BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	AS 2021-008
PETITION OF AMEREN ENERGY MEDINA	)	
VALLEY COGEN, LLC (OLD MEREDOSIA)	)	
FOR ADJUSTED STANDARDS	)	(Adjusted Standard-Land)
FROM 35 ILL ADM. CODE Part 845	)	

<u>NOTICE OF ELECTRONIC FILING</u>

To: See attached service list.

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSE TO PETITIONER'S REQUEST TO STAY PROCEEDINGS AND TO EXTEND THE DISCOVERY DEADLINE.

Respectfully Submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

Dated: January 17, 2025   By:_____/s/   Sara Terranova_____
                                                              Assistant Counsel
                                                              Division of Legal Counsel

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CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that I have electronically served the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSE TO PETITIONER'S REQUEST TO STAY PROCEEDINGS AND TO EXTEND THE DISCOVERY DEADLINE on January 17, 2025, to the following:

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dated: January 17, 2025

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSE TO PETITIONER'S REQUEST TO STAY PROCEEDINGS AND TO EXTEND THE DISCOVERY DEADLINE

NOW COMES the Illinois Environmental Protection Agency ("Agency" or "Illinois EPA"), by and through one of its attorneys, Sara G. Terranova, pursuant to 35 Ill. Adm. Code 101.500(d), and hereby provides this response to the request by Ameren Energy Medina Valley Cogen, LLC ("Petitioner") to stay these proceedings and to extend the discovery deadline. The Agency respectfully urges the Illinois Pollution Control Board ("Board") to DENY Petitioner's Motions. In support of this request, the Illinois EPA states as follows:

I.   Procedural Background

On December 19, 2024, Petitioner filed motions requesting both a stay of the proceeding and an extension of the discovery deadline to conduct a treatability study. Specifically, Petitioner seeks a 180-day stay of Adjusted Standard proceeding to conduct a treatability study aimed at finding an in-situ groundwater treatment option that preserves the existing ecosystem. *See* Ameren Energy Median Valley Cogen LLC's Motion for a 180-Day Stay. PCB AS 2021-008. (December 19, 2024). In addition, Petitioner states that the study's results might require additional discovery and therefore requests extending the discovery deadline to 90 days after either the stay's conclusion or the Board's decision on the stay, whichever is later. *See* Ameren Energy Median Valley Cogen LLC's Motion to Extend Discovery. ("Motion to Extend Discovery") PCB AS 2021-008 (December 19, 2024).

II.   **<u>Reasons for Opposing the Stay Request and Discovery Extension</u>**

Illinois EPA opposes the Petitioner's request for a stay in the Adjusted Standard proceeding

and for an extension of the discovery deadline for the following reasons:

a)   Concession of Inactive CCRSI Status

The Petitioner conceded that the Old Meredosia Pond is an inactive Coal Combustion

Residuals Surface Impoundment (CCRSI) (*see* Motion to Extend Discovery at 1, ¶ 3). This

recognition subjects the Petitioner to the comprehensive requirements for closure, groundwater

monitoring, and post-closure care as dictated by 35 Ill. Adm Code 845 (Part 845). *See* 35 Ill. Adm.

Code 845.100(c).

b)   Regulatory Frameworks and Compliance Obligations

Although the Petitioner's designation under federal regulations has not yet been formally

established as a Legacy CCRSI or a CCR Management Unit[1], the closure and monitoring standards

under 40 CFR 257 (Part 257) are substantially similar to those under Part 845. Regardless of the

framework – State or federal, the Petitioner is bound by stringent environmental protection

standards, which the proposed treatability study fails to address.

c)   Insufficiency of Treatability Study

The proposed treatability study lacks detailed specifications about its scope, methodology,

and expected results. It fails to meet the existing closure, monitoring and post-closure requirements

mandated under both Part 845 and Part 257. The study does not adequately address the

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[1] The federal rule, <u>Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments,</u> 89 Fed. Reg. 38950 (May 8, 2024), established the following definitions and requirements: A "Legacy CCR Surface Impoundment" means a CCR surface impoundment that no longer receives CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power or producer. A "CCR Management Unit" means any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit. This includes inactive CCR landfills and CCR units that closed prior to October 19, 2015. Facilities are required to self-assess to determine if their units meet these classifications and comply with applicable regulatory requirements. *See* 40 CFR 257.53 and 257.75.

comprehensive environmental safeguards required by these regulations, nor does it substitute the mandated procedural and remedial actions needed for compliance.

III.   Regulatory Obligations Under State and Federal Law

a)   Obligations as an Inactive CCRSI Under 35 Ill. Adm. Code 845

As a recognized inactive CCRSI under Part 845, the Petitioner is subject to comprehensive requirements under Part 845, including:

i)   Closure Requirements

Petitioner must either close by removal under Section 845.740 or install a final cover system to isolate CCR material under Section 845.750. *See* 35 Ill. Adm. Code Sections 845.740 and 845.750.

ii)   Groundwater Monitoring

Petitioner must maintain a robust groundwater monitoring system, including quarterly sampling and take corrective actions if contamination exceeds groundwater protection standards. *See* 35 Ill. Adm. Code Sections 845.620; 845.650; and 845.660.

iii)   Post Closure Care

Post-closure care must continue for a minimum of 30 years or until groundwater protection standards are met. *See* 35 Ill. Adm. Code Sections 845.680.

b)   Federal Regulatory Considerations under Part 257

While the Petitioner's status under federal regulations as a legacy CCRSI or a CCRMU has not been definitively established, the closure and monitoring requirements under Part 257 align closely with those of Part 845. Key obligations include:

i) Closure and Post-Closure Care

Similar to Part 845 federal requirements mandate either the removal or isolation of CCR materials, robust groundwater monitoring, and long-term post-closure care to ensure the containment and monitoring of contaminants. *See* 40 CFR 257.102.

ii) Groundwater Monitoring Requirements

A) Groundwater Monitoring System

The installation and maintenance of a comprehensive system to detect and evaluate any potential leakage from CCR units. *See* 40 CFR 257.91.

B) Sampling and Analysis

Regular sampling and analysis to ensure ongoing compliance with environmental standards, with stringent requirements for monitoring frequency and constituent analysis. *See* 40 CFR 257.94 and 257.95.

C) Corrective Action

Federal regulations require the prompt initiation of corrective actions if groundwater protection standards are exceeded, ensuring that any exceedances are addressed quickly to mitigate environmental and health risks. *See* 40 CFR 257.96.

These federal requirements align closely with those under Illinois's regulations, establishing a cohesive framework that ensures rigorous environmental protection and safety standards across both State and federal levels. The specific requirements for monitoring and corrective actions under federal law complement the closure and post-closure care requirements, creating a comprehensive regulatory approach for the management of CCR materials.

IV.   Current Compliance Deficiencies and Treatability Study Insufficiencies

     a)   Current Compliance Deficiencies

Petitioner has not installed a final cover system as required under Section 845.750 and has significant deficiencies in its groundwater monitoring program. Specifically, monitoring wells MW13 and MW14 are improperly constructed and fail to consistently collect groundwater samples. Quarterly monitoring has been inadequate, with no sample results from MW14 over the past two years. Monitoring well 8 has consistently exceeded groundwater protection standards for boron and selenium. (*See* 2023 Groundwater Monitoring Annual Report, "Attachment A").

     b)   Treatability Study Insufficiency

The proposed treatability study lacks detailed specifications about its scope, methodology, or anticipated outcomes. It fails to address the aforementioned deficiencies and does not meet the existing closure, monitoring, and post-closure requirements mandated under both 35 Ill. Adm. Code Part 845 and 40 CFR 257. The study does not adequately substitute for the comprehensive environmental safeguards required by these regulations.

V.   Conclusion

Granting the requested stay would unnecessarily delay compliance efforts, exacerbate existing environmental risks, and overlook the known deficiencies in the Petitioner's closure and groundwater monitoring programs. By conceding that Old Meredosia Pond is an inactive CCRSI and given the parallel regulatory requirements under State and federal regulations, the proposed treatability study does not adequately address these fundamental obligations.

Wherefore, the Illinois EPA respectfully requests that the Board DENY Petitioner's request to stay these proceedings and to extend the discovery deadline.

Respectfully submitted,
ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

Dated: January 17, 2025

By: /s/ Sara G. Terranova
      Sara G. Terranova
      Assistant Counsel
      Division of Legal Counsel

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Attachment A

Intended for
AmerenEnergy Medina Valley CoGen, LLC

Date
January 29, 2024

Project No.
1940102568

2023 GROUNDWATER MONITORING ANNUAL REPORT

CLOSED FLY ASH & BOTTOM ASH PONDS FORMER MEREDOSIA POWER STATION

RAMBØLL Bright ideas. Sustainable change.

2023 GROUNDWATER MONITORING ANNUAL REPORT
CLOSED FLY ASH & BOTTOM ASH PONDS
FORMER MEREDOSIA POWER STATION
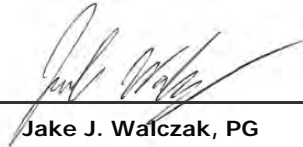
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Recipient	**AmerenEnergy Medina Valley CoGen, LLC**	Suite 1050
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Closed Fly Ash & Bottom Ash Ponds Former Meredosia Power Station

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ACRONYMS AND ABBREVIATIONS

Ameren	AmerenEnergy Medina Valley Cogen, LLC
Class I Groundwater Standard	Groundwater Quality Standards for Class I: Potable Resource Groundwater (35 IAC 620.410)
ft/ft	feet per foot
GMZ	Groundwater Management Zone
GMP	Groundwater Monitoring Plan
HDPE	High-density polyethylene
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
Meredosia	Former Meredosia Power Station
mg/L	milligrams per liter
TDS	total dissolved solids
Ameren	AmerenEnergy Medina Valley Cogen, LLC

1. INTRODUCTION

1.1 Background

This 2023 Annual Report has been prepared for AmerenEnergy Medina Valley Cogen, LLC (Ameren) to summarize groundwater monitoring results at the closed Fly Ash and Bottom Ash Ponds at the Former Meredosia Power Station (Meredosia, **Figure 1-1**). The Old Ash Pond was decommissioned and capped during the 1970s (Kleinfelder West, Inc., 2011), and is not addressed in this groundwater monitoring program. Ameren completed closure activities for the Fly Ash and Bottom Ash Ponds in December 2018 in accordance with the Closure Plan (Geotechnology, Inc., 2018a) and requirements of Title 35 of the Illinois Administrative Code (IAC) Part 840. Closure activities, which included grading, placement of a high-density polyethylene (HDPE) geomembrane covered with ClosureTurf®/ArmorFill® synthetic turf, and construction of surface water control structures, began in March 2018 and were completed as of December 5, 2018. The Power Station ceased operations in 2011 and the former power block area was sold in 2019.

The current groundwater monitoring network comprises of 14 monitoring wells, including five installed during October 2010 (APW-1 through APW-5), four installed during October 2015 (APW-6 through APW-9), three installed during August 2018 (APW-10 through APW-12), and two installed during July 2021 (APW-13 and APW-14). Monitoring wells APW-1 through APW-5 were initially sampled from 2010 to 2012. Beginning in June 2017, and in accordance with the Groundwater Monitoring Plan (GMP) dated December 14, 2016 (Geotechnology, Inc.), groundwater sampling was restarted and conducted quarterly at monitoring wells APW-1 through APW-9. Beginning in September 2018, and in accordance with the GMP, monitoring wells APW-10, APW-11, and APW-12 were added to the monitoring well network for quarterly sampling. Monitoring wells APW-13 and APW-14 were similarly added to the monitoring well network in July 2021. Monitoring wells were installed to define the lateral extent of impacts on site, as well as to assist in future groundwater monitoring of remedial actions. Locations of all monitoring wells are shown on **Figure 1-2**.

In conjunction with Ameren's request for approval of the Closure Plan, Ameren submitted the Groundwater Management Zone Plan, Fly Ash and Bottom Ash Pond, Meredosia Power Station (Geotechnology, Inc., 2016b) and a request to establish the Groundwater Management Zone (GMZ) pursuant to 35 IAC § 620.250(a)(2): Ash Ponds Closure, Groundwater Management Zone Application, dated October 17, 2017, which was approved by the Illinois Environmental Protection Agency (IEPA) on November 1, 2017.

The GMP, in accordance with 35 IAC § 840.114 and 35 IAC § 840.116, outlines groundwater monitoring and sampling procedures, establishes the parameters and methods to be used for analyzing the groundwater samples, and describes evaluation methods to assess post-closure groundwater quality and trends to demonstrate compliance with the applicable groundwater standards. The Groundwater Monitoring Program Schedule is provided in **Table 1-1**.

Monitoring well installation date, construction details, monitoring objective, position relative to the Fly Ash and Bottom Ash Ponds, and groundwater zone monitored are provided in **Table 1-2**. Field and laboratory parameters for evaluating groundwater quality are shown in **Table 1-3**.

Seven quarterly rounds of pre-closure groundwater data and twenty quarterly rounds of post-closure data have been collected between January 2019 and December 2023 to satisfy

Ramboll - 2023 Groundwater Monitoring Annual Report
Closed Fly Ash & Bottom Ash Ponds Former Meredosia Power Station

requirements of the GMP (Geotechnology, Inc., 2016a). This is the seventh annual report for Meredosia since groundwater monitoring restarted in 2017. This annual report includes the following elements:

- A summary of post-closure groundwater monitoring data collected during 2022 and 2023 (**Appendix A**).

- Methodology for the outlier and trend analyses along with the results for these analyses (**Appendix B**).

- Quarterly Site Inspection Forms, including observations and descriptions of any maintenance activities performed on the pond cap, embankment, roadway, and remaining basin (**Appendix C**).

1.2 Groundwater Quality Overview – 2019 to 2023

1.2.1 Summary of Cover System Construction and Maintenance

Inspections of the cover system at the Fly Ash Pond and embankment at the Bottom Ash Pond are performed quarterly. Routine maintenance is completed as needed, as soon as practicable, after issues are identified and may include recontouring the ground surface, repairing drainage channels, repairing and replacing lining material, revegetating areas, and removing woody vegetation. Maintenance activities can be found in more detail in the Post-Closure Care Plan (Geotechnology, Inc., 2018b) and **Appendix C**.

1.2.2 Summary of Post-Closure Groundwater Quality Data

Post-closure (2019 to 2023) groundwater quality data were assessed to evaluate overall groundwater condition and cover system performance. This assessment was performed independently from the compliance evaluations required by the GMP, which are focused on specific compliance criteria and proposed mitigation actions. This assessment is intended as a holistic review of groundwater quality since closure.

Arsenic and boron are identified in the Closure Plan as the primary indicator constituents for coal ash leachate impacts to groundwater at the Fly Ash Pond and Bottom Ash Pond. As such, arsenic and boron are the focus of this groundwater quality data review.

Dissolved and total arsenic concentration time series since 2019 are presented in **Figures 1-3 through 1-14**. Time series for monitoring wells APW-13 and APW-14 are not included because the wells are frequently dry and there is not enough concentration data to include these wells in this assessment. The lines through the concentration data on the figures represent the best fit linear regressions for arsenic concentrations in each well. These best fit linear regression lines are included in the figures to provide a convenient means of evaluating general post-closure concentration patterns. The regression lines are not equivalent to the groundwater compliance statistical trends discussed in **Section 3.3**. Arsenic concentrations in downgradient compliance wells have generally been stable or decreasing since closure and are currently less than the 35 IAC § 620.410 Class I Groundwater Standard in the majority of the compliance groundwater monitoring wells in 2023, with the following exceptions:

- APW-3 – dissolved and total arsenic concentrations are greater than the Class I Groundwater Standard, but both exhibit stable concentration patterns.

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- APW-4 – dissolved and total arsenic concentrations have decreased below the Class I Groundwater Standard in mid-2023 and continue to decline.

Dissolved and total boron concentration time series since 2019 are presented in **Figures 1-15 through 1-26**. Generally, dissolved and total boron concentrations in downgradient compliance wells have been stable or decreasing since 2019 and are less than the 35 IAC § 620.410 Class I Groundwater Standard in 2023, with the following exceptions:

- APW-3 – dissolved and total boron concentrations are greater than the Class I Groundwater Standard, but both exhibit stable concentration patterns.

Other wells in the monitoring network exhibit increasing concentrations above the Class I Groundwater Standard (i.e., APW-10 and APW-11), but are located hydraulically upgradient of the closed Fly Ash and Bottom Ash Ponds (**Figures 3-1 through 3-4**). Midgradient well APW-8, also located hydraulically upgradient of the closed Fly Ash and Bottom Ash Ponds, exhibits dissolved and total boron concentrations above Class I Groundwater Standard but concentrations are decreasing. Consequently, it is not likely the closed Fly Ash and Bottom Ash Ponds are contributing to the elevated and/or increasing dissolved and total boron concentrations observed at these wells.

1.2.3   Conclusion

The stable or decreasing indicator constituent concentrations (arsenic and boron) in the downgradient compliance monitoring wells across the site are a strong indication that the cover system is functioning as designed to improve overall groundwater quality beneath the closed Fly Ash and Bottom Ash Ponds.

2. GROUNDWATER MONITORING PLAN COMPLIANCE

2.1 Applicable Groundwater Quality Standards

2.1.1 On-Site Groundwater Standards

Pursuant to 35 IAC § 620.450(a), the on-site groundwater quality shall be restored to the Groundwater Quality Standards for Class I: Potable Resource Groundwater (Class I Groundwater Standards) (35 IAC § 620.410).

If upon completion of the 30-year post-closure care period the observed concentrations in the site groundwater still exceed a Class I Groundwater Standard, the on-site standard may be adjusted, provided criteria are addressed to the satisfaction of the IEPA.

2.1.2 Off-Site Groundwater Standards

For off-site groundwater compliance, the Class I Groundwater Standards are also used (35 IAC § 620.410). A GMZ was requested and approved for Meredosia as part of the Closure Plan (Geotechnology, Inc., 2018a). The point of compliance wells for the subject property will be APW-2 and APW-3. These wells are located adjacent to the Illinois River and downgradient of the closed Fly Ash and Bottom Ash Ponds. If closure of the Fly Ash Pond and Bottom Ash Pond does not reduce the monitored constituent concentrations to levels less than the Class I Groundwater Standards, a plan for post-remediation monitoring will be submitted to the IEPA (Geotechnology, Inc., 2016b).

2.2 Demonstration of Compliance

Compliance is based on attainment of post-closure groundwater quality that meets the Class I Groundwater Standards, as set forth in 35 IAC § 620.410. Groundwater is in compliance when monitored constituent concentrations are less than the Class I Groundwater Standards and there are no short-term statistically significant increasing trends at the GMZ boundary compliance wells.

2.2.1 Compliance Determination

As described in Section 5.2 of the GMP (Geotechnology, Inc., 2016a):

- Compliance is determined by performing an annual trend analysis for each downgradient monitoring well (**Table 1-2**) for all constituents listed in **Table 1-3**. The analysis shall use Sen's estimate of the slope and be performed on a minimum of eight consecutive post-closure groundwater samples.

- If the results of sampling and trend analysis determine a positive slope at any downgradient monitoring well, a Mann-Kendall test will be performed at 95 percent confidence to determine whether or not the positive slope represents a statistically significant increasing trend. Ameren will investigate the cause of a statistically significant increasing trend as described below.

  – Notification of statistically significant increasing trends and revision to the sampling frequency must be reported to the IEPA within 30 days of making the determinations.

  – If the investigation attributes a statistically significant increasing trend to a superseding cause, Ameren will notify the IEPA in writing, stating the cause of the increasing trend and providing the rationale used in such a determination.

– If there is no superseding cause and the statistically significant increasing trend continues to be observed for two or more consecutive years, a hydrogeologic investigation (and additional site investigation[s], if necessary) will be performed.

• Based on the outcome of the investigation above, Ameren will take action to mitigate statistically significant increasing trends that are causing, threatening, or allowing exceedances of off-site groundwater quality standards. Such actions will be proposed as a modification to the post-closure care plan within 180 days after completion of the investigation activities described above.

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Closed Fly Ash & Bottom Ash Ponds Former Meredosia Power Station

3. DATA ANALYSIS

3.1 Groundwater Flow

Groundwater elevation contour maps were generated for each quarterly sampling event (**Figures 3-1 through 3-4**). A timeseries of groundwater elevations from 2022 to 2023 is provided in **Figure 3-5** and shows a general decrease in elevations over time. Monitoring wells APW-13 and APW-14 were dry during all 2023 sampling events. Groundwater in the uppermost aquifer generally flows from east to west/northwest towards the Illinois River, which is consistent with past evaluations. No groundwater flow reversals were observed in 2023. Horizontal hydraulic gradients calculated along the flow path from midgradient monitoring well APW-8 to downgradient compliance well APW-2 ranged from 0.0001 to 0.0031 feet per foot (ft/ft) during 2023.

3.2 Review of Analytical Data (2022–2023)

Groundwater samples from the most recent eight post-closure monitoring events were collected on March 17, 2022; June 22, 2022; August 18, 2022; December 21, 2022; February 2, 2023; April 26, 2023; September 22, 2023; and November 8, 2023. All sampling dates and field and laboratory analytical results are tabulated in **Appendix A**. Sampling anomalies are noted below:

- Monitoring well APW-13 was dry or did not have adequate water for sampling with the exceptions of the first and second quarter of 2022, hence, the well was only sampled twice.

- Monitoring well APW-14 was not sampled because it was dry or did not have adequate water during all sampling events.

Results of groundwater monitoring during 2022 and 2023 for constituents that exceeded the 35 IAC § 620.410 Class I Groundwater Standard when the GMZ was established (arsenic, boron, iron, manganese, and sulfate) are summarized below:

- Arsenic is a coal ash indicator at the Fly Ash Pond and Bottom Ash Pond (see **Section 1.2.2**). Dissolved and total arsenic concentrations in monitoring wells during 2022 and 2023 are shown on **Figures 3-6A through 3-9B**.

  – Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved arsenic concentrations were all non-detect and total arsenic concentrations ranged from less than (<) 0.0010 to 0.0023 milligrams per liter (mg/L).

  – Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved arsenic concentrations ranged from <0.0010 to 0.0023 mg/L and total arsenic concentrations ranged from <0.0010 to 0.059 mg/L.

  – Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved arsenic concentrations ranged from <0.0010 to 0.32 mg/L and total arsenic concentrations ranged from < 0.0010 to 0.36 mg/L.

- Boron is the primary indicator constituent for coal ash impacts to groundwater at the Fly Ash Pond and Bottom Ash Pond (see **Section 1.2.2**). Dissolved and total boron concentrations are shown on **Figures 3-10 through 3-13**.

  – Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved boron concentrations ranged from 0.039 to 4.1 mg/L and total boron concentrations ranged from <0.020 to 4.9 mg/L.

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- – Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved boron concentrations ranged from 0.10 to 7.0 mg/L and total boron concentrations ranged from 0.11 to 7.9 mg/L.

- – Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved boron concentrations ranged from 0.079 to 22 mg/L and total boron concentrations ranged from 0.010 to 24 mg/L.

- Manganese and iron mobility are affected by fluctuations of oxidation-reduction conditions and pH, making them unreliable coal ash indicators at the site (Geotechnology, Inc., 2016b).

- Sulfate is a non-indicator constituent, however, similar to indicator parameters, sulfate concentrations are generally less than the Class I Groundwater Standard, as illustrated by the box-whisker and timeseries plots (**Figures 3-14 and 3-15**) and showed generally stable or decreasing trends during this reporting period (**Appendix B3**).

3.3   Statistical Analyses

Analytical data for downgradient wells (APW-2, APW-3, APW-4, APW-9, and APW-12) were evaluated to identify short-term (compliance) data trends in the 2022–2023 dataset. Trends were evaluated according to the procedure outlined in the GMP (Geotechnology, Inc., 2016a).

3.3.1   Outlier Analysis

The Grubbs outlier test determines whether there is statistical evidence of a high or low observation that differs significantly from the other data. The test methodology and results are listed in **Appendix B1 and B2**, respectively. Outliers identified during the compliance period (2022–2023) by the Grubbs outlier test based on the date range of 2010–2023 were not eliminated from further statistical analysis because there is no documentation indicating they are not representative of actual field conditions. In addition, these identified outliers did not have any influence on the short-term compliance trends.

3.3.2   Sen's Estimate of the Slope

Sen's estimate of the slope is a non-parametric estimator of trend. It is the median of all slopes between all possible unique pairs of individual data points in the time period being analyzed. The slopes represent the rate of change of the measured parameter, where the y-axis is the parameter value and the x-axis is calendar time. The method is robust, and fairly insensitive to the presence of a small fraction of outliers and non-detect data values. The test methodologies and results are listed in **Appendix B1 and B3**, respectively.

Six cases with positive slopes, six cases with negative slopes and fifteen cases with flat or no slopes were identified in the 2022-2023 datasets for downgradient compliance wells where one or more monitored constituent concentrations was above the Class I Groundwater Standard (**Table 3-1**). Sen's estimate of the slope was not determined for downgradient wells where all concentrations were below the Class I Groundwater Standard.

3.3.3   Mann-Kendall Trend Analysis

The six cases with positive Sen's slopes referenced above (see **Section 3.3.2**) were tested using the Mann-Kendall test to determine if the positive slopes represented statistically significant increasing trends. The Mann-Kendall test is a non-parametric, one-tailed test to determine

whether a dataset has a statistically significant increasing or decreasing trend. The test methodology and results are listed in **Appendix B1 and B3**, respectively.

The Mann-Kendall test did not determine any case of statistically significant increasing trend in the 2022–2023 dataset for downgradient compliance wells (**Table 3-1**).

3.4   Site Inspection

The Post-Closure Maintenance Program requires quarterly inspection for the first five years after closure (i.e., through 2023). After five years, the inspection frequency can be reduced to semi-annually provided that semiannual groundwater monitoring has been approved by IEPA. After five years of semiannual monitoring, the inspection frequency can be reduced to annually pending approval of annual groundwater monitoring. Discontinuance of site inspections will occur after IEPA approval of the certified Post-Closure Care Report.

Site inspections include assessment of the condition and need for repair of final cover, as wells as fencing, monitoring points, and surface water control features. The inspection reports from 2023 are included in **Appendix C**.

Site inspections were performed on March 7, 2023; April 18, 2023; September 1, 2023; and December 20, 2023. As noted in the 2022 Groundwater Monitoring Annual Report (Ramboll, 2023), a tear was observed in the ClosureTurf®/ArmorFill® synthetic turf towards the cap peak. A turf flap from the rip completely covers the HDPE geomembrane and no geomembrane damage was observed. The tear in the Closure Turf was repaired in 2023. Overall, all the components of the ClosureTurf®/ArmorFill® synthetic turf cover system are in good condition and will continue to be monitored as part of quarterly site inspections.

4. EVALUATION OF COMPLIANCE AND CONCLUSIONS

Cover system construction and maintenance, as well as stable or decreasing arsenic and boron concentrations in the majority of downgradient compliance monitoring wells across the site are strong indications that the cover system is functioning as designed to improve overall groundwater quality beneath the pond.

Statistical analyses of analytical results for groundwater samples collected during the 2022-2023 compliance period at the Meredosia Fly Ash and Bottom Ash Ponds indicated downgradient monitoring wells were in compliance with the requirements stated in the GMP: concentrations of monitored parameters above the 35 IAC § 620.410 Class I Groundwater Standard did not exhibit short-term statistically significant increasing trends for any parameter at any downgradient monitoring well during the 2022-2023 compliance period. As such, no further action is required at this time. The concentrations of indicator parameters will continue to be monitored and evaluated in 2024.

5. REFERENCES

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TABLES

Table 1-1. Groundwater Monitoring Program Schedule

2023 Annual Report

Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

Frequency	Duration	Sampling Quarter
Quarterly	Begins: June 2017	January- March (1) April - June (2) July - September (3) October - December (4)
	Ends: After successful completion of the post-closure activities required and approval of the Illinois Environmental Protection Agency (IEPA); or Acceptance of reduced frequency by IEPA based on successful demonstration under Semi-Annual or Annual Frequency	
Semi-Annual or Annual	Begins: Upon demonstration that monitoring effectiveness will not be compromised by reduced frequency, adequate data has been collected to characterize groundwater, and concentration of constituents monitored at downgradient boundaries do not demonstrate statistically significant increasing trends that can be attributed to the former ash ponds	April - June (2)
	Ends: After successful completion of the post-closure activities required and approval of the IEPA	October - December (4)

[O: YD/SJC, C: YD/SJC]

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Table 1-2. Groundwater Monitoring System Wells

2023 Annual Report

Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

Monitoring Well Number	Installation Date	Surface Elevation (ft NAVD88)[1]	TOC Elevation (ft NAVD88)[1]	Top of Screen Elevation (ft NAVD88)[1]	Bottom of Screen Elevation (ft NAVD88)[1]	Total Well Depth (ft BGS)	Objective	Position	Monitoring Zone
APW-1	10/26/2010	446.06	449.26	431.40	421.40	24.7	Compliance	Upgradient	Uppermost Aquifer
APW-2	10/25/2010	433.97	436.87	421.10	411.10	22.9	Compliance	Downgradient	Uppermost Aquifer
APW-3	10/25/2010	433.35	436.28	420.80	410.80	22.6	Compliance	Downgradient	Uppermost Aquifer
APW-4	10/26/2010	431.90	434.86	415.80	409.30	26.1	Compliance	Downgradient	Uppermost Aquifer
APW-5	10/26/2010	450.48	453.20	431.00	421.00	29.5	Compliance	Upgradient	Uppermost Aquifer
APW-6	10/1/2015	448.60	451.90	431.10	421.10	28.0	Compliance	Midgradient	Uppermost Aquifer
APW-7	10/1/2015	435.00	438.70	429.00	419.00	16.5	Compliance	Midgradient	Uppermost Aquifer
APW-8	10/1/2015	460.50	463.90	431.90	421.90	39.1	Compliance	Midgradient	Uppermost Aquifer
APW-9	10/1/2015	445.00	448.10	426.20	416.20	29.3	Compliance	Downgradient	Uppermost Aquifer
APW-10	8/20/2018	454.10	457.45	424.90	414.90	39.4	Compliance	Midgradient	Uppermost Aquifer
APW-11	8/22/2018	461.89	465.40	427.64	417.64	44.45	Compliance	Upgradient	Uppermost Aquifer
APW-12	8/21/2018	431.94	435.52	422.10	412.10	20.0	Compliance	Downgradient	Uppermost Aquifer
APW-13	7/13/2021	457.84	461.55	437.34	427.34	31.0	Compliance	Midgradient	Uppermost Aquifer
APW-14	7/12/2021	455.55	459.27	439.04	429.04	27.0	Compliance	Midgradient	Uppermost Aquifer

[U: RSD 3/4/2022, C: RAB 3/10/22]

Notes:

1. Elevations referenced to North American Vertical Datum (NAVD) of 1988 with the exception of APW-5 through APW-9 which are referenced to feet above Mean Sea Level

BGS = below ground surface

ft = feet

NAVD88 = North American Vertical Datum of 1988

TOC = top of casing (i.e., top of riser pipe)

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Table 1-3. Groundwater Monitoring Program Parameters

2023 Annual Report

Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

Field Parameters	STORET Code	
pH[2]	00400	
Specific Conductance[2]	00094	
Temperature (Fahrenheit)	00011	
Depth to Water (from TOC)	72109	
Elevation of Groundwater Surface[2]	71993	
Depth of Well (BGS)[2]	72008	
Elevation of Measuring Point	72110	
Laboratory Parameters[1]	STORET Code - Dissolved	STORET Code - Total
Boron[2]	01020	01022
Iron[2]	01046	01045
Manganese[2]	01056	01055
Sulfate[2]	00946	- -
Total Dissolved Solids (TDS)[2]	70300	- -
Antimony	01095	01097
Arsenic	01000	01002
Barium	01005	01007
Beryllium	01010	01012
Cadmium	01025	01027
Chloride	00941	- -
Chromium	01030	01034
Cobalt	01035	01037
Copper	01040	01042
Cyanide	- -	00720
Fluoride	00950	- -
Lead	01049	01051
Mercury	71890	71900
Nickel	01065	01067
Nitrate as N	00613	- -
Nitrite as N	00618	- -
Selenium	01145	01147
Silver	01075	01077
Thallium	01057	01059
Vanadium	01085	01087
Zinc	01090	01092

[O: YD/SJC, C: YD/SJC]

Notes:

[1] Reported as dissolved (filtered) concentrations.

[2] Mandatory monitoring parameter per 35 IAC § 840.114(a).

- - = not analyzed

BGS = Below Ground Surface

N = Nitrogen

STORET = Storage and retrieval

TOC = Top of Casing

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Table 3-1. Trend Analysis Results
2023 Annual Report
Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

	APW-2	APW-3	APW-4	APW-9	APW-12
Number of Samples	8	8	8	8	8
Antimony, dissolved	DNE	DNE	DNE	DNE	DNE
Antimony, total	DNE	DNE	DNE	DNE	DNE
Arsenic, dissolved	DNE	None	None	DNE	DNE
Arsenic, total	DNE	None	None	DNE	None
Barium, dissolved	DNE	DNE	DNE	DNE	DNE
Barium, total	DNE	DNE	DNE	DNE	DNE
Beryllium, dissolved	DNE	DNE	DNE	DNE	DNE
Beryllium, total	DNE	DNE	DNE	DNE	DNE
Boron, dissolved	-	+	DNE	DNE	DNE
Boron, total	None	+	DNE	DNE	DNE
Cadmium, dissolved	DNE	DNE	DNE	DNE	DNE
Cadmium, total	DNE	DNE	DNE	DNE	DNE
Chloride, dissolved	DNE	DNE	DNE	DNE	DNE
Chromium, dissolved	DNE	DNE	DNE	DNE	DNE
Chromium, total	DNE	DNE	DNE	DNE	DNE
Cobalt, dissolved	DNE	DNE	DNE	DNE	DNE
Cobalt, total	DNE	DNE	DNE	DNE	DNE
Copper, dissolved	DNE	DNE	DNE	DNE	DNE
Copper, total	DNE	DNE	DNE	DNE	DNE
Cyanide, total	DNE	DNE	DNE	DNE	DNE
Fluoride, dissolved	DNE	DNE	DNE	DNE	DNE
Iron, dissolved	DNE	DNE	-	DNE	DNE
Iron, total	+	+	Decrease	DNE	None
Lead, dissolved	DNE	DNE	DNE	DNE	DNE
Lead, total	DNE	DNE	DNE	DNE	None
Manganese, dissolved	None	None	-	DNE	+
Manganese, total	None	None	Decrease	DNE	+
Mercury, dissolved	DNE	DNE	DNE	DNE	DNE
Mercury, total	DNE	DNE	DNE	DNE	DNE
Nickel, dissolved	DNE	DNE	DNE	DNE	DNE
Nickel, total	DNE	DNE	DNE	DNE	DNE
Nitrate (as N), dissolved	DNE	DNE	DNE	DNE	DNE
Nitrite (as N), dissolved*	DNE	DNE	DNE	DNE	DNE
pH	None	DNE	None	DNE	None
Selenium, dissolved	DNE	DNE	DNE	DNE	DNE
Selenium, total	DNE	DNE	DNE	DNE	DNE
Silver, dissolved	DNE	DNE	DNE	DNE	DNE
Silver, total	DNE	DNE	DNE	DNE	DNE
Sulfate, dissolved	DNE	DNE	DNE	Decrease	DNE
Thallium, dissolved	DNE	DNE	DNE	DNE	DNE
Thallium, total	DNE	DNE	DNE	DNE	DNE
Total Dissolved Solids	DNE	DNE	DNE	DNE	DNE
Vanadium, dissolved	DNE	DNE	DNE	DNE	DNE
Vanadium, total	DNE	DNE	DNE	DNE	DNE
Zinc, dissolved	DNE	DNE	DNE	DNE	DNE
Zinc, total	DNE	DNE	DNE	DNE	DNE

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Table 3-1. Trend Analysis Results
2023 Annual Report
Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

Notes:

1. Trend analysis was completed for downgradient wells.

2. Non-detects were treated as one half the detection limit for Mann Kendall Trend analysis.

3. Date range for the Sen's non-parametric estimate of the median slope and trend analysis is 1/1/2022-12/31/2023.

* = No Class I Groundwater Quality Standard

- = Negative Sen's non-parametric estimate of the median slope

+ = Positive Sen's non-parametric estimate of the median slope

Decrease = Statistically significant decreasing trend

DNE = Constituent did not exceed the Class I groundwater quality standard during the reporting period (2022-2023)

Increase = Statistically significant increasing trend

None = Insufficent evidence of a trend as determined using the Mann-Kendall test at 95% confidence for constituents with
maximum concentration higher than the Class I Groundwater Quality Standard

FIGURES

SITE LOCATION

BOTTOM ASH POND BERM CAP (CLOSED)

FLY ASH POND (CLOSED)

OLD ASH POND (CLOSED)

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

KEY MAP

- - - APPROXIMATE PROPERTY BOUNDARY

- - - LIMITS OF CCP MANAGEMENT

NOTE
Base map property lines were updated based on March 2019 Plat of Survey.

Map Scale: 1:1:24,000;
Map Center: 90°34'10"W 39°49'15"N

0   1,000   2,000
|———|———| Feet

SITE LOCATION MAP

2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

FIGURE 1-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

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Y:\Mapping\Projects\6\67815\mxd\2022\Figure 1-1_Site Location Map.mxd

DATED: 12/18/2023 | DESIGNER: egreaves

ILLINOIS RIVER

APW-9

BOTTOM ASH POND BERM CAP (CLOSED)

APW-2

APW-3

APW-8

APW-10

APW-11

FLY ASH POND (CLOSED)

APW-13

OLD ASH POND (CLOSED)

APW-14

APW-6

APW-7

APW-5

APW-1

APW-4

APW-12

Legend:

- MONITORING WELL LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- LIMITS OF CCP MANAGEMENT
- APPROXIMATE GROUNDWATER MONITORING ZONE

NOTE
Base map property lines were updated based on March 2019 Plat of Survey.

0   240   480
Feet

MONITORING WELL LOCATION MAP

FIGURE 1-2

RAMBOLL AMERICAS
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2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

RAMBOLL

PROJECT: 72694 | DATED: 12/18/2023 | DESIGNER: egreaves

Y:\Mapping\Projects\6\67815\mxd\2022\Figure 1-2_Site_Base_Map.mxd

Service Layer Credits:
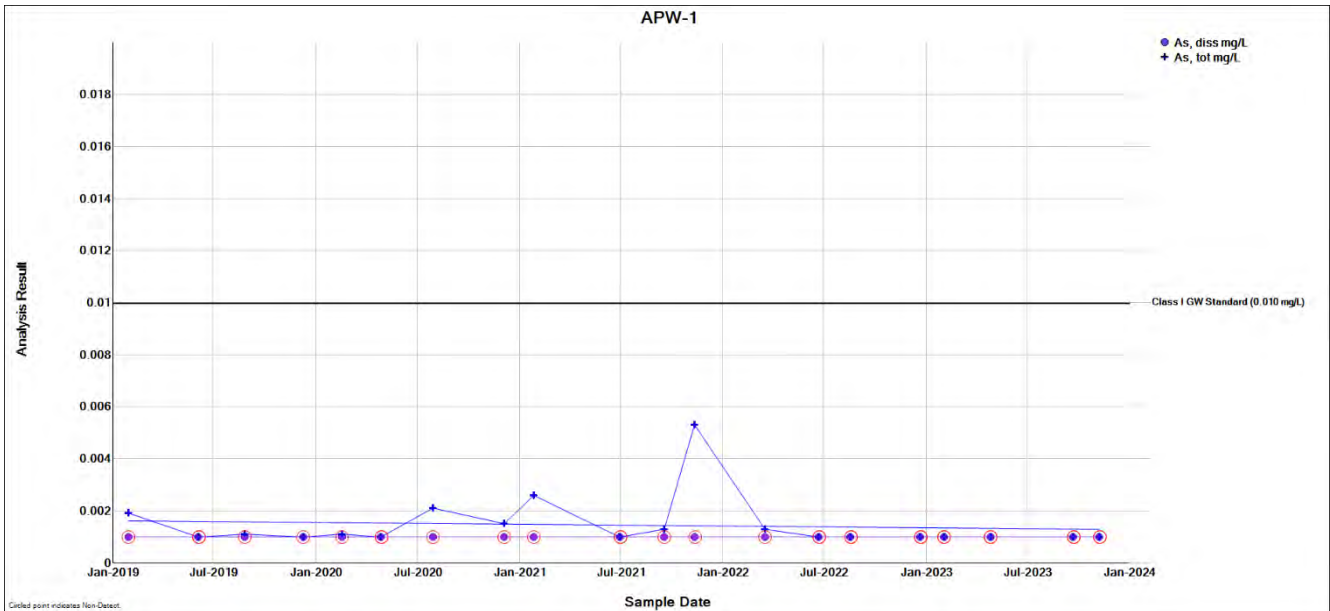
Figure 1-3. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-1

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
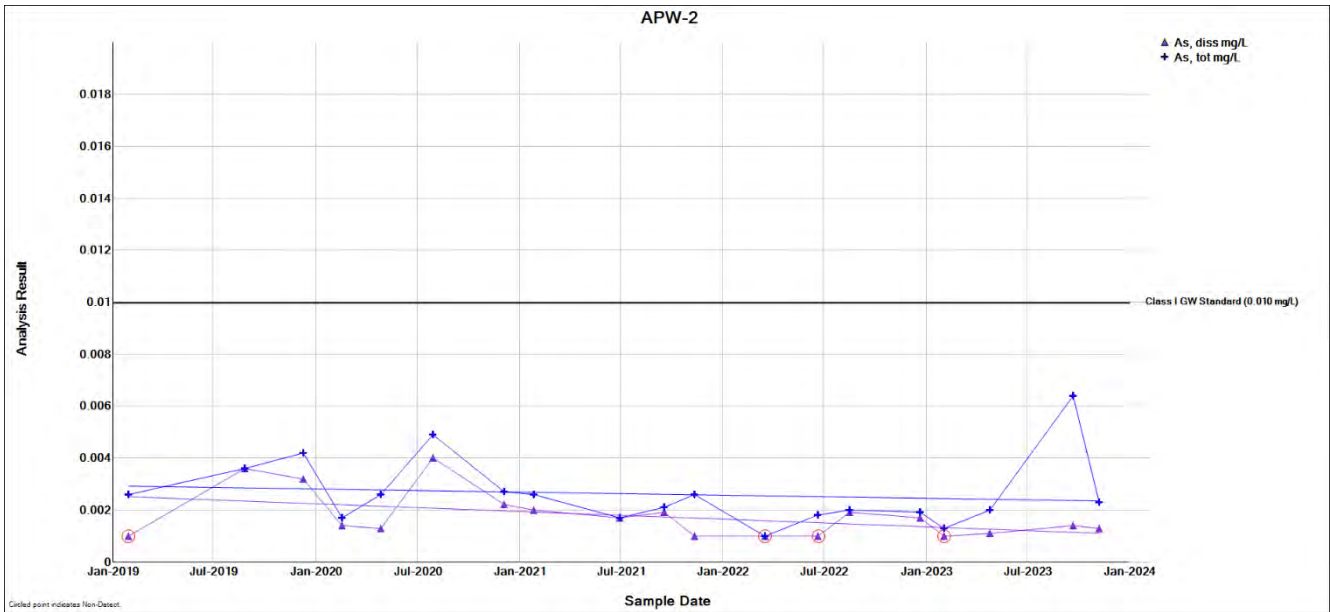
Figure 1-4. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-2

The Class Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
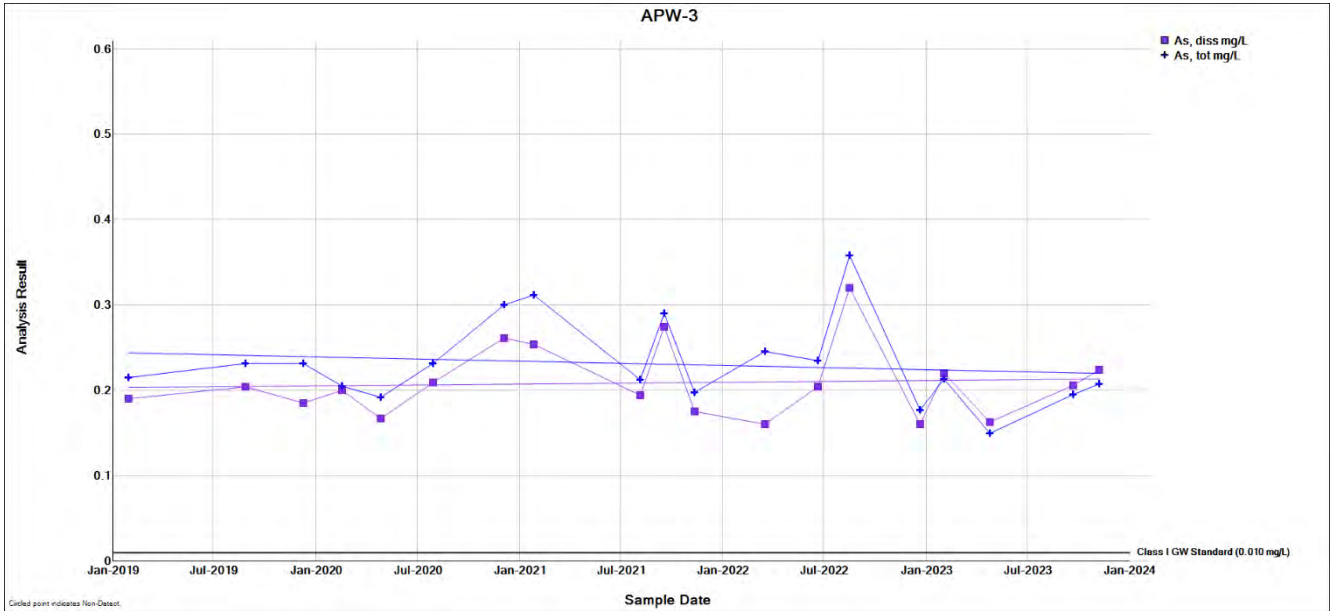
Figure 1-5. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-3

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
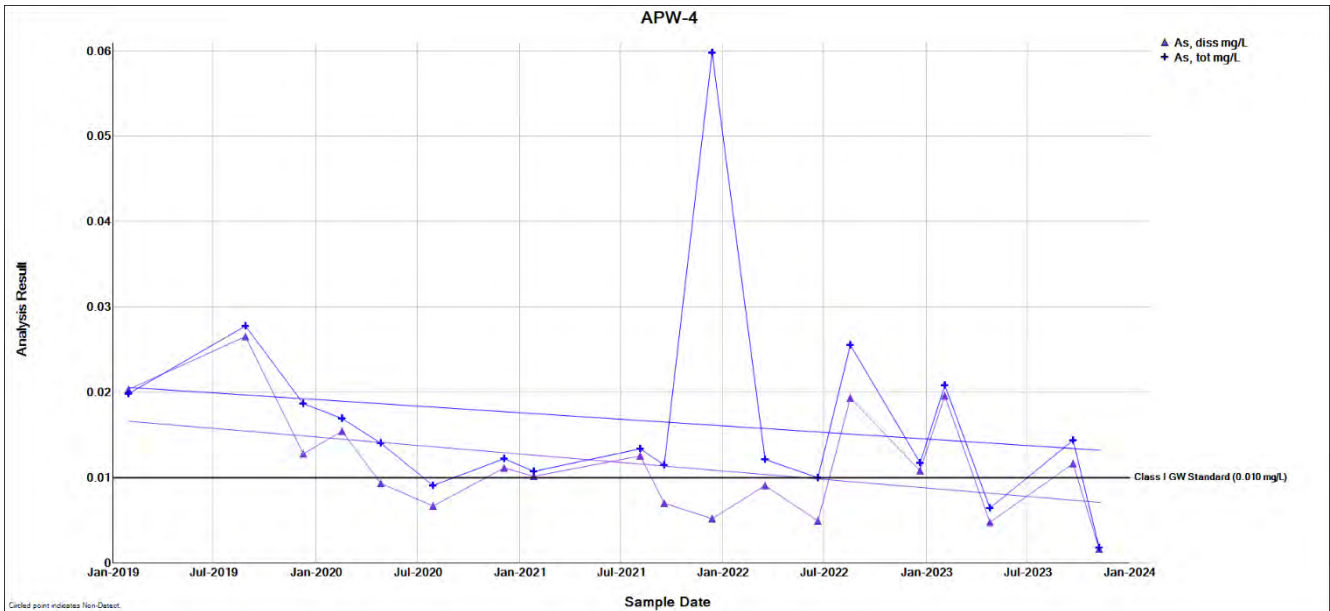
Figure 1-6. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-4

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
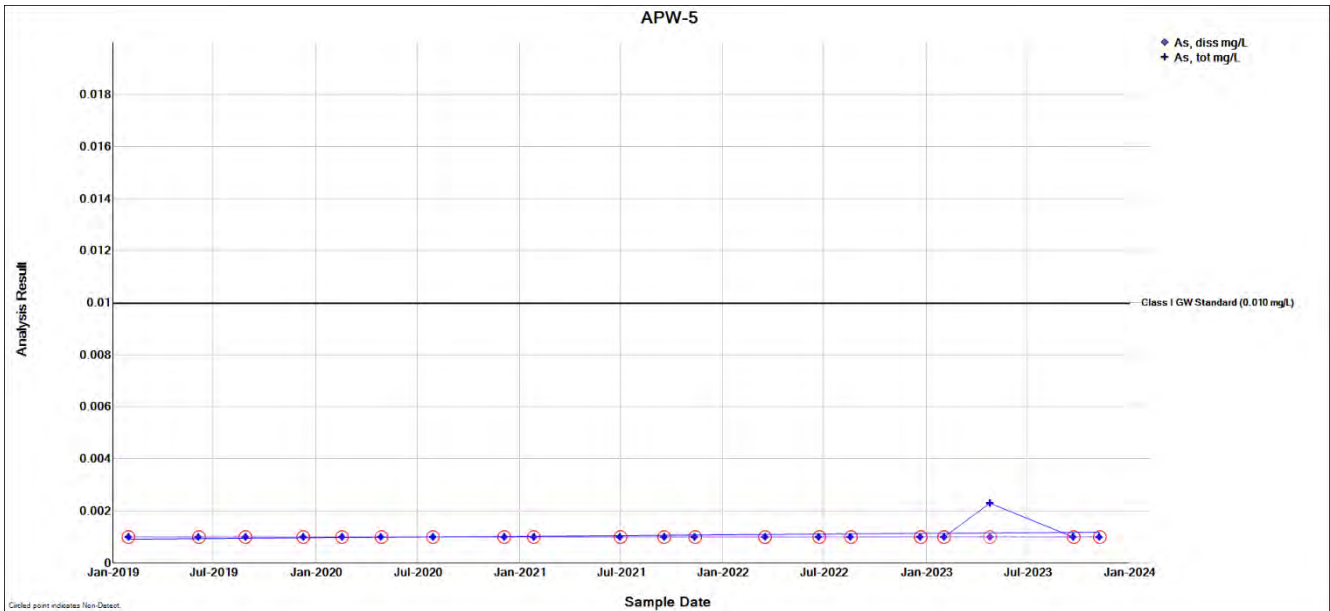
Figure 1-7. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-5

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
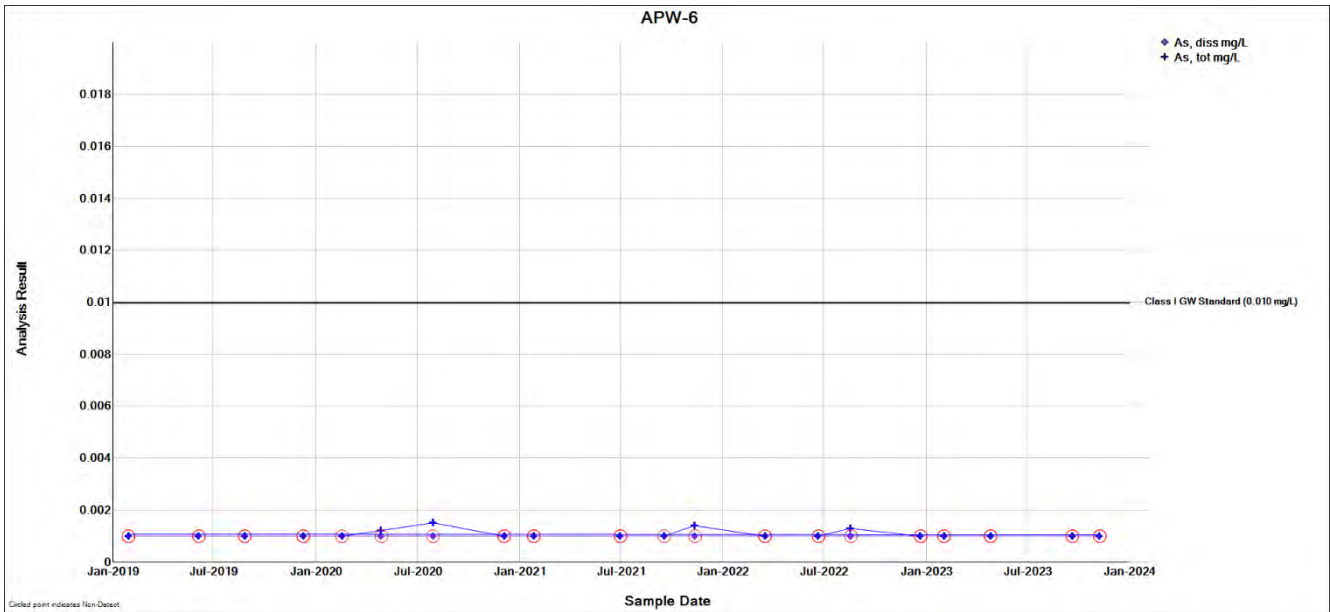
Figure 1-8. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-6

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
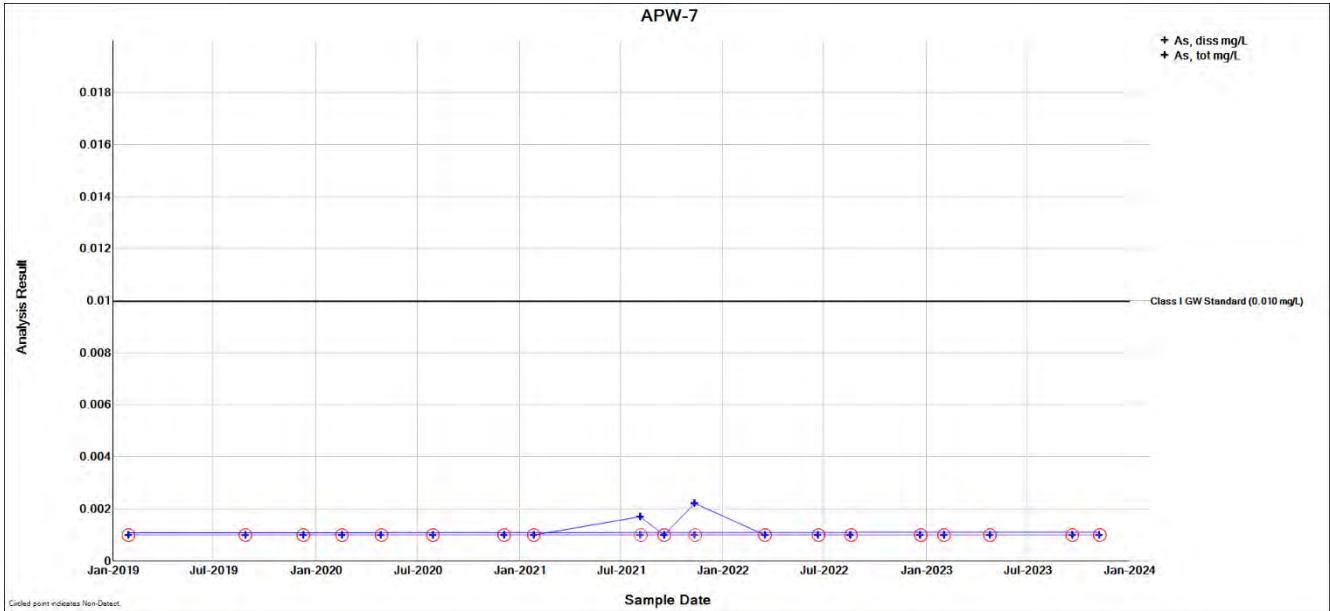
Figure 1-9. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-7

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
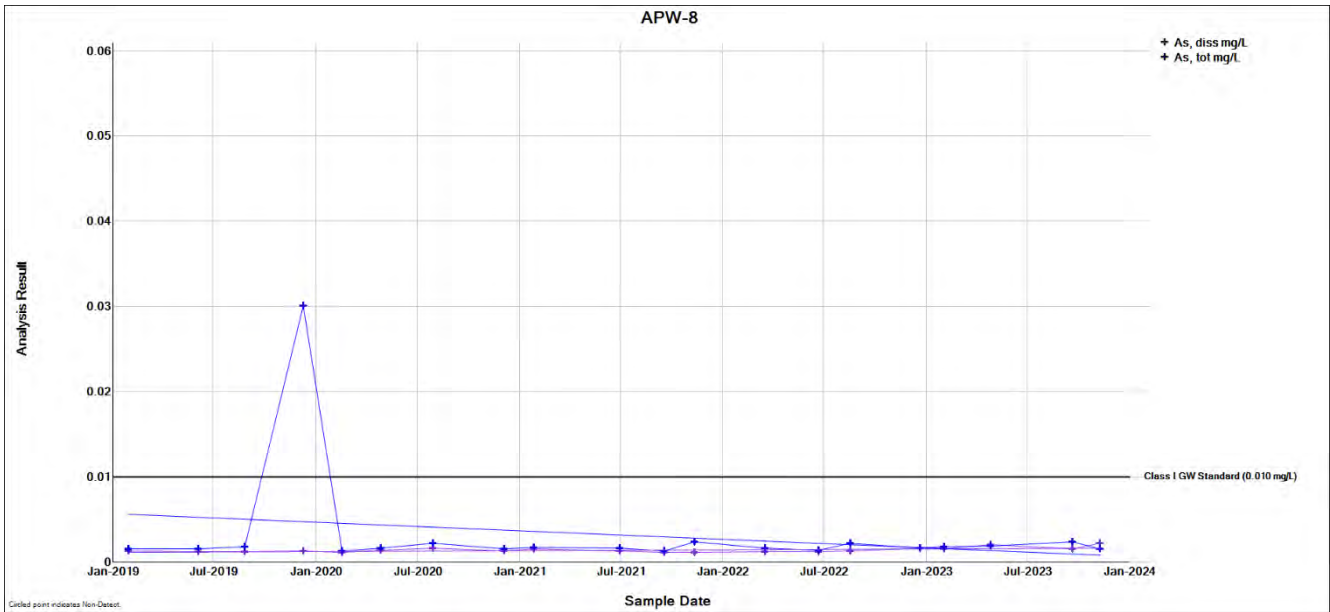
Figure 1-10. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-8

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

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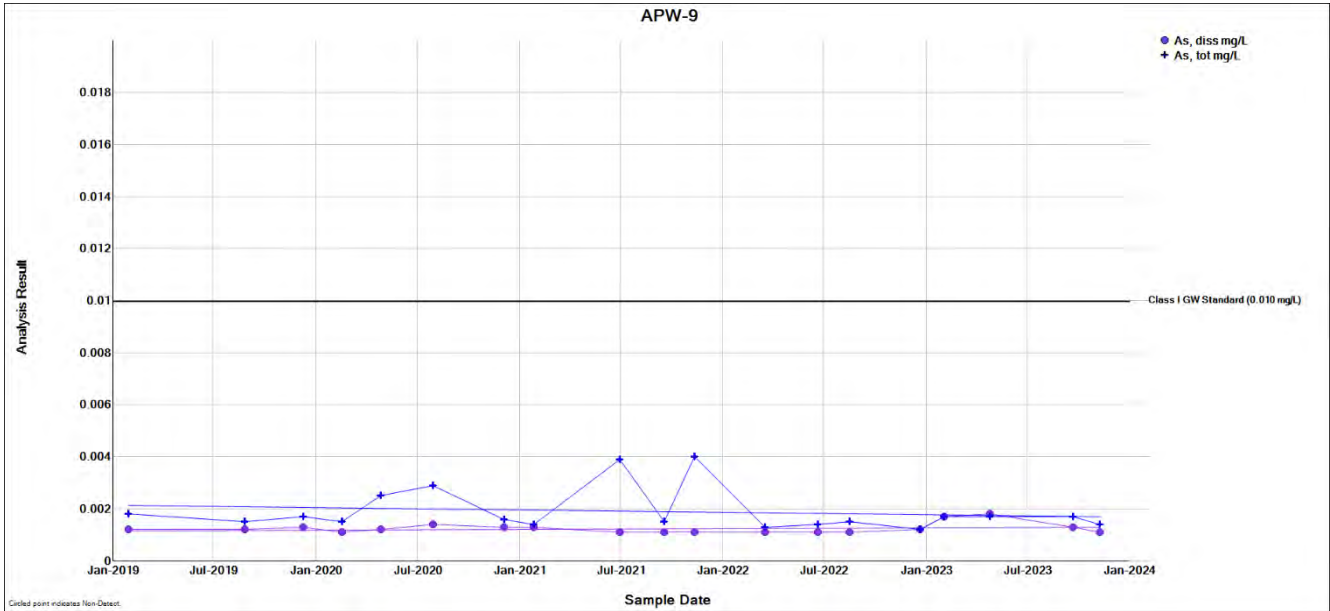
Figure 1-11. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-9

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
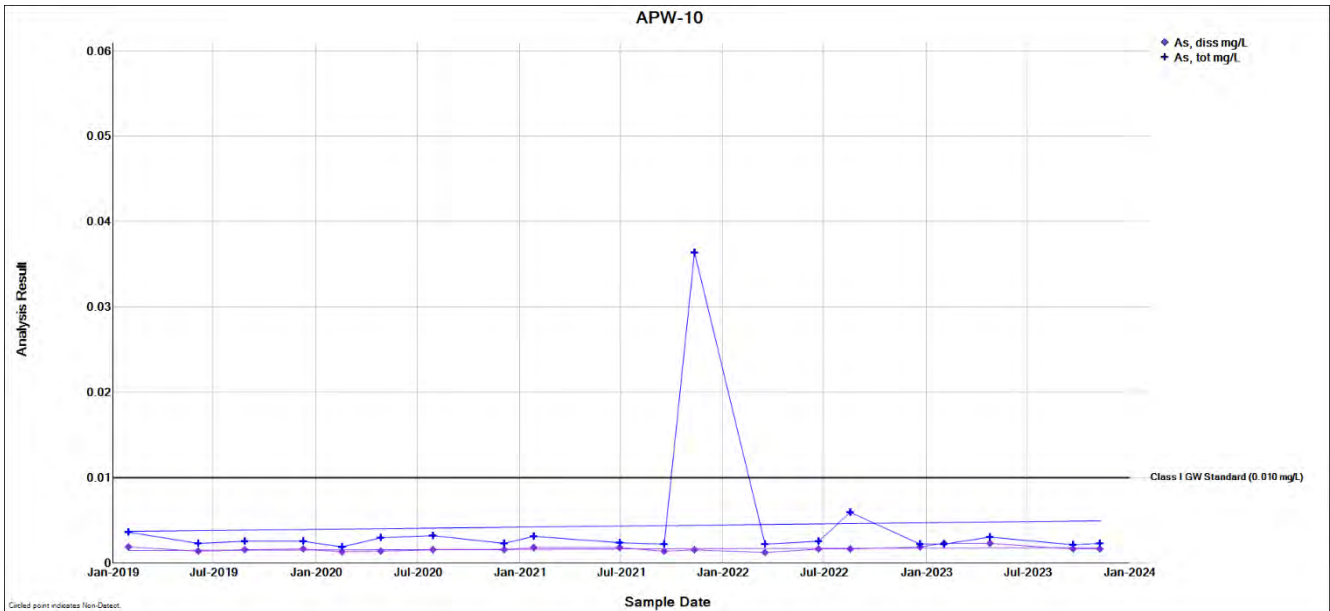
Figure 1-12. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-10

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBØLL
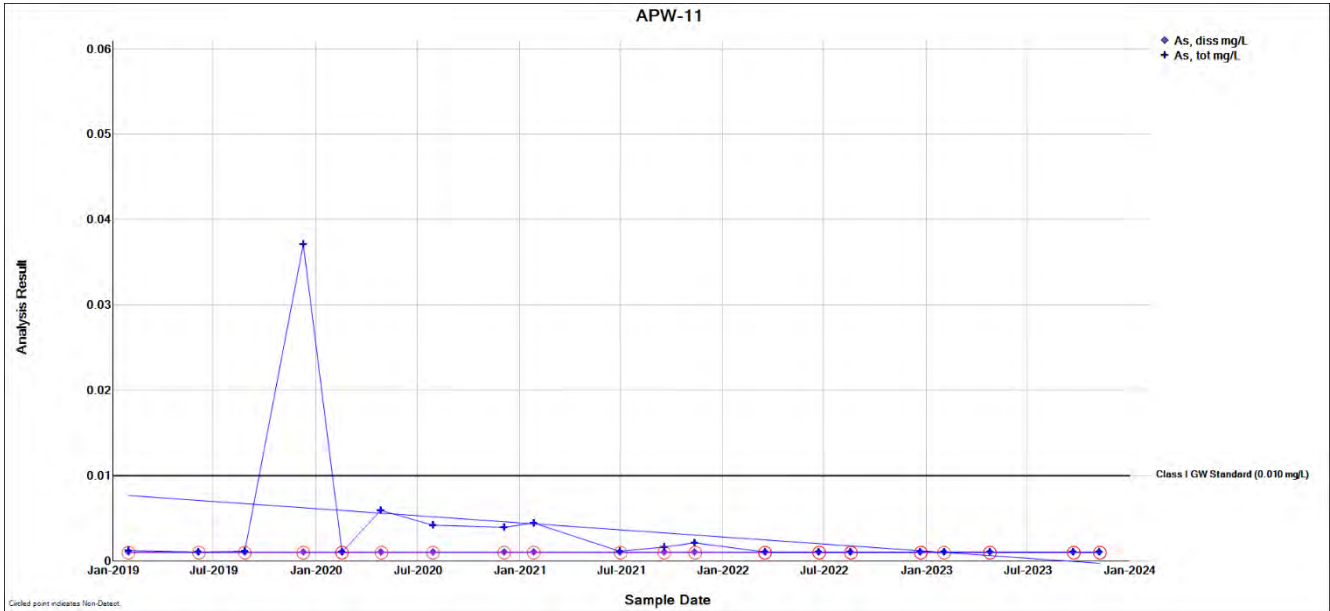
Figure 1-13. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-11

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
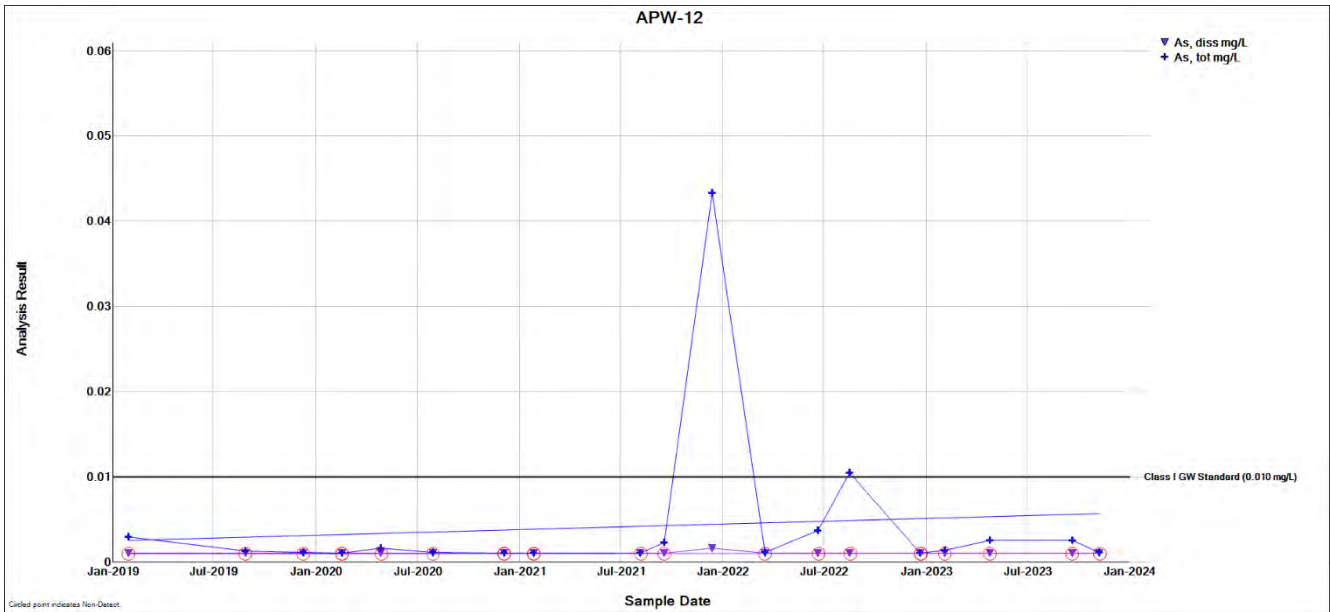
Figure 1-14. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-12

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.

RAMBØLL
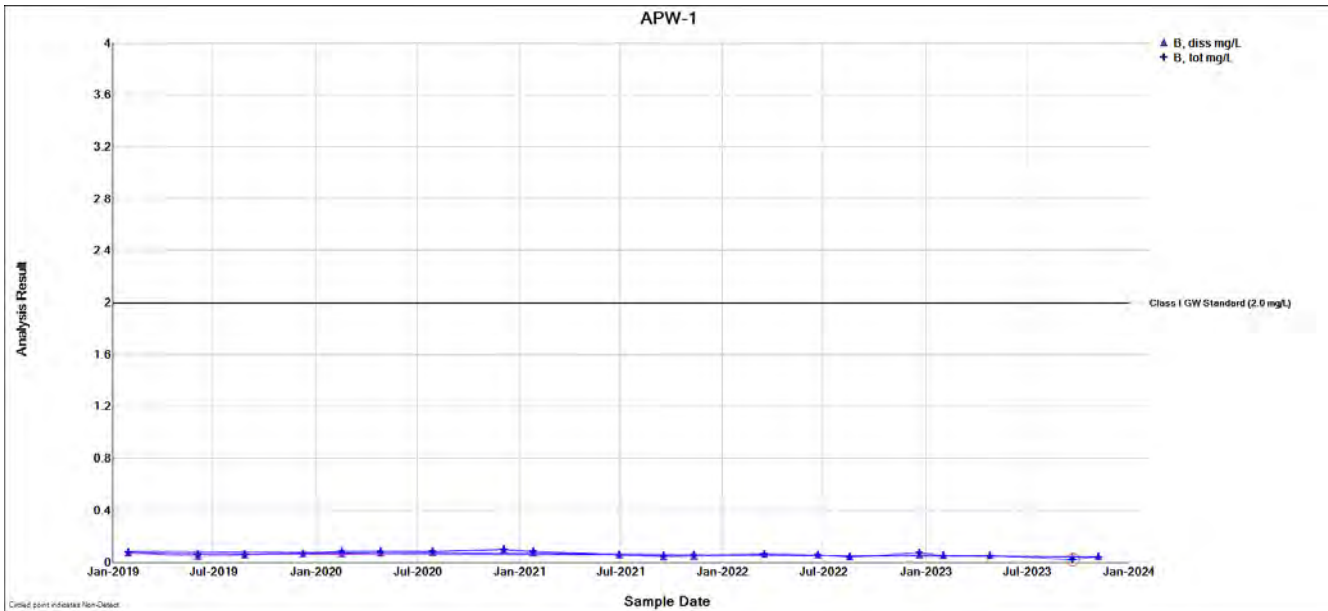
Figure 1-15. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-1
The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.
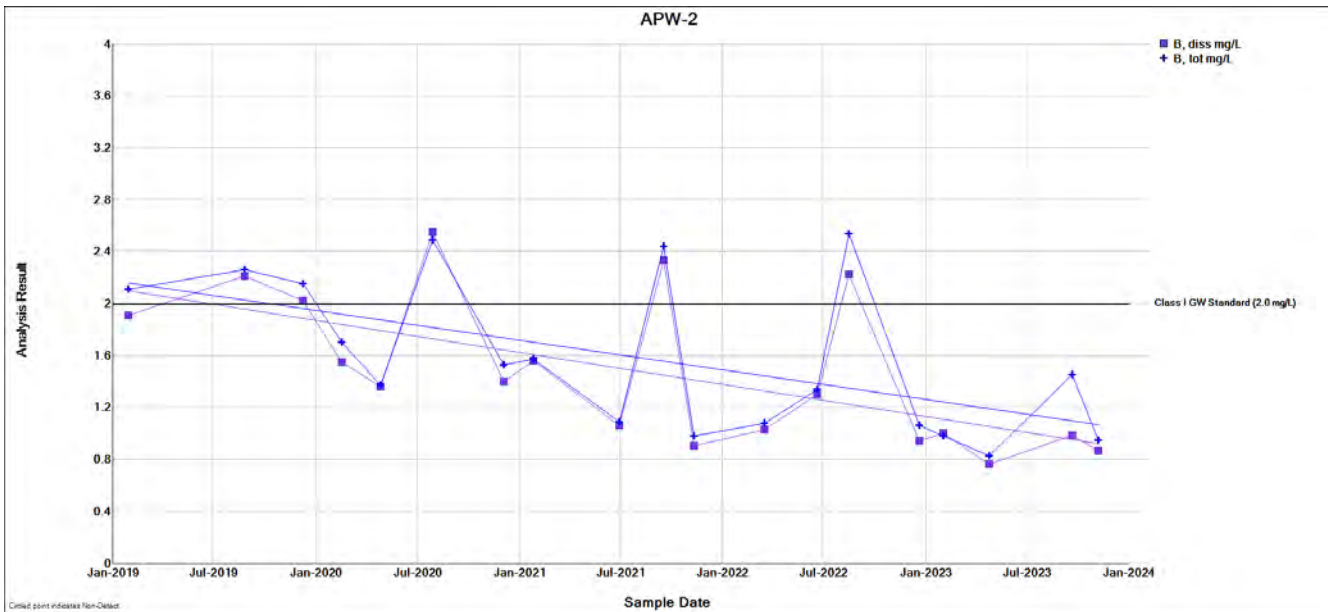
Figure 1-16. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-2
The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBOLL
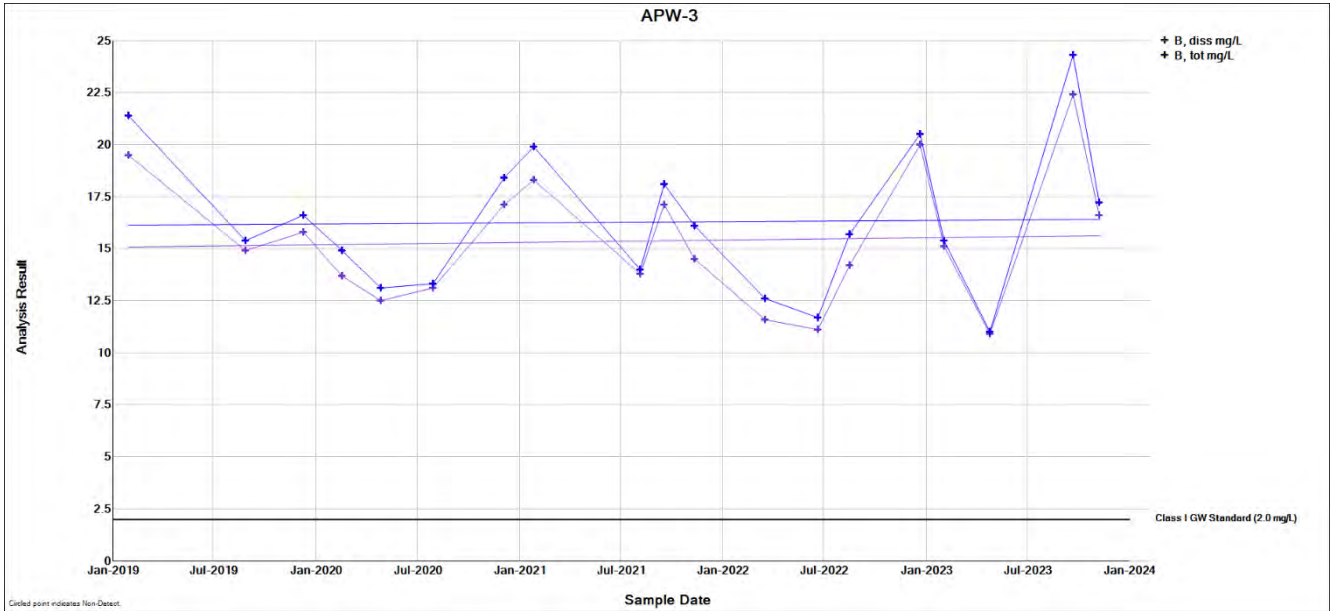
Figure 1-17. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-3

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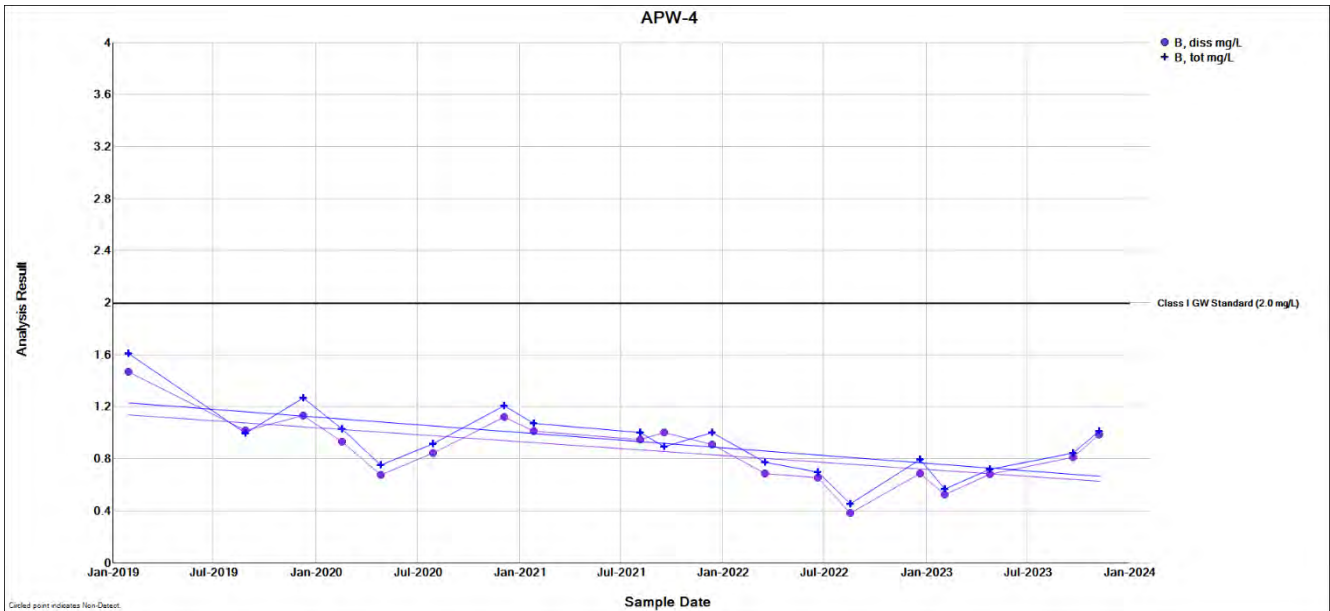
Figure 1-18. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-4

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBØLL
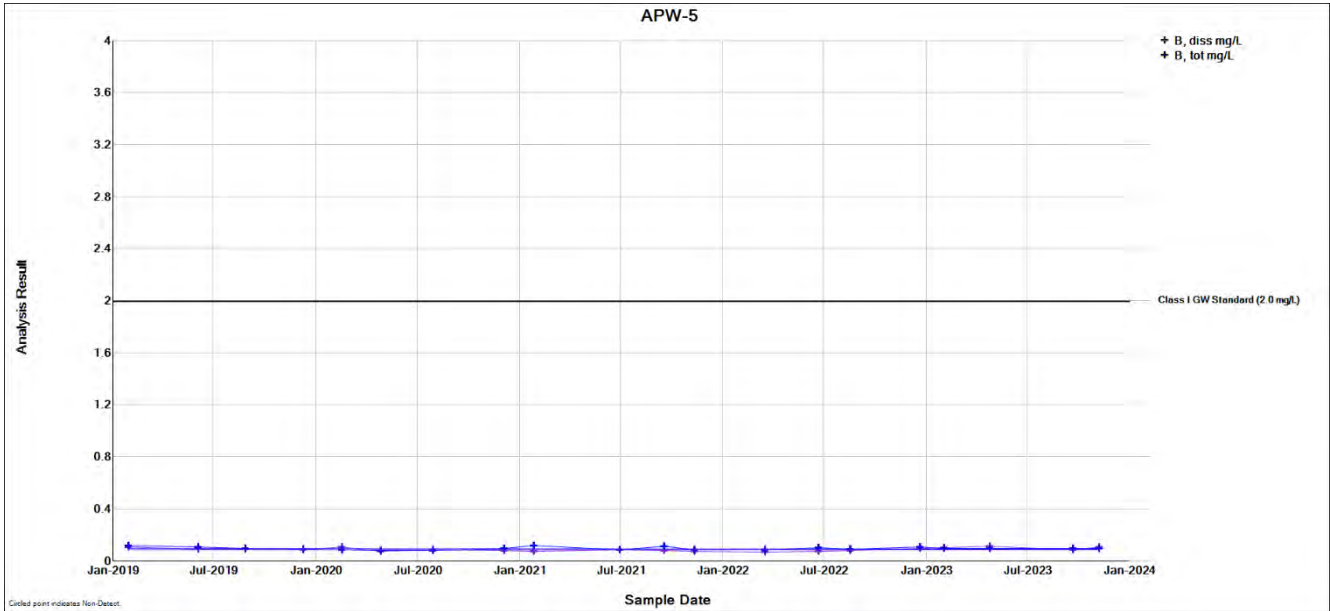
Figure 1-19. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-5

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
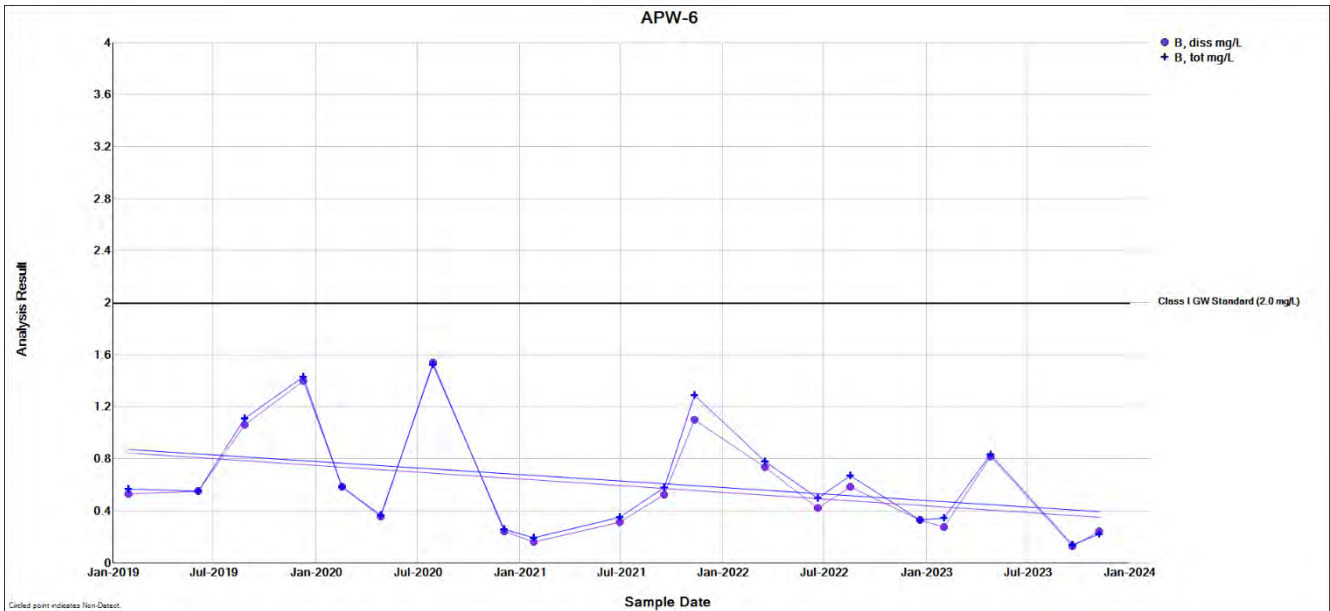
Figure 1-20. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-6

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBØLL
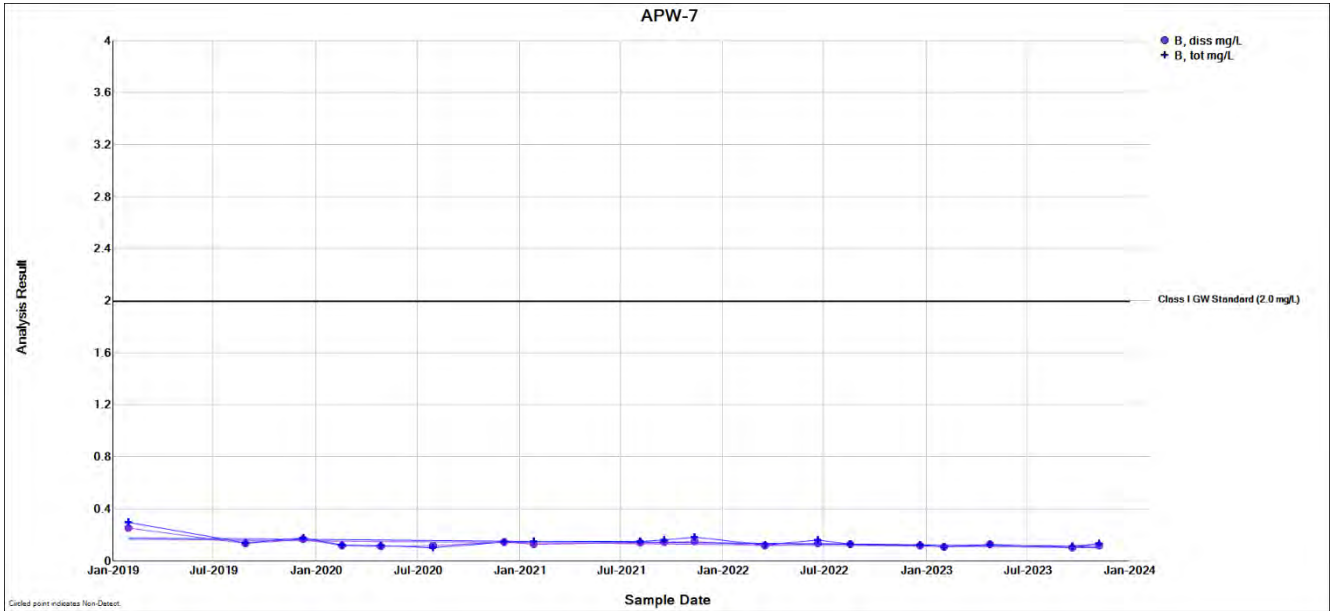
Figure 1-21. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-7
The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
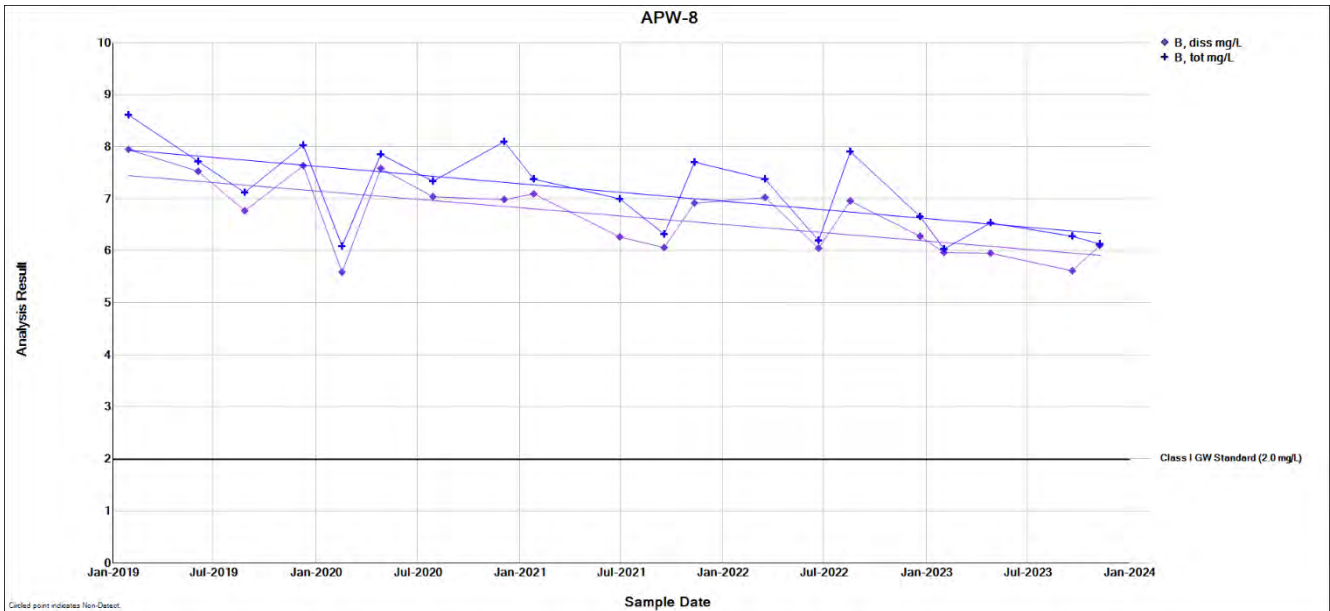
Figure 1-22. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-8
The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBØLL
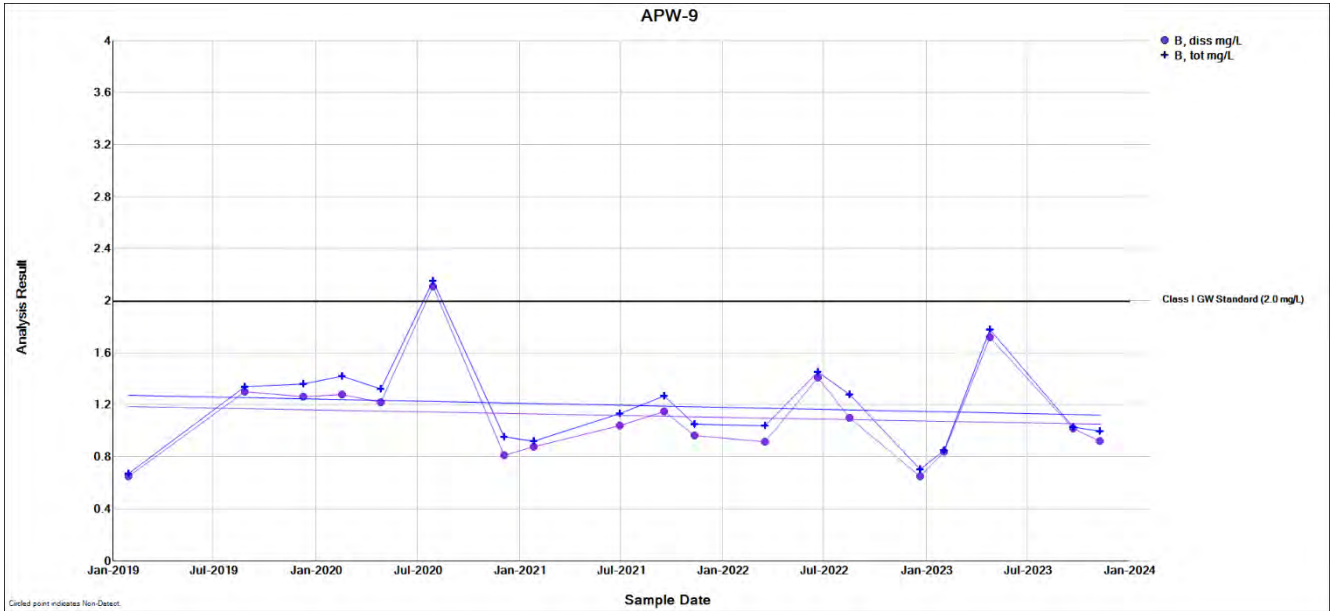
Figure 1-23. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-9

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
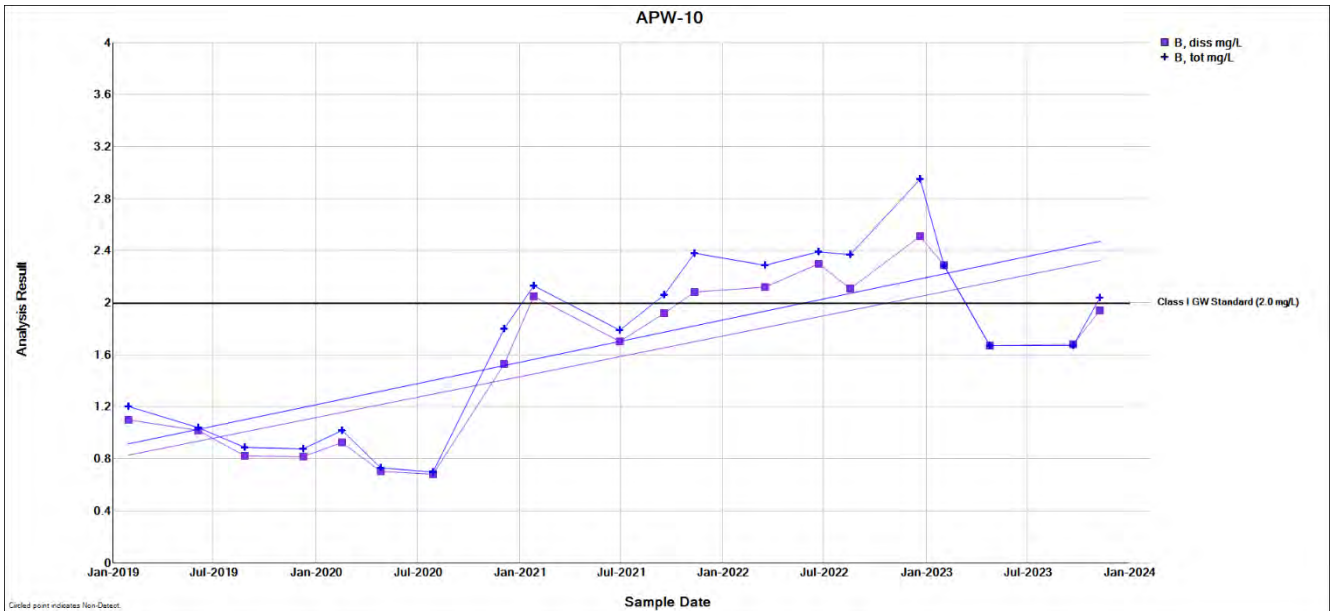
Figure 1-24. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-10

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

RAMBØLL
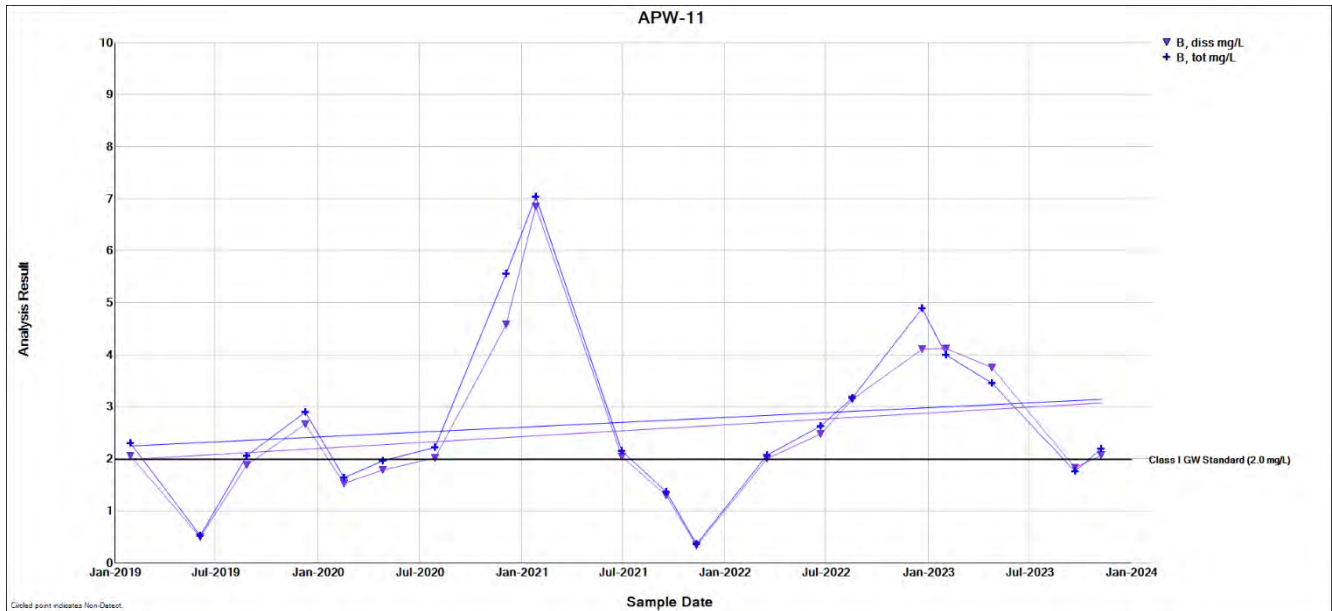
Figure 1-25. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-11

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.
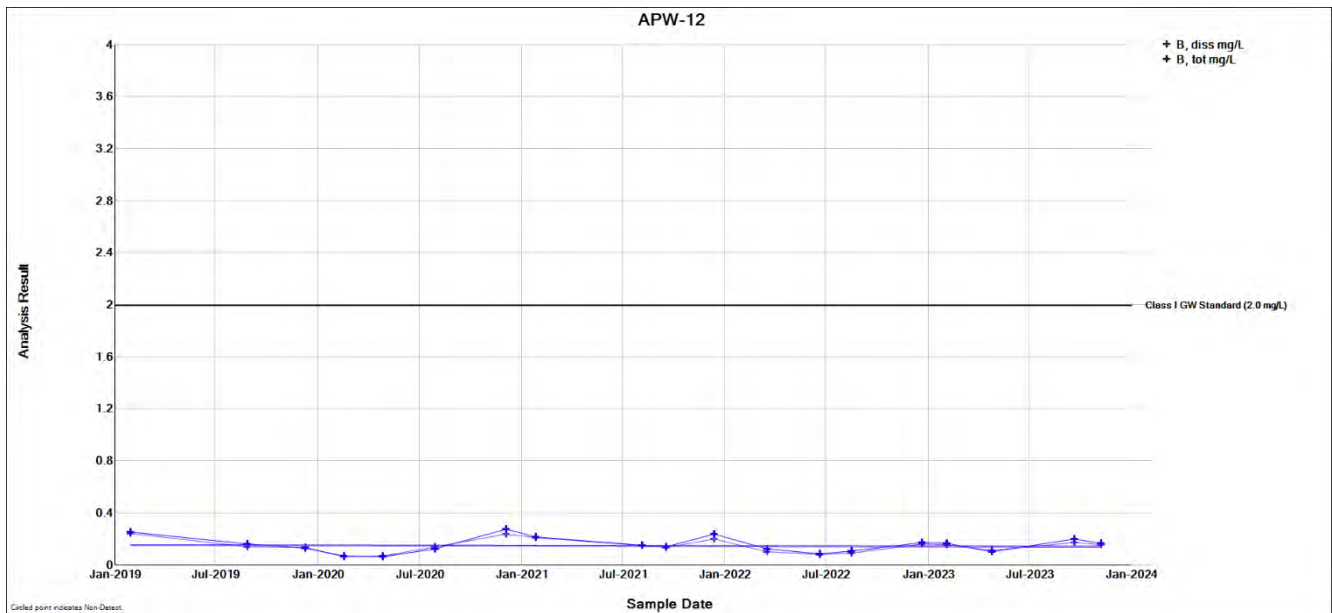
Figure 1-26. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-12

The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

GROUNDWATER ELEVATIONS - FEBRUARY 2-3, 2023

FIGURE 3-1

Legend:

- MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- APPROXIMATE PROPERTY BOUNDARY
- LIMITS OF CCP MANAGEMENT

0   240   480 Feet

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NGVD29 and then converted to NAVD88 at the time of this drawing.
NM= Groundwater Elevation Not Measured Due to Flooding
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

NOTE
Base map property lines were updated based on March 2019 Plat of Survey.

RAMBOLL AMERICAS
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2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

RAMBOLL

Labels on figure:
- BOTTOM ASH POND BERM CAP (CLOSED)
- FLY ASH POND (CLOSED)
- OLD ASH POND (CLOSED)
- ILLINOIS RIVER = 421.51 FT*
- APW-9 423.60
- APW-2 422.54
- APW-3 423.43
- APW-10 425.63
- APW-8 425.35
- APW-11 426.70
- APW-13 <426.84
- APW-14 <428.55
- APW-6 426.47
- APW-7 425.20
- APW-4 423.97
- APW-12 423.93
- APW-5 426.25
- APW-1 427.88

Side text:
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PROJECT: 72894 | DATED: 12/19/2023 | DESIGNER: egreaves
Service Layer Credits: NAIP\USDA_CONUS_PRIME:

BOTTOM ASH
POND BERM
CAP (CLOSED)

APW-9
428.45

ILLINOIS RIVER = 427.46 FT*

APW-2
426.67

APW-10
429.12

APW-3
427.67

APW-8
426.79

APW-11
429.48

FLY ASH POND
(CLOSED)

APW-13
<426.84

429

OLD ASH
POND
(CLOSED)

APW-14
<428.55

427

430

428

431

APW-6
427.89

APW-5
428.80

432

APW-1
432.35

APW-7
428.15

APW-4
427.72

APW-12
427.75

Legend

- MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

- APPROXIMATE PROPERTY BOUNDARY
- LIMITS OF CCP MANAGEMENT

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NGVD29 and then converted to NAVD88 at the time of this drawing.
NM= Groundwater Elevation Not Measured Due to Flooding
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

NOTE
Base map property lines were updated based on March 2019 Plat of Survey.

GROUNDWATER ELEVATIONS - APRIL 25-26, 2023

FIGURE 3-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

RAMBOLL

0   240   480
|___|___| Feet

Y:\Mapping\Projects\6\67815\mxd\2023\2023.aprx
PROJECT: 72894 | DATED: 12/22/2023 | DESIGNER: egreaves
Service Layer Credits: World Imagery: Maxar

BOTTOM ASH POND
BERM CAP
(CLOSED)

APW-9
422.58

ILLINOIS RIVER = 420.61 FT*

APW-2
422.21

423

424

APW-10
424.75

APW-3
421.03

APW-8
424.30

425

APW-11
426.07

422

APW-13
<426.84

FLY
ASH POND
(CLOSED)

426

OLD ASH POND
(CLOSED)

APW-14
<428.55

APW-6
425.64

APW-7
424.30

APW-5
425.50

427

APW-1
427.45

APW-4
422.96

APW-12
422.88

GROUNDWATER ELEVATIONS - SEPTEMBER 20-22, 2023

FIGURE 3-3

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR
(1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION
CONTOUR

GROUNDWATER FLOW DIRECTION

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

*River Elevation obtained from United States Geological Survey
05585500 Meredosia, IL gaging station. The elevation was reported in
NGVD29 and then converted to NAVD88 at the time of this drawing.
NM= Groundwater Elevation Not Measured Due to Flooding
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

NOTE
Base map property lines were updated
based on March 2019 Plat of Survey.

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

RAMBOLL

0   240   480
Feet

Y:\Mapping\Projects\6\67815\mxd\2023\2023.aprx

PROJECT: 72894 | DATED: 12/22/2023 | DESIGNER: egreaves

Service Layer Credits: World Imagery: Maxar

BOTTOM ASH POND BERM CAP (CLOSED)

APW-9
425.69

APW-10
424.32

ILLINOIS RIVER = 420.61 FT*

APW-2
421.98

APW-3
421.78

APW-8
424.08

APW-11
425.44

APW-13
<426.84

FLY ASH POND (CLOSED)

422

423

424

425

OLD ASH POND (CLOSED)

APW-14
<428.55

APW-1
425.58

APW-7
424.04

APW-6
425.24

APW-5
424.97

APW-4
422.91

APW-12
423.89

Y:\Mapping\Projects\6\67815\mxd\2023\2023.aprx

PROJECT: 72894 | DATED: 12/22/2023 | DESIGNER: egreaves

Service Layer Credits: World Imagery: Maxar

Legend

	MONITORING WELL LOCATION		APPROXIMATE PROPERTY BOUNDARY
	GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)		LIMITS OF CCP MANAGEMENT
	INFERRED GROUNDWATER ELEVATION CONTOUR		
	GROUNDWATER FLOW DIRECTION		

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NGVD29 and then converted to NAVD88 at the time of this drawing.
NM= Groundwater Elevation Not Measured Due to Flooding
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

NOTE
Base map property lines were updated based on March 2019 Plat of Survey.

0   240   480
Feet

GROUNDWATER ELEVATIONS - NOVEMBER 8-9, 2023

FIGURE 3-4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

2023 GROUNDWATER MONITORING ANNUAL REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

RAMBOLL
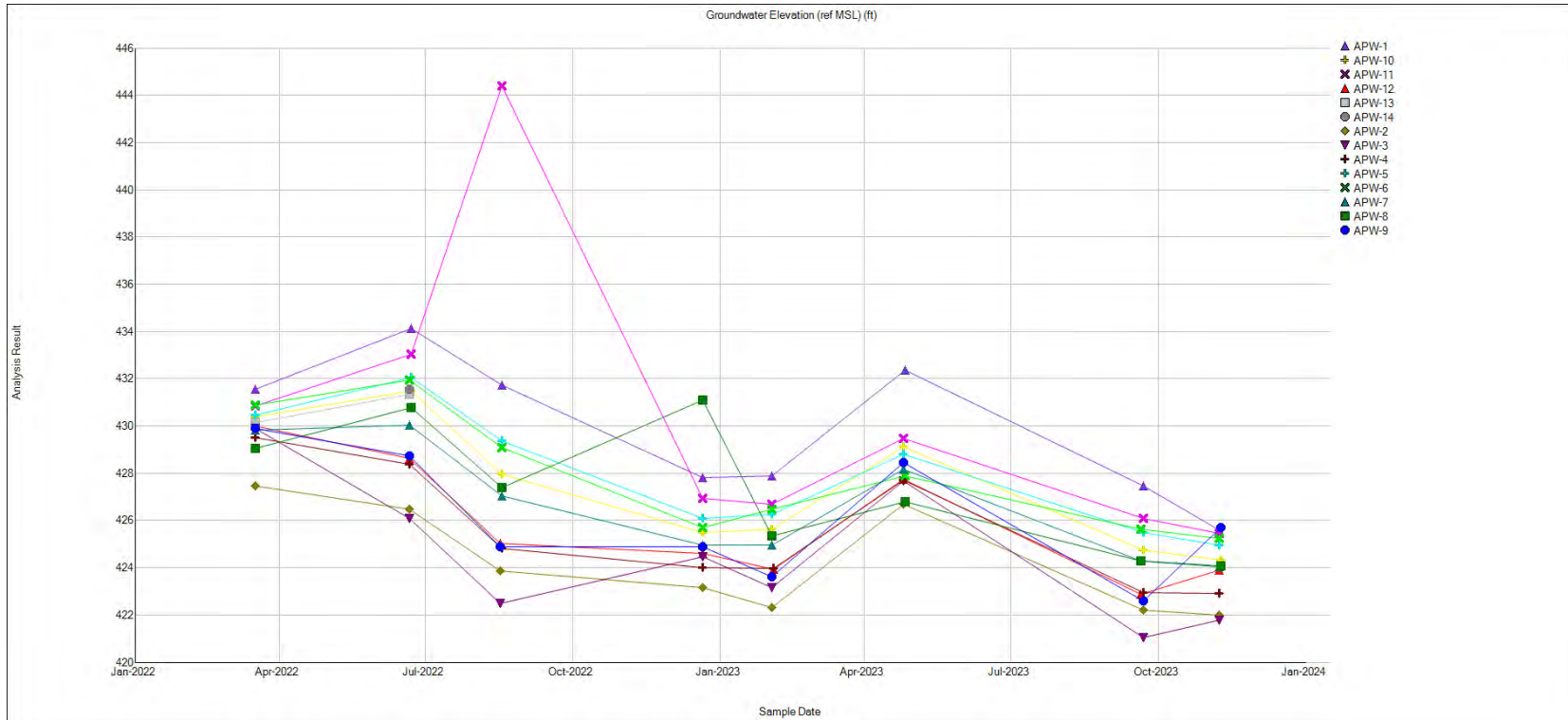
Figure 3-5. Groundwater Elevations Timeseries Plot
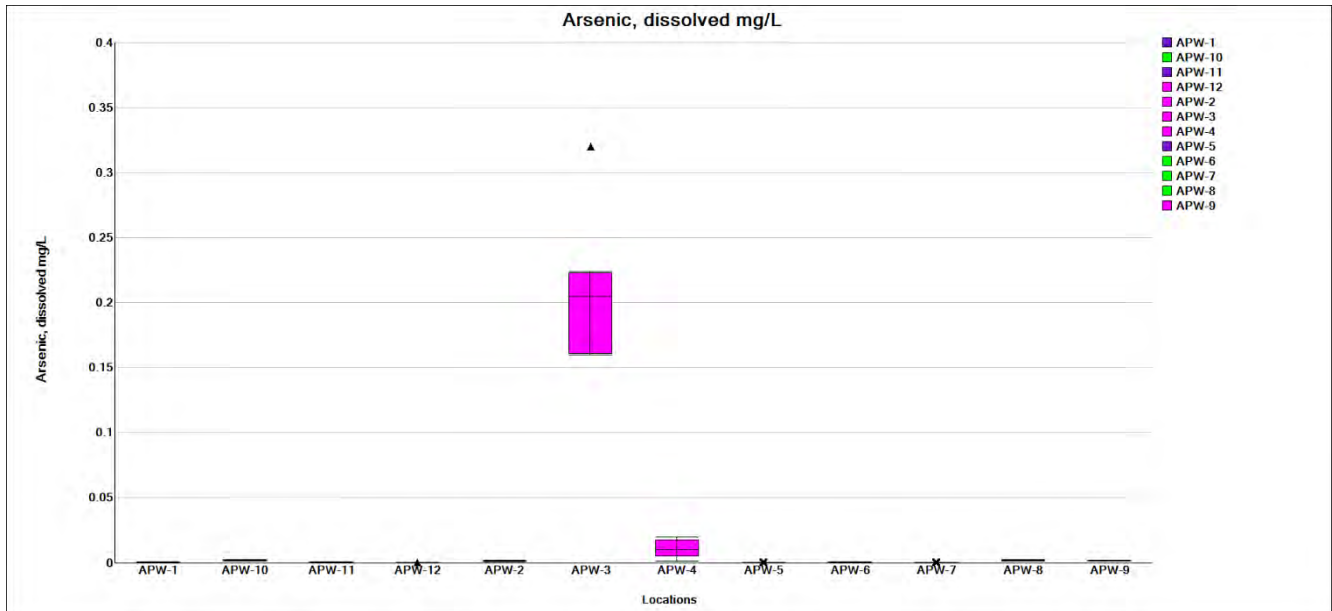
Figure 3-6A. Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2022 and 2023.

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
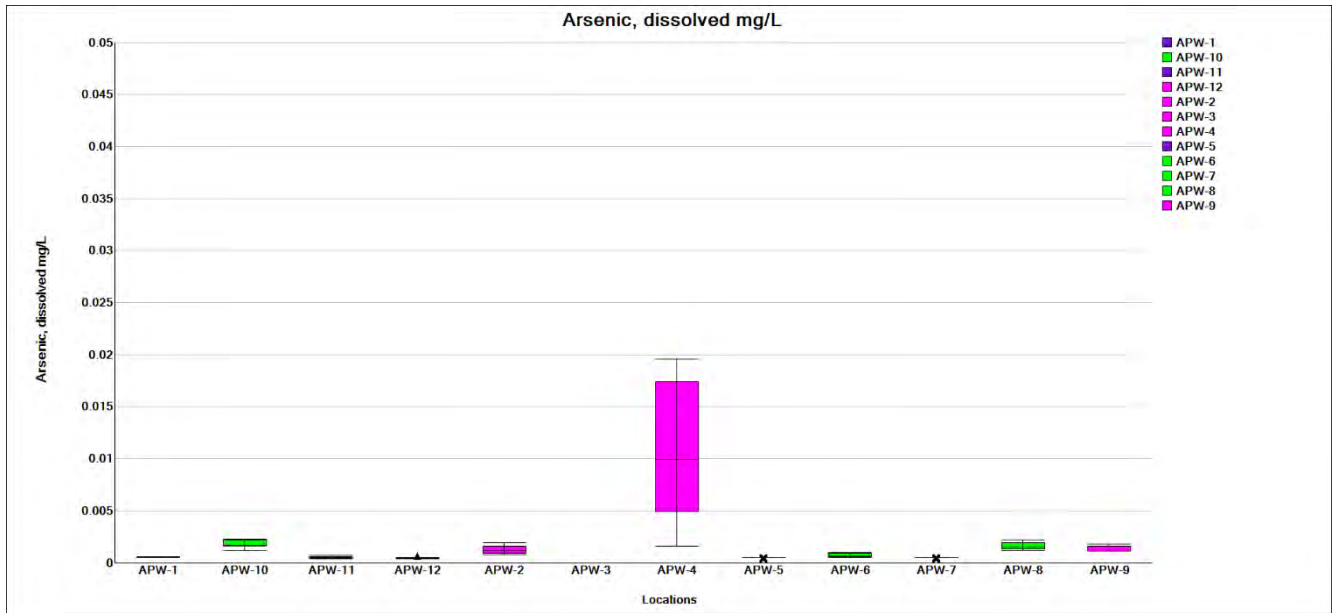
Figure 3-6B. Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2022 and 2023 (Zoomed In).

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.

RAMBØLL
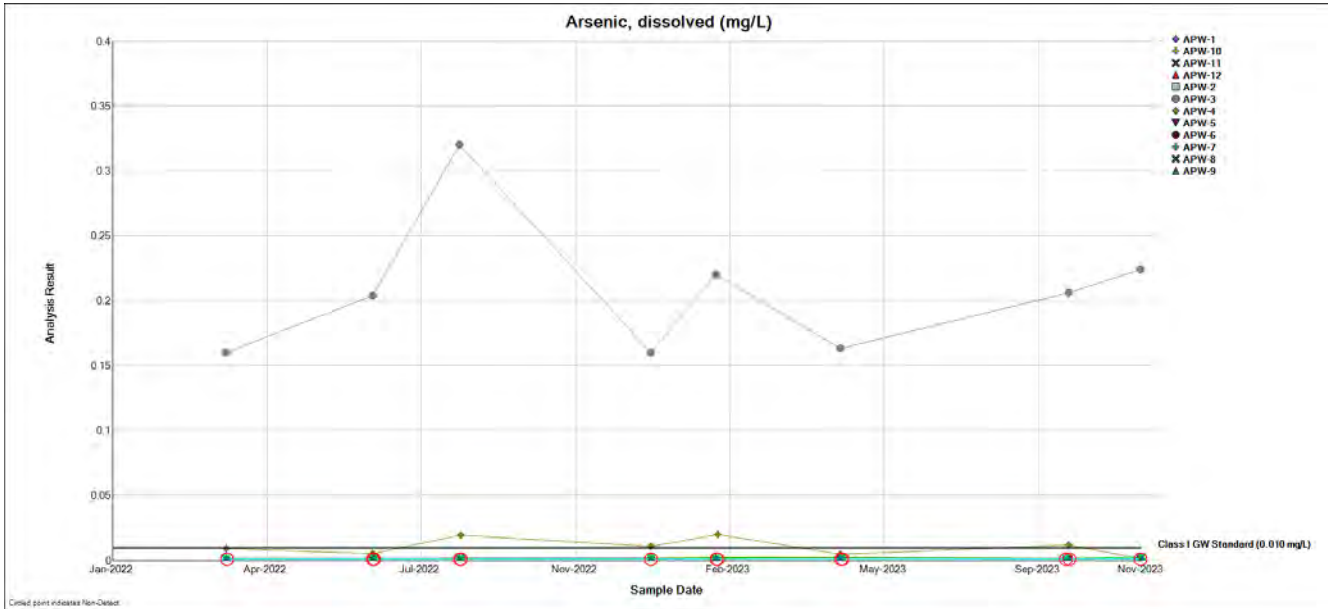
Figure 3-7A. Dissolved Arsenic Concentrations during the Reporting Period (2022–2023) at All Compliance Wells.

Circled results indicate non-detects.
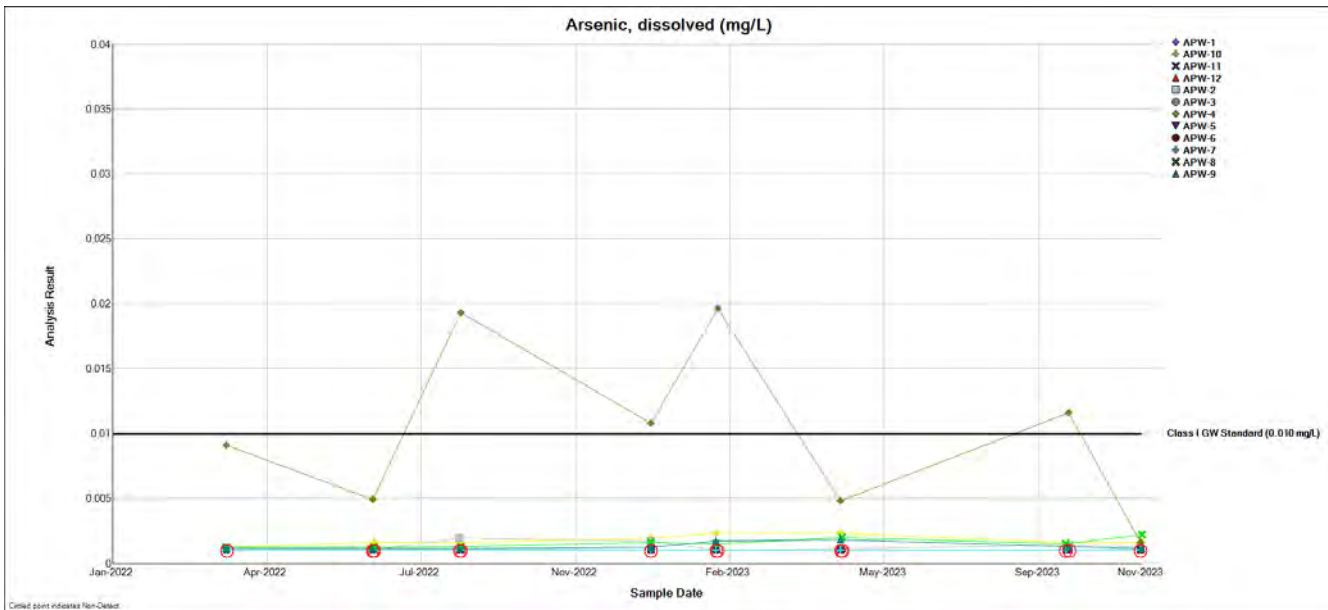
Figure 3-7B. Dissolved Arsenic Concentrations during the Reporting Period (2022–2023) at All Compliance Wells (Zoomed In).

Circled results indicate non-detects.

RAMBØLL
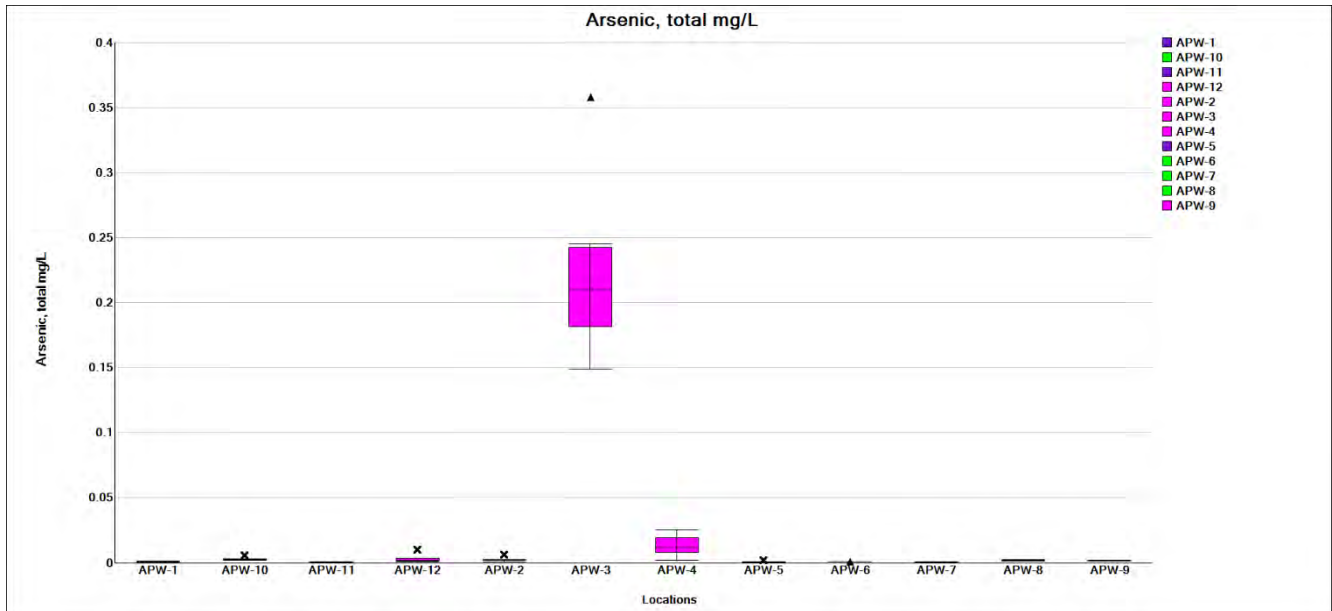
Figure 3-8A. Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2022 and 2023.

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
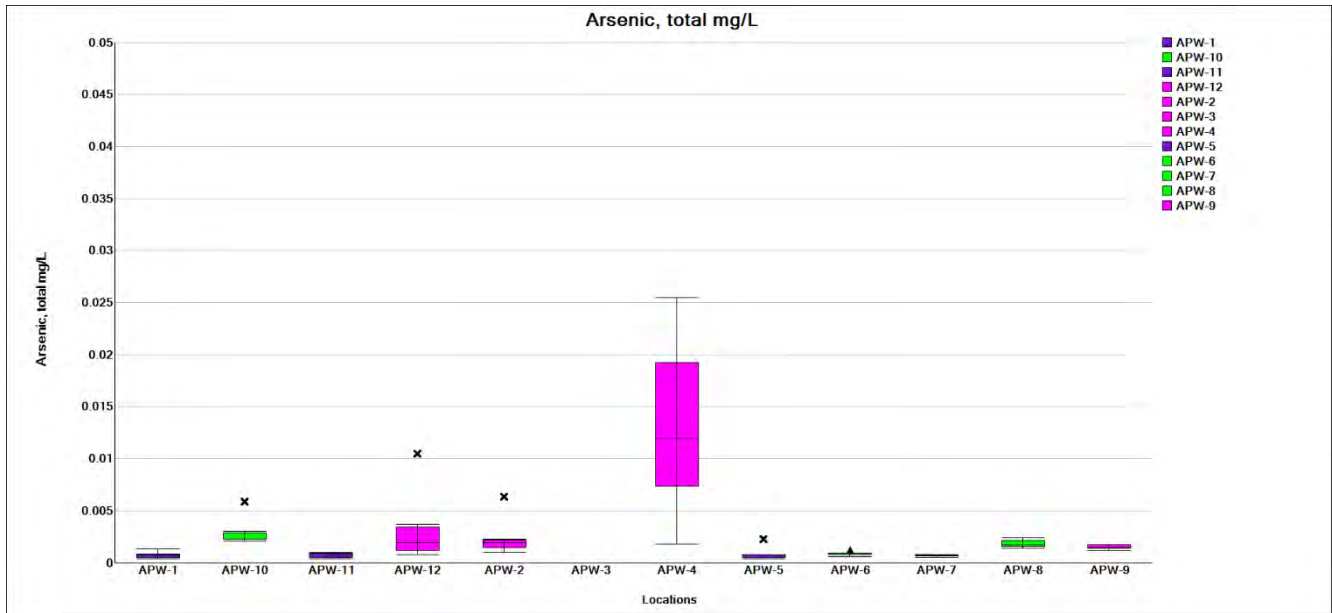
Figure 3-8B. Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2022 and 2023 (Zoomed In).

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
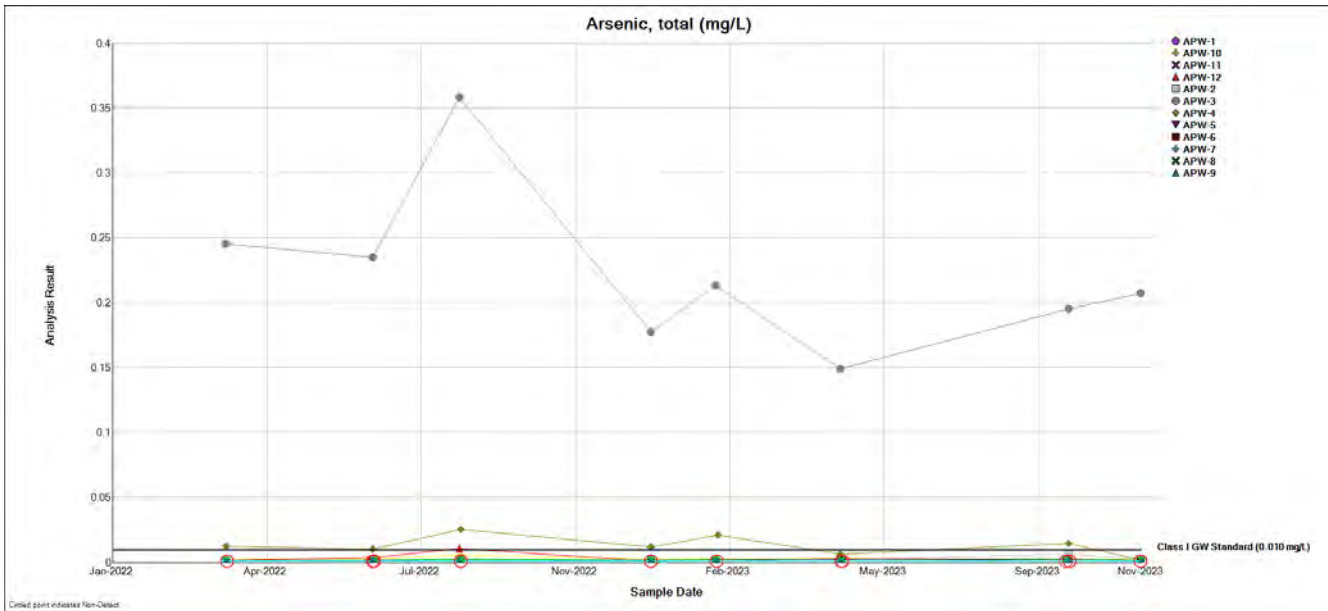
Figure 3-9A. Total Arsenic Concentrations during the Reporting Period (2022—2023) at All Compliance Wells.
Circled results indicate non-detects.
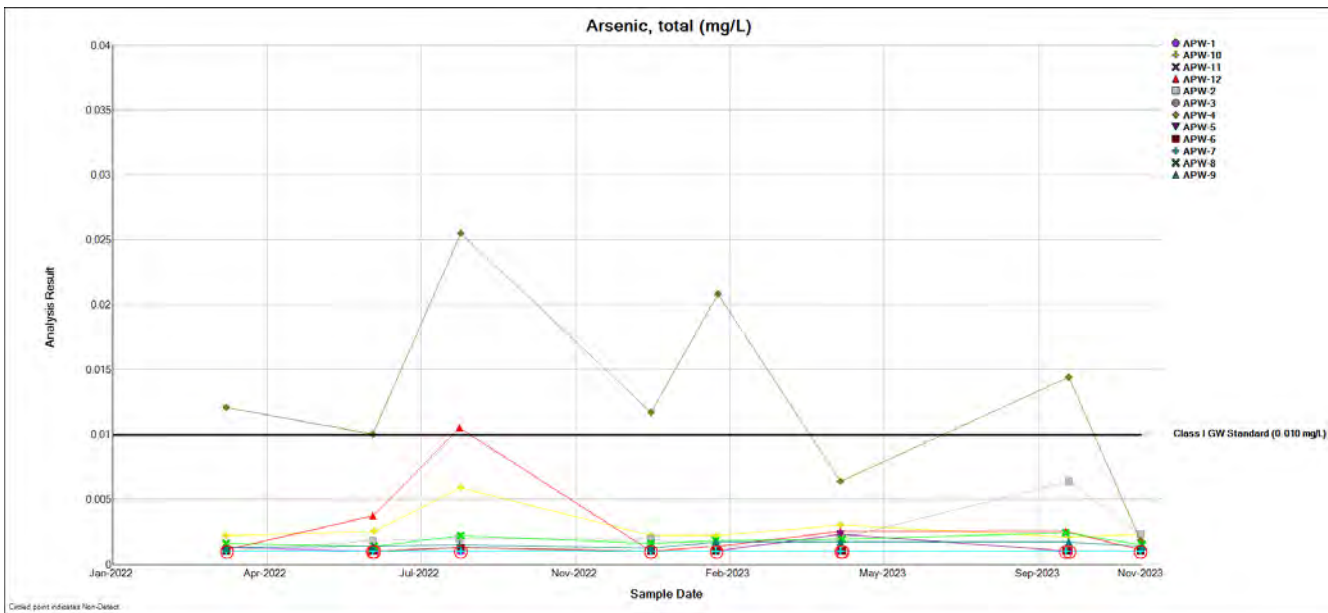
Figure 3-9B. Total Arsenic Concentrations during the Reporting Period (2022—2023) at All Compliance Wells (Zoomed In).
Circled results indicate non-detects.

RAMBØLL
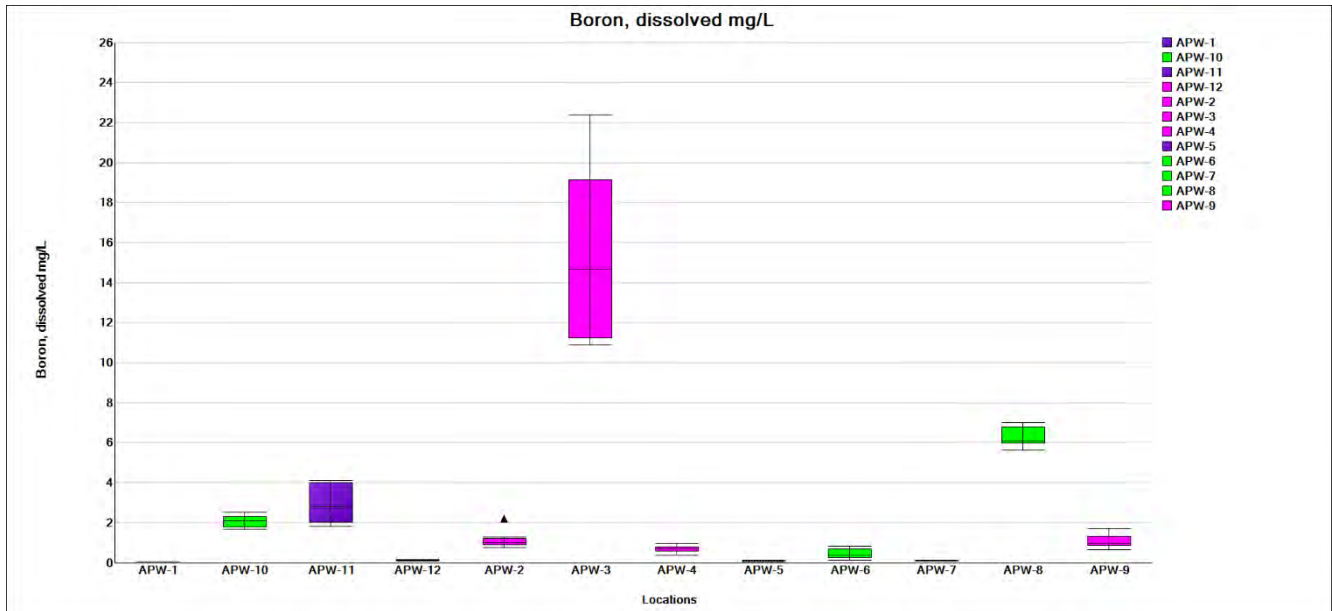
Figure 3-10. Box-Whisker Plot Showing Distribution of Dissolved Boron Concentration by Monitoring Well for Data Collected in 2022 and 2023.

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the interquartile range (IQR) of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
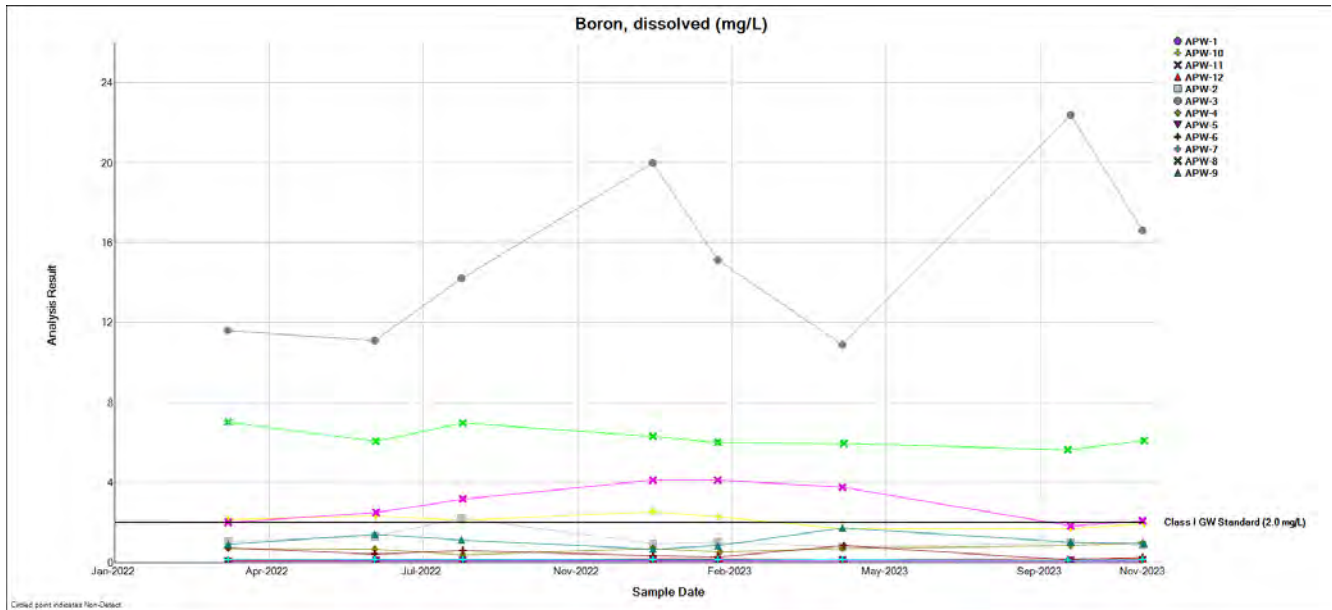
Figure 3-11. Dissolved Boron Concentrations during the Reporting Period (2022–2023) at All Compliance Wells.

RAMBOLL
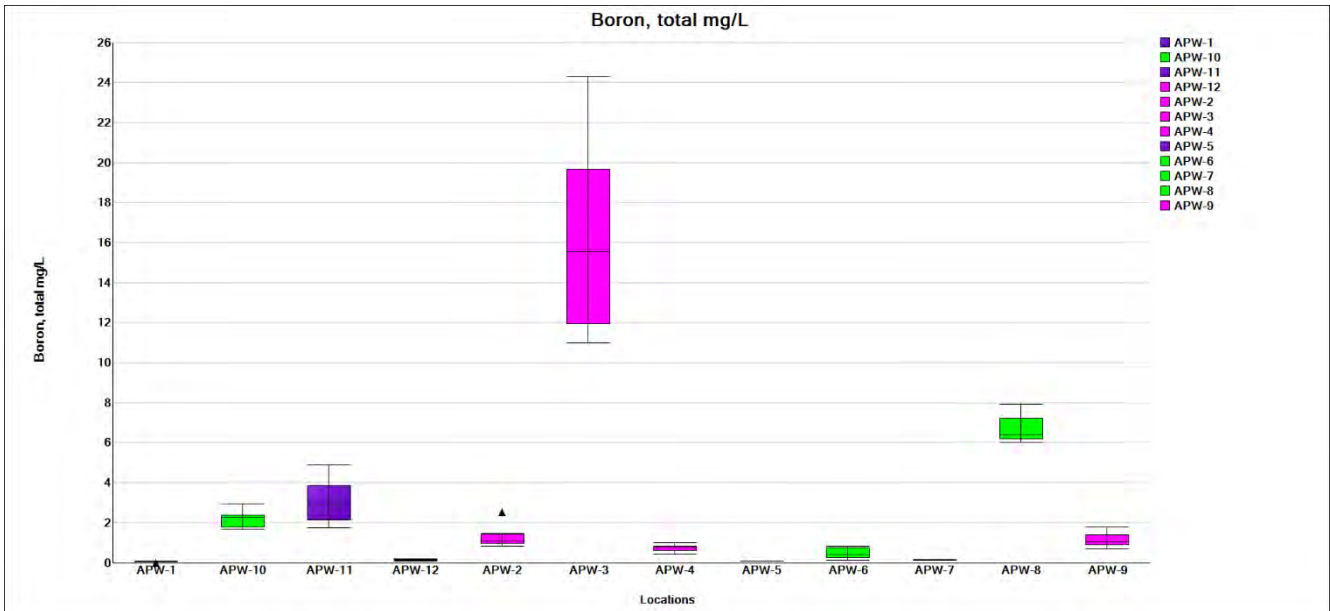
Figure 3-12. Box-Whisker Plot Showing Distribution of Total Boron Concentration by Monitoring Well for Data Collected in 2022 and 2023.

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
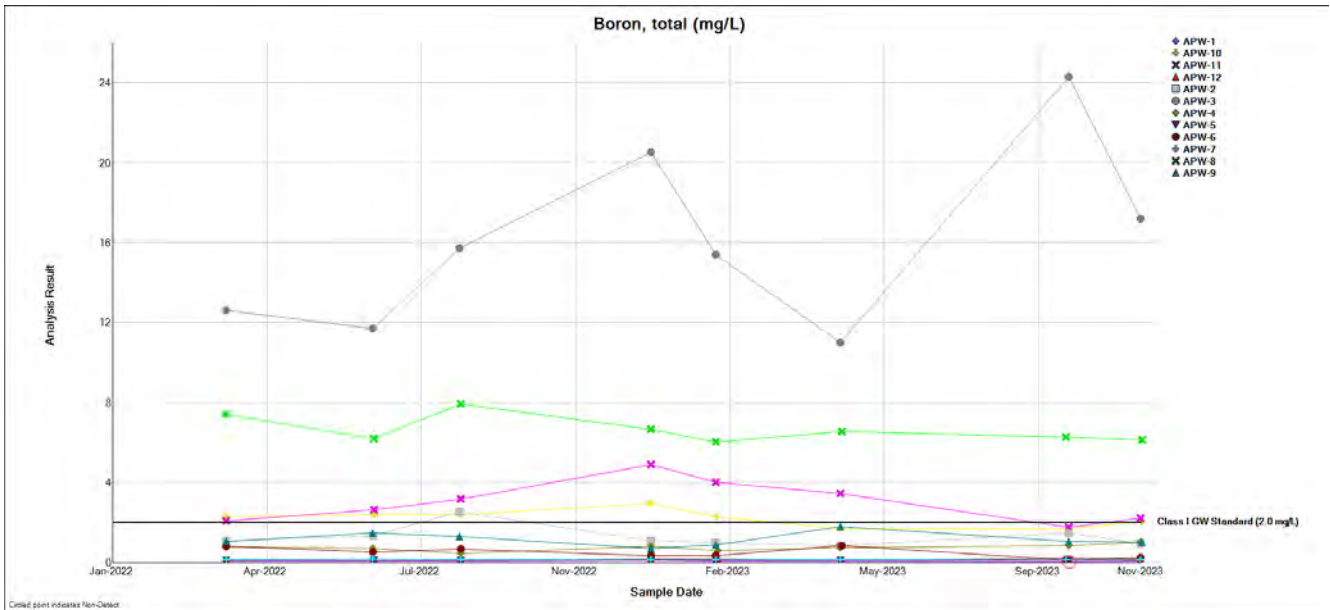
Figure 3-13. Total Boron Concentrations during the Reporting Period (2022–2023) at All Compliance Wells.
Circled results indicate non-detects.

RAMBØLL
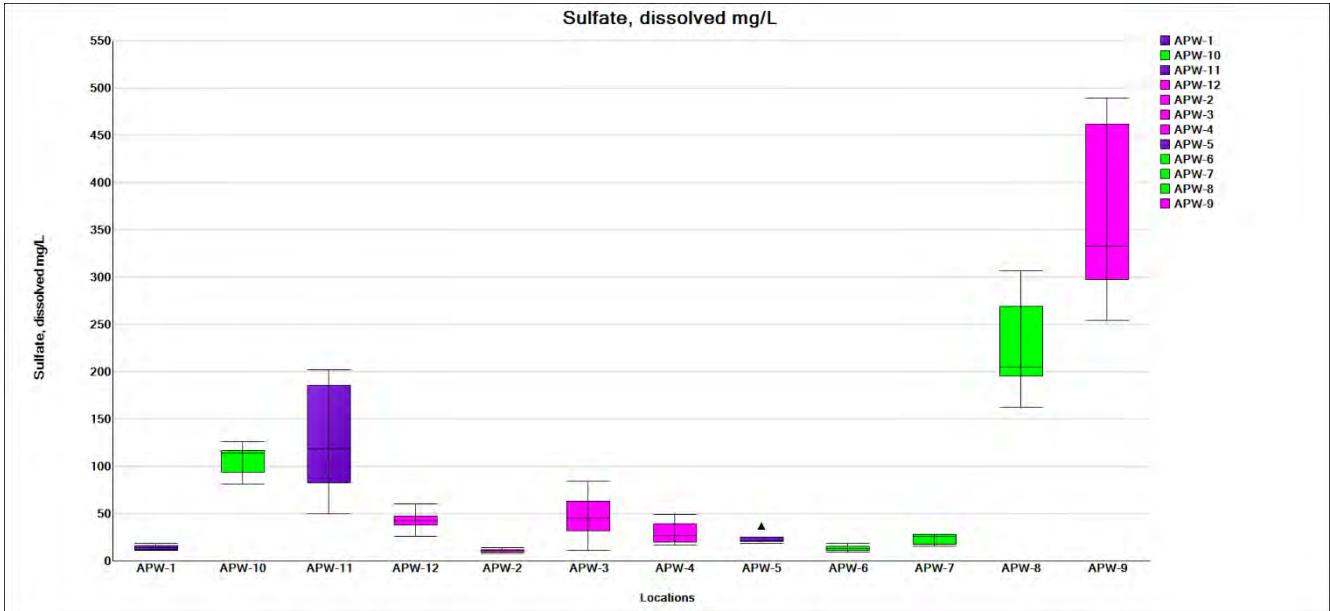
Figure 3-14. Box-Whisker Plot Showing Distribution of Dissolved Sulfate Concentration by Monitoring Well for Data Collected in 2022 and 2023.

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The triangle symbol represents an outlier greater than 1.5 times the IQR of the dataset, the "X" symbol represents an outlier greater than 3 times the IQR.
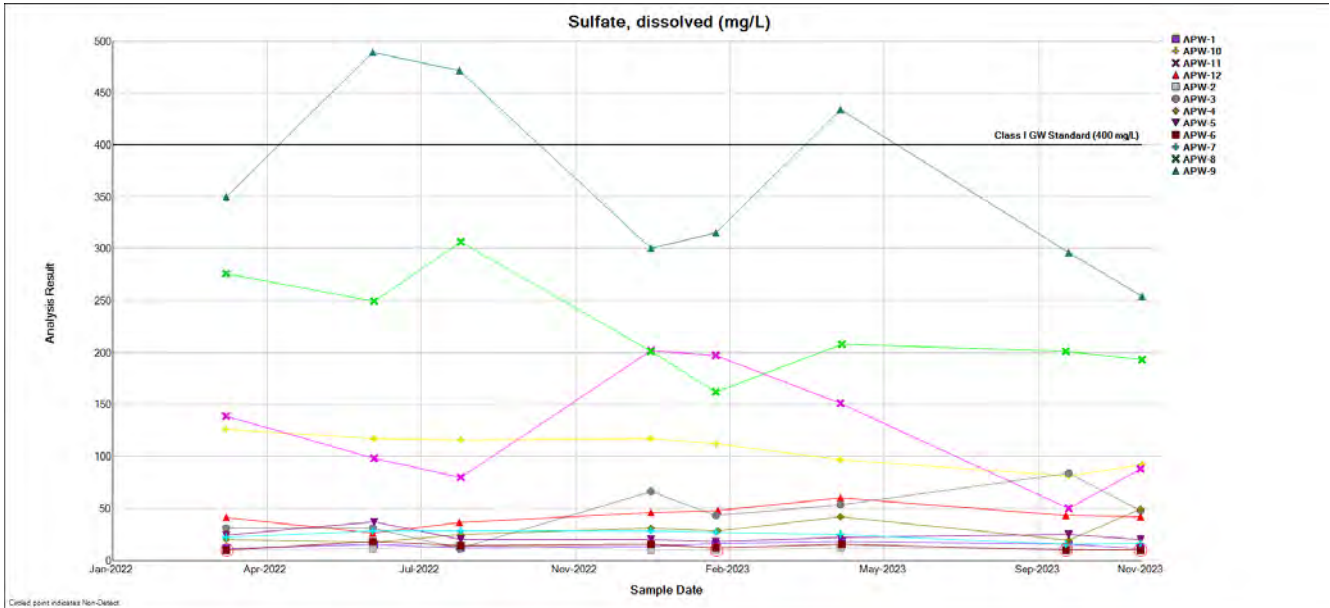
Figure 3-15. Dissolved Sulfate Concentrations during the Reporting Period (2022–2023) at All Compliance Wells.

Circled results indicate non-detects.

RAMBOLL

APPENDIX A
GROUNDWATER MONITORING RESULTS 2022-2023

December 8, 2023
10:10:03 AM

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-1

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
B, diss, mg/L	0.0619	0.0553	0.0402	0.0585	0.0540	0.0510	0.0387	0.0473
B, tot, mg/L	0.0604	0.0577	0.0410	0.0719	0.0508	0.0535	<0.0200	0.0431
Ba, diss, mg/L	0.0094	0.0193	0.0131	0.0090	0.0169	0.0135	0.0121	0.0079
Ba, tot, mg/L	0.0159	0.0238	0.0165	0.0130	0.0172	0.0203	0.0144	0.0096
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	46.0	159.0	84.0	42.0	64.0	69.0	92.0	47.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0173	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.23	0.23	0.33	0.30	0.29	0.17	0.28	0.54
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	1.6400	0.9330	0.6240	0.4690	0.8640	0.8300	0.0704	0.4680
GW Elv, ft	431.57	434.14	431.72	427.83	427.88	432.35	427.45	425.58
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.1110	0.1190	0.0687	0.0429	0.0842	0.0753	0.0093	0.0400
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	0.0069	0.0053	<0.0050	<0.0050	0.0112	0.0055	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	4.350	2.290	6.110	3.220	2.800	3.100	2.520	2.760
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	0.0018	0.0016	<0.0010	<0.0010	0.0011	<0.0010	0.0046	<0.0010
pH (field), STD	6.93	6.93	6.84	7.02	6.98	6.52	6.60	7.27
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-1

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	11	15	12	13	16	18	15	11
Spec. Cond. (field), micromho	491	685	711	564	575	687	665	433
TDS, mg/L	208	420	392	240	264	204	344	246
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0271	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-2

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	0.0019	0.0017	<0.0010	0.0011	0.0014	0.0013
As, tot, mg/L	0.0010	0.0018	0.0020	0.0019	0.0013	0.0020	0.0064	0.0023
B, diss, mg/L	1.0300	1.3000	2.2200	0.9390	1.0000	0.7620	0.9840	0.8660
B, tot, mg/L	1.0800	1.3400	2.5400	1.0600	0.9780	0.8260	1.4500	0.9480
Ba, diss, mg/L	0.0357	0.0417	0.0544	0.0375	0.0435	0.0374	0.0399	0.0414
Ba, tot, mg/L	0.0398	0.0573	0.0639	0.0500	0.0482	0.0482	0.1220	0.0653
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	2.0	8.0	17.0	<4.0	2.0	<4.0	<4.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0074	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0083	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	<0.0050
F, diss, mg/L	0.30	0.29	0.26	0.31	0.29	0.30	0.28	0.32
Fe, diss, mg/L	<0.0400	<0.0400	0.0409	<0.0400	<0.0400	<0.0400	<0.0400	0.0617
Fe, tot, mg/L	0.2900	2.0800	1.0800	0.5080	0.6590	1.5700	11.9000	2.9600
GW Elv, ft	427.46	426.48	423.87	423.17	422.31	426.67	422.21	421.98
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	0.0519	0.1710	0.4400	0.0834	0.0451	0.0423	0.2020	0.1180
Mn, tot, mg/L	0.0743	0.2710	0.5330	0.1440	0.0774	0.1880	0.7790	0.2320
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0078	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.056
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0039	0.0015
pH (field), STD	6.84	6.98	6.84	6.87	6.88	6.42	6.54	6.77
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	0.0011
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-2

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	10	11	14	10	<10	12	11	<10
Spec. Cond. (field), micromho	684	479	793	704	571	678	680	548
TDS, mg/L	300	356	492	332	362	178	374	276
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0114	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0233	0.0102

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-3

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	0.1600	0.2040	0.3200	0.1600	0.2200	0.1630	0.2060	0.2240
As, tot, mg/L	0.2450	0.2350	0.3580	0.1770	0.2130	0.1490	0.1950	0.2070
B, diss, mg/L	11.6000	11.1000	14.2000	20.0000	15.1000	10.9000	22.4000	16.6000
B, tot, mg/L	12.6000	11.7000	15.7000	20.5000	15.4000	11.0000	24.3000	17.2000
Ba, diss, mg/L	0.0895	0.0701	0.0716	0.1140	0.1550	0.0972	0.1040	0.1280
Ba, tot, mg/L	0.1100	0.1150	0.1140	0.1570	0.1420	0.1060	0.1670	0.1540
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	16.0	17.0	17.0	26.0	17.0	17.0	34.0	19.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0073	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0115	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0128	<0.0050
F, diss, mg/L	0.20	0.20	0.20	0.18	0.17	0.19	0.18	0.19
Fe, diss, mg/L	4.4500	1.9500	1.5500	3.7200	4.8400	3.8300	3.3400	3.9700
Fe, tot, mg/L	6.0000	7.7400	6.5600	6.7000	5.4400	4.8000	15.4000	7.0800
GW Elv, ft	429.89	426.09	422.48	424.47	423.17	427.67	421.03	421.78
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	1.0700	1.0200	0.9800	1.0700	1.3200	1.1500	1.0200	1.3600
Mn, tot, mg/L	1.1700	1.1600	1.1200	1.3100	1.3800	1.1300	1.2100	1.4800
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	0.0020	0.0011	0.0018	<0.0010	<0.0010	0.0068	0.0015
pH (field), STD	7.24	7.35	7.45	7.28	7.31	6.89	7.05	7.30
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-3

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	31	31	11	66	43	53	84	48
Spec. Cond. (field), micromho	1310	772	1030	1430	1280	1350	1190	1230
TDS, mg/L	636	612	676	760	850	560	755	785
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0160	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	0.0131	<0.0100	0.0122	<0.0100	<0.0100	0.0371	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-4

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/3/2023	4/25/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	0.0091	0.0049	0.0193	0.0108	0.0196	0.0048	0.0116	0.0016
As, tot, mg/L	0.0121	0.0100	0.0255	0.0117	0.0208	0.0064	0.0144	0.0018
B, diss, mg/L	0.6870	0.6520	0.3840	0.6870	0.5220	0.6830	0.8120	0.9840
B, tot, mg/L	0.7730	0.6970	0.4550	0.7960	0.5660	0.7170	0.8460	1.0100
Ba, diss, mg/L	0.0350	0.0335	0.0287	0.0300	0.0436	0.0289	0.0324	0.0326
Ba, tot, mg/L	0.0586	0.0708	0.0669	0.0461	0.0505	0.0336	0.0424	0.0373
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	30.0	36.0	53.0	35.0	41.0	22.0	21.0	12.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	0.0069	<0.0050	0.0105	0.0139	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.40	0.37	0.38	0.41	0.39	0.37	0.43	0.36
Fe, diss, mg/L	9.2000	4.5000	7.3600	4.6600	7.7400	1.6200	7.7900	0.1110
Fe, tot, mg/L	14.0000	12.2000	16.2000	6.0900	9.2900	2.5600	10.8000	0.8160
GW Elv, ft	429.50	428.37	424.82	424.02	423.97	427.72	422.96	422.91
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	1.4900	1.3200	1.4400	1.2400	1.3700	1.1100	1.5500	0.4730
Mn, tot, mg/L	1.7000	1.4800	1.7000	1.5300	1.4000	1.1900	1.6200	0.4990
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	<0.050	<0.050	0.210	<0.050	<0.050	0.212	<0.050	3.890
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	0.0014	0.0021	0.0038	0.0038	0.0014	<0.0010	<0.0010	<0.0010
pH (field), STD	6.92	6.94	6.77	6.85	6.91	6.42	6.82	6.78
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-4

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/3/2023	4/25/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	20	17	25	31	28	42	19	49
Spec. Cond. (field), micromho	890	520	613	954	718	901	813	819
TDS, mg/L	396	368	420	444	360	410	465	534
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	0.0111	0.0133	0.0221	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-5

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0023	<0.0010	<0.0010
B, diss, mg/L	0.0693	0.0730	0.0806	0.0967	0.0993	0.1130	0.0852	0.1080
B, tot, mg/L	0.0826	0.0982	0.0884	0.1040	0.0943	0.0924	0.0936	0.0975
Ba, diss, mg/L	0.0063	0.0085	0.0069	0.0071	0.0084	0.0101	0.0082	0.0083
Ba, tot, mg/L	0.0085	0.0095	0.0085	0.0082	0.0093	0.0162	0.0090	0.0091
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	3.0	2.0	2.0	9.0	10.0	12.0	5.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.17	0.19	0.18	0.22	0.20	0.20	0.21	0.21
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.4990	0.1080	0.3880	<0.0400	<0.0400	2.2200	<0.0400	<0.0400
GW Elv, ft	430.46	432.05	429.36	426.10	426.25	428.80	425.50	424.97
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0653	0.0190	0.0688	<0.0070	<0.0070	0.2350	0.0070	<0.0070
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0089	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	2.220	2.600	2.310	1.760	1.920	2.400	2.790	2.760
Pb, diss, mg/L	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0032	<0.0010	<0.0010
pH (field), STD	7.42	7.27	7.38	7.41	7.39	7.41	7.11	7.49
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

December 8, 2023
10:10:10 AM

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-5

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	24	37	20	20	18	22	25	20
Spec. Cond. (field), micromho	580	476	445	642	531	670	567	485
TDS, mg/L	238	330	272	288	300	142	324	326
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-6

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/20/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
B, diss, mg/L	0.7370	0.4230	0.5850	0.3270	0.2730	0.8160	0.1300	0.2440
B, tot, mg/L	0.7800	0.4980	0.6680	0.3300	0.3470	0.8340	0.1410	0.2180
Ba, diss, mg/L	0.0124	0.0136	0.0113	0.0099	0.0105	0.0119	0.0094	0.0106
Ba, tot, mg/L	0.0145	0.0148	0.0140	0.0107	0.0106	0.0143	0.0103	0.0123
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	1.0	3.0	1.0	<4.0	2.0	<4.0	<4.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.14	0.15	0.16	0.13	0.12	0.16	0.12	0.11
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.4860	0.2420	0.9660	0.1300	<0.0400	0.1200	<0.0400	0.3360
GW Elv, ft	430.90	431.94	429.07	425.70	426.47	427.89	425.64	425.24
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0279	0.0144	0.0609	0.0081	<0.0070	0.0084	<0.0070	0.0325
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	0.205	0.175	0.253	0.622	0.538	0.326	0.377	0.321
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
pH (field), STD	7.15	7.17	7.27	7.27	7.26	6.70	7.03	7.08
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-6

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/20/2023	11/8/2023
SO4, diss, mg/L	<10	18	14	15	12	15	<10	10
Spec. Cond. (field), micromho	606	391	408	593	485	699	512	492
TDS, mg/L	252	272	242	258	248	244	282	298
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

December 8, 2023
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Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-7

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/20/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
B, diss, mg/L	0.1160	0.1350	0.1250	0.1180	0.1070	0.1260	0.1020	0.1140
B, tot, mg/L	0.1230	0.1590	0.1270	0.1200	0.1070	0.1240	0.1130	0.1350
Ba, diss, mg/L	0.0285	0.0333	0.0270	0.0196	0.0218	0.0246	0.0184	0.0171
Ba, tot, mg/L	0.0331	0.0357	0.0304	0.0251	0.0227	0.0271	0.0206	0.0221
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	21.0	35.0	48.0	38.0	36.0	24.0	18.0	18.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.23	0.26	0.27	0.27	0.22	0.23	0.26	0.26
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.3870	0.6260	0.4740	0.5090	0.2120	0.3470	0.1240	0.6720
GW Elv, ft	429.81	430.02	427.05	424.95	424.95	428.15	424.30	424.04
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0423	0.0393	0.0283	0.0288	0.0124	0.0207	0.0137	0.0422
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	3.140	5.000	3.380	1.140	1.420	2.570	0.892	1.070
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
pH (field), STD	6.97	7.15	6.90	7.10	7.10	6.50	6.96	7.12
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-7

	3/17/2022	6/21/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/20/2023	11/8/2023
SO4, diss, mg/L	22	28	28	28	27	25	15	16
Spec. Cond. (field), micromho	723	471	587	743	604	750	600	524
TDS, mg/L	310	334	356	348	344	322	330	310
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-8

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/20/2023	11/9/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	0.0012	0.0012	0.0013	0.0016	0.0015	0.0020	0.0015	0.0022
As, tot, mg/L	0.0016	0.0014	0.0022	0.0016	0.0018	0.0019	0.0024	0.0015
B, diss, mg/L	7.0200	6.0500	6.9600	6.2800	5.9700	5.9500	5.6100	6.1000
B, tot, mg/L	7.3800	6.2000	7.9100	6.6500	6.0300	6.5300	6.2700	6.1300
Ba, diss, mg/L	0.0538	0.0706	0.0676	0.0479	0.0521	0.0631	0.0508	0.0495
Ba, tot, mg/L	0.0583	0.0748	0.0781	0.0552	0.0568	0.0637	0.0604	0.0508
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	12.0	11.0	11.0	11.0	12.0	12.0	10.0	11.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	0.0256	0.0072	0.0108	0.0320	0.0223	0.0133	0.0102	0.0118
Cr, tot, mg/L	0.0278	0.0078	0.0138	0.0381	0.0230	0.0134	0.0126	0.0117
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.13	0.10	0.12	<0.10	<0.10	0.13	<0.10	<0.10
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.1300	0.1240	0.9260	0.0751	<0.0400	0.2460	0.9890	<0.0400
GW Elv, ft	429.06	430.76	427.39	431.11	425.35	426.79	424.30	424.08
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0156	0.0158	0.1010	0.0159	<0.0070	0.0252	0.1320	<0.0070
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	4.730	4.280	3.900	3.330	3.360	3.650	4.090	3.880
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	0.0013	<0.0010
pH (field), STD	7.34	7.29	7.41	7.44	7.43	6.89	7.24	7.07
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	0.0583	0.0698	0.0614	<0.0400	0.0512	<0.0400	0.0801	0.0600
Se, tot, mg/L	0.0627	0.0720	0.0819	0.0451	0.0492	0.0546	0.0798	0.0666

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-8

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/26/2023	9/20/2023	11/9/2023
SO4, diss, mg/L	276	249	306	201	162	208	201	193
Spec. Cond. (field), micromho	1240	747	881	1050	787	908	858	746
TDS, mg/L	658	600	652	572	520	544	566	540
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-9

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/9/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	0.0011	0.0011	0.0011	0.0012	0.0017	0.0018	0.0013	0.0011
As, tot, mg/L	0.0013	0.0014	0.0015	0.0012	0.0017	0.0017	0.0017	0.0014
B, diss, mg/L	0.9150	1.4100	1.1000	0.6460	0.8360	1.7200	1.0200	0.9180
B, tot, mg/L	1.0400	1.4500	1.2800	0.7030	0.8520	1.7800	1.0300	0.9960
Ba, diss, mg/L	0.0177	0.0281	0.0212	0.0117	0.0146	0.0206	0.0128	0.0112
Ba, tot, mg/L	0.0199	0.0335	0.0239	0.0147	0.0173	0.0216	0.0155	0.0134
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	2.0	3.0	2.0	<4.0	1.0	5.0	<4.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	0.0070	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	0.0074	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	0.36	0.26	0.35	0.52	0.46	0.41	0.49	0.55
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.1270	0.9960	0.1220	0.1510	0.1930	<0.0400	0.5890	0.2920
GW Elv, ft	429.88	428.72	424.90	424.90	423.60	428.45	422.58	425.69
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0136	0.0413	0.0157	0.0164	0.0242	<0.0070	0.0542	0.0288
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	2.740	3.860	2.690	1.910	2.250	2.610	2.700	2.560
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
pH (field), STD	6.84	7.08	6.97	7.19	7.17	6.63	7.24	7.12
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0012	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-9

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/9/2023
SO4, diss, mg/L	350	489	471	300	315	434	296	254
Spec. Cond. (field), micromho	1370	1040	1210	1070	929	1430	923	799
TDS, mg/L	782	1040	986	634	678	808	682	624
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-10

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/9/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	0.0012	0.0016	0.0016	0.0019	0.0023	0.0023	0.0016	0.0016
As, tot, mg/L	0.0022	0.0025	0.0059	0.0022	0.0022	0.0030	0.0021	0.0023
B, diss, mg/L	2.1200	2.3000	2.1100	2.5100	2.2900	1.6700	1.6800	1.9400
B, tot, mg/L	2.2900	2.3900	2.3700	2.9500	2.2800	1.6700	1.6700	2.0400
Ba, diss, mg/L	0.0222	0.0219	0.0231	0.0188	0.0217	0.0186	0.0179	0.0186
Ba, tot, mg/L	0.0265	0.0277	0.0345	0.0226	0.0241	0.0220	0.0180	0.0209
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	6.0	5.0	4.0	<4.0	3.0	<4.0	<4.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	0.0082	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	0.0060	<0.0050	0.0052	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	0.0084	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.9240	1.2200	3.9700	0.1930	0.3000	0.8520	0.0895	0.5320
GW Elv, ft	430.40	431.48	427.96	425.50	425.63	429.12	424.75	424.32
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0701	0.1420	0.2880	0.0146	0.0436	0.0648	0.0148	0.0462
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	0.0057	0.0122	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	2.390	3.070	3.190	2.400	2.280	2.550	2.140	2.470
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	0.0012	0.0019	0.0056	<0.0010	0.0011	0.0015	<0.0010	<0.0010
pH (field), STD	7.39	7.54	7.47	7.39	7.46	7.51	7.37	7.61
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0013	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-10

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/9/2023
SO4, diss, mg/L	126	117	116	117	112	97	81	92
Spec. Cond. (field), micromho	809	515	588	714	596	661	529	497
TDS, mg/L	386	382	408	374	382	318	320	336
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	0.0137	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-11

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010
B, diss, mg/L	2.0000	2.4800	3.1400	4.1100	4.1200	3.7500	1.8200	2.0700
B, tot, mg/L	2.0700	2.6200	3.1700	4.8900	4.0000	3.4500	1.7600	2.1900
Ba, diss, mg/L	0.0198	0.0140	0.0175	0.0169	0.0175	0.0170	0.0104	0.0125
Ba, tot, mg/L	0.0218	0.0171	0.0194	0.0205	0.0196	0.0184	0.0103	0.0139
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	5.0	4.0	2.0	6.0	6.0	4.0	<4.0	<4.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
F, diss, mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.4520	0.8650	0.2330	0.2370	0.3150	0.2910	<0.0400	0.3910
GW Elv, ft	430.85	433.03	444.38	426.94	426.70	429.48	426.07	425.44
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070
Mn, tot, mg/L	0.0263	0.0964	0.0308	0.0185	0.0169	0.0194	<0.0070	0.0381
Ni, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ni, tot, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	2.760	2.940	0.656	5.020	4.750	5.470	3.960	5.320
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
pH (field), STD	7.40	7.34	7.21	7.43	7.42	7.47	7.07	7.46
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-11

	3/17/2022	6/22/2022	8/18/2022	12/21/2022	2/2/2023	4/25/2023	9/22/2023	11/8/2023
SO4, diss, mg/L	139	98	80	202	197	151	50	88
Spec. Cond. (field), micromho	852	503	596	1080	812	880	525	565
TDS, mg/L	416	354	424	578	542	224	318	364
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100

December 8, 2023
10:10:05 AM

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-12

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/3/2023	4/25/2023	9/20/2023	11/8/2023
Ag, diss, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
As, tot, mg/L	0.0011	0.0037	0.0105	<0.0010	0.0014	0.0025	0.0025	0.0011
B, diss, mg/L	0.0993	0.0791	0.0881	0.1600	0.1530	0.1110	0.1710	0.1540
B, tot, mg/L	0.1220	0.0816	0.1040	0.1690	0.1650	0.1010	0.1990	0.1660
Ba, diss, mg/L	0.1380	0.0975	0.1120	0.1140	0.1180	0.1680	0.1310	0.1150
Ba, tot, mg/L	0.1690	0.1430	0.1830	0.1370	0.1170	0.1820	0.1880	0.1360
Be, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cl, diss, mg/L	40.0	48.0	47.0	40.0	38.0	46.0	34.0	41.0
Co, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Co, tot, mg/L	0.0106	0.0118	0.0157	0.0068	0.0077	0.0068	0.0162	0.0110
Cr, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cr, tot, mg/L	<0.0050	<0.0050	0.0079	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	0.0064	0.0148	<0.0050	0.0050	<0.0050	0.0053	<0.0050
F, diss, mg/L	0.29	0.34	0.32	0.34	0.33	0.27	0.31	0.33
Fe, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Fe, tot, mg/L	0.5740	4.4500	10.9000	0.6220	1.0400	1.5900	2.8200	0.8080
GW Elv, ft	429.99	428.61	425.02	424.61	423.93	427.75	422.88	423.89
Hg, diss, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mn, diss, mg/L	1.0100	1.0200	1.4300	1.3400	1.3800	0.9040	1.6600	1.5700
Mn, tot, mg/L	4.2600	2.2300	2.6300	2.5000	3.9700	3.0800	4.3600	2.8900
Ni, diss, mg/L	0.0065	0.0065	0.0068	0.0081	0.0099	0.0065	0.0109	0.0071
Ni, tot, mg/L	0.0127	0.0152	0.0278	0.0124	0.0155	0.0128	0.0222	0.0106
NO2, diss, mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NO3, diss, mg/L	2.320	0.238	0.368	0.215	0.134	3.730	4.100	0.325
Pb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Pb, tot, mg/L	<0.0010	0.0038	0.0109	<0.0010	0.0019	0.0020	0.0023	<0.0010
pH (field), STD	6.72	7.01	7.01	6.91	6.95	6.41	6.78	6.92
Sb, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Se, diss, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400
Se, tot, mg/L	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-12

	3/17/2022	6/21/2022	8/17/2022	12/21/2022	2/3/2023	4/25/2023	9/20/2023	11/8/2023
SO4, diss, mg/L	41	26	36	46	48	60	43	42
Spec. Cond. (field), micromho	876	466	678	881	752	1060	885	780
TDS, mg/L	372	340	414	420	448	520	524	440
Tl, diss, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100	0.0186	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	0.0157	0.0343	<0.0100	<0.0100	0.0112	0.0106	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-13

	3/17/2022	6/21/2022
Ag, diss, mg/L	<0.007	<0.007
Ag, tot, mg/L	<0.007	<0.007
As, diss, mg/L	<0.0010	<0.0010
As, tot, mg/L	0.0012	<0.0010
B, diss, mg/L	7.1300	5.2700
B, tot, mg/L	7.4600	5.5200
Ba, diss, mg/L	0.0553	0.0405
Ba, tot, mg/L	0.0599	0.0438
Be, diss, mg/L	<0.0005	<0.0005
Be, tot, mg/L	<0.0005	<0.0005
Cd, diss, mg/L	<0.0020	<0.0020
Cl, diss, mg/L	20.0	6.0
Co, diss, mg/L	<0.0050	<0.0050
Co, tot, mg/L	<0.0050	<0.0050
Cr, diss, mg/L	0.0083	<0.0050
Cr, tot, mg/L	0.0143	<0.0050
Cu, diss, mg/L	<0.0050	<0.0050
Cu, tot, mg/L	<0.0050	<0.0050
F, diss, mg/L	<0.10	<0.10
Fe, diss, mg/L	<0.0400	<0.0400
Fe, tot, mg/L	1.0600	0.6030
GW Elv, ft	430.15	431.35
Hg, diss, mg/L	<0.0002	<0.0002
Hg, tot, mg/L	<0.0002	<0.0002
Mn, diss, mg/L	<0.0070	<0.0070
Mn, tot, mg/L	0.0683	0.0266
Ni, diss, mg/L	<0.0050	<0.0050
Ni, tot, mg/L	0.0056	<0.0050
NO2, diss, mg/L	<0.05	<0.05
NO3, diss, mg/L	4.620	3.040
Pb, diss, mg/L	<0.0010	<0.0010
Pb, tot, mg/L	0.0011	<0.0010
pH (field), STD	7.03	7.06
Sb, diss, mg/L	<0.0010	<0.0010
Sb, tot, mg/L	<0.0010	<0.0010
Se, diss, mg/L	0.0873	<0.0400
Se, tot, mg/L	0.0892	<0.0400

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-13

	3/17/2022	6/21/2022
SO4, diss, mg/L	205	193
Spec. Cond. (field), micromho	1120	710
TDS, mg/L	572	624
Tl, diss, mg/L	<0.0020	<0.0020
Tl, tot, mg/L	<0.0020	<0.0020
V, diss, mg/L	<0.0100	<0.0100
V, tot, mg/L	<0.0100	<0.0100
Zn, diss, mg/L	<0.0100	<0.0100
Zn, tot, mg/L	<0.0100	<0.0100

Meredosia Power Station
Groundwater Monitoring Results 2022-2023

Date Range: 01/01/2022 to 12/31/2023
Well: APW-14

	6/21/2022
GW Elv, ft	431.57

**APPENDIX B
STATISTICAL OUTPUT**

APPENDIX B1
TEST DESCRIPTIONS

EPRI | **ELECTRIC POWER RESEARCH INSTITUTE**

MANAGES

Groundwater Data Management and Evaluation Software

Software Manual Product ID #1012581

Software Manual, February 2010

EPRI Project Manager
K. Ladwig

DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITIES

NOTE

For further information about EPRI, call the EPRI Customer Assistance Center at 800.313.3774 or e-mail askepri@epri.com.

10
STATISTICAL ANALYSIS

Stand-Alone Statistical Tests

Statistical Evaluation Report

The Statistical Evaluation Report is comprised of a series of subreports as described below.

User Selections:

- One location.
- Sample date range for data selection.
- Interval length: the length of the averaging period in months (1,2,3,4, or 6).
- One parameter.
- Non-detect processing: multiplier between 0 and 1.
- One-sided confidence $(1-\alpha)$ level – 0.90, 0.95 or 0.99.
- Limit type: used in the statistical overview to determine exceedances.

==Mann-Kendall Trend and Seasonal Analysis Tests==

The Mann-Kendall test for trend is insensitive to the presence or absence of seasonality. The test is non-parametric and does not assume any type of data distribution. Nonetheless, two forms of the test are provided in MANAGES, one ignoring data seasonality even if it is present, and one considering data seasonality. In the test, the null hypothesis, H_0, is that the Sen trend is zero, and the alternate hypothesis, H_a, is that the trend is non-zero.

In general, the Mann-Kendall test considering seasonality indicates a larger range for allowable Sen estimate of trend when seasonality is actually present than the range indicated by the test performed ignoring seasonality.

In the Mann-Kendall Trend Analysis, available in under the Statistical Evaluation Report and in the Statistical Procedure for Detection Monitoring, and Mann-Kendall Seasonal Analysis, found under the Statistical Evaluation Report, MANAGES first calculates the Sen slope and the upper and lower confidence limits of the Sen slope, and then determines whether the Sen slope is statistically significant. Slope is statistically significant if it is non-zero.

Statistical Analysis

Mann-Kendall Test for Sen Slope Significance – a two-sided, non-parametric method for data sets as small as 10, unless there are many tied (e.g., equal, NDs are treated as tieds) values (Gilbert, 1987; p. 208)	
Indicator Function $\text{sgn}(x_{ij} - x_{jk})$	$= 1$ if $(x_{ij} - x_{jk}) > 0$ $= 0$ if $(x_{ij} - x_{jk}) = 0$ $= -1$ if $(x_{ij} - x_{jk}) < 0$ where $x_{i1}, x_{i2}, ..., x_{in}$ are the time ordered data (n_i is total of data in the i-th season).
Mann-Kendall Statistic, S_i	$\displaystyle = \sum_{k=1}^{ni-1} \sum_{j=k+1}^{ni} \text{sgn}(x_{ij} - x_{jk})$
Variance of S_i $VAR(S_i)$	$VAR(S_i) =$ $\displaystyle \frac{1}{18}\left\{ n_i(n_i-1)(2n_i+5) \; - \sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(2t_{ip}+5) - \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(2u_{iq}+5) \right\}$ $\displaystyle + \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(t_{ip}-2)\sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(u_{iq}-2)}{9n_i(n_i-1)(n_i-2)}$ $\displaystyle + \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)\sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)}{2n_i(n_i-1)}.$ The variable g_i is the number of tied groups (equal-valued) data in the i-th season, t_{ip} is the number of tied data in the p-th group for the i-th season, h_i is the number of sampling times (or time periods) in the i-th season that contain multiple data, u_{iq} is the number of multiple data in the q-th time period in the i-th season, and n_i is the number of data values in the i-th season.

Test Statistic, Z	If $S' = \sum_{i=1}^{K} S_i$, where K is the number of seasons, then the test statistic Z is computed as:
	$$Z = \begin{cases} \dfrac{S'-1}{[VAR(S')]^{1/2}} & \text{iff } S' > 0 \\\\ 0 & \text{iff } S' = 0 \\\\ \dfrac{S'+1}{[VAR(S')]^{1/2}} & \text{iff } S' < 0 \end{cases}$$ Where "iff" is an acroym meaning: if-and-only-if. A positive Z value means an upward trend and a negative Z value means a negative trend.
Hypothesis Test: H_0 = no trend H_a = trend present This is a two-sided test at the α significance level.	Accept the null hypothesis H_0 of no trend if $|Z| \leq Z_{1-\alpha/2}$ Reject the null hypothesis H_0 if $|Z| > Z_{1-\alpha/2}$ where $Z_{1-\alpha/2}$ is obtained from Table A1 in Gilbert (1987; p. 254).

Kruskal-Wallis Analysis (Test for Seasonality)

To perform the Kruskal-Wallis test for data seasonality, data points are first segmented according to season (Gilbert, 1987). The null hypothesis, H_0, is that all seasons have the same mean value. The alternative hypothesis, H_a ,is that at least one season has a mean larger or smaller than the mean of at least one other season. Montgomery et al. (1987) provide additional information on groundwater data seasonality. This is a two-sided, non-parametric test.

In MANAGES, the Kruskal-Wallis Test for Seasonality is found under Data Review // Non-Parametric Methods // Kruskal-Wallis Analysis. It determines whether the seasonal means for the specified parameter at the specified location are statistically the same.

Statistical Analysis

	or $Z_i \geq SCL$.

Outlier Tests

Outlier tests are useful in detecting inconsistencies of measurement within a data set. An outlier is defined as an observation that appears to deviate markedly from other values of a sample set. There are many possible reasons for the presence of an outlier, including 1) the presence of a true but extreme value from a single population, resulting from random variability inherent in the data; 2) an improper identification of the underlying distribution describing the population from which the sample set comes from; 3) the occurrence of some unknown event(s) such as a spill, creating a mixture of two or more populations; 4) a gross deviation from prescribed sampling procedures or laboratory analysis; 5) a transcription error in the data value or data unit of measurement.

USEPA (1989; p. 8-11) states that the purpose of a test for outliers is to determine whether or not there is statistical evidence that an observation that appears extreme does not fit the distribution of the rest of the data. If an observation is identified as an outlier, then steps need to be taken to determine whether it is the result of an error or a valid extreme observation. If a true error, such as in transcription, dilution, or analytical procedure, can be identified, then the suspect value should be replaced with its corrected value. If the source of the error can be determined but no correction is possible, then the observation is deleted and the reason for deletion is reported along with any statistical analysis. If no source of error can be documented, then it must be assumed that the observation is a true but extreme value of the data set. If this is the case, the outlier observation(s) must not be altered or excluded from any statistical analysis. Identification of an observation as an outlier but with no error documented could be used to suggest resampling to confirm the value (USEPA, 1989; p. 8-13).

The outlier tests provided in MANAGES are based on either the single outlier test of Grubbs (1969), which is used by USEPA (1989; pp. 8-10 to 8-13) or the single outlier test of Dixon (1951, 1953), which is used by USEPA (2000; pp. 4-24) and by ASTM (1998). The outlier tests assume the data come from a normal distribution. Only one outlier, either an extreme low or an extreme high, can be detected during a single analysis of a data set. Additional outliers can be detected by temporarily removing a previously detected outlier from a data set and then repeating the test on the remaining, reduced, data set. During each pass of the outlier test, the sample mean, standard deviation, and sample size used in the test statistics are computed using only the data remaining in the set. The process can be continued until there is either an insufficient amount of data remaining (a minimum of 3 values) or when no additional outliers are found. When using MANAGES, the user will be asked how many outliers are to be checked and it will then automatically perform all of the recursive calls and data reductions with the Grubbs or Dixon routine. When done, a report can be generated that will show each outlier marked with a flag indicating the sequential order in which the outliers were identified.

Critical values used in the one-sided Grubbs test are taken directly from those in Grubbs and Beck (1972) for sample sizes smaller than 147 observations. Critical values for sample sizes larger than 147 were generated numerically using a Monte Carlo routine, where each sampling event was simulated 100,000 times. Sample sizes ranging from 148 to 5,000 where used and then their resultant test statistic T_n curve fitted at specific significance levels. By this method, it was possible to match Grubbs results to at least four significant digits for corresponding tabulated values.

Critical values used in the one-sided Dixon outlier test are taken directly from tables given in Dixon (1951), Dixon (1953; page 89), and USEPA (2000; p. A-5, Table A-3). The critical values were then curve fitted for every sample size between 3 and 25 as a function of the significance level. By this method, it was possible to match Dixon's results to at least four significant digits for corresponding tabulated values. Note that the Dixon test assumes the data are either normally or lognormally distributed. Hence, sample sizes can only range between 3 and 25, inclusive. Dixon never developed an outlier test for sample sizes larger than 25.

User Selections:

- One or up to 100 locations: a separate test is performed for each location.

- One or up to 100 parameters: a separate test is performed for each parameter.

- Evaluation date range.

- Confidence $(1-\alpha)$ level: 0.90, 0.95 or 0.99.

- Non-detect processing: multiplier between 0 and 1.

- Data transformation option: none and log (base e).

- Number of outliers: one, two, first 5%, first 10%. Selecting any option other than one causes MANAGES to rerun the test, with outliers from prior tests removed, until either no outliers are detected or the specified number of outliers are detected.

Technical Details

Grubbs Outlier Test – The Grubbs outlier test determines whether there is statistical evidence that an observation does not fit the remaining data (USEPA, 1989; p. 8-11). This significance test looks at either the highest or the lowest observation in normal samples.	
The number of observations taken during a specified scoping period; n	n

Statistical Analysis

Mean of the observed data during the scoping period; $\overline{X}$	$\overline{X} = \frac{1}{n}\sum_{i=1}^{n} X_i$ where X_i is the i-th observation.
Standard deviation of observed data; S_x.	$S_x = \sqrt{\frac{1}{(n-1)}\sum_{i=1}^{n}(X_i - \overline{X})^2}$
Test statistics: T_l & T_n	Sort the data into ascending order, then compute the statistics $T_l = (\overline{X} - X_l)/S_x$ $T_n = (X_n - \overline{X})/S_x$ where X_l is the smallest value of the n observations and X_n is the largest value of the n observations.
One-sided test with a $(1-\alpha)$ confidence level that there is a single extreme outlier within the n observations.	Grubbs single, one-sided test of either an extreme low outlier : X_l *is an outlier if* $T_l \geq T_{cr(1-\alpha,n)}$ or an extreme high outlier: X_n *is an outlier if* $T_n \geq T_{cr(1-\alpha,n)}$. The function $T_{cr(1-\alpha,n)}$ is the critical value, given in Grubbs and Beck (1972; Table 1) and USEPA (1989; p. B-11, Table 8) . Note that the critical value assumes that the mean and standard deviation are computed from the sample being tested.

Dixon Outlier Test – The Dixon outlier test determines whether there is statistical evidence that an extreme observation does not fit the remaining data (USEPA, 2000; p. 4-24 and ASTM D6312, 1998). This significance test looks at both the highest and the

lowest observations in a sample data set. However, the routine will only perform the outlier tests if several conditions are first satisfied. For example, the Dixon outlier algorithm checks the distribution of the sample data for both normality and lognormality using the Shapiro-Wilk W-test. The outlier routine will not proceed with a data set if the W-test fails. In addition, the Dixon outlier test is limited to a minimum of 3 and a maximum sample size n of 25 data values.

The number of observations taken during a specified scoping period; n	Number of observations, n, where $3 \le n \le 25$.
Sorting the sample data	Sort the data into ascending order, with the minimum data value $X_{(1)}$ first and the maximum data value $X_{(n)}$ last. Use the natural log of the data values if data are lognormally distributed, i.e., $X_{(j)} = Ln[X_{(j)}]$.
Goodness-of fit tests	After temporarily excluding either the minimum or maximum value of the data set, the Shapiro-Wilk's W-test is used to determine if the remaining $n-1$ values are normally or lognormally distributed. If not, the Dixon outlier test can't be used.
Test statistic, T_s, for the minimum data value	Compute the T_s test statistic for $X_{(1)}$ as an outlier: $T_s = \dfrac{X_{(2)} - X_{(1)}}{X_{(n)} - X_{(1)}}$ *for* $3 \le n \le 7$ $T_s = \dfrac{X_{(2)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $8 \le n \le 10$ $T_s = \dfrac{X_{(3)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $11 \le n \le 13$ $T_s = \dfrac{X_{(3)} - X_{(1)}}{X_{(n-2)} - X_{(1)}}$ *for* $14 \le n \le 25$.
Test statistic, T_s, for the maximum data value	Compute the T_s test statistic for $X_{(n)}$ as an outlier:

Statistical Analysis

	$T_s = \dfrac{X_{(n)} - X_{(n-1)}}{X_{(n)} - X_{(1)}}$ *for* $3 \le n \le 7$ $T_s = \dfrac{X_{(n)} - X_{(n-1)}}{X_{(n)} - X_{(2)}}$ *for* $8 \le n \le 10$ $T_s = \dfrac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(2)}}$ *for* $11 \le n \le 13$ $T_s = \dfrac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(3)}}$ *for* $14 \le n \le 25.$
Critical value T_c	USEPA (2000; p. A-5, Table A-3) lists the critical values of the Dixon test as a function of sample size for a one-sided extreme value test at the significance levels α of 0.1, 0.05, and 0.01.
One-sided test with a $(1-\alpha)$ confidence level that there is a single extreme outlier within the n observations.	Dixon's single, one-sided test for statistical evidence of either an extreme low-valued outlier: $X_{(1)}$ *is an outlier if* $T_s \ge T_c$ or an extreme high-valued outlier: $X_{(n)}$ *is an outlier if* $T_s \ge T_c$. The function T_c is the critical value, given in Dixon (1953; page 89) and USEPA (2000; p. A-5, Table A-3). Note that the critical value assumes that the data are either normally or lognormally distributed.

Other Statistical Calculations Used in MANAGES

Sen Estimate of Slope

The Sen estimate of slope is the median of all slopes between all possible unique pairs of individual data points in the time period being analyzed (Gilbert, 1987). The slopes represent the rate of change of the measured parameter, with the y-axis being the parameter value and the x-axis being calendar days. Sen's estimate of slope is a non-parametric estimator of trend. The method is robust, and fairly insensitive to the presence of a small fraction of outliers and non-detect data values. In contrast, linear regression and other least squares estimators of slope are significantly more sensitive, and more likely to give erroneous slope indications, even when only a few outlier values are present.

When data averaging is not activated, the Sen slope is calculated using individual data points and actual sampling dates. When data averaging is activated, multiple data points within each specified season period are reduced to one data point by arithmetic averaging over each of the season periods. These averaged values are then assigned to the day that corresponds to the middle of that season's period.

The approximate lower and upper confidence limits for the Sen slope can also be calculated using normal theory (Gilbert, 1987). It should be noted that confidence limits for the Sen slope are not necessarily symmetrical about the estimated slope since ranked values of slope are used in the calculation.

MANAGES calculates Sen slope in the Sen Slope Overlay Graph, Statistical Summary reports and in the two Mann-Kendall tests performed under the Statistical Evaluation Report.

Sen's Estimate of Slope – two-sided, non-parametric method that calculates the trend of a single data series. It is less sensitive to outliers and non-detect values than linear regression (Gilbert, 1987; p. 217).	
Slope, Q	$$= \frac{X_{i'} - X_i}{i' - i}$$ where $X_{i'}$ and x_i are data values at times i' and i, respectively, and where $i' > i$. Typically, i' and i are expressed in units of either days for trend analysis or years for seasonal analysis.
N′	Number of unique data point pairs that can be made for the observations in the data set, for $i' > i$. For n monitoring events, N′ is given as: $$N' = n(n-1)/2$$

Statistical Analysis

Sen's Slope Estimate	Sen's slope estimator = median slope $= Q_{[(N'+1)/2]}$ if N' is odd $= \dfrac{1}{2}(Q_{[N'/2]} + Q_{[(N'+2)/2]})$ if N' is even where the Q values have first been ranked from smallest to largest.
$Z_{1-\alpha/2}$	Statistic for the cumulative normal distribution (Gilbert, 1987; p. 254) for the two-sided, α significance level.
Variance estimate of the Mann-Kendall S Statistic, VAR(S)	VAR(S) $= \dfrac{1}{18}\left[n(n-1)(2n+5) - \sum_{p=1}^{g} t_p(t_p-1)(2t_p+5)\right]$ where g is the number of tied groups, t_p is the number of data in the pth group, and n is the number of data values.
C_α	$= Z_{1-\alpha/2}\sqrt{VAR(S)}$
Sen's Slope , a two-sided test at the α significance level	$M_1 = \dfrac{(N'-C_\alpha)}{2}$ $M_2 = \dfrac{(N'+C_\alpha)}{2}$ Lower limit of confidence interval is the M_1-th largest slope, and upper limit of confidence interval is the (M_2+1)-th largest of the N' ordered slope estimates.

Coefficient of Skewness for Normality

The coefficient of skewness is another measure for data normality (Gilbert, 1987). MANAGES provides the value of the coefficient of skewness in the Statistical Evalueation Report, Statistical Overview. Additional information on data normality is given by Montgomery, et al. (1987).

APPENDIX B2
OUTLIER TEST RESULTS

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Antimony, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Antimony, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0005
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	0.0010	False		1

Antimony, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023	**LT Multiplier: x 0.50**
Confidence Level: 95%	**Number of Outliers: One Outlier**
Transform: None	

Antimony, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Antimony, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Antimony, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Antimony, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Antimony, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0004
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0017
Test Statistic, high extreme of all data: Tn = 4.1514
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0017	False		1

Antimony, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023
LT Multiplier: x 0.50

Confidence Level: 95%
Number of Outliers: One Outlier

Transform: None

Antimony, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0005
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: $X_n = 0.0011$
Test Statistic, high extreme of all data: $T_n = 5.0037$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/20/2023	0.0011	False		1

Antimony, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0005$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Antimony, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0005$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Antimony, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0005

Standard Deviation of all data: 0.0001

Largest Observation Concentration of all data: Xn = 0.0011

Test Statistic, high extreme of all data: Tn = 4.9029

T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0011	False		1

Antimony, total, mg/L

Location: APW-1

Mean of all data: 0.0005

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0005

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Antimony, total, mg/L

Location: APW-10

Mean of all data: 0.0006

Standard Deviation of all data: 0.0003

Largest Observation Concentration of all data: Xn = 0.0018

Test Statistic, high extreme of all data: Tn = 3.7826

T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0018	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Antimony, total, mg/L

Location: APW-11

Mean of all data: 0.0006
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0026
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0026	False		1

Antimony, total, mg/L

Location: APW-12

Mean of all data: 0.0006
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: Xn = 0.0029
Test Statistic, high extreme of all data: Tn = 4.3644
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0029	False		1

Antimony, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Antimony, total, mg/L

Location: APW-2

Mean of all data: 0.0007
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0041
Test Statistic, high extreme of all data: Tn = 4.7743
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	0.0041	False		1

Antimony, total, mg/L

Location: APW-3

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Antimony, total, mg/L

Location: APW-4

Mean of all data: 0.0005
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0013	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Antimony, total, mg/L

Location: APW-5

Mean of all data: 0.0005
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0012
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	0.0012	False		1

Antimony, total, mg/L

Location: APW-6

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Antimony, total, mg/L

Location: APW-7

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Antimony, total, mg/L

Location: APW-8

Mean of all data: 0.0007
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: $Xn = 0.0057$
Test Statistic, high extreme of all data: $Tn = 4.9705$
T Critical of all data: $Tcr = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0057	False		1

Antimony, total, mg/L

Location: APW-9

Mean of all data: 0.0006
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: $Xn = 0.0016$
Test Statistic, high extreme of all data: $Tn = 3.0887$
T Critical of all data: $Tcr = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	0.0016	False		1

Arsenic, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $Xn = 0.0005$
Test Statistic, high extreme of all data: $Tn = 0.5365$
T Critical of all data: $Tcr = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Arsenic, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0016
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: X_n = 0.0023
Test Statistic, high extreme of all data: T_n = 2.3434
T Critical of all data: T_{cr} = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Arsenic, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0005
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Arsenic, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0006
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: X_n = 0.0016
Test Statistic, high extreme of all data: T_n = 4.3644
T Critical of all data: T_{cr} = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0016	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Arsenic, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0005$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Arsenic, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0019
Standard Deviation of all data: 0.0014
Largest Observation Concentration of all data: $X_n = 0.0044$
Test Statistic, high extreme of all data: $T_n = 1.8176$
T Critical of all data: $T_{cr} = 2.7860$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Arsenic, dissolved, mg/L

Location: APW-3

Mean of all data: 0.2066
Standard Deviation of all data: 0.0495
Largest Observation Concentration of all data: $X_n = 0.3200$
Test Statistic, high extreme of all data: $T_n = 2.2889$
T Critical of all data: $T_{cr} = 2.7860$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Arsenic, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0244
Standard Deviation of all data: 0.0386
Largest Observation Concentration of all data: $Xn = 0.1800$
Test Statistic, high extreme of all data: $Tn = 4.0295$
T Critical of all data: $Tcr = 2.7730$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	0.1800	False		1

Arsenic, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $Xn = 0.0011$
Test Statistic, high extreme of all data: $Tn = 2.6931$
T Critical of all data: $Tcr = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $Xn = 0.0005$
Test Statistic, high extreme of all data: $Tn = 0.0000$
T Critical of all data: $Tcr = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Arsenic, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0005
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/28/2017	0.0010	False		1

Arsenic, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0014
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0022
Test Statistic, high extreme of all data: Tn = 3.1390
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/09/2023	0.0022	False		1

Arsenic, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0011
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0018
Test Statistic, high extreme of all data: Tn = 2.0491
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Arsenic, total, mg/L

Location: APW-1

Mean of all data: 0.0016
Standard Deviation of all data: 0.0018
Largest Observation Concentration of all data: $Xn = 0.0089$
Test Statistic, high extreme of all data: $Tn = 4.0793$
T Critical of all data: $Tcr = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0089	False		1

Arsenic, total, mg/L

Location: APW-10

Mean of all data: 0.0044
Standard Deviation of all data: 0.0072
Largest Observation Concentration of all data: $Xn = 0.0364$
Test Statistic, high extreme of all data: $Tn = 4.4375$
T Critical of all data: $Tcr = 2.6030$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0364	False		1

Arsenic, total, mg/L

Location: APW-11

Mean of all data: 0.0032
Standard Deviation of all data: 0.0077
Largest Observation Concentration of all data: $Xn = 0.0371$
Test Statistic, high extreme of all data: $Tn = 4.3853$
T Critical of all data: $Tcr = 2.6030$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0371	False		1

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Arsenic, total, mg/L

Location: APW-12

Mean of all data: 0.0041
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0433
Test Statistic, high extreme of all data: Tn = 4.2450
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0433	False		1

Arsenic, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0012
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, total, mg/L

Location: APW-2

Mean of all data: 0.0027
Standard Deviation of all data: 0.0015
Largest Observation Concentration of all data: Xn = 0.0067
Test Statistic, high extreme of all data: Tn = 2.6105
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Arsenic, total, mg/L

Location: APW-3

Mean of all data: 0.2324
Standard Deviation of all data: 0.0530
Largest Observation Concentration of all data: Xn = 0.3580
Test Statistic, high extreme of all data: Tn = 2.3696
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Arsenic, total, mg/L

Location: APW-4

Mean of all data: 0.0157
Standard Deviation of all data: 0.0107
Largest Observation Concentration of all data: Xn = 0.0598
Test Statistic, high extreme of all data: Tn = 4.1214
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0598	False		1

Arsenic, total, mg/L

Location: APW-5

Mean of all data: 0.0009
Standard Deviation of all data: 0.0008
Largest Observation Concentration of all data: Xn = 0.0039
Test Statistic, high extreme of all data: Tn = 3.5920
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0039	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Arsenic, total, mg/L

Location: APW-6

Mean of all data: 0.0009
Standard Deviation of all data: 0.0006
Largest Observation Concentration of all data: Xn = 0.0027
Test Statistic, high extreme of all data: Tn = 3.0437
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0027	False		1

Arsenic, total, mg/L

Location: APW-7

Mean of all data: 0.0016
Standard Deviation of all data: 0.0043
Largest Observation Concentration of all data: Xn = 0.0225
Test Statistic, high extreme of all data: Tn = 4.8730
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0225	False		1

Arsenic, total, mg/L

Location: APW-8

Mean of all data: 0.0028
Standard Deviation of all data: 0.0055
Largest Observation Concentration of all data: Xn = 0.0301
Test Statistic, high extreme of all data: Tn = 4.9841
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0301	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Arsenic, total, mg/L

Location: APW-9

Mean of all data: 0.0020
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0042
Test Statistic, high extreme of all data: Tn = 2.5780
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0127
Standard Deviation of all data: 0.0043
Largest Observation Concentration of all data: Xn = 0.0232
Test Statistic, high extreme of all data: Tn = 2.4584
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	<0.0000	True	-1	

Barium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0191
Standard Deviation of all data: 0.0022
Largest Observation Concentration of all data: Xn = 0.0231
Test Statistic, high extreme of all data: Tn = 1.7994
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

12/08/2023
10:17:34AM

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Barium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0155
Standard Deviation of all data: 0.0041
Largest Observation Concentration of all data: Xn = 0.0284
Test Statistic, high extreme of all data: Tn = 3.1248
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	0.0284	False		1

Barium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.1316
Standard Deviation of all data: 0.0336
Largest Observation Concentration of all data: Xn = 0.2460
Test Statistic, high extreme of all data: Tn = 3.4084
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	0.2460	False		1

Barium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0553
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Barium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0494
Standard Deviation of all data: 0.0136
Largest Observation Concentration of all data: Xn = 0.0718
Test Statistic, high extreme of all data: Tn = 1.6394
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	<0.0000	True	-1	

Barium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0759
Standard Deviation of all data: 0.0297
Largest Observation Concentration of all data: Xn = 0.1550
Test Statistic, high extreme of all data: Tn = 2.6669
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0473
Standard Deviation of all data: 0.0183
Largest Observation Concentration of all data: Xn = 0.0950
Test Statistic, high extreme of all data: Tn = 2.6090
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Barium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0079
Standard Deviation of all data: 0.0020
Largest Observation Concentration of all data: Xn = 0.0108
Test Statistic, high extreme of all data: Tn = 1.4891
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	<0.0000	True	-1	

Barium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0137
Standard Deviation of all data: 0.0030
Largest Observation Concentration of all data: Xn = 0.0198
Test Statistic, high extreme of all data: Tn = 2.0676
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0292
Standard Deviation of all data: 0.0070
Largest Observation Concentration of all data: Xn = 0.0445
Test Statistic, high extreme of all data: Tn = 2.1849
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Barium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0627
Standard Deviation of all data: 0.0085
Largest Observation Concentration of all data: Xn = 0.0754
Test Statistic, high extreme of all data: Tn = 1.4918
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Barium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0236
Standard Deviation of all data: 0.0094
Largest Observation Concentration of all data: Xn = 0.0490
Test Statistic, high extreme of all data: Tn = 2.7001
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/29/2020	0.0490	False		1

Barium, total, mg/L

Location: APW-1

Mean of all data: 0.0215
Standard Deviation of all data: 0.0104
Largest Observation Concentration of all data: Xn = 0.0650
Test Statistic, high extreme of all data: Tn = 4.1750
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0650	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Barium, total, mg/L

Location: APW-10

Mean of all data: 0.0294
Standard Deviation of all data: 0.0257
Largest Observation Concentration of all data: Xn = 0.1430
Test Statistic, high extreme of all data: Tn = 4.4235
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.1430	False		1

Barium, total, mg/L

Location: APW-11

Mean of all data: 0.0235
Standard Deviation of all data: 0.0177
Largest Observation Concentration of all data: Xn = 0.0970
Test Statistic, high extreme of all data: Tn = 4.1496
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0970	False		1

Barium, total, mg/L

Location: APW-12

Mean of all data: 0.1691
Standard Deviation of all data: 0.0725
Largest Observation Concentration of all data: Xn = 0.4390
Test Statistic, high extreme of all data: Tn = 3.7223
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.4390	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Barium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0599
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Barium, total, mg/L

Location: APW-2

Mean of all data: 0.0722
Standard Deviation of all data: 0.0274
Largest Observation Concentration of all data: Xn = 0.1650
Test Statistic, high extreme of all data: Tn = 3.3933
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.1650	False		1

Barium, total, mg/L

Location: APW-3

Mean of all data: 0.1100
Standard Deviation of all data: 0.0276
Largest Observation Concentration of all data: Xn = 0.1670
Test Statistic, high extreme of all data: Tn = 2.0650
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Barium, total, mg/L

Location: APW-4

Mean of all data: 0.0694
Standard Deviation of all data: 0.0485
Largest Observation Concentration of all data: Xn = 0.2860
Test Statistic, high extreme of all data: Tn = 4.4674
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.2860	False		1

Barium, total, mg/L

Location: APW-5

Mean of all data: 0.0109
Standard Deviation of all data: 0.0046
Largest Observation Concentration of all data: Xn = 0.0304
Test Statistic, high extreme of all data: Tn = 4.2020
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0304	False		1

Barium, total, mg/L

Location: APW-6

Mean of all data: 0.0162
Standard Deviation of all data: 0.0042
Largest Observation Concentration of all data: Xn = 0.0270
Test Statistic, high extreme of all data: Tn = 2.5910
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Barium, total, mg/L

Location: APW-7

Mean of all data: 0.0389
Standard Deviation of all data: 0.0260
Largest Observation Concentration of all data: Xn = 0.1600
Test Statistic, high extreme of all data: Tn = 4.6584
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.1600	False		1

Barium, total, mg/L

Location: APW-8

Mean of all data: 0.0731
Standard Deviation of all data: 0.0250
Largest Observation Concentration of all data: Xn = 0.1850
Test Statistic, high extreme of all data: Tn = 4.4831
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1850	False		1

Barium, total, mg/L

Location: APW-9

Mean of all data: 0.0309
Standard Deviation of all data: 0.0128
Largest Observation Concentration of all data: Xn = 0.0606
Test Statistic, high extreme of all data: Tn = 2.3202
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Beryllium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0002
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: $X_n = 0.0003$
Test Statistic, high extreme of all data: $T_n = 0.5365$
T Critical of all data: $T_{cr} = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Beryllium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0003$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Beryllium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0003$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0002
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0004
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0042
Test Statistic, high extreme of all data: Tn = 5.3828
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0042	False		1

Beryllium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0003
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0018
Test Statistic, high extreme of all data: Tn = 4.1005
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	0.0018	False		1

Beryllium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0002
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0003
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0017
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0017	False		1

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, total, mg/L

Location: APW-1

Mean of all data: 0.0003
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0006
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0006	False		1

Beryllium, total, mg/L

Location: APW-10

Mean of all data: 0.0003
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0013	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, total, mg/L

Location: APW-11

Mean of all data: 0.0003
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0014
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0014	False		1

Beryllium, total, mg/L

Location: APW-12

Mean of all data: 0.0003
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0018
Test Statistic, high extreme of all data: Tn = 4.3644
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0018	False		1

Beryllium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Beryllium, total, mg/L

Location: APW-2

Mean of all data: 0.0003
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: $X_n = 0.0006$
Test Statistic, high extreme of all data: $T_n = 4.9029$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0006	False		1

Beryllium, total, mg/L

Location: APW-3

Mean of all data: 0.0004
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: $X_n = 0.0049$
Test Statistic, high extreme of all data: $T_n = 4.9029$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0049	False		1

Beryllium, total, mg/L

Location: APW-4

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0003$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Beryllium, total, mg/L

Location: APW-5

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Beryllium, total, mg/L

Location: APW-6

Mean of all data: 0.0003
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0006
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0006	False		1

Beryllium, total, mg/L

Location: APW-7

Mean of all data: 0.0003
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0009
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0009	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Beryllium, total, mg/L

Location: APW-8

Mean of all data: 0.0003
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0019
Test Statistic, high extreme of all data: Tn = 4.6463
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0019	False		1

Beryllium, total, mg/L

Location: APW-9

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0003
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0739
Standard Deviation of all data: 0.0255
Largest Observation Concentration of all data: Xn = 0.1400
Test Statistic, high extreme of all data: Tn = 2.5951
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, dissolved, mg/L

Location: APW-10

Mean of all data: 1.5616
Standard Deviation of all data: 0.5864
Largest Observation Concentration of all data: Xn = 2.5100
Test Statistic, high extreme of all data: Tn = 1.6172
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L

Location: APW-11

Mean of all data: 2.5225
Standard Deviation of all data: 1.4484
Largest Observation Concentration of all data: Xn = 6.8400
Test Statistic, high extreme of all data: Tn = 2.9809
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	6.8400	False		1

Boron, dissolved, mg/L

Location: APW-12

Mean of all data: 0.1447
Standard Deviation of all data: 0.0531
Largest Observation Concentration of all data: Xn = 0.2410
Test Statistic, high extreme of all data: Tn = 1.8156
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 7.1300
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, dissolved, mg/L

Location: APW-2

Mean of all data: 2.0249
Standard Deviation of all data: 0.8792
Largest Observation Concentration of all data: Xn = 3.9000
Test Statistic, high extreme of all data: Tn = 2.1327
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, dissolved, mg/L

Location: APW-3

Mean of all data: 20.1697
Standard Deviation of all data: 8.0601
Largest Observation Concentration of all data: Xn = 46.0000
Test Statistic, high extreme of all data: Tn = 3.2047
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	46.0000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, dissolved, mg/L

Location: APW-4

Mean of all data: 1.6988
Standard Deviation of all data: 1.4949
Largest Observation Concentration of all data: Xn = 6.3000
Test Statistic, high extreme of all data: Tn = 3.0779
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	6.3000	False		1

Boron, dissolved, mg/L

Location: APW-5

Mean of all data: 0.1313
Standard Deviation of all data: 0.0906
Largest Observation Concentration of all data: Xn = 0.4100
Test Statistic, high extreme of all data: Tn = 3.0751
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	0.4100	False		1

Boron, dissolved, mg/L

Location: APW-6

Mean of all data: 0.6345
Standard Deviation of all data: 0.4844
Largest Observation Concentration of all data: Xn = 1.8100
Test Statistic, high extreme of all data: Tn = 2.4266
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, dissolved, mg/L

Location: APW-7

Mean of all data: 0.1473
Standard Deviation of all data: 0.0619
Largest Observation Concentration of all data: Xn = 0.3780
Test Statistic, high extreme of all data: Tn = 3.7245
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/27/2018	0.3780	False		1

Boron, dissolved, mg/L

Location: APW-8

Mean of all data: 6.9933
Standard Deviation of all data: 0.8900
Largest Observation Concentration of all data: Xn = 8.8800
Test Statistic, high extreme of all data: Tn = 2.1198
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L

Location: APW-9

Mean of all data: 1.0800
Standard Deviation of all data: 0.4414
Largest Observation Concentration of all data: Xn = 2.1100
Test Statistic, high extreme of all data: Tn = 2.3334
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Boron, total, mg/L

Location: APW-1

Mean of all data: 0.0683
Standard Deviation of all data: 0.0206
Largest Observation Concentration of all data: Xn = 0.1100
Test Statistic, high extreme of all data: Tn = 2.0310
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	<0.0100	True	-1	

Boron, total, mg/L

Location: APW-10

Mean of all data: 1.6706
Standard Deviation of all data: 0.6524
Largest Observation Concentration of all data: Xn = 2.9500
Test Statistic, high extreme of all data: Tn = 1.9610
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, total, mg/L

Location: APW-11

Mean of all data: 2.6774
Standard Deviation of all data: 1.5567
Largest Observation Concentration of all data: Xn = 7.0400
Test Statistic, high extreme of all data: Tn = 2.8025
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	7.0400	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Boron, total, mg/L

Location: APW-12

Mean of all data: 0.1543
Standard Deviation of all data: 0.0586
Largest Observation Concentration of all data: Xn = 0.2730
Test Statistic, high extreme of all data: Tn = 2.0249
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 7.4600
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, total, mg/L

Location: APW-2

Mean of all data: 1.8147
Standard Deviation of all data: 0.6626
Largest Observation Concentration of all data: Xn = 2.9400
Test Statistic, high extreme of all data: Tn = 1.6983
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Boron, total, mg/L

Location: APW-3

Mean of all data: 18.1038
Standard Deviation of all data: 4.8570
Largest Observation Concentration of all data: Xn = 28.7000
Test Statistic, high extreme of all data: Tn = 2.1816
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, total, mg/L

Location: APW-4

Mean of all data: 1.1320
Standard Deviation of all data: 0.4453
Largest Observation Concentration of all data: Xn = 2.1400
Test Statistic, high extreme of all data: Tn = 2.2636
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, total, mg/L

Location: APW-5

Mean of all data: 0.0987
Standard Deviation of all data: 0.0157
Largest Observation Concentration of all data: Xn = 0.1540
Test Statistic, high extreme of all data: Tn = 3.5233
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/20/2018	0.1540	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, total, mg/L

Location: APW-6

Mean of all data: 0.6751
Standard Deviation of all data: 0.5066
Largest Observation Concentration of all data: Xn = 1.9100
Test Statistic, high extreme of all data: Tn = 2.4377
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Boron, total, mg/L

Location: APW-7

Mean of all data: 0.1556
Standard Deviation of all data: 0.0623
Largest Observation Concentration of all data: Xn = 0.3630
Test Statistic, high extreme of all data: Tn = 3.3294
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/27/2018	0.3630	False		1

Boron, total, mg/L

Location: APW-8

Mean of all data: 7.4126
Standard Deviation of all data: 0.9502
Largest Observation Concentration of all data: Xn = 9.4000
Test Statistic, high extreme of all data: Tn = 2.0916
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Boron, total, mg/L

Location: APW-9

Mean of all data: 1.1747
Standard Deviation of all data: 0.4930
Largest Observation Concentration of all data: Xn = 2.3000
Test Statistic, high extreme of all data: Tn = 2.2825
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cadmium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cadmium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0010
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0019
Test Statistic, high extreme of all data: Tn = 2.7301
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4728
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cadmium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cadmium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cadmium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   LT Multiplier: x 0.50

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cadmium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-1

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cadmium, total, mg/L

Location: APW-10

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-11

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-12

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cadmium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0010
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-2

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0010
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-3

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0010
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cadmium, total, mg/L

Location: APW-4

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cadmium, total, mg/L

Location: APW-5

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cadmium, total, mg/L

Location: APW-6

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

12/08/2023

10:17:34AM

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cadmium, total, mg/L

Location: APW-7

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-8

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, total, mg/L

Location: APW-9

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chloride, dissolved, mg/L

Location: APW-1

Mean of all data: 42.5

Standard Deviation of all data: 35.1

Largest Observation Concentration of all data: $X_n = 159.0$

Test Statistic, high extreme of all data: $T_n = 3.3$

T Critical of all data: $T_{cr} = 2.8$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/22/2022	159.0	False		1

Chloride, dissolved, mg/L

Location: APW-10

Mean of all data: 3.4

Standard Deviation of all data: 1.7

Largest Observation Concentration of all data: $X_n = 7.0$

Test Statistic, high extreme of all data: $T_n = 2.2$

T Critical of all data: $T_{cr} = 2.6$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chloride, dissolved, mg/L

Location: APW-11

Mean of all data: 3.8

Standard Deviation of all data: 2.2

Largest Observation Concentration of all data: $X_n = 11.0$

Test Statistic, high extreme of all data: $T_n = 3.3$

T Critical of all data: $T_{cr} = 2.6$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	11.0	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chloride, dissolved, mg/L

Location: APW-12

Mean of all data: 43.5
Standard Deviation of all data: 12.4
Largest Observation Concentration of all data: X_n = 75.0
Test Statistic, high extreme of all data: T_n = 2.5
T Critical of all data: T_{cr} = 2.6

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chloride, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: X_n = 20.0
Test Statistic, high extreme of all data: T_n = 0.0
T Critical of all data: T_{cr} = 0.0

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chloride, dissolved, mg/L

Location: APW-2

Mean of all data: 21.0
Standard Deviation of all data: 15.4
Largest Observation Concentration of all data: X_n = 50.0
Test Statistic, high extreme of all data: T_n = 1.9
T Critical of all data: T_{cr} = 2.8

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chloride, dissolved, mg/L

Location: APW-3

Mean of all data: 29.1

Standard Deviation of all data: 12.8

Largest Observation Concentration of all data: Xn = 58.0

Test Statistic, high extreme of all data: Tn = 2.3

T Critical of all data: Tcr = 2.8

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chloride, dissolved, mg/L

Location: APW-4

Mean of all data: 35.3

Standard Deviation of all data: 11.8

Largest Observation Concentration of all data: Xn = 63.0

Test Statistic, high extreme of all data: Tn = 2.3

T Critical of all data: Tcr = 2.8

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chloride, dissolved, mg/L

Location: APW-5

Mean of all data: 5.9

Standard Deviation of all data: 4.9

Largest Observation Concentration of all data: Xn = 22.0

Test Statistic, high extreme of all data: Tn = 3.3

T Critical of all data: Tcr = 2.8

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/04/2019	22.0	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Chloride, dissolved, mg/L

Location: APW-6

Mean of all data: 6.2
Standard Deviation of all data: 6.4
Largest Observation Concentration of all data: Xn = 27.0
Test Statistic, high extreme of all data: Tn = 3.2
T Critical of all data: Tcr = 2.7

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	27.0	False		1

Chloride, dissolved, mg/L

Location: APW-7

Mean of all data: 35.4
Standard Deviation of all data: 11.6
Largest Observation Concentration of all data: Xn = 67.0
Test Statistic, high extreme of all data: Tn = 2.7
T Critical of all data: Tcr = 2.7

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	67.0	False		1

Chloride, dissolved, mg/L

Location: APW-8

Mean of all data: 10.2
Standard Deviation of all data: 3.5
Largest Observation Concentration of all data: Xn = 18.0
Test Statistic, high extreme of all data: Tn = 2.2
T Critical of all data: Tcr = 2.7

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Chloride, dissolved, mg/L

Location: APW-9

Mean of all data: 14.6
Standard Deviation of all data: 13.0
Largest Observation Concentration of all data: Xn = 43.0
Test Statistic, high extreme of all data: Tn = 2.2
T Critical of all data: Tcr = 2.7

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Chromium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0019
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Chromium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chromium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $Xn = 0.0025$
Test Statistic, high extreme of all data: $Tn = 0.0000$
T Critical of all data: $Tcr = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $Xn = 0.0025$
Test Statistic, high extreme of all data: $Tn = 0.0000$
T Critical of all data: $Tcr = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $Xn = 0.0083$
Test Statistic, high extreme of all data: $Tn = 0.0000$
T Critical of all data: $Tcr = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Chromium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0022
Standard Deviation of all data: 0.0013
Largest Observation Concentration of all data: Xn = 0.0069
Test Statistic, high extreme of all data: Tn = 3.7178
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/15/2011	0.0069	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Chromium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0019
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chromium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0118
Standard Deviation of all data: 0.0060
Largest Observation Concentration of all data: Xn = 0.0320
Test Statistic, high extreme of all data: Tn = 3.3901
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/21/2022	0.0320	False		1

Chromium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Chromium, total, mg/L

Location: APW-1

Mean of all data: 0.0035
Standard Deviation of all data: 0.0033
Largest Observation Concentration of all data: Xn = 0.0173
Test Statistic, high extreme of all data: Tn = 4.1804
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
02/02/2023	0.0173	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chromium, total, mg/L

Location: APW-10

Mean of all data: 0.0050
Standard Deviation of all data: 0.0086
Largest Observation Concentration of all data: Xn = 0.0431
Test Statistic, high extreme of all data: Tn = 4.4176
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0431	False		1

Chromium, total, mg/L

Location: APW-11

Mean of all data: 0.0051
Standard Deviation of all data: 0.0093
Largest Observation Concentration of all data: Xn = 0.0465
Test Statistic, high extreme of all data: Tn = 4.4340
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0465	False		1

Chromium, total, mg/L

Location: APW-12

Mean of all data: 0.0048
Standard Deviation of all data: 0.0093
Largest Observation Concentration of all data: Xn = 0.0450
Test Statistic, high extreme of all data: Tn = 4.3292
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0450	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Chromium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0143
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Chromium, total, mg/L

Location: APW-2

Mean of all data: 0.0027
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0083
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0083	False		1

Chromium, total, mg/L

Location: APW-3

Mean of all data: 0.0033
Standard Deviation of all data: 0.0022
Largest Observation Concentration of all data: Xn = 0.0115
Test Statistic, high extreme of all data: Tn = 3.6896
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0115	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Chromium, total, mg/L

Location: APW-4

Mean of all data: 0.0033
Standard Deviation of all data: 0.0021
Largest Observation Concentration of all data: $X_n = 0.0105$
Test Statistic, high extreme of all data: $T_n = 3.3602$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/21/2017	0.0105	False		1

Chromium, total, mg/L

Location: APW-5

Mean of all data: 0.0027
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: $X_n = 0.0061$
Test Statistic, high extreme of all data: $T_n = 3.8489$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0061	False		1

Chromium, total, mg/L

Location: APW-6

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Chromium, total, mg/L

Location: APW-7

Mean of all data: 0.0033
Standard Deviation of all data: 0.0042
Largest Observation Concentration of all data: $X_n = 0.0241$
Test Statistic, high extreme of all data: $T_n = 4.9029$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0241	False		1

Chromium, total, mg/L

Location: APW-8

Mean of all data: 0.0143
Standard Deviation of all data: 0.0091
Largest Observation Concentration of all data: $X_n = 0.0438$
Test Statistic, high extreme of all data: $T_n = 3.2493$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0438	False		1

Chromium, total, mg/L

Location: APW-9

Mean of all data: 0.0026
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: $X_n = 0.0053$
Test Statistic, high extreme of all data: $T_n = 4.9029$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0053	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cobalt, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0019
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: X_n = 0.0025
Test Statistic, high extreme of all data: T_n = 0.5365
T Critical of all data: T_{cr} = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0025
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0025
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Cobalt, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cobalt, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cobalt, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0025
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: Xn = 0.0035
Test Statistic, high extreme of all data: Tn = 1.8358
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	<0.0000	True	-1	

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cobalt, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cobalt, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.4728
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cobalt, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0019
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cobalt, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cobalt, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0034
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0072
Test Statistic, high extreme of all data: Tn = 2.2549
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cobalt, total, mg/L

Location: APW-1

Mean of all data: 0.0050
Standard Deviation of all data: 0.0069
Largest Observation Concentration of all data: Xn = 0.0352
Test Statistic, high extreme of all data: Tn = 4.3917
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0352	False		1

Cobalt, total, mg/L

Location: APW-10

Mean of all data: 0.0084
Standard Deviation of all data: 0.0230
Largest Observation Concentration of all data: Xn = 0.1110
Test Statistic, high extreme of all data: Tn = 4.4544
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.1110	False		1

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cobalt, total, mg/L

Location: APW-11

Mean of all data: 0.0075
Standard Deviation of all data: 0.0178
Largest Observation Concentration of all data: Xn = 0.0860
Test Statistic, high extreme of all data: Tn = 4.4082
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0860	False		1

Cobalt, total, mg/L

Location: APW-12

Mean of all data: 0.0094
Standard Deviation of all data: 0.0151
Largest Observation Concentration of all data: Xn = 0.0723
Test Statistic, high extreme of all data: Tn = 4.1655
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0723	False		1

Cobalt, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cobalt, total, mg/L

Location: APW-2

Mean of all data: 0.0027
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0074
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0074	False		1

Cobalt, total, mg/L

Location: APW-3

Mean of all data: 0.0027
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0073
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0073	False		1

Cobalt, total, mg/L

Location: APW-4

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cobalt, total, mg/L

Location: APW-5

Mean of all data: 0.0040
Standard Deviation of all data: 0.0049
Largest Observation Concentration of all data: Xn = 0.0265
Test Statistic, high extreme of all data: Tn = 4.6049
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0265	False		1

Cobalt, total, mg/L

Location: APW-6

Mean of all data: 0.0027
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0077
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0077	False		1

Cobalt, total, mg/L

Location: APW-7

Mean of all data: 0.0032
Standard Deviation of all data: 0.0036
Largest Observation Concentration of all data: Xn = 0.0207
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0207	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cobalt, total, mg/L

Location: APW-8

Mean of all data: 0.0056
Standard Deviation of all data: 0.0143
Largest Observation Concentration of all data: Xn = 0.0771
Test Statistic, high extreme of all data: Tn = 4.9861
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0771	False		1

Cobalt, total, mg/L

Location: APW-9

Mean of all data: 0.0047
Standard Deviation of all data: 0.0031
Largest Observation Concentration of all data: Xn = 0.0119
Test Statistic, high extreme of all data: Tn = 2.3518
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0021
Standard Deviation of all data: 0.0013
Largest Observation Concentration of all data: Xn = 0.0068
Test Statistic, high extreme of all data: Tn = 3.5322
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	0.0068	False		1

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Copper, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Copper, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Copper, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0020
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: $Xn = 0.0025$
Test Statistic, high extreme of all data: $Tn = 0.4728$
T Critical of all data: $Tcr = 2.7730$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Copper, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0019
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: $Xn = 0.0025$
Test Statistic, high extreme of all data: $Tn = 0.5365$
T Critical of all data: $Tcr = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Copper, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $Xn = 0.0025$
Test Statistic, high extreme of all data: $Tn = 0.0000$
T Critical of all data: $Tcr = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Copper, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Copper, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Copper, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Copper, total, mg/L

Location: APW-1

Mean of all data: 0.0037
Standard Deviation of all data: 0.0042
Largest Observation Concentration of all data: Xn = 0.0226
Test Statistic, high extreme of all data: Tn = 4.4987
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0226	False		1

Copper, total, mg/L

Location: APW-10

Mean of all data: 0.0071
Standard Deviation of all data: 0.0189
Largest Observation Concentration of all data: Xn = 0.0913
Test Statistic, high extreme of all data: Tn = 4.4556
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0913	False		1

Copper, total, mg/L

Location: APW-11

Mean of all data: 0.0089
Standard Deviation of all data: 0.0223
Largest Observation Concentration of all data: Xn = 0.1070
Test Statistic, high extreme of all data: Tn = 4.4074
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1070	False		1

Based on Grubbs one-sided outlier test

12/08/2023
10:17:34AM

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Copper, total, mg/L

Location: APW-12

Mean of all data: 0.0067
Standard Deviation of all data: 0.0146
Largest Observation Concentration of all data: Xn = 0.0693
Test Statistic, high extreme of all data: Tn = 4.2832
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0693	False		1

Copper, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Copper, total, mg/L

Location: APW-2

Mean of all data: 0.0027
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0071
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0071	False		1

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Copper, total, mg/L

Location: APW-3

Mean of all data: 0.0031
Standard Deviation of all data: 0.0022
Largest Observation Concentration of all data: Xn = 0.0128
Test Statistic, high extreme of all data: Tn = 4.4122
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0128	False		1

Copper, total, mg/L

Location: APW-4

Mean of all data: 0.0045
Standard Deviation of all data: 0.0039
Largest Observation Concentration of all data: Xn = 0.0159
Test Statistic, high extreme of all data: Tn = 2.9032
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0159	False		1

Copper, total, mg/L

Location: APW-5

Mean of all data: 0.0030
Standard Deviation of all data: 0.0021
Largest Observation Concentration of all data: Xn = 0.0130
Test Statistic, high extreme of all data: Tn = 4.7125
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0130	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Copper, total, mg/L

Location: APW-6

Mean of all data: 0.0027
Standard Deviation of all data: 0.0012
Largest Observation Concentration of all data: Xn = 0.0086
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0086	False		1

Copper, total, mg/L

Location: APW-7

Mean of all data: 0.0034
Standard Deviation of all data: 0.0047
Largest Observation Concentration of all data: Xn = 0.0263
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0263	False		1

Copper, total, mg/L

Location: APW-8

Mean of all data: 0.0056
Standard Deviation of all data: 0.0152
Largest Observation Concentration of all data: Xn = 0.0815
Test Statistic, high extreme of all data: Tn = 4.9976
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0815	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Copper, total, mg/L

Location: APW-9

Mean of all data: 0.0030
Standard Deviation of all data: 0.0016
Largest Observation Concentration of all data: Xn = 0.0093
Test Statistic, high extreme of all data: Tn = 4.0583
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0093	False		1

Cyanide, total, mg/L

Location: APW-1

Mean of all data: 0.002
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 1.244
T Critical of all data: Tcr = 2.811

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-10

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.003
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cyanide, total, mg/L

Location: APW-11

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.003
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-12

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.003
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-13

Mean of all data: 0.000
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.003
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Cyanide, total, mg/L

Location: APW-2

Mean of all data: 0.002
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: X_n = 0.004
Test Statistic, high extreme of all data: T_n = 1.227
T Critical of all data: T_{cr} = 2.786

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-3

Mean of all data: 0.002
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: X_n = 0.004
Test Statistic, high extreme of all data: T_n = 1.617
T Critical of all data: T_{cr} = 2.786

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-4

Mean of all data: 0.002
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: X_n = 0.004
Test Statistic, high extreme of all data: T_n = 1.218
T Critical of all data: T_{cr} = 2.773

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Cyanide, total, mg/L

Location: APW-5

Mean of all data: 0.002
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 1.244
T Critical of all data: Tcr = 2.811

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-6

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 2.353
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-7

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 3.138
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	<0.004	True		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Cyanide, total, mg/L

Location: APW-8

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 2.353
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Cyanide, total, mg/L

Location: APW-9

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 2.300
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Fluoride, dissolved, mg/L

Location: APW-1

Mean of all data: 0.18
Standard Deviation of all data: 0.12
Largest Observation Concentration of all data: Xn = 0.54
Test Statistic, high extreme of all data: Tn = 3.06
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/08/2023	0.54	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Fluoride, dissolved, mg/L

Location: APW-10

Mean of all data: 0.05
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.05
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Fluoride, dissolved, mg/L

Location: APW-11

Mean of all data: 0.06
Standard Deviation of all data: 0.02
Largest Observation Concentration of all data: Xn = 0.13
Test Statistic, high extreme of all data: Tn = 2.84
T Critical of all data: Tcr = 2.60

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/04/2019	0.13	False		1

Fluoride, dissolved, mg/L

Location: APW-12

Mean of all data: 0.33
Standard Deviation of all data: 0.04
Largest Observation Concentration of all data: Xn = 0.42
Test Statistic, high extreme of all data: Tn = 2.21
T Critical of all data: Tcr = 2.58

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Fluoride, dissolved, mg/L

Location: APW-13

Mean of all data: 0.00
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.05
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Fluoride, dissolved, mg/L

Location: APW-2

Mean of all data: 0.29
Standard Deviation of all data: 0.07
Largest Observation Concentration of all data: Xn = 0.46
Test Statistic, high extreme of all data: Tn = 2.35
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/24/2011	<0.00	True	-1	

Fluoride, dissolved, mg/L

Location: APW-3

Mean of all data: 0.24
Standard Deviation of all data: 0.08
Largest Observation Concentration of all data: Xn = 0.54
Test Statistic, high extreme of all data: Tn = 3.53
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	0.54	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Fluoride, dissolved, mg/L

Location: APW-4

Mean of all data: 0.43
Standard Deviation of all data: 0.10
Largest Observation Concentration of all data: Xn = 0.79
Test Statistic, high extreme of all data: Tn = 3.65
T Critical of all data: Tcr = 2.77

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	0.79	False		1

Fluoride, dissolved, mg/L

Location: APW-5

Mean of all data: 0.12
Standard Deviation of all data: 0.09
Largest Observation Concentration of all data: Xn = 0.36
Test Statistic, high extreme of all data: Tn = 2.72
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Fluoride, dissolved, mg/L

Location: APW-6

Mean of all data: 0.15
Standard Deviation of all data: 0.04
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 2.86
T Critical of all data: Tcr = 2.70

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/29/2020	0.25	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Fluoride, dissolved, mg/L

Location: APW-7

Mean of all data: 0.27
Standard Deviation of all data: 0.05
Largest Observation Concentration of all data: Xn = 0.40
Test Statistic, high extreme of all data: Tn = 2.81
T Critical of all data: Tcr = 2.68

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.40	False		1

Fluoride, dissolved, mg/L

Location: APW-8

Mean of all data: 0.10
Standard Deviation of all data: 0.05
Largest Observation Concentration of all data: Xn = 0.24
Test Statistic, high extreme of all data: Tn = 2.65
T Critical of all data: Tcr = 2.70

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Fluoride, dissolved, mg/L

Location: APW-9

Mean of all data: 0.34
Standard Deviation of all data: 0.10
Largest Observation Concentration of all data: Xn = 0.57
Test Statistic, high extreme of all data: Tn = 2.18
T Critical of all data: Tcr = 2.68

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Iron, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0198
Standard Deviation of all data: 0.0260
Largest Observation Concentration of all data: Xn = 0.1620
Test Statistic, high extreme of all data: Tn = 5.4611
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	0.1620	False		1

Iron, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0434
Standard Deviation of all data: 0.1098
Largest Observation Concentration of all data: Xn = 0.5350
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	0.5350	False		1

Iron, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0256
Standard Deviation of all data: 0.0264
Largest Observation Concentration of all data: Xn = 0.1440
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/04/2019	0.1440	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Iron, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0270
Standard Deviation of all data: 0.0319
Largest Observation Concentration of all data: $X_n = 0.1660$
Test Statistic, high extreme of all data: $T_n = 4.3644$
T Critical of all data: $T_{cr} = 2.5800$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.1660	False		1

Iron, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Iron, dissolved, mg/L

Location: APW-2

Mean of all data: 0.2017
Standard Deviation of all data: 0.2550
Largest Observation Concentration of all data: $X_n = 1.1000$
Test Statistic, high extreme of all data: $T_n = 3.5222$
T Critical of all data: $T_{cr} = 2.7860$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/24/2011	1.1000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Iron, dissolved, mg/L

Location: APW-3

Mean of all data: 2.0371
Standard Deviation of all data: 1.5056
Largest Observation Concentration of all data: Xn = 5.4000
Test Statistic, high extreme of all data: Tn = 2.2336
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Iron, dissolved, mg/L

Location: APW-4

Mean of all data: 7.4282
Standard Deviation of all data: 4.0971
Largest Observation Concentration of all data: Xn = 16.0000
Test Statistic, high extreme of all data: Tn = 2.0922
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Iron, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0146
Standard Deviation of all data: 0.0081
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.6597
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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12/08/2023

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Iron, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0185

Standard Deviation of all data: 0.0036

Largest Observation Concentration of all data: Xn = 0.0200

Test Statistic, high extreme of all data: Tn = 0.4092

T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Iron, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0286

Standard Deviation of all data: 0.0230

Largest Observation Concentration of all data: Xn = 0.1130

Test Statistic, high extreme of all data: Tn = 3.6632

T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/29/2020	0.1130	False		1

Iron, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0185

Standard Deviation of all data: 0.0036

Largest Observation Concentration of all data: Xn = 0.0200

Test Statistic, high extreme of all data: Tn = 0.4092

T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Iron, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0199
Standard Deviation of all data: 0.0083
Largest Observation Concentration of all data: Xn = 0.0565
Test Statistic, high extreme of all data: Tn = 4.4016
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	0.0565	False		1

Iron, total, mg/L

Location: APW-1

Mean of all data: 2.4621
Standard Deviation of all data: 3.4170
Largest Observation Concentration of all data: Xn = 17.4000
Test Statistic, high extreme of all data: Tn = 4.3717
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	17.4000	False		1

Iron, total, mg/L

Location: APW-10

Mean of all data: 3.2603
Standard Deviation of all data: 9.2787
Largest Observation Concentration of all data: Xn = 44.5000
Test Statistic, high extreme of all data: Tn = 4.4446
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	44.5000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Iron, total, mg/L

Location: APW-11

Mean of all data: 3.9651
Standard Deviation of all data: 11.9703
Largest Observation Concentration of all data: Xn = 56.8000
Test Statistic, high extreme of all data: Tn = 4.4138
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	56.8000	False		1

Iron, total, mg/L

Location: APW-12

Mean of all data: 4.5028
Standard Deviation of all data: 12.3912
Largest Observation Concentration of all data: Xn = 57.6000
Test Statistic, high extreme of all data: Tn = 4.2851
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	57.6000	False		1

Iron, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 1.0600
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Iron, total, mg/L

Location: APW-2

Mean of all data: 3.1287
Standard Deviation of all data: 3.9802
Largest Observation Concentration of all data: Xn = 17.8000
Test Statistic, high extreme of all data: Tn = 3.6861
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	17.8000	False		1

Iron, total, mg/L

Location: APW-3

Mean of all data: 5.4654
Standard Deviation of all data: 3.1528
Largest Observation Concentration of all data: Xn = 15.4000
Test Statistic, high extreme of all data: Tn = 3.1511
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	15.4000	False		1

Iron, total, mg/L

Location: APW-4

Mean of all data: 13.0960
Standard Deviation of all data: 12.5782
Largest Observation Concentration of all data: Xn = 70.3000
Test Statistic, high extreme of all data: Tn = 4.5479
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	70.3000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   LT Multiplier: x 0.50

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Iron, total, mg/L

Location: APW-5

Mean of all data: 0.7466
Standard Deviation of all data: 1.2309
Largest Observation Concentration of all data: Xn = 5.8000
Test Statistic, high extreme of all data: Tn = 4.1055
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	5.8000	False		1

Iron, total, mg/L

Location: APW-6

Mean of all data: 0.6617
Standard Deviation of all data: 0.7948
Largest Observation Concentration of all data: Xn = 3.8200
Test Statistic, high extreme of all data: Tn = 3.9739
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	3.8200	False		1

Iron, total, mg/L

Location: APW-7

Mean of all data: 1.9924
Standard Deviation of all data: 6.7759
Largest Observation Concentration of all data: Xn = 35.0000
Test Statistic, high extreme of all data: Tn = 4.8713
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	35.0000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Iron, total, mg/L

Location: APW-8

Mean of all data: 2.0036
Standard Deviation of all data: 7.9549
Largest Observation Concentration of all data: X_n = 41.7000
Test Statistic, high extreme of all data: T_n = 4.9902
T Critical of all data: T_{cr} = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	41.7000	False		1

Iron, total, mg/L

Location: APW-9

Mean of all data: 1.0415
Standard Deviation of all data: 1.2895
Largest Observation Concentration of all data: X_n = 5.0600
Test Statistic, high extreme of all data: T_n = 3.1163
T Critical of all data: T_{cr} = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	5.0600	False		1

Lead, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: X_n = 0.0005
Test Statistic, high extreme of all data: T_n = 0.5365
T Critical of all data: T_{cr} = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Lead, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Lead, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Lead, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0005
Standard Deviation of all data: 0.0001
Largest Observation Concentration of all data: Xn = 0.0011
Test Statistic, high extreme of all data: Tn = 4.3644
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0011	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Lead, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Lead, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0005
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 3.0839
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/21/2022	0.0013	False		1

Lead, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0004
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0011
Test Statistic, high extreme of all data: Tn = 2.9313
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	0.0011	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Lead, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0004
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 3.4299
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0013	False		1

Lead, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0004
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0017
Test Statistic, high extreme of all data: Tn = 3.6810
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0017	False		1

Lead, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Lead, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0005
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Lead, total, mg/L

Location: APW-1

Mean of all data: 0.0032
Standard Deviation of all data: 0.0036
Largest Observation Concentration of all data: Xn = 0.0179
Test Statistic, high extreme of all data: Tn = 4.1282
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0179	False		1

Lead, total, mg/L

Location: APW-10

Mean of all data: 0.0039
Standard Deviation of all data: 0.0097
Largest Observation Concentration of all data: Xn = 0.0469
Test Statistic, high extreme of all data: Tn = 4.4343
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0469	False		1

Lead, total, mg/L

Location: APW-11

Mean of all data: 0.0044
Standard Deviation of all data: 0.0127
Largest Observation Concentration of all data: Xn = 0.0605
Test Statistic, high extreme of all data: Tn = 4.4130
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0605	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Lead, total, mg/L

Location: APW-12

Mean of all data: 0.0040
Standard Deviation of all data: 0.0094
Largest Observation Concentration of all data: $X_n = 0.0438$
Test Statistic, high extreme of all data: $T_n = 4.2258$
T Critical of all data: $T_{cr} = 2.5800$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0438	False		1

Lead, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0011$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, total, mg/L

Location: APW-2

Mean of all data: 0.0009
Standard Deviation of all data: 0.0008
Largest Observation Concentration of all data: $X_n = 0.0039$
Test Statistic, high extreme of all data: $T_n = 3.8189$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0039	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Lead, total, mg/L

Location: APW-3

Mean of all data: 0.0013
Standard Deviation of all data: 0.0016
Largest Observation Concentration of all data: Xn = 0.0068
Test Statistic, high extreme of all data: Tn = 3.3607
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0068	False		1

Lead, total, mg/L

Location: APW-4

Mean of all data: 0.0016
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0058
Test Statistic, high extreme of all data: Tn = 2.4683
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, total, mg/L

Location: APW-5

Mean of all data: 0.0012
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0078
Test Statistic, high extreme of all data: Tn = 3.7701
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0078	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Lead, total, mg/L

Location: APW-6

Mean of all data: 0.0010
Standard Deviation of all data: 0.0008
Largest Observation Concentration of all data: Xn = 0.0040
Test Statistic, high extreme of all data: Tn = 3.7902
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0040	False		1

Lead, total, mg/L

Location: APW-7

Mean of all data: 0.0017
Standard Deviation of all data: 0.0053
Largest Observation Concentration of all data: Xn = 0.0276
Test Statistic, high extreme of all data: Tn = 4.8888
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0276	False		1

Lead, total, mg/L

Location: APW-8

Mean of all data: 0.0026
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0484
Test Statistic, high extreme of all data: Tn = 4.9896
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0484	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Lead, total, mg/L

Location: APW-9

Mean of all data: 0.0013
Standard Deviation of all data: 0.0013
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 2.7909
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0050	False		1

Manganese, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0032
Standard Deviation of all data: 0.0019
Largest Observation Concentration of all data: Xn = 0.0091
Test Statistic, high extreme of all data: Tn = 3.1091
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	0.0091	False		1

Manganese, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0056
Standard Deviation of all data: 0.0089
Largest Observation Concentration of all data: Xn = 0.0452
Test Statistic, high extreme of all data: Tn = 4.4586
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	0.0452	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Manganese, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0102
Standard Deviation of all data: 0.0203
Largest Observation Concentration of all data: Xn = 0.0900
Test Statistic, high extreme of all data: Tn = 3.9410
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/04/2019	0.0900	False		1

Manganese, dissolved, mg/L

Location: APW-12

Mean of all data: 1.2098
Standard Deviation of all data: 0.3044
Largest Observation Concentration of all data: Xn = 1.7400
Test Statistic, high extreme of all data: Tn = 1.7419
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0035
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Manganese, dissolved, mg/L

Location: APW-2

Mean of all data: 0.4429
Standard Deviation of all data: 0.3177
Largest Observation Concentration of all data: Xn = 1.0700
Test Statistic, high extreme of all data: Tn = 1.9740
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, dissolved, mg/L

Location: APW-3

Mean of all data: 0.7745
Standard Deviation of all data: 0.2976
Largest Observation Concentration of all data: Xn = 1.3600
Test Statistic, high extreme of all data: Tn = 1.9673
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, dissolved, mg/L

Location: APW-4

Mean of all data: 1.9113
Standard Deviation of all data: 0.9133
Largest Observation Concentration of all data: Xn = 5.4000
Test Statistic, high extreme of all data: Tn = 3.8200
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2011	5.4000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   LT Multiplier: x 0.50

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Manganese, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0041
Standard Deviation of all data: 0.0066
Largest Observation Concentration of all data: $X_n = 0.0400$
Test Statistic, high extreme of all data: $T_n = 5.4803$
T Critical of all data: $T_{cr} = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	0.0400	False		1

Manganese, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0039
Standard Deviation of all data: 0.0038
Largest Observation Concentration of all data: $X_n = 0.0224$
Test Statistic, high extreme of all data: $T_n = 4.9110$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0224	False		1

Manganese, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0673
Standard Deviation of all data: 0.1374
Largest Observation Concentration of all data: $X_n = 0.6110$
Test Statistic, high extreme of all data: $T_n = 3.9562$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/28/2017	0.6110	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Manganese, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0032
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0035
Test Statistic, high extreme of all data: Tn = 0.4092
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0034
Standard Deviation of all data: 0.0012
Largest Observation Concentration of all data: Xn = 0.0080
Test Statistic, high extreme of all data: Tn = 3.8741
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	0.0080	False		1

Manganese, total, mg/L

Location: APW-1

Mean of all data: 0.2362
Standard Deviation of all data: 0.3553
Largest Observation Concentration of all data: Xn = 1.7900
Test Statistic, high extreme of all data: Tn = 4.3727
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	1.7900	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Manganese, total, mg/L

Location: APW-10

Mean of all data: 0.2600
Standard Deviation of all data: 0.7134
Largest Observation Concentration of all data: Xn = 3.4300
Test Statistic, high extreme of all data: Tn = 4.4437
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	3.4300	False		1

Manganese, total, mg/L

Location: APW-11

Mean of all data: 0.2754
Standard Deviation of all data: 0.7703
Largest Observation Concentration of all data: Xn = 3.6900
Test Statistic, high extreme of all data: Tn = 4.4328
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	3.6900	False		1

Manganese, total, mg/L

Location: APW-12

Mean of all data: 2.6840
Standard Deviation of all data: 2.4080
Largest Observation Concentration of all data: Xn = 12.0000
Test Statistic, high extreme of all data: Tn = 3.8688
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	12.0000	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Manganese, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0683
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, total, mg/L

Location: APW-2

Mean of all data: 0.4155
Standard Deviation of all data: 0.2777
Largest Observation Concentration of all data: X_n = 1.1000
Test Statistic, high extreme of all data: T_n = 2.4653
T Critical of all data: T_{cr} = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Manganese, total, mg/L

Location: APW-3

Mean of all data: 0.9626
Standard Deviation of all data: 0.2270
Largest Observation Concentration of all data: X_n = 1.4800
Test Statistic, high extreme of all data: T_n = 2.2788
T Critical of all data: T_{cr} = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Manganese, total, mg/L

Location: APW-4

Mean of all data: 1.6930
Standard Deviation of all data: 0.3975
Largest Observation Concentration of all data: Xn = 2.3500
Test Statistic, high extreme of all data: Tn = 1.6526
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/08/2023	0.4990	False	-1	

Manganese, total, mg/L

Location: APW-5

Mean of all data: 0.1254
Standard Deviation of all data: 0.2337
Largest Observation Concentration of all data: Xn = 1.1500
Test Statistic, high extreme of all data: Tn = 4.3844
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	1.1500	False		1

Manganese, total, mg/L

Location: APW-6

Mean of all data: 0.0454
Standard Deviation of all data: 0.0511
Largest Observation Concentration of all data: Xn = 0.2330
Test Statistic, high extreme of all data: Tn = 3.6701
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.2330	False		1

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023
Confidence Level: 95%
Transform: None

LT Multiplier: x 0.50
Number of Outliers: One Outlier

Manganese, total, mg/L

Location: APW-7

Mean of all data: 0.1941
Standard Deviation of all data: 0.3898
Largest Observation Concentration of all data: Xn = 1.9200
Test Statistic, high extreme of all data: Tn = 4.4276
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	1.9200	False		1

Manganese, total, mg/L

Location: APW-8

Mean of all data: 0.1545
Standard Deviation of all data: 0.5158
Largest Observation Concentration of all data: Xn = 2.7100
Test Statistic, high extreme of all data: Tn = 4.9540
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	2.7100	False		1

Manganese, total, mg/L

Location: APW-9

Mean of all data: 0.1066
Standard Deviation of all data: 0.1398
Largest Observation Concentration of all data: Xn = 0.5250
Test Statistic, high extreme of all data: Tn = 2.9926
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.5250	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Mercury, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.5110
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.4728
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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12/08/2023

10:17:34AM

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, total, mg/L

Location: APW-1

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, total, mg/L

Location: APW-10

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, total, mg/L

Location: APW-11

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0001$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-12

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0001$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0001$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Mercury, total, mg/L

Location: APW-2

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0001
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-3

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0001
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-4

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0001
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Mercury, total, mg/L

Location: APW-5

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-6

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-7

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

MANAGES V 4.1.0

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Mercury, total, mg/L

Location: APW-8

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Mercury, total, mg/L

Location: APW-9

Mean of all data: 0.0001
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0001
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nickel, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0025
Standard Deviation of all data: 0.0023
Largest Observation Concentration of all data: Xn = 0.0140
Test Statistic, high extreme of all data: Tn = 5.0314
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/24/2011	0.0140	False		1

Based on Grubbs one-sided outlier test

MANAGES V 4.1.0

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Nickel, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0025$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0071
Standard Deviation of all data: 0.0025
Largest Observation Concentration of all data: $X_n = 0.0109$
Test Statistic, high extreme of all data: $T_n = 1.5365$
T Critical of all data: $T_{cr} = 2.5800$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nickel, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nickel, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0037
Standard Deviation of all data: 0.0029
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 2.8516
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/24/2011	0.0120	False		1

Nickel, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0033
Standard Deviation of all data: 0.0027
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 3.2064
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/17/2012	0.0120	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Nickel, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0037
Standard Deviation of all data: 0.0036
Largest Observation Concentration of all data: Xn = 0.0190
Test Statistic, high extreme of all data: Tn = 4.2951
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/15/2011	0.0190	False		1

Nickel, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0026
Standard Deviation of all data: 0.0019
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 3.8316
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/24/2011	0.0100	False		1

Nickel, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Nickel, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nickel, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0025
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0025
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nickel, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0038
Standard Deviation of all data: 0.0030
Largest Observation Concentration of all data: Xn = 0.0119
Test Statistic, high extreme of all data: Tn = 2.6541
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nickel, total, mg/L

Location: APW-1

Mean of all data: 0.0095
Standard Deviation of all data: 0.0115
Largest Observation Concentration of all data: $X_n = 0.0583$
Test Statistic, high extreme of all data: $T_n = 4.2380$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0583	False		1

Nickel, total, mg/L

Location: APW-10

Mean of all data: 0.0118
Standard Deviation of all data: 0.0333
Largest Observation Concentration of all data: $X_n = 0.1600$
Test Statistic, high extreme of all data: $T_n = 4.4503$
T Critical of all data: $T_{cr} = 2.6030$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.1600	False		1

Nickel, total, mg/L

Location: APW-11

Mean of all data: 0.0120
Standard Deviation of all data: 0.0318
Largest Observation Concentration of all data: $X_n = 0.1520$
Test Statistic, high extreme of all data: $T_n = 4.4084$
T Critical of all data: $T_{cr} = 2.6030$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1520	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nickel, total, mg/L

Location: APW-12

Mean of all data: 0.0170
Standard Deviation of all data: 0.0205
Largest Observation Concentration of all data: Xn = 0.1040
Test Statistic, high extreme of all data: Tn = 4.2366
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.1040	False		1

Nickel, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0056
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, total, mg/L

Location: APW-2

Mean of all data: 0.0033
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0078
Test Statistic, high extreme of all data: Tn = 2.7087
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0078	False		1

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Nickel, total, mg/L

Location: APW-3

Mean of all data: 0.0031
Standard Deviation of all data: 0.0018
Largest Observation Concentration of all data: Xn = 0.0091
Test Statistic, high extreme of all data: Tn = 3.3078
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0091	False		1

Nickel, total, mg/L

Location: APW-4

Mean of all data: 0.0032
Standard Deviation of all data: 0.0022
Largest Observation Concentration of all data: Xn = 0.0107
Test Statistic, high extreme of all data: Tn = 3.4815
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/21/2017	0.0107	False		1

Nickel, total, mg/L

Location: APW-5

Mean of all data: 0.0049
Standard Deviation of all data: 0.0065
Largest Observation Concentration of all data: Xn = 0.0332
Test Statistic, high extreme of all data: Tn = 4.3592
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0332	False		1

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nickel, total, mg/L

Location: APW-6

Mean of all data: 0.0031
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0103
Test Statistic, high extreme of all data: Tn = 4.1262
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0103	False		1

Nickel, total, mg/L

Location: APW-7

Mean of all data: 0.0044
Standard Deviation of all data: 0.0078
Largest Observation Concentration of all data: Xn = 0.0417
Test Statistic, high extreme of all data: Tn = 4.8076
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0417	False		1

Nickel, total, mg/L

Location: APW-8

Mean of all data: 0.0077
Standard Deviation of all data: 0.0225
Largest Observation Concentration of all data: Xn = 0.1200
Test Statistic, high extreme of all data: Tn = 4.9812
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1200	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nickel, total, mg/L

Location: APW-9

Mean of all data: 0.0065
Standard Deviation of all data: 0.0053
Largest Observation Concentration of all data: Xn = 0.0194
Test Statistic, high extreme of all data: Tn = 2.4396
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrate nitrogen, dissolved, mg/L

Location: APW-1

Mean of all data: 3.854
Standard Deviation of all data: 1.421
Largest Observation Concentration of all data: Xn = 8.240
Test Statistic, high extreme of all data: Tn = 3.087
T Critical of all data: Tcr = 2.811

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/05/2018	8.240	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-10

Mean of all data: 2.955
Standard Deviation of all data: 0.721
Largest Observation Concentration of all data: Xn = 4.530
Test Statistic, high extreme of all data: Tn = 2.183
T Critical of all data: Tcr = 2.603

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

12/08/2023

10:17:34AM

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: APW-11

Mean of all data: 3.272
Standard Deviation of all data: 1.140
Largest Observation Concentration of all data: Xn = 5.470
Test Statistic, high extreme of all data: Tn = 1.929
T Critical of all data: Tcr = 2.603

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrate nitrogen, dissolved, mg/L

Location: APW-12

Mean of all data: 1.184
Standard Deviation of all data: 1.574
Largest Observation Concentration of all data: Xn = 5.500
Test Statistic, high extreme of all data: Tn = 2.742
T Critical of all data: Tcr = 2.580

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	5.500	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-13

Mean of all data: 0.000
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 4.620
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: APW-2

Mean of all data: 0.047
Standard Deviation of all data: 0.082
Largest Observation Concentration of all data: Xn = 0.400
Test Statistic, high extreme of all data: Tn = 4.285
T Critical of all data: Tcr = 2.786

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	0.400	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-3

Mean of all data: 0.035
Standard Deviation of all data: 0.082
Largest Observation Concentration of all data: Xn = 0.490
Test Statistic, high extreme of all data: Tn = 5.520
T Critical of all data: Tcr = 2.786

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	0.490	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-4

Mean of all data: 0.181
Standard Deviation of all data: 0.682
Largest Observation Concentration of all data: Xn = 3.890
Test Statistic, high extreme of all data: Tn = 5.440
T Critical of all data: Tcr = 2.773

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/08/2023	3.890	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: APW-5

Mean of all data: 2.211
Standard Deviation of all data: 0.690
Largest Observation Concentration of all data: Xn = 4.290
Test Statistic, high extreme of all data: Tn = 3.012
T Critical of all data: Tcr = 2.811

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	4.290	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-6

Mean of all data: 0.410
Standard Deviation of all data: 0.389
Largest Observation Concentration of all data: Xn = 2.130
Test Statistic, high extreme of all data: Tn = 4.418
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	2.130	False		1

Nitrate nitrogen, dissolved, mg/L

Location: APW-7

Mean of all data: 1.886
Standard Deviation of all data: 1.790
Largest Observation Concentration of all data: Xn = 5.470
Test Statistic, high extreme of all data: Tn = 2.002
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: APW-8

Mean of all data: 4.277
Standard Deviation of all data: 0.690
Largest Observation Concentration of all data: Xn = 5.770
Test Statistic, high extreme of all data: Tn = 2.164
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrate nitrogen, dissolved, mg/L

Location: APW-9

Mean of all data: 3.200
Standard Deviation of all data: 1.277
Largest Observation Concentration of all data: Xn = 8.330
Test Statistic, high extreme of all data: Tn = 4.018
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/29/2020	8.330	False		1

Nitrite nitrogen, dissolved, mg/L

Location: APW-1

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Nitrite nitrogen, dissolved, mg/L

Location: APW-10

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 2.56

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrite nitrogen, dissolved, mg/L

Location: APW-11

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 2.56

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrite nitrogen, dissolved, mg/L

Location: APW-12

Mean of all data: 0.03
Standard Deviation of all data: 0.01
Largest Observation Concentration of all data: Xn = 0.07
Test Statistic, high extreme of all data: Tn = 3.39
T Critical of all data: Tcr = 2.58

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
02/17/2020	0.07	False		1

Based on Grubbs one-sided outlier test

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12/08/2023

10:17:34AM

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nitrite nitrogen, dissolved, mg/L

Location: APW-13

Mean of all data: 0.00
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrite nitrogen, dissolved, mg/L

Location: APW-2

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrite nitrogen, dissolved, mg/L

Location: APW-3

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Nitrite nitrogen, dissolved, mg/L

Location: APW-4

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrite nitrogen, dissolved, mg/L

Location: APW-5

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrite nitrogen, dissolved, mg/L

Location: APW-6

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Nitrite nitrogen, dissolved, mg/L

Location: APW-7

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrite nitrogen, dissolved, mg/L

Location: APW-8

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Nitrite nitrogen, dissolved, mg/L

Location: APW-9

Mean of all data: 0.03
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: Xn = 0.03
Test Statistic, high extreme of all data: Tn = 0.00
T Critical of all data: Tcr = 0.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

pH (field), STD

Location: APW-1

Mean of all data: 6.99
Standard Deviation of all data: 0.29
Largest Observation Concentration of all data: Xn = 7.83
Test Statistic, high extreme of all data: Tn = 2.90
T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/24/2011	7.83	False		1

pH (field), STD

Location: APW-10

Mean of all data: 7.52
Standard Deviation of all data: 0.14
Largest Observation Concentration of all data: Xn = 7.75
Test Statistic, high extreme of all data: Tn = 1.61
T Critical of all data: Tcr = 2.60

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/30/2021	7.11	False	-1	

pH (field), STD

Location: APW-11

Mean of all data: 7.38
Standard Deviation of all data: 0.15
Largest Observation Concentration of all data: Xn = 7.57
Test Statistic, high extreme of all data: Tn = 1.28
T Critical of all data: Tcr = 2.60

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

---

pH (field), STD

Location: APW-12

Mean of all data: 6.89
Standard Deviation of all data: 0.20
Largest Observation Concentration of all data: $Xn = 7.24$
Test Statistic, high extreme of all data: $Tn = 1.76$
T Critical of all data: $Tcr = 2.58$

			Outlier	Outlier
Sample Date	Value	LT_Value	Low Side	High Side

No Outliers

pH (field), STD

Location: APW-13

Mean of all data: 0.00
Standard Deviation of all data: 0.00
Largest Observation Concentration of all data: $Xn = 7.06$
Test Statistic, high extreme of all data: $Tn = 0.00$
T Critical of all data: $Tcr = 0.00$

			Outlier	Outlier
Sample Date	Value	LT_Value	Low Side	High Side

No Outliers

pH (field), STD

Location: APW-2

Mean of all data: 6.85
Standard Deviation of all data: 0.26
Largest Observation Concentration of all data: $Xn = 7.41$
Test Statistic, high extreme of all data: $Tn = 2.18$
T Critical of all data: $Tcr = 2.77$

			Outlier	Outlier
Sample Date	Value	LT_Value	Low Side	High Side
12/13/2010	5.98	False	-1	

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

---

pH (field), STD

Location: APW-3

Mean of all data: 7.49

Standard Deviation of all data: 0.35

Largest Observation Concentration of all data: Xn = 8.36

Test Statistic, high extreme of all data: Tn = 2.49

T Critical of all data: Tcr = 2.77

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

pH (field), STD

Location: APW-4

Mean of all data: 6.87

Standard Deviation of all data: 0.25

Largest Observation Concentration of all data: Xn = 7.42

Test Statistic, high extreme of all data: Tn = 2.18

T Critical of all data: Tcr = 2.76

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	5.88	False	-1	

pH (field), STD

Location: APW-5

Mean of all data: 7.36

Standard Deviation of all data: 0.25

Largest Observation Concentration of all data: Xn = 7.91

Test Statistic, high extreme of all data: Tn = 2.20

T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	6.44	False	-1	

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

---

pH (field), STD

Location: APW-6

Mean of all data: 7.15
Standard Deviation of all data: 0.18
Largest Observation Concentration of all data: X_n = 7.53
Test Statistic, high extreme of all data: T_n = 2.10
T Critical of all data: T_{cr} = 2.70

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

pH (field), STD

Location: APW-7

Mean of all data: 7.00
Standard Deviation of all data: 0.16
Largest Observation Concentration of all data: X_n = 7.16
Test Statistic, high extreme of all data: T_n = 1.02
T Critical of all data: T_{cr} = 2.68

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/25/2023	6.50	False	-1	

pH (field), STD

Location: APW-8

Mean of all data: 7.32
Standard Deviation of all data: 0.15
Largest Observation Concentration of all data: X_n = 7.56
Test Statistic, high extreme of all data: T_n = 1.57
T Critical of all data: T_{cr} = 2.70

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/26/2023	6.89	False	-1	

Based on Grubbs one-sided outlier test

12/08/2023

10:17:34AM

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

pH (field), STD

Location: APW-9

Mean of all data: 6.94

Standard Deviation of all data: 0.16

Largest Observation Concentration of all data: Xn = 7.24

Test Statistic, high extreme of all data: Tn = 1.85

T Critical of all data: Tcr = 2.68

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0157

Standard Deviation of all data: 0.0080

Largest Observation Concentration of all data: Xn = 0.0200

Test Statistic, high extreme of all data: Tn = 0.5359

T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0200

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0200

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0212
Standard Deviation of all data: 0.0054
Largest Observation Concentration of all data: $X_n = 0.0453$
Test Statistic, high extreme of all data: $T_n = 4.4772$
T Critical of all data: $T_{cr} = 2.6030$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	0.0453	False		1

Selenium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0873$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0161
Standard Deviation of all data: 0.0077
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.5089
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0160
Standard Deviation of all data: 0.0078
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.5099
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0191
Standard Deviation of all data: 0.0044
Largest Observation Concentration of all data: Xn = 0.0300
Test Statistic, high extreme of all data: Tn = 2.4532
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	<0.0000	True	-1	

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0158
Standard Deviation of all data: 0.0078
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.5349
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0692
Standard Deviation of all data: 0.0198
Largest Observation Concentration of all data: $X_n = 0.0963$
Test Statistic, high extreme of all data: $T_n = 1.3700$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, total, mg/L

Location: APW-1

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, total, mg/L

Location: APW-10

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, total, mg/L

Location: APW-11

Mean of all data: 0.0213
Standard Deviation of all data: 0.0059
Largest Observation Concentration of all data: Xn = 0.0479
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	0.0479	False		1

Selenium, total, mg/L

Location: APW-12

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0892
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, total, mg/L

Location: APW-2

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, total, mg/L

Location: APW-3

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Selenium, total, mg/L

Location: APW-4

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, total, mg/L

Location: APW-5

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, total, mg/L

Location: APW-6

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0200$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Selenium, total, mg/L

Location: APW-7

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, total, mg/L

Location: APW-8

Mean of all data: 0.0751
Standard Deviation of all data: 0.0158
Largest Observation Concentration of all data: Xn = 0.1110
Test Statistic, high extreme of all data: Tn = 2.2697
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Selenium, total, mg/L

Location: APW-9

Mean of all data: 0.0200
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0200
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Silver, dissolved, mg/L

Location: APW-1

Mean of all data: 0.003
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.625$
T Critical of all data: $T_{cr} = 2.811$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-10

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.000$
T Critical of all data: $T_{cr} = 0.000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-11

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.000$
T Critical of all data: $T_{cr} = 0.000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Silver, dissolved, mg/L

Location: APW-12

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.000$
T Critical of all data: $T_{cr} = 0.000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-13

Mean of all data: 0.000
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.000$
T Critical of all data: $T_{cr} = 0.000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-2

Mean of all data: 0.003
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.605$
T Critical of all data: $T_{cr} = 2.786$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Silver, dissolved, mg/L

Location: APW-3

Mean of all data: 0.003
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.605$
T Critical of all data: $T_{cr} = 2.786$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, dissolved, mg/L

Location: APW-4

Mean of all data: 0.003
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.571$
T Critical of all data: $T_{cr} = 2.773$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, dissolved, mg/L

Location: APW-5

Mean of all data: 0.003
Standard Deviation of all data: 0.001
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.625$
T Critical of all data: $T_{cr} = 2.811$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Silver, dissolved, mg/L

Location: APW-6

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.409
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-7

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, dissolved, mg/L

Location: APW-8

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.409
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

12/08/2023

10:17:34AM

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Silver, dissolved, mg/L

Location: APW-9

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-1

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.409
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-10

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023 **LT Multiplier: x 0.50**

Confidence Level: 95% **Number of Outliers: One Outlier**

Transform: None

Silver, total, mg/L

Location: APW-11

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-12

Mean of all data: 0.004
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-13

Mean of all data: 0.000
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.000
T Critical of all data: Tcr = 0.000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Silver, total, mg/L

Location: APW-2

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-3

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, total, mg/L

Location: APW-4

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Silver, total, mg/L

Location: APW-5

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.409
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, total, mg/L

Location: APW-6

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.409
T Critical of all data: Tcr = 2.698

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, total, mg/L

Location: APW-7

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: Xn = 0.004
Test Statistic, high extreme of all data: Tn = 0.418
T Critical of all data: Tcr = 2.681

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Silver, total, mg/L

Location: APW-8

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.409$
T Critical of all data: $T_{cr} = 2.698$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Silver, total, mg/L

Location: APW-9

Mean of all data: 0.003
Standard Deviation of all data: 0.000
Largest Observation Concentration of all data: $X_n = 0.004$
Test Statistic, high extreme of all data: $T_n = 0.418$
T Critical of all data: $T_{cr} = 2.681$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-1

Mean of all data: 466
Standard Deviation of all data: 179
Largest Observation Concentration of all data: $X_n = 1030$
Test Statistic, high extreme of all data: $T_n = 3$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/17/2021	1030	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-10

Mean of all data: 558
Standard Deviation of all data: 97
Largest Observation Concentration of all data: Xn = 809
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-11

Mean of all data: 656
Standard Deviation of all data: 197
Largest Observation Concentration of all data: Xn = 1100
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-12

Mean of all data: 789
Standard Deviation of all data: 156
Largest Observation Concentration of all data: Xn = 1138
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-13

Mean of all data: 0
Standard Deviation of all data: 0
Largest Observation Concentration of all data: Xn = 1120
Test Statistic, high extreme of all data: Tn = 0
T Critical of all data: Tcr = 0

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-2

Mean of all data: 773
Standard Deviation of all data: 190
Largest Observation Concentration of all data: Xn = 1152
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-3

Mean of all data: 1095
Standard Deviation of all data: 172
Largest Observation Concentration of all data: Xn = 1430
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-4

Mean of all data: 805
Standard Deviation of all data: 109
Largest Observation Concentration of all data: Xn = 967
Test Statistic, high extreme of all data: Tn = 1
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-5

Mean of all data: 527
Standard Deviation of all data: 83
Largest Observation Concentration of all data: Xn = 707
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2010	267	False	-1	

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-6

Mean of all data: 575
Standard Deviation of all data: 106
Largest Observation Concentration of all data: Xn = 793
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

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User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

___

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-7

Mean of all data: 649
Standard Deviation of all data: 85
Largest Observation Concentration of all data: Xn = 819
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-8

Mean of all data: 963
Standard Deviation of all data: 129
Largest Observation Concentration of all data: Xn = 1240
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Specific Conductance @ 25C (field), micromhos/cm

Location: APW-9

Mean of all data: 1261
Standard Deviation of all data: 275
Largest Observation Concentration of all data: Xn = 1740
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

___

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Sulfate, dissolved, mg/L

Location: APW-1

Mean of all data: 16
Standard Deviation of all data: 5
Largest Observation Concentration of all data: $X_n = 33$
Test Statistic, high extreme of all data: $T_n = 4$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/24/2011	33	False		1

Sulfate, dissolved, mg/L

Location: APW-10

Mean of all data: 85
Standard Deviation of all data: 25
Largest Observation Concentration of all data: $X_n = 126$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L

Location: APW-11

Mean of all data: 106
Standard Deviation of all data: 72
Largest Observation Concentration of all data: $X_n = 309$
Test Statistic, high extreme of all data: $T_n = 3$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	309	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Sulfate, dissolved, mg/L

Location: APW-12

Mean of all data: 46
Standard Deviation of all data: 17
Largest Observation Concentration of all data: Xn = 96
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	96	False		1

Sulfate, dissolved, mg/L

Location: APW-13

Mean of all data: 0
Standard Deviation of all data: 0
Largest Observation Concentration of all data: Xn = 205
Test Statistic, high extreme of all data: Tn = 0
T Critical of all data: Tcr = 0

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L

Location: APW-2

Mean of all data: 21
Standard Deviation of all data: 15
Largest Observation Concentration of all data: Xn = 67
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/27/2018	67	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Sulfate, dissolved, mg/L

Location: APW-3

Mean of all data: 130
Standard Deviation of all data: 102
Largest Observation Concentration of all data: $X_n = 310$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Sulfate, dissolved, mg/L

Location: APW-4

Mean of all data: 26
Standard Deviation of all data: 12
Largest Observation Concentration of all data: $X_n = 53$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Sulfate, dissolved, mg/L

Location: APW-5

Mean of all data: 30
Standard Deviation of all data: 18
Largest Observation Concentration of all data: $X_n = 83$
Test Statistic, high extreme of all data: $T_n = 3$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/27/2018	83	False		1

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Sulfate, dissolved, mg/L

Location: APW-6

Mean of all data: 19
Standard Deviation of all data: 9
Largest Observation Concentration of all data: $X_n = 38$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L

Location: APW-7

Mean of all data: 29
Standard Deviation of all data: 8
Largest Observation Concentration of all data: $X_n = 41$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L

Location: APW-8

Mean of all data: 287
Standard Deviation of all data: 71
Largest Observation Concentration of all data: $X_n = 421$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023
Confidence Level: 95%
Transform: None

LT Multiplier: x 0.50
Number of Outliers: One Outlier

Sulfate, dissolved, mg/L

Location: APW-9

Mean of all data: 431
Standard Deviation of all data: 148
Largest Observation Concentration of all data: Xn = 757
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0007
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.6722
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Thallium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Thallium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0007
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.6551
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.6096
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0008
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.6225
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Thallium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0007
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.6722$
T Critical of all data: $T_{cr} = 2.8110$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.4092$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.4181$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Thallium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4092
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Thallium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4181
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Thallium, total, mg/L

Location: APW-1

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4092
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Thallium, total, mg/L

Location: APW-10

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-11

Mean of all data: 0.0010
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-12

Mean of all data: 0.0011
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0024
Test Statistic, high extreme of all data: Tn = 4.3644
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0024	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Thallium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-2

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4181
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-3

Mean of all data: 0.0010
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0021
Test Statistic, high extreme of all data: Tn = 3.8433
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/06/2021	0.0021	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Thallium, total, mg/L

Location: APW-4

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4181
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Thallium, total, mg/L

Location: APW-5

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4092
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Thallium, total, mg/L

Location: APW-6

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 0.4092
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Thallium, total, mg/L

Location: APW-7

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.4181$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-8

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.4092$
T Critical of all data: $T_{cr} = 2.6980$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Thallium, total, mg/L

Location: APW-9

Mean of all data: 0.0009
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: $X_n = 0.0010$
Test Statistic, high extreme of all data: $T_n = 0.4181$
T Critical of all data: $T_{cr} = 2.6810$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Total Dissolved Solids, mg/L

Location: APW-1

Mean of all data: 228
Standard Deviation of all data: 75
Largest Observation Concentration of all data: Xn = 420
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Total Dissolved Solids, mg/L

Location: APW-10

Mean of all data: 328
Standard Deviation of all data: 42
Largest Observation Concentration of all data: Xn = 408
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Total Dissolved Solids, mg/L

Location: APW-11

Mean of all data: 389
Standard Deviation of all data: 142
Largest Observation Concentration of all data: Xn = 812
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/26/2021	812	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Total Dissolved Solids, mg/L

Location: APW-12

Mean of all data: 435
Standard Deviation of all data: 99
Largest Observation Concentration of all data: $X_n = 730$
Test Statistic, high extreme of all data: $T_n = 3$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	730	False		1

Total Dissolved Solids, mg/L

Location: APW-13

Mean of all data: 0
Standard Deviation of all data: 0
Largest Observation Concentration of all data: $X_n = 624$
Test Statistic, high extreme of all data: $T_n = 0$
T Critical of all data: $T_{cr} = 0$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Total Dissolved Solids, mg/L

Location: APW-2

Mean of all data: 445
Standard Deviation of all data: 113
Largest Observation Concentration of all data: $X_n = 630$
Test Statistic, high extreme of all data: $T_n = 2$
T Critical of all data: $T_{cr} = 3$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Total Dissolved Solids, mg/L

Location: APW-3

Mean of all data: 702
Standard Deviation of all data: 88
Largest Observation Concentration of all data: Xn = 970
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/17/2012	970	False		1

Total Dissolved Solids, mg/L

Location: APW-4

Mean of all data: 452
Standard Deviation of all data: 74
Largest Observation Concentration of all data: Xn = 690
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	690	False		1

Total Dissolved Solids, mg/L

Location: APW-5

Mean of all data: 277
Standard Deviation of all data: 59
Largest Observation Concentration of all data: Xn = 382
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Total Dissolved Solids, mg/L

Location: APW-6

Mean of all data: 307
Standard Deviation of all data: 48
Largest Observation Concentration of all data: Xn = 398
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Total Dissolved Solids, mg/L

Location: APW-7

Mean of all data: 348
Standard Deviation of all data: 41
Largest Observation Concentration of all data: Xn = 464
Test Statistic, high extreme of all data: Tn = 3
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/29/2019	464	False		1

Total Dissolved Solids, mg/L

Location: APW-8

Mean of all data: 650
Standard Deviation of all data: 92
Largest Observation Concentration of all data: Xn = 832
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Total Dissolved Solids, mg/L

Location: APW-9

Mean of all data: 932
Standard Deviation of all data: 245
Largest Observation Concentration of all data: Xn = 1430
Test Statistic, high extreme of all data: Tn = 2
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Vanadium, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Vanadium, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

12/08/2023

10:17:34AM

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Vanadium, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0050

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0050

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Vanadium, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0050

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0050

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Vanadium, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0050

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0050

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Vanadium, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, total, mg/L

Location: APW-1

Mean of all data: 0.0058
Standard Deviation of all data: 0.0031
Largest Observation Concentration of all data: Xn = 0.0205
Test Statistic, high extreme of all data: Tn = 4.7186
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0205	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Vanadium, total, mg/L

Location: APW-10

Mean of all data: 0.0076
Standard Deviation of all data: 0.0122
Largest Observation Concentration of all data: Xn = 0.0622
Test Statistic, high extreme of all data: Tn = 4.4772
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0622	False		1

Vanadium, total, mg/L

Location: APW-11

Mean of all data: 0.0088
Standard Deviation of all data: 0.0158
Largest Observation Concentration of all data: Xn = 0.0790
Test Statistic, high extreme of all data: Tn = 4.4477
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0790	False		1

Vanadium, total, mg/L

Location: APW-12

Mean of all data: 0.0097
Standard Deviation of all data: 0.0185
Largest Observation Concentration of all data: Xn = 0.0894
Test Statistic, high extreme of all data: Tn = 4.3080
T Critical of all data: Tcr = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0894	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Vanadium, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Vanadium, total, mg/L

Location: APW-2

Mean of all data: 0.0052
Standard Deviation of all data: 0.0013
Largest Observation Concentration of all data: Xn = 0.0114
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0114	False		1

Vanadium, total, mg/L

Location: APW-3

Mean of all data: 0.0057
Standard Deviation of all data: 0.0026
Largest Observation Concentration of all data: Xn = 0.0160
Test Statistic, high extreme of all data: Tn = 3.8889
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0160	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Vanadium, total, mg/L

Location: APW-4

Mean of all data: 0.0059
Standard Deviation of all data: 0.0027
Largest Observation Concentration of all data: Xn = 0.0152
Test Statistic, high extreme of all data: Tn = 3.4990
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0152	False		1

Vanadium, total, mg/L

Location: APW-5

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Vanadium, total, mg/L

Location: APW-6

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Vanadium, total, mg/L

Location: APW-7

Mean of all data: 0.0072
Standard Deviation of all data: 0.0111
Largest Observation Concentration of all data: Xn = 0.0618
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0618	False		1

Vanadium, total, mg/L

Location: APW-8

Mean of all data: 0.0067
Standard Deviation of all data: 0.0091
Largest Observation Concentration of all data: Xn = 0.0522
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0522	False		1

Vanadium, total, mg/L

Location: APW-9

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Zinc, dissolved, mg/L

Location: APW-1

Mean of all data: 0.0042

Standard Deviation of all data: 0.0030

Largest Observation Concentration of all data: Xn = 0.0162

Test Statistic, high extreme of all data: Tn = 4.0358

T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.0162	False		1

Zinc, dissolved, mg/L

Location: APW-10

Mean of all data: 0.0050

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0050

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Zinc, dissolved, mg/L

Location: APW-11

Mean of all data: 0.0050

Standard Deviation of all data: 0.0000

Largest Observation Concentration of all data: Xn = 0.0050

Test Statistic, high extreme of all data: Tn = 0.0000

T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

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Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Zinc, dissolved, mg/L

Location: APW-12

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, dissolved, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, dissolved, mg/L

Location: APW-2

Mean of all data: 0.0041
Standard Deviation of all data: 0.0020
Largest Observation Concentration of all data: Xn = 0.0064
Test Statistic, high extreme of all data: Tn = 1.1370
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

LT Multiplier: x 0.50

Confidence Level: 95%

Number of Outliers: One Outlier

Transform: None

Zinc, dissolved, mg/L

Location: APW-3

Mean of all data: 0.0043
Standard Deviation of all data: 0.0024
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 3.2189
T Critical of all data: Tcr = 2.7860

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/18/2012	0.0120	False		1

Zinc, dissolved, mg/L

Location: APW-4

Mean of all data: 0.0043
Standard Deviation of all data: 0.0019
Largest Observation Concentration of all data: Xn = 0.0072
Test Statistic, high extreme of all data: Tn = 1.5215
T Critical of all data: Tcr = 2.7730

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, dissolved, mg/L

Location: APW-5

Mean of all data: 0.0039
Standard Deviation of all data: 0.0021
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.5365
T Critical of all data: Tcr = 2.8110

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023　　　　　　　　　　　　　　　**LT Multiplier: x 0.50**

Confidence Level: 95%　　　　　　　　　　　　　　　　　　　　**Number of Outliers: One Outlier**

Transform: None

Zinc, dissolved, mg/L

Location: APW-6

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, dissolved, mg/L

Location: APW-7

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, dissolved, mg/L

Location: APW-8

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: $X_n = 0.0050$
Test Statistic, high extreme of all data: $T_n = 0.0000$
T Critical of all data: $T_{cr} = 0.0000$

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Based on Grubbs one-sided outlier test

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Zinc, dissolved, mg/L

Location: APW-9

Mean of all data: 0.0050
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0050
Test Statistic, high extreme of all data: Tn = 0.0000
T Critical of all data: Tcr = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
No Outliers				

Zinc, total, mg/L

Location: APW-1

Mean of all data: 0.0103
Standard Deviation of all data: 0.0103
Largest Observation Concentration of all data: Xn = 0.0510
Test Statistic, high extreme of all data: Tn = 3.9537
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0510	False		1

Zinc, total, mg/L

Location: APW-10

Mean of all data: 0.0136
Standard Deviation of all data: 0.0347
Largest Observation Concentration of all data: Xn = 0.1680
Test Statistic, high extreme of all data: Tn = 4.4462
T Critical of all data: Tcr = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.1680	False		1

Based on Grubbs one-sided outlier test

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023

Confidence Level: 95%

Transform: None

LT Multiplier: x 0.50

Number of Outliers: One Outlier

Zinc, total, mg/L

Location: APW-11

Mean of all data: 0.0158
Standard Deviation of all data: 0.0392
Largest Observation Concentration of all data: X_n = 0.1890
Test Statistic, high extreme of all data: T_n = 4.4153
T Critical of all data: T_{cr} = 2.6030

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1890	False		1

Zinc, total, mg/L

Location: APW-12

Mean of all data: 0.0163
Standard Deviation of all data: 0.0392
Largest Observation Concentration of all data: X_n = 0.1850
Test Statistic, high extreme of all data: T_n = 4.2994
T Critical of all data: T_{cr} = 2.5800

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.1850	False		1

Zinc, total, mg/L

Location: APW-13

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: X_n = 0.0050
Test Statistic, high extreme of all data: T_n = 0.0000
T Critical of all data: T_{cr} = 0.0000

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

MANAGES V 4.1.0

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Zinc, total, mg/L

Location: APW-2

Mean of all data: 0.0067
Standard Deviation of all data: 0.0055
Largest Observation Concentration of all data: Xn = 0.0265
Test Statistic, high extreme of all data: Tn = 3.6183
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2021	0.0265	False		1

Zinc, total, mg/L

Location: APW-3

Mean of all data: 0.0084
Standard Deviation of all data: 0.0082
Largest Observation Concentration of all data: Xn = 0.0371
Test Statistic, high extreme of all data: Tn = 3.5059
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2023	0.0371	False		1

Zinc, total, mg/L

Location: APW-4

Mean of all data: 0.0099
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0369
Test Statistic, high extreme of all data: Tn = 2.9497
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/13/2021	0.0369	False		1

Based on Grubbs one-sided outlier test

MANAGES V 4.1.0

Meredosia Power Station

Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Zinc, total, mg/L

Location: APW-5

Mean of all data: 0.0057
Standard Deviation of all data: 0.0026
Largest Observation Concentration of all data: Xn = 0.0173
Test Statistic, high extreme of all data: Tn = 4.4661
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0173	False		1

Zinc, total, mg/L

Location: APW-6

Mean of all data: 0.0053
Standard Deviation of all data: 0.0016
Largest Observation Concentration of all data: Xn = 0.0133
Test Statistic, high extreme of all data: Tn = 5.0037
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0133	False		1

Zinc, total, mg/L

Location: APW-7

Mean of all data: 0.0085
Standard Deviation of all data: 0.0177
Largest Observation Concentration of all data: Xn = 0.0953
Test Statistic, high extreme of all data: Tn = 4.9029
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/19/2017	0.0953	False		1

Based on Grubbs one-sided outlier test

MANAGES V 4.1.0

Meredosia Power Station
Outlier Analysis Results

User Supplied Information

Date Range: 12/13/2010 to 11/09/2023   **LT Multiplier: x 0.50**

Confidence Level: 95%   **Number of Outliers: One Outlier**

Transform: None

Zinc, total, mg/L

Location: APW-8

Mean of all data: 0.0106
Standard Deviation of all data: 0.0269
Largest Observation Concentration of all data: Xn = 0.1450
Test Statistic, high extreme of all data: Tn = 4.9962
T Critical of all data: Tcr = 2.6980

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/2019	0.1450	False		1

Zinc, total, mg/L

Location: APW-9

Mean of all data: 0.0060
Standard Deviation of all data: 0.0028
Largest Observation Concentration of all data: Xn = 0.0154
Test Statistic, high extreme of all data: Tn = 3.4022
T Critical of all data: Tcr = 2.6810

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2018	0.0154	False		1

Based on Grubbs one-sided outlier test

APPENDIX B3
SEN SLOPE AND MANN-KENDALL TEST RESULTS - SHORT TERM

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	APW-1	**Parameter Code:**	00400
Location Class:		**Parameter:**	pH (field)
Location Type:	Groundwater	**Units:**	STD
Confidence Level:	95.00%		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.00   STD per period
  R-Squared error of fit: 0.00

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.00   STD per period
  Lower Confidence Limit of Slope, M1:   0.00   STD per period
  Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.00
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0775   mg/L per period
    R-Squared error of fit: 0.0388

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0923   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.698   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.234   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00285   mg/L per period
    R-Squared error of fit: 0.234

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00214   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00655   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00180   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.0437   mg/L per period
    R-Squared error of fit: 0.0592

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00634   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.196   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.107   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-1**   **Parameter Code:**   **00946**
Location Class: **Parameter:**   **Sulfate, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00259   mg/L per period
    R-Squared error of fit: 0.0476

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00683   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00715   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0165   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.628
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data): 0.000263 mg/L per period
    R-Squared error of fit: 0.259

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000148 mg/L per period
    Lower Confidence Limit of Slope, M1: -.000176 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.000636 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.499
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000000755   mg/L per period
    R-Squared error of fit: 0.325

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.31
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000548   mg/L per period
    R-Squared error of fit: 0.0872

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000641   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000265   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000109   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-1**   **Parameter Code:**   **01007**
Location Class: **Parameter:**   **Barium, total**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000107   mg/L per period
    R-Squared error of fit: 0.276

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000105   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000281   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000477   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
   Slope (fitted to data):   -.0000216   mg/L per period
   R-Squared error of fit: 0.307

Sen's Non-parametric estimate of the slope (two-tailed test)
   Median Slope: -.0000244   mg/L per period
   Lower Confidence Limit of Slope, M1:   -.0000637   mg/L per period
   Upper Confidence Limit of Slope, M2+1:   -.00000446   mg/L per period

Non-parametric Mann-Kendall Test for Trend
   S Statistic: -1.86
   Z test: 1.64
   At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000490   mg/L per period
    R-Squared error of fit: 0.324

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000294   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000118   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000227   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**		**Parameter Code:**	**01025**
Location Class:			**Parameter:**	**Cadmium, dissolved**
Location Type:	**Groundwater**		**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000949   mg/L per period
    R-Squared error of fit: 0.00150

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.00165   mg/L per period
    R-Squared error of fit: 0.586

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00143   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00273   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.000316   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.10
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000135   mg/L per period
    R-Squared error of fit: 0.0421

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000103   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000328   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000385   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.664
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-1**

Location Class:

Location Type: **Groundwater**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **01055**

Parameter: **Manganese, total**

Units: **mg/L**

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000141   mg/L per period
    R-Squared error of fit: 0.660

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000145   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000228   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.0000285   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.86
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
　　Slope (fitted to data):　　　　　　　　　　　　0.0　　mg/L per period
　　R-Squared error of fit:　　　　　　　　　　　　0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
　　Median Slope:　　　　　　　　　　　　　　　　0.0　　mg/L per period
　　Lower Confidence Limit of Slope, M1:　　　　　0.0　　mg/L per period
　　Upper Confidence Limit of Slope, M2+1:　　　　0.0　　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　　S Statistic:　　　　　　　　　　　　　　　　　0.0
　　Z test:　　　　　　　　　　　　　　　　　　　1.64
　　At the 95.0 % Confidence Level (two-tailed test):　　None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000441	mg/L per period
R-Squared error of fit:	0.0926	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000451	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000159	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000124	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.930
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data): 0.0 mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0 mg/L per period
  Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000175   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-1**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.07

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.25
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**00515**
Location Class:			**Parameter:**	**Total Dissolved Solids**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.128   mg/L per period
    R-Squared error of fit: 0.654

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.118   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.204   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.00501   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.75
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**00613**
Location Class:			**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:** **00618**
Location Class: **Parameter:**   **Nitrate nitrogen, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000882   mg/L per period
    R-Squared error of fit: 0.255

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000527   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00260   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.000579   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.619
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**00720**
Location Class:			**Parameter:**	**Cyanide, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**

Location Class:

Location Type:

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **00941**

Parameter: **Chloride, dissolved**

Units: **mg/L**

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00654   mg/L per period
    R-Squared error of fit: 0.783

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00660   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00998   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.00289   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.52
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:**   **00946**

Location Class: **Parameter:**   **Sulfate, dissolved**

Location Type: **Units:**   **mg/L**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   -.0666   mg/L per period

    R-Squared error of fit: 0.852

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.0683   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.0907   mg/L per period

    Upper Confidence Limit of Slope, M2+1: -.0281   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -2.74

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
　Slope (fitted to data): 　　　　　　　　　0.0　mg/L per period
　R-Squared error of fit: 　　　　　　　　　0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
　Median Slope: 　　　　　　　　　　　0.0　mg/L per period
　Lower Confidence Limit of Slope, M1: 　　0.0　mg/L per period
　Upper Confidence Limit of Slope, M2+1: 　0.0　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　S Statistic: 　　　　　　　　　　　　　0.0
　Z test: 　　　　　　　　　　　　　　　1.64
　At the 95.0 % Confidence Level (two-tailed test): 　None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000625   mg/L per period
    R-Squared error of fit: 0.123

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000693   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000273   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.07
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000163   mg/L per period
    R-Squared error of fit: 0.0732

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000000903   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000251   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000179   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.255
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.00000794   mg/L per period
    R-Squared error of fit: 0.679

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000715   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000117   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.00000116   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.24
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
　　Slope (fitted to data): $\qquad$ -.0000177　　mg/L per period
　　R-Squared error of fit: $\qquad$ 0.561

Sen's Non-parametric estimate of the slope (two-tailed test)
　　Median Slope: $\qquad$ -.0000147　　mg/L per period
　　Lower Confidence Limit of Slope, M1: $\qquad$ -.0000265　　mg/L per period
　　Upper Confidence Limit of Slope, M2+1: $\qquad$ -.00000537　　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　　S Statistic: $\qquad$ -2.10
　　Z test: $\qquad$ 1.64
　　At the 95.0 % Confidence Level (two-tailed test): $\qquad$ Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:** **01020**
Location Class: **Parameter:** **Boron, dissolved**
Location Type: **Units:** **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000787   mg/L per period
    R-Squared error of fit: 0.316

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000754   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00195   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000880   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.00107   mg/L per period
    R-Squared error of fit: 0.298

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000715   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00251   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000310   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.50
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:**   **01030**
Location Class: **Parameter:**   **Chromium, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**01034**
Location Class:			**Parameter:**	**Chromium, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000144   mg/L per period
    R-Squared error of fit: 0.0451

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000000125   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.329
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000263   mg/L per period
    R-Squared error of fit: 0.0777

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.00000272   mg/L per period
  R-Squared error of fit: 0.0777

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.436
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00263   mg/L per period
    R-Squared error of fit: 0.200

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00128   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00473   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00198   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:**   **01046**
Location Class: **Parameter:**   **Iron, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
   Slope (fitted to data):   0.0   mg/L per period
   R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
   Median Slope: 0.0   mg/L per period
   Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
   Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
   S Statistic: 0.0
   Z test: 1.64
   At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   -.00000355   mg/L per period

    R-Squared error of fit: 0.200

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.00000172   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.00000579   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.000000340   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.27

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000212   mg/L per period
    R-Squared error of fit: 0.247

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000969   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000401   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000202   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**01056**
Location Class:			**Parameter:**	**Manganese, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data): 0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-10**   **Parameter Code:**   **01065**
Location Class: **Parameter:**   **Nickel, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000652   mg/L per period
    R-Squared error of fit: 0.163

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000701   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.986
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**01087**
Location Class:			**Parameter:**	**Vanadium, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**01092**
Location Class:			**Parameter:**	**Zinc, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000401   mg/L per period
    R-Squared error of fit: 0.0777

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**01097**
Location Class:			**Parameter:**	**Antimony, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000256 mg/L per period
    R-Squared error of fit: 0.0375

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-10**		**Parameter Code:**	**71900**
Location Class:			**Parameter:**	**Mercury, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.01

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.62
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.155   mg/L per period
    R-Squared error of fit: 0.0821

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.110   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.656   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.676   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-11**   **Parameter Code:**   **00618**
Location Class: **Parameter:**   **Nitrate nitrogen, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00505   mg/L per period
    R-Squared error of fit: 0.424

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00449   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000165   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00860   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00349   mg/L per period
    R-Squared error of fit: 0.186

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00417   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0137   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00110   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.04
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0616 mg/L per period
    R-Squared error of fit: 0.0558

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0949 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.388 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.210 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.619
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-11**   **Parameter Code:**   **01000**

Location Class: **Parameter:**   **Arsenic, dissolved**

Location Type: **Units:**   **mg/L**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0000000323   mg/L per period
  R-Squared error of fit: 0.00152

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000104   mg/L per period
    R-Squared error of fit: 0.506

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000751   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000174   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000000477   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.50
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000135   mg/L per period
    R-Squared error of fit: 0.579

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000139   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000209   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.000000639   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**		**Parameter Code:**	**01020**
Location Class:			**Parameter:**	**Boron, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000359   mg/L per period
    R-Squared error of fit: 0.00625

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000175   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00409   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00632   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000622   mg/L per period
    R-Squared error of fit: 0.0154

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000180   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00663   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00608   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000174   mg/L per period
    R-Squared error of fit: 0.00152

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000608   mg/L per period
    R-Squared error of fit: 0.283

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000412   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00137   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000404   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.619
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**		**Parameter Code:**	**01046**
Location Class:			**Parameter:**	**Iron, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-11**   **Parameter Code:**   **01049**
Location Class: **Parameter:**   **Lead, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000562   mg/L per period
    R-Squared error of fit: 0.180

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000392   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000103   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000258   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

**Meredosia Power Station
Mann-Kendall Trend Analysis**

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID: **APW-11**
Location Class:
Location Type:
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **01097**
Parameter: **Antimony, total**
Units: **mg/L**

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Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-11**   **Parameter Code:**   **01147**
Location Class: **Parameter:**   **Selenium, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-11**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00 STD per period
    R-Squared error of fit: 0.04

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00 STD per period
    Lower Confidence Limit of Slope, M1:   0.00 STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00 STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -0.50
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.234   mg/L per period
    R-Squared error of fit: 0.604

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.275   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0595   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.432   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 2.35
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data): 0.00222 mg/L per period
  R-Squared error of fit: 0.0779

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.000257 mg/L per period
  Lower Confidence Limit of Slope, M1: -.00280 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.00904 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.124
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0104   mg/L per period
    R-Squared error of fit: 0.207

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0121   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0318   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00769   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.997
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**		**Parameter Code:**	**00946**
Location Class:			**Parameter:**	**Sulfate, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
   Slope (fitted to data):   0.0207   mg/L per period
   R-Squared error of fit: 0.206

Sen's Non-parametric estimate of the slope (two-tailed test)
   Median Slope: 0.0198   mg/L per period
   Lower Confidence Limit of Slope, M1:   -.0176   mg/L per period
   Upper Confidence Limit of Slope, M2+1:   0.0899   mg/L per period

Non-parametric Mann-Kendall Test for Trend
   S Statistic: 1.11
   Z test: 1.64
   At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000157   mg/L per period
    R-Squared error of fit: 0.00000179

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000990   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000996   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000143   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.126
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-12**   **Parameter Code:**   **01000**
Location Class: **Parameter:**   **Arsenic, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000441   mg/L per period
    R-Squared error of fit: 0.0850

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000000540   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000141   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000618   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.126
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-12**   **Parameter Code:**   **01005**
Location Class: **Parameter:**   **Barium, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000209   mg/L per period
    R-Squared error of fit: 0.0430

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000350   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000536   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000903   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.00000305   mg/L per period
  R-Squared error of fit: 0.000590

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.00000354   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.000145   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0000962   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.124
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000129   mg/L per period
    R-Squared error of fit: 0.576

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000117   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000108   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000214   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000129   mg/L per period
    R-Squared error of fit: 0.438

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000136   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000379   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000304   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000250   mg/L per period
    R-Squared error of fit: 0.0784

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000480   mg/L per period
    R-Squared error of fit: 0.000767

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000333   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000152   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000175   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   -.00000584   mg/L per period
    R-Squared error of fit: 0.0885

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000218   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000558   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.399
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00494   mg/L per period
    R-Squared error of fit: 0.0898

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000281   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0184   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00776   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000495   mg/L per period
    R-Squared error of fit: 0.0928

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000128   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000400   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.000571   mg/L per period
  R-Squared error of fit: 0.0212

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.00126   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.00269   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.00466   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.619
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-12**   **Parameter Code:** **01056**
Location Class: **Parameter:**   **Manganese, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000805   mg/L per period
    R-Squared error of fit: 0.379

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000920   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000283   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.00134   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-12**   **Parameter Code:** **01065**
Location Class: **Parameter:**   **Nickel, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
 Slope (fitted to data):   0.00000401 mg/L per period
 R-Squared error of fit: 0.248

Sen's Non-parametric estimate of the slope (two-tailed test)
 Median Slope: 0.00000371 mg/L per period
 Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
 Upper Confidence Limit of Slope, M2+1: 0.0000103 mg/L per period

Non-parametric Mann-Kendall Test for Trend
 S Statistic: 1.53
 Z test: 1.64
 At the 95.0 % Confidence Level (two-tailed test): None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000287   mg/L per period
    R-Squared error of fit: 0.0108

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000228   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000168   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000229   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**		**Parameter Code:**	**01085**
Location Class:			**Parameter:**	**Vanadium, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000631   mg/L per period
    R-Squared error of fit: 0.0784

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000141   mg/L per period
    R-Squared error of fit: 0.0891

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000493   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000163   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.399
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-12**   **Parameter Code:**   **01145**
Location Class: **Parameter:**   **Selenium, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-12**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:	**Groundwater**	**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.00   STD per period

    R-Squared error of fit: 0.35

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.00   STD per period

    Lower Confidence Limit of Slope, M1:   0.00   STD per period

    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.00

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data): -.126 mg/L per period
  R-Squared error of fit: 0.0898

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.0855 mg/L per period
  Lower Confidence Limit of Slope, M1: -.544 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.179 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.124
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000290 mg/L per period
    R-Squared error of fit: 0.321

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.31
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-2**   **Parameter Code:**   **00941**
Location Class: **Parameter:**   **Chloride, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0108   mg/L per period
    R-Squared error of fit: 0.181

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0131   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.986
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00607   mg/L per period
    R-Squared error of fit: 0.165

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00607   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0178   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00428   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.507
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-2**   **Parameter Code:**   **00950**
Location Class: **Parameter:**   **Fluoride, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0000265   mg/L per period
     R-Squared error of fit: 0.0942

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0000318   mg/L per period
     Lower Confidence Limit of Slope, M1:   -.0000632   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.000108   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.377
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000923 mg/L per period
    R-Squared error of fit: 0.123

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000117 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000129 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000240 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.509
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000479   mg/L per period
    R-Squared error of fit: 0.365

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000184   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.000000588   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000845   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.99
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000291   mg/L per period
    R-Squared error of fit: 0.0113

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000533   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000203   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000190   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
Slope (fitted to data):   0.0000690   mg/L per period
R-Squared error of fit: 0.327

Sen's Non-parametric estimate of the slope (two-tailed test)
Median Slope: 0.0000313   mg/L per period
Lower Confidence Limit of Slope, M1:   -.0000357   mg/L per period
Upper Confidence Limit of Slope, M2+1:   0.000143   mg/L per period

Non-parametric Mann-Kendall Test for Trend
S Statistic: 0.997
Z test: 1.64
At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000996   mg/L per period
    R-Squared error of fit: 0.211

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000572   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00232   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000817   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000761   mg/L per period
    R-Squared error of fit: 0.0875

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000488   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00189   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000651   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000458   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000387   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000363   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0106 mg/L per period
    R-Squared error of fit: 0.345

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00432 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000797 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0160 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000294   mg/L per period
    R-Squared error of fit: 0.164

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000465   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.658
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000000553   mg/L per period
    R-Squared error of fit: 0.00175

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.00000317   mg/L per period

    R-Squared error of fit: 0.329

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.00000468   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 1.00

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000398 mg/L per period
    R-Squared error of fit: 0.119

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000268 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000686 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00132 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.0000811   mg/L per period
  R-Squared error of fit: 0.0169

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.0000224   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.000581   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.000344   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.124
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**		**Parameter Code:**	**01059**
Location Class:			**Parameter:**	**Thallium, total**
Location Type:	**Groundwater**		**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.00000419   mg/L per period
  R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.873
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Electronic Filing: Received, Clerk's Office 01/17/2025

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Electronic Filing: Received, Clerk's Office 01/17/2025

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000506   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000193   mg/L per period
    R-Squared error of fit: 0.408

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000162   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.64
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000104 mg/L per period
    R-Squared error of fit: 0.636

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000130 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.83
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-2**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:	**Groundwater**	**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.20

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -0.62
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.211   mg/L per period
    R-Squared error of fit: 0.210

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.255   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.181   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.759   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0156   mg/L per period
    R-Squared error of fit: 0.275

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00473   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0331   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.73
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0725   mg/L per period
    R-Squared error of fit: 0.470

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0600   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0151   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.150   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.50
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000290   mg/L per period
    R-Squared error of fit: 0.302

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000235   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000684   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.29
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000106   mg/L per period
    R-Squared error of fit: 0.0000184

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000318   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000182   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000251   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.997
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   -.000149   mg/L per period

    R-Squared error of fit: 0.258

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.0000938   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.000304   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0000834   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.36

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000733   mg/L per period
    R-Squared error of fit: 0.300

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000774   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000168   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000187   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000788   mg/L per period
    R-Squared error of fit: 0.473

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000752   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000149   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000128   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID: APW-3   **Parameter Code:**   **01010**
Location Class: **Parameter:**   **Beryllium, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

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Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
　　Slope (fitted to data):　　　　　　　　　　　0.0118　　mg/L per period
　　R-Squared error of fit:　　　　　　　　　　0.351

Sen's Non-parametric estimate of the slope (two-tailed test)
　　Median Slope:　　　　　　　　　　　　0.00980　　mg/L per period
　　Lower Confidence Limit of Slope, M1:　　　-.00398　　mg/L per period
　　Upper Confidence Limit of Slope, M2+1:　　0.0274　　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　　S Statistic:　　　　　　　　　　　　　　　1.11
　　Z test:　　　　　　　　　　　　　　　　　1.64
　　At the 95.0 % Confidence Level (two-tailed test):　　None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0118   mg/L per period
    R-Squared error of fit: 0.306

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00979   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00747   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0280   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000711   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-3   **Parameter Code:**   01037
Location Class: **Parameter:**   Cobalt, total
Location Type: Groundwater   **Units:**   mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000379   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000814   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00659   mg/L per period
    R-Squared error of fit: 0.179

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00114   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00753   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0149   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-3   **Parameter Code:**   01046
Location Class: **Parameter:**   Iron, dissolved
Location Type: Groundwater   **Units:**   mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.00149   mg/L per period
    R-Squared error of fit: 0.0769

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000828   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00294   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00803   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
   Slope (fitted to data): 0.00000459 mg/L per period
   R-Squared error of fit: 0.219

Sen's Non-parametric estimate of the slope (two-tailed test)
   Median Slope: 0.000000446 mg/L per period
   Lower Confidence Limit of Slope, M1: -.00000292 mg/L per period
   Upper Confidence Limit of Slope, M2+1: 0.00000781 mg/L per period

Non-parametric Mann-Kendall Test for Trend
   S Statistic: 0.255
   Z test: 1.64
   At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000343   mg/L per period
    R-Squared error of fit: 0.312

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000430   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000102   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000814   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000348 mg/L per period
    R-Squared error of fit: 0.271

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000348 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000140 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000816 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.13
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data): 0.0 mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0 mg/L per period
  Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000363   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000869   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000197	mg/L per period
R-Squared error of fit:	0.143	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000131	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000454	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**		**Parameter Code:**	**01097**
Location Class:			**Parameter:**	**Antimony, total**
Location Type:	**Groundwater**		**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	APW-3	**Parameter Code:**	01145
Location Class:		**Parameter:**	Selenium, dissolved
Location Type:	Groundwater	**Units:**	mg/L
Confidence Level:	95.00%		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-3**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:	**Groundwater**	**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.00   STD per period

    R-Squared error of fit: 0.16

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.00   STD per period

    Lower Confidence Limit of Slope, M1:   0.00   STD per period

    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.36

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.189   mg/L per period
    R-Squared error of fit: 0.512

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.182   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0106   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.398   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data): 0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00360   mg/L per period
    R-Squared error of fit: 0.324

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000400   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00296   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.29
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0406   mg/L per period
    R-Squared error of fit: 0.451

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0465   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0899   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00968   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0328   mg/L per period
    R-Squared error of fit: 0.377

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0481   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.000370   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0729   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data): 0.00000370 mg/L per period
    R-Squared error of fit: 0.00113

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000254 mg/L per period
    Lower Confidence Limit of Slope, M1: -.000121 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.000110 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.249
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000784   mg/L per period
    R-Squared error of fit: 0.0643

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000859   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000423   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000260   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-4**   **Parameter Code:**   **01002**

Location Class: **Parameter:**   **Arsenic, total**

Location Type: **Groundwater**   **Units:**   **mg/L**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line

    Slope (fitted to data):   -.0000139   mg/L per period

    R-Squared error of fit: 0.154

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.0000167   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.0000383   mg/L per period

    Upper Confidence Limit of Slope, M2+1: 0.00000974   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -.866

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000146   mg/L per period
    R-Squared error of fit: 0.00424

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000209   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000171   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000999   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.0000521   mg/L per period
  R-Squared error of fit: 0.673

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.0000616   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.0000990   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   -.0000259   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -2.10
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-4**   **Parameter Code:**   **01020**
Location Class: **Parameter:**   **Boron, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.000527   mg/L per period
     R-Squared error of fit: 0.397

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.000474   mg/L per period
     Lower Confidence Limit of Slope, M1:   -.0000231   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.00123   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 1.25
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000441   mg/L per period
    R-Squared error of fit: 0.309

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000468   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000423   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00115   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000115   mg/L per period
    R-Squared error of fit: 0.0776

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	APW-4	**Parameter Code:**	01035
Location Class:		**Parameter:**	Cobalt, dissolved
Location Type:	Groundwater	**Units:**	mg/L
Confidence Level:	95.00%		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000863   mg/L per period
    R-Squared error of fit: 0.167

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000194   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.00
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
　Slope (fitted to data):　　　　　　　　　　　　　　　　-.0182　　mg/L per period
　R-Squared error of fit:　　　　　　　　　　　　　　　　0.509

Sen's Non-parametric estimate of the slope (two-tailed test)
　Median Slope:　　　　　　　　　　　　　　　　　　-.0203　　mg/L per period
　Lower Confidence Limit of Slope, M1:　　　　　　　　-.0327　　mg/L per period
　Upper Confidence Limit of Slope, M2+1:　　　　　　　-.00402　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　S Statistic:　　　　　　　　　　　　　　　　　　　-1.86
　Z test:　　　　　　　　　　　　　　　　　　　　　1.64
　At the 95.0 % Confidence Level (two-tailed test):　　　Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**		**Parameter Code:**	**01046**
Location Class:			**Parameter:**	**Iron, dissolved**
Location Type:	**Groundwater**		**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00798   mg/L per period
    R-Squared error of fit: 0.278

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00902   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0206   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00183   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000357   mg/L per period
    R-Squared error of fit: 0.302

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000313   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000895   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.55
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   -.00122   mg/L per period

    R-Squared error of fit: 0.429

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.00131   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.00265   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   -.0000583   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.75

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-4**   **Parameter Code:**   **01056**
Location Class: **Parameter:**   **Manganese, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000886   mg/L per period
    R-Squared error of fit: 0.304

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000789   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00174   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000256   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000190   mg/L per period
    R-Squared error of fit: 0.419

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000106   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000256   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.58
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-4**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:	**Groundwater**	**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00 STD per period
    R-Squared error of fit: 0.02

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00 STD per period
    Lower Confidence Limit of Slope, M1:   0.00 STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00 STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.25
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0457   mg/L per period
    R-Squared error of fit: 0.0239

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.119   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.196   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.175   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000743 mg/L per period
    R-Squared error of fit: 0.181

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000741 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000833 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00307 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00467   mg/L per period
    R-Squared error of fit: 0.0591

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00509   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0123   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0242   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.509
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.0102   mg/L per period
  R-Squared error of fit: 0.131

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.00580   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.0297   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0101   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.509
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**		**Parameter Code:**	**00950**
Location Class:			**Parameter:**	**Fluoride, dissolved**
Location Type:	**Groundwater**		**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000598   mg/L per period
    R-Squared error of fit: 0.586

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000578   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0000148   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000777   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.88
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000578   mg/L per period
    R-Squared error of fit: 0.0377

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000300   mg/L per period
    R-Squared error of fit: 0.291

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000329   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000000428   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000808   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000287   mg/L per period
    R-Squared error of fit: 0.0542

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00000112   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000109   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000807   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.499
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-5 **Parameter Code:** 01010
Location Class: **Parameter:** Beryllium, dissolved
Location Type: Groundwater **Units:** mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-5   **Parameter Code:**   **01020**
Location Class: **Parameter:**   **Boron, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000554   mg/L per period
    R-Squared error of fit: 0.541

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000714   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0000296   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000129   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 2.35
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000124   mg/L per period
    R-Squared error of fit: 0.168

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000145   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000183   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000340   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.619
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-5**   **Parameter Code:**   **01025**
Location Class: **Parameter:**   **Cadmium, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000932   mg/L per period
    R-Squared error of fit: 0.0377

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000288   mg/L per period
    R-Squared error of fit: 0.0000665

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000292   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00103   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.20
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000000369   mg/L per period
    R-Squared error of fit: 0.0777

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000868   mg/L per period
    R-Squared error of fit: 0.0377

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   -.0000212   mg/L per period
  R-Squared error of fit: 0.00326

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: -.0000498   mg/L per period
  Lower Confidence Limit of Slope, M1:   -.000172   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0000186   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: -.764
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-5   **Parameter Code:** 01059

Location Class: **Parameter:** Thallium, total

Location Type: Groundwater   **Units:** mg/L

Confidence Level: 95.00%

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

     Slope (fitted to data):   0.0   mg/L per period

     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

     Median Slope: 0.0   mg/L per period

     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

     S Statistic: 0.0

     Z test: 1.64

     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.00000206   mg/L per period

    R-Squared error of fit: 0.0377

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.436

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-5**   **Parameter Code:**   **01075**
Location Class: **Parameter:**   **Silver, dissolved**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-5**   **Parameter Code:**   **01092**
Location Class: **Parameter:**   **Zinc, total**
Location Type: **Groundwater**   **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-5**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:	**Groundwater**	**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

__Trend Analysis__

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.18

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -0.75
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0553 mg/L per period
    R-Squared error of fit: 0.345

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0436 mg/L per period
    Lower Confidence Limit of Slope, M1: -.0590 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.127 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-6**   **Parameter Code:**   **00613**
Location Class: **Parameter:**   **Nitrite nitrogen, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**		**Parameter Code:**	**00618**
Location Class:			**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000274   mg/L per period
    R-Squared error of fit: 0.139

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000295   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000750   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000842   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000762 mg/L per period
    R-Squared error of fit: 0.0645

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00239 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.579
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-6**   **Parameter Code:**   **00946**
Location Class: **Parameter:**   **Sulfate, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00479   mg/L per period
    R-Squared error of fit: 0.0459

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00933   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0261   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0156   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.628
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000537   mg/L per period
    R-Squared error of fit: 0.355

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000560   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000123   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000176   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.38
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000000369   mg/L per period
    R-Squared error of fit: 0.0776

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000443   mg/L per period
    R-Squared error of fit: 0.464

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000478   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000832   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000153   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000539   mg/L per period
    R-Squared error of fit: 0.353

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000373   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000131   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000000600   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000645   mg/L per period
    R-Squared error of fit: 0.312

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000693   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00138   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000897   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**		**Parameter Code:**	**01022**
Location Class:			**Parameter:**	**Boron, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000777   mg/L per period
    R-Squared error of fit: 0.406

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000755   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00134   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000303   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
　　Slope (fitted to data): 0.0　mg/L per period
　　R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
　　Median Slope: 0.0　mg/L per period
　　Lower Confidence Limit of Slope, M1: 0.0　mg/L per period
　　Upper Confidence Limit of Slope, M2+1: 0.0　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　　S Statistic: 0.0
　　Z test: 1.64
　　At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000697   mg/L per period
    R-Squared error of fit: 0.221

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000549   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00143   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000457   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.25
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000000369   mg/L per period
    R-Squared error of fit: 0.0776

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-6**   **Parameter Code:**   **01055**
Location Class: **Parameter:**   **Manganese, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000280   mg/L per period
    R-Squared error of fit: 0.0910

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000286   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000738   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000497   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.748
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**		**Parameter Code:**	**01059**
Location Class:			**Parameter:**	**Thallium, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.000000472   mg/L per period
    R-Squared error of fit: 0.226

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**		**Parameter Code:**	**01145**
Location Class:			**Parameter:**	**Selenium, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-6**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.01

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.00
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0174   mg/L per period
    R-Squared error of fit: 0.0471

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0542   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0989   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0501   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.748
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00518   mg/L per period
    R-Squared error of fit: 0.577

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00462   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00861   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.000461   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.86
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0259   mg/L per period
    R-Squared error of fit: 0.250

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0365   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0725   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00621   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.25
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0169   mg/L per period
    R-Squared error of fit: 0.442

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0123 mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0304 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.53
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0000107   mg/L per period

    R-Squared error of fit: 0.0130

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.0000330   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.000143   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-7
Location Class:
Location Type:
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Parameter Code: 01005
Parameter: Barium, dissolved
Units: mg/L

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data): -.0000222   mg/L per period
    R-Squared error of fit: 0.715

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000212   mg/L per period
    Lower Confidence Limit of Slope, M1: -.0000325   mg/L per period
    Upper Confidence Limit of Slope, M2+1: -.00000962   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.35
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000227   mg/L per period
    R-Squared error of fit: 0.776

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000236   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000391   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.0000107   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.35
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
　　Slope (fitted to data):　　　　　　　　　　　　　0.0　　mg/L per period
　　R-Squared error of fit:　　　　　　　　　　　　　0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
　　Median Slope:　　　　　　　　　　　　　　　　0.0　mg/L per period
　　Lower Confidence Limit of Slope, M1:　　　　　　0.0　mg/L per period
　　Upper Confidence Limit of Slope, M2+1:　　　　　0.0　mg/L per period

Non-parametric Mann-Kendall Test for Trend
　　S Statistic:　　　　　　　　　　　　　　　　　0.0
　　Z test:　　　　　　　　　　　　　　　　　　　1.64
　　At the 95.0 % Confidence Level (two-tailed test):　None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-7**   **Parameter Code:**   **01012**
Location Class: **Parameter:**   **Beryllium, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   0.0   mg/L per period
     R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: 0.0   mg/L per period
     Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: 0.0
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000268	mg/L per period
R-Squared error of fit:	0.286	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000267	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000683	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000186	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.11
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000221   mg/L per period
    R-Squared error of fit: 0.0890

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000151   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000915   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000299   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
 Slope (fitted to data):   0.0   mg/L per period
 R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
 Median Slope: 0.0   mg/L per period
 Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
 Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
 S Statistic: 0.0
 Z test: 1.64
 At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
Slope (fitted to data):   0.0   mg/L per period
R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
Median Slope: 0.0   mg/L per period
Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
S Statistic: 0.0
Z test: 1.64
At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000166   mg/L per period
    R-Squared error of fit: 0.0344

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000430   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00123   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000495   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**		**Parameter Code:**	**01046**
Location Class:			**Parameter:**	**Iron, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data): 0.0 mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0 mg/L per period
  Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01055**
Location Class:		**Parameter:**	**Manganese, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000222   mg/L per period
    R-Squared error of fit: 0.153

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000478   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000632   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000571   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.11
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-7**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-7**   **Parameter Code:**   **71900**
Location Class: **Parameter:**   **Mercury, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **00400**
Location Class: **Parameter:**   **pH (field)**
Location Type: **Units:**   **STD**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.28

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1:   0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -0.87
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.183   mg/L per period
    R-Squared error of fit: 0.583

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.189   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.403   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.0280   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -2.10
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**00613**
Location Class:		**Parameter:**	**Nitrite nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000973   mg/L per period
    R-Squared error of fit: 0.195

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00108   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00424   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00151   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **00941**
Location Class: **Parameter:**   **Chloride, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00134   mg/L per period
    R-Squared error of fit: 0.164

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00358   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.549
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **00946**
Location Class: **Parameter:**   **Sulfate, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   -.158   mg/L per period
     R-Squared error of fit: 0.492

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: -.137   mg/L per period
     Lower Confidence Limit of Slope, M1:   -.275   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   -.00999   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: -1.75
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **00950**

Location Class: **Parameter:**   **Fluoride, dissolved**

Location Type: **Units:**   **mg/L**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000114   mg/L per period
    R-Squared error of fit: 0.398

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000104   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000252   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.34
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**

Location Class:

Location Type:

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **01000**

Parameter: **Arsenic, dissolved**

Units: **mg/L**

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.00000138   mg/L per period

    R-Squared error of fit: 0.650

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.00000155   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.000000592   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.00000231   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 2.39

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   Upward

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000495   mg/L per period
    R-Squared error of fit: 0.0911

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000681   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00000115   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000231   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.748
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **01005**
Location Class: **Parameter:**   **Barium, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000202   mg/L per period
    R-Squared error of fit: 0.239

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000195   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000494   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000862   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000232   mg/L per period
    R-Squared error of fit: 0.269

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000175   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000597   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000179   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00169   mg/L per period
    R-Squared error of fit: 0.523

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00174   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00305   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   -.000270   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.86
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **01022**
Location Class: **Parameter:**   **Boron, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00185   mg/L per period
    R-Squared error of fit: 0.348

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00189   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00407   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000286   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.36
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000111   mg/L per period
    R-Squared error of fit: 0.0722

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000893   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000590   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000218   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **01034**
Location Class: **Parameter:**   **Chromium, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
     Slope (fitted to data):   -.0000135   mg/L per period
     R-Squared error of fit: 0.0796

Sen's Non-parametric estimate of the slope (two-tailed test)
     Median Slope: -.0000118   mg/L per period
     Lower Confidence Limit of Slope, M1:   -.0000689   mg/L per period
     Upper Confidence Limit of Slope, M2+1:   0.0000155   mg/L per period

Non-parametric Mann-Kendall Test for Trend
     S Statistic: -1.11
     Z test: 1.64
     At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01037**
Location Class:		**Parameter:**	**Cobalt, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000242   mg/L per period
    R-Squared error of fit: 0.0164

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000116   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000871   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00176   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.249
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**		**Parameter Code:**	**01046**
Location Class:			**Parameter:**	**Iron, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000259   mg/L per period
    R-Squared error of fit: 0.0223

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.167
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **01055**
Location Class: **Parameter:**   **Manganese, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000428   mg/L per period
    R-Squared error of fit: 0.0347

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000812   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000878   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000237   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.249
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**
Location Class:
Location Type:
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **01059**
Parameter: **Thallium, total**
Units: **mg/L**

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-8   **Parameter Code:** 01067
Location Class: **Parameter:** Nickel, total
Location Type: **Units:** mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00000291   mg/L per period
    R-Squared error of fit: 0.225

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**		**Parameter Code:**	**01075**
Location Class:			**Parameter:**	**Silver, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01092**
Location Class:		**Parameter:**	**Zinc, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**		**Parameter Code:**	**01145**
Location Class:			**Parameter:**	**Selenium, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000000284   mg/L per period
    R-Squared error of fit: 0.00000772

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.00000156   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.000143   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000897   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**	**Parameter Code:**	**01147**
Location Class:		**Parameter:**	**Selenium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000000120   mg/L per period
    R-Squared error of fit: 0.0000000353

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000118   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000608   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000883   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.124
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-8**   **Parameter Code:**   **71890**
Location Class: **Parameter:**   **Mercury, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-8**		**Parameter Code:**	**71900**
Location Class:			**Parameter:**	**Mercury, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

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User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**00400**
Location Class:		**Parameter:**	**pH (field)**
Location Type:		**Units:**	**STD**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

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Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.00   STD per period
    R-Squared error of fit: 0.09

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.00   STD per period
    Lower Confidence Limit of Slope, M1:   0.00   STD per period
    Upper Confidence Limit of Slope, M2+1: 0.00   STD per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.87
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**		**Parameter Code:**	**00515**
Location Class:			**Parameter:**	**Total Dissolved Solids**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   -.475   mg/L per period

    R-Squared error of fit: 0.409

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: -.620   mg/L per period

    Lower Confidence Limit of Slope, M1:   -.898   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0478   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: -1.36

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**   **Parameter Code:** **00613**
Location Class: **Parameter:**   **Nitrite nitrogen, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
 Slope (fitted to data):   0.0 mg/L per period
 R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
 Median Slope: 0.0 mg/L per period
 Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
 Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
 S Statistic: 0.0
 Z test: 1.64
 At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
   Slope (fitted to data):   -.000910   mg/L per period
   R-Squared error of fit: 0.121

Sen's Non-parametric estimate of the slope (two-tailed test)
   Median Slope: -.000309   mg/L per period
   Lower Confidence Limit of Slope, M1:   -.00281   mg/L per period
   Upper Confidence Limit of Slope, M2+1:   0.00165   mg/L per period

Non-parametric Mann-Kendall Test for Trend
   S Statistic: -.866
   Z test: 1.64
   At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**		**Parameter Code:**	**00720**
Location Class:			**Parameter:**	**Cyanide, total**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**   **Parameter Code:**   **00941**
Location Class: **Parameter:**   **Chloride, dissolved**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000256   mg/L per period
    R-Squared error of fit: 0.00214

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00286   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00263   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.143
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
- Slope (fitted to data): -.249 mg/L per period
- R-Squared error of fit: 0.360

Sen's Non-parametric estimate of the slope (two-tailed test)
- Median Slope: -.179 mg/L per period
- Lower Confidence Limit of Slope, M1: -.669 mg/L per period
- Upper Confidence Limit of Slope, M2+1: -.0383 mg/L per period

Non-parametric Mann-Kendall Test for Trend
- S Statistic: -1.86
- Z test: 1.64
- At the 95.0 % Confidence Level (two-tailed test): Downward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-9   **Parameter Code:**   00950
Location Class: **Parameter:**   Fluoride, dissolved
Location Type: **Units:**   mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000361   mg/L per period
    R-Squared error of fit: 0.619

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000335   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.000104   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000624   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.86
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   Upward

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000414   mg/L per period
    R-Squared error of fit: 0.0947

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000362   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000176   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.20
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01002**
Location Class:		**Parameter:**	**Arsenic, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000414   mg/L per period
    R-Squared error of fit: 0.204

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000000637   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000000904   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00000121   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 1.16
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**

Parameter Code: **01005**

Location Class:

Parameter: **Barium, dissolved**

Location Type:

Units: **mg/L**

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

     Slope (fitted to data):   -.0000171   mg/L per period

     R-Squared error of fit: 0.392

Sen's Non-parametric estimate of the slope (two-tailed test)

     Median Slope: -.0000165   mg/L per period

     Lower Confidence Limit of Slope, M1:   -.0000371   mg/L per period

     Upper Confidence Limit of Slope, M2+1:   0.00000204   mg/L per period

Non-parametric Mann-Kendall Test for Trend

     S Statistic: -1.61

     Z test: 1.64

     At the 95.0 % Confidence Level (two-tailed test):   None

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Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01007**
Location Class:		**Parameter:**	**Barium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000194   mg/L per period
    R-Squared error of fit: 0.403

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000163   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000403   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000000466   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -1.61
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01012**
Location Class:		**Parameter:**	**Beryllium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000453   mg/L per period
    R-Squared error of fit: 0.000799

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.0000973   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00193   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00131   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01022**
Location Class:		**Parameter:**	**Boron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.000174   mg/L per period
    R-Squared error of fit: 0.0116

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: -.000328   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00207   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.00143   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01027**
Location Class:		**Parameter:**	**Cadmium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		
Date Range: 01/01/2022 to 12/31/2023			

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01034**
Location Class:		**Parameter:**	**Chromium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000208   mg/L per period
    R-Squared error of fit: 0.0783

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**

Location Class:

Location Type:

Confidence Level: **95.00%**

Date Range: 01/01/2022 to 12/31/2023

Parameter Code: **01037**

Parameter: **Cobalt, total**

Units: **mg/L**

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.00000227 mg/L per period
    R-Squared error of fit: 0.0783

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: -.436
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01042**
Location Class:		**Parameter:**	**Copper, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
  Slope (fitted to data):   0.0   mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0   mg/L per period
  Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
  Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01045**
Location Class:		**Parameter:**	**Iron, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   -.0000667   mg/L per period
    R-Squared error of fit: 0.00193

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.000218   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.00127   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.000926   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.371
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01051**
Location Class:		**Parameter:**	**Lead, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**   **Parameter Code:**   **01055**
Location Class: **Parameter:**   **Manganese, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0000248   mg/L per period
    R-Squared error of fit: 0.105

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0000208   mg/L per period
    Lower Confidence Limit of Slope, M1:   -.0000661   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0000880   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.866
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**		**Parameter Code:**	**01057**
Location Class:			**Parameter:**	**Thallium, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01059**
Location Class:		**Parameter:**	**Thallium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01067**
Location Class:		**Parameter:**	**Nickel, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line

    Slope (fitted to data):   0.0   mg/L per period

    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)

    Median Slope: 0.0   mg/L per period

    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period

    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend

    S Statistic: 0.0

    Z test: 1.64

    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01077**
Location Class:		**Parameter:**	**Silver, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**		**Parameter Code:**	**01085**
Location Class:			**Parameter:**	**Vanadium, dissolved**
Location Type:			**Units:**	**mg/L**
Confidence Level:	**95.00%**			

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01087**
Location Class:		**Parameter:**	**Vanadium, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
  Slope (fitted to data): 0.0 mg/L per period
  R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
  Median Slope: 0.0 mg/L per period
  Lower Confidence Limit of Slope, M1: 0.0 mg/L per period
  Upper Confidence Limit of Slope, M2+1: 0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
  S Statistic: 0.0
  Z test: 1.64
  At the 95.0 % Confidence Level (two-tailed test): None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: APW-9   **Parameter Code:** 01092
Location Class: **Parameter:** Zinc, total
Location Type: **Units:** mg/L
Confidence Level: 95.00%
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

<u>Trend Analysis</u>

Trend of the least squares straight line
    Slope (fitted to data):   0.000000473   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01097**
Location Class:		**Parameter:**	**Antimony, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.000000552   mg/L per period
    R-Squared error of fit: 0.228

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.873
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0 mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0 mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0 mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0 mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID: **APW-9**   **Parameter Code:**   **01147**
Location Class: **Parameter:**   **Selenium, total**
Location Type: **Units:**   **mg/L**
Confidence Level: **95.00%**
Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1:   0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

Meredosia Power Station
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**APW-9**	**Parameter Code:**	**71900**
Location Class:		**Parameter:**	**Mercury, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2022 to 12/31/2023

Trend Analysis

Trend of the least squares straight line
    Slope (fitted to data):   0.0   mg/L per period
    R-Squared error of fit: 0.0

Sen's Non-parametric estimate of the slope (two-tailed test)
    Median Slope: 0.0   mg/L per period
    Lower Confidence Limit of Slope, M1:   0.0   mg/L per period
    Upper Confidence Limit of Slope, M2+1: 0.0   mg/L per period

Non-parametric Mann-Kendall Test for Trend
    S Statistic: 0.0
    Z test: 1.64
    At the 95.0 % Confidence Level (two-tailed test):   None

APPENDIX C
SITE INSPECTION REPORTS

Inspection Form for Closed Ponds at Ameren Facilities

Projcet Name: Quarterly Ash Pond Cap Inspection

Location: Meredosia Power Plant

System Description: Fly Ash Pond
Bottom Ash Embankment

Engineer/Inspectors: Lisa Meyer

Owner Representative: n/a

Inspection Date: 03/07/2023
Temperature: 38 F
Weather: Sunny

River Level 431.97
gage at Meredosia 13.97
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom
is at 430.00' MSL

Gage height, ft ⓘ
13.97 ft - Mar 07, 2023 12:00:00 PM CST

Overall System Rating: **Acceptable**

System Rating Codes

Acceptable System: Nearly all items or components are rated as GC or NE.

Minimally Acceptable System: One or more items are rated as MM or one or more items are rated as IM or EC and an engineering determination concludes that the IM or EC items would not prevent the system from performing as intended.

Unacceptable System: One or more items are rated as IM or EC and would prevent the system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

Condition Codes

EC = Emergency Condition. A serious dam safety condition exists that needs immediate action. Emergency measures implemented as instructed by Supervising Engineer, Dam Safety; i.e. pool draw down, work stoppage, or plant stoppage.

IM = Item needing Immediate Maintenance to restore or ensure its safety or integrity. Remediation should be completed within an appropriate timeframe as determined by the Supervising Engineer, Dam Safety.

MM = Item needing Minor Maintenance and/or repairs within the year. The safety or integrity of the item is not yet imperiled.

OB = Condition requires regular Observation to ensure that the condition does not become worse.

GC = Good Condition.

NE = No Evidence of a problem.

NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Fly Ash Pond Cap - ClosureTurf
Quarterly Site Inspection Checksheet

Page 2 of 9

Date	03/07/2023
Inspector	Lisa Meyer
Temperature	38 F
Weather	Sunny

	Item	Condition Code *	Comments
Closure Cap	**Drainage Ditch/ArmorFill**	GC	ArmorFill in good condition in ditches. No change in locations/quantity of puddles in ditches.
	Sand on Cap	GC	Sand is in good condition. No need to place additional sand or sweep existing sand.
	ClosureTurf	OB	About a 3 ft tear in the turf towards the cap peak out from outfall 6. Turf flap from rip completely covers HDPE liner. No damage or degradation evident in the HDPE liner. Monitor.
	Riprap Outlet Flumes	GC	Flumes are in good condiiton.
	Other	--	
Embankment	**Riprap**	GC	Riprap is in good condition.
	Vegetation in riprap	GC	No overgrowth of weeds or sapplings. Additional herbicide application occurred October 4, 2022.
	Vegetation at Toe	GC	Vegetation that re-emerged after flood-waters receded is not a problem.
	Debris/Logs	GC	Minimal debris on embankment and at toe of embankment.
	Erosion	GC	No erosion evident at toe of embankments.
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Bottom Ash Embankment - ClosureTurf
Quarterly Site Inspection Checksheet

Date	03/07/2023
Inspector	Lisa Meyer
Temperature	38 F
Weather	Sunny

	Item	Condition Code *	Comments
Roadway	**Gravel Road**	GC	Roadway gravel is compacted and smooth.
	Drainage	GC	No drainage problems at this time.
	Other	GC	No issues.
Embankment	**Vegetation at Toe**	GC	Vegetation at toe has re-emerged after flood-waters receded.
	ClosureTurf	GC	Turf is in good condition. Sand on slopes does not require sweeping.
	ArmorFill	GC	Polyurethane has been applied and sand is locked in-place. No disintegration of polyurethane material is evident at this time.
	Riprap at Toe	GC	Riprap at toe is in good condition.Weeds sprayed on Sept 23, 2022.
	Riprap Outlet Flumes	GC	Flumes are in good condition. Weeds sprayed on Sept 23, 2022
	Other	--	
Remaining Basin	**Side Slopes**	GC	Sedimentation logs are in good condition. Vegetation is established on the slopes.
	Bottom	GC	Vegetation is re-emerging after flooding. Some shallow ponding (<3" water) at various locations within the limits of the clean-closed bottom ash pond. Minimal debris (caused by flooding) along slopes of basin.
	Outlet Riprap	GC	Riprap is in good condtion. Weeds sprayed on Sept. 23, 2022.
	Toe Riprap	GC	Riprap in good condition.Weeds sprayed Sept 23, 2022.
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Fly Ash Pond Cap – Outlet 1 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 2 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 3 and embankment (facing north and south)

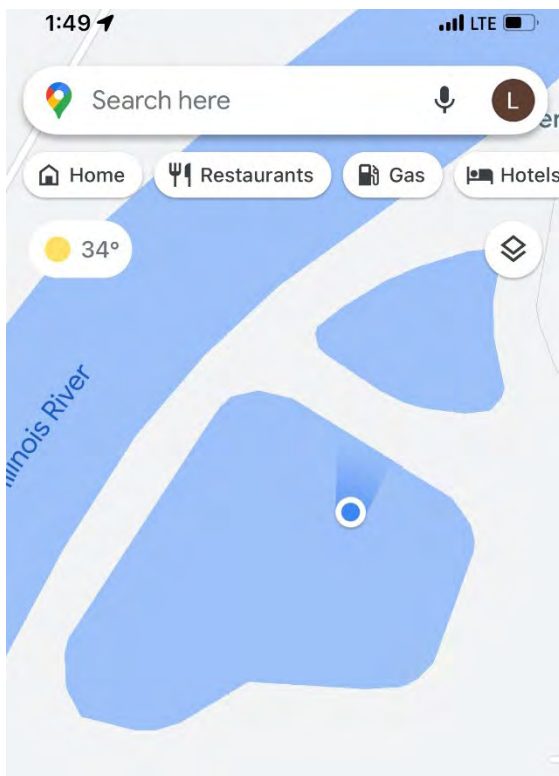Fly Ash Pond Cap – Outlet 4 and embankment (facing north and south)

Fly Ash Pond Cap – Outlet 5 and embankment (looking east and west)

Fly Ash Pond Cap – Outlet 6 and embankment (facing east and west)

MONITOR – Fly Ash CAP – Turf Rip with approximate coordinates

Bottom Ash CAP

North Embankment   South embankment

River embankment   Letdown

Penetrations

Old East Pond

East embankment

West embankment

North embankment

South embankment

Inspection Form for Closed Ponds at Ameren Facilities

Projcet Name:	Quarterly Ash Pond Cap Inspection	Inspection Date:	04/18/2023
		Temperature:	59 F
Location:	Meredosia Power Plant	Weather:	Sunny
System Description:	Fly Ash Pond	River Level	430.5
	Bottom Ash Embankment	gage at Meredosia	12.5

Gage 0' = 418.00' MSL
Bottom Ash Pond bottom
is at 430.00' MSL

Engineer/Inspectors: Lisa Meyer

Owner Representative: n/a

Initial Closre Turf Installation: Sep-2018

Illinois River at Meredosia, IL - 05585500
April 15, 2023 - April 21, 2023
Gage height, ft ❶
12.5 ft - Apr 18, 2023 10:30:00 AM CDT

Overall System Rating: Acceptable

System Rating Codes

Acceptable System: Nearly all items or components are rated as GC or NE.

Minimally Acceptable System: One or more items are rated as MM or one or more items are rated as IM or EC and an engineering determination concludes that the IM or EC items would not prevent the system from performing as intended.

Unacceptable System: One or more items are rated as IM or EC and would prevent the system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

Condition Codes

EC = Emergency Condition. A serious dam safety condition exists that needs immediate action. Emergency measures implemented as instructed by Supervising Engineer, Dam Safety; i.e. pool draw down, work stoppage, or plant stoppage.

IM = Item needing Immediate Maintenance to restore or ensure its safety or integrity. Remediation should be completed within an appropriate timeframe as determined by the Supervising Engineer, Dam Safety.

MM = Item needing Minor Maintenance and/or repairs within the year. The safety or integrity of the item is not yet imperiled.

OB = Condition requires regular Observation to ensure that the condition does not become worse.

GC = Good Condition.

NE = No Evidence of a problem.

NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Fly Ash Pond Cap - ClosureTurf
Quarterly Site Inspection Checksheet

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Date	04/18/2023
Inspector	Lisa Meyer
Temperature	59 F
Weather	Sunny

	Item	Condition Code *	Comments
Closure Cap	**Drainage Ditch/ArmorFill**	GC	ArmorFill in good condition in ditches. No change in locations/quantity of puddles in ditches.
	Sand on Cap	GC	Sand is in good condition. No need to place additional sand or sweep existing sand.
	ClosureTurf	OB	About a 3 ft tear in the turf towards the cap peak out from outfall 6. Turf flap from rip completely covers HDPE liner. No damage or degradation evident in the HDPE liner. Monitor.
	Riprap Outlet Flumes	GC	Flumes are in good condiiton.
	Other	--	General Maintenace. On 4/18/23 WatershedGeo applied DuraGuard to all ~36.5 acres over the course of 2 days. 35 gallons of DuraGuard and 2300 pounds of sand were applied
Embankment	**Riprap**	GC	Riprap is in good condition.
	Vegetation in riprap	GC	No overgrowth of weeds or sapplings. Next herbicide application scheduled for mid-June.
	Vegetation at Toe	GC	Vegetation that re-emerged after flood-waters receded is not a problem.
	Debris/Logs	GC	Minimal debris on embankment and at toe of embankment.
	Erosion	GC	No erosion evident at toe of embankments.
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Bottom Ash Embankment - ClosureTurf
Quarterly Site Inspection Checksheet

Date	04/18/2023
Inspector	Lisa Meyer
Temperature	59 F
Weather	Sunny

	Item	Condition Code *	Comments
Roadway	**Gravel Road**	**GC**	Roadway gravel is compacted and smooth.
	Drainage	**GC**	No drainage problems at this time.
	Other	**GC**	No issues.
Embankment	**Vegetation at Toe**	**GC**	Vegetation at toe has re-emerged after flood-waters receded.
	ClosureTurf	**GC**	Turf is in good condition. Sand on slopes does not require sweeping.
	ArmorFill	**GC**	Polyurethane has been applied and sand is locked in-place. No disintegration of polyurethane material is evident at this time.
	Riprap at Toe	**GC**	Riprap at toe is in good condition. Next herbicide application scheduled for mid-June.
	Riprap Outlet Flumes	**GC**	Flumes are in good condition. Next herbicide application scheduled for mid-June.
	Other	**--**	
Remaining Basin	**Side Slopes**	**GC**	Sedimentation logs are in good condition. Vegetation is established on the slopes.
	Bottom	**GC**	Vegetation is re-emerging after flooding. Some shallow ponding (<3" water) at various locations within the limits of the clean-closed bottom ash pond. Minimal debris (caused by flooding) along slopes of basin.
	Outlet Riprap	**GC**	Riprap is in good condtion. Next herbicide application scheduled for mid-June.
	Toe Riprap	**GC**	Riprap in good condition. Next herbicide application scheduled for mid-June.
	Other	**--**	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Fly Ash Pond Cap – Outlet 1 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 2 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 3 and embankment (facing north and south)

Fly Ash Pond Cap – Outlet 4 and embankment (facing north and south)

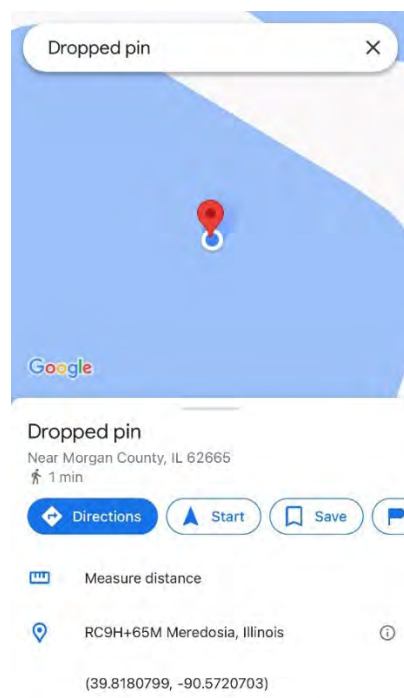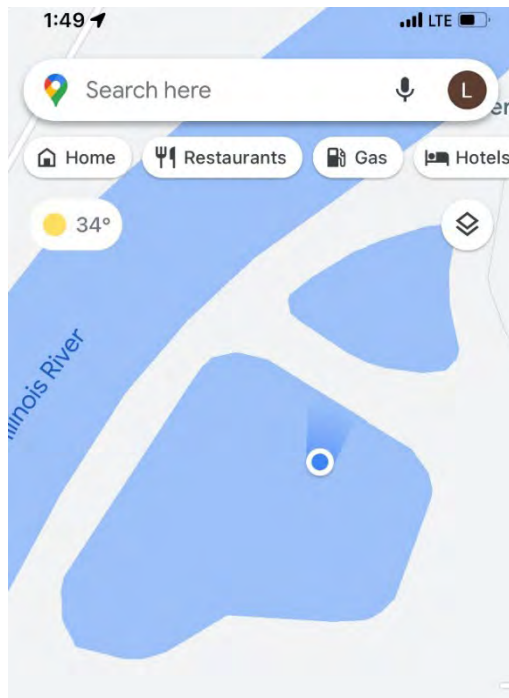Fly Ash Pond Cap – Outlet 5 and embankment (looking east and west)

Fly Ash Pond Cap – Outlet 6 and embankment (facing east and west)

DuraGuard 5-Year Application on Fly Ash Pond Cap

MONITOR – Fly Ash Cap – Turf Rip with approximate coordinates.

Bottom Ash CAP

North Embankment

South embankment

River embankment

Letdown

Penetrations

Old East Pond

East embankment

West embankment

North embankment

South embankment

Inspection Form for Closed Ponds at Ameren Facilities

Projcet Name:	Quarterly Ash Pond Cap Inspection	Inspection Date:	09/01/2023
		Temperature:	75 F
Location:	Meredosia Power Plant	Weather:	Sunny
System Description:	Fly Ash Pond	River Level	419.55
	Bottom Ash Embankment	gage at Meredosia	1.55

Gage 0' = 418.00' MSL
Bottom Ash Pond bottom
is at 430.00' MSL

Engineer/Inspectors: Lisa Meyer

Owner Representative: n/a

Initial Closre Turf Installation: Sep-2018

Illinois River at Meredosia, IL - 05585500
August 27, 2023 - September 10, 2023
Gage height, feet
Equipment Malfunction - Sep 03, 2023 01:00:00 AM CDT

Overall System Rating: **Acceptable**

System Rating Codes

Acceptable System: Nearly all items or components are rated as GC or NE.

Minimally Acceptable System: One or more items are rated as MM or one or more items are rated as IM or EC and an engineering determination concludes that the IM or EC items would not prevent the system from performing as intended.

Unacceptable System: One or more items are rated as IM or EC and would prevent the system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

Condition Codes

EC = Emergency Condition. A serious dam safety condition exists that needs immediate action. Emergency measures implemented as instructed by Supervising Engineer, Dam Safety; i.e. pool draw down, work stoppage, or plant stoppage.

IM = Item needing Immediate Maintenance to restore or ensure its safety or integrity. Remediation should be completed within an appropriate timeframe as determined by the Supervising Engineer, Dam Safety.

MM = Item needing Minor Maintenance and/or repairs within the year. The safety or integrity of the item is not yet imperiled.

OB = Condition requires regular Observation to ensure that the condition does not become worse.

GC = Good Condition.

NE = No Evidence of a problem.

NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Fly Ash Pond Cap - ClosureTurf
Quarterly Site Inspection Checksheet

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Date	09/01/2023
Inspector	Lisa Meyer
Temperature	75 F
Weather	Sunny

	Item	Condition Code *	Comments
Closure Cap	**Drainage Ditch/ArmorFill**	**GC**	ArmorFill in good condition in ditches. No change in locations/quantity of puddles in ditches.
	Sand on Cap	**GC**	Sand is in good condition. No need to place additional sand or sweep existing sand.
	ClosureTurf	**OB**	About a 3 ft tear in the turf towards the cap peak out from outfall 6. Turf flap from rip completely covers HDPE liner. No damage or degradation evident in the HDPE liner. Monitor.
	Riprap Outlet Flumes	**GC**	Flumes are in good condiiton.
	Other		
Embankment	**Riprap**	**GC**	Riprap is in good condition.
	Vegetation in riprap	**GC**	No overgrowth of weeds or sapplings. Second herbicide application occurred in Aug. 2023.
	Vegetation at Toe	**GC**	Vegetation that re-emerged after flood-waters receded is not a problem.
	Debris/Logs	**GC**	Minimal debris on embankment and at toe of embankment.
	Erosion	**GC**	No erosion evident at toe of embankments.
	Other	**--**	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Bottom Ash Embankment - ClosureTurf
Quarterly Site Inspection Checksheet

Date	09/01/2023
Inspector	Lisa Meyer
Temperature	75 F
Weather	Sunny

	Item	Condition Code *	Comments
Roadway	**Gravel Road**	GC	Roadway gravel is compacted and smooth.
	Drainage	GC	No drainage problems at this time.
	Other	GC	No issues.
Embankment	**Vegetation at Toe**	GC	Vegetation at toe is minimal.
	ClosureTurf	GC	Turf is in good condition. Sand on slopes does not require sweeping.
	ArmorFill	GC	Polyurethane has been applied and sand is locked in-place. No disintegration of polyurethane material is evident at this time.
	Riprap at Toe	GC	Riprap at toe is in good condition. Second herbicide application occurred in Aug. 2023.
	Riprap Outlet Flumes	GC	Flumes are in good condition.
	Other	--	
Remaining Basin	**Side Slopes**	GC	Sedimentation logs are in good condition. Vegetation is established on the slopes.
	Bottom	GC	Vegetation at bottom is minimal. Some shallow ponding at various locations within the limits of the clean-closed bottom ash pond. Minimal debris (caused by flooding) along slopes of basin.
	Outlet Riprap	GC	Riprap is in good condtion.
	Toe Riprap	GC	Riprap in good condition
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
QB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Fly Ash Pond Cap – Outlet 1 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 2 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 3 and embankment (facing north and south)

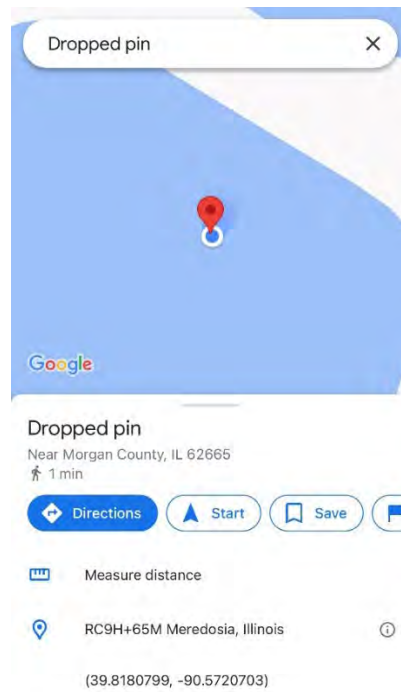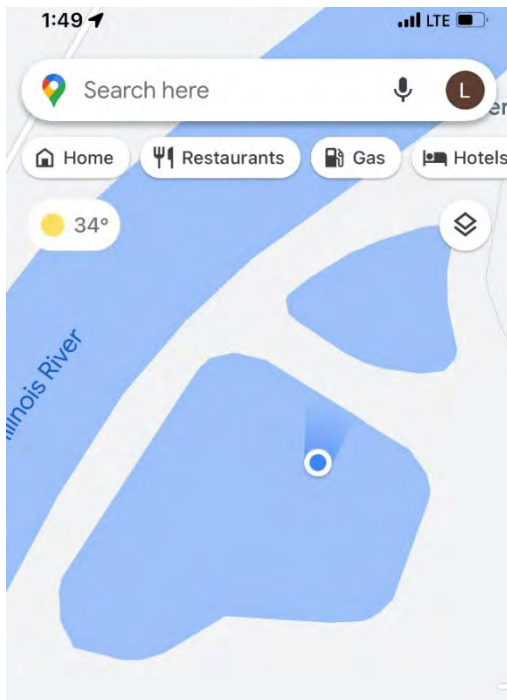Fly Ash Pond Cap – Outlet 4 and embankment (facing north and south)

Fly Ash Pond Cap – Outlet 5 and embankment (looking east and west)

Fly Ash Pond Cap – Outlet 6 and embankment (facing east and west)

MONITOR – Fly Ash Cap – Turf Rip with approximate coordinates.

Bottom Ash CAP

North Embankment   South embankment

River embankment   Letdown

Penetrations

Old East Pond

East embankment

West embankment

North embankment

South embankment

Inspection Form for Closed Ponds at Ameren Facilities

Projcet Name: Quarterly Ash Pond Cap Inspection

Location: Meredosia Power Plant

System Description: Fly Ash Pond
Bottom Ash Embankment

Engineer/Inspectors: Annie Muehlfarth

Owner Representative: n/a

Initial Closre Turf Installation: Sep-2018

Inspection Date: 12/20/2023
Temperature: 30 F
Weather: Sunny

River Level 422.12
gage at Meredosia 4.12
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom
is at 430.00' MSL

Illinois River at Meredosia, IL - 05585500
December 14, 2023 - December 21, 2023
Gage height, feet
4.12 ft - Dec 20, 2023 12:00:00 PM CST

Overall System Rating: Acceptable

System Rating Codes

Acceptable System: Nearly all items or components are rated as GC or NE.

Minimally Acceptable System: One or more items are rated as MM or one or more items are rated as IM or EC and an engineering determination concludes that the IM or EC items would not prevent the system from performing as intended.

Unacceptable System: One or more items are rated as IM or EC and would prevent the system from performing as intended, or a serious deficiency noted in past inspections (which had previously resulted in a minimally acceptable system rating) has not been corrected within the established timeframe, not to exceed two years.

Condition Codes

EC = Emergency Condition. A serious dam safety condition exists that needs immediate action. Emergency measures implemented as instructed by Supervising Engineer, Dam Safety; i.e. pool draw down, work stoppage, or plant stoppage.

IM = Item needing Immediate Maintenance to restore or ensure its safety or integrity. Remediation should be completed within an appropriate timeframe as determined by the Supervising Engineer, Dam Safety.

MM = Item needing Minor Maintenance and/or repairs within the year. The safety or integrity of the item is not yet imperiled.

OB = Condition requires regular Observation to ensure that the condition does not become worse.

GC = Good Condition.

NE = No Evidence of a problem.

NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station

Fly Ash Pond Cap - ClosureTurf

Quarterly Site Inspection Checksheet

Page 2 of 9

Date	12/20/2023
Inspector	Annie Muehlfarth
Temperature	30 F
Weather	Sunny

	Item	Condition Code *	Comments
Closure Cap	Drainage Ditch/ArmorFill	GC	ArmorFill in good condition in ditches. No change in locations/quantity of puddles in ditches.
	Sand on Cap	GC	Sand is in good condition. No need to place additional sand or sweep existing sand.
	ClosureTurf	GC	About a 3 ft tear in the turf towards the cap peak out from outfall 6. Turf flap from rip completely covers HDPE liner. This tear has been repaired.
	Riprap Outlet Flumes	GC	Flumes are in good condiiton.
	Other	--	
Embankment	Riprap	GC	Riprap is in good condition.
	Vegetation in riprap	GC	No overgrowth of weeds or sapplings. Second herbicide application occurred in Aug. 2023.
	Vegetation at Toe	GC	Vegetation is not a problem.
	Debris/Logs	GC	Minimal debris on embankment and at toe of embankment.
	Erosion	GC	No erosion evident at toe of embankments.
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
OB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
NI = Not Inspected. Reason should be stated in comment

Meredosia Power Station
Bottom Ash Embankment - ClosureTurf
Quarterly Site Inspection Checksheet

Date	12/20/2023
Inspector	Annie Muehlfarth
Temperature	30 F
Weather	Sunny

	Item	Condition Code *	Comments
Roadway	**Gravel Road**	GC	Roadway gravel is compacted and smooth.
	Drainage	GC	No drainage problems at this time.
	Other	GC	No issues.
Embankment	**Vegetation at Toe**	GC	Vegetation at toe is minimal.
	ClosureTurf	GC	Turf is in good condition. Sand on slopes does not require sweeping.
	ArmorFill	GC	Polyurethane has been applied and sand is locked in-place. No disintegration of polyurethane material is evident at this time.
	Riprap at Toe	GC	Riprap at toe is in good condition. Second herbicide application occurred in Aug. 2023.
	Riprap Outlet Flumes	GC	Flumes are in good condition.
	Other	--	
Remaining Basin	**Side Slopes**	GC	Sedimentation logs are in good condition. Vegetation is established on the slopes.
	Bottom	GC	Vegetation at bottom is minimal. Some shallow ponding at various locations within the limits of the clean-closed bottom ash pond. Minimal debris (caused by flooding) along slopes of basin.
	Outlet Riprap	GC	Riprap is in good condtion.
	Toe Riprap	GC	Riprap in good condition
	Other	--	

Condition Codes

IM = Item needing Immediate Maintenance. Remediation should be completed within 1 month.
MM = Item needing Minor Maintenance and/or repairs within the year.
OB = Condition requires regular observation to ensure that the condition does not become worse.
GC = Good Condition. Working properly.
NE = No Evidence of a problem.
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Fly Ash Pond Cap – Outlet 1 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 2 and embankment (facing east and west)

Fly Ash Pond Cap – Outlet 3 and embankment (facing north and south)

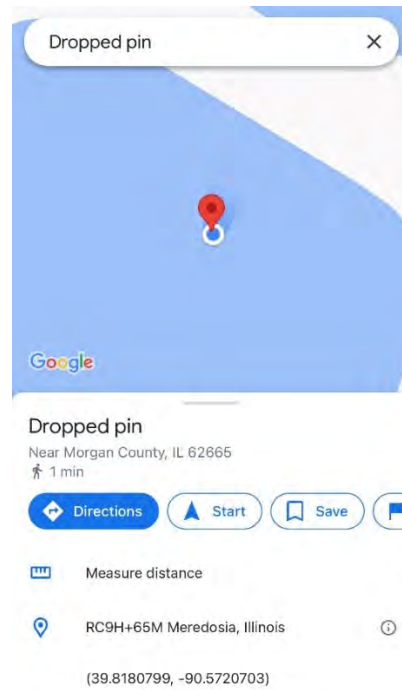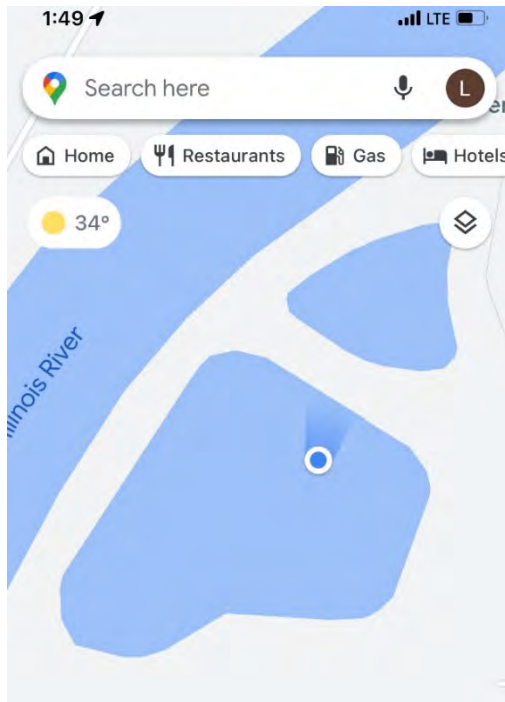Fly Ash Pond Cap – Outlet 4 and embankment (facing north and south)

Fly Ash Pond Cap – Outlet 5 and embankment (looking east and west)

Fly Ash Pond Cap – Outlet 6 and embankment (facing east and west)

Fly Ash Cap – Repaired Turf Rip with approximate coordinates.

Bottom Ash CAP

North Embankment   South embankment

Southwest corner   Letdown

Old East Pond

East embankment

West embankment

North embankment

South embankment