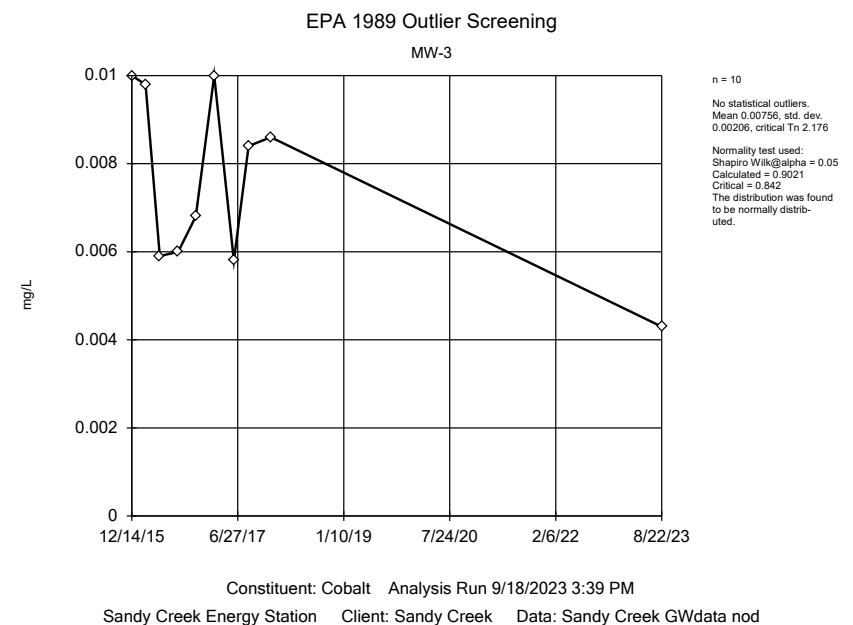
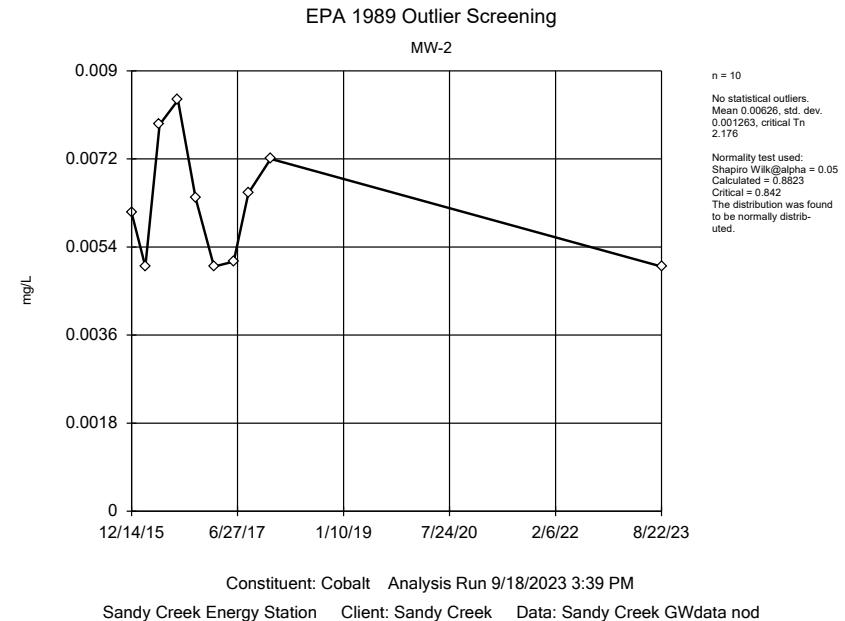
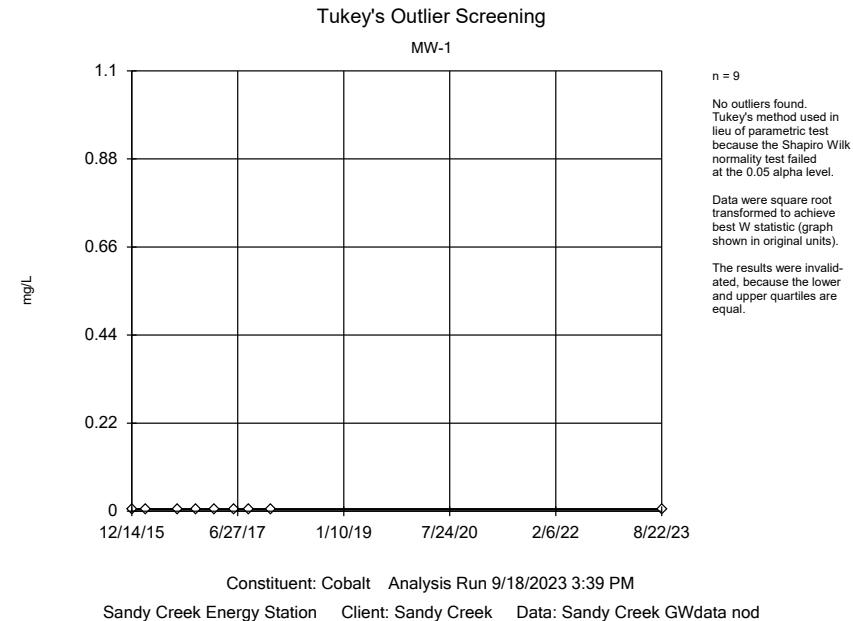
MW-3
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

EPA 1989 Outlier Screening

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	Tn
12/14/2015	0.015
2/25/2016	0.0053
5/11/2016	0.011
8/16/2016	0.0073
11/17/2016	<0.007
2/23/2017	<0.007
6/7/2017	<0.007
8/24/2017	<0.007
12/20/2017	<0.007
8/22/2023	0.0028
	-2.12



Tukey's Outlier Screening

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.005
2/25/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
8/22/2023	<0.005

EPA 1989 Outlier Screening

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn
12/14/2015	0.0061
2/25/2016	<0.005
5/11/2016	0.0079
8/16/2016	0.0084
11/17/2016	0.0064
2/23/2017	<0.005
6/7/2017	0.0051
8/24/2017	0.0065
12/20/2017	0.0072
8/22/2023	<0.005
	-0.04051
	-1.044
	1.265
	1.575
	0.2019
	-1.044
	-0.9445
	0.2802
	0.7965
	-1.044

EPA 1989 Outlier Screening

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

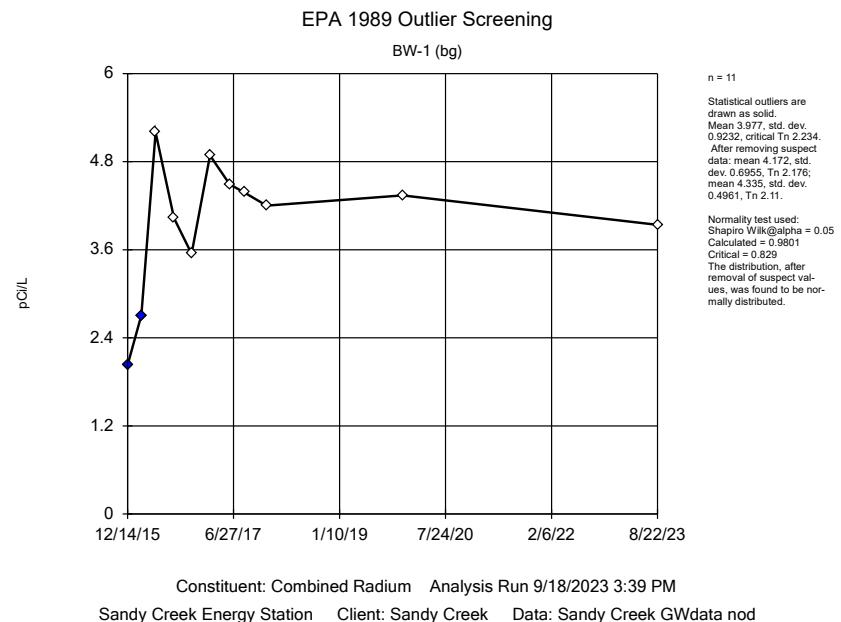
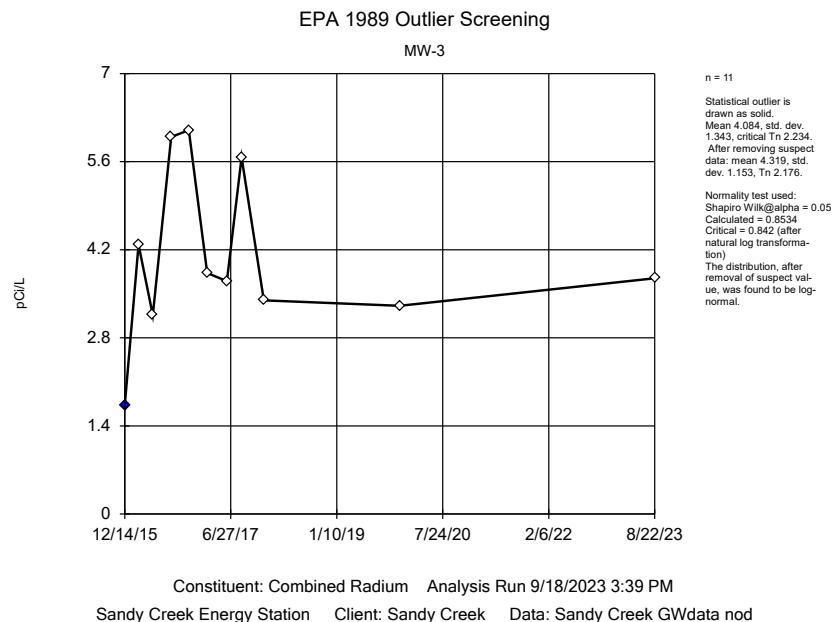
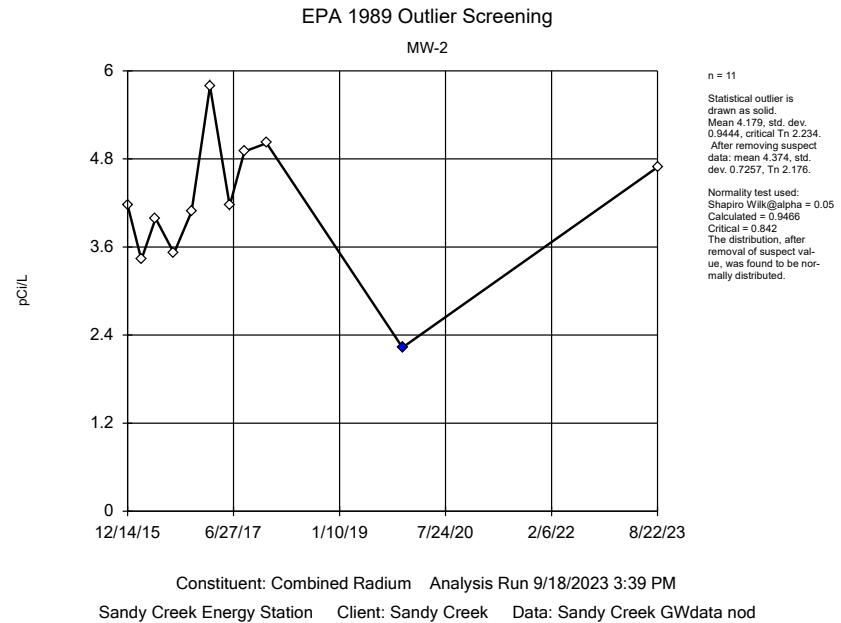
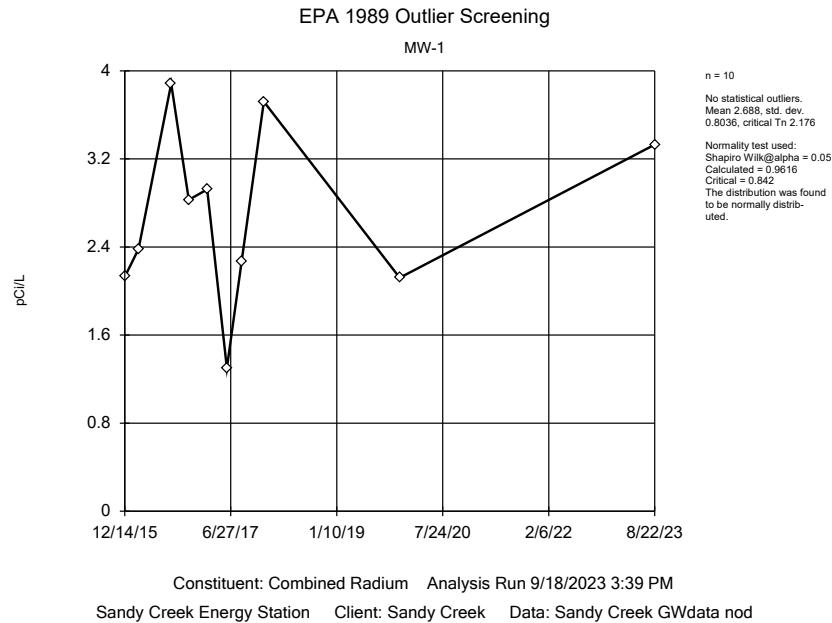
MW-3	Tn
12/14/2015	<0.01
2/25/2016	0.0098
5/11/2016	0.0059
8/16/2016	0.006
11/17/2016	0.0068
2/23/2017	<0.01
6/7/2017	0.0058
8/24/2017	0.0084
12/20/2017	0.0086
8/22/2023	0.0043

Tukey's Outlier Screening

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	
12/14/2015	0.0026
2/25/2016	0.0035
5/11/2016	0.0035
8/16/2016	0.0029
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	0.0034
8/22/2023	<0.005



EPA 1989 Outlier Screening

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	2.13
2/25/2016	2.382
8/16/2016	3.883
11/17/2016	2.828
2/23/2017	2.923
6/7/2017	1.3
8/24/2017	2.267
12/20/2017	3.72
12/10/2019	2.12
8/22/2023	3.33
	-0.5763
	-0.2336
	1.264
	0.2923
	0.3936
	-2.09
	-0.3853
	1.133
	-0.5908
	0.7931

EPA 1989 Outlier Screening

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn
12/14/2015	4.17	0.0968
2/25/2016	3.427	-0.681
5/11/2016	3.989	-0.07909
8/16/2016	3.517	-0.5782
11/17/2016	4.083	0.01323
2/23/2017	5.79	1.398
6/7/2017	4.164	0.09109
8/24/2017	4.9	0.7362
12/20/2017	5.015	0.8281
12/10/2019	2.23 (O)	-2.384 (O)
8/22/2023	4.686	0.5592
		0.4971

EPA 1989 Outlier Screening

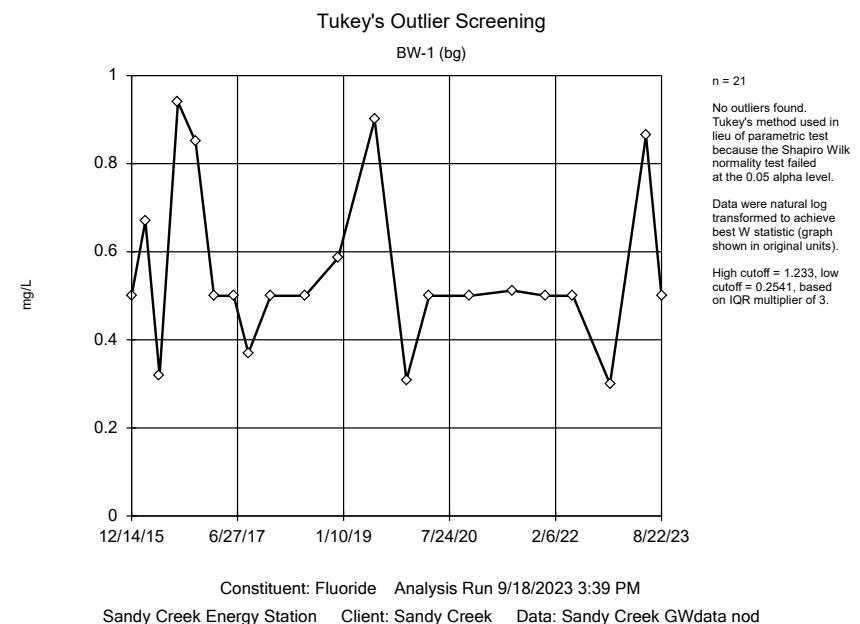
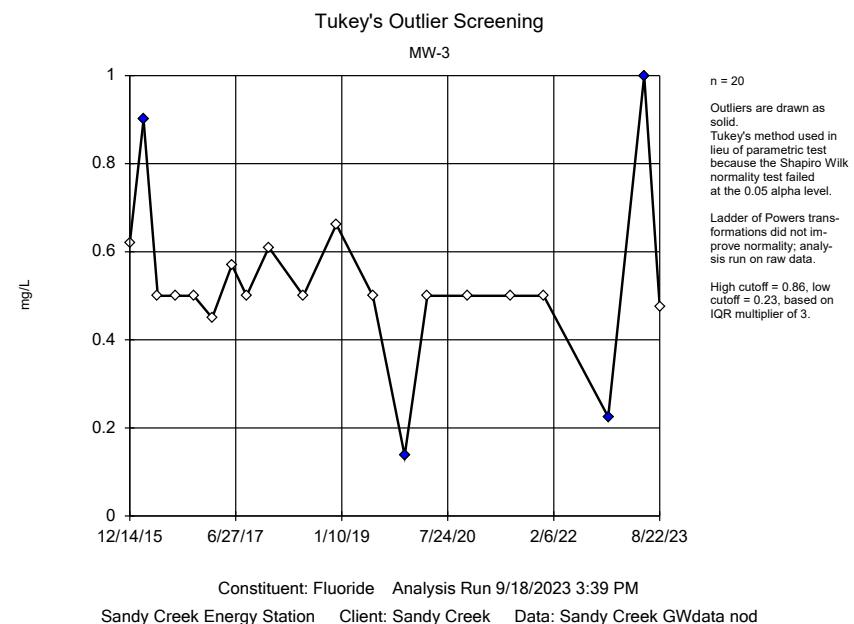
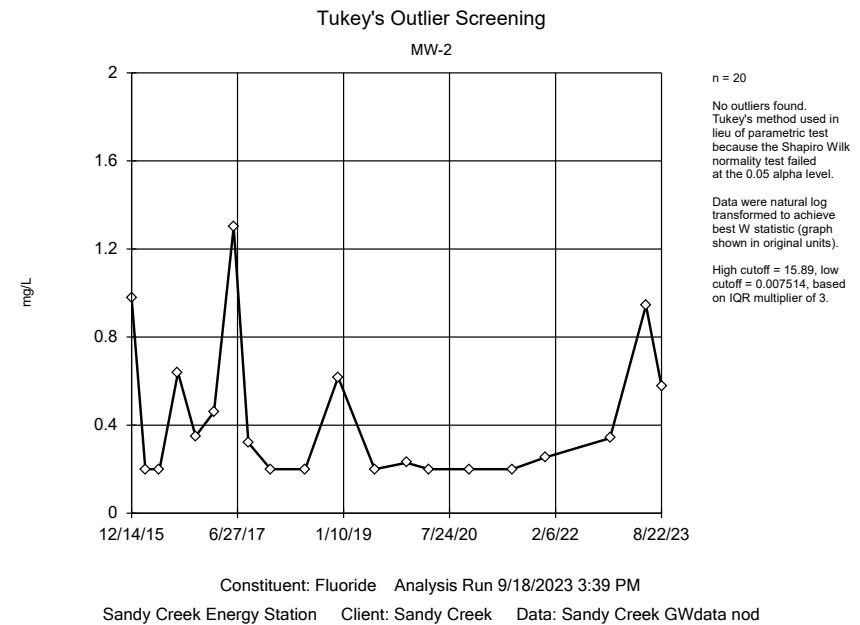
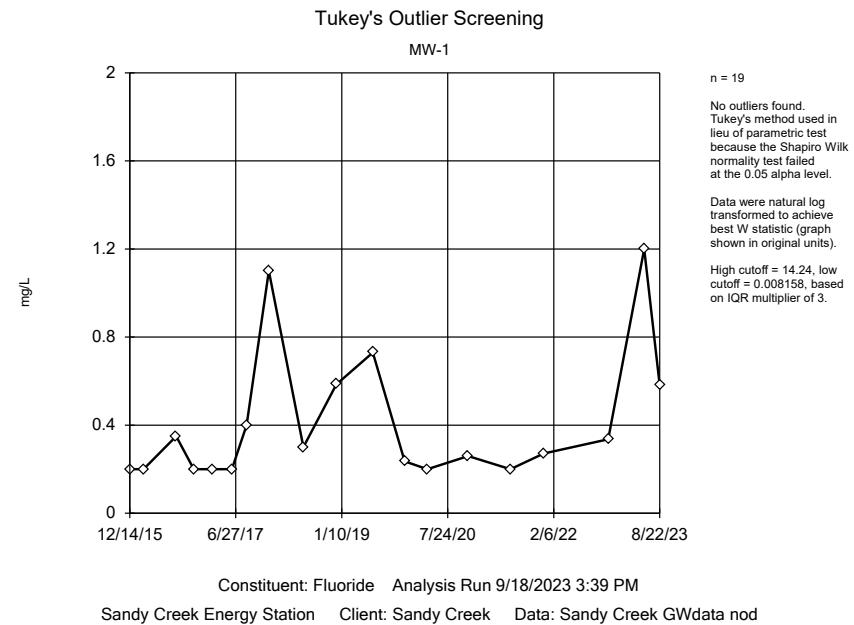
Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3	Tn	Tn
12/14/2015	1.733 (O)	-2.239 (O)
2/25/2016	4.28	0.2822
5/11/2016	3.16	-0.5639
8/16/2016	5.991	1.22
11/17/2016	6.102	1.271
2/23/2017	3.831	-0.02688
6/7/2017	3.701	-0.1232
8/24/2017	5.67	1.067
12/20/2017	3.396	-0.363
12/10/2019	3.31	-0.4346
8/22/2023	3.746	-0.08946

EPA 1989 Outlier Screening

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn	Tn	Tn
12/14/2015	2.03 (O)	-2.341 (O)		
2/25/2016	2.707 (O)	-1.292	-2.296 (O)	
5/11/2016	5.2	1.088	1.286	1.645
8/16/2016	4.03	0.1591	-0.1128	-0.587
11/17/2016	3.545	-0.3083	-0.8163	-1.71
2/23/2017	4.886	0.8613	0.944	1.099
6/7/2017	4.49	0.5532	0.4803	0.3592
8/24/2017	4.38	0.4627	0.3442	0.1421
12/20/2017	4.2	0.3098	0.1139	-0.2253
12/10/2019	4.34	0.4293	0.2938	0.06176
8/22/2023	3.94	0.0768	-0.2367	-0.7848



Tukey's Outlier Screening

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.2
2/25/2016	<0.2
8/16/2016	0.35
11/17/2016	<0.2
2/23/2017	<0.2
6/7/2017	<0.2
8/24/2017	0.4
12/20/2017	1.1
6/21/2018	0.3
12/13/2018	0.585
6/24/2019	0.73
12/10/2019	0.236
4/8/2020	<0.2
11/10/2020	0.26
6/22/2021	<0.2
12/15/2021	0.271
11/22/2022	0.336
6/1/2023	1.2
8/22/2023	0.581

Tukey's Outlier Screening

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	0.98
2/25/2016	<0.2
5/11/2016	<0.2
8/16/2016	0.64
11/17/2016	0.35
2/23/2017	0.46
6/7/2017	1.3
8/24/2017	0.32
12/20/2017	<0.2
6/21/2018	<0.2
12/13/2018	0.618
6/24/2019	<0.2
12/10/2019	0.229
4/8/2020	<0.2
11/10/2020	<0.2
6/22/2021	<0.2
12/15/2021	0.254
11/22/2022	0.341
6/1/2023	0.944
8/22/2023	0.577

Tukey's Outlier Screening

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	0.62
2/25/2016	0.9 (O)
5/11/2016	<0.5
8/16/2016	<0.5
11/17/2016	<0.5
2/23/2017	0.45
6/7/2017	0.57
8/24/2017	<0.5
12/20/2017	0.61
6/21/2018	<0.5
12/13/2018	0.662
6/24/2019	<0.5
12/10/2019	0.137 (O)
4/8/2020	<0.5
11/10/2020	<0.5
6/22/2021	<0.5
12/15/2021	<0.5
11/22/2022	0.225 (O)
6/1/2023	1 (O)
8/22/2023	0.476

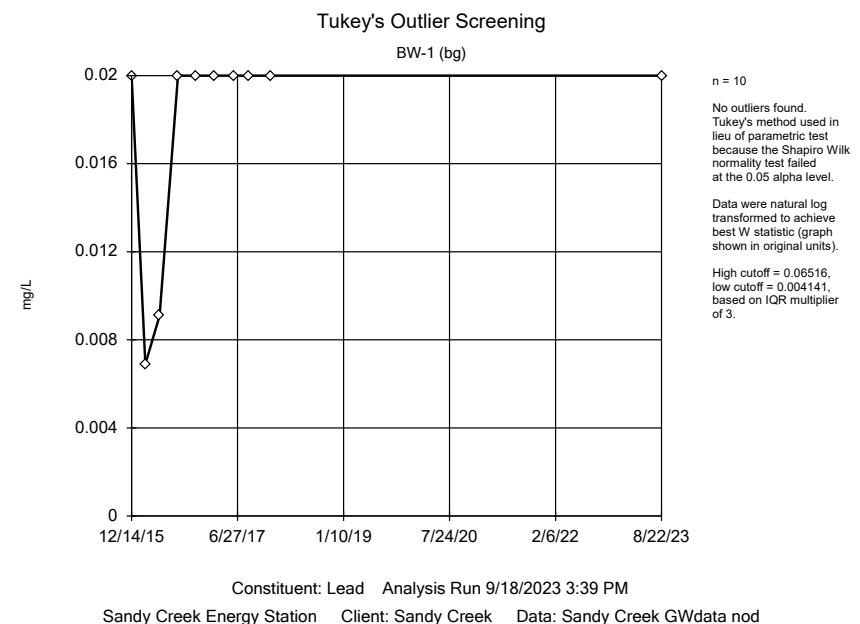
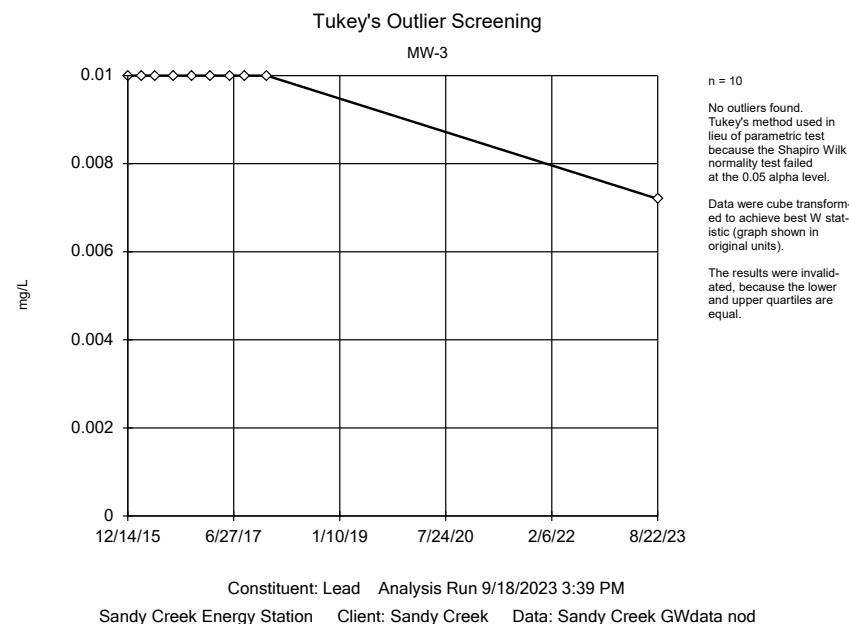
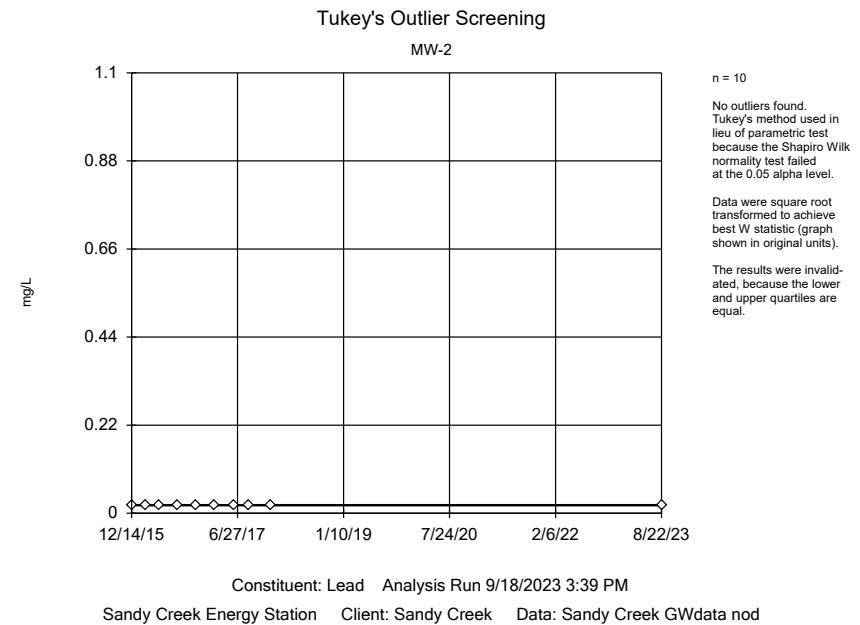
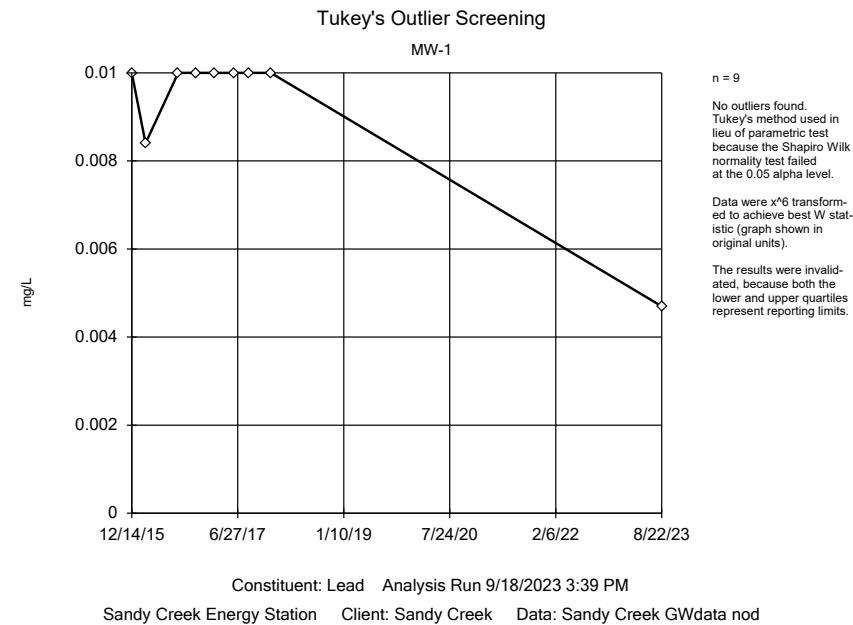
Tukey's Outlier Screening

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)

12/14/2015	<0.5
2/25/2016	0.67
5/11/2016	0.32
8/16/2016	0.94
11/17/2016	0.85
2/23/2017	<0.5
6/7/2017	<0.5
8/24/2017	0.37
12/20/2017	<0.5
6/21/2018	<0.5
12/13/2018	0.586
6/24/2019	0.9
12/10/2019	0.309
4/8/2020	<0.5
11/10/2020	<0.5
6/22/2021	0.512
12/15/2021	<0.5
5/10/2022	<0.5
11/22/2022	0.3
6/1/2023	0.864
8/22/2023	<0.5



Tukey's Outlier Screening

Constituent: Lead (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.01
2/25/2016 0.0084
8/16/2016 <0.01
11/17/2016 <0.01
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 0.0047

Tukey's Outlier Screening

Constituent: Lead (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.02
2/25/2016 <0.02
5/11/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
8/22/2023 <0.02

Tukey's Outlier Screening

Constituent: Lead (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.01
2/25/2016	<0.01
5/11/2016	<0.01
8/16/2016	<0.01
11/17/2016	<0.01
2/23/2017	<0.01
6/7/2017	<0.01
8/24/2017	<0.01
12/20/2017	<0.01
8/22/2023	0.0072

Tukey's Outlier Screening

Constituent: Lead (mg/L) Analysis Run 9/18/2023 3:43 PM

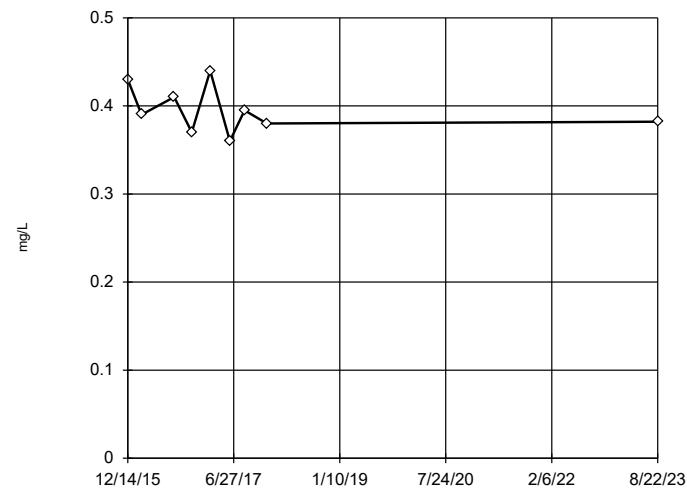
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)

12/14/2015	<0.02
2/25/2016	0.0069
5/11/2016	0.0091
8/16/2016	<0.02
11/17/2016	<0.02
2/23/2017	<0.02
6/7/2017	<0.02
8/24/2017	<0.02
12/20/2017	<0.02
8/22/2023	<0.02

EPA 1989 Outlier Screening

MW-1

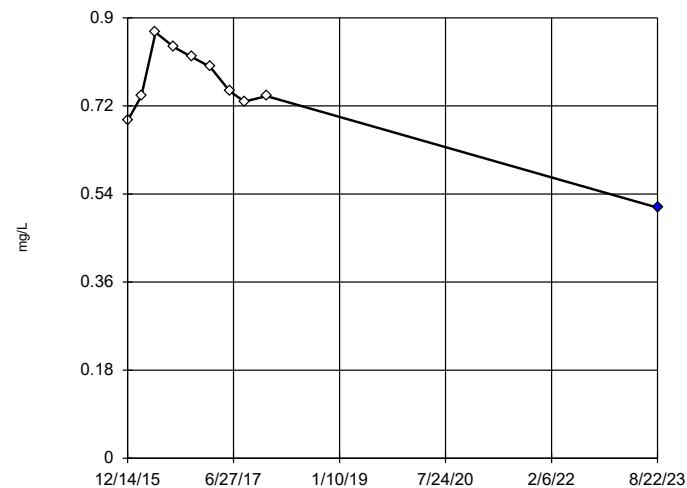


n = 9
No statistical outliers.
Mean 0.3952, std. dev.
0.02679, critical Tn 2.11.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9464
Critical = 0.829
The distribution was found
to be normally distributed.

EPA 1989 Outlier Screening

MW-2

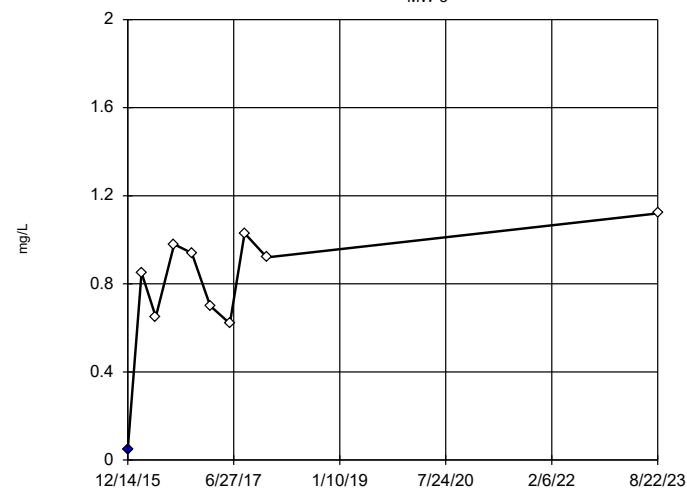


n = 10
Statistical outlier is
drawn as solid.
Mean 0.7491, std. dev.
0.1004, critical Tn 2.176.
After removing suspect
data: mean 0.7754, std.
dev. 0.05949, Tn 2.11.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9439
Critical = 0.829
The distribution, after
removal of suspect val-
ue, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

MW-3

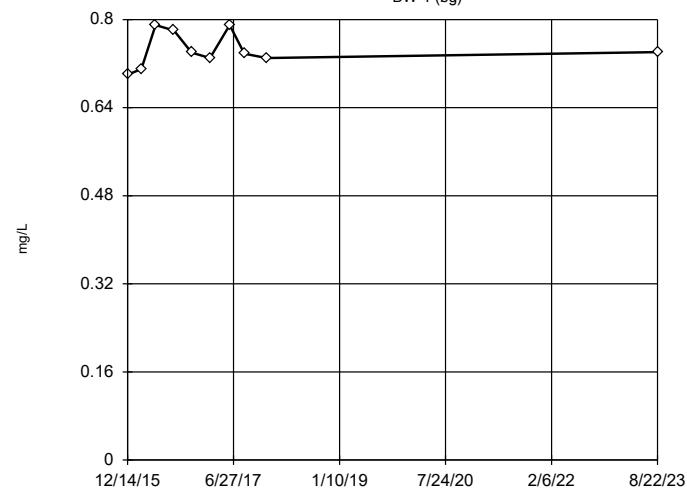


n = 10
Statistical outlier is
drawn as solid.
Mean 0.786, std. dev.
0.3073, critical Tn 2.176.
After removing suspect
data: mean 0.8678, std.
dev. 0.176, Tn 2.11.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9359
Critical = 0.829
The distribution, after
removal of suspect val-
ue, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

BW-1 (bg)



n = 10
No statistical outliers.
Mean 0.7449, std. dev.
0.03174, critical Tn 2.176.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.8957
Critical = 0.829
The distribution was found
to be normally distrib-
uted.

EPA 1989 Outlier Screening

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	0.43
2/25/2016	0.39
8/16/2016	0.41
11/17/2016	0.37
2/23/2017	0.44
6/7/2017	0.36
8/24/2017	0.395
12/20/2017	0.38
8/22/2023	0.382

EPA 1989 Outlier Screening

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn
12/14/2015	0.69	-0.4893
2/25/2016	0.74	-0.01972
5/11/2016	0.87	1.067
8/16/2016	0.84	0.8311
11/17/2016	0.82	0.6693
2/23/2017	0.8	0.5036
6/7/2017	0.75	0.07038
8/24/2017	0.729	-0.1202
12/20/2017	0.74	-0.01972
8/22/2023	0.512 (O)	-2.492 (O)

EPA 1989 Outlier Screening

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3	Tn	Tn
12/14/2015	<0.05 (O)	-2.778 (O)
2/25/2016	0.85	0.3072
5/11/2016	0.65	0.01508
8/16/2016	0.98	0.4622
11/17/2016	0.94	0.4168
2/23/2017	0.7	0.09578
6/7/2017	0.62	-0.03637
8/24/2017	1.03	0.5164
12/20/2017	0.92	0.3934
8/22/2023	1.12	0.6076
		1.296

EPA 1989 Outlier Screening

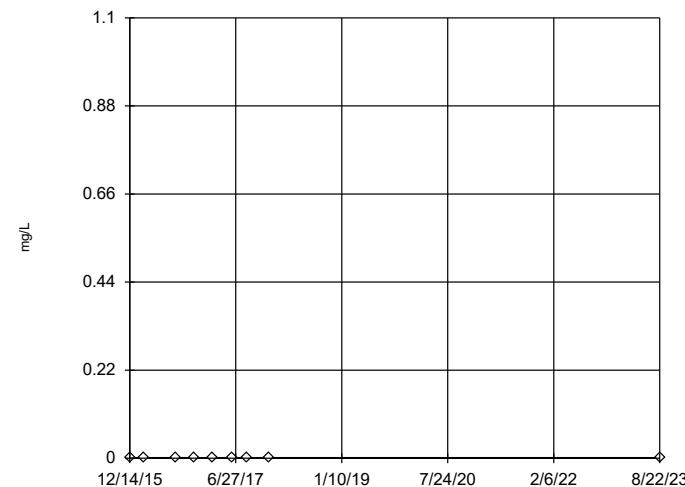
Constituent: Lithium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn
12/14/2015	0.7	-1.448
2/25/2016	0.71	-1.113
5/11/2016	0.79	1.406
8/16/2016	0.78	1.106
11/17/2016	0.74	-0.1366
2/23/2017	0.73	-0.4576
6/7/2017	0.79	1.406
8/24/2017	0.738	-0.2004
12/20/2017	0.73	-0.4576
8/22/2023	0.741	-0.1047

Tukey's Outlier Screening

MW-1



n = 9

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

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

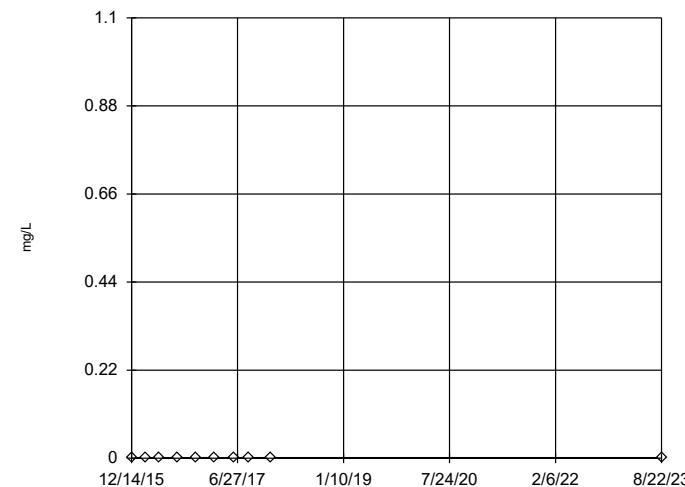
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-2



n = 10

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

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

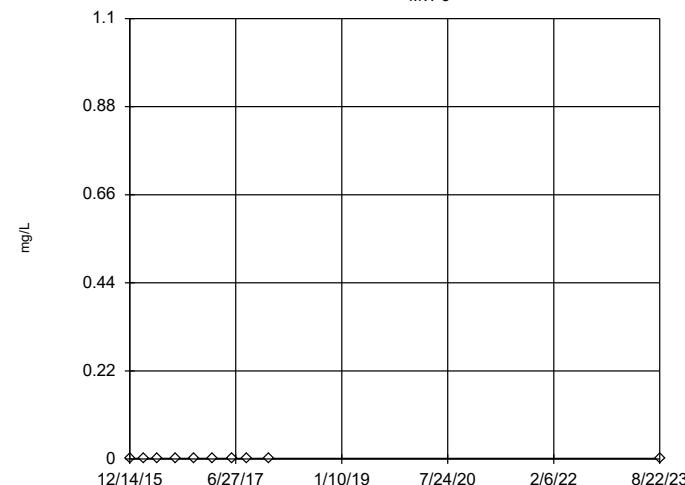
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-3



n = 10

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

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

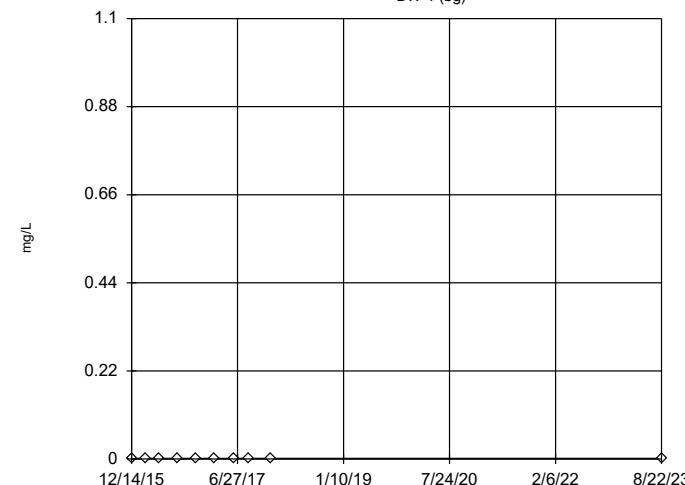
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

BW-1 (bg)



n = 10

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.05 alpha level.

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

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

Constituent: Mercury Analysis Run 9/18/2023 3:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.0002
2/25/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Tukey's Outlier Screening

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.0002
2/25/2016	<0.0002
5/11/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Tukey's Outlier Screening

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

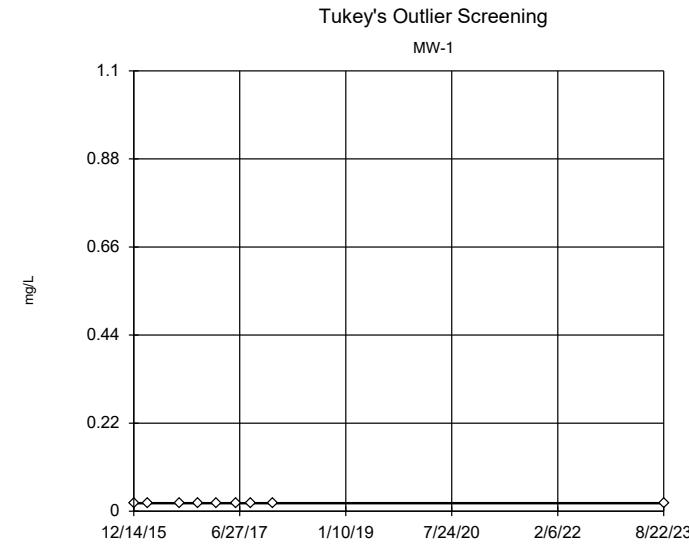
12/14/2015	<0.0002
2/25/2016	<0.0002
5/11/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Tukey's Outlier Screening

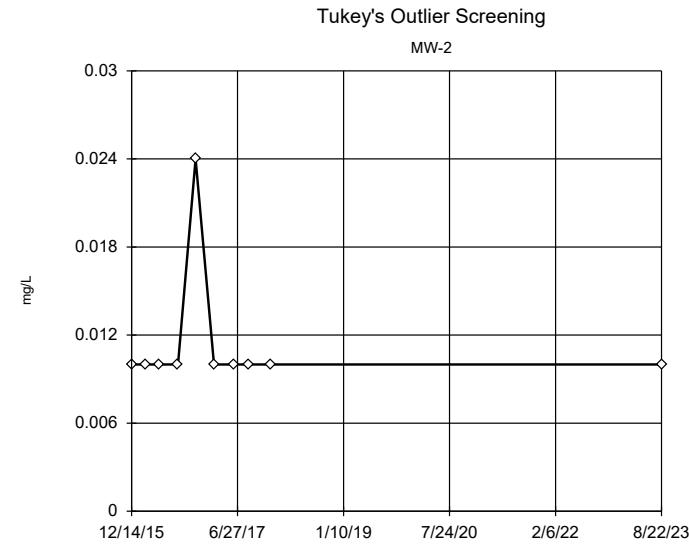
Constituent: Mercury (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

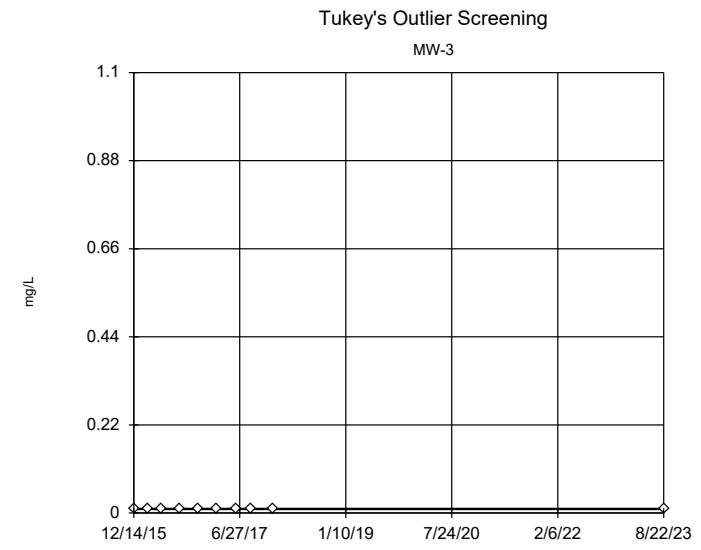
BW-1 (bg)	
12/14/2015	<0.0002
2/25/2016	<0.0002
5/11/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002



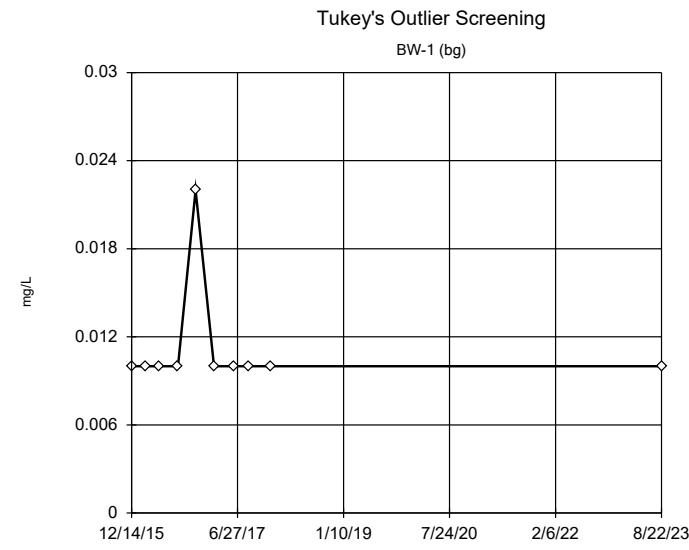
Constituent: Molybdenum Analysis Run 9/18/2023 3:39 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



Constituent: Molybdenum Analysis Run 9/18/2023 3:39 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



Constituent: Molybdenum Analysis Run 9/18/2023 3:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



Constituent: Molybdenum Analysis Run 9/18/2023 3:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.02
2/25/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
8/22/2023 <0.02

Tukey's Outlier Screening

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.01
2/25/2016 <0.01
5/11/2016 <0.01
8/16/2016 <0.01
11/17/2016 0.024
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 <0.01

Tukey's Outlier Screening

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.01
2/25/2016 <0.01
5/11/2016 <0.01
8/16/2016 <0.01
11/17/2016 <0.01
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 <0.01

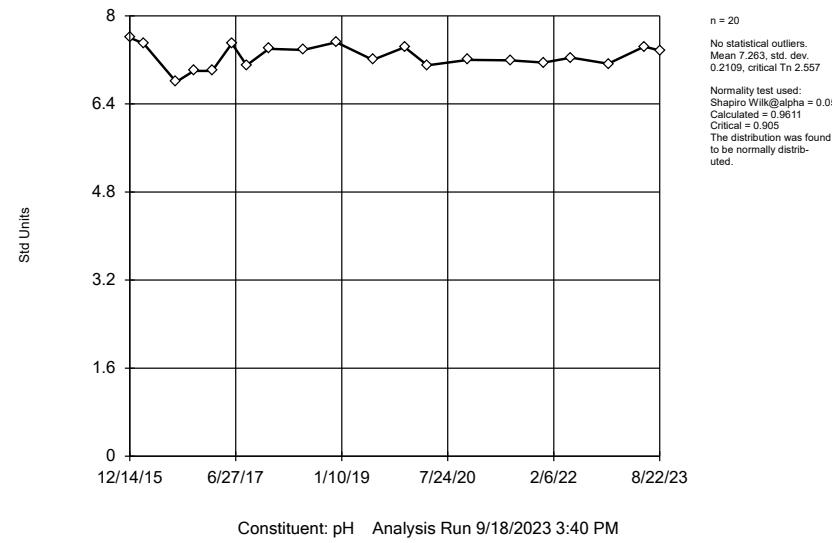
Tukey's Outlier Screening

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)
12/14/2015	<0.01
2/25/2016	<0.01
5/11/2016	<0.01
8/16/2016	<0.01
11/17/2016	0.022
2/23/2017	<0.01
6/7/2017	<0.01
8/24/2017	<0.01
12/20/2017	<0.01
8/22/2023	<0.01

EPA 1989 Outlier Screening

MW-1

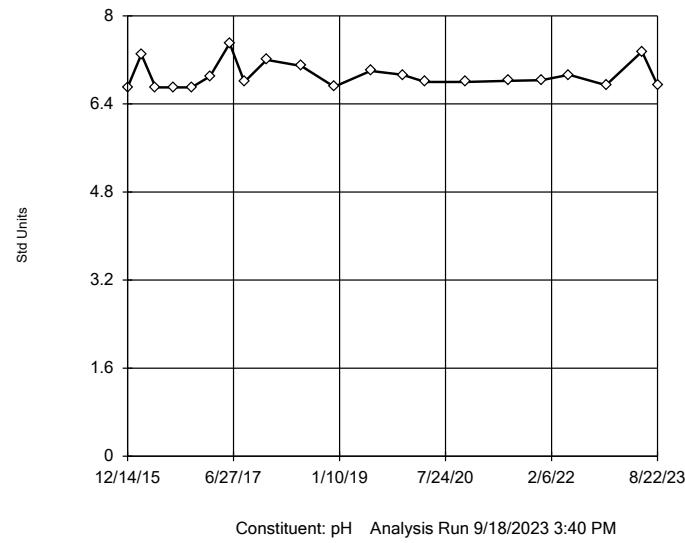


Constituent: pH Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-2

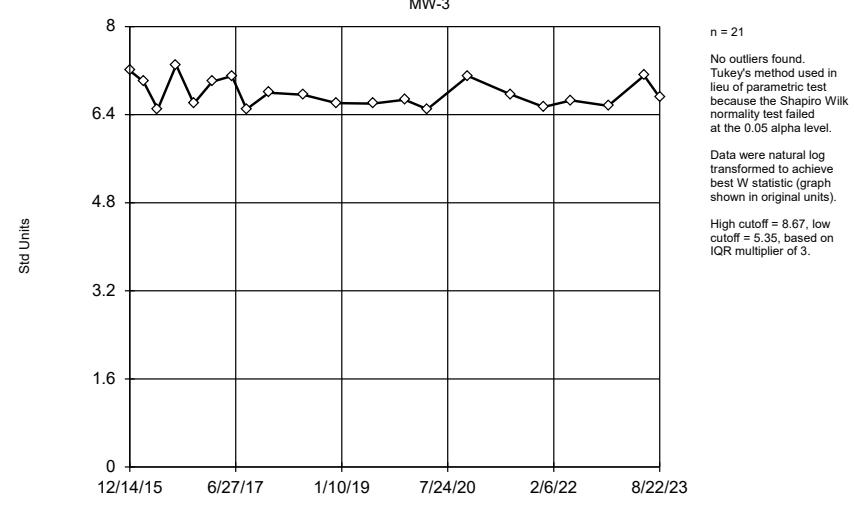


Constituent: pH Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

MW-3

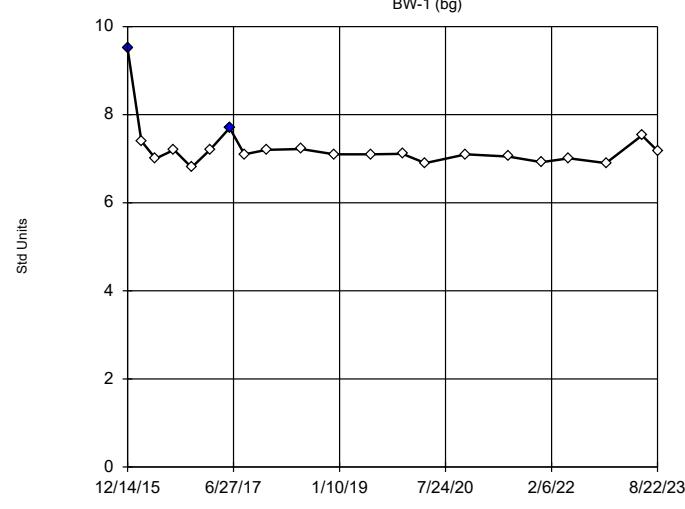


Constituent: pH Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

BW-1 (bg)



Constituent: pH Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

Constituent: pH (Std Units) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	7.6
2/25/2016	7.5
8/16/2016	6.8
11/17/2016	7
2/23/2017	7
6/7/2017	7.5
8/24/2017	7.1
12/20/2017	7.4
6/21/2018	7.38
12/13/2018	7.52
6/24/2019	7.2
12/10/2019	7.43
4/8/2020	7.1
11/10/2020	7.2
6/22/2021	7.19
12/15/2021	7.15
5/10/2022	7.24
11/22/2022	7.13
6/1/2023	7.44
8/22/2023	7.37

Tukey's Outlier Screening

Constituent: pH (Std Units) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	6.7
2/25/2016	7.3
5/11/2016	6.7
8/16/2016	6.7
11/17/2016	6.7
2/23/2017	6.9
6/7/2017	7.5
8/24/2017	6.8
12/20/2017	7.2
6/21/2018	7.09
12/13/2018	6.71
6/24/2019	7
12/10/2019	6.93
4/8/2020	6.8
11/10/2020	6.8
6/22/2021	6.82
12/15/2021	6.83
5/10/2022	6.93
11/22/2022	6.74
6/1/2023	7.35
8/22/2023	6.74

Tukey's Outlier Screening

Constituent: pH (Std Units) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

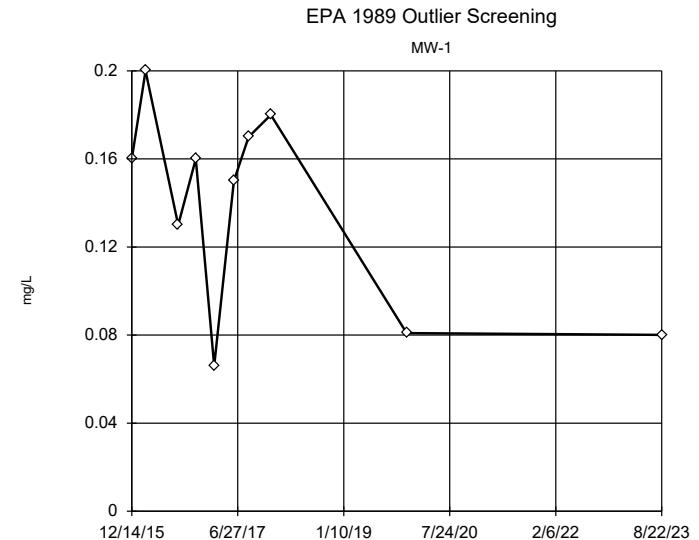
12/14/2015	7.2
2/25/2016	7
5/11/2016	6.5
8/16/2016	7.3
11/17/2016	6.6
2/23/2017	7
6/7/2017	7.1
8/24/2017	6.5
12/20/2017	6.8
6/21/2018	6.76
12/13/2018	6.61
6/24/2019	6.6
12/10/2019	6.67
4/8/2020	6.5
11/10/2020	7.1
6/22/2021	6.77
12/15/2021	6.54
5/10/2022	6.66
11/22/2022	6.56
6/1/2023	7.11
8/22/2023	6.71

EPA 1989 Outlier Screening

Constituent: pH (Std Units) Analysis Run 9/18/2023 3:43 PM

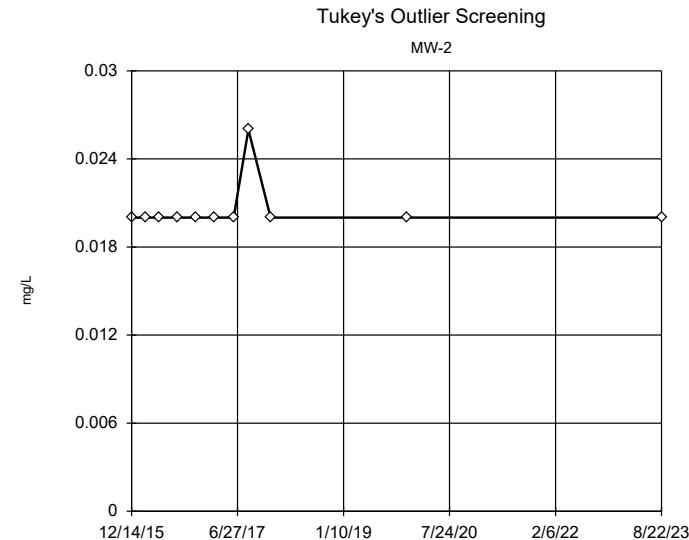
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn	Tn	Tn
12/14/2015	9.5 (O)	3.958 (O)		
2/25/2016	7.4	0.3351	1.233	1.67
5/11/2016	7	-0.4708	-0.6311	-0.6058
8/16/2016	7.2	-0.06224	0.3138	0.5481
11/17/2016	6.8	-0.8912	-1.603	-1.793
2/23/2017	7.2	-0.06224	0.3138	0.5481
6/7/2017	7.7 (O)	0.9114	2.566 (O)	
8/24/2017	7.1	-0.2651	-0.1554	-0.02481
12/20/2017	7.2	-0.06224	0.3138	0.5481
6/21/2018	7.22	-0.02201	0.4068	0.6617
12/13/2018	7.1	-0.2651	-0.1554	-0.02481
6/24/2019	7.1	-0.2651	-0.1554	-0.02481
12/10/2019	7.11	-0.2447	-0.1081	0.03284
4/8/2020	6.9	-0.6794	-1.114	-1.195
11/10/2020	7.1	-0.2651	-0.1554	-0.02481
6/22/2021	7.05	-0.3676	-0.3924	-0.3143
12/15/2021	6.92	-0.6375	-1.017	-1.077
5/10/2022	7.01	-0.4501	-0.5833	-0.5474
11/22/2022	6.9	-0.6794	-1.114	-1.195
6/1/2023	7.53	0.5877	1.817	2.384
8/22/2023	7.18	-0.1026	0.2205	0.4341



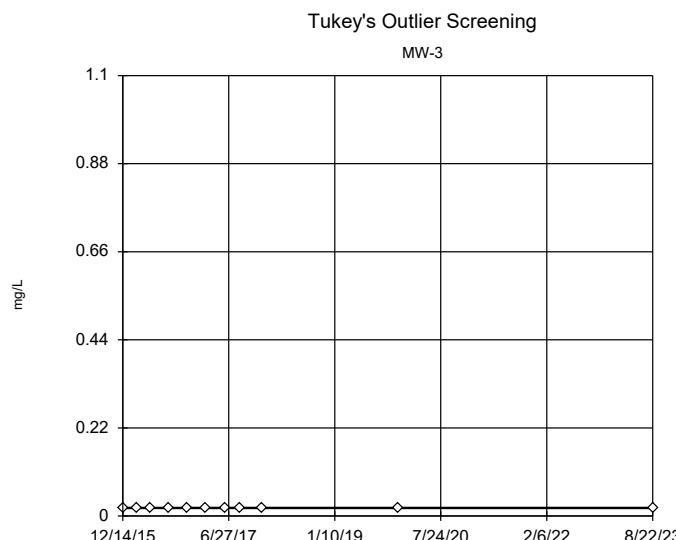
Constituent: Selenium Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



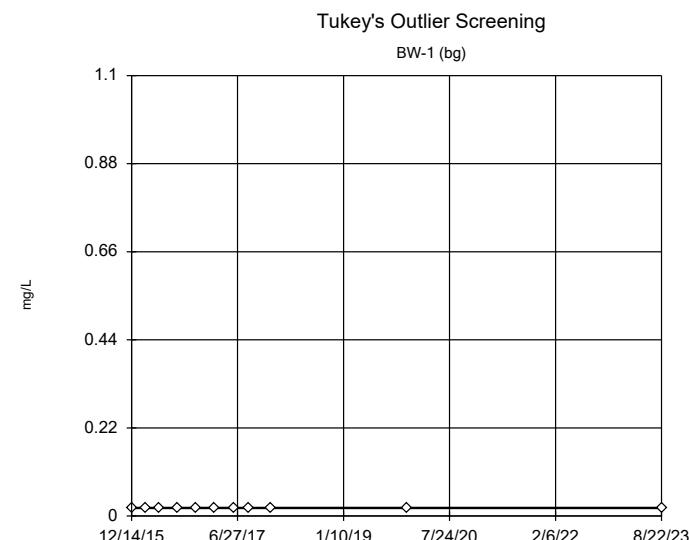
Constituent: Selenium Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



Constituent: Selenium Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



Constituent: Selenium Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	0.16
2/25/2016	0.2
8/16/2016	0.13
11/17/2016	0.16
2/23/2017	0.066
6/7/2017	0.15
8/24/2017	0.17
12/20/2017	0.18
12/10/2019	0.0809
8/22/2023	0.0801

Tukey's Outlier Screening

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.02
2/25/2016	<0.02
5/11/2016	<0.02
8/16/2016	<0.02
11/17/2016	<0.02
2/23/2017	<0.02
6/7/2017	<0.02
8/24/2017	0.026
12/20/2017	<0.02
12/10/2019	<0.02
8/22/2023	<0.02

Tukey's Outlier Screening

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.02
2/25/2016	<0.02
5/11/2016	<0.02
8/16/2016	<0.02
11/17/2016	<0.02
2/23/2017	<0.02
6/7/2017	<0.02
8/24/2017	<0.02
12/20/2017	<0.02
12/10/2019	<0.02
8/22/2023	<0.02

Tukey's Outlier Screening

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 3:43 PM

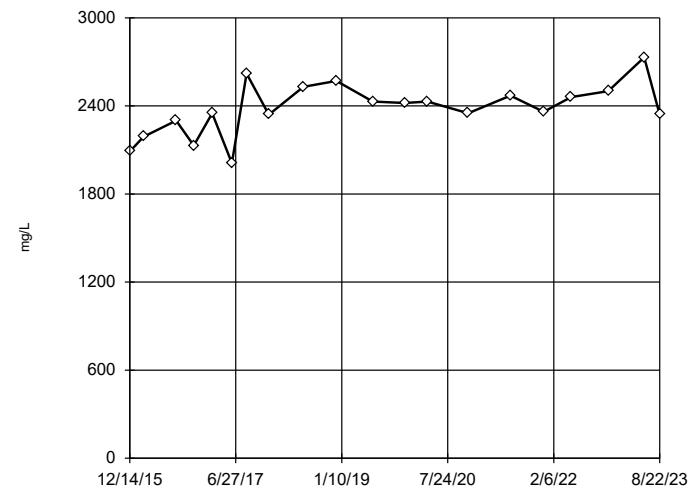
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)

12/14/2015	<0.02
2/25/2016	<0.02
5/11/2016	<0.02
8/16/2016	<0.02
11/17/2016	<0.02
2/23/2017	<0.02
6/7/2017	<0.02
8/24/2017	<0.02
12/20/2017	<0.02
12/10/2019	<0.02
8/22/2023	<0.02

EPA 1989 Outlier Screening

MW-1

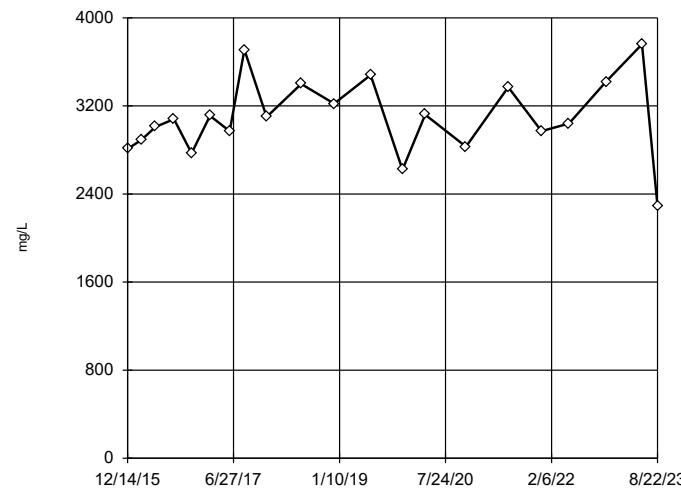


n = 20
No statistical outliers.
Mean 2381, std. dev. 178.5,
critical Tn 2.557.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9737
Critical = 0.905
The distribution was found
to be normally distributed.

EPA 1989 Outlier Screening

MW-2

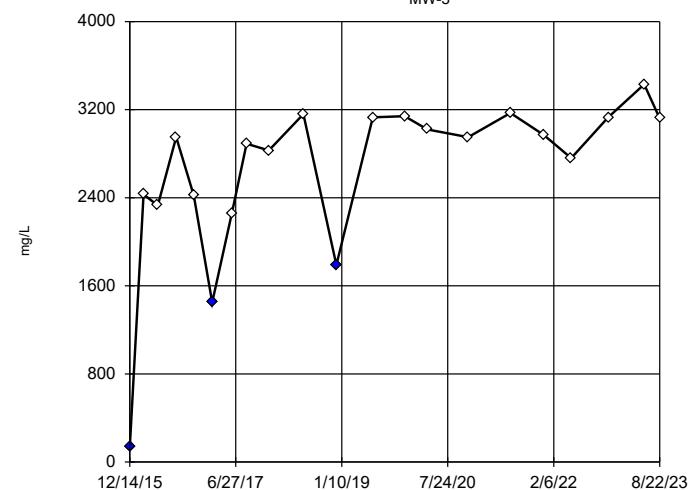


n = 21
No statistical outliers.
Mean 3094, std. dev. 351.7,
critical Tn 2.56.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9768
Critical = 0.908
The distribution was found
to be normally distributed.

EPA 1989 Outlier Screening

MW-3

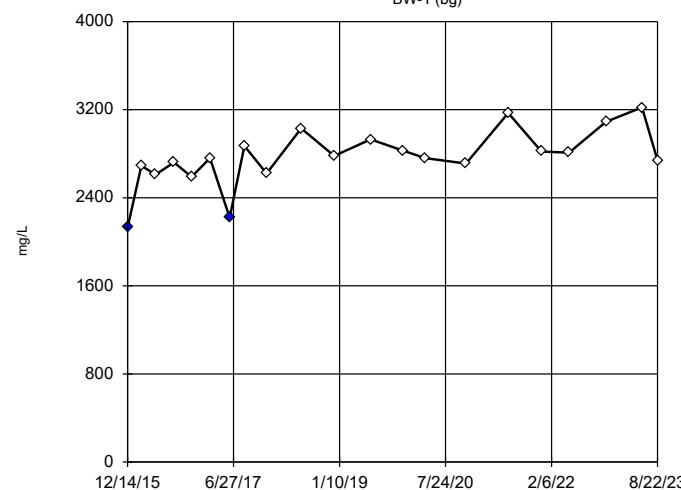


n = 21
Statistical outliers are
drawn as solid.
Mean 2641, std. dev. 756.3,
critical Tn 2.58. After
removing suspect data:
mean 2767, std. dev. 505,
Tn 2.557; mean 2836, std.
dev. 401.7, Tn 2.532;
mean 2894, std. dev. 331.4,
Tn 2.504.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.9987
Critical = 0.897
The distribution, after
removal of suspect val-
ues, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

BW-1 (bg)



n = 21
Statistical outliers are
drawn as solid.
Mean 2767, std. dev. 262.9,
critical Tn 2.58. After
removing suspect data:
mean 2799, std. dev. 224.3,
Tn 2.557; mean 2829, std.
dev. 183.2, Tn 2.532.

Normality test used:
Shapiro Wilk@alpha = 0.05
Calculated = 0.914
Critical = 0.907
The distribution, after
removal of suspect val-
ues, was found to be nor-
mally distributed.

EPA 1989 Outlier Screening

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	2090 -1.674
2/25/2016	2190 -1.061
8/16/2016	2300 -0.4182
11/17/2016	2130 -1.425
2/23/2017	2350 -0.1361
6/7/2017	2010 -2.186
8/24/2017	2620 1.291
12/20/2017	2340 -0.1921
6/21/2018	2530 0.832
12/13/2018	2570 1.038
6/24/2019	2430 0.303
12/10/2019	2420 0.2489
4/8/2020	2430 0.303
11/10/2020	2350 -0.1361
6/22/2021	2470 0.5172
12/15/2021	2360 -0.08042
5/10/2022	2460 0.4639
11/22/2022	2500 0.6755
6/1/2023	2730 1.83
8/22/2023	2340 -0.1921

EPA 1989 Outlier Screening

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn
12/14/2015	2810
2/25/2016	2890
5/11/2016	3010
8/16/2016	3080
11/17/2016	2770
2/23/2017	3110
6/7/2017	2970
8/24/2017	3710
12/20/2017	3100
6/21/2018	3400
12/13/2018	3220
6/24/2019	3480
12/10/2019	2620
4/8/2020	3120
11/10/2020	2830
6/22/2021	3370
12/15/2021	2970
5/10/2022	3040
11/22/2022	3420
6/1/2023	3760
8/22/2023	2290

EPA 1989 Outlier Screening

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

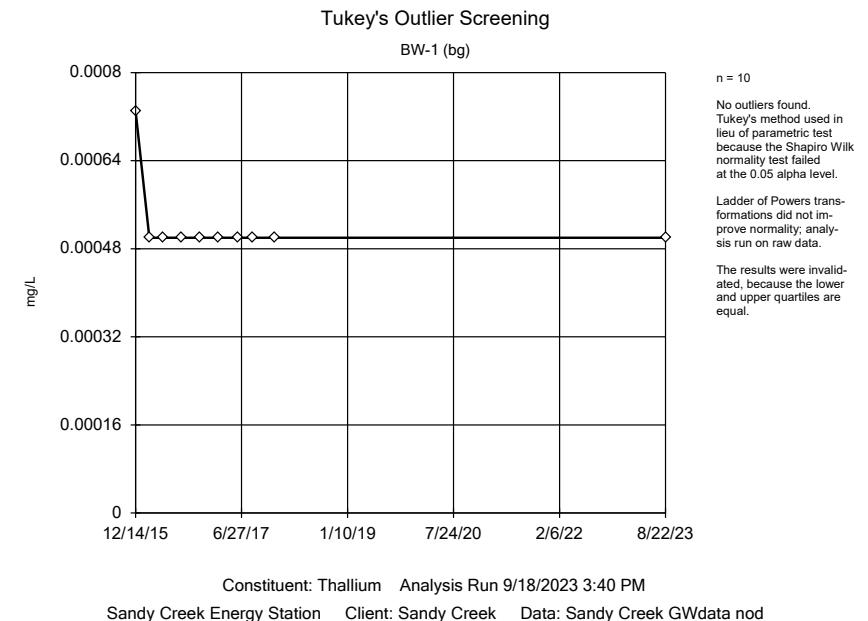
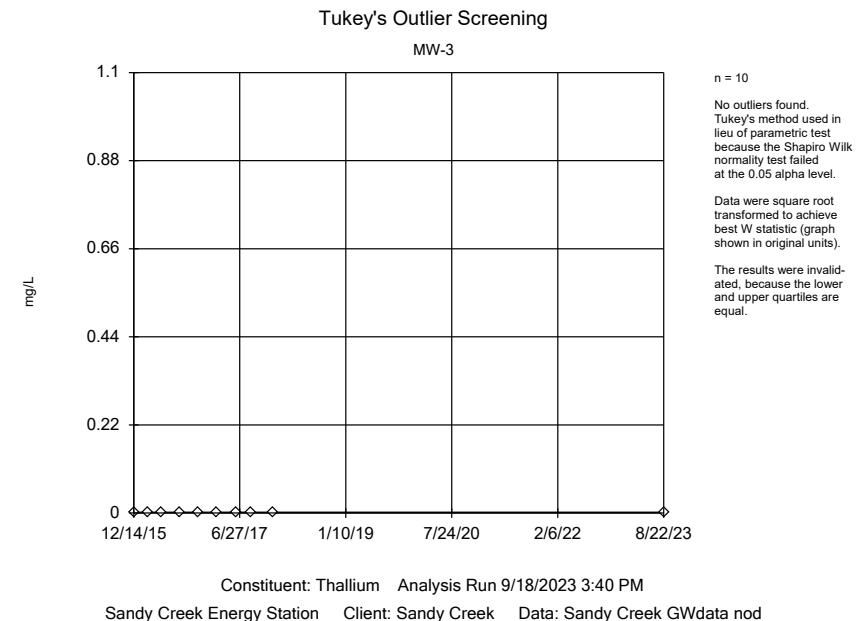
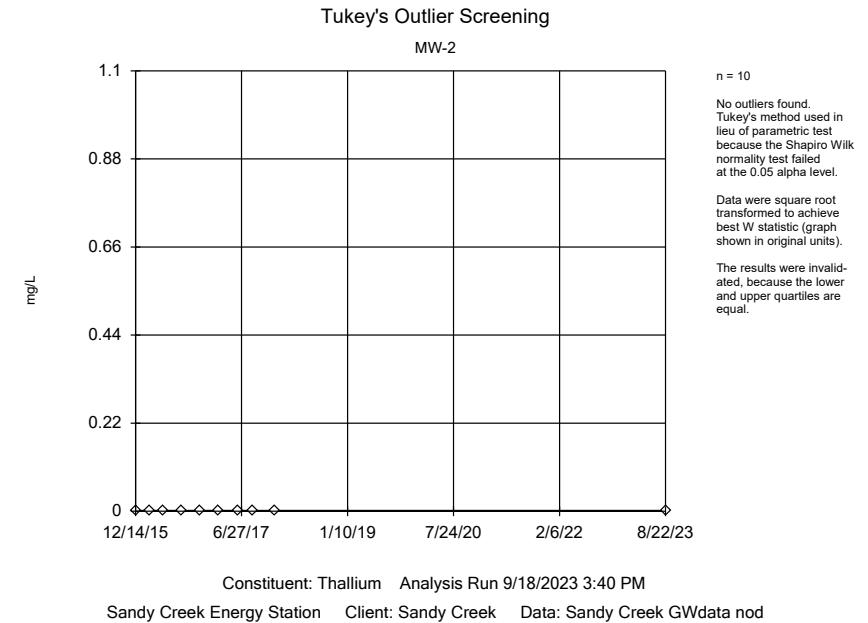
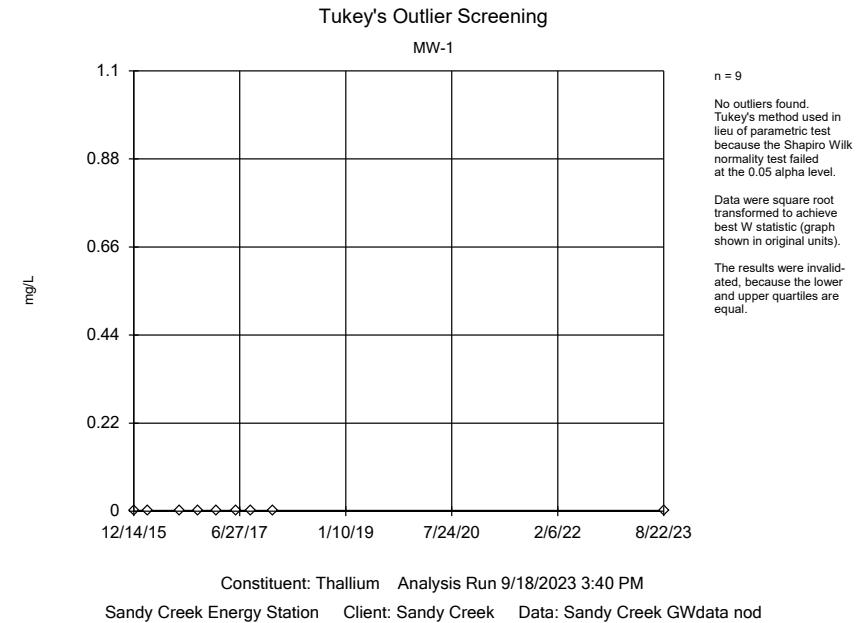
MW-3	Tn	Tn	Tn	Tn
12/14/2015	135 (O)	-4.158 (O)		
2/25/2016	2430	0.04756	-0.5146	-0.8976
5/11/2016	2330	-0.01359	-0.7109	-1.161
8/16/2016	2950	0.3297	0.3909	0.3181
11/17/2016	2420	0.04156	-0.5339	-0.9234
2/23/2017	1450 (O)	-0.7038	-2.926 (O)	
6/7/2017	2260	-0.05798	-0.8533	-1.352
8/24/2017	2890	0.2998	0.295	0.1893
12/20/2017	2830	0.2693	0.197	0.05773
6/21/2018	3160	0.4298	0.7121	0.7492
12/13/2018	1790 (O)	-0.3972	-1.942	-2.814 (O)
6/24/2019	3130	0.4159	0.6675	0.6894
12/10/2019	3140	0.4205	0.6824	0.7094
4/8/2020	3020	0.3638	0.5005	0.4651
11/10/2020	2950	0.3297	0.3909	0.3181
6/22/2021	3170	0.4344	0.7268	0.769
12/15/2021	2970	0.3396	0.4225	0.3604
5/10/2022	2760	0.2328	0.08004	-0.09928
11/22/2022	3130	0.4159	0.6675	0.6894
6/1/2023	3430	0.5491	1.095	1.263
8/22/2023	3120	0.4112	0.6526	0.6693

EPA 1989 Outlier Screening

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1 (bg)	Tn	Tn	Tn
12/14/2015	2130 (O)	-2.592 (O)		
2/25/2016	2690	-0.2377	-0.445	-0.7643
5/11/2016	2610	-0.5422	-0.8139	-1.241
8/16/2016	2720	-0.1258	-0.3094	-0.5893
11/17/2016	2590	-0.6198	-0.908	-1.362
2/23/2017	2760	0.02146	-0.131	-0.3589
6/7/2017	2220 (O)	-2.175	-2.792 (O)	
8/24/2017	2870	0.4157	0.3466	0.2578
12/20/2017	2620	-0.5036	-0.7672	-1.18
6/21/2018	3030	0.9629	1.01	1.114
12/13/2018	2780	0.09429	-0.04279	-0.245
6/24/2019	2930	0.6244	0.5994	0.5843
12/10/2019	2830	0.2741	0.1751	0.03632
4/8/2020	2760	0.02146	-0.131	-0.3589
11/10/2020	2710	-0.163	-0.3545	-0.6474
6/22/2021	3170	1.419	1.562	1.827
12/15/2021	2820	0.2384	0.1318	-0.01955
5/10/2022	2810	0.2026	0.08839	-0.0756
11/22/2022	3090	1.161	1.249	1.423
6/1/2023	3220	1.576	1.753	2.074
8/22/2023	2740	-0.0519	-0.2199	-0.4737



Tukey's Outlier Screening

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.0005
2/25/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Tukey's Outlier Screening

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.0005
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Tukey's Outlier Screening

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.0005
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Tukey's Outlier Screening

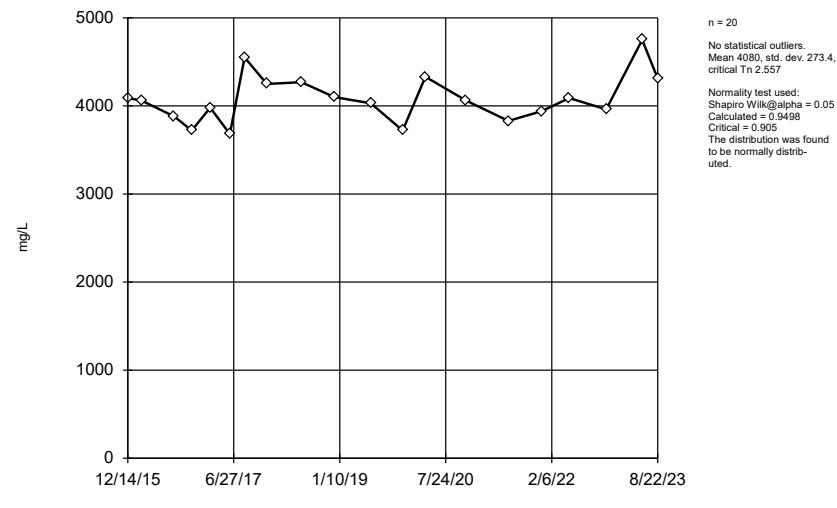
Constituent: Thallium (mg/L) Analysis Run 9/18/2023 3:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1 (bg)	
12/14/2015	0.00073
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

EPA 1989 Outlier Screening

MW-1

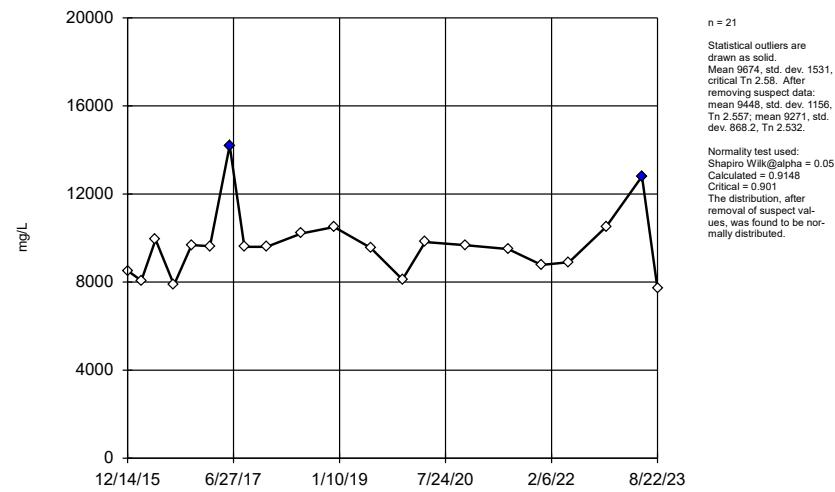


Constituent: Total Dissolved Solids Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

MW-2

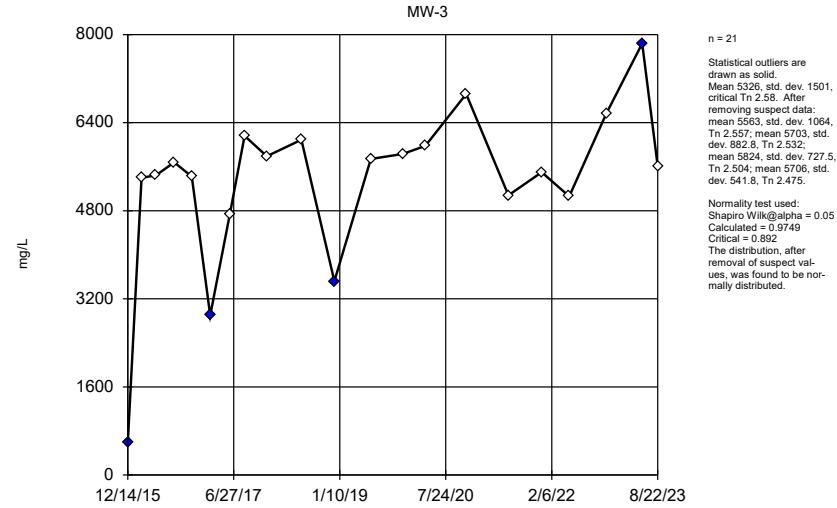


Constituent: Total Dissolved Solids Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

MW-3

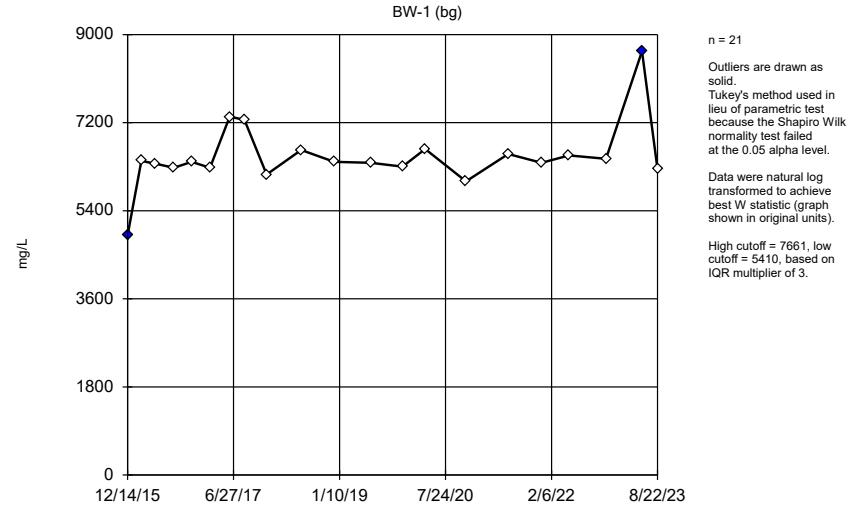


Constituent: Total Dissolved Solids Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Tukey's Outlier Screening

BW-1 (bg)



Constituent: Total Dissolved Solids Analysis Run 9/18/2023 3:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

EPA 1989 Outlier Screening

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	Tn
12/14/2015	4090 0.0688
2/25/2016	4060 -0.04299
8/16/2016	3880 -0.7316
11/17/2016	3720 -1.371
2/23/2017	3980 -0.3452
6/7/2017	3680 -1.535
8/24/2017	4550 1.687
12/20/2017	4250 0.6515
6/21/2018	4270 0.7228
12/13/2018	4100 0.1059
6/24/2019	4030 -0.1556
12/10/2019	3720 -1.371
4/8/2020	4330 0.9347
11/10/2020	4060 -0.04299
6/22/2021	3830 -0.9285
12/15/2021	3940 -0.4986
5/10/2022	4090 0.0688
11/22/2022	3960 -0.4217
6/1/2023	4750 2.34
8/22/2023	4310 0.8644

EPA 1989 Outlier Screening

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	Tn	Tn	Tn
12/14/2015	8520	-0.7912	-0.8123
2/25/2016	8070	-1.161	-1.269
5/11/2016	9930	0.2511	0.4766
8/16/2016	7870	-1.331	-1.48
11/17/2016	9680	0.0776	0.262
2/23/2017	9630	0.04235	0.2184
6/7/2017	14200 (O)	2.686 (O)	
8/24/2017	9600	0.02111	0.1921
12/20/2017	9600	0.02111	0.1921
6/21/2018	10200	0.4337	0.7024
12/13/2018	10500	0.631	0.9464
6/24/2019	9560	-0.007309	0.157
12/10/2019	8120	-1.119	-1.217
4/8/2020	9820	0.1753	0.3828
11/10/2020	9670	0.07056	0.2533
6/22/2021	9500	-0.05016	0.104
12/15/2021	8780	-0.5866	-0.5593
5/10/2022	8900	-0.4942	-0.4451
11/22/2022	10500	0.631	0.9464
6/1/2023	12800 (O)	1.979	2.613 (O)
8/22/2023	7700	-1.48	-1.664
			-1.884

EPA 1989 Outlier Screening

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 3:43 PM

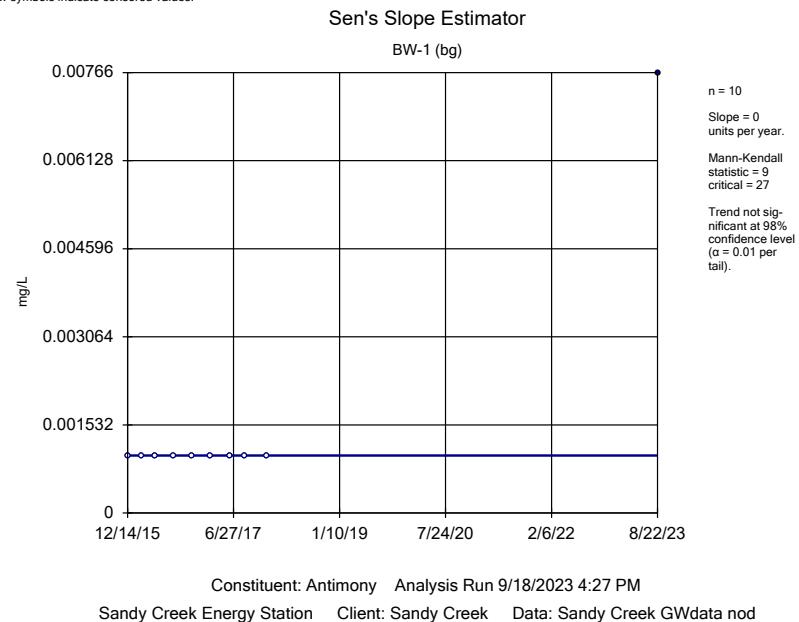
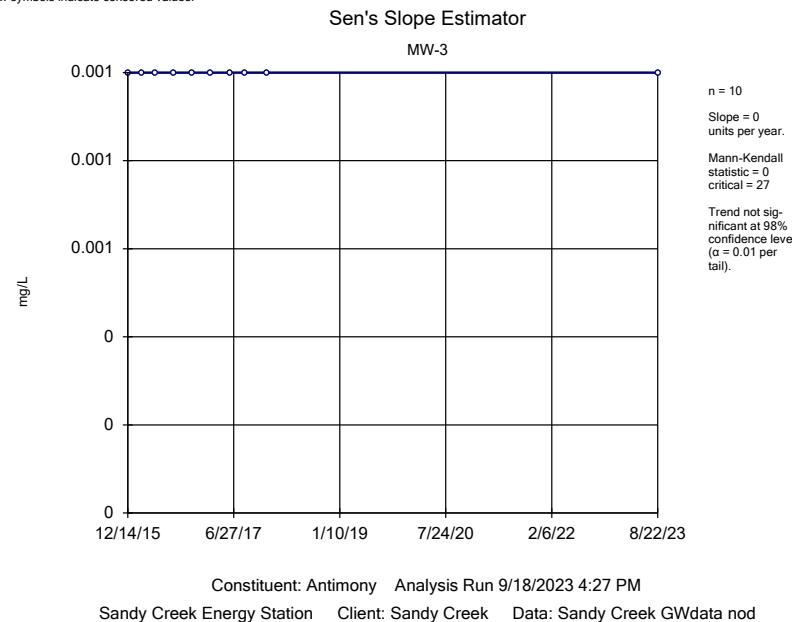
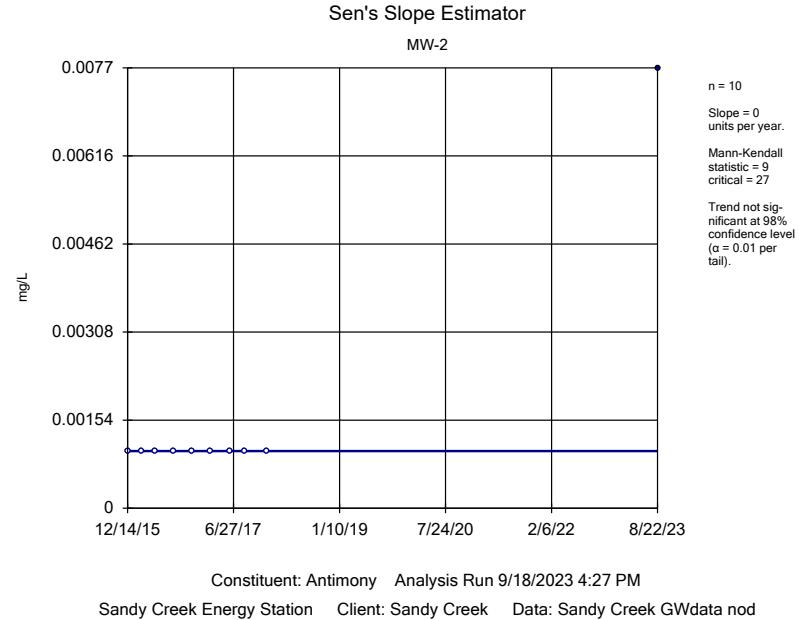
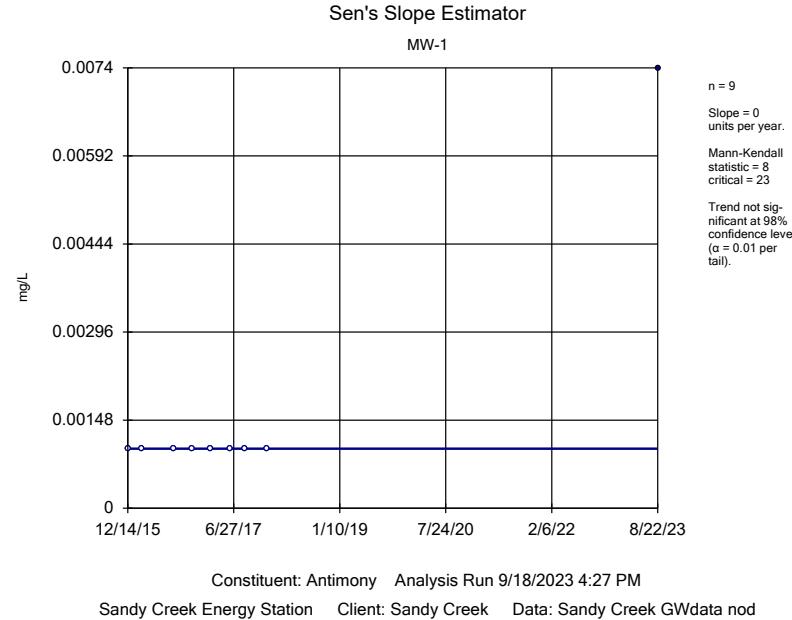
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

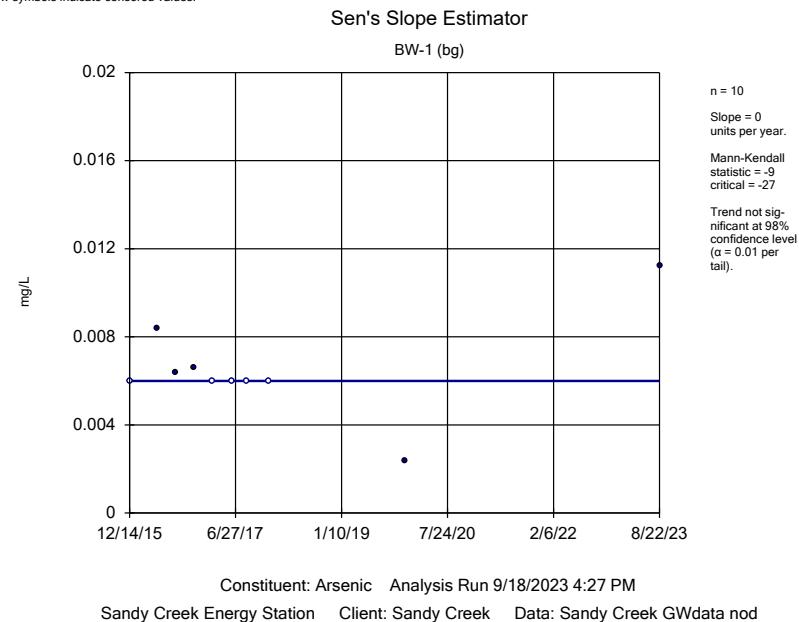
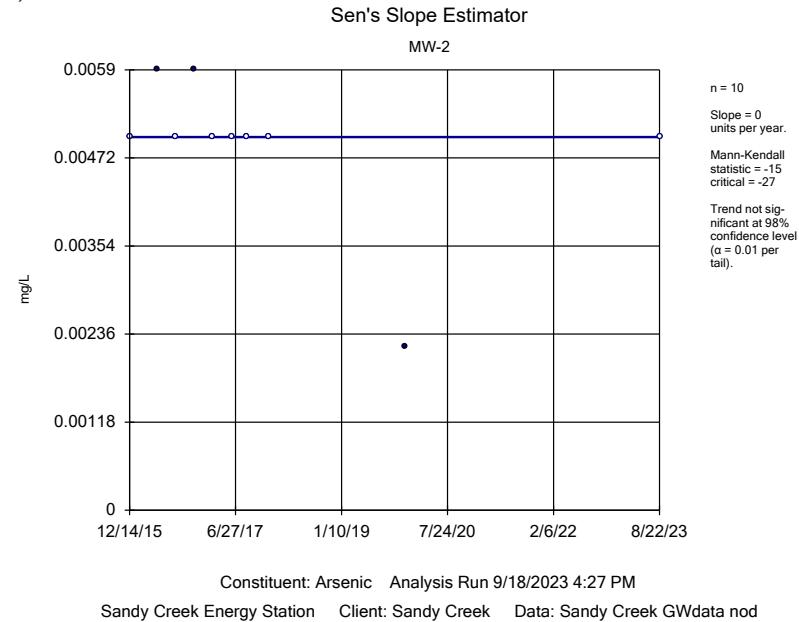
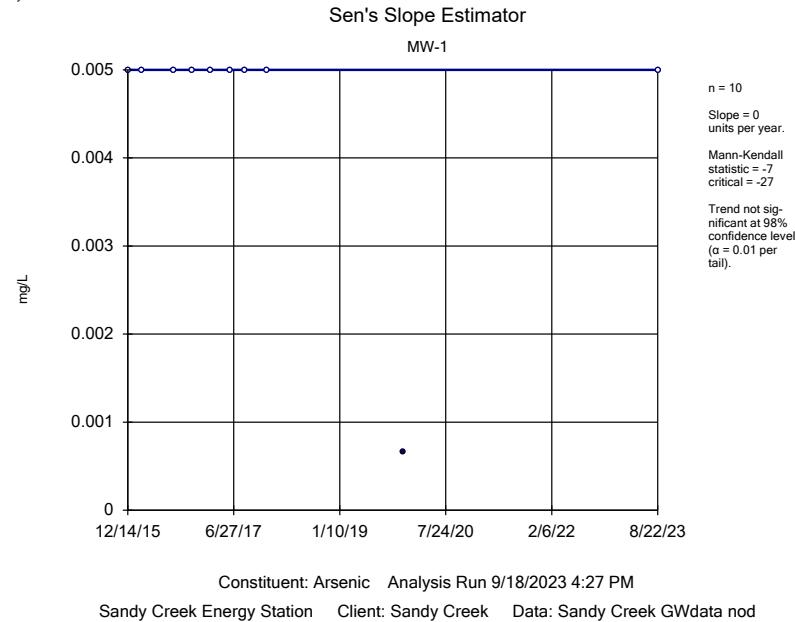
	MW-3	Tn	Tn	Tn	Tn	Tn
12/14/2015	586 (O)	-4.004 (O)				
2/25/2016	5400	0.1824	-0.04357	-0.2632	-0.58	-0.5418
5/11/2016	5440	0.1963	-0.009513	-0.2176	-0.5178	-0.4632
8/16/2016	5680	0.2777	0.1897	0.04869	-0.1539	-0.003898
11/17/2016	5420	0.1894	-0.02651	-0.2404	-0.5488	-0.5024
2/23/2017	2900 (O)	-0.9894	-2.912 (O)			
6/7/2017	4740	-0.06333	-0.6451	-1.067	-1.679	-1.929
8/24/2017	6160	0.4306	0.5641	0.5492	0.53	0.8592
12/20/2017	5790	0.3138	0.2782	0.167	0.007841	0.2002
6/21/2018	6090	0.409	0.5113	0.4787	0.4337	0.7376
12/13/2018	3520 (O)	-0.6242	-2.018	-2.903 (O)		
6/24/2019	5740	0.2975	0.2382	0.1135	-0.06527	0.1079
12/10/2019	5830	0.3268	0.31	0.2095	0.06588	0.2734
4/8/2020	5980	0.3747	0.4272	0.3662	0.28	0.5437
11/10/2020	6920	0.6499	1.101	1.267	1.511	2.097
6/22/2021	5080	0.06724	-0.3255	-0.64	-1.095	-1.192
12/15/2021	5500	0.217	0.0411	-0.15	-0.4253	-0.3465
5/10/2022	5060	0.05981	-0.3437	-0.6643	-1.128	-1.234
11/22/2022	6560	0.5492	0.8544	0.9373	1.06	1.529
6/1/2023	7840 (O)	0.8851	1.677	2.037	2.563 (O)	
8/22/2023	5610	0.2543	0.1325	-0.0278	-0.2584	-0.1358

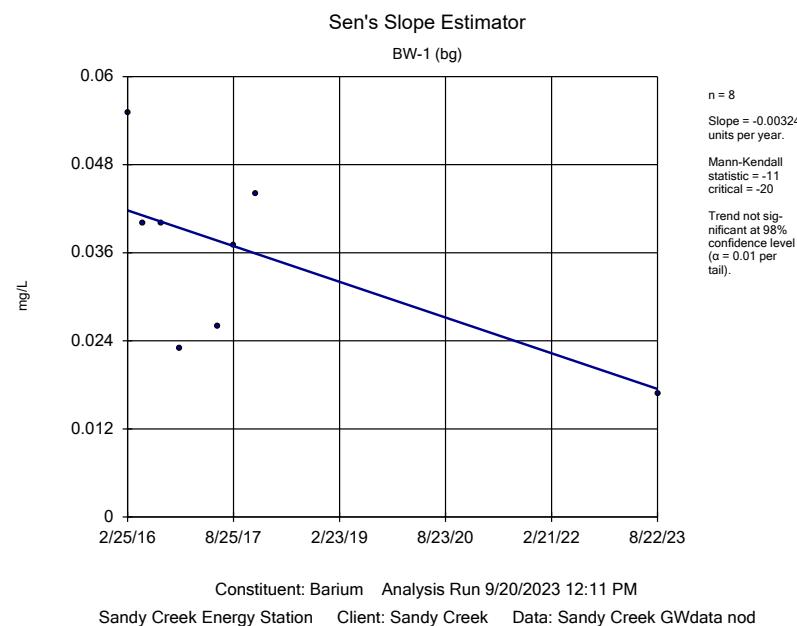
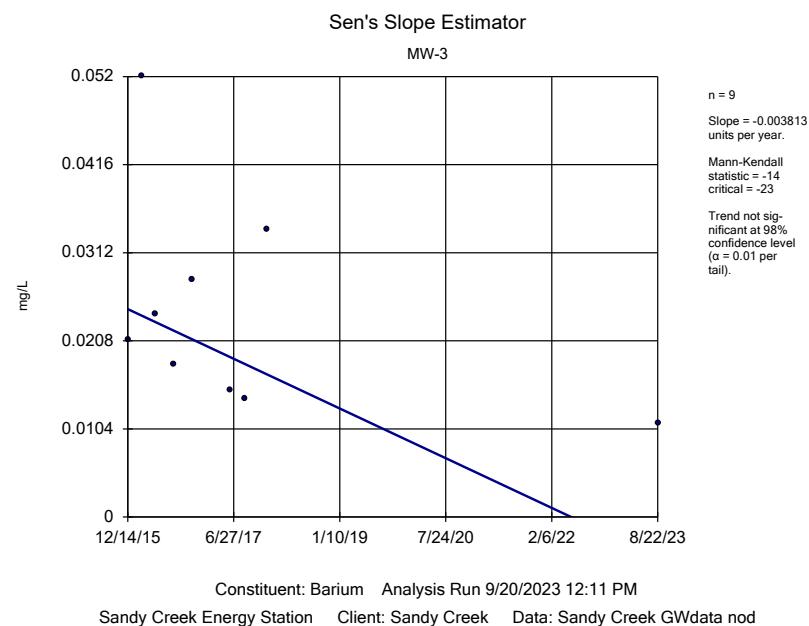
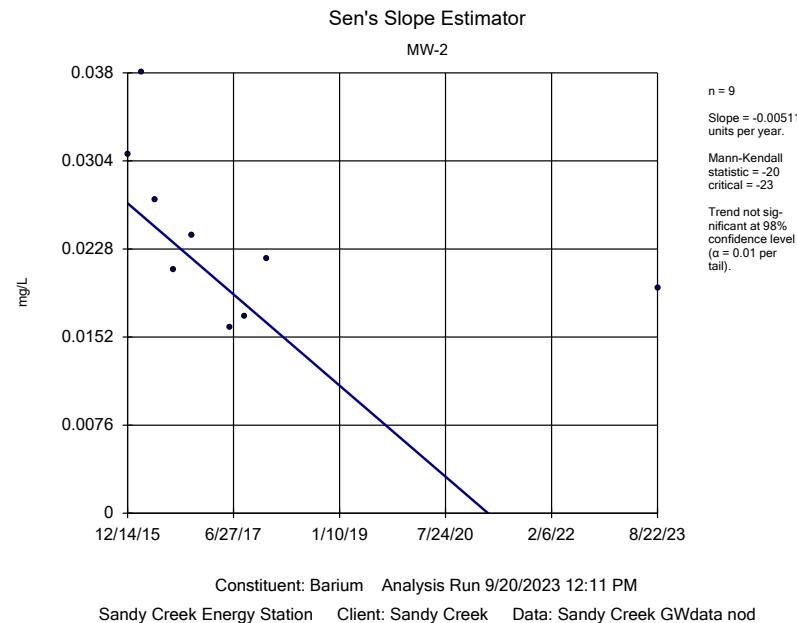
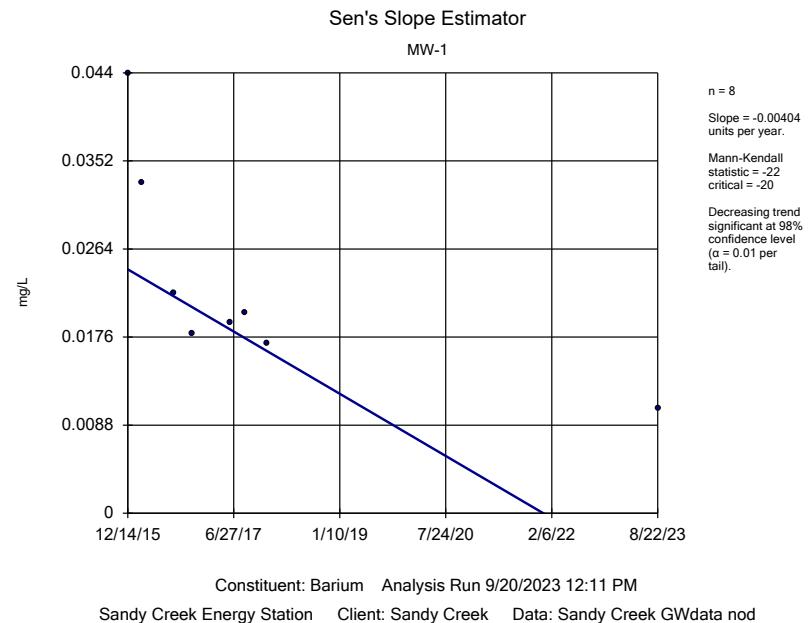
Tukey's Outlier Screening

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 3:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

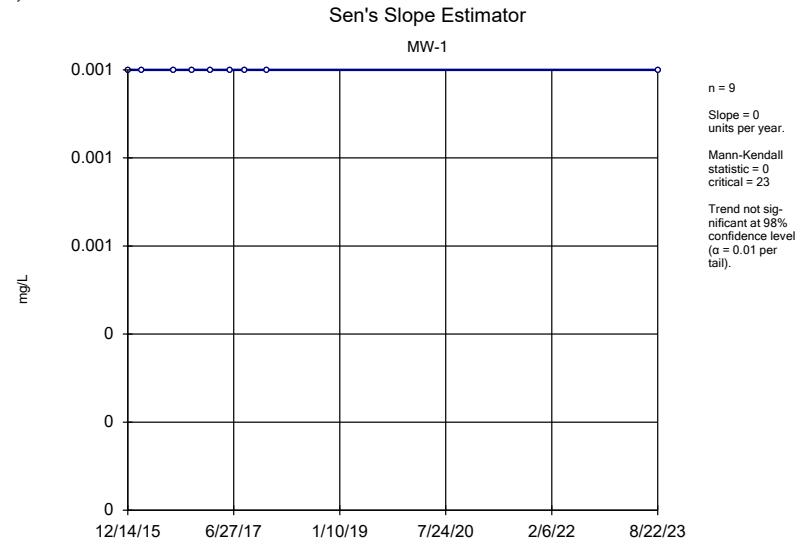
BW-1 (bg)	
12/14/2015	4900 (O)
2/25/2016	6420
5/11/2016	6360
8/16/2016	6280
11/17/2016	6400
2/23/2017	6280
6/7/2017	7320
8/24/2017	7260
12/20/2017	6140
6/21/2018	6640
12/13/2018	6400
6/24/2019	6380
12/10/2019	6300
4/8/2020	6660
11/10/2020	6000
6/22/2021	6560
12/15/2021	6380
5/10/2022	6530
11/22/2022	6460
6/1/2023	8660 (O)
8/22/2023	6250





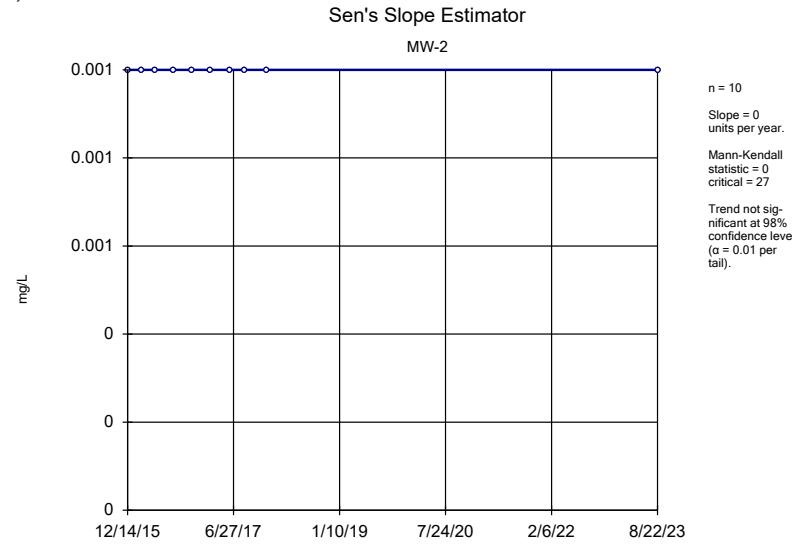


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Hollow symbols indicate censored values.



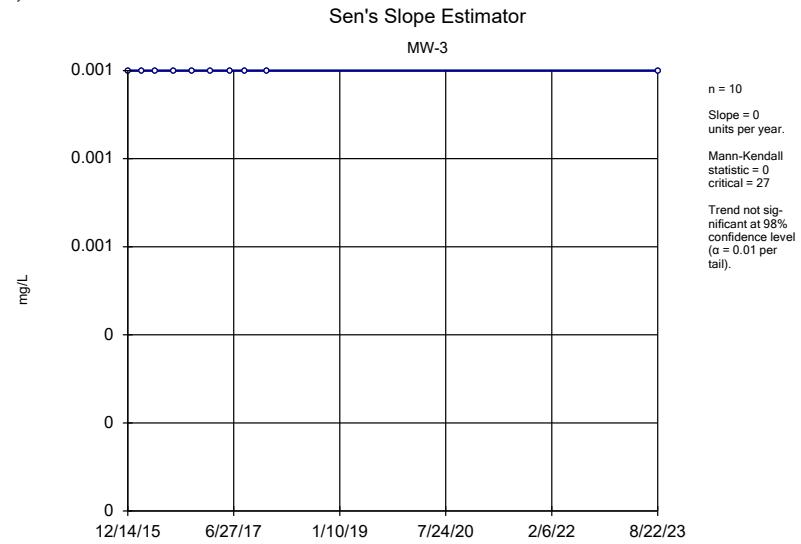
Constituent: Beryllium Analysis Run 9/18/2023 4:27 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

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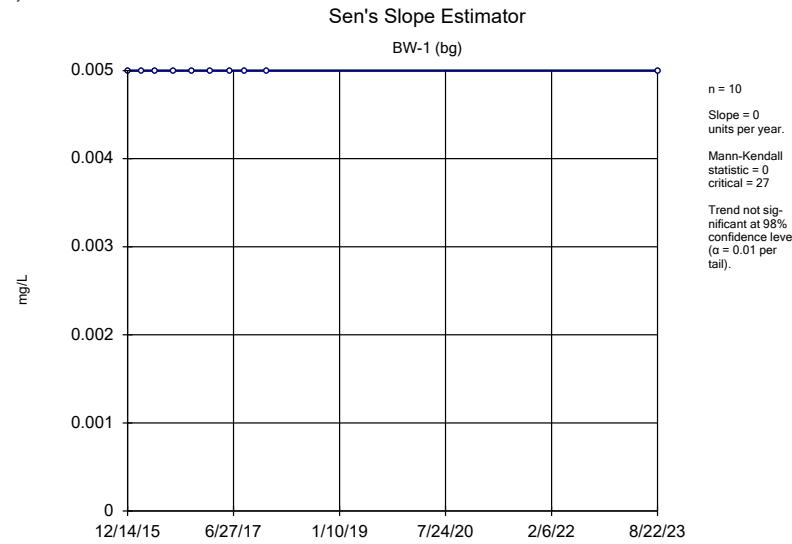
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

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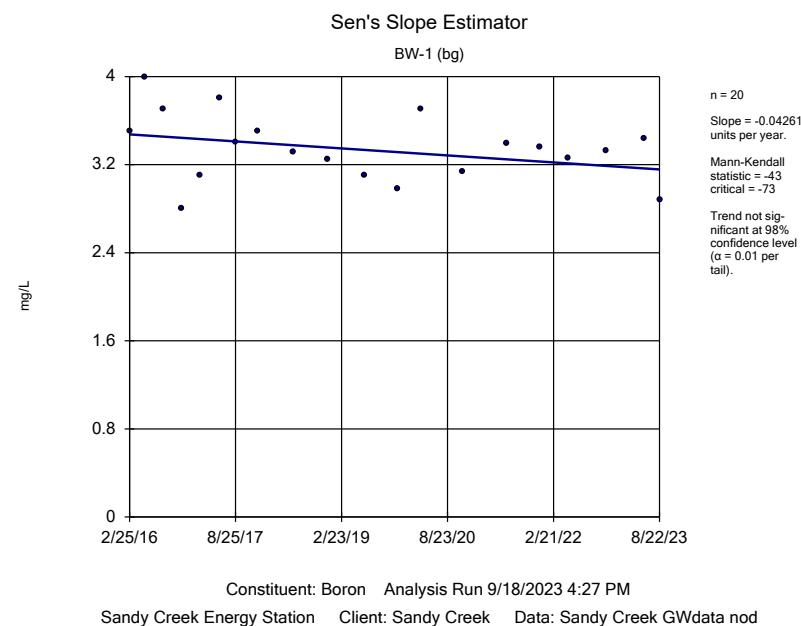
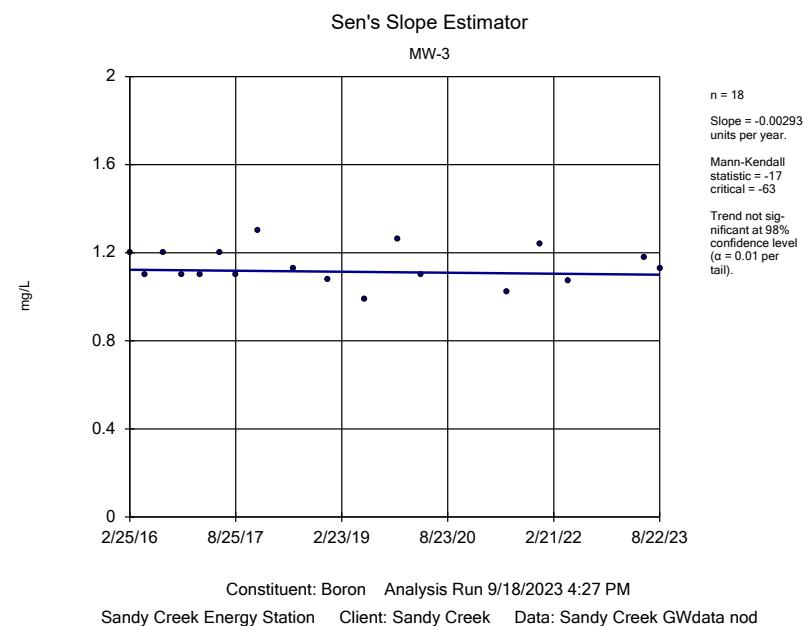
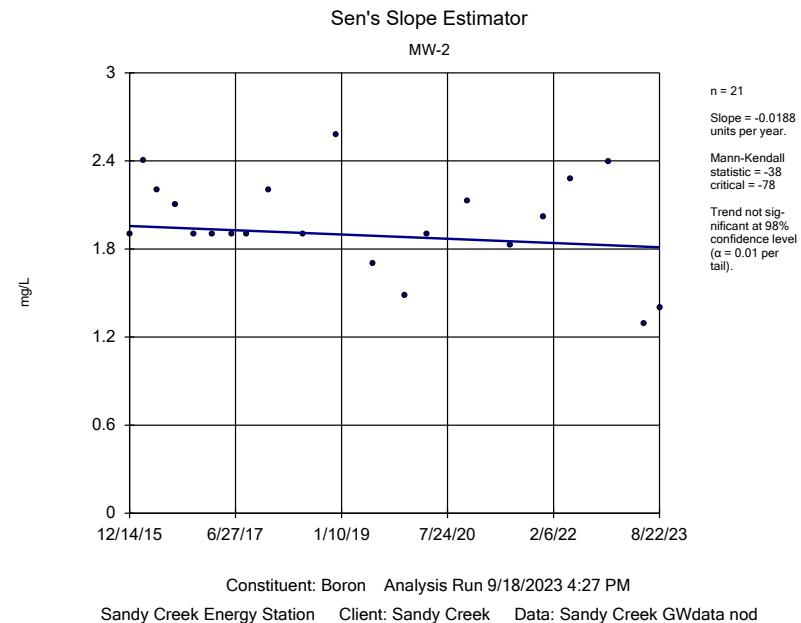
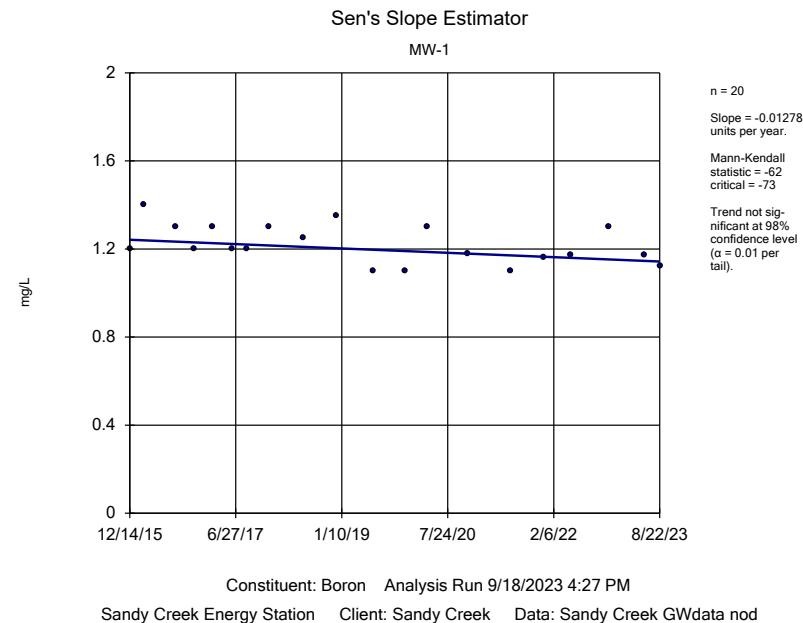


Constituent: Beryllium Analysis Run 9/18/2023 4:27 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

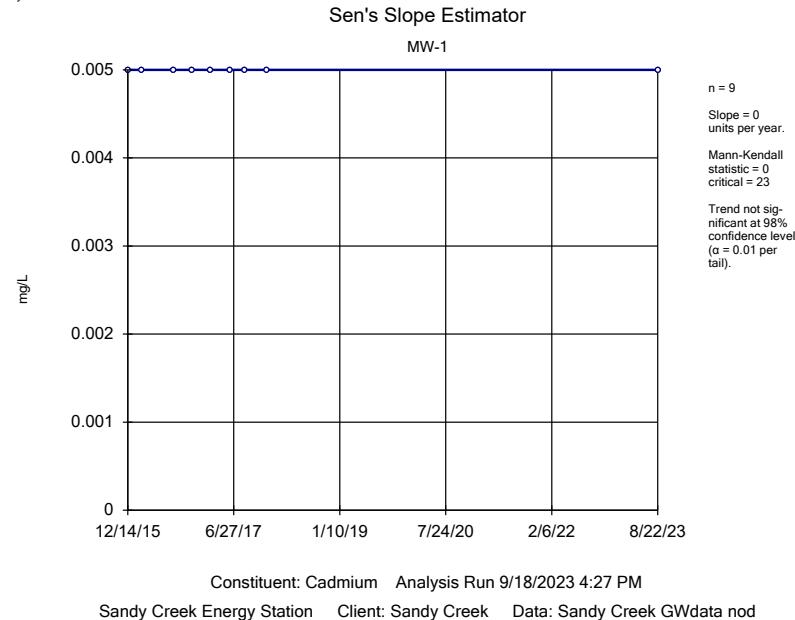
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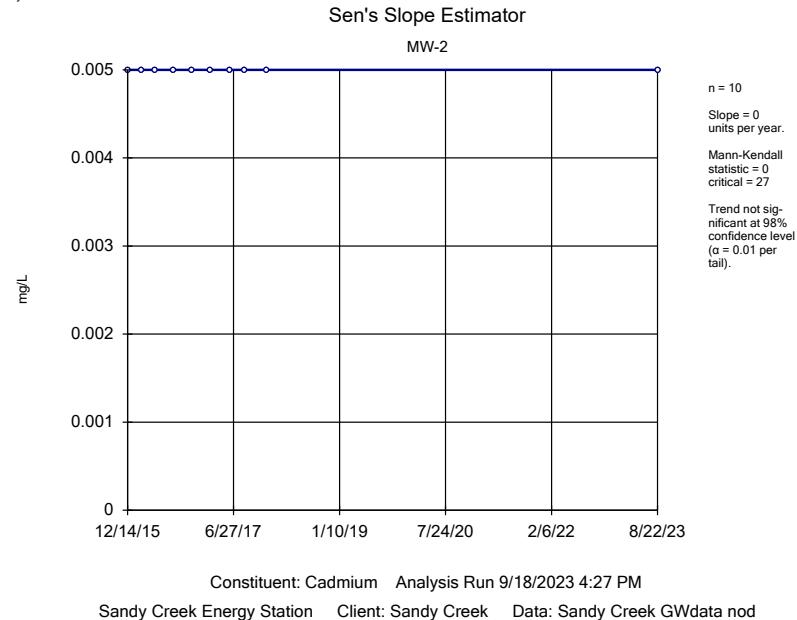
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod



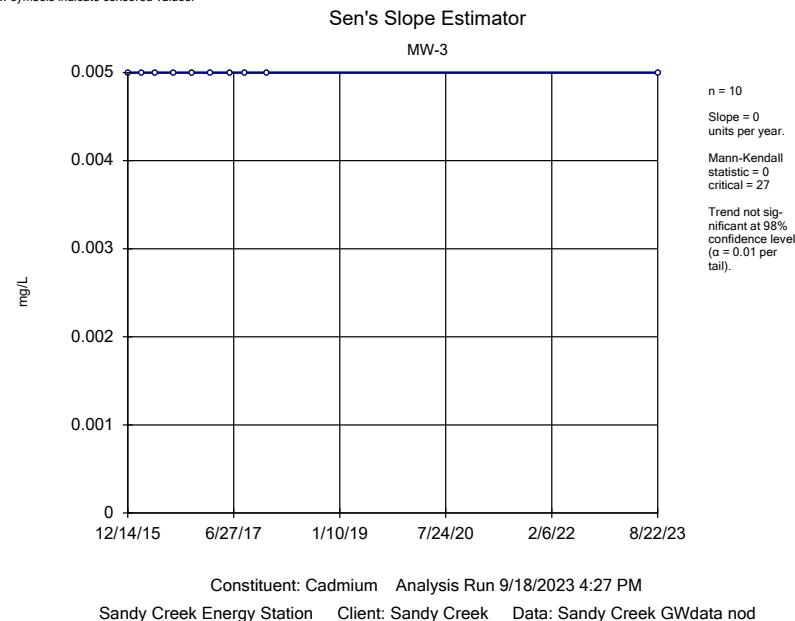
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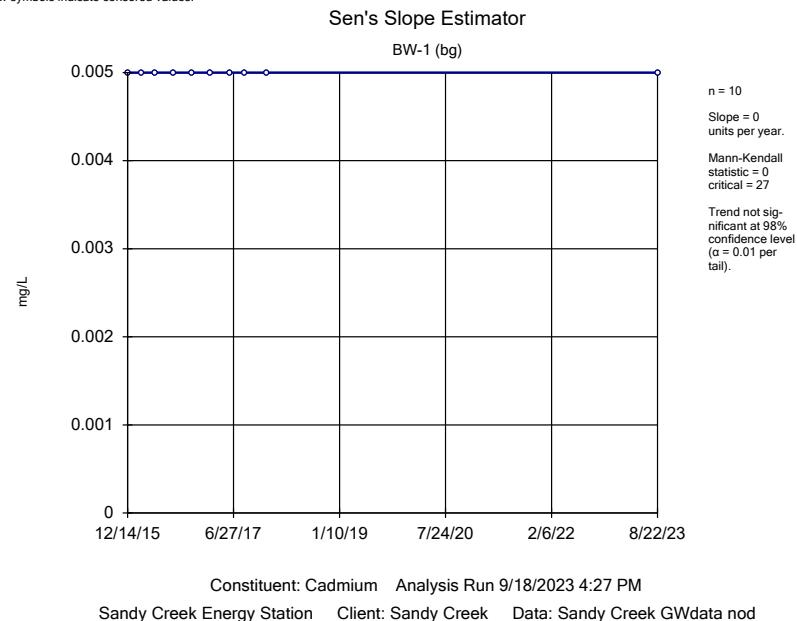
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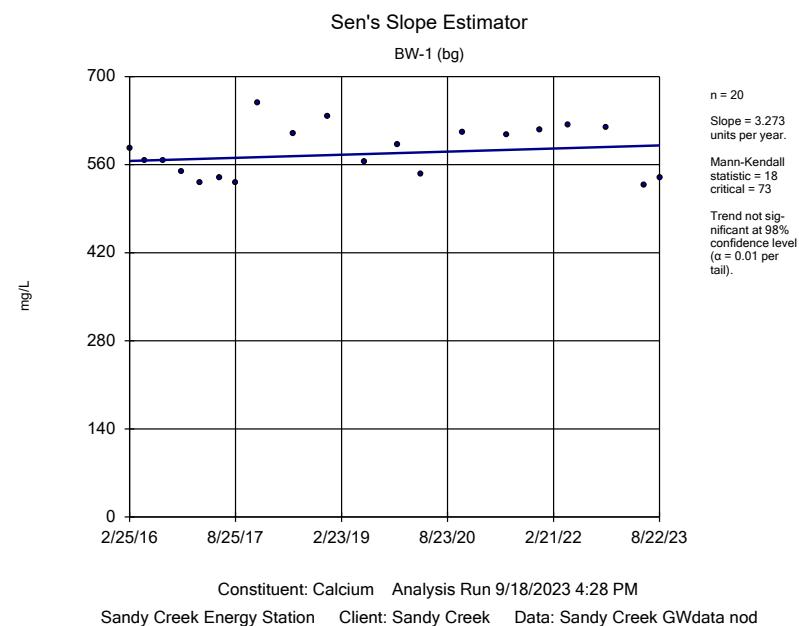
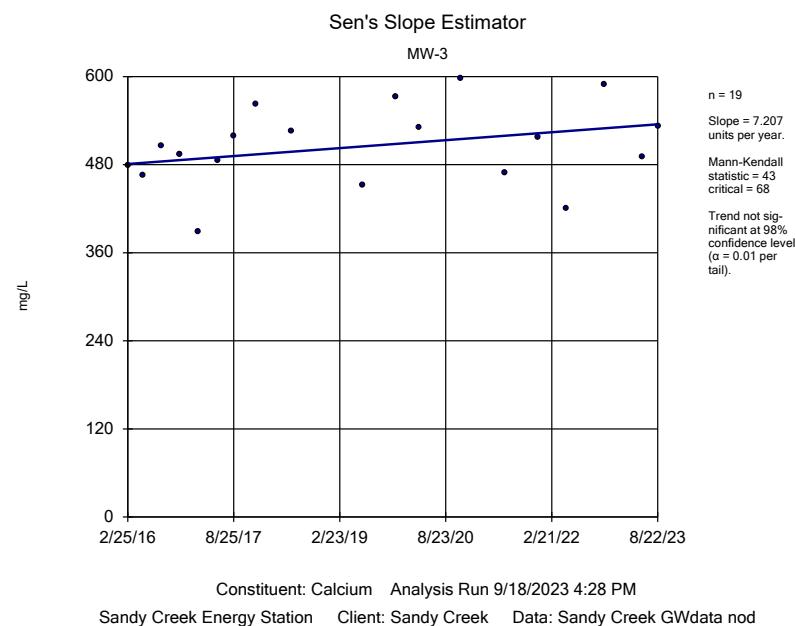
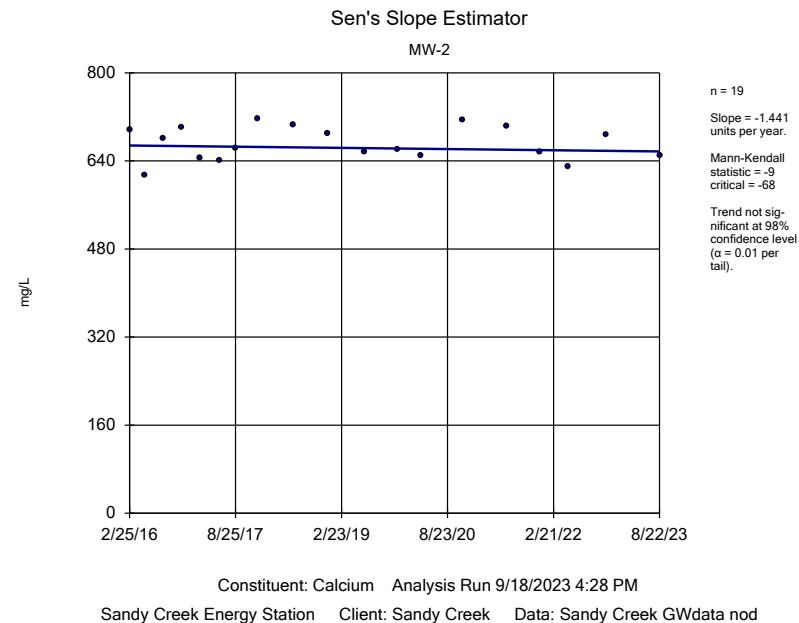
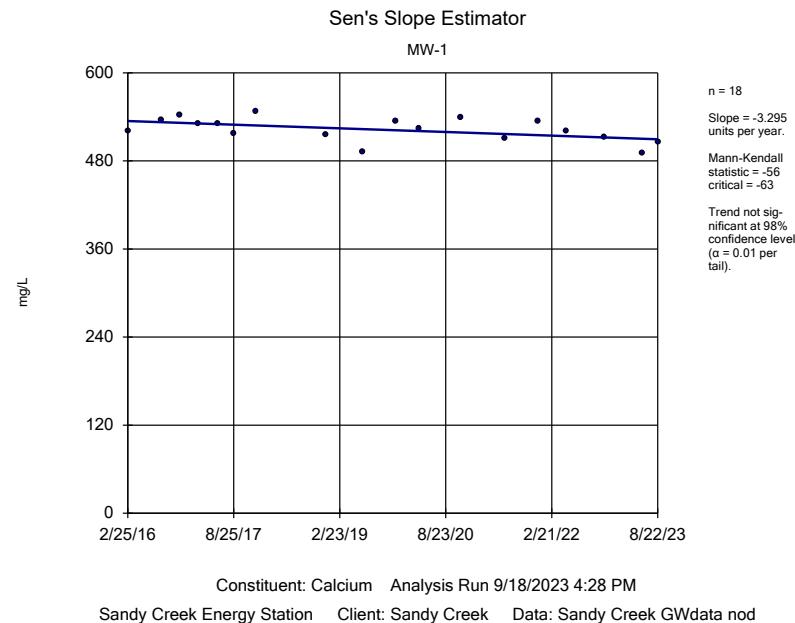


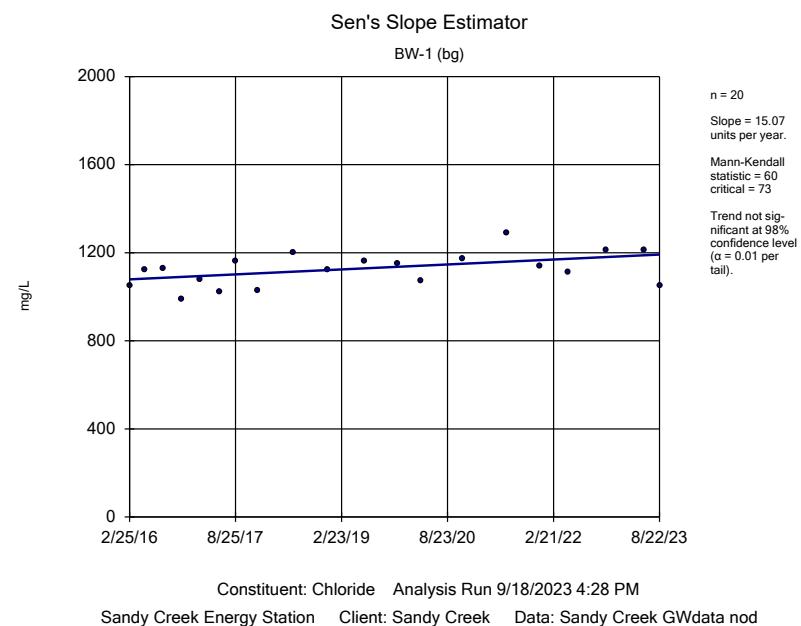
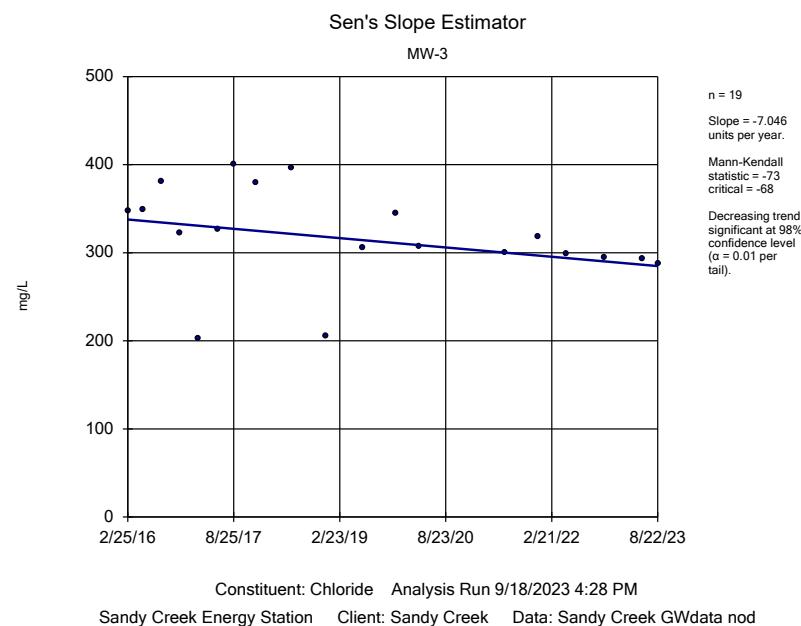
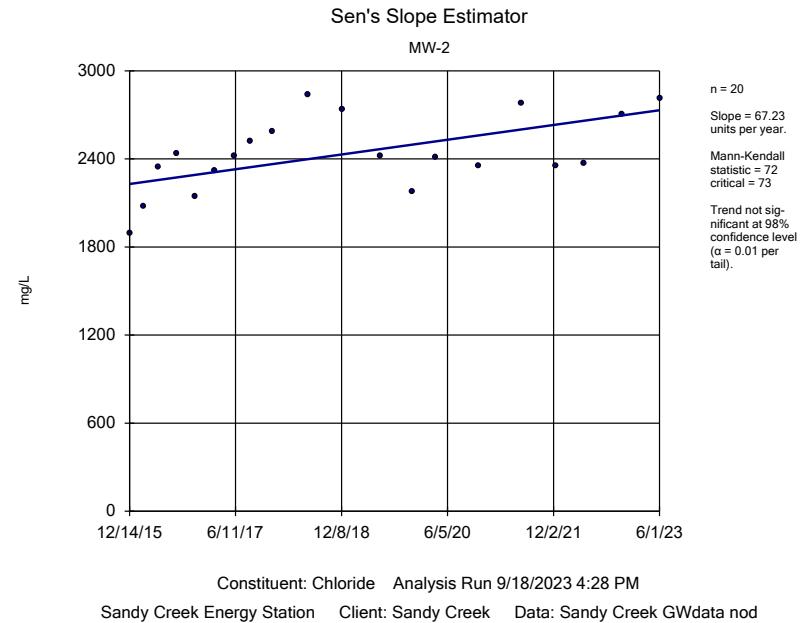
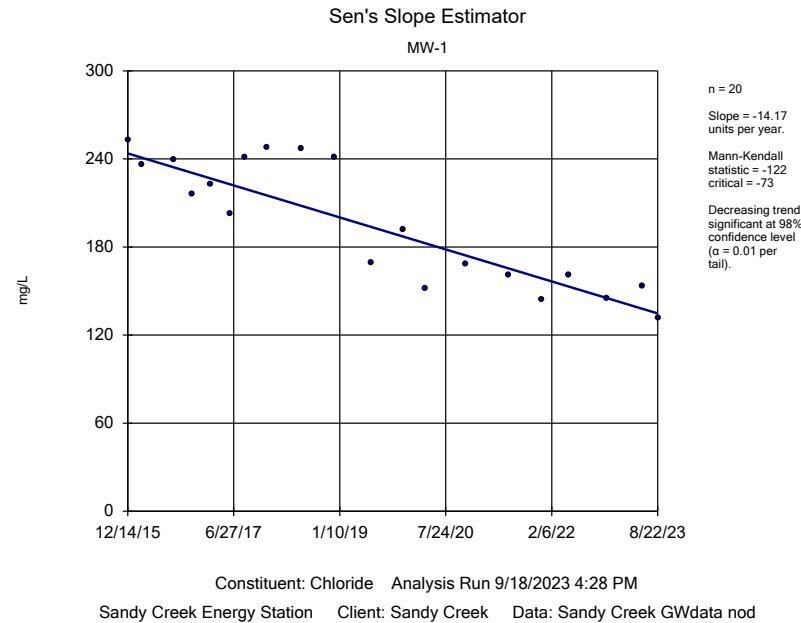
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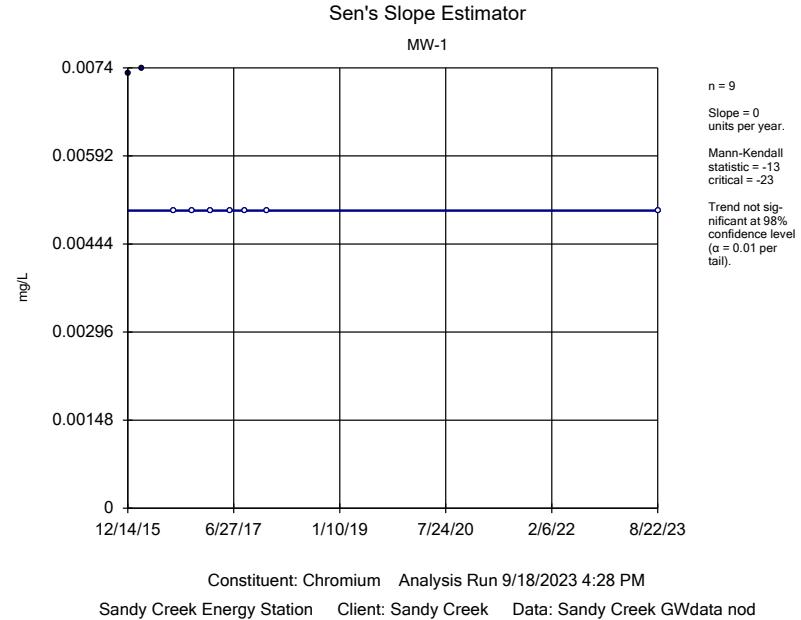
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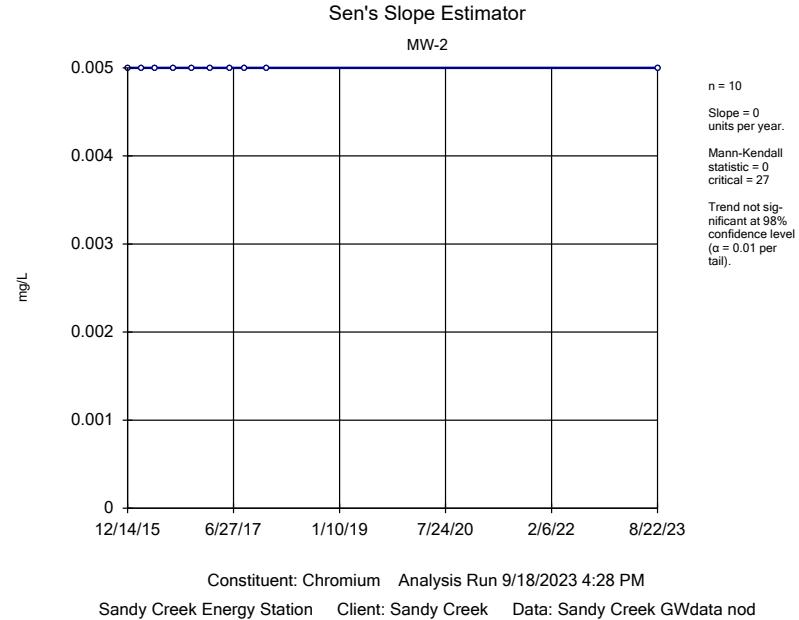




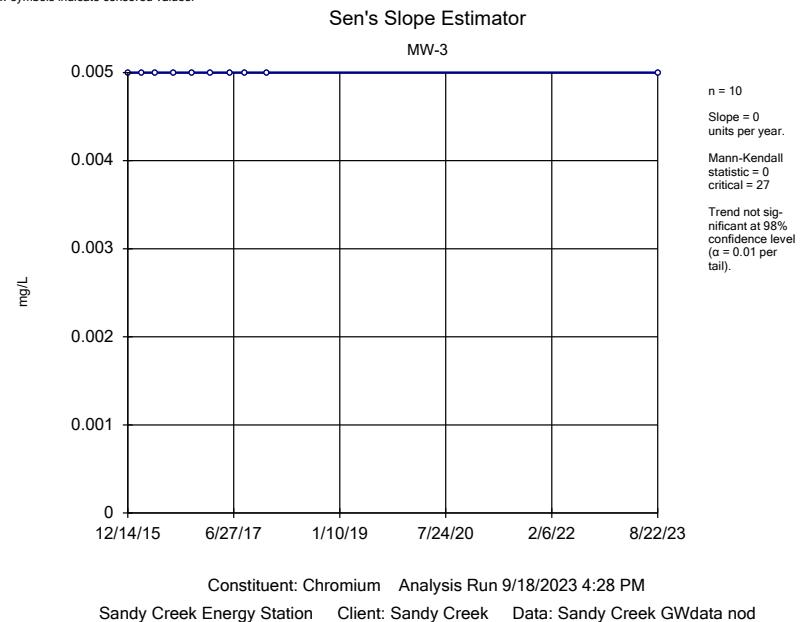
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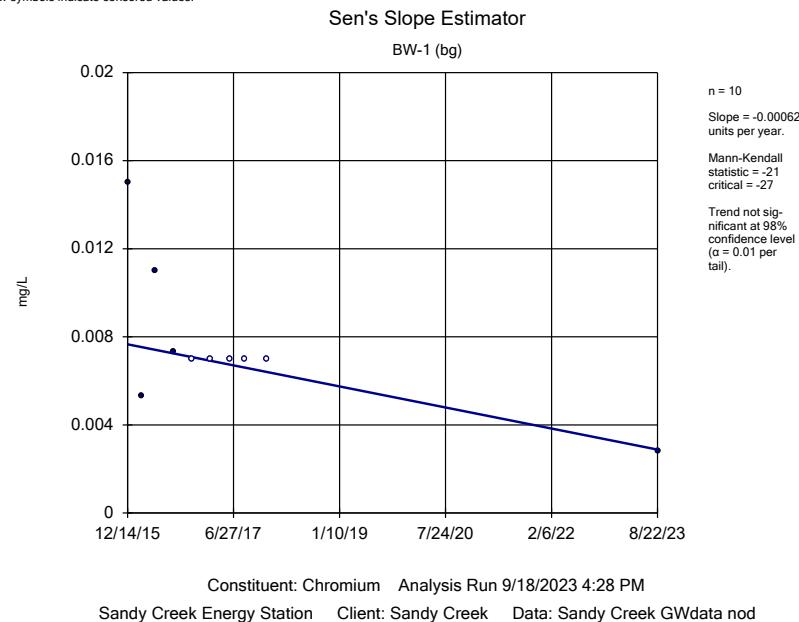
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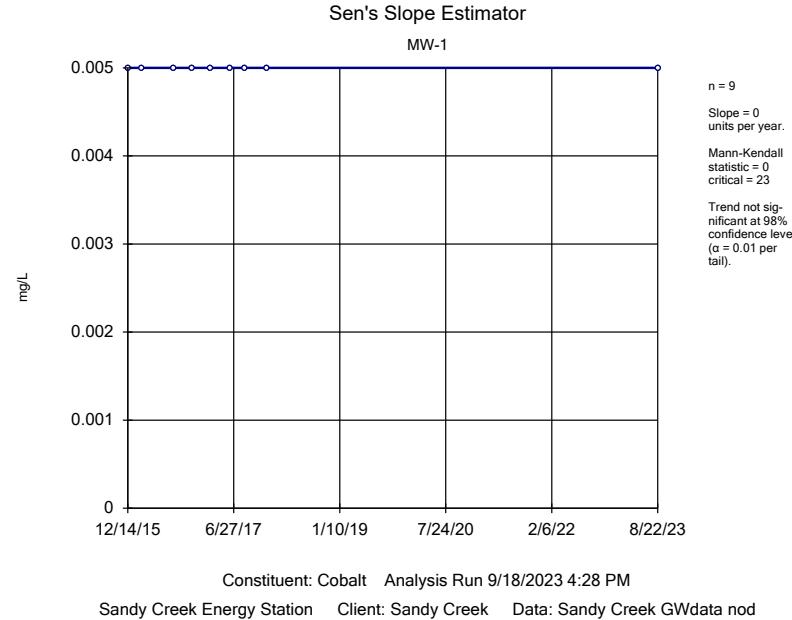
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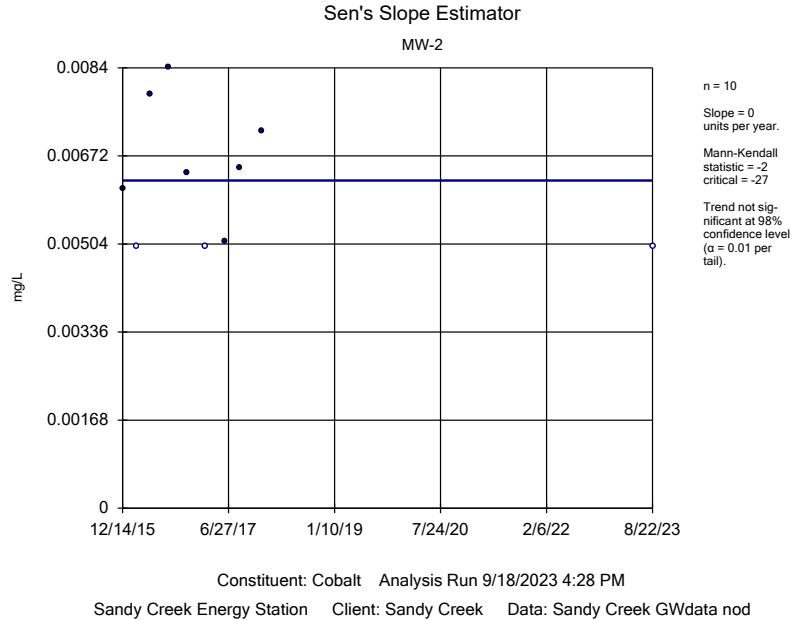
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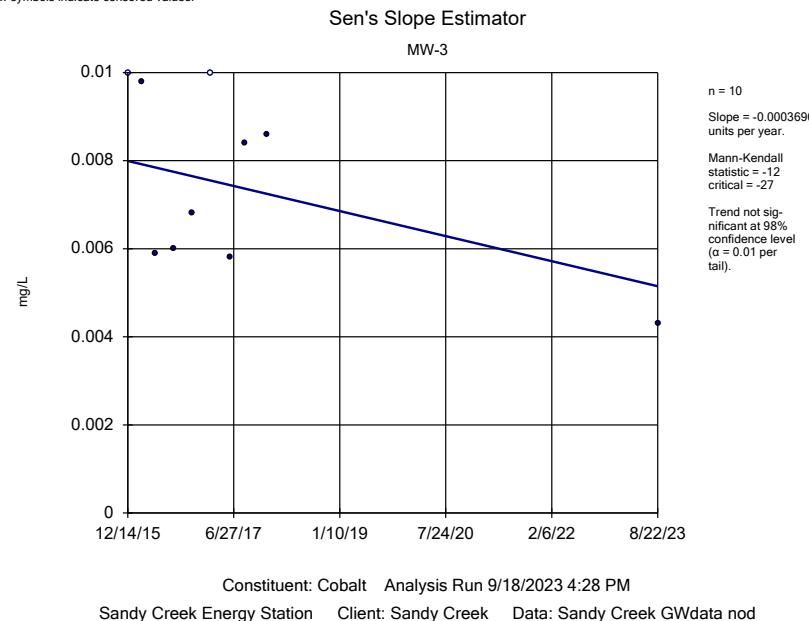
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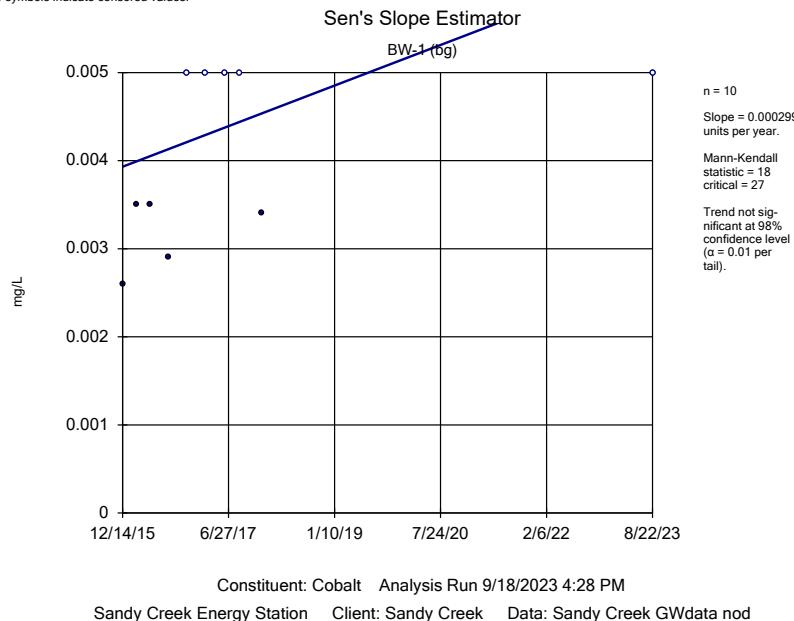
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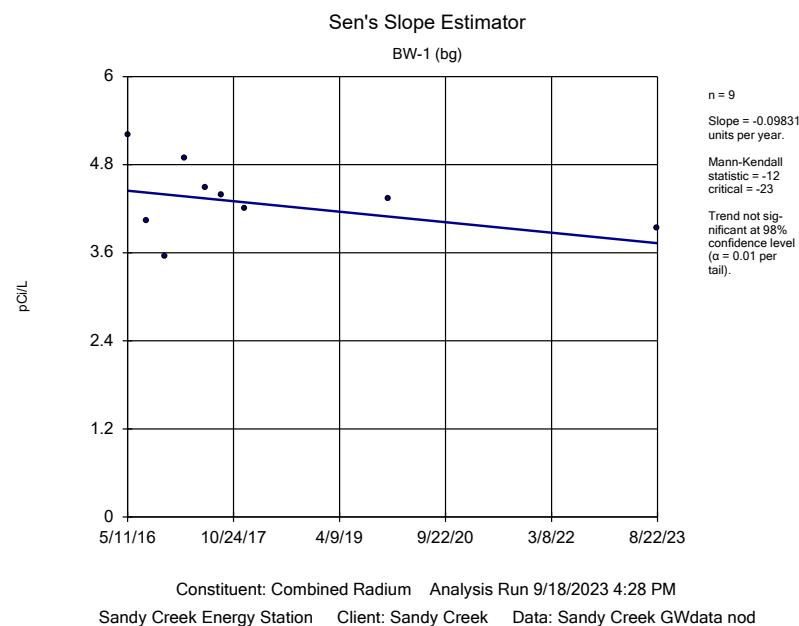
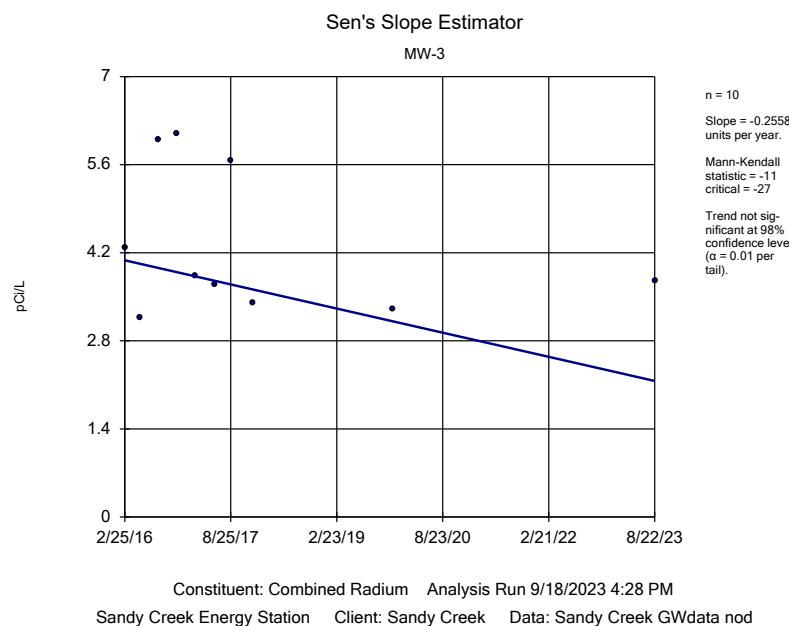
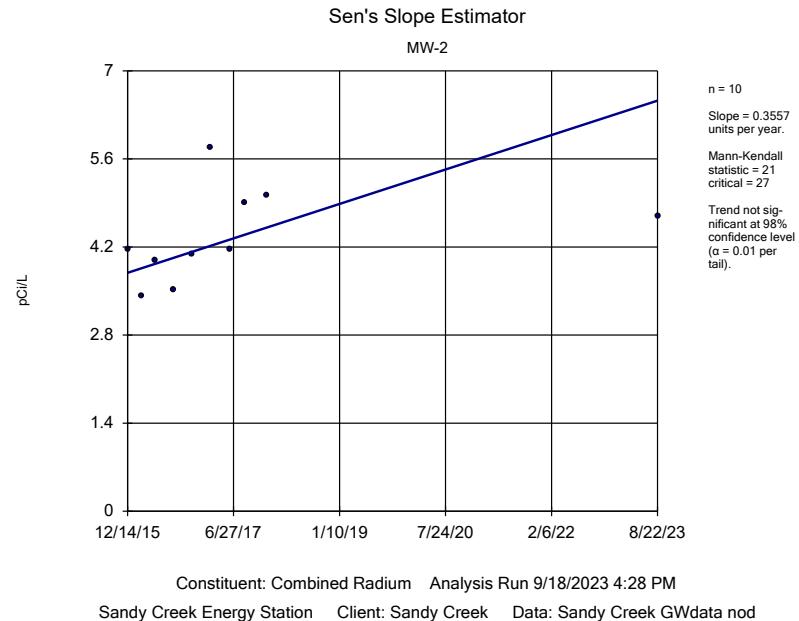
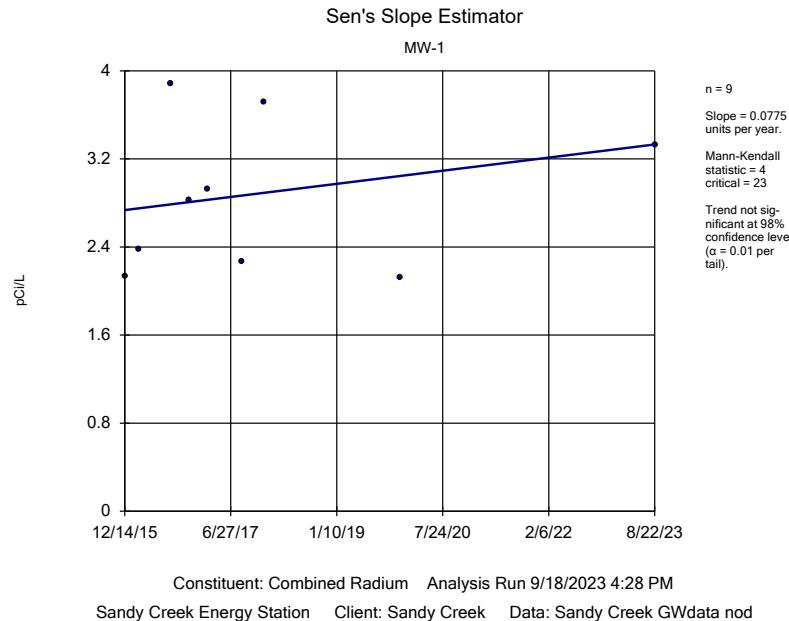


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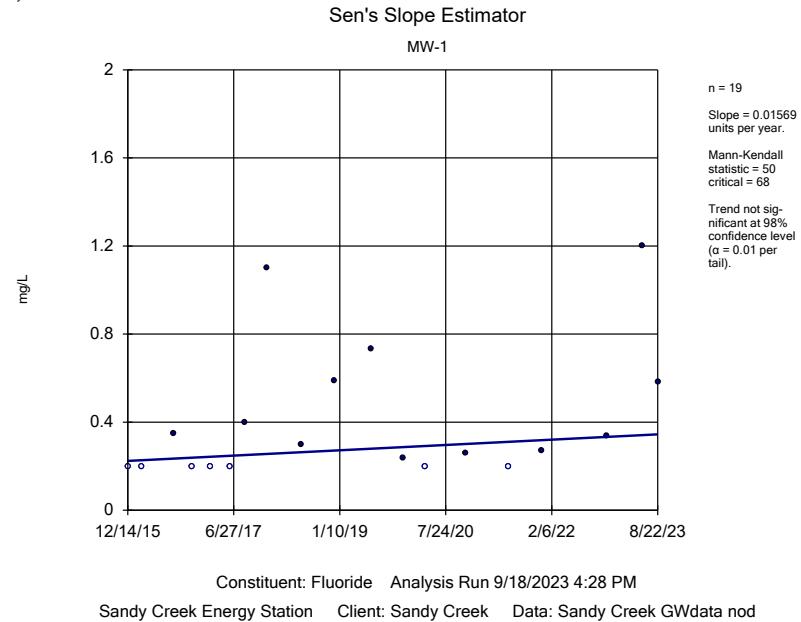


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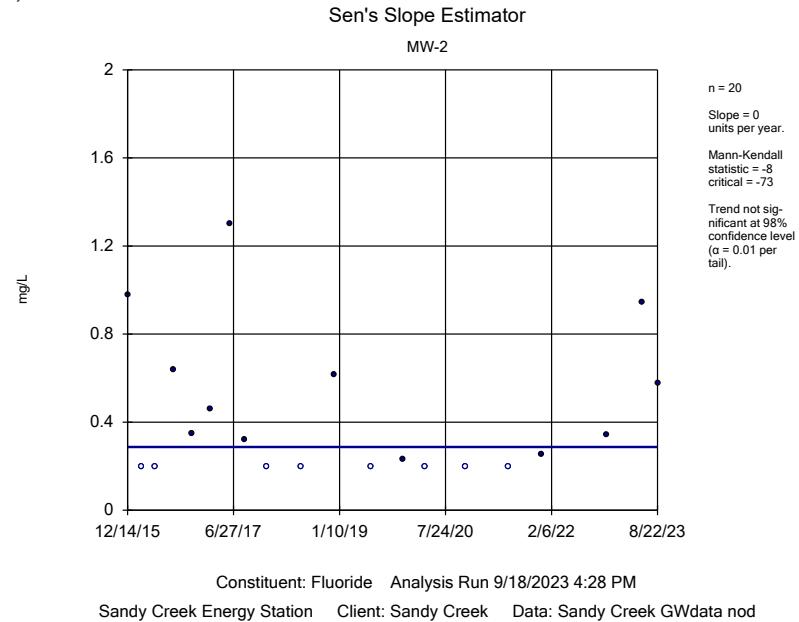




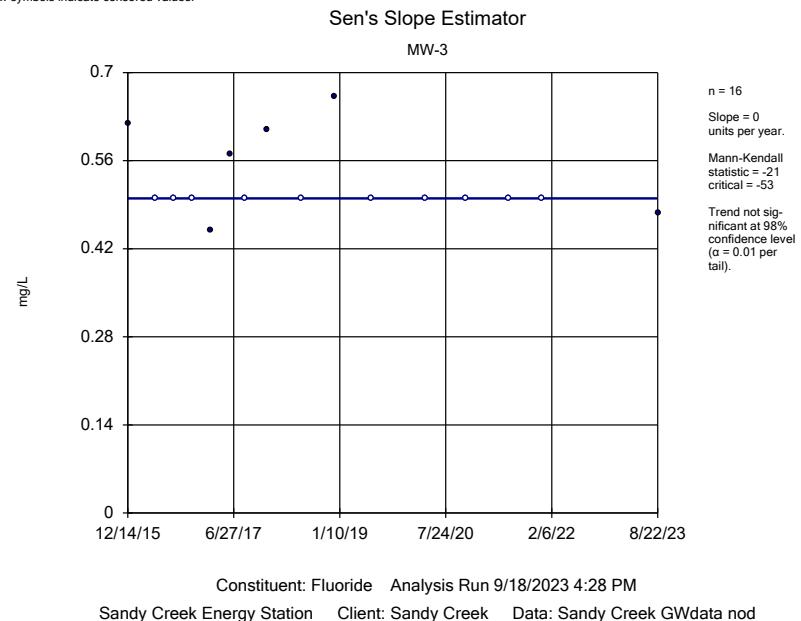
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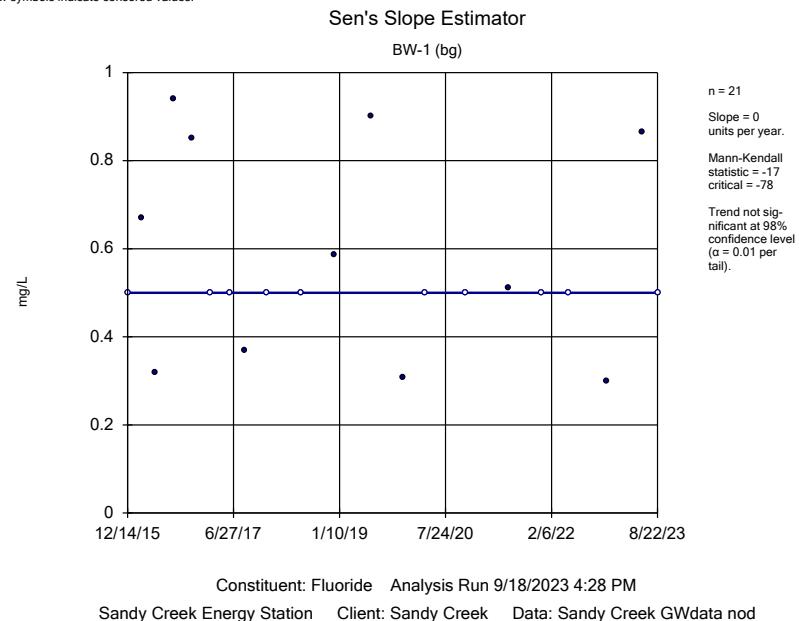
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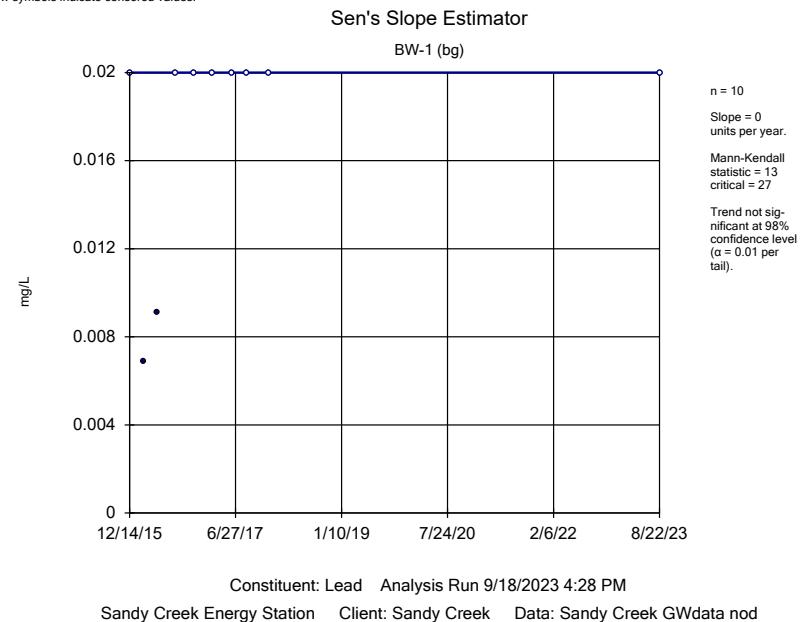
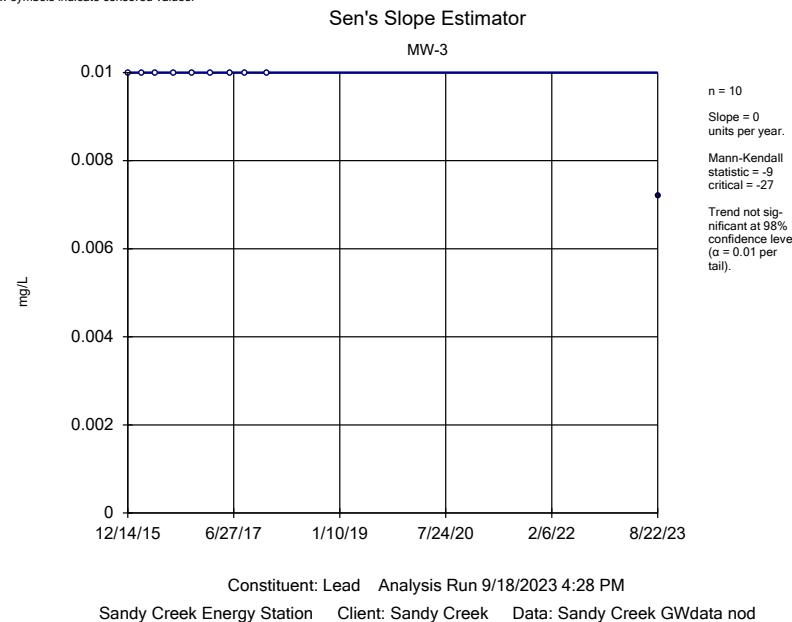
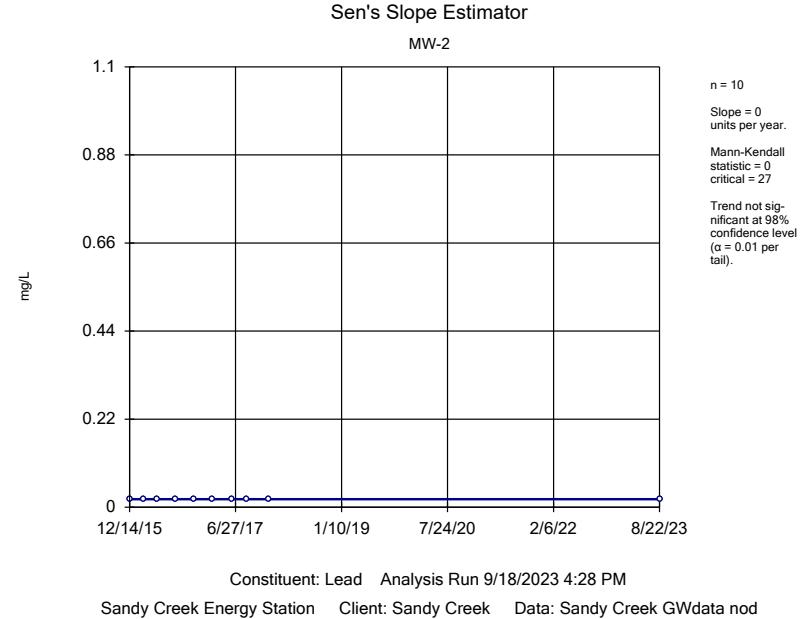
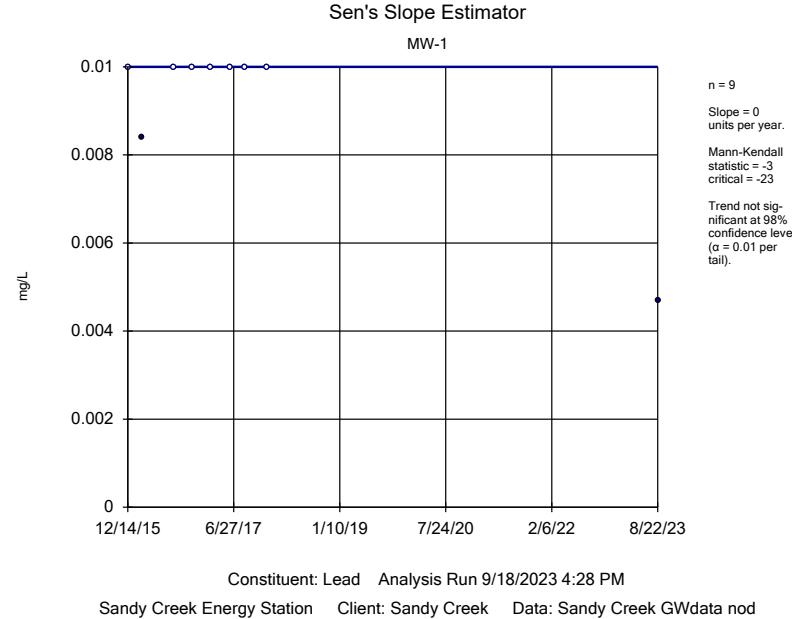


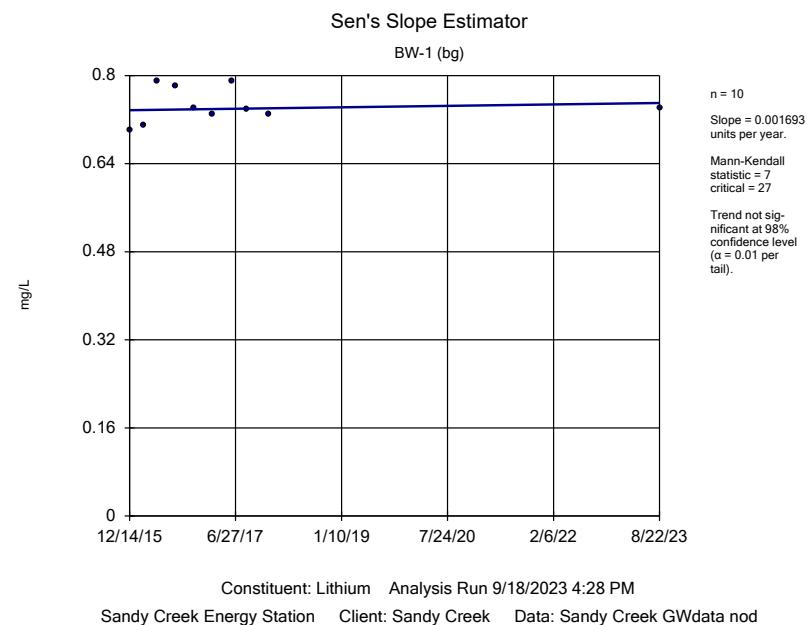
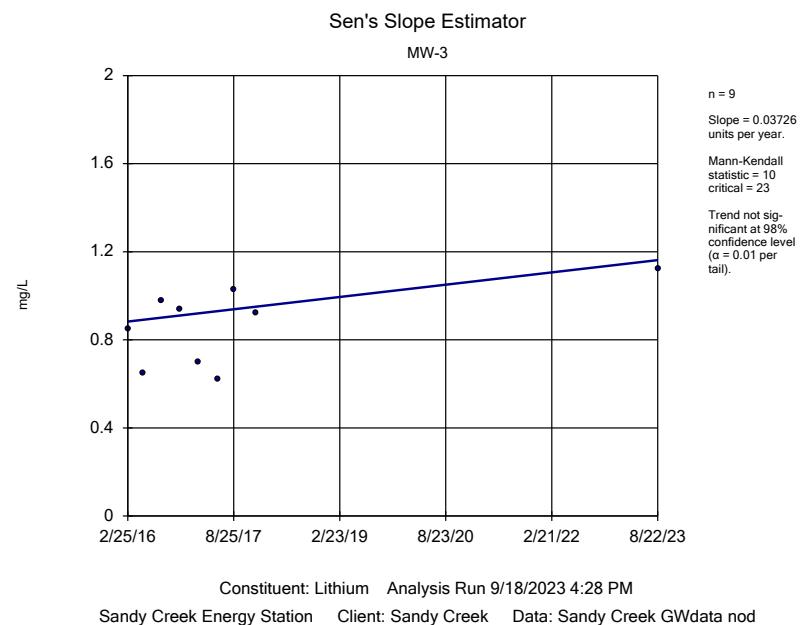
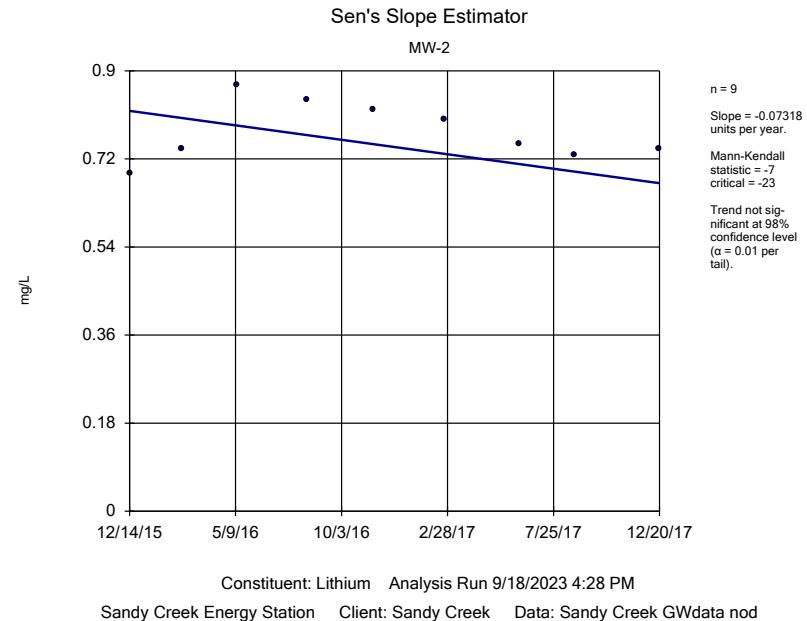
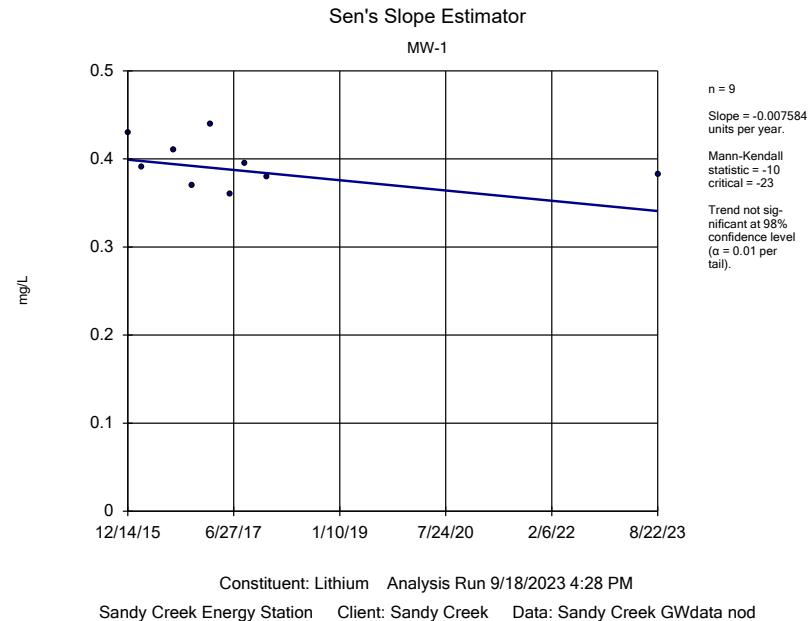
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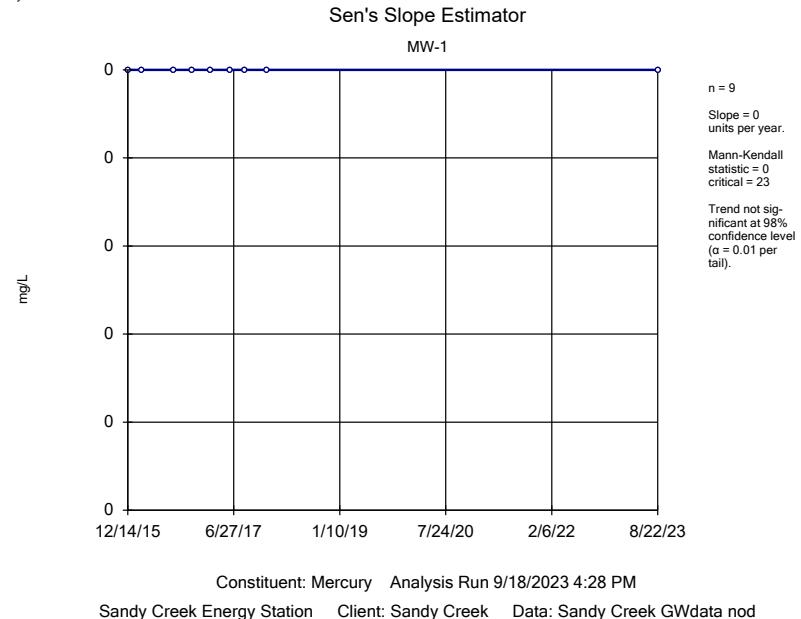
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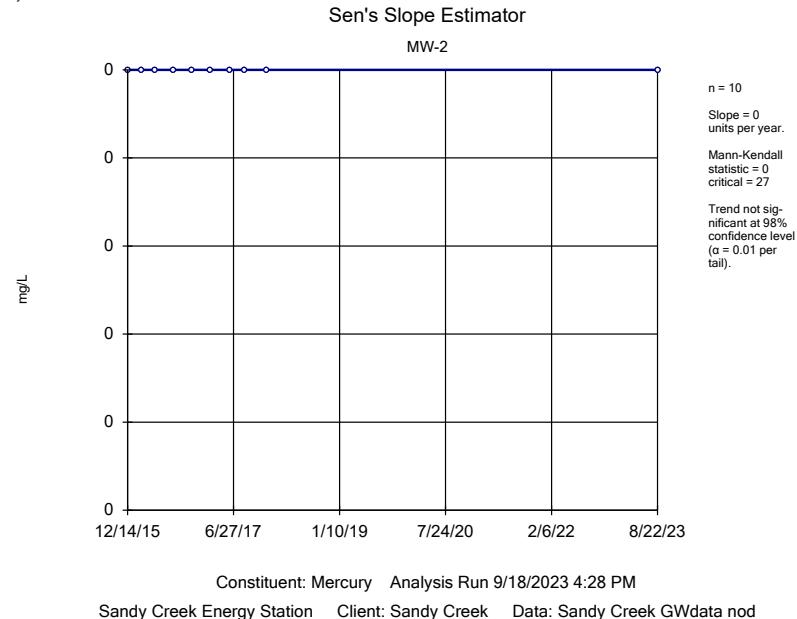




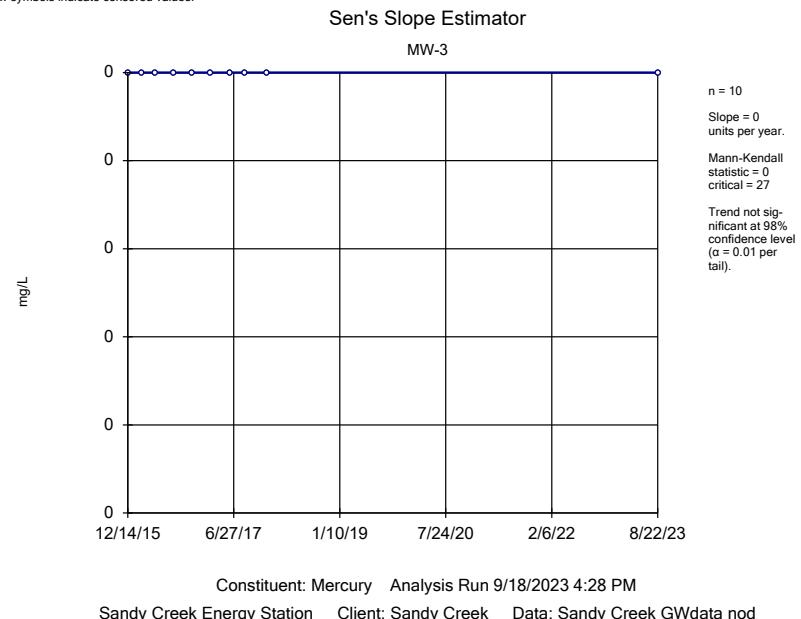
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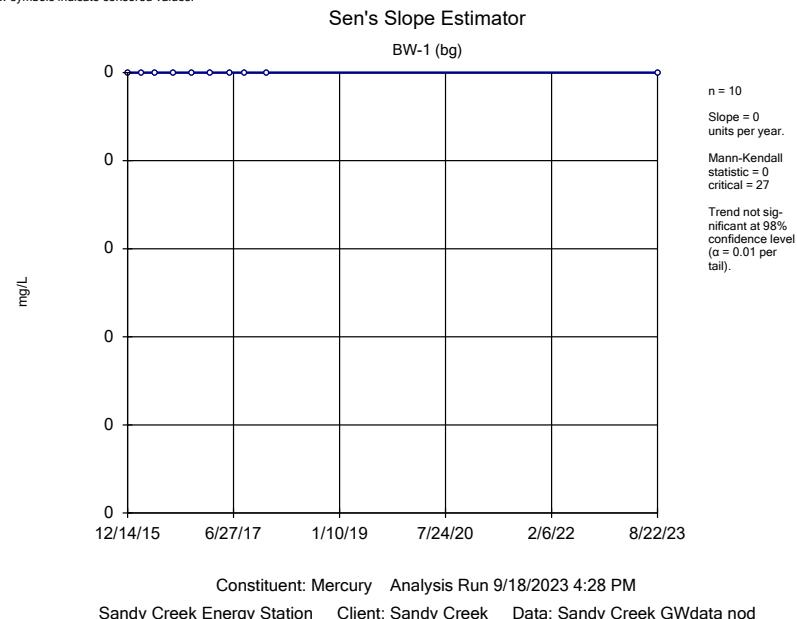
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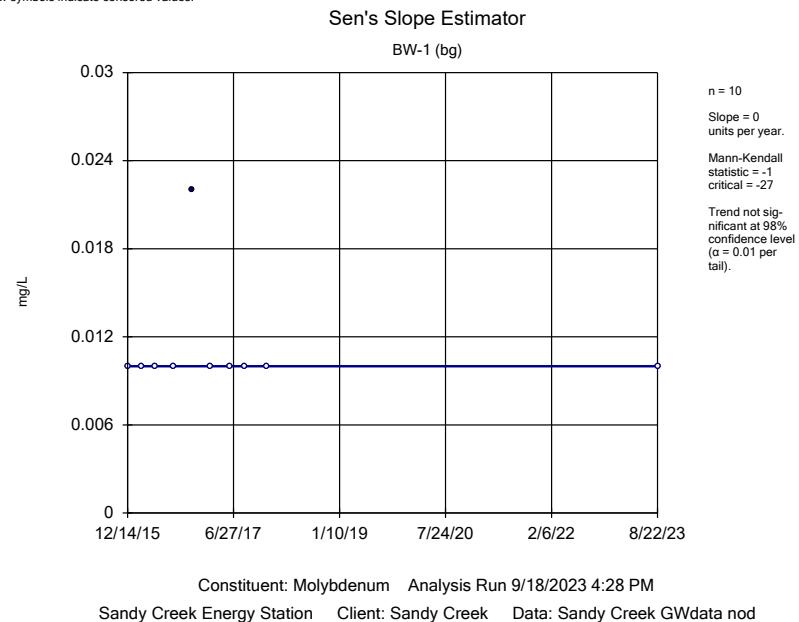
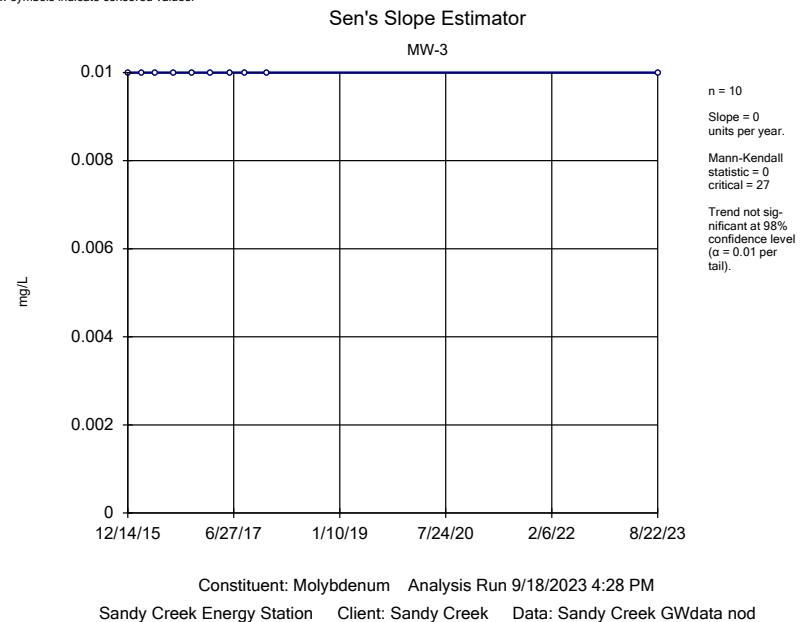
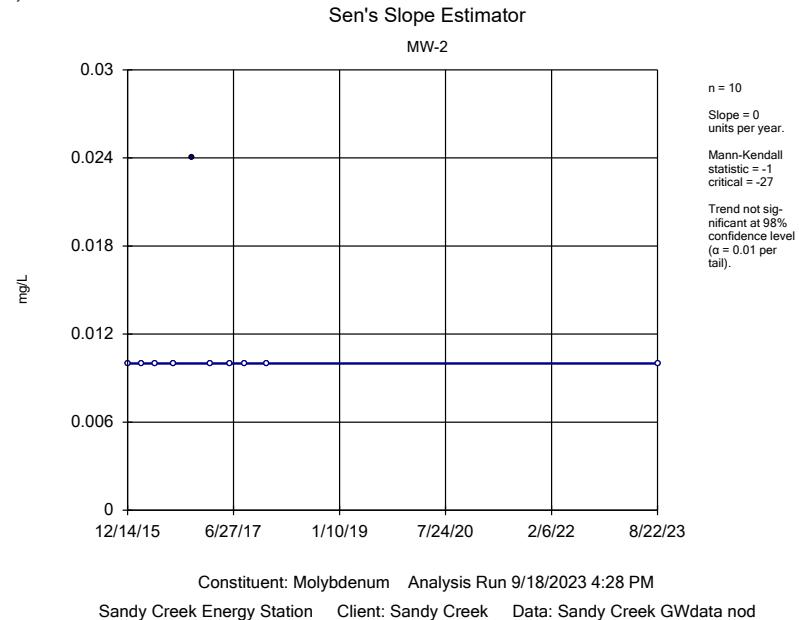
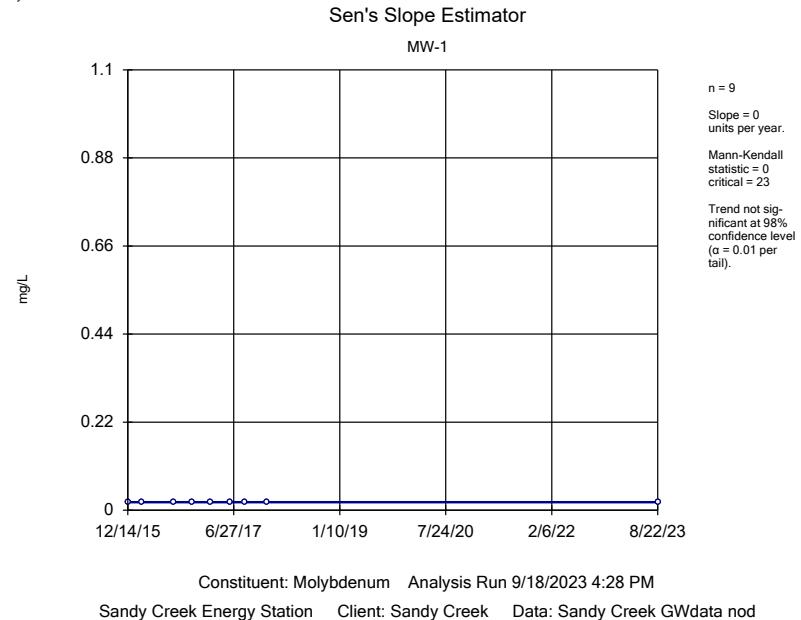


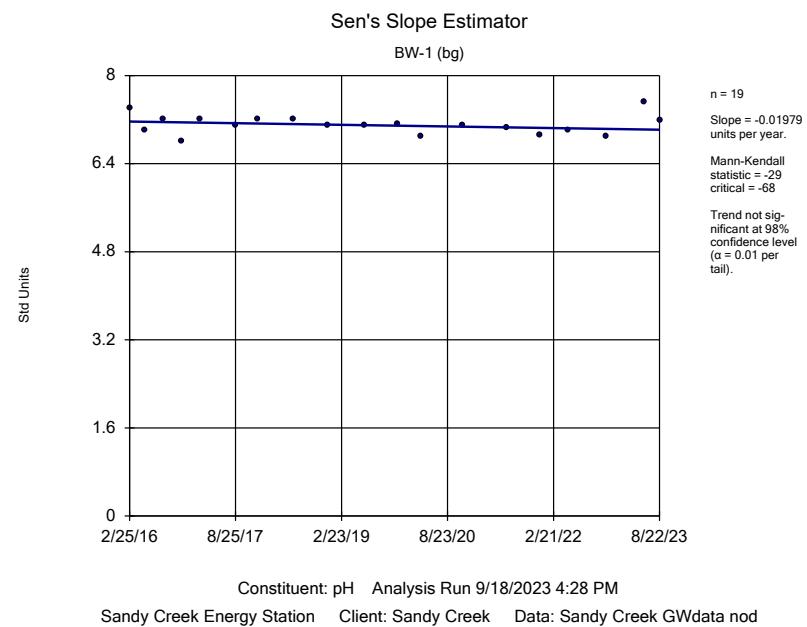
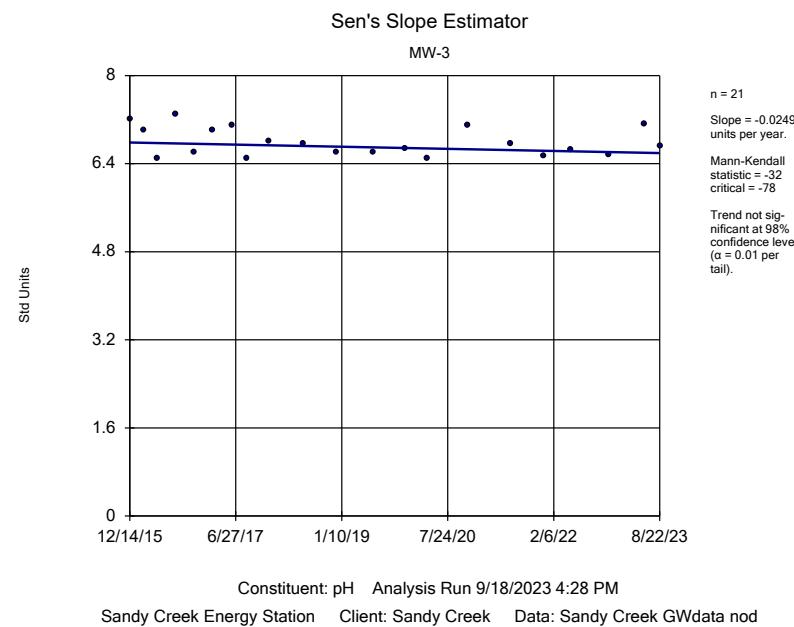
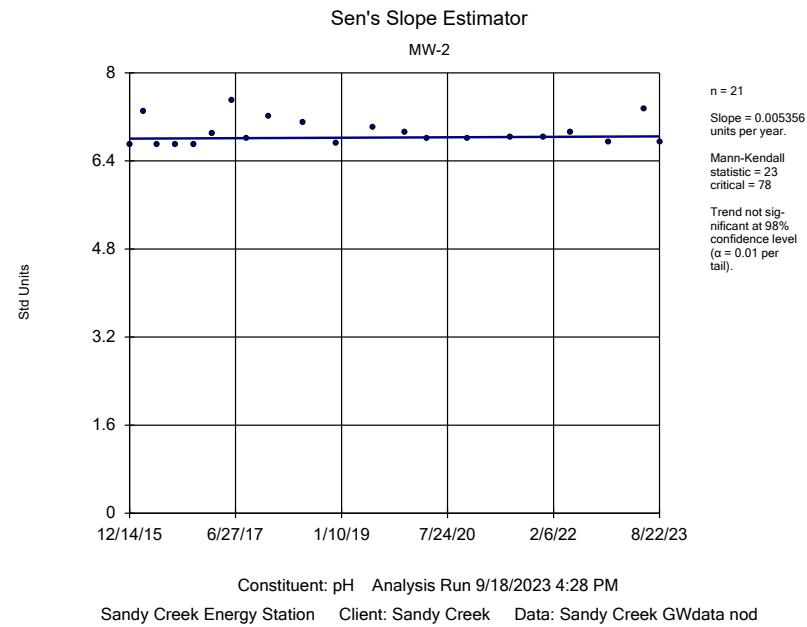
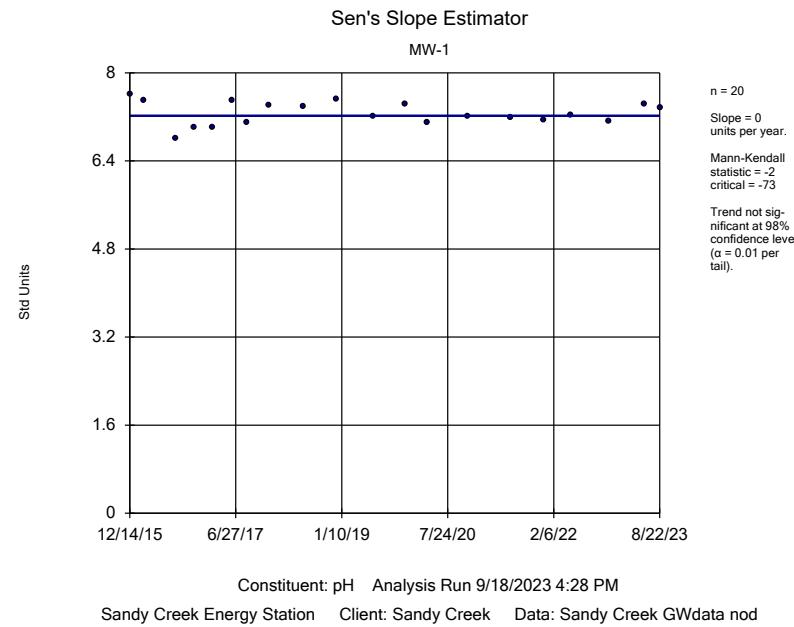
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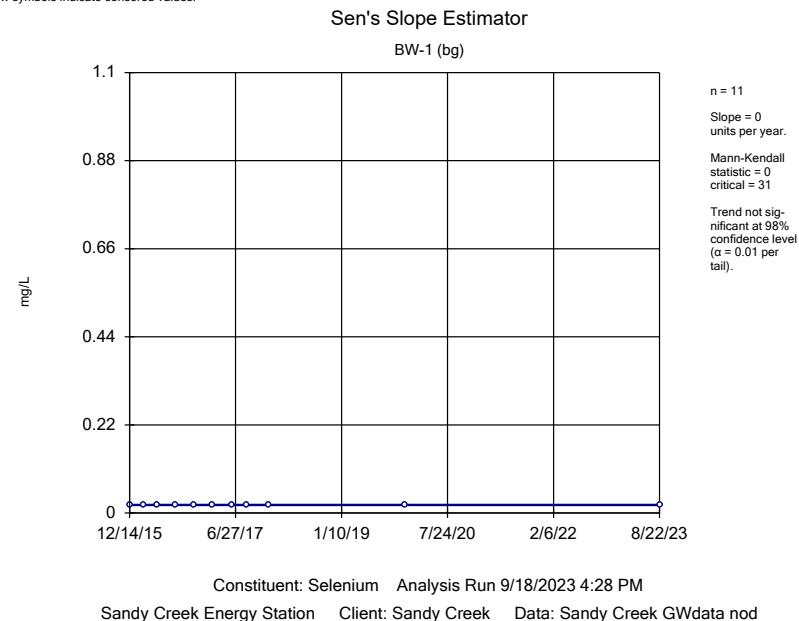
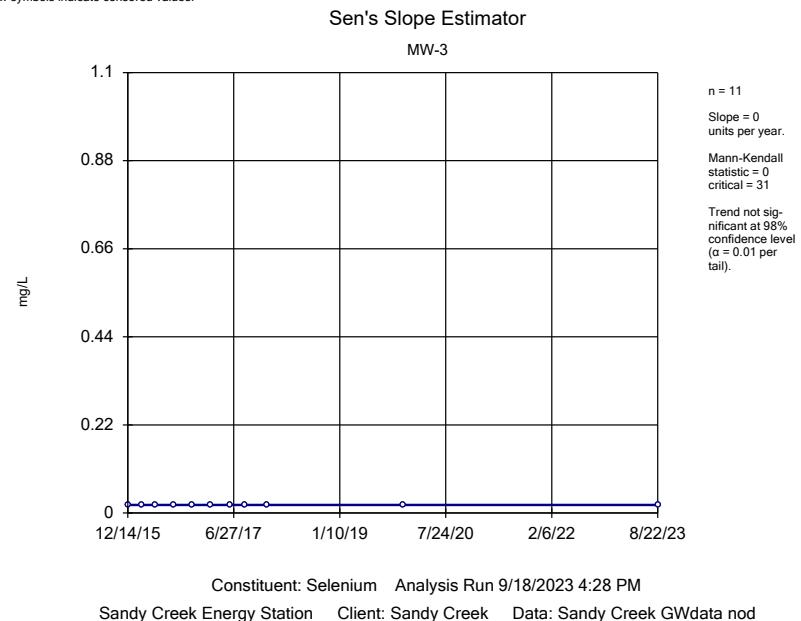
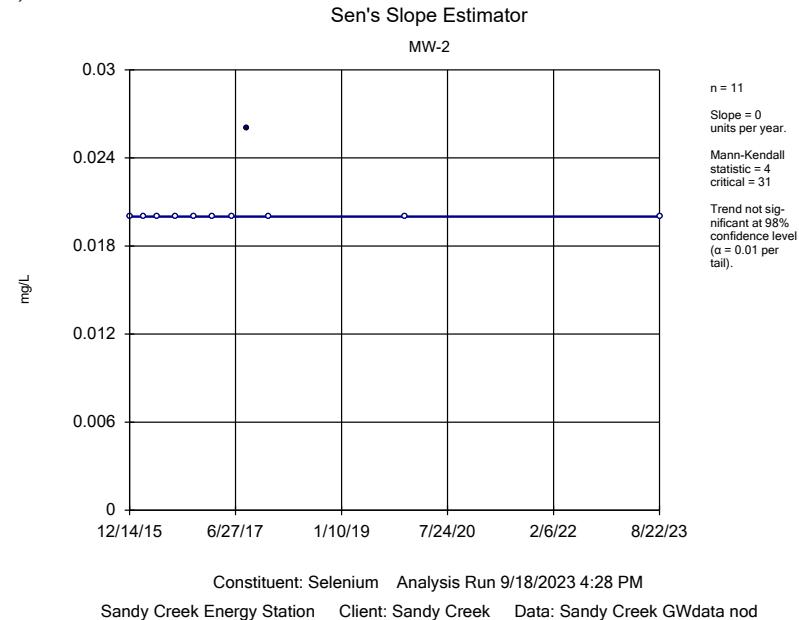
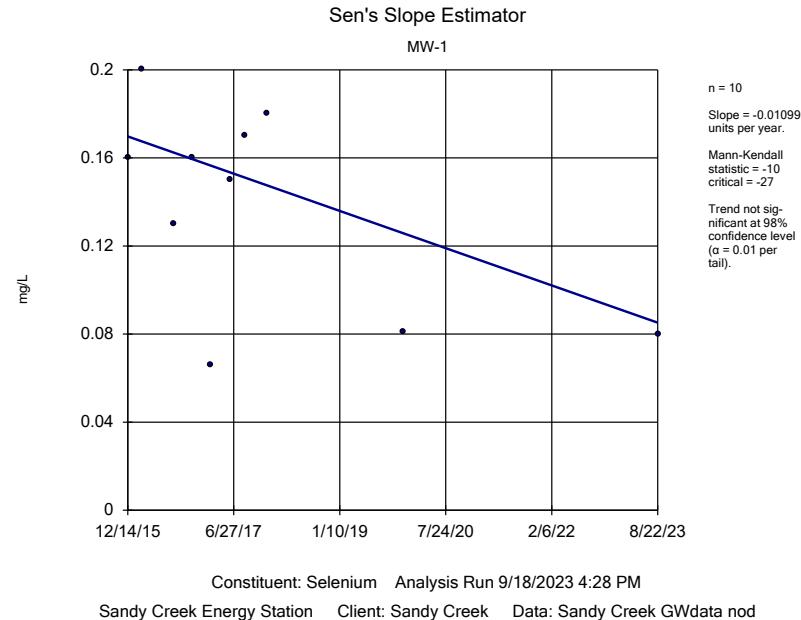


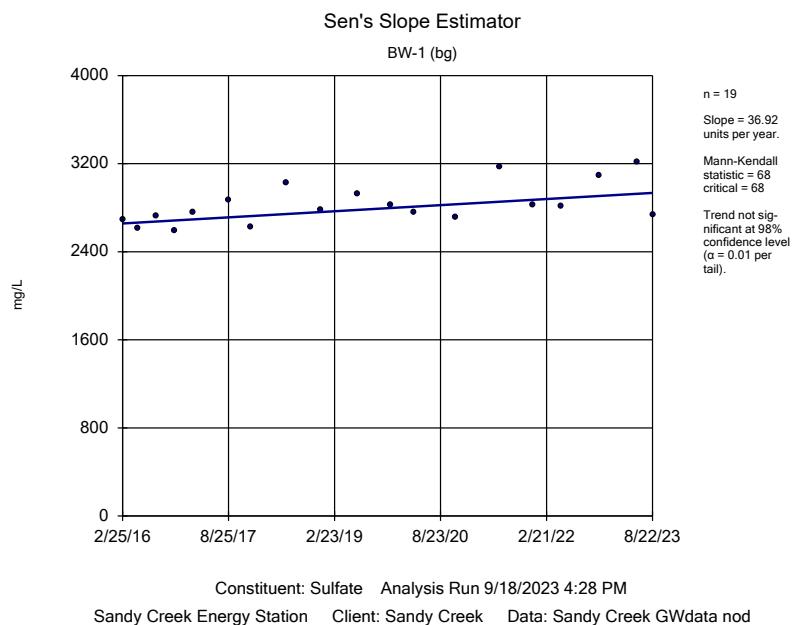
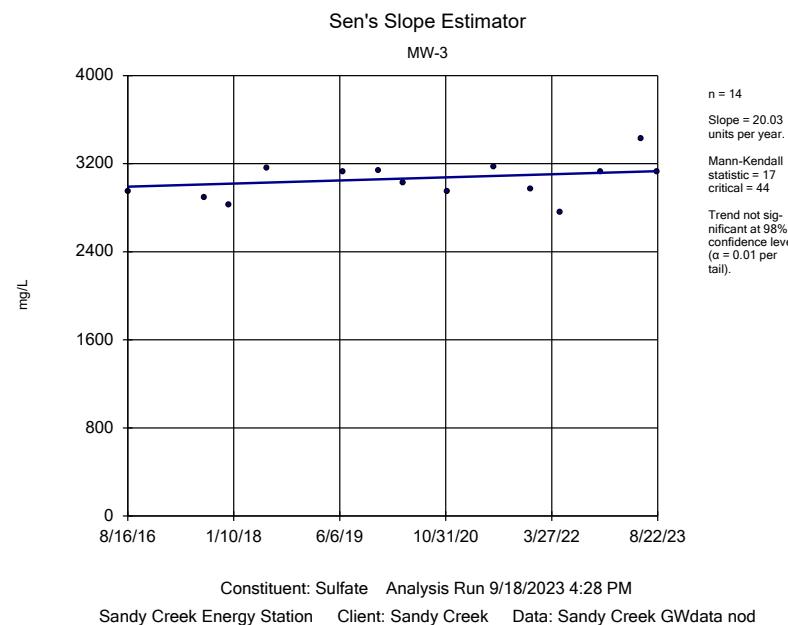
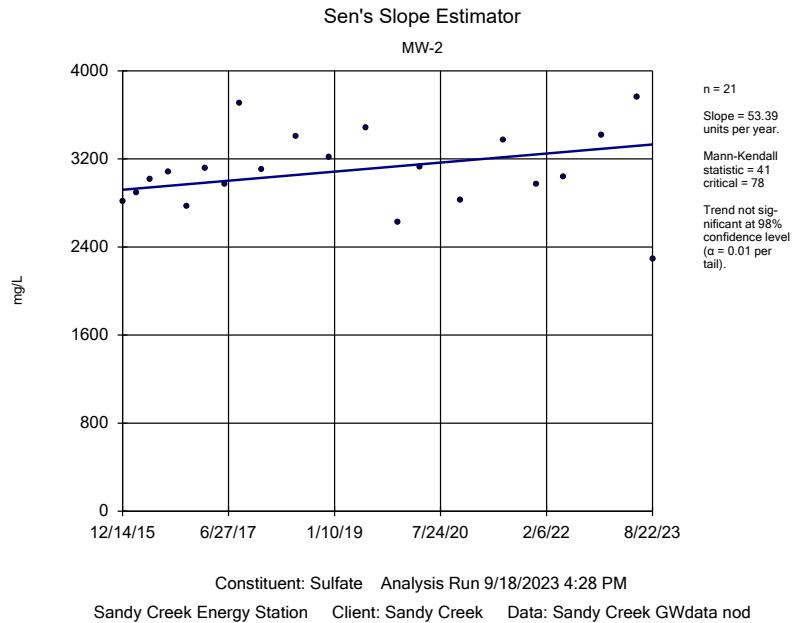
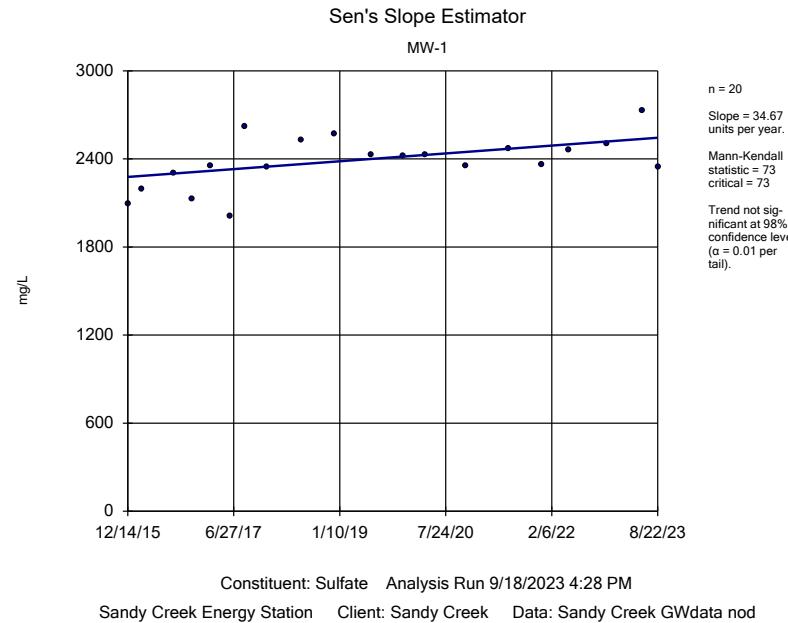
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Hollow symbols indicate censored values.



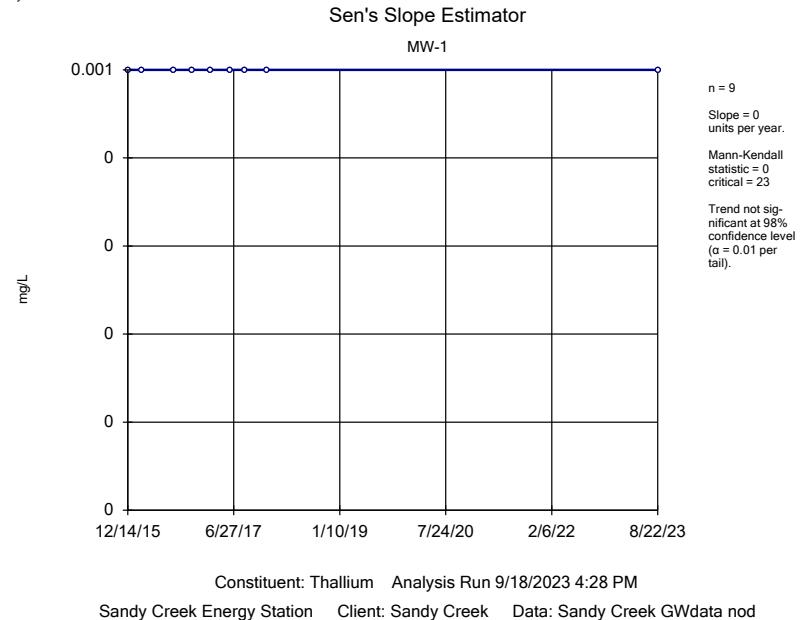




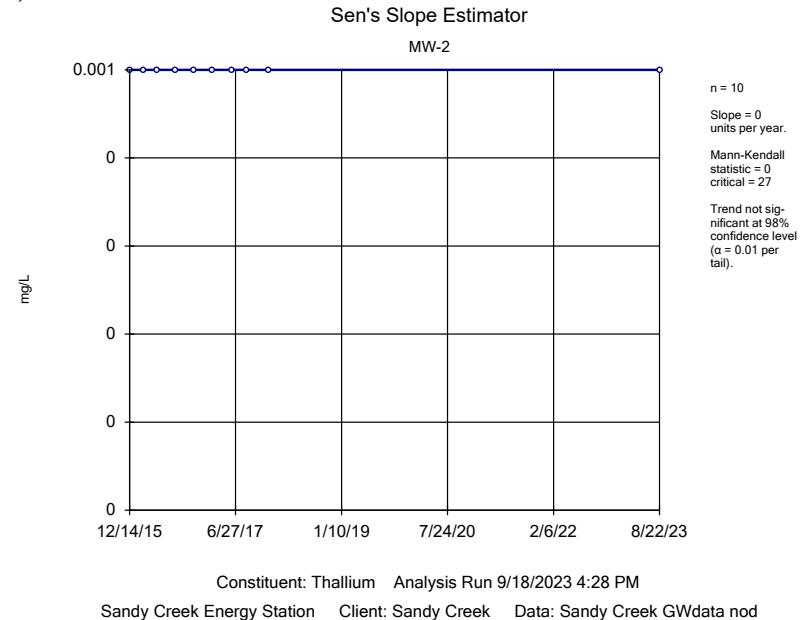




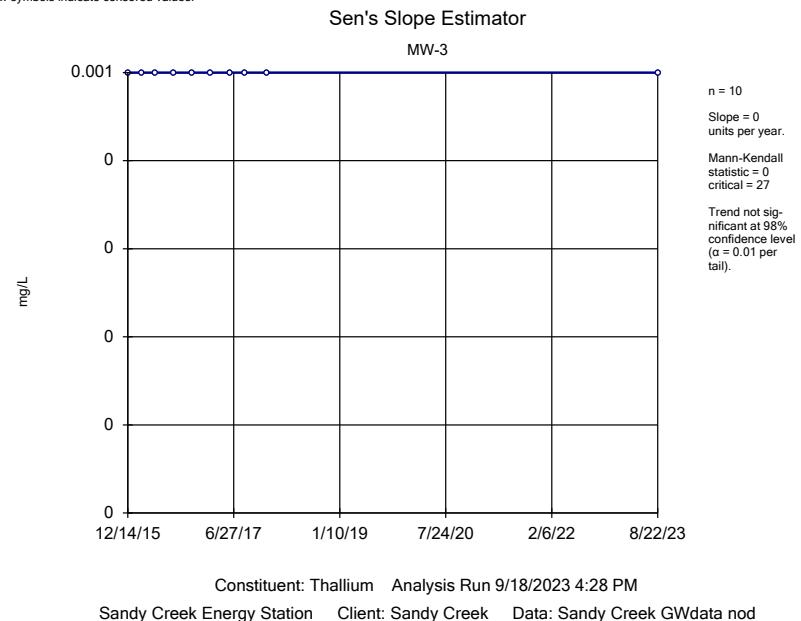
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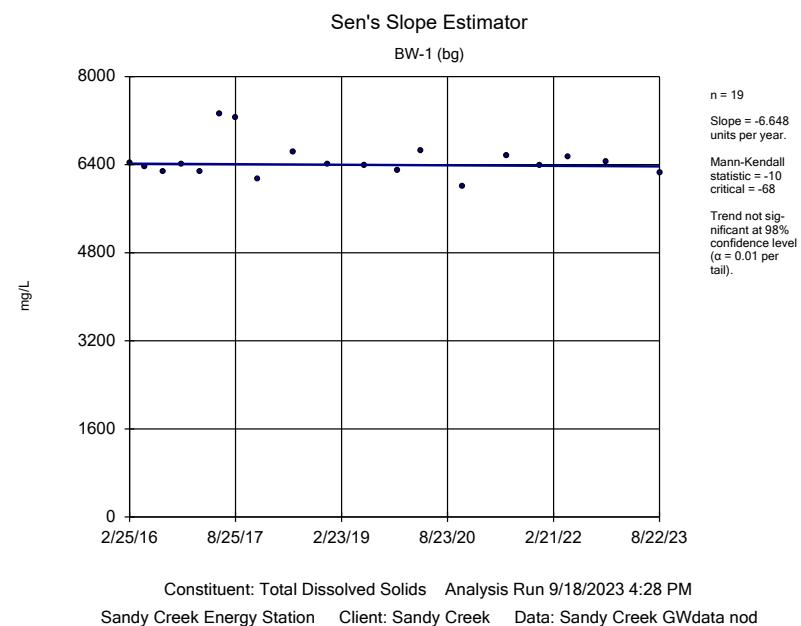
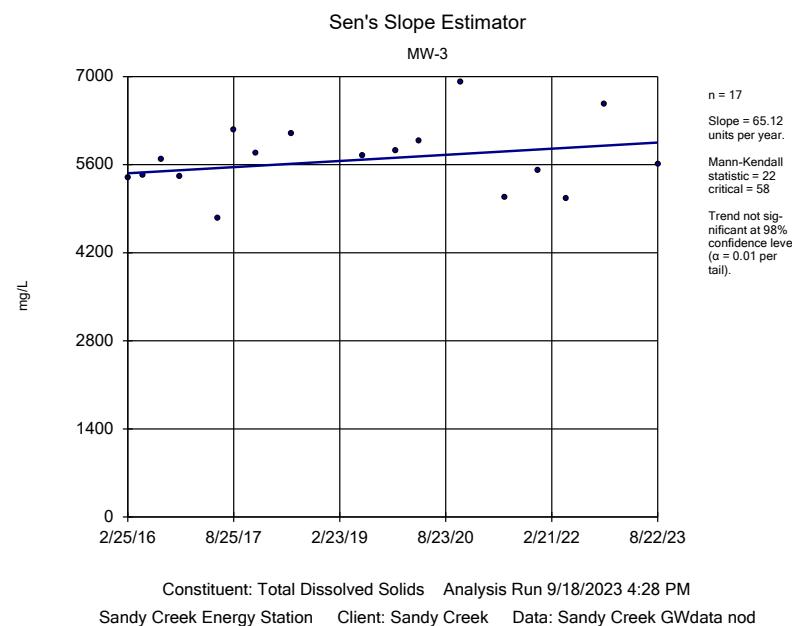
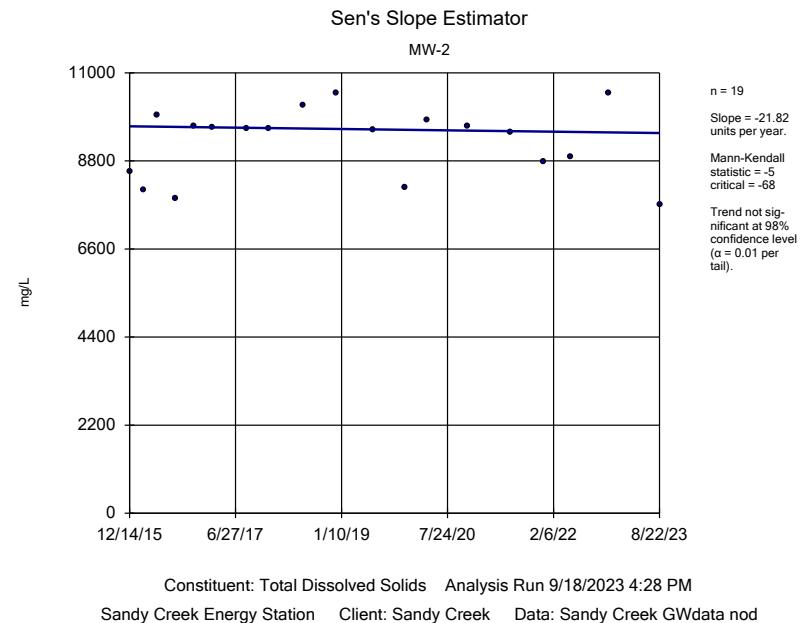
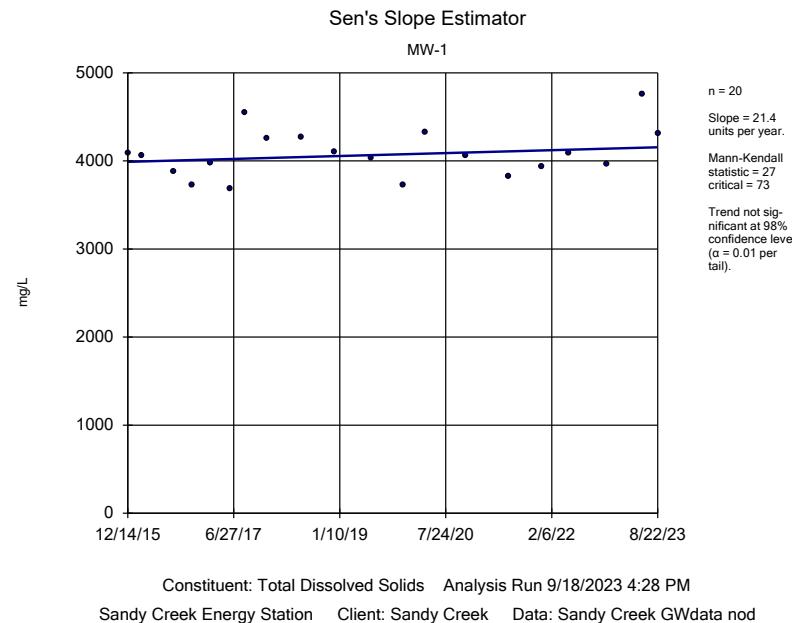


Sanitas™ v.9.6.37 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.



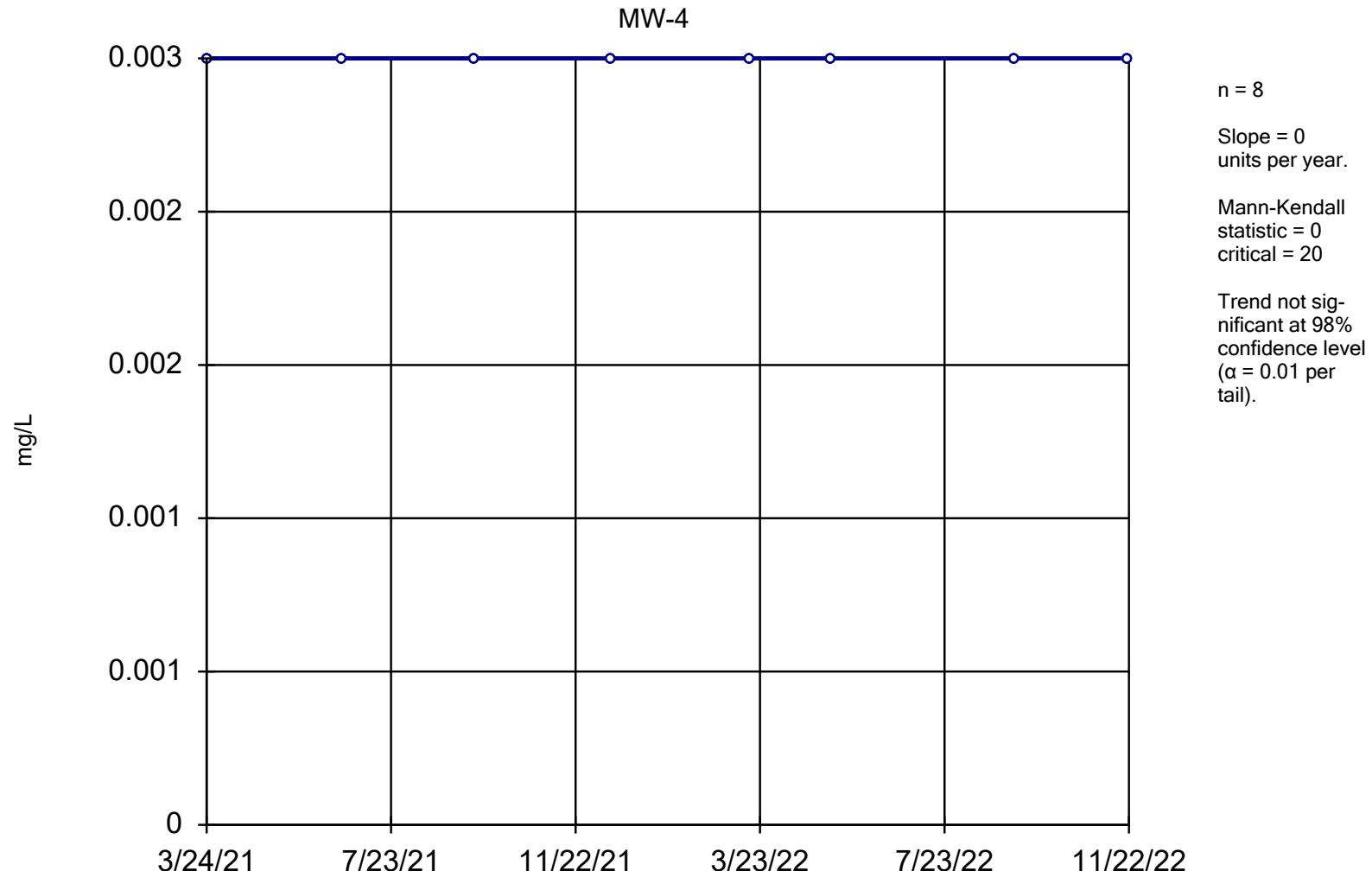
Sanitas™ v.9.6.37 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.





Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

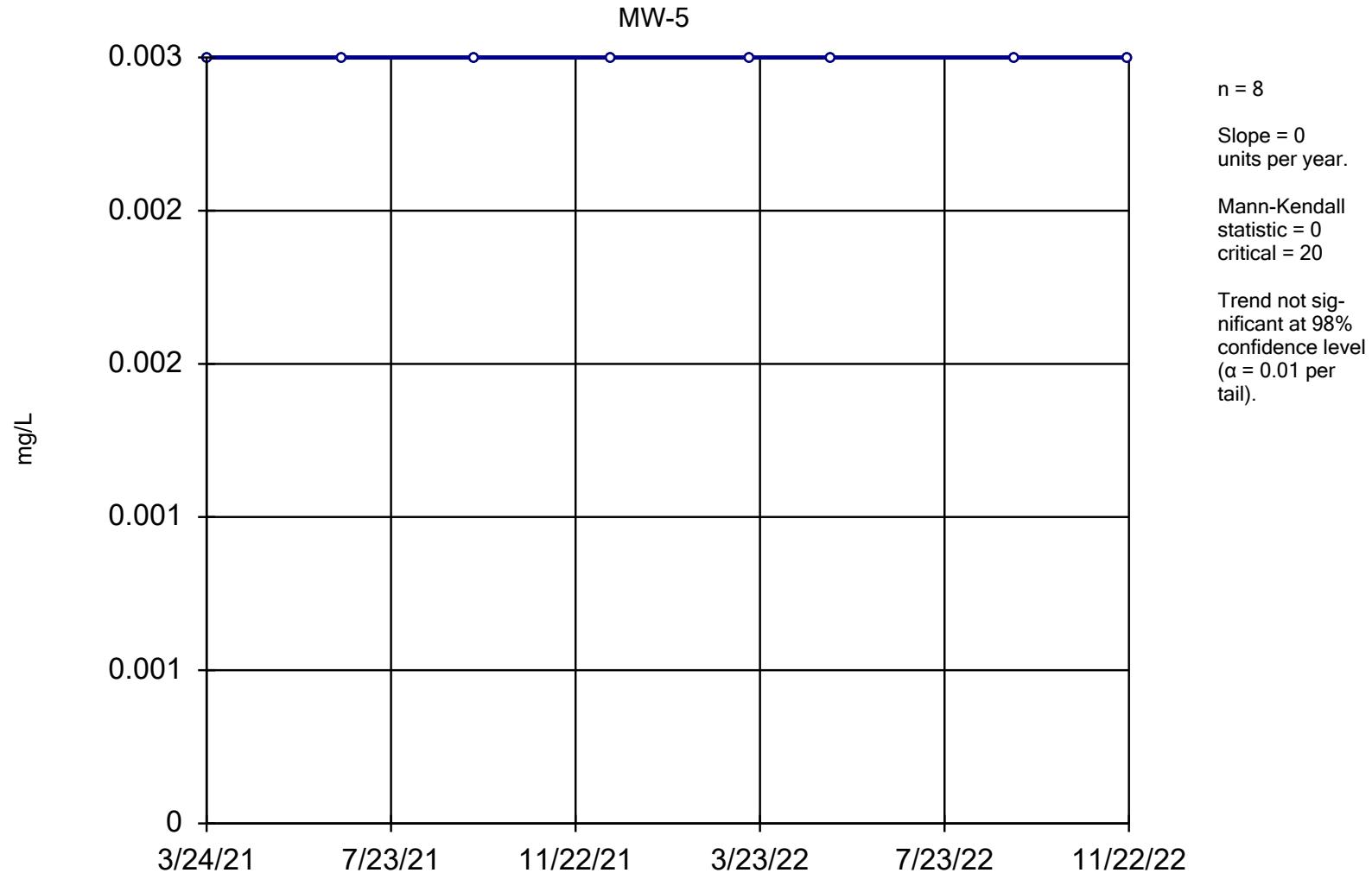


Constituent: Antimony Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator



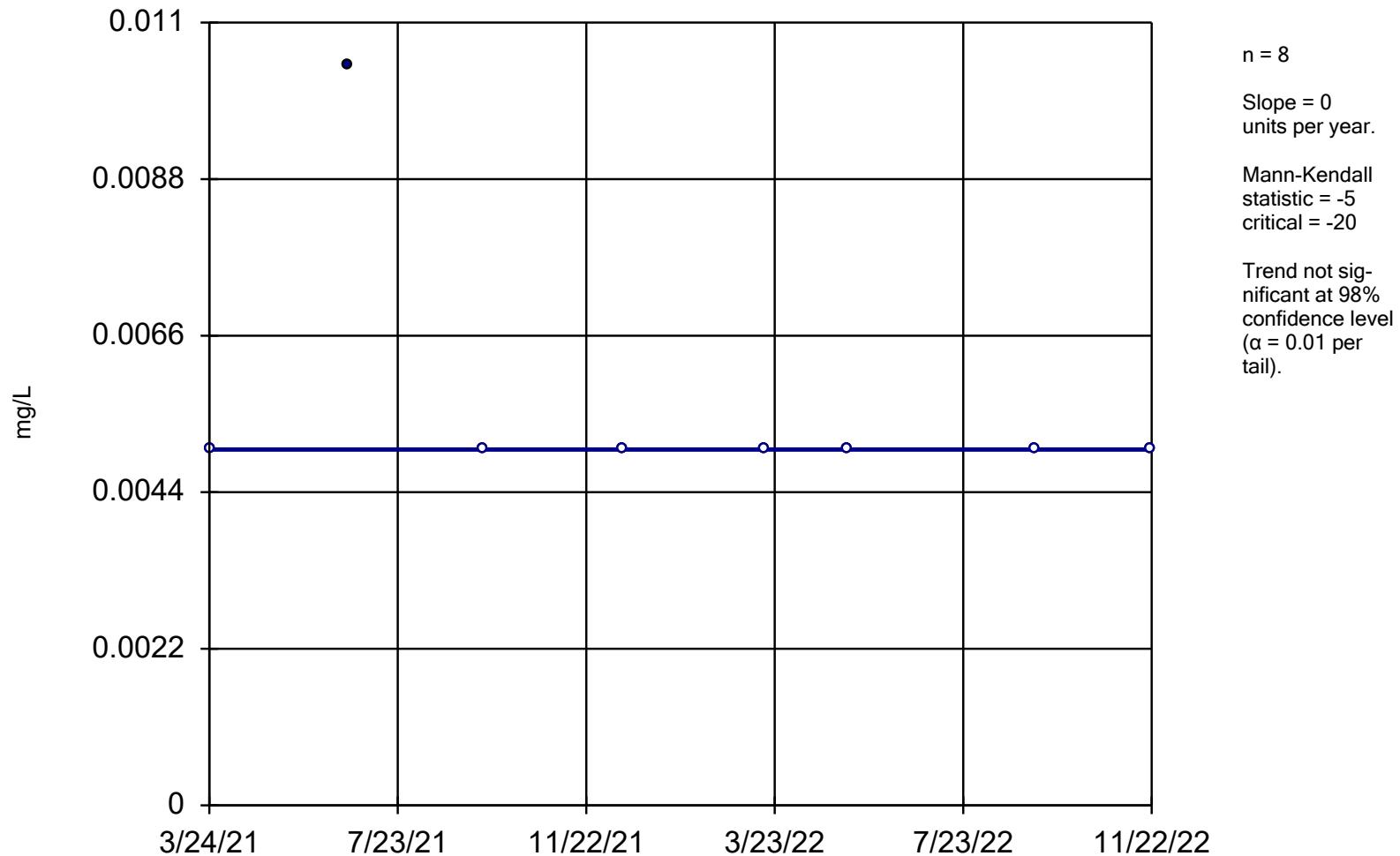
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Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4

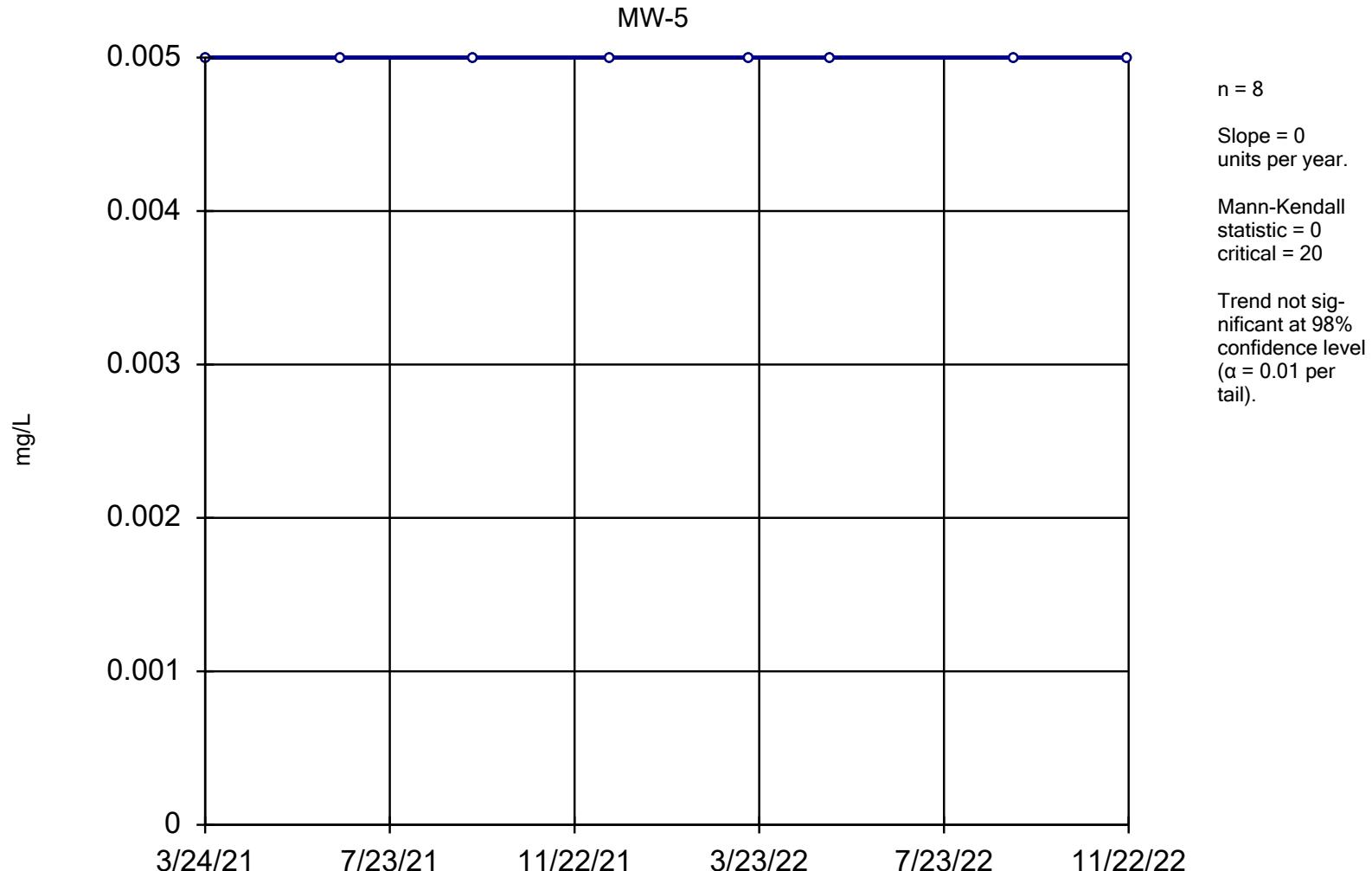


Constituent: Arsenic Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

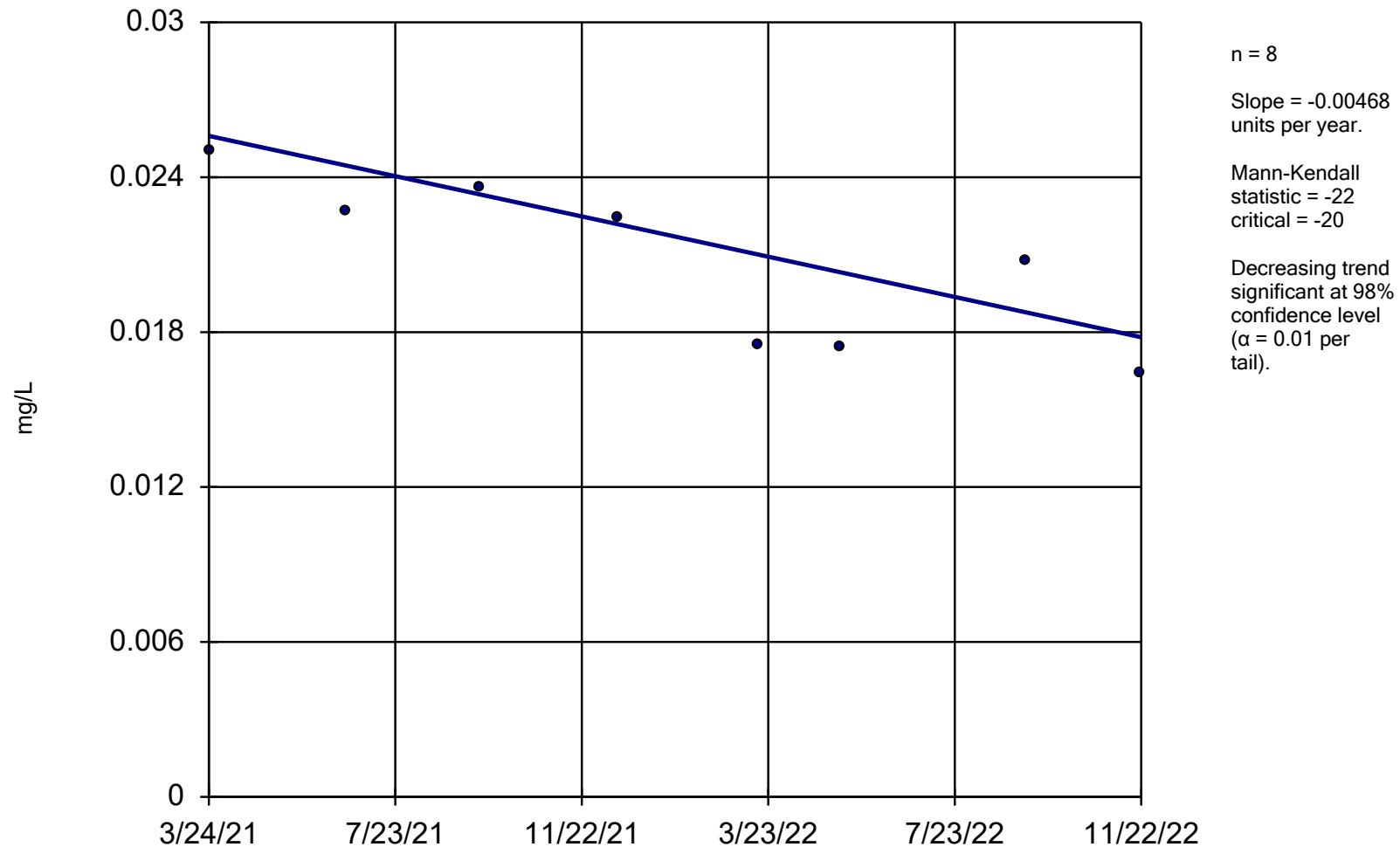
Sen's Slope Estimator



Constituent: Arsenic Analysis Run 3/8/2023 1:56 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-4

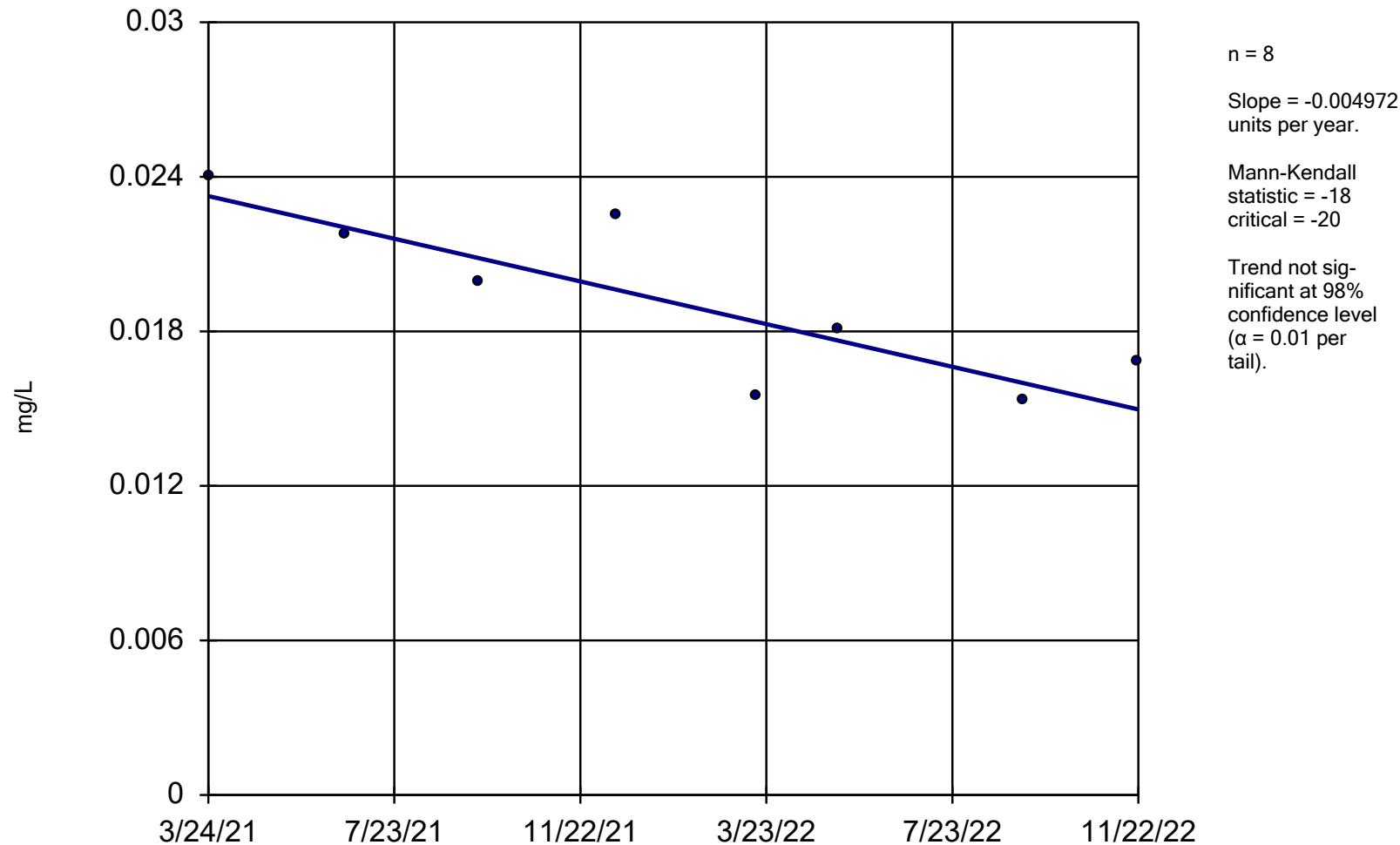


Constituent: Barium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-5

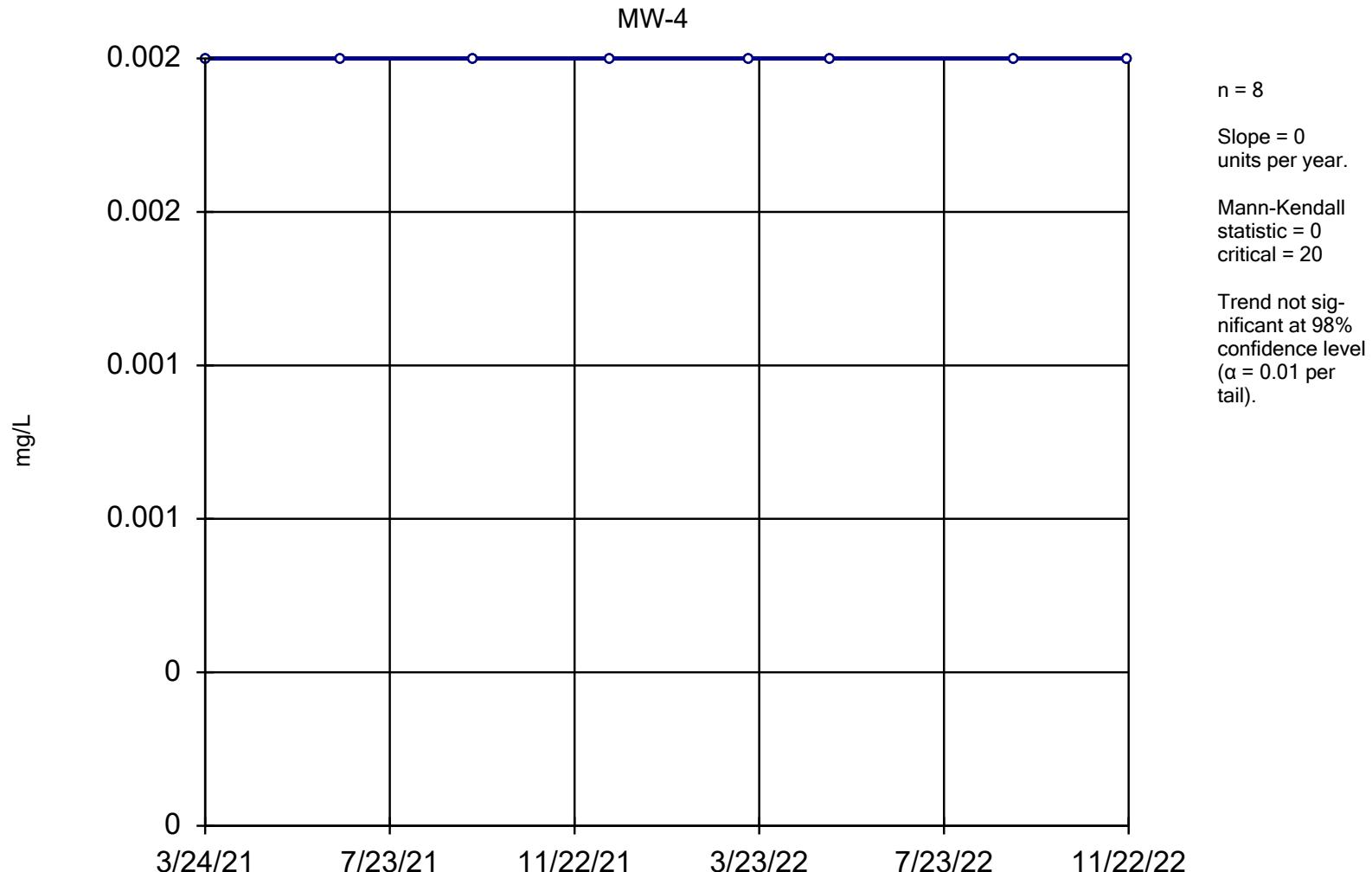


Constituent: Barium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

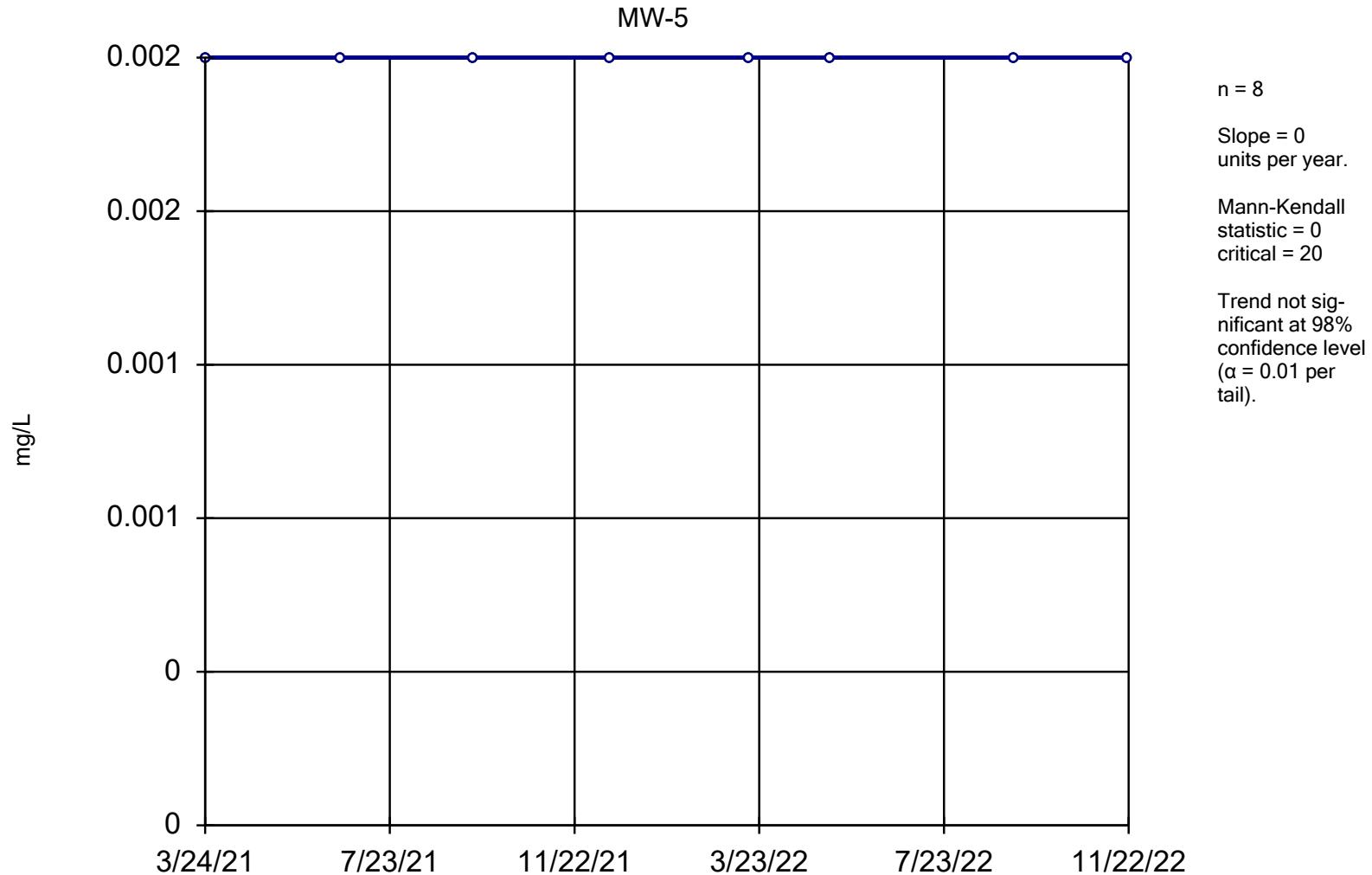


Constituent: Beryllium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

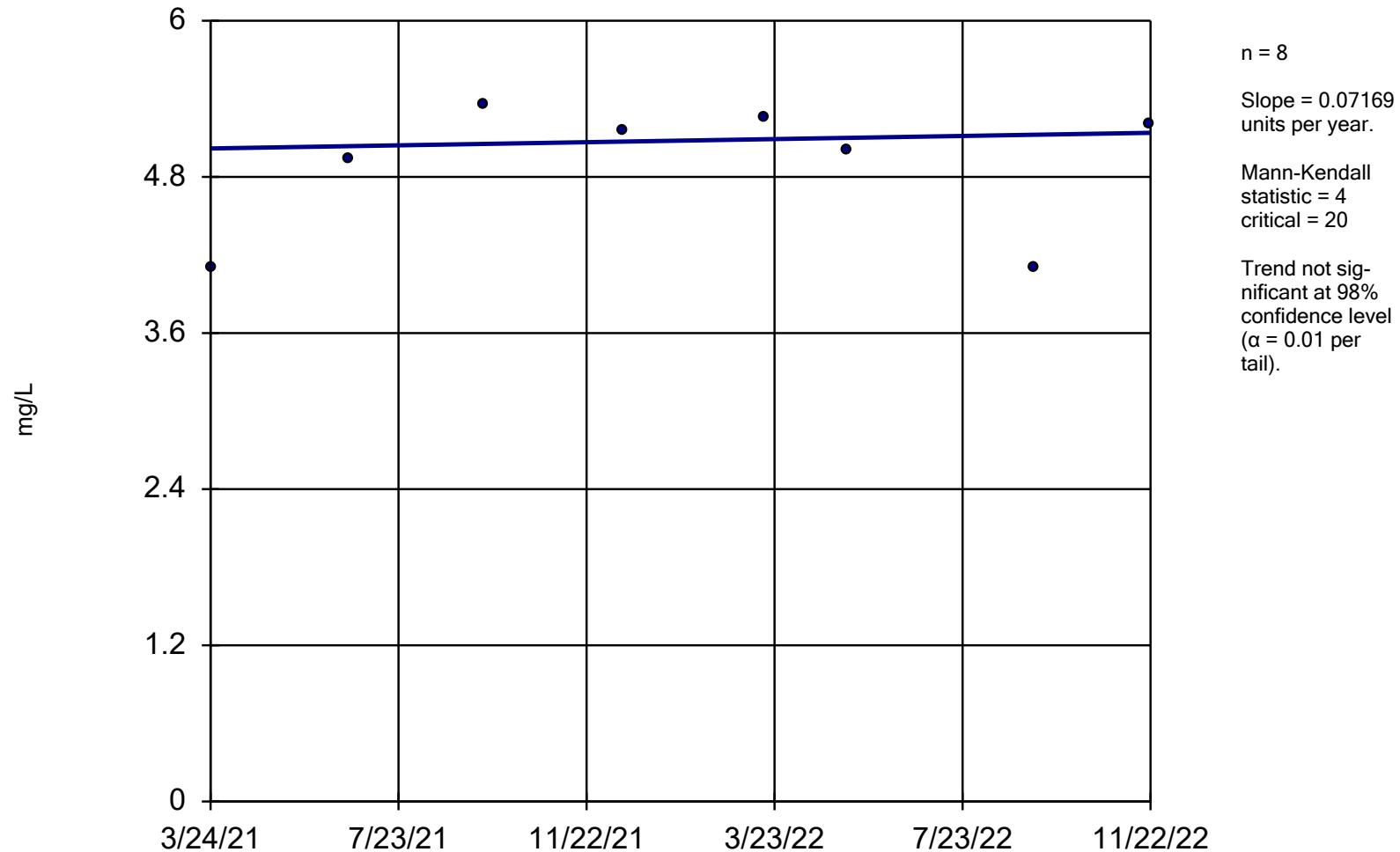


Constituent: Beryllium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-4

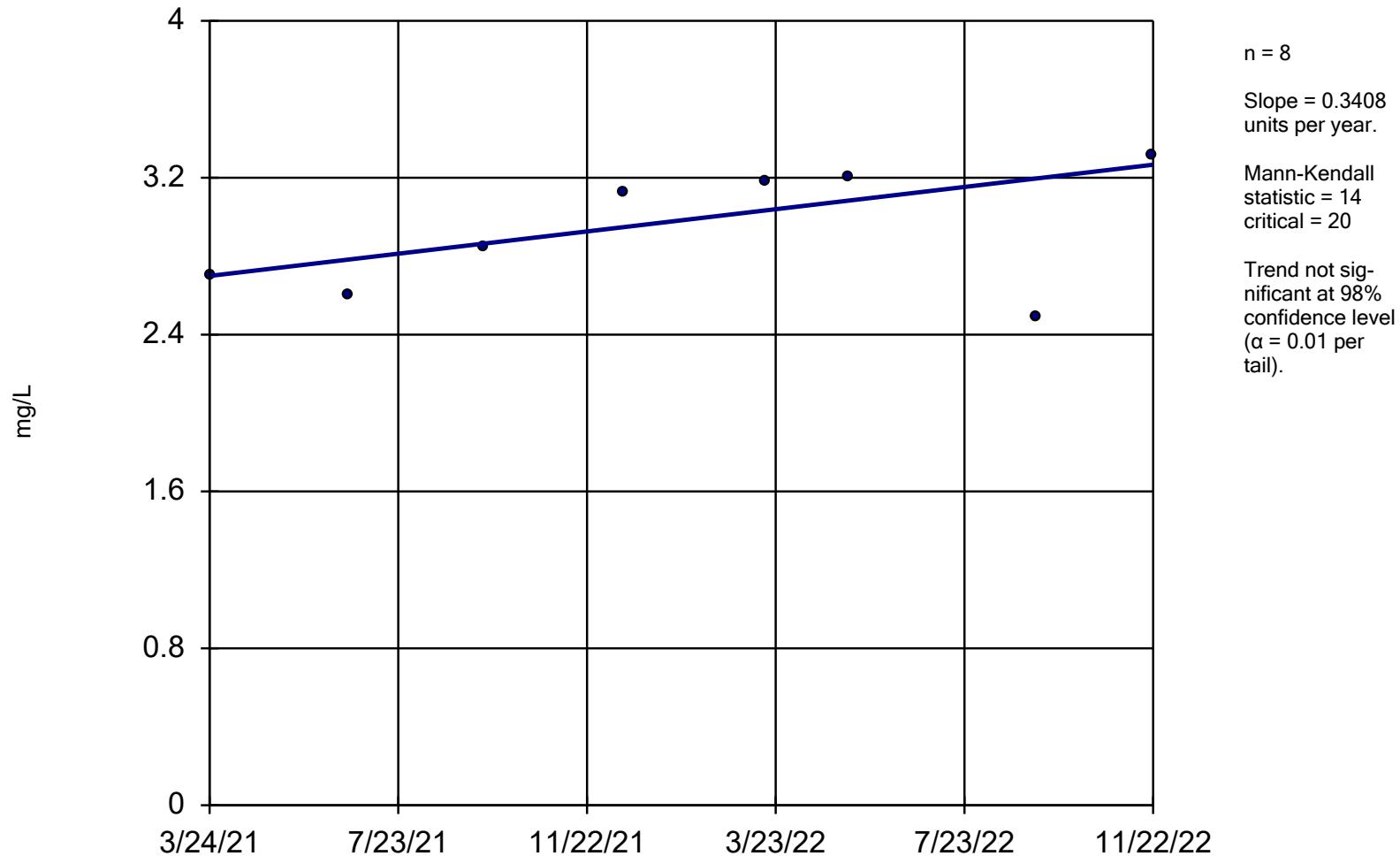


Constituent: Boron Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-5

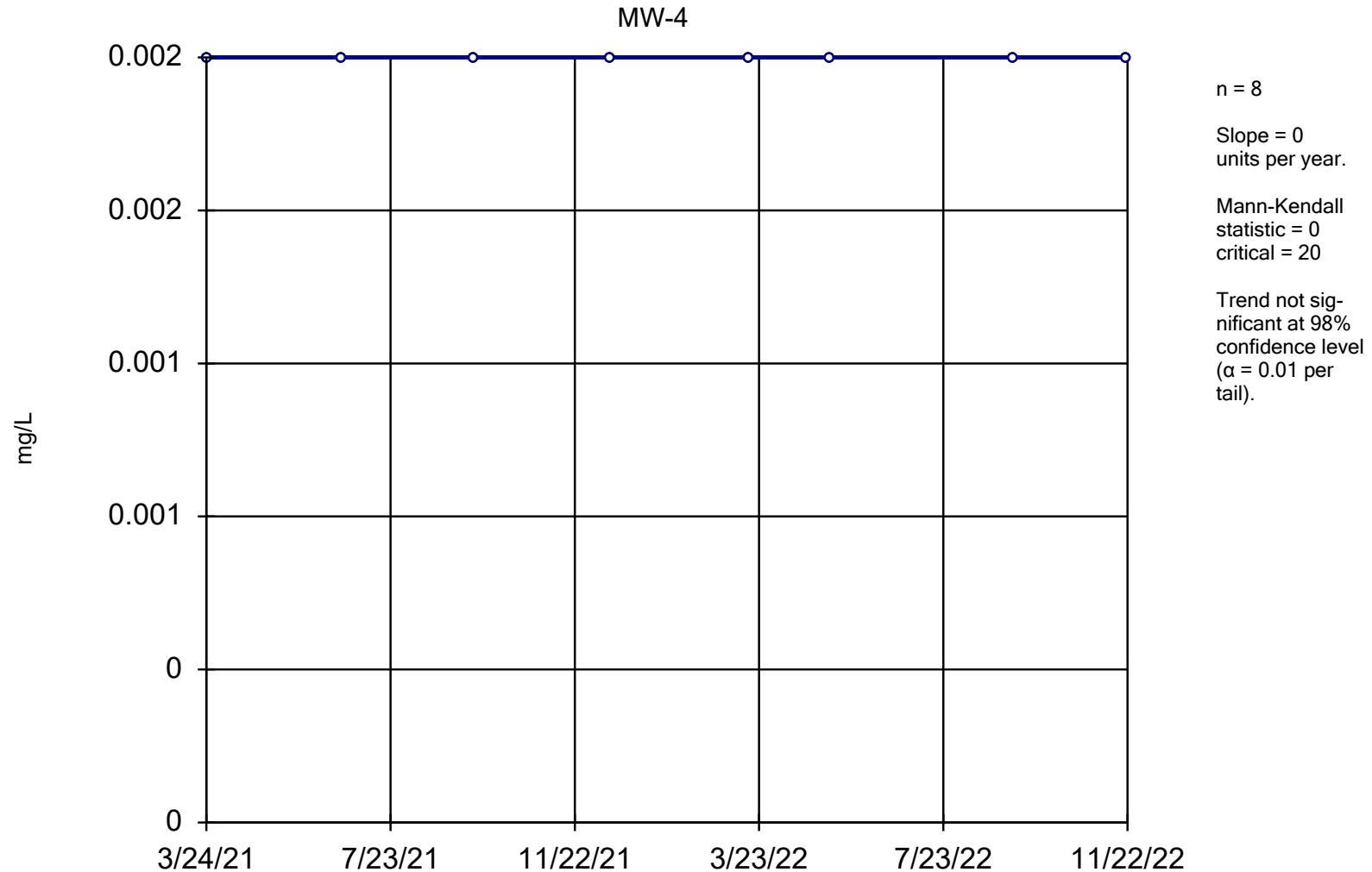


Constituent: Boron Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

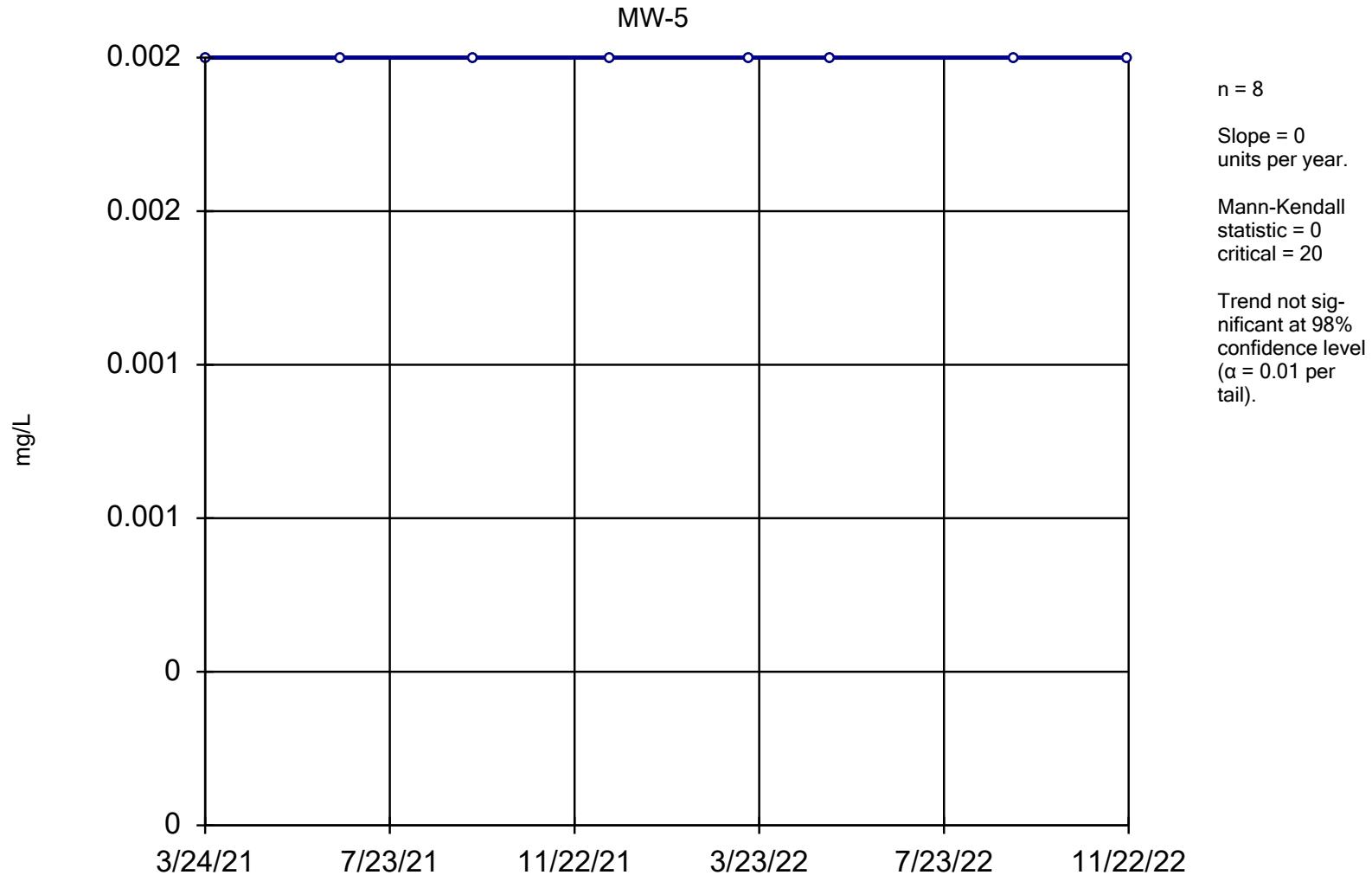


Constituent: Cadmium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

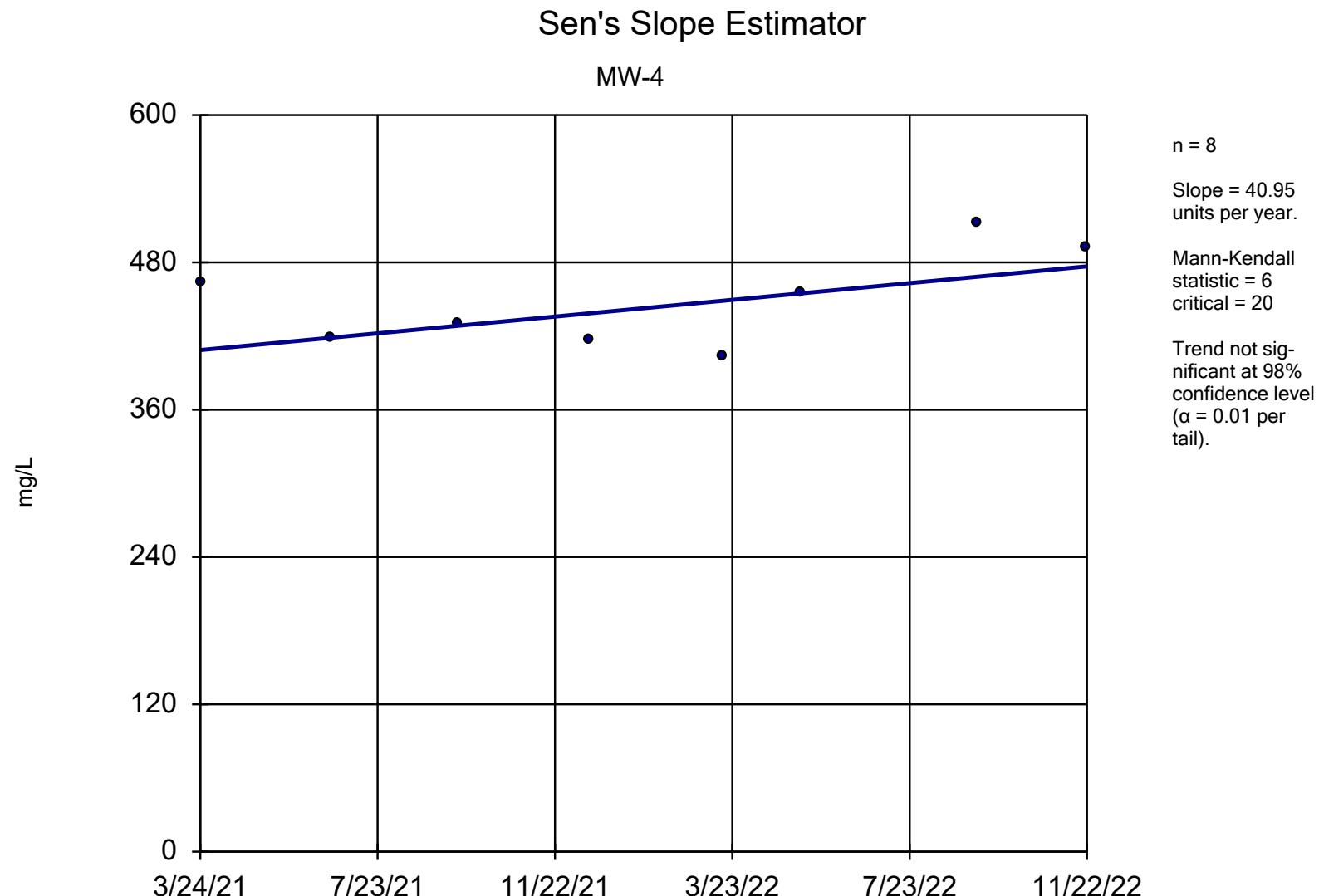
Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator



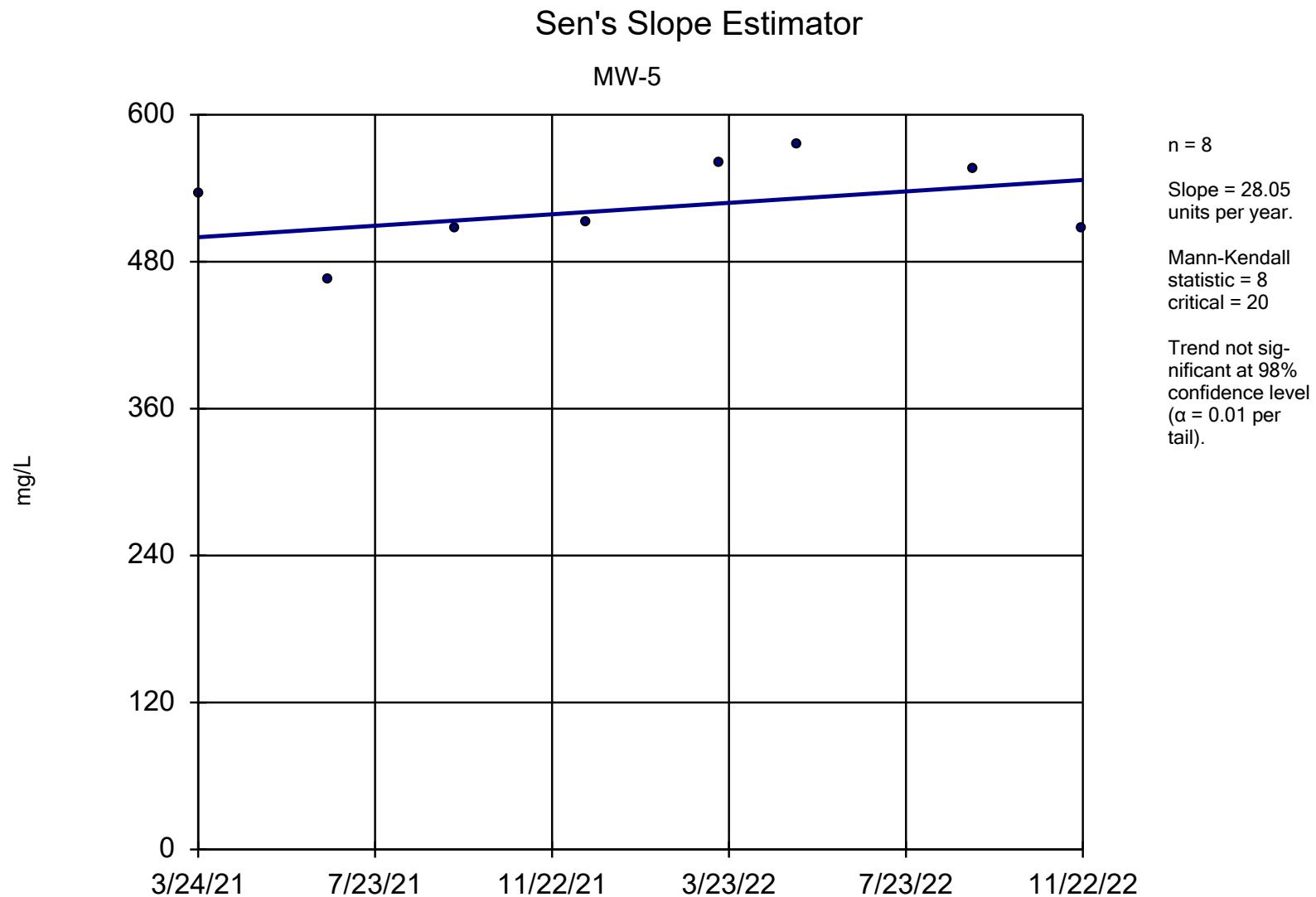
Constituent: Cadmium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



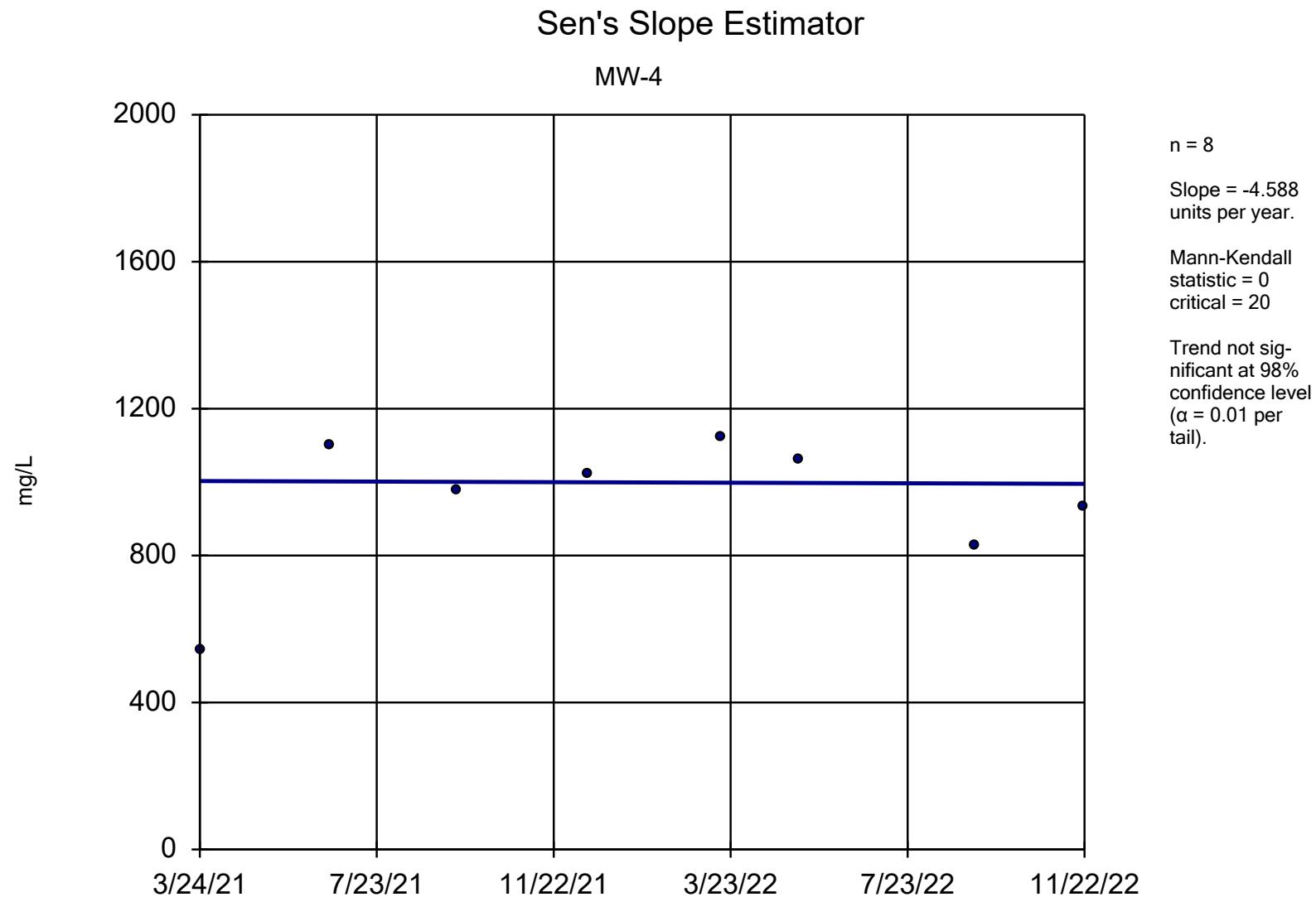
Constituent: Calcium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



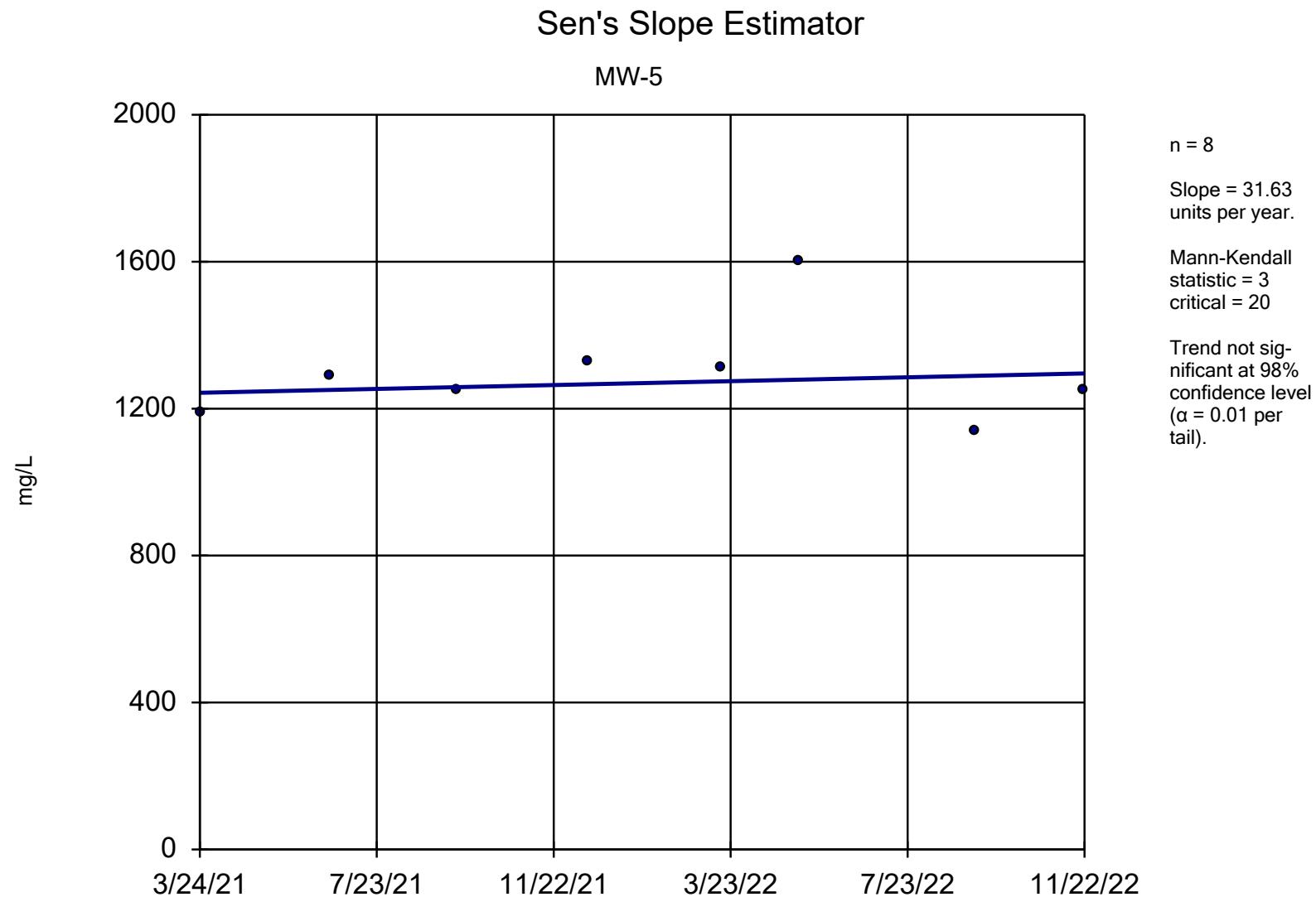
Constituent: Calcium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



Constituent: Chloride Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

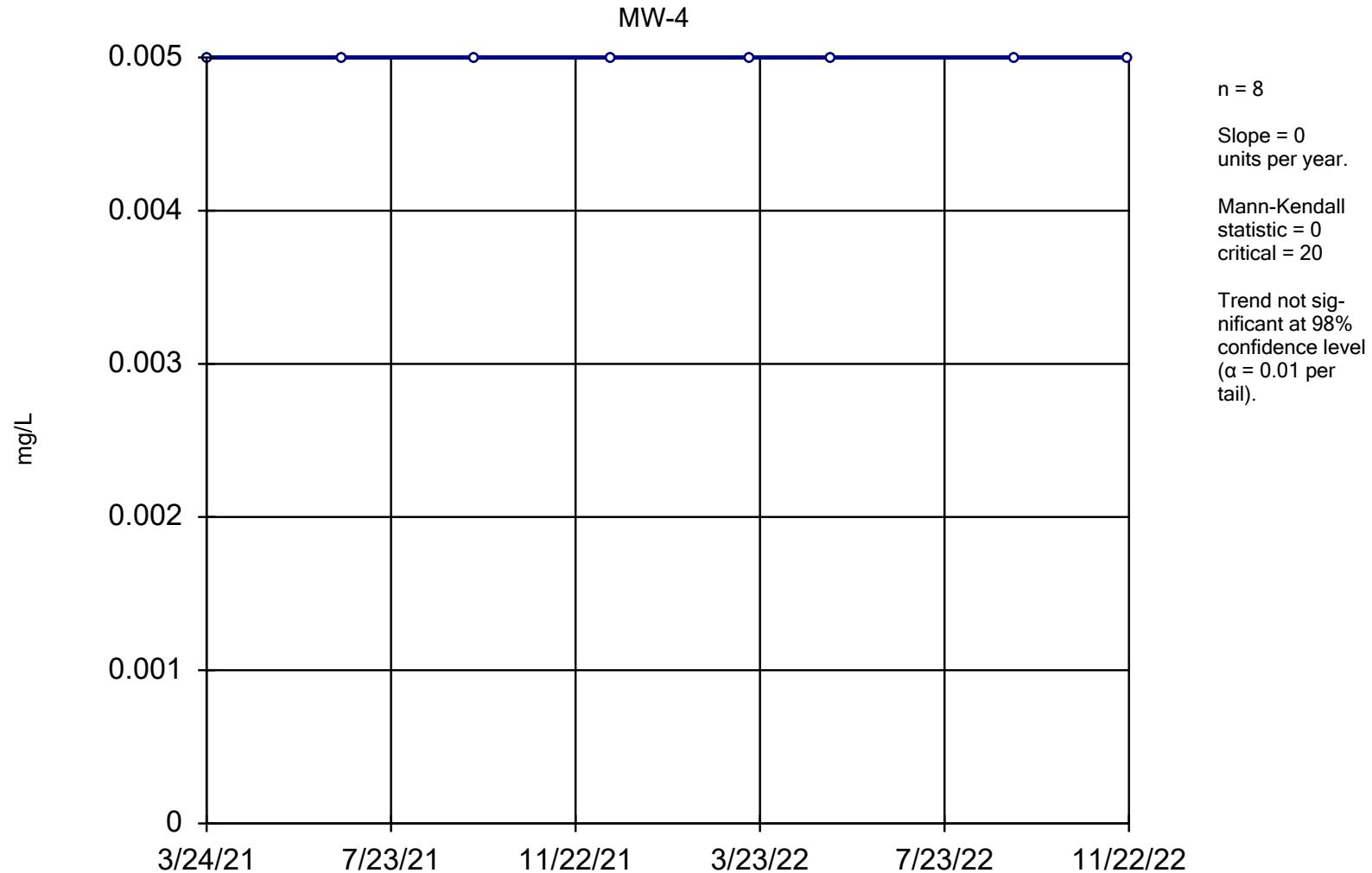


Constituent: Chloride Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

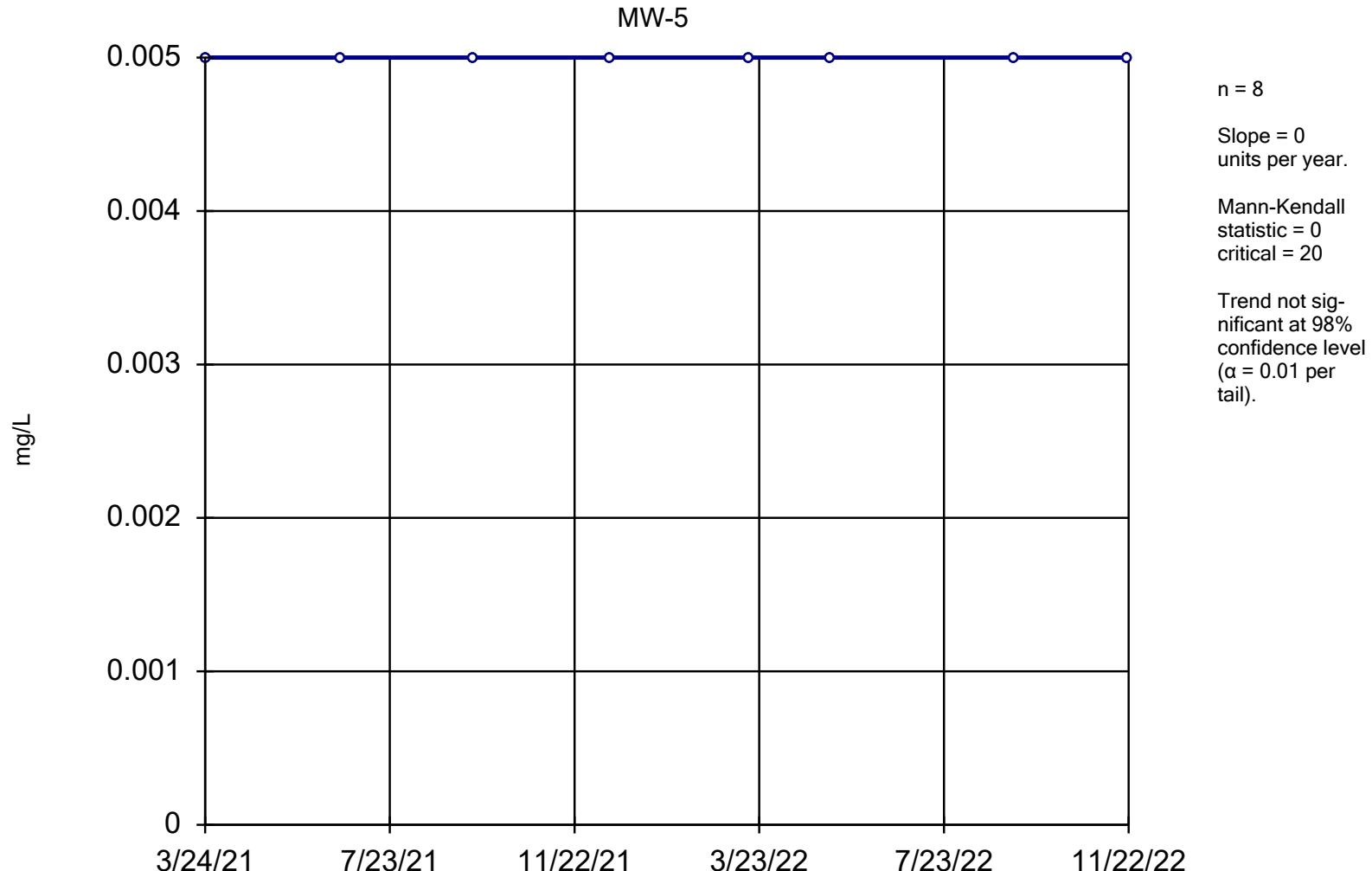


Constituent: Chromium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

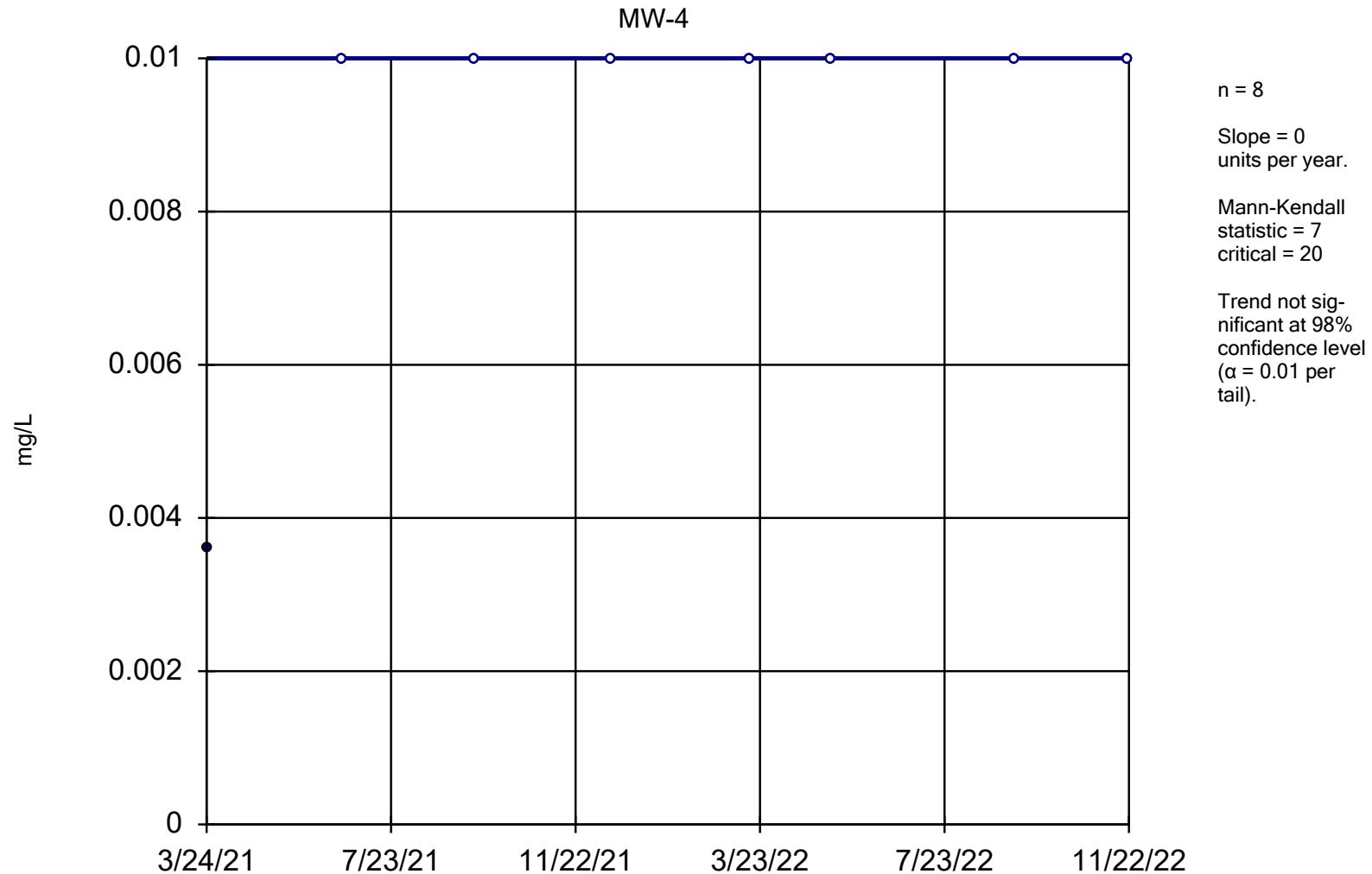


Constituent: Chromium Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

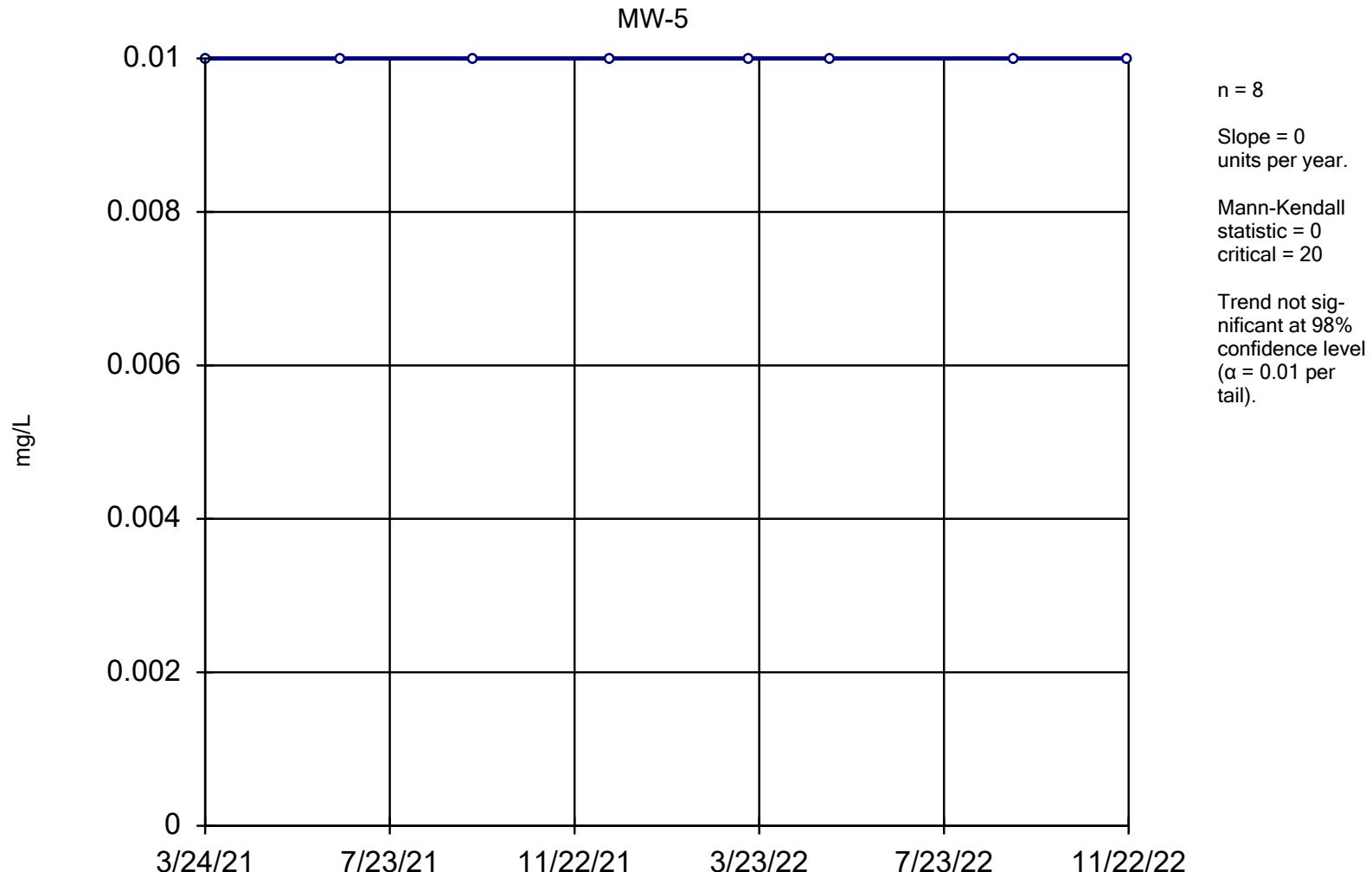


Constituent: Cobalt Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

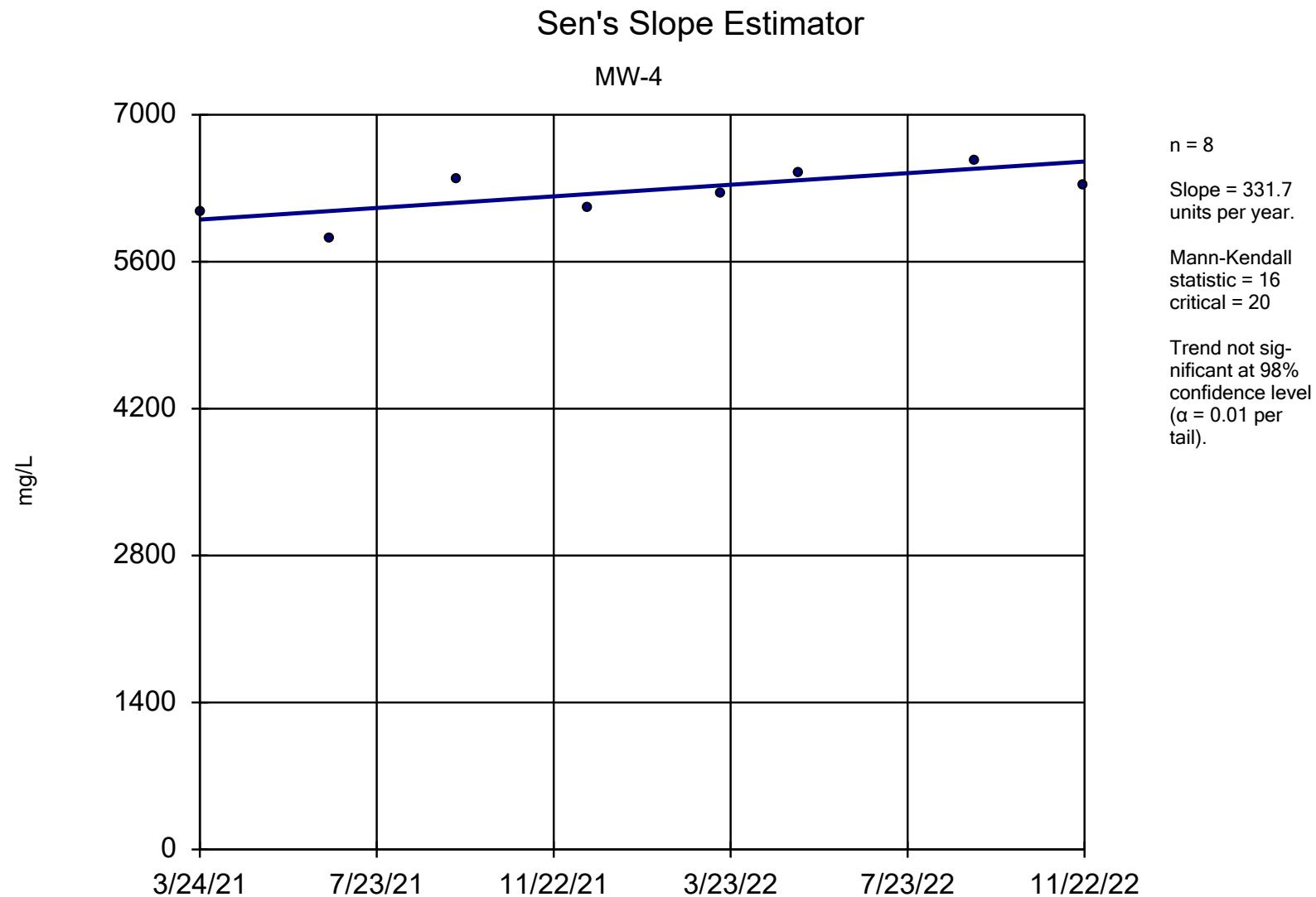
Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

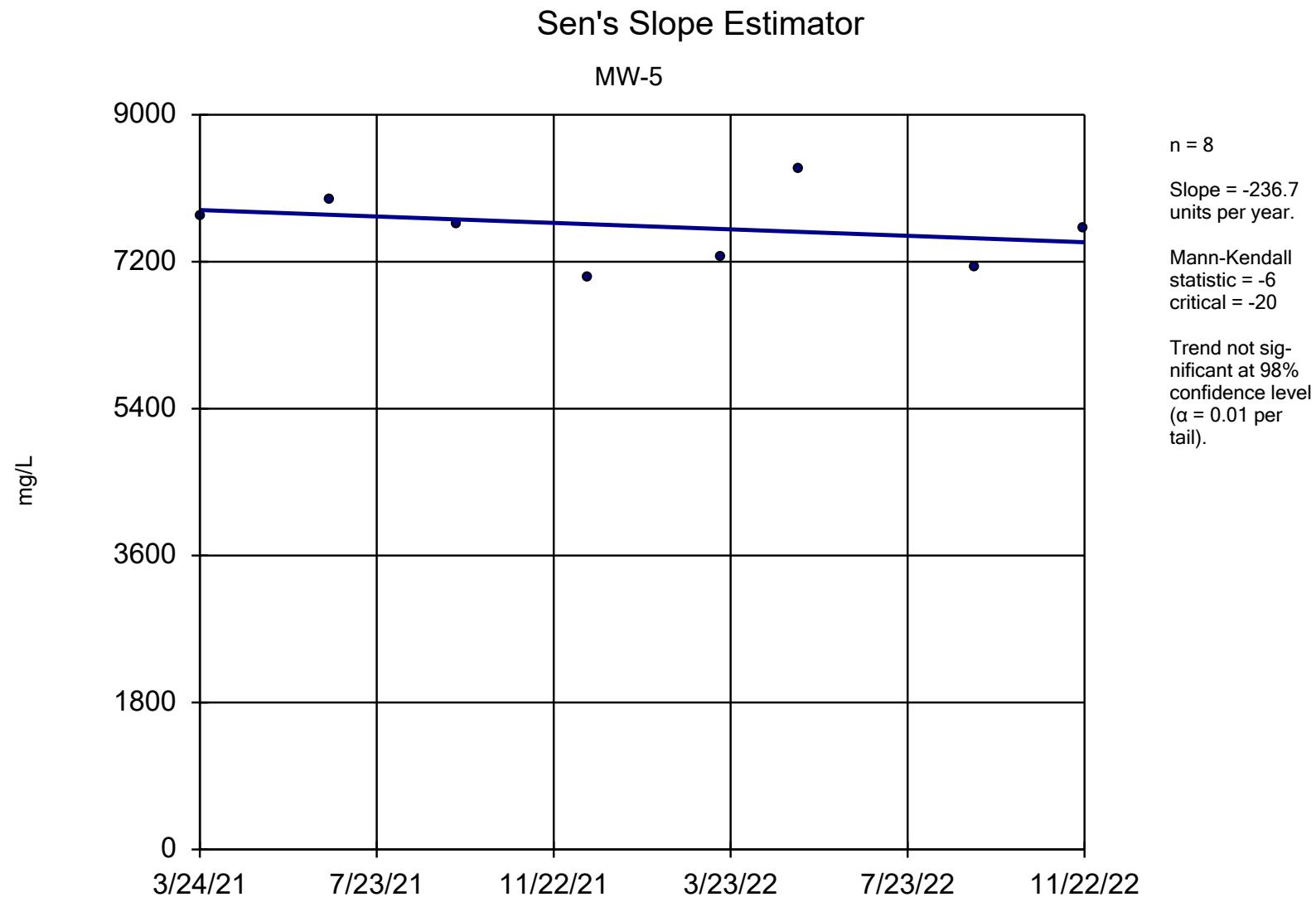


Constituent: Cobalt Analysis Run 3/8/2023 1:56 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



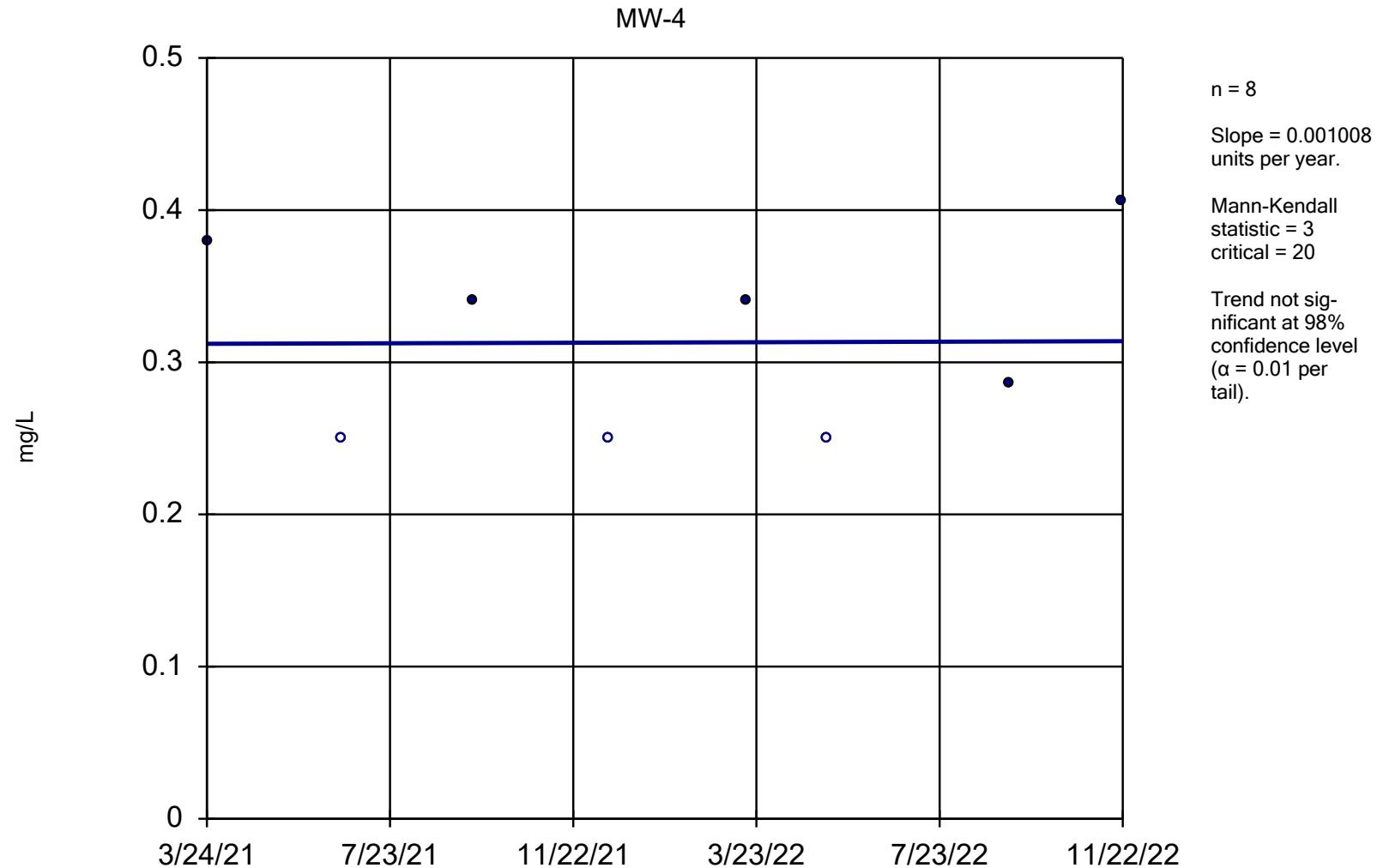
Constituent: Total Dissolved Solids Analysis Run 3/8/2023 1:57 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



Constituent: Total Dissolved Solids Analysis Run 3/8/2023 1:57 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator



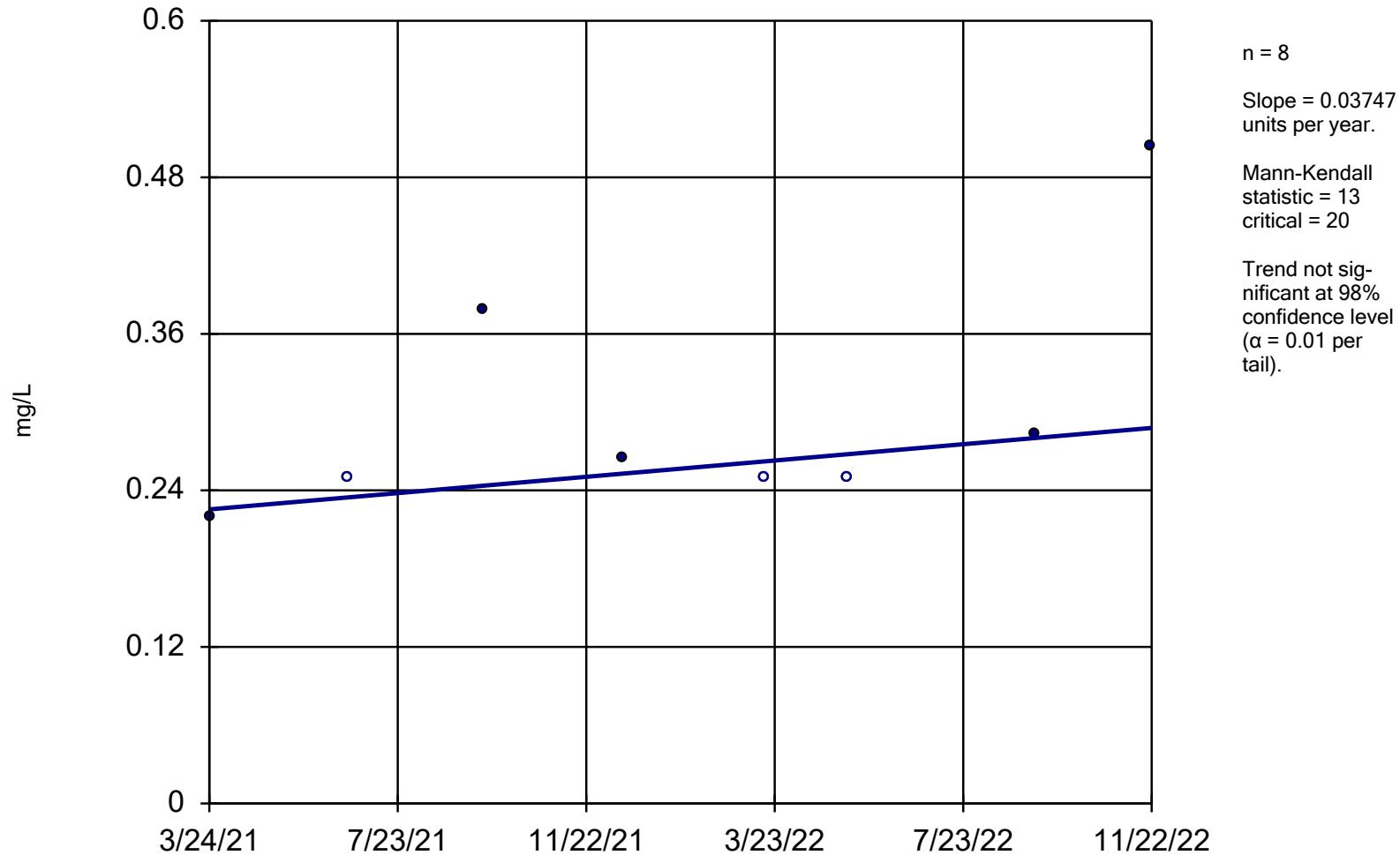
Constituent: Fluoride Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5

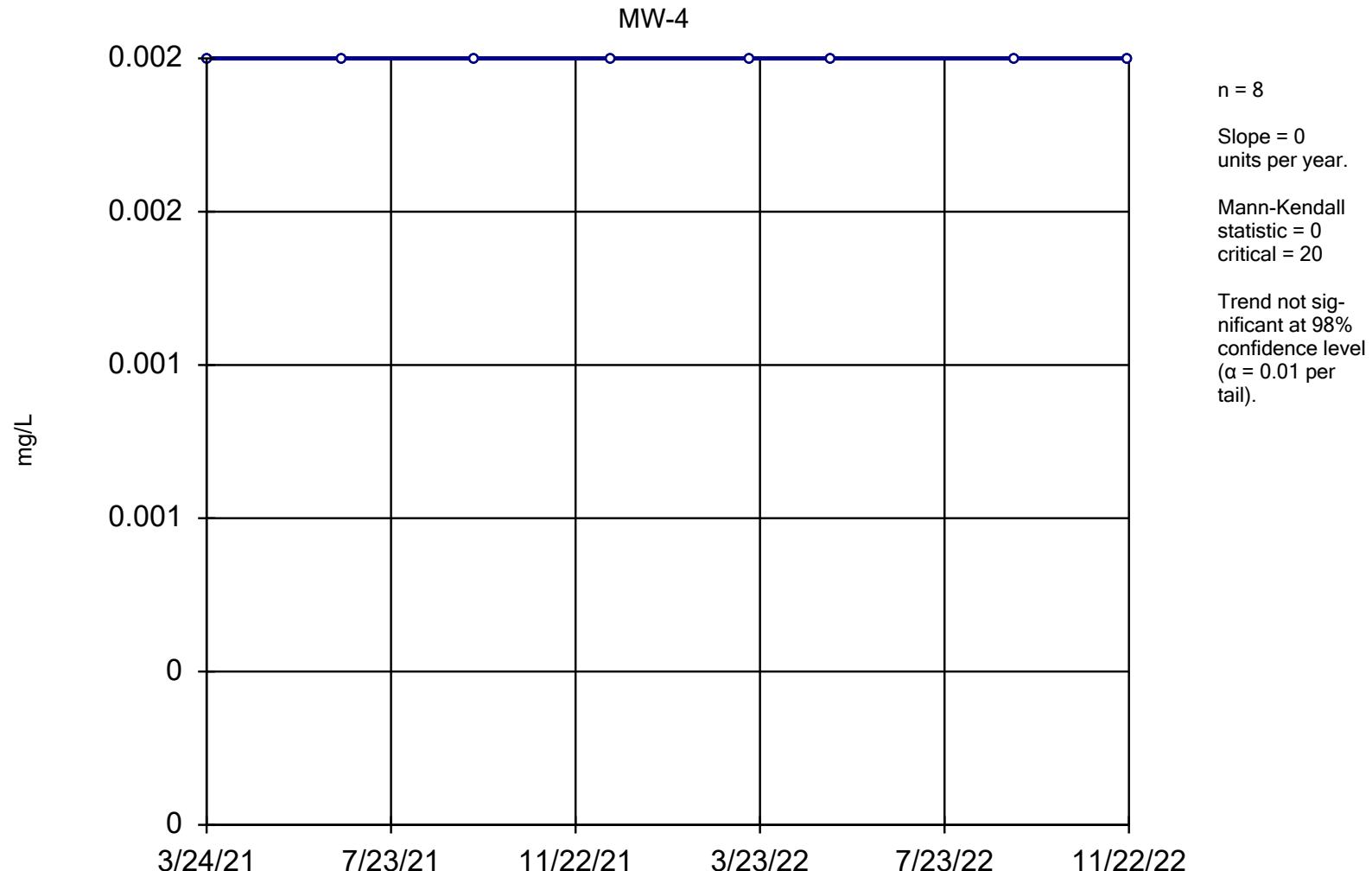


Constituent: Fluoride Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

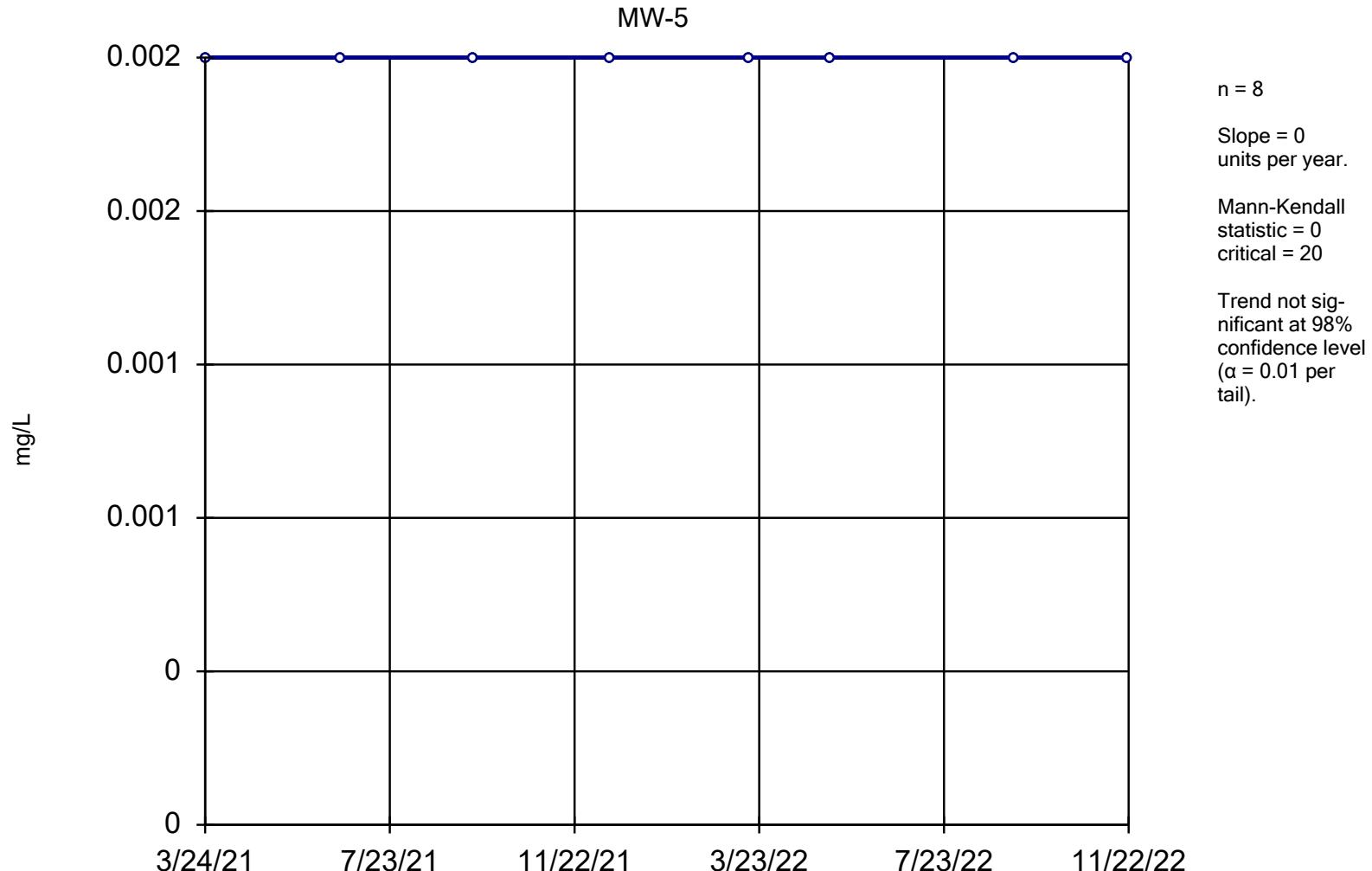


Constituent: Lead Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

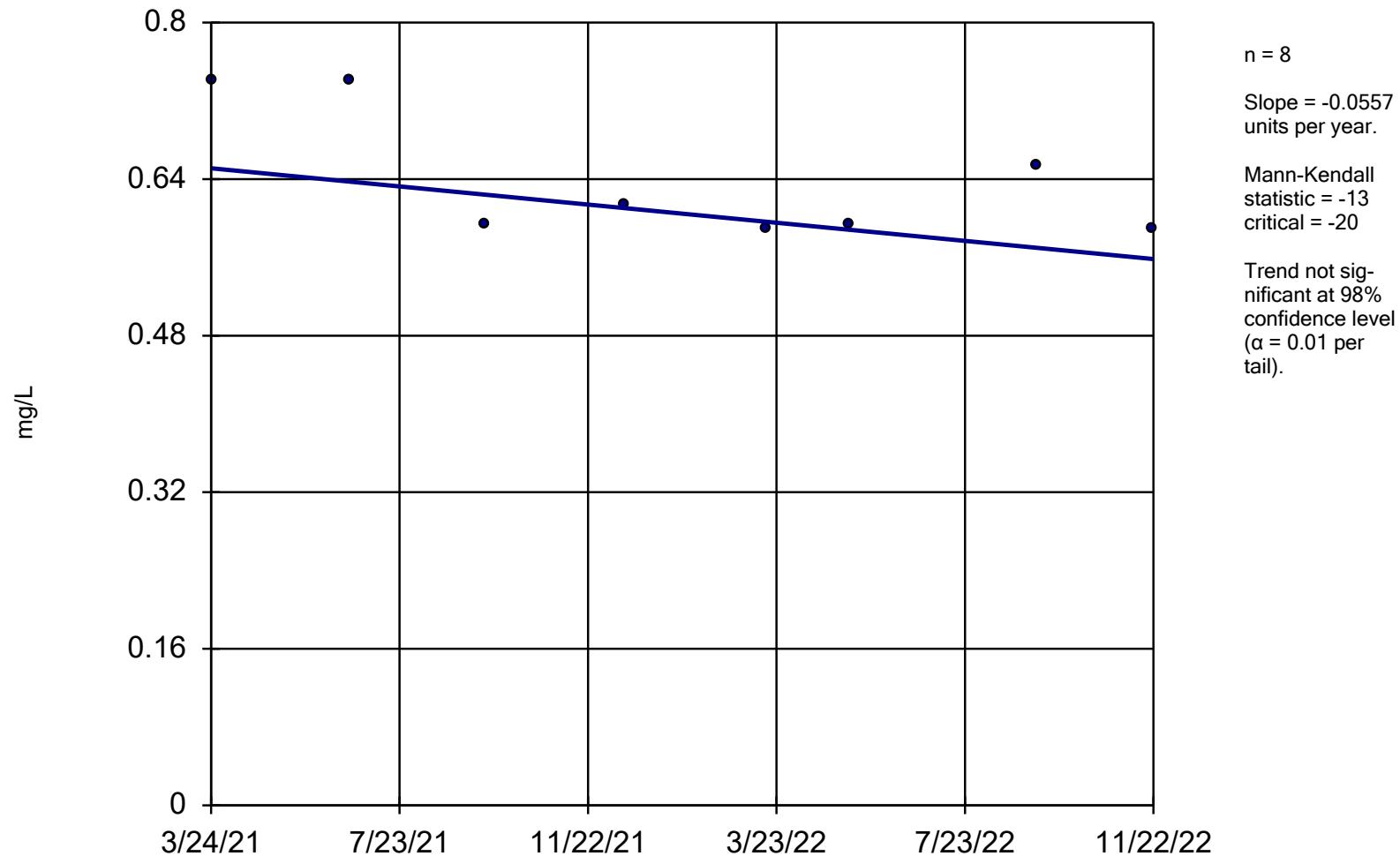


Constituent: Lead Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-4

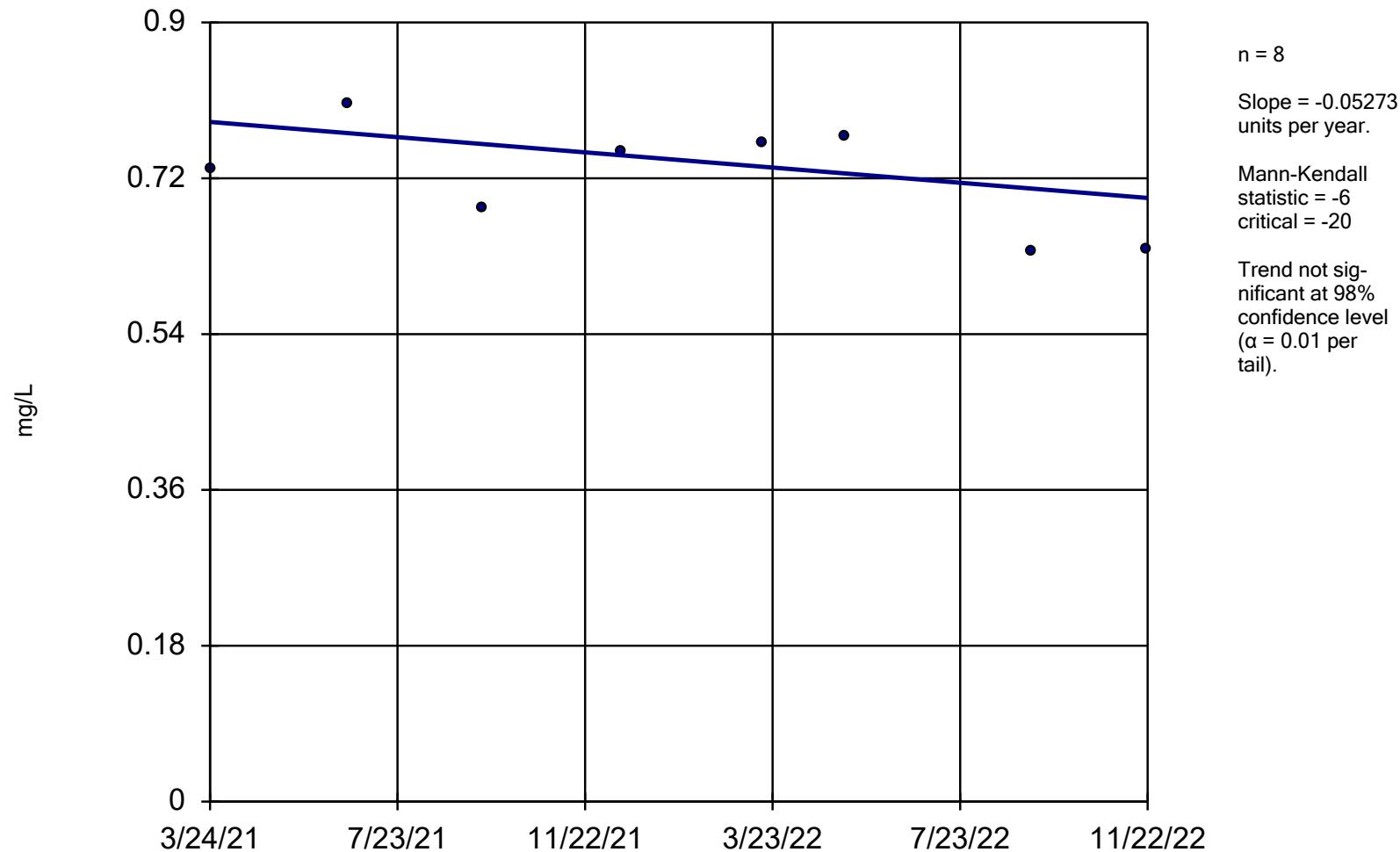


Constituent: Lithium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-5

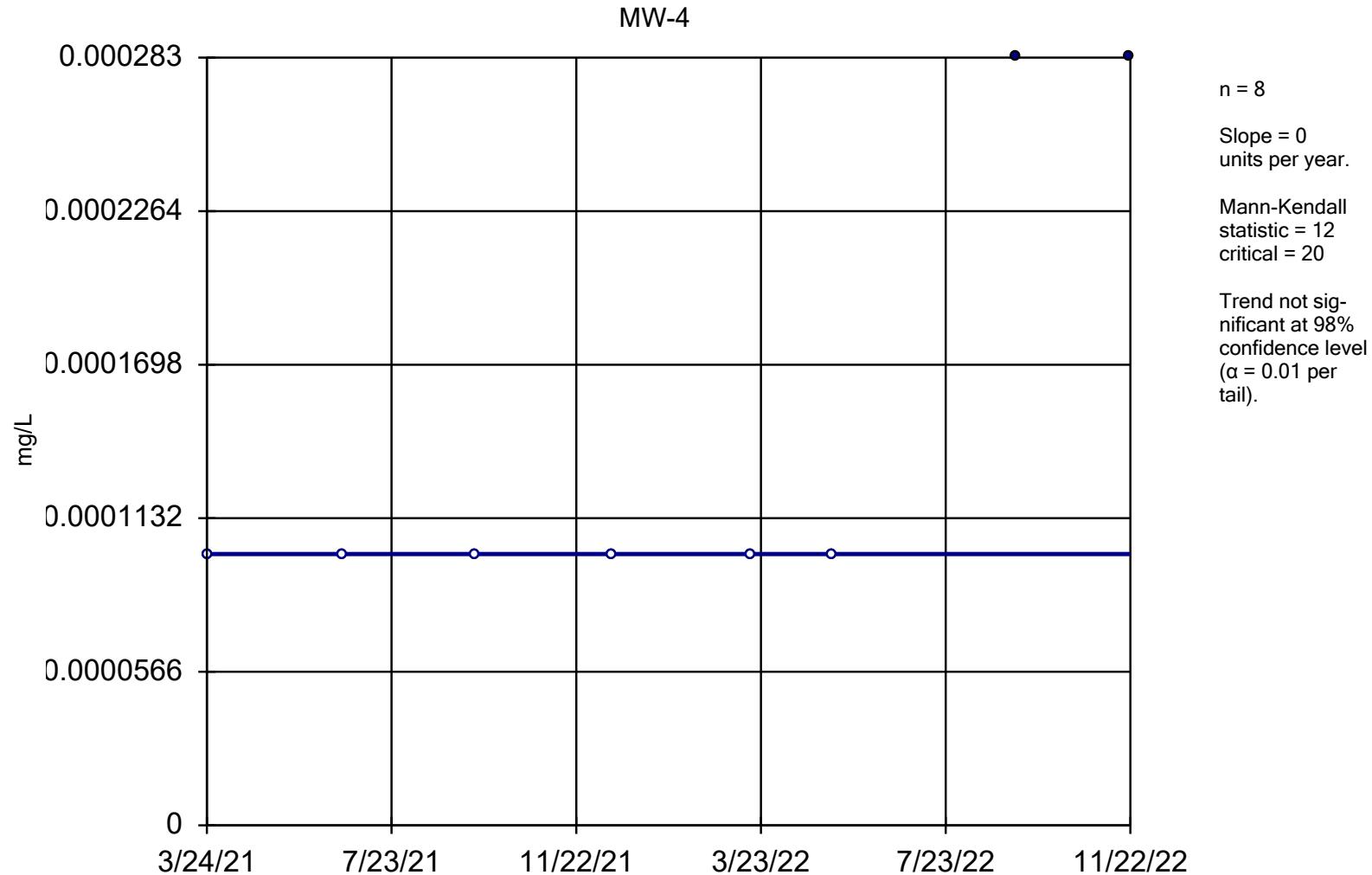


Constituent: Lithium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

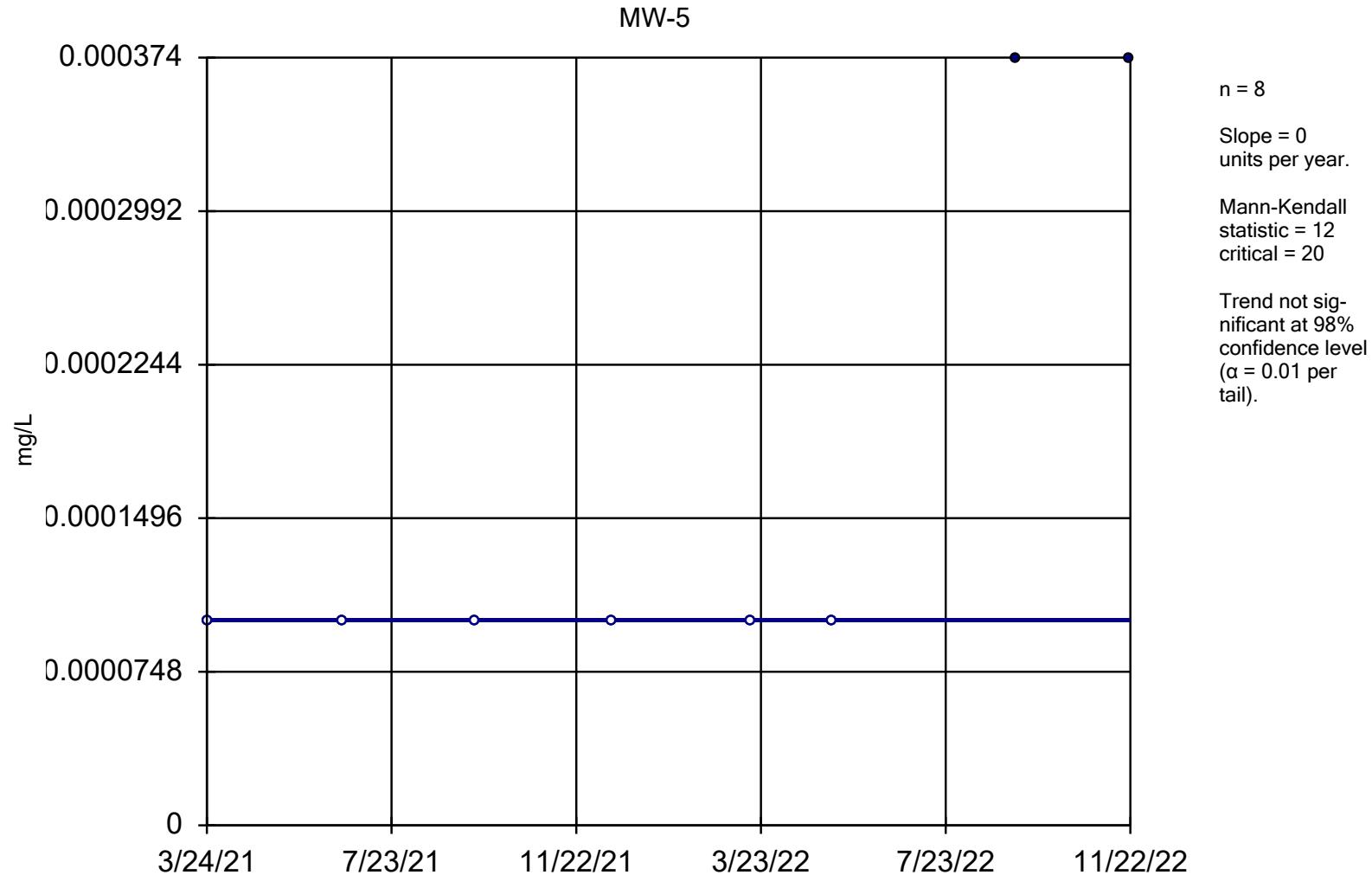


Constituent: Mercury Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

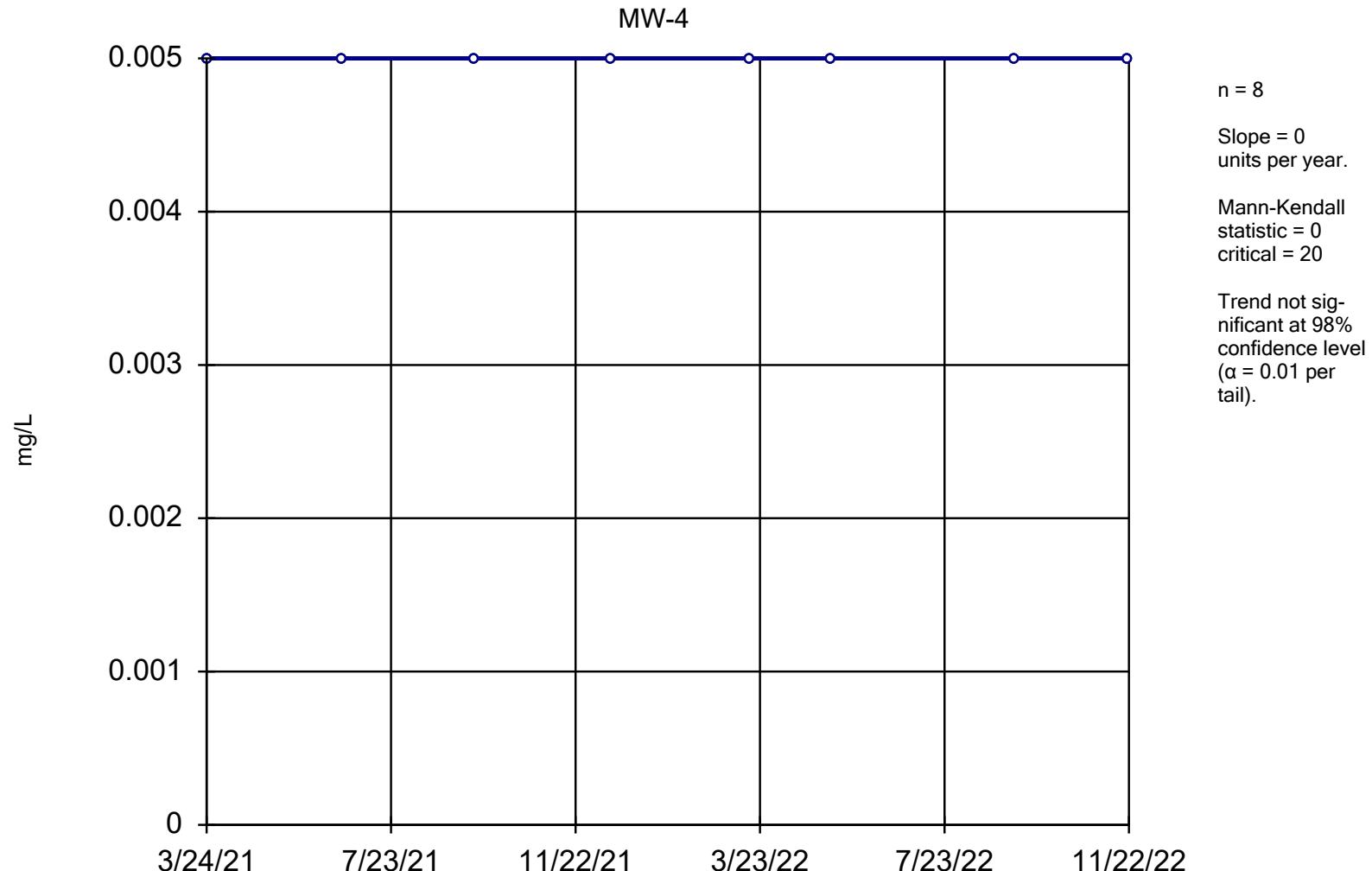


Constituent: Mercury Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

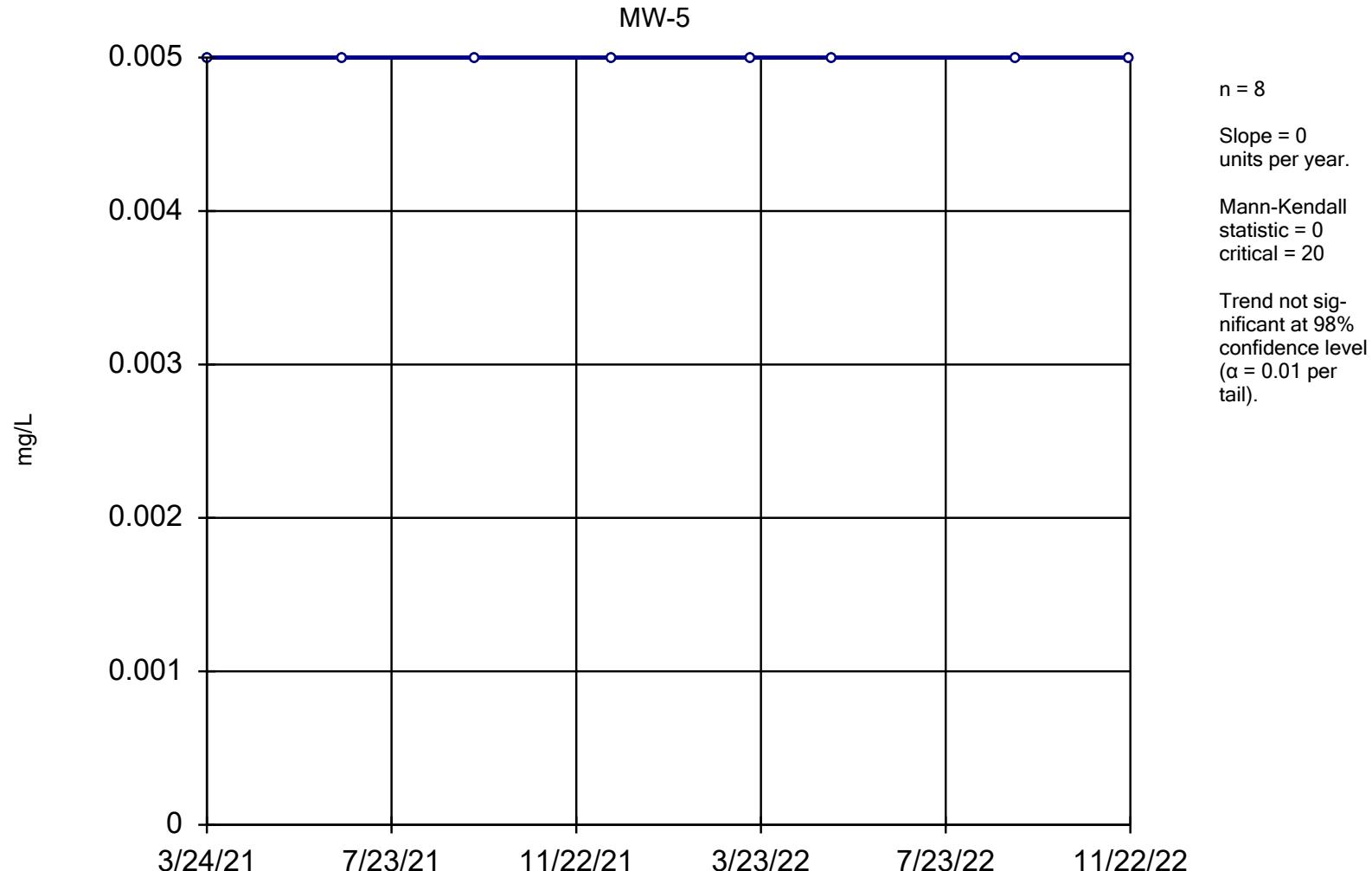


Constituent: Molybdenum Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

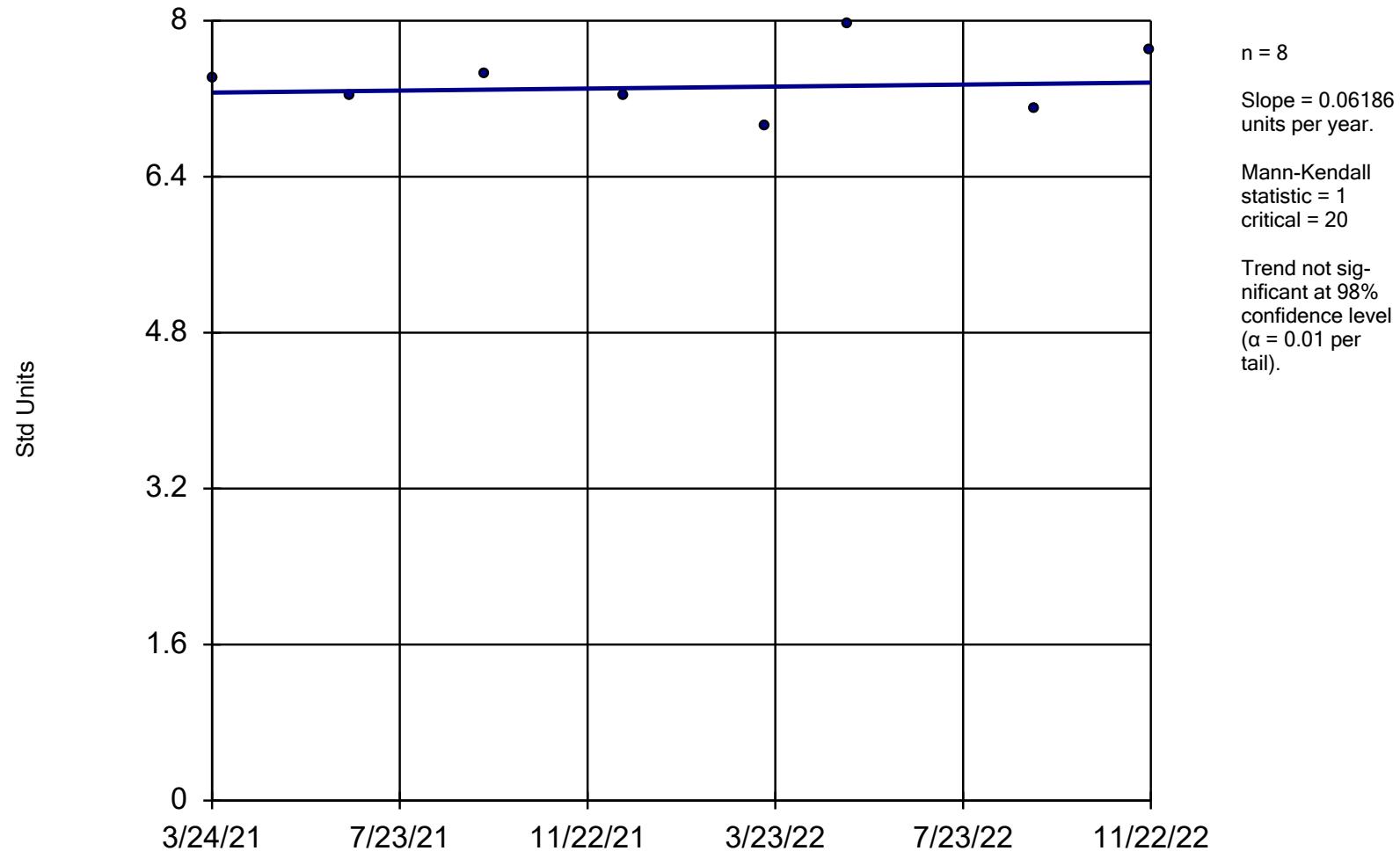


Constituent: Molybdenum Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-4

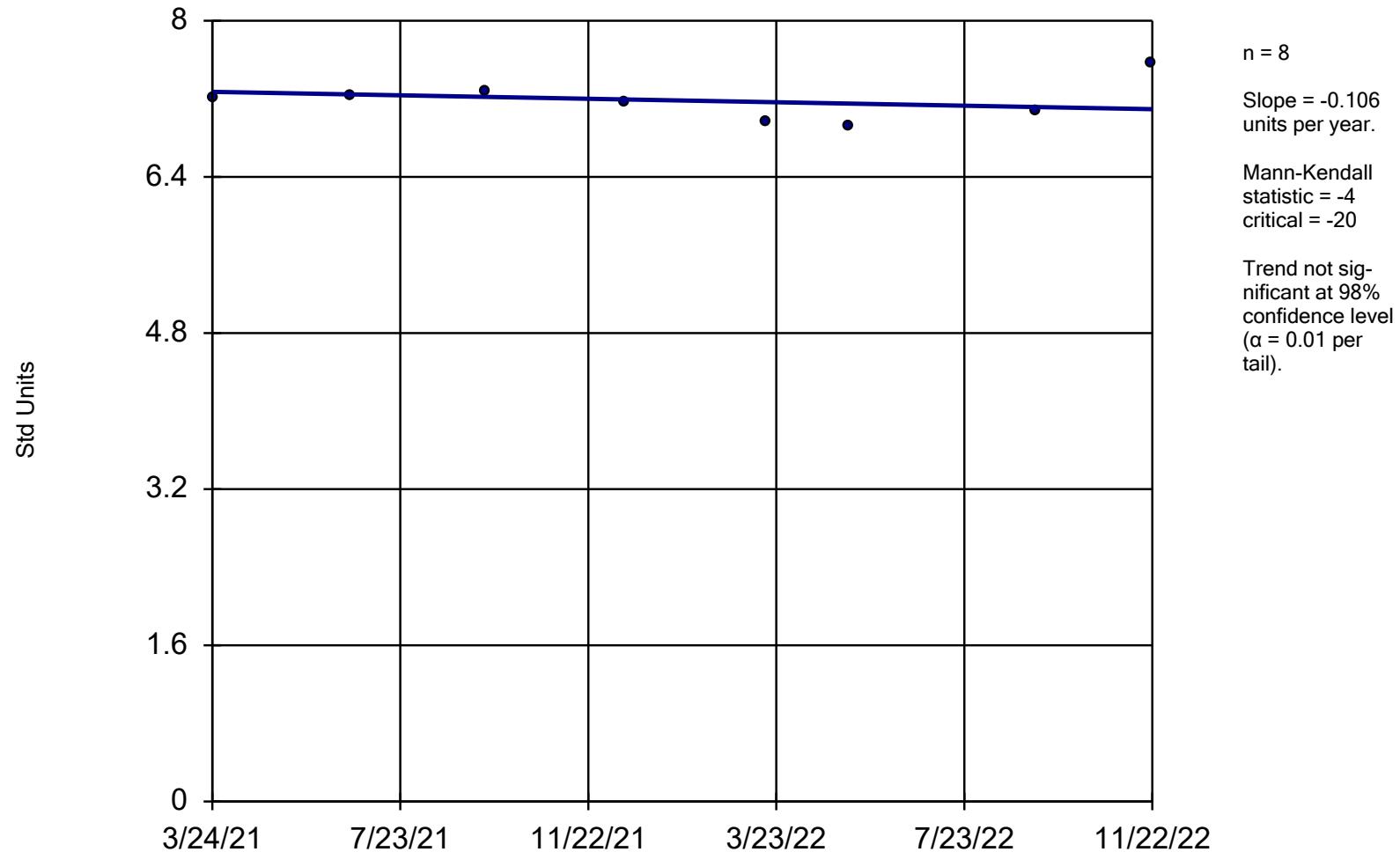


Constituent: pH Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sen's Slope Estimator

MW-5

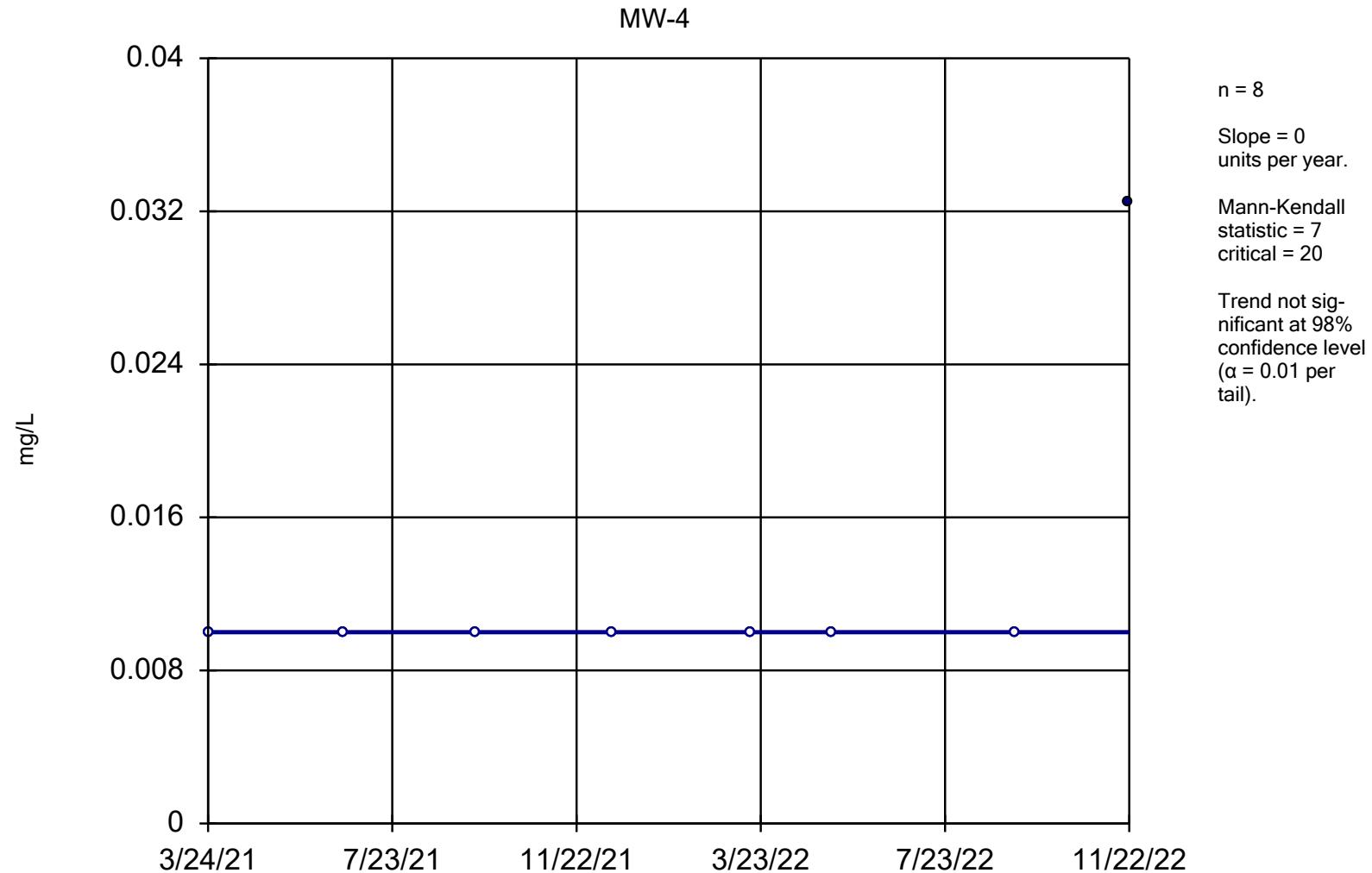


Constituent: pH Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

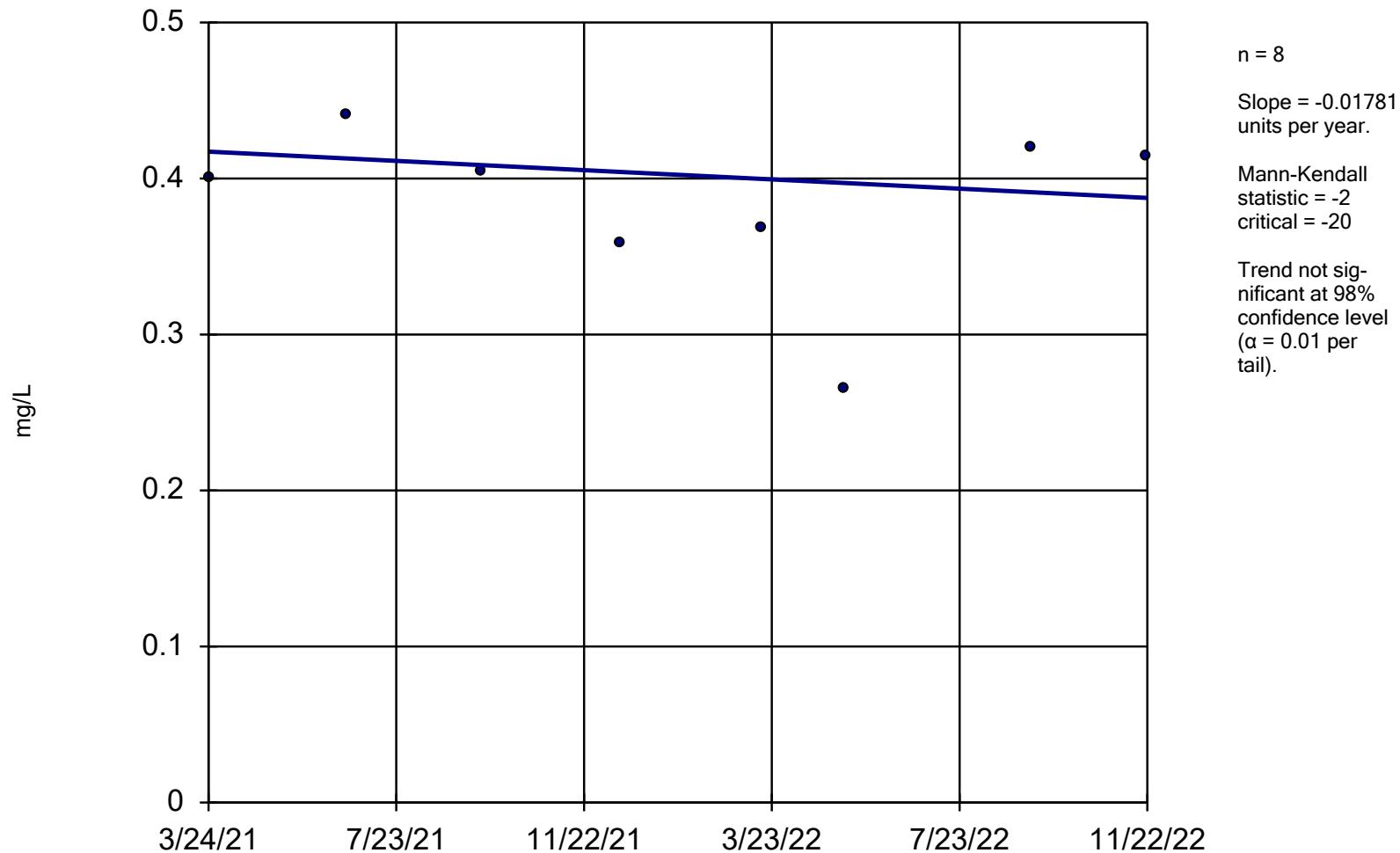


Constituent: Selenium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

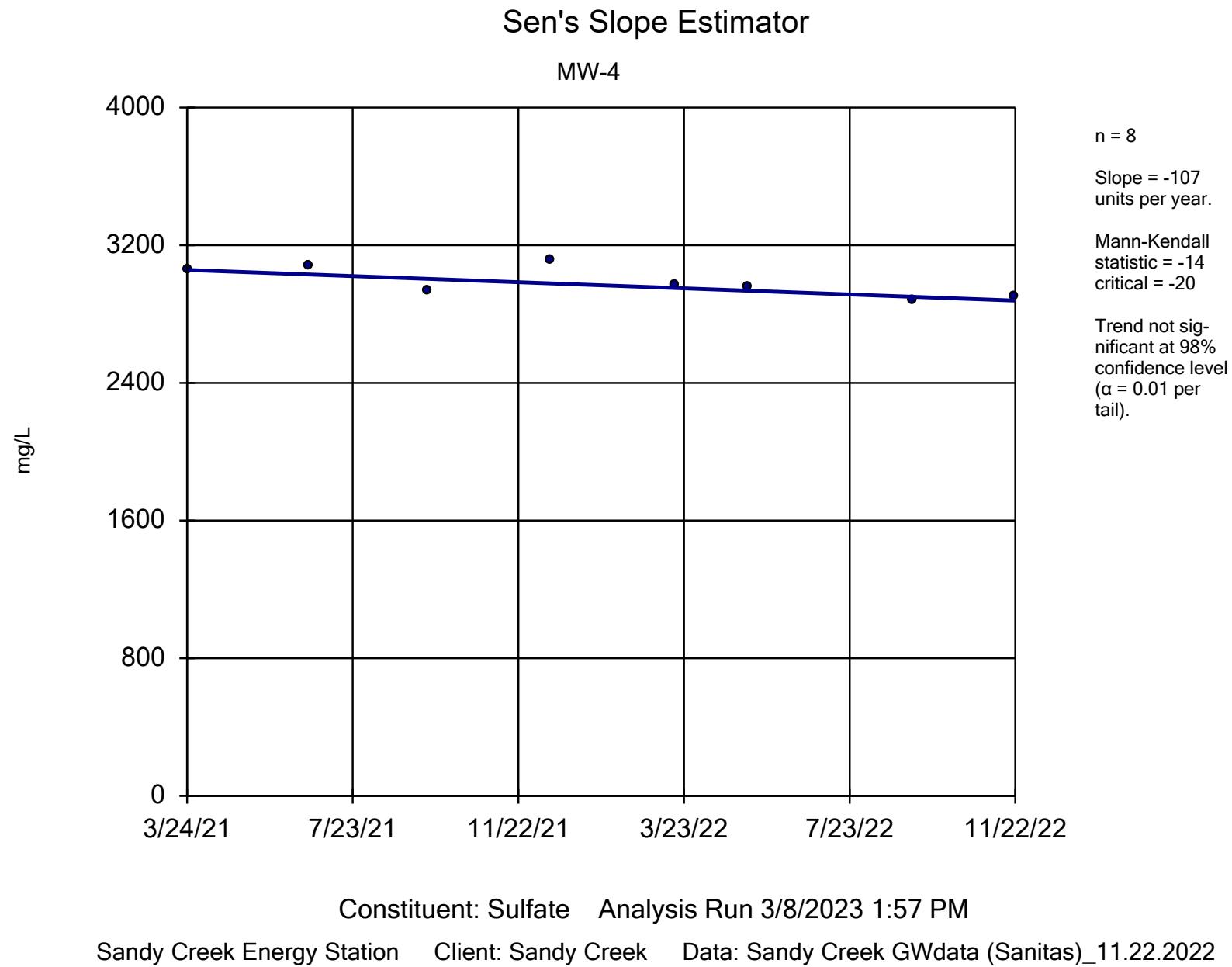
Sen's Slope Estimator

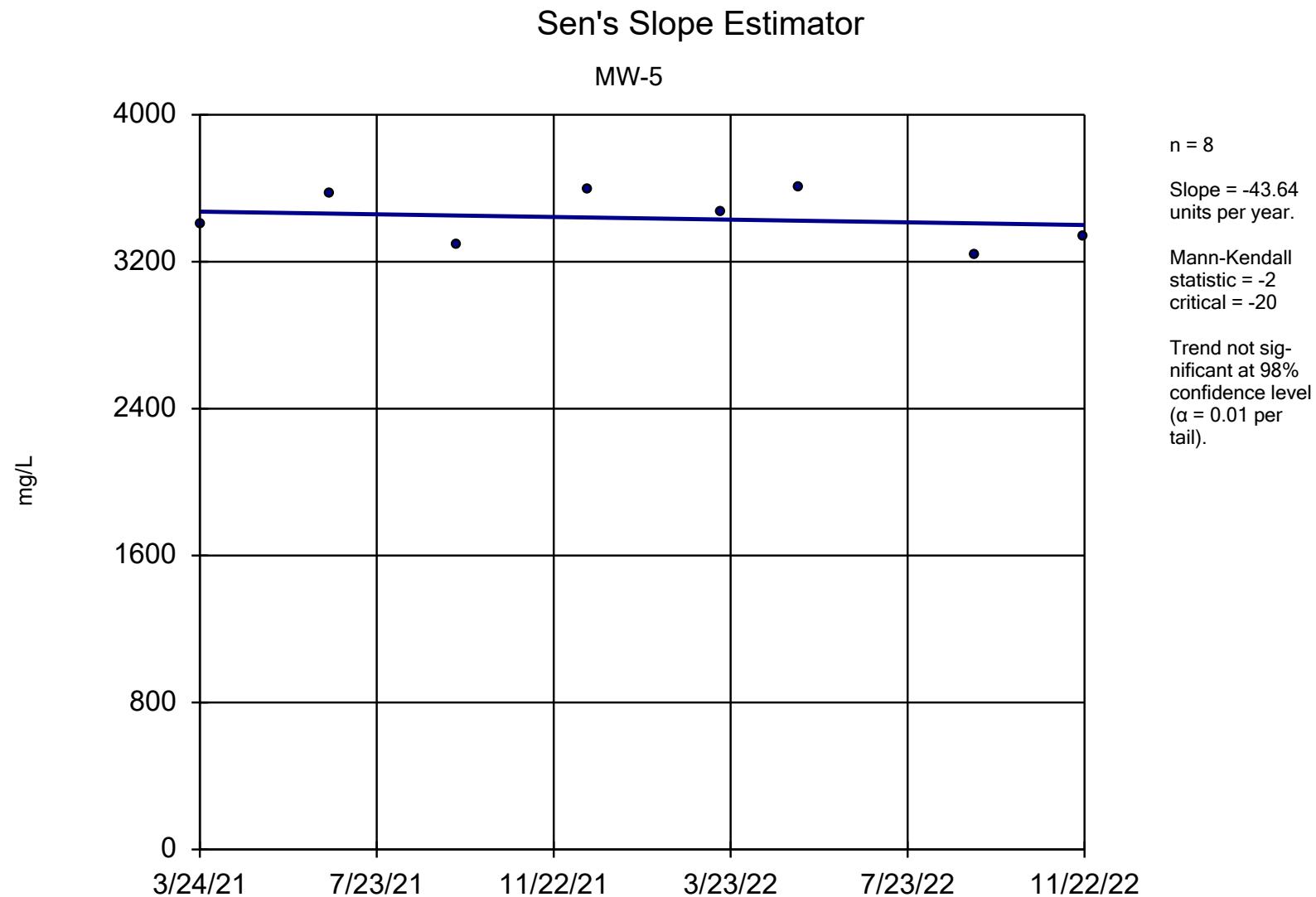
MW-5



Constituent: Selenium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022



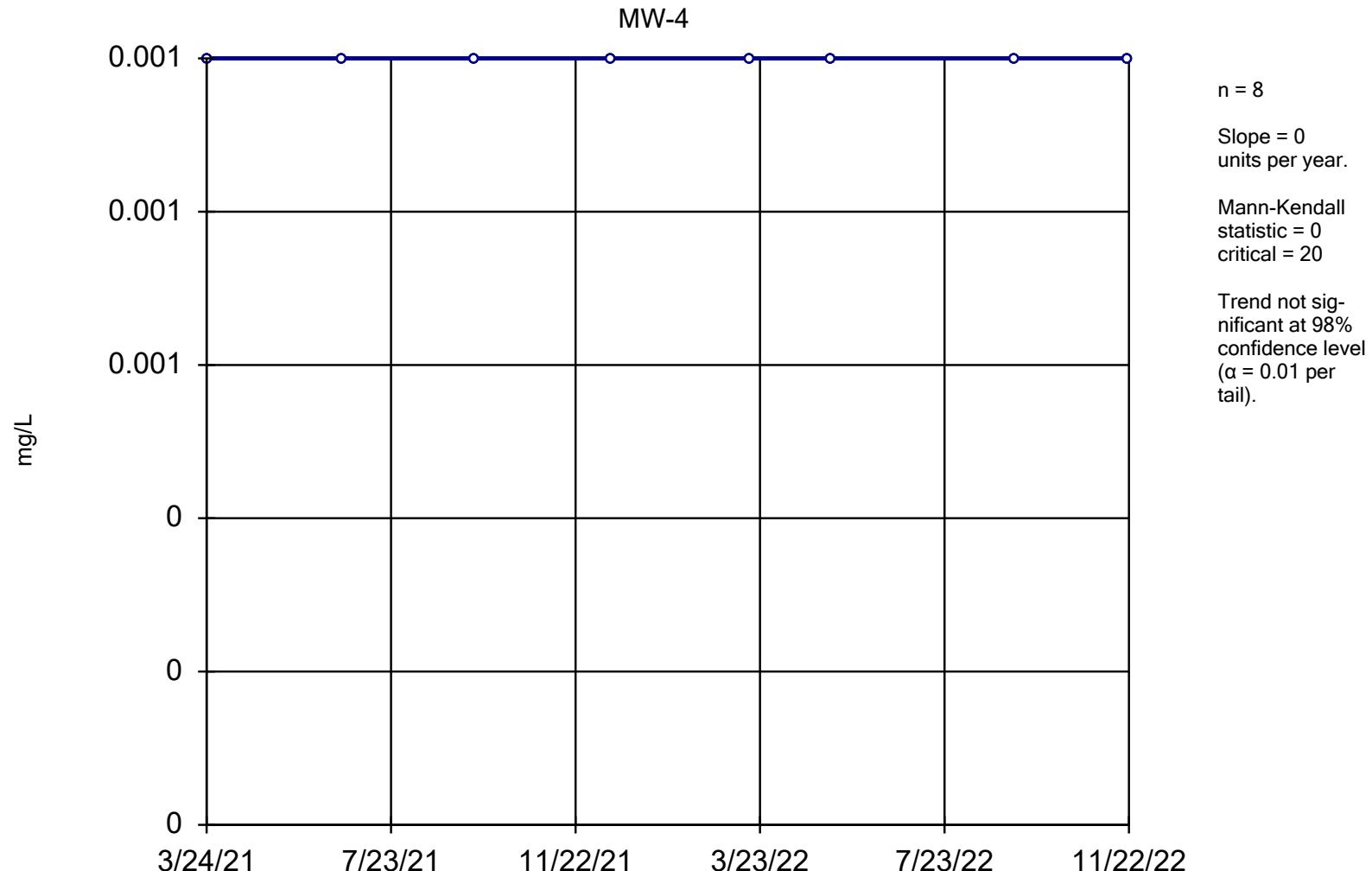


Constituent: Sulfate Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

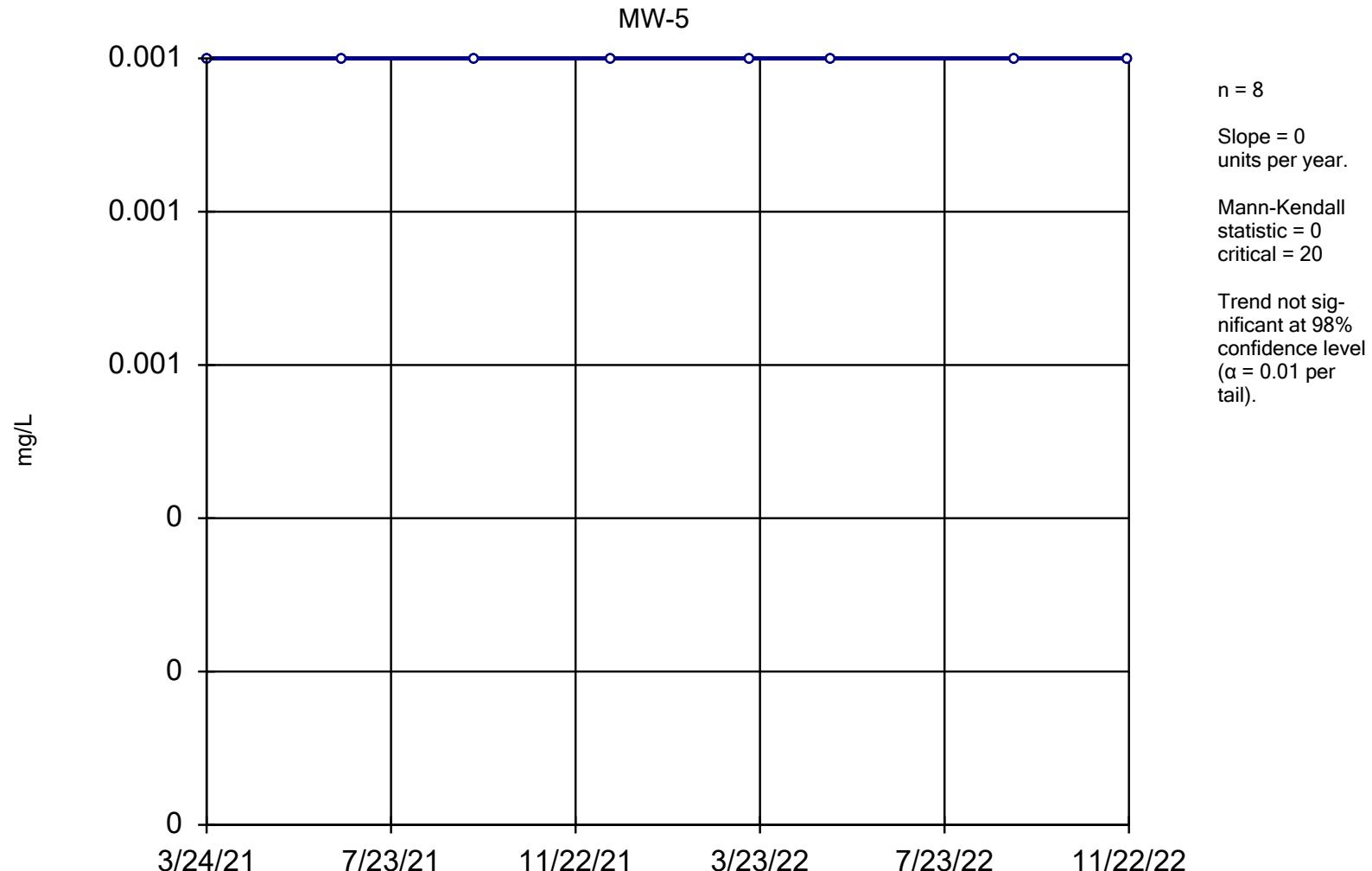


Constituent: Thallium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

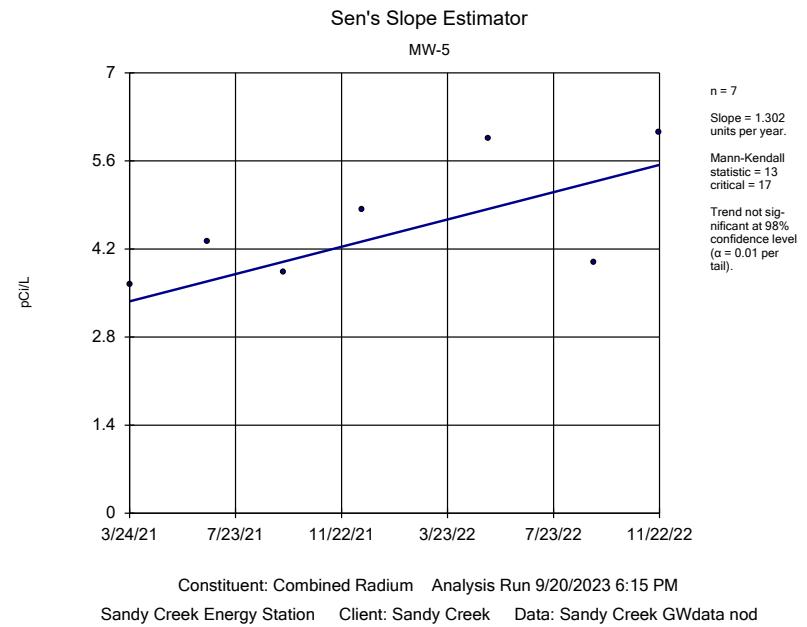
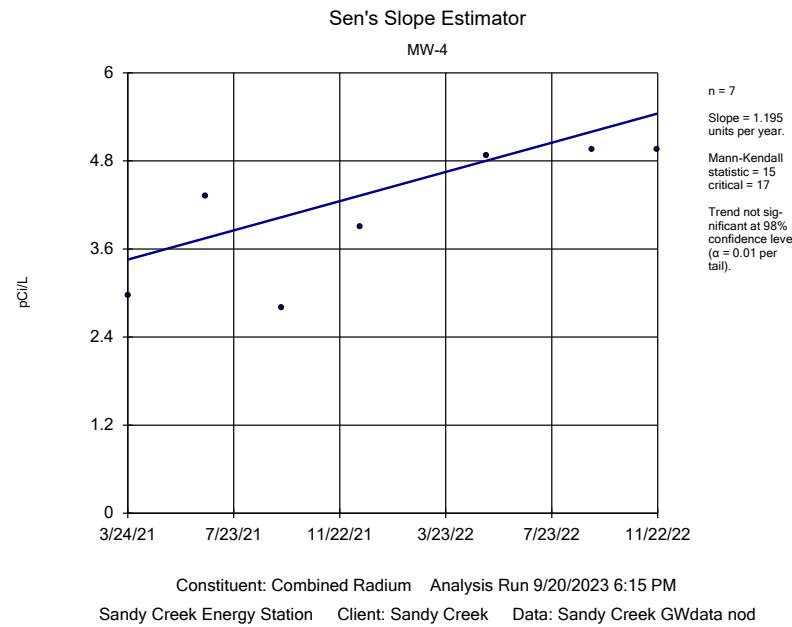
Sanitas™ v.9.6.36 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

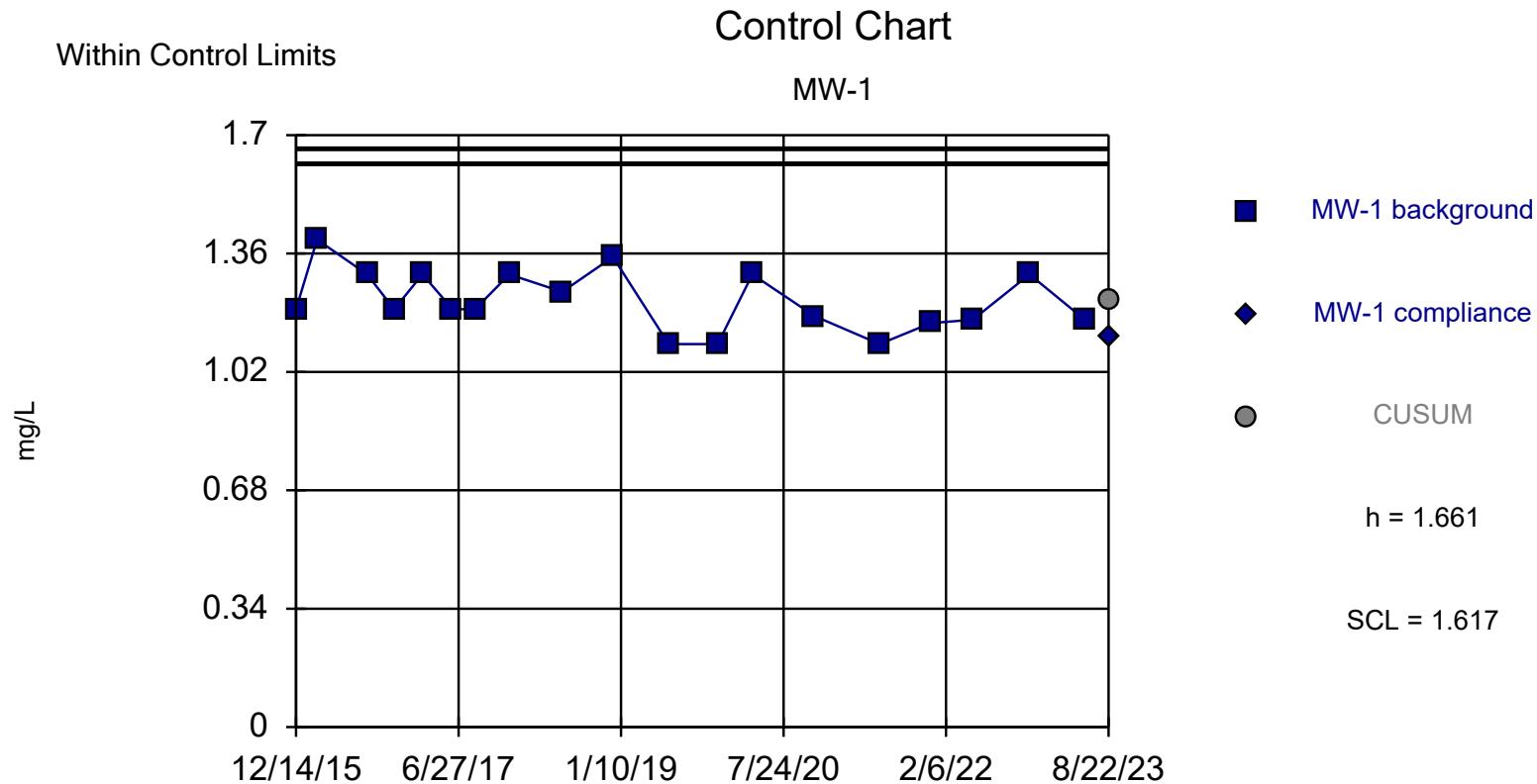
Sen's Slope Estimator



Constituent: Thallium Analysis Run 3/8/2023 1:57 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022





Background Data Summary: Mean=1.225, Std. Dev.=0.08714, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9335, critical = 0.901. Report alpha = 0.000174. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

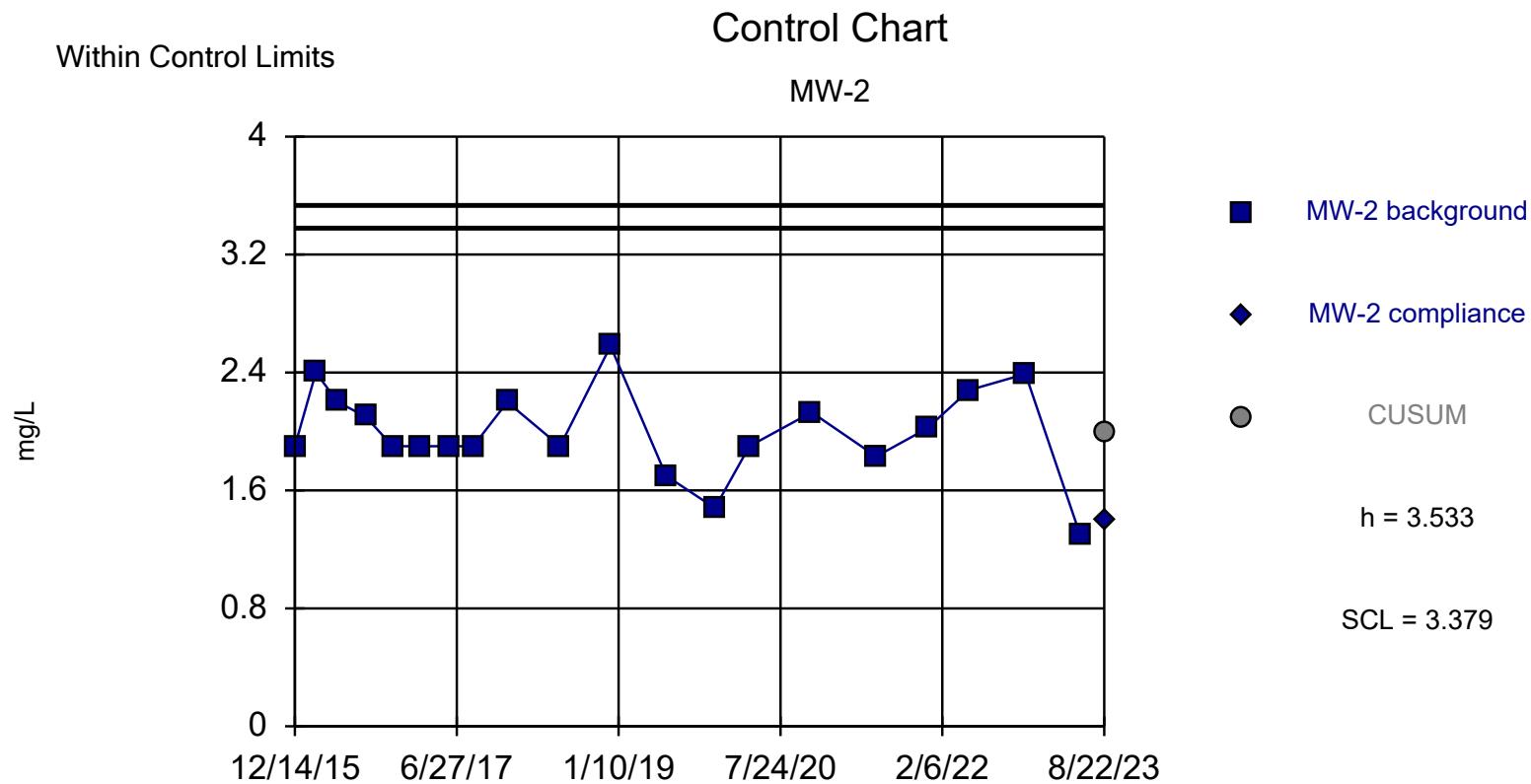
Constituent: Boron Analysis Run 9/18/2023 4:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Boron (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-1	MW-1	Std. Mean	CUSUM
12/14/2015	1.2			
2/25/2016	1.4			
8/16/2016	1.3			
11/17/2016	1.2			
2/23/2017	1.3			
6/7/2017	1.2			
8/24/2017	1.2			
12/20/2017	1.3			
6/21/2018	1.25			
12/13/2018	1.35			
6/24/2019	1.1			
12/10/2019	1.1			
4/8/2020	1.3			
11/10/2020	1.18			
6/22/2021	1.1			
12/15/2021	1.16			
5/10/2022	1.17			
11/22/2022	1.3			
6/1/2023	1.17			
8/22/2023	1.12	-1.208	1.225	



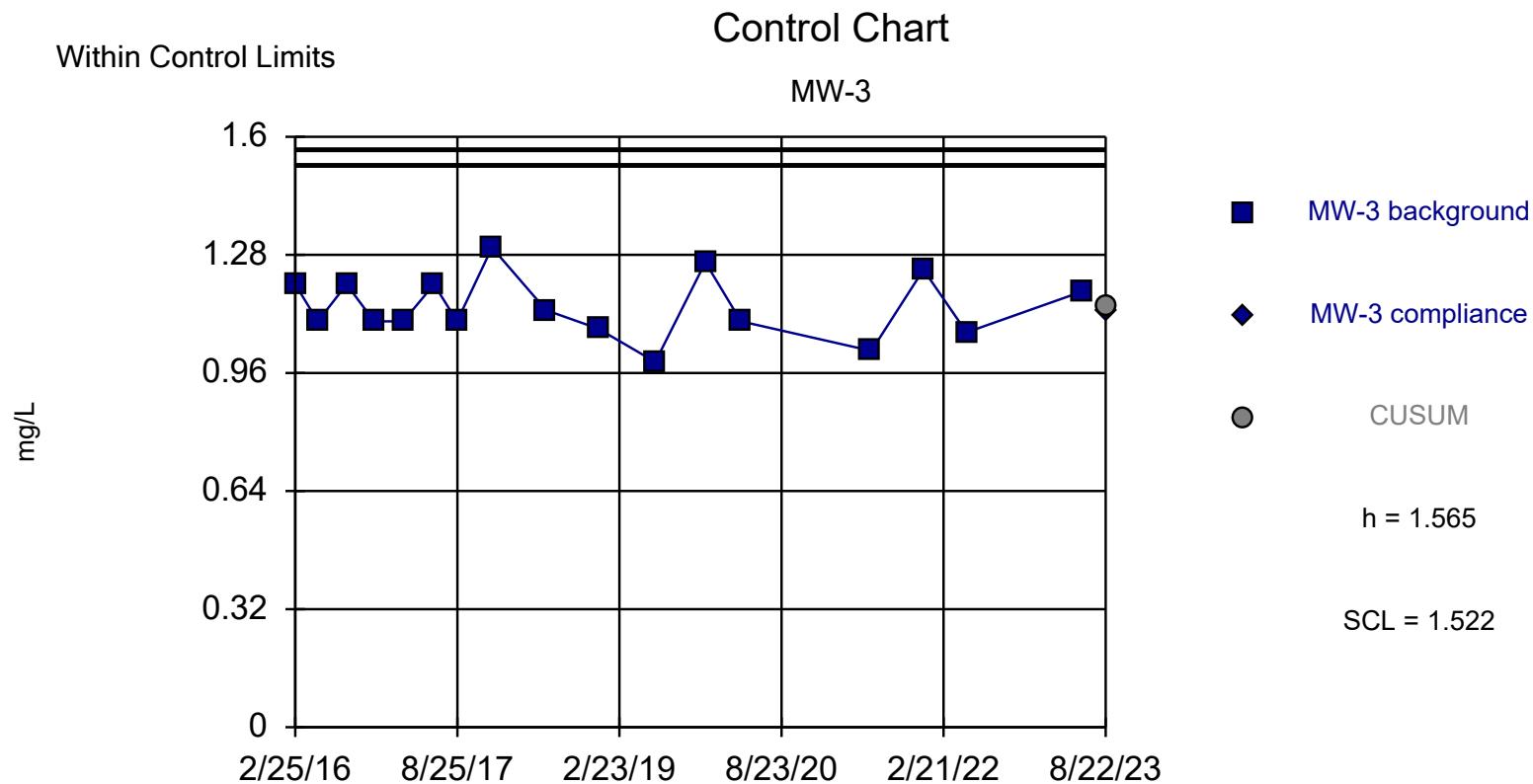
Background Data Summary: Mean=1.995, Std. Dev.=0.3075, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9551, critical = 0.905. Report alpha = 0.000176. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Boron Analysis Run 9/18/2023 4:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Boron (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-2	MW-2	Std. Mean	CUSUM
12/14/2015	1.9			
2/25/2016	2.4			
5/11/2016	2.2			
8/16/2016	2.1			
11/17/2016	1.9			
2/23/2017	1.9			
6/7/2017	1.9			
8/24/2017	1.9			
12/20/2017	2.2			
6/21/2018	1.9			
12/13/2018	2.58			
6/24/2019	1.7			
12/10/2019	1.48			
4/8/2020	1.9			
11/10/2020	2.13			
6/22/2021	1.83			
12/15/2021	2.02			
5/10/2022	2.28			
11/22/2022	2.39			
6/1/2023	1.29			
8/22/2023	1.4		-1.935	1.995

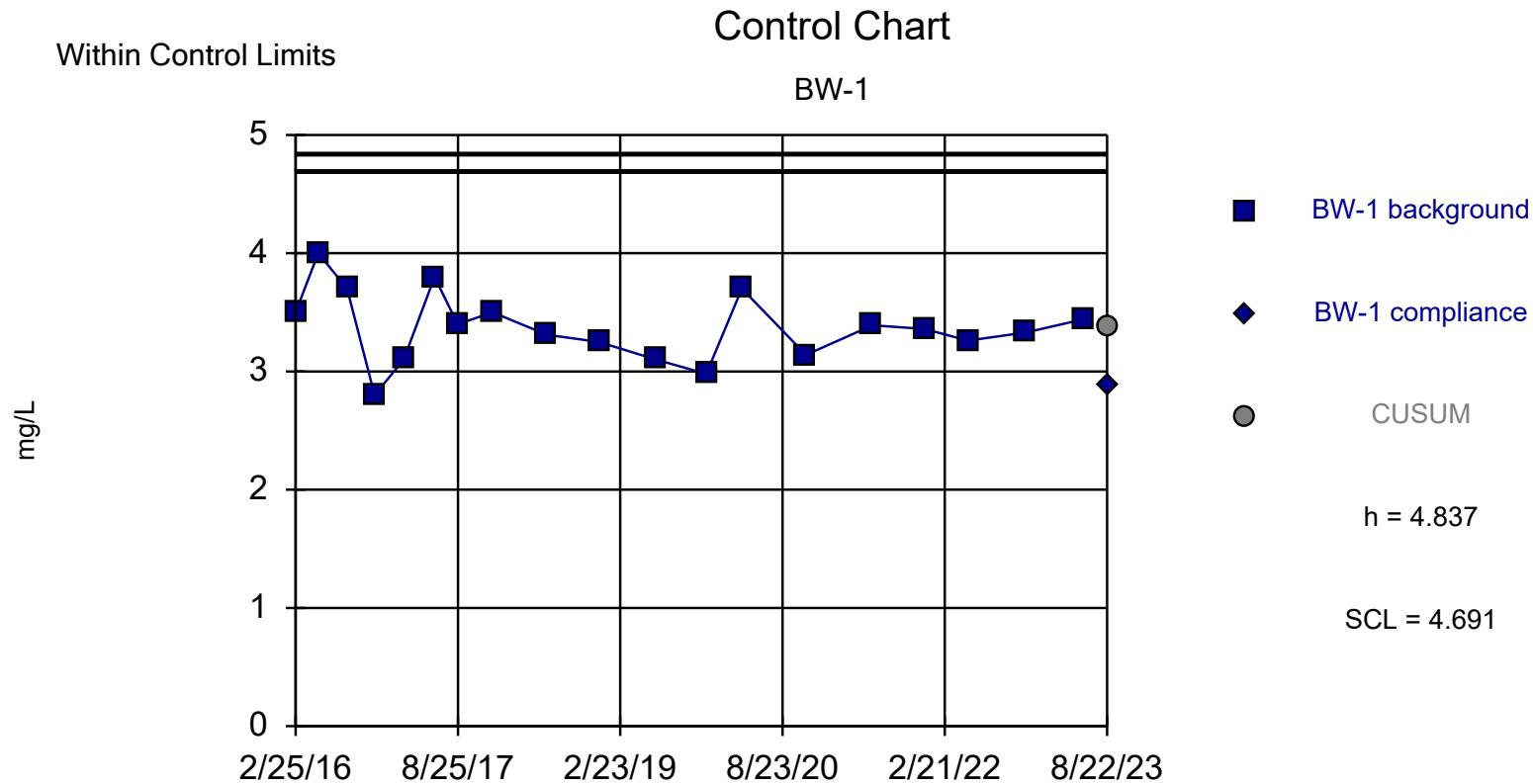


Control Chart

Constituent: Boron (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	MW-3	Std. Mean	CUSUM
2/25/2016	1.2			
5/11/2016	1.1			
8/16/2016	1.2			
11/17/2016	1.1			
2/23/2017	1.1			
6/7/2017	1.2			
8/24/2017	1.1			
12/20/2017	1.3			
6/21/2018	1.13			
12/13/2018	1.08			
6/24/2019	0.99			
12/10/2019	1.26			
4/8/2020	1.1			
6/22/2021	1.02			
12/15/2021	1.24			
5/10/2022	1.07			
6/1/2023	1.18			
8/22/2023	1.13	-0.1106	1.139	

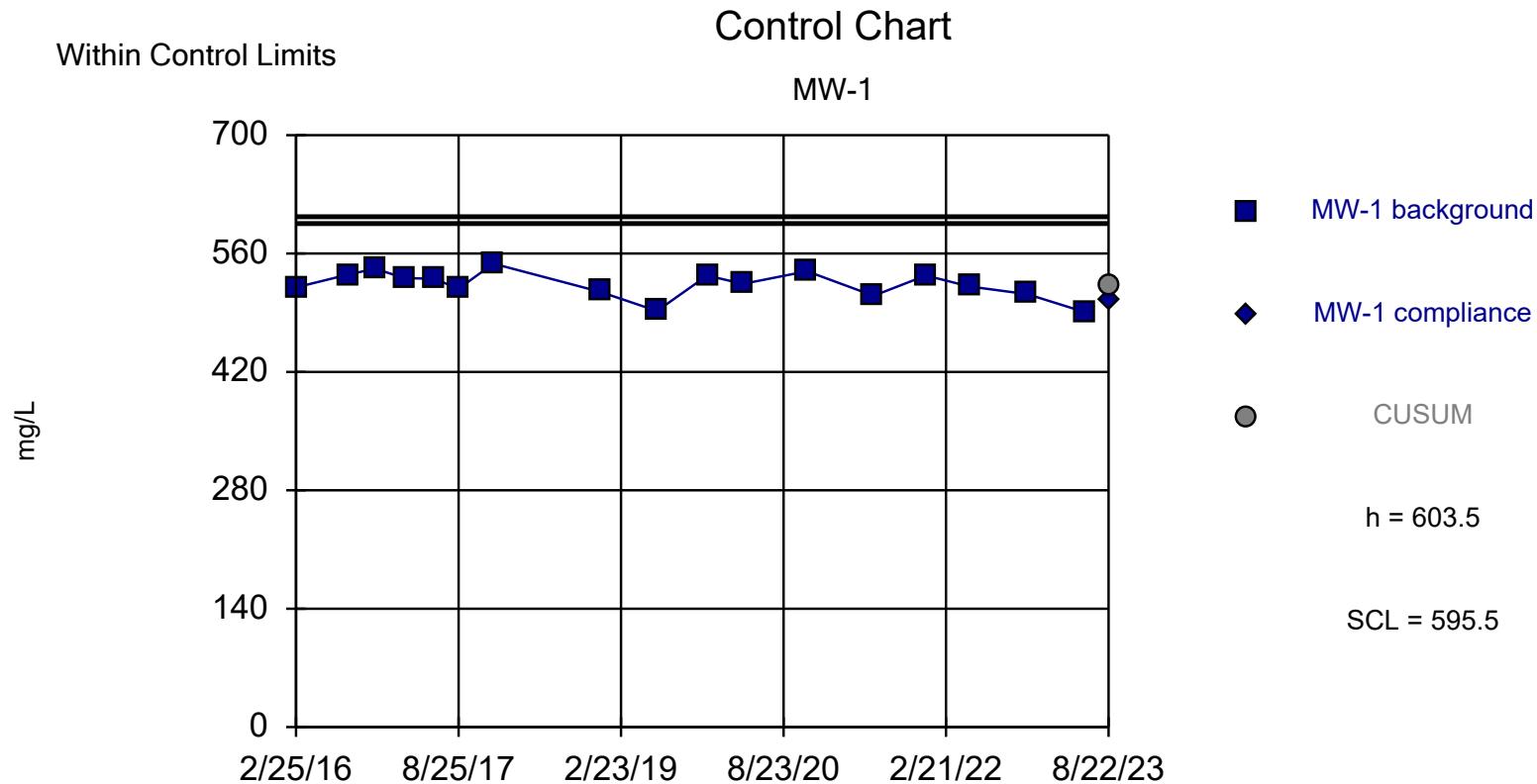


Control Chart

Constituent: Boron (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1	BW-1	Std. Mean	CUSUM
2/25/2016	3.5			
5/11/2016	4			
8/16/2016	3.7			
11/17/2016	2.8			
2/23/2017	3.1			
6/7/2017	3.8			
8/24/2017	3.4			
12/20/2017	3.5			
6/21/2018	3.31			
12/13/2018	3.25			
6/24/2019	3.1			
12/10/2019	2.98			
4/8/2020	3.7			
11/10/2020	3.14			
6/22/2021	3.39			
12/15/2021	3.36			
5/10/2022	3.26			
11/22/2022	3.33			
6/1/2023	3.44			
8/22/2023	2.88	-1.677	3.372	

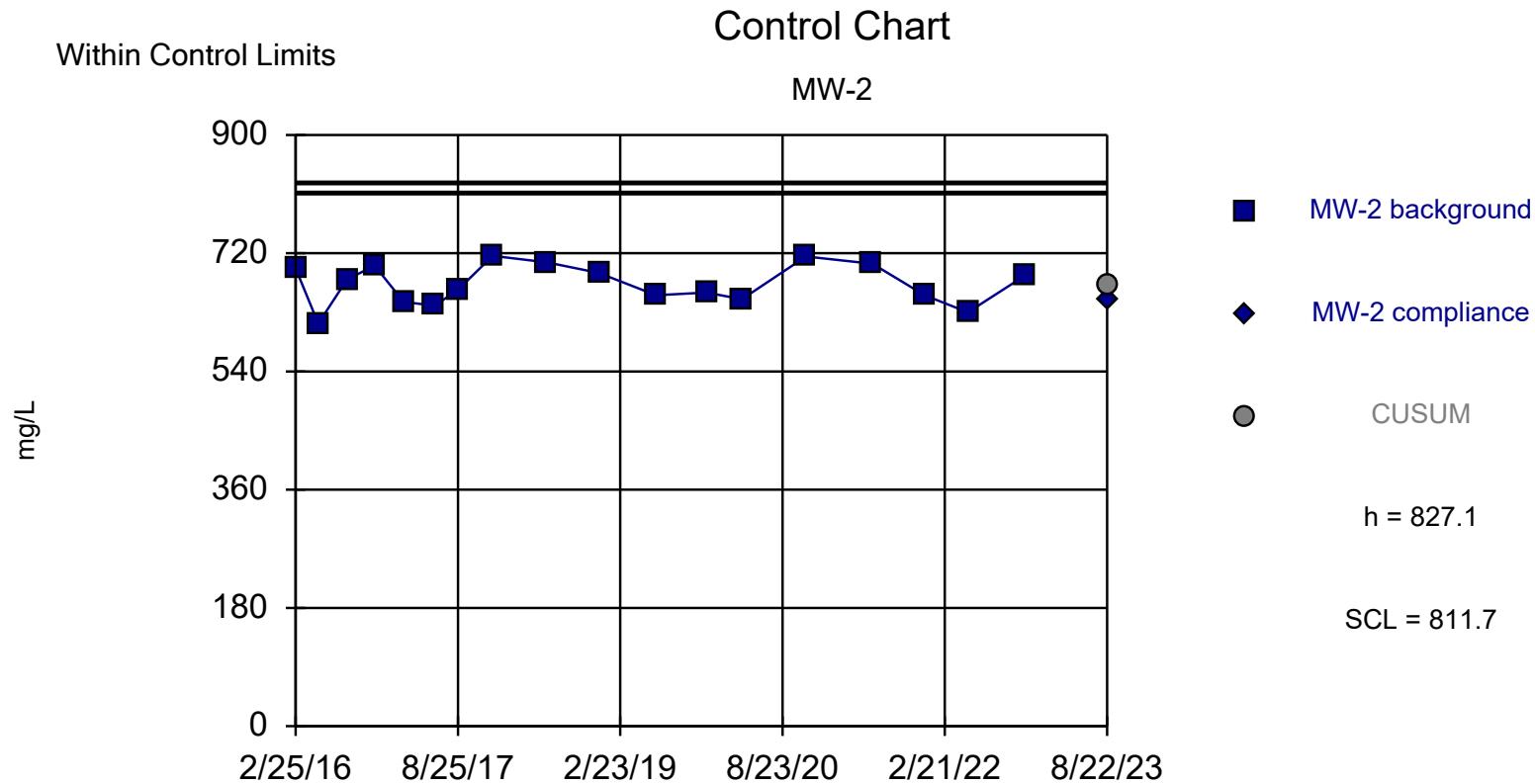


Control Chart

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-1	MW-1	Std. Mean	CUSUM
2/25/2016	520			
8/16/2016	535			
11/17/2016	542			
2/23/2017	531			
6/7/2017	530			
8/24/2017	518			
12/20/2017	548			
12/13/2018	515			
6/24/2019	492			
12/10/2019	534			
4/8/2020	524			
11/10/2020	539			
6/22/2021	510			
12/15/2021	534			
5/10/2022	521			
11/22/2022	512			
6/1/2023	491			
8/22/2023	506	-1.078	523.3	

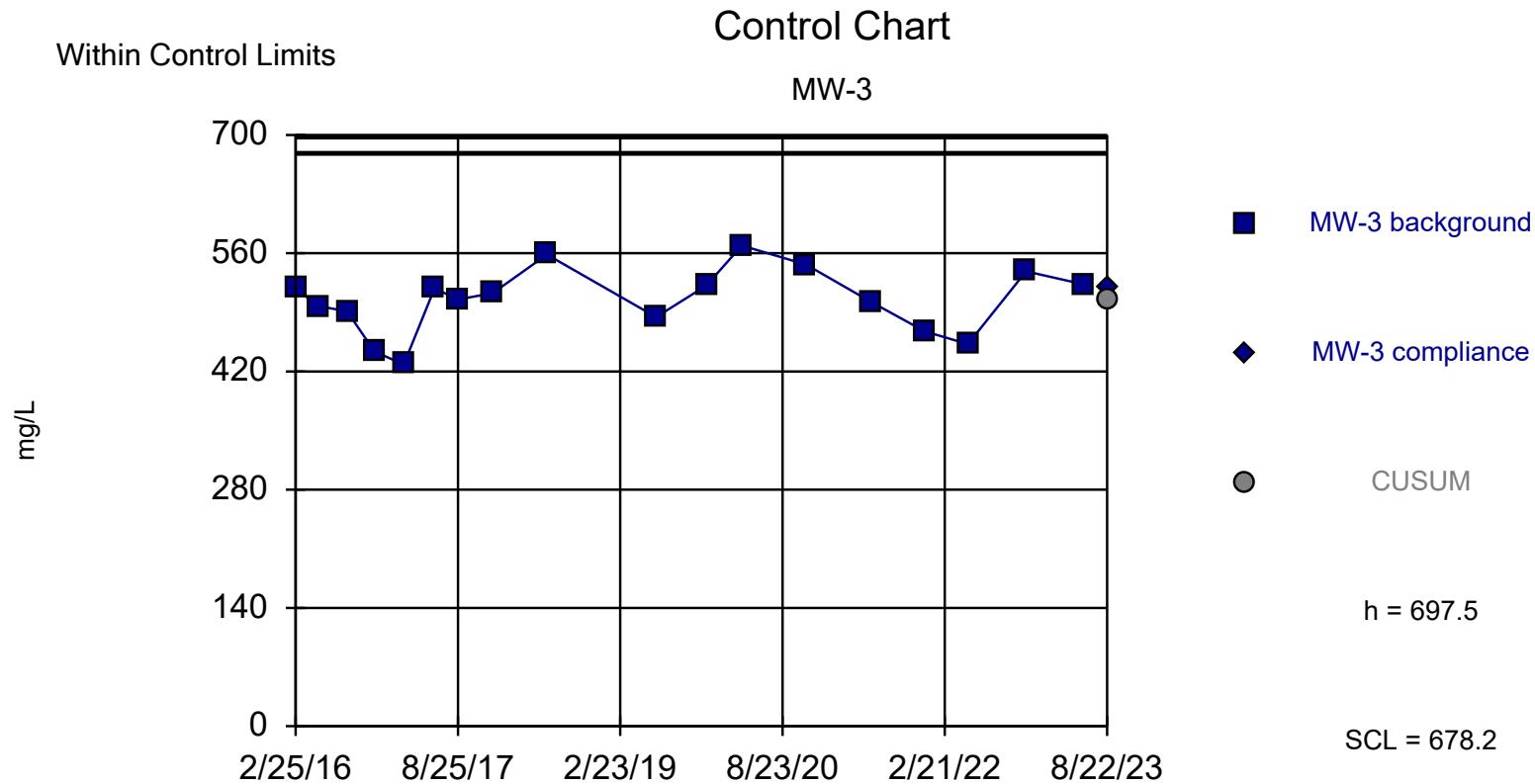


Control Chart

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-2	MW-2	Std. Mean	CUSUM
2/25/2016	697			
5/11/2016	613			
8/16/2016	680			
11/17/2016	701			
2/23/2017	646			
6/7/2017	640			
8/24/2017	664			
12/20/2017	716			
6/21/2018	706			
12/13/2018	690			
6/24/2019	656			
12/10/2019	660			
4/8/2020	650			
11/10/2020	715			
6/22/2021	704			
12/15/2021	656			
5/10/2022	630			
11/22/2022	687			
8/22/2023	650	-0.7401	672.8	

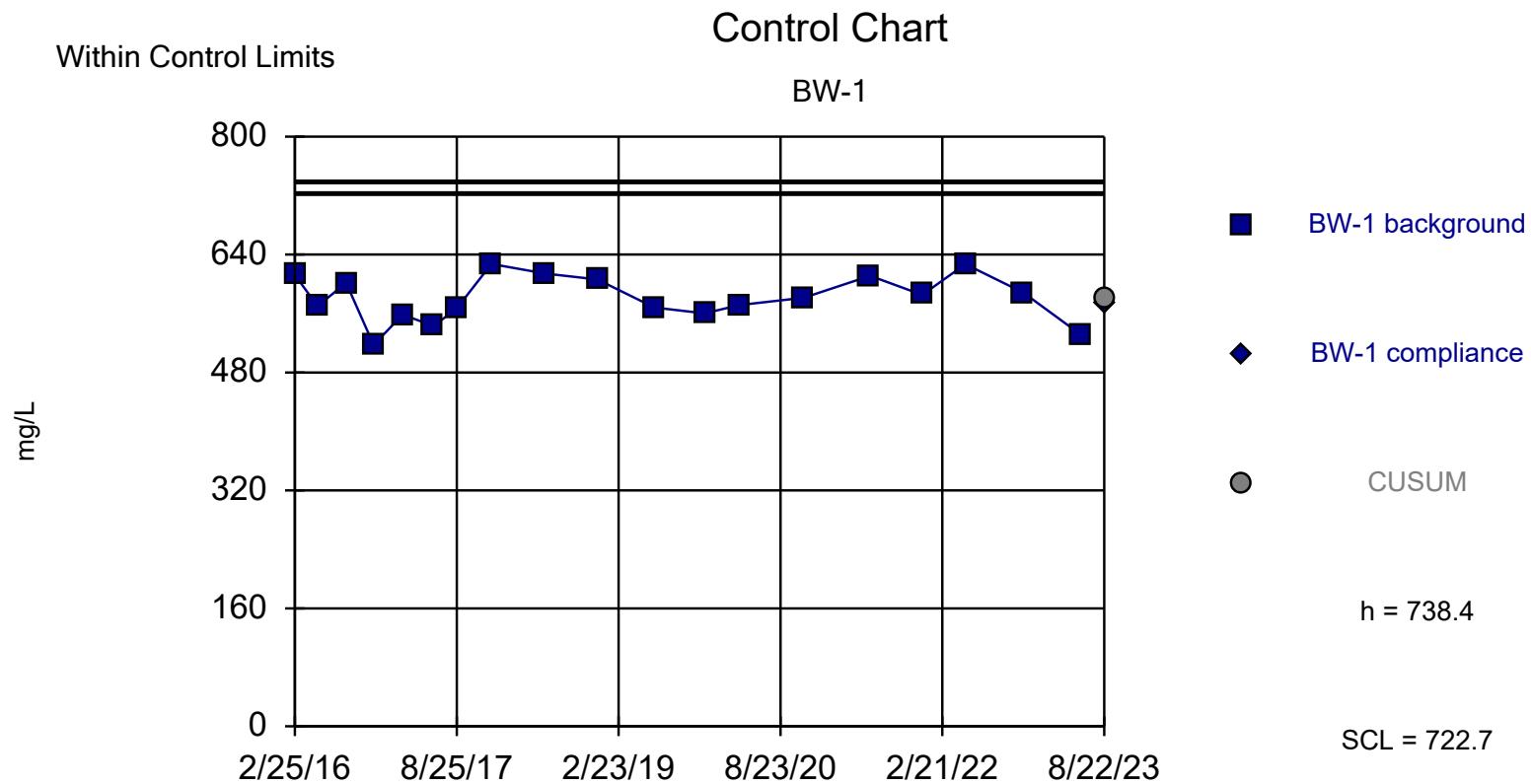


Control Chart

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	MW-3	Deseas.	Std. Mean	CUSUM
2/25/2016	479		518.1		
5/11/2016	465		497.4		
8/16/2016	505		491.1		
11/17/2016	494		443.6		
2/23/2017	389		428.1		
6/7/2017	486		518.4		
8/24/2017	519		505.1		
12/20/2017	563		512.6		
6/21/2018	526		558.4		
6/24/2019	452		484.4		
12/10/2019	572		521.6		
4/8/2020	530		569.1		
11/10/2020	597		546.6		
6/22/2021	469		501.4		
12/15/2021	518		467.6		
5/10/2022	420		452.4		
11/22/2022	589		538.6		
6/1/2023	491		523.4		
8/22/2023		533	519.1	0.3825	504.3



Control Chart

Constituent: Calcium (mg/L) Analysis Run 9/18/2023 4:44 PM

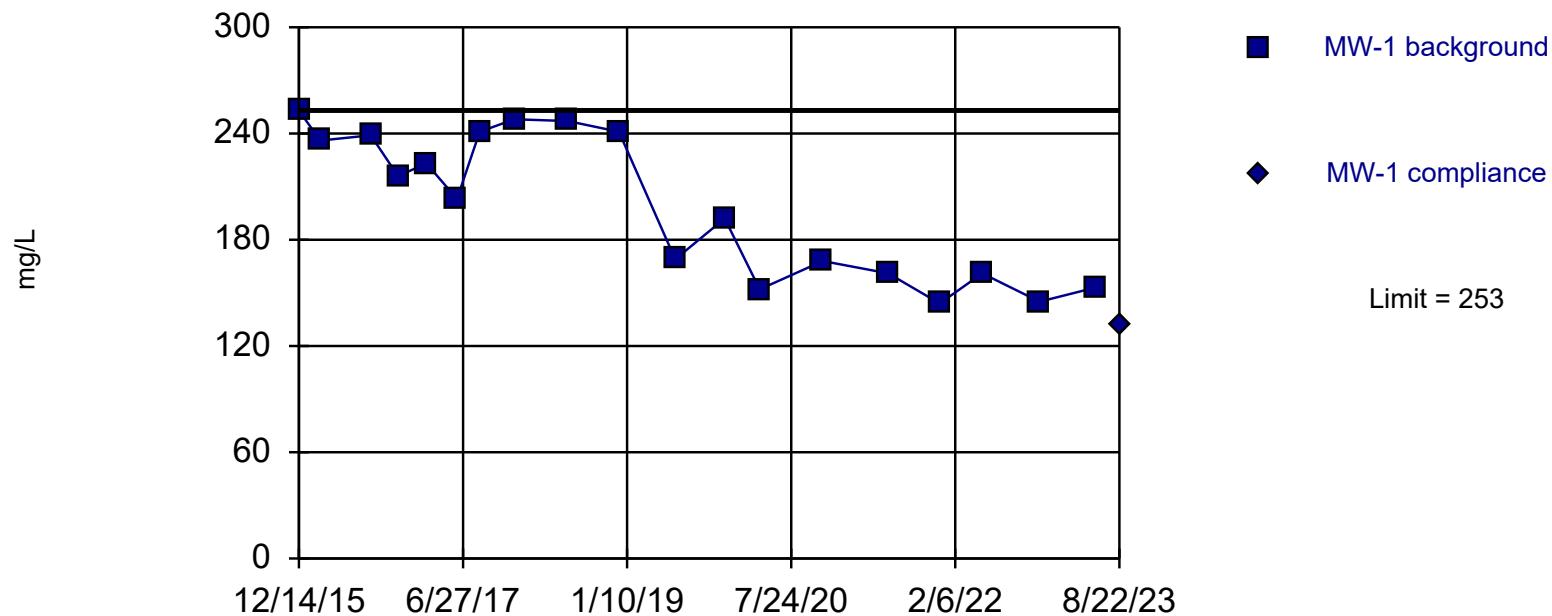
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1	BW-1	Deseas.	Std. Mean	CUSUM
2/25/2016	586		612.5		
5/11/2016	566		570.1		
8/16/2016	566		601.5		
11/17/2016	548		517.3		
2/23/2017	532		558.5		
6/7/2017	539		543.1		
8/24/2017	531		566.5		
12/20/2017	658		627.3		
6/21/2018	610		614.1		
12/13/2018	637		606.3		
6/24/2019	564		568.1		
12/10/2019	591		560.3		
4/8/2020	545		571.5		
11/10/2020	612		581.3		
6/22/2021	607		611.1		
12/15/2021	616		585.3		
5/10/2022	623		627.1		
11/22/2022	619		588.3		
6/1/2023	528		532.1		
8/22/2023		539	574.5	-0.212	581.2

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. Report alpha = 0.05. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 9/18/2023 4:43 PM

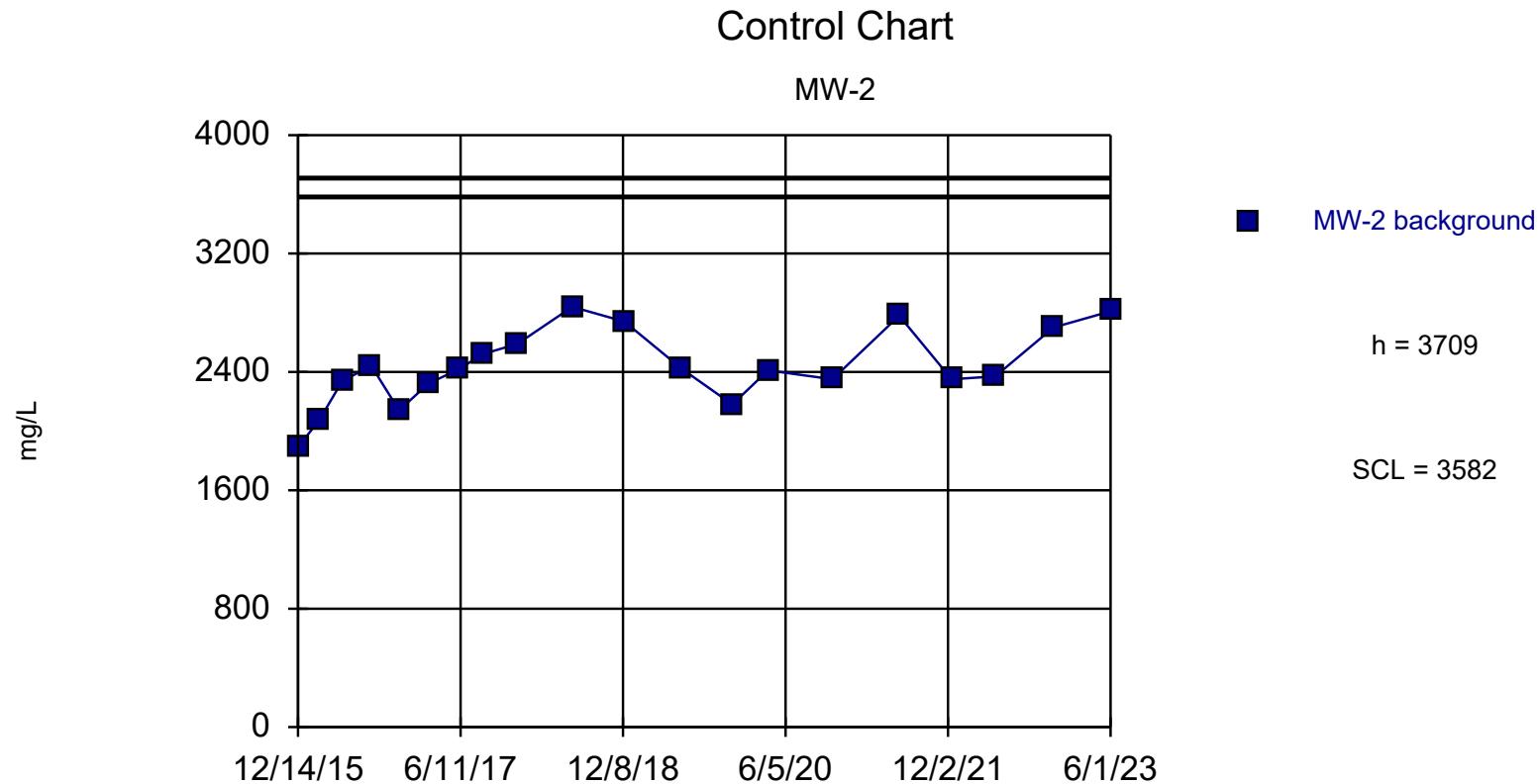
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	MW-1
12/14/2015	253
2/25/2016	236
8/16/2016	239
11/17/2016	216
2/23/2017	223
6/7/2017	203
8/24/2017	241
12/20/2017	248
6/21/2018	247
12/13/2018	241
6/24/2019	169
12/10/2019	192
4/8/2020	152
11/10/2020	168
6/22/2021	161
12/15/2021	144
5/10/2022	161
11/22/2022	145
6/1/2023	153
8/22/2023	132



Background Data Summary: Mean=2435, Std. Dev.=255, n=20. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9589, critical = 0.905. Report alpha = 0. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

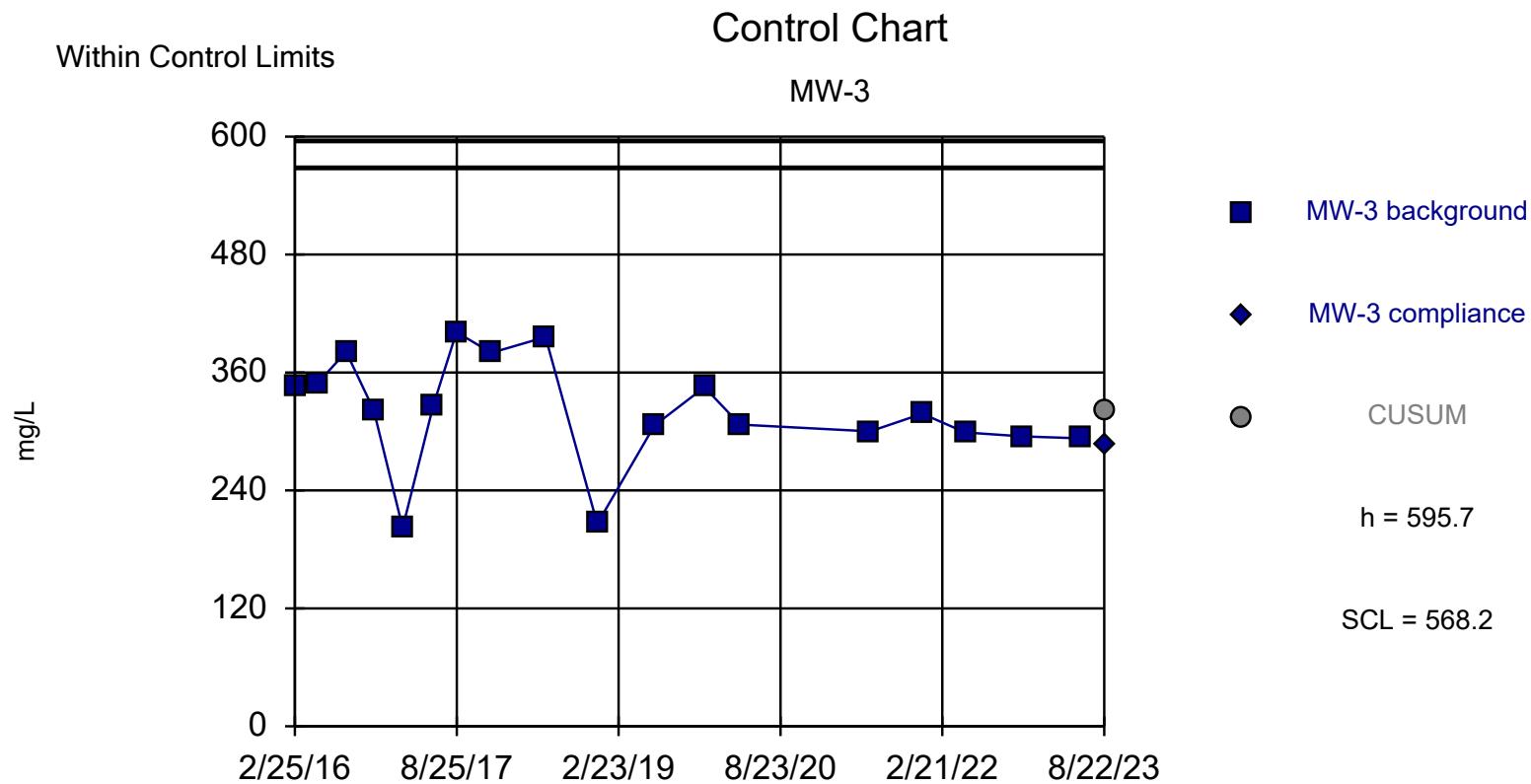
Constituent: Chloride Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 1890
2/25/2016 2080
5/11/2016 2340
8/16/2016 2440
11/17/2016 2140
2/23/2017 2320
6/7/2017 2420
8/24/2017 2520
12/20/2017 2590
6/21/2018 2840
12/13/2018 2740
6/24/2019 2420
12/10/2019 2180
4/8/2020 2410
11/10/2020 2350
6/22/2021 2780
12/15/2021 2350
5/10/2022 2370
11/22/2022 2700
6/1/2023 2810



Background Data Summary: Mean=320.8, Std. Dev.=54.98, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9133, critical = 0.897. Report alpha = 0.000252. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Chloride Analysis Run 9/18/2023 4:43 PM

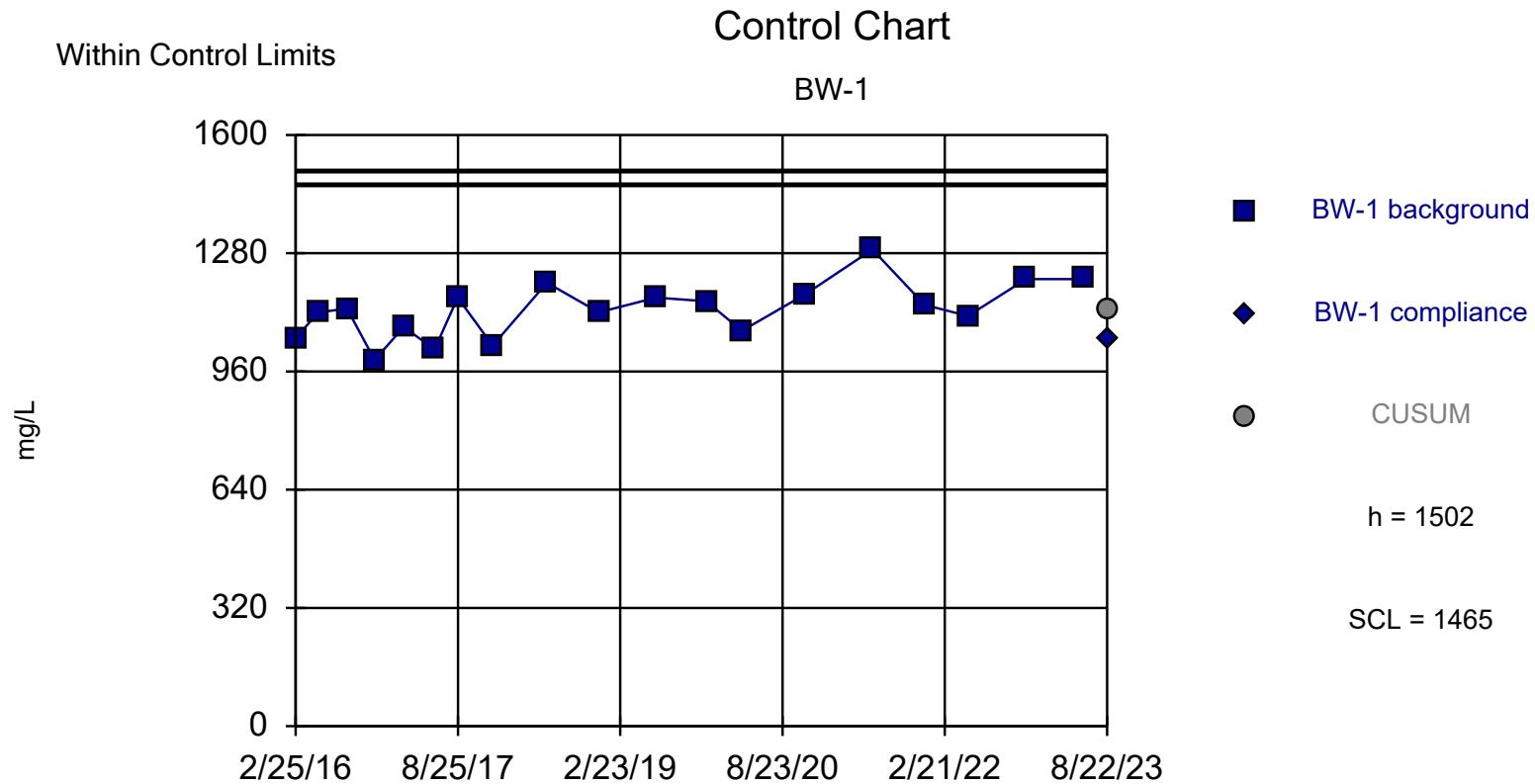
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	MW-3	Std. Mean	CUSUM
2/25/2016	347			
5/11/2016	349			
8/16/2016	381			
11/17/2016	322			
2/23/2017	202			
6/7/2017	327			
8/24/2017	401			
12/20/2017	380			
6/21/2018	396			
12/13/2018	206			
6/24/2019	306			
12/10/2019	345			
4/8/2020	307			
6/22/2021	300			
12/15/2021	318			
5/10/2022	299			
11/22/2022	295			
6/1/2023	293			
8/22/2023	287	-0.6144	320.8	



Control Chart

Constituent: Chloride (mg/L) Analysis Run 9/18/2023 4:44 PM

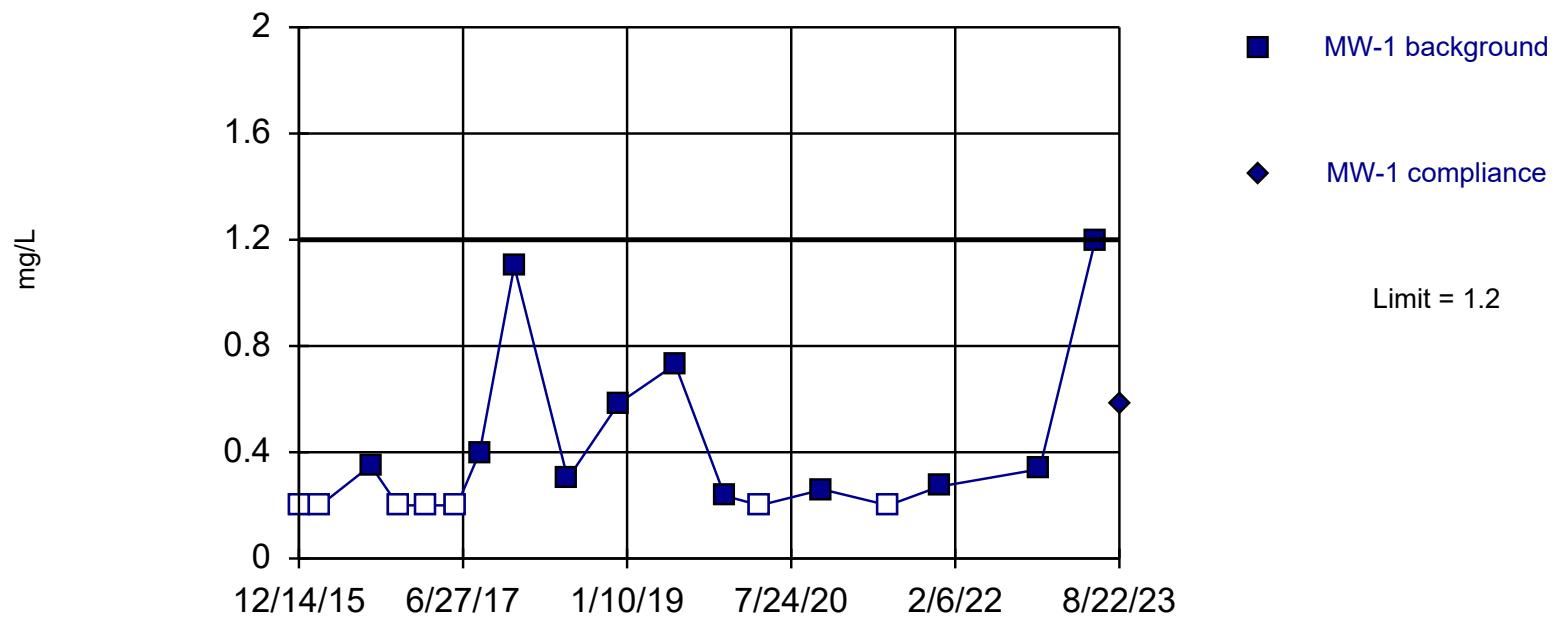
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1	BW-1	Std. Mean	CUSUM
2/25/2016	1050			
5/11/2016	1120			
8/16/2016	1130			
11/17/2016	991			
2/23/2017	1080			
6/7/2017	1020			
8/24/2017	1160			
12/20/2017	1030			
6/21/2018	1200			
12/13/2018	1120			
6/24/2019	1160			
12/10/2019	1150			
4/8/2020	1070			
11/10/2020	1170			
6/22/2021	1290			
12/15/2021	1140			
5/10/2022	1110			
11/22/2022	1210			
6/1/2023	1210			
8/22/2023	1050	-1.024	1127	

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 18 background values. 38.89% NDs. Report alpha = 0.05263. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

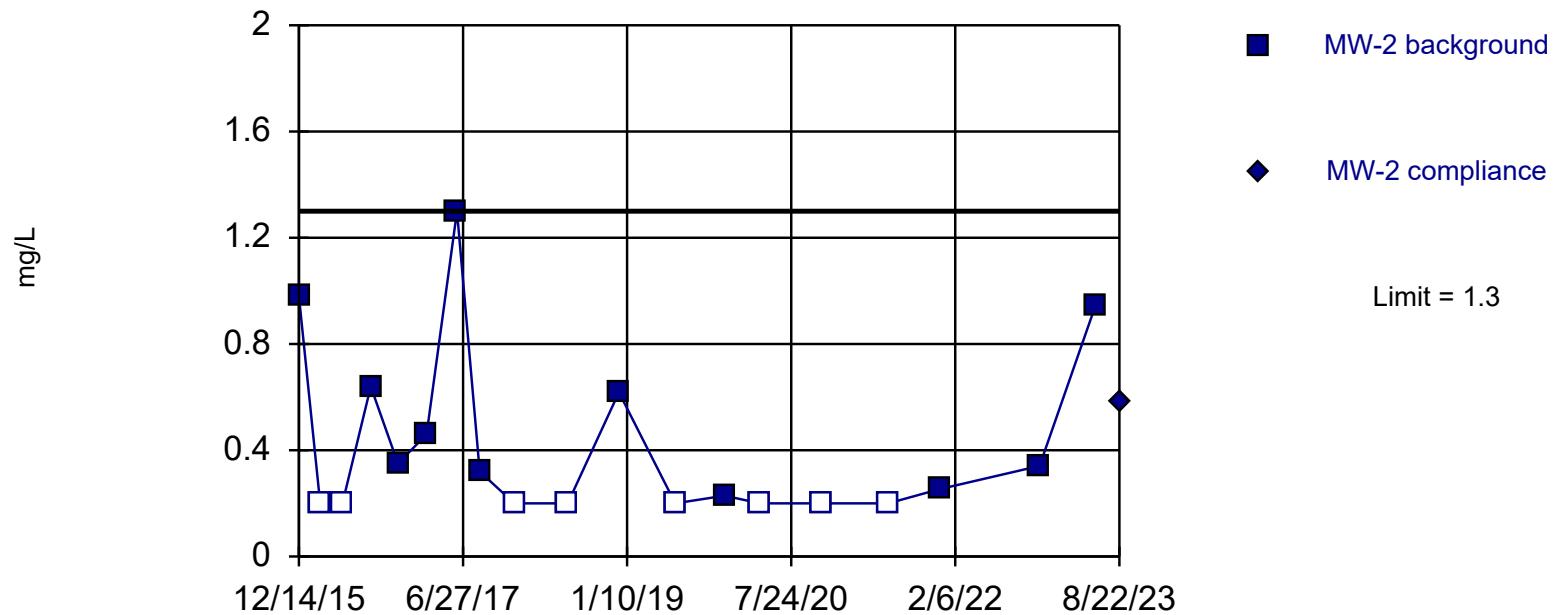
MW-1	MW-1
12/14/2015	<0.2
2/25/2016	<0.2
8/16/2016	0.35
11/17/2016	<0.2
2/23/2017	<0.2
6/7/2017	<0.2
8/24/2017	0.4
12/20/2017	1.1
6/21/2018	0.3
12/13/2018	0.585
6/24/2019	0.73
12/10/2019	0.236
4/8/2020	<0.2
11/10/2020	0.26
6/22/2021	<0.2
12/15/2021	0.271
11/22/2022	0.336
6/1/2023	1.2
8/22/2023	0.581

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. 42.11% NDs. Report alpha = 0.05. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

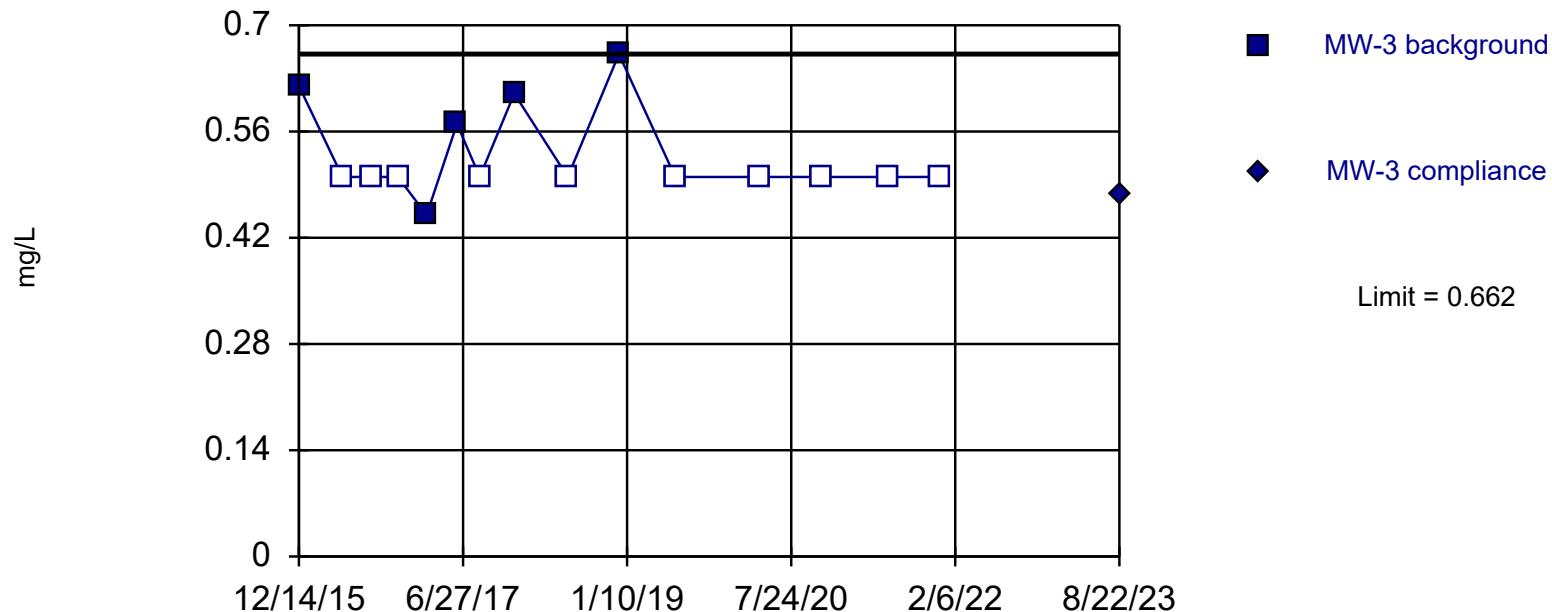
MW-2	MW-2
12/14/2015	0.98
2/25/2016	<0.2
5/11/2016	<0.2
8/16/2016	0.64
11/17/2016	0.35
2/23/2017	0.46
6/7/2017	1.3
8/24/2017	0.32
12/20/2017	<0.2
6/21/2018	<0.2
12/13/2018	0.618
6/24/2019	<0.2
12/10/2019	0.229
4/8/2020	<0.2
11/10/2020	<0.2
6/22/2021	<0.2
12/15/2021	0.254
11/22/2022	0.341
6/1/2023	0.944
8/22/2023	0.577

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 15 background values. 66.67% NDs. Report alpha = 0.0625. Most recent point compared to limit.
Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Fluoride Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 4:44 PM

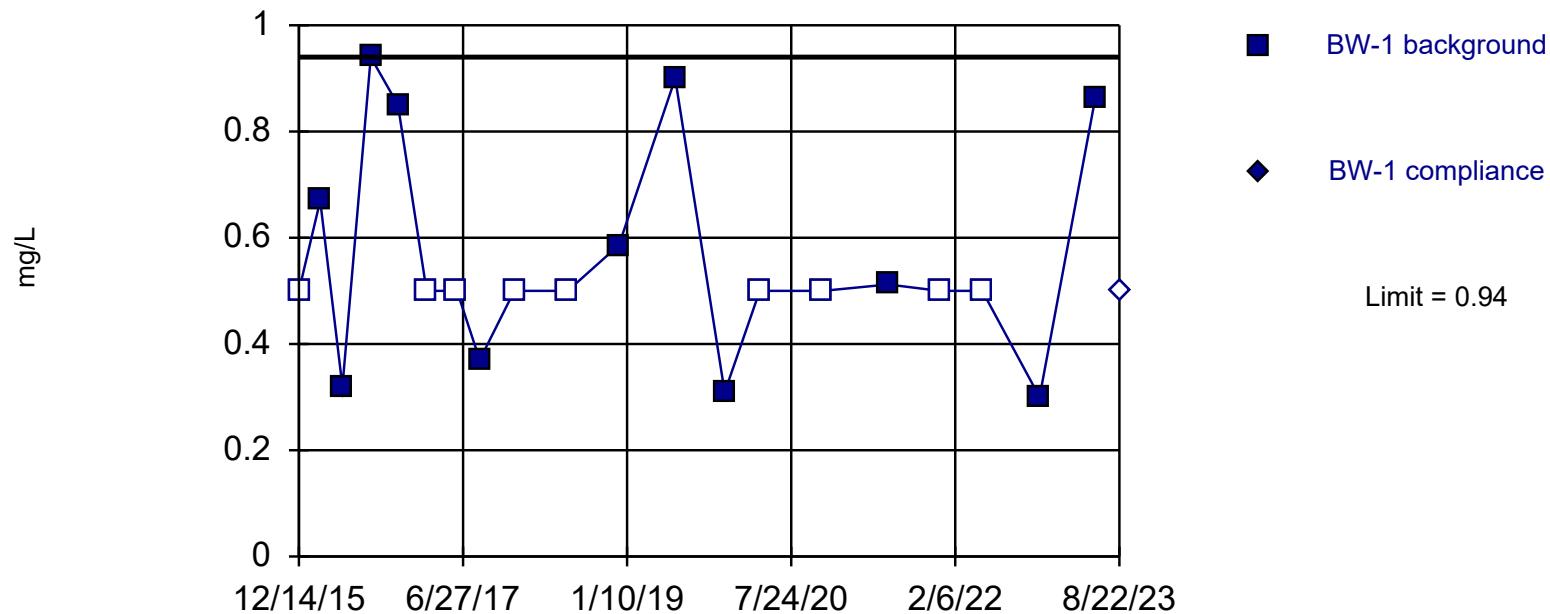
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3	MW-3
12/14/2015	0.62
5/11/2016	<0.5
8/16/2016	<0.5
11/17/2016	<0.5
2/23/2017	0.45
6/7/2017	0.57
8/24/2017	<0.5
12/20/2017	0.61
6/21/2018	<0.5
12/13/2018	0.662
6/24/2019	<0.5
4/8/2020	<0.5
11/10/2020	<0.5
6/22/2021	<0.5
12/15/2021	<0.5
8/22/2023	0.476

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. 45% NDs. Report alpha = 0.04762. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 9/18/2023 4:43 PM

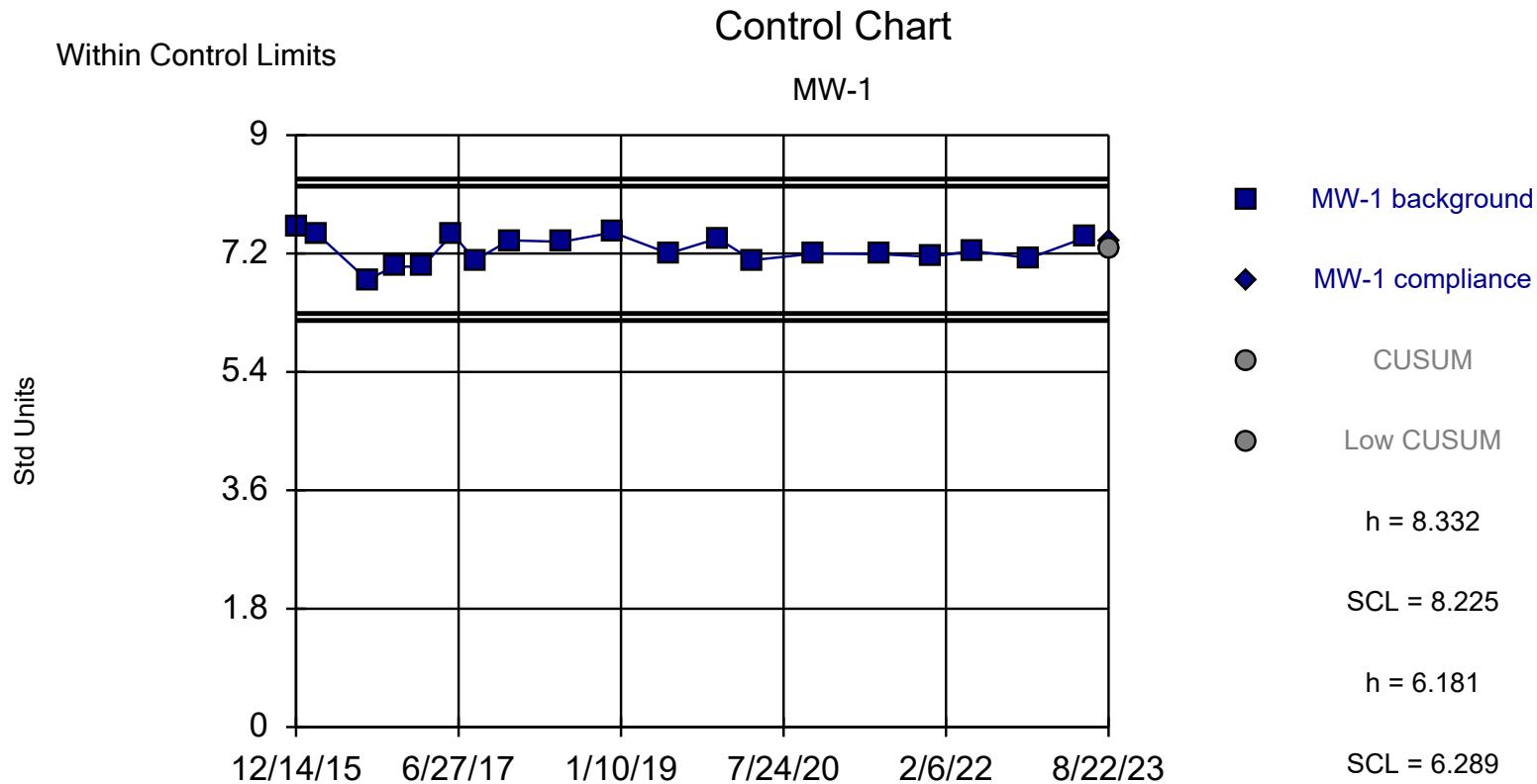
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Fluoride (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	BW-1
12/14/2015	<0.5
2/25/2016	0.67
5/11/2016	0.32
8/16/2016	0.94
11/17/2016	0.85
2/23/2017	<0.5
6/7/2017	<0.5
8/24/2017	0.37
12/20/2017	<0.5
6/21/2018	<0.5
12/13/2018	0.586
6/24/2019	0.9
12/10/2019	0.309
4/8/2020	<0.5
11/10/2020	<0.5
6/22/2021	0.512
12/15/2021	<0.5
5/10/2022	<0.5
11/22/2022	0.3
6/1/2023	0.864
8/22/2023	<0.5



Background Data Summary: Mean=7.257, Std. Dev.=0.2151, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9577, critical = 0.901. Report alpha = 0.000176. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: pH Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

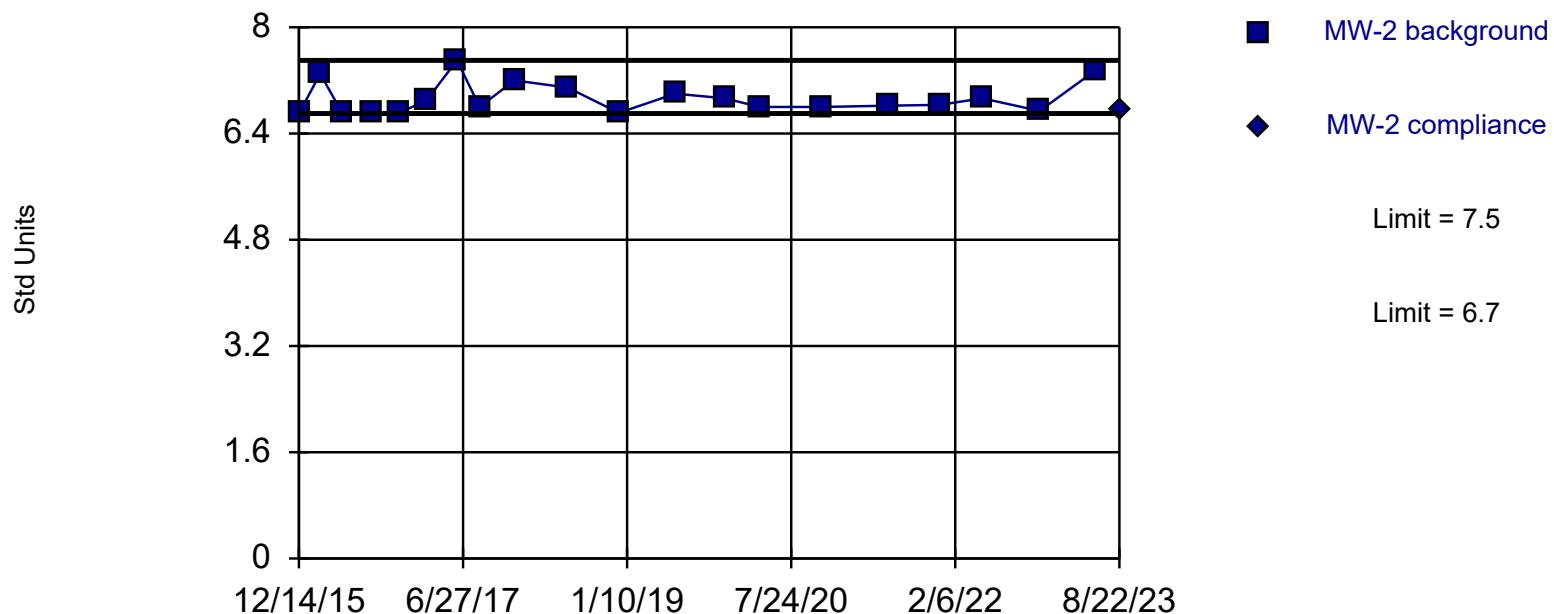
Constituent: pH (Std Units) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-1	MW-1	Std. Mean	CUSUM	Low CUSUM
12/14/2015	7.6				
2/25/2016	7.5				
8/16/2016	6.8				
11/17/2016	7				
2/23/2017	7				
6/7/2017	7.5				
8/24/2017	7.1				
12/20/2017	7.4				
6/21/2018	7.38				
12/13/2018	7.52				
6/24/2019	7.2				
12/10/2019	7.43				
4/8/2020	7.1				
11/10/2020	7.2				
6/22/2021	7.19				
12/15/2021	7.15				
5/10/2022	7.24				
11/22/2022	7.13				
6/1/2023	7.44				
8/22/2023		7.37	0.526	7.257	7.257

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Report alpha = 0.09524. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

Constituent: pH Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

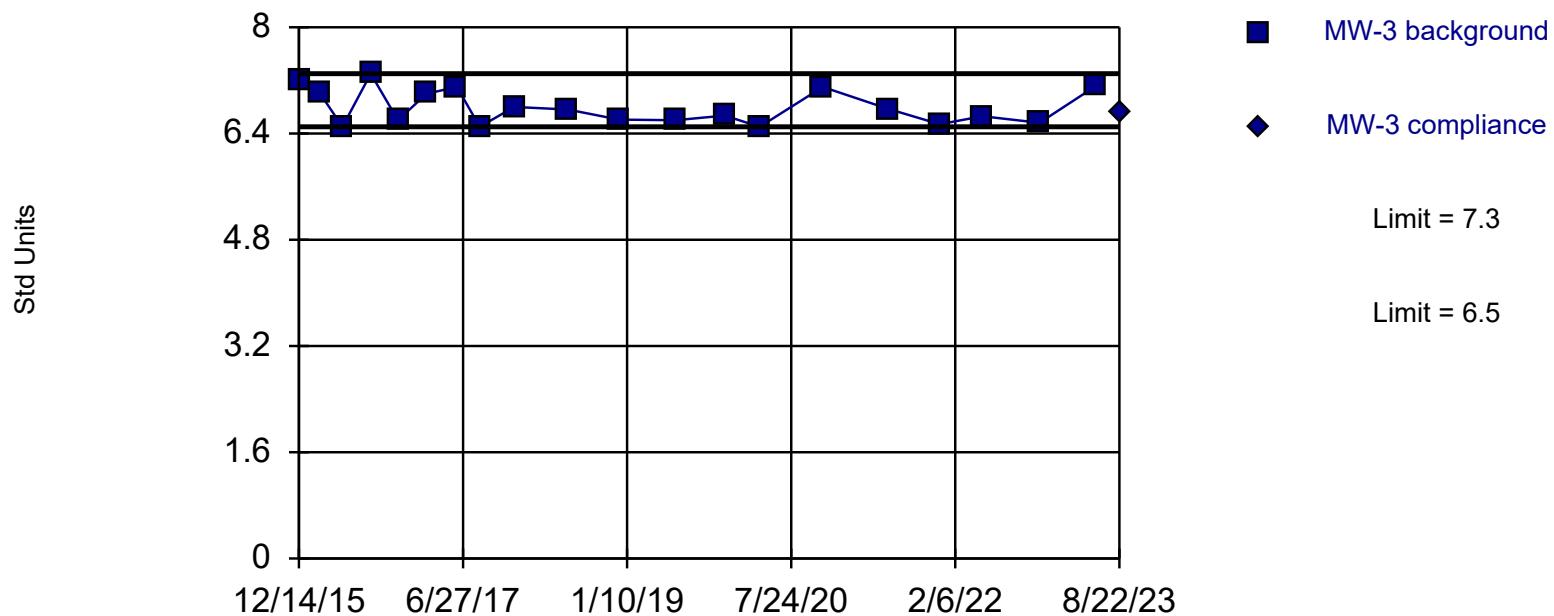
Constituent: pH (Std Units) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	MW-2
12/14/2015	6.7
2/25/2016	7.3
5/11/2016	6.7
8/16/2016	6.7
11/17/2016	6.7
2/23/2017	6.9
6/7/2017	7.5
8/24/2017	6.8
12/20/2017	7.2
6/21/2018	7.09
12/13/2018	6.71
6/24/2019	7
12/10/2019	6.93
4/8/2020	6.8
11/10/2020	6.8
6/22/2021	6.82
12/15/2021	6.83
5/10/2022	6.93
11/22/2022	6.74
6/1/2023	7.35
8/22/2023	6.74

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Report alpha = 0.09524. Most recent point compared to limit. Seasonality was not detected with 95% confidence.

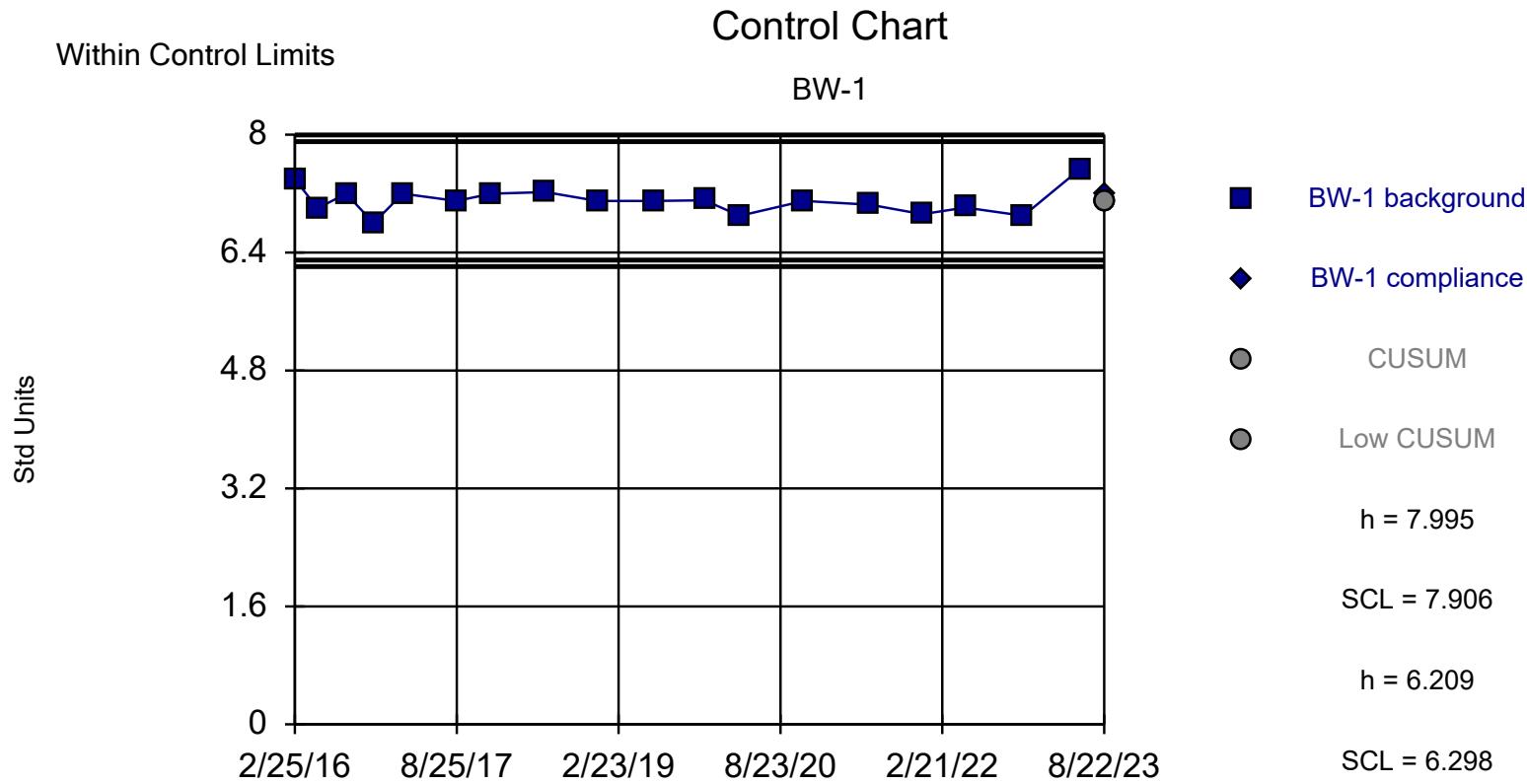
Constituent: pH Analysis Run 9/18/2023 4:43 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: pH (Std Units) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3	MW-3
12/14/2015	7.2
2/25/2016	7
5/11/2016	6.5
8/16/2016	7.3
11/17/2016	6.6
2/23/2017	7
6/7/2017	7.1
8/24/2017	6.5
12/20/2017	6.8
6/21/2018	6.76
12/13/2018	6.61
6/24/2019	6.6
12/10/2019	6.67
4/8/2020	6.5
11/10/2020	7.1
6/22/2021	6.77
12/15/2021	6.54
5/10/2022	6.66
11/22/2022	6.56
6/1/2023	7.11
8/22/2023	6.71



Background Data Summary: Mean=7.102, Std. Dev.=0.1786, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9487, critical = 0.897. Report alpha = 0.00022. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: pH Analysis Run 9/18/2023 4:43 PM

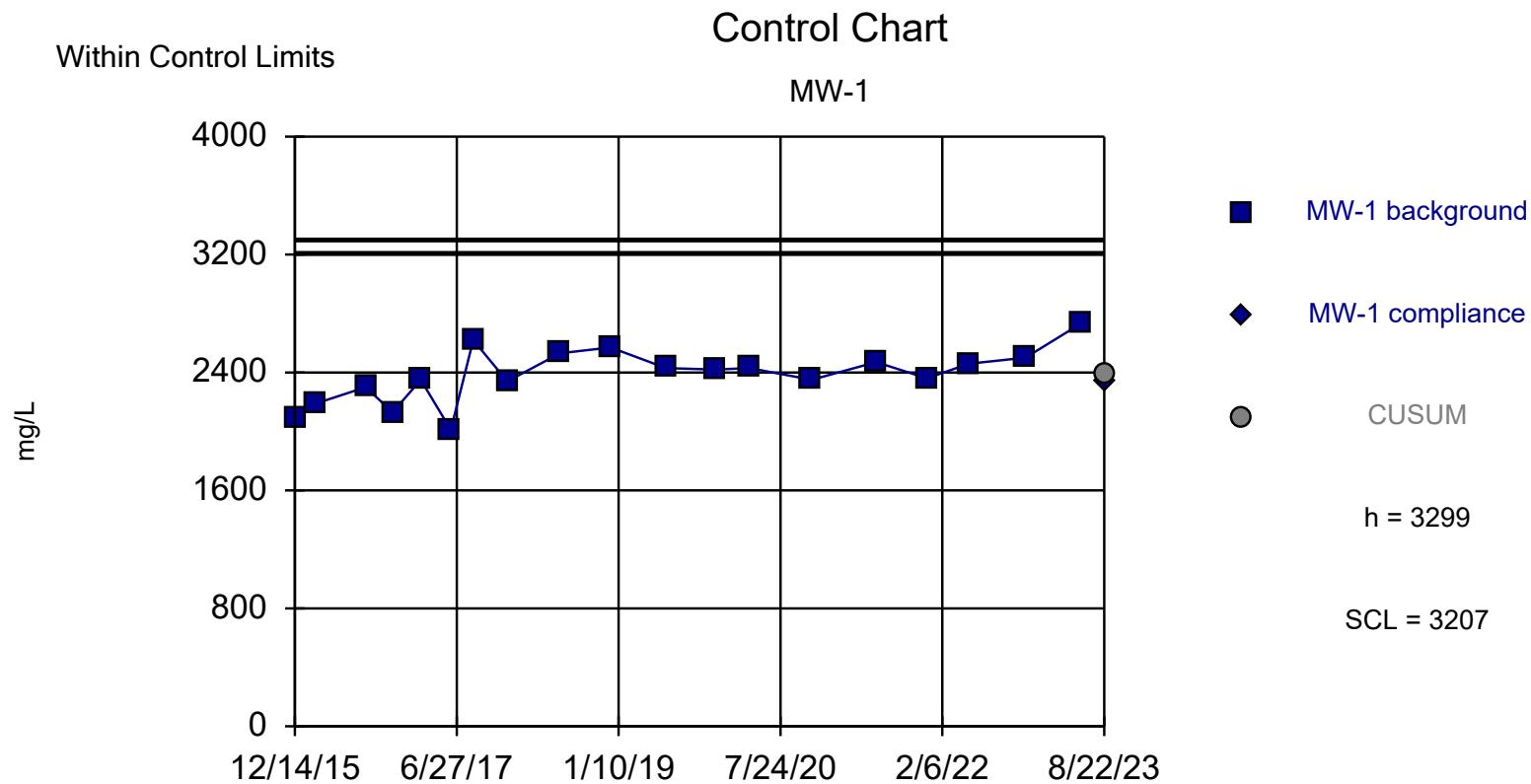
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: pH (Std Units) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1	BW-1	Std. Mean	CUSUM	Low CUSUM
2/25/2016	7.4				
5/11/2016	7				
8/16/2016	7.2				
11/17/2016	6.8				
2/23/2017	7.2				
8/24/2017	7.1				
12/20/2017	7.2				
6/21/2018	7.22				
12/13/2018	7.1				
6/24/2019	7.1				
12/10/2019	7.11				
4/8/2020	6.9				
11/10/2020	7.1				
6/22/2021	7.05				
12/15/2021	6.92				
5/10/2022	7.01				
11/22/2022	6.9				
6/1/2023	7.53				
8/22/2023		7.18	0.4355	7.102	7.102



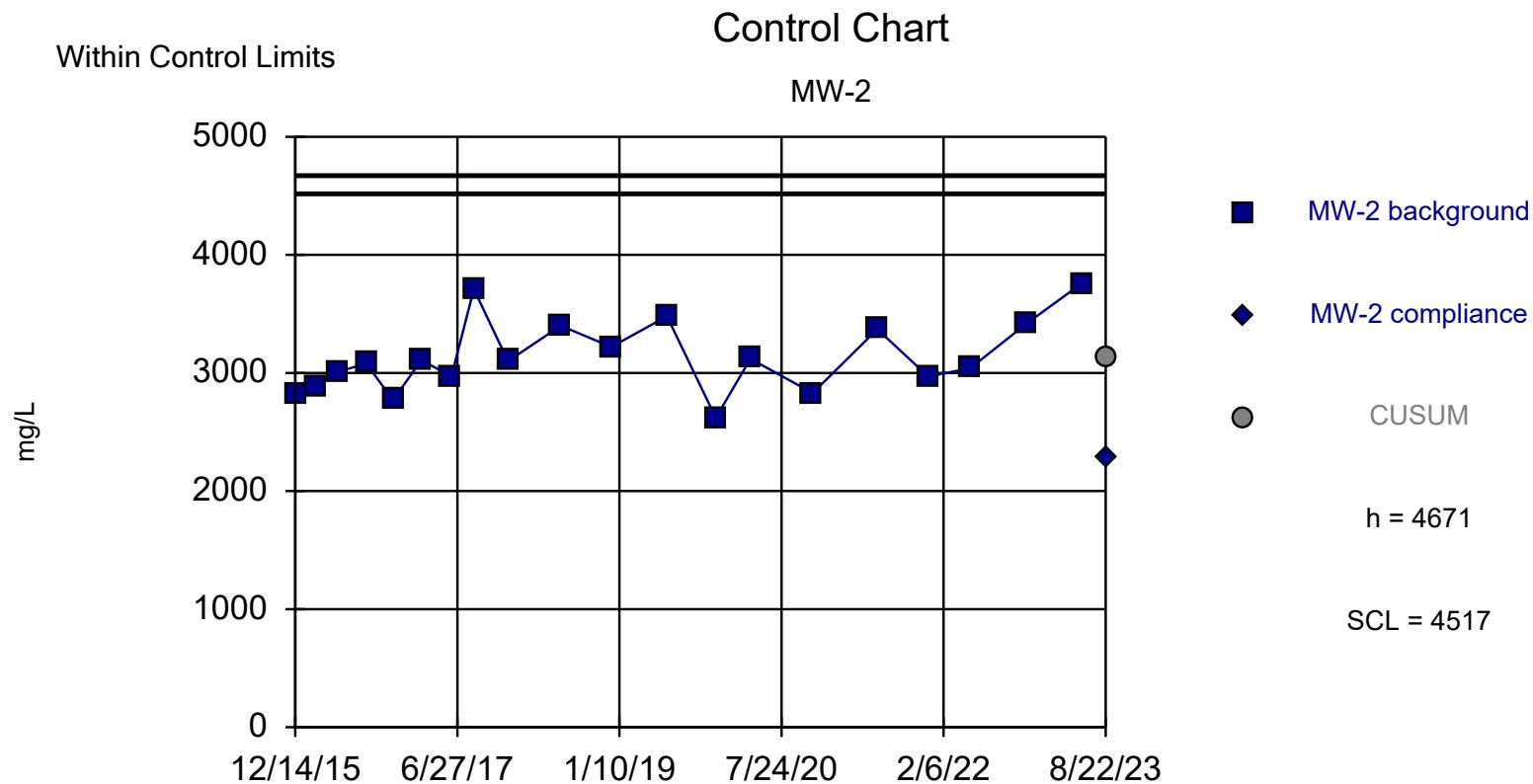
Background Data Summary: Mean=2383, Std. Dev.=183.2, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9737, critical = 0.901. Report alpha = 0.000192. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 9/18/2023 4:43 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-1	MW-1	Std. Mean	CUSUM
12/14/2015	2090			
2/25/2016	2190			
8/16/2016	2300			
11/17/2016	2130			
2/23/2017	2350			
6/7/2017	2010			
8/24/2017	2620			
12/20/2017	2340			
6/21/2018	2530			
12/13/2018	2570			
6/24/2019	2430			
12/10/2019	2420			
4/8/2020	2430			
11/10/2020	2350			
6/22/2021	2470			
12/15/2021	2360			
5/10/2022	2460			
11/22/2022	2500			
6/1/2023	2730			
8/22/2023		2340	-0.2356	2383



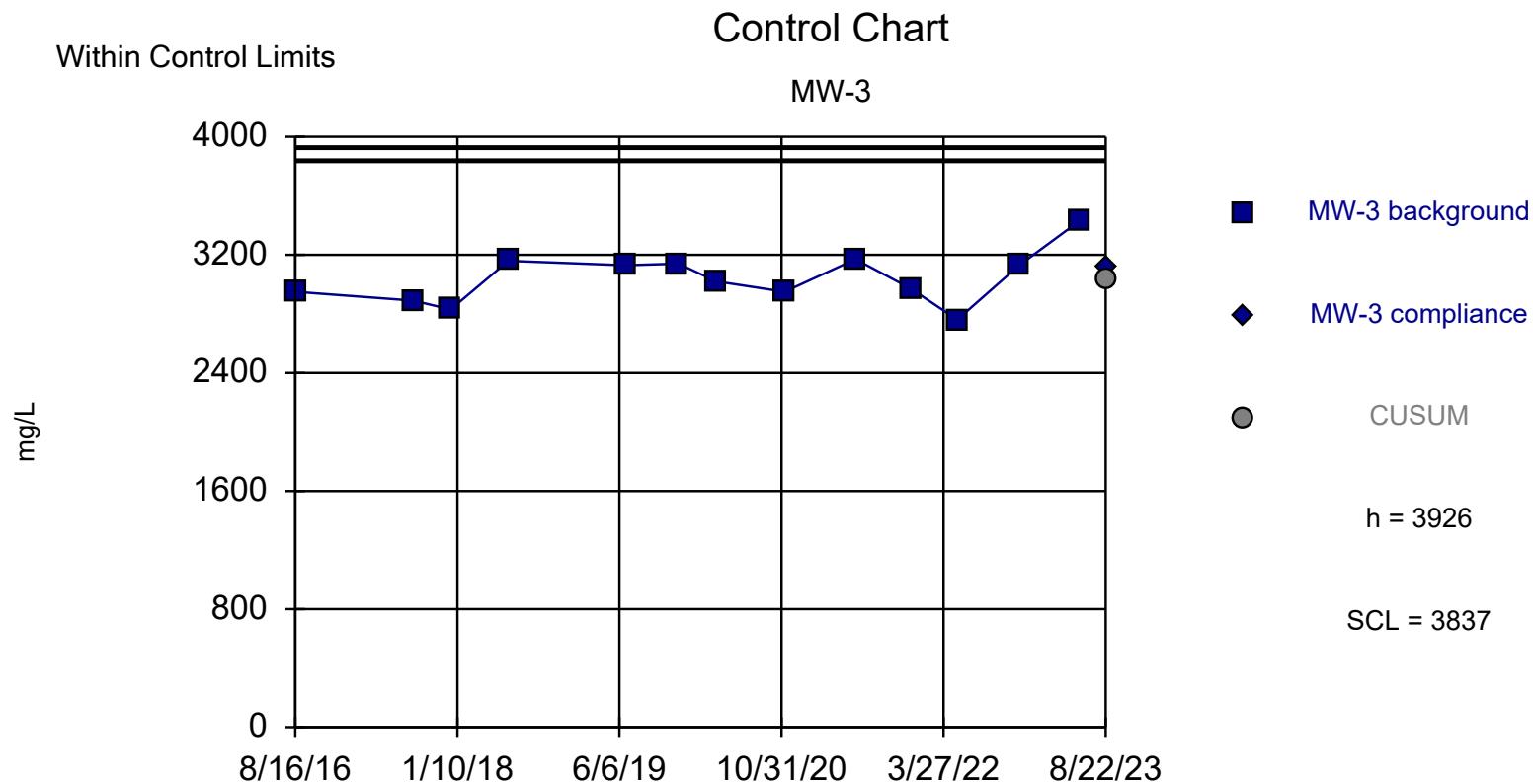
Background Data Summary: Mean=3134, Std. Dev.=307.4, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9589, critical = 0.905. Report alpha = 0.00019. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2	MW-2	Std. Mean	CUSUM
12/14/2015	2810		
2/25/2016	2890		
5/11/2016	3010		
8/16/2016	3080		
11/17/2016	2770		
2/23/2017	3110		
6/7/2017	2970		
8/24/2017	3710		
12/20/2017	3100		
6/21/2018	3400		
12/13/2018	3220		
6/24/2019	3480		
12/10/2019	2620		
4/8/2020	3120		
11/10/2020	2830		
6/22/2021	3370		
12/15/2021	2970		
5/10/2022	3040		
11/22/2022	3420		
6/1/2023	3760		
8/22/2023	2290	-2.746	3134



Background Data Summary: Mean=3041, Std. Dev.=177, n=13. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9511, critical = 0.866. Report alpha = 0.000492. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 9/18/2023 4:44 PM

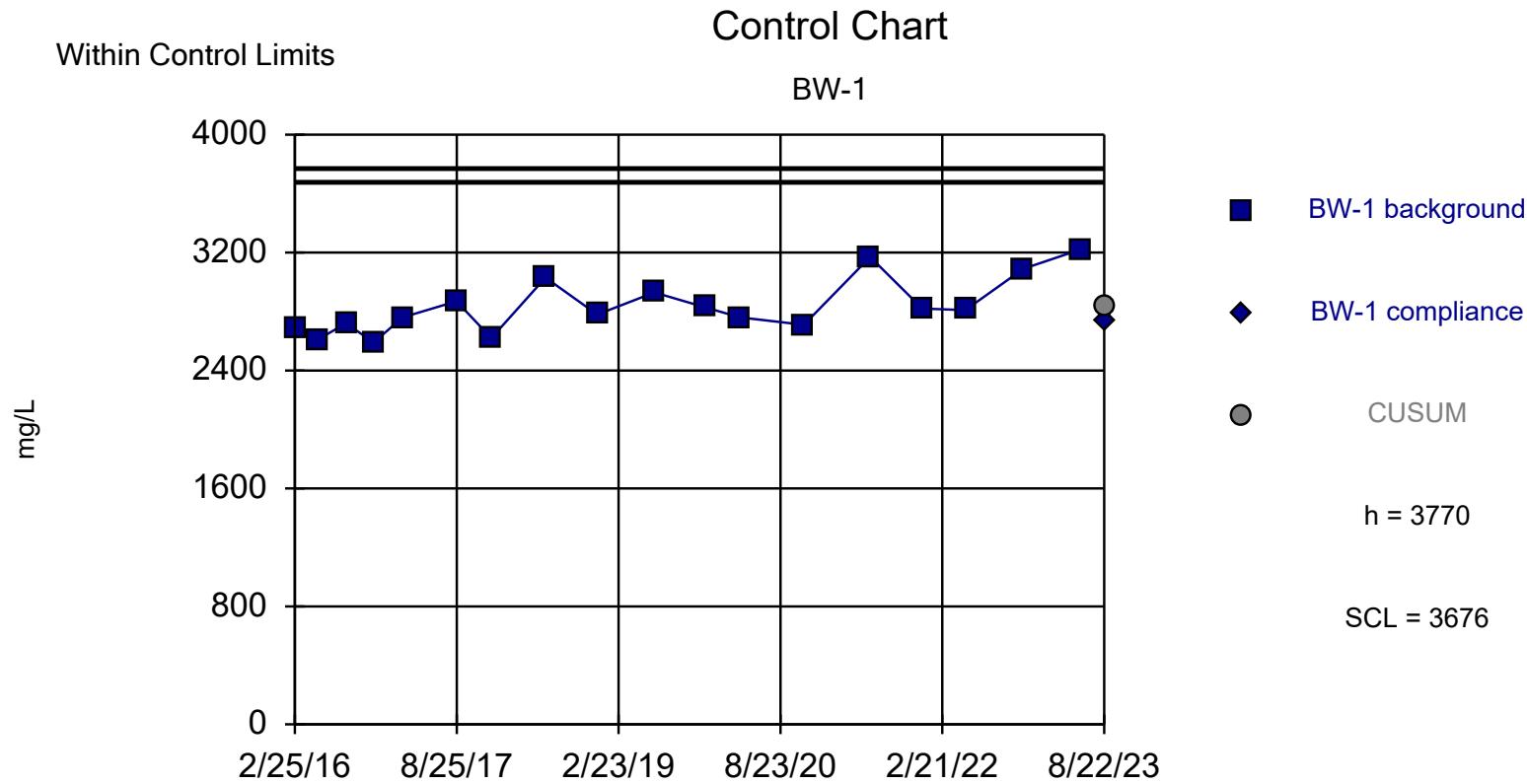
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	MW-3	Std. Mean	CUSUM
8/16/2016	2950			
8/24/2017	2890			
12/20/2017	2830			
6/21/2018	3160			
6/24/2019	3130			
12/10/2019	3140			
4/8/2020	3020			
11/10/2020	2950			
6/22/2021	3170			
12/15/2021	2970			
5/10/2022	2760			
11/22/2022	3130			
6/1/2023	3430			
8/22/2023		3120	0.4475	3041



Background Data Summary: Mean=2834, Std. Dev.=187.2, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9221, critical = 0.897. Report alpha = 0.000206. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 9/18/2023 4:44 PM

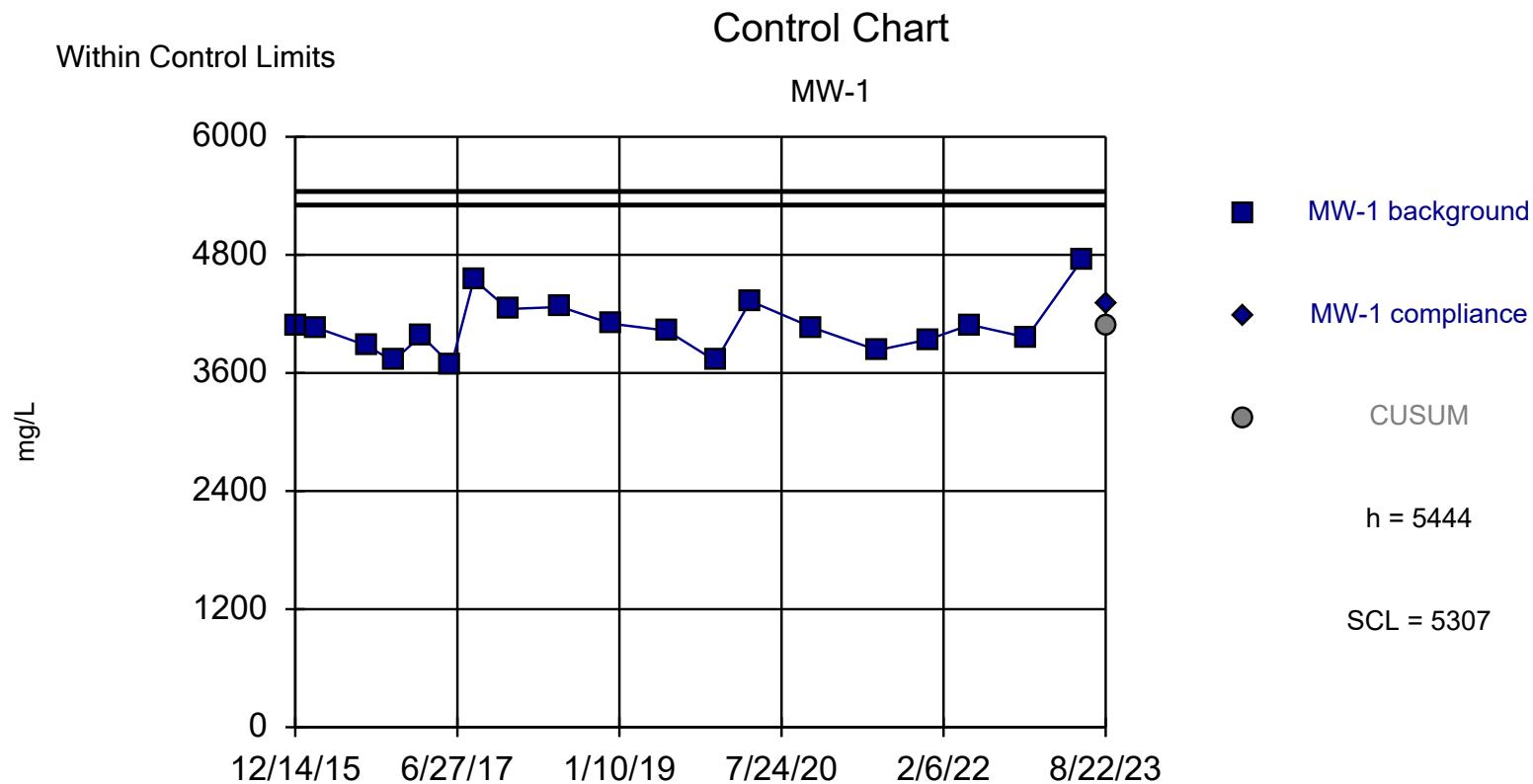
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Sulfate (mg/L) Analysis Run 9/18/2023 4:44 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1	BW-1	Std. Mean	CUSUM
2/25/2016	2690			
5/11/2016	2610			
8/16/2016	2720			
11/17/2016	2590			
2/23/2017	2760			
8/24/2017	2870			
12/20/2017	2620			
6/21/2018	3030			
12/13/2018	2780			
6/24/2019	2930			
12/10/2019	2830			
4/8/2020	2760			
11/10/2020	2710			
6/22/2021	3170			
12/15/2021	2820			
5/10/2022	2810			
11/22/2022	3090			
6/1/2023	3220			
8/22/2023	2740	-0.5016	2834	



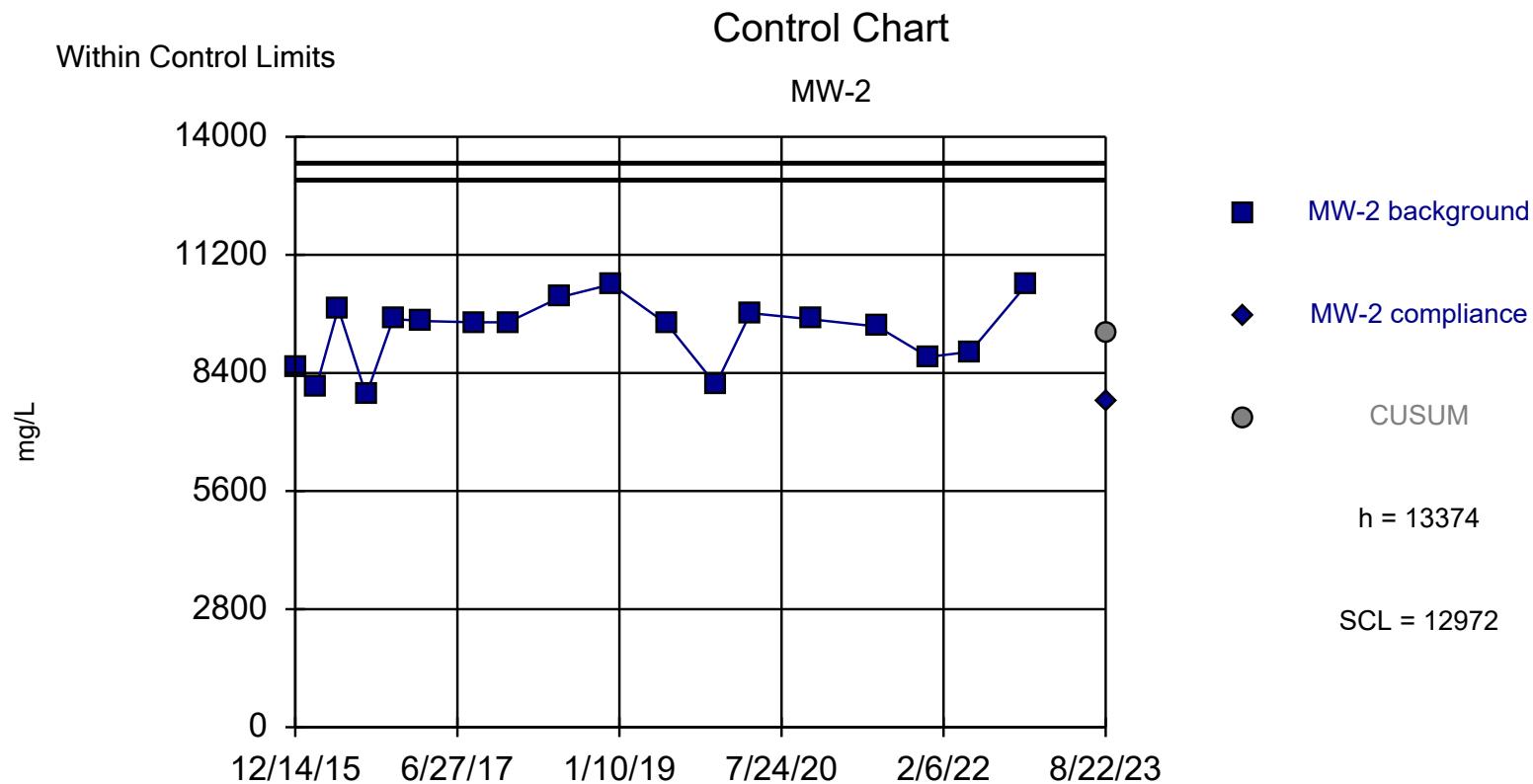
Background Data Summary: Mean=4068, Std. Dev.=275.3, n=19. Seasonality was not detected with 95% confidence.
Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9366, critical = 0.901. Report alpha = 0.000154. Dates ending 6/1/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1	MW-1	Std. Mean	CUSUM
12/14/2015	4090		
2/25/2016	4060		
8/16/2016	3880		
11/17/2016	3720		
2/23/2017	3980		
6/7/2017	3680		
8/24/2017	4550		
12/20/2017	4250		
6/21/2018	4270		
12/13/2018	4100		
6/24/2019	4030		
12/10/2019	3720		
4/8/2020	4330		
11/10/2020	4060		
6/22/2021	3830		
12/15/2021	3940		
5/10/2022	4090		
11/22/2022	3960		
6/1/2023	4750		
8/22/2023	4310	0.8795	4068



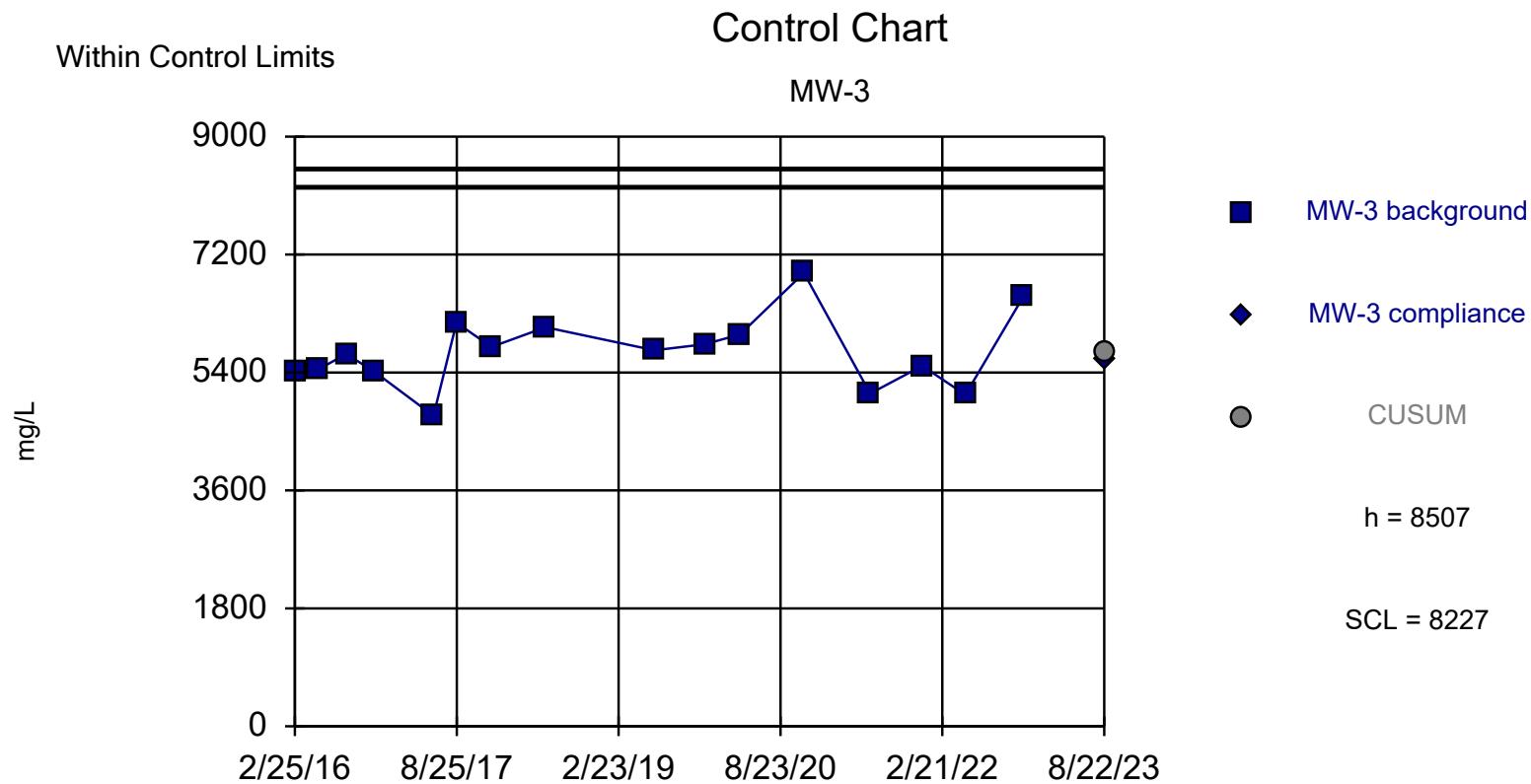
Background Data Summary: Mean=9358, Std. Dev.=803, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9157, critical = 0.897. Report alpha = 0.000214. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-2	MW-2	Std. Mean	CUSUM
12/14/2015	8520			
2/25/2016	8070			
5/11/2016	9930			
8/16/2016	7870			
11/17/2016	9680			
2/23/2017	9630			
8/24/2017	9600			
12/20/2017	9600			
6/21/2018	10200			
12/13/2018	10500			
6/24/2019	9560			
12/10/2019	8120			
4/8/2020	9820			
11/10/2020	9670			
6/22/2021	9500			
12/15/2021	8780			
5/10/2022	8900			
11/22/2022	10500			
8/22/2023		7700	-2.065	9358



Background Data Summary: Mean=5712, Std. Dev.=559, n=16. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9775, critical = 0.887. Report alpha = 0.0003. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

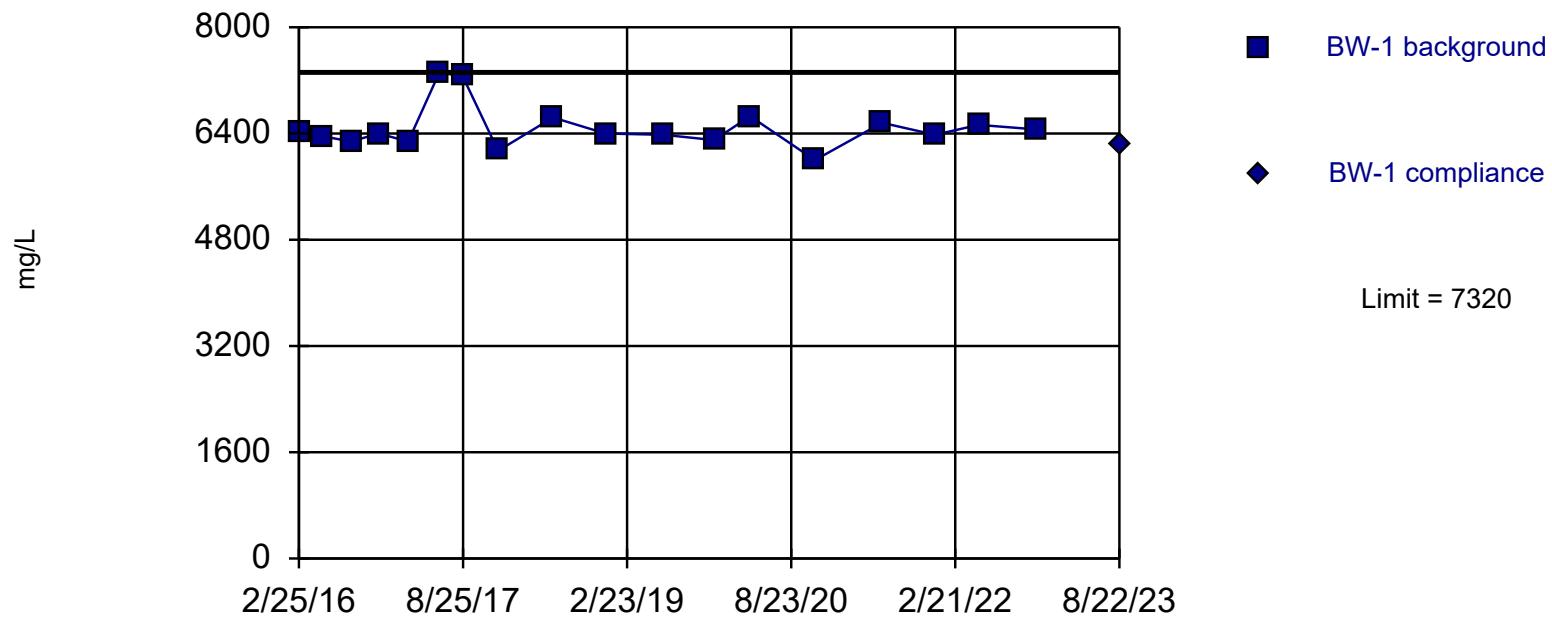
Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	MW-3	Std. Mean	CUSUM
2/25/2016	5400			
5/11/2016	5440			
8/16/2016	5680			
11/17/2016	5420			
6/7/2017	4740			
8/24/2017	6160			
12/20/2017	5790			
6/21/2018	6090			
6/24/2019	5740			
12/10/2019	5830			
4/8/2020	5980			
11/10/2020	6920			
6/22/2021	5080			
12/15/2021	5500			
5/10/2022	5060			
11/22/2022	6560			
8/22/2023	5610	-0.1823	5712	

Within Limit

Prediction Limit

Intrawell Non-parametric



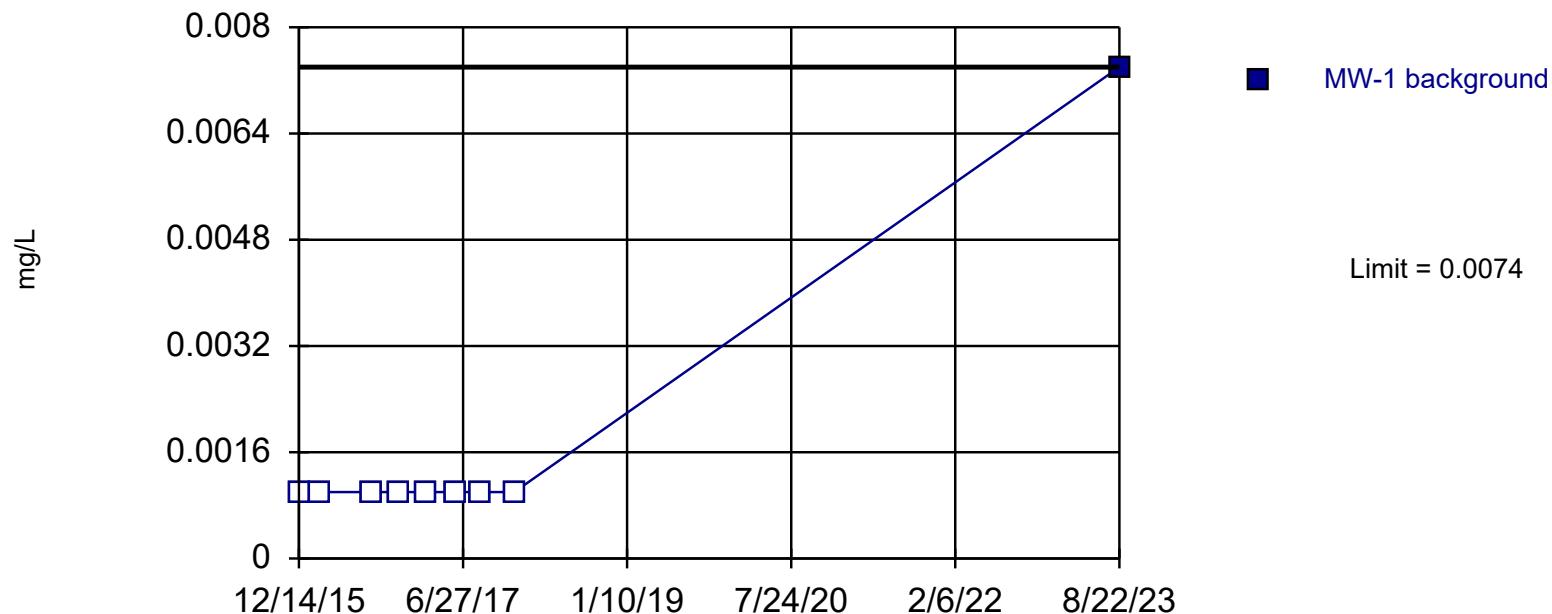
Control Chart Alternate

Constituent: Total Dissolved Solids (mg/L) Analysis Run 9/18/2023 4:44 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	BW-1
2/25/2016	6420
5/11/2016	6360
8/16/2016	6280
11/17/2016	6400
2/23/2017	6280
6/7/2017	7320
8/24/2017	7260
12/20/2017	6140
6/21/2018	6640
12/13/2018	6400
6/24/2019	6380
12/10/2019	6300
4/8/2020	6660
11/10/2020	6000
6/22/2021	6560
12/15/2021	6380
5/10/2022	6530
11/22/2022	6460
8/22/2023	6250

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 9 background values. 88.89% NDs. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 9/18/2023 4:34 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

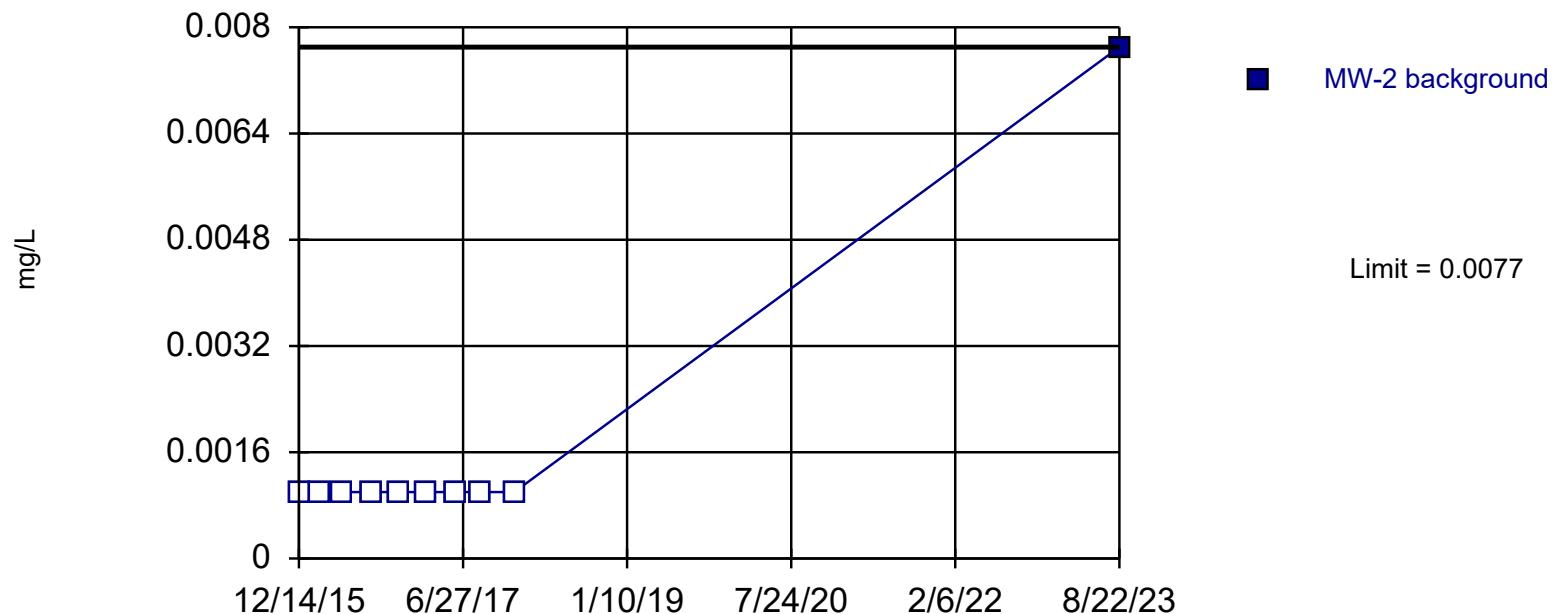
Control Chart Alternate

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.001
2/25/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 0.0074

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

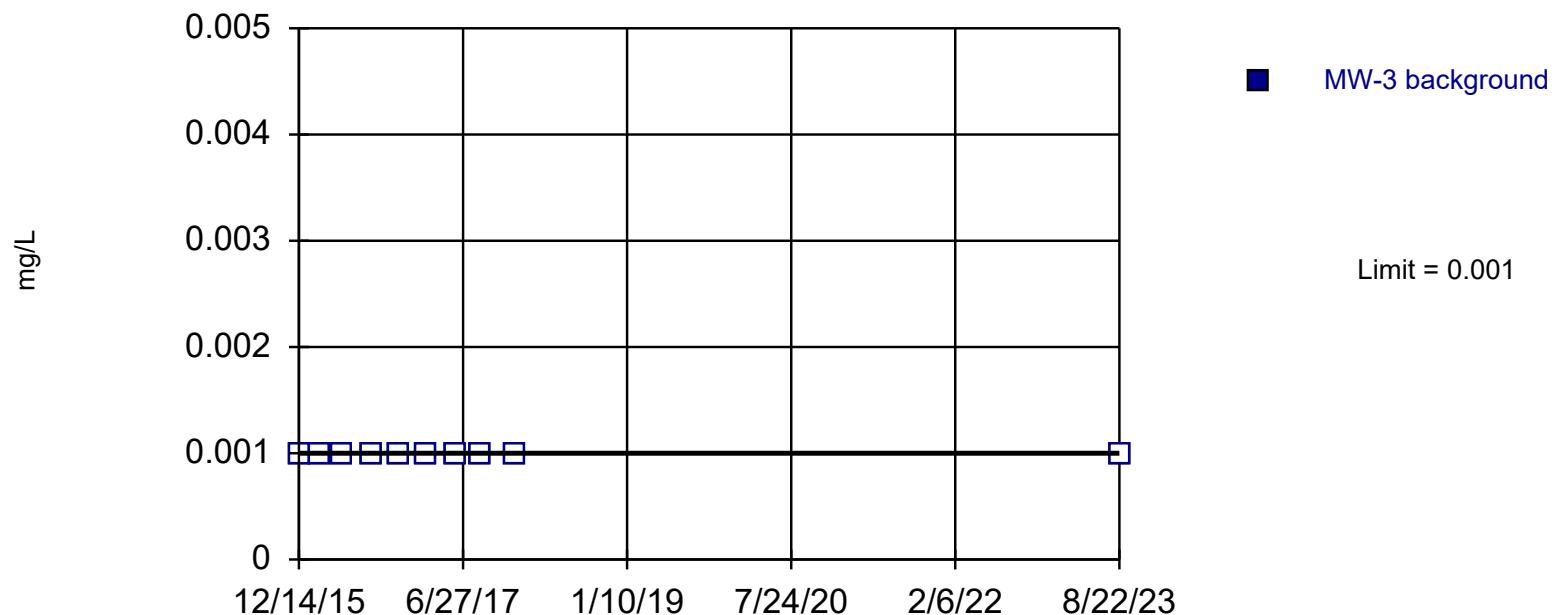
Control Chart Alternate

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 0.0077

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

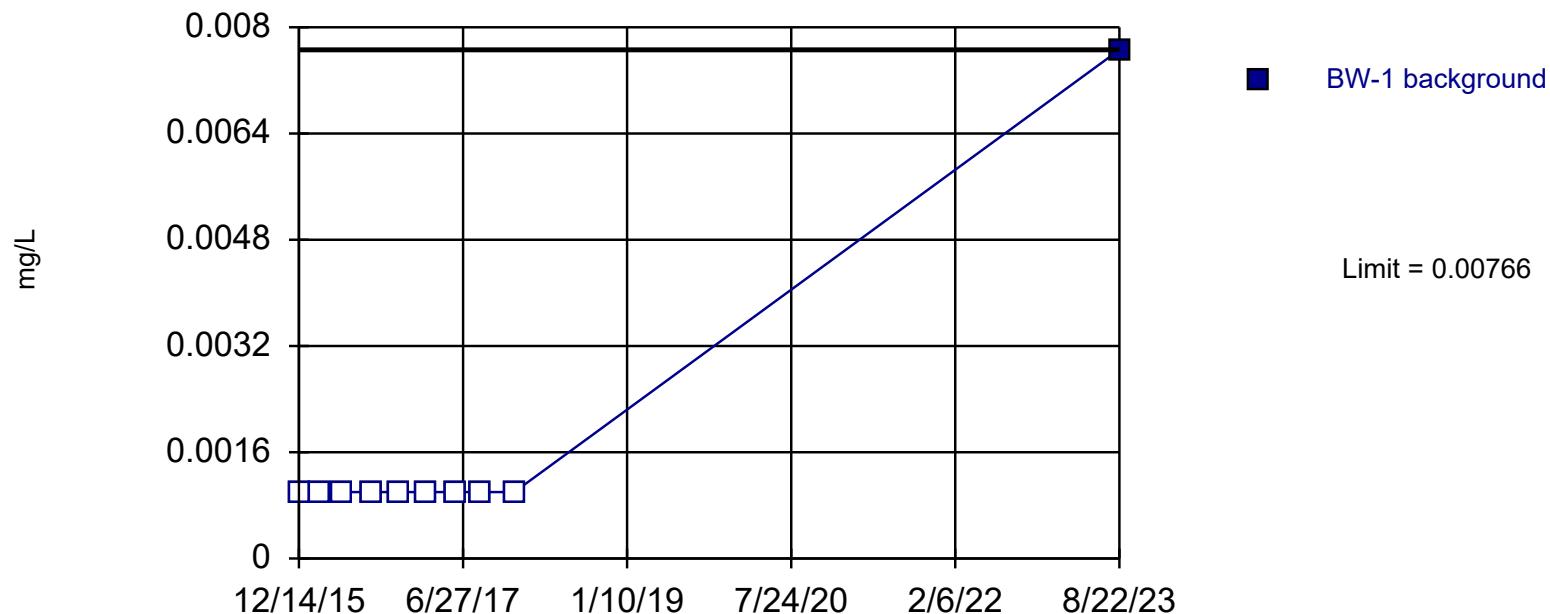
Control Chart Alternate

Constituent: Antimony (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 <0.001

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

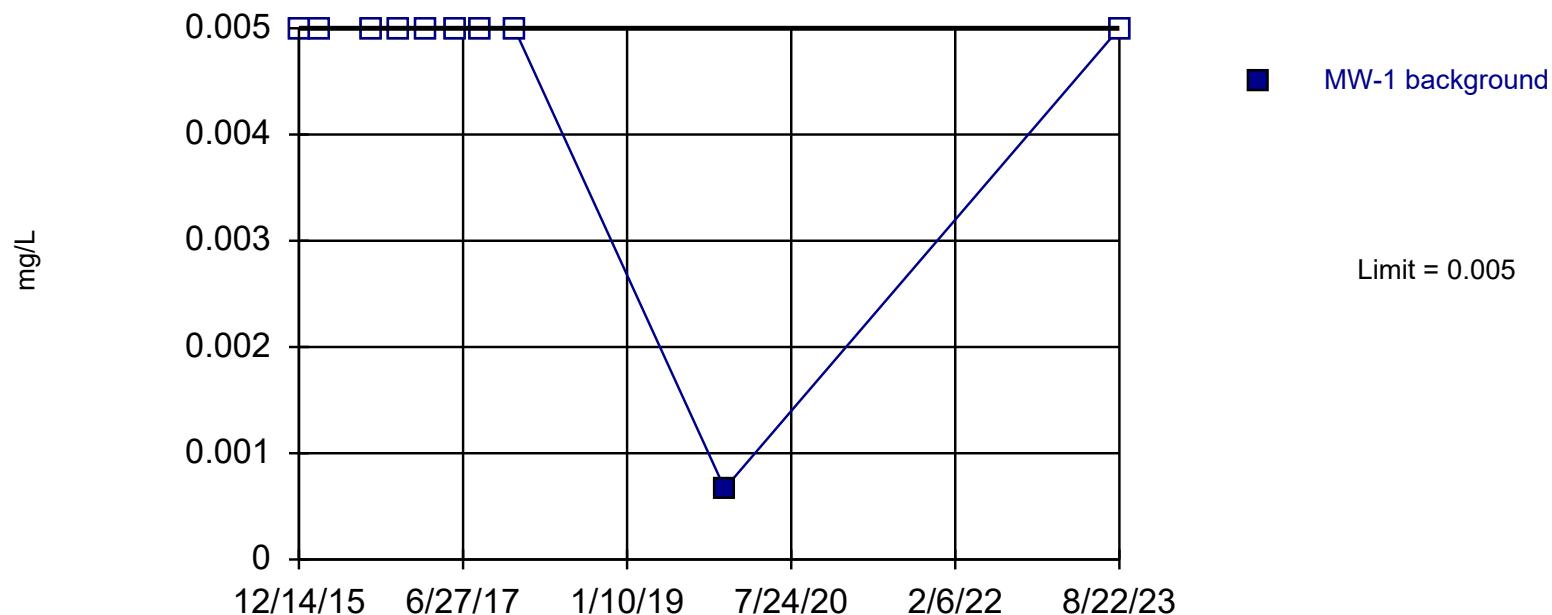
Constituent: Antimony (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 0.00766

Sanitas™ v.9.6.37 Sanitas software licensed to SCS Engineers. EPA
Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

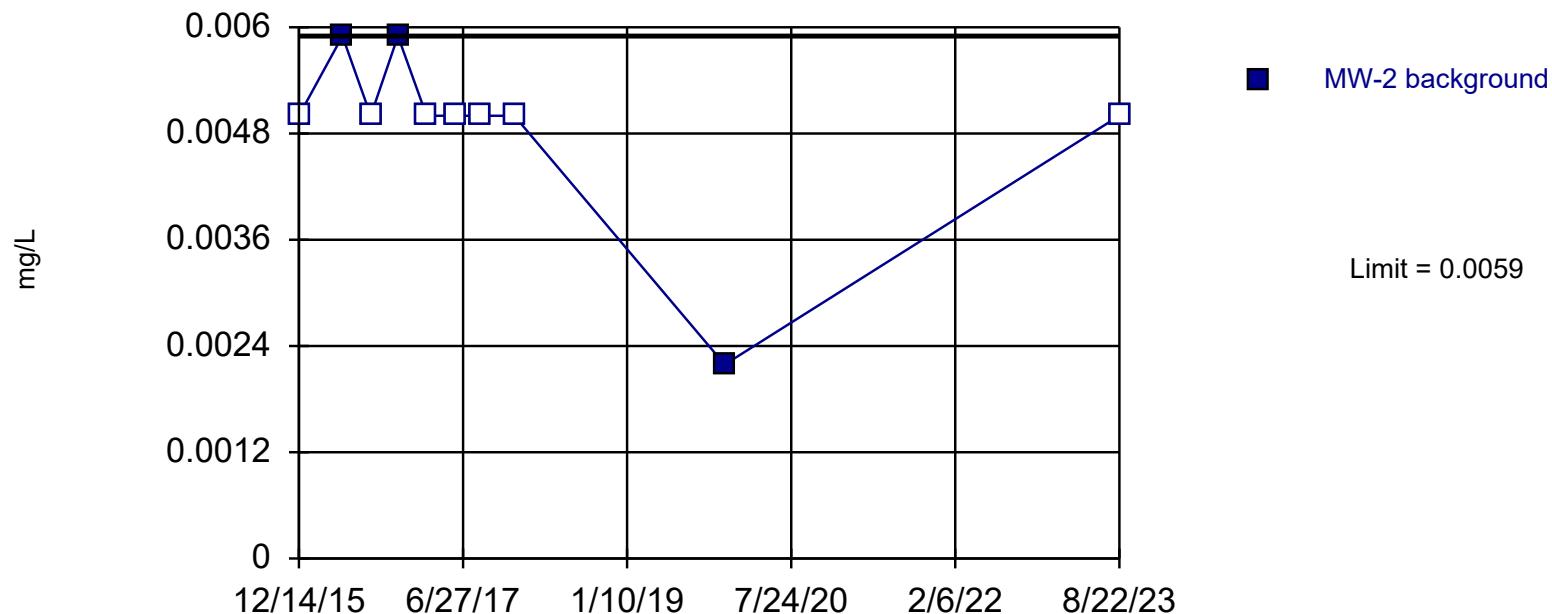
Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.005
2/25/2016	<0.005
8/16/2016	<0.005
11/17/2016	<0.005
2/23/2017	<0.005
6/7/2017	<0.005
8/24/2017	<0.005
12/20/2017	<0.005
12/10/2019	0.000667
8/22/2023	<0.005

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 70% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

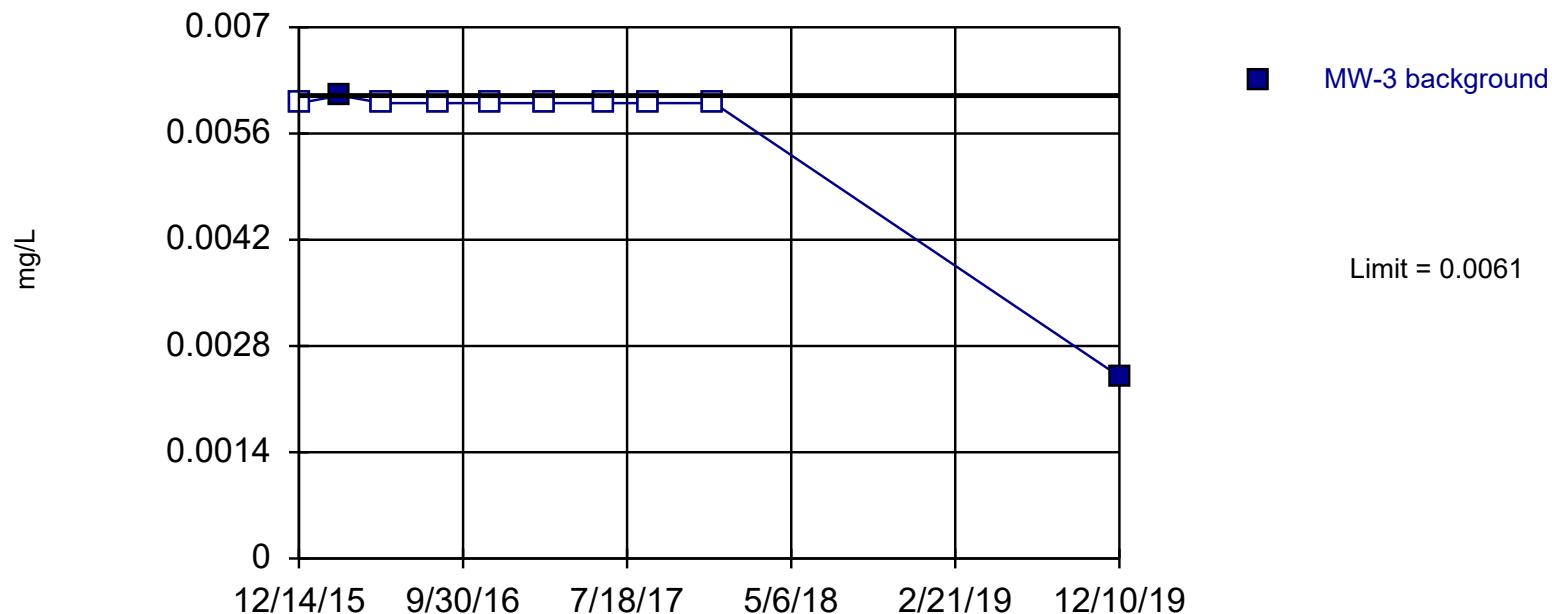
Control Chart Alternate

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.005
5/11/2016 0.0059
8/16/2016 <0.005
11/17/2016 0.0059
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
12/10/2019 0.00219
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 80% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

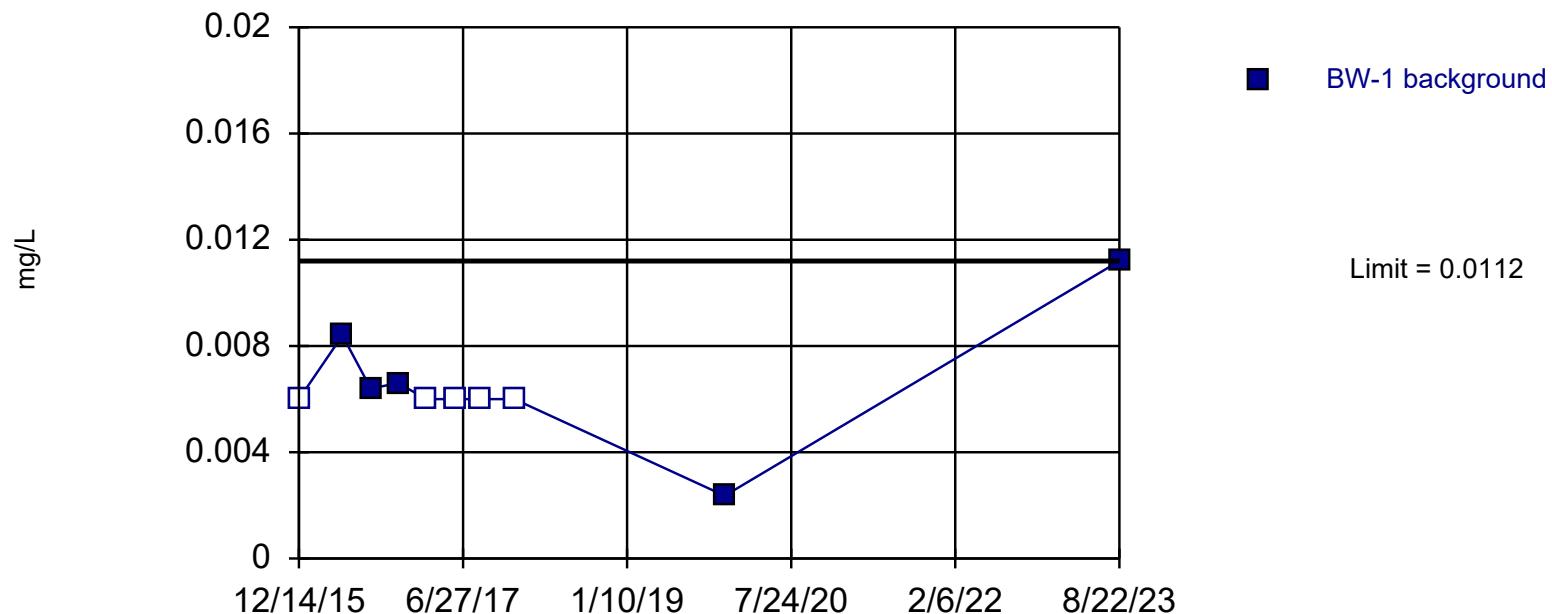
Control Chart Alternate

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.006
2/25/2016 0.0061
5/11/2016 <0.006
8/16/2016 <0.006
11/17/2016 <0.006
2/23/2017 <0.006
6/7/2017 <0.006
8/24/2017 <0.006
12/20/2017 <0.006
12/10/2019 0.0024

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 10 background values. 50% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 9/18/2023 4:35 PM

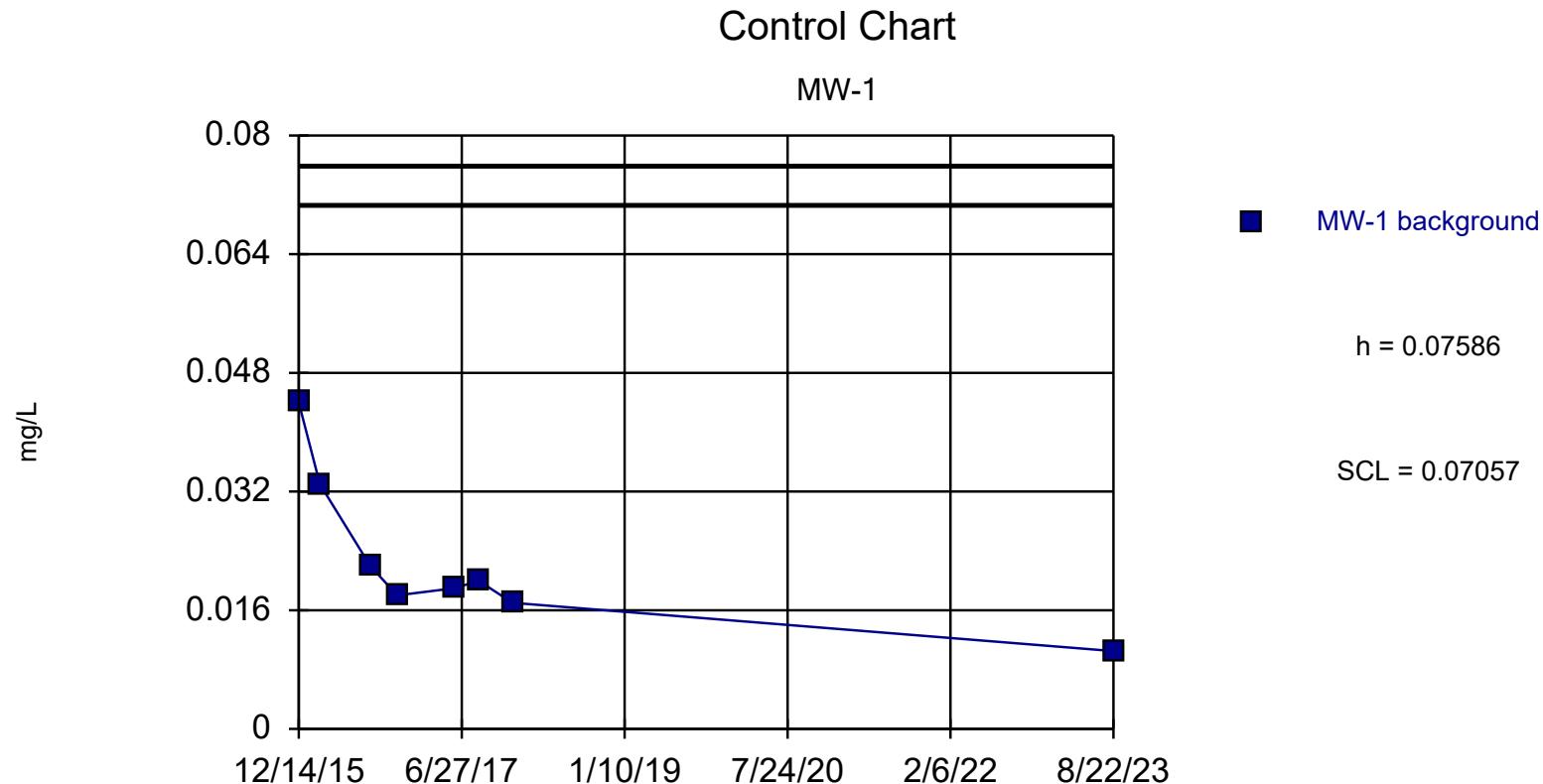
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Arsenic (mg/L) Analysis Run 9/18/2023 4:40 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.006
5/11/2016 0.0084
8/16/2016 0.0064
11/17/2016 0.0066
2/23/2017 <0.006
6/7/2017 <0.006
8/24/2017 <0.006
12/20/2017 <0.006
12/10/2019 0.00236
8/22/2023 0.0112



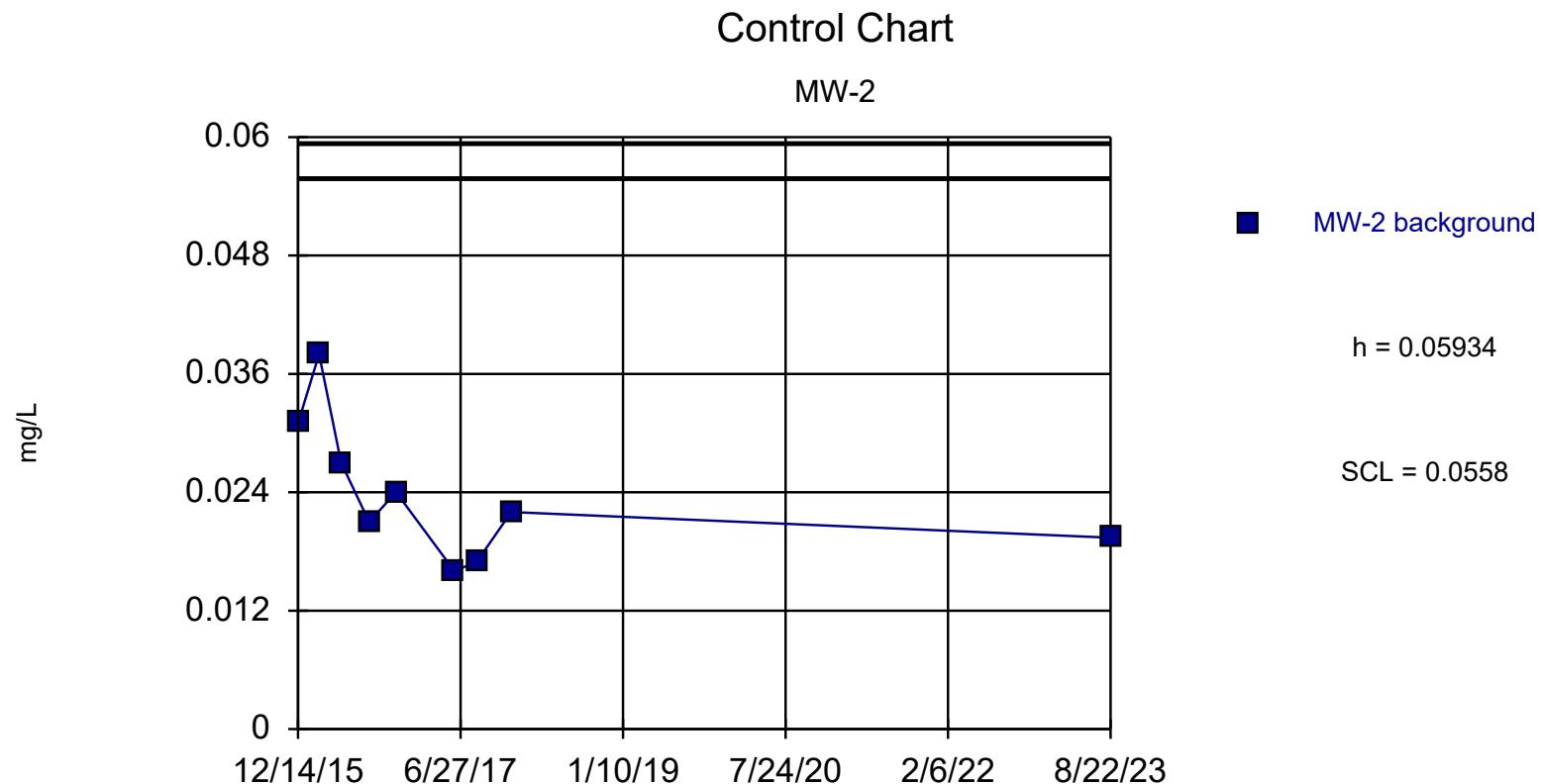
Background Data Summary: Mean=0.02294, Std. Dev.=0.01058, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.868, critical = 0.818. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Barium Analysis Run 9/20/2023 12:07 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Barium (mg/L) Analysis Run 9/20/2023 12:09 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 0.044
2/25/2016 0.033
8/16/2016 0.022
11/17/2016 0.018
6/7/2017 0.019
8/24/2017 0.02
12/20/2017 0.017
8/22/2023 0.0105



Background Data Summary: Mean=0.02393, Std. Dev.=0.007081, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9268, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

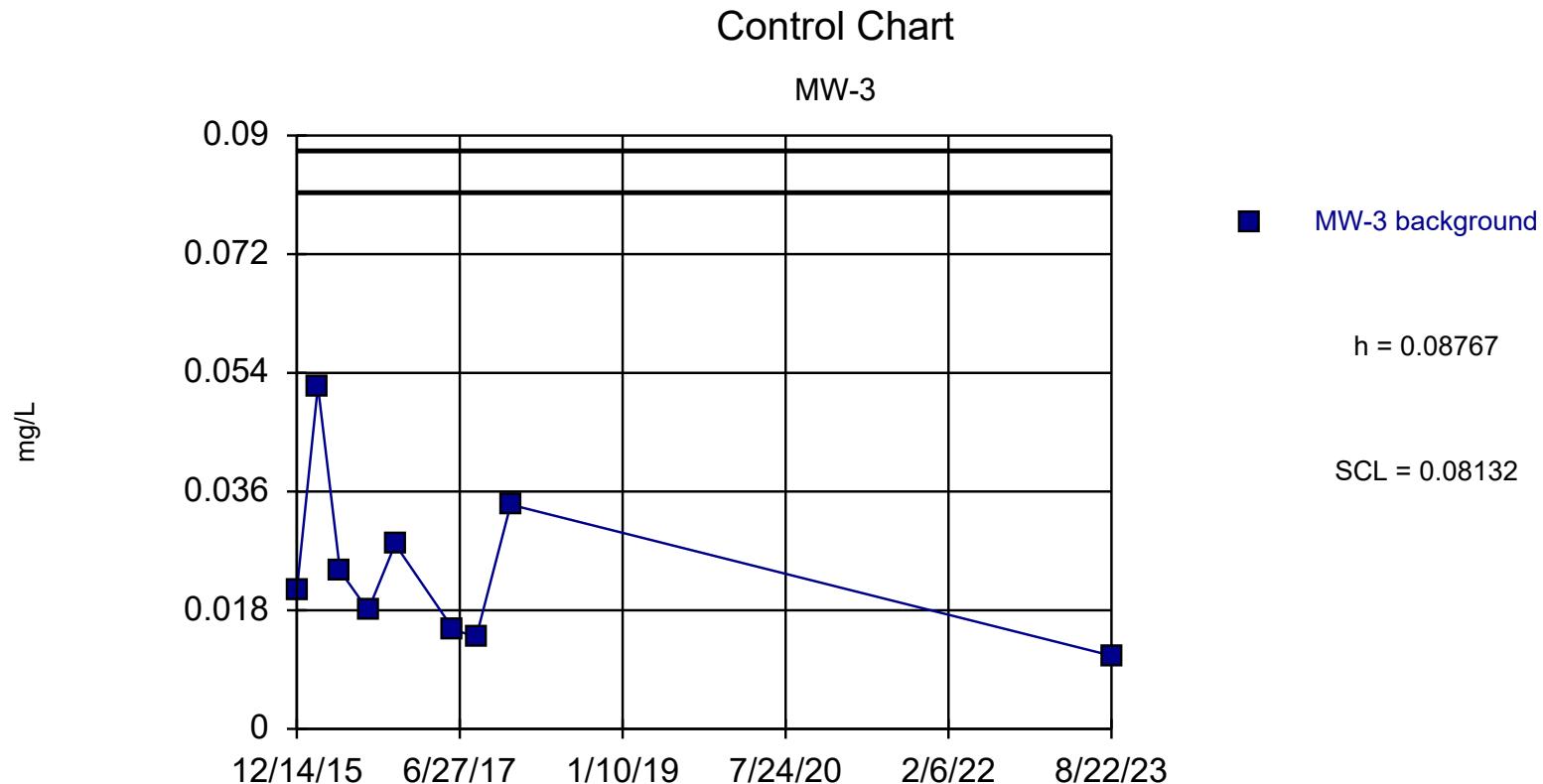
Constituent: Barium Analysis Run 9/20/2023 12:07 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Barium (mg/L) Analysis Run 9/20/2023 12:09 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 0.031
2/25/2016 0.038
5/11/2016 0.027
8/16/2016 0.021
11/17/2016 0.024
6/7/2017 0.016
8/24/2017 0.017
12/20/2017 0.022
8/22/2023 0.0194



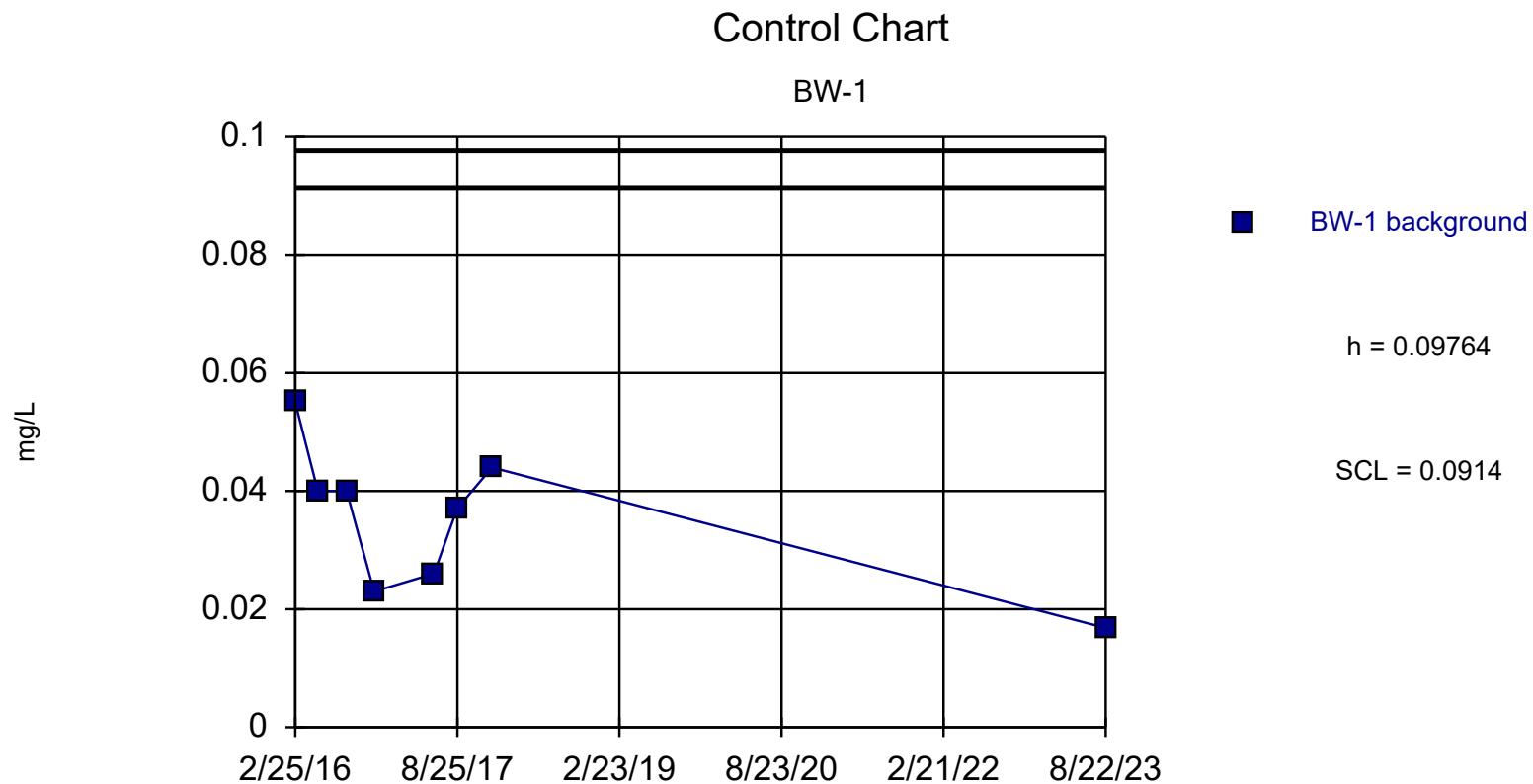
Background Data Summary: Mean=0.02412, Std. Dev.=0.01271, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8792, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Barium Analysis Run 9/20/2023 12:07 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Barium (mg/L) Analysis Run 9/20/2023 12:09 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 0.021
2/25/2016 0.052
5/11/2016 0.024
8/16/2016 0.018
11/17/2016 0.028
6/7/2017 0.015
8/24/2017 0.014
12/20/2017 0.034
8/22/2023 0.0111



Background Data Summary: Mean=0.03523, Std. Dev.=0.01248, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9607, critical = 0.818. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Barium Analysis Run 9/20/2023 12:07 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

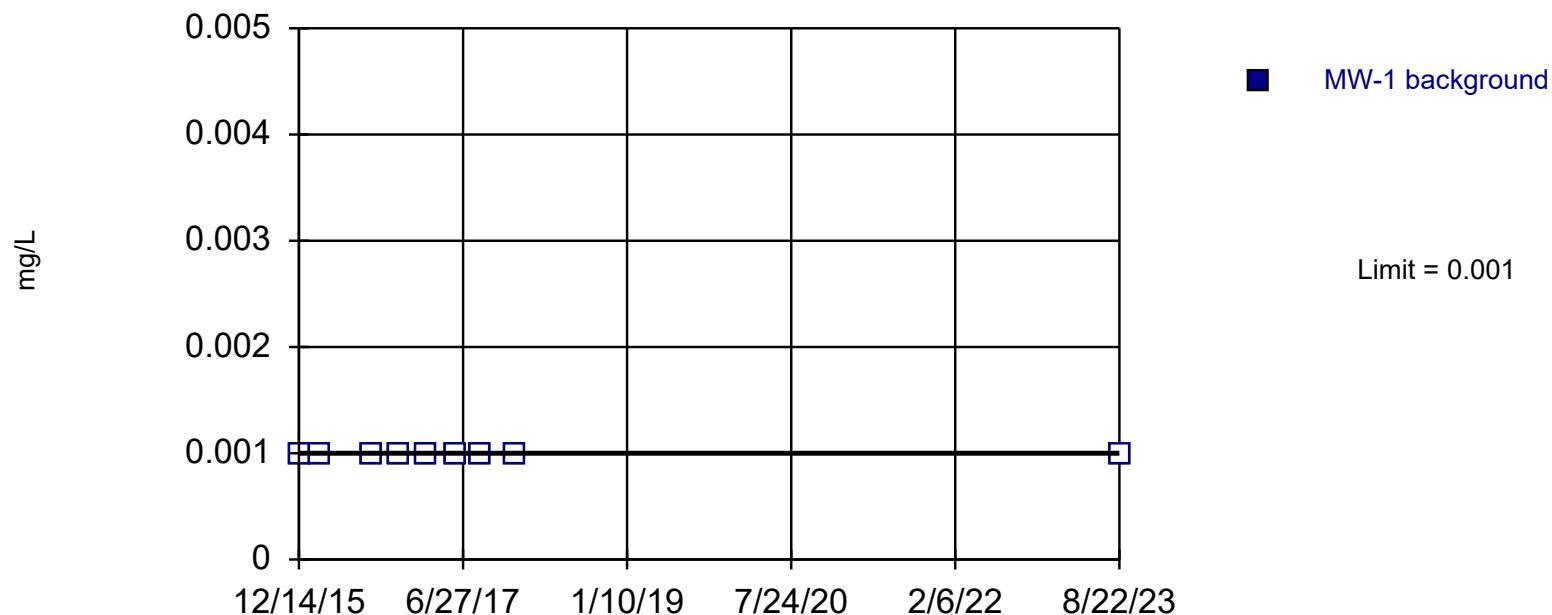
Control Chart

Constituent: Barium (mg/L) Analysis Run 9/20/2023 12:09 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1
2/25/2016	0.055
5/11/2016	0.04
8/16/2016	0.04
11/17/2016	0.023
6/7/2017	0.026
8/24/2017	0.037
12/20/2017	0.044
8/22/2023	0.0168

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

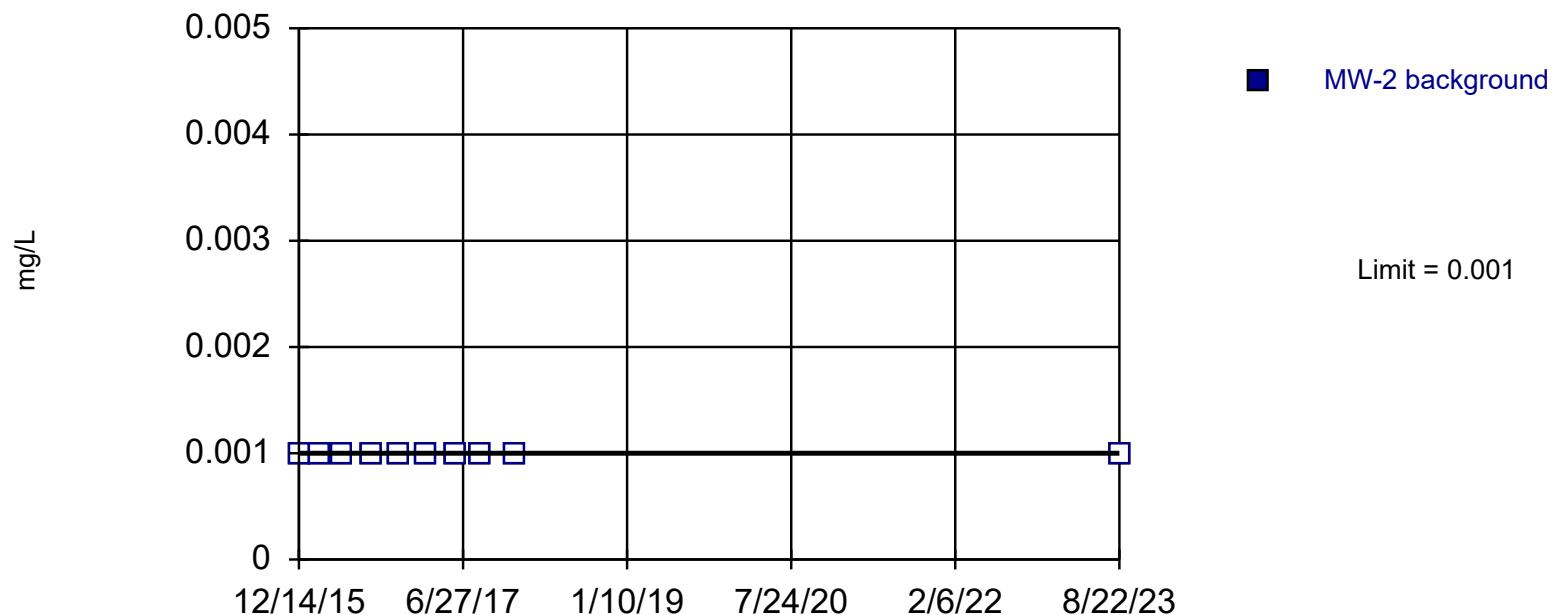
Control Chart Alternate

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.001
2/25/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 <0.001

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

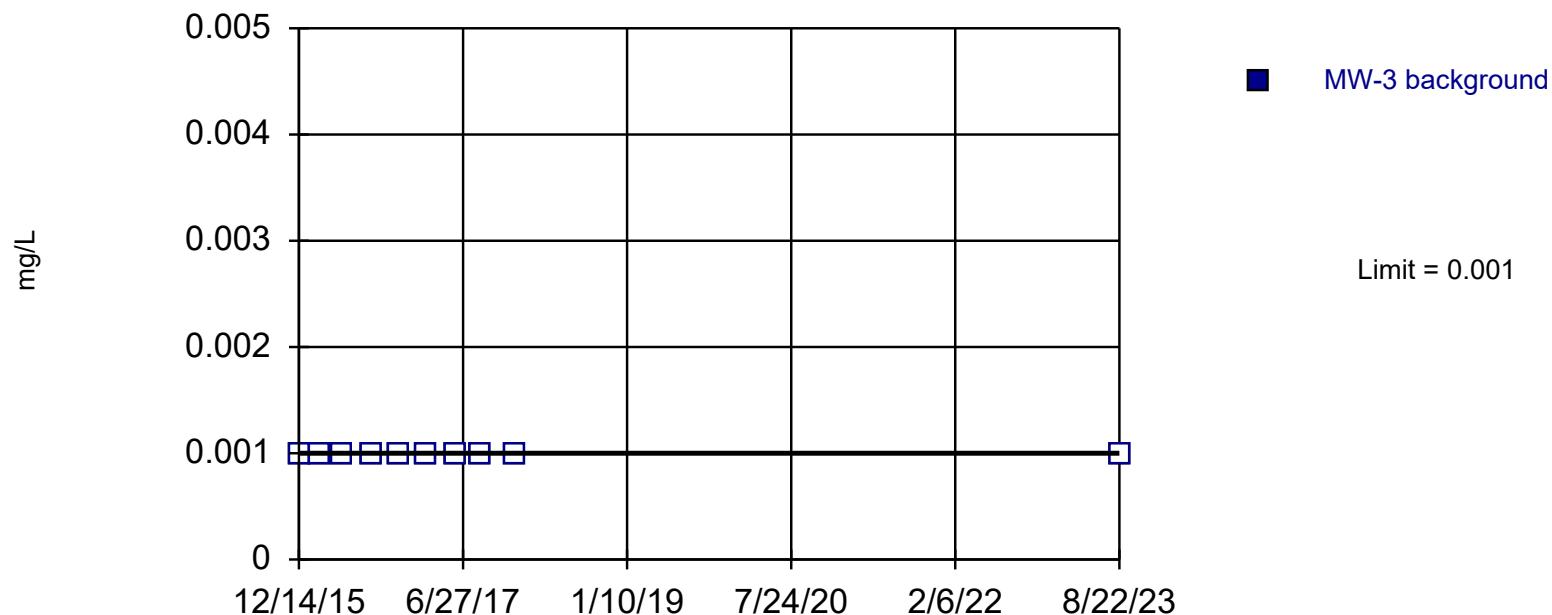
Control Chart Alternate

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 <0.001

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

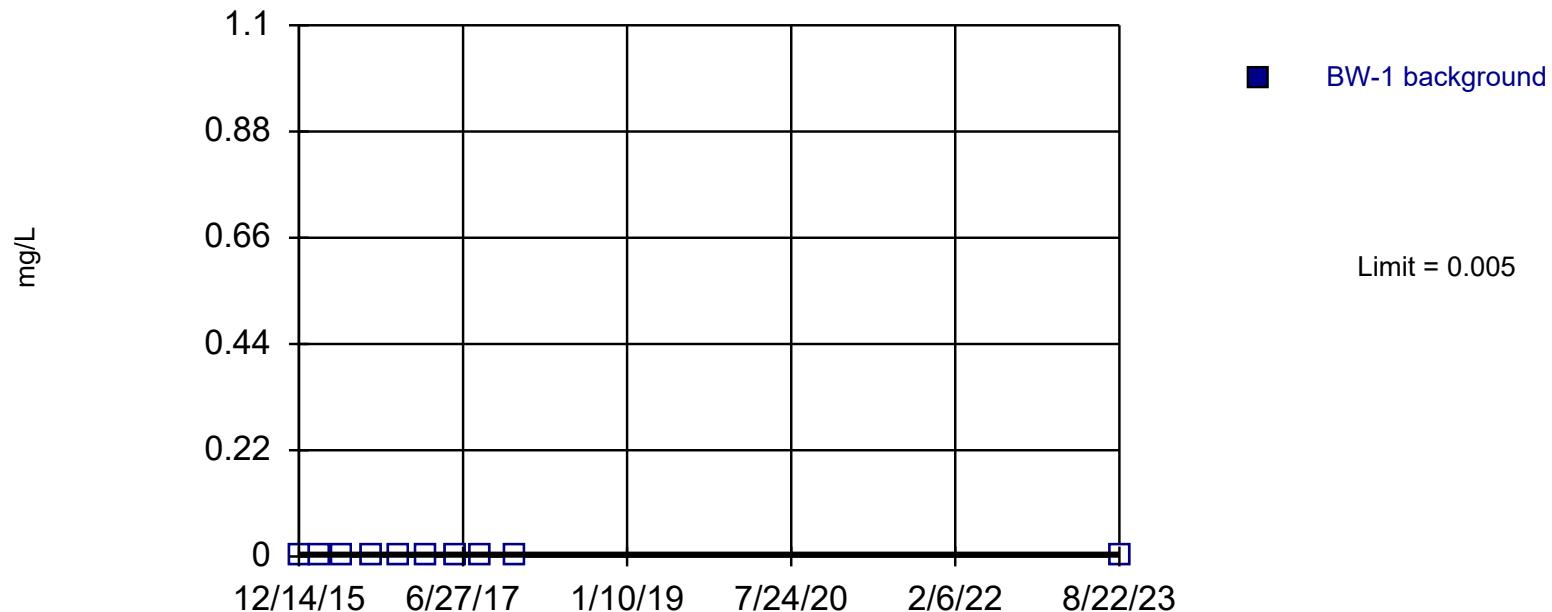
Control Chart Alternate

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.001
2/25/2016 <0.001
5/11/2016 <0.001
8/16/2016 <0.001
11/17/2016 <0.001
2/23/2017 <0.001
6/7/2017 <0.001
8/24/2017 <0.001
12/20/2017 <0.001
8/22/2023 <0.001

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

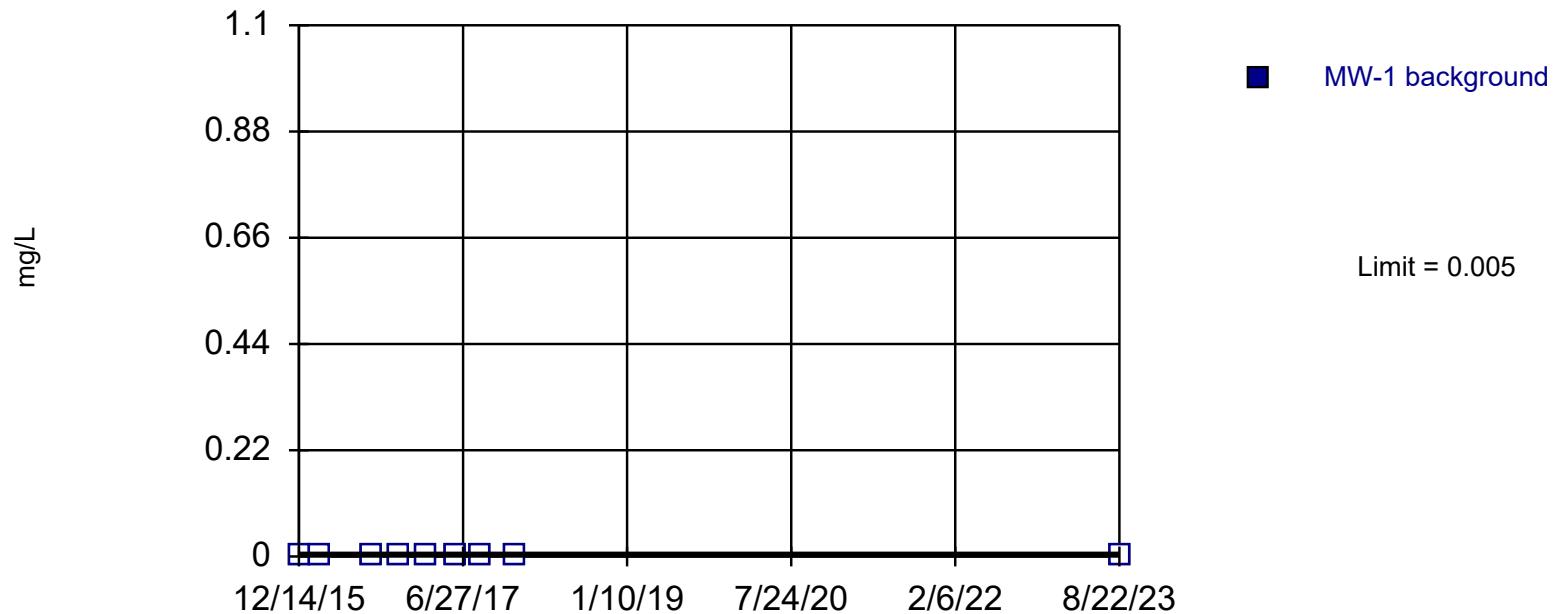
Control Chart Alternate

Constituent: Beryllium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

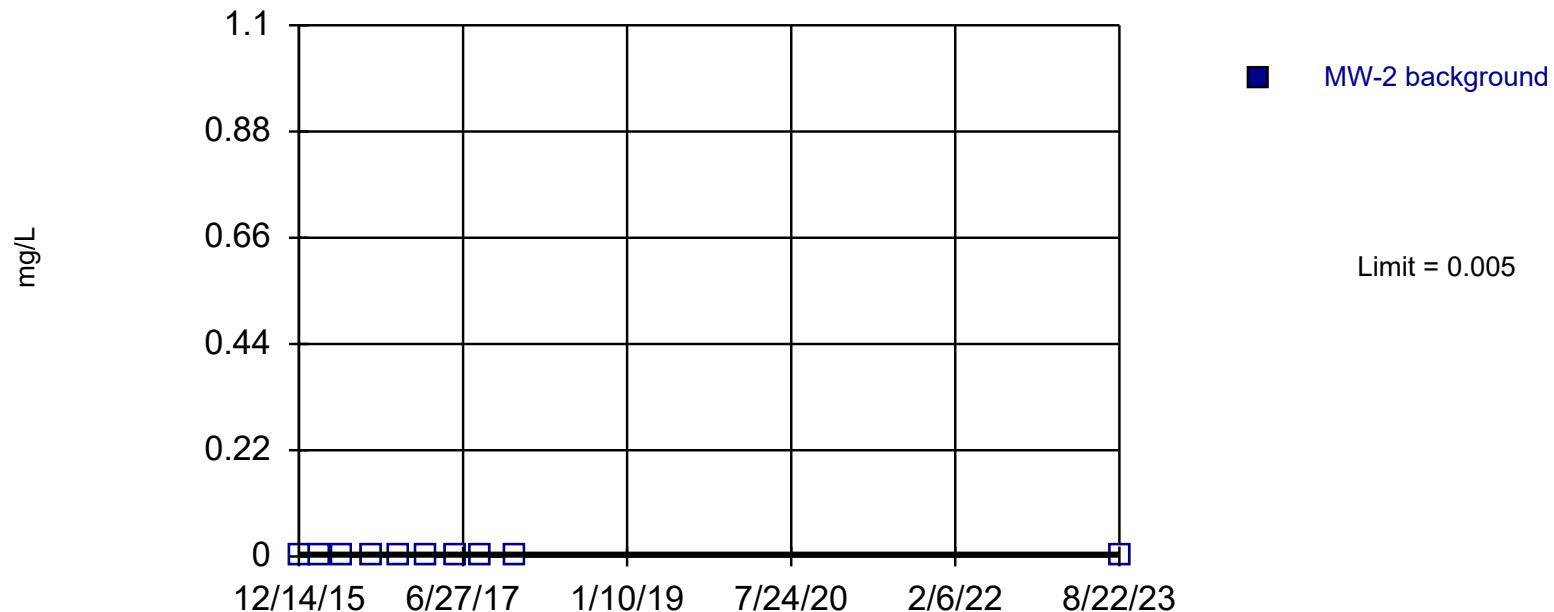
Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.005
2/25/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

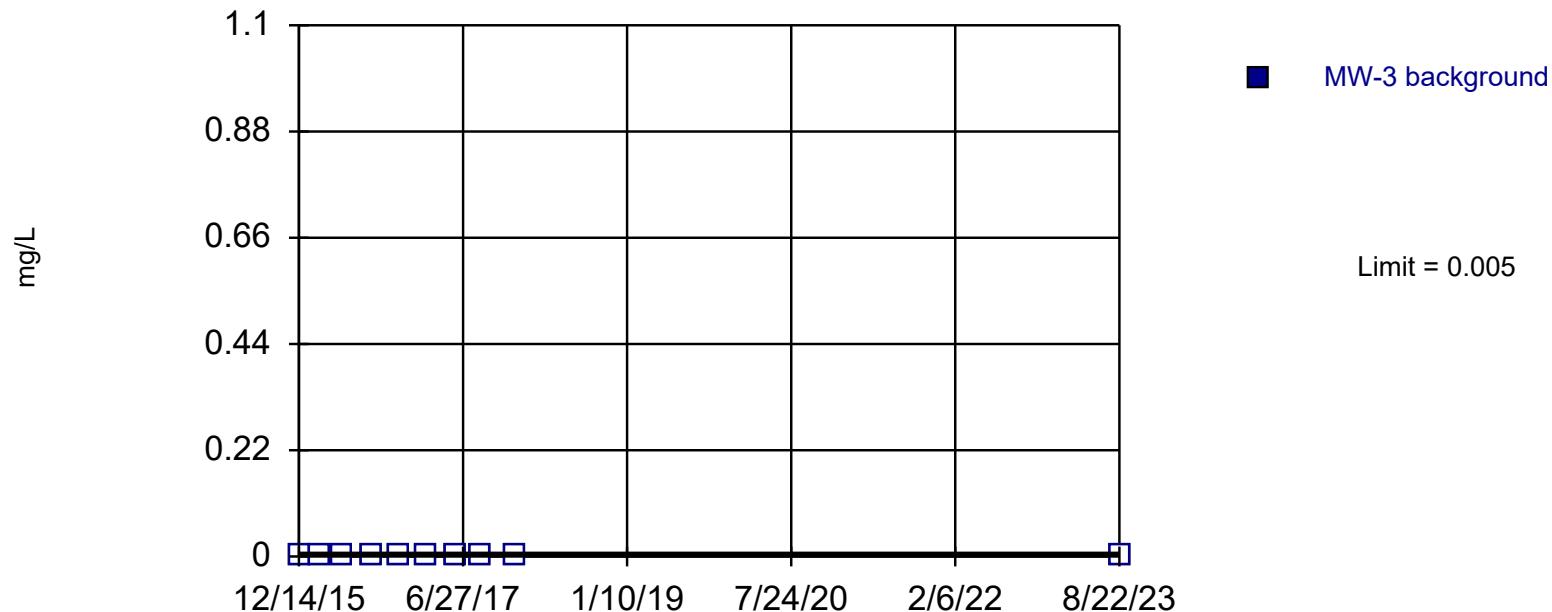
Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

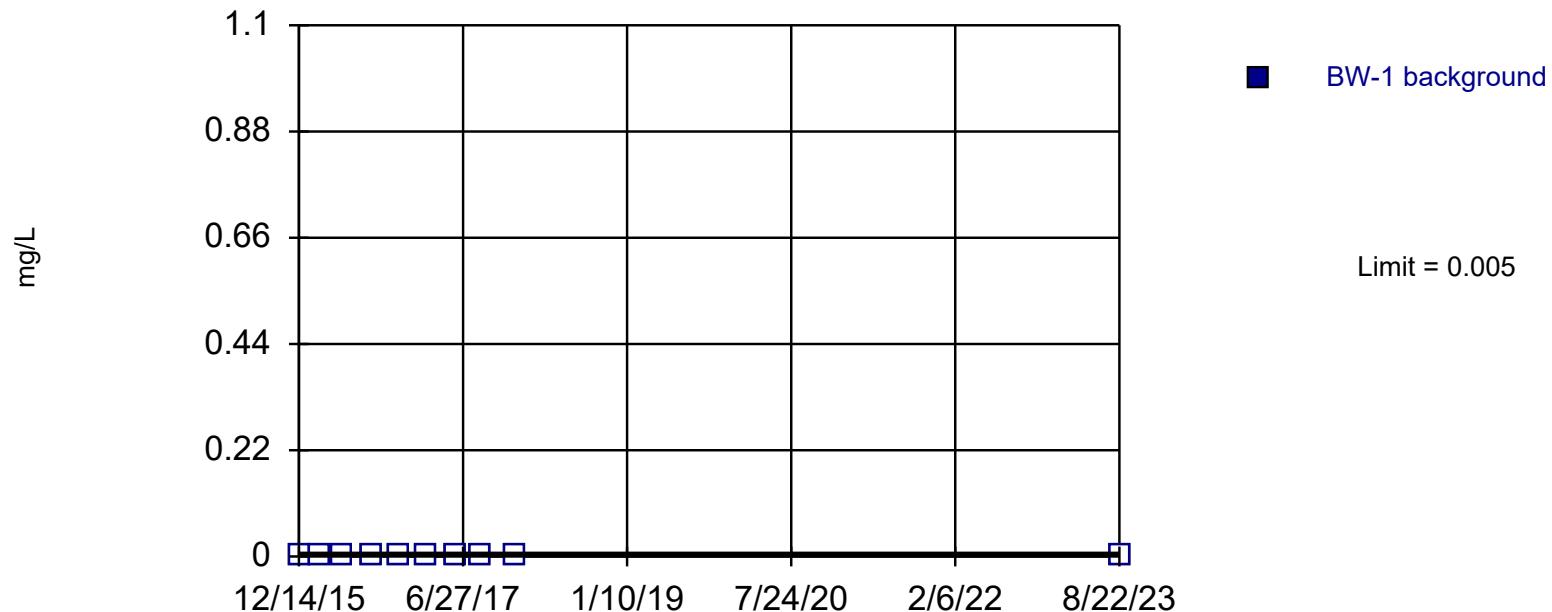
Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

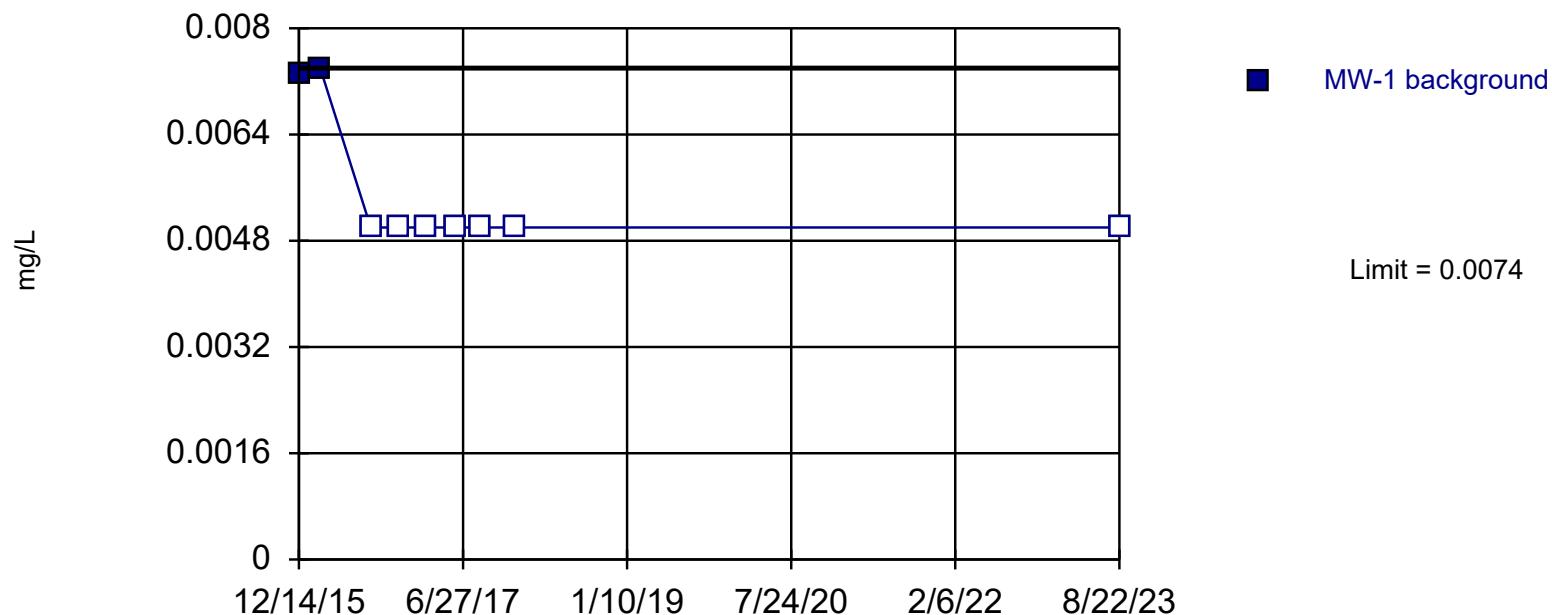
Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 9 background values. 77.78% NDs. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

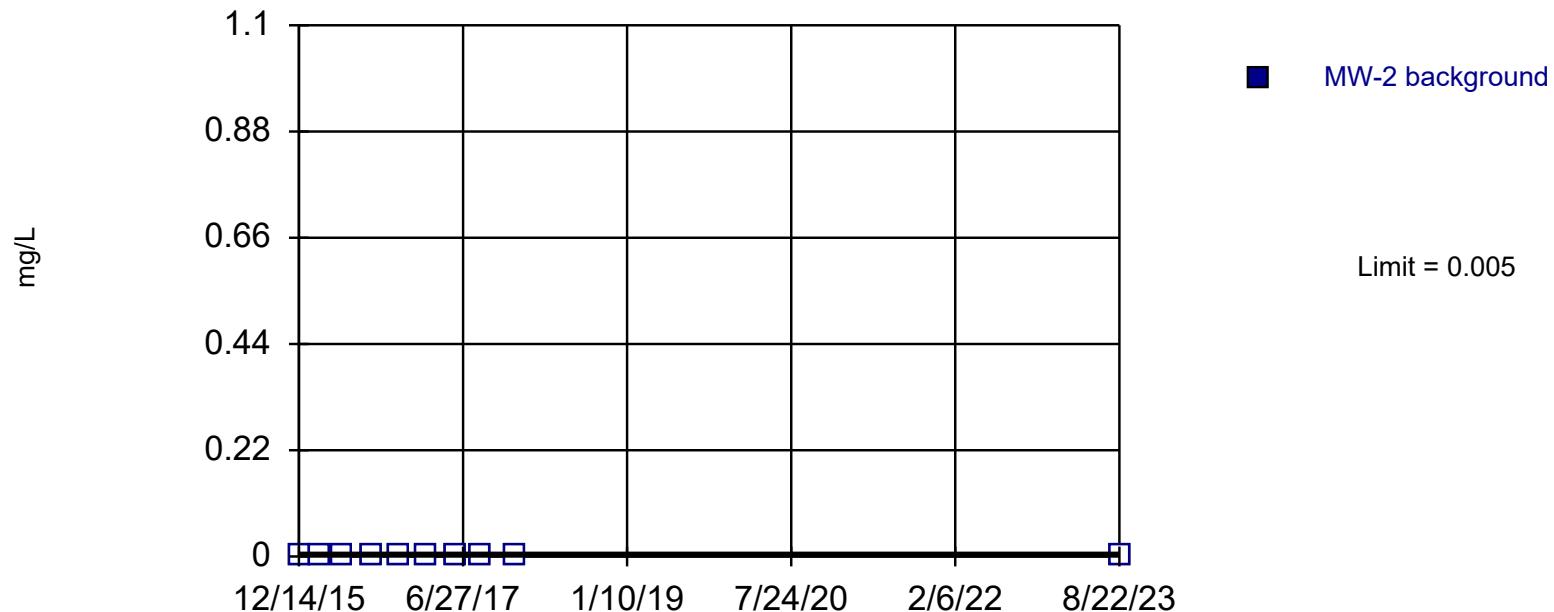
Control Chart Alternate

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 0.0073
2/25/2016 0.0074
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

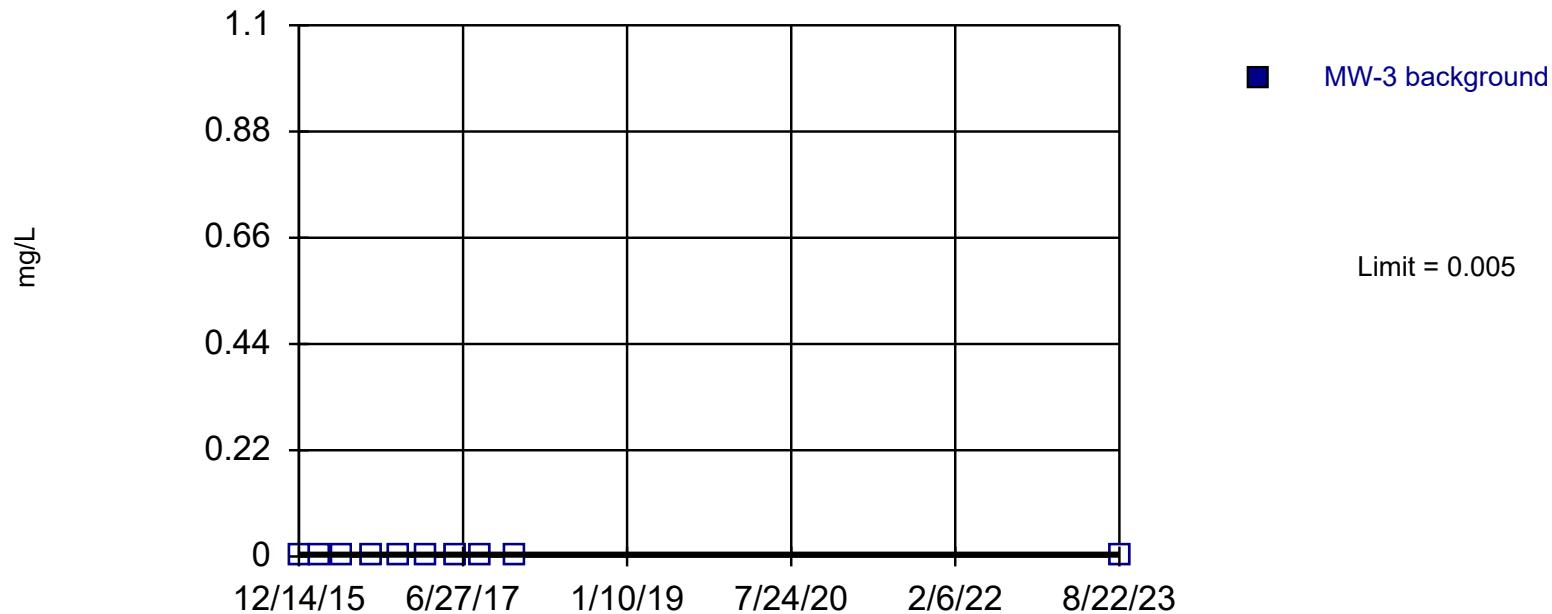
Control Chart Alternate

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 9/18/2023 4:35 PM

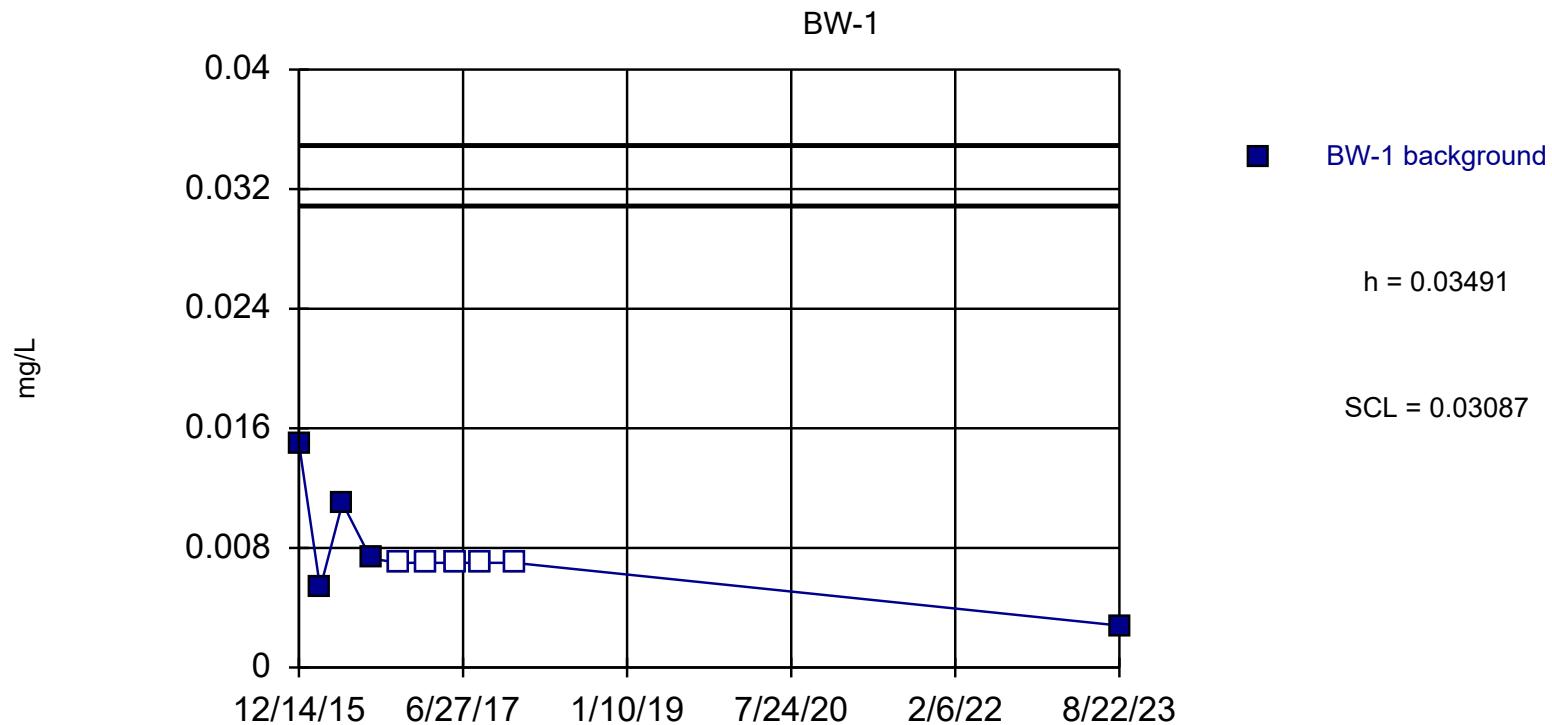
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Chromium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.005
2/25/2016 <0.005
5/11/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Control Chart



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.07528, Std. Dev.=0.02231, n=10, 50% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8673, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Chromium Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

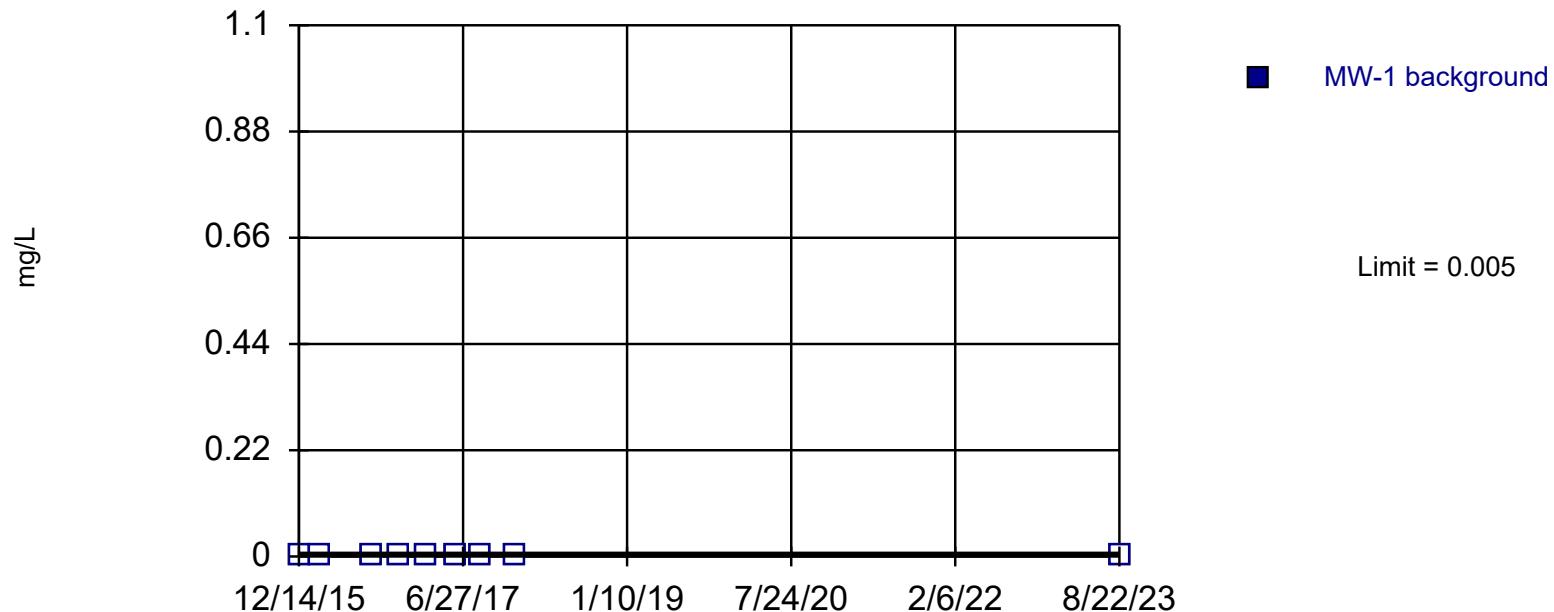
Constituent: Chromium (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	Square Root
12/14/2015	0.015
2/25/2016	0.0053
5/11/2016	0.011
8/16/2016	0.0073
11/17/2016	<0.007
2/23/2017	<0.007
6/7/2017	<0.007
8/24/2017	<0.007
12/20/2017	<0.007
8/22/2023	0.0028
	0.1225
	0.0728
	0.1049
	0.08544
	0.08367
	0.08367
	0.08367
	0.08367
	0.05292

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

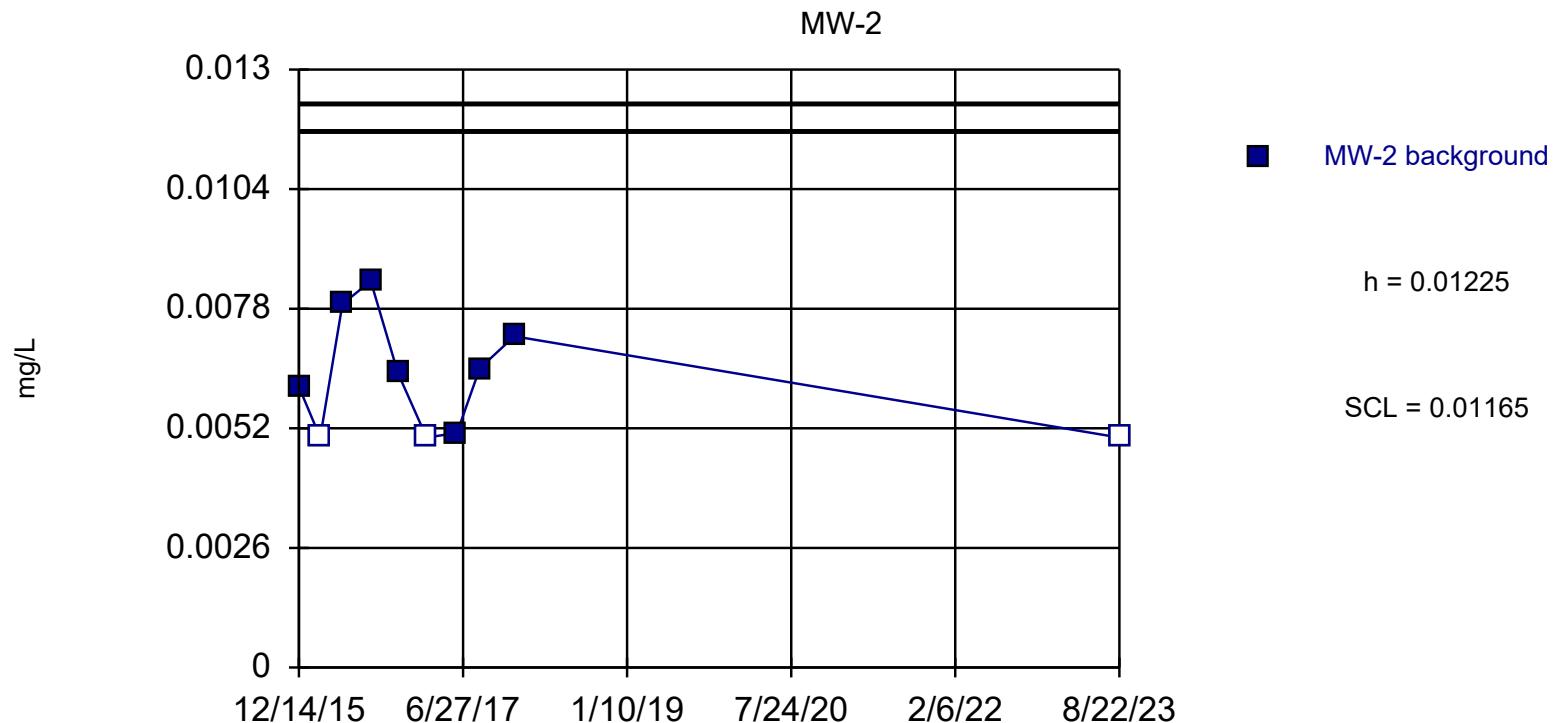
Constituent: Cobalt Analysis Run 9/18/2023 4:35 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.005
2/25/2016 <0.005
8/16/2016 <0.005
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 <0.005
8/22/2023 <0.005

Control Chart



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00626, Std. Dev.=0.001198, n=10, 30% NDs.
Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05,
calculated = 0.8823, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized
h=5, SCL=4.5.

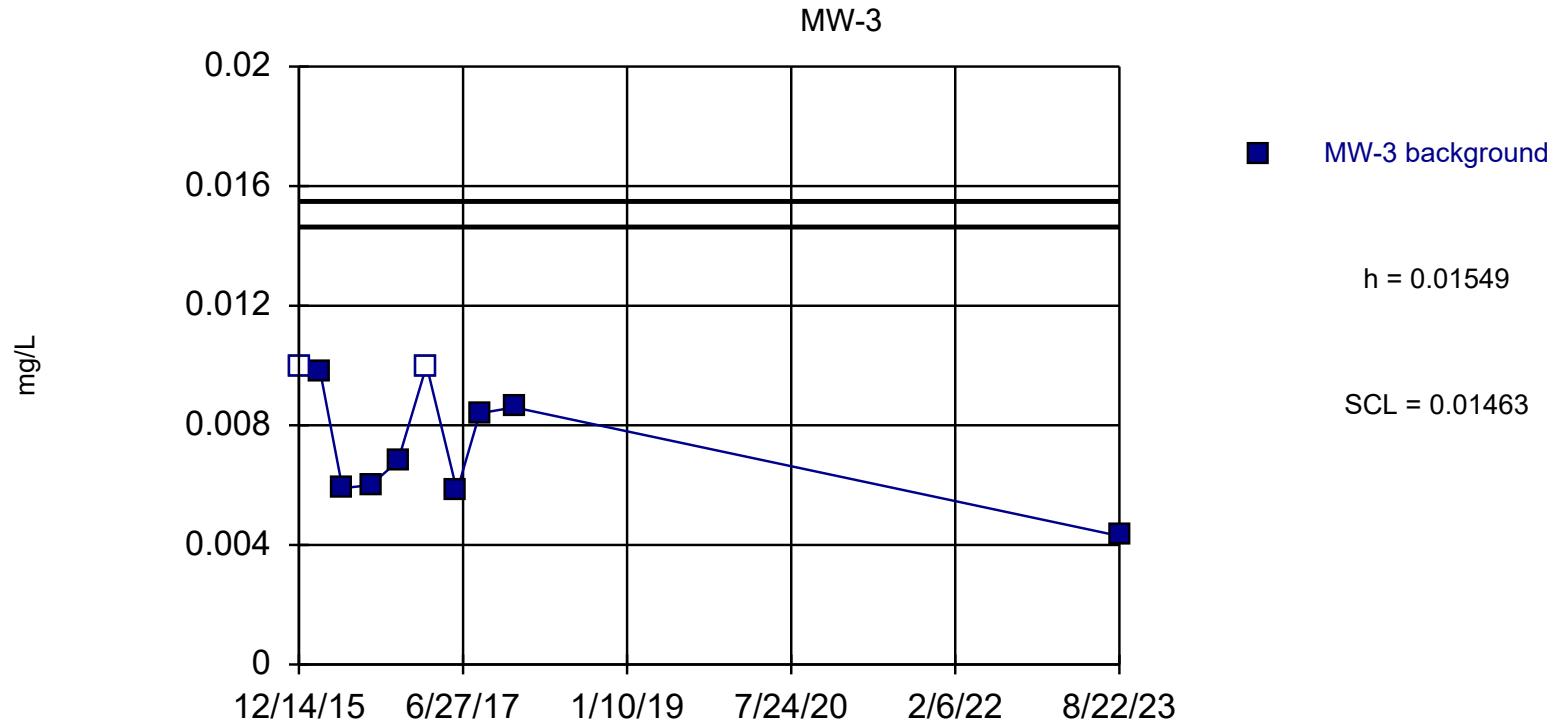
Constituent: Cobalt Analysis Run 9/18/2023 4:35 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 0.0061
2/25/2016 <0.005
5/11/2016 0.0079
8/16/2016 0.0084
11/17/2016 0.0064
2/23/2017 <0.005
6/7/2017 0.0051
8/24/2017 0.0065
12/20/2017 0.0072
8/22/2023 <0.005

Control Chart



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00695, Std. Dev.=0.001707, n=10, 20% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9021, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Cobalt Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

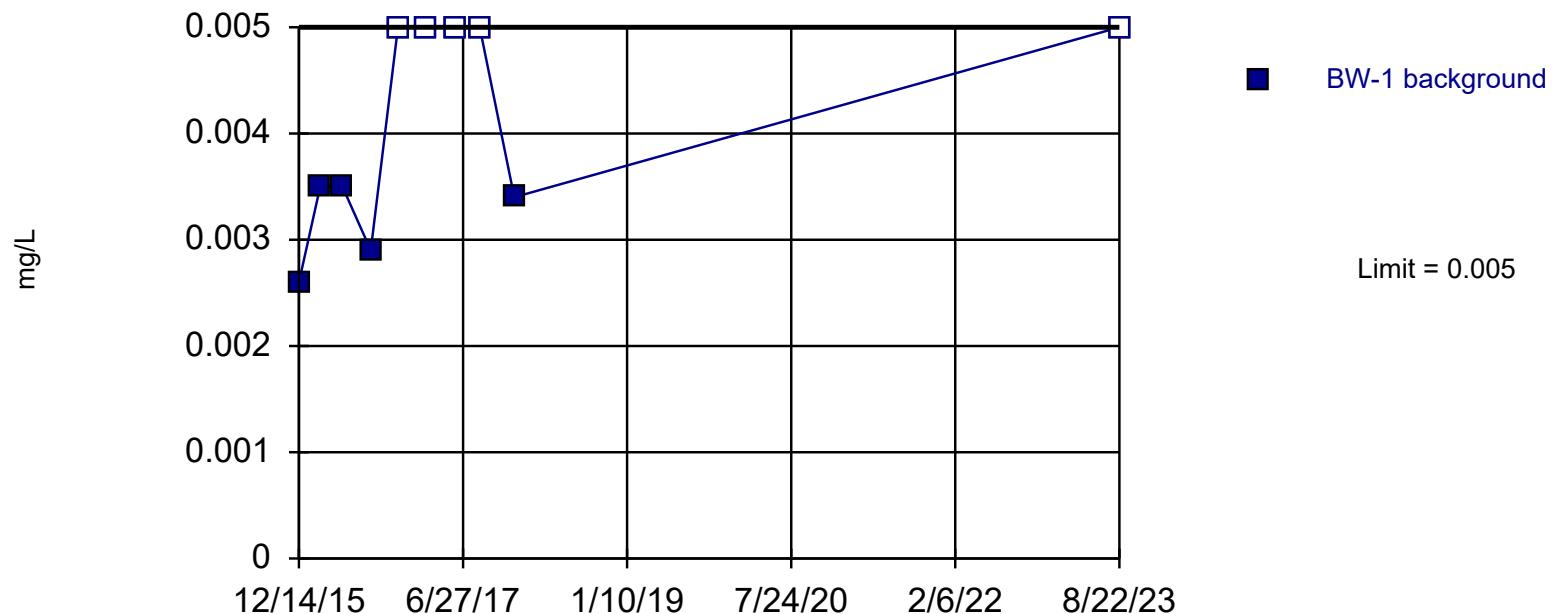
Control Chart

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.01
2/25/2016 0.0098
5/11/2016 0.0059
8/16/2016 0.006
11/17/2016 0.0068
2/23/2017 <0.01
6/7/2017 0.0058
8/24/2017 0.0084
12/20/2017 0.0086
8/22/2023 0.0043

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 10 background values. 50% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

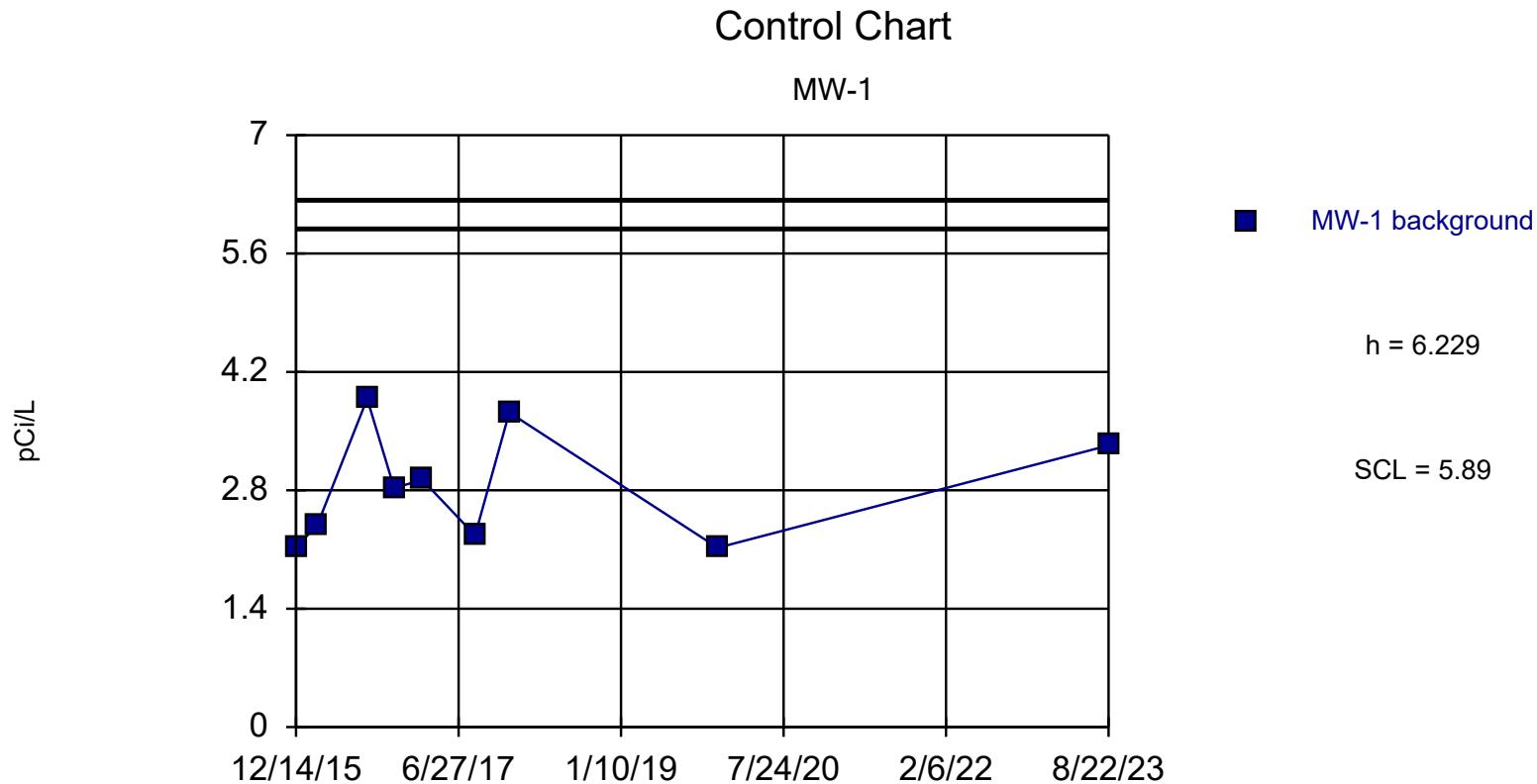
Constituent: Cobalt Analysis Run 9/18/2023 4:35 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Cobalt (mg/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 0.0026
2/25/2016 0.0035
5/11/2016 0.0035
8/16/2016 0.0029
11/17/2016 <0.005
2/23/2017 <0.005
6/7/2017 <0.005
8/24/2017 <0.005
12/20/2017 0.0034
8/22/2023 <0.005



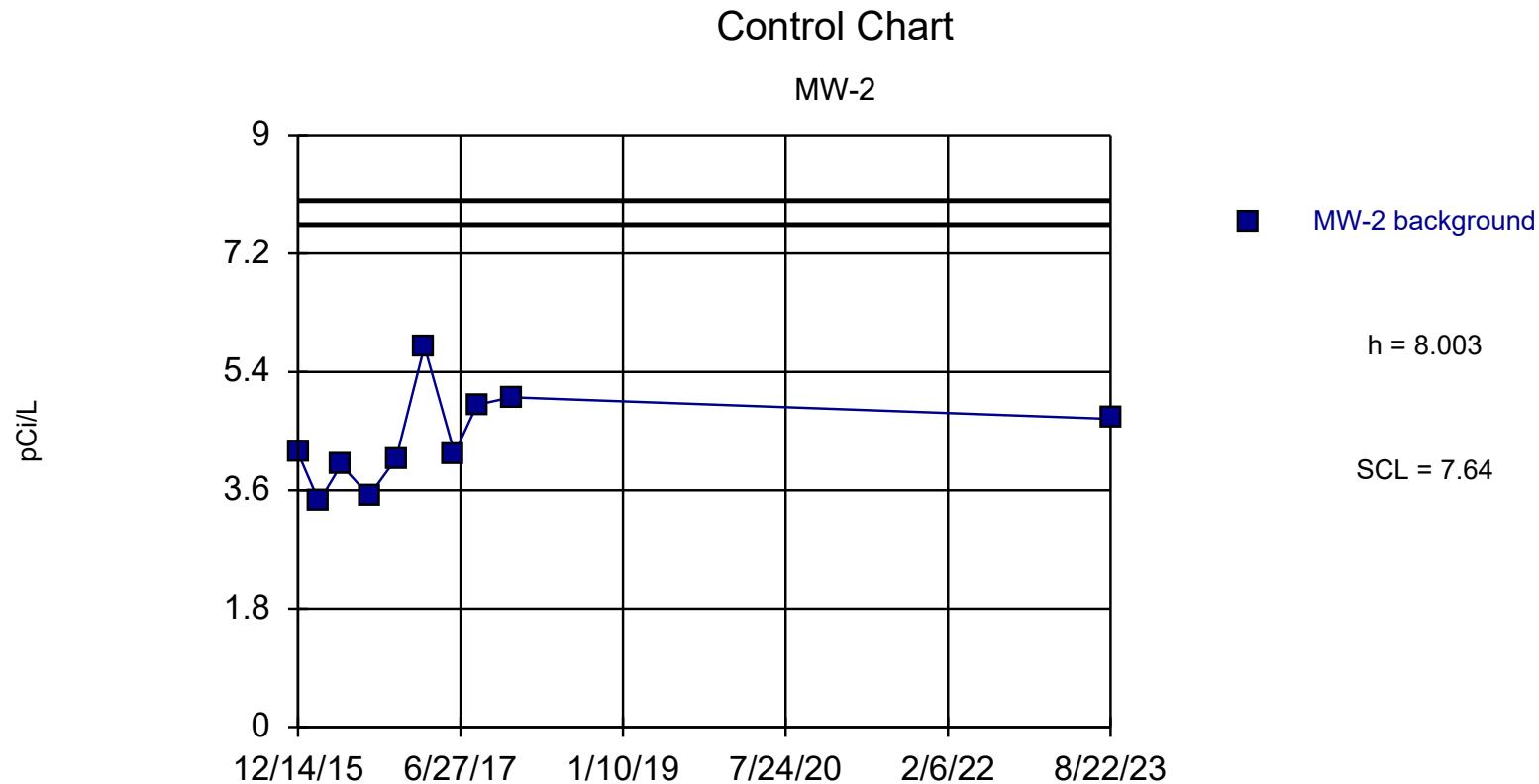
Background Data Summary: Mean=2.843, Std. Dev.=0.6773, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8978, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Combined Radium Analysis Run 9/18/2023 4:35 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 2.13
2/25/2016 2.382
8/16/2016 3.883
11/17/2016 2.828
2/23/2017 2.923
8/24/2017 2.267
12/20/2017 3.72
12/10/2019 2.12
8/22/2023 3.33



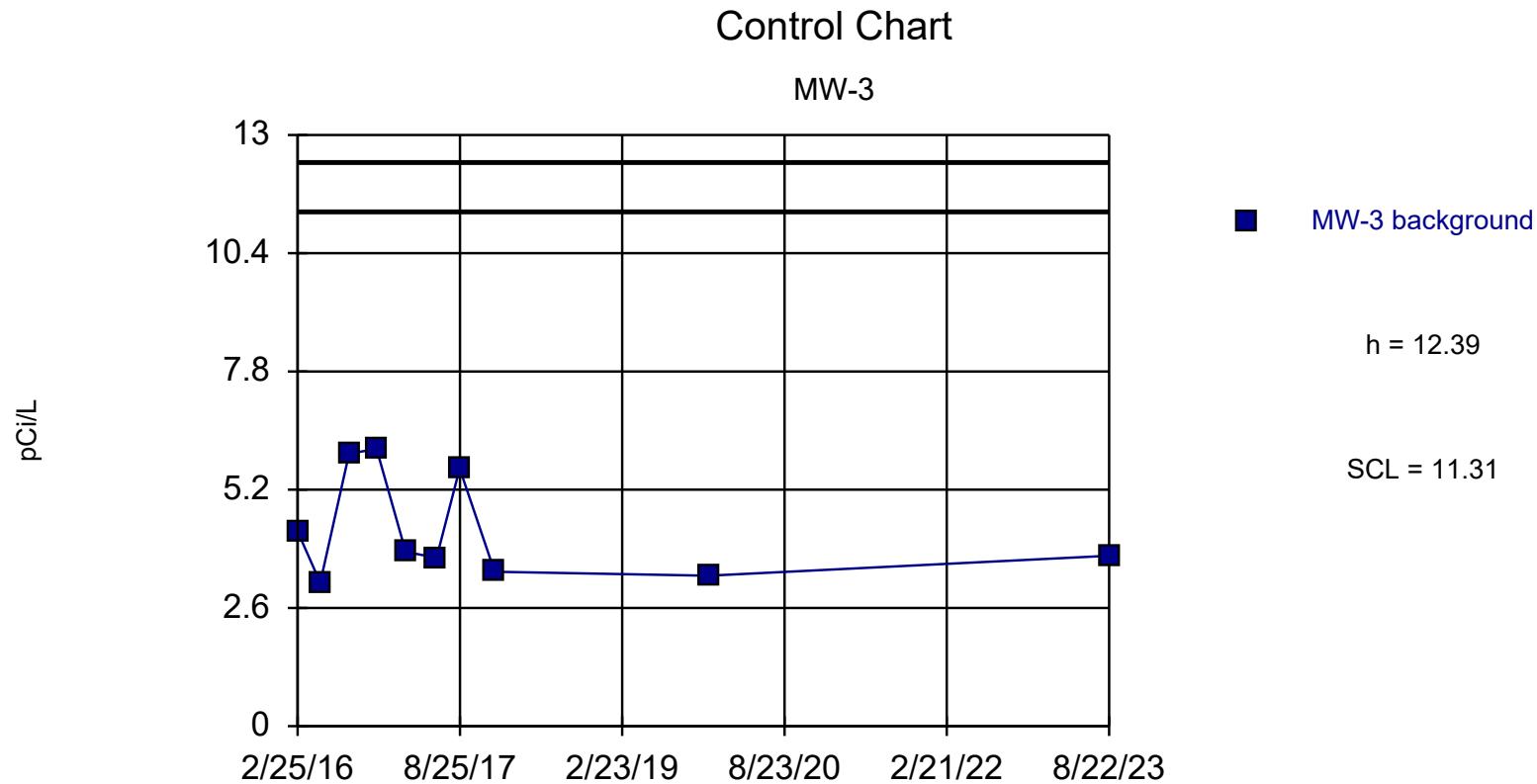
Background Data Summary: Mean=4.374, Std. Dev.=0.7257, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9466, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Combined Radium Analysis Run 9/18/2023 4:35 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 4.17
2/25/2016 3.427
5/11/2016 3.989
8/16/2016 3.517
11/17/2016 4.083
2/23/2017 5.79
6/7/2017 4.164
8/24/2017 4.9
12/20/2017 5.015
8/22/2023 4.686



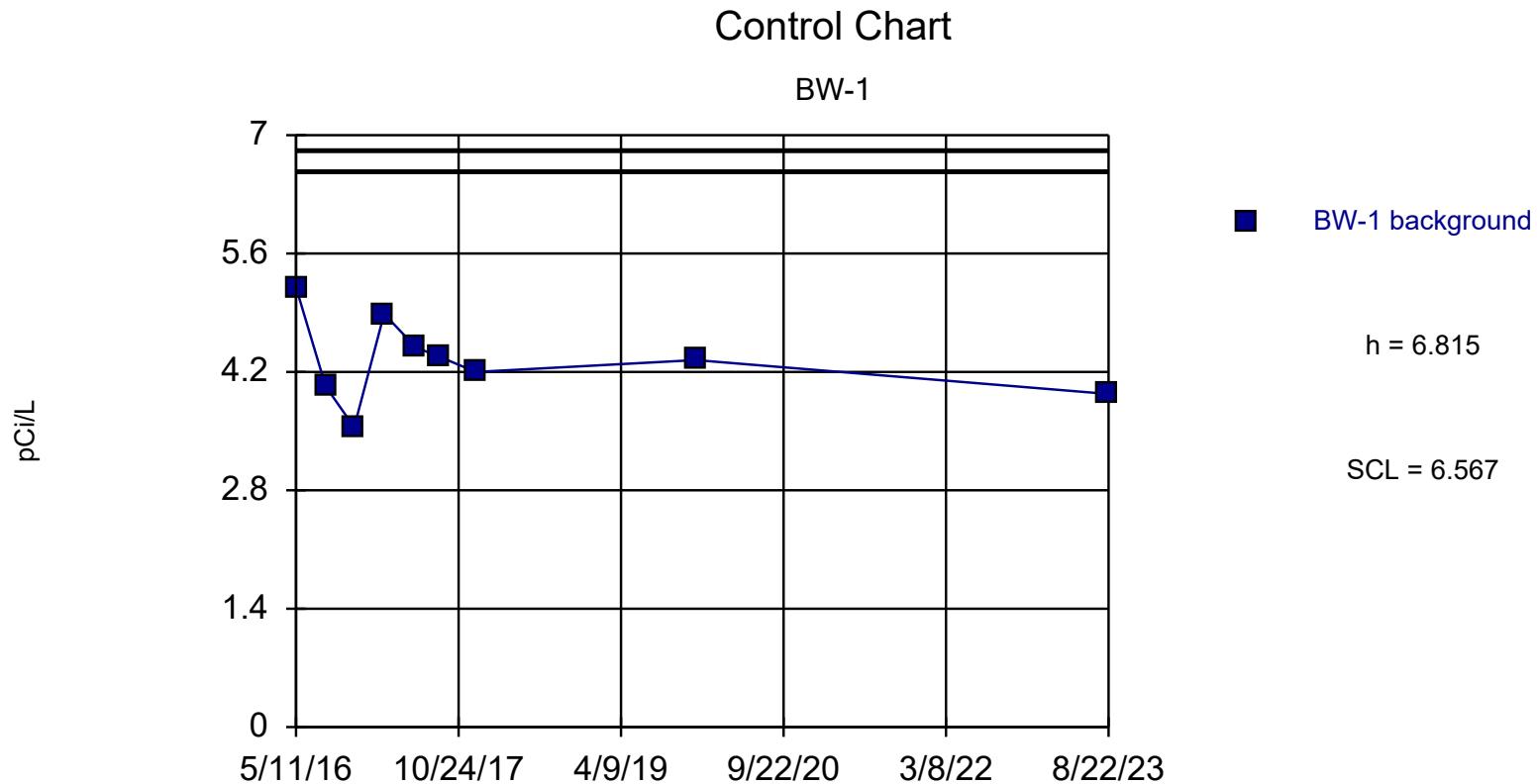
Background Data Summary (based on cube root transformation): Mean=1.618, Std. Dev.=0.1393, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8423, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Combined Radium Analysis Run 9/18/2023 4:35 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3	Cube Root
2/25/2016	4.28	1.624
5/11/2016	3.16	1.467
8/16/2016	5.991	1.816
11/17/2016	6.102	1.827
2/23/2017	3.831	1.565
6/7/2017	3.701	1.547
8/24/2017	5.67	1.783
12/20/2017	3.396	1.503
12/10/2019	3.31	1.49
8/22/2023	3.746	1.553



Background Data Summary: Mean=4.335, Std. Dev.=0.4961, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9801, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Combined Radium Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

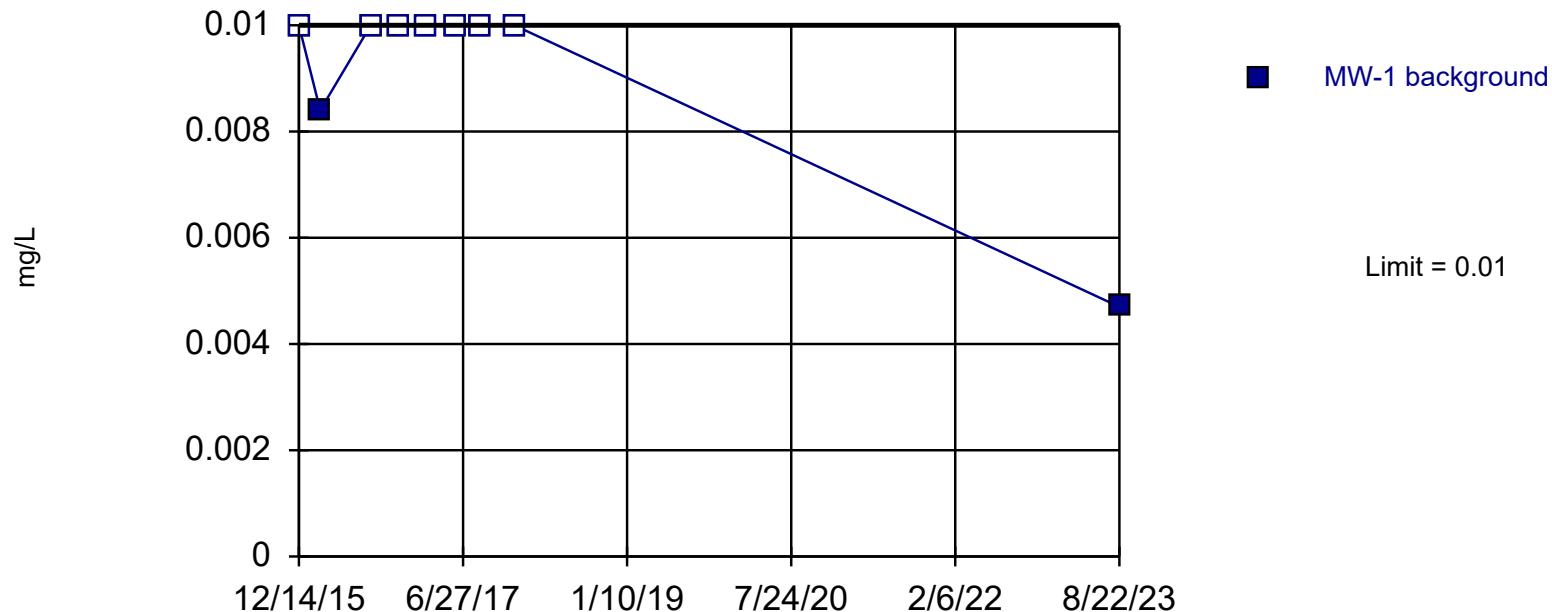
Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:40 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	BW-1
5/11/2016	5.2
8/16/2016	4.03
11/17/2016	3.545
2/23/2017	4.886
6/7/2017	4.49
8/24/2017	4.38
12/20/2017	4.2
12/10/2019	4.34
8/22/2023	3.94

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 9 background values. 77.78% NDs. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

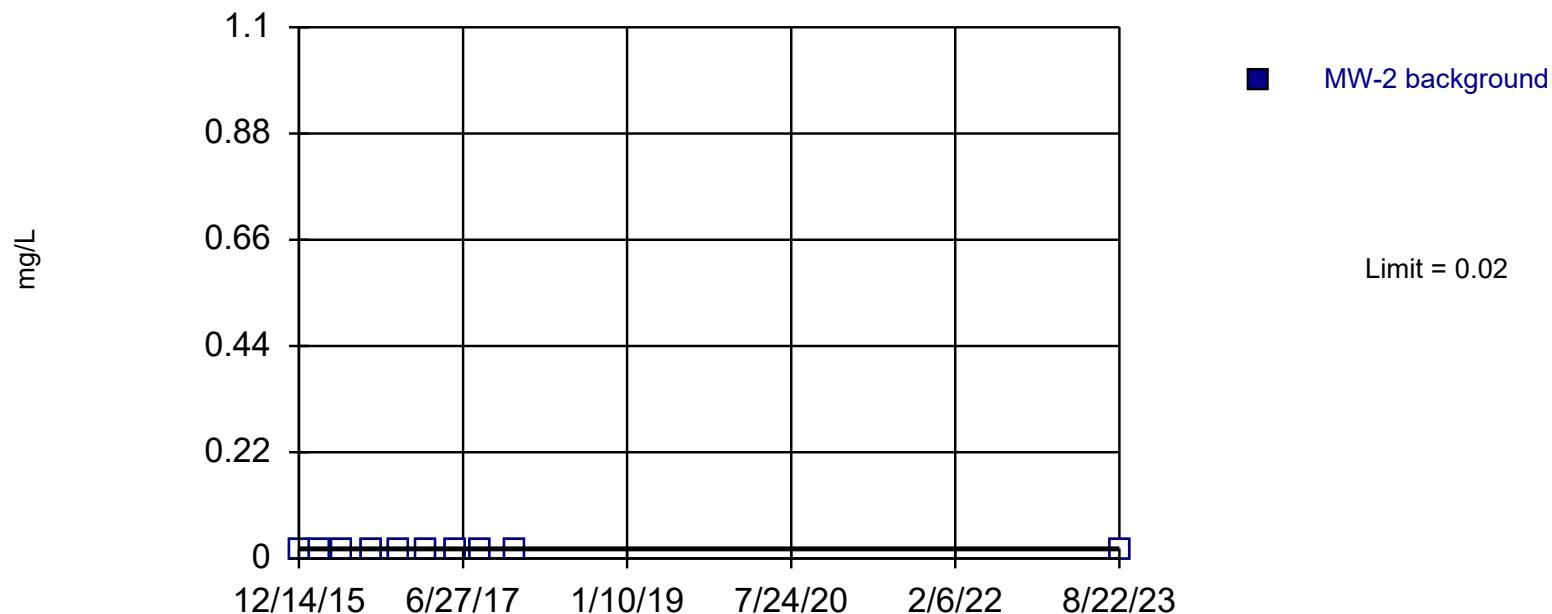
Constituent: Lead (mg/L) Analysis Run 9/18/2023 4:41 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.01
2/25/2016 0.0084
8/16/2016 <0.01
11/17/2016 <0.01
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 0.0047

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

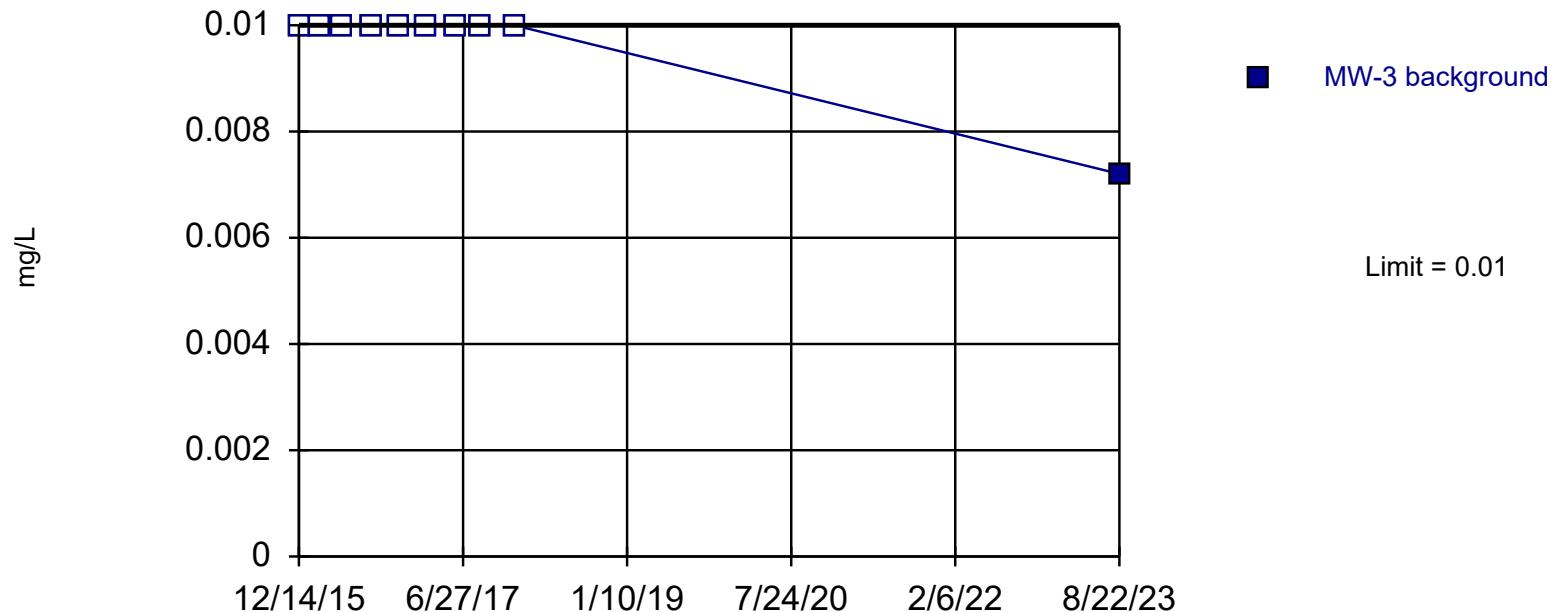
Constituent: Lead (mg/L) Analysis Run 9/18/2023 4:41 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.02
2/25/2016 <0.02
5/11/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
8/22/2023 <0.02

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

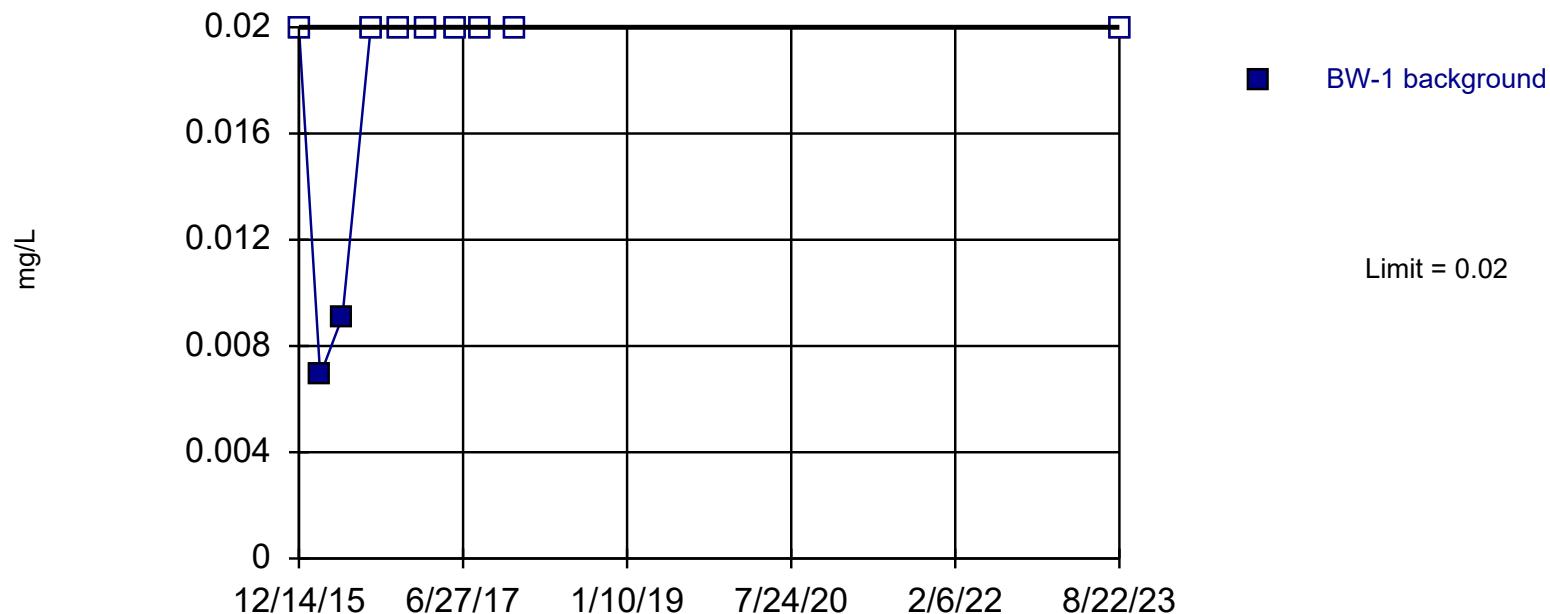
Constituent: Lead (mg/L) Analysis Run 9/18/2023 4:41 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.01
2/25/2016 <0.01
5/11/2016 <0.01
8/16/2016 <0.01
11/17/2016 <0.01
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 0.0072

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 80% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 9/18/2023 4:36 PM

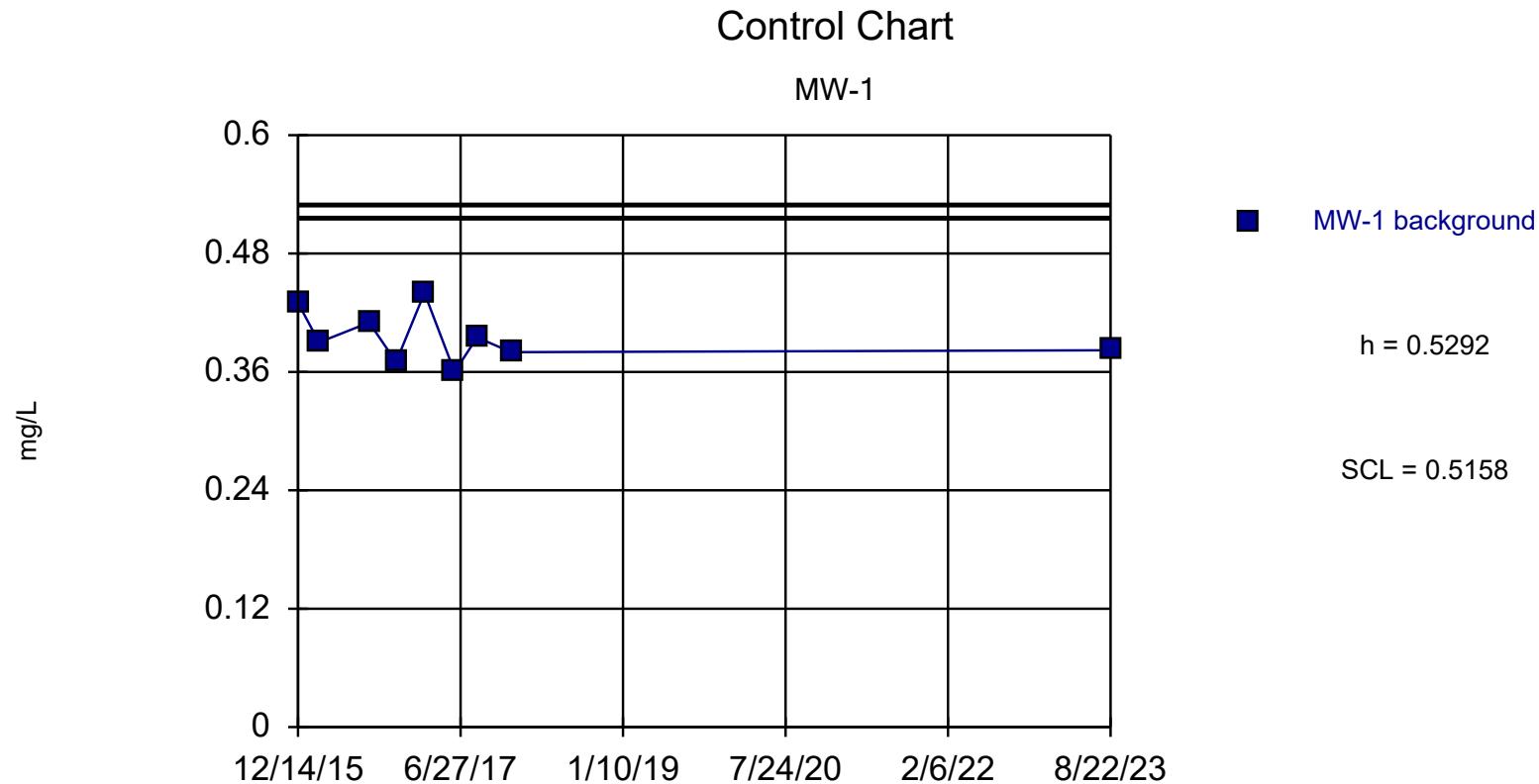
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Lead (mg/L) Analysis Run 9/18/2023 4:41 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	
12/14/2015	<0.02
2/25/2016	0.0069
5/11/2016	0.0091
8/16/2016	<0.02
11/17/2016	<0.02
2/23/2017	<0.02
6/7/2017	<0.02
8/24/2017	<0.02
12/20/2017	<0.02
8/22/2023	<0.02



Background Data Summary: Mean=0.3952, Std. Dev.=0.02679, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9464, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

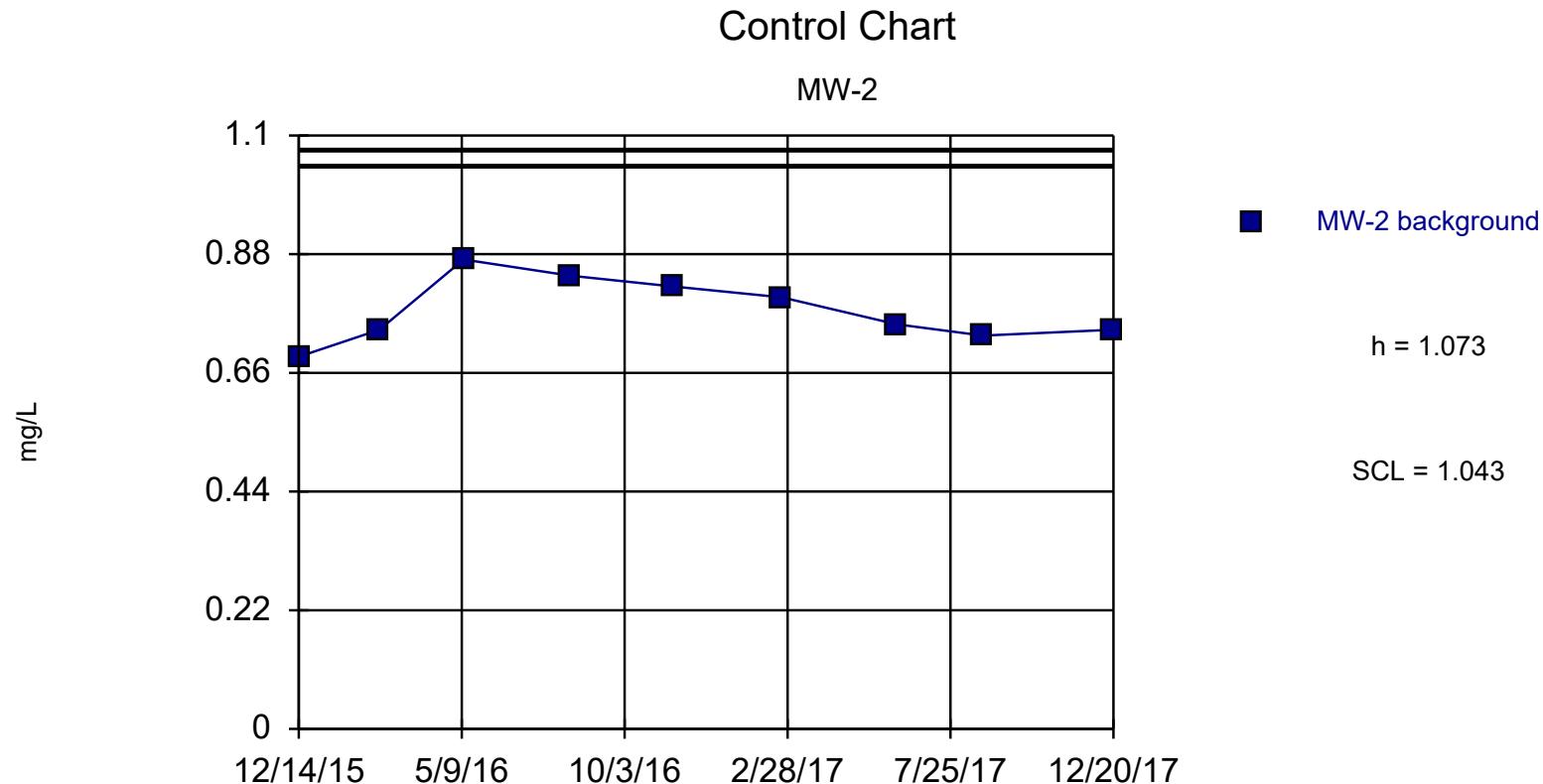
Constituent: Lithium Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	0.43
2/25/2016	0.39
8/16/2016	0.41
11/17/2016	0.37
2/23/2017	0.44
6/7/2017	0.36
8/24/2017	0.395
12/20/2017	0.38
8/22/2023	0.382



Background Data Summary: Mean=0.7754, Std. Dev.=0.05949, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9439, critical = 0.829. Report alpha = 0. Dates ending 12/20/2017 used for control stats. Standardized h=5, SCL=4.5.

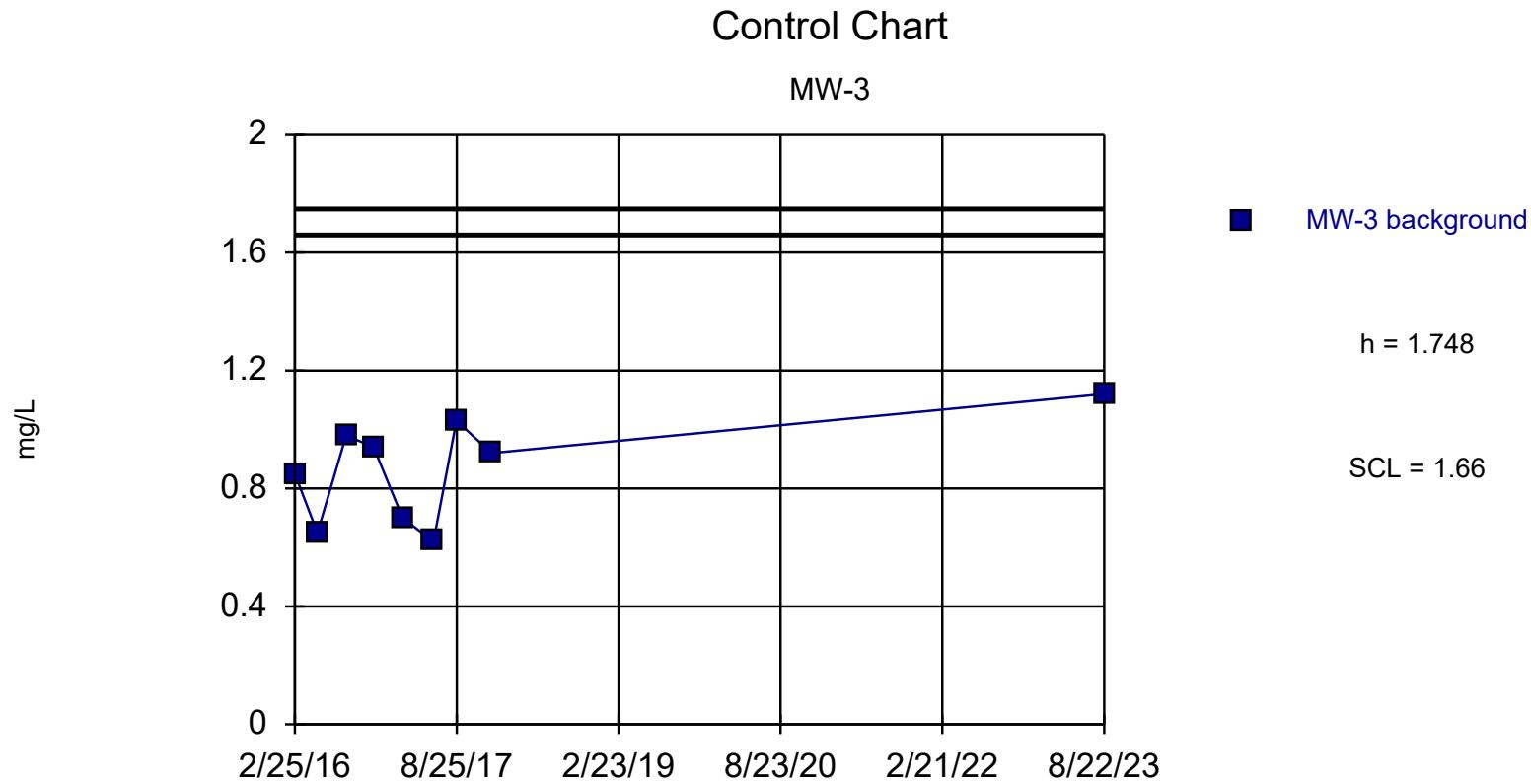
Constituent: Lithium Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	0.69
2/25/2016	0.74
5/11/2016	0.87
8/16/2016	0.84
11/17/2016	0.82
2/23/2017	0.8
6/7/2017	0.75
8/24/2017	0.729
12/20/2017	0.74



Background Data Summary: Mean=0.8678, Std. Dev.=0.176, n=9. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9359, critical = 0.829. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

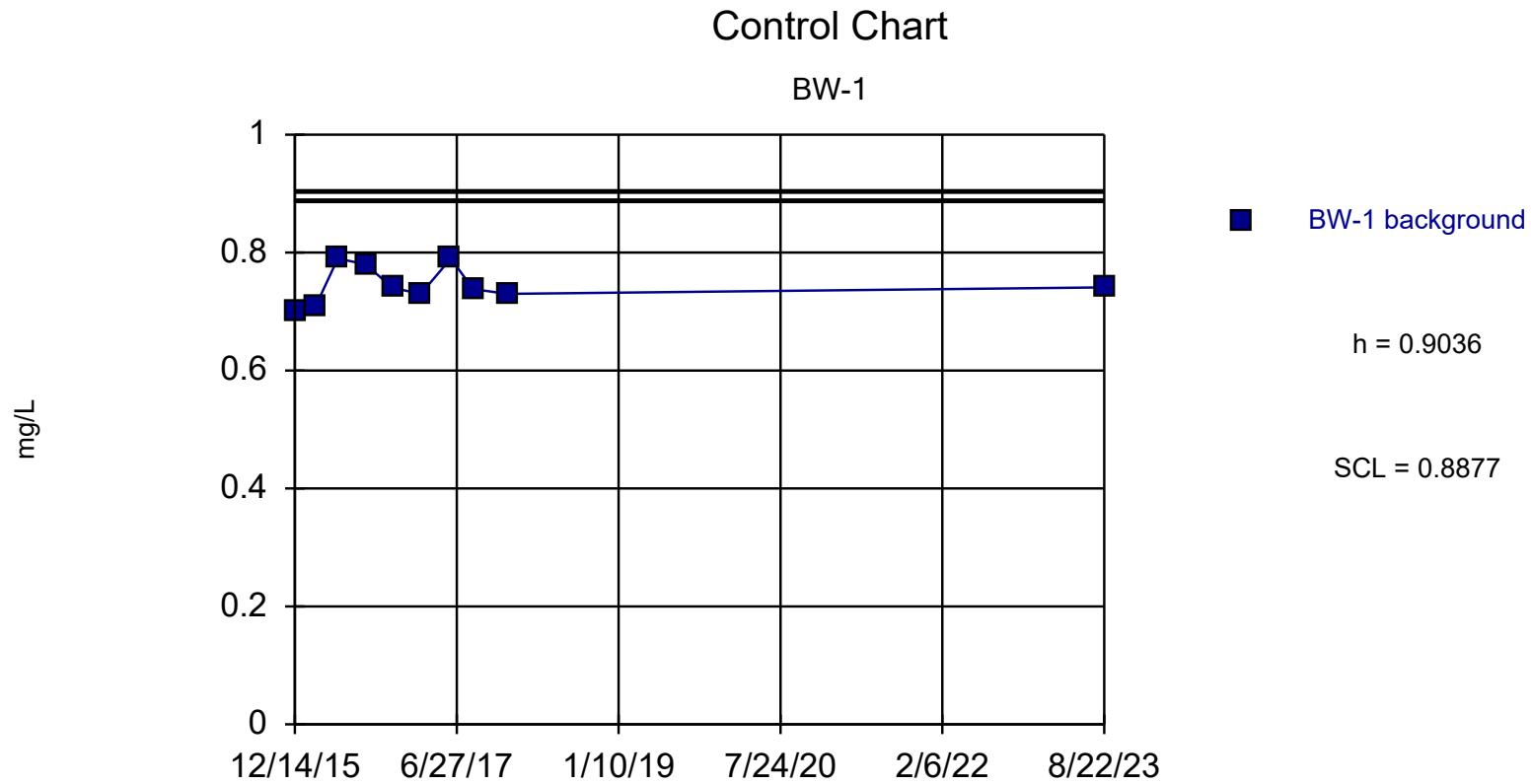
Constituent: Lithium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-3
2/25/2016	0.85
5/11/2016	0.65
8/16/2016	0.98
11/17/2016	0.94
2/23/2017	0.7
6/7/2017	0.62
8/24/2017	1.03
12/20/2017	0.92
8/22/2023	1.12



Background Data Summary: Mean=0.7449, Std. Dev.=0.03174, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8957, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Lithium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

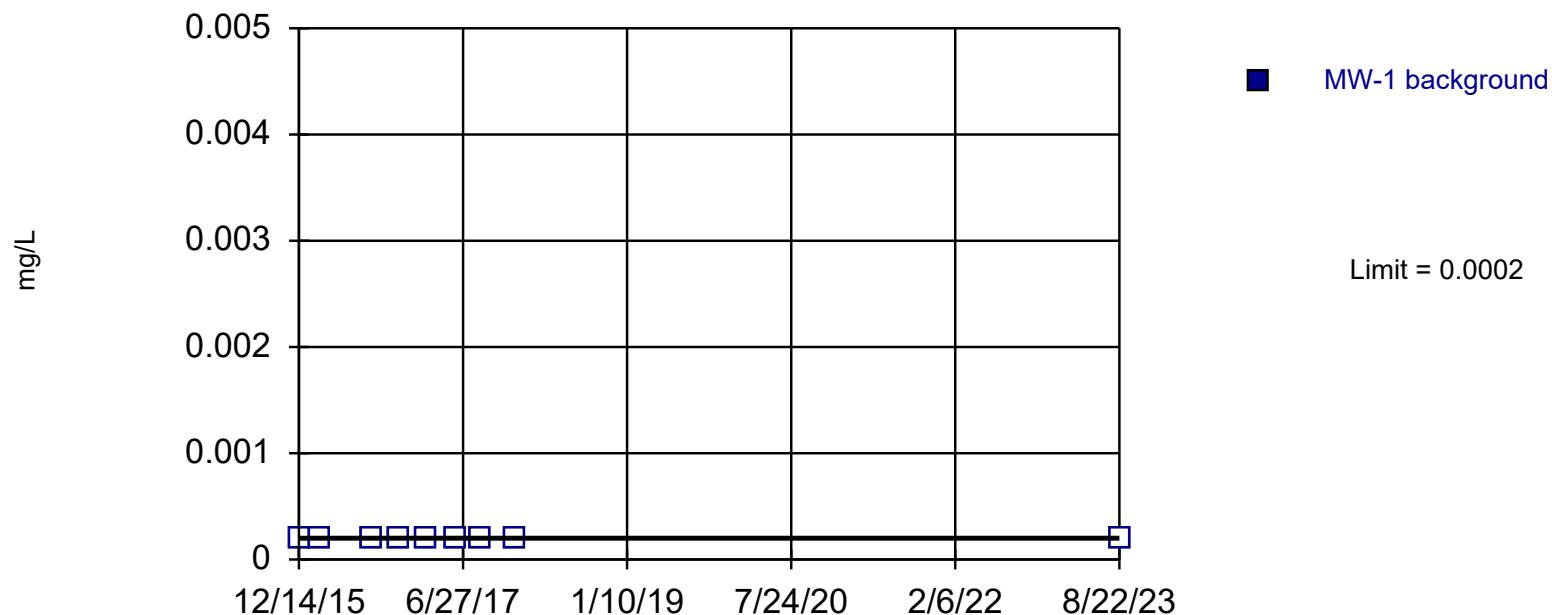
Control Chart

Constituent: Lithium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 0.7
2/25/2016 0.71
5/11/2016 0.79
8/16/2016 0.78
11/17/2016 0.74
2/23/2017 0.73
6/7/2017 0.79
8/24/2017 0.738
12/20/2017 0.73
8/22/2023 0.741

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 4:41 PM

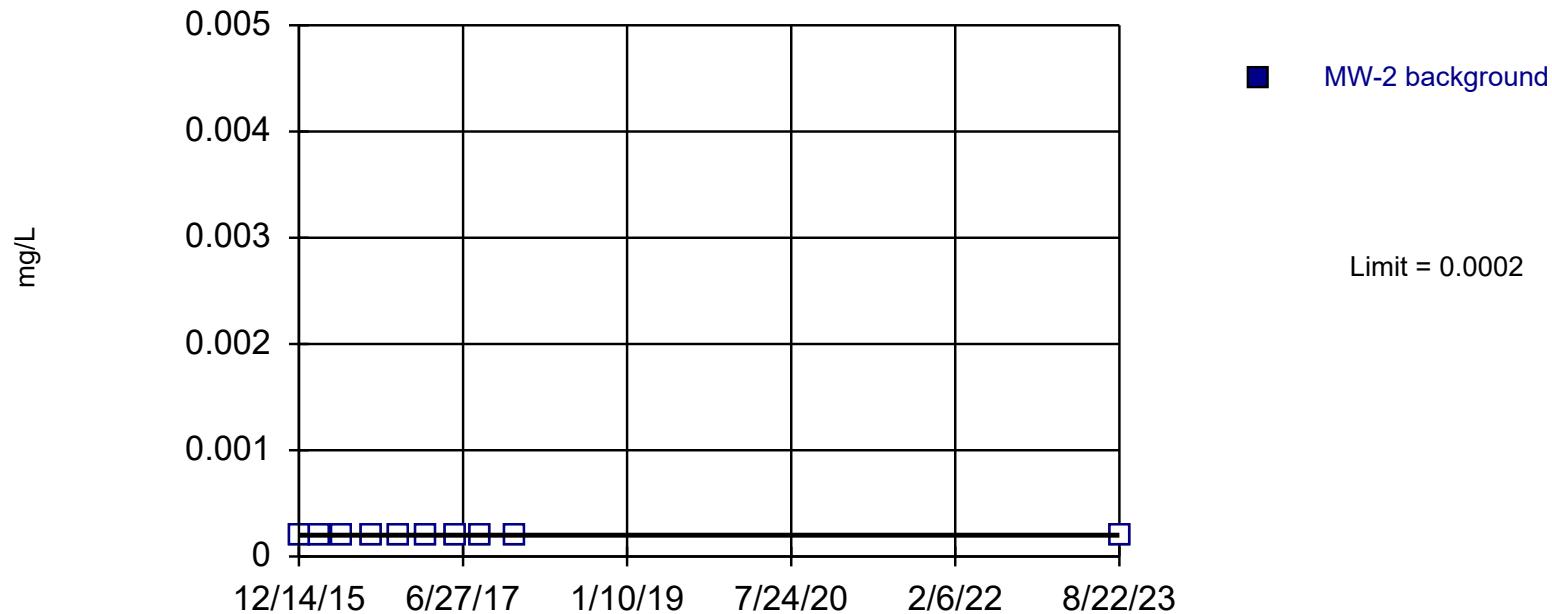
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.0002
2/25/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 4:41 PM

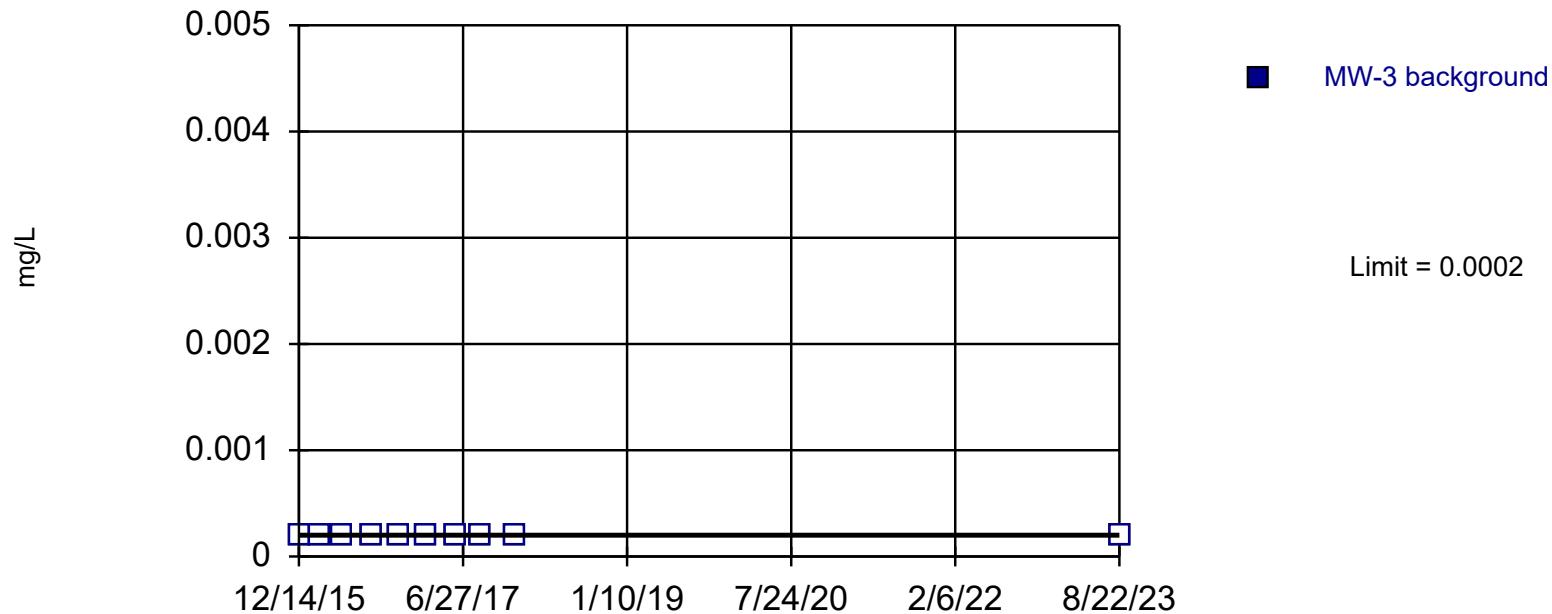
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.0002
2/25/2016	<0.0002
5/11/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Mercury (mg/L) Analysis Run 9/18/2023 4:41 PM

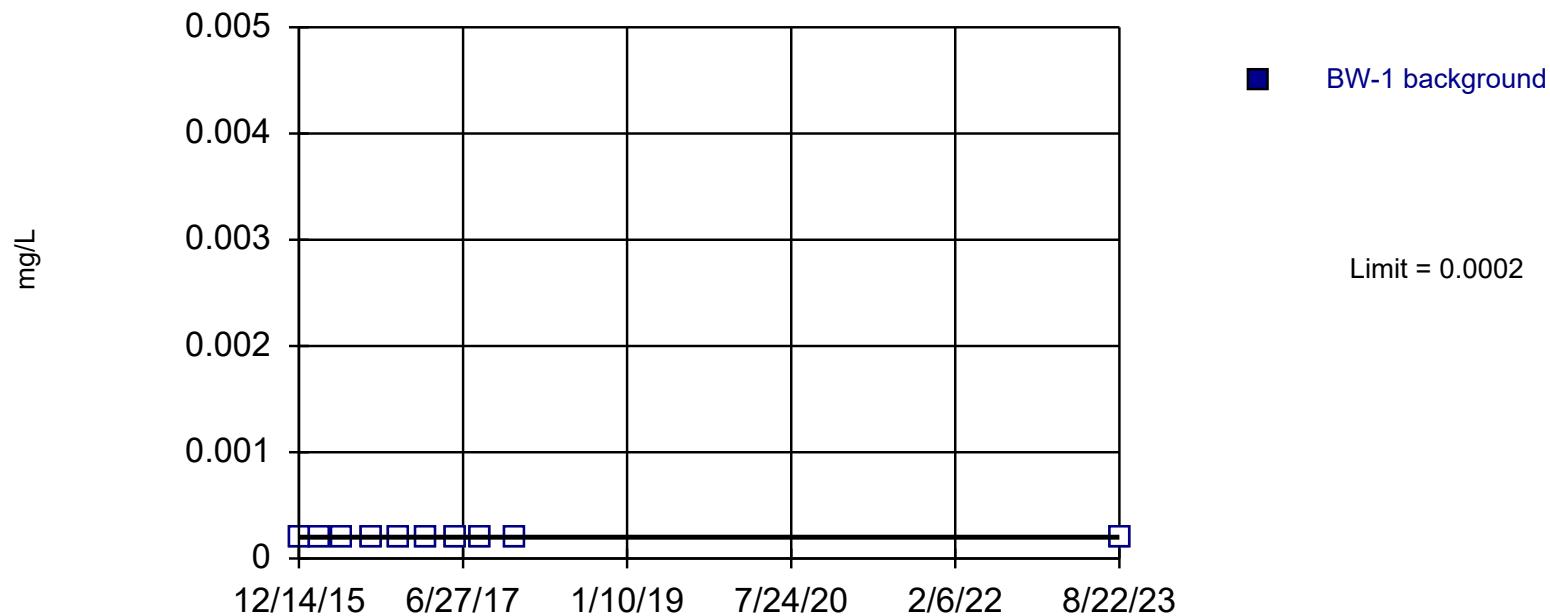
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.0002
2/25/2016	<0.0002
5/11/2016	<0.0002
8/16/2016	<0.0002
11/17/2016	<0.0002
2/23/2017	<0.0002
6/7/2017	<0.0002
8/24/2017	<0.0002
12/20/2017	<0.0002
8/22/2023	<0.0002

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 9/18/2023 4:36 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

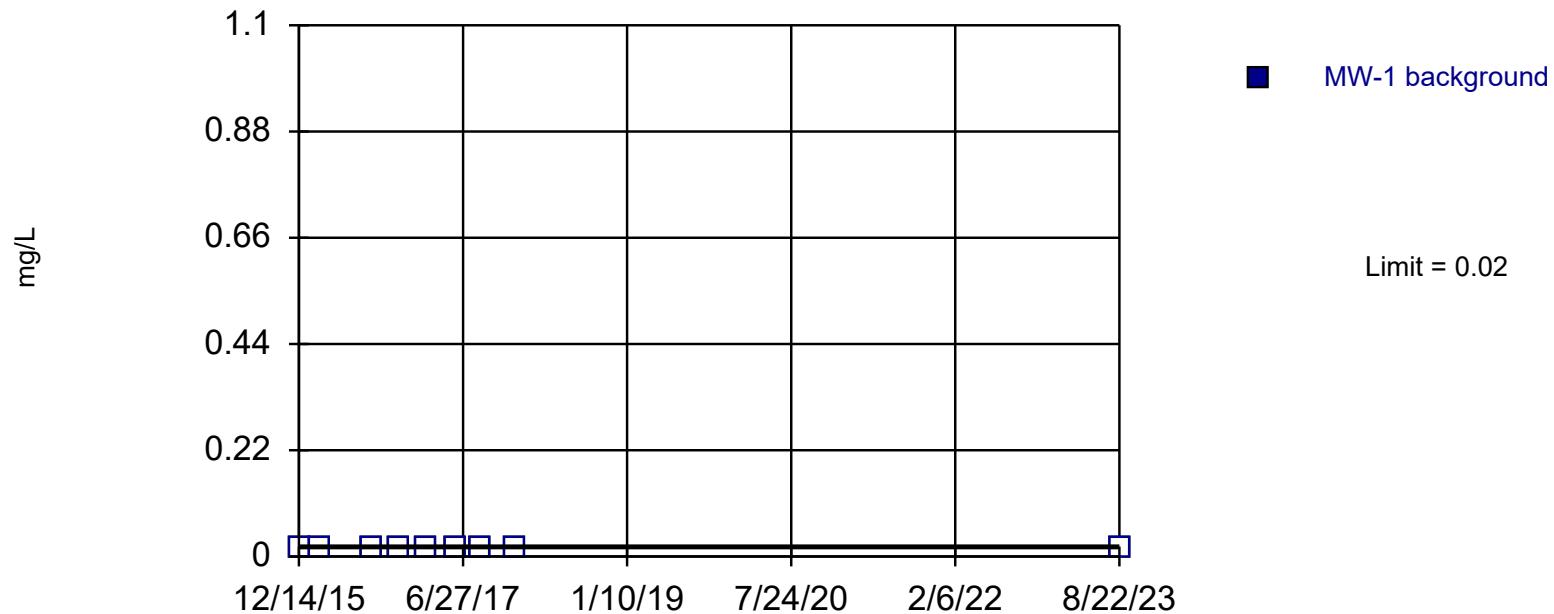
Constituent: Mercury (mg/L) Analysis Run 9/18/2023 4:41 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.0002
2/25/2016 <0.0002
5/11/2016 <0.0002
8/16/2016 <0.0002
11/17/2016 <0.0002
2/23/2017 <0.0002
6/7/2017 <0.0002
8/24/2017 <0.0002
12/20/2017 <0.0002
8/22/2023 <0.0002

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Molybdenum Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

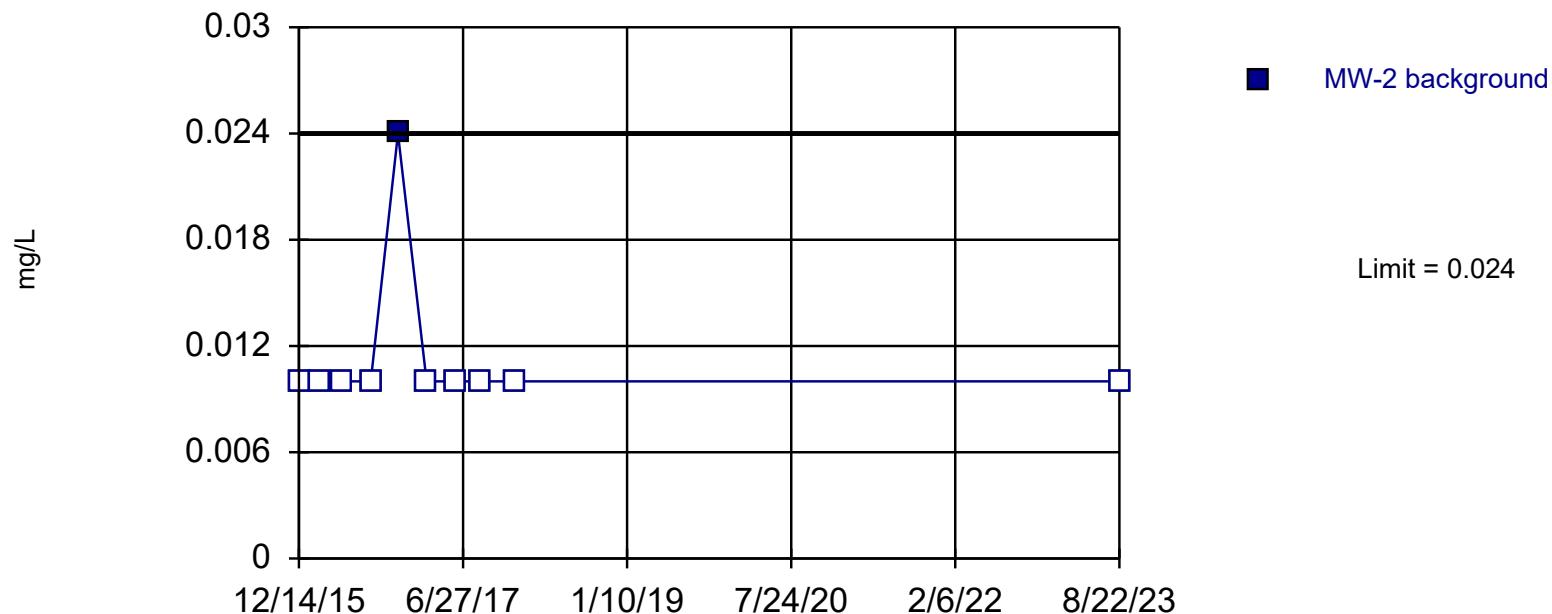
Control Chart Alternate

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1
12/14/2015 <0.02
2/25/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
8/22/2023 <0.02

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Molybdenum Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

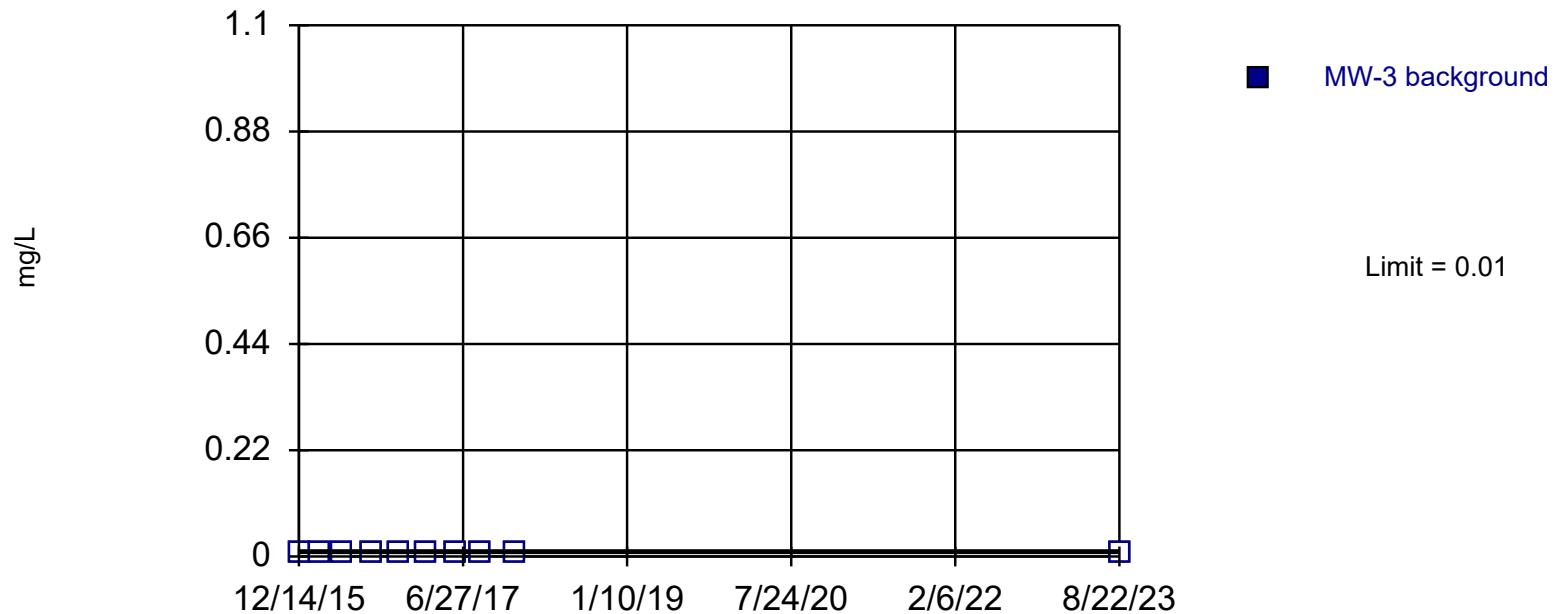
Control Chart Alternate

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.01
2/25/2016 <0.01
5/11/2016 <0.01
8/16/2016 <0.01
11/17/2016 0.024
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 <0.01

Prediction Limit

Intrawell Non-parametric, MW-3



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Molybdenum Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

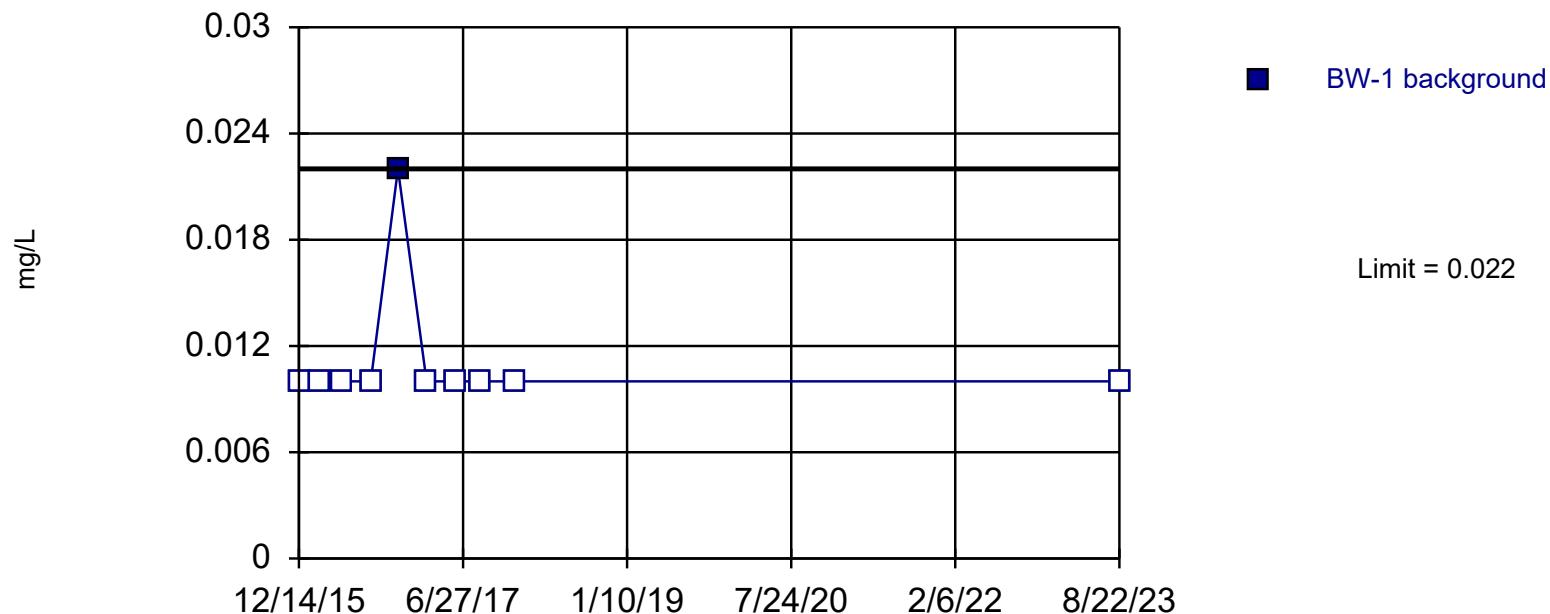
Control Chart Alternate

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.01
2/25/2016 <0.01
5/11/2016 <0.01
8/16/2016 <0.01
11/17/2016 <0.01
2/23/2017 <0.01
6/7/2017 <0.01
8/24/2017 <0.01
12/20/2017 <0.01
8/22/2023 <0.01

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

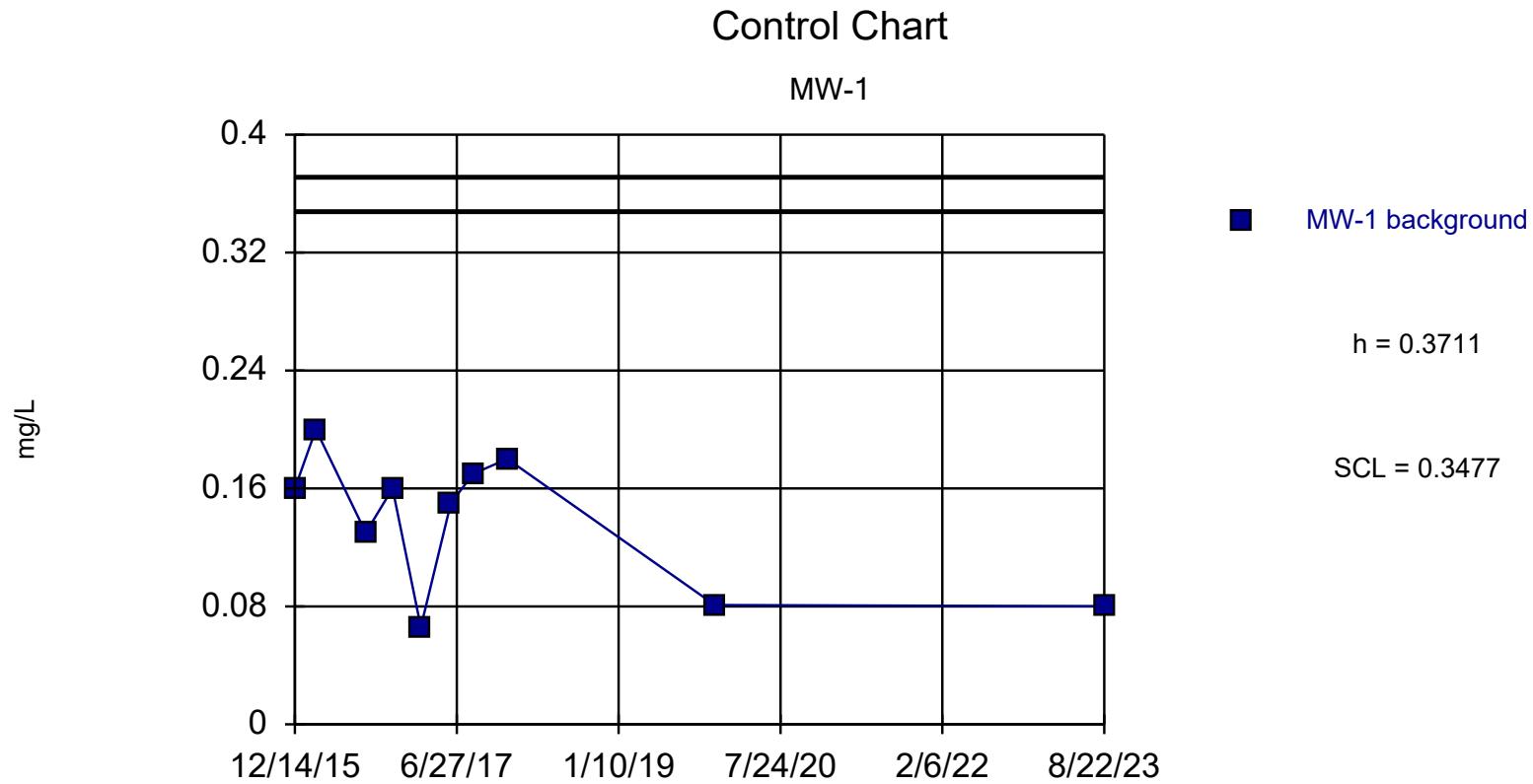
Constituent: Molybdenum Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Molybdenum (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	
12/14/2015	<0.01
2/25/2016	<0.01
5/11/2016	<0.01
8/16/2016	<0.01
11/17/2016	0.022
2/23/2017	<0.01
6/7/2017	<0.01
8/24/2017	<0.01
12/20/2017	<0.01
8/22/2023	<0.01



Background Data Summary: Mean=0.1377, Std. Dev.=0.04667, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9013, critical = 0.842. Report alpha = 0. Dates ending 8/22/2023 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Selenium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

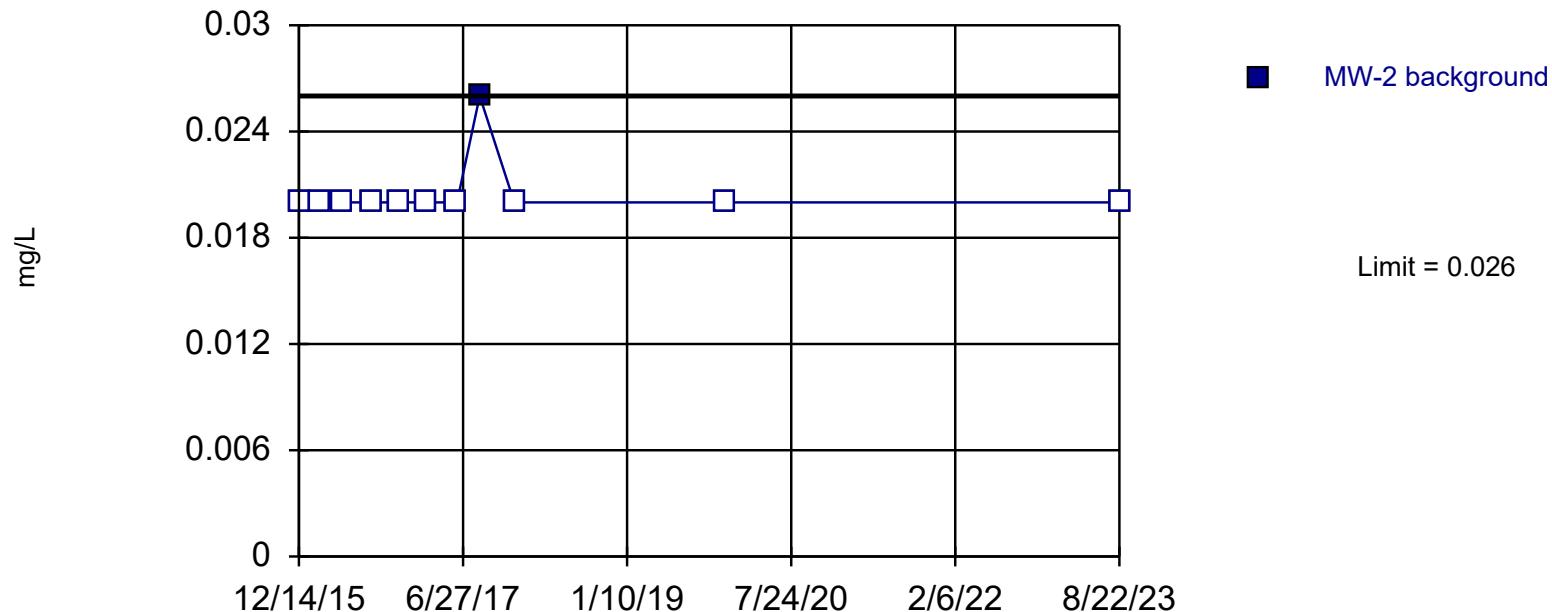
Constituent: Selenium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	0.16
2/25/2016	0.2
8/16/2016	0.13
11/17/2016	0.16
2/23/2017	0.066
6/7/2017	0.15
8/24/2017	0.17
12/20/2017	0.18
12/10/2019	0.0809
8/22/2023	0.0801

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 11 background values. 90.91% NDs. Report alpha = 0.08333. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

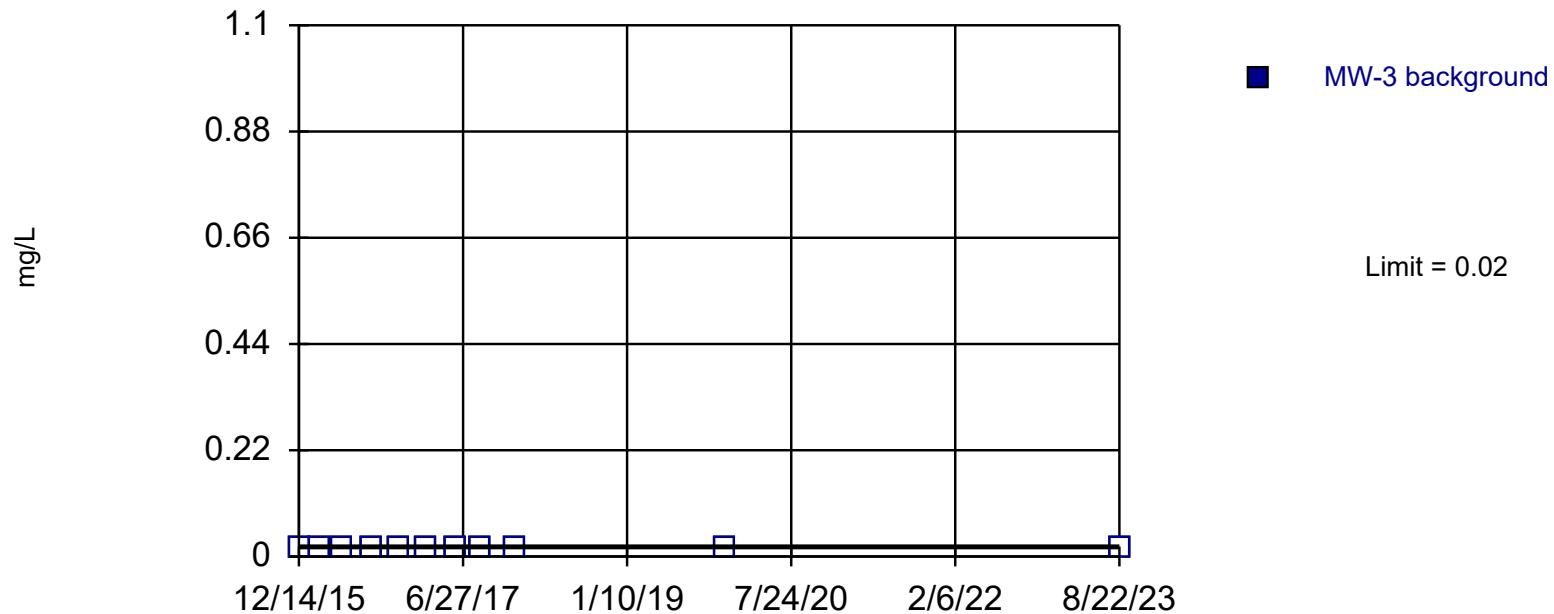
Control Chart Alternate

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2
12/14/2015 <0.02
2/25/2016 <0.02
5/11/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 0.026
12/20/2017 <0.02
12/10/2019 <0.02
8/22/2023 <0.02

Prediction Limit

Intrawell Non-parametric, MW-3



MW-3 background

Limit = 0.02

Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 11$) were censored; limit is most recent reporting limit. Report alpha = 0.08333. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

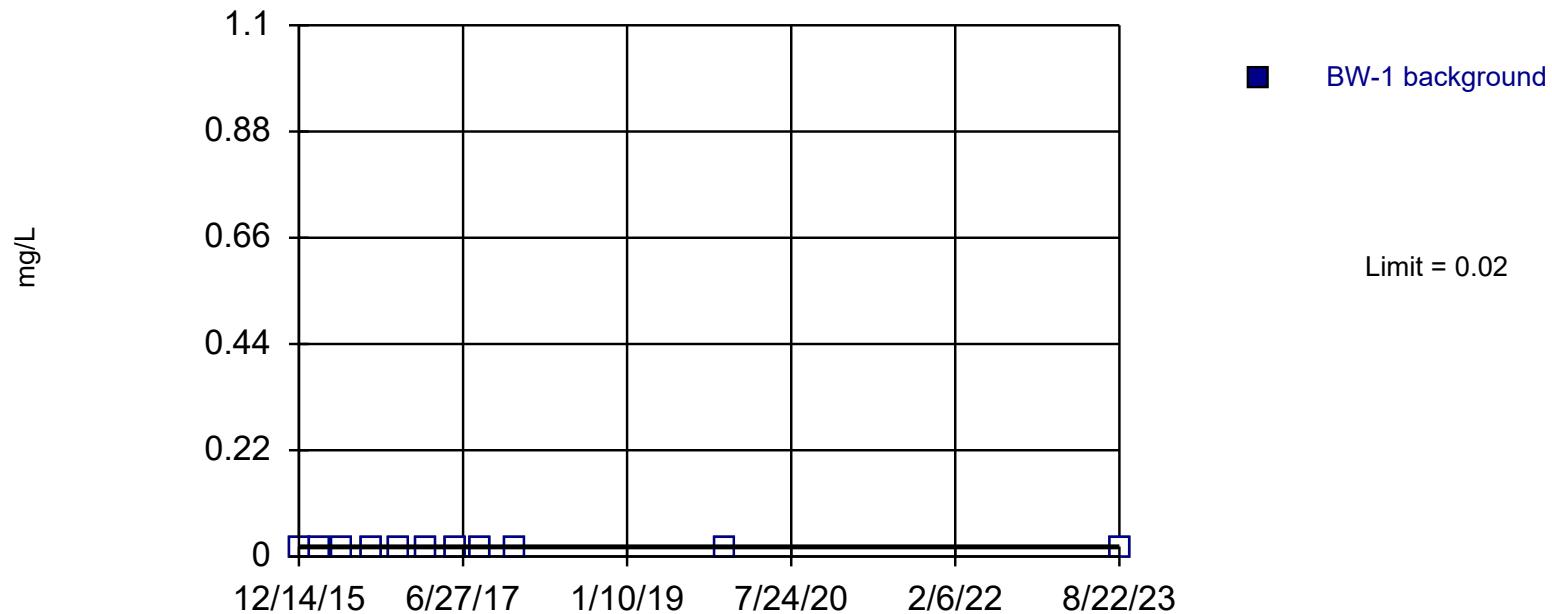
Control Chart Alternate

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3
12/14/2015 <0.02
2/25/2016 <0.02
5/11/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
12/10/2019 <0.02
8/22/2023 <0.02

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 11$) were censored; limit is most recent reporting limit. Report alpha = 0.08333. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

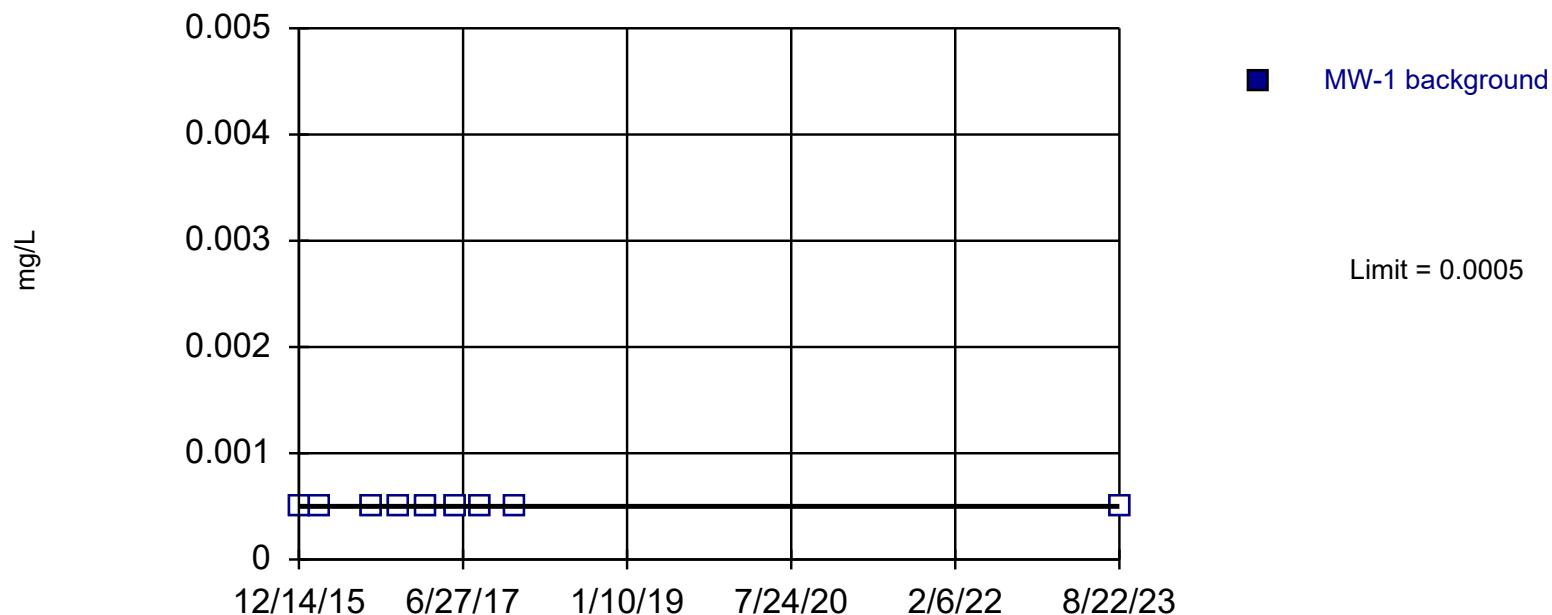
Control Chart Alternate

Constituent: Selenium (mg/L) Analysis Run 9/18/2023 4:41 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1
12/14/2015 <0.02
2/25/2016 <0.02
5/11/2016 <0.02
8/16/2016 <0.02
11/17/2016 <0.02
2/23/2017 <0.02
6/7/2017 <0.02
8/24/2017 <0.02
12/20/2017 <0.02
12/10/2019 <0.02
8/22/2023 <0.02

Prediction Limit

Intrawell Non-parametric, MW-1



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 9$) were censored; limit is most recent reporting limit. Report alpha = 0.1. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 4:41 PM

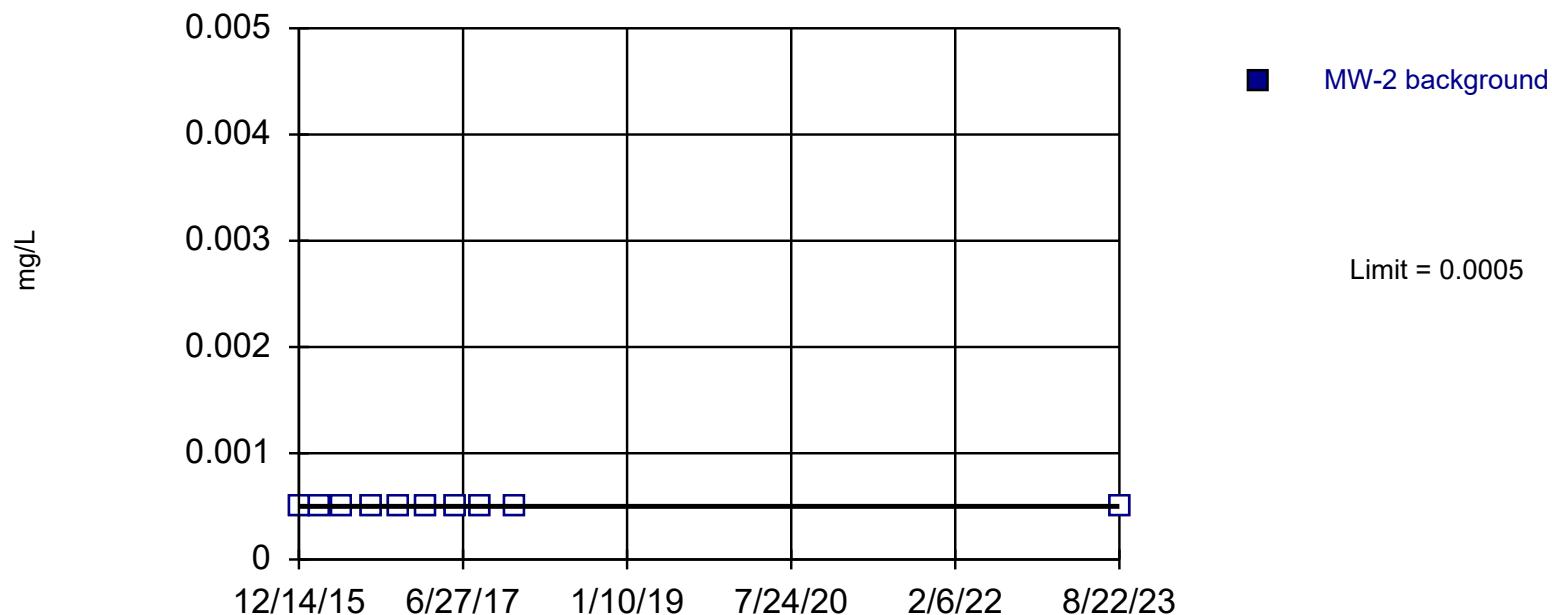
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-1

12/14/2015	<0.0005
2/25/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Prediction Limit

Intrawell Non-parametric, MW-2



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 4:41 PM

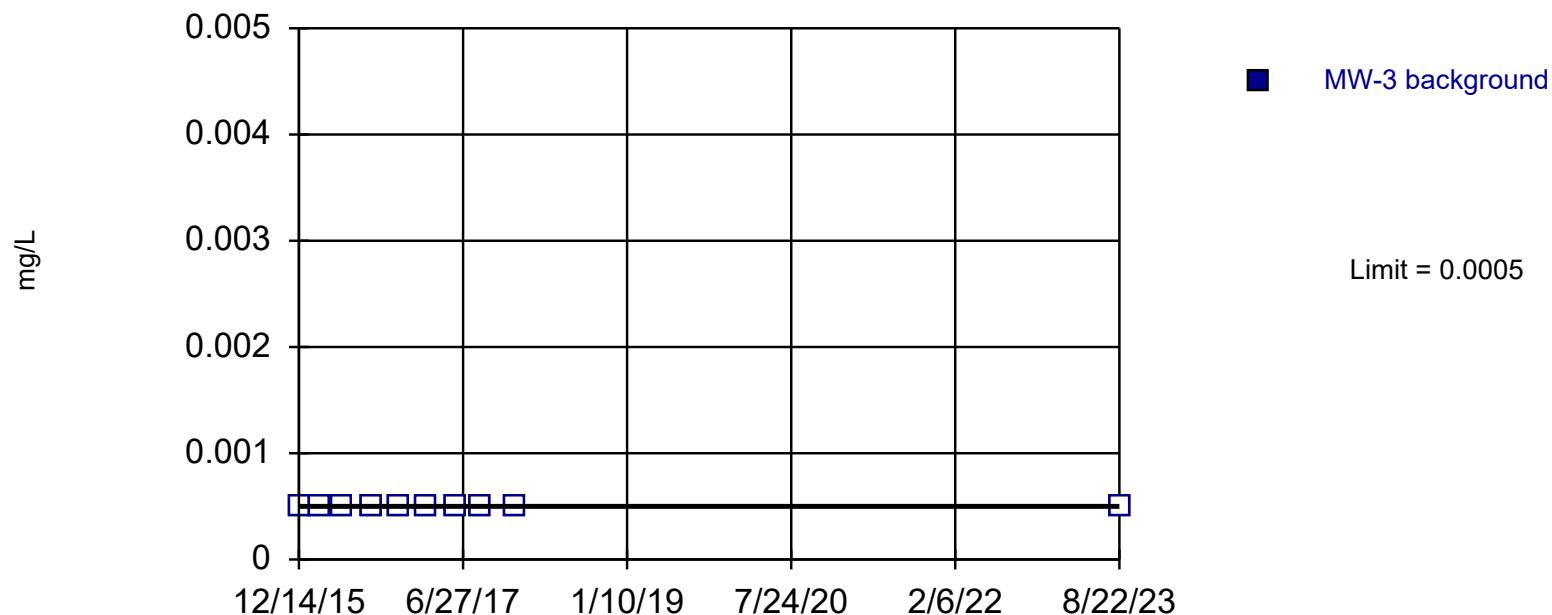
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-2

12/14/2015	<0.0005
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Prediction Limit

Intrawell Non-parametric, MW-3



Limit = 0.0005

Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 10$) were censored; limit is most recent reporting limit. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 4:41 PM

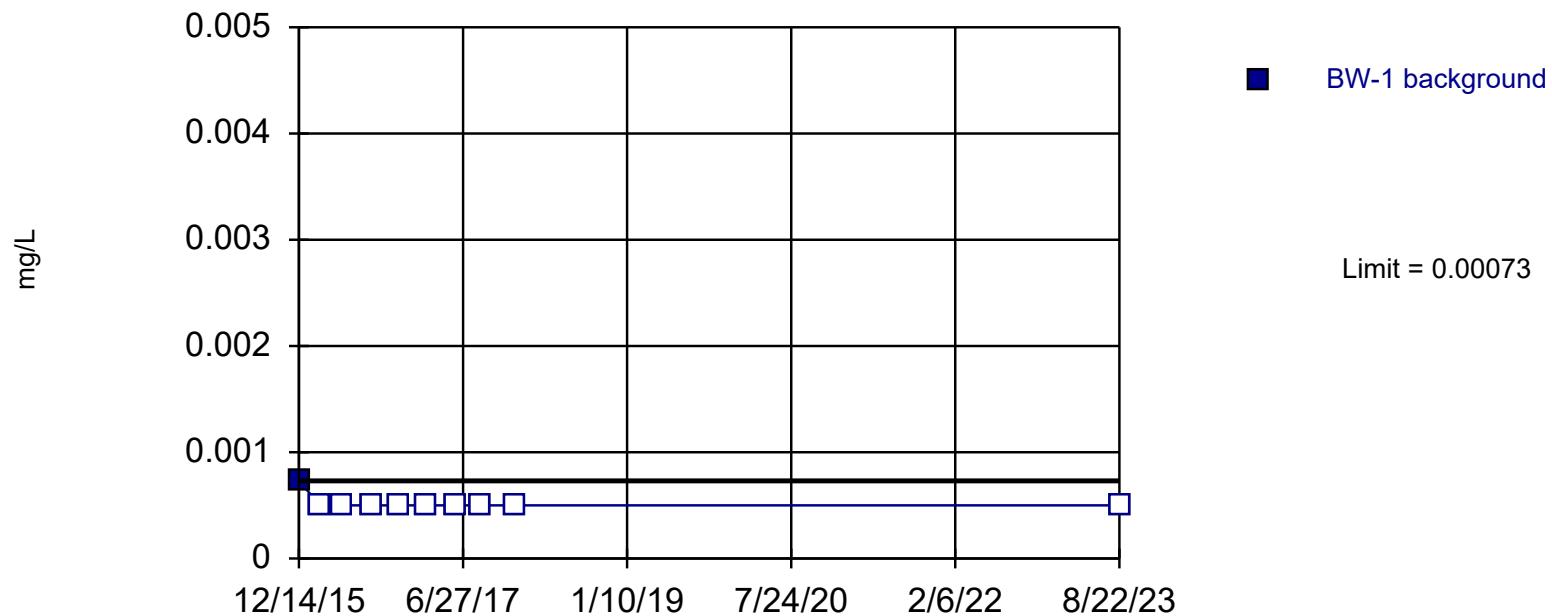
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

MW-3

12/14/2015	<0.0005
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

Prediction Limit

Intrawell Non-parametric, BW-1 (bg)



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 10 background values. 90% NDs. Report alpha = 0.09091. Assumes 1 future value. Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 9/18/2023 4:36 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart Alternate

Constituent: Thallium (mg/L) Analysis Run 9/18/2023 4:41 PM

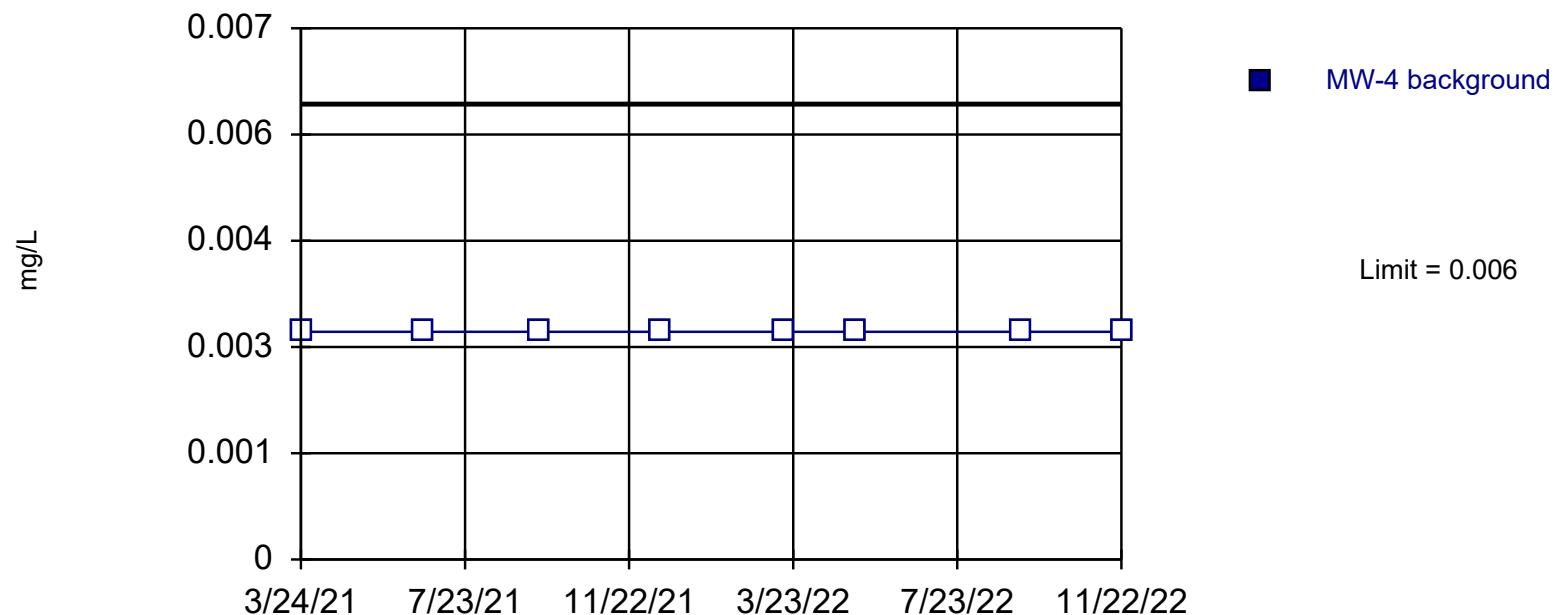
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

BW-1	
12/14/2015	0.00073
2/25/2016	<0.0005
5/11/2016	<0.0005
8/16/2016	<0.0005
11/17/2016	<0.0005
2/23/2017	<0.0005
6/7/2017	<0.0005
8/24/2017	<0.0005
12/20/2017	<0.0005
8/22/2023	<0.0005

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Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Antimony Analysis Run 3/8/2023 2:18 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Antimony (mg/L) Analysis Run 3/8/2023 2:39 PM

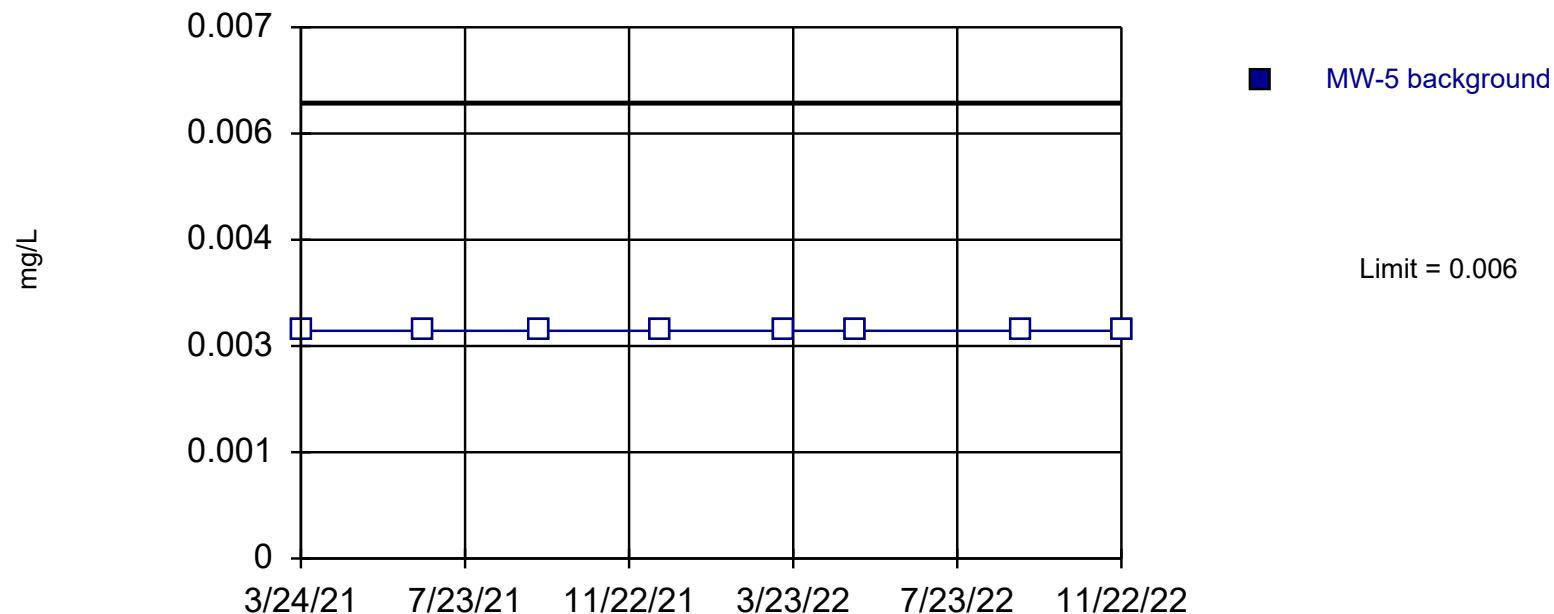
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.006
6/22/2021	<0.006
9/17/2021	<0.006
12/15/2021	<0.006
3/17/2022	<0.006
5/10/2022	<0.006
9/8/2022	<0.006
11/22/2022	<0.006

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Antimony Analysis Run 3/8/2023 2:18 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Antimony (mg/L) Analysis Run 3/8/2023 2:39 PM

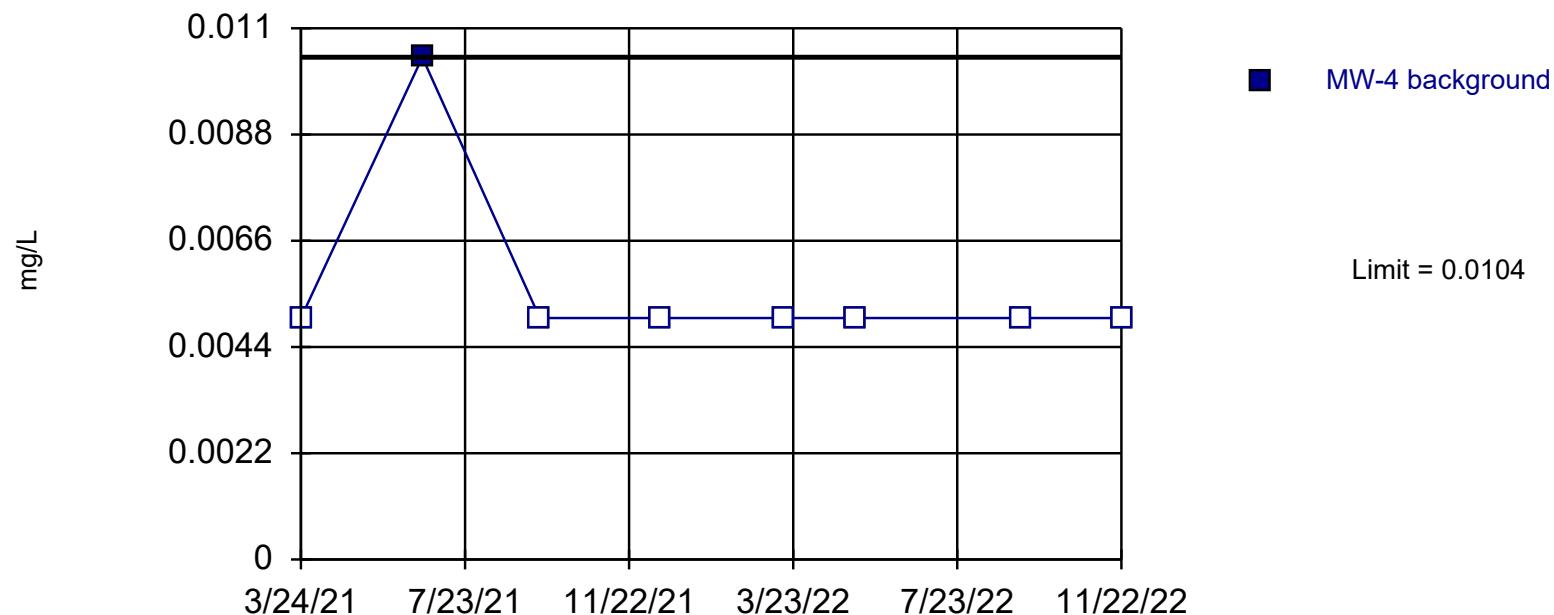
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.006
6/22/2021	<0.006
9/17/2021	<0.006
12/15/2021	<0.006
3/17/2022	<0.006
5/10/2022	<0.006
9/8/2022	<0.006
11/22/2022	<0.006

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 87.5% NDs. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Arsenic Analysis Run 3/8/2023 2:18 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Arsenic (mg/L) Analysis Run 3/8/2023 2:39 PM

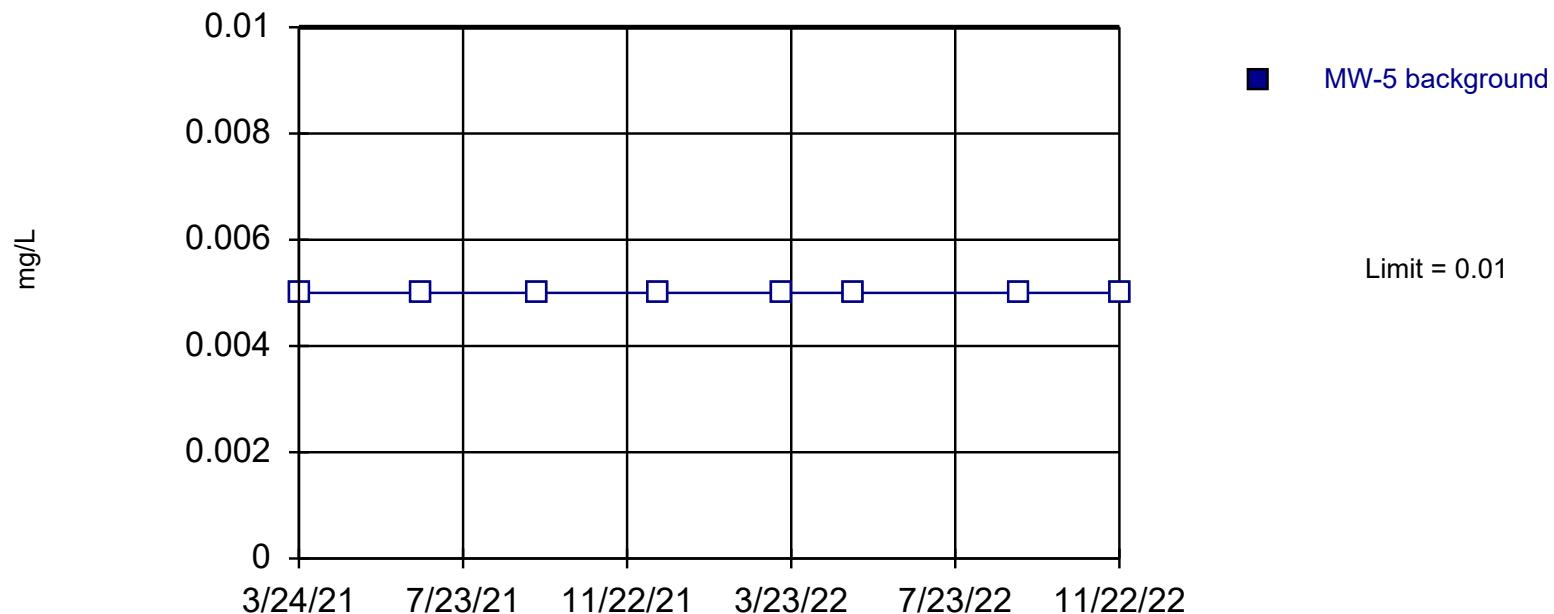
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.01
6/22/2021	0.0104
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Arsenic Analysis Run 3/8/2023 2:18 PM

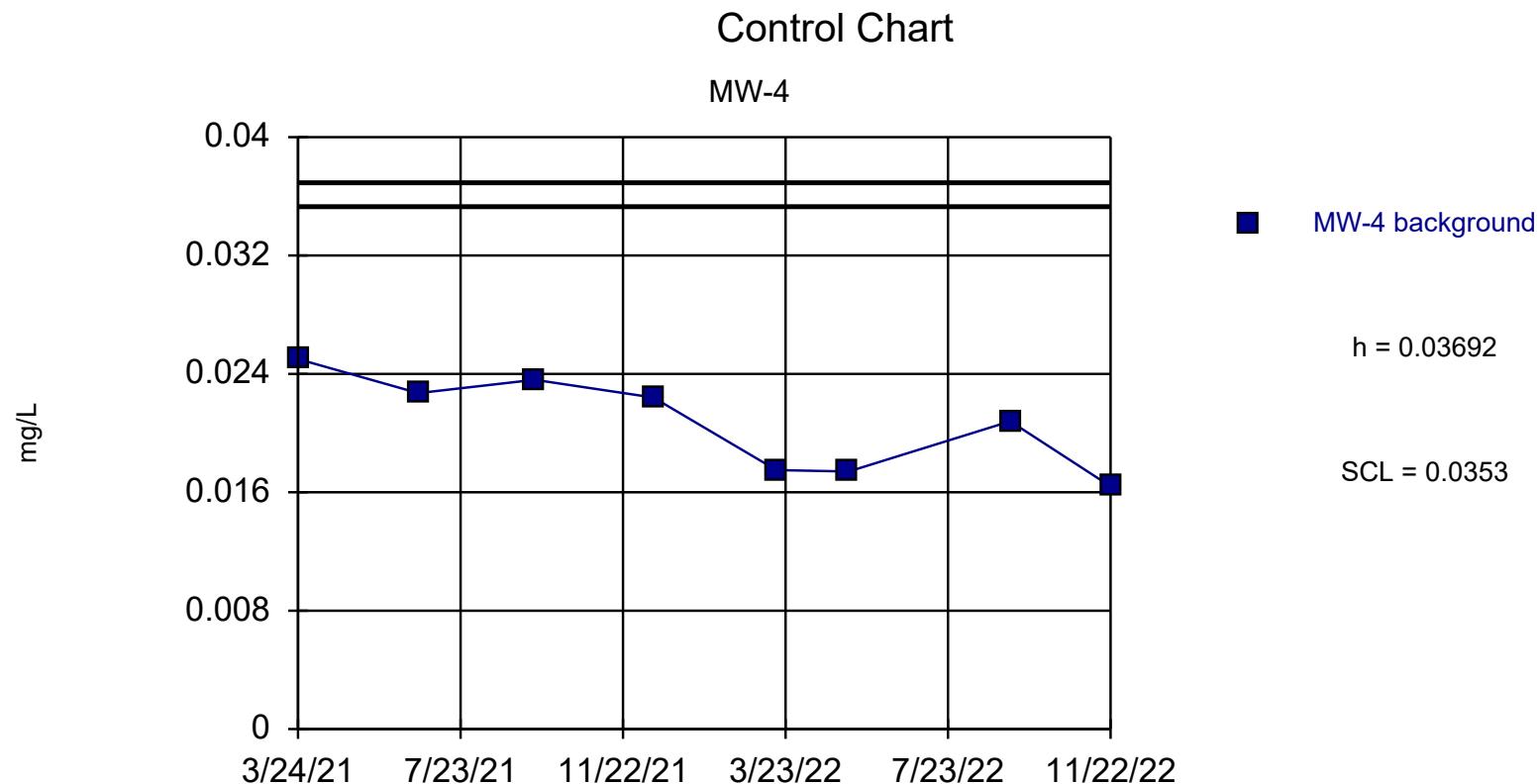
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Arsenic (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.01
6/22/2021	<0.01
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01



Background Data Summary: Mean=0.02073, Std. Dev.=0.003238, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9075, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Barium Analysis Run 3/8/2023 2:18 PM

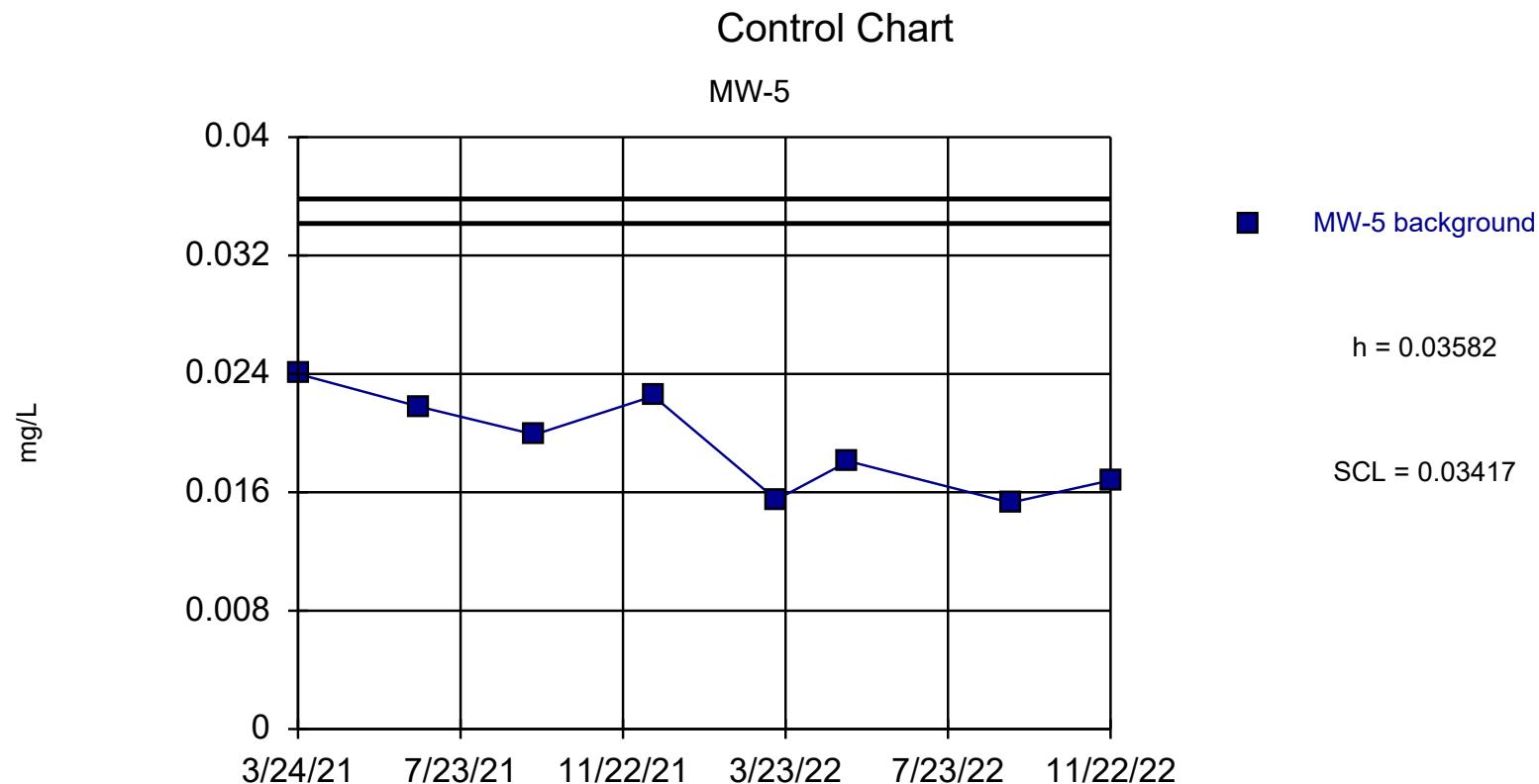
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Barium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 0.025
6/22/2021 0.0227
9/17/2021 0.0236
12/15/2021 0.0224
3/17/2022 0.0175
5/10/2022 0.0174
9/8/2022 0.0208
11/22/2022 0.0164



Background Data Summary: Mean=0.01924, Std. Dev.=0.003317, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9274, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Barium Analysis Run 3/8/2023 2:18 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

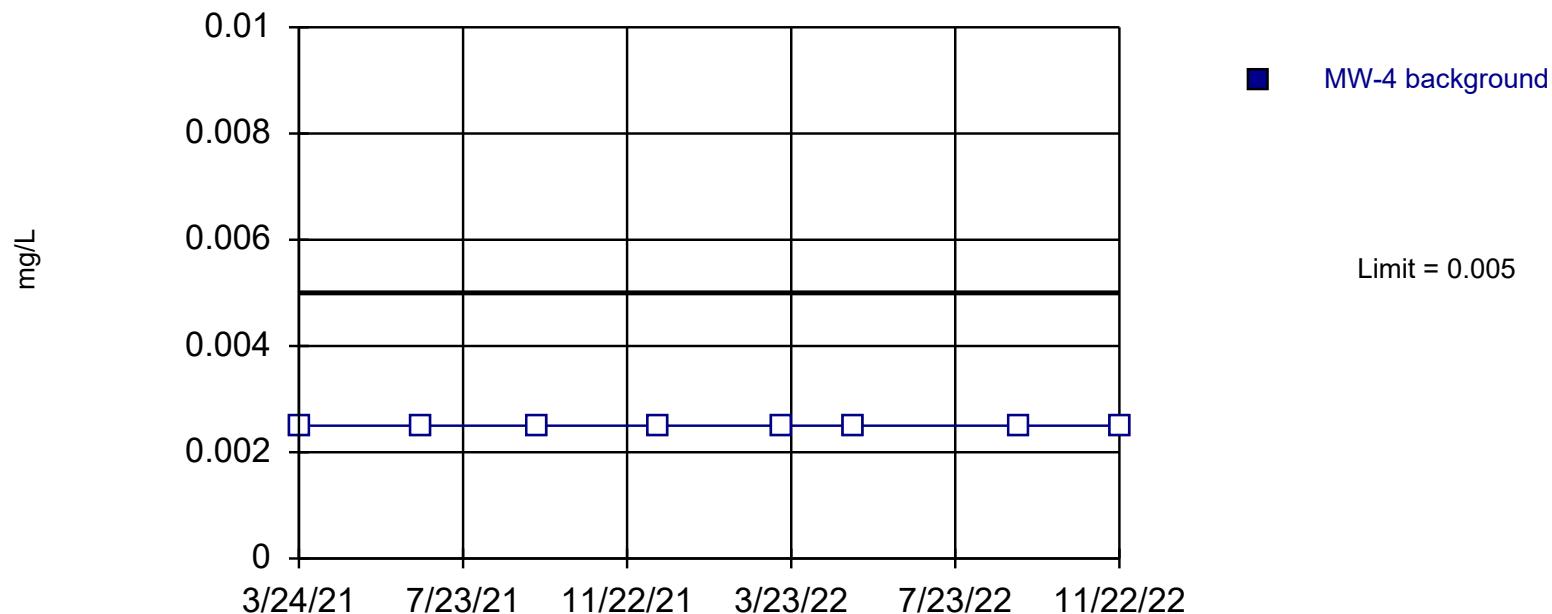
Constituent: Barium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 0.024
6/22/2021 0.0218
9/17/2021 0.0199
12/15/2021 0.0225
3/17/2022 0.0155
5/10/2022 0.0181
9/8/2022 0.0153
11/22/2022 0.0168

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Beryllium Analysis Run 3/8/2023 2:18 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

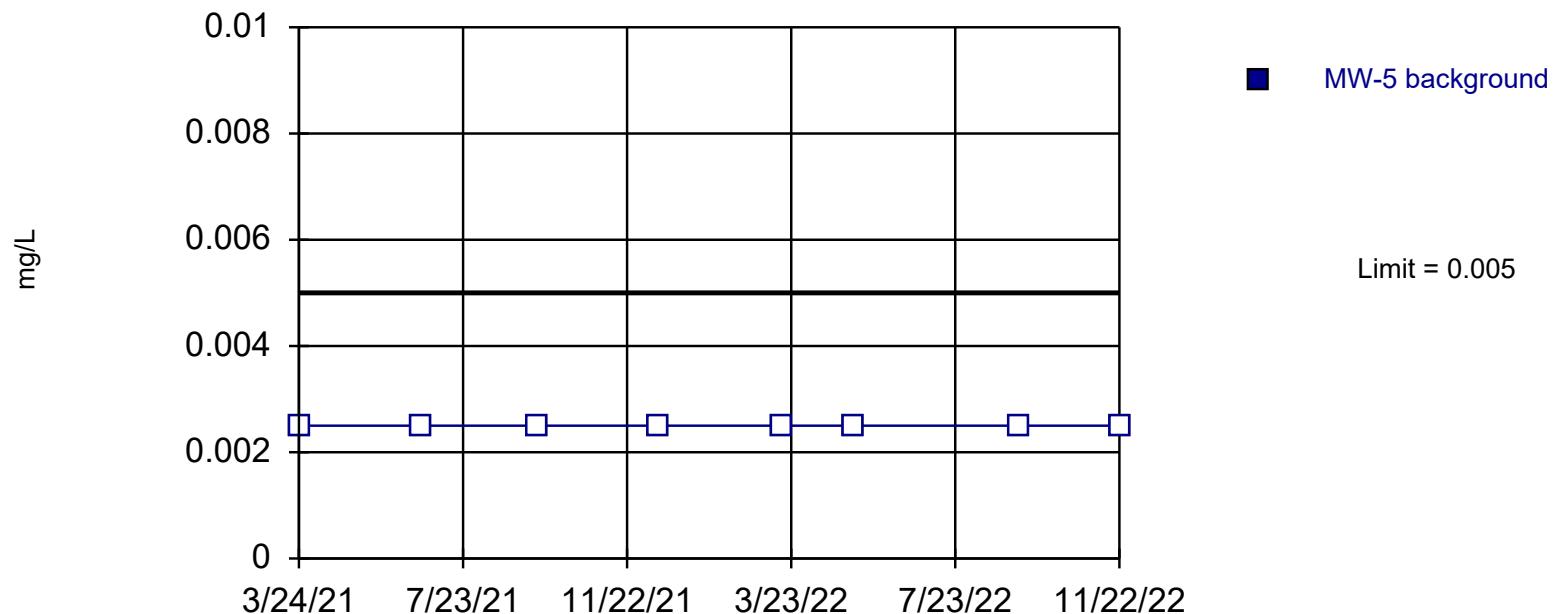
Constituent: Beryllium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Beryllium Analysis Run 3/8/2023 2:18 PM

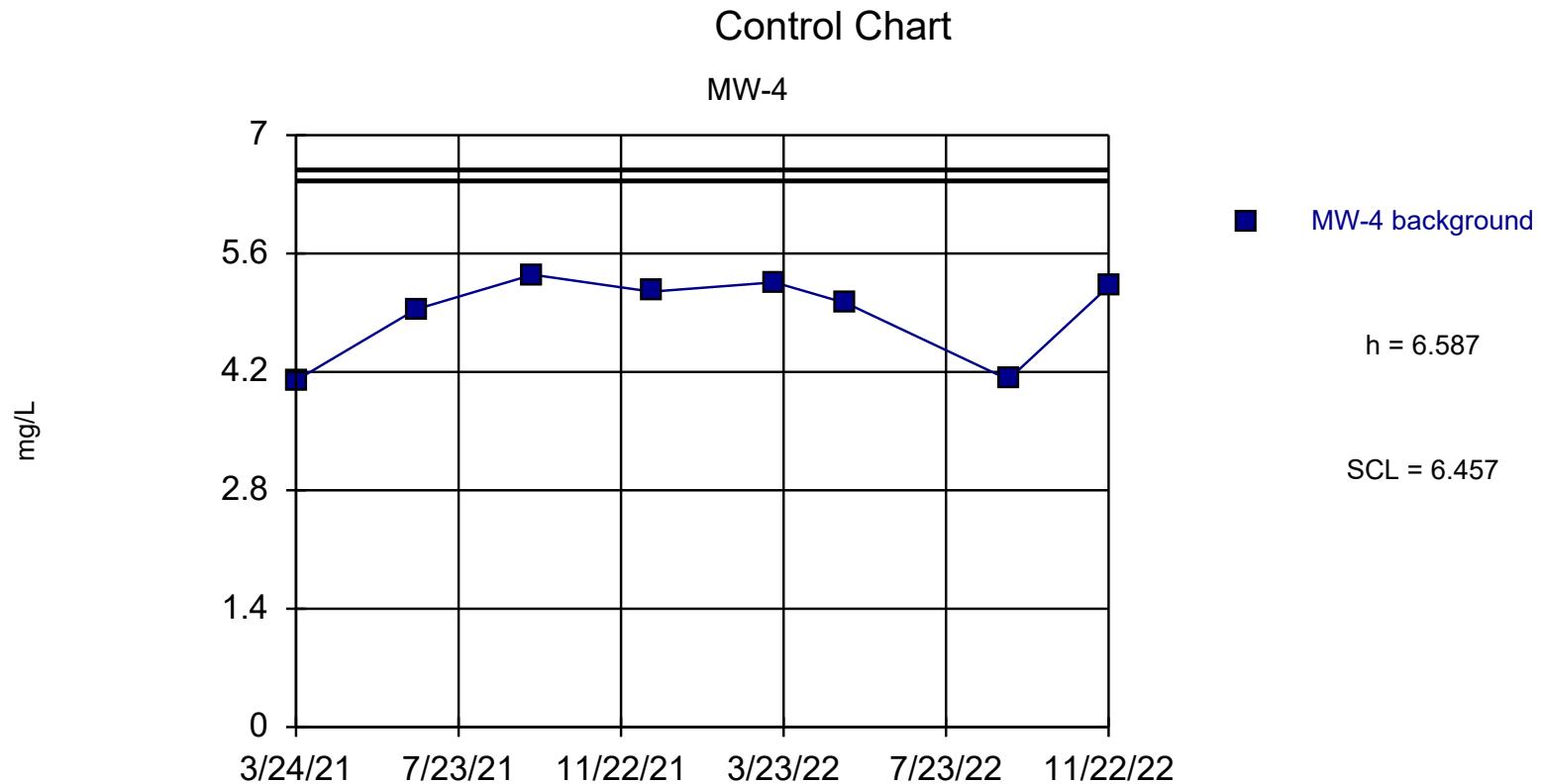
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Beryllium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005



Background Data Summary (based on cube transformation): Mean=120.2, Std. Dev.=33.13, n=8. Normality test:
Shapiro Wilk @alpha = 0.05, calculated = 0.8182, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used
for control stats. Standardized h=5, SCL=4.5.

Constituent: Boron Analysis Run 3/8/2023 2:18 PM

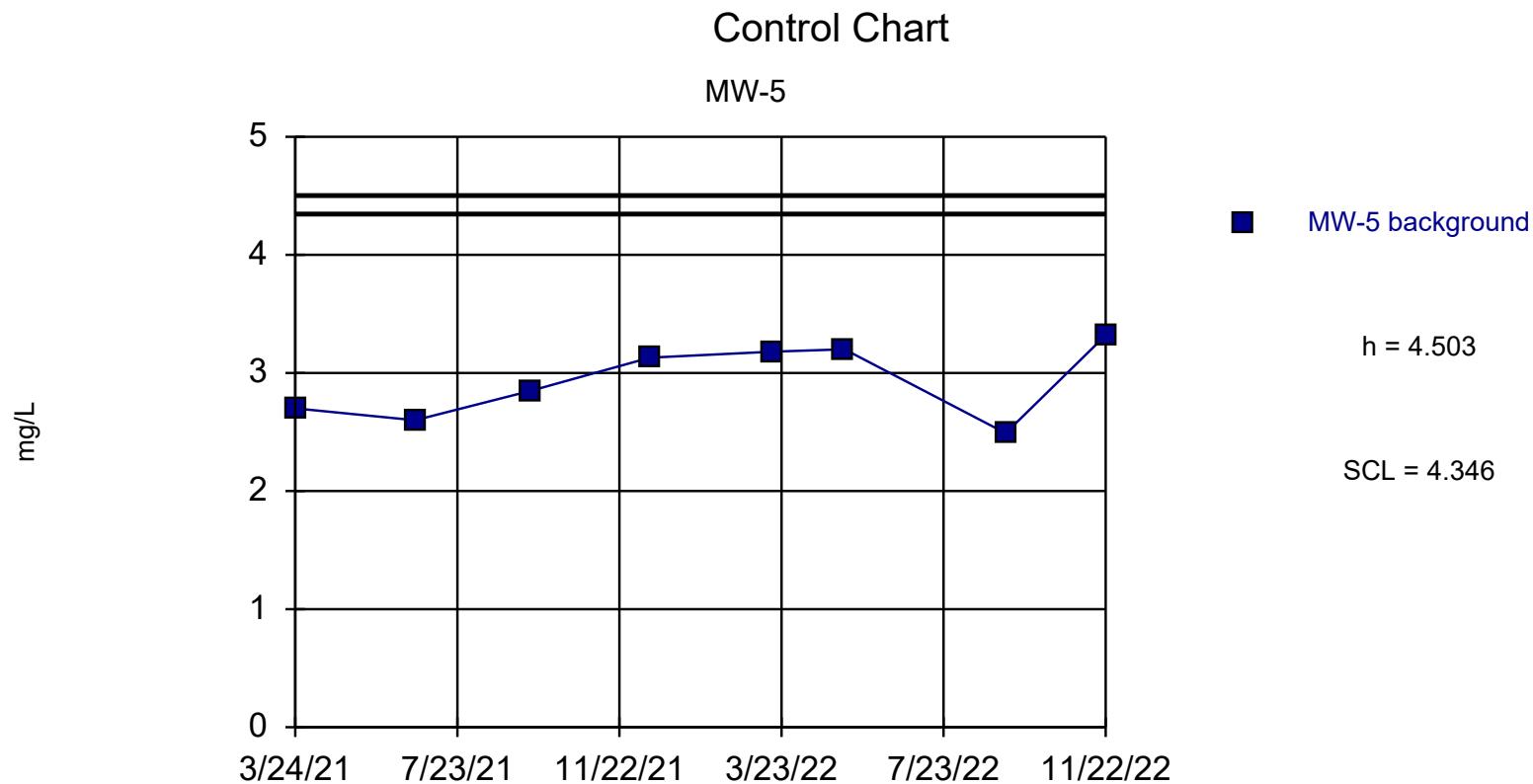
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Boron (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4	Cube
3/24/2021	4.1
6/22/2021	4.94
9/17/2021	5.35
12/15/2021	5.15
3/17/2022	5.26
5/10/2022	5.01
9/8/2022	4.11
11/22/2022	5.21



Background Data Summary: Mean=2.934, Std. Dev.=0.3138, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9091, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Boron Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Boron (mg/L) Analysis Run 3/8/2023 2:39 PM

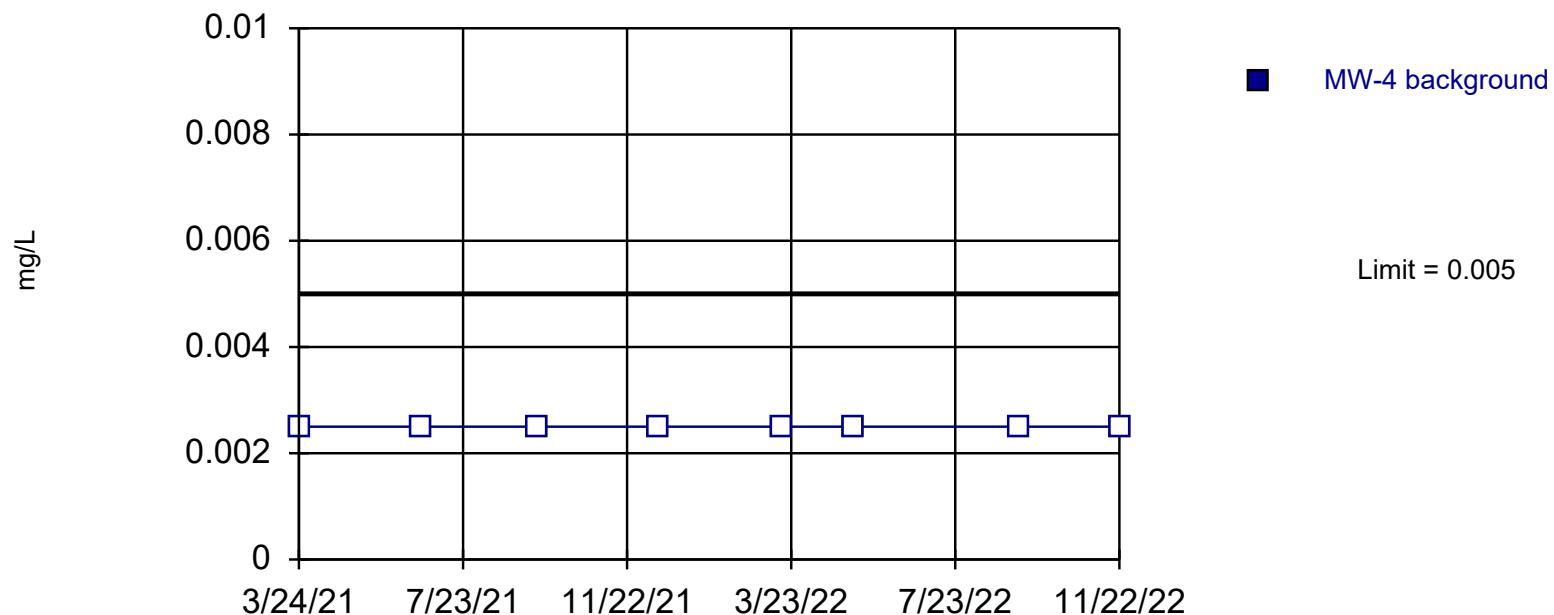
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	2.7
6/22/2021	2.6
9/17/2021	2.85
12/15/2021	3.13
3/17/2022	3.18
5/10/2022	3.2
9/8/2022	2.49
11/22/2022	3.32

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Cadmium Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 3/8/2023 2:39 PM

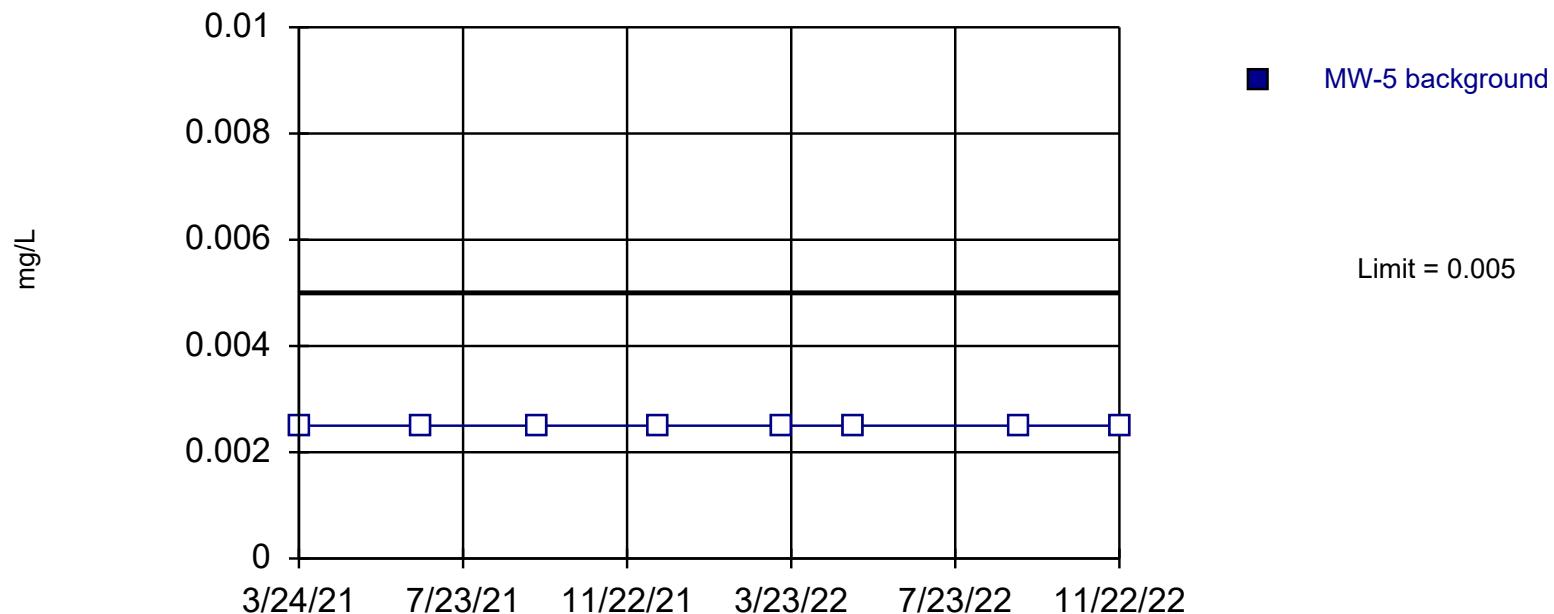
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Cadmium Analysis Run 3/8/2023 2:19 PM

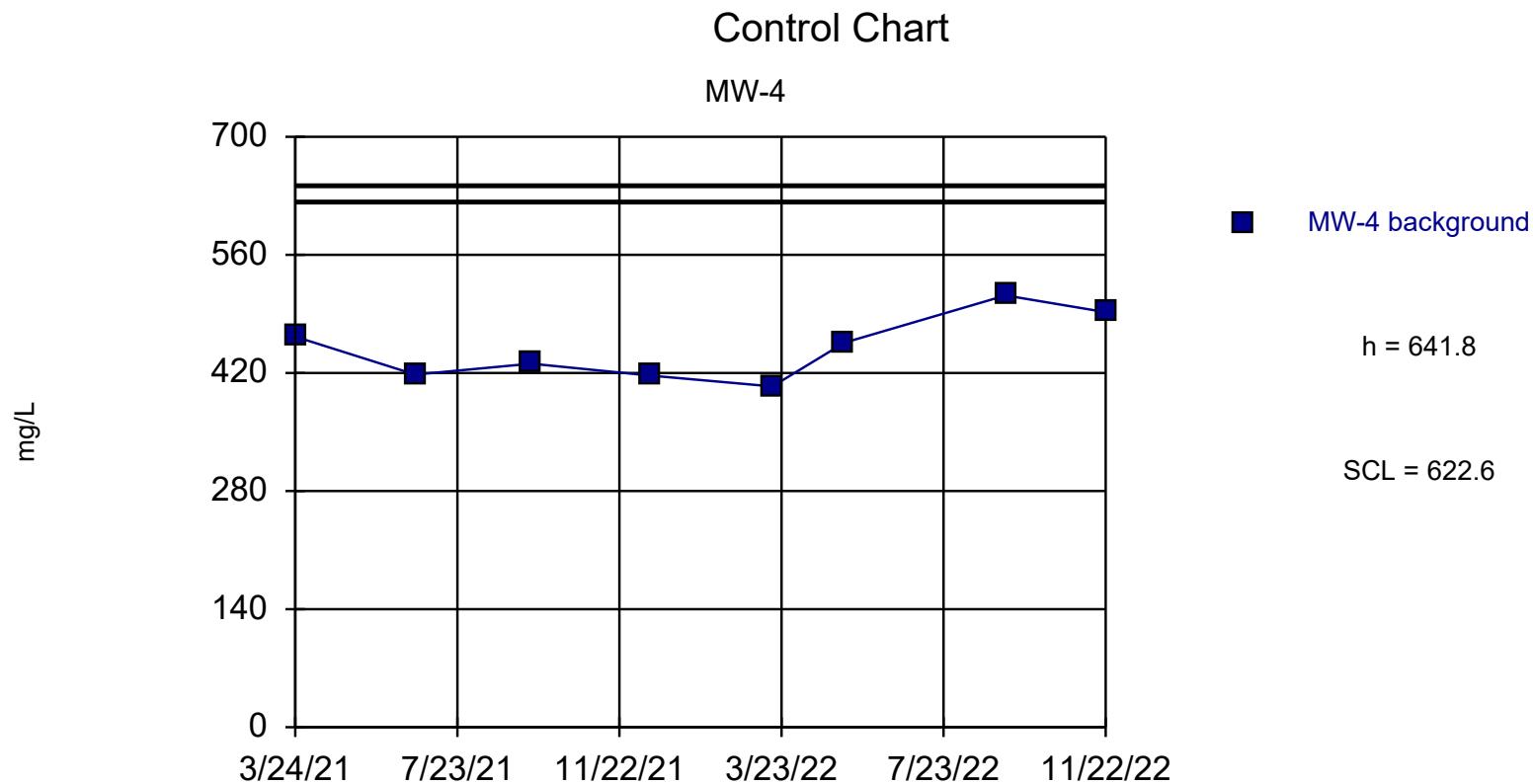
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Cadmium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005



Background Data Summary: Mean=449.1, Std. Dev.=38.54, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9301, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Calcium Analysis Run 3/8/2023 2:19 PM

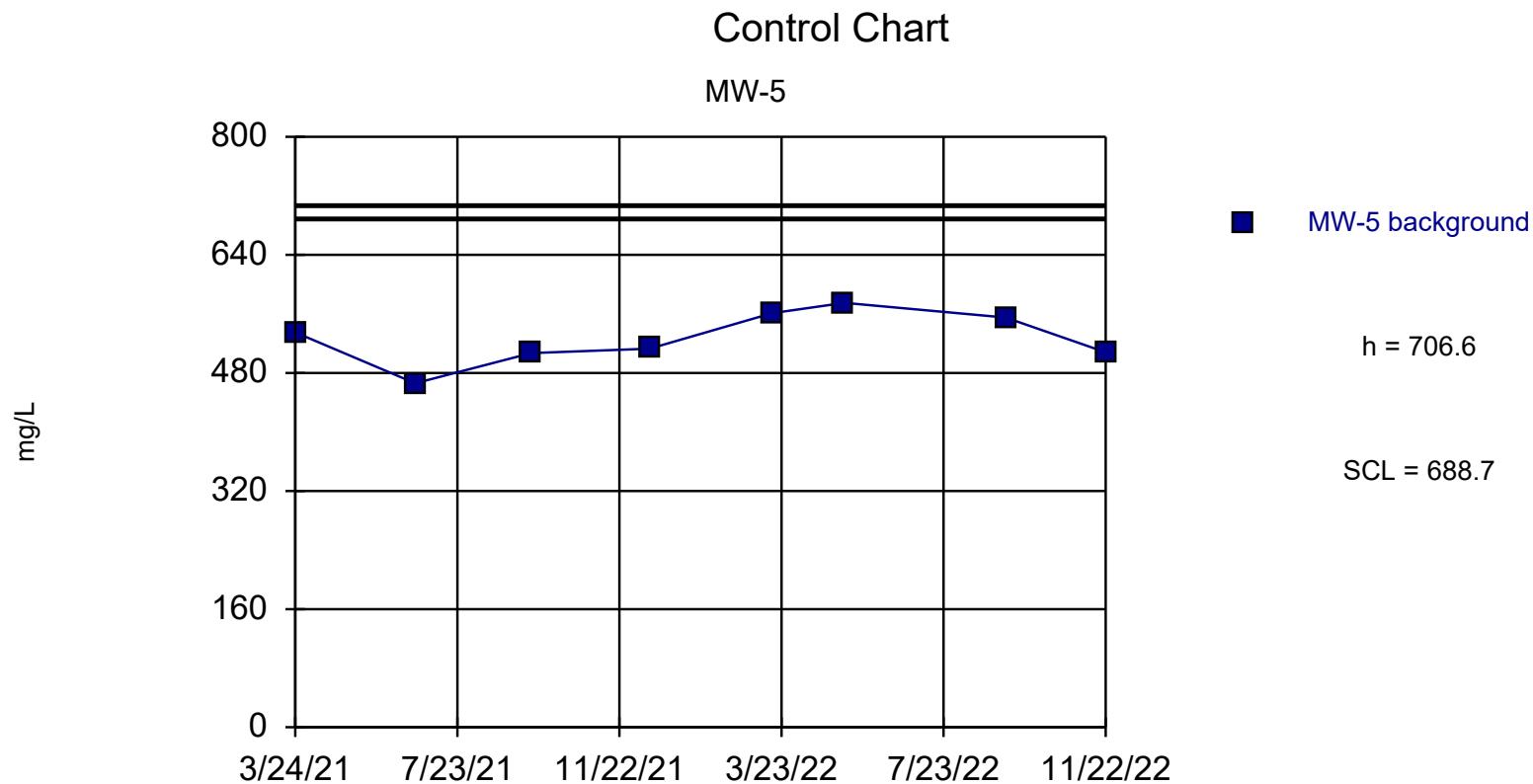
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Calcium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 463
6/22/2021 418
9/17/2021 431
12/15/2021 417
3/17/2022 404
5/10/2022 456
9/8/2022 512
11/22/2022 492



Background Data Summary: Mean=527.5, Std. Dev.=35.82, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9519, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Calcium Analysis Run 3/8/2023 2:19 PM

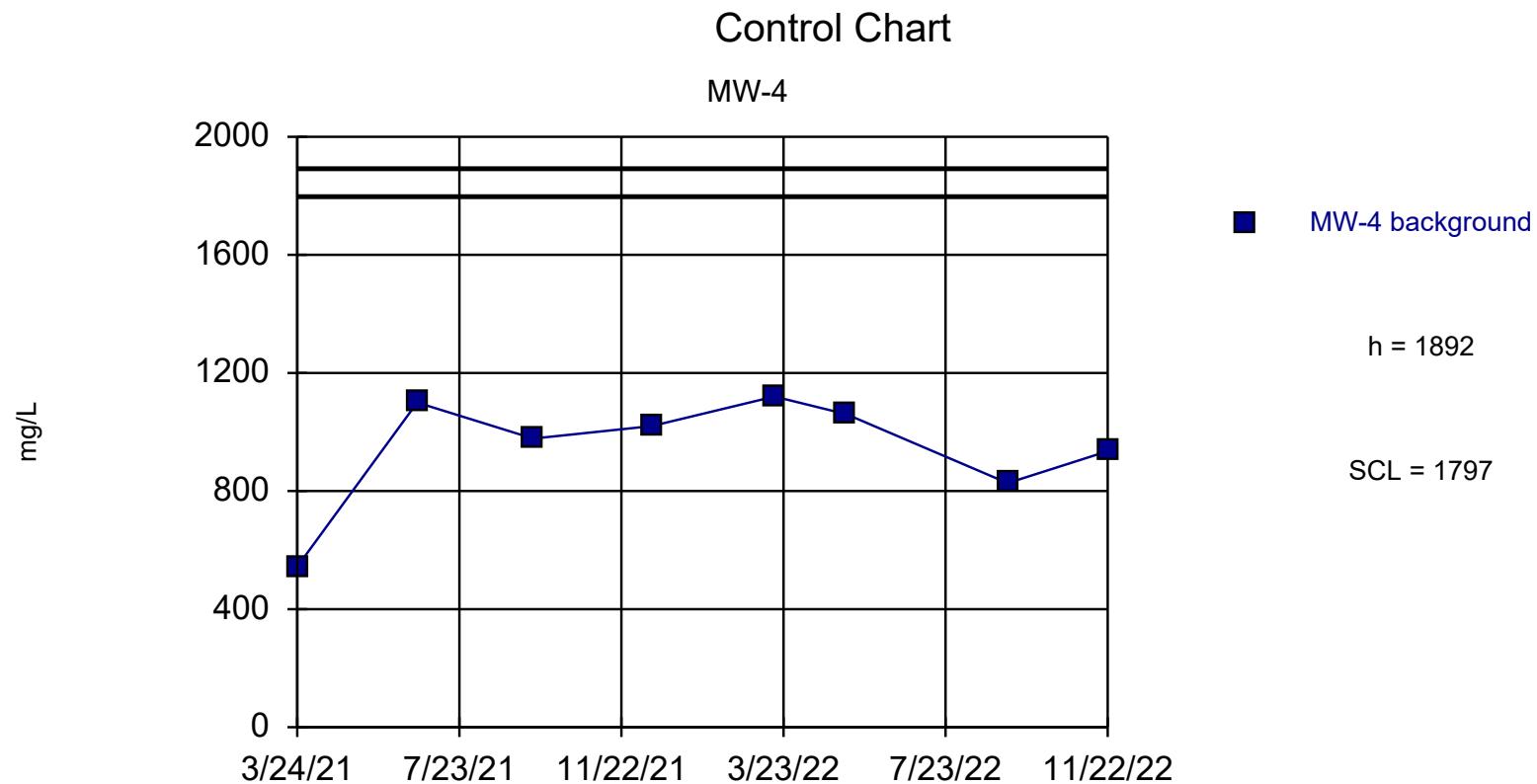
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Calcium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 535
6/22/2021 466
9/17/2021 507
12/15/2021 513
3/17/2022 561
5/10/2022 575
9/8/2022 555
11/22/2022 508



Background Data Summary: Mean=948, Std. Dev.=188.7, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8454, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

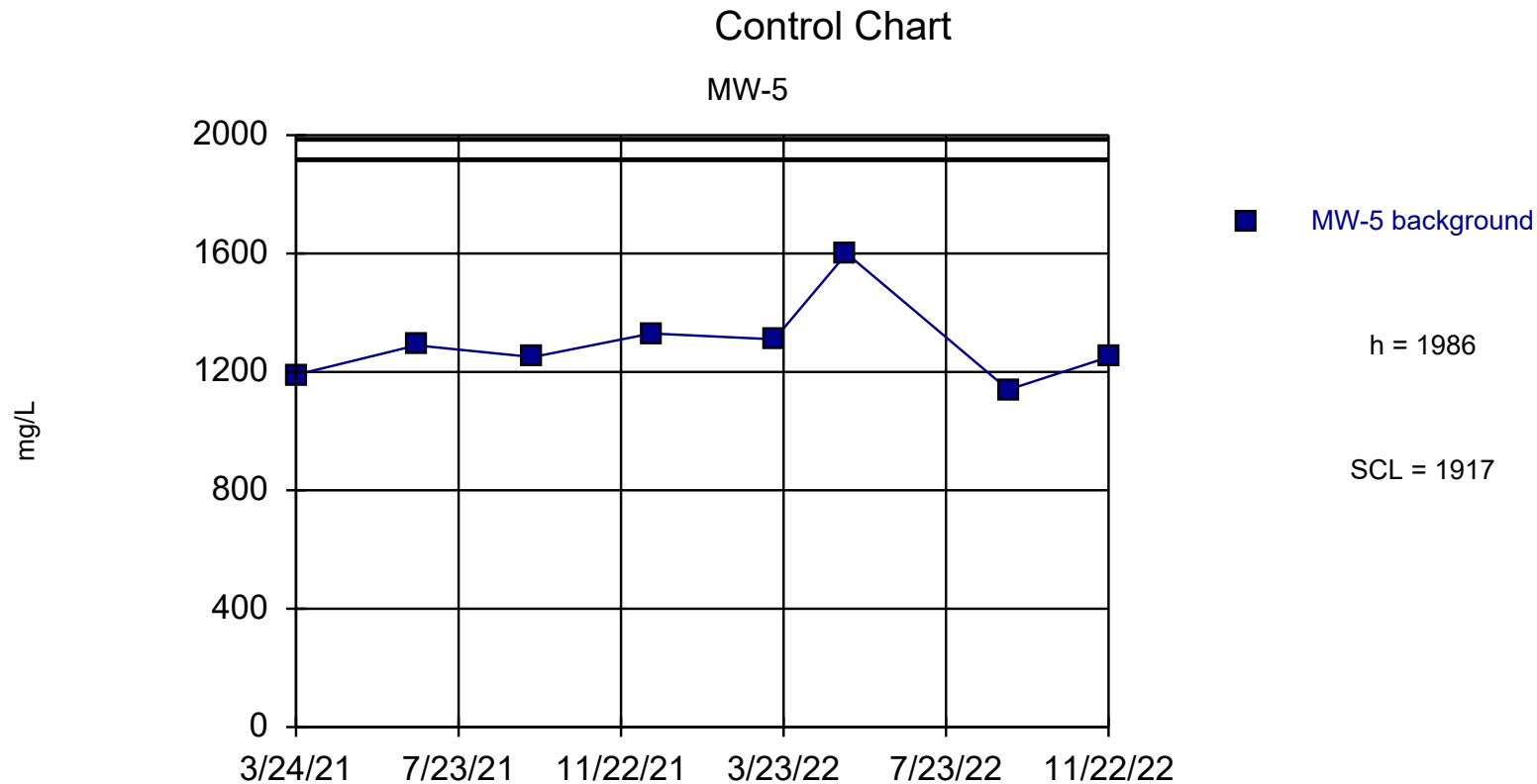
Constituent: Chloride Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Chloride (mg/L) Analysis Run 3/8/2023 2:39 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 544
6/22/2021 1100
9/17/2021 978
12/15/2021 1020
3/17/2022 1120
5/10/2022 1060
9/8/2022 827
11/22/2022 935



Background Data Summary: Mean=1295, Std. Dev.=138.2, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.842, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Chloride Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Chloride (mg/L) Analysis Run 3/8/2023 2:39 PM

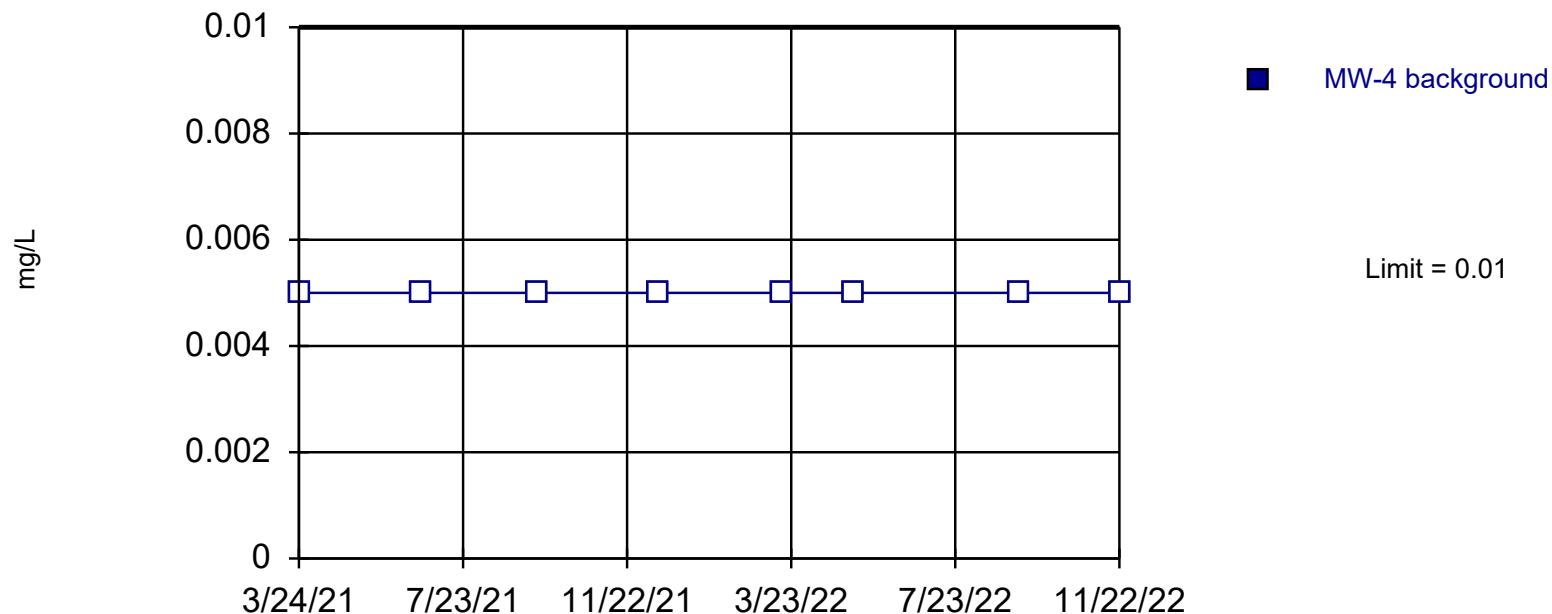
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 1190
6/22/2021 1290
9/17/2021 1250
12/15/2021 1330
3/17/2022 1310
5/10/2022 1600
9/8/2022 1140
11/22/2022 1250

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Chromium Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Chromium (mg/L) Analysis Run 3/8/2023 2:39 PM

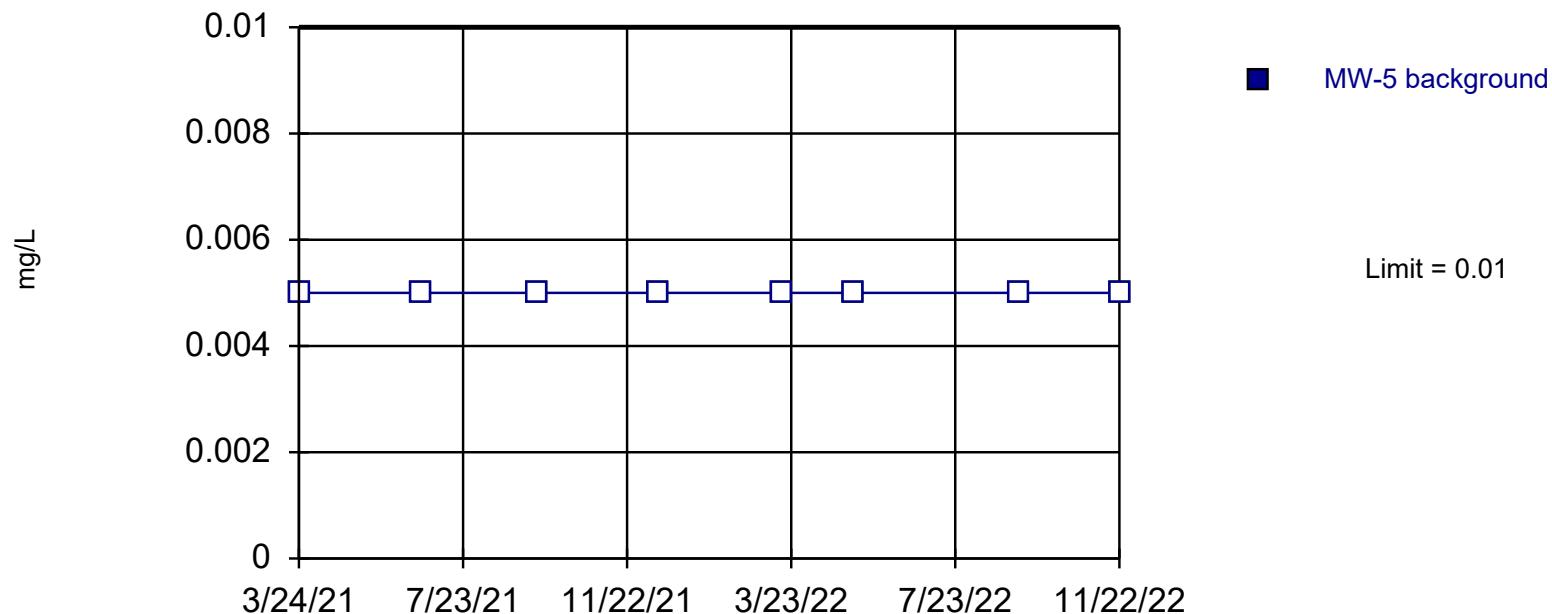
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.01
6/22/2021	<0.01
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Chromium Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Chromium (mg/L) Analysis Run 3/8/2023 2:39 PM

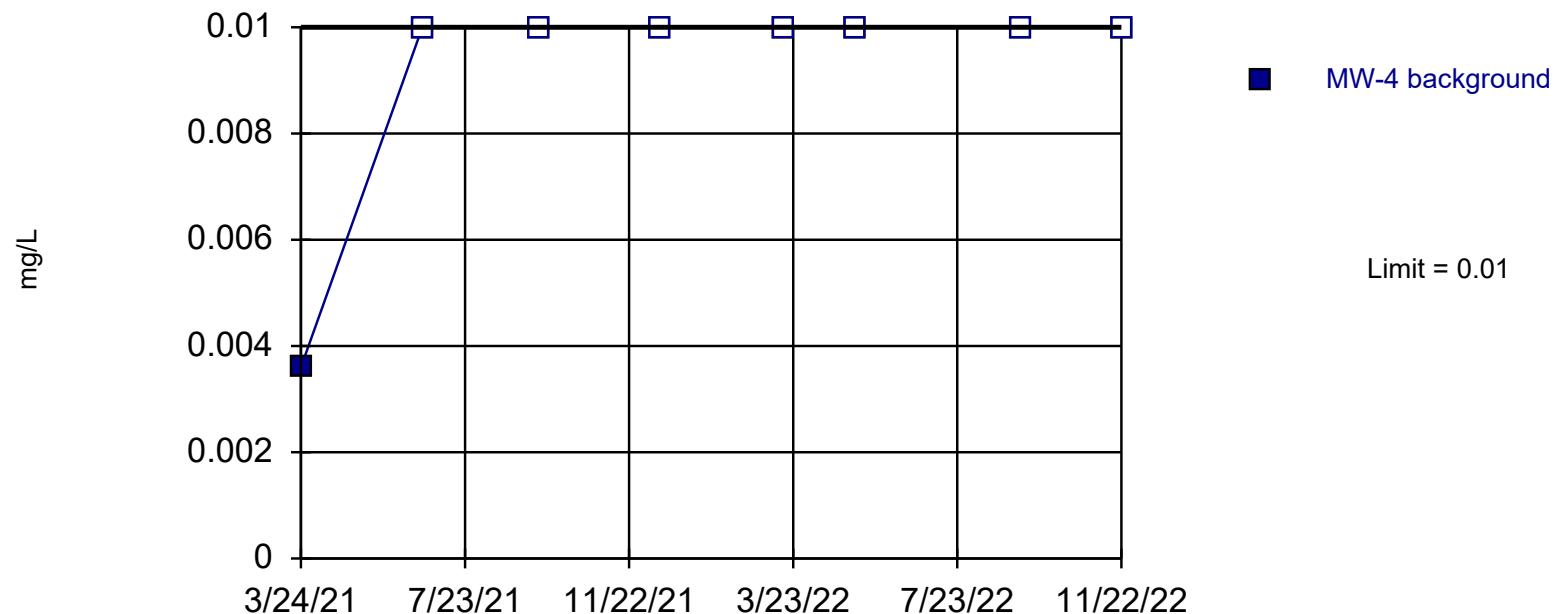
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.01
6/22/2021	<0.01
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 87.5% NDs. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Cobalt Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Cobalt (mg/L) Analysis Run 3/8/2023 2:39 PM

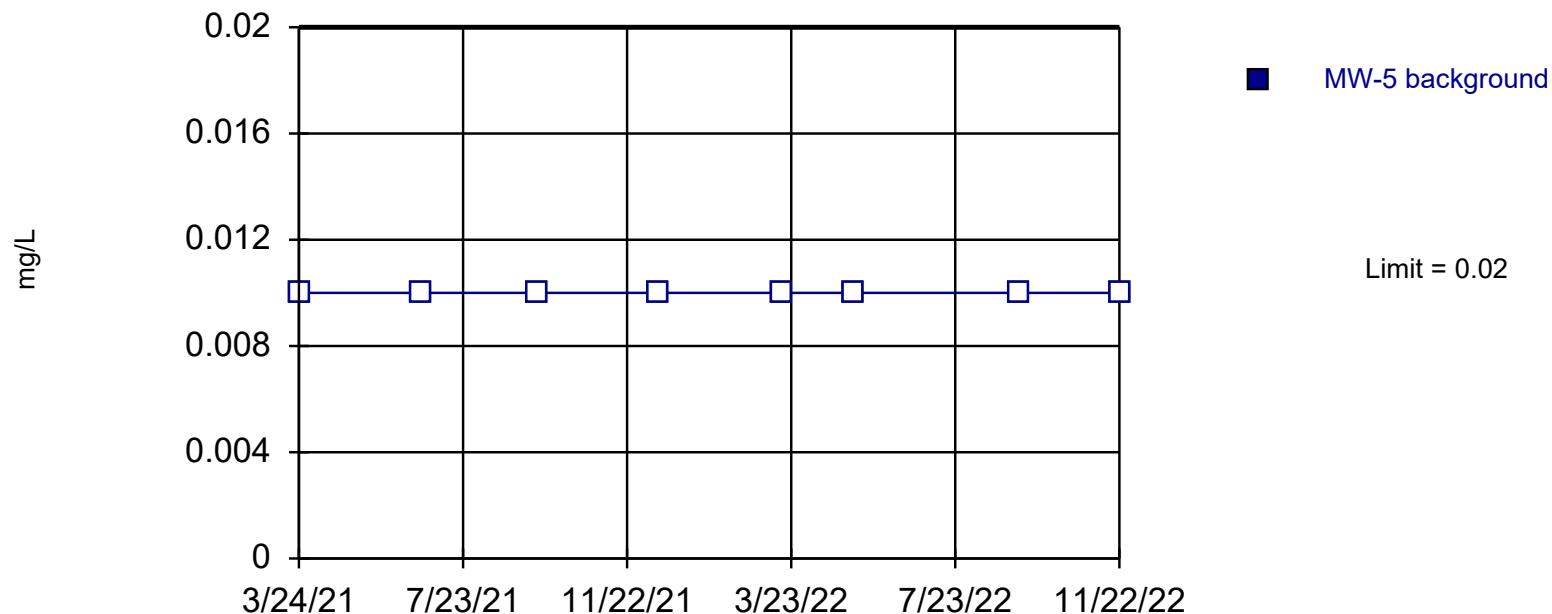
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	0.0036
6/22/2021	<0.02
9/17/2021	<0.02
12/15/2021	<0.02
3/17/2022	<0.02
5/10/2022	<0.02
9/8/2022	<0.02
11/22/2022	<0.02

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Cobalt Analysis Run 3/8/2023 2:19 PM

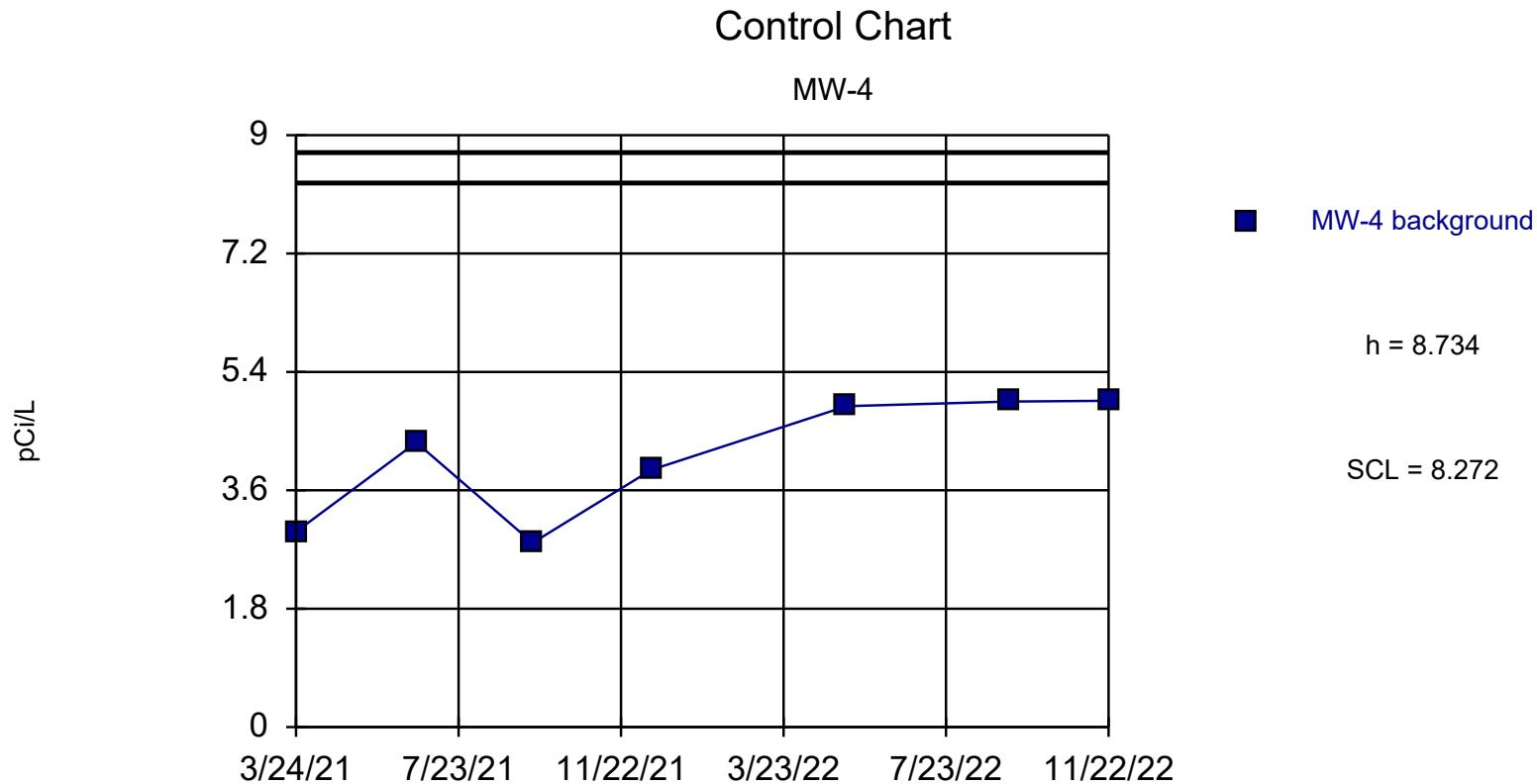
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Cobalt (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.02
6/22/2021	<0.02
9/17/2021	<0.02
12/15/2021	<0.02
3/17/2022	<0.02
5/10/2022	<0.02
9/8/2022	<0.02
11/22/2022	<0.02



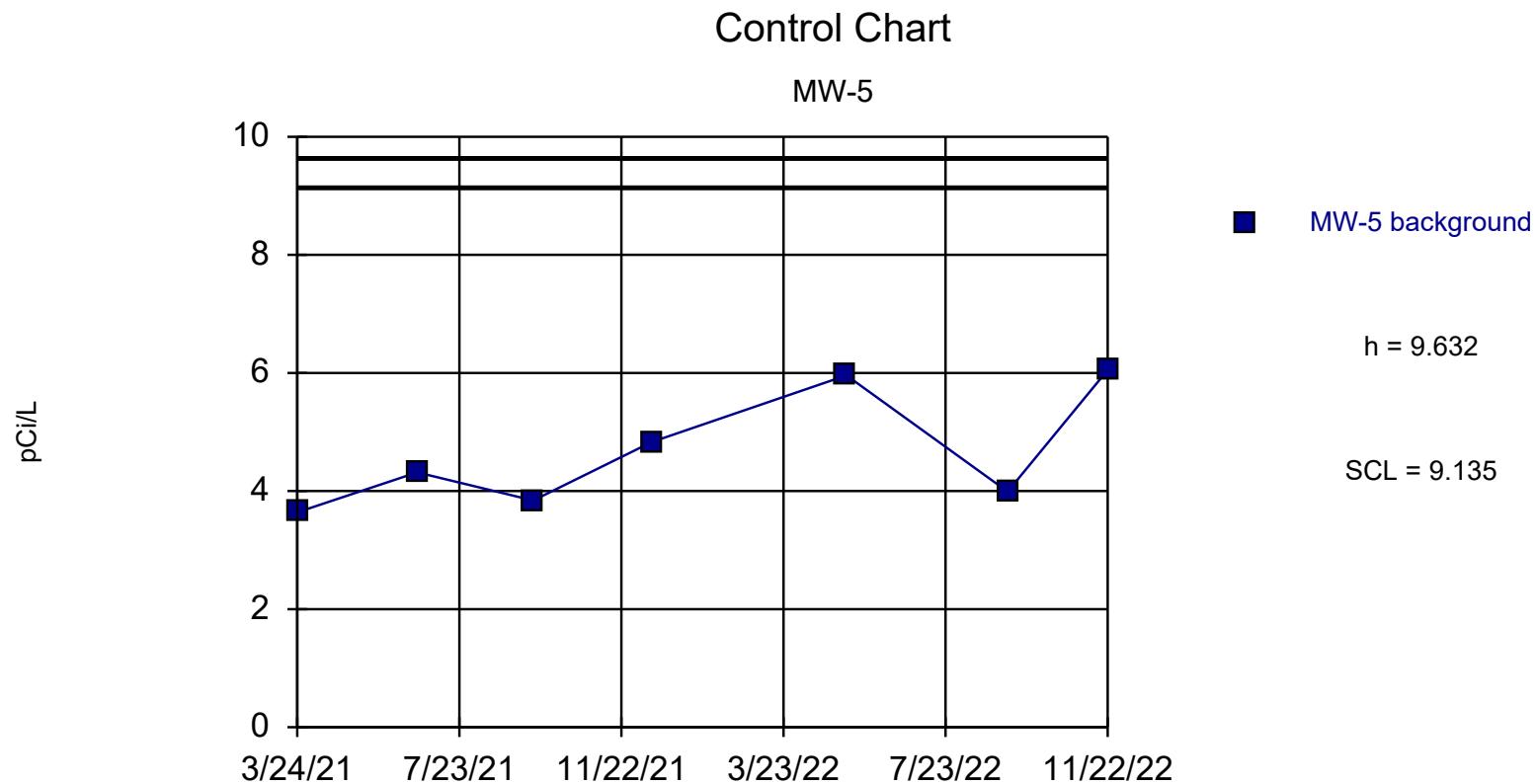
Background Data Summary: Mean=4.114, Std. Dev.=0.9241, n=7. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8463, critical = 0.803. Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Combined Radium Analysis Run 9/18/2023 4:46 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:47 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-4
3/24/2021	2.97
6/22/2021	4.327
9/17/2021	2.8
12/15/2021	3.91
5/10/2022	4.88
9/8/2022	4.95
11/22/2022	4.96



Background Data Summary: Mean=4.661, Std. Dev.=0.9942, n=7. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.863, critical = 0.803. Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

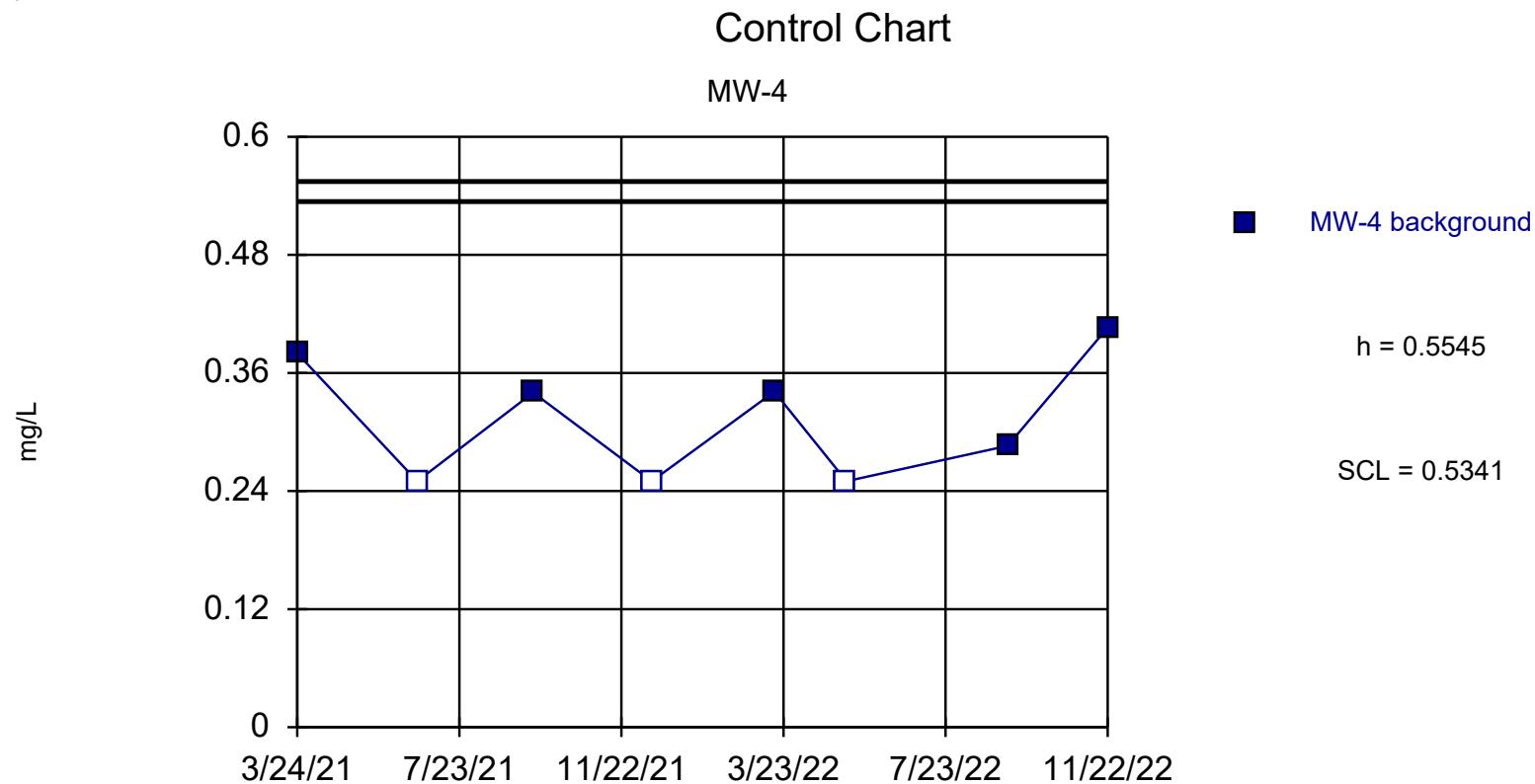
Constituent: Combined Radium Analysis Run 9/18/2023 4:46 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

Control Chart

Constituent: Combined Radium (pCi/L) Analysis Run 9/18/2023 4:47 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata nod

	MW-5
3/24/2021	3.64
6/22/2021	4.316
9/17/2021	3.84
12/15/2021	4.83
5/10/2022	5.96
9/8/2022	3.99
11/22/2022	6.05

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Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.3506, Std. Dev.=0.04077, n=8, 37.5% NDs.
Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.874, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

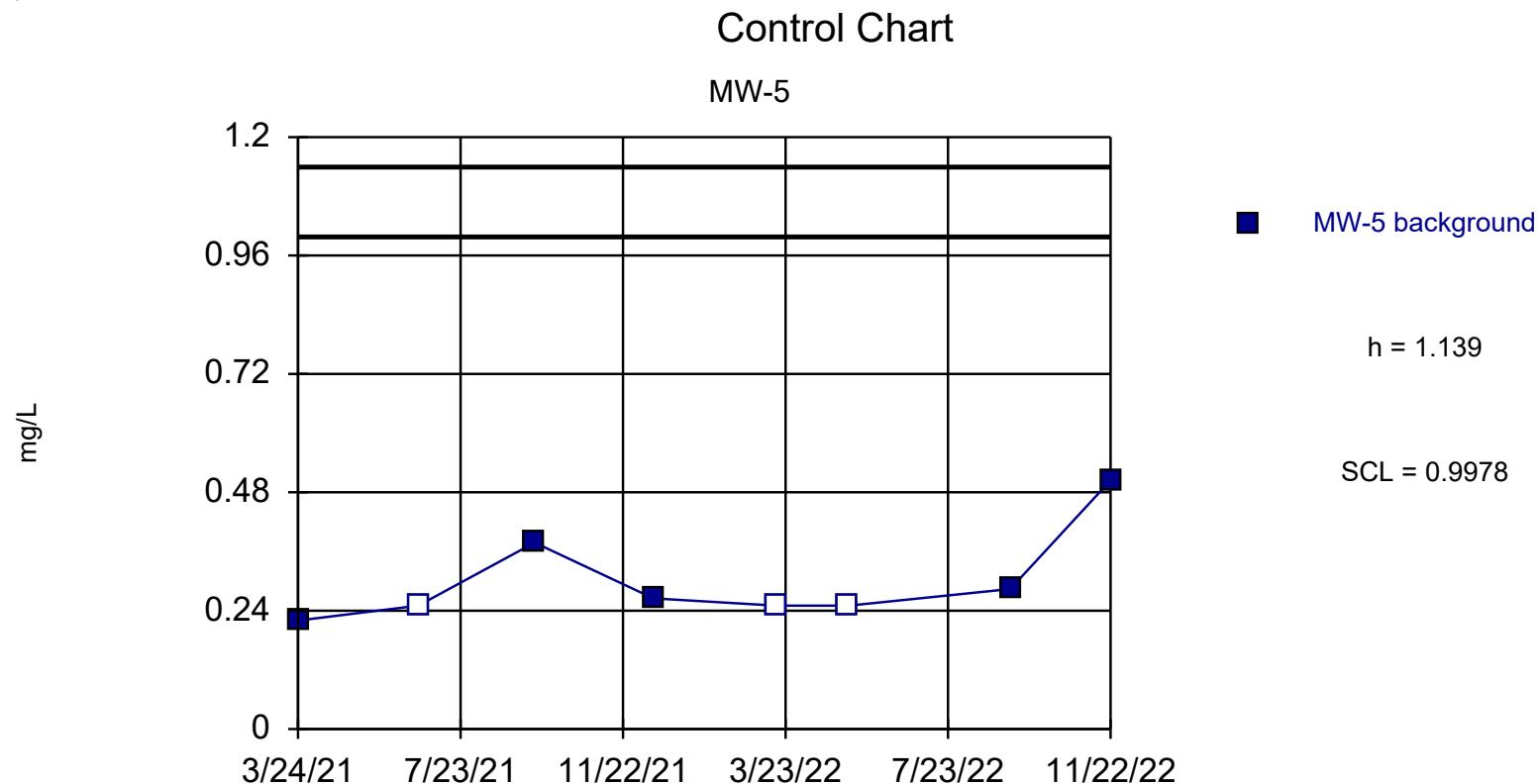
Constituent: Fluoride Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Fluoride (mg/L) Analysis Run 3/8/2023 2:39 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 0.38
6/22/2021 <0.5
9/17/2021 0.34
12/15/2021 <0.5
3/17/2022 0.341
5/10/2022 <0.5
9/8/2022 0.286
11/22/2022 0.406



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-1.196, Std. Dev.=0.2652, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8221, critical = 0.818.
Report alpha = 0. Dates ending 11/22/2022 used for control stats. Standardized h=5, SCL=4.5.

Constituent: Fluoride Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Fluoride (mg/L) Analysis Run 3/8/2023 2:39 PM

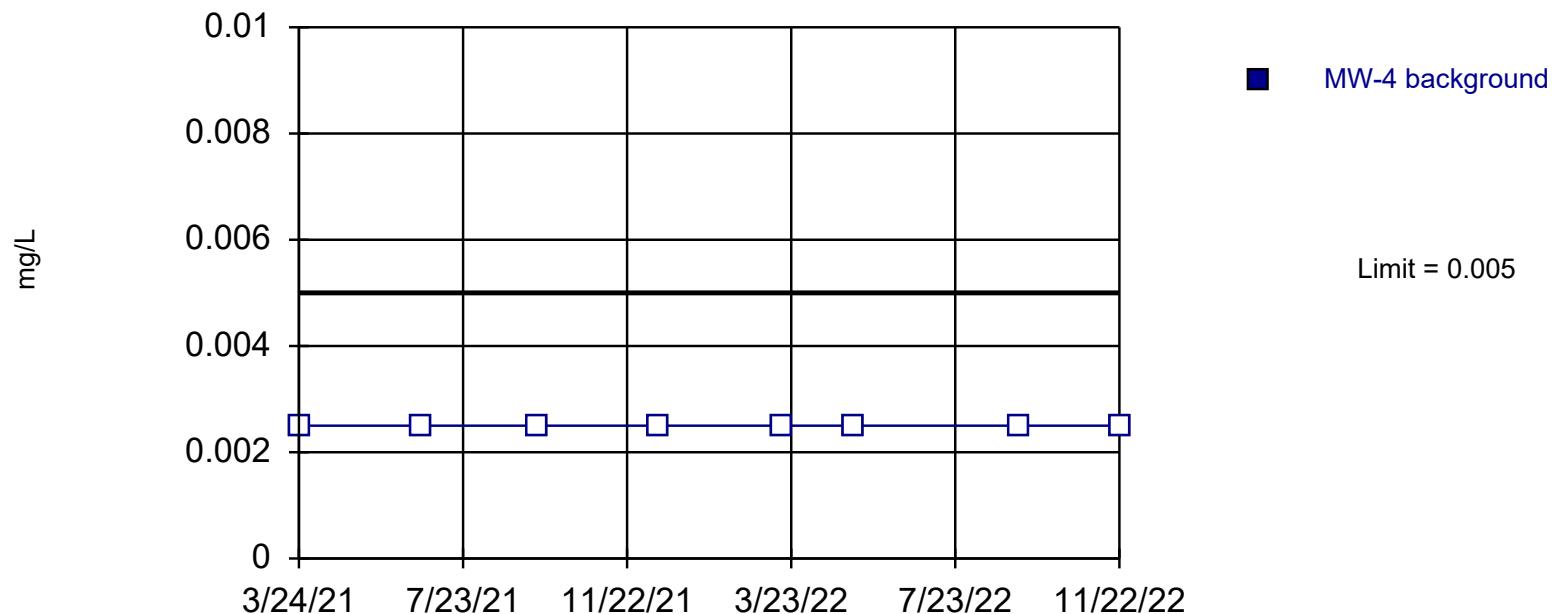
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5	Natural Log
3/24/2021	0.22
6/22/2021	<0.5
9/17/2021	0.378
12/15/2021	0.265
3/17/2022	<0.5
5/10/2022	<0.5
9/8/2022	0.284
11/22/2022	0.504

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Lead Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Lead (mg/L) Analysis Run 3/8/2023 2:39 PM

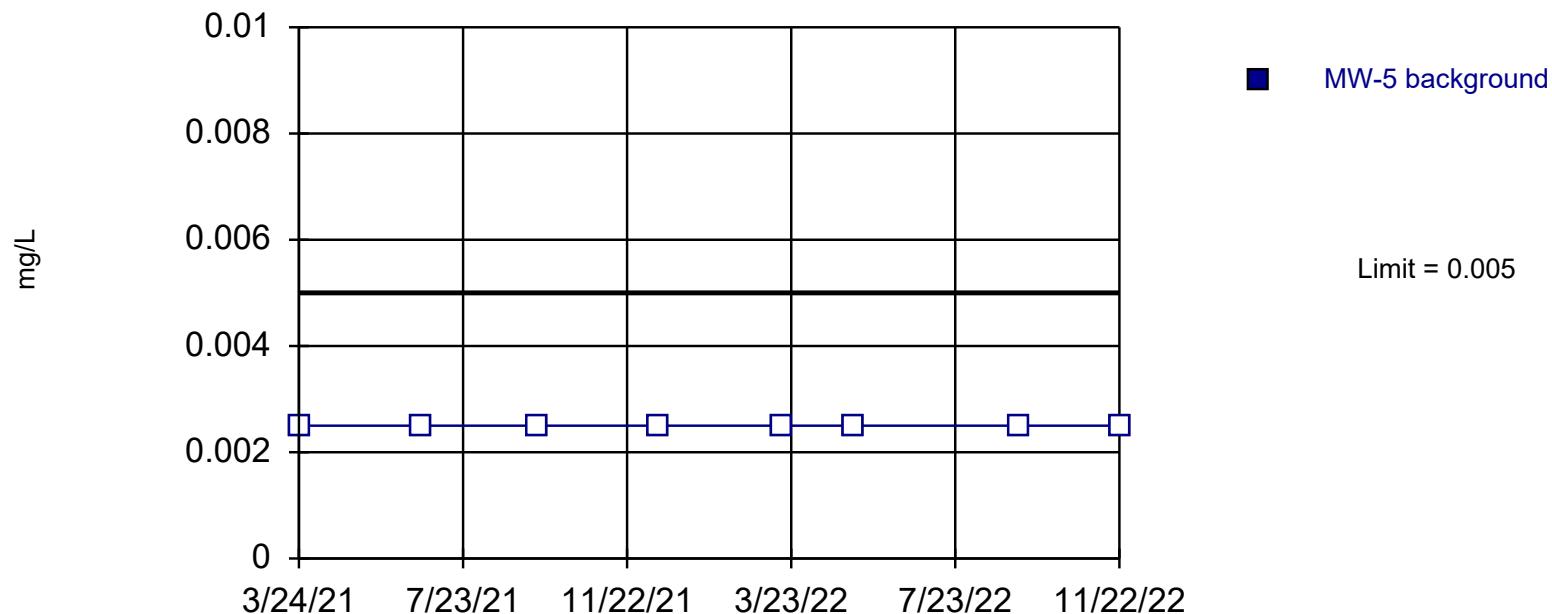
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Lead Analysis Run 3/8/2023 2:19 PM

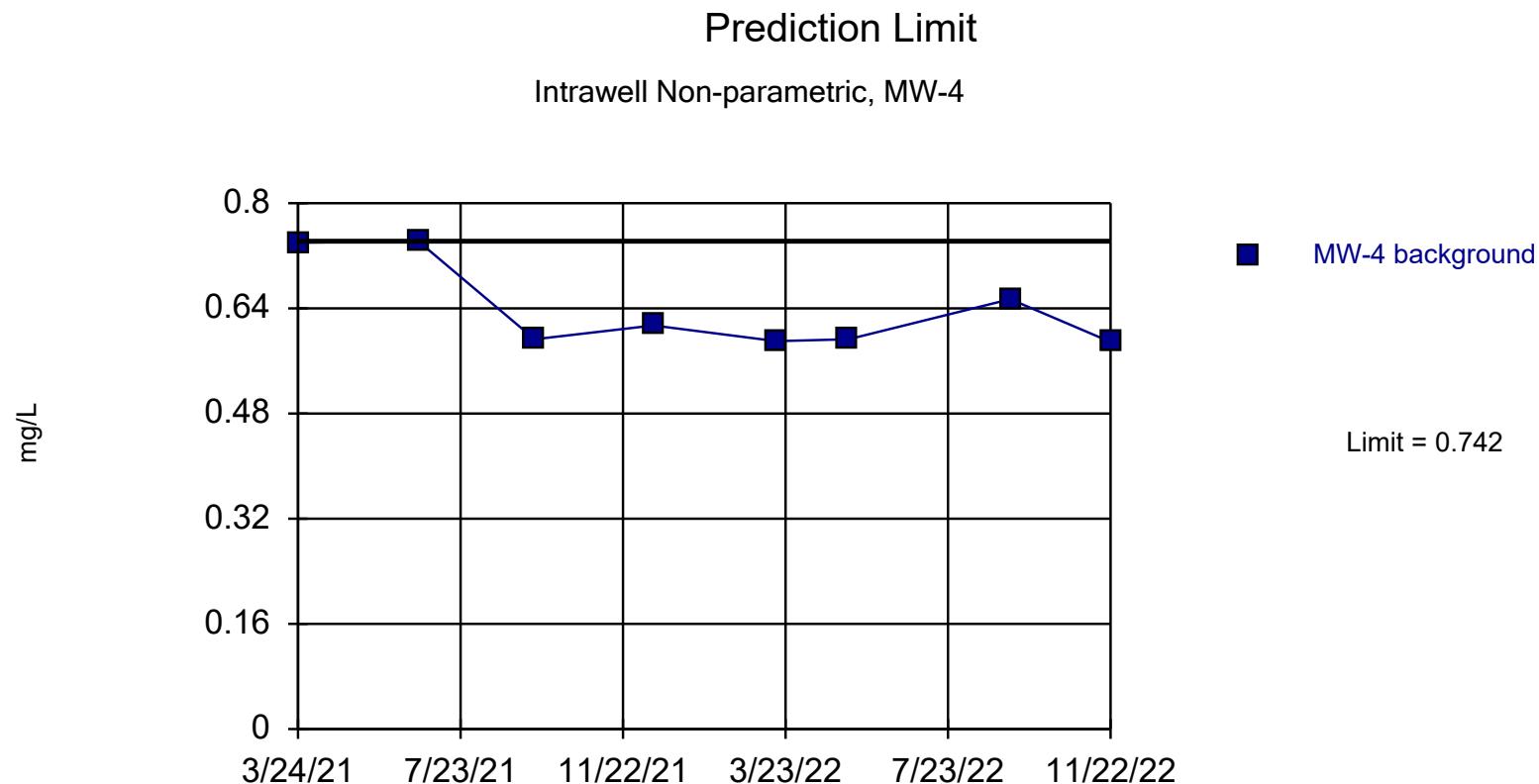
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Lead (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.005
6/22/2021	<0.005
9/17/2021	<0.005
12/15/2021	<0.005
3/17/2022	<0.005
5/10/2022	<0.005
9/8/2022	<0.005
11/22/2022	<0.005



Non-parametric test used in lieu of control chart because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 8 background values. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Lithium Analysis Run 3/8/2023 2:19 PM

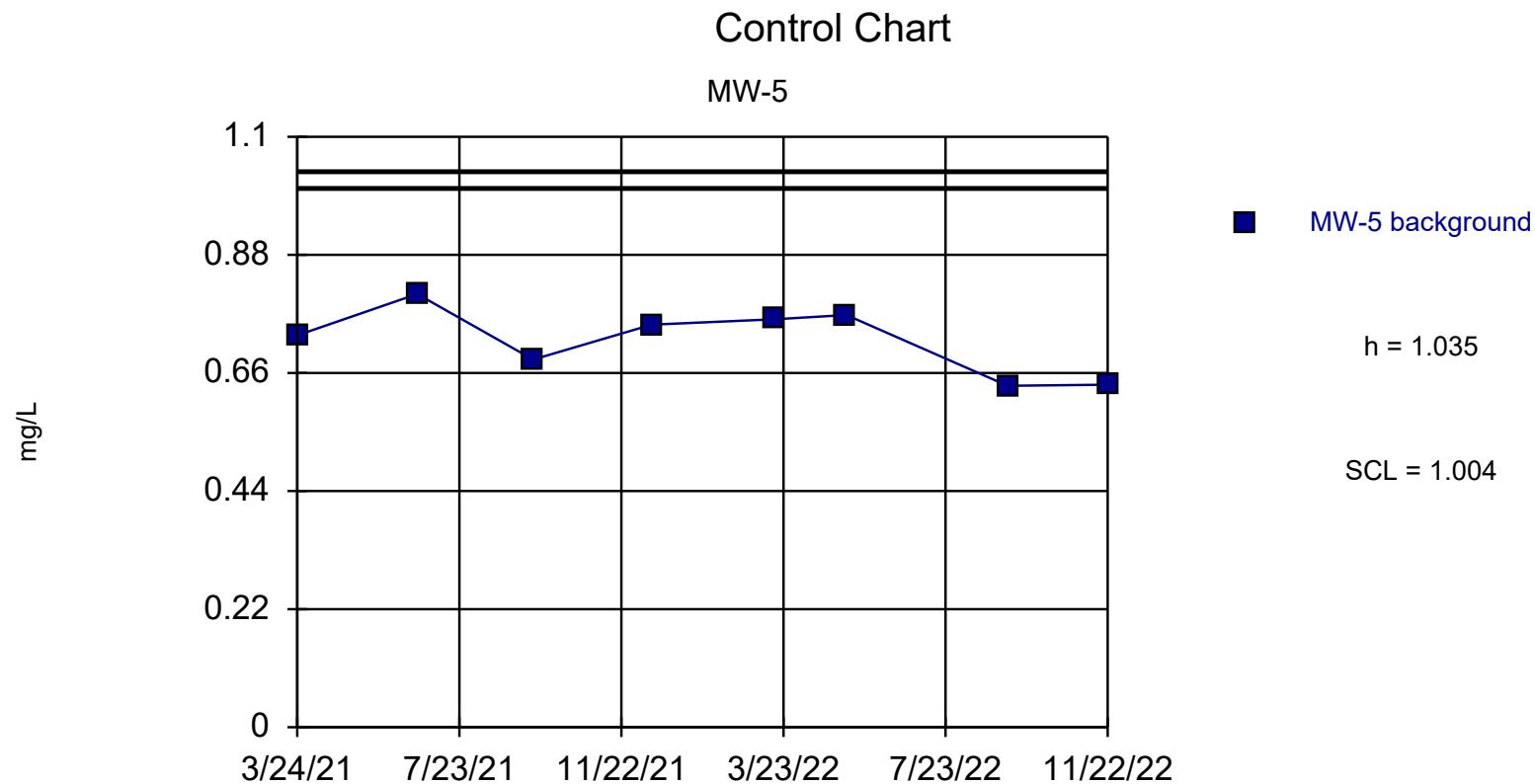
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Lithium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	0.74
6/22/2021	0.742
9/17/2021	0.593
12/15/2021	0.614
3/17/2022	0.59
5/10/2022	0.593
9/8/2022	0.654
11/22/2022	0.589



Background Data Summary: Mean=0.7218, Std. Dev.=0.06263, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9187, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Lithium Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Lithium (mg/L) Analysis Run 3/8/2023 2:39 PM

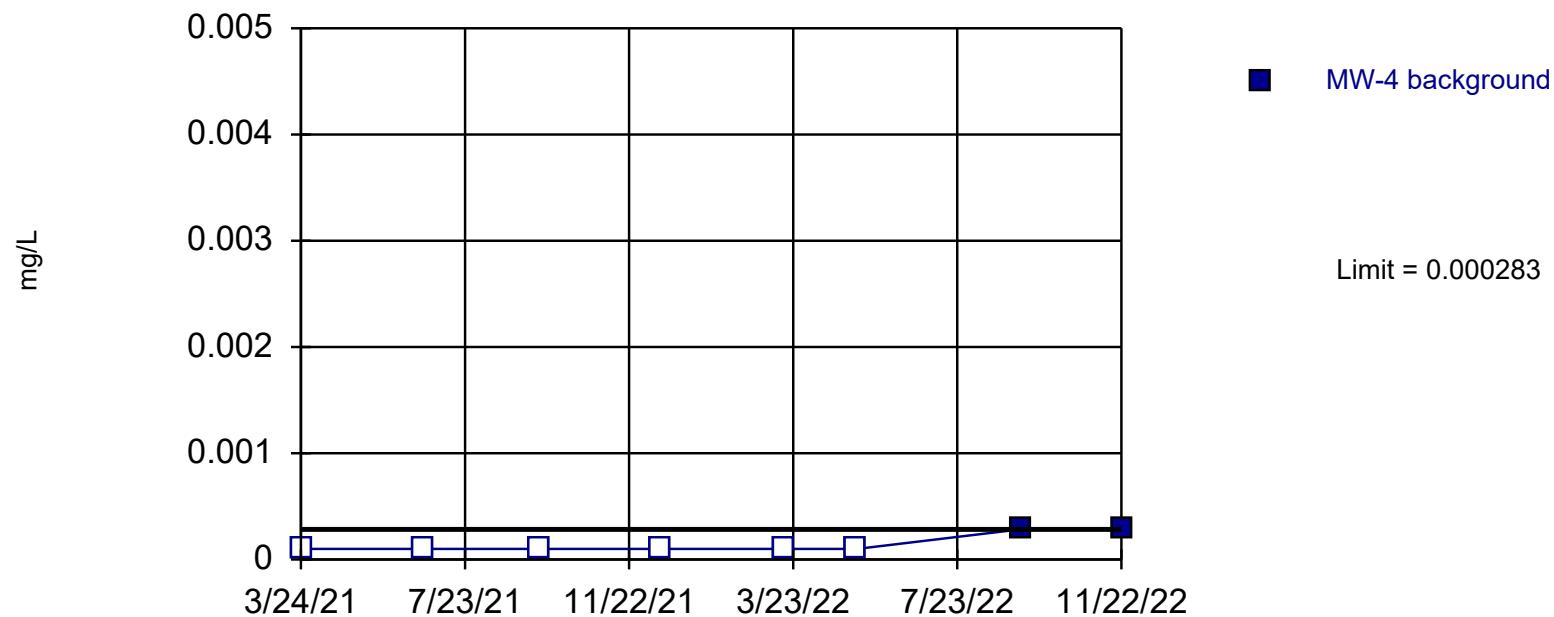
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 0.73
6/22/2021 0.807
9/17/2021 0.685
12/15/2021 0.75
3/17/2022 0.76
5/10/2022 0.768
9/8/2022 0.636
11/22/2022 0.638

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 75% NDs. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Mercury Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Mercury (mg/L) Analysis Run 3/8/2023 2:39 PM

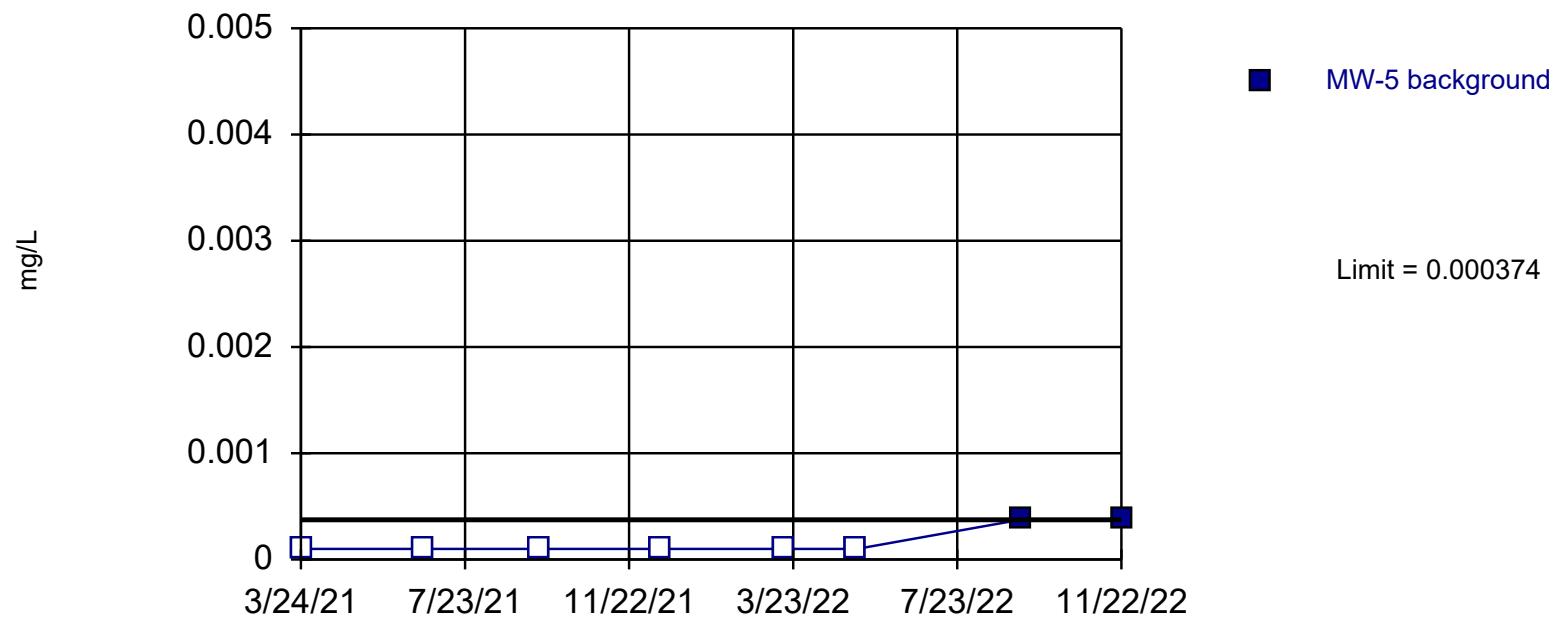
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.0002
6/22/2021	<0.0002
9/17/2021	<0.0002
12/15/2021	<0.0002
3/17/2022	<0.0002
5/10/2022	<0.0002
9/8/2022	0.000283
11/22/2022	0.000283

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Hollow symbols indicate censored values.

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 75% NDs. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Mercury Analysis Run 3/8/2023 2:19 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

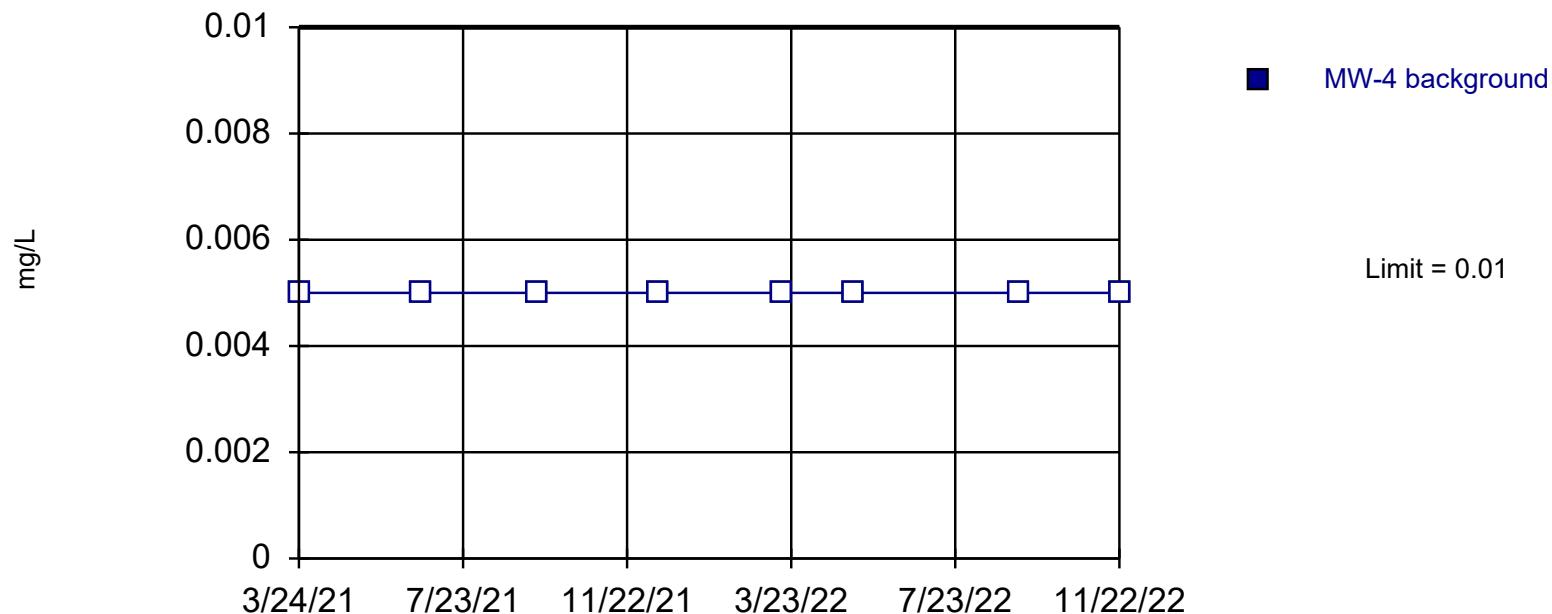
Constituent: Mercury (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.0002
6/22/2021	<0.0002
9/17/2021	<0.0002
12/15/2021	<0.0002
3/17/2022	<0.0002
5/10/2022	<0.0002
9/8/2022	0.000374
11/22/2022	0.000374

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Molybdenum Analysis Run 3/8/2023 2:20 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

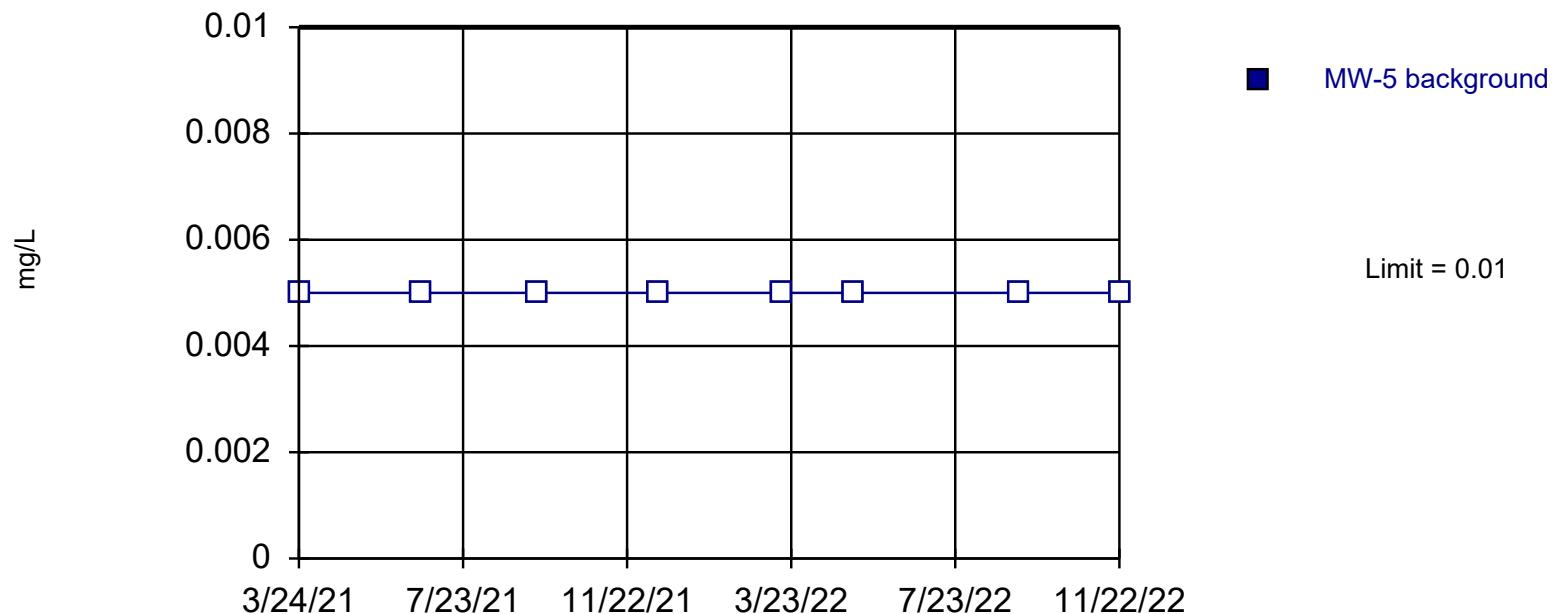
Constituent: Molybdenum (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.01
6/22/2021	<0.01
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Molybdenum Analysis Run 3/8/2023 2:20 PM

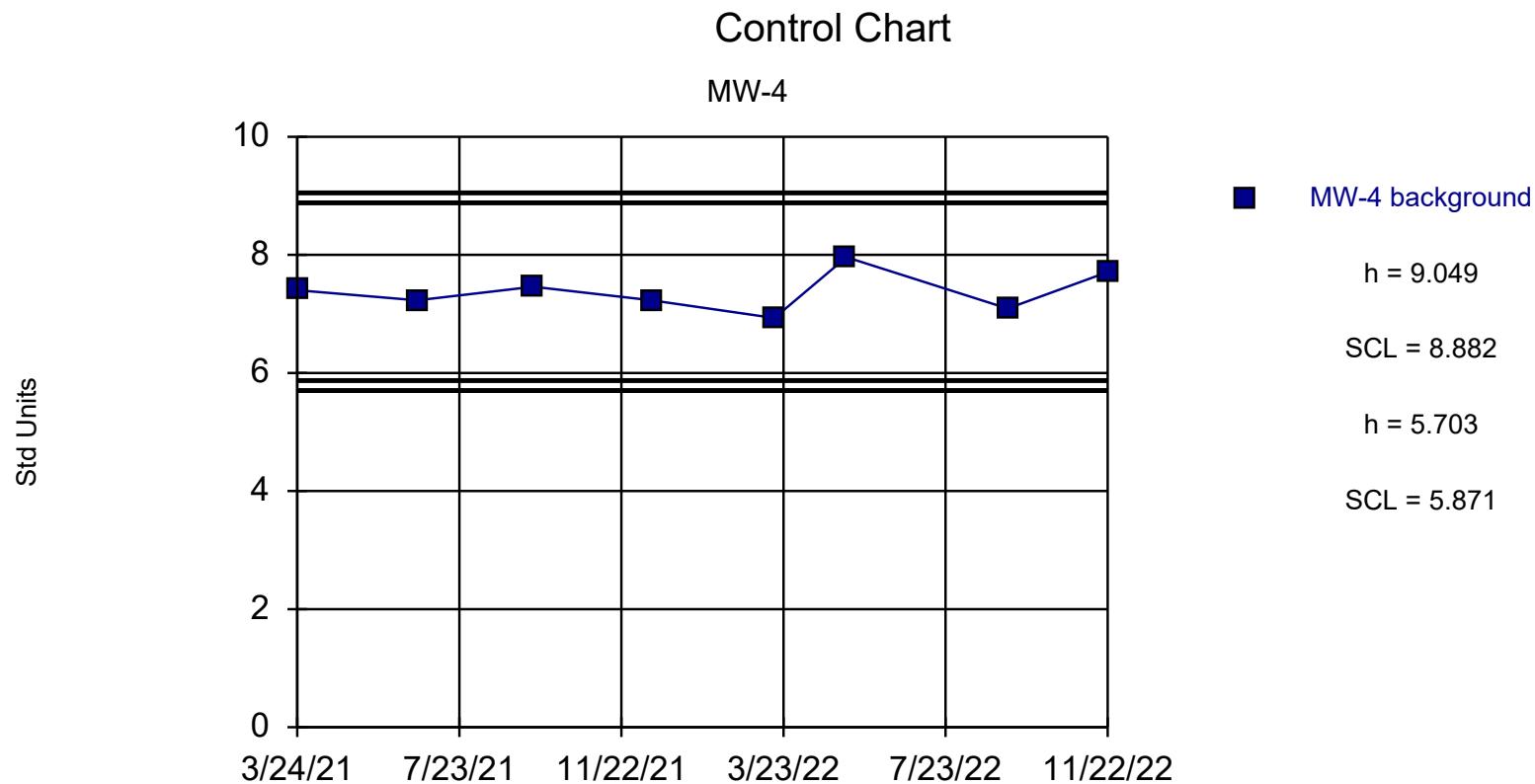
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Molybdenum (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.01
6/22/2021	<0.01
9/17/2021	<0.01
12/15/2021	<0.01
3/17/2022	<0.01
5/10/2022	<0.01
9/8/2022	<0.01
11/22/2022	<0.01



Background Data Summary: Mean=7.376, Std. Dev.=0.3346, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9641, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: pH Analysis Run 3/8/2023 2:20 PM

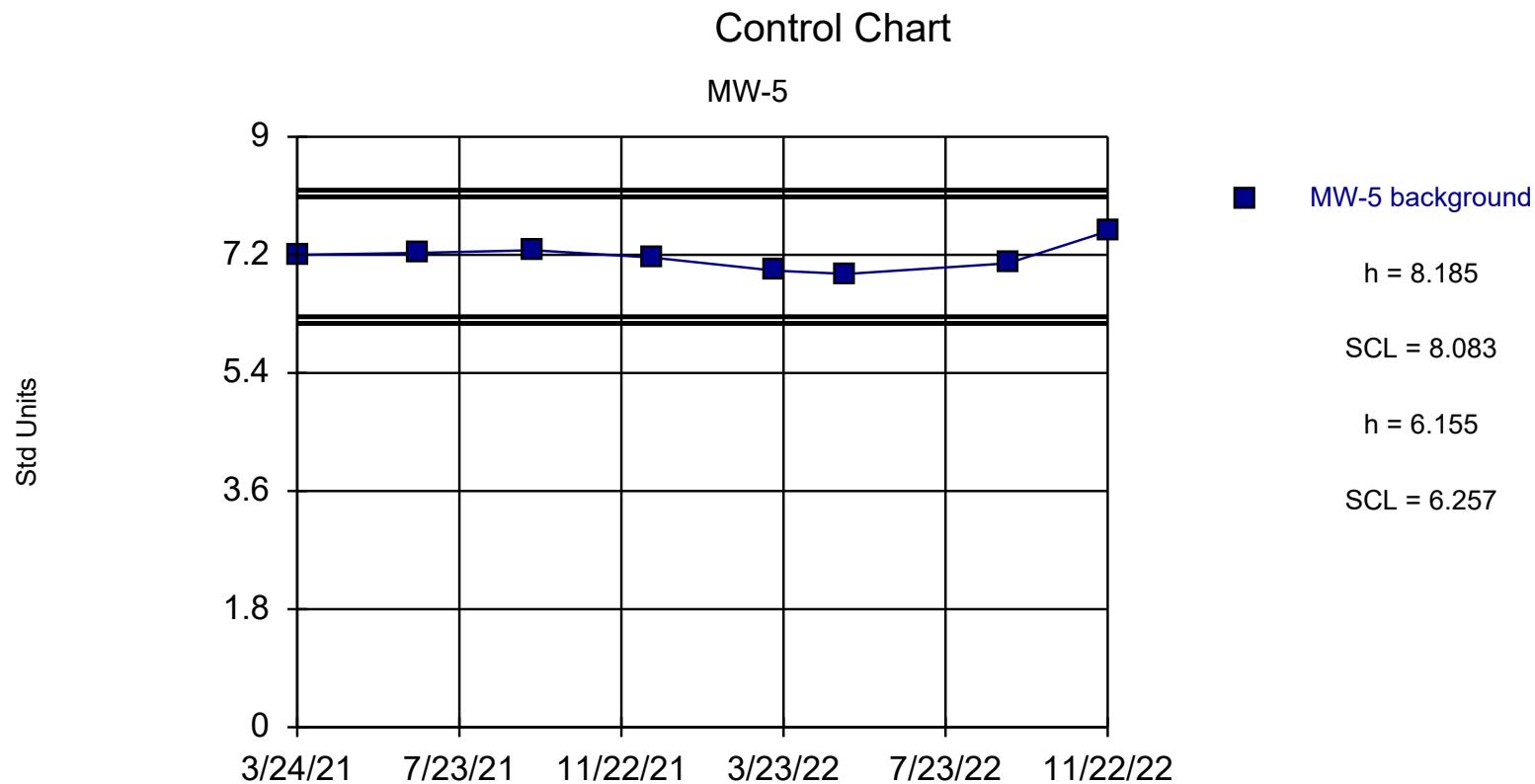
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: pH (Std Units) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 7.4
6/22/2021 7.23
9/17/2021 7.46
12/15/2021 7.23
3/17/2022 6.93
5/10/2022 7.96
9/8/2022 7.09
11/22/2022 7.71



Background Data Summary: Mean=7.17, Std. Dev.=0.203, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9434, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: pH Analysis Run 3/8/2023 2:20 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

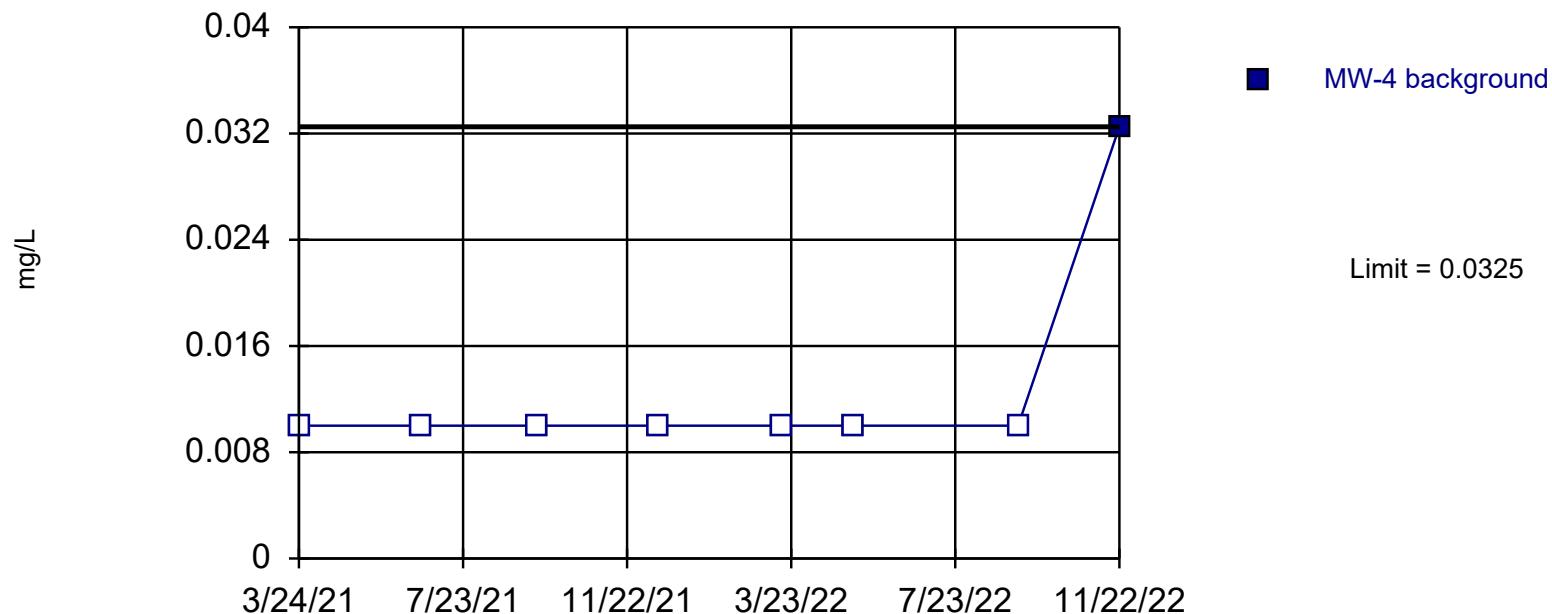
Constituent: pH (Std Units) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 7.2
6/22/2021 7.23
9/17/2021 7.27
12/15/2021 7.16
3/17/2022 6.96
5/10/2022 6.91
9/8/2022 7.07
11/22/2022 7.56

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. Limit is highest of 8 background values. 87.5% NDs. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Selenium Analysis Run 3/8/2023 2:20 PM

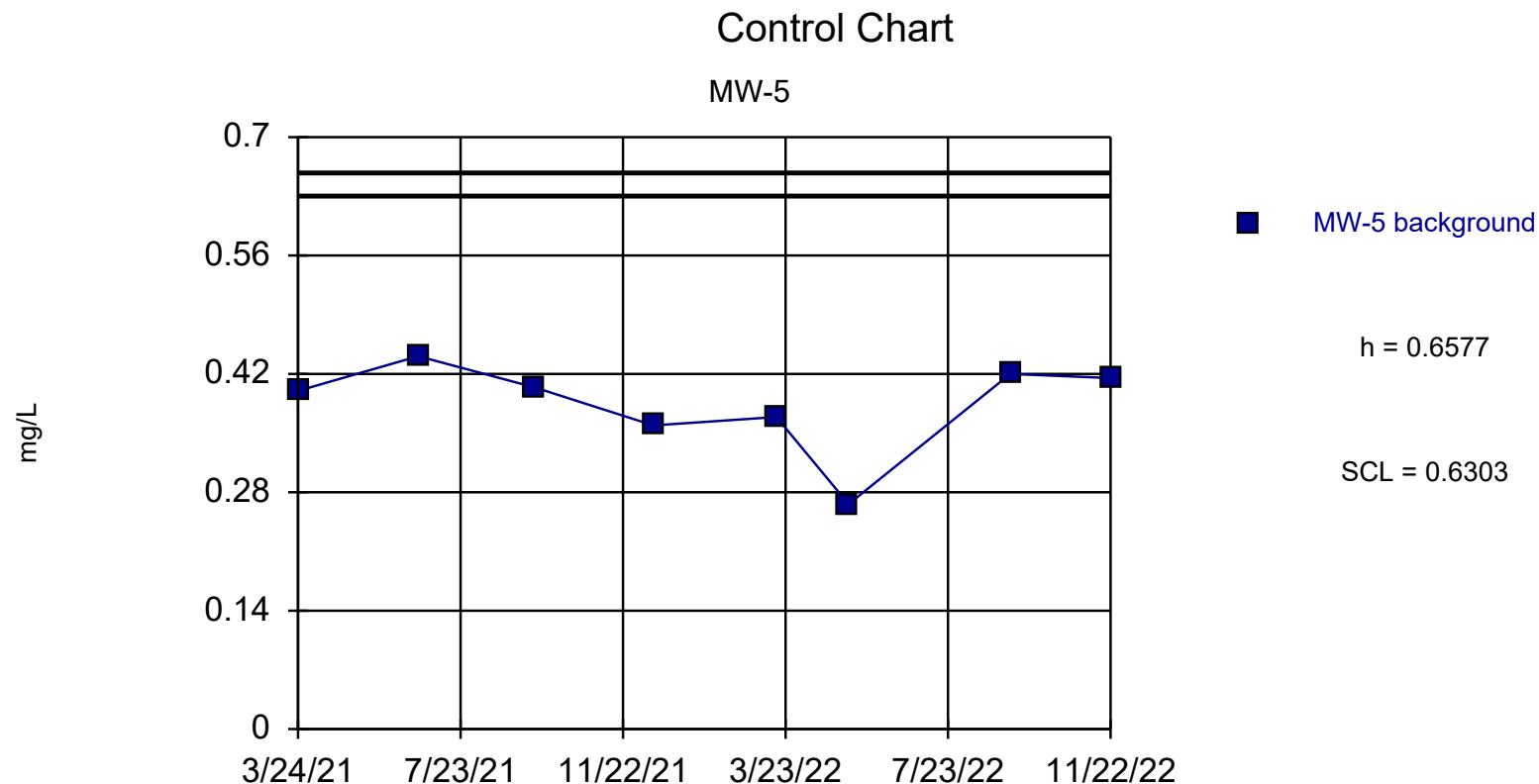
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Selenium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.02
6/22/2021	<0.02
9/17/2021	<0.02
12/15/2021	<0.02
3/17/2022	<0.02
5/10/2022	<0.02
9/8/2022	<0.02
11/22/2022	0.0325



Background Data Summary: Mean=0.3843, Std. Dev.=0.05469, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8507, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Selenium Analysis Run 3/8/2023 2:20 PM

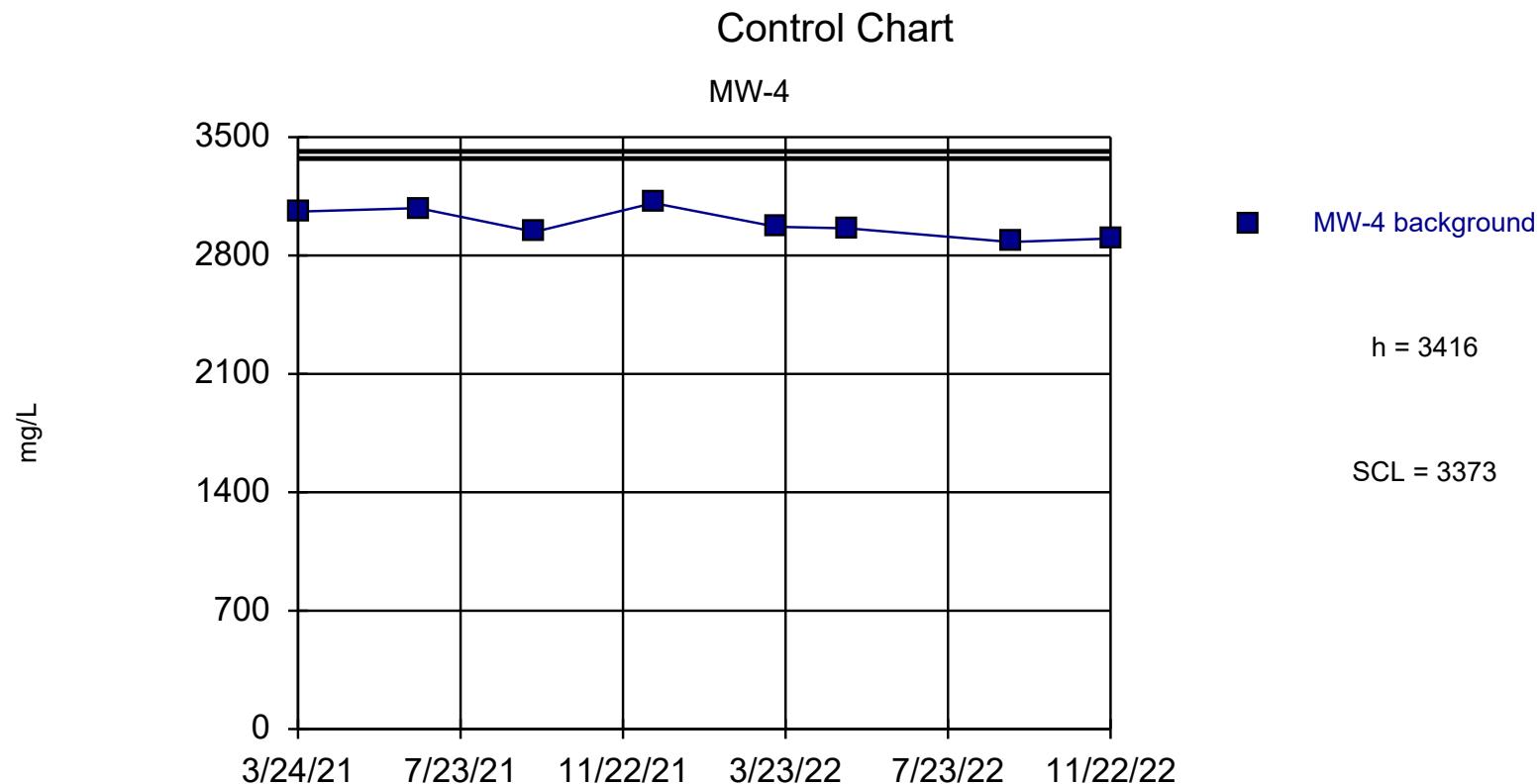
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Selenium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 0.4
6/22/2021 0.441
9/17/2021 0.404
12/15/2021 0.359
3/17/2022 0.369
5/10/2022 0.266
9/8/2022 0.42
11/22/2022 0.415



Background Data Summary: Mean=2988, Std. Dev.=85.65, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9223, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 3/8/2023 2:20 PM

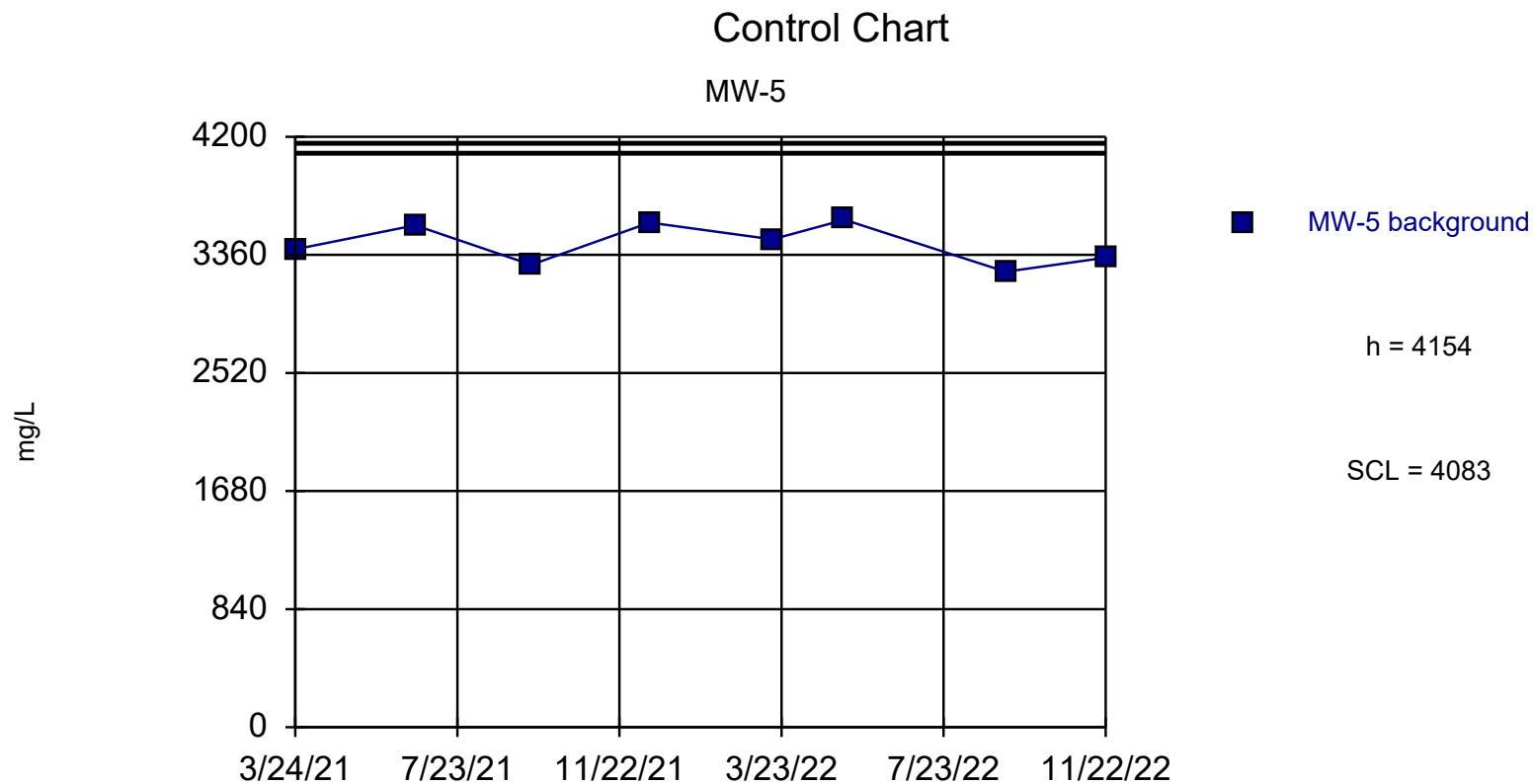
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Sulfate (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 3060
6/22/2021 3080
9/17/2021 2940
12/15/2021 3110
3/17/2022 2970
5/10/2022 2960
9/8/2022 2880
11/22/2022 2900



Background Data Summary: Mean=3439, Std. Dev.=143.1, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9189, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Sulfate Analysis Run 3/8/2023 2:20 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

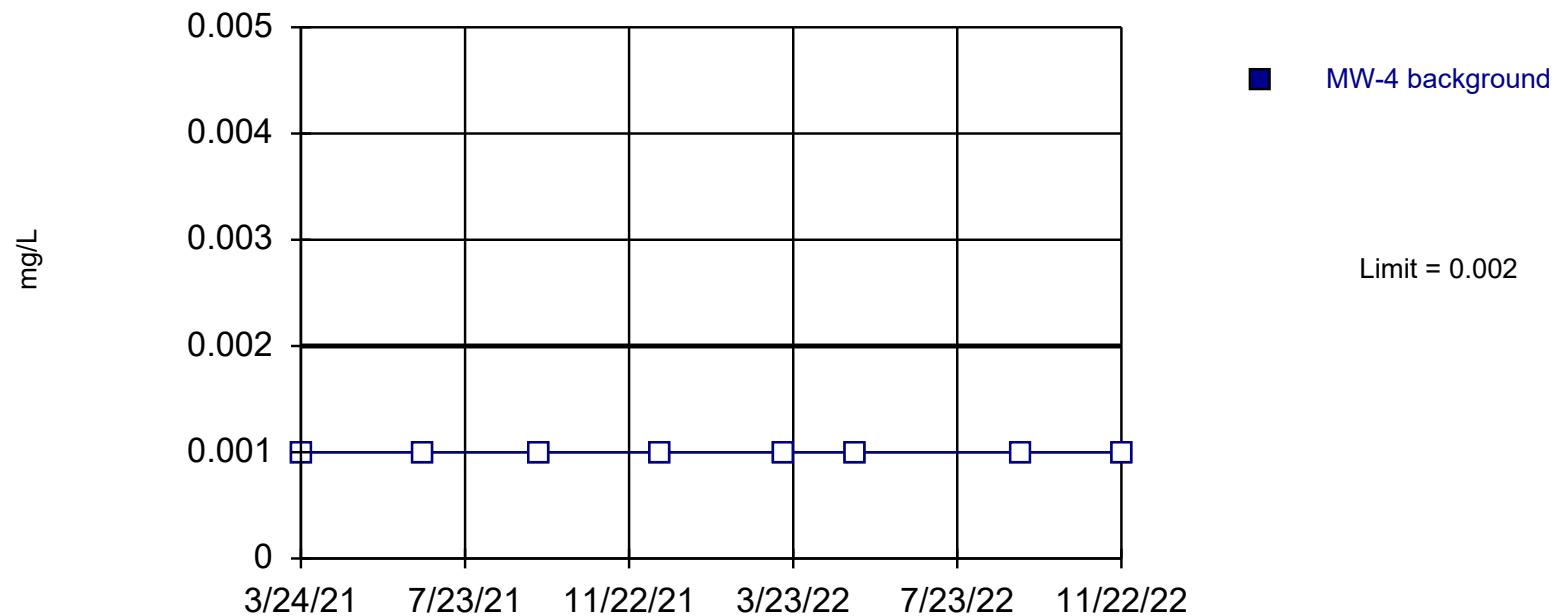
Constituent: Sulfate (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	3400
6/22/2021	3570
9/17/2021	3290
12/15/2021	3590
3/17/2022	3470
5/10/2022	3610
9/8/2022	3240
11/22/2022	3340

Prediction Limit

Intrawell Non-parametric, MW-4



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Thallium Analysis Run 3/8/2023 2:20 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

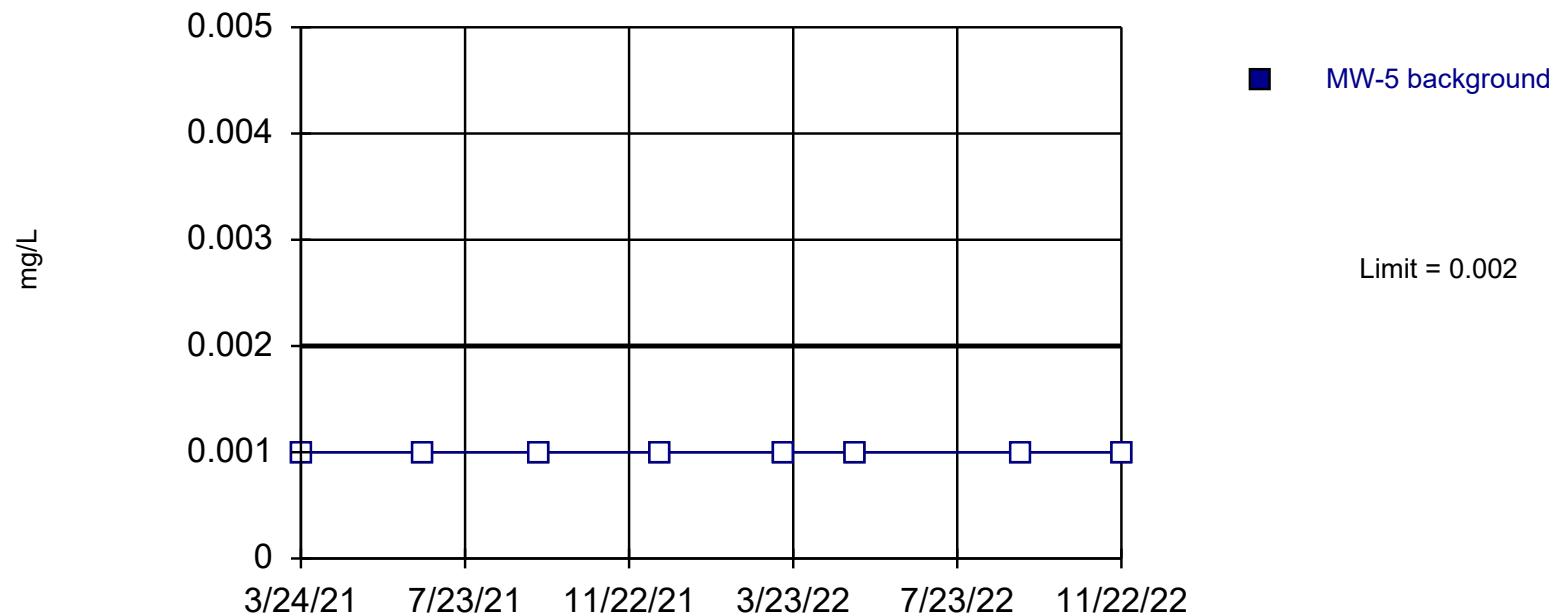
Constituent: Thallium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-4
3/24/2021	<0.002
6/22/2021	<0.002
9/17/2021	<0.002
12/15/2021	<0.002
3/17/2022	<0.002
5/10/2022	<0.002
9/8/2022	<0.002
11/22/2022	<0.002

Prediction Limit

Intrawell Non-parametric, MW-5



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 50%. All background values ($n = 8$) were censored; limit is most recent reporting limit. Report alpha = 0.1111. Assumes 1 future value.

Constituent: Thallium Analysis Run 3/8/2023 2:20 PM

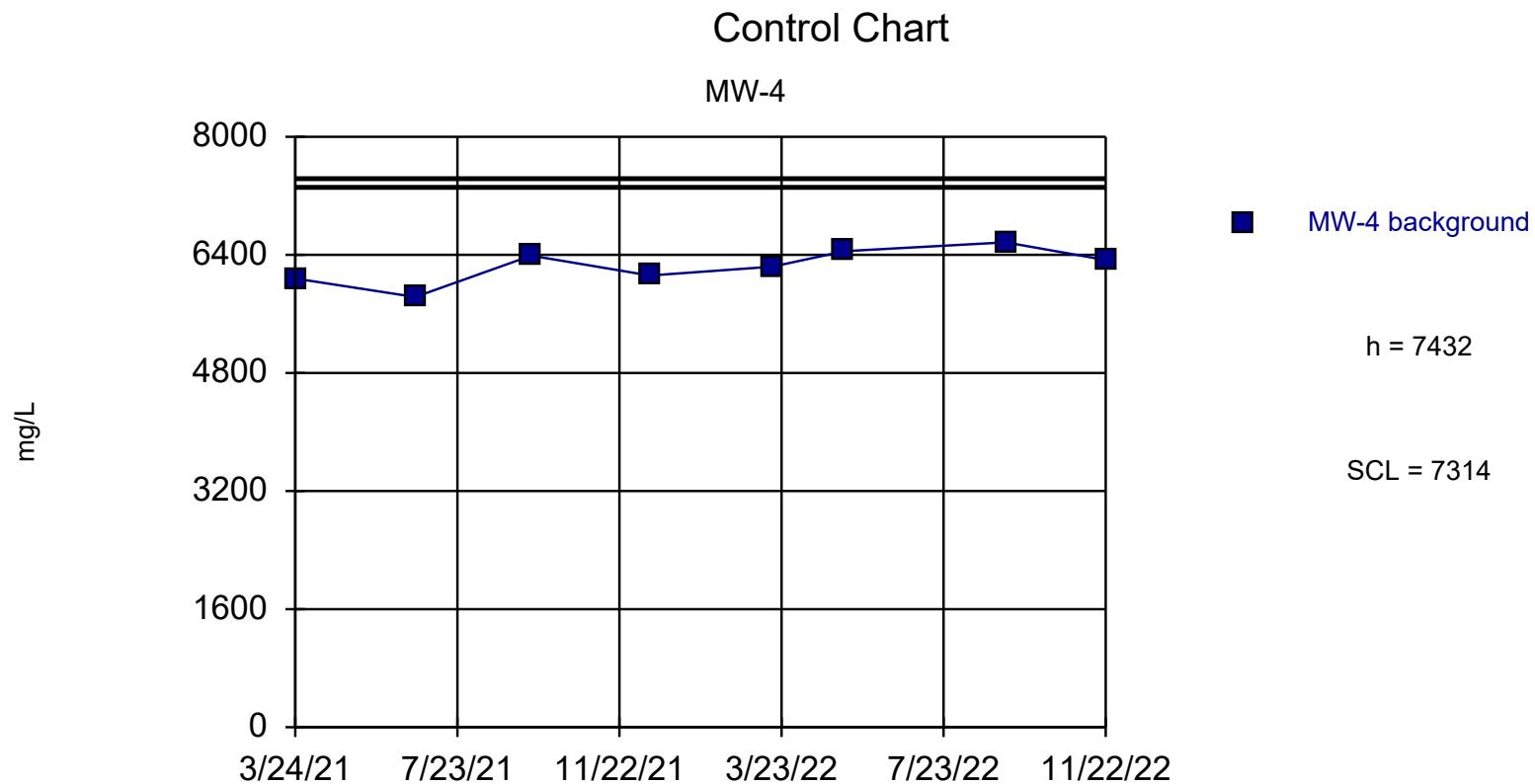
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart Alternate

Constituent: Thallium (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

	MW-5
3/24/2021	<0.002
6/22/2021	<0.002
9/17/2021	<0.002
12/15/2021	<0.002
3/17/2022	<0.002
5/10/2022	<0.002
9/8/2022	<0.002
11/22/2022	<0.002



Background Data Summary: Mean=6251, Std. Dev.=236.2, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9745, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

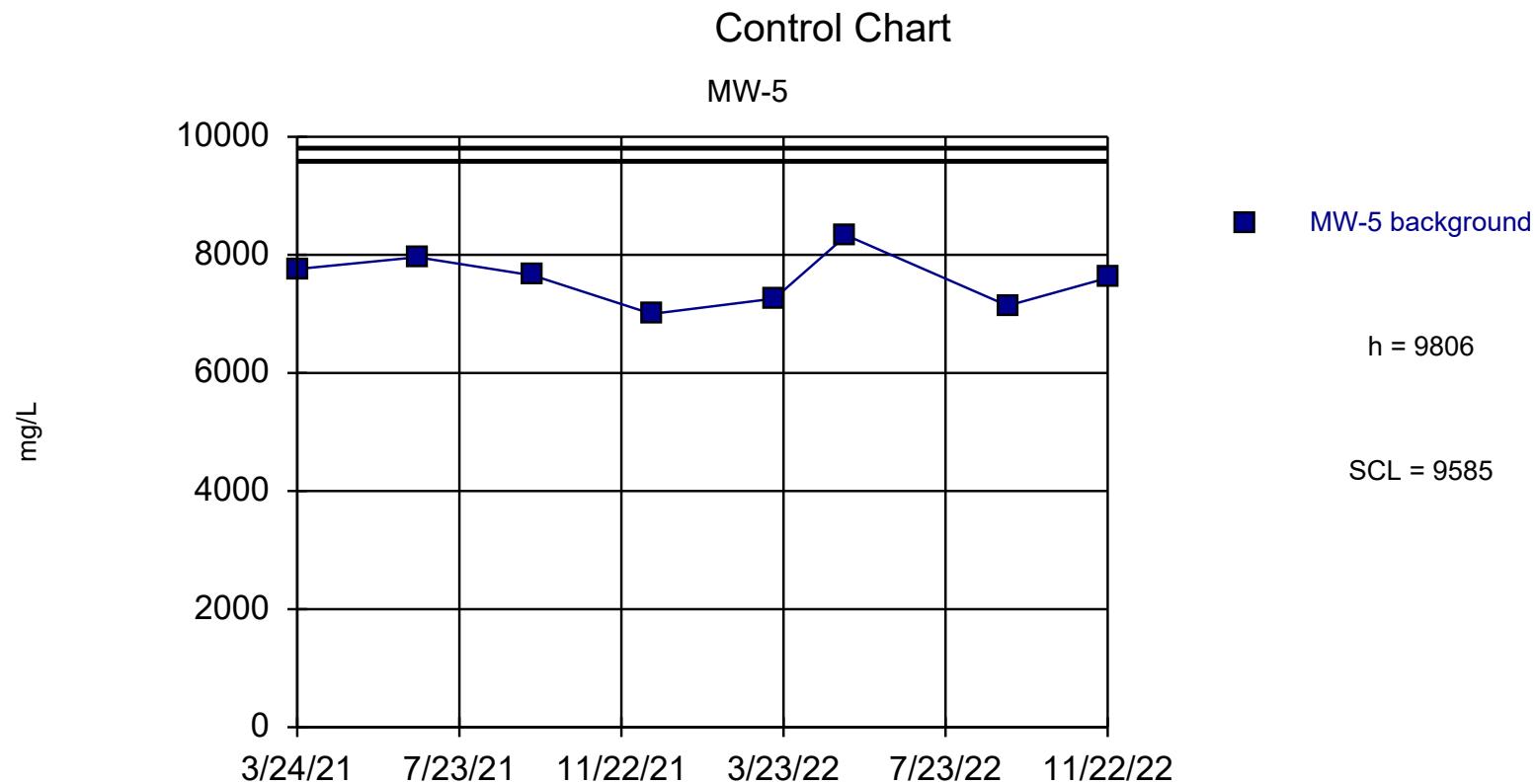
Constituent: Total Dissolved Solids Analysis Run 3/8/2023 2:20 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-4
3/24/2021 6080
6/22/2021 5830
9/17/2021 6390
12/15/2021 6120
3/17/2022 6240
5/10/2022 6450
9/8/2022 6570
11/22/2022 6330



Background Data Summary: Mean=7589, Std. Dev.=443.5, n=8. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9668, critical = 0.818. Report alpha = 0. Dates ending 11/22/2022 used for control stats.
Standardized h=5, SCL=4.5.

Constituent: Total Dissolved Solids Analysis Run 3/8/2023 2:20 PM
Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

Control Chart

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/8/2023 2:39 PM

Sandy Creek Energy Station Client: Sandy Creek Data: Sandy Creek GWdata (Sanitas)_11.22.2022

MW-5
3/24/2021 7760
6/22/2021 7960
9/17/2021 7650
12/15/2021 7000
3/17/2022 7260
5/10/2022 8330
9/8/2022 7140
11/22/2022 7610