Electronic Filing: Received, Clerk's Office 06/04/2026

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| | ) | PCB AS 2021-008 |
| PETITION OF AMEREN ENERGY | ) | (Adjusted Standard – Land) |
| MEDIAN VALLEY COGEN LLC (OLD | ) | |
| MEREDOSIA) FOR AN ADJUSTED | ) | |
| STANDARD FROM 35 ADMIN. CODE | ) | |
| PART 845 | ) | |

**NOTICE OF FILING**

To: See attached Service List

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board Ameren Energy Median Valley Cogen LLC's Second Amended Petition for Adjusted Standard, a copy of which is herewith served upon you.

Dated: June 4, 2026

AMEREN ENERGY MEDINA VALLEY COGEN, LLC

By: /s/Kristen L. Gale

Kristen L. Gale
Susan M. Franzetti
NIJMAN FRANZETTI LLP
10 South LaSalle Street Suite 3400
Chicago, IL 60603
(312) 251-5590
kg@nijmanfranzetti.com
sf@nijmanfranzetti.com

**SERVICE LIST**

Don Brown, Clerk of the Board
Carol Webb
Illinois Pollution Control Board
60 E. Van Buren Street, Suite 630
Chicago, IL 60605
don.brown@illinois.gov
Carol.Webb @illinois.gov

Charles E. Matoesian
Rebecca Strauss
Brian Navarrete
Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
charles.matoesian@illinois.gov
Rebecca.Strauss@illinois.gov
Brian.Navarrete@illinois.gov

**CERTIFICATE OF SERVICE**

The undersigned, an attorney, certifies that a true copy of the foregoing Notice of Filing and Ameren Energy Median Valley Cogen LLC's Second Amended Petition for Adjusted Standard was electronically filed on June 4, 2026 with the following:

Don Brown, Clerk of the Board
Illinois Pollution Control Board
60 E. Van Buren Street, Suite 630
Chicago, IL 60605
don.brown@illinois.gov

and that copies were sent via e-mail on June 4, 2026 to the parties on the service list.

Dated: June 4, 2026 /s/Kristen L. Gale

Kristen L Gale
Susan M. Franzetti
Nijman Franzetti LLP
10 S. LaSalle Street, Suite 3400
Chicago, IL 60603
(312) 251-5590
kg@nijmanfranzetti.com
sf@nijmanfranzetti.com

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| | ) | |
| PETITION OF AMEREN ENERGY MEDINA | ) | AS 21-008 |
| VALLEY COGEN, LLC (OLD MEREDOSIA) | ) | (Adjusted Standard - Land) |
| FOR ADJUSTED STANDARDS | ) | |
| FROM 35 ILL. ADMIN. CODE PART 845 | ) | |

**SECOND AMENDED PETITION FOR ADJUSTED STANDARD**

Ameren Energy Medina Valley Cogen, LLC ("Ameren"), is amending its Petition for an Adjusted Standard from the Part 845 Illinois Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments at 35 Ill. Adm. Code 845 (“Illinois CCR Rule” or “Part 845”) to allow an alternative method to close the inactive Old Ash Pond (“Old Meredosia”) at Meredosia Power Station (“MPS”).

Old Meredosia ceased operation and closed in the early 1970’s, allowing the establishment of a significant ecosystem that supports variety of plants and animals, including threatened and sensitive species. Because of the ecosystem, Ameren conducted a treatability study to evaluate alternative methods to treat the groundwater flowing under the Old Meredosia Pond. Based on the study, Ameren has identified a groundwater treatment system that will effectively treat the groundwater while also conserving an established environment on the surface of Old Meredosia. Given Old Meredosia’s history, surface ecology, and the separation of the groundwater from its base, Ameren is amending its Petition and requests that the Illinois Pollution Control Board (“Board”) grant an adjusted standard for an alternative closure and post-closure method that treats the groundwater without disturbing the surface.

Section 104.418(a) of the Board rules for adjusted standards allows a petitioner to amend its petition at any time and requires a re-notice of the amended petition if the amendment is a substantive change. 35 Ill. Adm. Code 104.418(a). Also, Section 104.418(d) of the Board rules states that written amendments to the petition "need not repeat the entire unchanged portion of the original filing provided that a sufficient portion of the original filing is repeated so that the context of the amendment is made clear." 35 Ill. Adm. Code 104.418(d). Here, Ameren is not repeating the entirety of its Amended Petition, but reasserts and incorporates by reference the contents of the Amended Petition. Further, because Ameren's modifications of its petition are substantive changes, Ameren will re-notice the petition pursuant to Section 104.408.

## I. BACKGROUND

On May 11, 2021, Ameren filed its Petition seeking a finding that Old Meredosia was not a CCR surface impoundment regulated by Part 845. On May 1, 2023, Ameren filed an Amended Petition continuing to seek a finding that Old Meredosia was not a CCR surface impoundment, or in the alternative grant it an adjusted standard from the requirements of Part 845, except Part 845.760(h) (Deed Notation) and Part 845, Subpart I (Financial Assurance). ("Amended Petition"). Ameren attached six exhibits in support of its Amended Petition with detailed technical information on Old Meredosia.[1] The exhibits included a 2023 report by WSP describing the extensive ecosystem that developed and now exists on Old Meredosia. ("WSP Report"). Amended Petition, Exhibit 2 – Attachment A (PAS App'x, p. 620). Ameren also conducted an evaluation of the groundwater under Old Meredosia, which determined that the CCR in the Old Meredosia Pond is approximately 15-feet above the groundwater, and the

[1] The Amended Petition Exhibit pages are numbered sequentially from page 1 through page 1166. The page numbers are identified herein as "PAS App'x. p. [X]".

CCR "is not inundated by groundwater during normal or flood conditions." Amended Petition, Exhibit 2 - Attachment B (PAS App'x, pp. 691 to 692). Moreover, while certain CCR constituents, particularly boron, were detected slightly above the Part 845 standards, Ameren's analysis concluded there was no risk to human health or the environment. Amended Petition, Exhibit. 3 (PAS Appx, p. 1049).

On August 3, 2023, the Agency filed its recommendation on Ameren's Petition ("Recommendation"). The Agency's focus was primarily on whether Old Meredosia was a CCR surface impoundment but did not dispute the presence of the significant ecosystem that is present on the Old Meredosia Pond. Agency Recommendation, ¶38. Rather, the Agency conceded that "if the Board finds the Petitioner's arguments convincing that there are valuable natural resources present within the footprint of Old Meredosia… then an adjusted standard from some aspects of Part 845 may be granted." *Id.* The Agency further stated that an adjusted standard from the Part 845, Subpart F: Groundwater Monitoring and Corrective Action and Subpart G: Closure and Post-closure Care, would be necessary, because of the disturbance to the natural habitat. *Id*, ¶39. The Agency also suggested alternative deadlines for installation of a groundwater monitoring system, and submission of operating permit and construction permit applications. *Id*., ¶40.

On February 5, 2024, Ameren filed its response to Illinois EPA's recommendation. At the same time, Ameren began investigating alternatives available to manage the Old Meredosia Pond that would not disturb and destroy the valuable natural resources on its surface

On December 19, 2024, Ameren moved for a stay of this matter so that it could conduct a treatability study of groundwater treatment methods as an alternative to a Part 845 closure

and post-closure. On May 1, 2025, the Board granted Ameren's motion finding that "treatability study would provide more useful information for the review of Ameren's requested adjusted standard." *In the Matter of: Petition of Ameren Energy Medina Valley Cogen, LLC (Old Meredosia)*, PCB AS21-8, Order, *slip op.* 3 (May 1, 2025). The Board further found that it did "not appear that there would be an increased risk of groundwater contamination due to the stay because Old Meredosia is 15 feet above the groundwater, CCR is not in contact with groundwater, and there are no downgradient potable wells." *Id.*

Ameren has successfully completed the treatability study evaluating the in-situ resin barrier and in-situ boron precipitation process. The study showed that a permeable reactive barrier ("PRB") of "RemBind 100x" effectively treats the groundwater and reduces the concentrations of boron. As explained more fully herein, Ameren is seeking an adjusted standard from the Part 845 closure and post-closure requirements to install a PRB to treat the groundwater and avoid destroying the natural resource on the surface of Old Meredosia.

## II. APPLICATION OF AUTOMATIC STAY

Ameren filed its petition within 20 days of the effective date of the Illinois CCR Rule, so the operation of the Illinois CCR Rule is stayed. 415 ILCS 5/28.1(e). This amended petition is not a new petition, and does not cancel the stay of the operation of the Illinois CCR Rule on Old Meredosia.

## III. WITHDRAWAL OF REQUEST FOR INAPPLICABILITY

Ameren is withdrawing its request for inapplicability in this proceeding.

## IV. ANALYSIS AND PETITION CONTENT REQUIREMENTS

The Board requires that certain information be included in each petition for an adjusted standard. 35 Ill. Adm. Code §104.406. Within each heading, Ameren summarizes the relevant

information from the Amended Petition, presents additional information, and also incorporates by reference the relevant contents from its Amended Petition.

**A. Regulations From Which Adjusted Standards are Sought (35 Ill. Admin. Code 104.406(a))**

Ameren is seeking an adjusted standard from the Part 845 rules of general applicability for the closure and post-closure methods and related requirements identified herein in Section IV.F.3, which became effective on April 21, 2021. Given Old Meredosia's history of closure prior to any applicable regulatory regime and the ecosystem on its surface, Ameren requests that the Board grant an adjusted standard from the closure and post-closure requirements in the Illinois CCR Rule, and related requirements. As an alternative to the Part 845 closure and post-closure methods, Ameren proposes to install a PRB composed of a specifically formulated resin to treat the groundwater. Closing a historically closed unit with an alternative method is the type of "site-specific issue" identified by the Board in its order adopting Part 845 that would merit an adjusted standard. *In re: Standards for the Disposal of CCRs in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845,* R20-19, Opinion and Order of the Board, p. 5 (Apr. 15, 2021).

**B. Whether the regulation was promulgated to implement the CWA, Safe Drinking Water Act, Comprehensive Environmental Response, Compensation and Liability Act, or the State programs concerning RCRA, UIC, or NPDES:**

Part 845 implements Sections 12, 22 and 22.59 of the Act. 35 Ill. Adm. Code 845. Section 22 of the Act provides the Board authority to adopt regulations to promote the purpose of Title V, Land Pollution and Refuse Disposal, the Title implementing the requirements of RCRA. Part 845 was not promulgated to implement the state RCRA program, which is Section 22.4 of the Act. *Big River Zinc Corp. v. Illinois EPA.,* 1991 Ill. ENV. LEXIS 350, PCB 91-61 (May 6, 1991), p. *12 (Regulations or rules adopted pursuant to Section 22.4 implement the state's RCRA program).

**C. The Level of Justification Required for the Adjusted Standards (35 Ill. Admin. Code 104.406(c))**

The regulations from which Ameren seeks the adjusted standards do not specify a level of justification. Therefore, the level of justification specified by Section 28.1(c) of the Act applies, and the Board may grant this Petition after determining that:

> (1) factors relating to the petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to the petitioner;
>
> (2) the existence of those factors justifies an adjusted standard;
>
> (3) the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
>
> (4) The adjusted standard is consistent with any applicable federal law.

415 ILCS 5/28.1(c)(1)–(4). Ameren must also justify all the requested adjustments consistent with Section 27(a) of the Act. 415 ILCS 5/28.1(a). Section 27(a) of the Act requires the Board to consider the following factors in promulgating regulations:

> [T]he Board shall take into account the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of the existing air quality, or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.
> 415 ILCS 5/27(a).

**D. Description of the Nature of Petitioner's Activities (35 Ill. Admin. Code 104.406(d))**

Ameren provided a detailed description of the nature of its activities subject to the proposed adjusted standard in its Amended Petition, which is incorporated by reference. *See* Petition at 11-15. To assist the Board, Ameren summarizes that information here, and also supplements with additional information.

The MPS is located at 800 South Washington Street along the east bank of the Illinois River, just south of the Village of Meredosia. *See* Amended Petition, p. 11, and Exhibit 3 of Amended Petition, Figure 1 (PAS App'x, p. 1061). A predecessor of Ameren began operation of MPS in 1948, and MPS ceased operating as a coal powered electric generating station in 2011. *See* Amended Petition, p. 12. Ameren has decommissioned MPS, including closing the two active CCR surface impoundments pursuant to closure plans approved by Illinois EPA. *Id*, p. 11. Because MPS is decommissioned, there are no full time employees employed at the station.

As stated in the Amended Petition, Old Meredosia is approximately 17 acres, with ash ranging between 9-11.5 feet in thickness. Amended Petition, p. 14 *citing* Exhibit 2, at pp. 3–4 (PAS App'x, pp. 622 to 623). Ameren's predecessor operated Old Meredosia over fifty years ago, and it ceased the activities at Old Meredosia in 1971. Amended Petition, p. 11. There are no water supply wells downgradient of Old Meredosia, and the closest water wells are approximately 340 feet to the south and southeast of Old Meredosia (*i.e.*, upgradient of Old Meredosia). *See* Amended Petition, p. 17 *citing* Exhibit 3**,** § 1.6 (PAS App'x, p. 1040).

1. Valuable Natural Resources On the Surface of Old Meredosia

There is an established grove of mature native vegetation on the pond, including 10.2 acres of deciduous forest, 2.3 acres of shrubbery, 3.5 acres of grassland cover. *Id.* 14, citing Ex. 2 (PAS App'x, p. 622) and WSP Rpt., §3.2.1 (PAS App'x, p. 654). Ameren engaged WSP to conduct an evaluation of the ecosystem on the surface. WSP concluded that because Old Meredosia Pond has not been disturbed for approximately 50 years, the Pond has "important features that have moderate to high ecological value based on the presence of an established Bald Eagle nest and suitable habitat for other sensitive species." *Id*, §3 (PAS App'x, p. 666).

In particular, WSP found that of the 54 plant species identified, 38 are native species, and approximately eight have a relatively high floristic quality. *Id*, §3.2.1 and Table 3-2 (PAS App'x, p. 654, 657-658). Moreover, Old Meredosia includes a sand prairie, an uncommon plant community considered to be of higher floristic value, containing fairly conservative species including sandthread lovegrass, eastern prickly pear, and spotted beebalm. *Id*, §3.2.1 (PAS App'x, pp. 655 to 656).

WSP also found that the grove of vegetation on Old Meredosia provides a habitat for numerous wildlife species, including American goldfinches, downy woodpeckers, northern cardinals, black-capped chickadees, American robins, yellow-rumped warblers, mourning doves, tufted titmice, turkey vultures, white-tailed deer, eastern cottontails, eastern gray squirrels, Virginia opossums, raccoons, and eastern moles. *Id*, §3.2.3 (PAS App'x, p. 660). WSP observed a raptor nest, a turtle nest, and numerous songbird nests throughout the area, concluding that the habitat provides "functional value to wildlife for roosting, nesting, foraging, and migratory use for both resident and nonresident bird species." *Id*. There are also thirteen migratory birds of conservation concern that have the potential to be in the vicinity of Old Meredosia. Attachment A (WSP Report) to Exhibit 2 (HA Putrich Report) at Table 3-3 (PAS App'x, p. 654).

Old Meredosia is also a suitable habitat for various sensitive animal species. *Id.* at § 3.2.4 (PAS App'x, p. 662). WSP identified a Bald Eagle nest at the Old Meredosia Pond. *Id.*, §3.2.4.1 (PAS App'x, p. 662). The Bald and Golden Eagle Protection Act protects Bald Eagles nation-wide and states it is unlawful to "take" bald or golden eagles, including their parts, nests, or eggs without a permit from the Secretary of the Interior. 16 U.S.C. § 668(a). Old Meredosia is also within one of the three Illinois regions for the Illinois Chorus Frog, a listed threatened species

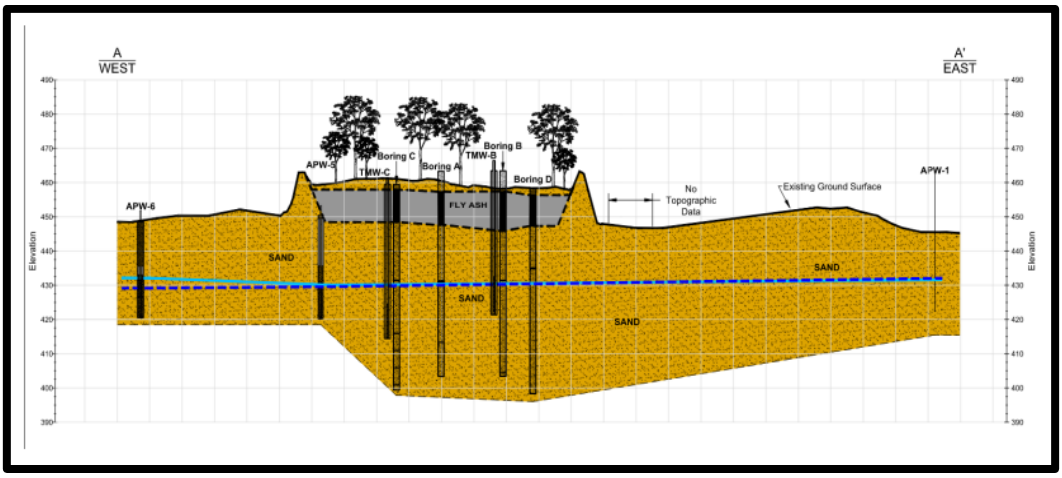
protected by the Illinois Endangered Species Act. WSP Rpt, §3.2.4.3 (PAS App'x, p. 663). Illinois Chorus Frogs are found in sand prairies, like the sand prairie at Old Meredosia. WSP Rpt, §3.2.4.3 (PAS App'x, p. 663). Because survey methods are not available for terrestrial habitat, the Illinois Natural History Survey states that the Illinois Chorus Frog "presence should be assumed in an area if it contains sandy soil and is within 1 mile of an occupied breeding pond." [2] Here, there are documented Illinois Chorus Frog breeding areas within one-mile of the Old Meredosia Pond, which has sandy soil (*i.e.* – the sand prairie). WSP Rpt, §3.2.4.3 (PAS App'x, pp. 663 to 665). Accordingly, WSP concluded that it must be assumed that the Illinois Chorus Frog is present at Old Meredosia Pond. *Id.* Similarly, WSP found that the Old Meredosia Pond is potentially suitable habitat for various bat species, including the endangered Indiana bat, the threatened northern long-eared bat, and the threatened tricolored bat. WSP Rpt, §3.2.4.2 (PAS App'x, pp. 662 to 663).

2. Groundwater Does Not Intersect with the Base of Old Meredosia and Is Not an Risk to Potential Offsite Sources

Ameren's expert, Haley & Aldrich, evaluated the groundwater and concluded that that the CCR in Old Meredosia is not inundated by groundwater during normal or flood conditions, and is not a risk to any potential offsite sources. The groundwater at MSP predominantly flows from east to west/northwest, towards the Illinois River, which is the major hydraulic control in the area. Ex. 7 (Haley & Aldredge 2026 Memo, PAS App'x p. 1168).[3] As shown below, under normal conditions, the CCR in the Old Meredosia Pond is approximately 15-feet above the groundwater.

[2] Illinois Natural History Survey. 2017. Conservation guidance for Illinois Chorus Frog (Pseudacris illinoensis). Prepared for the Illinois Department of Natural Resources, Division of Natural Heritage., p. 9; available at https://naturalheritage.illinois.gov/content/dam/soi/en/web/naturalheritage/speciesconservation/speciesguidance/documents/icf-species-guidance-final.pdf (last visited 2/18/2026).

[3] The additional exhibits attached here are continued sequentially from the exhibits attached to the Amended Petition, starting with page 1167. The page numbers are identified herein as "PAS App'x. p. [X]".




Amended Petition, Exhibit 2 - Attachment B (PAS App'x, pp. 691 to 692, 702).

Depending on the river level and during flooding events, the groundwater levels may rise. Ex. 7 (Haley & Aldredge 2026 Memo, PAS App'x pp. 1169 to 1170). Accordingly, Ameren's experts evaluated separation between the base of Old Meredosia and the groundwater table during a major flood event in June 2019, which was one of the four highest readings recorded, and within 0.5 feet of the highest recording in July 2015. *Id*, at PAS App'x pp. 1169 to 1170.[4] The evaluation demonstrated that even during a major flooding event "there is no hydraulic connection between any portion of the base of the Old Meredosia Pond and the groundwater under normal or extreme groundwater fluctuations." *Id.*, PAS App'x p. 1170 to 1171.

Further, depending on the river level, the groundwater gradient may occasionally "flatten", and on rare occasions reverse during extreme high water events. *Id*, PAS App'x pp. 1169, 1171. However, Haley & Aldrich concluded that even when there is a flow reversal, the groundwater flowing under Old Meredosia did not travel across a property boundary. *Id.*, at PAS App'x p. 1172. During the June 2019 flooding event, the groundwater under the Old Meredosia reversed and flowed to the east. Haley & Aldrich calculated that the velocity of the groundwater when it

[4] Because groundwater sampling was not performed between 2012 and 2016, no groundwater levels are available for July 2015. *Id.*, at 2.

flowed to the east was 0.8 feet per day. *Id.*, at PAS App'x p. 1171. At that speed, for the reversed groundwater to reach the eastern boundary of the Ameren Property (which is 110 feet away), the groundwater reversal would have to be for over 135 days. *Id*. However, the duration of the three recent flooding events in April 2013, June 2015, and July 2019 were each less than 75 days. *Id*. Because the duration of the flood events were far less than the time necessary for the reversed groundwater to travel offsite, Haley & Aldrich concluded that even during flow reversals, there is no evidence that the groundwater under Old Meredosia flows offsite to the east. *Id.*, at PAS App'x p. 1172.

Finally, while certain CCR constituents, particularly boron, were detected slightly above the Part 845 standards, Ameren's analysis concluded there was no risk to human health or the environment. Exhibit. 3 (PAS App'x, p. 1049). Rather, Ameren's experts concluded that the groundwater flowing from the Old Meredosia Pond presented no risk to the Illinois River because the constituent concentrations in the groundwater are lower than the site-specific screening concentrations that were protective of surface water. *Id*, at §4, 5 (PAS App'x, pp. 1047 to 1048). Also, the constituent concentrations in the Illinois River up and downstream of the Meredosia station were similar, further demonstrating the absence of impact on the Illinois River. *Id*.

As stated in its Amended Petition, Ameren closed the Bottom Ash Pond and Fly Ash Pond in 2011 with the review and approval of Illinois EPA. Amended Petition, p. 4. Pursuant to the post-closure plan, Ameren submits an Annual Report to Illinois that includes a compilation of the groundwater monitoring data and trend analysis for the groundwater at MPS. To assist the Board in its review, the 2025 Annual Report that was submitted on January 16, 2026 is attached as Exhibit 8 (PAS App'x pp. 1222 to 2664).

**E. Description of Efforts to Comply (35 Ill. Admin. Code 104.406(e))**

If Ameren must close Old Meredosia pursuant to Part 845, it will be required to close the unit by either (i) removal of the CCR or (ii) closure with a final cover system. The effort required for each of these options is set forth in the Haley & Aldrich 2023 Technical Memorandum located at Exhibit 2 of its Amended Petition (Ex. 2, PAS App'x pp. 629 to 634). Both of these options would result in the destruction of the significant ecosystem that exists on Old Meredosia. As Haley & Aldrich stated, to close Old Meredosia by removal, an estimated 400,000 cubic yards ("CY") of woody vegetation and existing cover and CCR material would be excavated and transported offsite for disposal. Ex. 2 of Amended Petition (PAS App'x, p. 631). Hauling a total quantity of 400,000 CY of material would require approximately 30,000 trucks. *Id.* The total cost for transport and disposal of the vegetation and material, including the labor and material costs, would be approximately $12,000,000 to $15,000,000. *Id.*, at Ex. 2 (PAS App'x p. 633). To close Old Meredosia in place with a final cover system, Ameren would be required to remove the surficial ecosystem, and import approximately 175,000 CY of earthen materials to construct the cover system. The total cost would be approximately $4,000,000 to $6,000,000. *Id.*

**F. Narrative Description of Proposed Adjusted Standard, Efforts Necessary to Achieve the Proposed Standard, and Proposed Adjusted Standard (35 Ill. Admin. Code 104.406(f))**

Ameren is seeking an adjusted standard from the closure requirements in Part 845, specifically from Subpart G of Part 845, and related sections of Part 845 identified herein. Instead, Ameren is proposing to install a PRB for in situ treatment of the groundwater pursuant to a construction permit application that will be submitted to Illinois EPA.

In consideration of the Automatic Stay granted pursuant to Section 21(e) of the Act, Ameren is also seeking an adjusted standard from the operating and construction permit application deadlines set forth in Part 845. Ameren is requesting that it submit an operating

permit application within 60 days of the Order and a construction permit application for the PRB within 180 days of the Board's Order.

In consideration of the alternative closure method and historic nature of Old Meredosia, Ameren is also seeking an adjusted standard from certain of the construction permit application requirements that are inapplicable. For example, Ameren is seeking an adjusted standard from the requirements in Section 845.220(a)(1)(E) – (J) regarding the construction, engineering, instrumentation, and design features for CCR surface impoundments. Similarly, Ameren is seeking an adjusted standard from the requirements in Section 845.220(a)(2)(A), (B)-(E), regarding the types of CCR currently entering a CCR surface impoundment and the duration of accumulation.

Finally, in consideration of the expectation that the groundwater treatment will successfully treat the groundwater within three years of installation, Ameren is seeking an adjusted standard from requiring an operating permit upon twelve consecutive quarters of groundwater results below the Part 845 standards.

The proposed language for the adjusted standard is below in Section IV.F.3 and for the Board's convenience, Ameren has attached as an exhibit a table of the regulations with their language. *See* Ex. 9 (PAS App'x pp. 2665 to 2668).

1. Results of the Treatability Study

During the stay granted by the Board, Ameren's expert, Loureiro, conducted a treatability study of alternative methods to treat the groundwater, primarily for boron. Loureiro compared two treatment options, an in-situ resin barrier and an in-situ boron precipitation process. Loureiro conducted a two-phased study comparing the dosage values to sit specific soils and groundwater flow at site-specific groundwater velocity. Based upon the reduction of constituents in the groundwater, the time required for contact between the groundwater and

material, and injectability and implementability of the application, Loureiro recommended using the resin "RemBind 100x" for the treatment. Loureiro anticipates that the boron concentrations downgradient of Old Meredosia will be below the Part 845 standards within three years of installation.

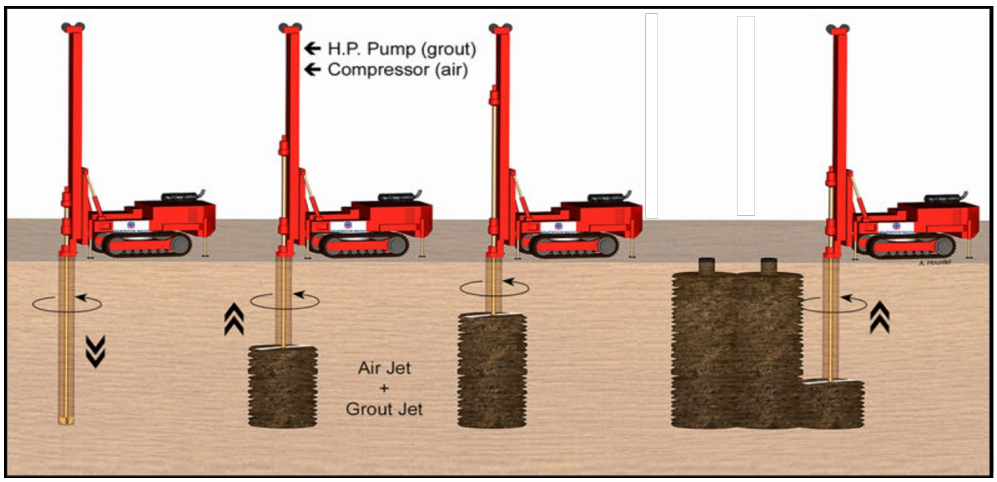
To determine the precise location for installation of the PRB, Loureiro also sampled the groundwater directly downgradient of Old Meredosia. Per the diagram below, the sample results showed that boron concentrations downgradient of Old Meredosia were above the Part 845 standard only on the northern-western side of Old Meredosia.

2. Efforts Necessary to Achieve the Proposed Standard

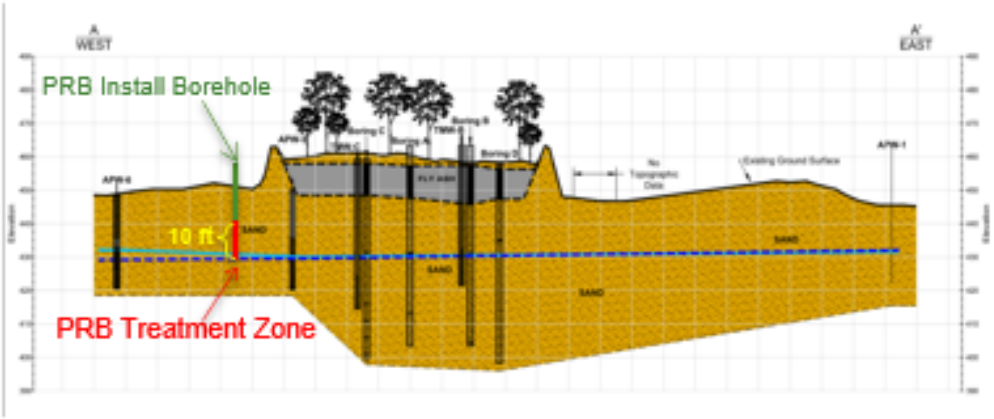
The RemBind 100x will be installed in a PRB along the northern part of the downgradient boundary of Old Meredosia to capture and treat the groundwater as it flows from beneath Old Meredosia. The approximate location of the PRB is identified in red in the above diagram.[5] To create the PRB, the RemBind 100x will be mixed in a slurry to the concentrations and

[5] The diagram is an approximation, and the precise location will be included in the work plan submitted as part of the construction permit.

ratios determined by the treatability study. As shown in the diagram below, the PRB (composed of the slurry) will be pumped into the soil through hollow-stem/flight auger.




To ensure consistent contact with the groundwater, the PRB will be approximately 10 feet in height and installed at the typical depth of groundwater, which is about 13 feet below the ground surface.




A preliminary Work Plan is attached as Exhibit 10 (PAS App'x pp. 2669 to 2676). Ameren will prepare and submit a detailed work plan, with a specific design, schedule, and location for installation of the PRB as part of the construction permit application submitted pursuant to this adjusted standard. The cost for installation of the PRB is approximately $4,000,000, with nominal operating costs.

3. Proposed Adjusted Standard

The proposed language for the adjusted standard is as follows:

Pursuant to Section 28.1 of the Environmental Protection Act (415 ILCS 5/28.1), the Illinois Pollution Control Board grants Ameren Energy Medina Valley Cogen, LLC (Ameren) an adjusted standard as follows:

(1) The inactive Old Ash Pond at Meredosia Power Station ("Old Meredosia") ceased accepting CCR and was capped with native materials in the early 1970's. Old Meredosia has not been operational and coal ash has not been deposited at the site for more than fifty years. In the intervening time, ten acres of deciduous forest and seven acres of shrub-scrub, herbaceous/grassland cover have grown on the site, which has become a suitable habitat for various protected species, including bald eagles and Illinois chorus frogs. Because of the presence of the ecosystem on the surface, Ameren is granted this Adjusted Standard for an alternative closure method, and is exempt from the following Part 845 closure and post closure requirements:

   a. 845.400(g)

   b. 845.550(a)(4) & (a)(5)

   c. 845.610(c)

   d. 845.610(e)(4)(H)

   e. All of Subpart G

   f. 845.800(b)

   g. 845.800(d)(20) through (32)

(2) In consideration of the Automatic Stay granted by Section 21(e) of the Act, 415 ILCS 5/21(e), Ameren is exempt from the deadline for submission of an operating permit application set forth in Sections 845.230(d)(1), and shall submit an operating permit application within 60 days of this Order.

(3) Within 180 days of this Order, Ameren will submit a construction permit application to Illinois EPA, to install a Permeable Reactive Barrier ("PRB") for in situ groundwater treatment with RemBind 100x. The construction permit application will include a detailed work plan with a specific design, schedule, and location for installation of the PRB. The construction permit application will be prepared pursuant to Part 845, except for the following requirements which are inapplicable to Old Meredosia:

   a. 845.220(a)(1)(E), (F), (G), (H), (I), and (J)

   b. 845.220(a)(2)(A), (C), (D), and (E)

c. 845.220(a)(5)

d. 845.220(a)(6)

e. 845.220(d)

f. 845.290

(4) Ameren shall maintain the operating permit for Old Meredosia for the duration of the groundwater treatment. Because of the alternative closure, Old Meredosia is exempt from Section 845.200(a)(5) and 845.230(c).

a. Instead, upon twelve consecutive quarters of groundwater results downgradient of Old Meredosia that are below the Part 845 standards, the operating permit and its requirements shall cease.

b. Within 30 days of the twelfth consecutive quarter of concentrations below the Part 845 standards, Ameren shall submit a certification by a qualified professional engineer to Illinois EPA certifying that the groundwater results are below the Part 845 standards and that the operating permit is terminated.

c. Ameren shall place the certification in its operating record within 30 days of submission to the Illinois EPA and shall maintain the certification in its operating record for at least three years.

d. Upon submission of the certification, Old Meredosia is no longer subject to Part 845, including Subpart I.

**G. Description of Impact on the Environment of Complying with the Regulation vs. Complying with the Adjusted Standard (35 Ill. Admin. Code 104.406(g))**

In its Amended Petition, Ameren described in detail how the Part 845 closure methods would have a negative impact on the environment *See* Amended Petition, pp. 16-24, and Ex. 2 (PAS App'x, pp. 620 to 1032). Here, Ameren summarizes the key points made in the Amended Petition to highlight that the proposed alternative closure method to treat the groundwater at Old Meredosia has a more favorable environmental impact than either of the Part 845 closure methods.

1. Part 845 Closures Will Destroy an Established Habitat that Supports Notable Species

It is undisputed that both Part 845 closure methods, either closure by removal or closure in place, would require destruction of the habitat on the surface. Amended Petition, p. 29; Agency Recommendation, ¶39. As described above in Section D.1, the surface of Old Meredosia contains

a varied ecosystem, including a deciduous forest, grassland, and rare sand prairie, a rare plant community. *See infra,* § D.1. The ecosystems support various native plants and provides a habitat for an array of common and sensitive species of plants and animals, including bald eagles, Indiana Bats, Northern long-eared bats, tricolored bats, and the Illinois Chorus Frog. *Id.*

Based upon the presence of the diverse flora and fauna on the surface, WSP concluded that both Part 845 closure methods "would result in tree and vegetation removal and disruption that would result in a net loss of ecosystem value and potential direct and indirect effects on notable species and habitats." Attachment A of Exhibit 2 of Amended Petition, at §4 (PAS App'x, p. 666). WSP found that during the closure process under either method, mobile wildlife would likely disperse to adjacent or similar habitats, but less mobile wildlife and those species that are more limited in their habitat preferences may be adversely impacted by the inability to find a suitable replacement habitat in the vicinity. *Id.* Removing the deciduous forestry and shrub-scrub in order to close Old Meredosia would directly impact the migratory birds that nest onsite and eliminate the suitable foraging and summer roost habitat present onsite and in the vicinity for the threatened bat species. *Id.* at PAS App'x pp. 666, 668.

The destruction of the surface would also irreparably damage a habitat for notable and sensitive species. WSP observed an established bald eagle nest, and at least four bald eagles in the vicinity, indicating that the bald eagle nest is viable and active. *Id.* at PAS App'x pp. 666 to 667. The Bald and Golden Eagle Protection Act bans the taking or disturbing of a bald eagle nest without a permit issued by the Secretary of the Interior. 16 U.S.C. § 668 (a). *Id.* Here, the destruction of the nest would be considered a "taking." *Id.* Similarly, a Part 845 closure would destroy a rare sand prairie, in and of itself a loss, which would also be a loss of habitat for the

presumed presence of the Illinois Chorus Frog, an Illinois threatened species. *Id.*, at PAS App'x p. 667.

4. Other Negative Environmental Impacts By the Part 845 Closure Methods

In addition to the destruction of wildlife at Old Meredosia, implementing a Part 845 closure would generate fugitive dust and would require extensive fuel consumption. Exhibit 2 of Amended Petition at PAS App'x p. 631. For a closure by removal, it would take approximately 30,000 round trips by trucks to remove the 400,000 CY of material. *Id.* Similarly, for closure in place, approximately 175,000 cubic yards of earthen materials would be required to construct the low-permeability and final protective soil layers, which would take approximately 15,000 truckloads. *Id.* Moreover, for a closure in place the natural environment on the surface of Old Meredosia would be replaced by a plastic sheet, without the ability for any future natural growth.

In comparison, Ameren's proposal would treat the groundwater passing under Old Meredosia without damaging the surface ecosystem until it is below the Part 845 standards, which is anticipated within three years.

**H. STATEMENT OF JUSTIFICATION (35 Ill. Admin. Code 104.406(h))**

Ameren detailed in its Amended Petition that the proposed adjusted standard is justified under Section 28.1(c) of the Act. *See* Amended Petition, pp. 26-30. As Ameren established, Old Meredosia is substantially different than active CCR surface impoundments intended to be covered by the Board's Part 845 regulations. Old Meredosia was closed over fifty years ago long before there were any applicable regulations. *Id.* at 27. Further, Old Meredosia does not hold water, and Ameren established that groundwater does not intersect with the base of the unit, even at the highest flood stage. *Id.*, *see also* Amended Petition Ex. 2, p. 4 (PAS App'x p. 629). Ameren's risk assessment established that there is no risk to human health or the environment by the presence of CCR in Old Meredosia. Amended Petition, p. 29, *citing* Ex. 3 (PAS App'x pp. 1033 to 1050).

Also, unlike typical CCR surface impoundments, there is an established ecosystem on the surface of Old Meredosia that supports a variety of notable plants and animals, including native plants, a rare sand prairie, a bald eagle nest, and the presumed presence of the Illinois Chorus Frog, an Illinois threatened species. Amended Petition, p. 28 and Attachment A to Ex. 2 (PAS App'x pp. 645 to 684). The existence of these factors justifies an adjusted standard.

Instead, Ameren is proposing to install a system to treat the groundwater slightly impacted by the historic CCR. The proposed adjusted standard would not result in environmental or adverse environmental or health effects substantially or significantly more adverse than the effects considered by the Board when it adopted Part 845. In fact, as established herein, requiring a Part 845 closure for Old Meredosia would result in the destruction of a mature and thriving ecosystem supporting notable and sensitive species, without any demonstrated or substantive benefit.

**I. Consistency with Federal Law (35 Ill. Admin. Code 104.406(i))**

Ameren's proposed standards are consistent with federal law because the federal CCR rule, do not apply to MSP and Old Meredosia. MSP is not an active electric utility, and does not have an inactive CCR surface impoundment or legacy CCR surface impoundment. Accordingly, the federal standards for the disposal of CCR in landfills and surface impoundments do not apply. 40 C.F.R. § 257.50 (c), (d) & (e); *See also* Ameren's Response to Illinois EPA's Recommendation, pp. 20-24.

**J. Hearing on the Petition (35 Ill. Admin. Code 104.406(j)**

Ameren requests a hearing on the Petition.

**I. DOCUMENTS RELIED UPON (35 Ill. Admin. Code 104.406(k))**

Ameren has provided the citations to relevant supporting documents and legal authorities and attached as exhibits to its Amended Petition the supporting documents which it relies on

for this Second Amended Petition. Ameren may also supplement this petition, with testimony or further argument, as allowed under Board rules.

## II. Conclusion

WHEREFORE, for all the foregoing reasons Ameren Energy Medina Valley Cogen, LLC respectfully requests that its Second Amended Petition for adjusted standards be granted and the Board provide Ameren the relief requested herein.

Dated: June 4, 2026

Respectfully submitted,

**Ameren Energy Medina Valley Cogen, LLC, Petitioner**

By: /s/ Kristen L. Gale
One of its Attorneys

Kristen L. Gale
Susan M. Franzetti
Craig Thedwall
Nijman Franzetti LLP
10 S. LaSalle Street, Suite 3400
Chicago, IL 60603
(312) 251-5590
kg@nijmanfranzetti.com
sf@nijmanfranzetti.com
ct@nijmanfranzetti.com

Electronic Filing: Received, Clerk's Office 06/04/2026

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

| | | |
|---|---|---|
| IN THE MATTER OF: | ) | |
| | ) | |
| PETITION OF AMEREN ENERGY MEDINA | ) | AS 21-008 |
| VALLEY COGEN, LLC (OLD MEREDOSIA) | ) | (Adjusted Standard - Land) |
| FOR ADJUSTED STANDARDS | ) | |
| FROM 35 ILL. ADMIN. CODE PART 845 | ) | |

## INDEX OF EXHIBITS


**Exhibit 1** *Geotechnology, Inc*., Closure Plan: Fly Ash Pond and Bottom Ash Pond, Meredosia Power Station, Project No. J024917.01 (Aug. 15, 2016)…….Pg. 1

**Exhibit 2** *Neal Kochis & Steven F. Putrich*, Technical Memorandum – Engineering Review/Expert Witness Support: Petition for Adjusted Standard for Old Meredosia, Illinois Pollution Control Board Docket AS 2021-08, HALEY & ALDRICH. (April 2023)……..Pg. 620

**Exhibit 3** *Lisa JN Bradley*, Report on Old Meredosia Risk Evaluation, Meredosia, Illinois, HALEY & ALDRICH (April, 2023)……Pg. 1033

**Exhibit 4** July 9, 1971 CIPS Permit……..Pg. 1116

**Exhibit 5** Elevation Rendering of Old Meredosia…….Pg. 1163

**Exhibit 6** Pre-Filed Answers of Gary King, R20-19, p.24 (Sep. 24, 2020)……..Pg. 1164

**Exhibit 7** *Dimitri Quafisi & Neal Kochis*, Technical Memorandum- Old Meredosia Update, Meredosia, Illinois, HALEY & ALDRICH (Apr. 3, 2026)……Pg. 1167

**Exhibit 8** *Annie Muehlfarth*, AmerenEnergy Medina Valley Cogen, LLC – Meredosia Energy Center, Post-Closure Annual Report for 2025, (Jan. 16, 2026)……...Pg. 1222

**Exhibit 9** Table of Regulations for the Exemption in Old Meredosia Adjusted Standard…….Pg. 2665

**Exhibit 10** *Loureiro Engineering Associates, Inc*., Old Ash Pond, Meredosia Power Station In Situ Boron Treatment Preliminary Draft Work Plan (April, 2026)……..Pg. 2669

# EXHIBIT 7

HALEY & ALDRICH, INC.
8899 Gander Creek Dr
Miamisburg, OH 45342
937.384.9940

**TECHNICAL MEMORANDUM**

April 3, 2026
File No. 0206891

TO: Ameren Missouri
1901 Chouteau Ave.
St. Louis, MO 63166-6149
Craig J. Giesmann - Director, Environmental Services

FROM: Haley & Aldrich, Inc.
Dimitri Quafisi
Technical Expert
Neal Kochis
Program Manager

SUBJECT: Old Meredosia Update Memo

## Introduction

Pursuant to a request from Ameren and its outside legal counsel, Haley & Aldrich, Inc. (Haley & Aldrich) has prepared a technical memorandum addressing the following three main topics:

- Evaluation of the separation between the base of the unit and the seasonal high groundwater table.
- Predominate nature of groundwater flow at the Site.
- Evaluation of the potential for groundwater flow off Site.

## Conceptual Site Model

The Meredosia Power Station Site is located at 800 South Washington Street, along the east bank of the Illinois River, just south of the Village of Meredosia. Old Meredosia is a closed coal ash impoundment constructed to support the Meredosia Power Station to manage CCR through the early 1970s. Old Meredosia is situated south of the former power block and facility infrastructure and is separated from the Illinois River to the west by two closed CCR Surface Impoundments (CCRSIs), the Bottom Ash Pond and the Fly Ash Pond[1] (Figure 1). The Old Meredosia footprint is trapezoidal in shape, with an

[1] Constructed to replace Old Meredosia, these two CCRSIs were closed following the decommissioning of the Meredosia Generating Facility in 2011. They are subject to an Illinois Environmental Protection Agency

approximate plan area of 17 acres. These acres are presently covered by a soil cap, mature vegetative growth, and a complementary wildlife habitat.

Topography at the Site ranges from a high of 460 feet above mean sea level (amsl) in the western portion of the Site, sloping to the east toward the Illinois River at an elevation of approximately 427 feet amsl. Uplands to the east of the Site comprising the eastern valley wall of the Illinois River Valley rises to an elevation of approximately 550 to 600 feet amsl.

The Meredosia Power Station and surrounding areas within the Illinois River Valley are underlaid by Mississippian bedrock of the Lower Valmeyeran Series consisting of Meppen Limestone, Fern Glen Formation, and the Burlington-Keokuk Limestone (Kolata, 2005). Unconsolidated geology overlying the Lower Valmeyeran Series at the Site consists of channel and floodplain deposits of the Cahokia formation underlain by glacial outwash deposits from the Henry Formation.

**The Cahokia Alluvium** – consists mainly of poorly-sorted silt, clay, and silty sand, but locally contains lenses of sand and gravel. The upper portion of the formation consists of overbank silt and clays. The lower portion consists of coarse-textured sand and lateral accretion deposits. The Cahokia formation may be up to 20 feet thick in the area of the Meredosia Power Station (Geotechnology Inc., 2016).

**The Henry Formation** – consists of glacial sand and gravel outwash. The Henry Formation is subdivided into three members that differ in lithology: the Batavia Member (outwash plains), the Mackinaw Member (valley trains), and the Wasco Member (ice-contact deposits; Willman and Frye, 1970; Willman et al., 1975). Based on information from well logs, the thickness of the Henry Formation ranges from 60 to 84 feet in the area of the Meredosia Power Station (Geotechnology Inc., 2016).

As reported in the *Hydrogeologic Assessment Report* prepared December 13, 2016, Geotechnology, Inc. completed borings as part of the global stability evaluation and groundwater monitoring well installation efforts. The findings from this evaluation described the stratigraphic column at the Site as native surface soils (predominantly silts and clays of the Cahokia Alluvium) approximately 8 to 17 feet below ground surface (bgs). Below this surface soil, alluvium was encountered which was described as the Henry Formation which comprises the primary shallow aquifer at the Site.

**Except in Extreme Short-Term Events, the Groundwater Flows Towards the Illinois River**

The groundwater at the Site flows from east to west/northwest across the Site from the upland toward the Illinois River, which is the major hydraulic control in the vicinity of the Old Meredosia Site. Attachment A provides groundwater contour maps prepared for the Site that depict standard westerly/northwesterly flow conditions. This attachment provides copies of groundwater elevation contours for each groundwater sampling event completed at the Site and incudes historical groundwater contour maps with the exception of those for March and June 2011 which were not completed due to low water levels (See Attachment A). The Geotechnology Hydrogeologic Assessment Report for Meredosia Fly Ash and Bottom Ash Pond Closure stated that only gauging events with data from at least five monitoring wells would be included. For this reason, the contour figures for March and

(IEPA)-approved closure plan that includes a groundwater management zone and monitoring requirements. Ameren has filed an operating permit for them pursuant to Part 845.

June 2011 were not prepared. Additionally, groundwater sampling was not performed between 2012 and 2016 and therefore flow maps for this time period were not prepared.

Groundwater is in communication with the Illinois River and groundwater gradients flatten during elevated river levels and during major flood events reverse. However, the groundwater gradient rarely reverses in the vicinity of Old Meredosia. Rather, since groundwater sampling began in November 2010, flow reversal was observed on three occasions (March 2018, November 2018, and June 2019) with the most extreme reversal event observed during the June 4, 2019 groundwater sampling event. This June 2019 event was compared to the historical river elevations documented using publicly available data from the United States Geological Survey (USGS) gauging station 05585500, Illinois River at Meredosia, Illinois (Meredosia USGS Gauge). When compared to historical elevation records at the Meredosia USGS Gauge, the June 4, 2019 event was one of the four highest readings recorded at the gauge (reading of 28.39 feet or elevation 446.03 feet amsl),[2] and within 0.50 feet of the highest gauge reading of 28.86 feet (elevation 446.50 feet amsl) recorded on July 2, 2015. **Figure 2** below presents the gauge heights for the past fifteen years at USGS station 05585500. The other two highest readings occurred in May 26, 1943 (elevation 446.34 ft amsl) and April 27, 2013 (elevation 446.33 ft amsl).

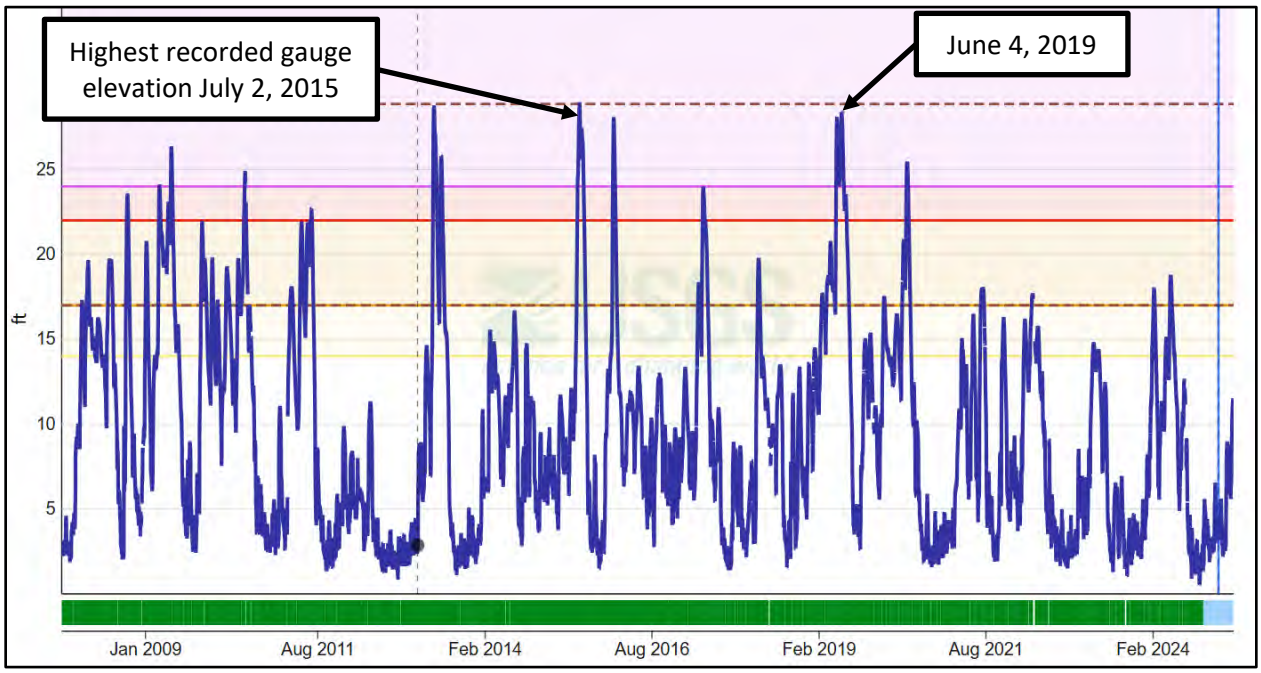



**Figure 2 – USGS gauge height continuous data for station 05585500, Illinois River at Meredosia, Illinois.**

**Groundwater Does Not Intersect with the Base of Old Meredosia**

To evaluate the separation between the Old Meredosia unit and the groundwater table, the June 4, 2019 groundwater gauging event was utilized as it provided the highest water levels recorded in the monitoring well network and was taken in conjunction with one of the highest river stages recorded. During this period, the resulting separation between the groundwater table and the base of the unit was conservatively calculated by subtracting the highest estimated groundwater elevation near the Old

[2] Including Meredosia USGS Gage height records predating the construction of Old Meredosia (prior to April 1922).

Meredosia unit (443.0 feet) from the lowest estimated base of unit elevation (445.9 feet). The estimated separation was 2.9 feet between the base of the unit and the maximum measured seasonal high-water table. It is also noted that prior to the June 4, 2019 peak, the river had already risen to an elevation of 28.00 feet (elevation 445.68 feet amsl) less than a month prior as part of the same overall flooding event (see **Figure 3**, below). This sustained high river elevation prior to the June 4 peak and gauging event demonstrates that groundwater elevations in the vicinity of Old Meredosia were very close to equilibrium during the June 4, 2019 groundwater gauging event.

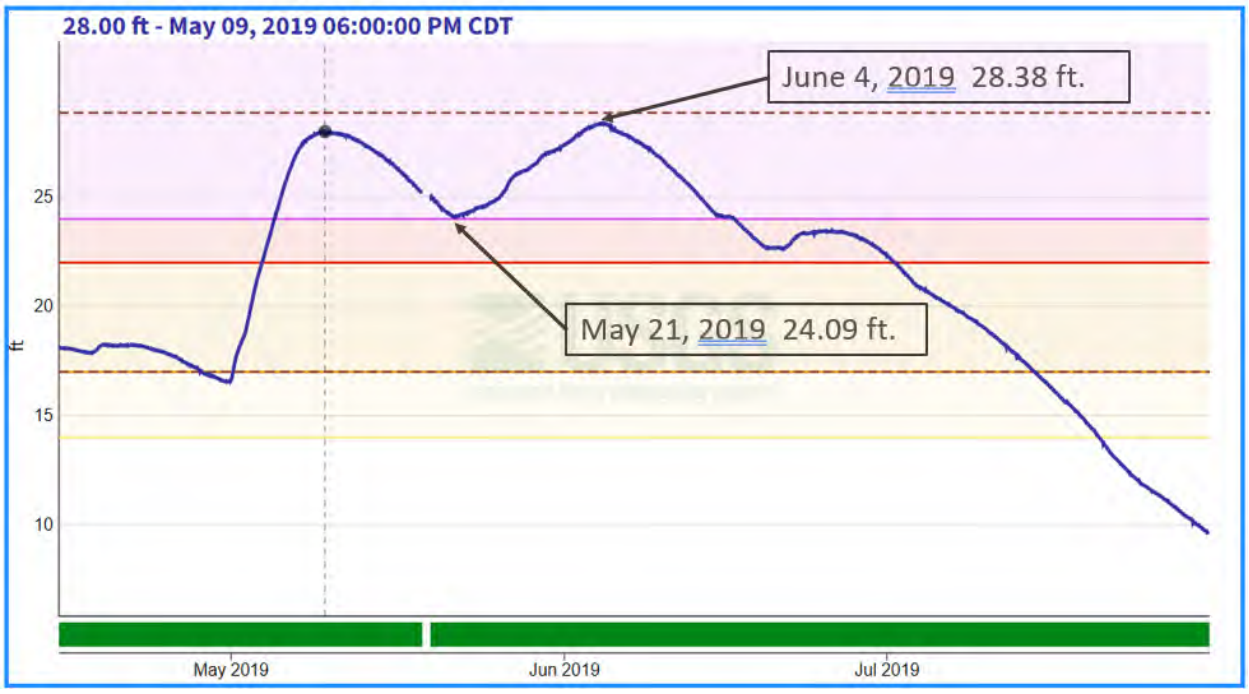



**Figure 3: Detailed view of 2019 flood period from May through June.**

Such analysis reflects that the maximum recorded river stage measured on July 2, 2015 results in a minimum separation between groundwater table and base of unit of approximately 2.4 feet.

The determination of the seasonally high groundwater table does not include conditions resulting from rare or extreme rainfall and/or flooding events; however, such an event was evaluated to demonstrate that even under extreme conditions, the separation between the unit and the water table is present. Considering the extreme nature of the June 4, 2019 flood event and the fact that groundwater elevation data was collected on that same day, it is concluded that the resulting Site groundwater conditions at that time provide a very conservative representation of the seasonally high groundwater table. A graph of water levels from APW-5, APW-8, and APW-11 is presented below with the elevation measured on June 4, 2019 for reference. As presented in **Figure 4**, groundwater elevations during seasonal highs average below 435 feet amsl. At this elevation, the separation between the bottom of the unit and the water table is approximately 11 feet. We note that one measurement shown below for APW-11 in August 2022, was anomalously high and was not included in the groundwater contours prepared in the *2022 Groundwater Monitoring and Annual Report* prepared by Ramboll. **Accordingly, there is no**

**hydraulic connection between any portion of the base of the Old Meredosia Pond and the groundwater under normal or extreme groundwater fluctuations**.

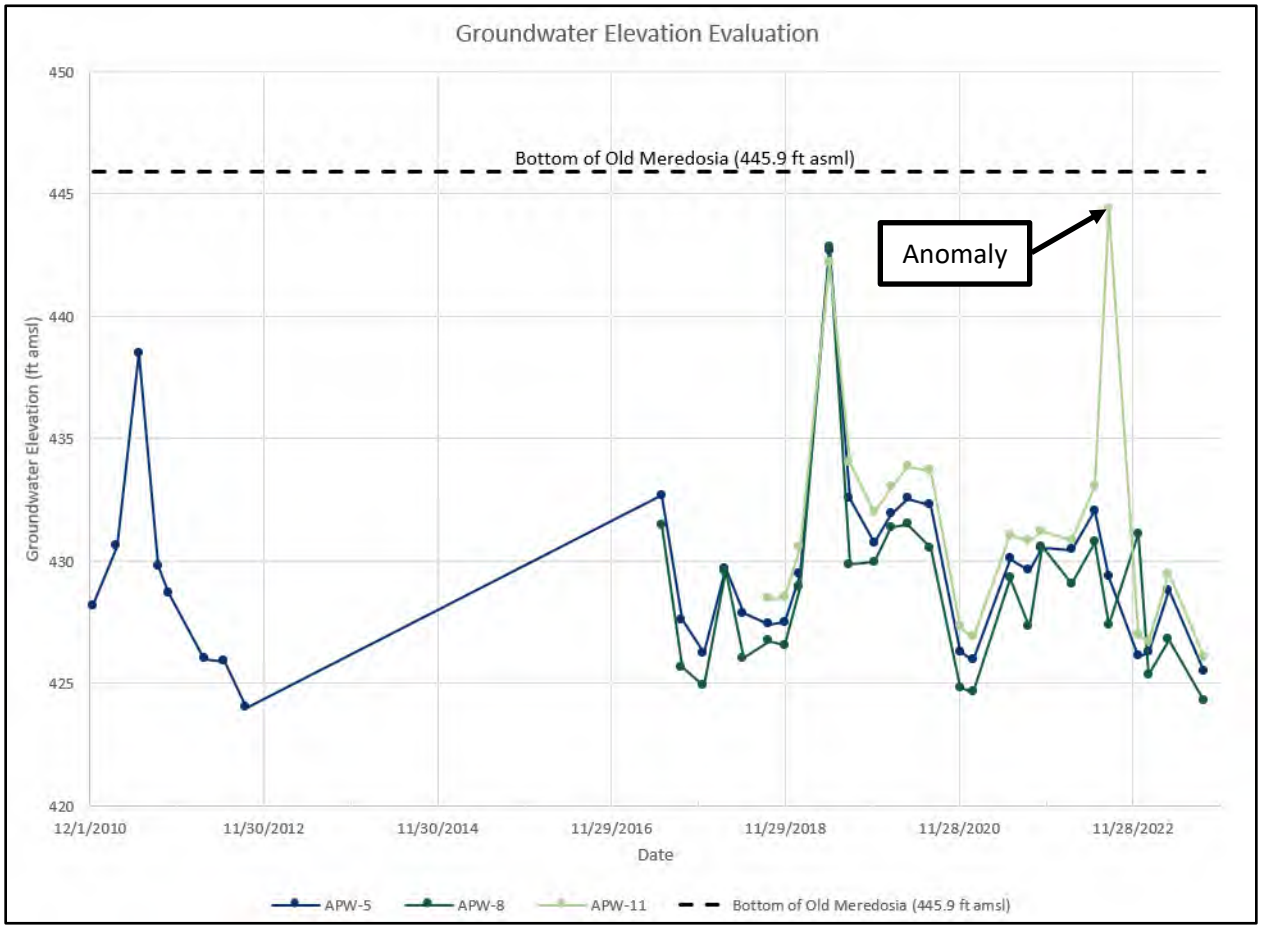



**Figure 4: Groundwater elevations over time for three monitoring wells near the Old Meredosia Unit. Elevation of the bottom of the unit is presented for reference.**

**Absence of Evidence of Groundwater Flow Off-Site**

During extreme high-water events, groundwater flow direction can reverse from the typical east to west/northwest flow direction observed during normal conditions. The June 4, 2019 event is the most extreme of three reversal events since November 2010 where observed flow across the Site flowed to the east. To evaluate the potential for groundwater flow off Site, groundwater velocity calculations were prepared as shown in Attachment B. The groundwater flow velocity was compared to the distance to the eastern boundary of the Ameren Property, to calculate the time for the groundwater to flow offsite for the June 2019 reversal event.

The groundwater velocity analysis showed that when the groundwater flow reversed the upper range of groundwater flow velocities was approximately 0.8 feet per day. The distance from the edge of the Old Meredosia unit to the property boundary to the east is approximately 110 feet. At a speed of 0.8 feet per day, the groundwater reversal would have to be over 135 days for the water from the eastern edge of the unit to reach the property boundary 110 feet away. In review of the river gauge data, the high-

water event on June 4, 2019 lasted approximately 75 days from when the initial gauge readings entered minor flood stage (17 feet) to when the gauge returned to below minor flood stage **(Figure 5)**. Because the actual flood event was half the time required for the flow reversal to reach off-site, **there is no evidence that groundwater traveled from the edge of the unit across the property boundary. Rather, the evidence demonstrates that the groundwater remained onsite before flows returned to natural conditions (to the west/northwest).**

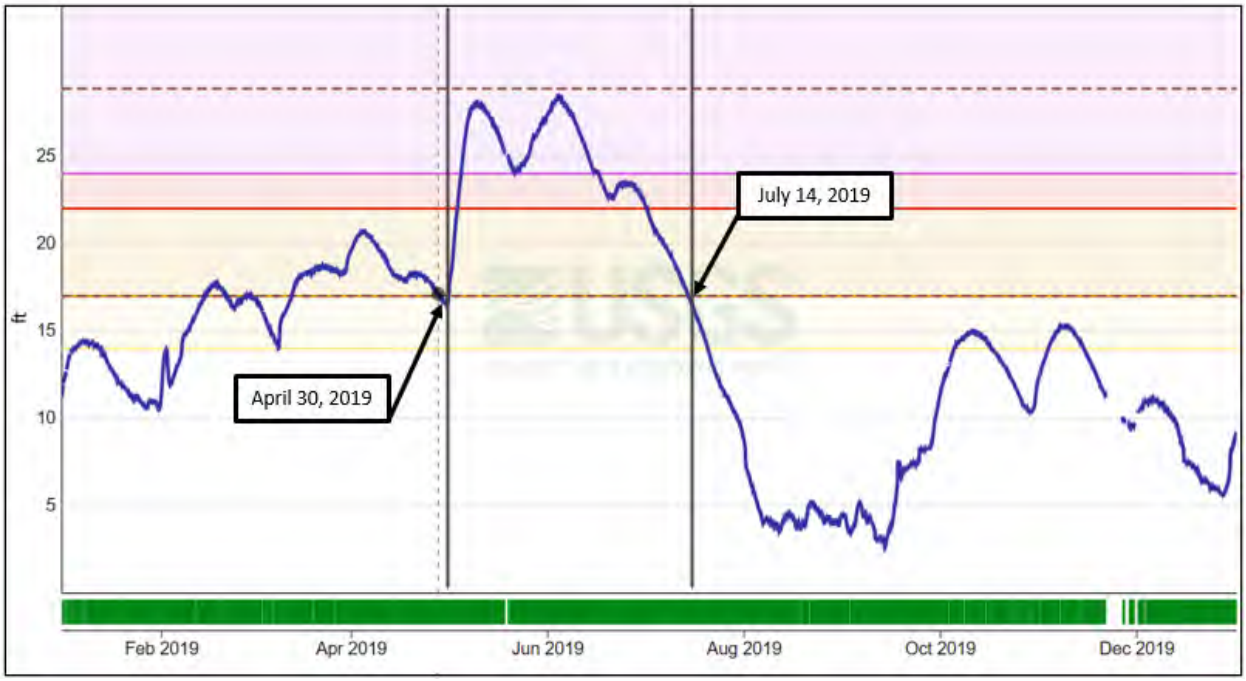



**Figure 5: USGS gauging station 05585500 showing the time period for the June 4, 2019 flooding event.**

The April 2013 and June 2015 flood events were evaluated to determine duration. Based on gauging station data, the Illinois River entered minor flood stage for 65 days and 50 days in 2013 and 2015, respectively. Both of these durations were shorter than that observed in the 2019 flood event.

## Conclusions

An evaluation of the current groundwater flow conditions was completed for the Site and the following conclusions can be ascertained.

- The predominate groundwater flow direction across the Site is from the east to the west/northwest toward the primary hydrogeologic control within the vicinity of the Illinois River.
- The groundwater is in communication with the surface water at the Site, and flood events in the river influence groundwater flow direction, resulting in rare temporary flow reversals during flooding events.
- The separation between the Old Meredosia unit and the groundwater is generally over 10 feet; however, during extreme flooding conditions like those seen in June 4, 2019, separation is still

present. This conservative review indicates that under normal seasonal high-water conditions, the unit does not have a hydraulic connection to the groundwater.

- During the most extreme of three observed groundwater flow reversals, the duration of sustained reversal (as indicated during the June 4, 2019 event) was approximately 75 days. Given groundwater flow velocities during this time period, the time required to traverse the distance from the edge of the unit to the property boundary is approximately 140 days. This makes transport off Site virtually impossible.
- Instead, even under extreme flood conditions, groundwater would not travel from the edge of the unit to the eastern property boundary before flows returned to natural conditions (to the west/northwest).

## References

1. Geotechnology Inc., 2016, Hydrogeologic Assessment report Fly Ash Pond and bottom Ash Pond.

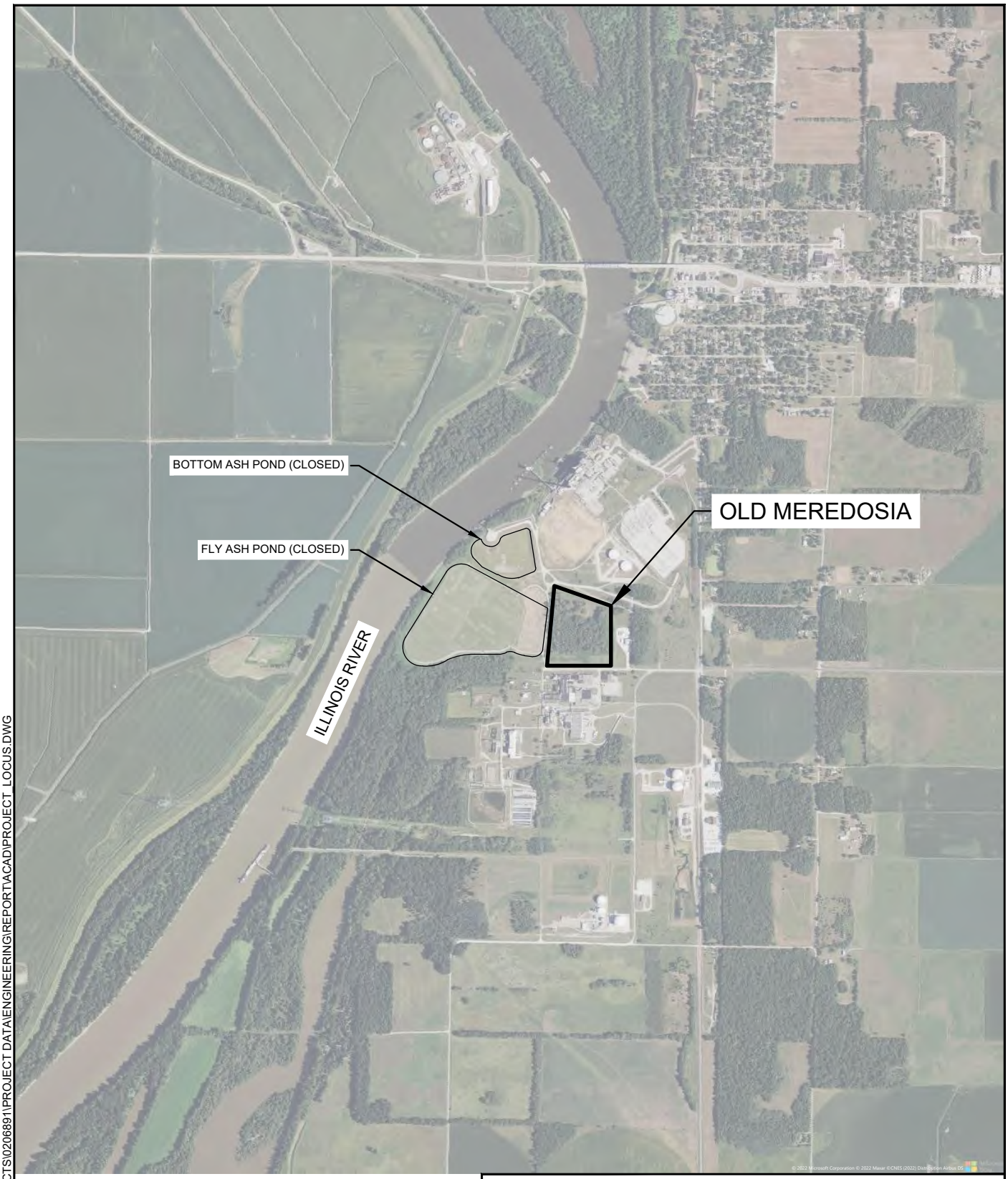
2. Kolata, D.R., 2005. Bedrock Geology of Illinois, Illinois State Geological Survey, Illinois Map 14.

3. Willman, H.B. & Frye J.C., 1970, Pleistocene Stratigraphy of Illinois, Illinois State Geological Survey, Bulletin 94, pg 204.

4. Willman, H.B., Atherton, E., Buschbach, T.C., Collinson, C., Frye, J.C., Hopkins, M.E., Lineback, J.A., and Simon, J.A., 1975. Handbook of Illinois Stratigraphy: Illinois State Geological Survey, Bulletin 95, 261 p.

Attachments:
Figure 1 – Site Location Map
Attachment A – Groundwater Contour Maps Prepared by Ramboll
Attachment B – Groundwater Velocity Calculations

FIGURE



SITE LOCATION

NOTE:

BASE MAP TAKEN FROM BING IMAGES

N

0 2000 4000

SCALE IN FEET

HALEY ALDRICH

AMEREN MISSOURI
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

SITE LOCATION MAP

SCALE: AS SHOWN
APRIL 2026

FIGURE 1

Saved by: GRUENDLING, SETH Printed: 12/9/2022 8:30 AM Sheet: HA-FIG-A-P
\\HALEYALDRICH\SHARE\CF\PROJECTS\0206891\PROJECT DATA\ENGINEERING\REPORT\ACAD\PROJECT LOCUS.DWG

# ATTACHMENT A
## Groundwater Contour Maps Prepared by Ramboll

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (November 17, 2010)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: [illegible] | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - NOVEMBER 2010**

| Project Number | |
|---|---|
| J024917.01 | PLATE 8 |

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (December 13, 2010)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/16/20 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - DECEMBER 2010**

| Project Number | |
|---|---|
| J024917.01 | PLATE 9 |

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (September 15, 2011)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

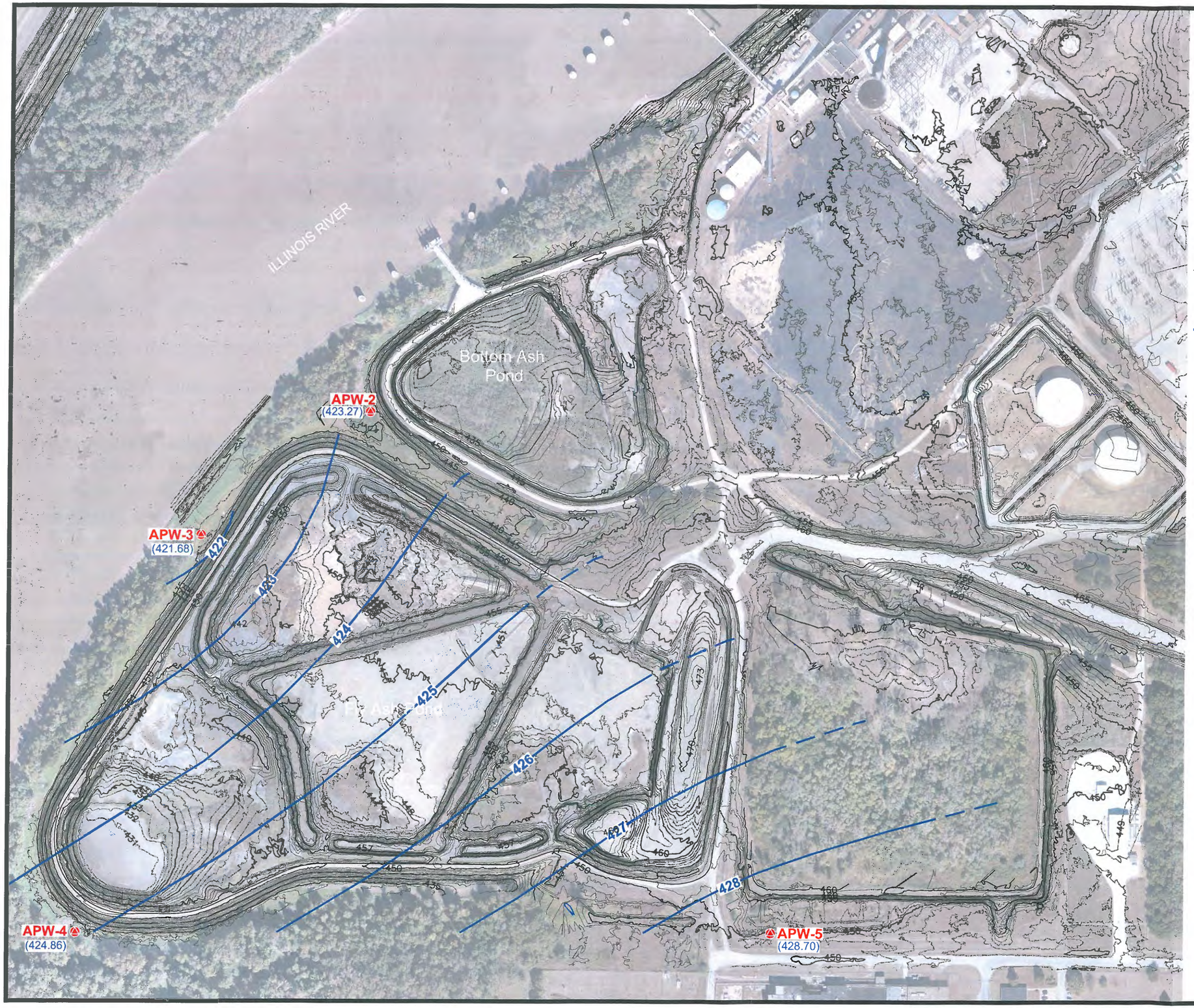
| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - SEPTEMBER 2011**

| Project Number | |
|---|---|
| J024917.01 | PLATE 10 |




NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (October 28, 2011)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - OCTOBER 2011**

| Project Number | |
|---|---|
| J024917.01 | PLATE 11 |

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (March 26, 2012)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/26/16 | Date: 7/20/16 |

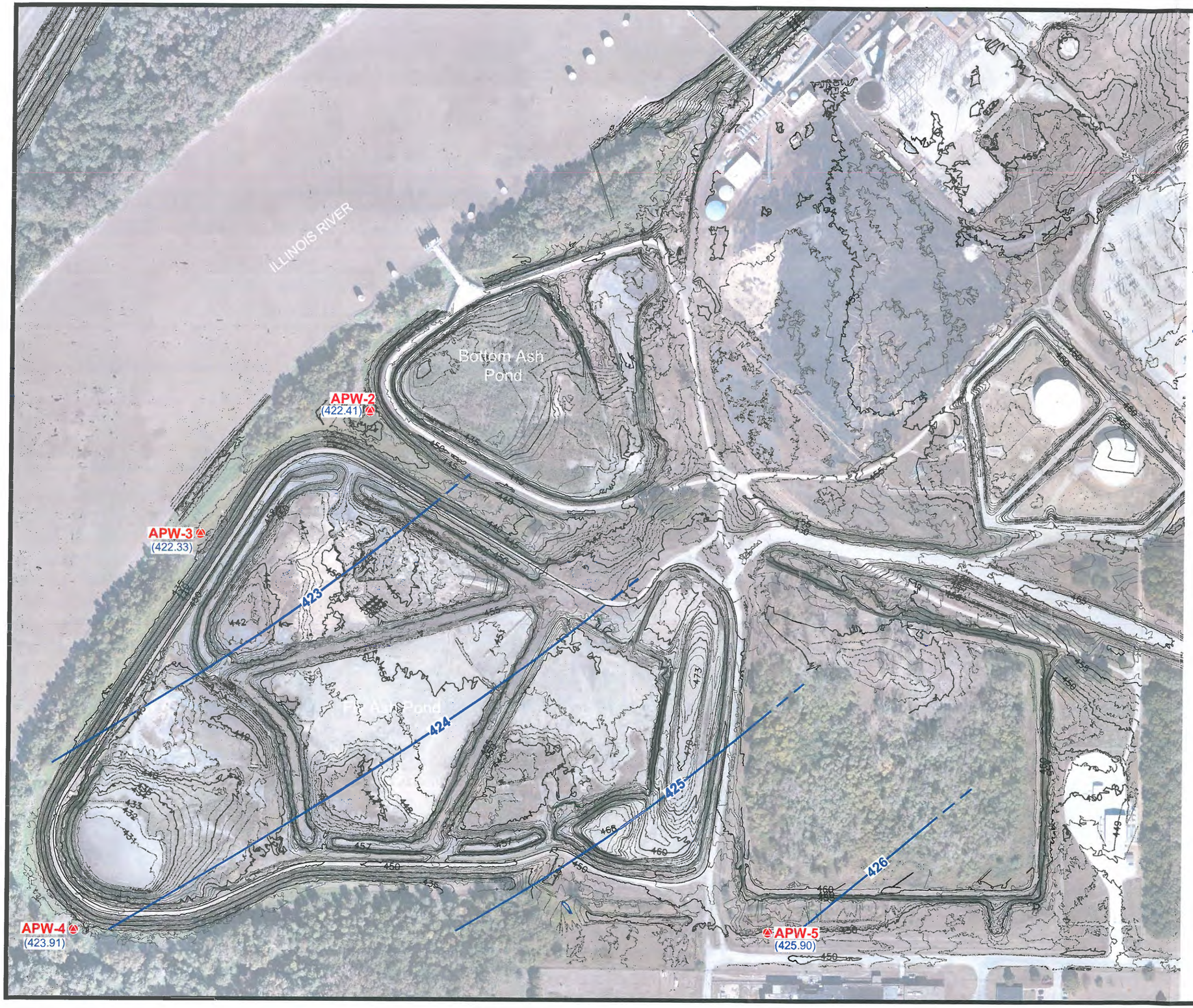
GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - MARCH 2012**

Project Number J024917.01

PLATE 12




NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (June 18, 2012)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| Drawn By: WAH | Ck'd By: | App'vd By: AMS |
|---|---|---|
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - JUNE 2012**

| Project Number J024917.01 | PLATE 13 |
|---|---|

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (September 17, 2012)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

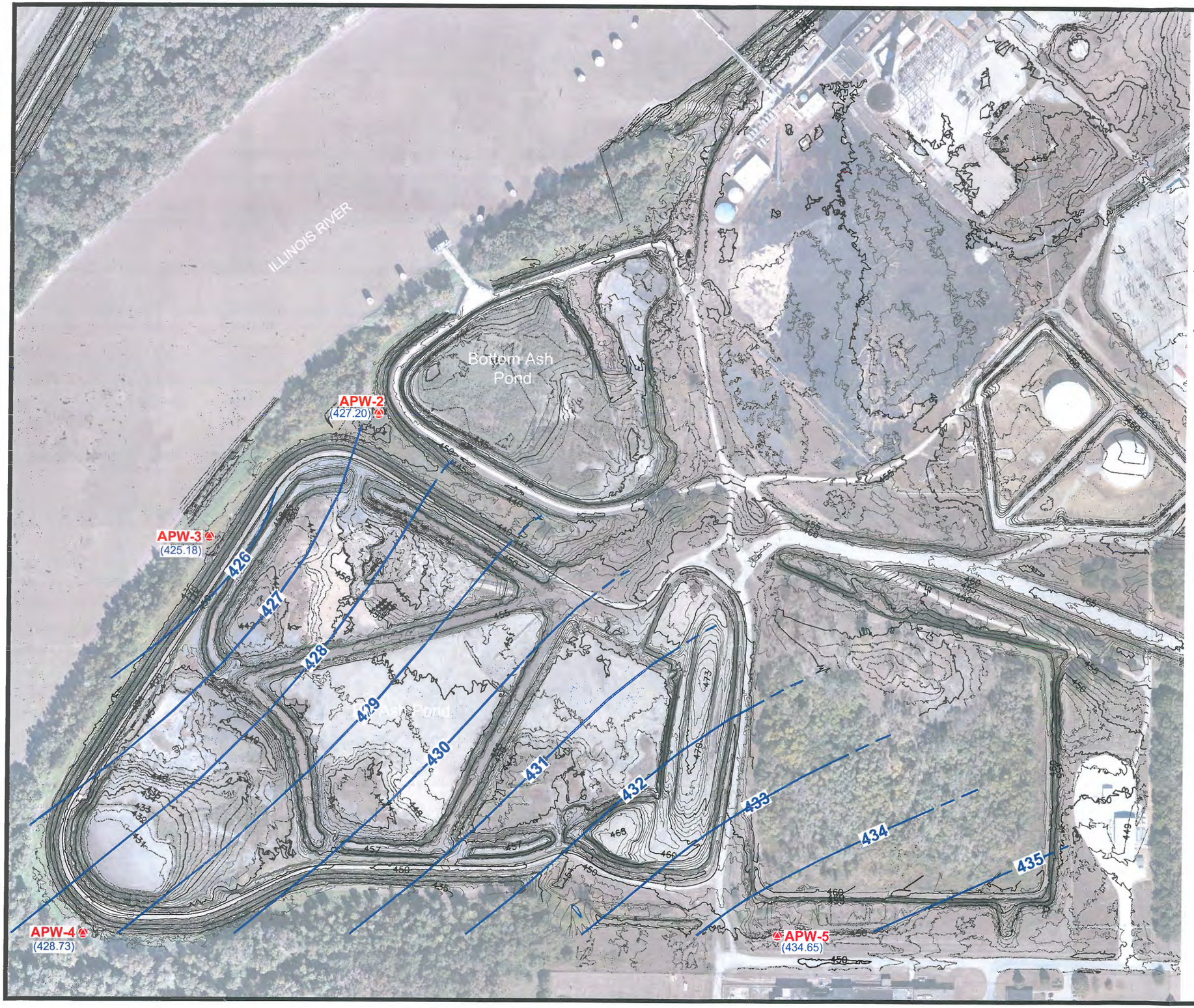
| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: VAE | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - SEPTEMBER 2012**

| | |
|---|---|
| Project Number J024917.01 | PLATE 14 |




NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (August 25, 2015)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: MA | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - AUGUST 2015**

| Project Number | |
|---|---|
| J024917.01 | PLATE 15 |

NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (December 21, 2015)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

| Drawn By: WAH | Ck'd By: the | App'vd By: AMS |
|---|---|---|
| Date: 3-9-16 | Date: 7/20/16 | Date: 7/20/16 |

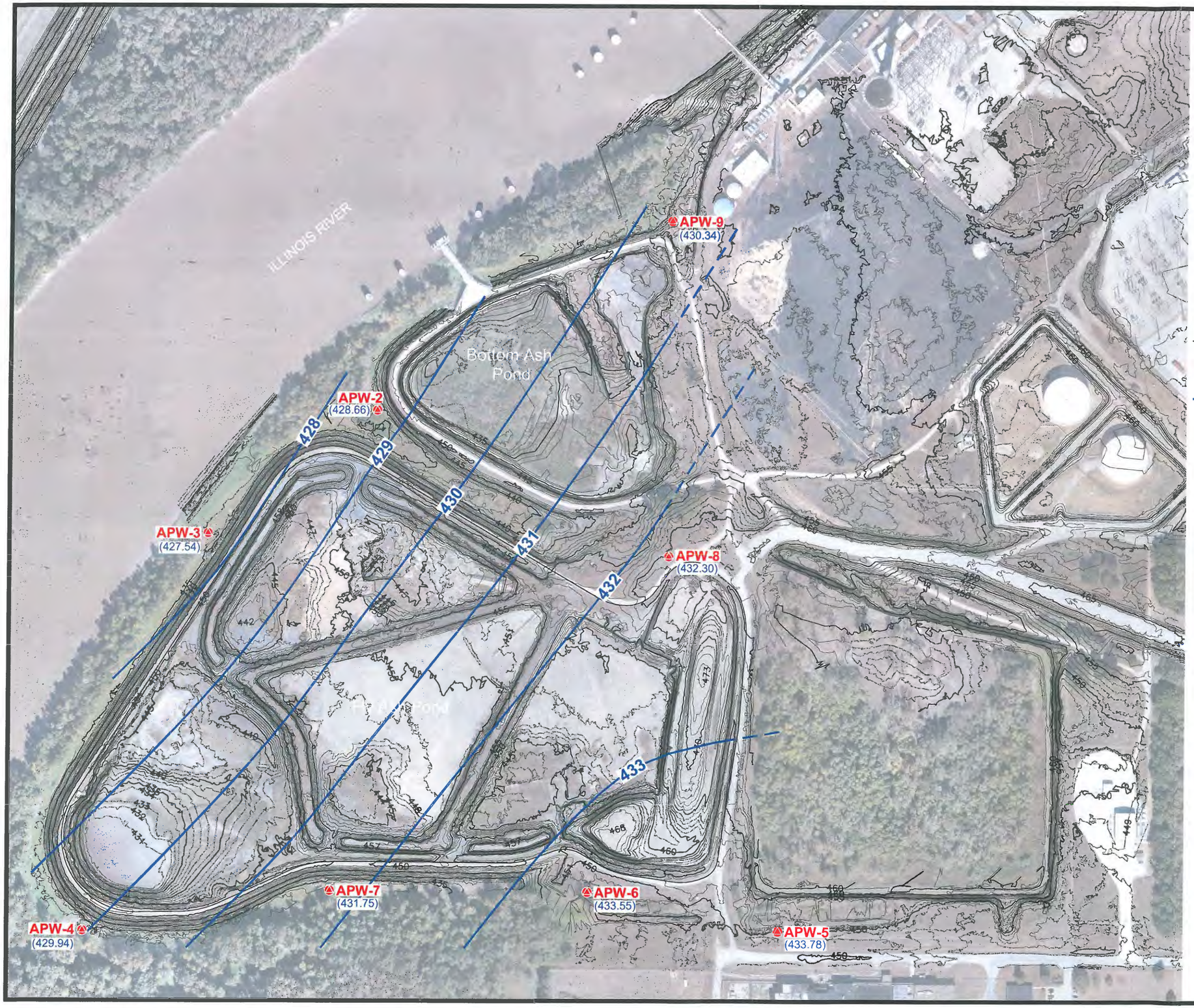
GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - DECEMBER 2015**

Project Number J024917.01

PLATE 16




NOTES

1. Plan adapted from drawings based on topography obtained by AeroView in October 2015 and supplied by the client.
2. Monitoring Wells were located by the project surveyor.
3. Monitoring Well APW-1 is located beyond the limits of this map and is approximately 2000-feet east of Monitoring Well APW-5.

LEGEND

- Monitoring Well Location
- (427.20) Groundwater Elevation at Well Location (February 18, 2016)
- —425— Groundwater Elevation Contour

N

0 300 600

SCALE IN FEET

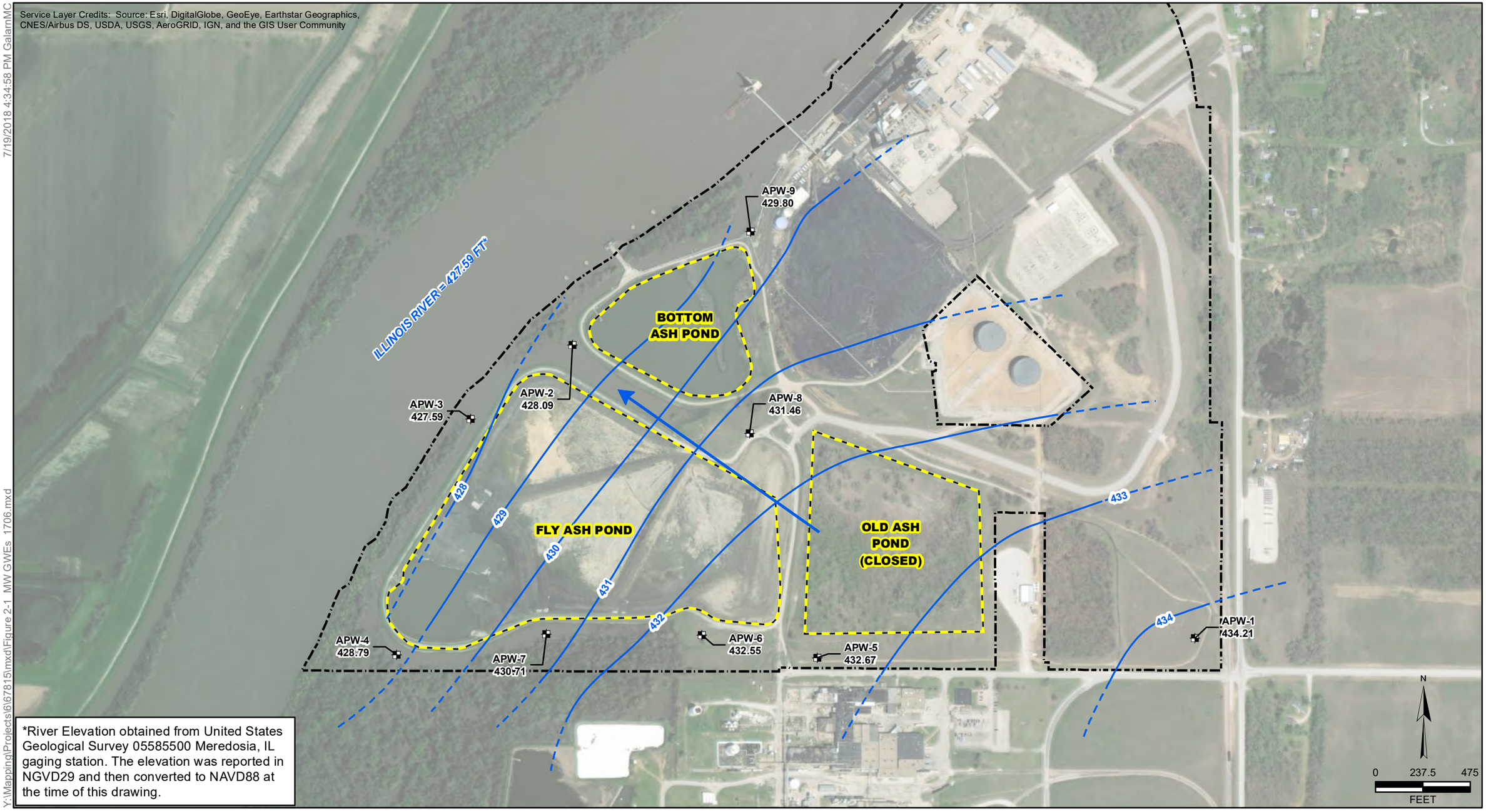
| | | |
|---|---|---|
| Drawn By: WAH | Ck'd By: VJE | App'vd By: AMS |
| Date: 5-18-16 | Date: 7/20/16 | Date: 7/20/16 |

GEOTECHNOLOGY INC
FROM THE GROUND UP

Meredosia Power Station
Meredosia, Illinois

**GROUNDWATER ELEVATION CONTOURS - FEBRUARY 2016**

| Project Number | |
|---|---|
| J024917.01 | PLATE 17 |




*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.

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

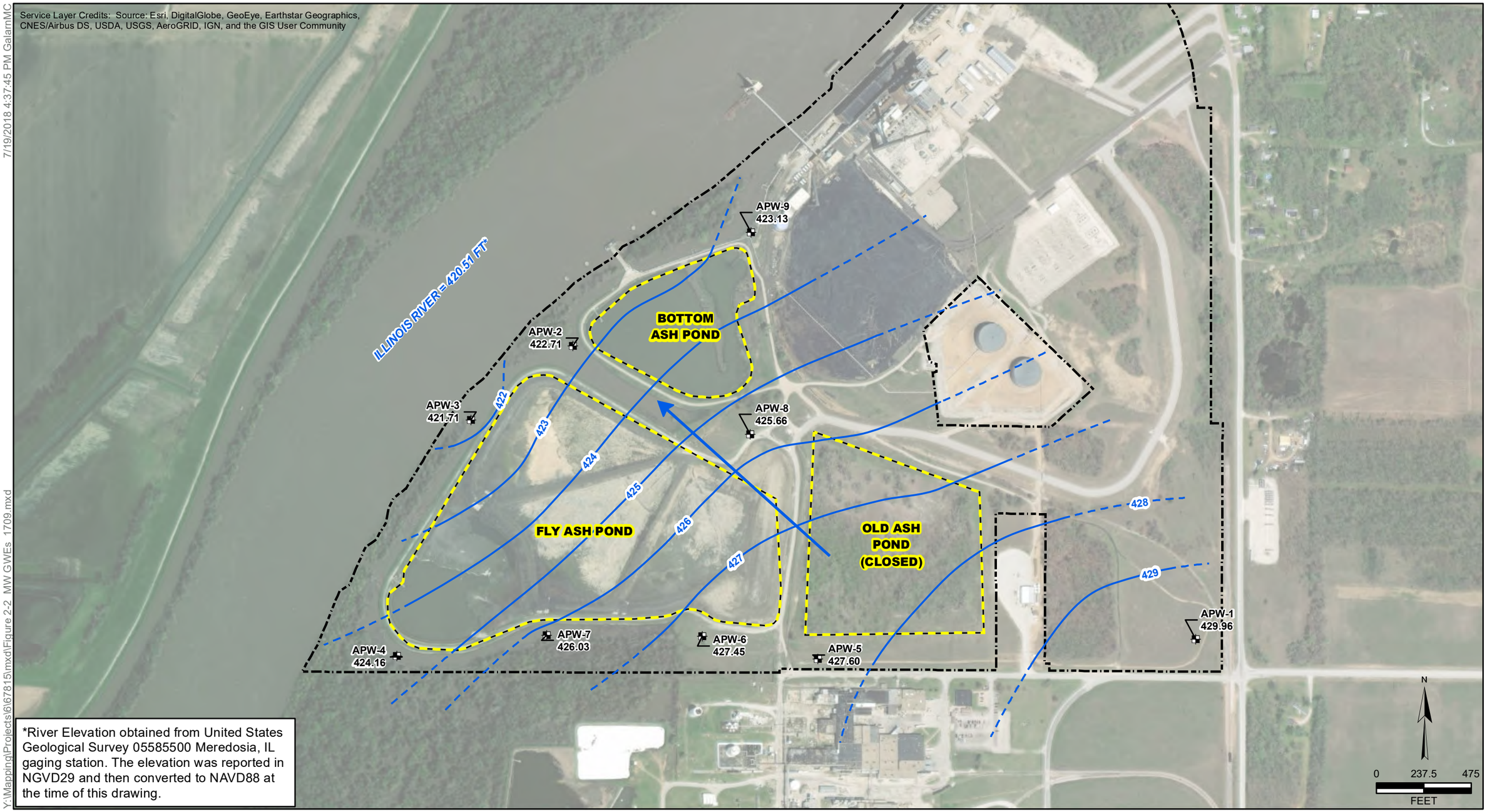
## GROUNDWATER ELEVATIONS - JUNE 28, 2017

2018 ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



7/19/2018 4:34:58 PM GalarnMC
Y:\Mapping\Projects\6\67815\mxd\Figure 2-1 MW GWEs 1706.mxd




*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.

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

## GROUNDWATER ELEVATIONS - SEPTEMBER 19, 2017

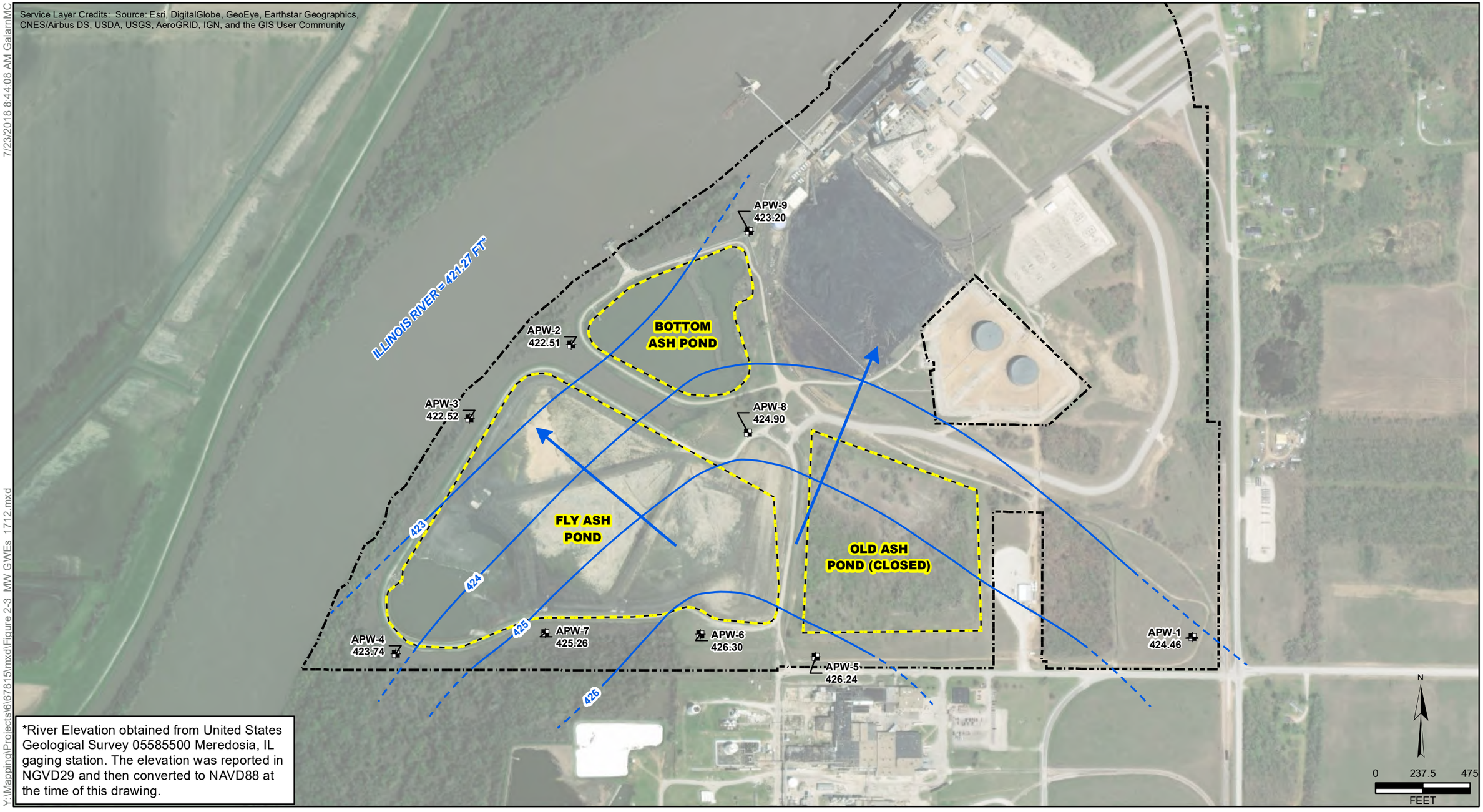
2018 ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



7/19/2018 4:37:45 PM GalarnMC
Y:\Mapping\Projects\6\67815\mxd\Figure 2-2 MW GWEs 1709.mxd

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community




*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.

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

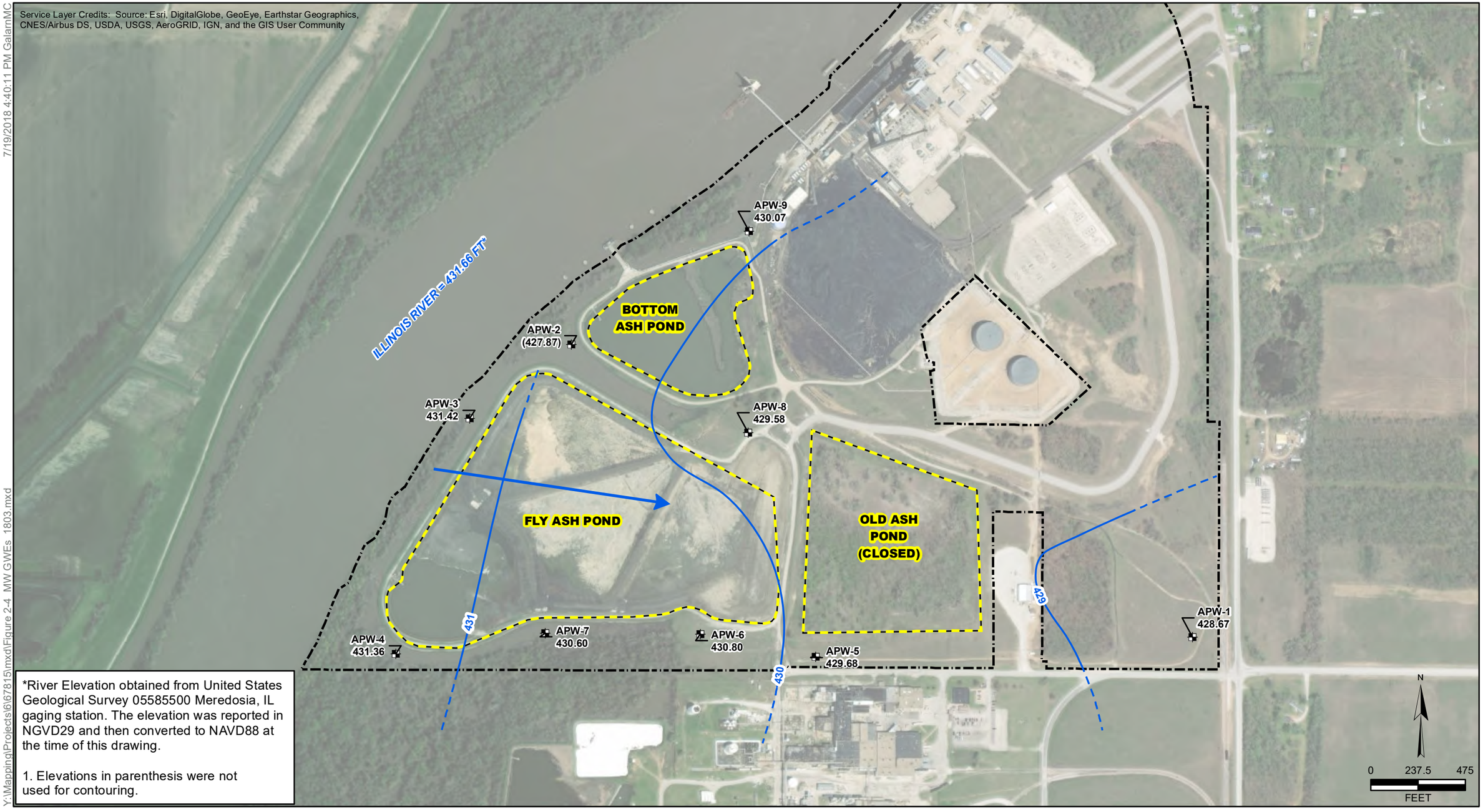
## GROUNDWATER ELEVATIONS - DECEMBER 21, 2017

2018 ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



7/23/2018 8:44:08 AM GalarnMC
Y:\Mapping\Projects\6\67815\mxd\Figure 2-3 MW GWEs 1712.mxd




*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.

1. Elevations in parenthesis were not used for contouring.

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

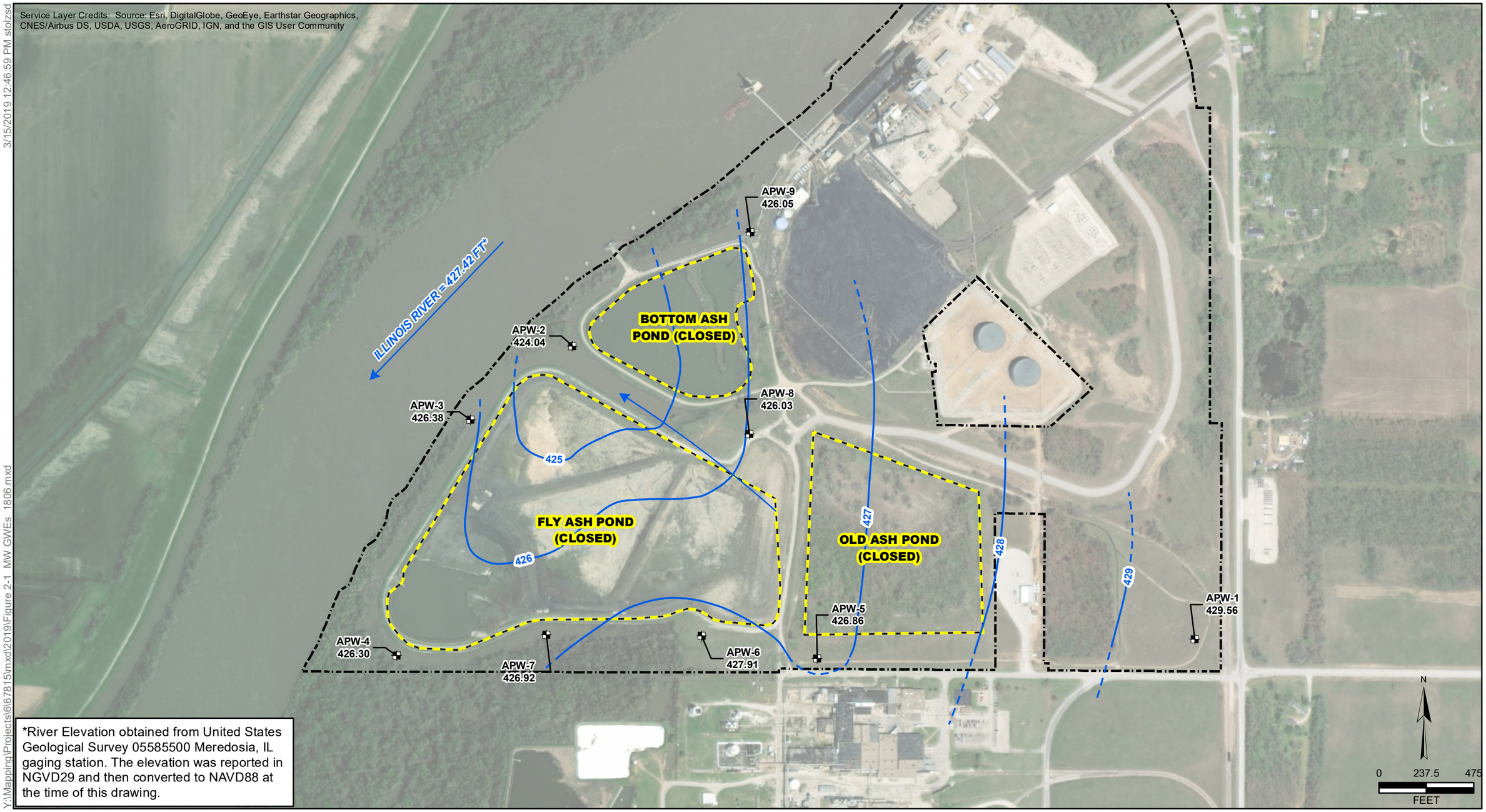
## GROUNDWATER ELEVATIONS - MARCH 21, 2018

2018 ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



7/19/2018 4:40:11 PM GalarnMC
Y:\Mapping\Projects\6\67815\mxd\Figure 2-4_MW GWEs_1803.mxd




*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.

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

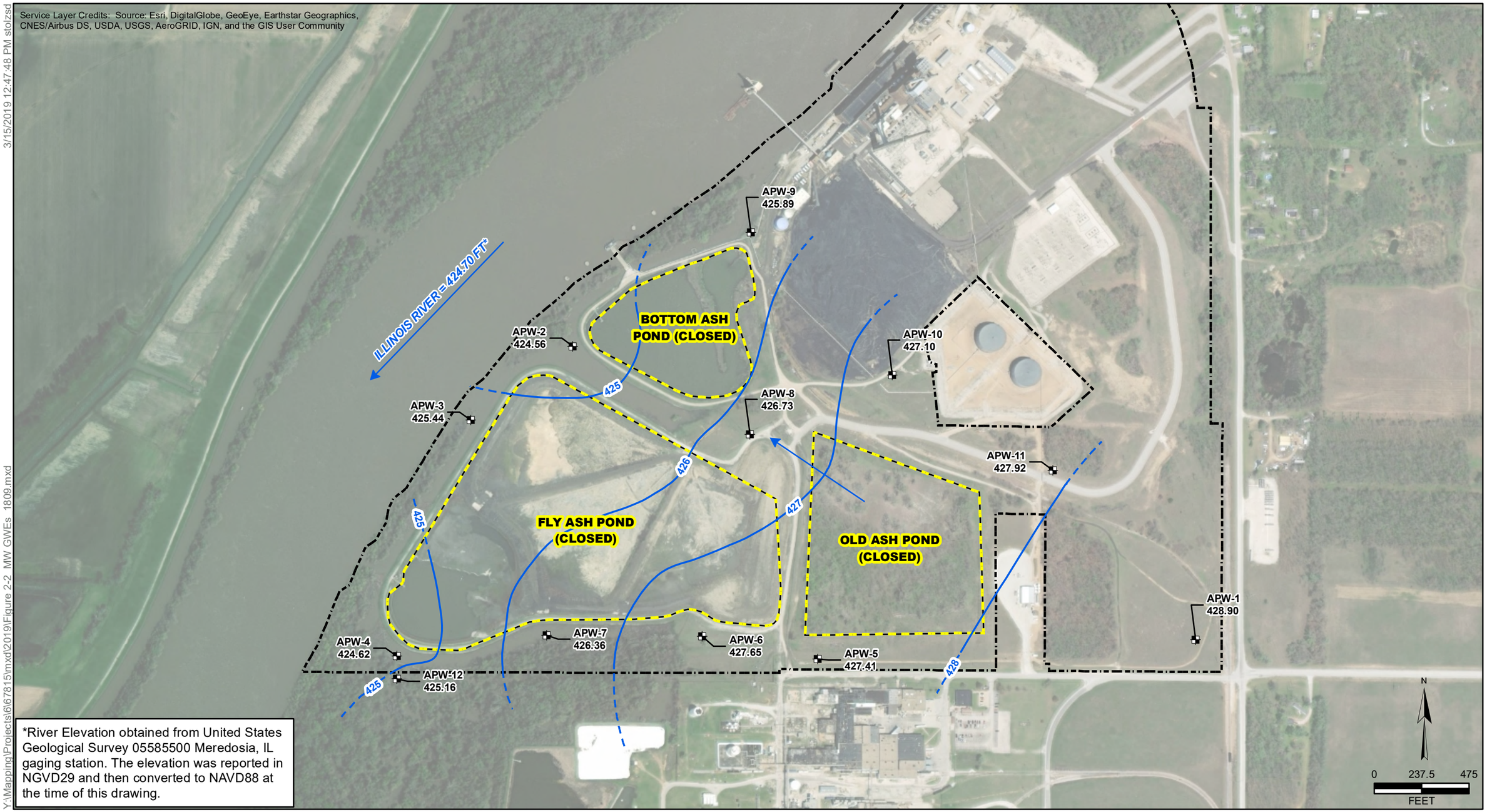
## GROUNDWATER ELEVATIONS - JUNE 5, 2018

2018 SECOND ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



3/15/2019 12:46:59 PM stolzsd
Y:\Mapping\Projects\6\67815\mxd\2019\Figure 2-1 MW GWEs 1806.mxd




*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.

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

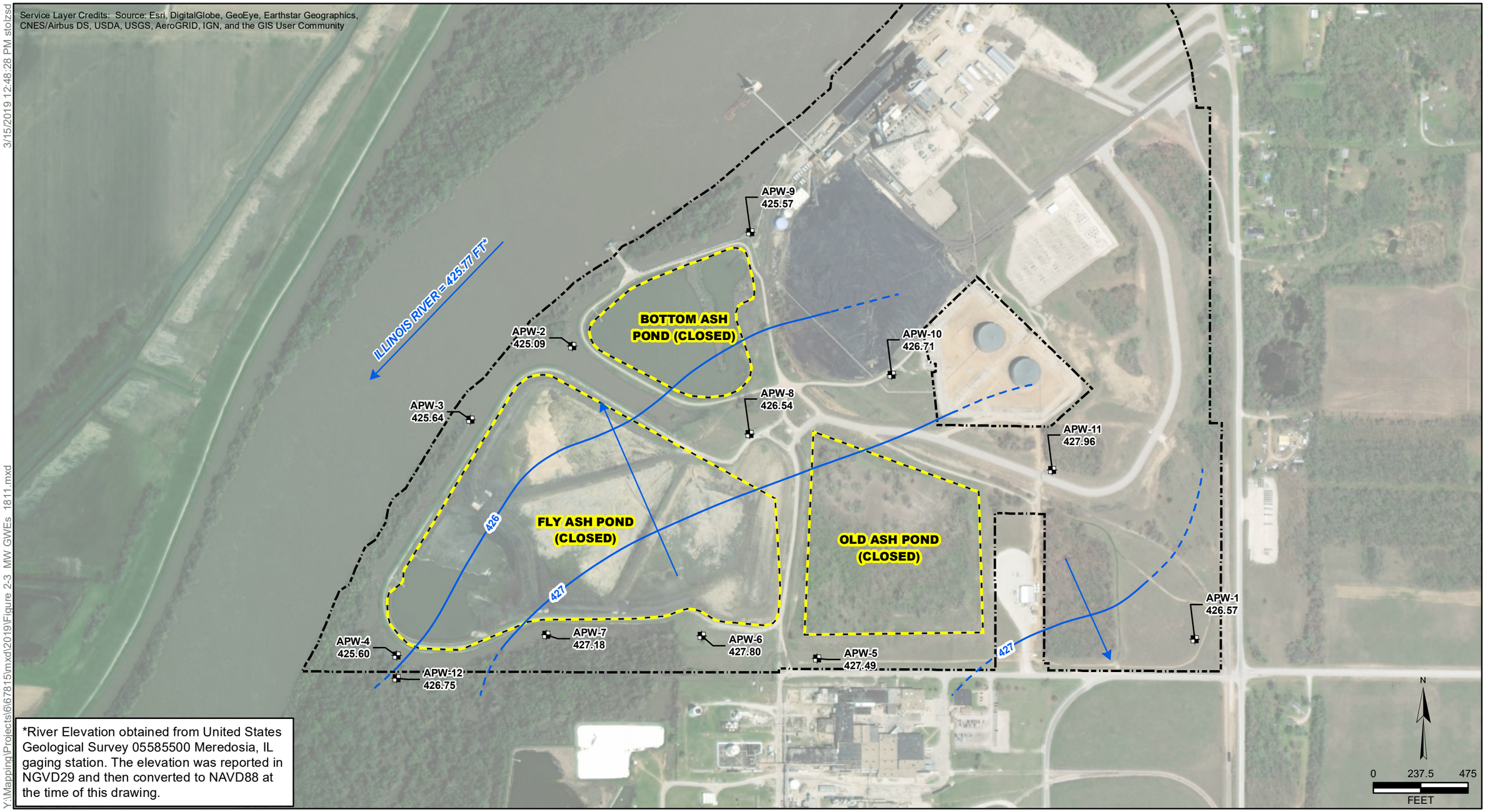
## GROUNDWATER ELEVATIONS - SEPTEMBER 20, 2018

2018 SECOND ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



3/15/2019 12:47:48 PM stolzsd
Y:\Mapping\Projects\6\67815\mxd\2019\Figure 2-2 MW GWEs 1809.mxd




*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.

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

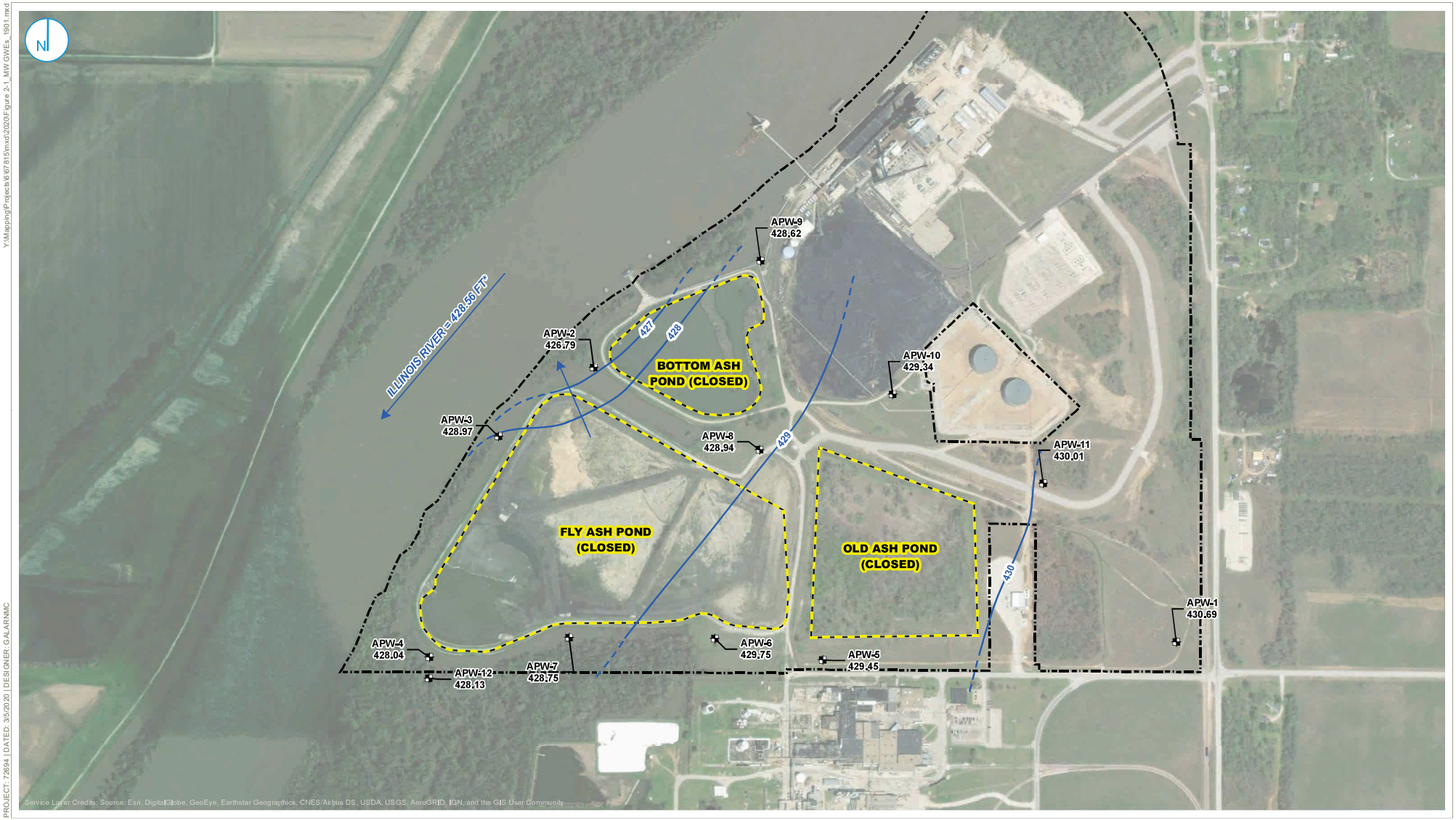
## GROUNDWATER ELEVATIONS - NOVEMBER 27, 2018

2018 SECOND ANNUAL MONITORING REPORT
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

O'BRIEN & GERE ENGINEERS, INC.



3/15/2019 12:48:28 PM stolzsd
Y:\Mapping\Projects\6\67815\mxd\2019\Figure 2-3 MW GWEs 1811.mxd




MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.

## GROUNDWATER ELEVATIONS - JANUARY 29, 2019

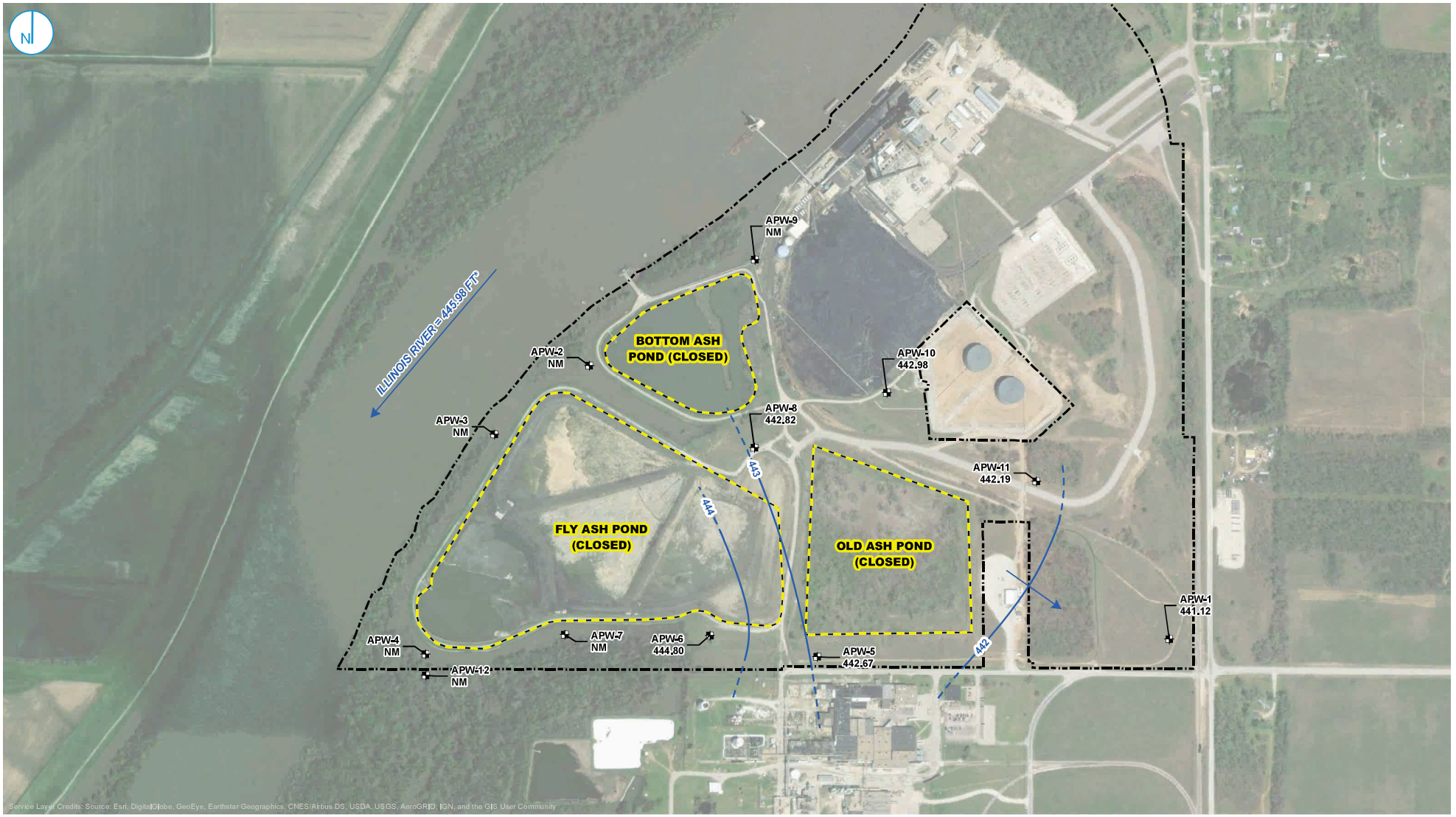
**2019 ANNUAL REPORT**
AMEREN ENERGY RESOURCES MEREDOSIA
POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 2-1**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\67815\mxd\2020\Figure 2-1_MW GWEs_1901.mxd
PROJECT: 72694 | DATED: 3/5/2020 | DESIGNER: GALARNMC




Y:\Mapping\Projects\667815\mxd\2020\Figure 2-2_MW GWEs_1906.mxd

PROJECT: 72694 | DATED: 3/5/2020 | DESIGNER: GALARNMC

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 = Not Measured, surrounding area flooded

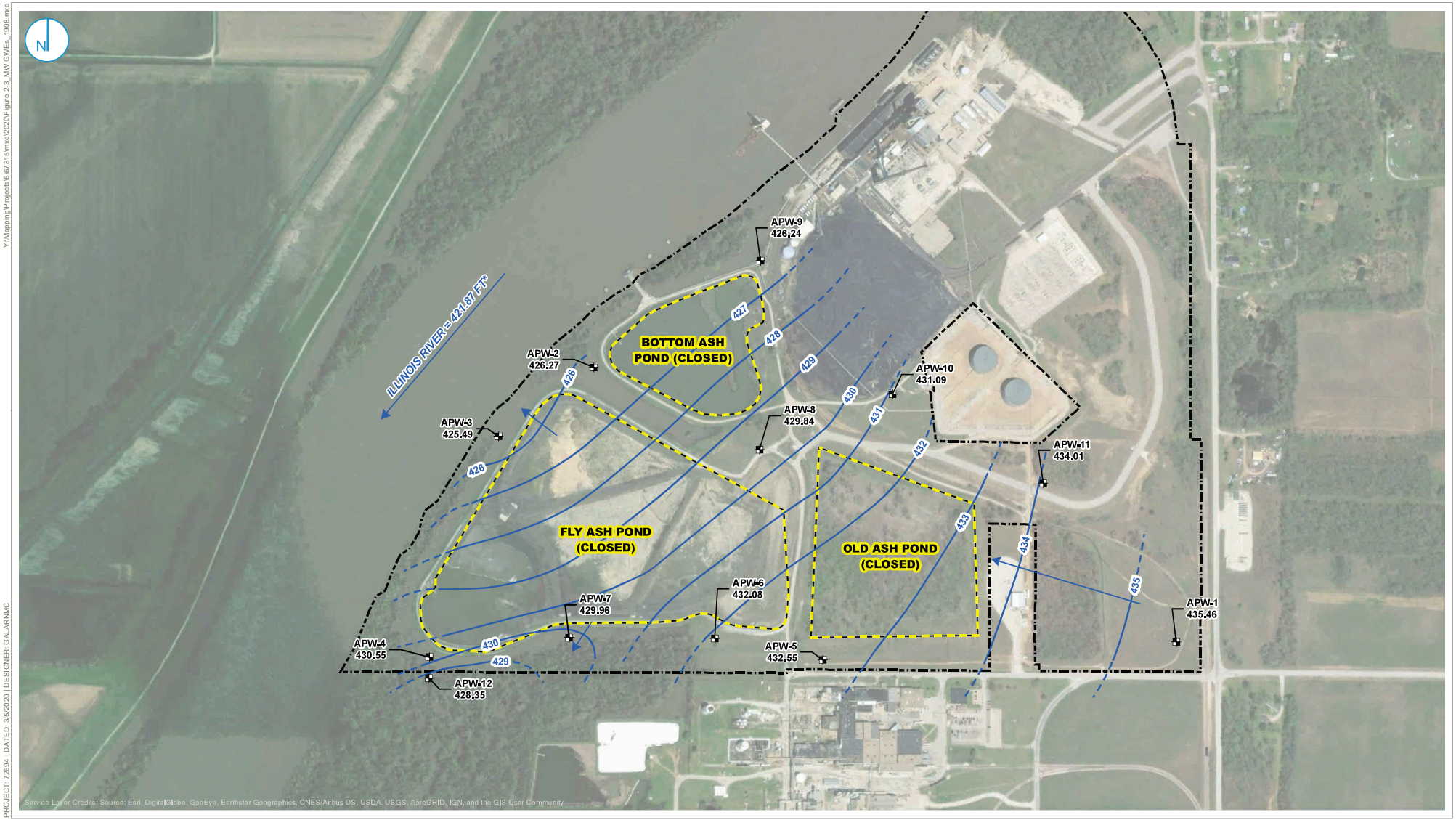
## GROUNDWATER ELEVATIONS - JUNE 4, 2019

**2019 ANNUAL REPORT**
AMEREN ENERGY RESOURCES MEREDOSIA
POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 2-2**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL




MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.

## GROUNDWATER ELEVATIONS - AUGUST 26-27, 2019

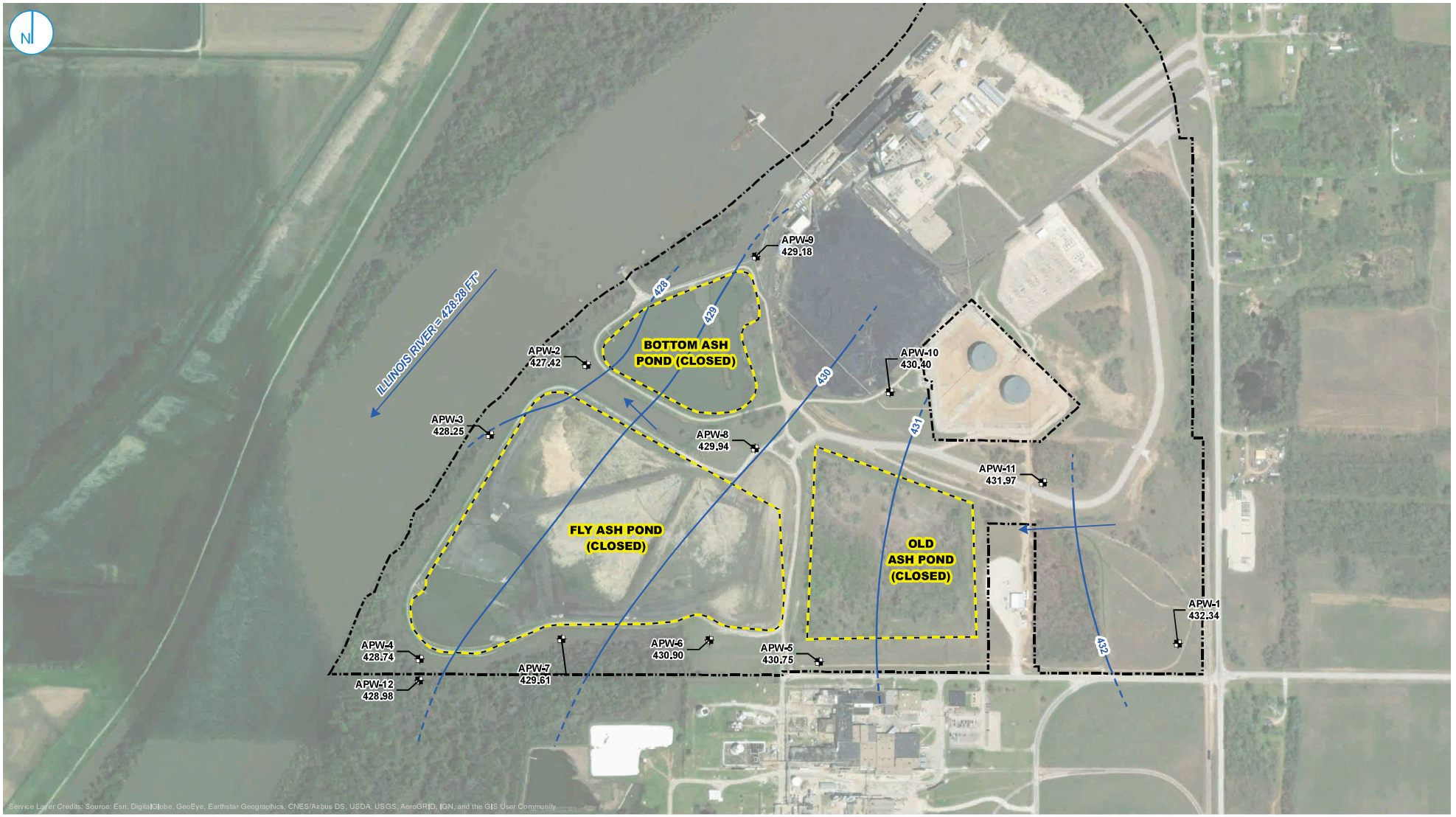
**2019 ANNUAL REPORT**
AMEREN ENERGY RESOURCES MEREDOSIA
POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 2-3**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\672815\mxd\2020\Figure 2-3_MW GWEs_1908.mxd
PROJECT: 72694 | DATED: 3/5/2020 | DESIGNER: GALARNMC




MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.

## GROUNDWATER ELEVATIONS - DECEMBER 9, 2019

**2019 ANNUAL REPORT**
AMEREN ENERGY RESOURCES MEREDOSIA
POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 2-4**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

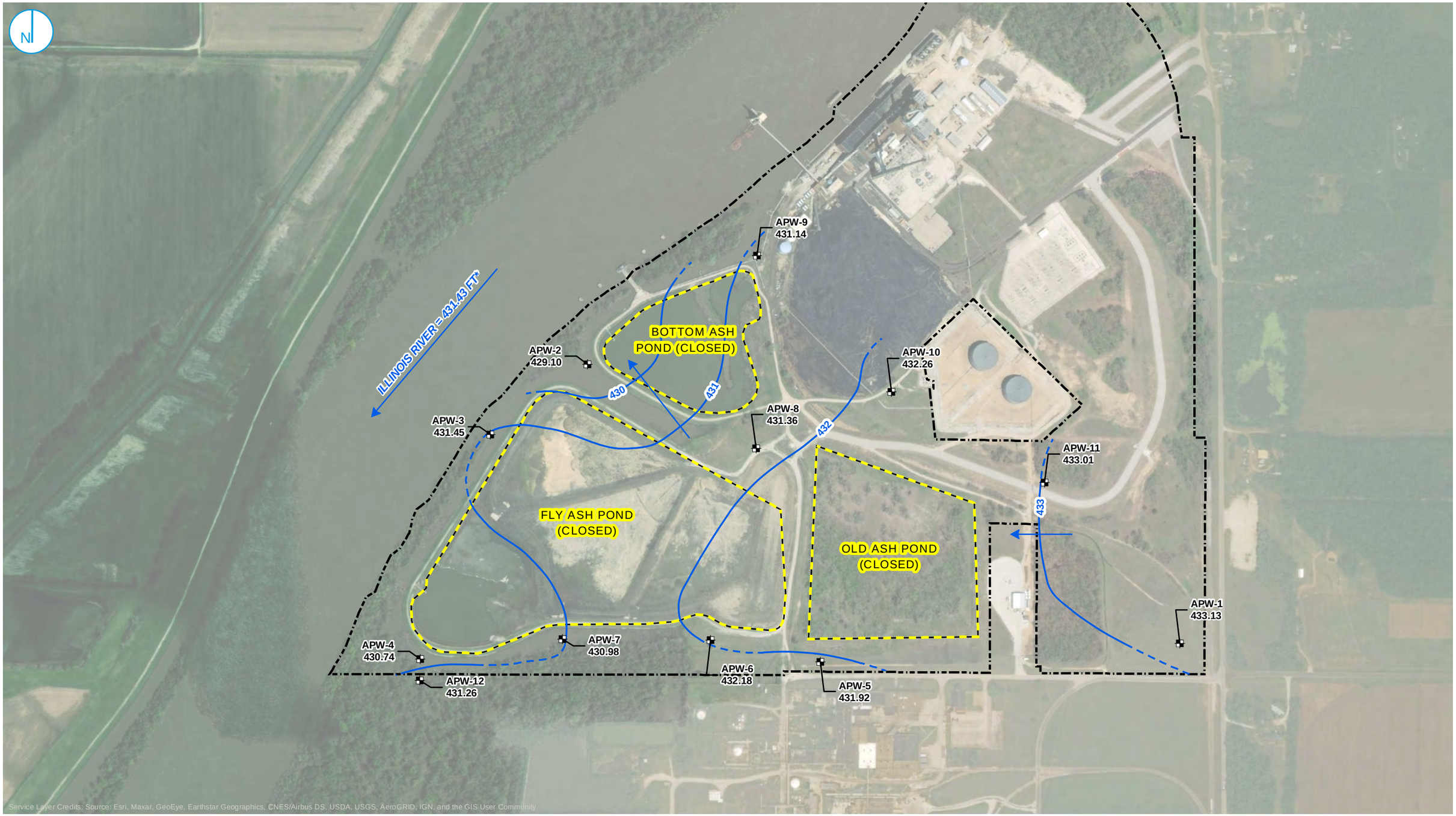
RAMBOLL

PROJECT: 72694 | DATED: 3/5/2020 | DESIGNER: GALARNMC

Y:\Mapping\Projects\672815\mxd\2020\Figure 2-4_MW GWEs_1912.mxd

Y:\Mapping\Projects\6\67815\mxd\2020\Figure 3-1_MW GWEs_2002.mxd

PROJECT: 72694 | DATED: 3/10/2021 | DESIGNER: MARRAMJ




MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

## GROUNDWATER ELEVATIONS - FEBRUARY 17, 2020

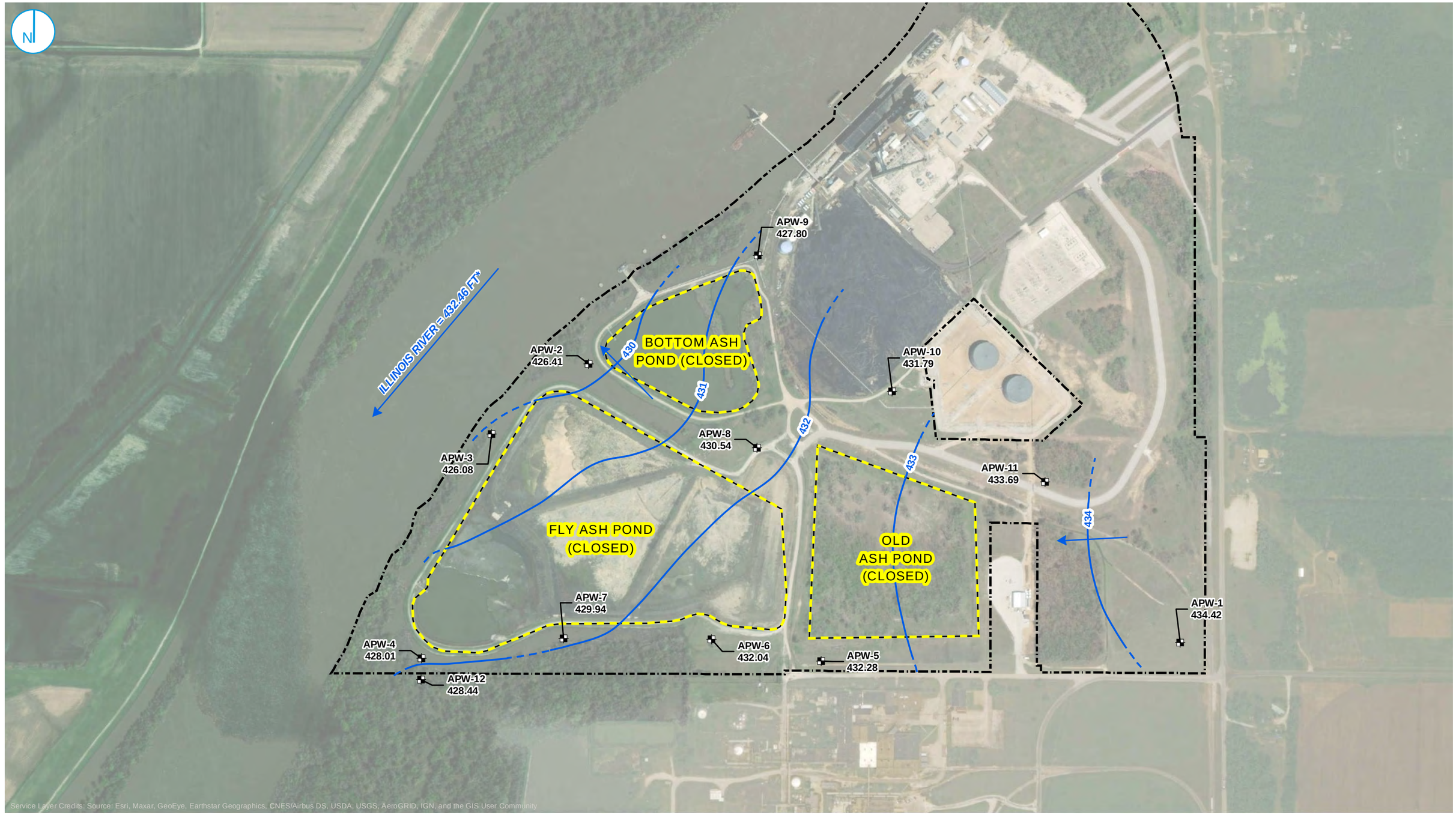
**2020 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-1**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\667815\mxd\2020\Figure 3-2_MW GWEs_2004.mxd




PROJECT: 72694 | DATED: 3/10/2021 | DESIGNER: MARRAMJ

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.
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

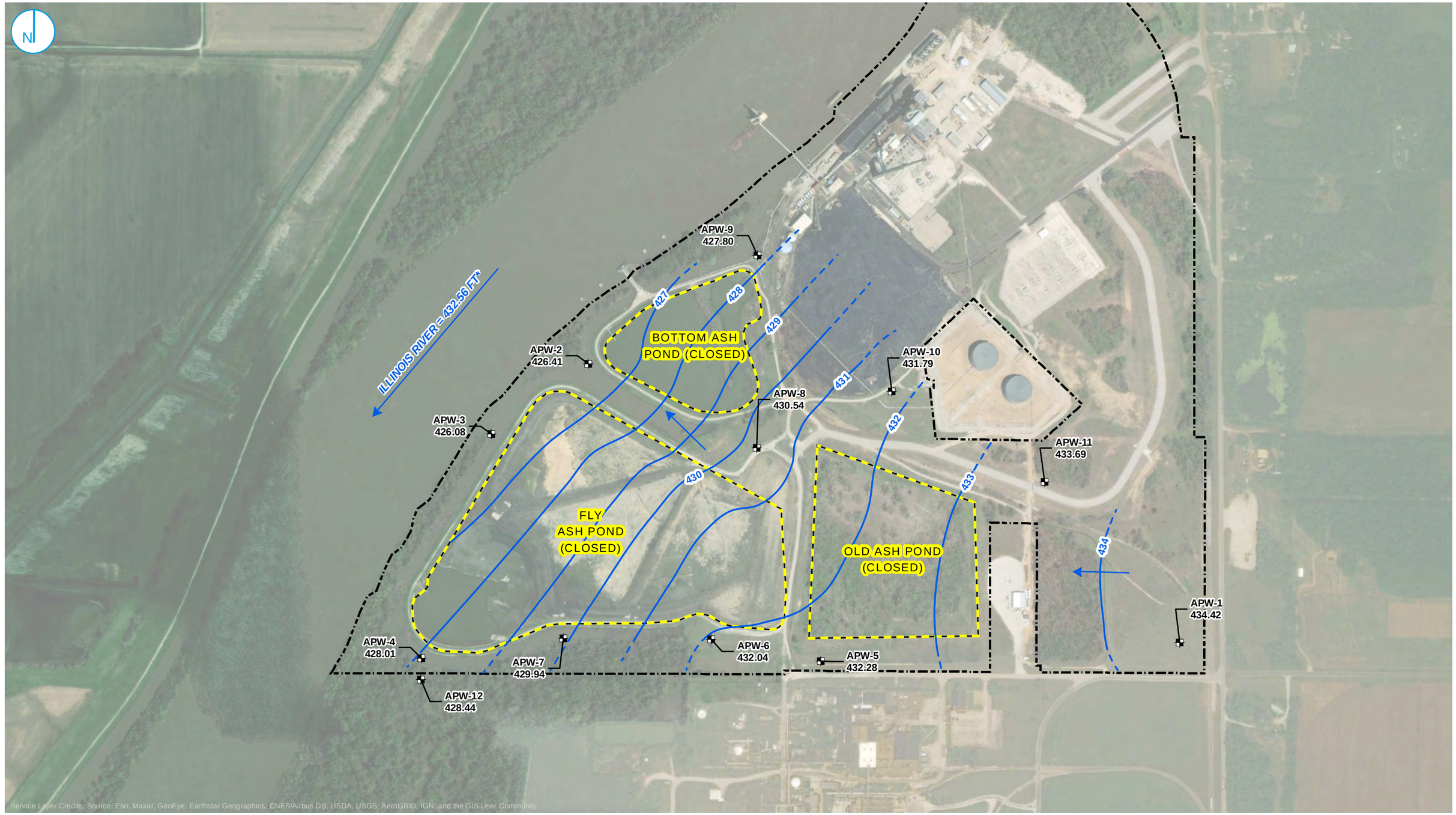
## GROUNDWATER ELEVATIONS - APRIL 27, 2020

**2020 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-2

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\667815\mxd\2020\Figure 3-3_MW GWEs_2007.mxd




PROJECT: 72694 | DATED: 3/10/2021 | DESIGNER: MARRAMJ

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.
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

## GROUNDWATER ELEVATIONS - JULY 29, 2020

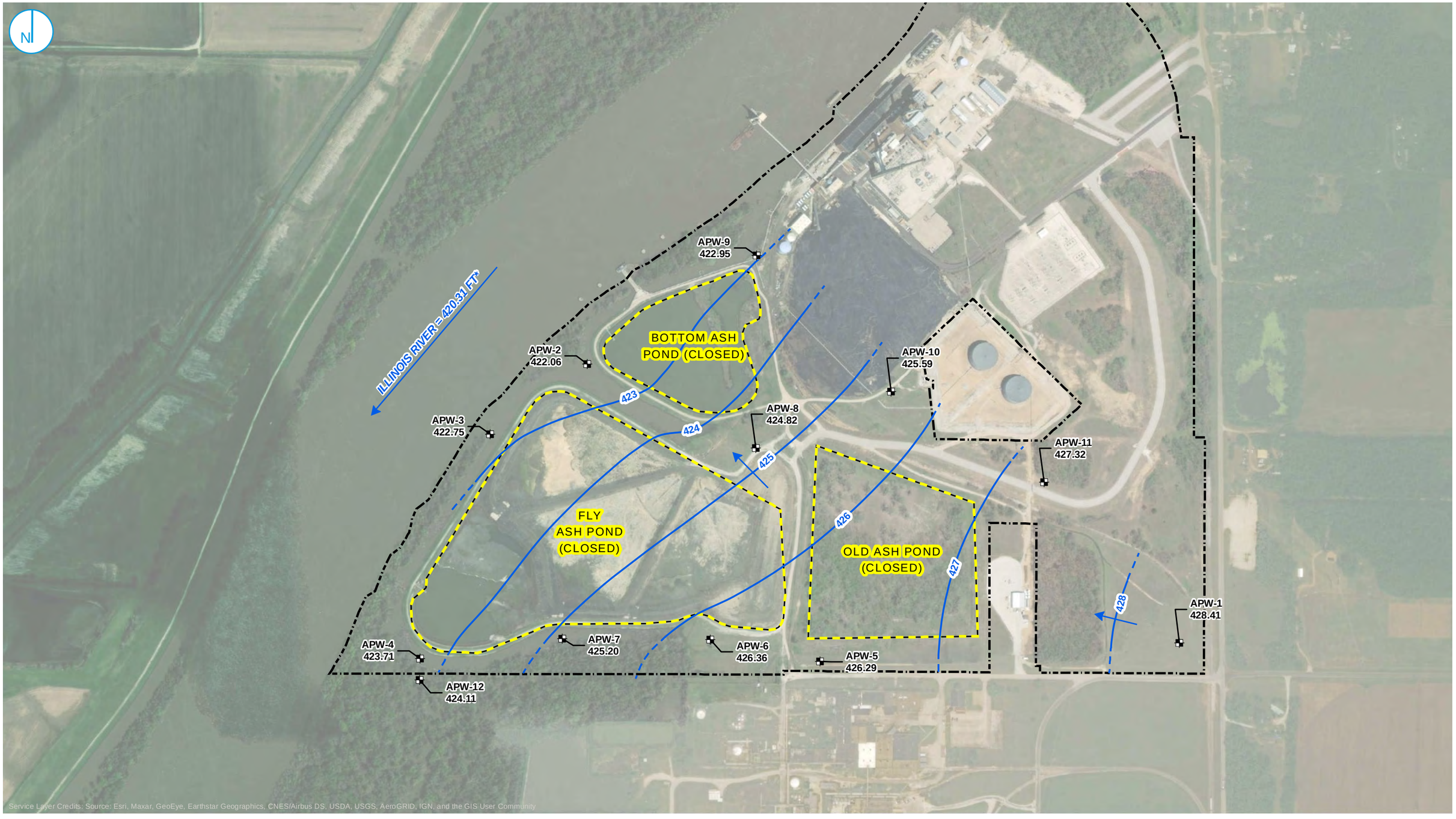
**2020 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-3

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\667815\mxd\2020\Figure 3-4_MW GWEs_2012.mxd




PROJECT: 72694 | DATED: 3/10/2021 | DESIGNER: MARRAMJ

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

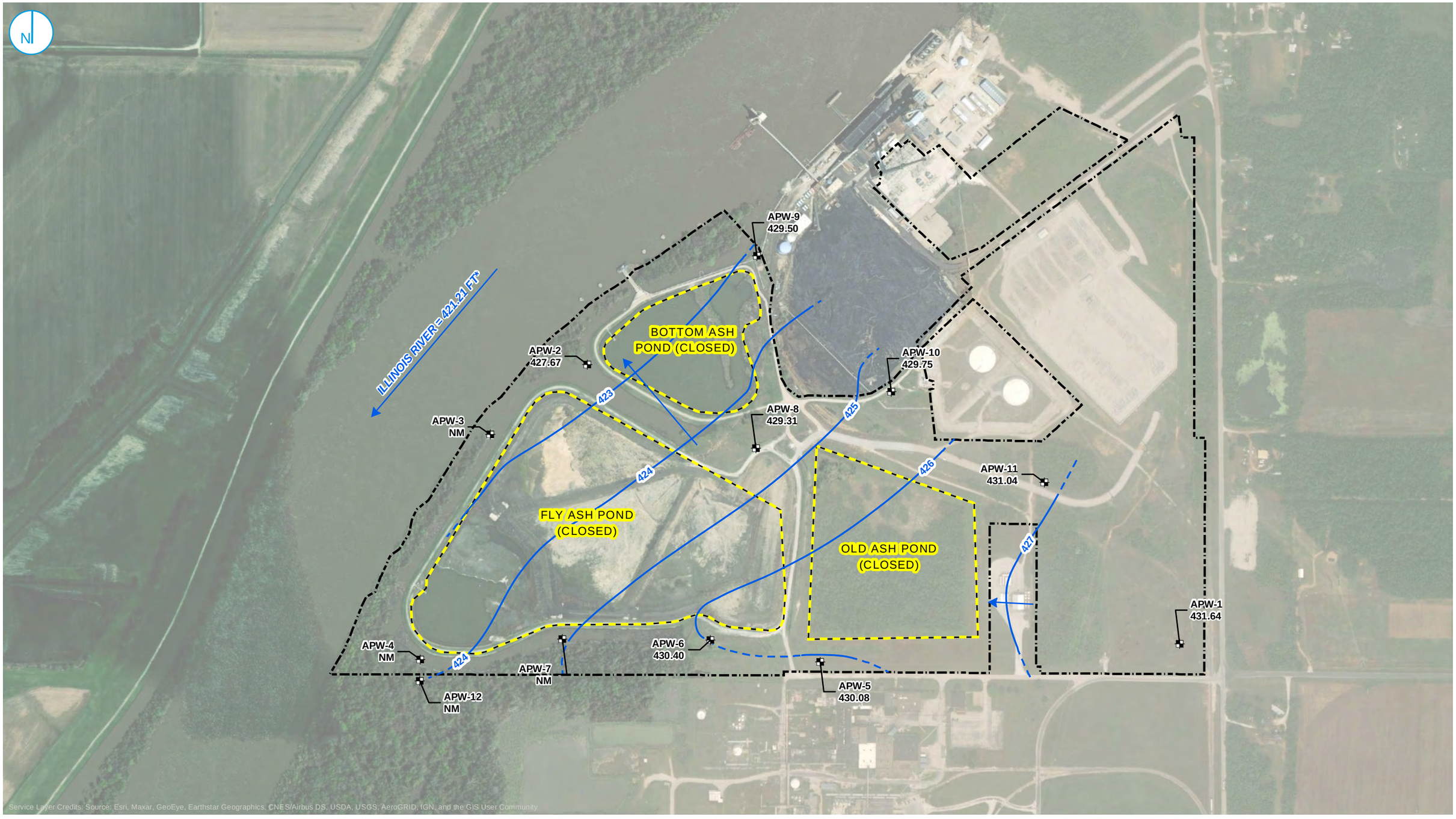
## GROUNDWATER ELEVATIONS - DECEMBER 4, 2020

**2020 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-4**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\667815\mxd\2021\Figure 3-1_MW GWEs_2101.mxd




PROJECT: 72694 | DATED: 2/25/2022 | DESIGNER: galammc

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.
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

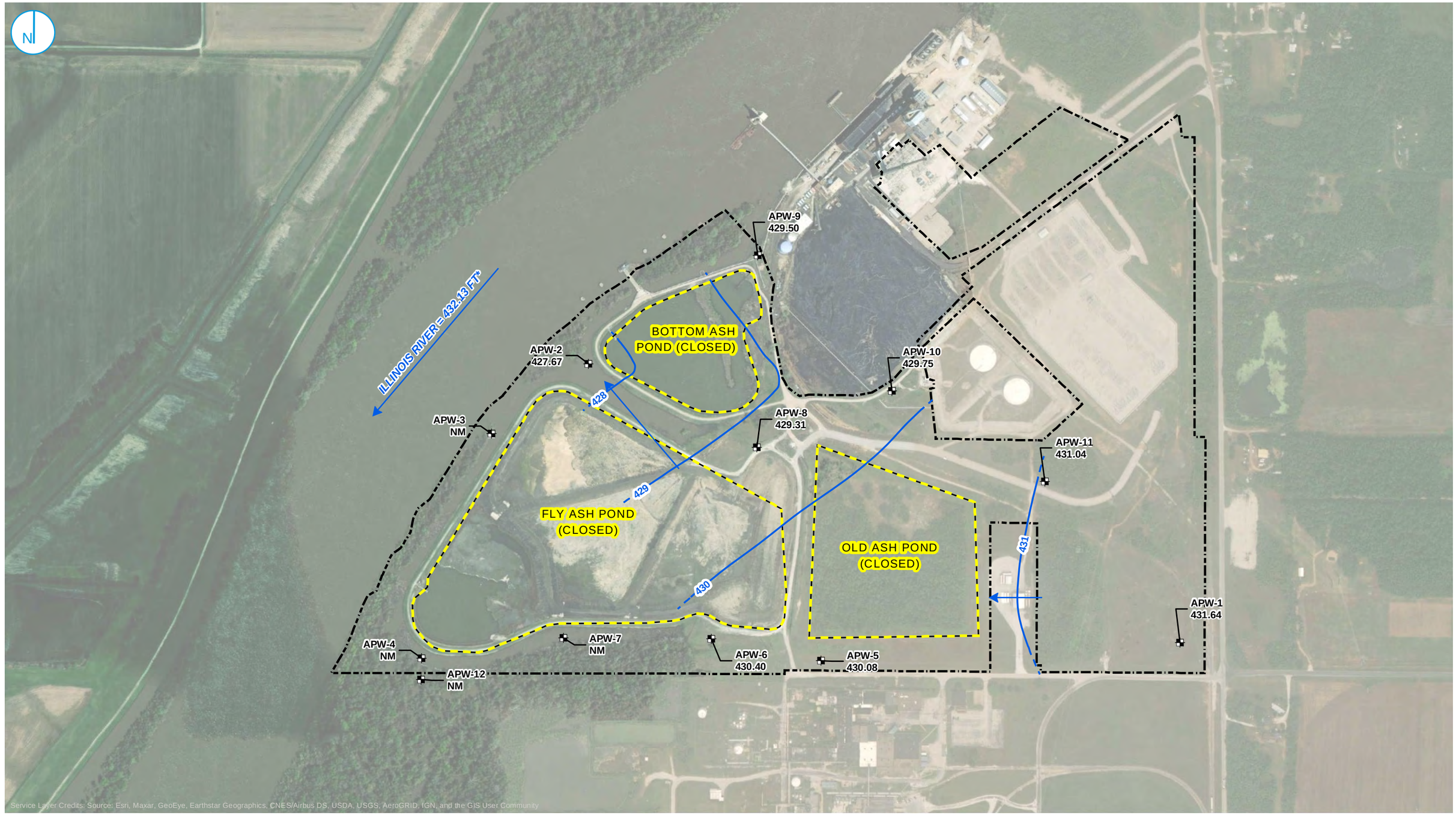
## GROUNDWATER ELEVATIONS - JANUARY 26, 2021

**2021 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-1

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\66781S\mxd\2021\Figure 3-2_MW GWEs_2106.mxd




PROJECT: 72694 | DATED: 2/25/2022 | DESIGNER: gabarnmc

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
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

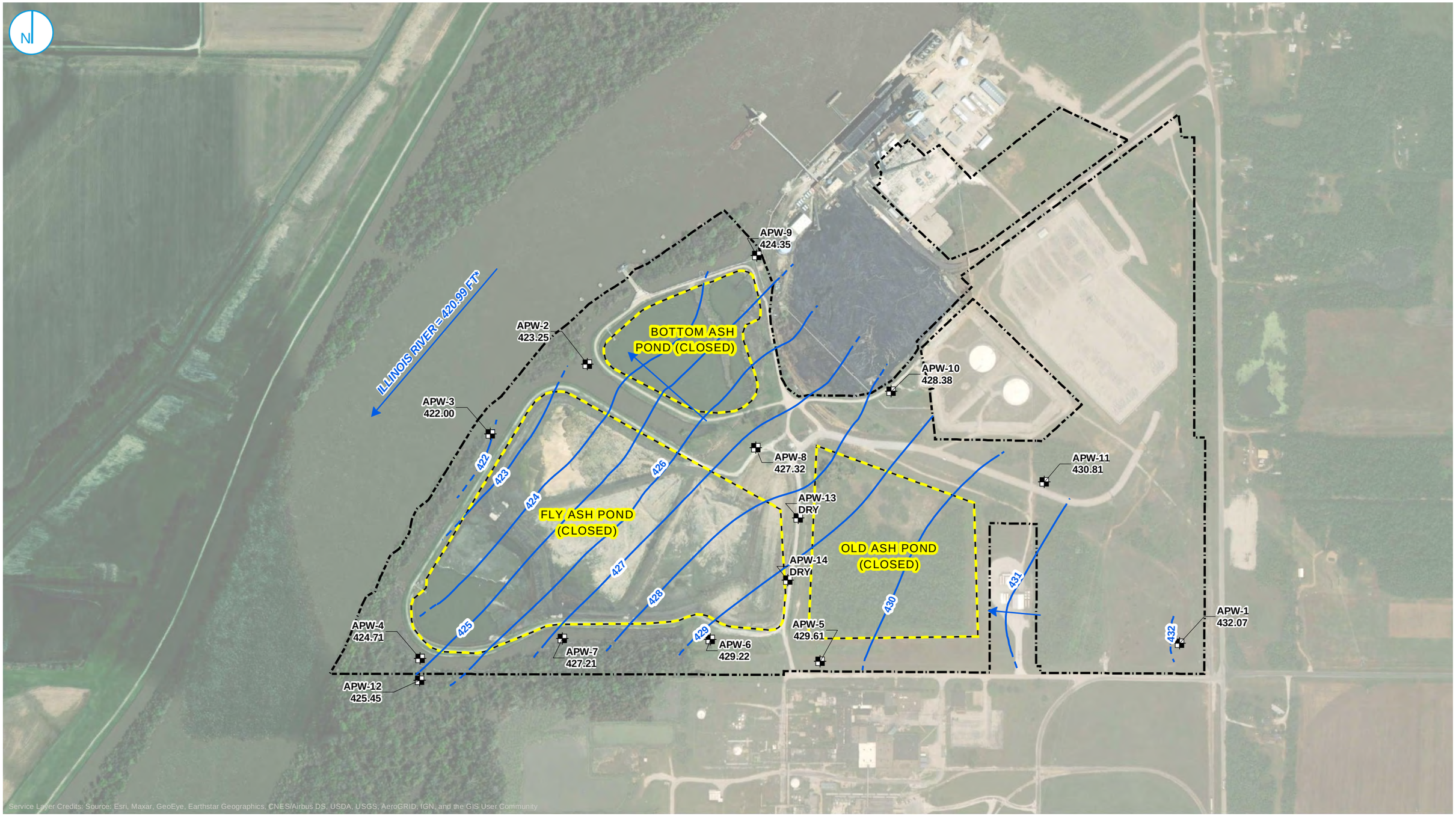
## GROUNDWATER ELEVATIONS - JUNE 30, 2021

**2021 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-2

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\6\67815\mxd\2021\Figure 3-3_MW GWEs_2109.mxd




PROJECT: 72694 | DATED: 2/25/2022 | DESIGNER: gaiannmc

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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
NGVD29 = National Geodetic Vertical Datum of 1929
NAVD88 = North American Vertical Datum of 1988

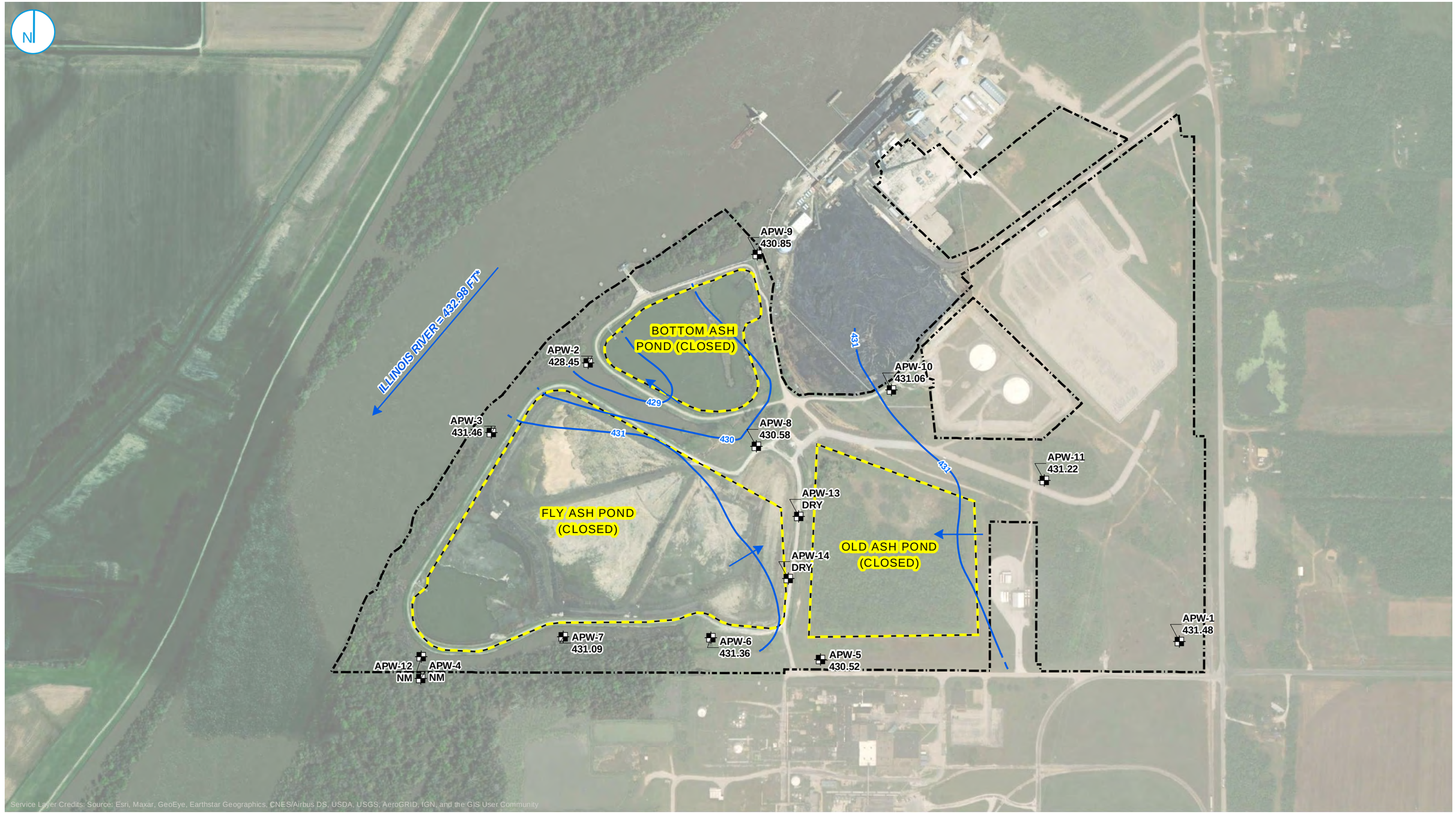
## GROUNDWATER ELEVATIONS - SEPTEMBER 17, 2021

**2021 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-3**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\686781\5\mxd\2021\Figure 3-4_MW GWEs_2111.mxd




PROJECT: 72694 | DATED: 2/25/2022 | DESIGNER: gabarnmc

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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

## GROUNDWATER ELEVATIONS - NOVEMBER 11, 2021

**2021 ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-4**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\667815\mxd\2022\Figure 3-1_MW GWEs_2203.mxd

PROJECT: 72694 | DATED: 3/16/2023 | DESIGNER: GALARNMC

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.
[1]= Groundwater Elevation Not Used For Contouring
[2]= Well Dry, Groundwater Level Below Bottom of Well Elevation Shown
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 - MARCH 17, 2022

**2022 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-1**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\6\67815\mxd\2022\Figure 3-2_MW GWEs_2206.mxd

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

0 240 480 Feet

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 - JUNE 21-22, 2022

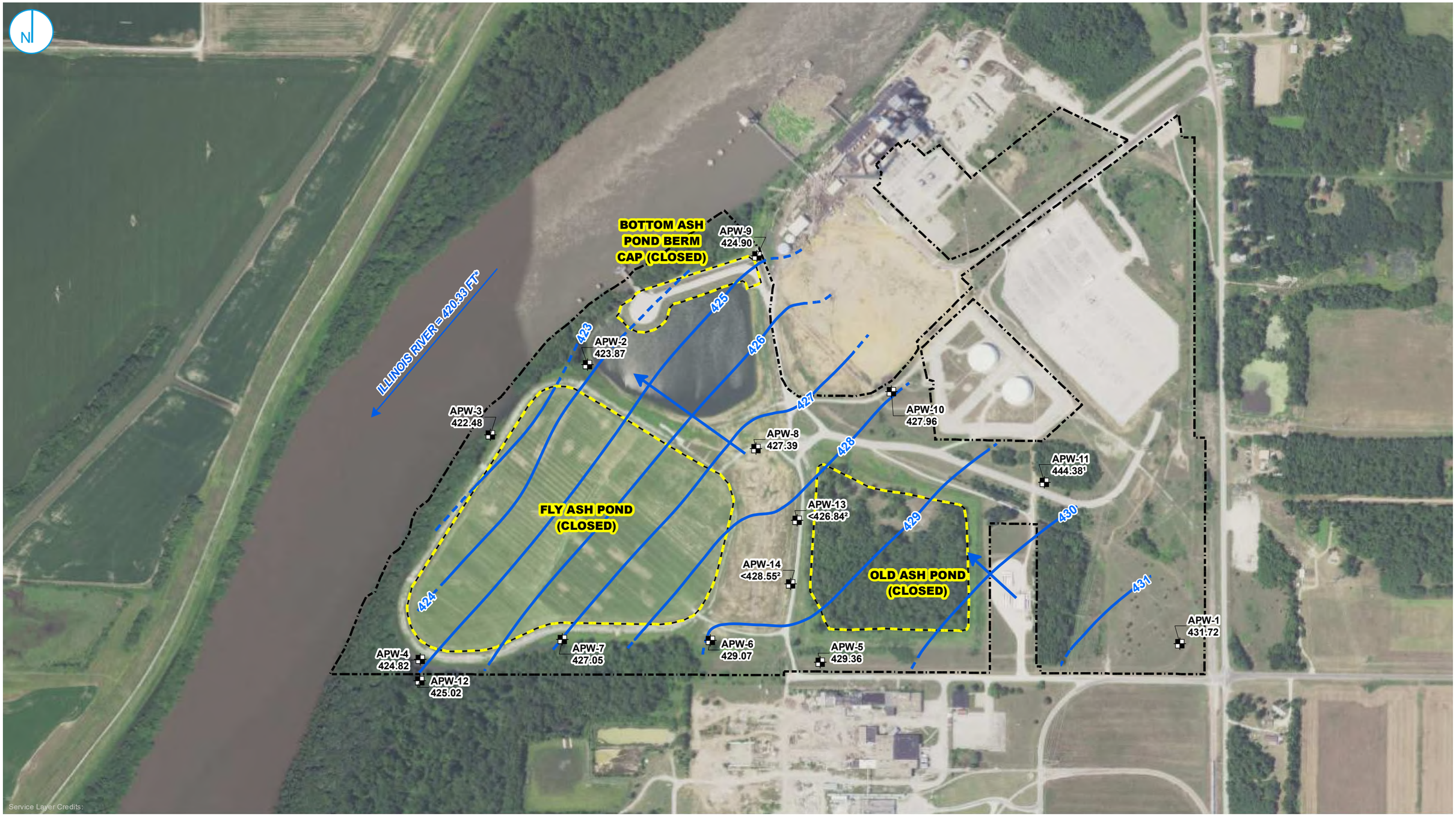
**2022 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-2

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

PROJECT: 72694 | DATED: 3/16/2023 | DESIGNER: GALARNMC

Y:\Mapping\Projects\667815\mxd\2022\Figure 3-3_MW GWEs_2208.mxd




PROJECT: 72694 | DATED: 3/16/2023 | DESIGNER: GALARNMC

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.
[1]= Groundwater Elevation Not Used For Contouring
[2]= Well Dry, Groundwater Level Below Bottom of Well Elevation Shown
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.

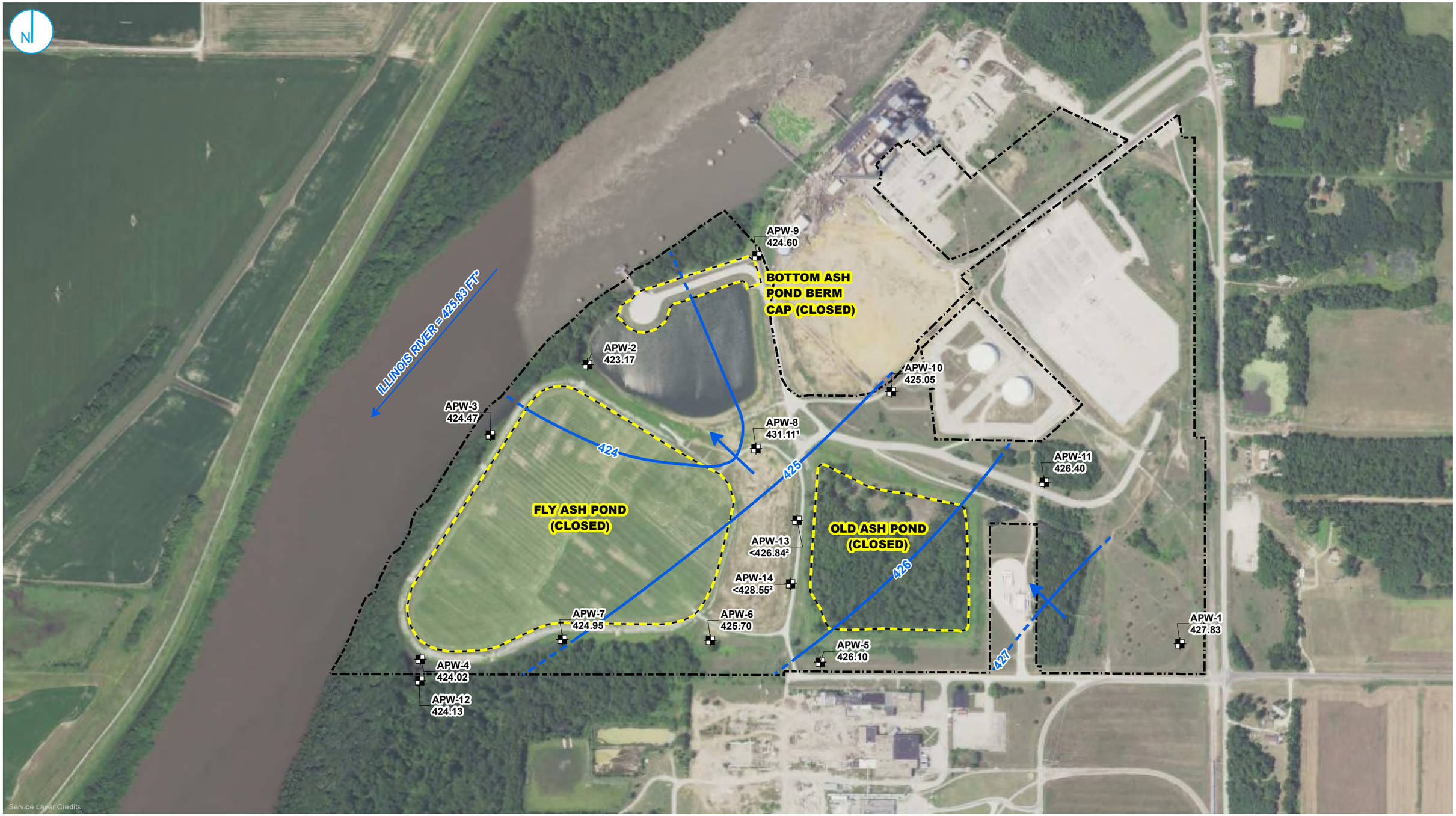
# GROUNDWATER ELEVATIONS - AUGUST 17-18, 2022

**2022 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-3**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

Y:\Mapping\Projects\667815\mxd\2022\Figure 3-4_MW GWEs_2212.mxd




PROJECT: 72694 | DATED: 3/16/2023 | DESIGNER: GALARNMC

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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.
[1]= Groundwater Elevation Not Used For Contouring
[2]= Well Dry, Groundwater Level Below Bottom of Well Elevation Shown
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 - DECEMBER 21, 2022

**2022 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-4**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

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

PROJECT: 72694 | DATED: 12/19/2023 | DESIGNER: egreaves

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.

## GROUNDWATER ELEVATIONS - FEBRUARY 2-3, 2023

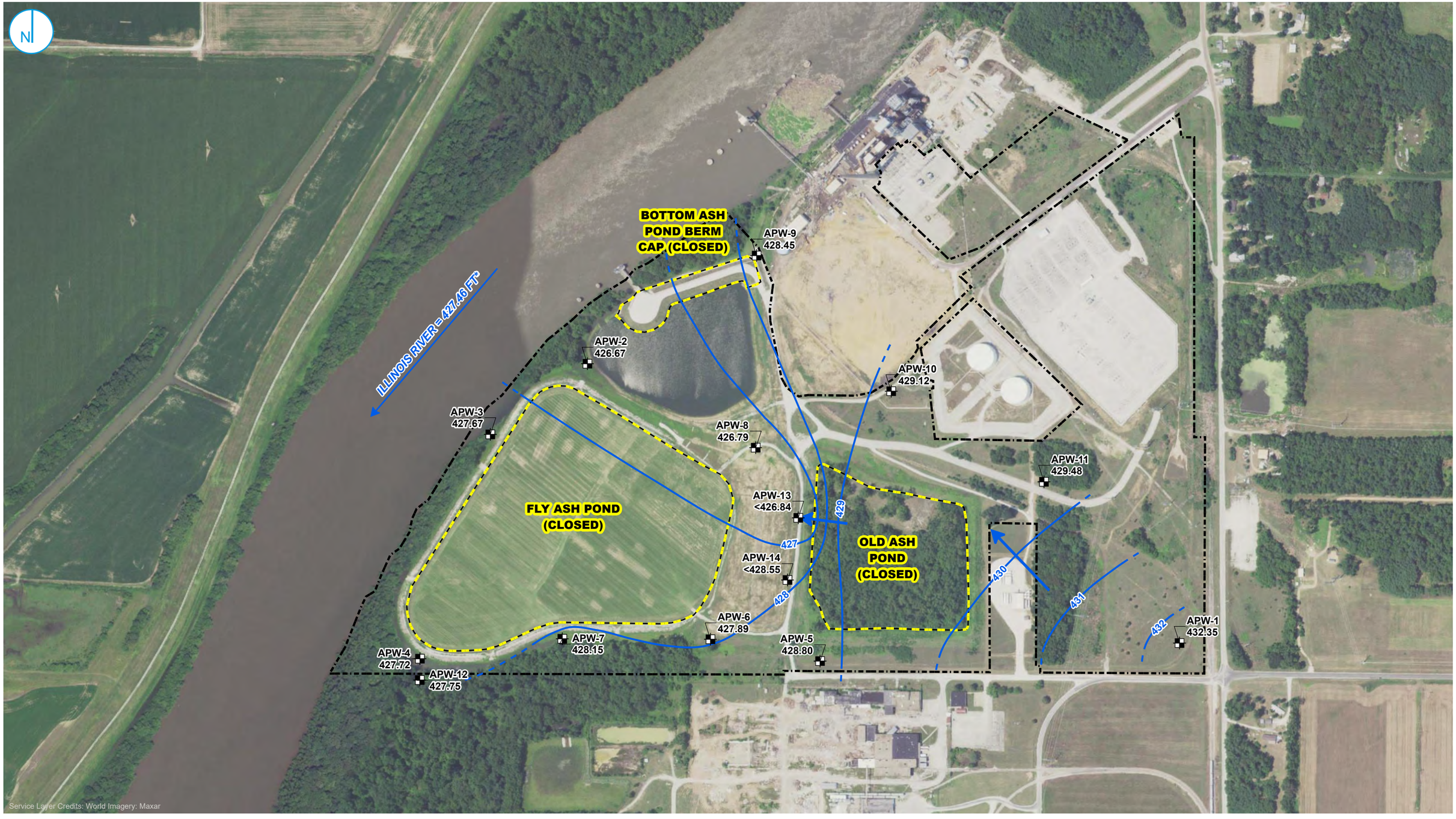
**2023 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

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




PROJECT: 72694 | DATED: 12/22/2023 | DESIGNER: egreaves

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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

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

## FIGURE 3-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\20231\2023.aprx

PROJECT: 72694 | DATED: 12/22/2023 | DESIGNER: egreaves

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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 - SEPTEMBER 20-22, 2023

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

## FIGURE 3-3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

PROJECT: 72694 | DATED: 12/22/2023 | DESIGNER: egreaves

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.

## GROUNDWATER ELEVATIONS - NOVEMBER 8-9, 2023

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

## FIGURE 3-4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\20241\2024.aprx

PROJECT: 72694 | DATED: 5/21/2024 | DESIGNER: egreaves

MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

0 240 480 Feet

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 NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.
Substantial rain increased the elevation of the river by approximately 1 ft between 3/12-3/14. Given this event, the average elevation of the river on 3/13 was used.

## POTENTIOMETRIC SURFACE MAP - MARCH 12-14, 2024

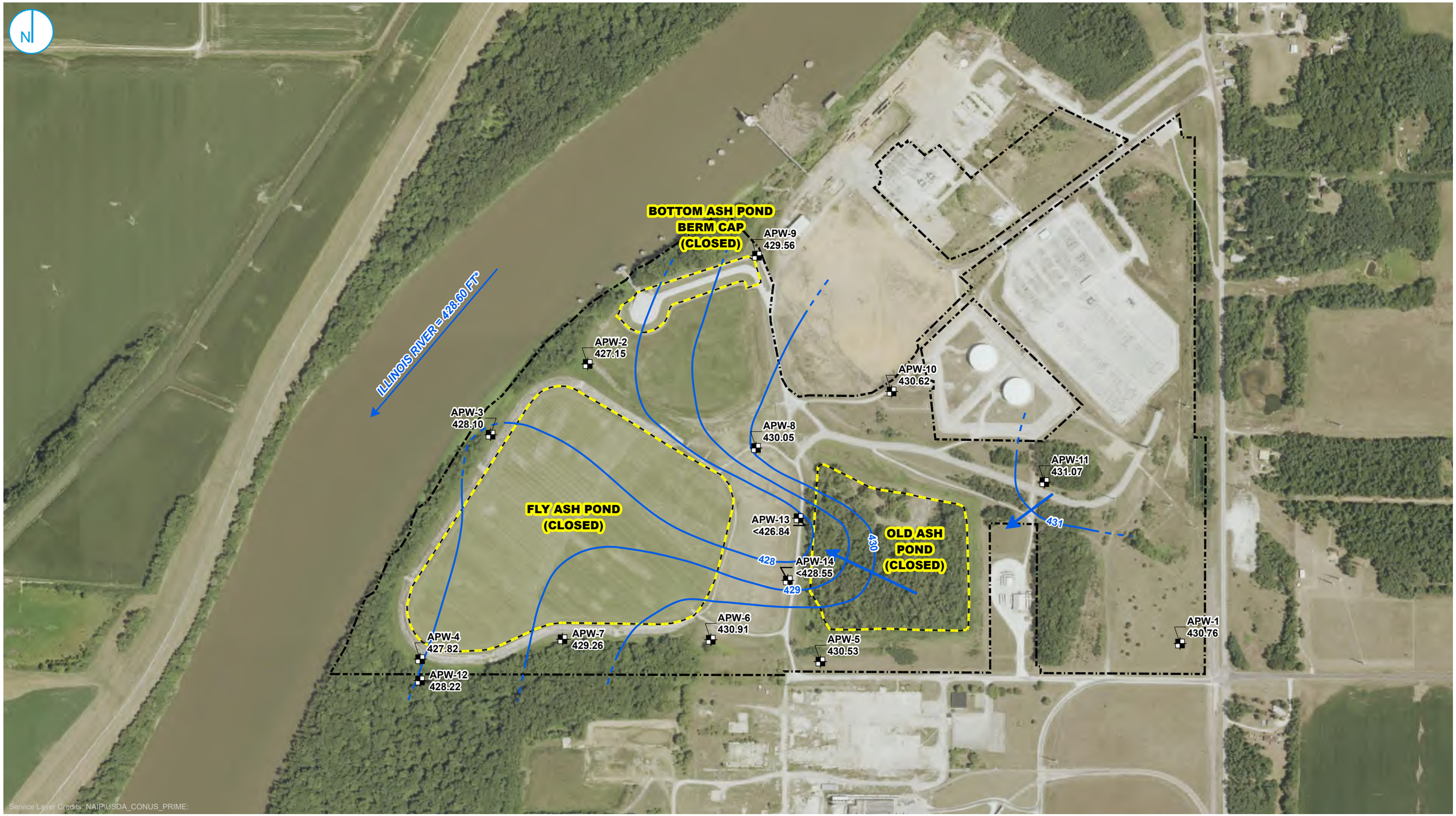
**2024 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\2024\2024.aprx




PROJECT: 72694 | DATED: 8/21/2024 | DESIGNER: STOLZSD

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 NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.
River elevation from June 11, 2024 at 12:00 was used.

## POTENTIOMETRIC SURFACE MAP - JUNE 10-12, 2024

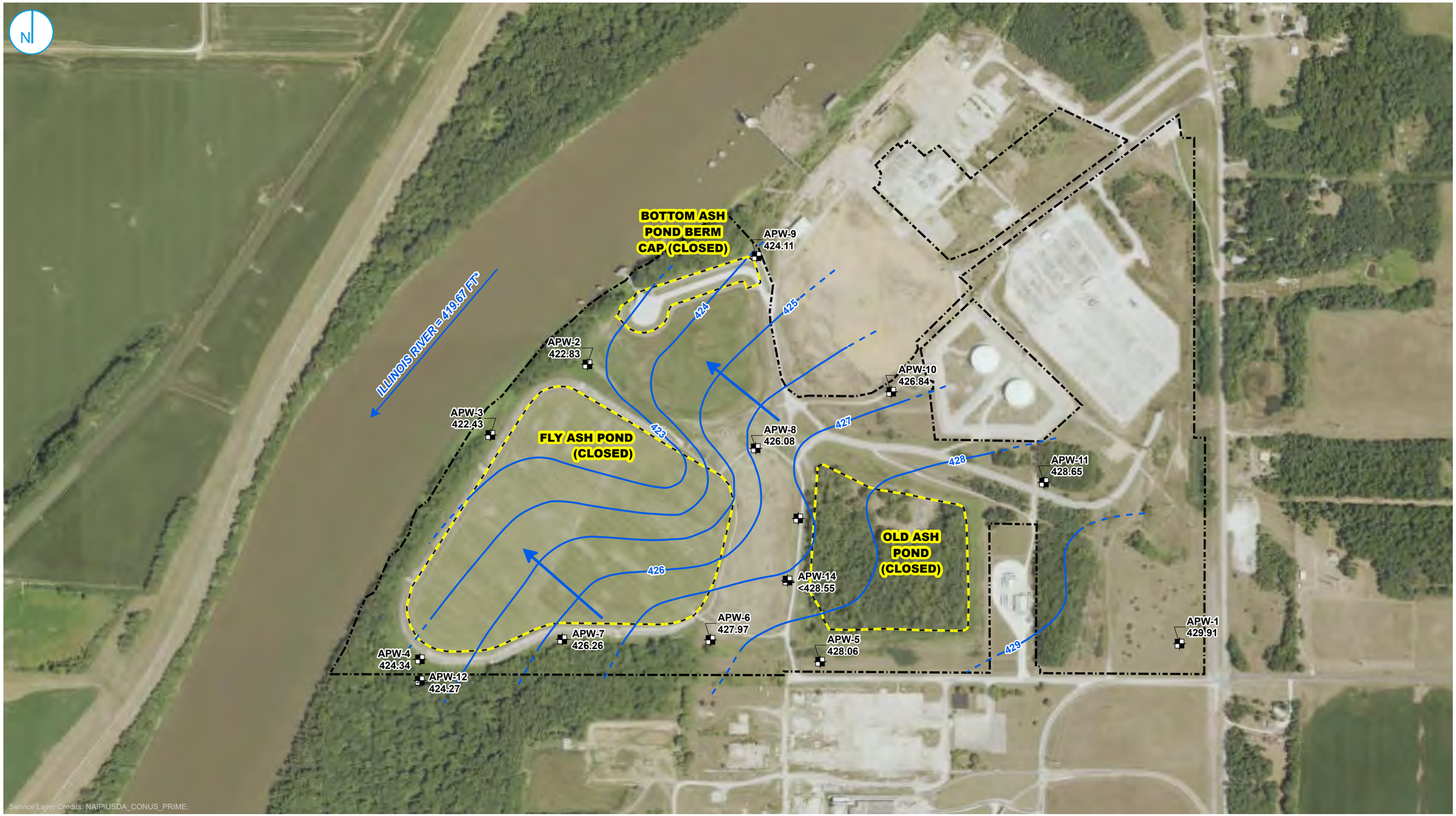
**2024 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\2024\2024.aprx




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

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 NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.
River elevation from August 27, 2024 at 12:00 was used.

## POTENTIOMETRIC SURFACE MAP - AUGUST 26-28, 2024

**2024 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

PROJECT: 72694 | DATED: 1/10/2025 | DESIGNER: HOTCALD

Y:\Mapping\Projects\6\67815\mxd\2024\2024.aprx

PROJECT: 72694 | DATED: 1/10/2025 | DESIGNER: HOTCALD

MONITORING WELL LOCATION

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

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 NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.
River elevation from November 14, 2024 at 12:00 was used.

## POTENTIOMETRIC SURFACE MAP - NOVEMBER 13-14, 2024

**2024 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

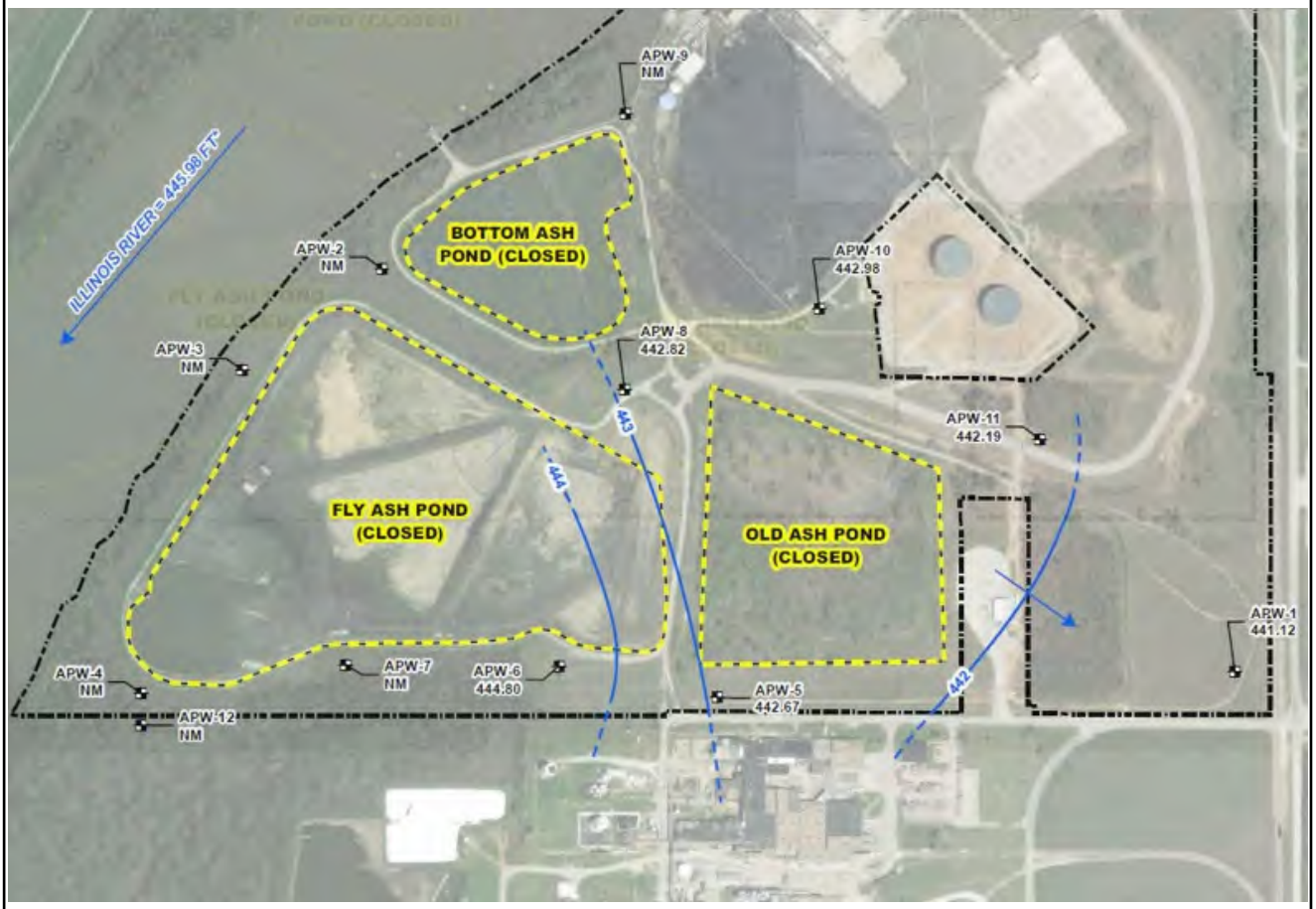
# ATTACHMENT B
# Groundwater Velocity Calculations

HALEY ALDRICH

# CALCULATIONS

| | | | |
|---|---|---|---|
| Client | Ameren Energy | File No. | 0206891-001 |
| Project | Meredosia Power Station | Sheet | 1 of 2 |
| Subject | Groundwater Seepage Velocity Calcs | Date | 17 November 2023 |
| | | Computed By | John Blue |
| | | Checked By | Dimitri Quafisi |

Calculation for the estimated groundwater velocity across the old closed ash pond at the Site during a high river stage event in June of 2019.




Hydraulic Conductivity values are estimated at 5.66 x $10^{-2}$ cm/s based on values reported for the Site area.

The monitoring wells were not tested for hydraulic conductivity; however, Gibb et al. (1979) published hydraulic conductivity values for wells along the Illinois waterway, which included a site-specific value of 1,200 gallons per day/square foot (gpd/$ft^2$). Both a maximum and an average hydraulic gradient were used. The average hydraulic gradient was based on the ten groundwater gauging events. Two groundwater gauging events were not used because of flooding and inaccessibility of the wells. Removing flooding events provides a more conservative value. The cross sectional area was assumed to be over the entire thickness of the aquifer, and along the entire length of the Fly Ash Pond parallel to the river, plus 50 feet north and south of the pond.

\\haleyaldrich.com\share\CF\Projects\0206891\Project Data\2023 Collection Trench Option

$$v = -\frac{K}{n_e}\frac{dH}{dL}$$

**v** = Seepage velocity, ft./day
**K** = hydraulic conductivity, ft./day
**dH** = change in head, ft.
**dL** = change in length, ft.
**$n_e$** = effective porosity, dimensionless

Seepage calculations, k = 5.66E-02 cm/sec. to 5.66E-03 cm/sec.

| | Description | v (ft./day) | K (ft./day) | $n_e$ dimensionless | dH (ft.) | dL (ft.) |
|---|---|---|---|---|---|---|
| 1. $K_{max}$ | | 0.802 | 1.60E+02 | 0.2 | 1 | 1000.0 |
| 2. $K_{min}$ | | 0.080 | 1.60E+01 | 0.2 | 1 | 1000.0 |

**Groundwater Velocity across old closed ash pond:**

$K_{max}$ v = 0.802 ft/day
$K_{min}$ v = 0.08 ft/day

**Notes:**

Hydraulic Conductivity is based on literature values for the area as no onsite values are available.
effective porosity is assumed to be 0.2 based on typical literature values for sand
distance between contours estimated from 2016 Part 1A Hydro-Geo-Report

Calculation to estimate seepage velocity across the old closed ash pond using the following assumptions:

- **Hydraulic Conductivity –** Based on literature values for the area as no onsite values are available. 1200 gpd/ft$^2$ is equal to approximately 5.66 x 10$^{-2}$ cm/s. Range of K values used with an order of magnitude less to show variability potential.
- **Effective Porosity –** effective porosity is assumed to be 0.2 based on typical literature values for sand
- **Distance between contours** – Estimated from 2016 Hydro-Geo-Report

\\haleyaldrich.com\share\CF\Projects\0206891\Project Data\2023 Collection Trench Option

# EXHIBIT 8

January 16, 2026

Illinois Environmental Protection Agency
Bureau of Land - # 33
Permit Section
2520 West Iles Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276

<submitted electronically to epa.ccr.part845.coordinator@illinois.gov>

Re: **AmerenEnergy Medina Valley Cogen, LLC – Meredosia Energy Center**
**Post-Closure Annual Report for 2025**
**Land Pollution Control Site ID: 1370305002**
**Bureau of Land Log No.: 2021-484 (Fly Ash Pond); 2021-485 (Bottom Ash Pond)**

As required per the Closure Plan dated March 12, 2018, enclosed is the electronic file of the annual report at the AmerenEnergy Medina Valley Cogen, LLC – Meredosia Energy Center. One hard copy of this report will be mailed directly to the address above. This annual report includes compilation of groundwater monitoring data and the trend analysis necessary to demonstrate compliance per the Closure Plan.

Please contact me at 314-437-6552 if questions arise regarding this report.

Sincerely,

Annie Muehlfarth
Environmental Services
Ameren Missouri
amuehlfarth@ameren.com

Cc: C. Giesmann, Ameren
L. Tolliver, Ameren
M. Wagstaff, Ameren
A. Nieman, Ameren

File: SharePoint

Intended for
**AmerenEnergy Medina Valley CoGen, LLC**

Date
**January 16, 2026**

Project No.
**1940108082**

# 2025 GROUNDWATER MONITORING ANNUAL REPORT

## CLOSED FLY ASH & BOTTOM ASH PONDS

## FORMER MEREDOSIA POWER STATION

RAMBOLL Bright ideas. Sustainable change.

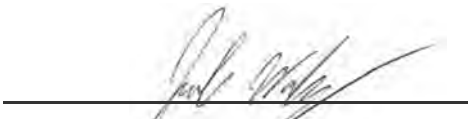
# 2025 GROUNDWATER MONITORING ANNUAL REPORT
# CLOSED FLY ASH & BOTTOM ASH PONDS
# FORMER MEREDOSIA POWER STATION

| | |
|---|---|
| Project name | **Former Meredosia Power Station** |
| Project no. | **1940108082** |
| Recipient | **AmerenEnergy Medina Valley CoGen, LLC** |
| Document type | **2025 Annual Report** |
| Revision | **0** |
| Version | **Final** |
| Date | **January 16, 2026** |
| Prepared by | **Evvan G. Plank** |
| Checked by | **Jake J. Walczak, PG** |
| Approved by | **Eric Tlachac, PE** |

Ramboll
333 W. Wacker Drive
Suite 1050
Chicago, IL 60606
USA

T 312-288-3800
F 414-837-3608
https://ramboll.com

**Evvan G. Plank**
**Hydrogeologist**



**Jake J. Walczak, PG**
**Technical Manager**

© 2026 Ramboll

# CONTENTS


| | | |
|---|---|---|
| **1.** | **Introduction** | **5** |
| 1.1 | Background | 5 |
| 1.2 | Groundwater Quality Overview – 2019 to 2025 | 6 |
| 1.2.1 | Summary of Cover System Construction and Maintenance | 6 |
| 1.2.2 | Summary of Post-Closure Groundwater Quality Data | 6 |
| 1.2.3 | Conclusion | 7 |
| **2.** | **Groundwater Monitoring Plan Compliance** | **8** |
| 2.1 | Applicable Groundwater Quality Standards | 8 |
| 2.1.1 | On-Site Groundwater Standards | 8 |
| 2.1.2 | Off-Site Groundwater Standards | 8 |
| 2.2 | Demonstration of Compliance | 8 |
| 2.2.1 | Compliance Determination | 8 |
| **3.** | **Data Analysis** | **10** |
| 3.1 | Groundwater Flow | 10 |
| 3.2 | Review of Analytical Data (2024–2025) | 10 |
| 3.3 | Statistical Analyses | 12 |
| 3.3.1 | Outlier Analysis | 12 |
| 3.3.2 | Sen's Estimate of the Slope | 12 |
| 3.3.3 | Mann-Kendall Trend Analysis | 12 |
| 3.4 | Site Inspection | 13 |
| **4.** | **Evaluation of Compliance and Conclusions** | **14** |
| **5.** | **References** | **15** |


## TABLES


| | |
|---|---|
| Table 1-1 | Groundwater Monitoring Program Schedule |
| Table 1-2 | Groundwater Monitoring Program Parameters |
| Table 1-3 | Groundwater Monitoring System Wells |
| Table 3-1 | Trend Analysis Results |


## FIGURES


| | |
|---|---|
| Figure 1-1 | Site Location Map |
| Figure 1-2 | Monitoring Well Location Map |
| Figure 1-3 | Arsenic Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-1 |
| Figure 1-4 | Arsenic Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-2 |
| Figure 1-5 | Arsenic Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-3 |
| Figure 1-6 | Arsenic Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-4 |
| Figure 1-7 | Arsenic Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-5 |
| Figure 1-8 | Arsenic Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-6 |
| Figure 1-9 | Arsenic Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-7 |
| Figure 1-10 | Arsenic Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-8 |
| Figure 1-11 | Arsenic Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-9 |
| Figure 1-12 | Arsenic Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-10 |
| Figure 1-13 | Arsenic Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-11 |
| Figure 1-14 | Arsenic Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-12 |
| Figure 1-15 | Boron Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-1 |

Figure 1-16 Boron Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-2
Figure 1-17 Boron Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-3
Figure 1-18 Boron Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-4
Figure 1-19 Boron Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-5
Figure 1-20 Boron Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-6
Figure 1-21 Boron Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-7
Figure 1-22 Boron Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-8
Figure 1-23 Boron Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-9
Figure 1-24 Boron Concentrations (Dissolved and Total) since 2019 at Midgradient Well APW-10
Figure 1-25 Boron Concentrations (Dissolved and Total) since 2019 at Upgradient Well APW-11
Figure 1-26 Boron Concentrations (Dissolved and Total) since 2019 at Downgradient Well APW-12
Figure 3-1 Potentiometric Surface Map – March 3, 2025
Figure 3-2 Potentiometric Surface Map – June 2, 2025
Figure 3-3 Potentiometric Surface Map – August 25-26, 2025
Figure 3-4 Potentiometric Surface Map – October 14-15, 2025
Figure 3-5 Groundwater Elevations Timeseries Plot
Figure 3-6 Illinois River Stage (2024-2025)
Figure 3-7A Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-7B Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025 (Zoomed In)
Figure 3-8A Dissolved Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-8B Dissolved Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells (Zoomed In)
Figure 3-9A Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-9B Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025 (Zoomed In)
Figure 3-10A Total Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-10B Total Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells (Zoomed In)
Figure 3-11 Box-Whisker Plot Showing Distribution of Dissolved Boron Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-12 Dissolved Boron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-13 Box-Whisker Plot Showing Distribution of Total Boron Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-14 Total Boron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-15 Box-Whisker Plot Showing Distribution of Dissolved Iron Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-16 Dissolved Iron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-17 Box-Whisker Plot Showing Distribution of Total Iron Concentration by Monitoring Well for Data Collected in 2024 and 2025

Figure 3-18 Total Iron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-19 Box-Whisker Plot Showing Distribution of Dissolved Manganese Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-20 Dissolved Manganese Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-21 Box-Whisker Plot Showing Distribution of Total Manganese Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-22 Total Manganese Concentrations during the Reporting Period (2024–2025) at All Compliance Wells
Figure 3-23 Box-Whisker Plot Showing Distribution of Dissolved Sulfate Concentration by Monitoring Well for Data Collected in 2024 and 2025
Figure 3-24 Dissolved Sulfate Concentrations during the Reporting Period (2024–2025) at All Compliance Wells

## APPENDICES

Appendix A Groundwater Monitoring Results 2024-2025
Appendix B Statistical Output
B1 Test Descriptions
B2 Outlier Test Results
B3 Sen Slope and Mann-Kendall Test Results – Short Term
B4 Sen Slope and Mann-Kendall Test Results – Long Term
Appendix C Site Inspection Reports

# 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 2025 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 December 5, 2018. The Power Station ceased operations in 2011 and the former power block area was sold in 2019.

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.

In accordance with 35 IAC § 840.114 and 35 IAC § 840.116, the Groundwater Monitoring Plan (GMP; Geotechnology, Inc., 2016a), 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 GMP Schedule is provided in **Table 1-1**. Field and laboratory parameters for evaluating groundwater quality are shown in **Table 1-2**.

The current groundwater monitoring network is comprised 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 GMP, groundwater sampling was restarted and quarterly monitoring was conducted at 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 facilitate groundwater monitoring. Locations of all monitoring wells are shown on **Figure 1-2**. 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 1-3**.

Twenty-eight quarterly rounds of post-closure data have been collected between January 2019 and December 2025 to satisfy requirements of the GMP. This annual report includes the following elements:

- A summary of the last eight quarterly rounds of post-closure groundwater monitoring data collected during 2024 and 2025 and used in short-term trend analysis (**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 2025

### 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 2025) 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.

Time series plots of total and dissolved concentrations of arsenic and boron observed at each groundwater monitoring well from 2019 through 2025 are presented on **Figures 1-3 through 1-26**. 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 and boron 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**. Sen's estimate of slope and long-term statistically significant trends, identified by Mann-Kendall analysis, are presented in **Appendix B4**.

Dissolved and total arsenic concentration time series plots are presented in **Figures 1-3 through 1-14**. 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 2025, with the exception of APW-3. Dissolved and total arsenic concentrations in APW-3 are greater than the Class I Groundwater Standard, but both exhibit decreasing concentration patterns.

Dissolved and total boron concentration time series plots 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 2025, with the exception of APW-3. Dissolved and total boron concentrations in APW-3 are greater than the Class I Groundwater Standard, but exhibit stable or decreasing concentration patterns.

Other wells in the monitoring network exhibit dissolved and total boron concentrations greater than the Class I Groundwater Standard (i.e., APW-8, 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**). Consequently, it is not likely the closed Fly Ash and Bottom Ash Ponds are contributing to the elevated dissolved and total boron concentrations observed at these wells. Additionally, dissolved and total boron concentrations at APW-11 exhibit stable concentration patterns, and decreasing concentration patterns at APW-8. Dissolved and total boron concentrations at APW-10 continued to exhibit fluctuating concentration patterns and have not quite decreased to concentrations observed prior to 2021.

### 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 1-3**) for all constituents listed in **Table 1-2**. The analysis shall use Sen's estimate of the slope and be performed on a minimum of eight consecutive post-closure groundwater samples.
- If Sen's estimate of slope determines 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.

# 3. DATA ANALYSIS

## 3.1 Groundwater Flow

Groundwater potentiometric surface maps were generated for each quarterly sampling event (**Figures 3-1 through 3-4**). A timeseries of groundwater elevations from 2024 to 2025 is provided in **Figure 3-5** and a hydrograph showing Illinois River gage height from 2024 to 2025 at United States Geological Survey (USGS) gaging station 05585500 is provided in **Figure 3-6**. **Figures 3-5 and 3-6** show a general pattern of elevated groundwater elevations during the spring and summer months when elevated Illinois River gage height is observed relative to lower groundwater elevations observed during the autumn and winter months when lower Illinois River gage height is observed. Groundwater elevations and Illinois River gage height were generally lower in 2025 than in 2024. Monitoring wells APW-13 and APW-14 were dry during all 2025 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 during sampling events in 2025. Horizontal hydraulic gradients calculated along the flow path from midgradient monitoring well APW-8 to downgradient compliance well APW-2 ranged from 0.0017 to 0.0022 feet per foot (ft/ft) during 2025.

## 3.2 Review of Analytical Data (2024–2025)

Groundwater samples from the most recent eight post-closure monitoring events were collected on March 12-14, 2024; June 10-12, 2024; August 26-28, 2024; November 12-14, 2024; March 3-4, 2025; June 2-4, 2025; August 25-26, 2025; and October 14-15, 2025. All sampling dates and field and laboratory analytical results are tabulated in **Appendix A**. Sampling anomalies are noted below:

- Monitoring wells APW-13 and APW-14 were not sampled because they were dry or did not have adequate water during all sampling events.

Results of groundwater monitoring during 2024 and 2025 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 2024 and 2025 are shown on **Figures 3-7A through 3-10B**.
  - Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved arsenic concentrations were less than (<) 0.0010 milligrams per liter (mg/L) and total arsenic concentrations ranged from <0.0010 to 0.0106 mg/L.
  - Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved arsenic concentrations ranged from <0.0010 to 0.0019 mg/L and total arsenic concentrations ranged from <0.0010 to 0.0097 mg/L.
  - Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved arsenic concentrations ranged from <0.0010 to 0.211 mg/L and total arsenic concentrations ranged from <0.0010 to 0.344 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 3-11 through 3-14**.
  - Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved boron concentrations ranged from <0.02 to 2.48 mg/L and total boron concentrations ranged from 0.0283 to 2.76 mg/L.
  - Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved boron concentrations ranged from 0.0656 to 6.47 mg/L and total boron concentrations ranged from 0.0731 to 6.73 mg/L.
  - Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved boron concentrations ranged from 0.0526 to 19.4 mg/L and total boron concentrations ranged from 0.0599 to 20.5 mg/L.
- Iron mobility is affected by fluctuations of oxidation-reduction conditions and pH, making it an unreliable coal ash indicator at the site (Geotechnology, Inc., 2016b). Dissolved and total iron concentrations are shown on **Figures 3-15 through 3-18**.
  - Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved iron concentrations ranged from <0.040 to 0.103mg/L and total iron concentrations ranged from <0.040 to 16.2 mg/L.
  - Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved iron concentrations were <0.040 mg/L and total iron concentrations ranged from <0.040 to 15.4 mg/L.
  - Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved iron concentrations ranged from <0.040 to 7.12 mg/L and total iron concentrations ranged from 0.0757 to 14.1 mg/L.
- Manganese mobility is also affected by fluctuations of oxidation-reduction conditions and pH, making it an unreliable coal ash indicator at the site (Geotechnology, Inc., 2016b). Dissolved and total manganese concentrations are shown on **Figures 3-19 through 3-22**.
  - Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved manganese concentrations ranged from <0.0070 to 0.238 mg/L and total manganese concentrations ranged from <0.0070 to 1.94 mg/L.
  - Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved manganese concentrations ranged from <0.0070 to 0.0077 mg/L and total manganese concentrations ranged from <0.0070 to 0.865 mg/L.
  - Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved manganese concentrations ranged from <0.0070 to 2.49 mg/L and total manganese concentrations ranged from 0.0085 to 8.93 mg/L.
- Sulfate is a non-indicator constituent, however, similar to indicator parameters, dissolved sulfate concentrations are generally less than the Class I Groundwater Standard, as illustrated by the box-whisker and timeseries plots (**Figures 3-23 and 3-24**).
  - Upgradient monitoring well (APW-1, APW-5, and APW-11) dissolved sulfate concentrations ranged from 11 to 94 mg/L.

- Midgradient monitoring well (APW-6, APW-7, APW-8, and APW-10) dissolved sulfate concentrations ranged from 15 to 218 mg/L.
- Downgradient monitoring well (APW-2, APW-3, APW-4, APW-9, and APW-12) dissolved sulfate concentrations ranged from <10.0 to 409 mg/L.

## 3.3 Statistical Analyses

Analytical data for downgradient compliance wells (APW-2, APW-3, APW-4, APW-9, and APW-12) were evaluated to identify short-term (compliance) trends in the 2024–2025 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 (2024–2025) by the Grubbs outlier test based on the date range of 2019–2025 were not eliminated from further statistical analysis because there is no documentation indicating they are not representative of actual field conditions. The identified outliers did not affect short-term compliance trends, as no such trends were found for well-parameter pairs with outliers during 2024–2025 (**Section 3.3.3**).

### 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 sample results. A negative slope is identified as < -0.0005, a positive slope is identified as > 0.0005, and a result >-0.0005 and <0.0005 is identified as having no slope. The test methodologies and results are listed in **Appendix B1 and B3**, respectively.

Seven cases with positive slopes, two cases with negative slopes, and fourteen cases with flat or no slopes were identified in the 2024-2025 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 seven 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 determined three cases of statistically significant increasing trends in the 2024–2025 dataset for downgradient compliance wells, dissolved iron at APW-3, and dissolved and total manganese at APW-12 (**Table 3-1; Appendix B3**).

## 3.4 Site Inspection

The Post-Closure Maintenance Program requires quarterly inspections 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 well as fencing, monitoring points, and surface water control features. The inspection reports from 2025 are included in **Appendix C**.

Site inspections were performed on February 25, 2025; May 28, 2025; September 5, 2025; and November 13, 2025. In the first quarter of 2025, four temporary piezometers were installed between February 27 and 28, 2025 in the Fly Ash Pond. In the second quarter, these piezometers were properly abandoned on May 27, 2025 and the liner and closure turf associated with the final cover in the vicinity of the abandonments were repaired on May 28, 2025. The first and second quarter inspections noted minor vegetation maintenance was required at the embankments. The vegetation growth at the embankments was managed through herbicide application and scheduled mowing. By the third quarter, dead saplings remained from earlier herbicide treatment, confirming that the summer vegetation control measures were effective. 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 2024-2025 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. The parameters and wells with statistically significant increasing short-term trends and concentrations above the 35 IAC 620.410 Class I Groundwater Standards have been identified in **Section 3.3.3** and in **Table 3-1** for the most recent eight monitoring events (2024-2025), and include dissolved iron at APW-3, and dissolved and total manganese at APW-12. These short-term increasing trends were isolated and not repeated from the 2023-2024 monitoring period (Ramboll, 2025). As such, no further action is required at this time. The concentrations of indicator parameters will continue to be monitored and evaluated in 2026.

# 5. REFERENCES

Geotechnology, Inc., 2016a. *Groundwater Monitoring Plan, Fly Ash Pond and Bottom Ash Pond, Meredosia Power Station*. December 14, 2016.

Geotechnology, Inc., 2016b. *Groundwater Management Zone Plan, Fly Ash Bottom Ash Pond, Meredosia Power Station, 800 South Washington Street, Meredosia, Illinois*. December 22, 2016.

Geotechnology, Inc., 2018a. *Closure Plan, Meredosia Power Station*. March 12, 2018.

Geotechnology, Inc., 2018b. *Post-Closure Care Plan, Meredosia Power Station*. March 12, 2018.

Illinois Environmental Protection Agency (IEPA), 1991. *Groundwater Quality Standards for Class I: Potable Resource Groundwater*, Title 35 of the Illinois Administrative Code Part 620: Groundwater Quality, amended 2013.

Kleinfelder West, Inc., 2011. *Coal Ash Impoundment Site Assessment Final Report, Meredosia Power Station, Ameren Energy Generating Company, Meredosia, Illinois.* May 10, 2011.

Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2025. *2024 Groundwater Monitoring Annual Report, Closed Fly Ash & Bottom Ash Ponds, Former Meredosia Power Station.* January 31, 2025.

# TABLES

**Table 1-1. Groundwater Monitoring Program Schedule**

2025 Annual Report

Meredosia Power Station - Fly Ash Pond and Bottom Ash Pond

| Frequency | Duration | Sampling Quarter |
|---|---|---|
| Quarterly | Begins: June 2017 | January- March (1)<br>April - June (2)<br>July - September (3)<br>October - December (4) |
| | Ends: After successful completion of the post-closure activities required and approval of the Illinois Environmental Protection Agency (IEPA); or<br>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)<br>October - December (4) |
| | Ends: After successful completion of the post-closure activities required and approval of the IEPA | |

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



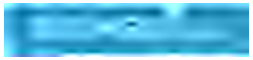


**Table 1-2. Groundwater Monitoring Program Parameters**

2025 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** | **STORET Code - Dissolved** | **STORET Code - Total** |
| Boron[2] | 01020 | 01022 |
| Iron[2] | 01046 | 01045 |
| Manganese[2] | 01056 | 01055 |
| Sulfate[1, 2] | 00946 | - - |
| Total Dissolved Solids (TDS)[1, 2] | 70300 | - - |
| Antimony | 01095 | 01097 |
| Arsenic | 01000 | 01002 |
| Barium | 01005 | 01007 |
| Beryllium | 01010 | 01012 |
| Cadmium | 01025 | 01027 |
| Chloride[1] | 00941 | - - |
| Chromium | 01030 | 01034 |
| Cobalt | 01035 | 01037 |
| Copper | 01040 | 01042 |
| Cyanide | - - | 00720 |
| Fluoride[1] | 00950 | - - |
| Lead | 01049 | 01051 |
| Mercury | 71890 | 71900 |
| Nickel | 01065 | 01067 |
| Nitrate as N[1] | 00613 | - - |
| Nitrite as N[1] | 00618 | - - |
| Selenium | 01145 | 01147 |
| Silver | 01075 | 01077 |
| Thallium | 01057 | 01059 |
| Vanadium | 01085 | 01087 |
| Zinc | 01090 | 01092 |

[O: YD/SJC, C: YD/SJC; U: EJT 12/22/25, C: EGP 12/22/25]

**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

**Table 1-3. Groundwater Monitoring System Wells**

2025 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) | Position | Monitoring Zone |
|---|---|---|---|---|---|---|---|---|
| APW-1 | 10/26/2010 | 446.06 | 449.26 | 431.40 | 421.40 | 24.7 | Upgradient | Uppermost Aquifer |
| APW-2 | 10/25/2010 | 433.97 | 436.87 | 421.10 | 411.10 | 22.9 | Downgradient | Uppermost Aquifer |
| APW-3 | 10/25/2010 | 433.35 | 436.28 | 420.80 | 410.80 | 22.6 | Downgradient | Uppermost Aquifer |
| APW-4 | 10/26/2010 | 431.90 | 434.86 | 415.80 | 409.30 | 26.1 | Downgradient | Uppermost Aquifer |
| APW-5 | 10/26/2010 | 450.48 | 453.20 | 431.00 | 421.00 | 29.5 | Upgradient | Uppermost Aquifer |
| APW-6 | 10/1/2015 | 448.60 | 451.90 | 431.10 | 421.10 | 28.0 | Midgradient | Uppermost Aquifer |
| APW-7 | 10/1/2015 | 435.00 | 438.70 | 429.00 | 419.00 | 16.5 | Midgradient | Uppermost Aquifer |
| APW-8 | 10/1/2015 | 460.50 | 463.90 | 431.90 | 421.90 | 39.1 | Midgradient | Uppermost Aquifer |
| APW-9 | 10/1/2015 | 445.00 | 448.10 | 426.20 | 416.20 | 29.3 | Downgradient | Uppermost Aquifer |
| APW-10 | 8/20/2018 | 454.10 | 457.45 | 424.90 | 414.90 | 39.4 | Midgradient | Uppermost Aquifer |
| APW-11 | 8/22/2018 | 461.89 | 465.40 | 427.64 | 417.64 | 44.45 | Upgradient | Uppermost Aquifer |
| APW-12 | 8/21/2018 | 431.94 | 435.52 | 422.10 | 412.10 | 20.0 | Downgradient | Uppermost Aquifer |
| APW-13 | 7/13/2021 | 457.84 | 461.55 | 437.34 | 427.34 | 31.0 | Midgradient | Uppermost Aquifer |
| APW-14 | 7/12/2021 | 455.55 | 459.27 | 439.04 | 429.04 | 27.0 | 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)



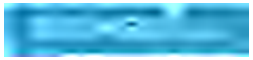


**Table 3-1. Trend Analysis Results**

2025 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 | None | DNE | DNE |
| **Arsenic, dissolved** | DNE | None | DNE | DNE | DNE |
| **Arsenic, total** | DNE | None | None | DNE | DNE |
| **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 | DNE |
| **Boron, total** | DNE | + | DNE | None | 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 | None | None |
| **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 | Increase | DNE | DNE | DNE |
| **Iron, total** | + | + | - | DNE | DNE |
| **Lead, dissolved** | DNE | DNE | DNE | DNE | DNE |
| **Lead, total** | DNE | DNE | DNE | DNE | DNE |
| **Manganese, dissolved** | None | None | None | DNE | Increase |
| **Manganese, total** | None | None | None | DNE | Increase |
| **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** | DNE | DNE | DNE | DNE | DNE |
| **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 | - | DNE |
| **Thallium, dissolved** | DNE | DNE | DNE | DNE | DNE |
| **Thallium, total** | None | 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 |

**Table 3-1. Trend Analysis Results**

2025 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 1/1/2024-12/31/2025.

* = 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

DNE = Constituent did not exceed the Class I groundwater quality standard during the reporting period (2024-2025)

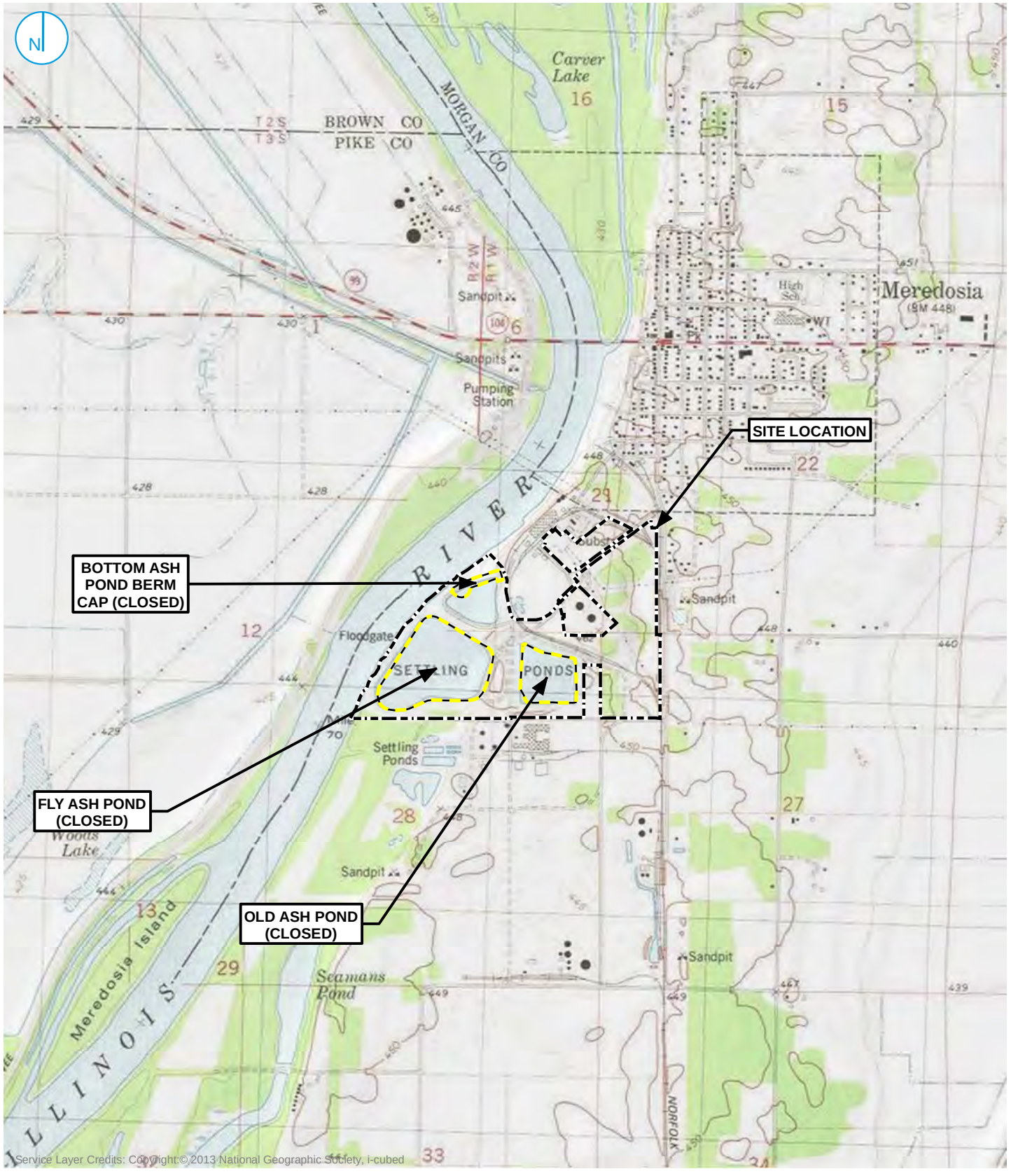
None = Insufficent evidence of a trend as determined using the Mann-Kendall test at 95% confidence for constituents with maximum concentration higher than the Class I Groundwater Quality Standard

Increase = Statistically significant increasing trend

Decrease = Statistically significant decreasing trend

# FIGURES

Y:\Mapping\Projects\667815\mxd\2022\Figure 1-1_Site Location Map.mxd
DATED: 12/18/2023 | DESIGNER: egreaves



KEY MAP

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

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

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

0 1,000 2,000 Feet

## SITE LOCATION MAP

**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

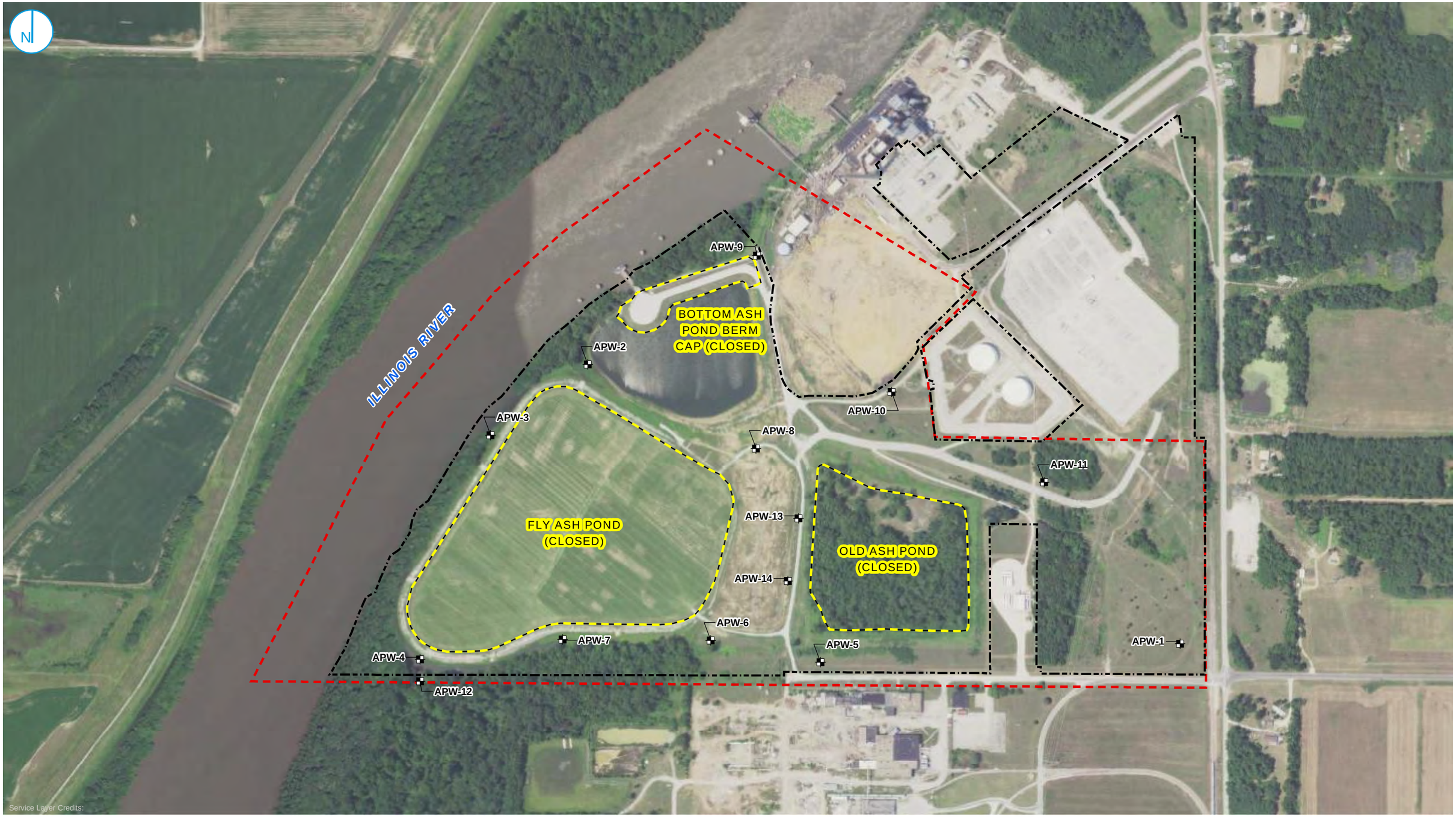
## FIGURE 1-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

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

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




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

0 240 480 Feet

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

## MONITORING WELL LOCATION MAP

**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 1-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

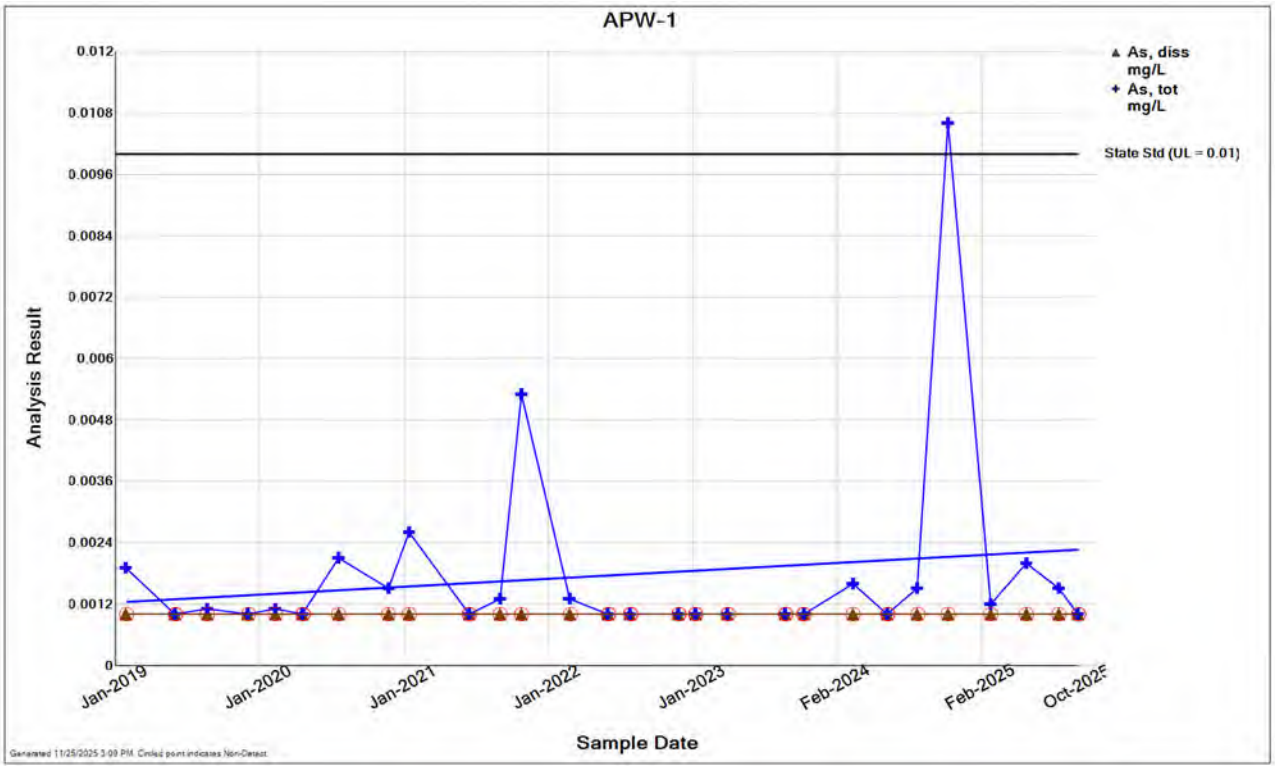



**Figure 1-3. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-1**

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

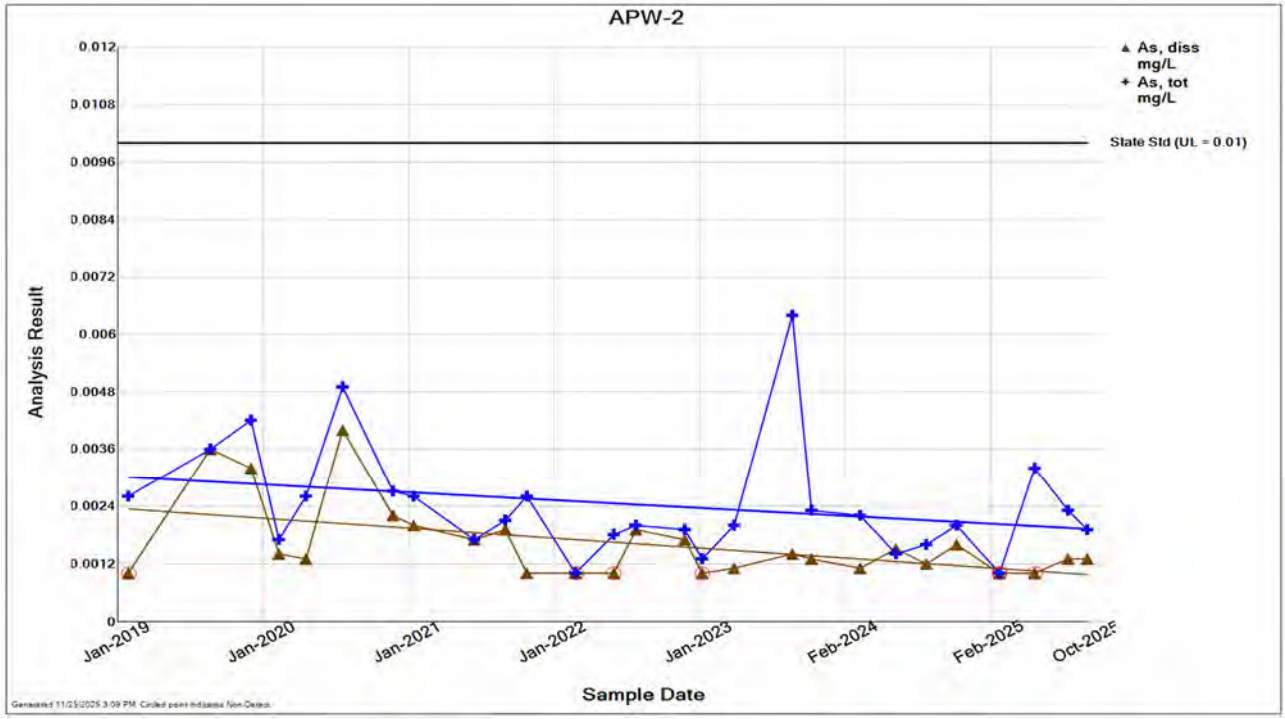



**Figure 1-4. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-2**

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

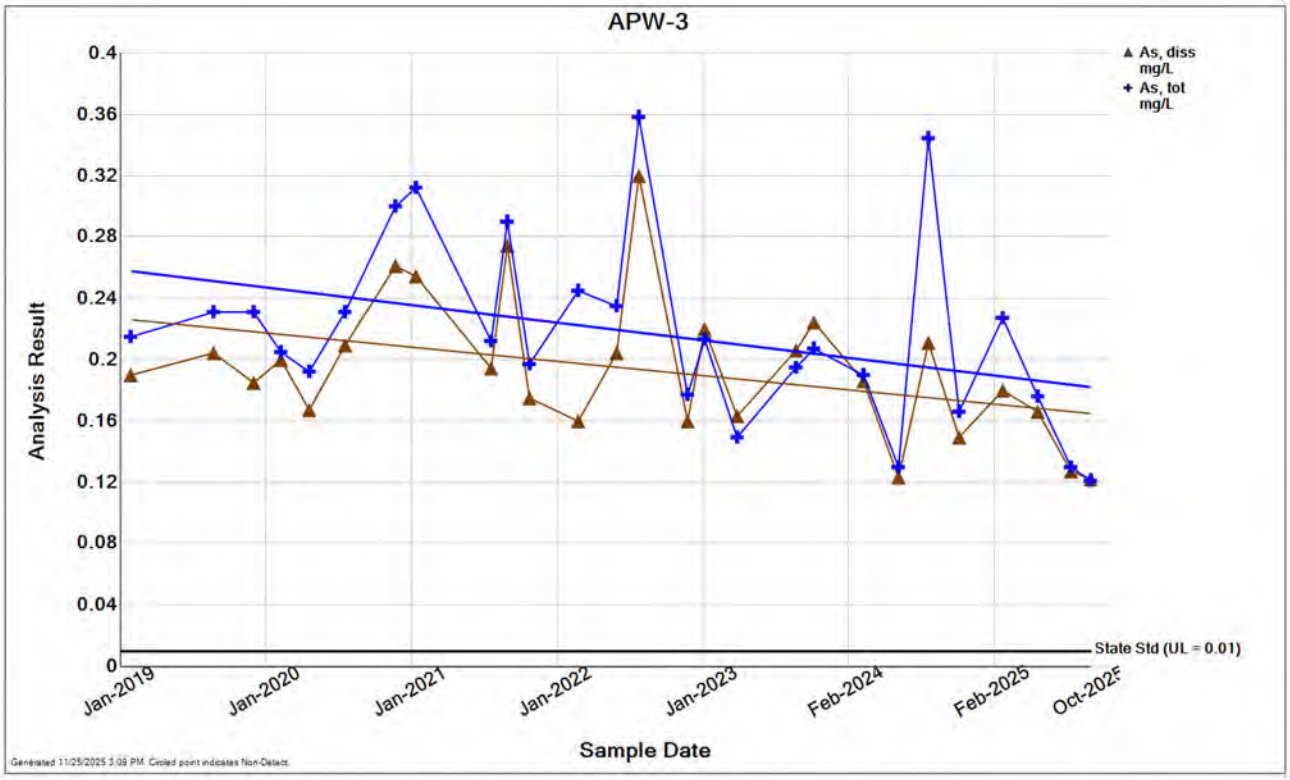



**Figure 1-5. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-3**

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

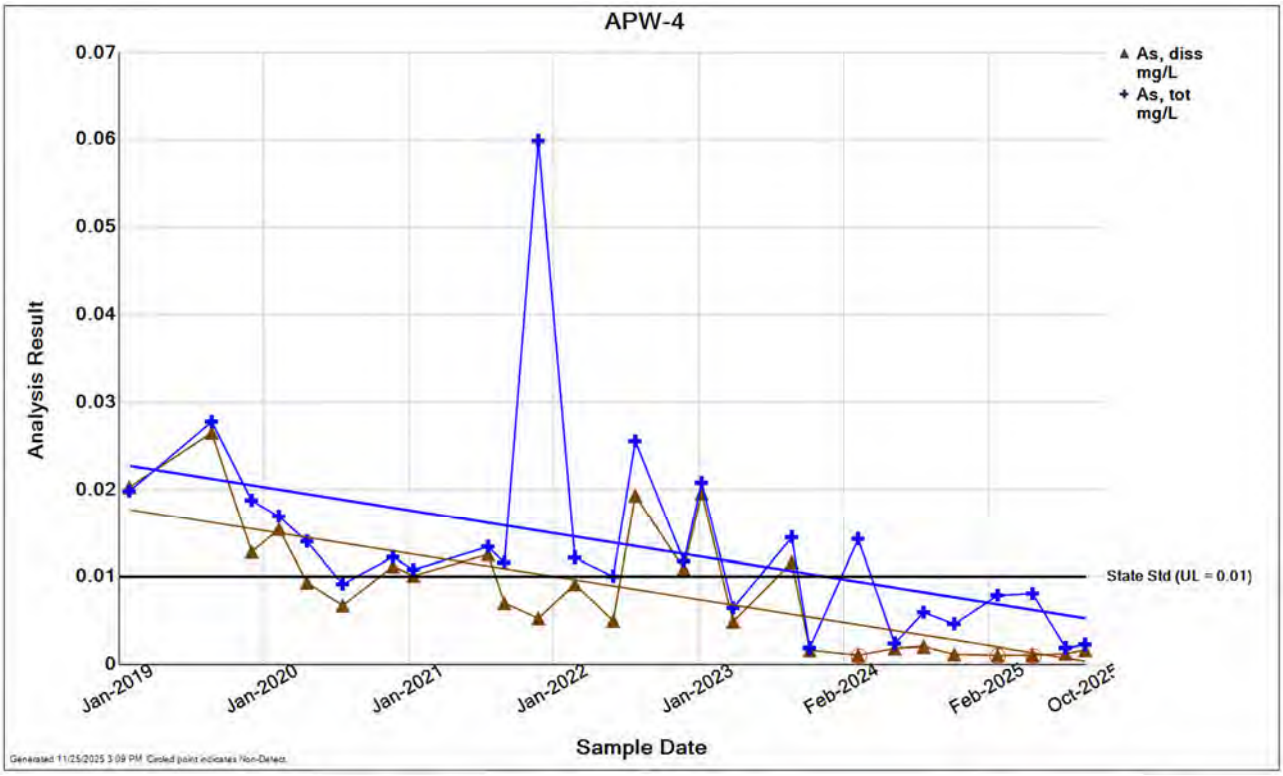



**Figure 1-6. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-4**

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

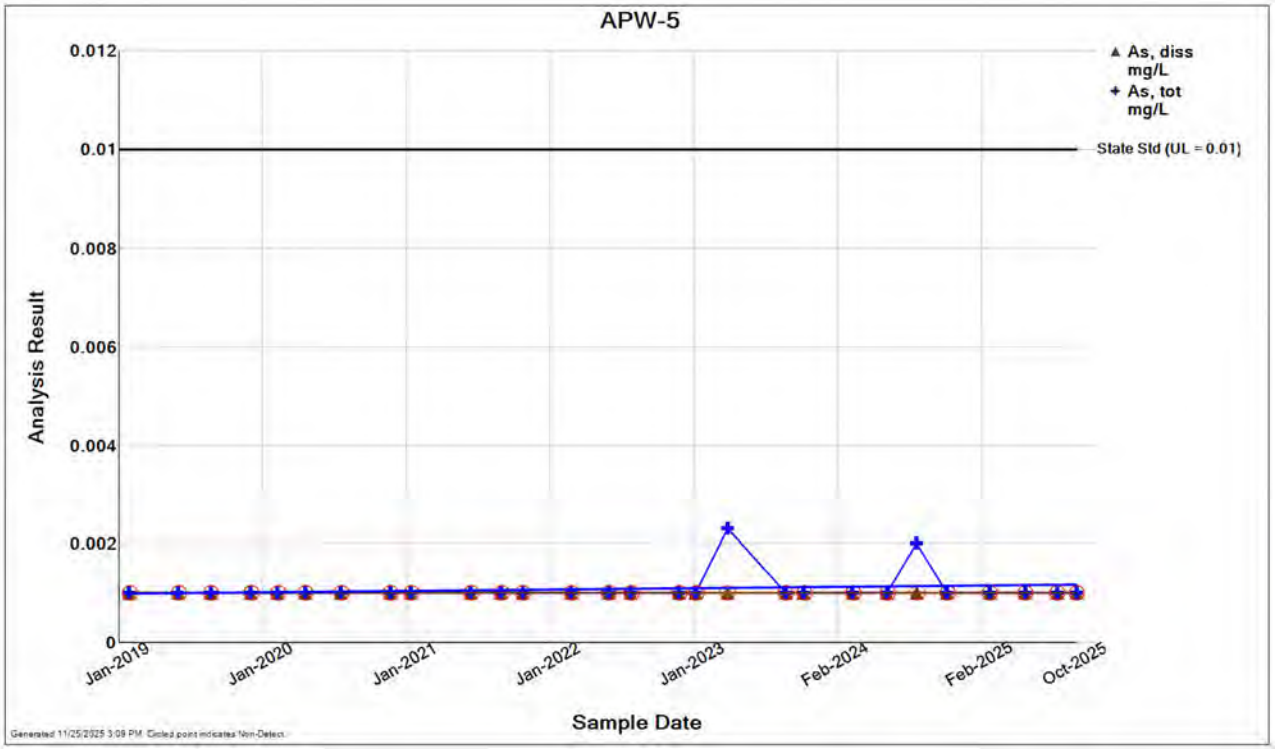



**Figure 1-7. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-5**

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

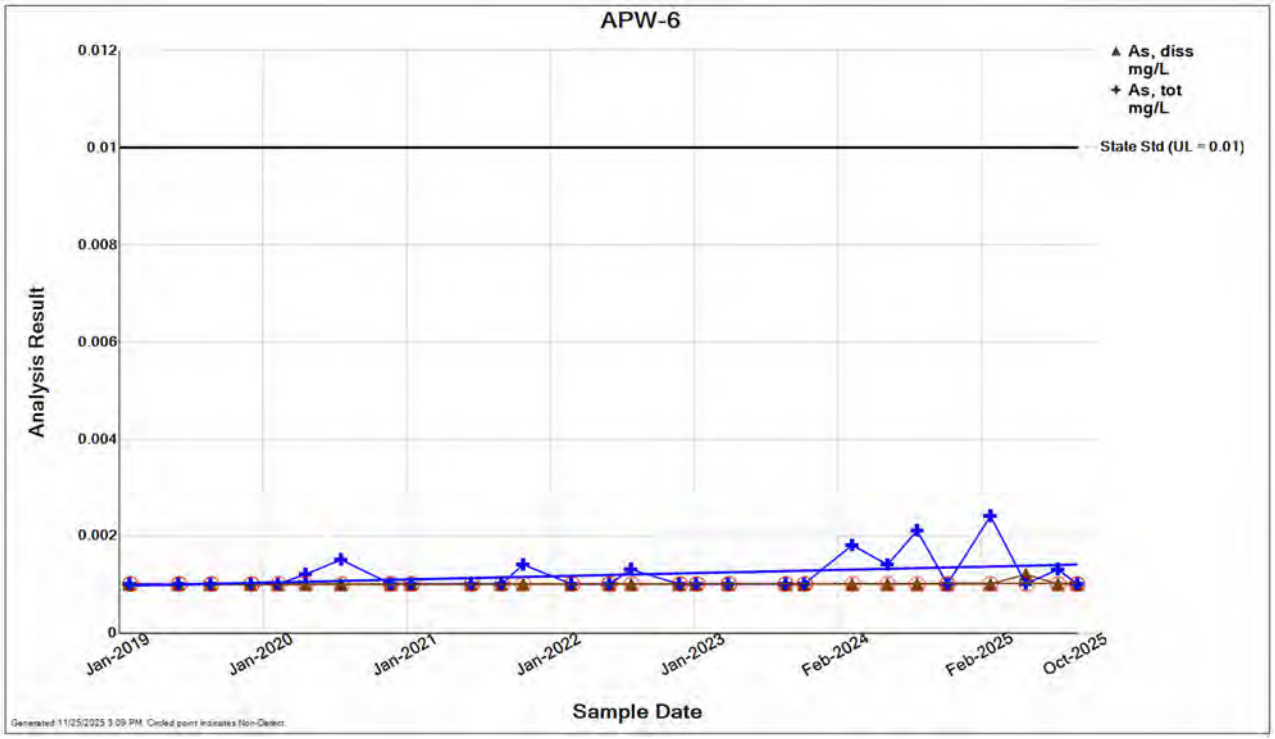



**Figure 1-8. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-6**

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

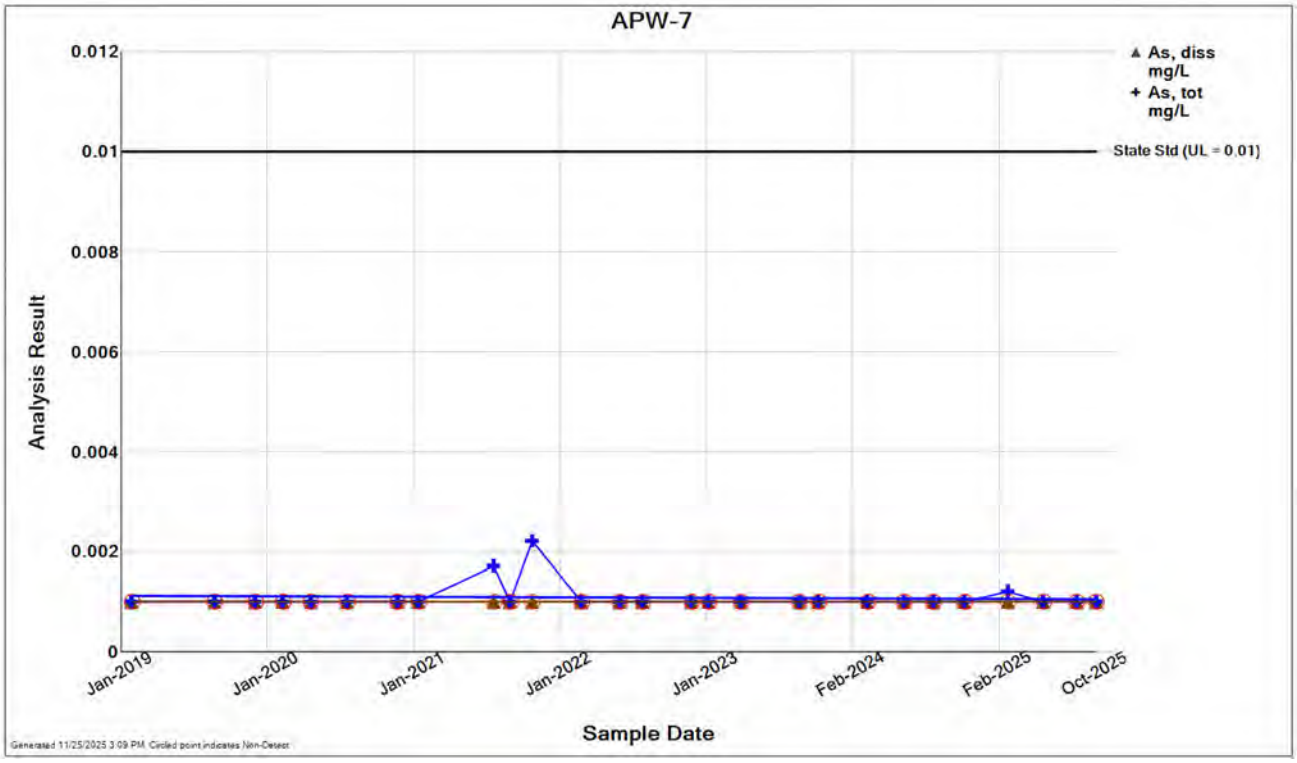



**Figure 1-9. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-7**

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

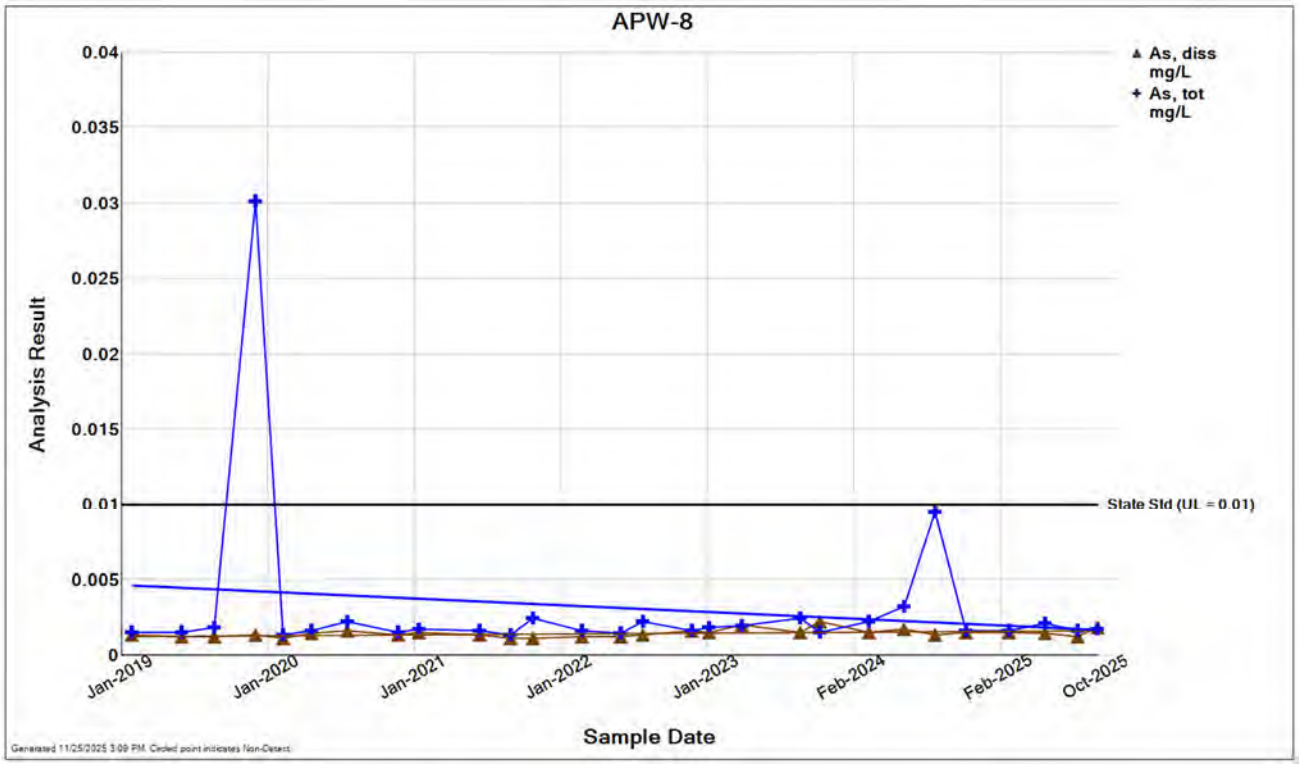



**Figure 1-10. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-8**

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

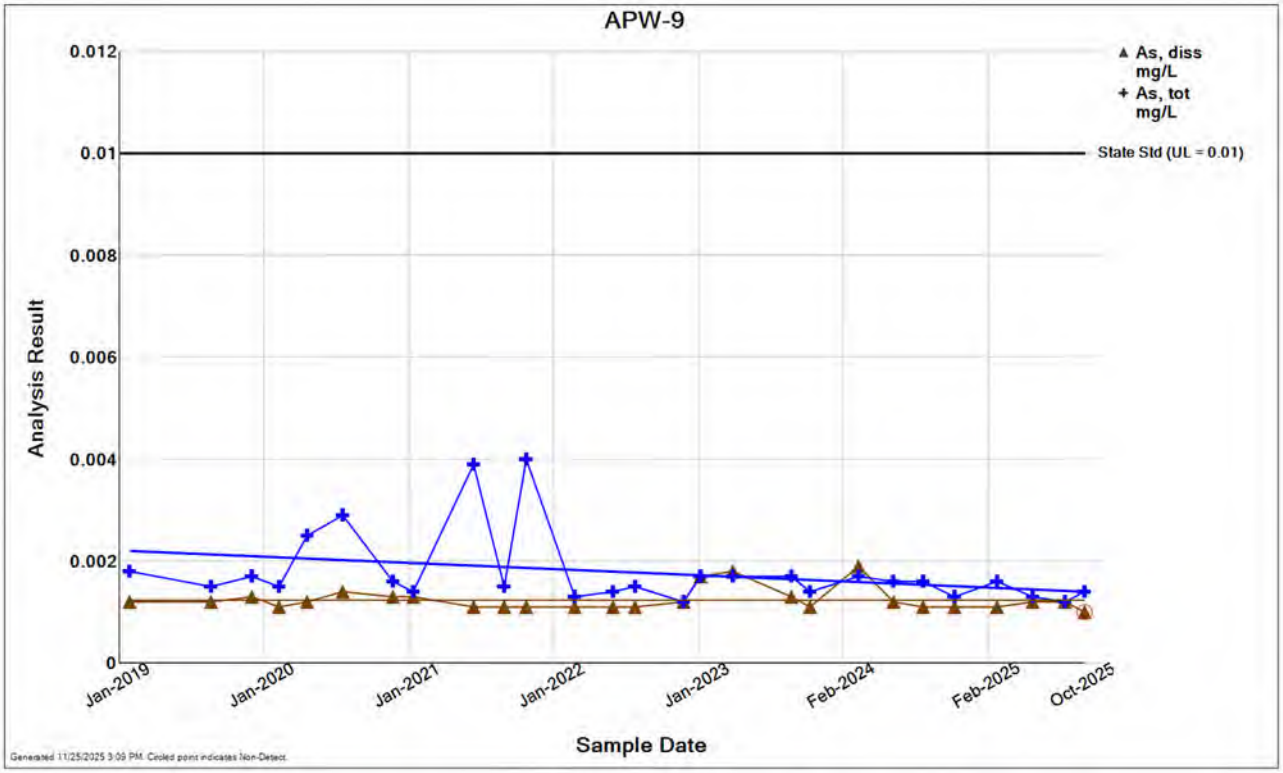



**Figure 1-11. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-9**

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

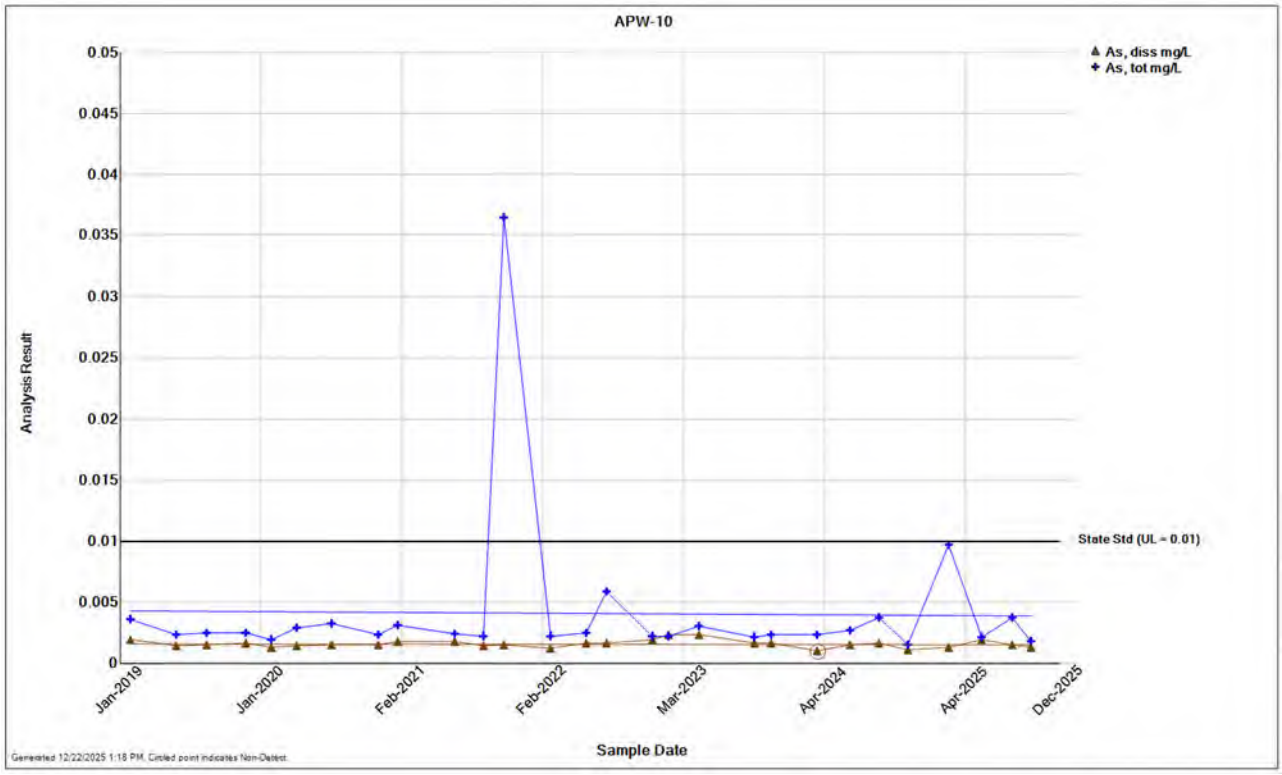



**Figure 1-12. Arsenic (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-10**

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

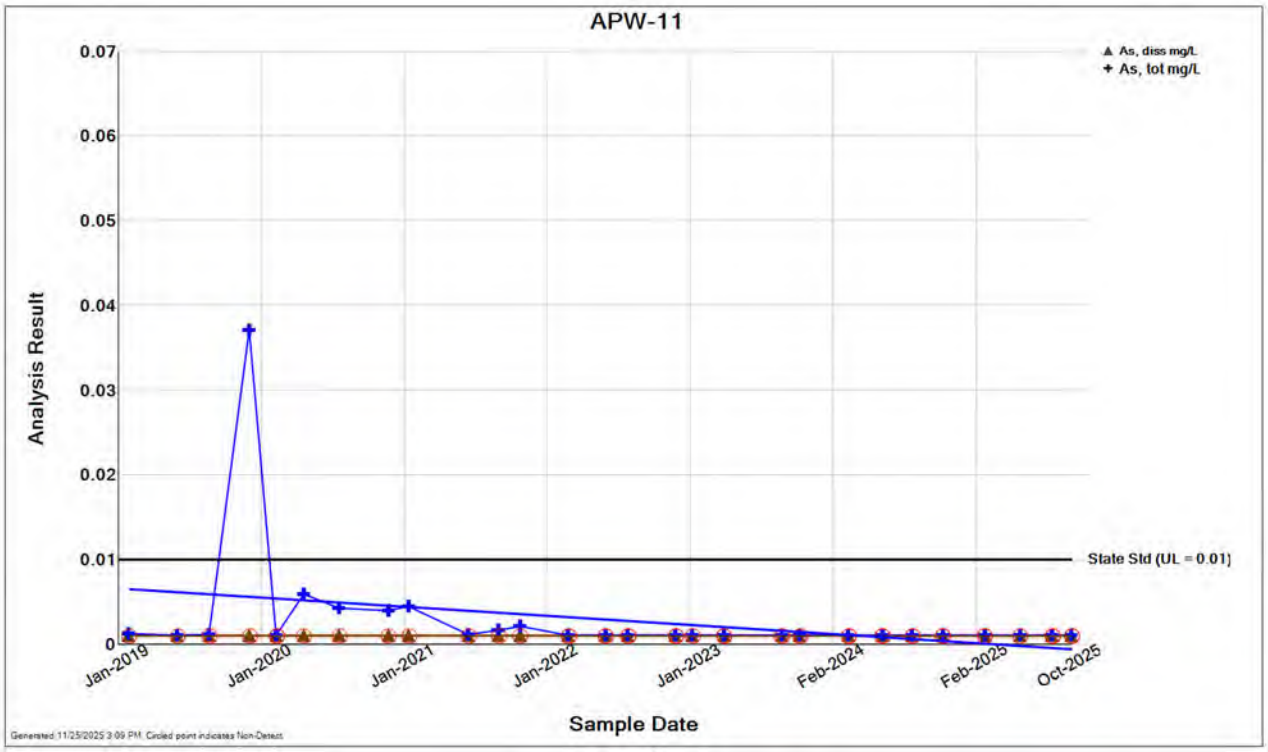



**Figure 1-13. Arsenic (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-11**

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

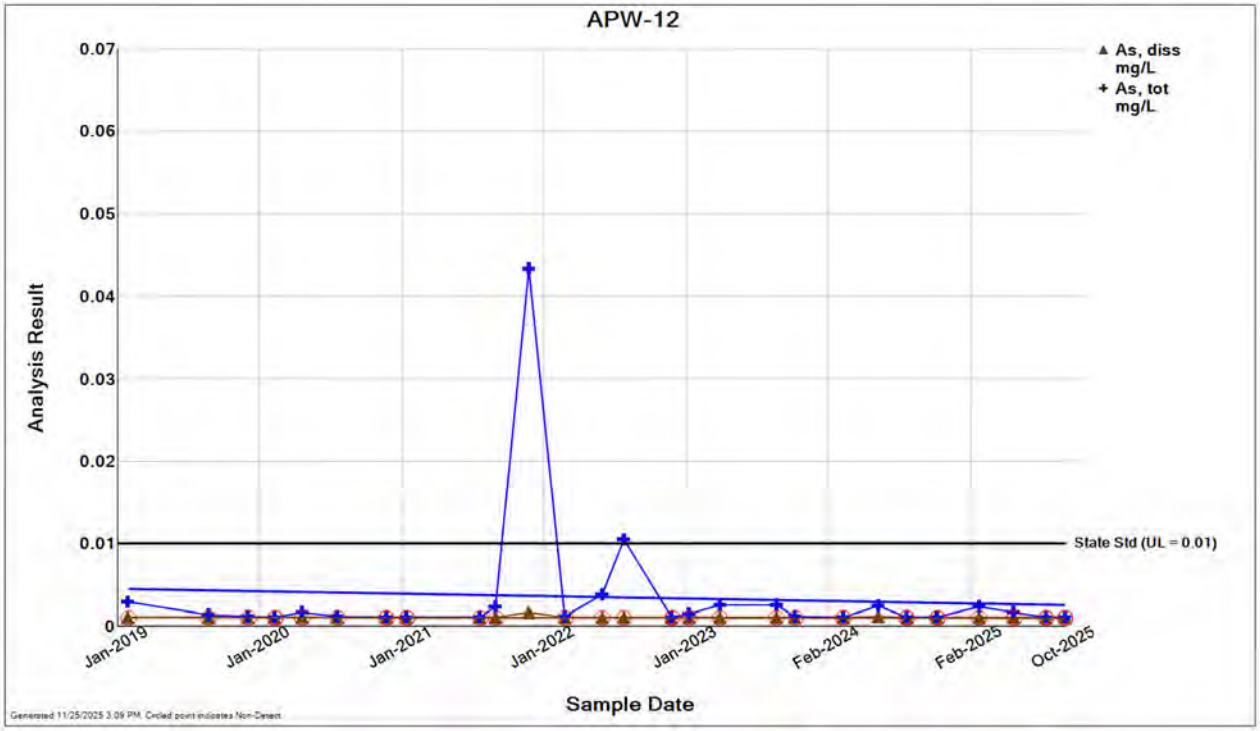



**Figure 1-14. Arsenic (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-12**

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

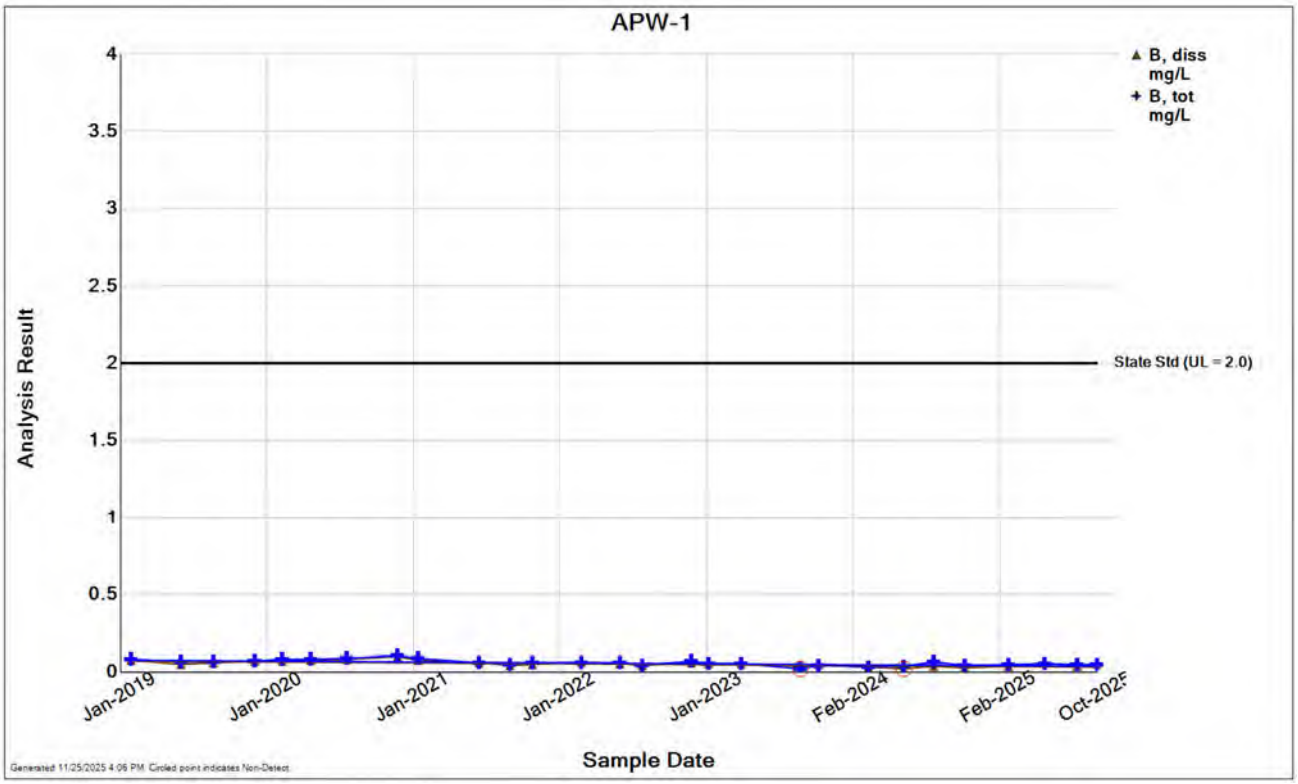



**Figure 1-15. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-1**

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

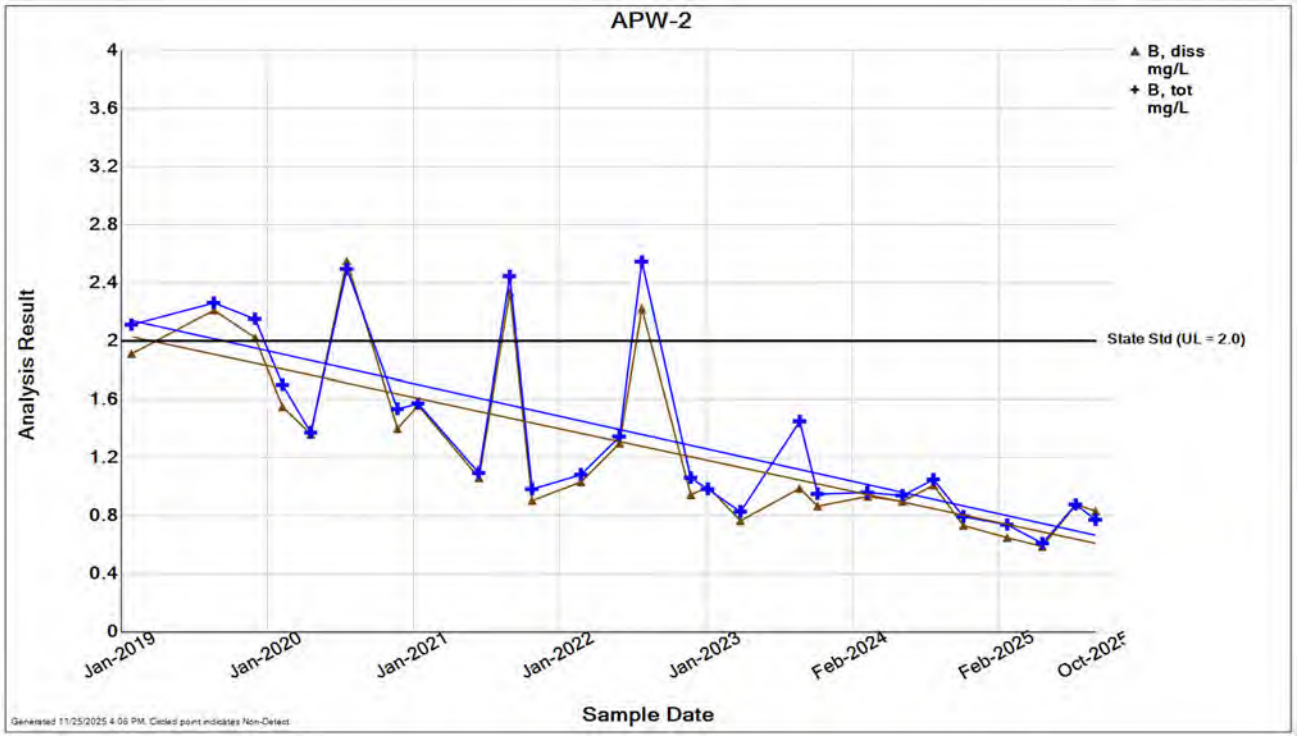



**Figure 1-16. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-2**

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

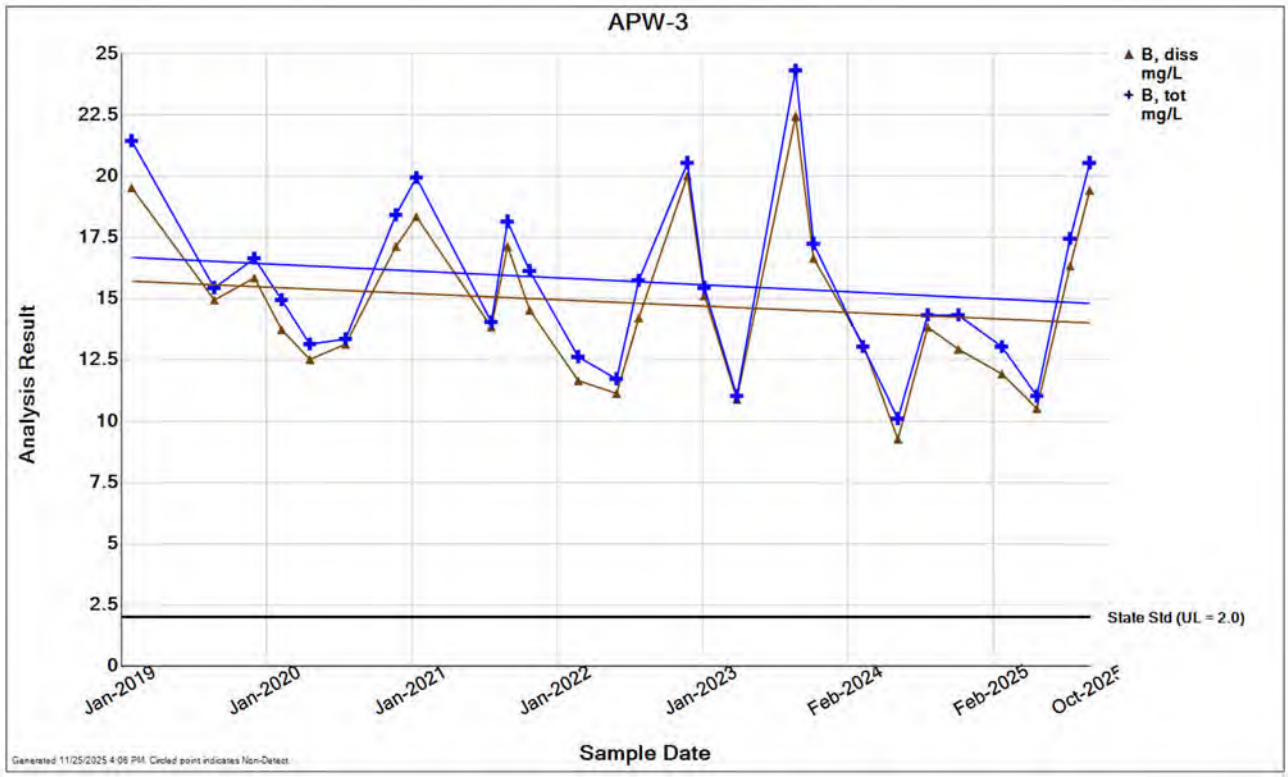



**Figure 1-17. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-3**

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

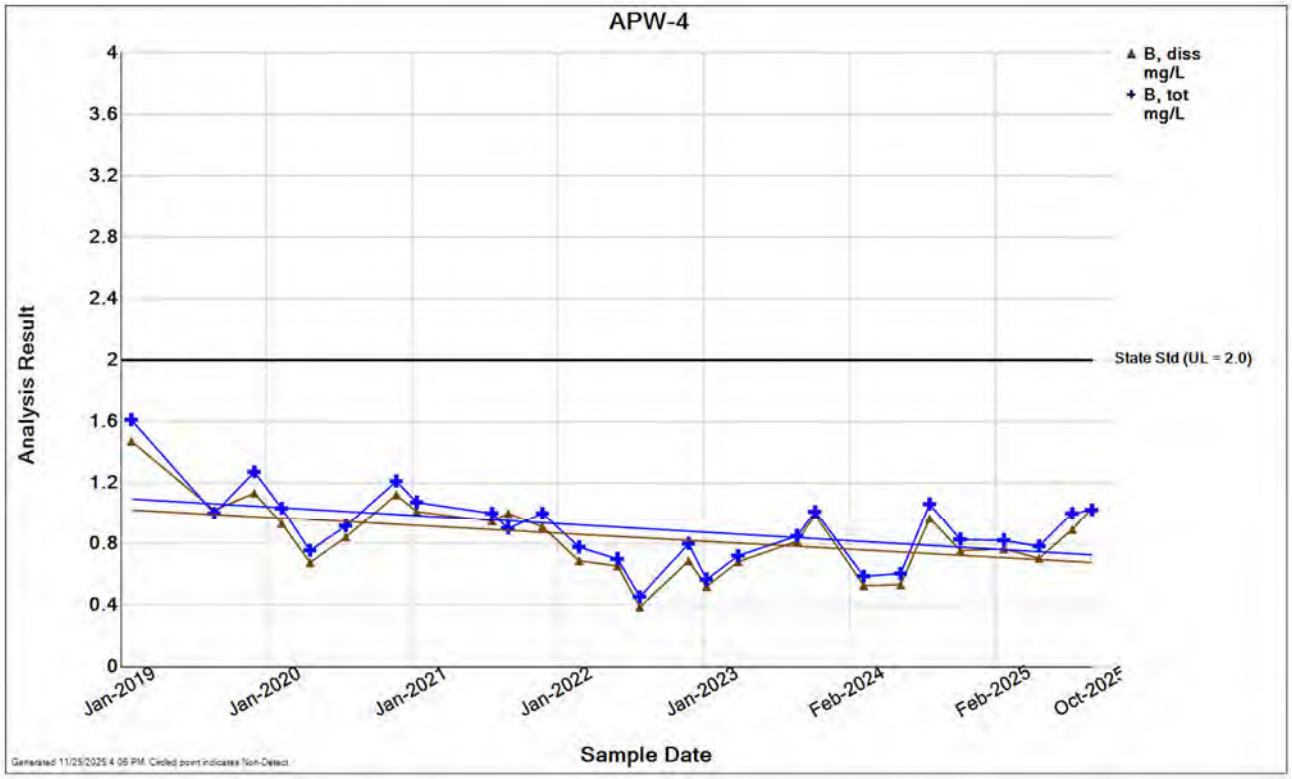



**Figure 1-18. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-4**

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

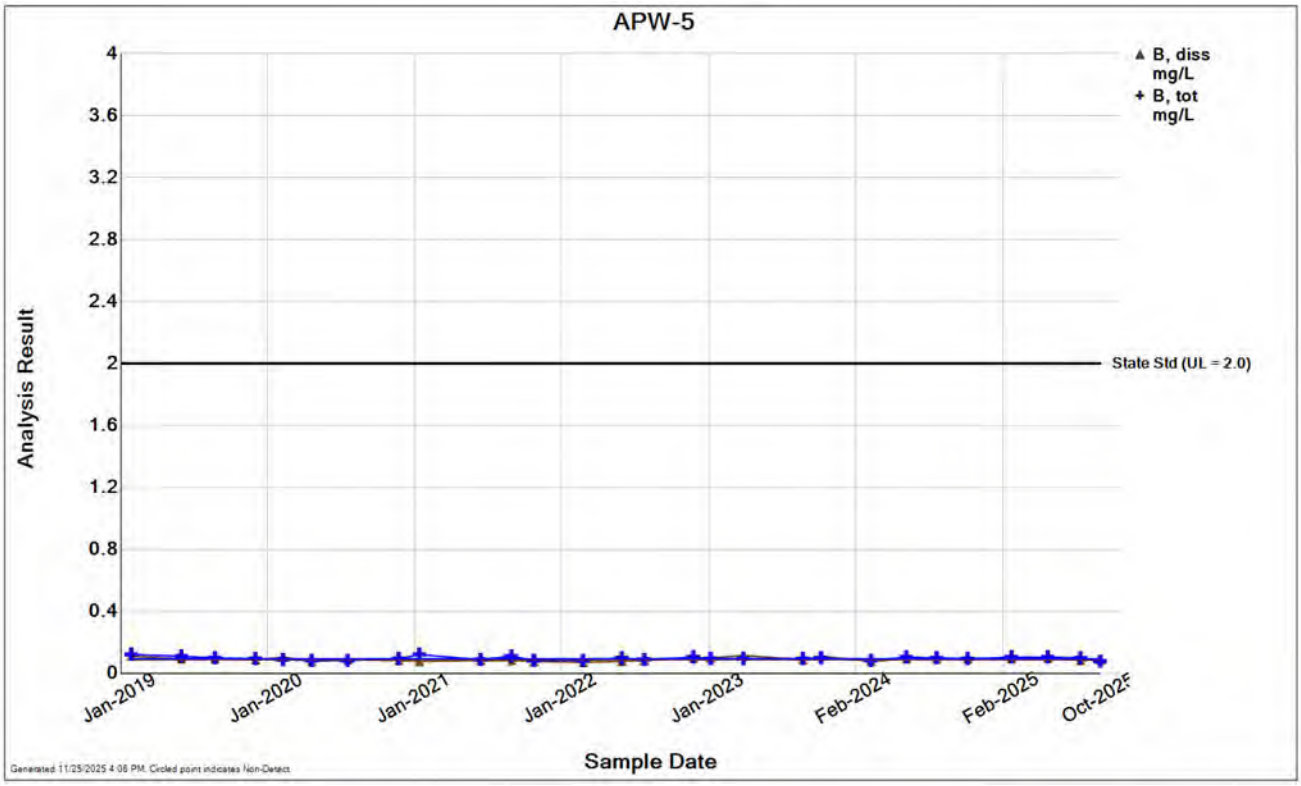



**Figure 1-19. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-5**

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

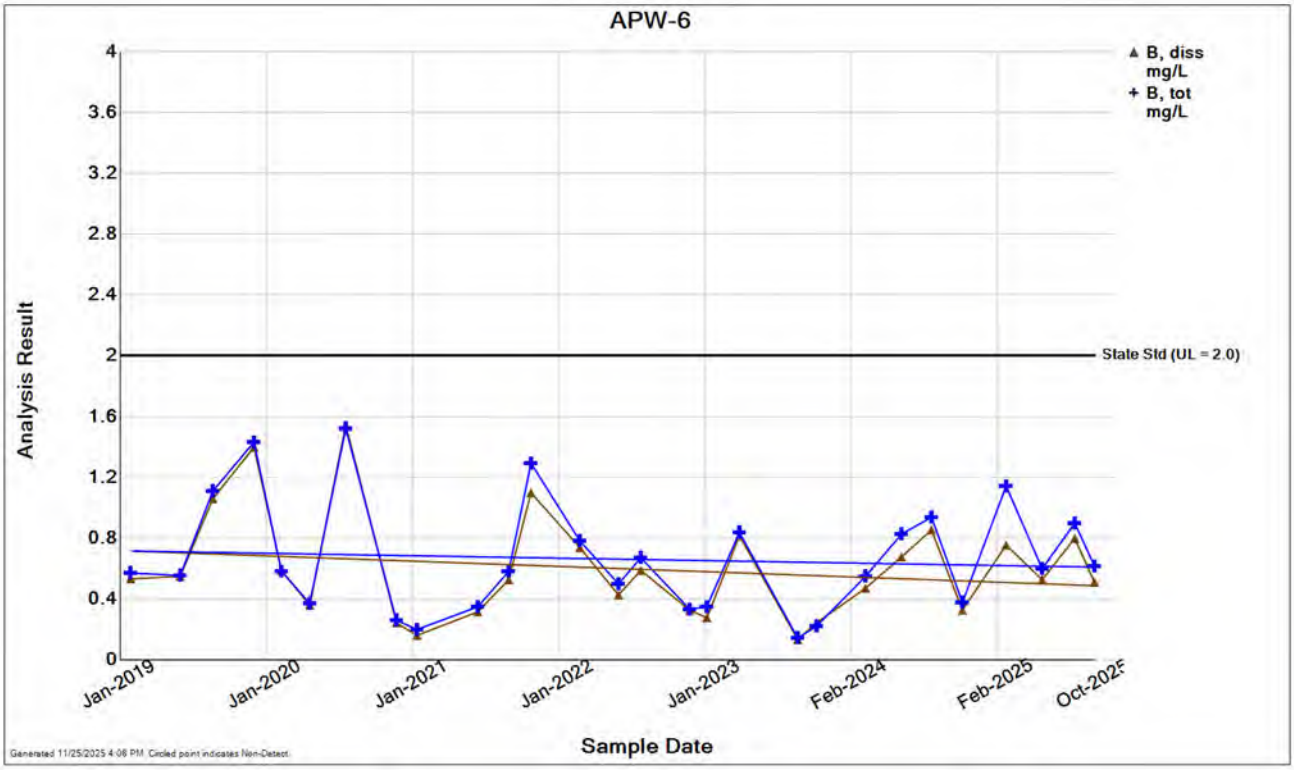



**Figure 1-20. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-6**

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

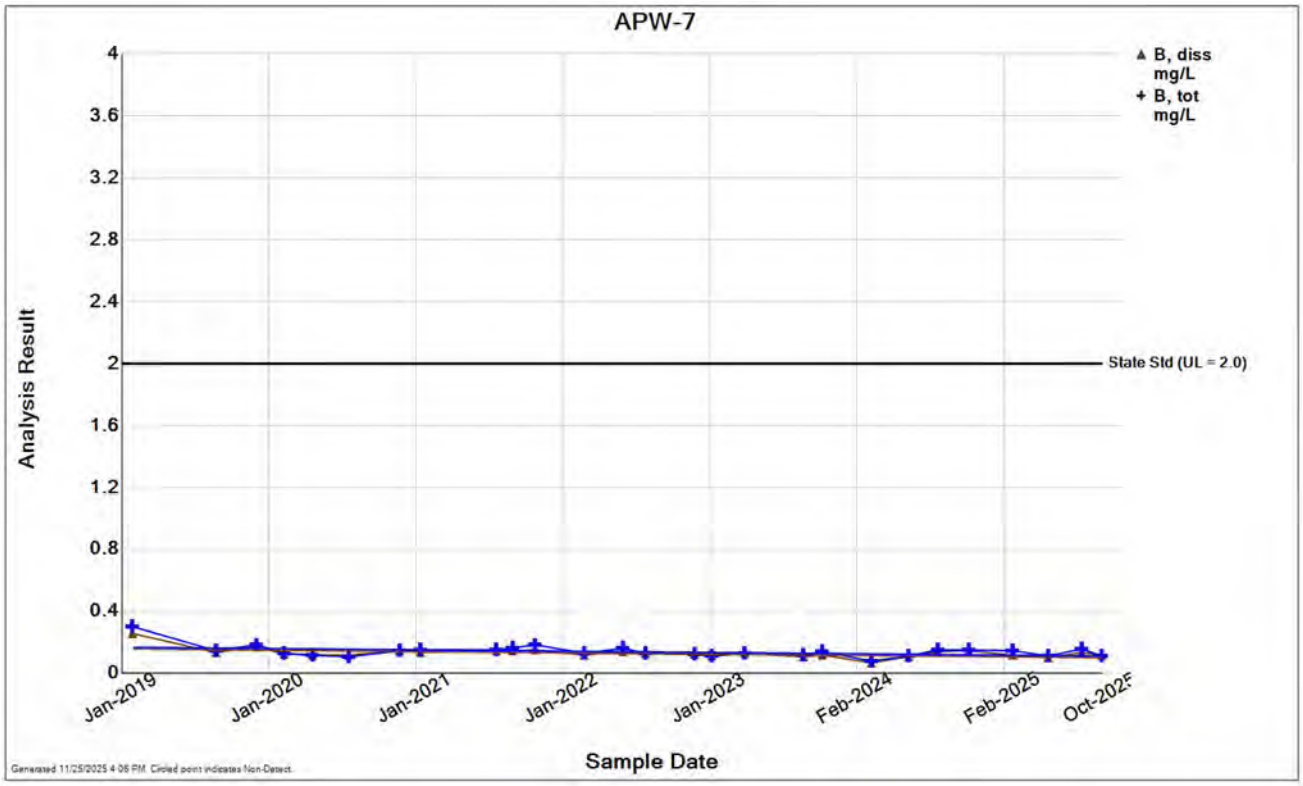



**Figure 1-21. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-7**

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

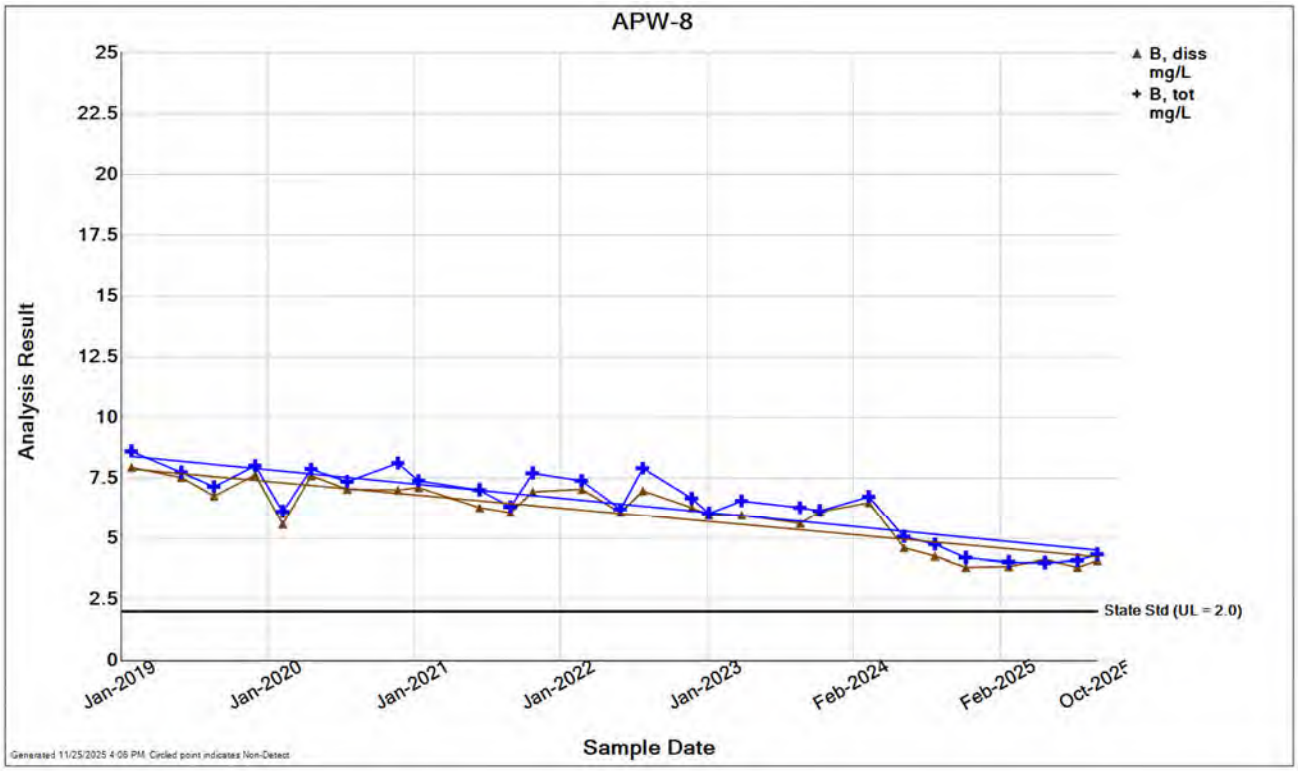



**Figure 1-22. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-8**

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

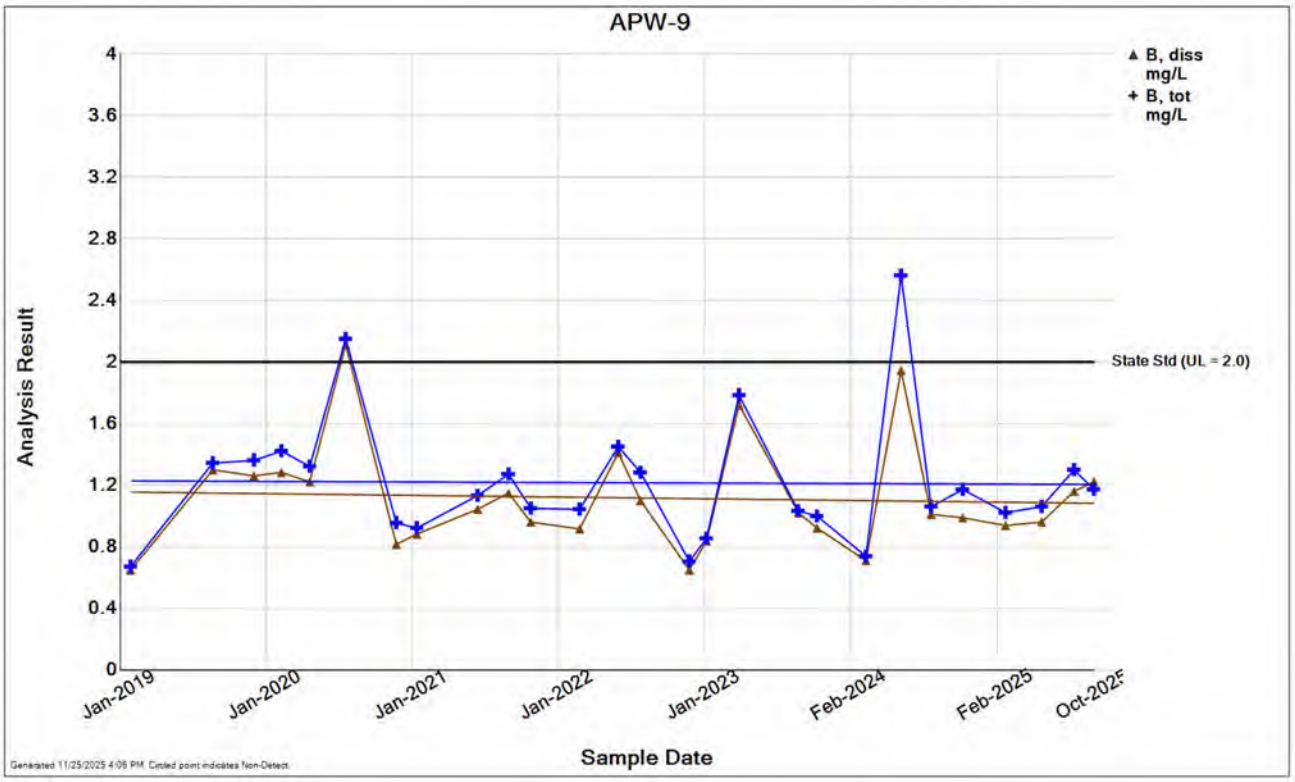



**Figure 1-23. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-9**

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

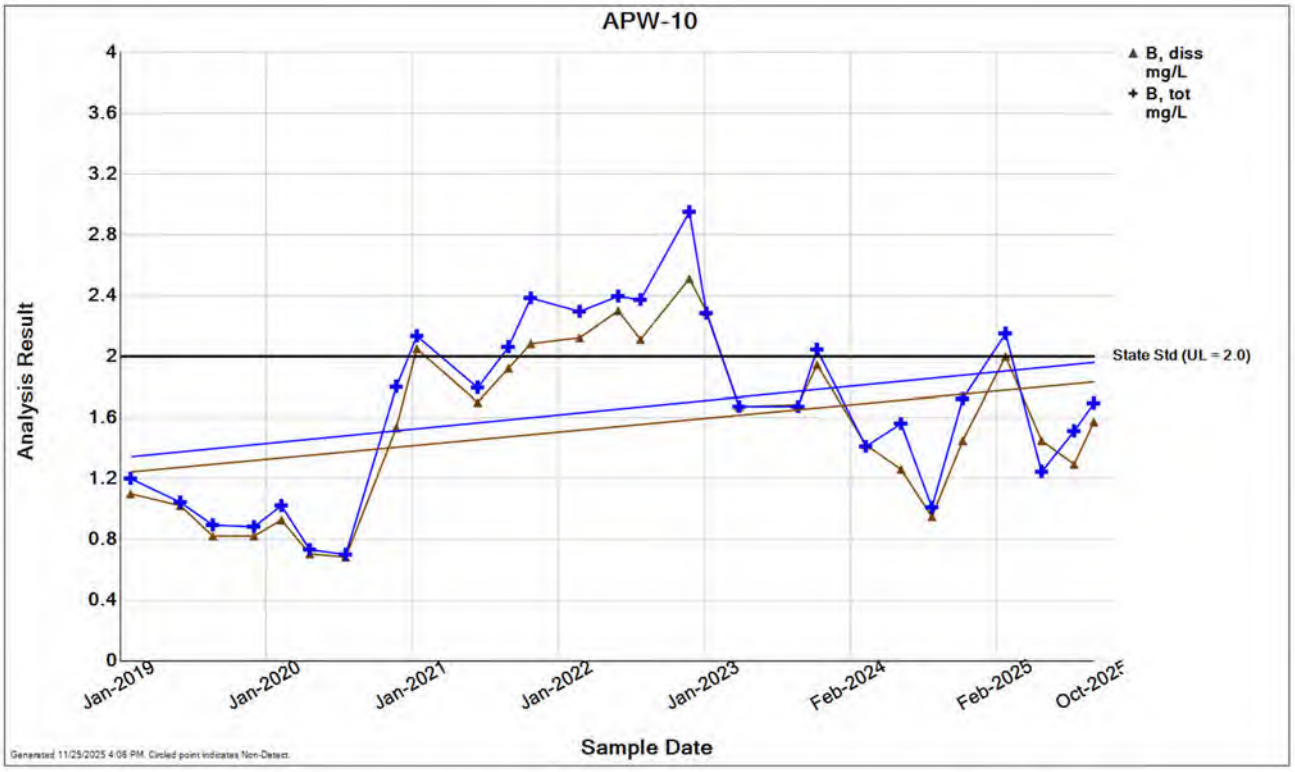



**Figure 1-24. Boron (Dissolved and Total) Concentrations since 2019 at Midgradient Well APW-10**

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

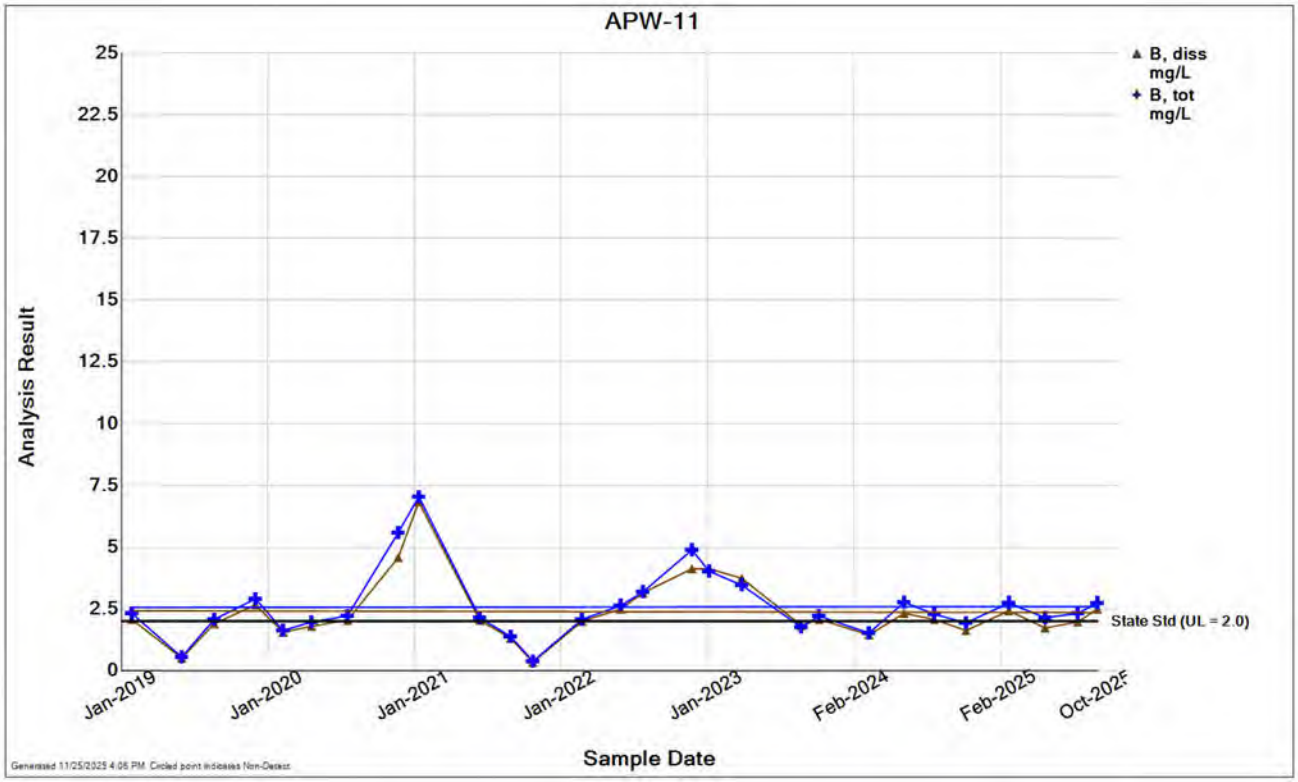



**Figure 1-25. Boron (Dissolved and Total) Concentrations since 2019 at Upgradient Well APW-11**

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

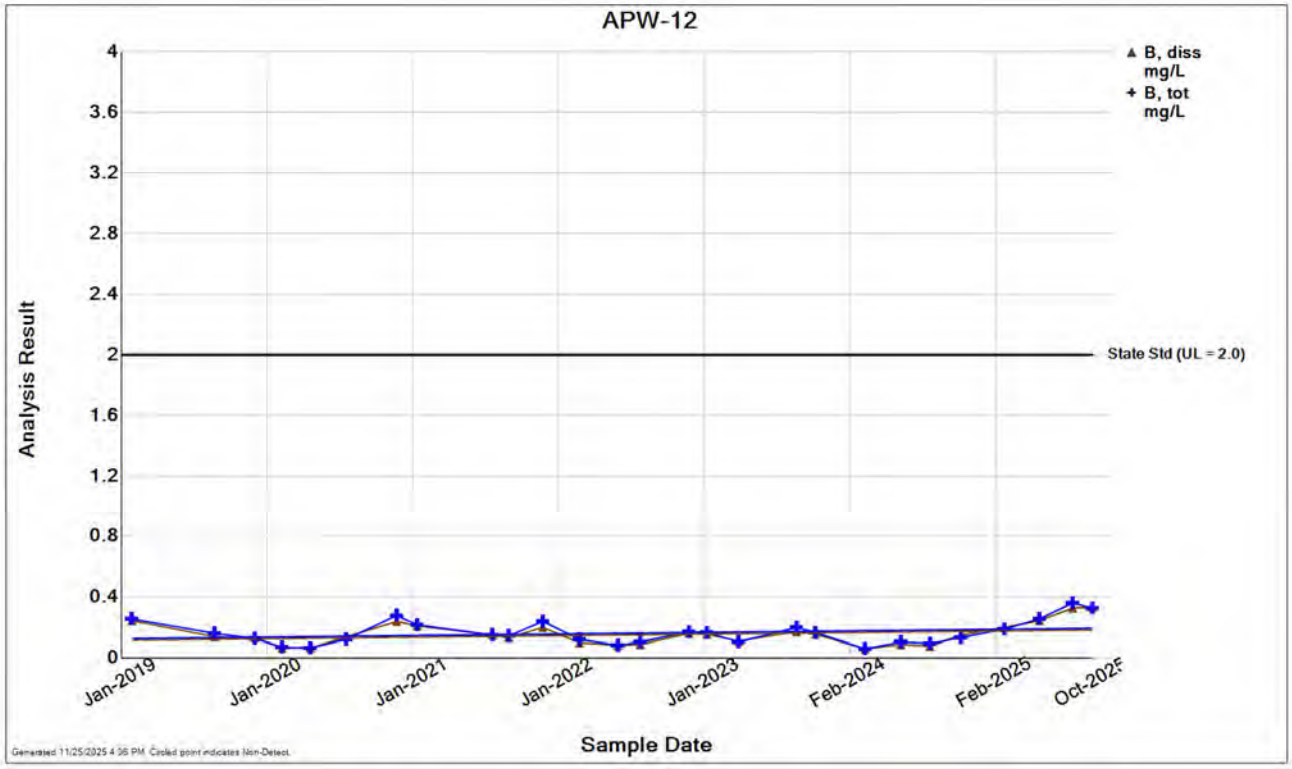
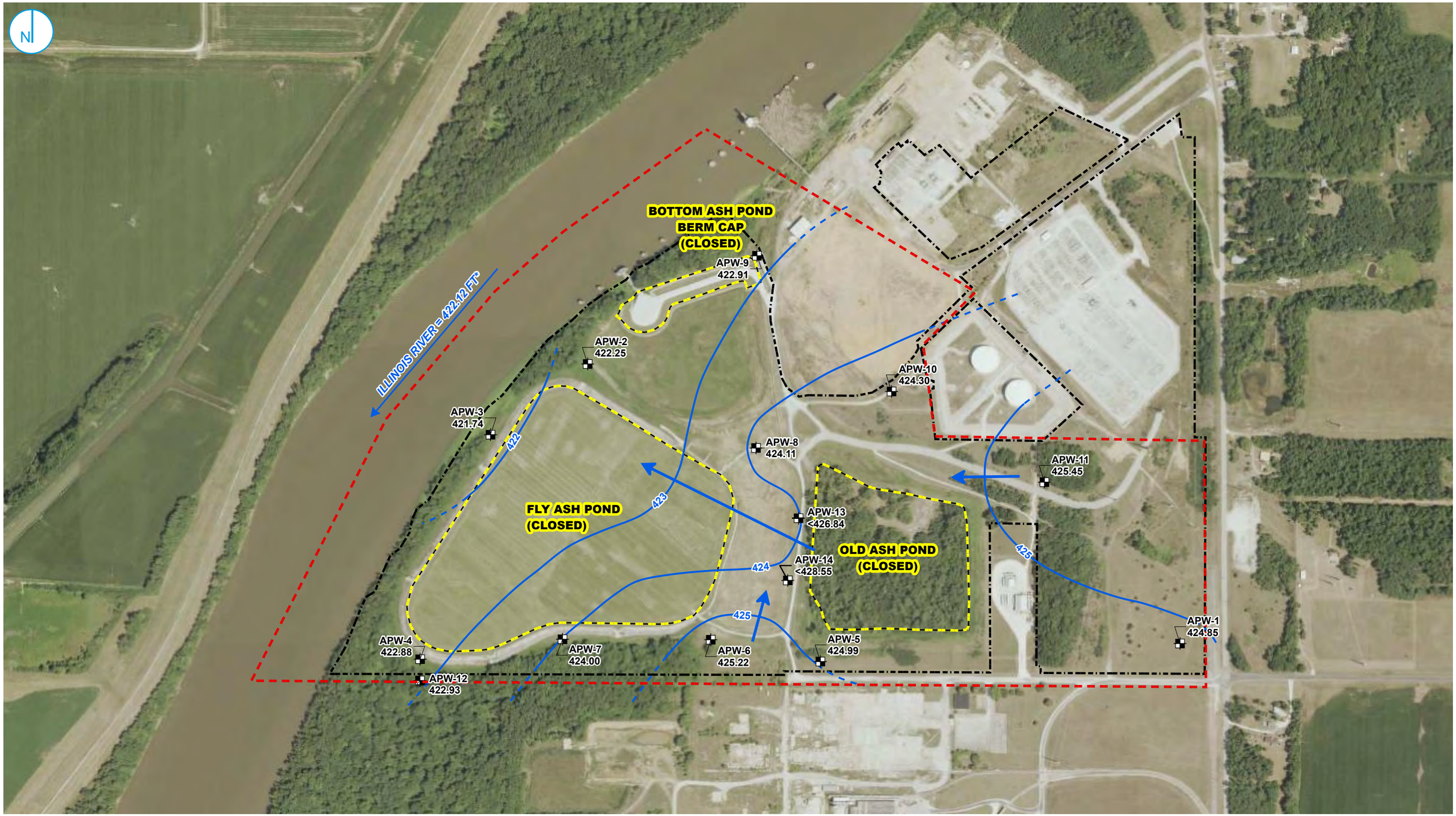



**Figure 1-26. Boron (Dissolved and Total) Concentrations since 2019 at Downgradient Well APW-12**

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

Y:\Mapping\Projects\6\67815\mxd\2025\2025.aprx




PROJECT: 72694 | DATED: 4/8/2025 | DESIGNER: PWYSIATKO

MONITORING WELL LOCATION

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

APPROXIMATE GROUNDWATER MONITORING ZONE

0 240 480 Feet

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.River elevation from November 14, 2024 at 12:00 was used.

# POTENTIOMETRIC SURFACE MAP MARCH 3, 2025

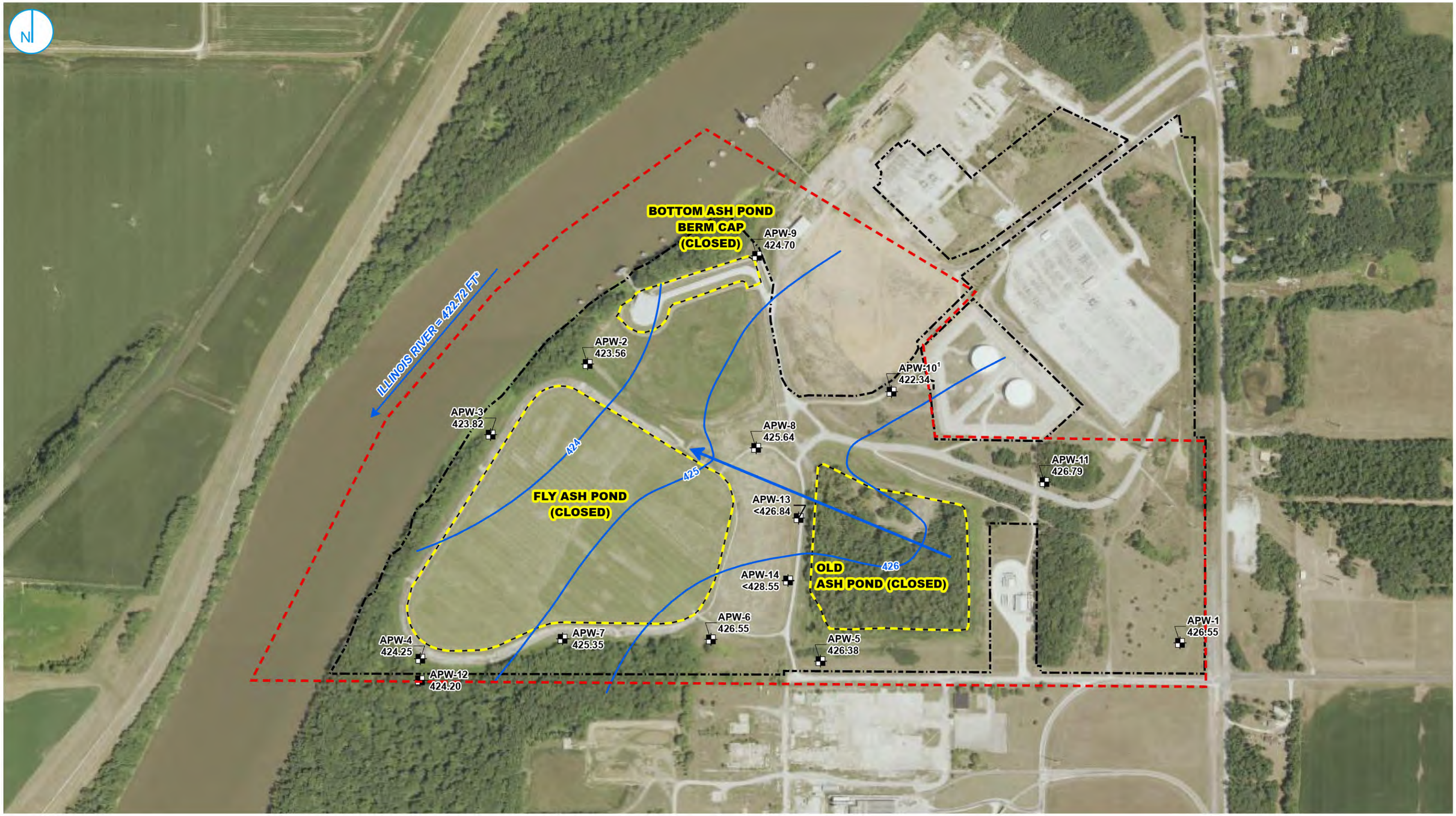
**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-1**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\2025\2025.aprx




PROJECT: 72694 | DATED: 7/30/2025 | DESIGNER: CHURCHKE

MONITORING WELL LOCATION

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

APPROXIMATE GROUNDWATER MONITORING ZONE

0 240 480 Feet

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988
[1]= Groundwater Elevation not used for contouring

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.River elevation from November 14, 2024 at 12:00 was used.

# POTENTIOMETRIC SURFACE MAP JUNE 2, 2025

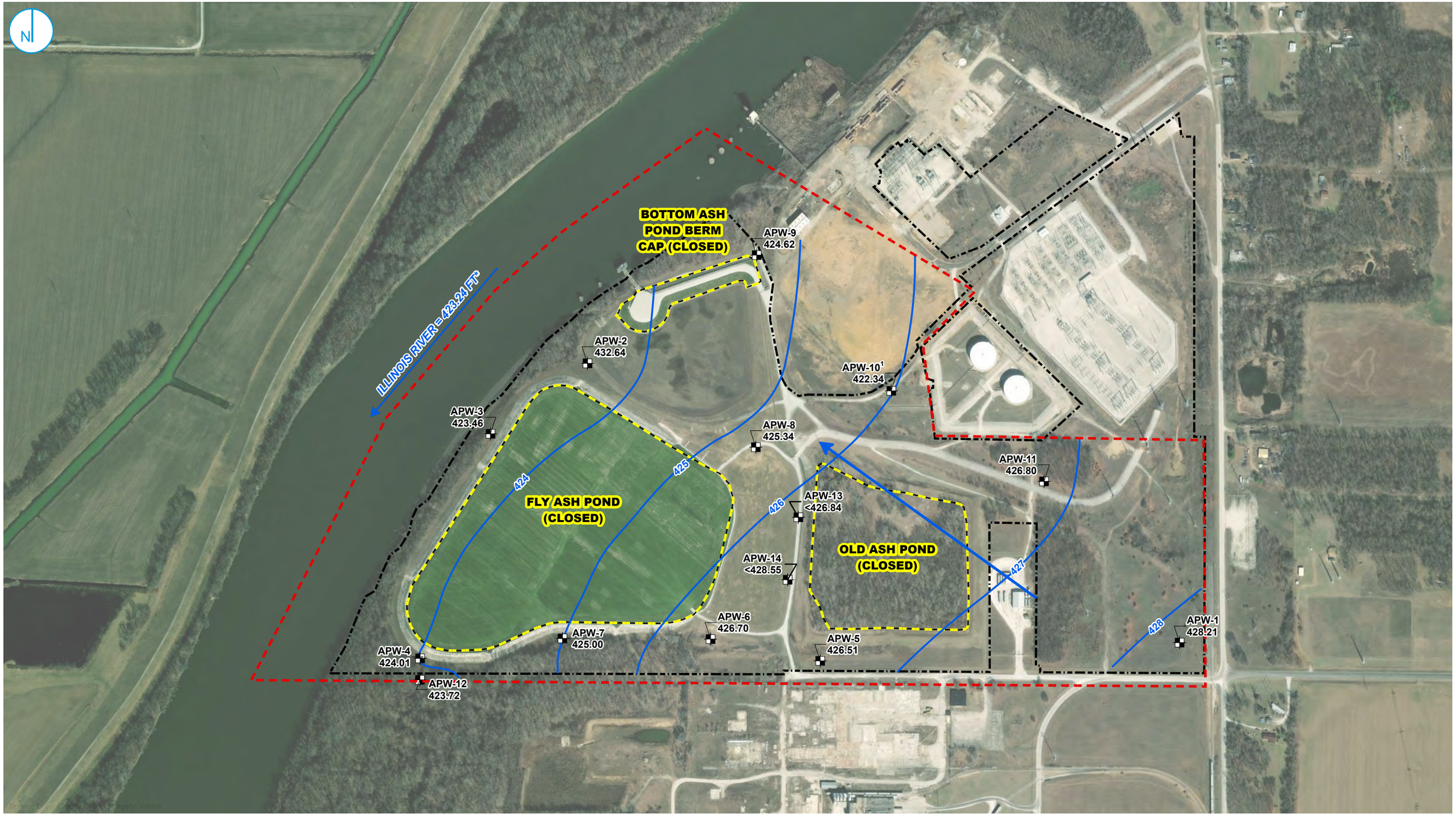
**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-2**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\2025\2025.aprx




PROJECT: 72694 | DATED: 11/24/2025 | DESIGNER: GALARNMC

MONITORING WELL LOCATION

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

APPROXIMATE GROUNDWATER MONITORING ZONE

0 240 480 Feet

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988
[1]= Groundwater Elevation not used for contouring

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.River elevation from November 14, 2024 at 12:00 was used.

# POTENTIOMETRIC SURFACE MAP AUGUST 25-26, 2025

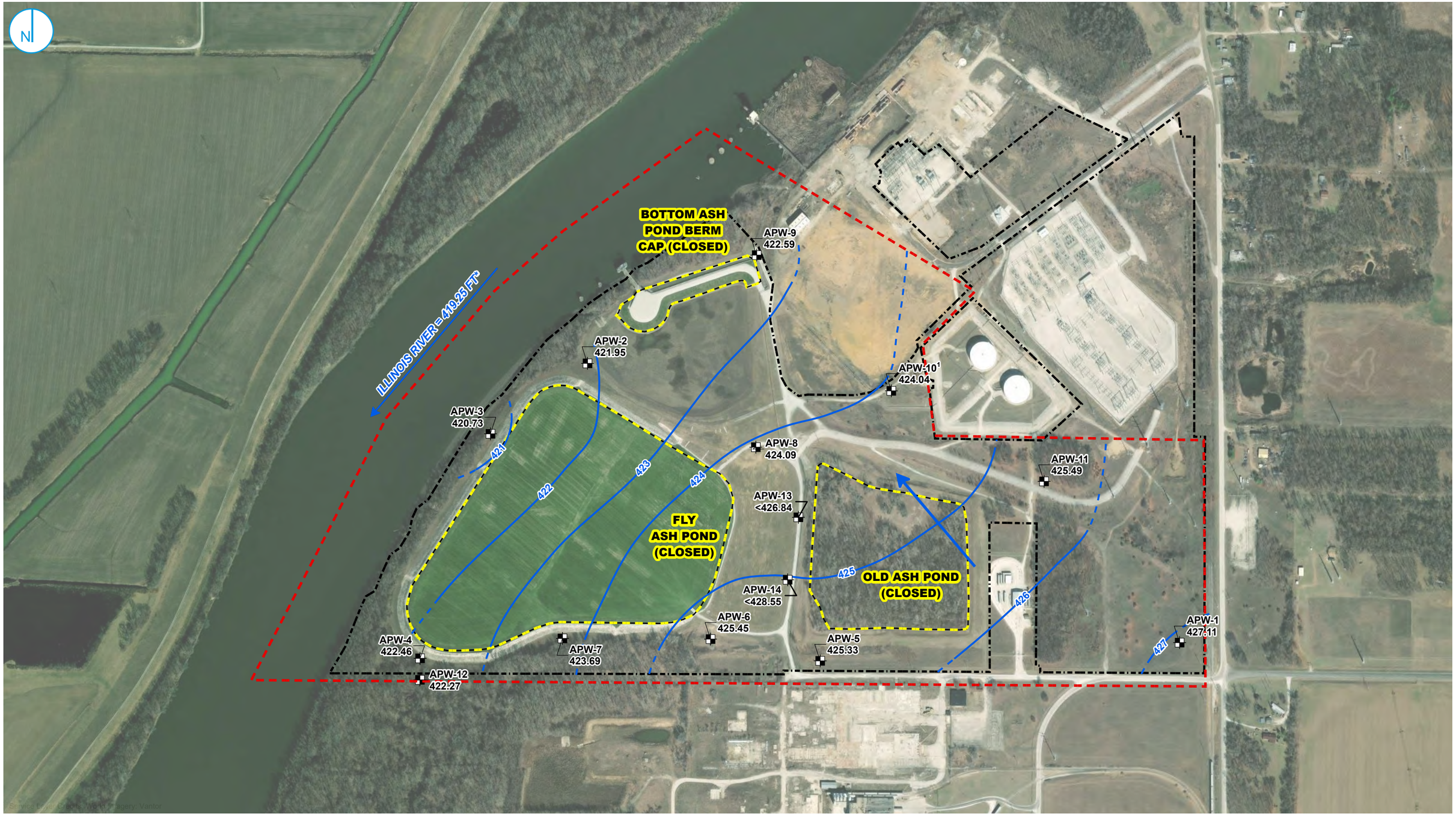
**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

**FIGURE 3-3**

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\Mapping\Projects\6\678151\mxd\2025\2025.aprx




PROJECT: 72694 | DATED: 11/14/2025 | DESIGNER: GALARNMC

MONITORING WELL LOCATION

APPROXIMATE PROPERTY BOUNDARY

LIMITS OF CCP MANAGEMENT

APPROXIMATE GROUNDWATER MONITORING ZONE

0 240 480 Feet

GROUNDWATER FLOW DIRECTION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD88)

INFERRED GROUNDWATER ELEVATION CONTOUR

*River Elevation obtained from United States Geological Survey 05585500 Meredosia, IL gaging station. The elevation was reported in NAVD88 at the time of this drawing.
NAVD88 = North American Vertical Datum of 1988
[1]= Groundwater Elevation not used for contouring

**NOTE**
Base map property lines were updated based on March 2019 Plat of Survey.River elevation from November 14, 2024 at 12:00 was used.



## POTENTIOMETRIC SURFACE MAP OCTOBER 14-15, 2025

**2025 GROUNDWATER MONITORING ANNUAL REPORT**
AMEREN ENERGY RESOURCES
MEREDOSIA POWER STATION
MORGAN COUNTY, ILLINOIS

## FIGURE 3-4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

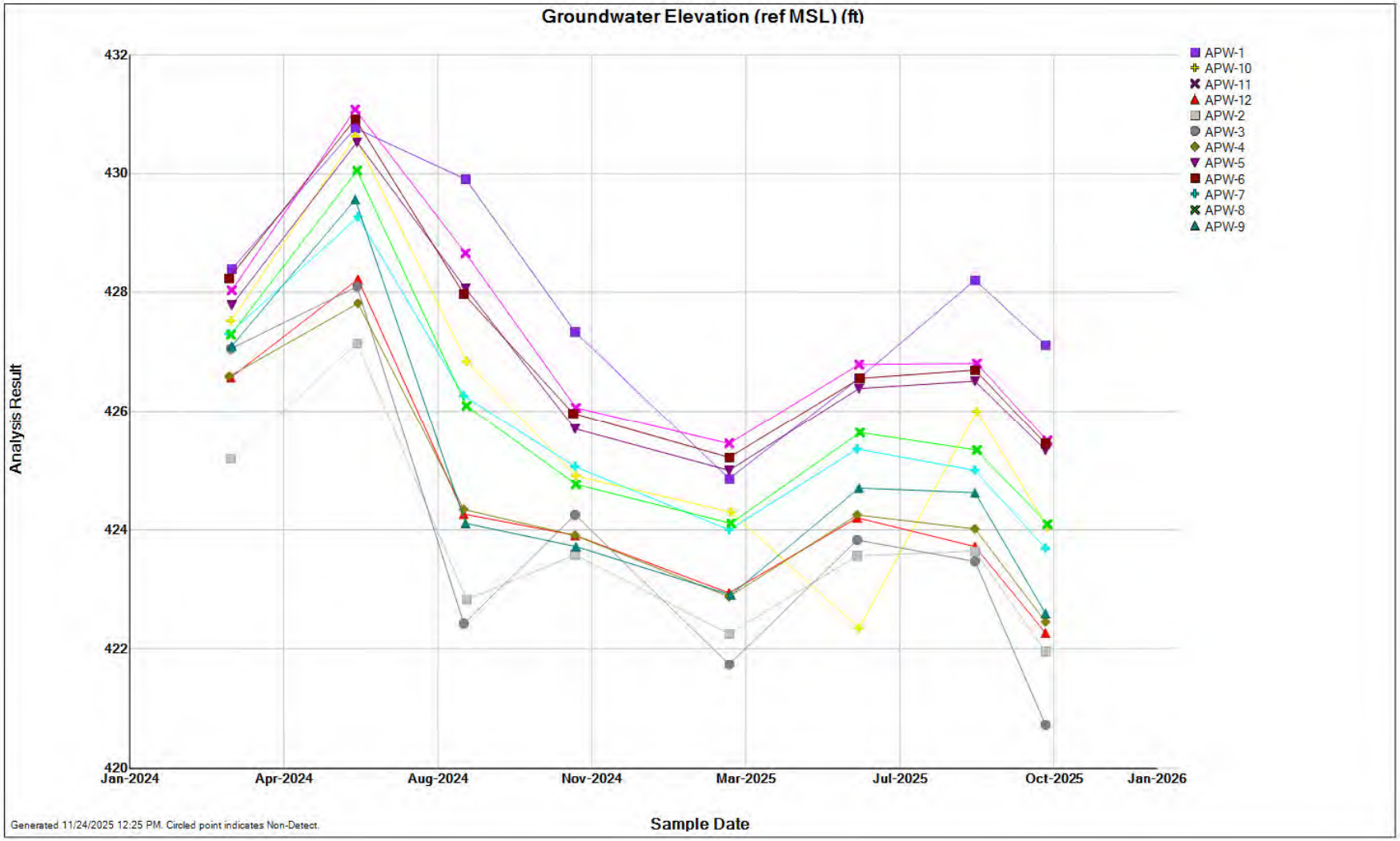



**Figure 3-5. Groundwater Elevations Timeseries Plot**

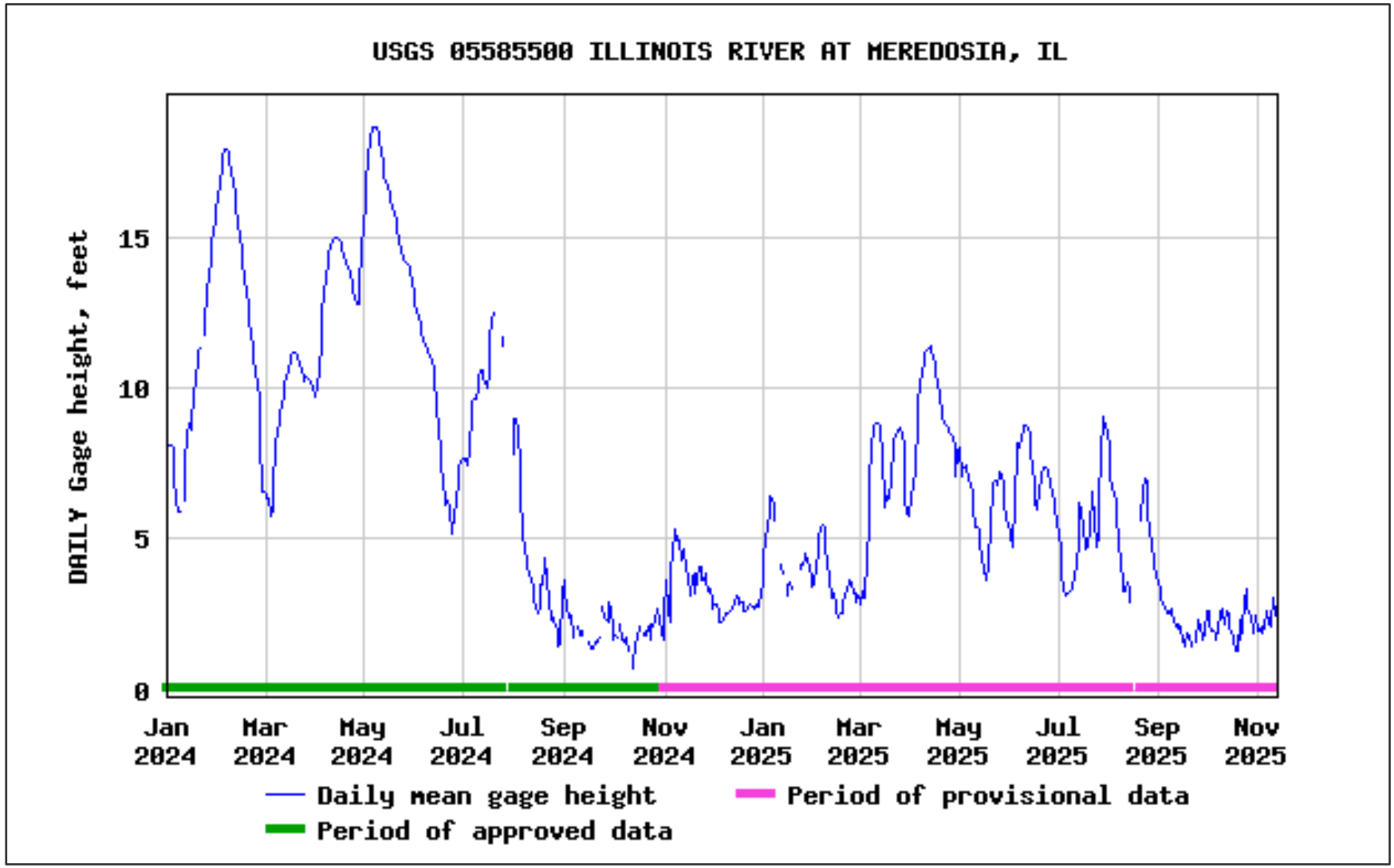



**Figure 3-6. Illinois River Stage (2024-2025)**

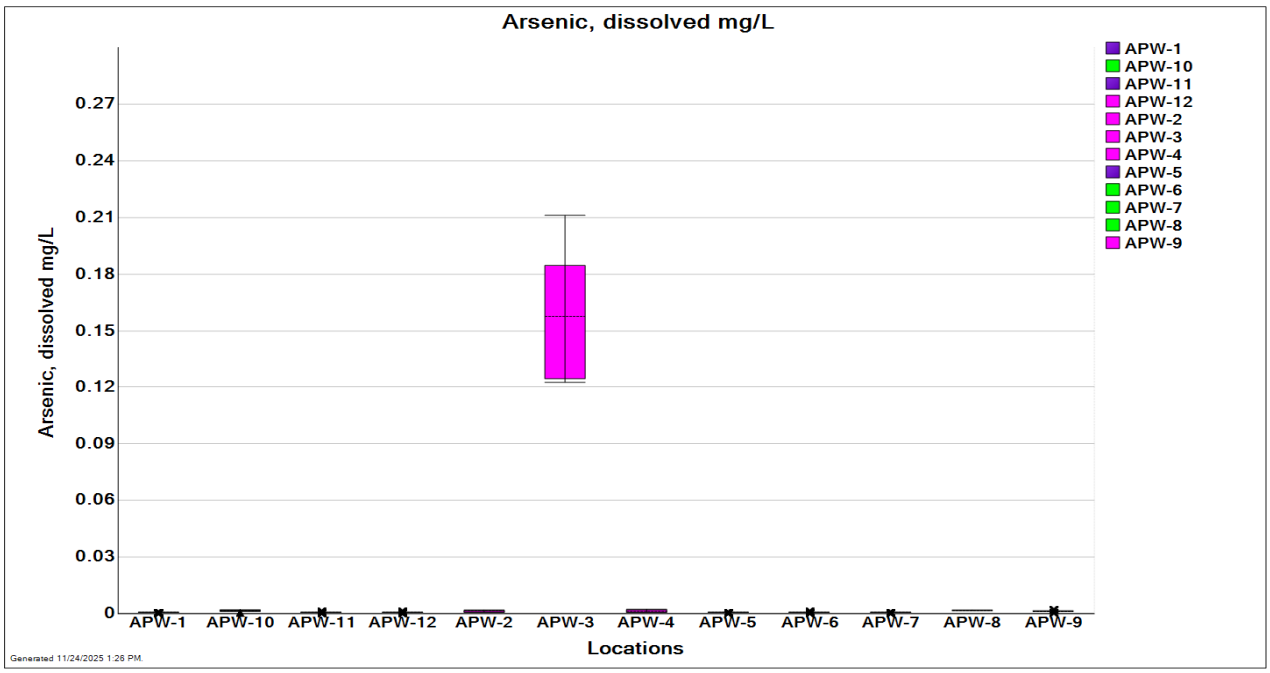



**Figure 3-7A. Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink. The "X" symbol represents an outlier greater than 3 times the Interquartile Range (IQR).

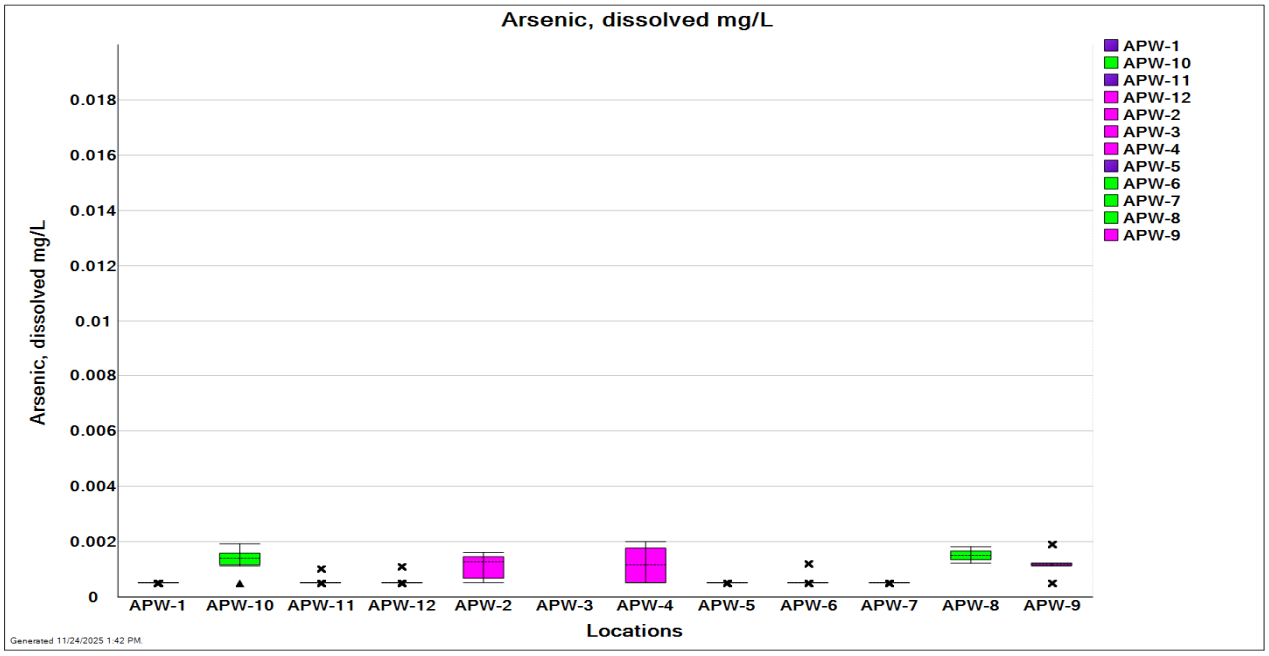



**Figure 3-7B. Box-Whisker Plot Showing Distribution of Dissolved Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025 (Zoomed In).**

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

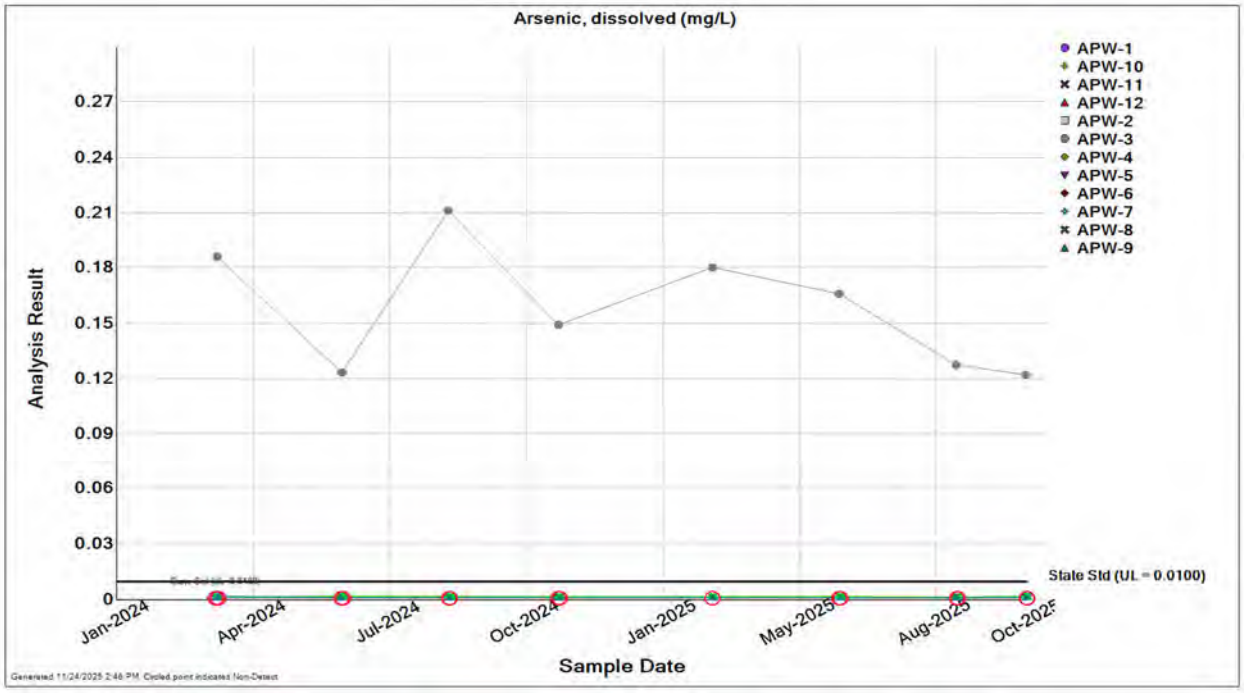



**Figure 3-8A. Dissolved Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

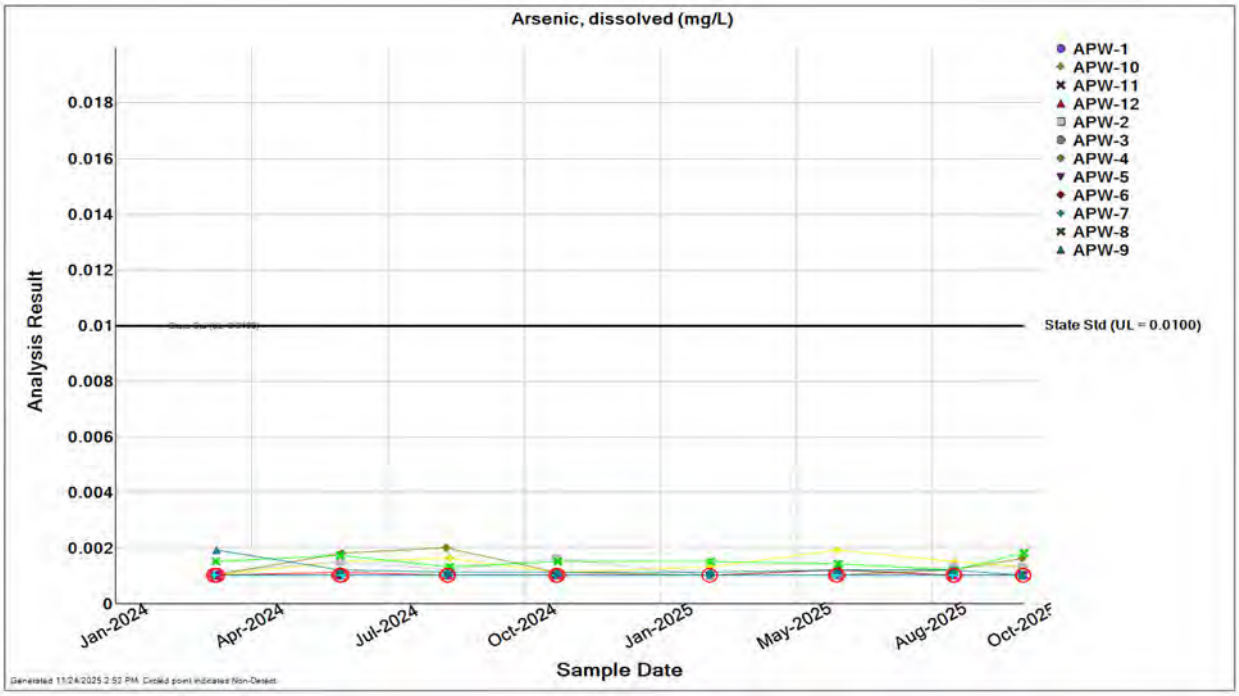



**Figure 3-8B. Dissolved Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells (Zoomed In).**

Circled results indicate non-detects.

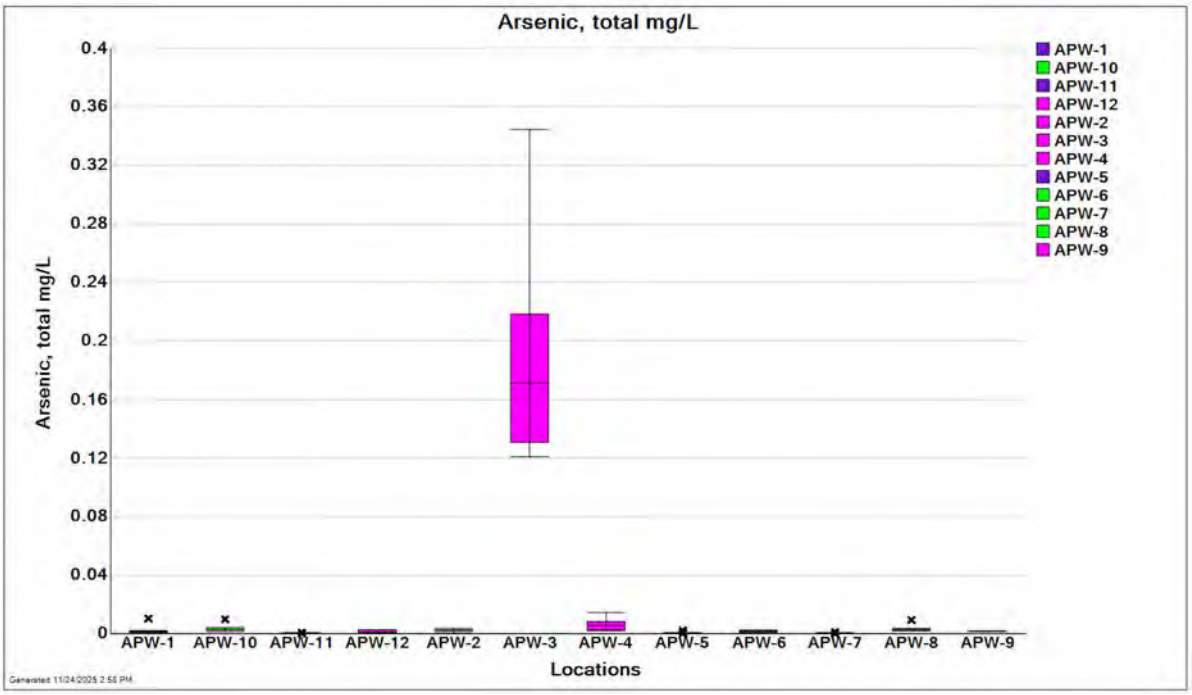



**Figure 3-9A. Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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

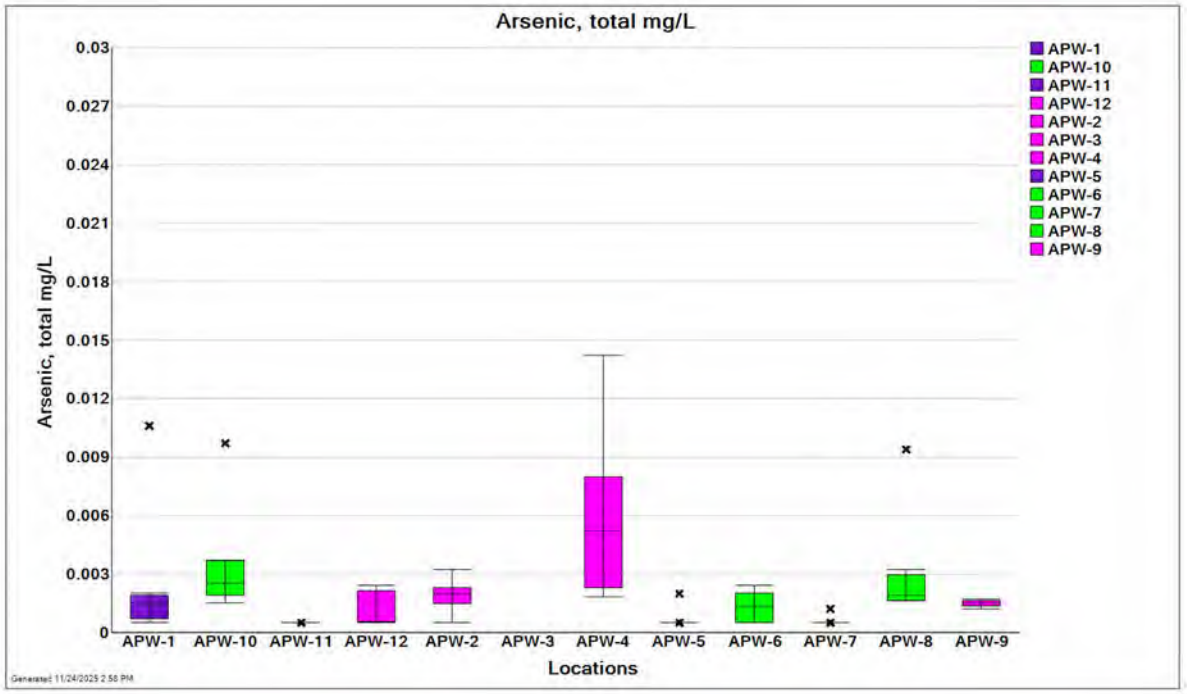



**Figure 3-9B. Box-Whisker Plot Showing Distribution of Total Arsenic Concentration by Monitoring Well for Data Collected in 2024 and 2025 (Zoomed In).**

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

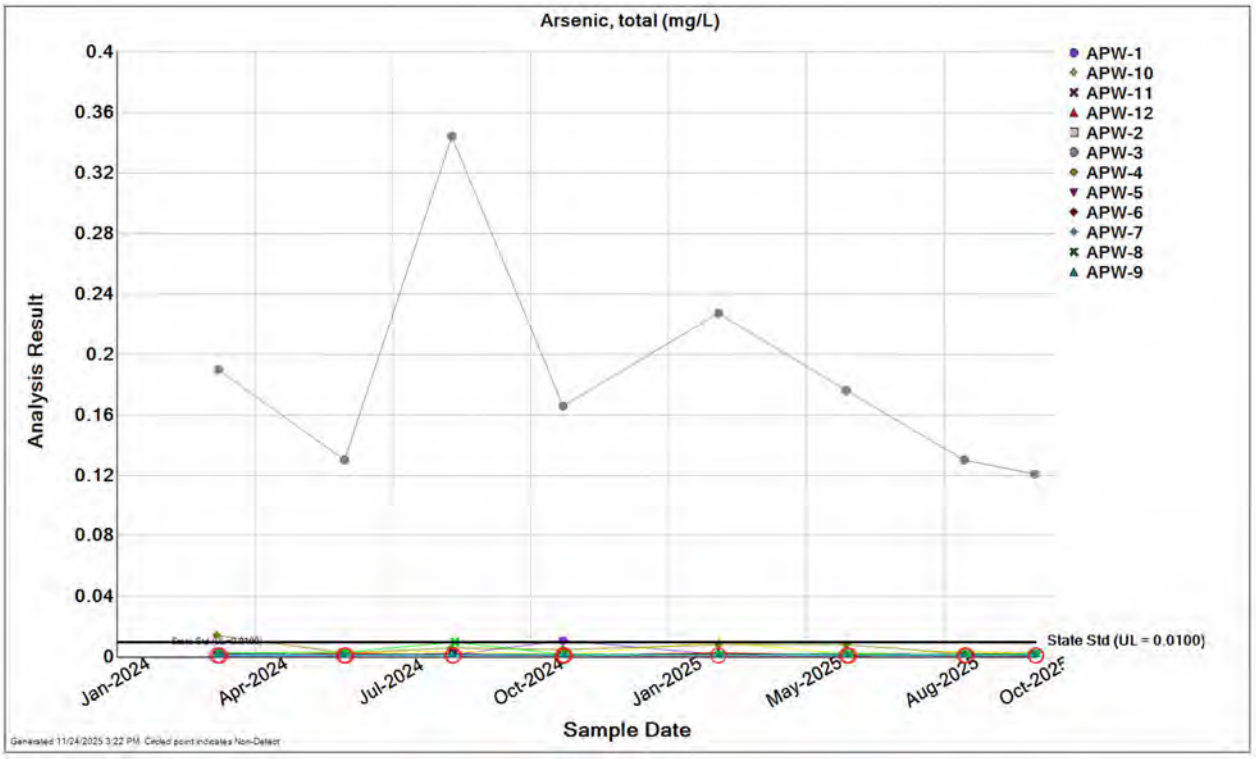



**Figure 3-10A. Total Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**
Circled results indicate non-detects.

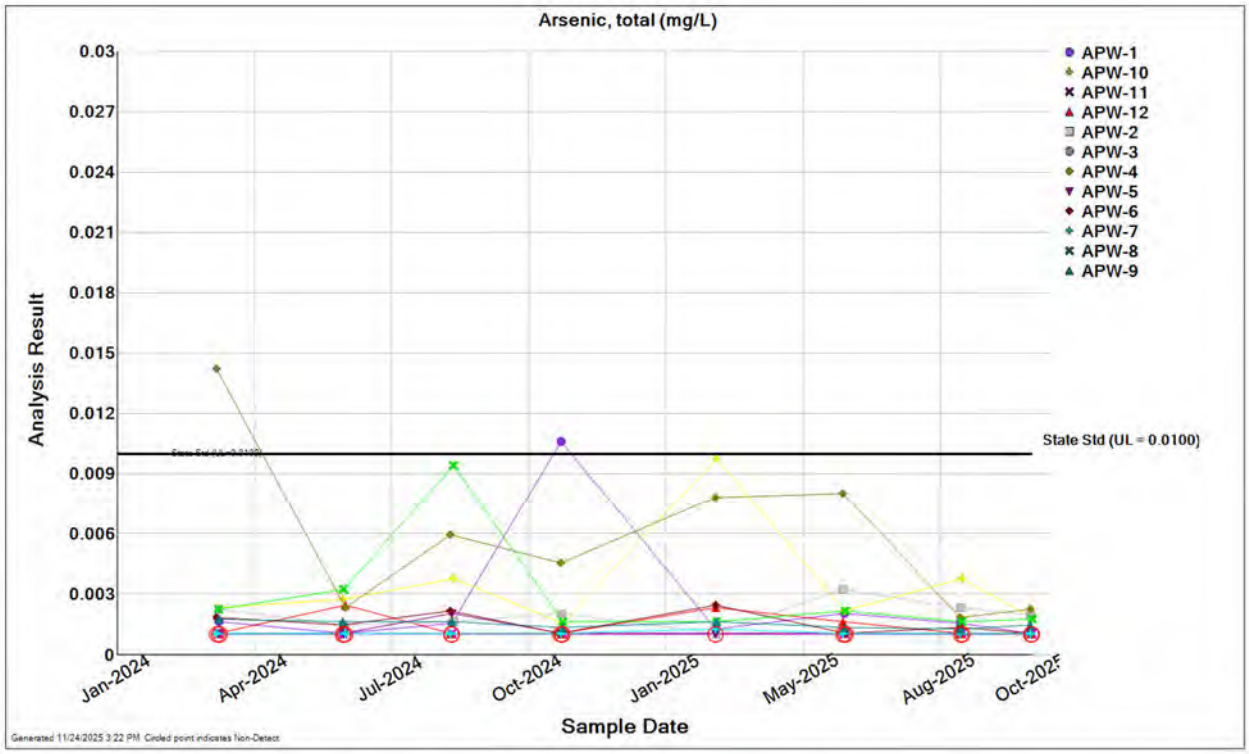



**Figure 3-10B. Total Arsenic Concentrations during the Reporting Period (2024–2025) at All Compliance Wells (Zoomed In).**
Circled results indicate non-detects.

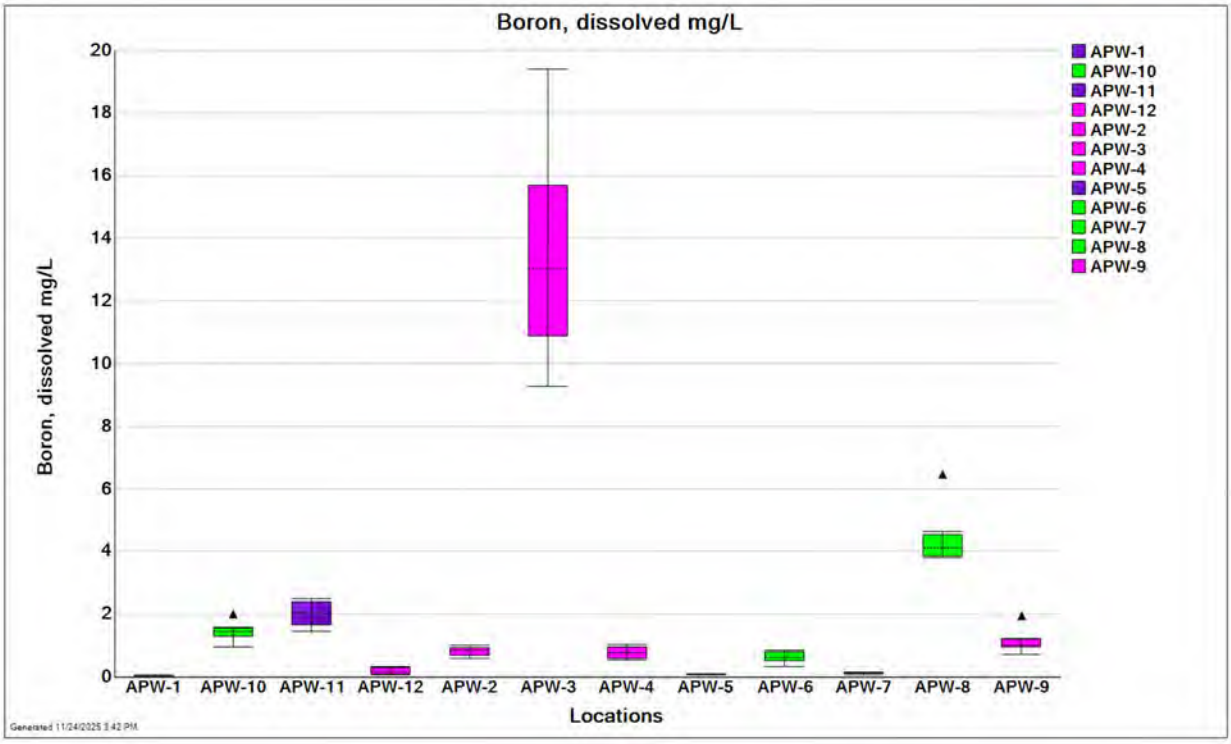



**Figure 3-11. Box-Whisker Plot Showing Distribution of Dissolved Boron Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

Note: Box-whisker plots for upgradient wells are purple, for midgradient wells are green, and for downgradient wells are pink.

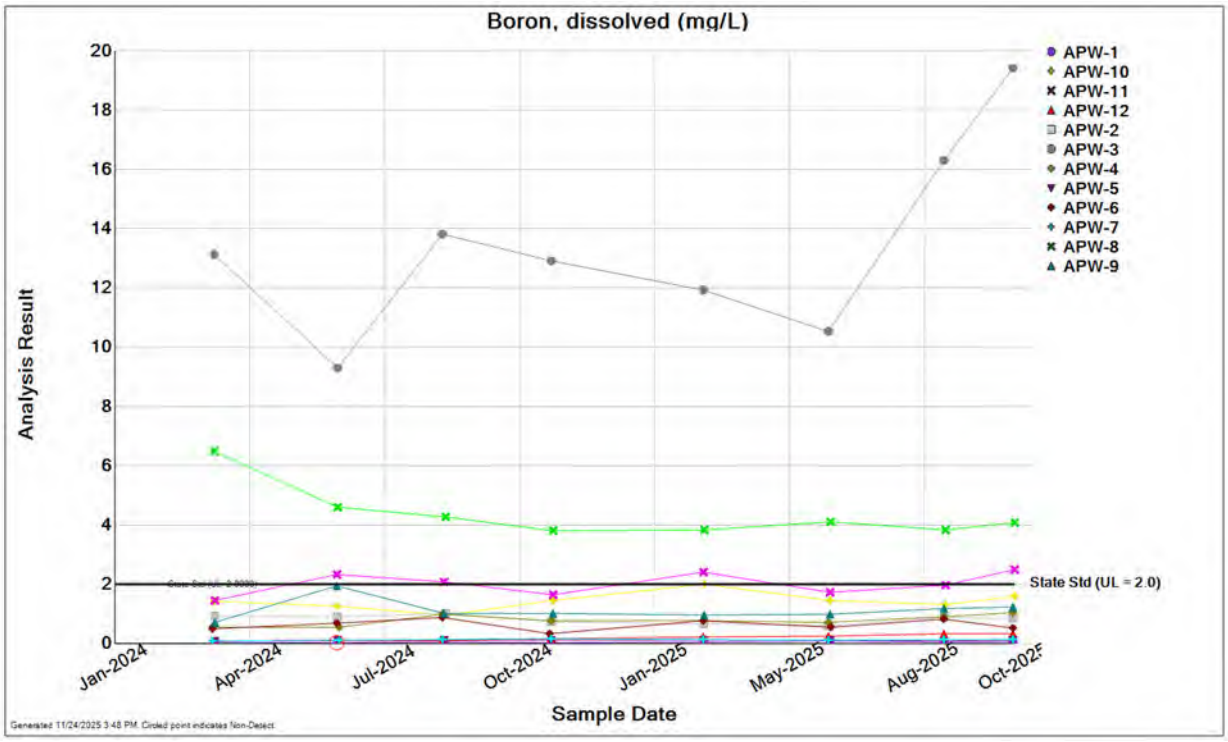



**Figure 3-12. Dissolved Boron Concentrations during the Reporting Period (2023–2024) at All Compliance Wells.**

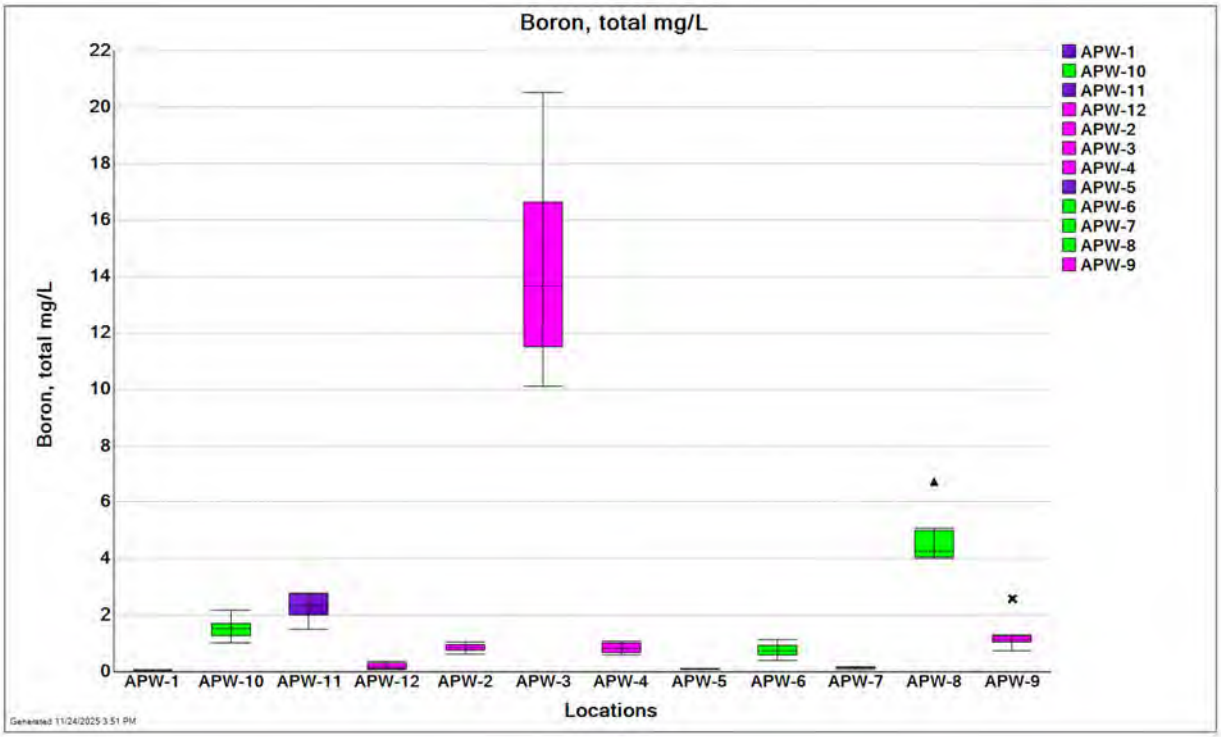



**Figure 3-13. Box-Whisker Plot Showing Distribution of Total Boron Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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.

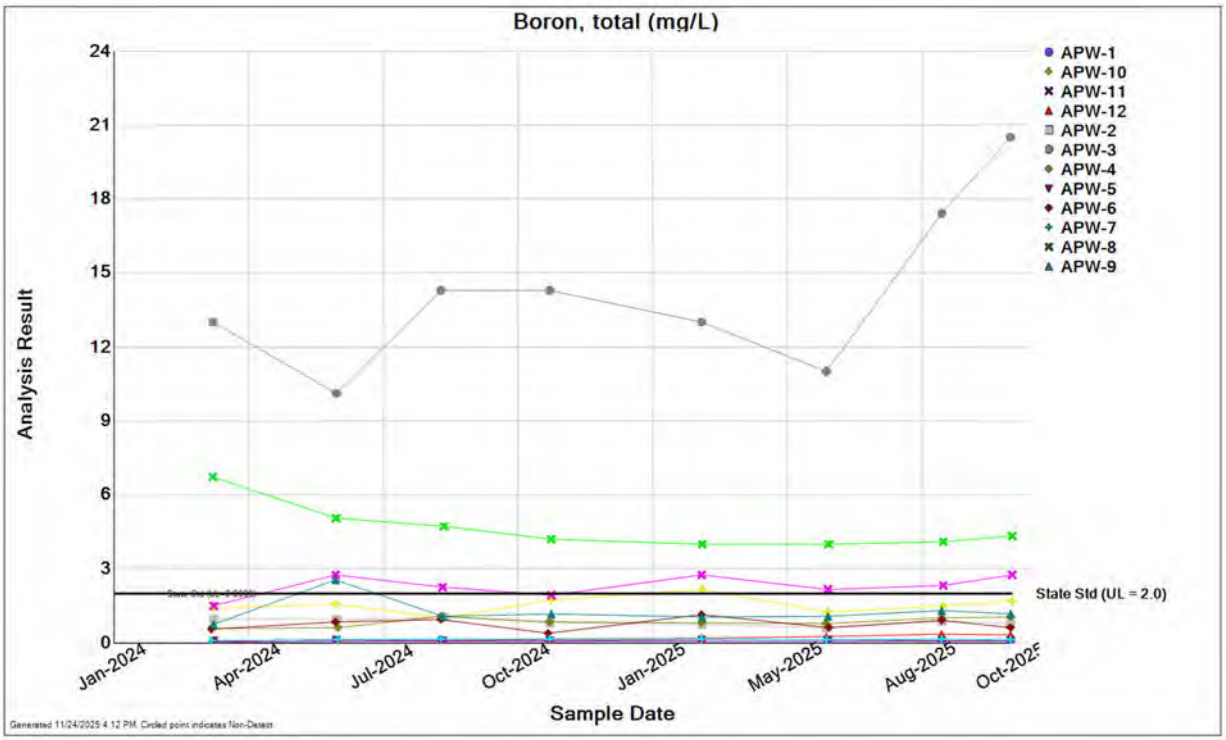



**Figure 3-14. Total Boron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

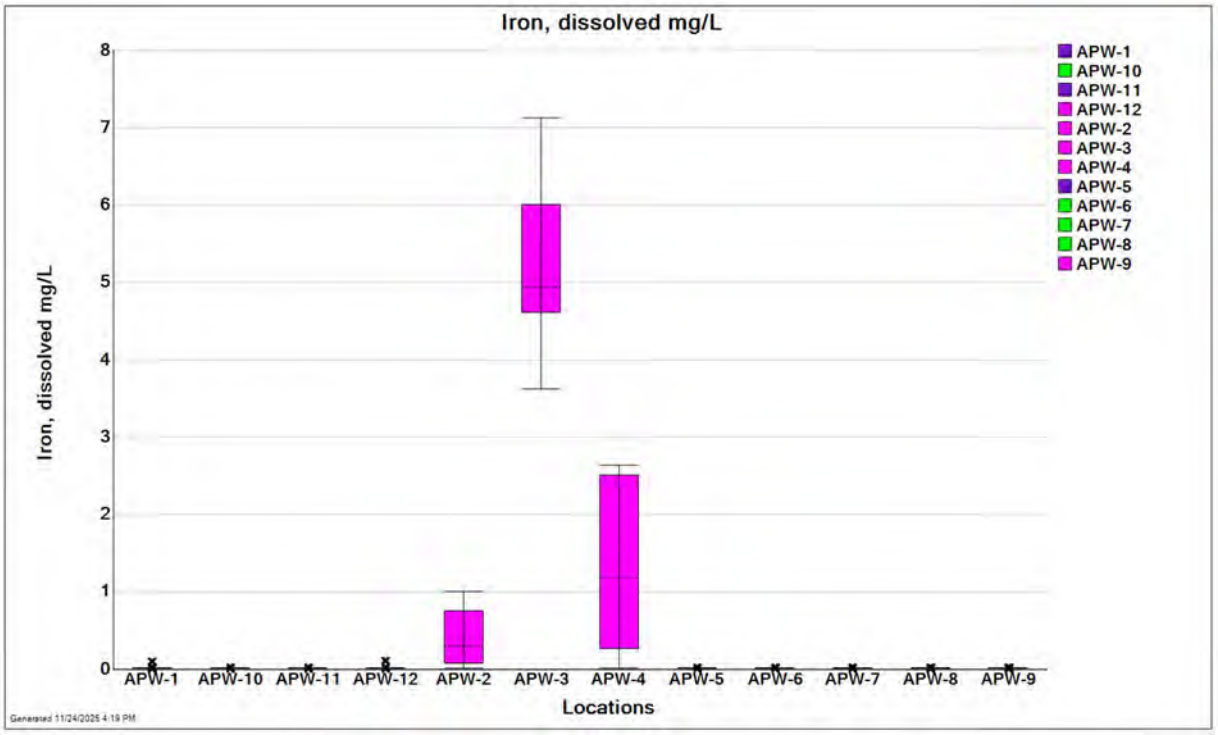



**Figure 3-15. Box-Whisker Plot Showing Distribution of Dissolved Iron Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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

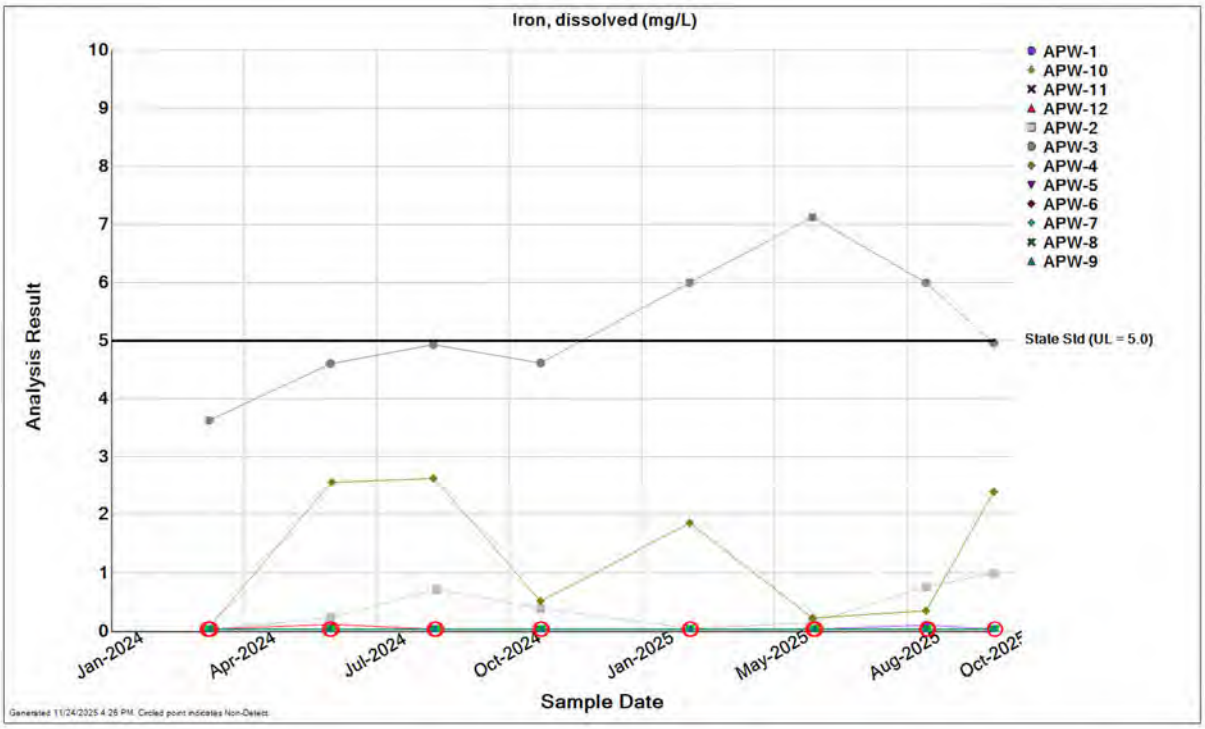



**Figure 3-16. Dissolved Iron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

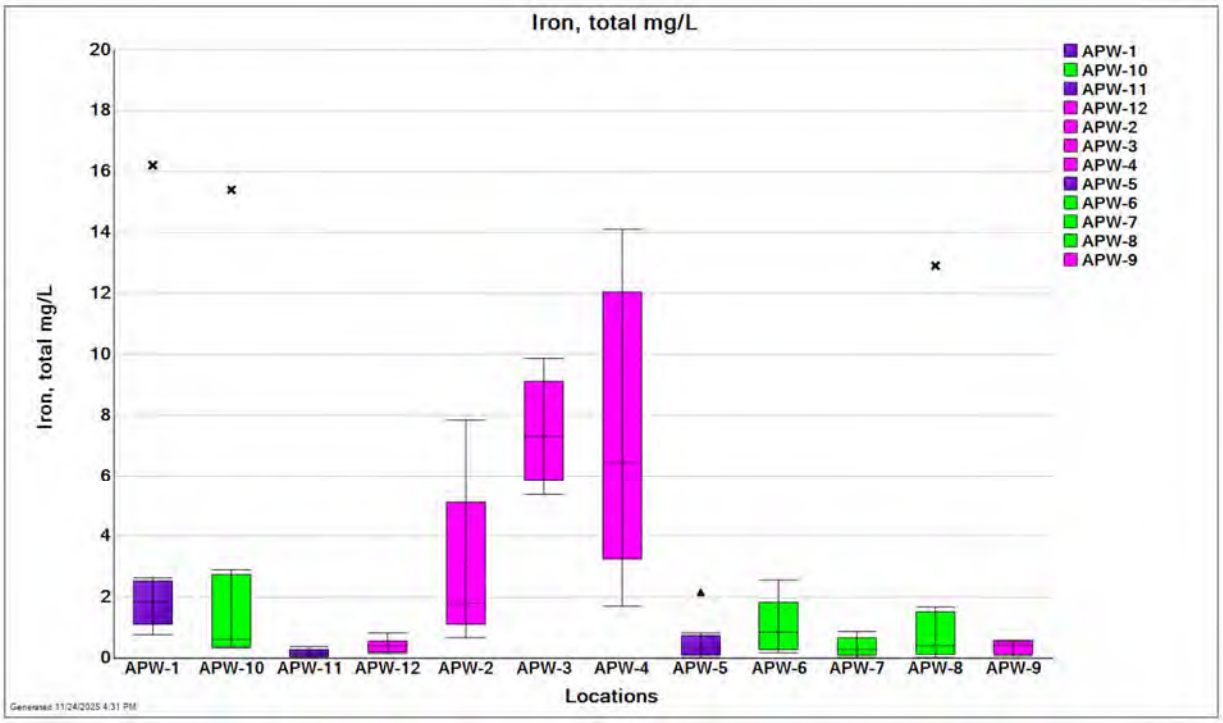



**Figure 3-17. Box-Whisker Plot Showing Distribution of Total Iron Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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.

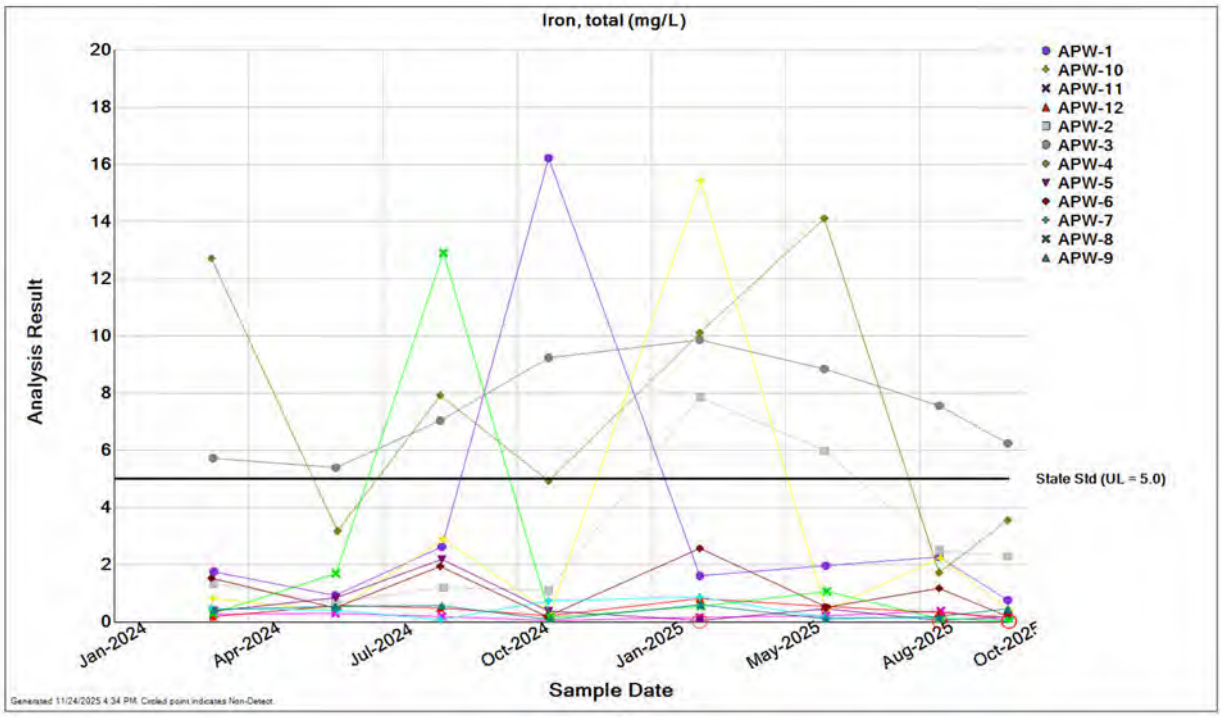



**Figure 3-18. Total Iron Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

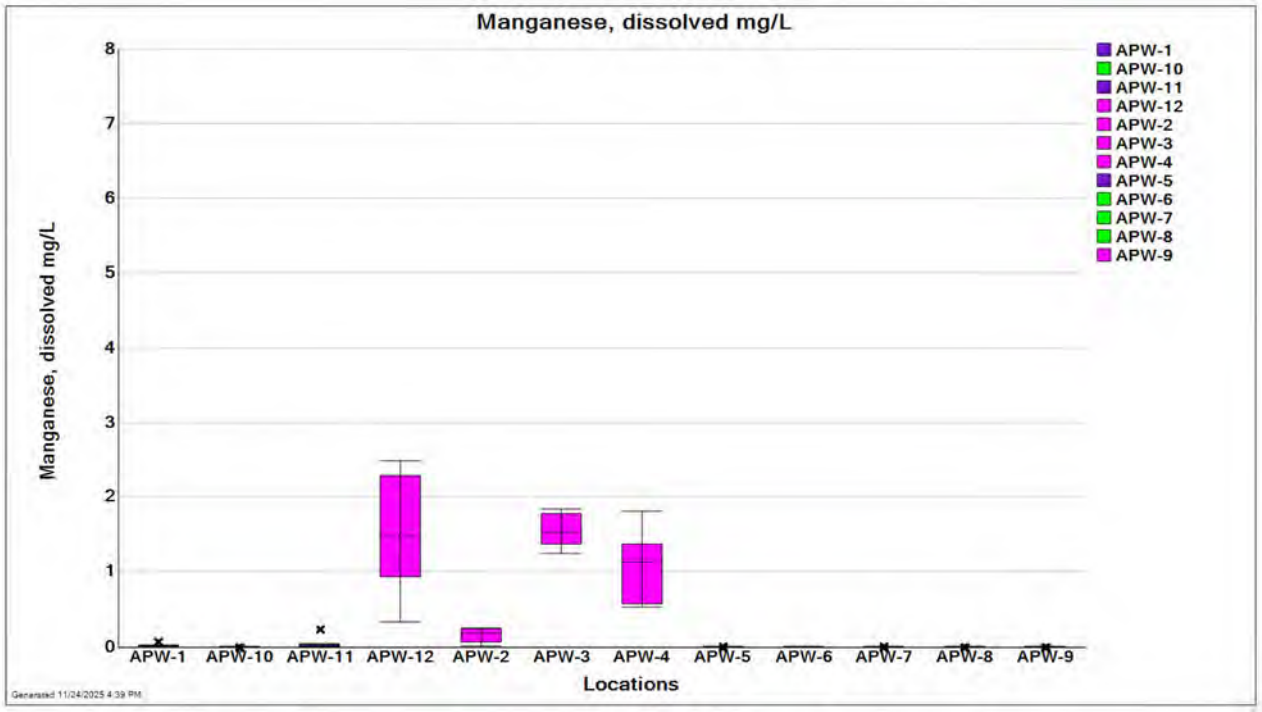



**Figure 3-19. Box-Whisker Plot Showing Distribution of Dissolved Manganese Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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

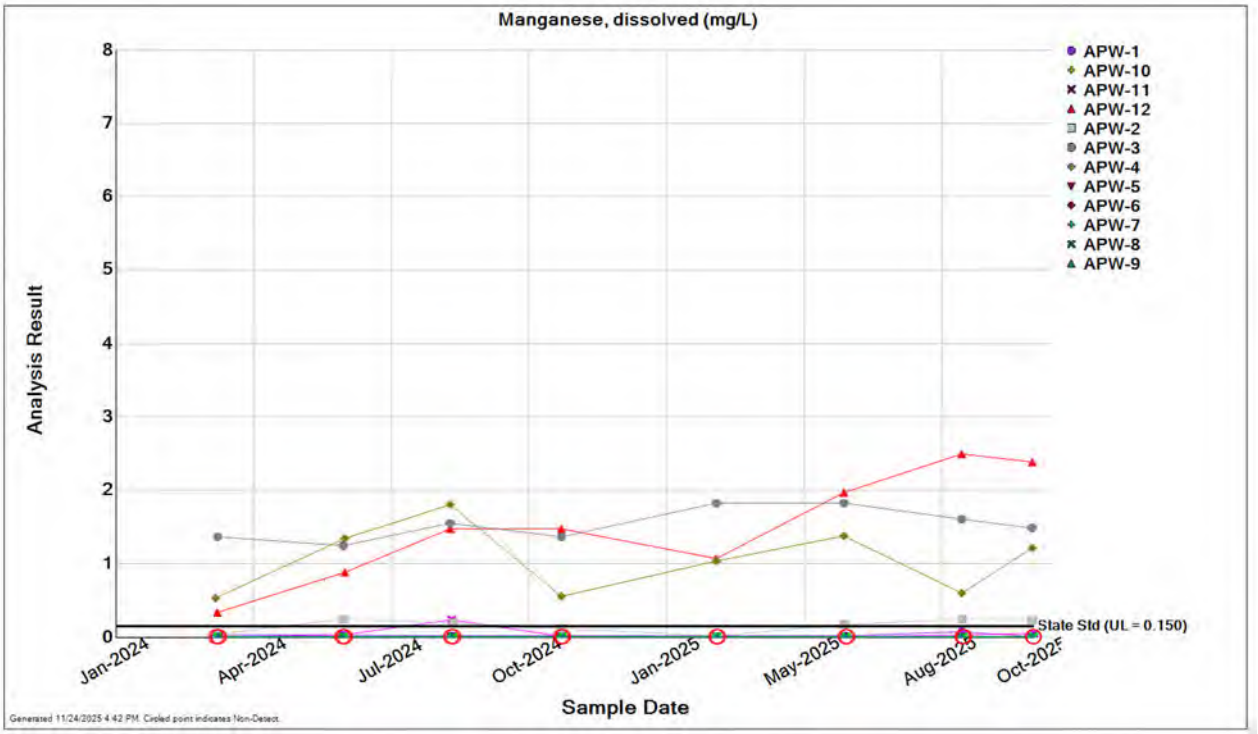



**Figure 3-20. Dissolved Manganese Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

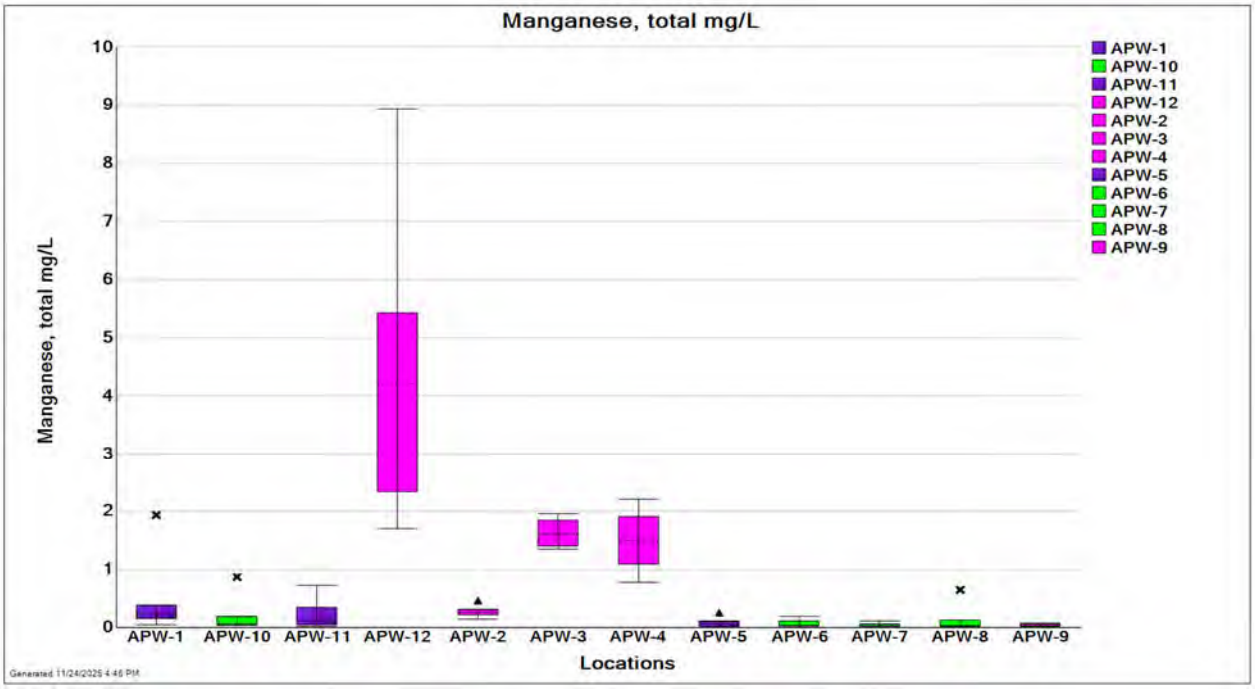



**Figure 3-21. Box-Whisker Plot Showing Distribution of Total Manganese Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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, and the "X" symbol represents an outlier greater than 3 times the IQR.

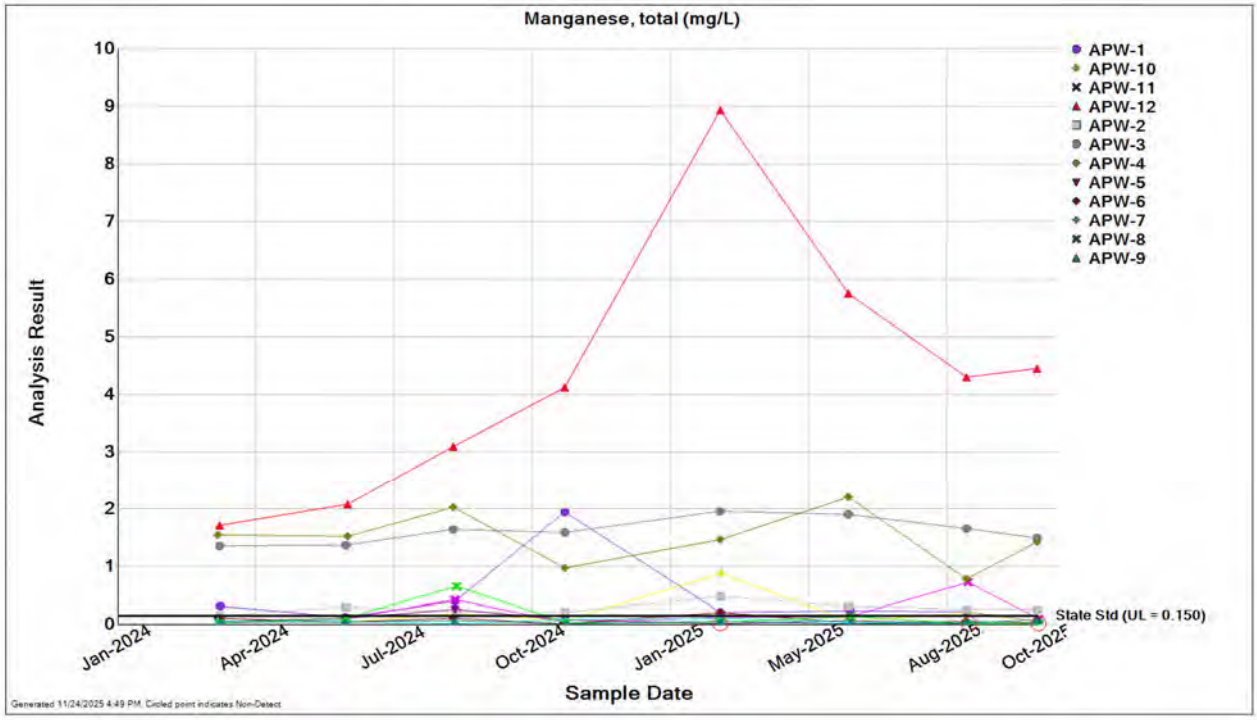



**Figure 3-22. Total Manganese Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

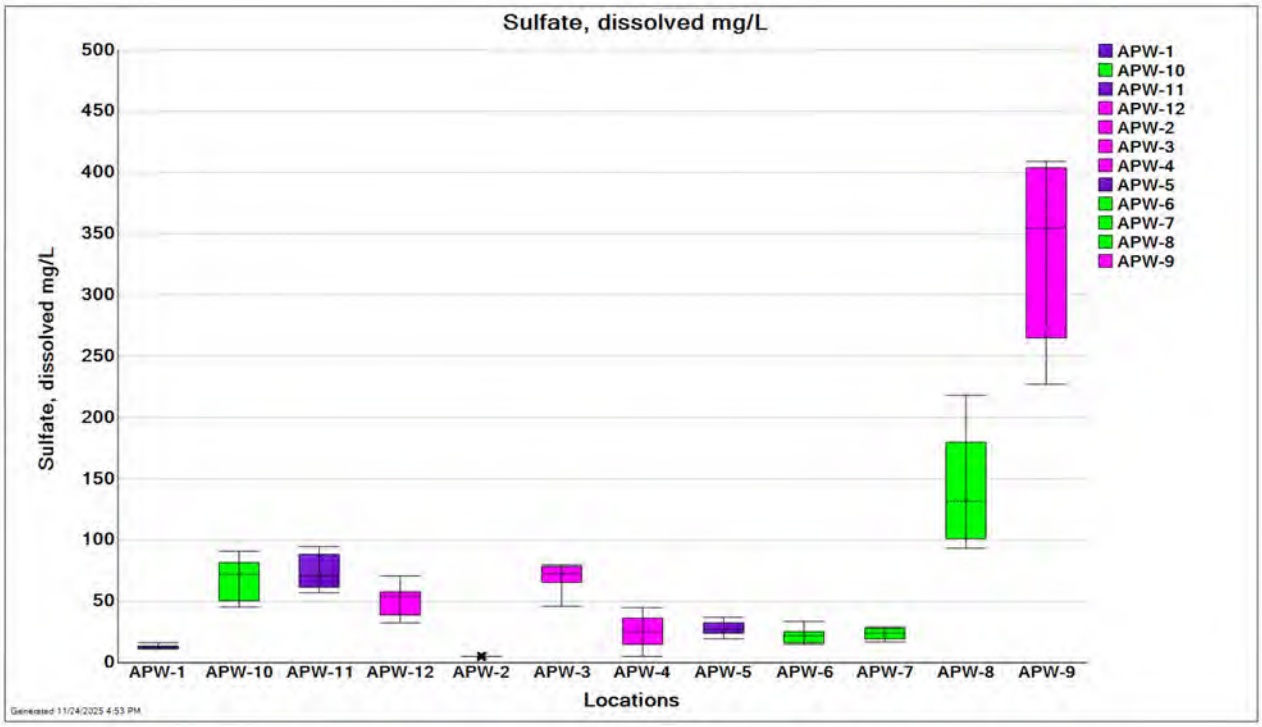



**Figure 3-23. Box-Whisker Plot Showing Distribution of Dissolved Sulfate Concentration by Monitoring Well for Data Collected in 2024 and 2025.**

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

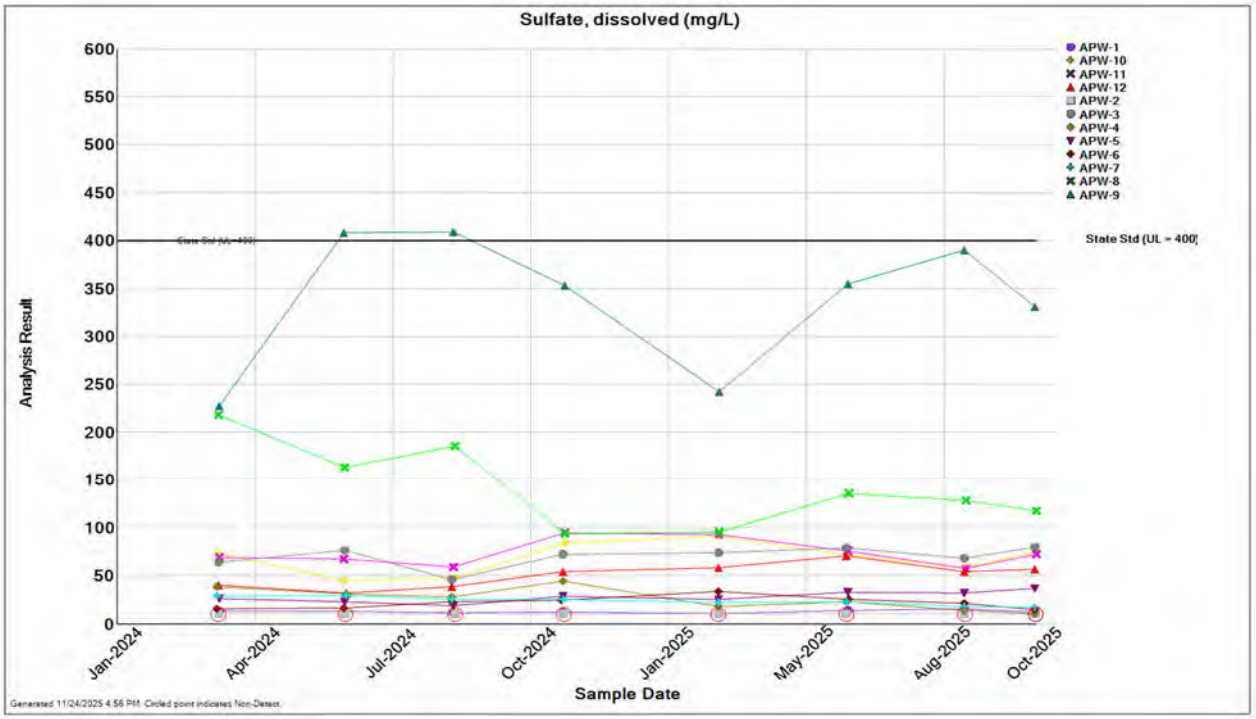



**Figure 3-24. Dissolved Sulfate Concentrations during the Reporting Period (2024–2025) at All Compliance Wells.**

Circled results indicate non-detects.

# APPENDIX A
# GROUNDWATER MONITORING RESULTS 2024-2025

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-1**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/13/2024 | 3/3/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0016 | <0.0010 | 0.0015 | 0.0106 | 0.0012 | 0.0020 | 0.0015 | <0.0010 |
| B, diss, mg/L | 0.0315 | <0.0200 | 0.0377 | 0.0225 | 0.0384 | 0.0556 | 0.0376 | 0.0534 |
| B, tot, mg/L | 0.0283 | 0.0365 | 0.0649 | 0.0404 | 0.0466 | 0.0529 | 0.0474 | 0.0482 |
| Ba, diss, mg/L | 0.0140 | 0.0115 | 0.0121 | 0.0132 | 0.0071 | 0.0113 | 0.0121 | 0.0106 |
| Ba, tot, mg/L | 0.0180 | 0.0184 | 0.0222 | 0.0551 | 0.0151 | 0.0237 | 0.0185 | 0.0149 |
| 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 | 0.0006 | <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 | 79.0 | 63.0 | 44.6 | 69.7 | 15.3 | 45.5 | 45.4 | 24.8 |
| Co, diss, mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Co, tot, mg/L | 0.0077 | <0.0050 | 0.0066 | 0.0330 | <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 | 0.0114 | <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 | 0.0063 | 0.0509 | <0.0050 | 0.0050 | 0.0050 | <0.0050 |
| F, diss, mg/L | 0.33 | 0.27 | <0.50 | <0.50 | 0.59 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | 0.1030 | <0.0400 |
| Fe, tot, mg/L | 1.7400 | 0.9140 | 2.6300 | 16.2000 | 1.6000 | 1.9700 | 2.2600 | 0.7620 |
| GW Elv, ft | 428.40 | 430.76 | 429.91 | 427.34 | 424.85 | 426.55 | 428.21 | 427.11 |
| 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 | 0.0282 | 0.0238 | 0.0206 | 0.0205 | 0.0116 | 0.0184 | 0.0686 | 0.0078 |
| Mn, tot, mg/L | 0.3130 | 0.1180 | 0.3890 | 1.9400 | 0.2020 | 0.2240 | 0.2110 | 0.0446 |
| Ni, diss, mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Ni, tot, mg/L | 0.0081 | <0.0050 | 0.0096 | 0.0520 | <0.0050 | 0.0067 | 0.0065 | <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 | 2.800 | 1.860 | 6.450 | 5.160 | 7.040 | 4.370 | 5.390 | 5.800 |
| Pb, diss, mg/L | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| Pb, tot, mg/L | 0.0034 | <0.0010 | 0.0032 | 0.0162 | 0.0016 | 0.0021 | 0.0024 | <0.0010 |
| pH (field), STD | 7.26 | 6.97 | 6.75 | 7.22 | 7.12 | 7.15 | 6.84 | 6.83 |
| 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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-1**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/13/2024 | 3/3/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 13 | 13 | 12 | 12 | 11 | 14 | 16 | 12 |
| Spec. Cond. (field), micromho | 665 | 510 | 450 | 791 | 257 | 600 | 555 | 435 |
| TDS, mg/L | 368 | 290 | 254 | 358 | 224 | 262 | 294 | 266 |
| 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 | 0.0194 | <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 | 0.0103 | 0.0680 | <0.0100 | 0.0109 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-2**

| | 3/13/2024 | 6/11/2024 | 8/28/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0015 | 0.0012 | 0.0016 | <0.0010 | <0.0010 | 0.0013 | 0.0013 |
| As, tot, mg/L | 0.0022 | 0.0014 | 0.0016 | 0.0020 | <0.0010 | 0.0032 | 0.0023 | 0.0019 |
| B, diss, mg/L | 0.9290 | 0.9000 | 1.0100 | 0.7280 | 0.6500 | 0.5870 | 0.8760 | 0.8290 |
| B, tot, mg/L | 0.9610 | 0.9340 | 1.0500 | 0.7930 | 0.7360 | 0.6060 | 0.8740 | 0.7680 |
| Ba, diss, mg/L | 0.0399 | 0.0393 | 0.0416 | 0.0415 | 0.0358 | 0.0374 | 0.0416 | 0.0417 |
| Ba, tot, mg/L | 0.0468 | 0.0436 | 0.0464 | 0.0517 | 0.0962 | 0.0747 | 0.0537 | 0.0524 |
| 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 | <4.0 | 5.0 | 5.9 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| 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 | 0.0221 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.28 | 0.25 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | 0.2310 | 0.7180 | 0.3910 | 0.0479 | 0.1400 | 0.7620 | 1.0000 |
| Fe, tot, mg/L | 1.3200 | 0.6650 | 1.1800 | 1.0700 | 7.8400 | 5.9900 | 2.4900 | 2.2800 |
| GW Elv, ft | 425.20 | 427.15 | 422.83 | 423.58 | 422.25 | 423.56 | 423.64 | 421.95 |
| 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 | 0.0430 | 0.2520 | 0.1920 | 0.1190 | 0.0173 | 0.1670 | 0.2480 | 0.2340 |
| Mn, tot, mg/L | 0.1410 | 0.2910 | 0.2030 | 0.2030 | 0.4680 | 0.3040 | 0.2580 | 0.2570 |
| 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 | <0.050 | 0.081 | 0.054 | <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 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 0.0012 | <0.0010 | <0.0010 |
| pH (field), STD | 7.05 | 6.94 | 6.52 | 6.80 | 6.91 | 6.89 | 6.84 | 6.72 |
| Sb, diss, mg/L | 0.0012 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-2**

| | 3/13/2024 | 6/11/2024 | 8/28/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| Spec. Cond. (field), micromho | 494 | 542 | 485 | 682 | 463 | 488 | 578 | 839 |
| TDS, mg/L | 324 | 358 | 340 | 368 | 320 | 318 | 348 | 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 | 0.0036 | <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 | 0.0119 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-3**

| | 3/13/2024 | 6/11/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.1860 | 0.1230 | 0.2110 | 0.1490 | 0.1800 | 0.1660 | 0.1270 | 0.1220 |
| As, tot, mg/L | 0.1900 | 0.1300 | 0.3440 | 0.1660 | 0.2270 | 0.1760 | 0.1300 | 0.1210 |
| B, diss, mg/L | 13.1000 | 9.2700 | 13.8000 | 12.9000 | 11.9000 | 10.5000 | 16.3000 | 19.4000 |
| B, tot, mg/L | 13.0000 | 10.1000 | 14.3000 | 14.3000 | 13.0000 | 11.0000 | 17.4000 | 20.5000 |
| Ba, diss, mg/L | 0.1110 | 0.1110 | 0.1450 | 0.1480 | 0.1610 | 0.1610 | 0.1590 | 0.1200 |
| Ba, tot, mg/L | 0.1260 | 0.1220 | 0.1610 | 0.1890 | 0.2100 | 0.1750 | 0.1630 | 0.1210 |
| Be, diss, mg/L | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.0011 | <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 | 18.0 | 19.0 | 17.1 | 16.6 | 15.0 | 14.4 | 26.5 | 34.2 |
| 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 | 0.0083 | <0.0050 | 0.0072 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | 0.0053 | 0.0232 | 0.0080 | <0.0050 | <0.0050 | 0.0072 |
| F, diss, mg/L | 0.19 | 0.18 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | 3.6200 | 4.5900 | 4.9200 | 4.6100 | 5.9900 | 7.1200 | 6.0000 | 4.9500 |
| Fe, tot, mg/L | 5.7200 | 5.3700 | 7.0200 | 9.2100 | 9.8600 | 8.8300 | 7.5600 | 6.2200 |
| GW Elv, ft | 427.05 | 428.10 | 422.43 | 424.25 | 421.74 | 423.82 | 423.46 | 420.73 |
| 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 | 1.3600 | 1.2400 | 1.5500 | 1.3600 | 1.8300 | 1.8300 | 1.6100 | 1.4900 |
| Mn, tot, mg/L | 1.3500 | 1.3600 | 1.6400 | 1.5800 | 1.9500 | 1.9000 | 1.6500 | 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 | <0.0050 | <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 | <0.050 | <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 | <0.0010 | 0.0011 | 0.0015 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| pH (field), STD | 7.40 | 7.24 | 7.24 | 7.07 | 7.23 | 7.13 | 7.09 | 6.96 |
| 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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-3**

| | 3/13/2024 | 6/11/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 64 | 76 | 46 | 72 | 74 | 79 | 68 | 80 |
| Spec. Cond. (field), micromho | 1040 | 1080 | 1150 | 1640 | 1200 | 1160 | 1290 | 1410 |
| TDS, mg/L | 784 | 740 | 685 | 830 | 952 | 900 | 835 | 866 |
| 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 | 0.0111 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-4**

| | 3/12/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0018 | 0.0020 | 0.0011 | <0.0010 | <0.0010 | 0.0012 | 0.0016 |
| As, tot, mg/L | 0.0142 | 0.0023 | 0.0059 | 0.0045 | 0.0078 | 0.0080 | 0.0018 | 0.0022 |
| B, diss, mg/L | 0.5260 | 0.5320 | 0.9660 | 0.7520 | 0.7630 | 0.7010 | 0.8920 | 1.0300 |
| B, tot, mg/L | 0.5850 | 0.6020 | 1.0600 | 0.8260 | 0.8210 | 0.7800 | 1.0000 | 1.0200 |
| Ba, diss, mg/L | 0.0310 | 0.0515 | 0.0602 | 0.0621 | 0.0416 | 0.0413 | 0.0524 | 0.0591 |
| Ba, tot, mg/L | 0.0854 | 0.0681 | 0.0901 | 0.0903 | 0.0719 | 0.0915 | 0.0598 | 0.0611 |
| 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 | 34.0 | 34.0 | 23.1 | 16.6 | 21.8 | 16.4 | 9.7 | 14.2 |
| 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 | 0.0080 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | 0.0052 | <0.0050 | <0.0050 | 0.0232 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.27 | 0.35 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | 2.5500 | 2.6300 | 0.5110 | 1.8400 | 0.2280 | 0.3460 | 2.3800 |
| Fe, tot, mg/L | 12.7000 | 3.1600 | 7.9100 | 4.9300 | 10.1000 | 14.1000 | 1.7100 | 3.5600 |
| GW Elv, ft | 426.59 | 427.82 | 424.34 | 423.90 | 422.88 | 424.25 | 424.01 | 422.46 |
| 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 | 0.5360 | 1.3400 | 1.8000 | 0.5500 | 1.0400 | 1.3700 | 0.6020 | 1.2100 |
| Mn, tot, mg/L | 1.5400 | 1.5200 | 2.0200 | 0.9610 | 1.4600 | 2.2000 | 0.7740 | 1.4200 |
| 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 | 1.320 | 0.100 | 0.134 | 4.160 | 0.238 | 1.040 | <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 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| pH (field), STD | 6.96 | 6.78 | 6.72 | 6.69 | 6.77 | 6.72 | 6.69 | 6.67 |
| Sb, diss, mg/L | <0.0010 | <0.0010 | 0.0011 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| Sb, tot, mg/L | <0.0010 | <0.0010 | 0.0089 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-4**

| | 3/12/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 38 | 31 | 28 | 44 | 18 | 23 | 14 | <10 |
| Spec. Cond. (field), micromho | 661 | 764 | 750 | 976 | 723 | 732 | 750 | 1040 |
| TDS, mg/L | 450 | 578 | 425 | 474 | 516 | 492 | 435 | 482 |
| 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 | 0.0101 | <0.0100 | <0.0100 | 0.0112 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-5**

| | 3/14/2024 | 6/11/2024 | 8/27/2024 | 11/13/2024 | 3/3/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0020 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| B, diss, mg/L | 0.0765 | 0.0944 | 0.0928 | 0.0928 | 0.0912 | 0.0962 | 0.0800 | 0.0873 |
| B, tot, mg/L | 0.0798 | 0.1010 | 0.0962 | 0.0921 | 0.1010 | 0.1040 | 0.0972 | 0.0735 |
| Ba, diss, mg/L | 0.0098 | 0.0095 | 0.0083 | 0.0100 | 0.0115 | 0.0120 | 0.0087 | 0.0105 |
| Ba, tot, mg/L | 0.0110 | 0.0137 | 0.0151 | 0.0134 | 0.0122 | 0.0144 | 0.0092 | 0.0149 |
| 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 | 13.0 | 9.0 | 6.5 | 7.4 | 5.4 | 7.2 | 6.6 | 6.7 |
| 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 | 0.0074 | <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 | 0.0584 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0283 | <0.0050 | 0.0772 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.21 | 0.15 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.3660 | 0.8270 | 2.1900 | 0.3570 | <0.0400 | 0.4420 | <0.0400 | 0.1900 |
| GW Elv, ft | 427.79 | 430.53 | 428.06 | 425.69 | 424.99 | 426.38 | 426.51 | 425.33 |
| 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 | 0.0098 | <0.0070 | <0.0070 | <0.0070 | <0.0070 | <0.0070 |
| Mn, tot, mg/L | 0.0538 | 0.1050 | 0.2550 | 0.0787 | <0.0070 | 0.0624 | 0.0076 | 0.0186 |
| 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 | 0.0057 | <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 | 3.240 | 3.140 | 2.820 | 2.960 | 3.250 | 3.500 | 2.650 | 2.700 |
| 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 | 0.0011 | 0.0022 | <0.0010 | <0.0010 | <0.0010 | 0.0014 | <0.0010 |
| pH (field), STD | 7.42 | 7.39 | 7.31 | 7.30 | 7.13 | 7.29 | 7.18 | 7.13 |
| 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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-5**

| | 3/14/2024 | 6/11/2024 | 8/27/2024 | 11/13/2024 | 3/3/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 26 | 23 | 19 | 28 | 25 | 33 | 32 | 36 |
| Spec. Cond. (field), micromho | 498 | 496 | 432 | 715 | 364 | 511 | 571 | 541 |
| TDS, mg/L | 312 | 298 | 248 | 364 | 310 | 314 | 292 | 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 | 0.0319 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | <0.0100 | 0.0131 | <0.0100 | 0.0463 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-6**

| | 3/12/2024 | 6/10/2024 | 8/26/2024 | 11/12/2024 | 3/3/2025 | 6/4/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0012 | <0.0010 | <0.0010 |
| As, tot, mg/L | 0.0018 | 0.0014 | 0.0021 | <0.0010 | 0.0024 | <0.0010 | 0.0013 | <0.0010 |
| B, diss, mg/L | 0.4700 | 0.6750 | 0.8530 | 0.3230 | 0.7510 | 0.5240 | 0.8000 | 0.5100 |
| B, tot, mg/L | 0.5470 | 0.8230 | 0.9380 | 0.3770 | 1.1400 | 0.5970 | 0.9000 | 0.6140 |
| Ba, diss, mg/L | 0.0124 | 0.0105 | 0.0114 | 0.0132 | 0.0134 | 0.0133 | 0.0111 | 0.0117 |
| Ba, tot, mg/L | 0.0184 | 0.0159 | 0.0185 | 0.0153 | 0.0209 | 0.0150 | 0.0134 | 0.0111 |
| 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 | <4.0 | <4.0 | <5.0 | 6.6 | <5.0 | 7.2 | <5.0 | <5.0 |
| 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 | 0.0358 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | 0.0071 | 0.0455 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.13 | 0.15 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 1.5300 | 0.4700 | 1.9400 | 0.1660 | 2.5600 | 0.5150 | 1.1600 | 0.1810 |
| GW Elv, ft | 428.24 | 430.91 | 427.97 | 425.96 | 425.22 | 426.55 | 426.70 | 425.45 |
| 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 | 0.0075 | <0.0070 | <0.0070 | <0.0070 | 0.0077 | <0.0070 | <0.0070 | <0.0070 |
| Mn, tot, mg/L | 0.0998 | 0.0283 | 0.1070 | 0.0127 | 0.1940 | 0.0211 | 0.0480 | 0.0143 |
| 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 | 0.0082 | <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 | 0.201 | 0.211 | 0.096 | 0.302 | 0.313 | 0.413 | 0.640 | 0.483 |
| 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 | 0.0026 | <0.0010 | 0.0031 | <0.0010 | 0.0075 | <0.0010 |
| pH (field), STD | 7.07 | 7.22 | 7.06 | 6.99 | 7.18 | 7.09 | 7.09 | 7.04 |
| Sb, diss, mg/L | <0.0010 | <0.0010 | <0.0010 | 0.0013 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| Sb, tot, mg/L | <0.0010 | <0.0010 | 0.0031 | <0.0010 | 0.0029 | <0.0010 | <0.0010 | <0.0010 |
| Se, diss, mg/L | <0.0400 | <0.0400 | 0.0428 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-6**

| | 3/12/2024 | 6/10/2024 | 8/26/2024 | 11/12/2024 | 3/3/2025 | 6/4/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 15 | 16 | 23 | 24 | 34 | 25 | 21 | 14 |
| Spec. Cond. (field), micromho | 438 | 464 | 487 | 806 | 524 | 504 | 618 | 473 |
| TDS, mg/L | 282 | 282 | 308 | 404 | 370 | 348 | 346 | 272 |
| 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 | 0.0211 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | <0.0100 | <0.0100 | 0.0108 | 0.0275 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-7**

| | 3/12/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0012 | <0.0010 | <0.0010 | <0.0010 |
| B, diss, mg/L | 0.0656 | 0.1010 | 0.1350 | 0.1410 | 0.1160 | 0.0991 | 0.1320 | 0.1150 |
| B, tot, mg/L | 0.0731 | 0.1100 | 0.1470 | 0.1490 | 0.1410 | 0.1100 | 0.1540 | 0.1110 |
| Ba, diss, mg/L | 0.0298 | 0.0406 | 0.0315 | 0.0417 | 0.0201 | 0.0210 | 0.0212 | 0.0215 |
| Ba, tot, mg/L | 0.0390 | 0.0494 | 0.0352 | 0.0554 | 0.0259 | 0.0232 | 0.0231 | 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 | 49.0 | 43.0 | 35.8 | 34.6 | 24.9 | 26.3 | 15.3 | 16.0 |
| 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 | 0.0158 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0312 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.22 | 0.27 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.4440 | 0.3850 | 0.0589 | 0.7350 | 0.8760 | 0.1450 | 0.1360 | <0.0400 |
| GW Elv, ft | 427.30 | 429.26 | 426.26 | 425.05 | 424.00 | 425.35 | 425.00 | 423.69 |
| 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 | 0.0076 | <0.0070 | <0.0070 |
| Mn, tot, mg/L | 0.0455 | 0.0466 | 0.0079 | 0.0693 | 0.1070 | 0.0369 | 0.0218 | 0.0127 |
| 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 | 3.500 | 1.160 | 1.960 | 2.430 | 2.750 | 3.010 | 1.870 | 0.981 |
| 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 | 6.77 | 6.81 | 6.82 | 6.95 | 7.12 | 6.93 | 6.85 | 6.95 |
| Sb, diss, mg/L | <0.0010 | <0.0010 | 0.0012 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| Sb, tot, mg/L | <0.0010 | <0.0010 | 0.0014 | <0.0010 | 0.0013 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-7**

| | 3/12/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 28 | 29 | 25 | 25 | 22 | 23 | 18 | 17 |
| Spec. Cond. (field), micromho | 553 | 624 | 618 | 882 | 541 | 584 | 626 | 906 |
| TDS, mg/L | 338 | 428 | 384 | 422 | 368 | 390 | 368 | 320 |
| Tl, diss, mg/L | <0.0020 | <0.0020 | <0.0020 | <0.0020 | <0.0020 | <0.0020 | 0.0025 | <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 | 0.0143 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | <0.0100 | 0.0114 | <0.0100 | 0.0103 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-8**

| | 3/13/2024 | 6/11/2024 | 8/28/2024 | 11/14/2024 | 3/4/2025 | 6/4/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0015 | 0.0017 | 0.0013 | 0.0015 | 0.0015 | 0.0014 | 0.0012 | 0.0018 |
| As, tot, mg/L | 0.0022 | 0.0032 | 0.0094 | 0.0016 | 0.0016 | 0.0021 | 0.0016 | 0.0017 |
| B, diss, mg/L | 6.4700 | 4.6000 | 4.2500 | 3.7900 | 3.8300 | 4.1000 | 3.8100 | 4.0700 |
| B, tot, mg/L | 6.7300 | 5.0400 | 4.7300 | 4.1900 | 4.0100 | 3.9900 | 4.0900 | 4.3100 |
| Ba, diss, mg/L | 0.0609 | 0.0545 | 0.0560 | 0.0358 | 0.0472 | 0.0617 | 0.0611 | 0.0445 |
| Ba, tot, mg/L | 0.0661 | 0.0646 | 0.0967 | 0.0406 | 0.0469 | 0.0619 | 0.0634 | 0.0494 |
| 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 | 10.0 | 9.0 | 7.5 | 8.3 | 6.7 | 6.2 | 7.5 | 5.6 |
| 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 | 0.0107 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Cr, diss, mg/L | 0.0106 | 0.0056 | <0.0050 | 0.0087 | 0.0145 | 0.0061 | 0.0080 | 0.0143 |
| Cr, tot, mg/L | 0.0120 | 0.0085 | 0.0164 | 0.0096 | 0.0136 | 0.0078 | 0.0083 | 0.0137 |
| Cu, diss, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0060 | 0.0053 | 0.0621 | 0.0071 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | 0.0063 | 0.0197 | 0.0060 | 0.0058 | 0.0678 | 0.0083 | <0.0050 |
| F, diss, mg/L | <0.10 | 0.14 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.2850 | 1.6800 | 12.9000 | 0.1570 | 0.5350 | 1.0500 | 0.0877 | <0.0400 |
| GW Elv, ft | 427.29 | 430.05 | 426.08 | 424.76 | 424.11 | 425.64 | 425.34 | 424.09 |
| 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 | 0.0244 | 0.1030 | 0.6540 | 0.0144 | 0.0393 | 0.1290 | <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 | 0.0198 | <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 | 3.420 | 4.110 | 2.780 | 2.860 | 2.950 | 2.800 | 2.760 | 2.350 |
| 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 | 0.0018 | 0.0124 | <0.0010 | <0.0010 | 0.0015 | <0.0010 | <0.0010 |
| pH (field), STD | 7.51 | 7.44 | 7.21 | 7.45 | 7.14 | 7.42 | 7.37 | 7.19 |
| 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 | 0.0624 | 0.0570 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Se, tot, mg/L | 0.0634 | 0.0602 | <0.0400 | 0.0444 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-8**

| | 3/13/2024 | 6/11/2024 | 8/28/2024 | 11/14/2024 | 3/4/2025 | 6/4/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 218 | 163 | 185 | 93 | 95 | 135 | 128 | 117 |
| Spec. Cond. (field), micromho | 728 | 721 | 650 | 758 | 436 | 634 | 690 | 885 |
| TDS, mg/L | 576 | 510 | 496 | 402 | 410 | 500 | 468 | 408 |
| 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 | 0.0185 | <0.0100 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |
| Zn, diss, mg/L | <0.0100 | <0.0100 | <0.0100 | <0.0100 | <0.0100 | 0.0227 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | 0.0312 | <0.0100 | <0.0100 | 0.0261 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-9**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/14/2024 | 3/4/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0019 | 0.0012 | 0.0011 | 0.0011 | 0.0011 | 0.0012 | 0.0012 | <0.0010 |
| As, tot, mg/L | 0.0017 | 0.0016 | 0.0016 | 0.0013 | 0.0016 | 0.0013 | 0.0012 | 0.0014 |
| B, diss, mg/L | 0.7080 | 1.9400 | 1.0100 | 0.9880 | 0.9380 | 0.9590 | 1.1600 | 1.2200 |
| B, tot, mg/L | 0.7340 | 2.5600 | 1.0600 | 1.1700 | 1.0200 | 1.0600 | 1.3000 | 1.1700 |
| Ba, diss, mg/L | 0.0137 | 0.0239 | 0.0186 | 0.0155 | 0.0133 | 0.0182 | 0.0180 | 0.0163 |
| Ba, tot, mg/L | 0.0145 | 0.0355 | 0.0225 | 0.0189 | 0.0159 | 0.0200 | 0.0214 | 0.0207 |
| 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 | <4.0 | <4.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| Co, diss, mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Co, tot, mg/L | 0.0052 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | 0.0067 |
| 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 | 0.1060 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0054 | <0.0050 | 0.1270 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.44 | 0.32 | <0.50 | <0.50 | 0.51 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.4370 | 0.5280 | 0.5700 | 0.0757 | 0.5880 | 0.0921 | 0.1720 | 0.4430 |
| GW Elv, ft | 427.10 | 429.56 | 424.11 | 423.72 | 422.91 | 424.70 | 424.62 | 422.59 |
| 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 | 0.0324 | 0.0393 | 0.0573 | 0.0126 | 0.0453 | 0.0085 | 0.0194 | 0.0698 |
| 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 | 2.480 | 3.300 | 3.640 | 2.650 | 2.360 | 2.980 | 3.320 | 3.780 |
| 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 | 7.09 | 6.77 | 7.11 | 6.75 | 7.09 | 6.87 | 6.90 |
| Sb, diss, mg/L | <0.0010 | 0.0011 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-9**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/14/2024 | 3/4/2025 | 6/3/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 227 | 408 | 409 | 353 | 242 | 355 | 390 | 331 |
| Spec. Cond. (field), micromho | 702 | 1170 | 1060 | 1220 | 571 | 844 | 1160 | 958 |
| TDS, mg/L | 556 | 928 | 926 | 720 | 602 | 734 | 836 | 724 |
| 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 | 0.0514 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | <0.0100 | <0.0100 | <0.0100 | 0.0618 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-10**

| | 3/13/2024 | 6/10/2024 | 8/28/2024 | 11/14/2024 | 3/4/2025 | 6/3/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0015 | 0.0016 | 0.0011 | 0.0013 | 0.0019 | 0.0015 | 0.0013 |
| As, tot, mg/L | 0.0023 | 0.0027 | 0.0037 | 0.0015 | 0.0097 | 0.0021 | 0.0037 | 0.0018 |
| B, diss, mg/L | 1.4200 | 1.2600 | 0.9490 | 1.4500 | 2.0000 | 1.4500 | 1.2900 | 1.5700 |
| B, tot, mg/L | 1.4100 | 1.5600 | 1.0100 | 1.7200 | 2.1500 | 1.2400 | 1.5100 | 1.6900 |
| Ba, diss, mg/L | 0.0174 | 0.0142 | 0.0170 | 0.0179 | 0.0207 | 0.0227 | 0.0195 | 0.0183 |
| Ba, tot, mg/L | 0.0195 | 0.0203 | 0.0264 | 0.0228 | 0.0480 | 0.0233 | 0.0286 | 0.0225 |
| 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 | <4.0 | <4.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| 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 | 0.0250 | <0.0050 | 0.0054 | <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 | 0.0052 | <0.0050 | <0.0050 | 0.0126 | <0.0050 | <0.0050 | <0.0050 |
| Cu, diss, mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | 0.1430 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | 0.0064 | 0.0492 | 0.0285 | 0.0873 | 0.0103 | <0.0050 |
| F, diss, mg/L | <0.10 | <0.10 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.8060 | 0.3630 | 2.9000 | 0.3270 | 15.4000 | 0.4020 | 2.2300 | 0.3740 |
| GW Elv, ft | 427.52 | 430.62 | 426.84 | 424.90 | 424.30 | 422.34 | 426.00 | 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 | 0.0613 | 0.0310 | 0.1810 | 0.0615 | 0.8650 | 0.0473 | 0.1940 | 0.0393 |
| 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 | 0.0328 | <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 | 1.920 | 1.910 | 2.050 | 2.290 | 2.900 | 2.690 | 2.330 | 3.080 |
| Pb, diss, mg/L | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | 0.0010 |
| Pb, tot, mg/L | 0.0011 | <0.0010 | 0.0031 | <0.0010 | 0.0132 | <0.0010 | 0.0037 | <0.0010 |
| pH (field), STD | 7.70 | 7.64 | 7.39 | 7.49 | 7.22 | 7.61 | 7.51 | 7.37 |
| 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 | 0.0011 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-10**

| | 3/13/2024 | 6/10/2024 | 8/28/2024 | 11/14/2024 | 3/4/2025 | 6/3/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 73 | 45 | 47 | 84 | 91 | 71 | 58 | 74 |
| Spec. Cond. (field), micromho | 434 | 418 | 380 | 683 | 381 | 430 | 481 | 776 |
| TDS, mg/L | 300 | 264 | 266 | 340 | 348 | 288 | 310 | 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 | 0.0182 | <0.0100 | <0.0100 | <0.0100 |
| Zn, diss, mg/L | <0.0100 | <0.0100 | <0.0100 | <0.0100 | <0.0100 | 0.0675 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | 0.0101 | 0.0258 | 0.0438 | 0.0422 | 0.0112 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-11**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/14/2024 | 3/3/2025 | 6/3/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 1.4500 | 2.3100 | 2.0600 | 1.6200 | 2.4000 | 1.7100 | 1.9600 | 2.4800 |
| B, tot, mg/L | 1.5000 | 2.7600 | 2.2600 | 1.9200 | 2.7400 | 2.1500 | 2.3200 | 2.7400 |
| Ba, diss, mg/L | 0.0136 | 0.0131 | 0.0139 | 0.0298 | 0.0163 | 0.0202 | 0.0151 | 0.0135 |
| Ba, tot, mg/L | 0.0147 | 0.0193 | 0.0182 | 0.0151 | 0.0185 | 0.0180 | 0.0211 | 0.0170 |
| 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 | <4.0 | <4.0 | <5.0 | 8.3 | <5.0 | <5.0 | <5.0 | <5.0 |
| 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 | 0.0075 | <0.0050 | 0.0671 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0196 | <0.0050 | <0.0050 | 0.0185 | <0.0050 |
| F, diss, mg/L | <0.10 | <0.10 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.2710 | 0.2870 | 0.1670 | 0.0454 | 0.1460 | 0.1930 | 0.3790 | 0.0513 |
| GW Elv, ft | 428.03 | 431.07 | 428.65 | 426.06 | 425.45 | 426.79 | 426.80 | 425.49 |
| 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 | 0.0277 | 0.2380 | <0.0070 | <0.0070 | <0.0070 | 0.0288 | 0.0455 |
| Mn, tot, mg/L | 0.0206 | 0.0953 | 0.4200 | 0.0211 | 0.1190 | 0.1250 | 0.7240 | 0.0949 |
| 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 | 0.10 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| NO3, diss, mg/L | 2.880 | 1.460 | 1.950 | 2.770 | 2.620 | 1.500 | 0.946 | 0.681 |
| 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 | 7.33 | 7.53 | 7.11 | 7.32 | 7.15 | 7.29 | 7.23 | 6.97 |
| 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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-11**

| | 3/14/2024 | 6/10/2024 | 8/27/2024 | 11/14/2024 | 3/3/2025 | 6/3/2025 | 8/26/2025 | 10/15/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 69 | 67 | 59 | 94 | 92 | 75 | 57 | 72 |
| Spec. Cond. (field), micromho | 469 | 554 | 539 | 748 | 453 | 549 | 572 | 889 |
| TDS, mg/L | 310 | 360 | 362 | 398 | 414 | 358 | 362 | 416 |
| 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 | 0.0338 | <0.0100 | <0.0100 |
| Zn, tot, mg/L | <0.0100 | <0.0100 | <0.0100 | 0.0134 | <0.0100 | <0.0100 | <0.0100 | <0.0100 |

# Meredosia Power Station
# Groundwater Monitoring Results 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-12**

| | 3/13/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| 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 | 0.0011 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 | <0.0010 |
| As, tot, mg/L | <0.0010 | 0.0024 | <0.0010 | <0.0010 | 0.0023 | 0.0016 | <0.0010 | <0.0010 |
| B, diss, mg/L | 0.0567 | 0.0849 | 0.0776 | 0.1450 | 0.1990 | 0.2390 | 0.3270 | 0.3280 |
| B, tot, mg/L | 0.0599 | 0.1040 | 0.0900 | 0.1320 | 0.1880 | 0.2540 | 0.3570 | 0.3250 |
| Ba, diss, mg/L | 0.1030 | 0.1160 | 0.0802 | 0.1050 | 0.0876 | 0.1340 | 0.1300 | 0.1260 |
| Ba, tot, mg/L | 0.1100 | 0.1710 | 0.1140 | 0.1230 | 0.1310 | 0.1630 | 0.1530 | 0.1320 |
| 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 | 73.0 | 45.0 | 43.1 | 31.3 | 43.4 | 33.6 | 24.7 | 23.6 |
| 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 | 0.0095 | 0.0093 | 0.0138 | 0.0111 | 0.0077 | 0.0136 |
| 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 | 0.0083 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| Cu, tot, mg/L | <0.0050 | <0.0050 | <0.0050 | 0.0180 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| F, diss, mg/L | 0.28 | 0.29 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Fe, diss, mg/L | <0.0400 | 0.1190 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 | <0.0400 |
| Fe, tot, mg/L | 0.1760 | 0.5510 | 0.4930 | 0.1960 | 0.8110 | 0.5410 | 0.3050 | 0.1540 |
| GW Elv, ft | 426.57 | 428.22 | 424.27 | 423.90 | 422.93 | 424.20 | 423.72 | 422.27 |
| 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 | 0.3330 | 0.8790 | 1.4700 | 1.4700 | 1.0700 | 1.9700 | 2.4900 | 2.3800 |
| Mn, tot, mg/L | 1.7000 | 2.0700 | 3.0900 | 4.1100 | 8.9300 | 5.7500 | 4.3000 | 4.4400 |
| Ni, diss, mg/L | <0.0050 | <0.0050 | 0.0059 | 0.0072 | 0.0077 | 0.0098 | 0.0116 | 0.0135 |
| Ni, tot, mg/L | <0.0050 | 0.0126 | 0.0070 | 0.0153 | 0.0252 | 0.0168 | 0.0164 | 0.0154 |
| NO2, diss, mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| NO3, diss, mg/L | 4.440 | 1.010 | 2.520 | 1.840 | 0.372 | 0.112 | 0.320 | 3.700 |
| 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 | 6.70 | 6.93 | 6.92 | 6.84 | 6.95 | 6.88 | 6.85 | 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 | 0.0013 | <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 2024-2025

**Date Range: 01/01/2024 to 12/31/2025**
**Well: APW-12**

| | 3/13/2024 | 6/12/2024 | 8/26/2024 | 11/13/2024 | 3/3/2025 | 6/2/2025 | 8/25/2025 | 10/14/2025 |
|---|---|---|---|---|---|---|---|---|
| SO4, diss, mg/L | 40 | 32 | 38 | 54 | 58 | 71 | 54 | 57 |
| Spec. Cond. (field), micromho | 620 | 628 | 604 | 957 | 688 | 814 | 996 | 1180 |
| TDS, mg/L | 408 | 460 | 388 | 492 | 472 | 576 | 590 | 582 |
| 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 | 0.0121 | <0.0100 | <0.0100 |

# APPENDIX B
# STATISTICAL OUTPUT

# APPENDIX B1
# TEST DESCRIPTIONS

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

ELECTRIC POWER RESEARCH INSTITUTE
3420 Hillview Avenue, Palo Alto, California 94304-1338 ▪ PO Box 10412, Palo Alto, California 94303-0813 ▪ USA
800.313.3774 ▪ 650.855.2121 ▪ askepri@epri.com ▪ www.epri.com

## DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITIES

ELECTRIC POWER RESEARCH INSTITUTE, INC. (“EPRI”) RESERVES ALL RIGHTS IN THE PROGRAM AS DELIVERED. THE PROGRAM OR ANY PORTION THEREOF MAY NOT BE REPRODUCED IN ANY FORM WHATSOEVER EXCEPT AS PROVIDED BY LICENSE, WITHOUT THE CONSENT OF EPRI.

A LICENSE UNDER EPRI'S RIGHTS IN THE PROGRAM CAN BE OBTAINED DIRECTLY FROM EPRI.

THE EMBODIMENTS OF THIS PROGRAM AND SUPPORTING MATERIALS MAY BE INDEPENDENTLY AVAILABLE FROM ELECTRIC POWER SOFTWARE CENTER (EPSC) FOR AN APPROPRIATE DISTRIBUTION FEE.

Electric Power Software Center (EPSC)
9625 Research Drive
Charlotte, NC 28262

THIS NOTICE MAY NOT BE REMOVED FROM THE PROGRAM BY ANY USER THEREOF.

NEITHER EPRI, ANY MEMBER OF EPRI, THE ORGANIZATION(S) BELOW, NOR ANY PERSON ACTING ON BEHALF OF ANY OF THEM:

1. MAKES ANY WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF ANY PURPOSE WITH RESPECT TO THE PROGRAM ; OR
2. ASSUMES ANY LIABILITY WHATSOEVER WITH RESPECT TO ANY USE OF THE PROGRAM OR ANY PORTION THEREOF OR WITH RESPECT TO ANY DAMAGES WHICH MAY RESULT FROM SUCH USE.

RESTRICTED RIGHTS LEGEND: USE, DUPLICATION, OR DISCLOSURE BY THE GOVERNMENT IS SUBJECT TO RESTRICTION AS SET FORTH IN PARAGRAPH (G) (3) (I), WITH THE EXCEPTION OF PARAGRAPH (G) (3) (I) (B) (5), OF THE RIGHTS IN TECHNICAL DATA AND COMPUTER SOFTWARE CLAUSE IN FAR 52.227-14, ALTERNATE III.

**Research Contractor Company Name (add others on lines below if more than one)**

**NOTICE:** THIS REPORT CONTAINS PROPRIETARY INFORMATION THAT IS THE INTELLECTUAL PROPERTY OF EPRI, ACCORDINGLY, IT IS AVAILABLE ONLY UNDER LICENSE FROM EPRI AND MAY NOT BE REPRODUCED OR DISCLOSED, WHOLLY OR IN PART, BY ANY LICENSEE TO ANY OTHER PERSON OR ORGANIZATION.

## NOTE

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

Electric Power Research Institute, EPRI, and TOGETHER…SHAPING THE FUTURE OF ELECTRICITY are registered service marks of the Electric Power Research Institute, Inc.

Copyright © 2009 Electric Power Research Institute, Inc. All rights reserved.

# 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.

| **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<br><br>$\mathrm{sgn}(x_{ij} - x_{jk})$ | = 1 if $(x_{ij} - x_{jk}) > 0$<br><br>= 0 if $(x_{ij} - x_{jk}) = 0$<br><br>= -1 if $(x_{ij} - x_{jk}) < 0$<br><br>where $x_{i1}, x_{i2}, \ldots, x_{in}$ are the time ordered data ($n_i$ is total of data in the i-th season). |
| Mann-Kendall Statistic, $S_i$ | $= \sum_{k=1}^{n_i-1} \sum_{j=k+1}^{n_i} \mathrm{sgn}(x_{ij} - x_{jk})$ |
| Variance of $S_i$ $VAR(S_i)$ | $VAR(S_i) =$<br>$\frac{1}{18}\left\{ n_i(n_i-1)(2n_i+5) - \sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(2t_{ip}+5) - \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(2u_{iq}+5) \right\}$<br>$+ \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(t_{ip}-2) \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(u_{iq}-2)}{9n_i(n_i-1)(n_i-2)}$<br>$+ \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1) \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)}{2n_i(n_i-1)}.$<br><br>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,<br><br>Z | If $S' = \sum_{i=1}^{K} S_i$ , where K is the number of seasons, then the test statistic Z is computed as:<br><br>$$Z = \begin{cases} \dfrac{S'-1}{[VAR(S')]^{1/2}} & \text{iff } S' > 0 \\ 0 & \text{iff } S' = 0 \\ \dfrac{S'+1}{[VAR(S')]^{1/2}} & \text{iff } S' < 0 \end{cases}$$<br><br>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:<br><br>$H_0$ = no trend<br><br>$H_a$ = trend present<br><br>This is a two-sided test at the $\alpha$ significance level. | Accept the null hypothesis $H_0$ of no trend<br><br>if $\lvert Z \rvert \leq Z_{1-\alpha/2}$<br><br>Reject the null hypothesis $H_0$<br><br>if $\lvert Z \rvert > Z_{1-\alpha/2}$<br><br>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.

| | |
|---|---|
| | 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 | $n$ |

| | |
|---|---|
| Mean of the observed data during the scoping period; $\overline{X}$ | $\overline{X} = \frac{1}{n}\sum_{i=1}^{n} X_i$<br><br>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<br><br>$T_l = (\overline{X} - X_l)/S_x$<br>$T_n = (X_n - \overline{X})/S_x$<br><br>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 :<br><br>$X_l$ *is an outlier if* $T_l \geq T_{cr(1-\alpha,n)}$<br><br>or an extreme high outlier:<br><br>$X_n$ *is an outlier if* $T_n \geq T_{cr(1-\alpha,n)}$.<br><br>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<br><br>$3 \le n \le 25$. |
| 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:<br><br>$T_s = \dfrac{X_{(2)} - X_{(1)}}{X_{(n)} - X_{(1)}}$ *for* $3 \le n \le 7$<br><br>$T_s = \dfrac{X_{(2)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $8 \le n \le 10$<br><br>$T_s = \dfrac{X_{(3)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $11 \le n \le 13$<br><br>$T_s = \dfrac{X_{(3)} - X_{(1)}}{X_{(n-2)} - X_{(1)}}$ *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: |

| | |
|---|---|
| | $T_s = \frac{X_{(n)} - X_{(n-1)}}{X_{(n)} - X_{(1)}}$ *for* $3 \le n \le 7$<br>$T_s = \frac{X_{(n)} - X_{(n-1)}}{X_{(n)} - X_{(2)}}$ *for* $8 \le n \le 10$<br>$T_s = \frac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(2)}}$ *for* $11 \le n \le 13$<br>$T_s = \frac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(3)}}$ *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 $\alpha$ 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:<br>$X_{(1)}$ *is an outlier if* $T_s \ge T_c$<br>or an extreme high-valued outlier:<br>$X_{(n)}$ *is an outlier if* $T_s \ge T_c$.<br>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 | $= \frac{x_{i'} - x_i}{i' - i}$<br><br>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:<br><br>$N' = n(n-1)/2$ |

| | |
|---|---|
| Sen's Slope Estimate | Sen's slope estimator = median slope<br><br>$= Q_{[(N'+1)/2]}$ if $N'$ is odd<br>$= \frac{1}{2}(Q_{[N'/2]} + Q_{[(N'+2)/2]})$ if $N'$ is even<br><br>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, $\alpha$ significance level. |
| Variance estimate of the Mann-Kendall S Statistic, VAR(S) | VAR(S)<br>$= \frac{1}{18}\left[n(n-1)(2n+5) - \sum_{p=1}^{g} t_p(t_p-1)(2t_p+5)\right]$<br><br>where $g$ is the number of tied groups, $t_p$ is the number of data in the $p$th group, and $n$ is the number of data values. |
| $C_\alpha$ | $= Z_{1-\alpha/2}\sqrt{VAR(S)}$ |
| Sen's Slope , a two-sided test at the $\alpha$ significance level | $M_1 = \frac{(N'-C_\alpha)}{2}$<br>$M_2 = \frac{(N'+C_\alpha)}{2}$<br><br>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: 01/01/2019 to 10/15/2025**
**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: 0.0005
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-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 = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0005
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 |
|---|---|---|---|---|
| 03/13/2024 | 0.0012 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Antimony, dissolved, 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, dissolved, mg/L**
**Location: APW-4**

Mean of all data: 0.0006
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0017
Test Statistic, high extreme of all data: Tn = 4.4585
T Critical of all data: Tcr = 2.6980

| 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: 0.0005
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: 01/01/2019 to 10/15/2025**
**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: 0.0006
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 4.0411
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/12/2024 | 0.0013 | False | | 1 |

**Antimony, 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 = 0.0012
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 |
|---|---|---|---|---|
| 08/26/2024 | 0.0012 | False | | 1 |

**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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0002
Largest Observation Concentration of all data: Xn = 0.0011
Test Statistic, high extreme of all data: Tn = 3.4694
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/10/2024 | 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 = 4.0122
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 5.1025
T Critical of all data: Tcr = 2.7140

| 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 = 4.7411
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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 = 4.8723
T Critical of all data: Tcr = 2.6980

| 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: 0.0008
Standard Deviation of all data: 0.0016
Largest Observation Concentration of all data: Xn = 0.0089
Test Statistic, high extreme of all data: Tn = 4.9810
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/26/2024 | 0.0089 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Antimony, total, mg/L**
**Location: APW-5**

Mean of all data: 0.0005
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0012
Test Statistic, high extreme of all data: Tn = 4.1150
T Critical of all data: Tcr = 2.7140

| 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: 0.0007
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0031
Test Statistic, high extreme of all data: Tn = 3.6899
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/26/2024 | 0.0031 | False | | 1 |

**Antimony, total, mg/L**
**Location: APW-7**

Mean of all data: 0.0006
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0014
Test Statistic, high extreme of all data: Tn = 3.6830
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/26/2024 | 0.0014 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 5.0473
T Critical of all data: Tcr = 2.7140

| 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 = 3.4741
T Critical of all data: Tcr = 2.6980

| 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: 0.0005
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Arsenic, dissolved, mg/L**
**Location: APW-10**

Mean of all data: 0.0016
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0023
Test Statistic, high extreme of all data: Tn = 2.1356
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 03/13/2024 | <0.0005 | True | -1 | |

**Arsenic, dissolved, mg/L**
**Location: APW-11**

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 = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0010 | False | | 1 |

**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: Xn = 0.0016
Test Statistic, high extreme of all data: Tn = 4.3718
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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***

**Arsenic, dissolved, mg/L**

**Location: APW-2**

Mean of all data: 0.0015
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0040
Test Statistic, high extreme of all data: Tn = 2.7386
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 07/29/2020 | 0.0040 | False | | 1 |

**Arsenic, dissolved, mg/L**

**Location: APW-3**

Mean of all data: 0.1939
Standard Deviation of all data: 0.0460
Largest Observation Concentration of all data: Xn = 0.3200
Test Statistic, high extreme of all data: Tn = 2.7408
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/17/2022 | 0.3200 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Arsenic, dissolved, mg/L**
**Location: APW-4**

Mean of all data: 0.0084
Standard Deviation of all data: 0.0072
Largest Observation Concentration of all data: Xn = 0.0265
Test Statistic, high extreme of all data: Tn = 2.5201
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Arsenic, dissolved, mg/L**
**Location: APW-5**

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***

**Arsenic, 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: Xn = 0.0012
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0012 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0000
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***

**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 = 2.9295
T Critical of all data: Tcr = 2.7140

| 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: 0.0012
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0019
Test Statistic, high extreme of all data: Tn = 2.6001
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 10/14/2025 | <0.0005 | True | -1 | |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Arsenic, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0016
Standard Deviation of all data: 0.0020
Largest Observation Concentration of all data: Xn = 0.0106
Test Statistic, high extreme of all data: Tn = 4.4422
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0106 | False | | 1 |

**Arsenic, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0041
Standard Deviation of all data: 0.0065
Largest Observation Concentration of all data: Xn = 0.0364
Test Statistic, high extreme of all data: Tn = 4.9519
T Critical of all data: Tcr = 2.7140

| 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: 0.0026
Standard Deviation of all data: 0.0069
Largest Observation Concentration of all data: Xn = 0.0371
Test Statistic, high extreme of all data: Tn = 4.9883
T Critical of all data: Tcr = 2.7140

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Arsenic, total, mg/L**
**Location: APW-12**

Mean of all data: 0.0033
Standard Deviation of all data: 0.0082
Largest Observation Concentration of all data: Xn = 0.0433
Test Statistic, high extreme of all data: Tn = 4.8591
T Critical of all data: Tcr = 2.6980

| 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: 0.0024
Standard Deviation of all data: 0.0012
Largest Observation Concentration of all data: Xn = 0.0064
Test Statistic, high extreme of all data: Tn = 3.2692
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 09/22/2023 | 0.0064 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.2177
Standard Deviation of all data: 0.0609
Largest Observation Concentration of all data: Xn = 0.3580
Test Statistic, high extreme of all data: Tn = 2.3032
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Arsenic, total, mg/L**
**Location: APW-4**

Mean of all data: 0.0135
Standard Deviation of all data: 0.0115
Largest Observation Concentration of all data: Xn = 0.0598
Test Statistic, high extreme of all data: Tn = 4.0207
T Critical of all data: Tcr = 2.6980

| 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: 0.0006
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0023
Test Statistic, high extreme of all data: Tn = 3.8700
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 0.0023 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 0.0024
Test Statistic, high extreme of all data: Tn = 2.6914
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Arsenic, total, mg/L**

**Location: APW-7**

Mean of all data: 0.0006
Standard Deviation of all data: 0.0004
Largest Observation Concentration of all data: Xn = 0.0022
Test Statistic, high extreme of all data: Tn = 3.8346
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0022 | False | | 1 |

**Arsenic, total, mg/L**

**Location: APW-8**

Mean of all data: 0.0031
Standard Deviation of all data: 0.0055
Largest Observation Concentration of all data: Xn = 0.0301
Test Statistic, high extreme of all data: Tn = 4.9110
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0018
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0040
Test Statistic, high extreme of all data: Tn = 3.0764
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0040 | False | | 1 |

**Barium, dissolved, mg/L**

**Location: APW-1**

Mean of all data: 0.0124
Standard Deviation of all data: 0.0036
Largest Observation Concentration of all data: Xn = 0.0232
Test Statistic, high extreme of all data: Tn = 3.0199
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/30/2021 | 0.0232 | False | | 1 |

**Barium, dissolved, mg/L**

**Location: APW-10**

Mean of all data: 0.0189
Standard Deviation of all data: 0.0023
Largest Observation Concentration of all data: Xn = 0.0231
Test Statistic, high extreme of all data: Tn = 1.7842
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Barium, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 0.0158
Standard Deviation of all data: 0.0046
Largest Observation Concentration of all data: Xn = 0.0298
Test Statistic, high extreme of all data: Tn = 3.0109
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/14/2024 | 0.0298 | False | | 1 |

**Barium, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 0.1272
Standard Deviation of all data: 0.0322
Largest Observation Concentration of all data: Xn = 0.2460
Test Statistic, high extreme of all data: Tn = 3.6897
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Barium, dissolved, mg/L**
**Location: APW-2**

Mean of all data: 0.0448
Standard Deviation of all data: 0.0082
Largest Observation Concentration of all data: Xn = 0.0626
Test Statistic, high extreme of all data: Tn = 2.1538
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-3**

Mean of all data: 0.1023
Standard Deviation of all data: 0.0359
Largest Observation Concentration of all data: Xn = 0.1610
Test Statistic, high extreme of all data: Tn = 1.6341
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-4**

Mean of all data: 0.0394
Standard Deviation of all data: 0.0107
Largest Observation Concentration of all data: Xn = 0.0621
Test Statistic, high extreme of all data: Tn = 2.1185
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: 01/01/2019 to 10/15/2025**
**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: 0.0084
Standard Deviation of all data: 0.0017
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 2.1510
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Barium, dissolved, mg/L**
**Location: APW-6**

Mean of all data: 0.0131
Standard Deviation of all data: 0.0030
Largest Observation Concentration of all data: Xn = 0.0198
Test Statistic, high extreme of all data: Tn = 2.2654
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Barium, dissolved, mg/L**
**Location: APW-7**

Mean of all data: 0.0290
Standard Deviation of all data: 0.0075
Largest Observation Concentration of all data: Xn = 0.0445
Test Statistic, high extreme of all data: Tn = 2.0573
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: 01/01/2019 to 10/15/2025**
**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: 0.0591
Standard Deviation of all data: 0.0093
Largest Observation Concentration of all data: Xn = 0.0749
Test Statistic, high extreme of all data: Tn = 1.6978
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Barium, dissolved, mg/L**

**Location: APW-9**

Mean of all data: 0.0220
Standard Deviation of all data: 0.0093
Largest Observation Concentration of all data: Xn = 0.0490
Test Statistic, high extreme of all data: Tn = 2.9143
T Critical of all data: Tcr = 2.6980

| 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: 0.0204
Standard Deviation of all data: 0.0087
Largest Observation Concentration of all data: Xn = 0.0551
Test Statistic, high extreme of all data: Tn = 3.9752
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0551 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Barium, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0286
Standard Deviation of all data: 0.0231
Largest Observation Concentration of all data: Xn = 0.1430
Test Statistic, high extreme of all data: Tn = 4.9427
T Critical of all data: Tcr = 2.7140

| 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: 0.0220
Standard Deviation of all data: 0.0159
Largest Observation Concentration of all data: Xn = 0.0970
Test Statistic, high extreme of all data: Tn = 4.7192
T Critical of all data: Tcr = 2.7140

| 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: 0.1628
Standard Deviation of all data: 0.0657
Largest Observation Concentration of all data: Xn = 0.4390
Test Statistic, high extreme of all data: Tn = 4.2065
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0615
Standard Deviation of all data: 0.0186
Largest Observation Concentration of all data: Xn = 0.1220
Test Statistic, high extreme of all data: Tn = 3.2448
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 09/22/2023 | 0.1220 | False | | 1 |

**Barium, total, mg/L**
**Location: APW-3**

Mean of all data: 0.1271
Standard Deviation of all data: 0.0353
Largest Observation Concentration of all data: Xn = 0.2100
Test Statistic, high extreme of all data: Tn = 2.3504
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: 01/01/2019 to 10/15/2025**
**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: 0.0683
Standard Deviation of all data: 0.0464
Largest Observation Concentration of all data: Xn = 0.2860
Test Statistic, high extreme of all data: Tn = 4.6927
T Critical of all data: Tcr = 2.6980

| 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: 0.0104
Standard Deviation of all data: 0.0026
Largest Observation Concentration of all data: Xn = 0.0162
Test Statistic, high extreme of all data: Tn = 2.1909
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Barium, total, mg/L**
**Location: APW-6**

Mean of all data: 0.0157
Standard Deviation of all data: 0.0037
Largest Observation Concentration of all data: Xn = 0.0226
Test Statistic, high extreme of all data: Tn = 1.8624
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Barium, total, mg/L**

**Location: APW-7**

Mean of all data: 0.0335
Standard Deviation of all data: 0.0099
Largest Observation Concentration of all data: Xn = 0.0554
Test Statistic, high extreme of all data: Tn = 2.2061
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Barium, total, mg/L**

**Location: APW-8**

Mean of all data: 0.0699
Standard Deviation of all data: 0.0258
Largest Observation Concentration of all data: Xn = 0.1850
Test Statistic, high extreme of all data: Tn = 4.4664
T Critical of all data: Tcr = 2.7140

| 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: 0.0274
Standard Deviation of all data: 0.0125
Largest Observation Concentration of all data: Xn = 0.0606
Test Statistic, high extreme of all data: Tn = 2.6419
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Beryllium, dissolved, mg/L**
**Location: APW-1**

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-10**

Mean of all data: 0.0003
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0005
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0005 | False | | 1 |

**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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0003
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***

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Beryllium, dissolved, mg/L**
**Location: APW-3**

Mean of all data: 0.0003
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0011
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 |
|---|---|---|---|---|
| 06/02/2025 | 0.0011 | False | | 1 |

**Beryllium, dissolved, mg/L**
**Location: APW-4**

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-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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0000
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 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 = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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 = 5.1025
T Critical of all data: Tcr = 2.7140

| 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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Beryllium, total, mg/L**

**Location: APW-2**

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-3**

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-4**

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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0000
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-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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0001
Largest Observation Concentration of all data: Xn = 0.0009
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 12/09/2019 | 0.0009 | 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: 0.0529
Standard Deviation of all data: 0.0184
Largest Observation Concentration of all data: Xn = 0.0970
Test Statistic, high extreme of all data: Tn = 2.3996
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 1.5484
Standard Deviation of all data: 0.5345
Largest Observation Concentration of all data: Xn = 2.5100
Test Statistic, high extreme of all data: Tn = 1.7990
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 2.3926
Standard Deviation of all data: 1.3144
Largest Observation Concentration of all data: Xn = 6.8400
Test Statistic, high extreme of all data: Tn = 3.3836
T Critical of all data: Tcr = 2.7140

| 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: 0.1546
Standard Deviation of all data: 0.0739
Largest Observation Concentration of all data: Xn = 0.3280
Test Statistic, high extreme of all data: Tn = 2.3467
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: 01/01/2019 to 10/15/2025**
**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: 1.2763
Standard Deviation of all data: 0.5700
Largest Observation Concentration of all data: Xn = 2.5500
Test Statistic, high extreme of all data: Tn = 2.2347
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-3**

Mean of all data: 14.7915
Standard Deviation of all data: 3.2370
Largest Observation Concentration of all data: Xn = 22.4000
Test Statistic, high extreme of all data: Tn = 2.3505
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Boron, dissolved, mg/L**
**Location: APW-4**

Mean of all data: 0.8380
Standard Deviation of all data: 0.2335
Largest Observation Concentration of all data: Xn = 1.4700
Test Statistic, high extreme of all data: Tn = 2.7073
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 1.4700 | False | | 1 |

**Boron, dissolved, mg/L**
**Location: APW-5**

Mean of all data: 0.0880
Standard Deviation of all data: 0.0115
Largest Observation Concentration of all data: Xn = 0.1130
Test Statistic, high extreme of all data: Tn = 2.1707
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, dissolved, mg/L**
**Location: APW-6**

Mean of all data: 0.6000
Standard Deviation of all data: 0.3511
Largest Observation Concentration of all data: Xn = 1.5400
Test Statistic, high extreme of all data: Tn = 2.6773
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Boron, dissolved, mg/L**
**Location: APW-7**

Mean of all data: 0.1278
Standard Deviation of all data: 0.0320
Largest Observation Concentration of all data: Xn = 0.2540
Test Statistic, high extreme of all data: Tn = 3.9428
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 0.2540 | False | | 1 |

**Boron, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 6.0079
Standard Deviation of all data: 1.2951
Largest Observation Concentration of all data: Xn = 7.9400
Test Statistic, high extreme of all data: Tn = 1.4919
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 1.1166
Standard Deviation of all data: 0.3542
Largest Observation Concentration of all data: Xn = 2.1100
Test Statistic, high extreme of all data: Tn = 2.8049
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 07/29/2020 | 2.1100 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Boron, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0582
Standard Deviation of all data: 0.0197
Largest Observation Concentration of all data: Xn = 0.1030
Test Statistic, high extreme of all data: Tn = 2.2777
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, total, mg/L**
**Location: APW-10**

Mean of all data: 1.6630
Standard Deviation of all data: 0.5934
Largest Observation Concentration of all data: Xn = 2.9500
Test Statistic, high extreme of all data: Tn = 2.1689
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, total, mg/L**
**Location: APW-11**

Mean of all data: 2.5933
Standard Deviation of all data: 1.4012
Largest Observation Concentration of all data: Xn = 7.0400
Test Statistic, high extreme of all data: Tn = 3.1735
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.1639
Standard Deviation of all data: 0.0788
Largest Observation Concentration of all data: Xn = 0.3570
Test Statistic, high extreme of all data: Tn = 2.4501
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-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: 1.3569
Standard Deviation of all data: 0.5986
Largest Observation Concentration of all data: Xn = 2.5400
Test Statistic, high extreme of all data: Tn = 1.9764
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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Boron, total, mg/L**

**Location: APW-3**

Mean of all data: 15.6741
Standard Deviation of all data: 3.5366
Largest Observation Concentration of all data: Xn = 24.3000
Test Statistic, high extreme of all data: Tn = 2.4391
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-4**

Mean of all data: 0.8999
Standard Deviation of all data: 0.2422
Largest Observation Concentration of all data: Xn = 1.6100
Test Statistic, high extreme of all data: Tn = 2.9324
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 1.6100 | False | | 1 |

**Boron, total, mg/L**

**Location: APW-5**

Mean of all data: 0.0944
Standard Deviation of all data: 0.0113
Largest Observation Concentration of all data: Xn = 0.1190
Test Statistic, high extreme of all data: Tn = 2.1712
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.6627
Standard Deviation of all data: 0.3729
Largest Observation Concentration of all data: Xn = 1.5200
Test Statistic, high extreme of all data: Tn = 2.2988
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Boron, total, mg/L**

**Location: APW-7**

Mean of all data: 0.1384
Standard Deviation of all data: 0.0396
Largest Observation Concentration of all data: Xn = 0.2950
Test Statistic, high extreme of all data: Tn = 3.9572
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 0.2950 | False | | 1 |

**Boron, total, mg/L**

**Location: APW-8**

Mean of all data: 6.4071
Standard Deviation of all data: 1.4034
Largest Observation Concentration of all data: Xn = 8.6100
Test Statistic, high extreme of all data: Tn = 1.5697
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Boron, total, mg/L**
**Location: APW-9**

Mean of all data: 1.2143
Standard Deviation of all data: 0.4150
Largest Observation Concentration of all data: Xn = 2.5600
Test Statistic, high extreme of all data: Tn = 3.2422
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/10/2024 | 2.5600 | False | | 1 |

**Cadmium, dissolved, 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***

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cadmium, dissolved, mg/L**
**Location: APW-2**

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-3**

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-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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cadmium, dissolved, 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, 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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-2**

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-3**

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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chloride, dissolved, mg/L**
**Location: APW-1**

Mean of all data: 54.7
Standard Deviation of all data: 34.9
Largest Observation Concentration of all data: Xn = 159.0
Test Statistic, high extreme of all data: Tn = 3.0
T Critical of all data: Tcr = 2.7

| 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: 3.2
Standard Deviation of all data: 1.5
Largest Observation Concentration of all data: Xn = 7.0
Test Statistic, high extreme of all data: Tn = 2.5
T Critical of all data: Tcr = 2.7

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Chloride, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 3.7
Standard Deviation of all data: 2.2
Largest Observation Concentration of all data: Xn = 11.0
Test Statistic, high extreme of all data: Tn = 3.3
T Critical of all data: Tcr = 2.7

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chloride, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 40.8
Standard Deviation of all data: 12.1
Largest Observation Concentration of all data: Xn = 75.0
Test Statistic, high extreme of all data: Tn = 2.8
T Critical of all data: Tcr = 2.7

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 75.0 | False | | 1 |

**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: Xn = 20.0
Test Statistic, high extreme of all data: Tn = 0.0
T Critical of all data: Tcr = 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: 8.3
Standard Deviation of all data: 7.7
Largest Observation Concentration of all data: Xn = 25.0
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chloride, dissolved, mg/L**

**Location: APW-3**

Mean of all data: 21.6
Standard Deviation of all data: 5.8
Largest Observation Concentration of all data: Xn = 34.2
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***

**Chloride, dissolved, mg/L**

**Location: APW-4**

Mean of all data: 27.8
Standard Deviation of all data: 10.4
Largest Observation Concentration of all data: Xn = 53.0
Test Statistic, high extreme of all data: Tn = 2.4
T Critical of all data: Tcr = 2.7

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Chloride, dissolved, mg/L**

**Location: APW-5**

Mean of all data: 7.8
Standard Deviation of all data: 4.7
Largest Observation Concentration of all data: Xn = 22.0
Test Statistic, high extreme of all data: Tn = 3.0
T Critical of all data: Tcr = 2.7

| 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: 01/01/2019 to 10/15/2025**
**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: 5.1
Standard Deviation of all data: 6.3
Largest Observation Concentration of all data: Xn = 27.0
Test Statistic, high extreme of all data: Tn = 3.5
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: 31.1
Standard Deviation of all data: 9.1
Largest Observation Concentration of all data: Xn = 49.0
Test Statistic, high extreme of all data: Tn = 2.0
T Critical of all data: Tcr = 2.7

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Chloride, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 9.5
Standard Deviation of all data: 3.0
Largest Observation Concentration of all data: Xn = 18.0
Test Statistic, high extreme of all data: Tn = 2.8
T Critical of all data: Tcr = 2.7

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 12/09/2019 | 18.0 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chloride, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 9.4
Standard Deviation of all data: 12.7
Largest Observation Concentration of all data: Xn = 43.0
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 |
|---|---|---|---|---|

***No Outliers***

**Chromium, dissolved, mg/L**
**Location: APW-1**

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-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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-3**

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-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: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chromium, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 0.0114
Standard Deviation of all data: 0.0062
Largest Observation Concentration of all data: Xn = 0.0320
Test Statistic, high extreme of all data: Tn = 3.2988
T Critical of all data: Tcr = 2.7140

| 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 = 4.2258
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Chromium, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0047
Standard Deviation of all data: 0.0078
Largest Observation Concentration of all data: Xn = 0.0431
Test Statistic, high extreme of all data: Tn = 4.9157
T Critical of all data: Tcr = 2.7140

| 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: 0.0045
Standard Deviation of all data: 0.0083
Largest Observation Concentration of all data: Xn = 0.0465
Test Statistic, high extreme of all data: Tn = 5.0517
T Critical of all data: Tcr = 2.7140

| 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: 0.0043
Standard Deviation of all data: 0.0082
Largest Observation Concentration of all data: Xn = 0.0450
Test Statistic, high extreme of all data: Tn = 4.9635
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 0.0030
Standard Deviation of all data: 0.0019
Largest Observation Concentration of all data: Xn = 0.0115
Test Statistic, high extreme of all data: Tn = 4.4585
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0027
Standard Deviation of all data: 0.0008
Largest Observation Concentration of all data: Xn = 0.0060
Test Statistic, high extreme of all data: Tn = 4.0339
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 12/13/2021 | 0.0060 | False | | 1 |

**Chromium, total, mg/L**

**Location: APW-5**

Mean of all data: 0.0026
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: Xn = 0.0054
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 0.0054 | 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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-8**

Mean of all data: 0.0143
Standard Deviation of all data: 0.0089
Largest Observation Concentration of all data: Xn = 0.0438
Test Statistic, high extreme of all data: Tn = 3.3134
T Critical of all data: Tcr = 2.7140

| 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: 0.0025
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cobalt, dissolved, mg/L**
**Location: APW-1**

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-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***

**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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0000
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: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-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***

**Cobalt, dissolved, mg/L**
**Location: APW-5**

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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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-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***

**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: 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 2.3072
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Cobalt, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0048
Standard Deviation of all data: 0.0064
Largest Observation Concentration of all data: Xn = 0.0330
Test Statistic, high extreme of all data: Tn = 4.3967
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0330 | False | | 1 |

**Cobalt, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0077
Standard Deviation of all data: 0.0207
Largest Observation Concentration of all data: Xn = 0.1110
Test Statistic, high extreme of all data: Tn = 4.9875
T Critical of all data: Tcr = 2.7140

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cobalt, total, mg/L**

**Location: APW-11**

Mean of all data: 0.0064
Standard Deviation of all data: 0.0158
Largest Observation Concentration of all data: Xn = 0.0860
Test Statistic, high extreme of all data: Tn = 5.0225
T Critical of all data: Tcr = 2.7140

| 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: 0.0097
Standard Deviation of all data: 0.0133
Largest Observation Concentration of all data: Xn = 0.0723
Test Statistic, high extreme of all data: Tn = 4.7042
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cobalt, 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 = 0.0074
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 |
|---|---|---|---|---|
| 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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0027
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0074
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/27/2024 | 0.0074 | False | | 1 |

**Cobalt, 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: 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, total, 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: 01/01/2019 to 10/15/2025**
**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: 0.0055
Standard Deviation of all data: 0.0141
Largest Observation Concentration of all data: Xn = 0.0771
Test Statistic, high extreme of all data: Tn = 5.0718
T Critical of all data: Tcr = 2.7140

| 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: 0.0044
Standard Deviation of all data: 0.0028
Largest Observation Concentration of all data: Xn = 0.0119
Test Statistic, high extreme of all data: Tn = 2.7111
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0119 | False | | 1 |

**Copper, dissolved, mg/L**

**Location: APW-1**

Mean of all data: 0.0027
Standard Deviation of all data: 0.0008
Largest Observation Concentration of all data: Xn = 0.0068
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0075
Standard Deviation of all data: 0.0266
Largest Observation Concentration of all data: Xn = 0.1430
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.1430 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 0.0050
Standard Deviation of all data: 0.0122
Largest Observation Concentration of all data: Xn = 0.0671
Test Statistic, high extreme of all data: Tn = 5.0872
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0671 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-12**

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 = 5.0037
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0083 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-3**

Mean of all data: 0.0029
Standard Deviation of all data: 0.0014
Largest Observation Concentration of all data: Xn = 0.0083
Test Statistic, high extreme of all data: Tn = 3.8393
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0083 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0027
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0080
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 |
|---|---|---|---|---|
| 11/13/2024 | 0.0080 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-5**

Mean of all data: 0.0045
Standard Deviation of all data: 0.0106
Largest Observation Concentration of all data: Xn = 0.0584
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0584 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-6**

Mean of all data: 0.0037
Standard Deviation of all data: 0.0063
Largest Observation Concentration of all data: Xn = 0.0358
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0358 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Copper, dissolved, mg/L**
**Location: APW-7**

Mean of all data: 0.0030
Standard Deviation of all data: 0.0026
Largest Observation Concentration of all data: Xn = 0.0158
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 |
|---|---|---|---|---|
| 11/13/2024 | 0.0158 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 0.0050
Standard Deviation of all data: 0.0112
Largest Observation Concentration of all data: Xn = 0.0621
Test Statistic, high extreme of all data: Tn = 5.0749
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0621 | False | | 1 |

**Copper, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 0.0063
Standard Deviation of all data: 0.0199
Largest Observation Concentration of all data: Xn = 0.1060
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 |
|---|---|---|---|---|
| 06/03/2025 | 0.1060 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Copper, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0050
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0509
Test Statistic, high extreme of all data: Tn = 4.9854
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0509 | False | | 1 |

**Copper, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0119
Standard Deviation of all data: 0.0240
Largest Observation Concentration of all data: Xn = 0.0913
Test Statistic, high extreme of all data: Tn = 3.3068
T Critical of all data: Tcr = 2.7140

| 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: 0.0087
Standard Deviation of all data: 0.0200
Largest Observation Concentration of all data: Xn = 0.1070
Test Statistic, high extreme of all data: Tn = 4.9203
T Critical of all data: Tcr = 2.7140

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0063
Standard Deviation of all data: 0.0131
Largest Observation Concentration of all data: Xn = 0.0693
Test Statistic, high extreme of all data: Tn = 4.7939
T Critical of all data: Tcr = 2.6980

| 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: 0.0034
Standard Deviation of all data: 0.0038
Largest Observation Concentration of all data: Xn = 0.0221
Test Statistic, high extreme of all data: Tn = 4.8692
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0221 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Copper, total, mg/L**
**Location: APW-3**

Mean of all data: 0.0041
Standard Deviation of all data: 0.0045
Largest Observation Concentration of all data: Xn = 0.0232
Test Statistic, high extreme of all data: Tn = 4.2518
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0232 | False | | 1 |

**Copper, total, mg/L**
**Location: APW-4**

Mean of all data: 0.0047
Standard Deviation of all data: 0.0052
Largest Observation Concentration of all data: Xn = 0.0232
Test Statistic, high extreme of all data: Tn = 3.5757
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0232 | False | | 1 |

**Copper, total, mg/L**
**Location: APW-5**

Mean of all data: 0.0061
Standard Deviation of all data: 0.0148
Largest Observation Concentration of all data: Xn = 0.0772
Test Statistic, high extreme of all data: Tn = 4.8166
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0772 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Copper, total, mg/L**
**Location: APW-6**

Mean of all data: 0.0042
Standard Deviation of all data: 0.0081
Largest Observation Concentration of all data: Xn = 0.0455
Test Statistic, high extreme of all data: Tn = 5.0734
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0455 | False | | 1 |

**Copper, total, mg/L**
**Location: APW-7**

Mean of all data: 0.0036
Standard Deviation of all data: 0.0055
Largest Observation Concentration of all data: Xn = 0.0312
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 |
|---|---|---|---|---|
| 11/13/2024 | 0.0312 | False | | 1 |

**Copper, total, mg/L**
**Location: APW-8**

Mean of all data: 0.0089
Standard Deviation of all data: 0.0190
Largest Observation Concentration of all data: Xn = 0.0815
Test Statistic, high extreme of all data: Tn = 3.8245
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Copper, total, mg/L**
**Location: APW-9**

Mean of all data: 0.0075
Standard Deviation of all data: 0.0239
Largest Observation Concentration of all data: Xn = 0.1270
Test Statistic, high extreme of all data: Tn = 4.9994
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.1270 | False | | 1 |

**Cyanide, 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 = 0.003
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-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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 01/01/2019 to 10/15/2025**
**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: 0.003
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-3**

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-4**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Cyanide, 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 = 0.003
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-6**

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-7**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**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 = 0.003
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-9**

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***

**Fluoride, dissolved, mg/L**

**Location: APW-1**

Mean of all data: 0.24
Standard Deviation of all data: 0.11
Largest Observation Concentration of all data: Xn = 0.59
Test Statistic, high extreme of all data: Tn = 3.13
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 03/03/2025 | 0.59 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.09
Standard Deviation of all data: 0.08
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.88
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Fluoride, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 0.10
Standard Deviation of all data: 0.08
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.81
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Fluoride, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 0.31
Standard Deviation of all data: 0.05
Largest Observation Concentration of all data: Xn = 0.42
Test Statistic, high extreme of all data: Tn = 2.31
T Critical of all data: Tcr = 2.70

| 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: 01/01/2019 to 10/15/2025**
**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: 0.27
Standard Deviation of all data: 0.03
Largest Observation Concentration of all data: Xn = 0.37
Test Statistic, high extreme of all data: Tn = 3.05
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.37 | False | | 1 |

**Fluoride, dissolved, mg/L**

**Location: APW-3**

Mean of all data: 0.21
Standard Deviation of all data: 0.03
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.37
T Critical of all data: Tcr = 2.70

| 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: 01/01/2019 to 10/15/2025**
**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: 0.36
Standard Deviation of all data: 0.07
Largest Observation Concentration of all data: Xn = 0.45
Test Statistic, high extreme of all data: Tn = 1.26
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-5**

Mean of all data: 0.18
Standard Deviation of all data: 0.06
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.31
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Fluoride, dissolved, mg/L**

**Location: APW-6**

Mean of all data: 0.17
Standard Deviation of all data: 0.05
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.57
T Critical of all data: Tcr = 2.71

| 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: 01/01/2019 to 10/15/2025**
**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: 0.26
Standard Deviation of all data: 0.04
Largest Observation Concentration of all data: Xn = 0.38
Test Statistic, high extreme of all data: Tn = 3.37
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 07/29/2020 | 0.38 | False | | 1 |

**Fluoride, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 0.14
Standard Deviation of all data: 0.08
Largest Observation Concentration of all data: Xn = 0.25
Test Statistic, high extreme of all data: Tn = 1.47
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Fluoride, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 0.33
Standard Deviation of all data: 0.10
Largest Observation Concentration of all data: Xn = 0.55
Test Statistic, high extreme of all data: Tn = 2.15
T Critical of all data: Tcr = 2.70

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0230
Standard Deviation of all data: 0.0157
Largest Observation Concentration of all data: Xn = 0.1030
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/25/2025 | 0.1030 | False | | 1 |

**Iron, dissolved, mg/L**

**Location: APW-10**

Mean of all data: 0.0384
Standard Deviation of all data: 0.0973
Largest Observation Concentration of all data: Xn = 0.5350
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 0.0244
Standard Deviation of all data: 0.0234
Largest Observation Concentration of all data: Xn = 0.1440
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Iron, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 0.0291
Standard Deviation of all data: 0.0333
Largest Observation Concentration of all data: Xn = 0.1660
Test Statistic, high extreme of all data: Tn = 4.1074
T Critical of all data: Tcr = 2.6980

| 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: 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***

**Iron, dissolved, mg/L**
**Location: APW-2**

Mean of all data: 0.2316
Standard Deviation of all data: 0.2871
Largest Observation Concentration of all data: Xn = 1.0000
Test Statistic, high extreme of all data: Tn = 2.6764
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Iron, dissolved, mg/L**
**Location: APW-3**

Mean of all data: 3.4189
Standard Deviation of all data: 1.7110
Largest Observation Concentration of all data: Xn = 7.1200
Test Statistic, high extreme of all data: Tn = 2.1632
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-4**

Mean of all data: 5.3513
Standard Deviation of all data: 3.9376
Largest Observation Concentration of all data: Xn = 11.3000
Test Statistic, high extreme of all data: Tn = 1.5107
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-5**

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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Iron, 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***

**Iron, dissolved, mg/L**

**Location: APW-7**

Mean of all data: 0.0266
Standard Deviation of all data: 0.0211
Largest Observation Concentration of all data: Xn = 0.1130
Test Statistic, high extreme of all data: Tn = 4.1033
T Critical of all data: Tcr = 2.6980

| 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: 0.0200
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Iron, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 0.0214
Standard Deviation of all data: 0.0070
Largest Observation Concentration of all data: Xn = 0.0565
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 |
|---|---|---|---|---|
| 08/26/2019 | 0.0565 | False | | 1 |

**Iron, total, mg/L**
**Location: APW-1**

Mean of all data: 2.1801
Standard Deviation of all data: 3.1504
Largest Observation Concentration of all data: Xn = 16.2000
Test Statistic, high extreme of all data: Tn = 4.4502
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 16.2000 | False | | 1 |

**Iron, total, mg/L**
**Location: APW-10**

Mean of all data: 3.1446
Standard Deviation of all data: 8.5886
Largest Observation Concentration of all data: Xn = 44.5000
Test Statistic, high extreme of all data: Tn = 4.8151
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Iron, total, mg/L**

**Location: APW-11**

Mean of all data: 3.1255
Standard Deviation of all data: 10.6819
Largest Observation Concentration of all data: Xn = 56.8000
Test Statistic, high extreme of all data: Tn = 5.0248
T Critical of all data: Tcr = 2.7140

| 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: 3.4247
Standard Deviation of all data: 11.0374
Largest Observation Concentration of all data: Xn = 57.6000
Test Statistic, high extreme of all data: Tn = 4.9083
T Critical of all data: Tcr = 2.6980

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 2.3697
Standard Deviation of all data: 2.6366
Largest Observation Concentration of all data: Xn = 11.9000
Test Statistic, high extreme of all data: Tn = 3.6146
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 09/22/2023 | 11.9000 | False | | 1 |

**Iron, total, mg/L**

**Location: APW-3**

Mean of all data: 6.3026
Standard Deviation of all data: 2.7541
Largest Observation Concentration of all data: Xn = 15.4000
Test Statistic, high extreme of all data: Tn = 3.3032
T Critical of all data: Tcr = 2.6980

| 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: 12.0428
Standard Deviation of all data: 12.5149
Largest Observation Concentration of all data: Xn = 70.3000
Test Statistic, high extreme of all data: Tn = 4.6550
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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: 0.4167
Standard Deviation of all data: 0.5629
Largest Observation Concentration of all data: Xn = 2.2200
Test Statistic, high extreme of all data: Tn = 3.2034
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 2.2200 | False | | 1 |

**Iron, total, mg/L**

**Location: APW-6**

Mean of all data: 0.5775
Standard Deviation of all data: 0.6357
Largest Observation Concentration of all data: Xn = 2.5600
Test Statistic, high extreme of all data: Tn = 3.1187
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 03/03/2025 | 2.5600 | False | | 1 |

**Iron, total, mg/L**

**Location: APW-7**

Mean of all data: 0.4500
Standard Deviation of all data: 0.6245
Largest Observation Concentration of all data: Xn = 3.0900
Test Statistic, high extreme of all data: Tn = 4.2272
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 3.0900 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 2.3264
Standard Deviation of all data: 8.0841
Largest Observation Concentration of all data: Xn = 41.7000
Test Statistic, high extreme of all data: Tn = 4.8705
T Critical of all data: Tcr = 2.7140

| 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: 0.6544
Standard Deviation of all data: 0.9203
Largest Observation Concentration of all data: Xn = 3.8600
Test Statistic, high extreme of all data: Tn = 3.4834
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 3.8600 | False | | 1 |

**Lead, dissolved, 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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0001
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 10/15/2025 | 0.0010 | False | | 1 |

**Lead, dissolved, mg/L**
**Location: APW-11**

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 = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 10/15/2025 | 0.0010 | False | | 1 |

**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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0002
Largest Observation Concentration of all data: Xn = 0.0013
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 |
|---|---|---|---|---|
| 12/21/2022 | 0.0013 | False | | 1 |

**Lead, dissolved, 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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Lead, dissolved, 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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 0.0005
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0013
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/18/2022 | 0.0013 | 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0001
Largest Observation Concentration of all data: Xn = 0.0010
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 10/15/2025 | 0.0010 | False | | 1 |

**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Lead, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0028
Standard Deviation of all data: 0.0033
Largest Observation Concentration of all data: Xn = 0.0162
Test Statistic, high extreme of all data: Tn = 4.0779
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0162 | False | | 1 |

**Lead, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0036
Standard Deviation of all data: 0.0088
Largest Observation Concentration of all data: Xn = 0.0469
Test Statistic, high extreme of all data: Tn = 4.8969
T Critical of all data: Tcr = 2.7140

| 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: 0.0035
Standard Deviation of all data: 0.0113
Largest Observation Concentration of all data: Xn = 0.0605
Test Statistic, high extreme of all data: Tn = 5.0252
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0031
Standard Deviation of all data: 0.0084
Largest Observation Concentration of all data: Xn = 0.0438
Test Statistic, high extreme of all data: Tn = 4.8352
T Critical of all data: Tcr = 2.6980

| 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: Xn = 0.0011
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, total, mg/L**

**Location: APW-2**

Mean of all data: 0.0008
Standard Deviation of all data: 0.0007
Largest Observation Concentration of all data: Xn = 0.0039
Test Statistic, high extreme of all data: Tn = 4.2932
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0012
Standard Deviation of all data: 0.0014
Largest Observation Concentration of all data: Xn = 0.0068
Test Statistic, high extreme of all data: Tn = 4.1661
T Critical of all data: Tcr = 2.6980

| 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: 0.0012
Standard Deviation of all data: 0.0012
Largest Observation Concentration of all data: Xn = 0.0052
Test Statistic, high extreme of all data: Tn = 3.2356
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 12/13/2021 | 0.0052 | False | | 1 |

**Lead, total, mg/L**
**Location: APW-5**

Mean of all data: 0.0007
Standard Deviation of all data: 0.0006
Largest Observation Concentration of all data: Xn = 0.0032
Test Statistic, high extreme of all data: Tn = 3.9674
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 0.0032 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Lead, total, mg/L**
**Location: APW-6**

Mean of all data: 0.0010
Standard Deviation of all data: 0.0014
Largest Observation Concentration of all data: Xn = 0.0075
Test Statistic, high extreme of all data: Tn = 4.5189
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/25/2025 | 0.0075 | False | | 1 |

**Lead, total, mg/L**
**Location: APW-7**

Mean of all data: 0.0006
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0020
Test Statistic, high extreme of all data: Tn = 4.3952
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0020 | False | | 1 |

**Lead, total, mg/L**
**Location: APW-8**

Mean of all data: 0.0029
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0484
Test Statistic, high extreme of all data: Tn = 4.9477
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0009
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0043
Test Statistic, high extreme of all data: Tn = 3.4103
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0043 | False | | 1 |

**Manganese, dissolved, mg/L**

**Location: APW-1**

Mean of all data: 0.0096
Standard Deviation of all data: 0.0137
Largest Observation Concentration of all data: Xn = 0.0686
Test Statistic, high extreme of all data: Tn = 4.2922
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/25/2025 | 0.0686 | False | | 1 |

**Manganese, dissolved, mg/L**

**Location: APW-10**

Mean of all data: 0.0051
Standard Deviation of all data: 0.0079
Largest Observation Concentration of all data: Xn = 0.0452
Test Statistic, high extreme of all data: Tn = 5.0814
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0189
Standard Deviation of all data: 0.0468
Largest Observation Concentration of all data: Xn = 0.2380
Test Statistic, high extreme of all data: Tn = 4.6809
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/27/2024 | 0.2380 | False | | 1 |

**Manganese, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 1.2714
Standard Deviation of all data: 0.4825
Largest Observation Concentration of all data: Xn = 2.4900
Test Statistic, high extreme of all data: Tn = 2.5257
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-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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Manganese, dissolved, mg/L**

**Location: APW-2**

Mean of all data: 0.2124
Standard Deviation of all data: 0.1434
Largest Observation Concentration of all data: Xn = 0.5130
Test Statistic, high extreme of all data: Tn = 2.0965
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-3**

Mean of all data: 1.1129
Standard Deviation of all data: 0.3438
Largest Observation Concentration of all data: Xn = 1.8300
Test Statistic, high extreme of all data: Tn = 2.0857
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-4**

Mean of all data: 1.3197
Standard Deviation of all data: 0.3942
Largest Observation Concentration of all data: Xn = 2.1200
Test Statistic, high extreme of all data: Tn = 2.0301
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Manganese, dissolved, mg/L**

**Location: APW-5**

Mean of all data: 0.0037
Standard Deviation of all data: 0.0012
Largest Observation Concentration of all data: Xn = 0.0098
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/27/2024 | 0.0098 | False | | 1 |

**Manganese, dissolved, mg/L**

**Location: APW-6**

Mean of all data: 0.0045
Standard Deviation of all data: 0.0037
Largest Observation Concentration of all data: Xn = 0.0224
Test Statistic, high extreme of all data: Tn = 4.8797
T Critical of all data: Tcr = 2.7140

| 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: 0.0404
Standard Deviation of all data: 0.0807
Largest Observation Concentration of all data: Xn = 0.3690
Test Statistic, high extreme of all data: Tn = 4.0724
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/06/2021 | 0.3690 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0035
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***

**Manganese, dissolved, mg/L**

**Location: APW-9**

Mean of all data: 0.0037
Standard Deviation of all data: 0.0009
Largest Observation Concentration of all data: Xn = 0.0080
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 |
|---|---|---|---|---|
| 08/26/2019 | 0.0080 | False | | 1 |

**Manganese, total, mg/L**

**Location: APW-1**

Mean of all data: 0.2320
Standard Deviation of all data: 0.3754
Largest Observation Concentration of all data: Xn = 1.9400
Test Statistic, high extreme of all data: Tn = 4.5498
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 1.9400 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Manganese, total, mg/L**

**Location: APW-10**

Mean of all data: 0.2383
Standard Deviation of all data: 0.6454
Largest Observation Concentration of all data: Xn = 3.4300
Test Statistic, high extreme of all data: Tn = 4.9456
T Critical of all data: Tcr = 2.7140

| 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: 0.2691
Standard Deviation of all data: 0.6896
Largest Observation Concentration of all data: Xn = 3.6900
Test Statistic, high extreme of all data: Tn = 4.9606
T Critical of all data: Tcr = 2.7140

| 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: 3.2287
Standard Deviation of all data: 2.5108
Largest Observation Concentration of all data: Xn = 12.0000
Test Statistic, high extreme of all data: Tn = 3.4934
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: Xn = 0.0683
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***

**Manganese, total, mg/L**

**Location: APW-2**

Mean of all data: 0.3048
Standard Deviation of all data: 0.1709
Largest Observation Concentration of all data: Xn = 0.7790
Test Statistic, high extreme of all data: Tn = 2.7744
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 09/22/2023 | 0.7790 | False | | 1 |

**Manganese, total, mg/L**

**Location: APW-3**

Mean of all data: 1.2078
Standard Deviation of all data: 0.3436
Largest Observation Concentration of all data: Xn = 1.9500
Test Statistic, high extreme of all data: Tn = 2.1601
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: 01/01/2019 to 10/15/2025**
**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: 1.5701
Standard Deviation of all data: 0.4009
Largest Observation Concentration of all data: Xn = 2.2800
Test Statistic, high extreme of all data: Tn = 1.7707
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Manganese, total, mg/L**

**Location: APW-5**

Mean of all data: 0.0563
Standard Deviation of all data: 0.0643
Largest Observation Concentration of all data: Xn = 0.2550
Test Statistic, high extreme of all data: Tn = 3.0911
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/27/2024 | 0.2550 | False | | 1 |

**Manganese, total, mg/L**

**Location: APW-6**

Mean of all data: 0.0375
Standard Deviation of all data: 0.0431
Largest Observation Concentration of all data: Xn = 0.1940
Test Statistic, high extreme of all data: Tn = 3.6361
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 03/03/2025 | 0.1940 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Manganese, total, mg/L**

**Location: APW-7**

Mean of all data: 0.0839
Standard Deviation of all data: 0.1262
Largest Observation Concentration of all data: Xn = 0.6360
Test Statistic, high extreme of all data: Tn = 4.3748
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/06/2021 | 0.6360 | False | | 1 |

**Manganese, total, mg/L**

**Location: APW-8**

Mean of all data: 0.1563
Standard Deviation of all data: 0.5156
Largest Observation Concentration of all data: Xn = 2.7100
Test Statistic, high extreme of all data: Tn = 4.9531
T Critical of all data: Tcr = 2.7140

| 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: 0.0653
Standard Deviation of all data: 0.1029
Largest Observation Concentration of all data: Xn = 0.4310
Test Statistic, high extreme of all data: Tn = 3.5548
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/30/2021 | 0.4310 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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 = 0.0000
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-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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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 = 0.0000
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: 01/01/2019 to 10/15/2025**
**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 = 0.0000
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-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 = 0.0000
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-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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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***

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 01/01/2019 to 10/15/2025**
**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: 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-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, 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 = 0.0001
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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-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 = 0.0000
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-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 = 0.0000
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**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: 0.0000
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***

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**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: 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-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***

**Nickel, dissolved, mg/L**
**Location: APW-12**

Mean of all data: 0.0073
Standard Deviation of all data: 0.0030
Largest Observation Concentration of all data: Xn = 0.0135
Test Statistic, high extreme of all data: Tn = 2.0714
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: 01/01/2019 to 10/15/2025**
**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: 0.0025
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-3**

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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Nickel, dissolved, 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***

**Nickel, dissolved, mg/L**
**Location: APW-5**

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-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: 01/01/2019 to 10/15/2025**
**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 = 2.7132
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 12/09/2019 | 0.0119 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Nickel, total, mg/L**
**Location: APW-1**

Mean of all data: 0.0081
Standard Deviation of all data: 0.0104
Largest Observation Concentration of all data: Xn = 0.0520
Test Statistic, high extreme of all data: Tn = 4.2313
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0520 | False | | 1 |

**Nickel, total, mg/L**
**Location: APW-10**

Mean of all data: 0.0103
Standard Deviation of all data: 0.0299
Largest Observation Concentration of all data: Xn = 0.1600
Test Statistic, high extreme of all data: Tn = 5.0001
T Critical of all data: Tcr = 2.7140

| 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: 0.0100
Standard Deviation of all data: 0.0283
Largest Observation Concentration of all data: Xn = 0.1520
Test Statistic, high extreme of all data: Tn = 5.0211
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Nickel, total, mg/L**
**Location: APW-12**

Mean of all data: 0.0166
Standard Deviation of all data: 0.0183
Largest Observation Concentration of all data: Xn = 0.1040
Test Statistic, high extreme of all data: Tn = 4.7684
T Critical of all data: Tcr = 2.6980

| 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: 0.0028
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0078
Test Statistic, high extreme of all data: Tn = 4.4408
T Critical of all data: Tcr = 2.6980

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0029
Standard Deviation of all data: 0.0013
Largest Observation Concentration of all data: Xn = 0.0077
Test Statistic, high extreme of all data: Tn = 3.6914
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/11/2021 | 0.0077 | False | | 1 |

**Nickel, total, mg/L**
**Location: APW-4**

Mean of all data: 0.0026
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: Xn = 0.0051
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 |
|---|---|---|---|---|
| 08/27/2019 | 0.0051 | False | | 1 |

**Nickel, total, mg/L**
**Location: APW-5**

Mean of all data: 0.0029
Standard Deviation of all data: 0.0014
Largest Observation Concentration of all data: Xn = 0.0089
Test Statistic, high extreme of all data: Tn = 4.2087
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 0.0089 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Nickel, total, mg/L**
**Location: APW-6**

Mean of all data: 0.0027
Standard Deviation of all data: 0.0011
Largest Observation Concentration of all data: Xn = 0.0082
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 03/03/2025 | 0.0082 | False | | 1 |

**Nickel, total, mg/L**
**Location: APW-7**

Mean of all data: 0.0029
Standard Deviation of all data: 0.0015
Largest Observation Concentration of all data: Xn = 0.0099
Test Statistic, high extreme of all data: Tn = 4.6931
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/26/2021 | 0.0099 | False | | 1 |

**Nickel, total, mg/L**
**Location: APW-8**

Mean of all data: 0.0076
Standard Deviation of all data: 0.0223
Largest Observation Concentration of all data: Xn = 0.1200
Test Statistic, high extreme of all data: Tn = 5.0431
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0053
Standard Deviation of all data: 0.0050
Largest Observation Concentration of all data: Xn = 0.0194
Test Statistic, high extreme of all data: Tn = 2.8110
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/27/2020 | 0.0194 | False | | 1 |

**Nitrate nitrogen, dissolved, mg/L**

**Location: APW-1**

Mean of all data: 4.154
Standard Deviation of all data: 1.406
Largest Observation Concentration of all data: Xn = 7.040
Test Statistic, high extreme of all data: Tn = 2.052
T Critical of all data: Tcr = 2.714

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Nitrate nitrogen, dissolved, mg/L**

**Location: APW-10**

Mean of all data: 2.690
Standard Deviation of all data: 0.560
Largest Observation Concentration of all data: Xn = 4.300
Test Statistic, high extreme of all data: Tn = 2.876
T Critical of all data: Tcr = 2.714

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 01/29/2019 | 4.300 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 2.895
Standard Deviation of all data: 1.277
Largest Observation Concentration of all data: Xn = 5.470
Test Statistic, high extreme of all data: Tn = 2.016
T Critical of all data: Tcr = 2.714

| 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: 1.345
Standard Deviation of all data: 1.646
Largest Observation Concentration of all data: Xn = 5.500
Test Statistic, high extreme of all data: Tn = 2.524
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-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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Nitrate nitrogen, dissolved, mg/L**
**Location: APW-2**

Mean of all data: 0.032
Standard Deviation of all data: 0.016
Largest Observation Concentration of all data: Xn = 0.081
Test Statistic, high extreme of all data: Tn = 3.002
T Critical of all data: Tcr = 2.698

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.081 | False | | 1 |

**Nitrate nitrogen, dissolved, mg/L**
**Location: APW-3**

Mean of all data: 0.026
Standard Deviation of all data: 0.005
Largest Observation Concentration of all data: Xn = 0.050
Test Statistic, high extreme of all data: Tn = 5.004
T Critical of all data: Tcr = 2.698

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 02/17/2020 | <0.050 | True | | 1 |

**Nitrate nitrogen, dissolved, mg/L**
**Location: APW-4**

Mean of all data: 0.438
Standard Deviation of all data: 1.079
Largest Observation Concentration of all data: Xn = 4.160
Test Statistic, high extreme of all data: Tn = 3.449
T Critical of all data: Tcr = 2.698

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 4.160 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 2.551
Standard Deviation of all data: 0.673
Largest Observation Concentration of all data: Xn = 4.290
Test Statistic, high extreme of all data: Tn = 2.582
T Critical of all data: Tcr = 2.714

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Nitrate nitrogen, dissolved, mg/L**

**Location: APW-6**

Mean of all data: 0.398
Standard Deviation of all data: 0.379
Largest Observation Concentration of all data: Xn = 2.130
Test Statistic, high extreme of all data: Tn = 4.566
T Critical of all data: Tcr = 2.714

| 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: 1.750
Standard Deviation of all data: 1.383
Largest Observation Concentration of all data: Xn = 5.000
Test Statistic, high extreme of all data: Tn = 2.351
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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Nitrate nitrogen, dissolved, mg/L**

**Location: APW-8**

Mean of all data: 3.866
Standard Deviation of all data: 0.838
Largest Observation Concentration of all data: Xn = 5.770
Test Statistic, high extreme of all data: Tn = 2.273
T Critical of all data: Tcr = 2.714

| 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: 3.272
Standard Deviation of all data: 1.241
Largest Observation Concentration of all data: Xn = 8.330
Test Statistic, high extreme of all data: Tn = 4.077
T Critical of all data: Tcr = 2.698

| 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: 01/01/2019 to 10/15/2025**
**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 = 0.00

| 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: 0.01
Largest Observation Concentration of all data: Xn = 0.10
Test Statistic, high extreme of all data: Tn = 4.90
T Critical of all data: Tcr = 2.68

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/10/2024 | 0.10 | False | | 1 |

**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 = 5.00
T Critical of all data: Tcr = 2.70

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**pH (field), STD**
**Location: APW-1**

Mean of all data: 6.93
Standard Deviation of all data: 0.22
Largest Observation Concentration of all data: Xn = 7.27
Test Statistic, high extreme of all data: Tn = 1.58
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**pH (field), STD**
**Location: APW-10**

Mean of all data: 7.51
Standard Deviation of all data: 0.15
Largest Observation Concentration of all data: Xn = 7.75
Test Statistic, high extreme of all data: Tn = 1.64
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**pH (field), STD**
**Location: APW-11**

Mean of all data: 7.33
Standard Deviation of all data: 0.16
Largest Observation Concentration of all data: Xn = 7.57
Test Statistic, high extreme of all data: Tn = 1.46
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**pH (field), STD**
**Location: APW-12**

Mean of all data: 6.87
Standard Deviation of all data: 0.18
Largest Observation Concentration of all data: Xn = 7.24
Test Statistic, high extreme of all data: Tn = 2.09
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**pH (field), STD**
**Location: APW-13**

Mean of all data: 4.70
Standard Deviation of all data: 4.07
Largest Observation Concentration of all data: Xn = 7.06
Test Statistic, high extreme of all data: Tn = 0.58
T Critical of all data: Tcr = 1.15

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/25/2025 | 0.00 | False | -1 | |

**pH (field), STD**
**Location: APW-2**

Mean of all data: 6.82
Standard Deviation of all data: 0.16
Largest Observation Concentration of all data: Xn = 7.08
Test Statistic, high extreme of all data: Tn = 1.62
T Critical of all data: Tcr = 2.70

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**pH (field), STD**
**Location: APW-3**

Mean of all data: 7.28
Standard Deviation of all data: 0.16
Largest Observation Concentration of all data: Xn = 7.51
Test Statistic, high extreme of all data: Tn = 1.43
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**pH (field), STD**
**Location: APW-4**

Mean of all data: 6.81
Standard Deviation of all data: 0.13
Largest Observation Concentration of all data: Xn = 7.05
Test Statistic, high extreme of all data: Tn = 1.77
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 04/25/2023 | 6.42 | False | -1 | |

**pH (field), STD**
**Location: APW-5**

Mean of all data: 7.30
Standard Deviation of all data: 0.15
Largest Observation Concentration of all data: Xn = 7.59
Test Statistic, high extreme of all data: Tn = 1.99
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/30/2021 | 6.87 | False | -1 | |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**pH (field), STD**
**Location: APW-6**

Mean of all data: 7.12
Standard Deviation of all data: 0.18
Largest Observation Concentration of all data: Xn = 7.53
Test Statistic, high extreme of all data: Tn = 2.27
T Critical of all data: Tcr = 2.71

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**pH (field), STD**
**Location: APW-7**

Mean of all data: 6.95
Standard Deviation of all data: 0.16
Largest Observation Concentration of all data: Xn = 7.15
Test Statistic, high extreme of all data: Tn = 1.28
T Critical of all data: Tcr = 2.70

| 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: 0.16
Largest Observation Concentration of all data: Xn = 7.56
Test Statistic, high extreme of all data: Tn = 1.50
T Critical of all data: Tcr = 2.71

| 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: 01/01/2019 to 10/15/2025**
**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: 6.93
Standard Deviation of all data: 0.17
Largest Observation Concentration of all data: Xn = 7.24
Test Statistic, high extreme of all data: Tn = 1.81
T Critical of all data: Tcr = 2.70

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|

***No Outliers***

**Selenium, dissolved, mg/L**
**Location: APW-1**

Mean of all data: 0.0200
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-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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Selenium, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 0.0209
Standard Deviation of all data: 0.0048
Largest Observation Concentration of all data: Xn = 0.0453
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 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-13**

Mean of all data: 0.0000
Standard Deviation of all data: 0.0000
Largest Observation Concentration of all data: Xn = 0.0873
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: 01/01/2019 to 10/15/2025**
**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: 0.0200
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-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***

**Selenium, dissolved, mg/L**

**Location: APW-4**

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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Selenium, dissolved, mg/L**

**Location: APW-5**

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-6**

Mean of all data: 0.0208
Standard Deviation of all data: 0.0043
Largest Observation Concentration of all data: Xn = 0.0428
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 08/26/2024 | 0.0428 | False | | 1 |

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Selenium, dissolved, mg/L**

**Location: APW-8**

Mean of all data: 0.0550
Standard Deviation of all data: 0.0250
Largest Observation Concentration of all data: Xn = 0.0930
Test Statistic, high extreme of all data: Tn = 1.5228
T Critical of all data: Tcr = 2.7140

| 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: 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-1**

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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0210
Standard Deviation of all data: 0.0053
Largest Observation Concentration of all data: Xn = 0.0479
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**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: 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-5**

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-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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0610
Standard Deviation of all data: 0.0238
Largest Observation Concentration of all data: Xn = 0.1010
Test Statistic, high extreme of all data: Tn = 1.6814
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.004
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, 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: 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, 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: 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 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, 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 = 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, dissolved, mg/L**
**Location: APW-2**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.004
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, dissolved, mg/L**
**Location: APW-4**

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, dissolved, mg/L**
**Location: APW-5**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.004
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, dissolved, mg/L**
**Location: APW-7**

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, dissolved, mg/L**
**Location: APW-8**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.004
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-1**

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-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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Silver, total, mg/L**
**Location: APW-2**

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-3**

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-4**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.004
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-6**

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-7**

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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.004
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-9**

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***

**Specific Conductance @ 25C (field), micromhos/cm**
**Location: APW-1**

Mean of all data: 511
Standard Deviation of all data: 185
Largest Observation Concentration of all data: Xn = 1030
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 |
|---|---|---|---|---|
| 09/17/2021 | 1030 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Specific Conductance @ 25C (field), micromhos/cm**
**Location: APW-10**

Mean of all data: 541
Standard Deviation of all data: 117
Largest Observation Concentration of all data: Xn = 809
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-11**

Mean of all data: 643
Standard Deviation of all data: 191
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: 798
Standard Deviation of all data: 175
Largest Observation Concentration of all data: Xn = 1180
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Specific Conductance @ 25C (field), micromhos/cm**
**Location: APW-13**

Mean of all data: 610
Standard Deviation of all data: 567
Largest Observation Concentration of all data: Xn = 1120
Test Statistic, high extreme of all data: Tn = 1
T Critical of all data: Tcr = 1

| 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: 663
Standard Deviation of all data: 162
Largest Observation Concentration of all data: Xn = 1110
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 |
|---|---|---|---|---|
| 09/17/2021 | 1110 | False | | 1 |

**Specific Conductance @ 25C (field), micromhos/cm**
**Location: APW-3**

Mean of all data: 1142
Standard Deviation of all data: 198
Largest Observation Concentration of all data: Xn = 1640
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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 781
Standard Deviation of all data: 115
Largest Observation Concentration of all data: Xn = 1040
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-5**

Mean of all data: 528
Standard Deviation of all data: 81
Largest Observation Concentration of all data: Xn = 715
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-6**

Mean of all data: 553
Standard Deviation of all data: 115
Largest Observation Concentration of all data: Xn = 806
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Specific Conductance @ 25C (field), micromhos/cm**
**Location: APW-7**

Mean of all data: 645
Standard Deviation of all data: 103
Largest Observation Concentration of all data: Xn = 906
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-8**

Mean of all data: 869
Standard Deviation of all data: 172
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: 1186
Standard Deviation of all data: 318
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: 01/01/2019 to 10/15/2025**
**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: 14
Standard Deviation of all data: 3
Largest Observation Concentration of all data: Xn = 21
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***

**Sulfate, dissolved, mg/L**
**Location: APW-10**

Mean of all data: 80
Standard Deviation of all data: 25
Largest Observation Concentration of all data: Xn = 126
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***

**Sulfate, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 97
Standard Deviation of all data: 66
Largest Observation Concentration of all data: Xn = 309
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 | 309 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 47
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: 14
Standard Deviation of all data: 11
Largest Observation Concentration of all data: Xn = 49
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 | 49 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Sulfate, dissolved, mg/L**
**Location: APW-3**

Mean of all data: 58
Standard Deviation of all data: 26
Largest Observation Concentration of all data: Xn = 141
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 | 141 | False | | 1 |

**Sulfate, dissolved, mg/L**
**Location: APW-4**

Mean of all data: 24
Standard Deviation of all data: 12
Largest Observation Concentration of all data: Xn = 49
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***

**Sulfate, dissolved, mg/L**
**Location: APW-5**

Mean of all data: 31
Standard Deviation of all data: 12
Largest Observation Concentration of all data: Xn = 70
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 | 70 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: Xn = 37
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***

**Sulfate, dissolved, mg/L**
**Location: APW-7**

Mean of all data: 25
Standard Deviation of all data: 6
Largest Observation Concentration of all data: Xn = 41
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***

**Sulfate, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 234
Standard Deviation of all data: 83
Largest Observation Concentration of all data: Xn = 389
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: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Sulfate, dissolved, mg/L**
**Location: APW-9**

Mean of all data: 425
Standard Deviation of all data: 145
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: 0.0010
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, 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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, 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***

**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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0010
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, dissolved, mg/L**
**Location: APW-3**

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, dissolved, 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***

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0010
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, 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***

**Thallium, dissolved, mg/L**

**Location: APW-7**

Mean of all data: 0.0011
Standard Deviation of all data: 0.0003
Largest Observation Concentration of all data: Xn = 0.0025
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 |
|---|---|---|---|---|
| 08/25/2025 | 0.0025 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0010
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, 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***

**Thallium, 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: 01/01/2019 to 10/15/2025**
**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 = 5.0037
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0011
Standard Deviation of all data: 0.0005
Largest Observation Concentration of all data: Xn = 0.0036
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 |
|---|---|---|---|---|
| 08/25/2025 | 0.0036 | False | | 1 |

**Thallium, total, mg/L**
**Location: APW-3**

Mean of all data: 0.0010
Standard Deviation of all data: 0.0002
Largest Observation Concentration of all data: Xn = 0.0021
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 |
|---|---|---|---|---|
| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Thallium, 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***

**Thallium, 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***

**Thallium, 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Thallium, 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***

**Thallium, 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***

**Thallium, 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: 01/01/2019 to 10/15/2025**
**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: 262
Standard Deviation of all data: 78
Largest Observation Concentration of all data: Xn = 420
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-10**

Mean of all data: 320
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: 386
Standard Deviation of all data: 127
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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Total Dissolved Solids, mg/L**
**Location: APW-12**

Mean of all data: 454
Standard Deviation of all data: 100
Largest Observation Concentration of all data: Xn = 730
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 | 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: Xn = 624
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***

**Total Dissolved Solids, mg/L**
**Location: APW-2**

Mean of all data: 377
Standard Deviation of all data: 89
Largest Observation Concentration of all data: Xn = 544
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: 01/01/2019 to 10/15/2025**
**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: 719
Standard Deviation of all data: 104
Largest Observation Concentration of all data: Xn = 952
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-4**

Mean of all data: 446
Standard Deviation of all data: 54
Largest Observation Concentration of all data: Xn = 578
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-5**

Mean of all data: 292
Standard Deviation of all data: 50
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 |
|---|---|---|---|---|
| 04/25/2023 | 142 | False | -1 | |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**Total Dissolved Solids, mg/L**
**Location: APW-6**

Mean of all data: 304
Standard Deviation of all data: 50
Largest Observation Concentration of all data: Xn = 404
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: 351
Standard Deviation of all data: 40
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: 584
Standard Deviation of all data: 103
Largest Observation Concentration of all data: Xn = 766
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: 01/01/2019 to 10/15/2025**
**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: 899
Standard Deviation of all data: 250
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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 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-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***

**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: 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**LT Multiplier: x 0.50**
**Confidence Level: 95%**
**Number of Outliers: One Outlier**
**Transform: None**

**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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0057
Standard Deviation of all data: 0.0029
Largest Observation Concentration of all data: Xn = 0.0194
Test Statistic, high extreme of all data: Tn = 4.7697
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0194 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0075
Standard Deviation of all data: 0.0110
Largest Observation Concentration of all data: Xn = 0.0622
Test Statistic, high extreme of all data: Tn = 4.9699
T Critical of all data: Tcr = 2.7140

| 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: 0.0079
Standard Deviation of all data: 0.0140
Largest Observation Concentration of all data: Xn = 0.0790
Test Statistic, high extreme of all data: Tn = 5.0690
T Critical of all data: Tcr = 2.7140

| 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: 0.0086
Standard Deviation of all data: 0.0164
Largest Observation Concentration of all data: Xn = 0.0894
Test Statistic, high extreme of all data: Tn = 4.9393
T Critical of all data: Tcr = 2.6980

| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0012
Largest Observation Concentration of all data: Xn = 0.0114
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 |
|---|---|---|---|---|
| 09/22/2023 | 0.0114 | False | | 1 |

**Vanadium, total, mg/L**

**Location: APW-3**

Mean of all data: 0.0054
Standard Deviation of all data: 0.0021
Largest Observation Concentration of all data: Xn = 0.0160
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 |
|---|---|---|---|---|
| 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Vanadium, total, mg/L**
**Location: APW-4**

Mean of all data: 0.0052
Standard Deviation of all data: 0.0010
Largest Observation Concentration of all data: Xn = 0.0103
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 |
|---|---|---|---|---|
| 12/13/2021 | 0.0103 | 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: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Vanadium, total, 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***

**Vanadium, total, mg/L**

**Location: APW-8**

Mean of all data: 0.0072
Standard Deviation of all data: 0.0092
Largest Observation Concentration of all data: Xn = 0.0522
Test Statistic, high extreme of all data: Tn = 4.9021
T Critical of all data: Tcr = 2.7140

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0054
Standard Deviation of all data: 0.0021
Largest Observation Concentration of all data: Xn = 0.0162
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| 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: 0.0072
Standard Deviation of all data: 0.0118
Largest Observation Concentration of all data: Xn = 0.0675
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0675 | False | | 1 |

**Zinc, dissolved, mg/L**
**Location: APW-11**

Mean of all data: 0.0060
Standard Deviation of all data: 0.0054
Largest Observation Concentration of all data: Xn = 0.0338
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0338 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**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: 0.0050
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: 01/01/2019 to 10/15/2025**
**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: 0.0050
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-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***

**Zinc, dissolved, mg/L**

**Location: APW-5**

Mean of all data: 0.0060
Standard Deviation of all data: 0.0051
Largest Observation Concentration of all data: Xn = 0.0319
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0319 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**
**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Zinc, dissolved, mg/L**
**Location: APW-6**

Mean of all data: 0.0056
Standard Deviation of all data: 0.0030
Largest Observation Concentration of all data: Xn = 0.0211
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0211 | False | | 1 |

**Zinc, dissolved, mg/L**
**Location: APW-7**

Mean of all data: 0.0053
Standard Deviation of all data: 0.0018
Largest Observation Concentration of all data: Xn = 0.0143
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 |
|---|---|---|---|---|
| 11/13/2024 | 0.0143 | False | | 1 |

**Zinc, dissolved, mg/L**
**Location: APW-8**

Mean of all data: 0.0056
Standard Deviation of all data: 0.0033
Largest Observation Concentration of all data: Xn = 0.0227
Test Statistic, high extreme of all data: Tn = 5.1025
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0227 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0067
Standard Deviation of all data: 0.0089
Largest Observation Concentration of all data: Xn = 0.0514
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 |
|---|---|---|---|---|
| 06/03/2025 | 0.0514 | False | | 1 |

**Zinc, total, mg/L**

**Location: APW-1**

Mean of all data: 0.0100
Standard Deviation of all data: 0.0129
Largest Observation Concentration of all data: Xn = 0.0680
Test Statistic, high extreme of all data: Tn = 4.4907
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0680 | False | | 1 |

**Zinc, total, mg/L**

**Location: APW-10**

Mean of all data: 0.0150
Standard Deviation of all data: 0.0318
Largest Observation Concentration of all data: Xn = 0.1680
Test Statistic, high extreme of all data: Tn = 4.8176
T Critical of all data: Tcr = 2.7140

| 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: 01/01/2019 to 10/15/2025**
**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: 0.0138
Standard Deviation of all data: 0.0348
Largest Observation Concentration of all data: Xn = 0.1890
Test Statistic, high extreme of all data: Tn = 5.0278
T Critical of all data: Tcr = 2.7140

| 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: 0.0138
Standard Deviation of all data: 0.0347
Largest Observation Concentration of all data: Xn = 0.1850
Test Statistic, high extreme of all data: Tn = 4.9266
T Critical of all data: Tcr = 2.6980

| 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: 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: 01/01/2019 to 10/15/2025**
**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: 0.0069
Standard Deviation of all data: 0.0054
Largest Observation Concentration of all data: Xn = 0.0265
Test Statistic, high extreme of all data: Tn = 3.5928
T Critical of all data: Tcr = 2.6980

| 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: 0.0076
Standard Deviation of all data: 0.0071
Largest Observation Concentration of all data: Xn = 0.0371
Test Statistic, high extreme of all data: Tn = 4.1392
T Critical of all data: Tcr = 2.6980

| 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: 0.0083
Standard Deviation of all data: 0.0071
Largest Observation Concentration of all data: Xn = 0.0369
Test Statistic, high extreme of all data: Tn = 4.0508
T Critical of all data: Tcr = 2.6980

| 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

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**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: 0.0068
Standard Deviation of all data: 0.0079
Largest Observation Concentration of all data: Xn = 0.0463
Test Statistic, high extreme of all data: Tn = 5.0059
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0463 | False | | 1 |

**Zinc, total, mg/L**
**Location: APW-6**

Mean of all data: 0.0060
Standard Deviation of all data: 0.0044
Largest Observation Concentration of all data: Xn = 0.0275
Test Statistic, high extreme of all data: Tn = 4.9382
T Critical of all data: Tcr = 2.7140

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/04/2025 | 0.0275 | False | | 1 |

**Zinc, total, mg/L**
**Location: APW-7**

Mean of all data: 0.0054
Standard Deviation of all data: 0.0016
Largest Observation Concentration of all data: Xn = 0.0114
Test Statistic, high extreme of all data: Tn = 3.8036
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 11/13/2024 | 0.0114 | False | | 1 |

Based on Grubbs one-sided outlier test

# Meredosia Power Station
## Outlier Analysis Results

**User Supplied Information**

**Date Range: 01/01/2019 to 10/15/2025**
**Confidence Level: 95%**
**Transform: None**

**LT Multiplier: x 0.50**
**Number of Outliers: One Outlier**

**Zinc, total, mg/L**

**Location: APW-8**

Mean of all data: 0.0117
Standard Deviation of all data: 0.0269
Largest Observation Concentration of all data: Xn = 0.1450
Test Statistic, high extreme of all data: Tn = 4.9633
T Critical of all data: Tcr = 2.7140

| 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: 0.0076
Standard Deviation of all data: 0.0110
Largest Observation Concentration of all data: Xn = 0.0618
Test Statistic, high extreme of all data: Tn = 4.9234
T Critical of all data: Tcr = 2.6980

| Sample Date | Value | LT_Value | Outlier Low Side | Outlier High Side |
|---|---|---|---|---|
| 06/03/2025 | 0.0618 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.14 | |

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: | -1.11 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.115 | mg/L per period |
| R-Squared error of fit: | 0.233 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.109 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.360 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0820 | 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-1** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00468 | mg/L per period |
| R-Squared error of fit: | 0.309 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00504 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00356 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0115 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00941** |
| **Location Class:** | | **Parameter:** | **Chloride, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0723 | mg/L per period |
| R-Squared error of fit: | 0.493 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0765 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.171 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00100 | 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-1** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00193 | mg/L per period |
| R-Squared error of fit: | 0.0679 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00137 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00809 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00738 | 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-1** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000329 | mg/L per period |
| R-Squared error of fit: | 0.00342 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000204 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000172 | mg/L 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-1** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000179 | mg/L per period |
| R-Squared error of fit: | 0.0127 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000000396 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000889 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000247 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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-1** | **Parameter Code:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000421 | mg/L per period |
| R-Squared error of fit: | 0.183 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000361 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000106 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000514 | 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-1** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000912 | mg/L per period |
| R-Squared error of fit: | 0.0211 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000312 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000539 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000178 | 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-1** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000640 | mg/L per period |
| R-Squared error of fit: | 0.0119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.0000502 | mg/L per period |
| R-Squared error of fit: | 0.497 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.0000535 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00000113 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000102 | 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-1** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000228 | mg/L per period |
| R-Squared error of fit: | 0.191 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000249 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000213 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000539 | 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-1** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000163 | mg/L per period |
| R-Squared error of fit: | 0.0119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000124 | mg/L per period |
| R-Squared error of fit: | 0.0614 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000331 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000139 | mg/L 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-1** | **Parameter Code:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000749 | mg/L per period |
| R-Squared error of fit: | 0.00888 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000105 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000798 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00287 | mg/L per period |
| R-Squared error of fit: | 0.0137 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000353 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00781 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00367 | 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-1** | **Parameter Code:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000610 | mg/L per period |
| R-Squared error of fit: | 0.192 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000452 | mg/L per period |
| R-Squared error of fit: | 0.0341 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000256 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000106 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000440 | 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-1** | **Parameter Code:** | **01055** |
| **Location Class:** | | **Parameter:** | **Manganese, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000573 | mg/L per period |
| R-Squared error of fit: | 0.0380 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000257 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00122 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000276 | 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000117 | mg/L per period |
| R-Squared error of fit: | 0.0172 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000265 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000458 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000474 | 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-1** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000126 | mg/L per period |
| R-Squared error of fit: | 0.0255 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000308 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000344 | 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: | -.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-1** | **Parameter Code:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000263 | mg/L per period |
| R-Squared error of fit: | 0.0119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000111 | mg/L per period |
| R-Squared error of fit: | 0.0113 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000141 | 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: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.21 | |

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-10** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0403 | mg/L per period |
| R-Squared error of fit: | 0.0769 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0681 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.175 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.130 | 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-10** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.00175 | mg/L per period |
| R-Squared error of fit: | 0.677 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.00199 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000773 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00266 | 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-10** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00941** |
| **Location Class:** | | **Parameter:** | **Chloride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000826 | mg/L per period |
| R-Squared error of fit: | 0.568 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00111 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0207 | mg/L per period |
| R-Squared error of fit: | 0.0698 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0268 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0702 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0702 | 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-10** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000331 | mg/L per period |
| R-Squared error of fit: | 0.568 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000445 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000971 | mg/L per period |
| R-Squared error of fit: | 0.245 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000110 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000000739 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000208 | 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-10** | **Parameter Code:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.00000103 | mg/L per period |
| R-Squared error of fit: | 0.00670 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | -.000000224 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000528 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000809 | mg/L per period |
| Non-parametric Mann-Kendall Test for Trend | | |
| S Statistic: | 0.0 | |
| Z test: | 1.64 | |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000764 | mg/L per period |
| R-Squared error of fit: | 0.398 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000761 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000112 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000214 | 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-10** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000119 | mg/L per period |
| R-Squared error of fit: | 0.0746 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000844 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000822 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000338 | 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000116 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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:** | **01012** |
| **Location Class:** | | **Parameter:** | **Beryllium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000459 | mg/L per period |
| R-Squared error of fit: | 0.105 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000308 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00130 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00158 | 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-10** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000386 | mg/L per period |
| R-Squared error of fit: | 0.0569 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000653 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000839 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00216 | 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-10** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000105 | mg/L per period |
| R-Squared error of fit: | 0.0000391 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000000144 | mg/L 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000600 | mg/L per period |
| R-Squared error of fit: | 0.0259 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000546 | 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-10** | **Parameter Code:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000652 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000395 | mg/L per period |
| R-Squared error of fit: | 0.0742 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000162 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000109 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000190 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.764 |
| 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-10** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00247 | mg/L per period |
| R-Squared error of fit: | 0.0102 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000933 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00571 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0104 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000447 | mg/L per period |
| R-Squared error of fit: | 0.285 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-10** | **Parameter Code:** | **01051** |
| **Location Class:** | | **Parameter:** | **Lead, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000284 | mg/L per period |
| R-Squared error of fit: | 0.0188 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000638 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000114 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000179 | mg/L per period |
| R-Squared error of fit: | 0.0179 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000884 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000342 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000625 | 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-10** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000522 | mg/L per period |
| R-Squared error of fit: | 0.0106 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000227 | mg/L per period |
| R-Squared error of fit: | 0.0106 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000290 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000226 | mg/L per period |
| R-Squared error of fit: | 0.0824 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000129 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000330 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000106 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.764 |
| 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-10** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000278 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.37 | |

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: | -1.61 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.100 | mg/L per period |
| R-Squared error of fit: | 0.359 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.111 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00183 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.287 | 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): | Upward |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000513 | 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: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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-11** | **Parameter Code:** | **00618** |
| **Location Class:** | | **Parameter:** | **Nitrate nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00268 | mg/L per period |
| R-Squared error of fit: | 0.451 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00308 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00629 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000550 | 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-11** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000218 | mg/L per period |
| R-Squared error of fit: | 0.000474 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | 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: | 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-11** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00181 | mg/L per period |
| R-Squared error of fit: | 0.000770 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0121 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0808 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0625 | 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-11** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000330 | mg/L per period |
| R-Squared error of fit: | 0.566 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000446 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000233 | mg/L per period |
| R-Squared error of fit: | 0.0770 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-11** | **Parameter Code:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000183 | mg/L per period |
| R-Squared error of fit: | 0.00462 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000232 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000251 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000141 | 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-11** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000420 | mg/L per period |
| R-Squared error of fit: | 0.176 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000280 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000517 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000136 | 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-11** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000695 | mg/L per period |
| R-Squared error of fit: | 0.147 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000638 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00109 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00264 | 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-11** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000958 | mg/L per period |
| R-Squared error of fit: | 0.203 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00128 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000752 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00251 | 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-11** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000291 | mg/L per period |
| R-Squared error of fit: | 0.0737 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000000536 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.329 |
| 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-11** | **Parameter Code:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000868 | mg/L per period |
| R-Squared error of fit: | 0.0570 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000000793 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.329 |
| 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-11** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000100 | mg/L per period |
| R-Squared error of fit: | 0.0331 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000219 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000593 | 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: | -.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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000448 | mg/L per period |
| R-Squared error of fit: | 0.285 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-11** | **Parameter Code:** | **01051** |
| **Location Class:** | | **Parameter:** | **Lead, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000424 | mg/L per period |
| R-Squared error of fit: | 0.133 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000174 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000183 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00118 | 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-11** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000621 | mg/L per period |
| R-Squared error of fit: | 0.0269 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000124 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000721 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000152 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.664 |
| 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-11** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000134 | mg/L per period |
| R-Squared error of fit: | 0.0770 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-11** | **Parameter Code:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000151 | mg/L per period |
| R-Squared error of fit: | 0.0116 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01097** |
| **Location Class:** | | **Parameter:** | **Antimony, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## 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: | -0.37 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.337 | mg/L per period |
| R-Squared error of fit: | 0.804 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.335 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.171 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.482 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00277 | mg/L per period |
| R-Squared error of fit: | 0.126 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00269 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00932 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00449 | 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:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0636 | mg/L per period |
| R-Squared error of fit: | 0.716 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0626 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.101 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0239 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.60 |
| 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-12** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0462 | mg/L per period |
| R-Squared error of fit: | 0.589 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0502 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00307 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0931 | 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-12** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000563 | mg/L per period |
| R-Squared error of fit: | 0.521 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000818 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.64 |
| 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-12** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000407 | 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: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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-12** | **Parameter Code:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000468 | mg/L per period |
| R-Squared error of fit: | 0.0131 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000421 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.430 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000531 | mg/L per period |
| R-Squared error of fit: | 0.320 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000452 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000554 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000141 | 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000341 | mg/L per period |
| R-Squared error of fit: | 0.100 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000483 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000661 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000112 | 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000507 | mg/L per period |
| R-Squared error of fit: | 0.959 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000494 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000404 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000627 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.09 |
| 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:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000513 | mg/L per period |
| R-Squared error of fit: | 0.928 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000524 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000383 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000599 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.85 |
| 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000154 | mg/L per period |
| R-Squared error of fit: | 0.549 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000157 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000000530 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000302 | 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-12** | **Parameter Code:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000106 | mg/L per period |
| R-Squared error of fit: | 0.0118 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000283 | mg/L per period |
| R-Squared error of fit: | 0.0118 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000425 | mg/L per period |
| R-Squared error of fit: | 0.00147 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000817 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00263 | 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: | -.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-12** | **Parameter Code:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000672 | 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: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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-12** | **Parameter Code:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00620 | mg/L per period |
| R-Squared error of fit: | 0.324 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00499 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00162 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0120 | 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): | Upward |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00324 | mg/L per period |
| R-Squared error of fit: | 0.832 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00330 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00213 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00535 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.49 |
| 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:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000185 | mg/L per period |
| R-Squared error of fit: | 0.960 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000191 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0000155 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000224 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.24 |
| 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:** | **01067** |
| **Location Class:** | | **Parameter:** | **Nickel, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000212 | mg/L per period |
| R-Squared error of fit: | 0.428 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000189 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000298 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000432 | 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000330 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-12** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000350 | mg/L per period |
| R-Squared error of fit: | 0.0678 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01147** |
| **Location Class:** | | **Parameter:** | **Selenium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## 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: | -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-2** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0132 | mg/L per period |
| R-Squared error of fit: | 0.0233 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0124 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.103 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0867 | 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-2** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000527 | mg/L per period |
| R-Squared error of fit: | 0.00280 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00270 | mg/L per period |
| R-Squared error of fit: | 0.155 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00667 | 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: | -.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-2** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000292 | mg/L per period |
| R-Squared error of fit: | 0.336 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000463 | mg/L per period |
| R-Squared error of fit: | 0.0548 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000214 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000141 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000819 | mg/L per period |
| R-Squared error of fit: | 0.0490 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000000874 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000436 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000464 | 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-2** | **Parameter Code:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000383 | mg/L per period |
| R-Squared error of fit: | 0.00130 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000130 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000624 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000125 | 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-2** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000330 | mg/L per period |
| R-Squared error of fit: | 0.147 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000190 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000177 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000808 | 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-2** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000314 | mg/L per period |
| R-Squared error of fit: | 0.205 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000405 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000858 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000418 | 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-2** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000430 | mg/L per period |
| R-Squared error of fit: | 0.405 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000502 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000917 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000658 | 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000359 | mg/L per period |
| R-Squared error of fit: | 0.0119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00557 | mg/L per period |
| R-Squared error of fit: | 0.199 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00298 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00322 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0134 | 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000973 | mg/L per period |
| R-Squared error of fit: | 0.307 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00125 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000138 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00347 | 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000326 | mg/L per period |
| R-Squared error of fit: | 0.0767 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-2** | **Parameter Code:** | **01055** |
| **Location Class:** | | **Parameter:** | **Manganese, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000182 | mg/L per period |
| R-Squared error of fit: | 0.154 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000157 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000239 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000368 | 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-2** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000155 | mg/L per period |
| R-Squared error of fit: | 0.127 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000197 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000265 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000483 | 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-2** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000191 | mg/L per period |
| R-Squared error of fit: | 0.192 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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:** | **01065** |
| **Location Class:** | | **Parameter:** | **Nickel, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01077** |
| **Location Class:** | | **Parameter:** | **Silver, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000126 | mg/L per period |
| R-Squared error of fit: | 0.0119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000681 | mg/L per period |
| R-Squared error of fit: | 0.336 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01097** |
| **Location Class:** | | **Parameter:** | **Antimony, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.70 | |

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: | -2.49 |
| 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-3** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.259 | mg/L per period |
| R-Squared error of fit: | 0.399 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.237 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.337 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.543 | 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:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0185 | mg/L per period |
| R-Squared error of fit: | 0.329 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00284 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0105 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0390 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0235 | mg/L per period |
| R-Squared error of fit: | 0.203 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0247 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0126 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0593 | 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:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000106 | mg/L per period |
| R-Squared error of fit: | 0.545 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | 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: | 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-3** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | -.0000724 | mg/L per period |
| R-Squared error of fit: | 0.211 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | -.000105 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000225 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000580 | 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:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | -.000128 | mg/L per period |
| R-Squared error of fit: | 0.135 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | -.000123 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000552 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000822 | 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-3** | **Parameter Code:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000537 | mg/L per period |
| R-Squared error of fit: | 0.262 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000479 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000623 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000130 | 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-3** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000360 | mg/L per period |
| R-Squared error of fit: | 0.0524 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000277 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000127 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000228 | 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000395 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-3** | **Parameter Code:** | **01012** |
| **Location Class:** | | **Parameter:** | **Beryllium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00892 | mg/L per period |
| R-Squared error of fit: | 0.341 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00840 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00794 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0225 | 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:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0102 | mg/L per period |
| R-Squared error of fit: | 0.405 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00970 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00244 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0234 | 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-3** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000113 | mg/L per period |
| R-Squared error of fit: | 0.00948 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000175 | mg/L per period |
| R-Squared error of fit: | 0.0000273 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000813 | 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: | 0.399 |
| 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-3** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00300 | mg/L per period |
| R-Squared error of fit: | 0.141 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00260 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00782 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0110 | 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-3** | **Parameter Code:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00357 | mg/L per period |
| R-Squared error of fit: | 0.477 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00419 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0000924 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00758 | 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): | Upward |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000444 | mg/L per period |
| R-Squared error of fit: | 0.0588 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000000381 | mg/L 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-3** | **Parameter Code:** | **01055** |
| **Location Class:** | | **Parameter:** | **Manganese, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000521 | mg/L per period |
| R-Squared error of fit: | 0.241 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000406 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000492 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00157 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000599 | mg/L per period |
| R-Squared error of fit: | 0.337 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000491 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000751 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00124 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000111 | mg/L per period |
| R-Squared error of fit: | 0.0117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.55 | |

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: | -2.39 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0316 | mg/L per period |
| R-Squared error of fit: | 0.0183 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00218 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.240 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.169 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00618** |
| **Location Class:** | | **Parameter:** | **Nitrate nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00160 | mg/L per period |
| R-Squared error of fit: | 0.0569 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000463 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00738 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000539 | 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-4** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0380 | mg/L per period |
| R-Squared error of fit: | 0.804 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0381 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0629 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0185 | 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-4** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0498 | mg/L per period |
| R-Squared error of fit: | 0.660 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0525 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0958 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0271 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000872 | mg/L per period |
| R-Squared error of fit: | 0.275 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000562 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.64 |
| 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-4** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000143 | mg/L per period |
| R-Squared error of fit: | 0.00243 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000330 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000328 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000104 | mg/L per period |
| R-Squared error of fit: | 0.275 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000921 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000243 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000933 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.0000153 | mg/L per period |
| R-Squared error of fit: | 0.0853 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.0000235 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000262 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000103 | 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-4** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000313 | mg/L per period |
| R-Squared error of fit: | 0.237 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000284 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000858 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000180 | 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000606 | mg/L per period |
| R-Squared error of fit: | 0.471 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000713 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0000775 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00113 | 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-4** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000564 | mg/L per period |
| R-Squared error of fit: | 0.425 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000637 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000786 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000954 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000100 | mg/L per period |
| R-Squared error of fit: | 0.0117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000639 | mg/L per period |
| R-Squared error of fit: | 0.0345 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000509 | mg/L 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-4** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00610 | mg/L per period |
| R-Squared error of fit: | 0.0764 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00570 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0289 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0248 | 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000176 | mg/L per period |
| R-Squared error of fit: | 0.00106 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000588 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00583 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00474 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000468 | mg/L per period |
| R-Squared error of fit: | 0.0429 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000221 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00275 | 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: | -.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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000288 | mg/L per period |
| R-Squared error of fit: | 0.000173 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000104 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00163 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00304 | 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-4** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000609 | mg/L per period |
| R-Squared error of fit: | 0.238 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000961 | mg/L 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-4** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000262 | mg/L per period |
| R-Squared error of fit: | 0.0675 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01097** |
| **Location Class:** | | **Parameter:** | **Antimony, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000366 | mg/L per period |
| R-Squared error of fit: | 0.0675 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.74 | |

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: | -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-5** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0353 | mg/L per period |
| R-Squared error of fit: | 0.0487 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0425 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.138 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.196 | 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-5** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000493 | mg/L per period |
| R-Squared error of fit: | 0.120 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000837 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00116 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00101 | 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-5** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00774 | mg/L per period |
| R-Squared error of fit: | 0.477 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00528 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0134 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000518 | 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-5** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0214 | mg/L per period |
| R-Squared error of fit: | 0.626 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0227 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00870 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0379 | 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-5** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000107 | mg/L per period |
| R-Squared error of fit: | 0.389 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000113 | 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-5** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000652 | mg/L per period |
| R-Squared error of fit: | 0.0670 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000196 | mg/L per period |
| R-Squared error of fit: | 0.105 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000177 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000407 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000736 | 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000977 | mg/L per period |
| R-Squared error of fit: | 0.0000997 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000220 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000107 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000906 | 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-5** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000169 | mg/L per period |
| R-Squared error of fit: | 0.00250 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000942 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000194 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000323 | 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-5** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000177 | mg/L per period |
| R-Squared error of fit: | 0.00116 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000138 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000559 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000433 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000213 | mg/L per period |
| R-Squared error of fit: | 0.0670 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000262 | 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: | 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:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000302 | mg/L per period |
| R-Squared error of fit: | 0.0569 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000000278 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.329 |
| 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-5** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00154 | mg/L per period |
| R-Squared error of fit: | 0.208 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00103 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00306 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000320 | 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-5** | **Parameter Code:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000487 | mg/L per period |
| R-Squared error of fit: | 0.0265 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000207 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000000503 | 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-5** | **Parameter Code:** | **01055** |
| **Location Class:** | | **Parameter:** | **Manganese, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000197 | mg/L per period |
| R-Squared error of fit: | 0.258 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000156 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000506 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000517 | 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000274 | mg/L per period |
| R-Squared error of fit: | 0.0670 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000139 | mg/L per period |
| R-Squared error of fit: | 0.0670 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01077** |
| **Location Class:** | | **Parameter:** | **Silver, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000126 | 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: | 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:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000178 | mg/L per period |
| R-Squared error of fit: | 0.0673 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000000872 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.329 |
| 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-5** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000448 | mg/L per period |
| R-Squared error of fit: | 0.285 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-5** | **Parameter Code:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## 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-6** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0503 | mg/L per period |
| R-Squared error of fit: | 0.0494 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0522 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.223 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.222 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000712 | mg/L per period |
| R-Squared error of fit: | 0.743 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000558 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000394 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00111 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.60 |
| 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-6** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00227 | mg/L per period |
| R-Squared error of fit: | 0.0504 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000980 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00719 | 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-6** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00620 | mg/L per period |
| R-Squared error of fit: | 0.0416 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00981 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0255 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0430 | 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-6** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000184 | mg/L per period |
| R-Squared error of fit: | 0.577 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000227 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.97 |
| 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-6** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000329 | mg/L per period |
| R-Squared error of fit: | 0.0786 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-6** | **Parameter Code:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000165 | mg/L per period |
| R-Squared error of fit: | 0.212 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000202 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000547 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000163 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.02 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000596 | mg/L per period |
| R-Squared error of fit: | 0.0129 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000104 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000545 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000743 | 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-6** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000911 | mg/L per period |
| R-Squared error of fit: | 0.380 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000111 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000249 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00000184 | 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-6** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000724 | mg/L per period |
| R-Squared error of fit: | 0.00687 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000946 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000748 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000916 | 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-6** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000117 | mg/L per period |
| R-Squared error of fit: | 0.00987 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000122 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00106 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00139 | 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-6** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000156 | mg/L per period |
| R-Squared error of fit: | 0.0786 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-6** | **Parameter Code:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000210 | mg/L per period |
| R-Squared error of fit: | 0.0866 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000129 | 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-6** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000980 | mg/L per period |
| R-Squared error of fit: | 0.0548 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00133 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00539 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00274 | 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-6** | **Parameter Code:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000466 | mg/L per period |
| R-Squared error of fit: | 0.157 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000130 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.717 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000734 | mg/L per period |
| R-Squared error of fit: | 0.0592 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000745 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000338 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000957 | 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-6** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000315 | mg/L per period |
| R-Squared error of fit: | 0.123 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000689 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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-6** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000978 | mg/L per period |
| R-Squared error of fit: | 0.0105 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000756 | mg/L per period |
| R-Squared error of fit: | 0.0786 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-6** | **Parameter Code:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000116 | mg/L per period |
| R-Squared error of fit: | 0.0949 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | 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: | 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-6** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000147 | mg/L per period |
| R-Squared error of fit: | 0.0120 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000715 | mg/L per period |
| R-Squared error of fit: | 0.0170 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000000278 | mg/L 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-6** | **Parameter Code:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000988 | mg/L per period |
| R-Squared error of fit: | 0.0670 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01147** |
| **Location Class:** | | **Parameter:** | **Selenium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.26 | |

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: | 1.75 |
| 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-7** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0610 | mg/L per period |
| R-Squared error of fit: | 0.118 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0958 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.225 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0731 | 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-7** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00136 | mg/L per period |
| R-Squared error of fit: | 0.106 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00153 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00479 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00345 | 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-7** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0566 | mg/L per period |
| R-Squared error of fit: | 0.963 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0566 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0677 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0473 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.85 |
| 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-7** | **Parameter Code:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0207 | mg/L per period |
| R-Squared error of fit: | 0.912 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0206 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0262 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0148 | 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-7** | **Parameter Code:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000156 | mg/L per period |
| R-Squared error of fit: | 0.0591 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000120 | mg/L per period |
| R-Squared error of fit: | 0.0105 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000297 | mg/L per period |
| R-Squared error of fit: | 0.490 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000219 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000585 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000626 | 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-7** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000459 | mg/L per period |
| R-Squared error of fit: | 0.548 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000349 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000689 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000189 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000494 | mg/L per period |
| R-Squared error of fit: | 0.179 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000637 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000673 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000136 | 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-7** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000513 | mg/L per period |
| R-Squared error of fit: | 0.149 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000223 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000812 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000175 | 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-7** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01027** |
| **Location Class:** | | **Parameter:** | **Cadmium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000242 | mg/L per period |
| R-Squared error of fit: | 0.0117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000522 | mg/L per period |
| R-Squared error of fit: | 0.0117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000516 | mg/L per period |
| R-Squared error of fit: | 0.116 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000655 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00225 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000874 | 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000289 | mg/L per period |
| R-Squared error of fit: | 0.0349 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000505 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000180 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000101 | 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-7** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000191 | mg/L per period |
| R-Squared error of fit: | 0.0768 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-7** | **Parameter Code:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000110 | mg/L per period |
| R-Squared error of fit: | 0.192 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-7** | **Parameter Code:** | **01059** |
| **Location Class:** | | **Parameter:** | **Thallium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000169 | mg/L per period |
| R-Squared error of fit: | 0.0117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000130 | mg/L per period |
| R-Squared error of fit: | 0.0101 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000305 | mg/L per period |
| R-Squared error of fit: | 0.0675 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-7** | **Parameter Code:** | **01097** |
| **Location Class:** | | **Parameter:** | **Antimony, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000255 | mg/L per period |
| R-Squared error of fit: | 0.0185 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000000139 | mg/L 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-7** | **Parameter Code:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.21 | |

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: | -1.61 |
| 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-8** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.182 | mg/L per period |
| R-Squared error of fit: | 0.391 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.206 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.473 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00612 | 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-8** | **Parameter Code:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00190 | mg/L per period |
| R-Squared error of fit: | 0.564 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00145 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00351 | 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-8** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00604 | mg/L per period |
| R-Squared error of fit: | 0.759 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00592 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00918 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00439 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.60 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.142 | mg/L per period |
| R-Squared error of fit: | 0.461 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.161 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.244 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0522 | 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:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000269 | mg/L per period |
| R-Squared error of fit: | 0.563 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000377 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.97 |
| 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-8** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000486 | mg/L per period |
| R-Squared error of fit: | 0.00274 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000000112 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000107 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000000973 | 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-8** | **Parameter Code:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000472 | mg/L per period |
| R-Squared error of fit: | 0.139 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000141 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000602 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000000365 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.02 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000546 | mg/L per period |
| R-Squared error of fit: | 0.0151 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000961 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000439 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000203 | 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-8** | **Parameter Code:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000297 | mg/L per period |
| R-Squared error of fit: | 0.133 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000130 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000100 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000463 | 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00293 | mg/L per period |
| R-Squared error of fit: | 0.481 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00159 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00513 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000517 | 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-8** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00337 | mg/L per period |
| R-Squared error of fit: | 0.592 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00240 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00528 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000264 | 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000722 | mg/L per period |
| R-Squared error of fit: | 0.131 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000866 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000923 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000266 | 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-8** | **Parameter Code:** | **01034** |
| **Location Class:** | | **Parameter:** | **Chromium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000196 | mg/L per period |
| R-Squared error of fit: | 0.0172 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000120 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000131 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000117 | 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-8** | **Parameter Code:** | **01035** |
| **Location Class:** | | **Parameter:** | **Cobalt, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000354 | mg/L per period |
| R-Squared error of fit: | 0.0663 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-8** | **Parameter Code:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000310 | mg/L per period |
| R-Squared error of fit: | 0.101 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000826 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | 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: | 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-8** | **Parameter Code:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000246 | mg/L per period |
| R-Squared error of fit: | 0.0556 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000227 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000247 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000781 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00635 | mg/L per period |
| R-Squared error of fit: | 0.0926 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00156 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00905 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00135 | 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000447 | mg/L per period |
| R-Squared error of fit: | 0.284 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-8** | **Parameter Code:** | **01051** |
| **Location Class:** | | **Parameter:** | **Lead, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000555 | mg/L per period |
| R-Squared error of fit: | 0.0807 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000683 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.717 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000306 | mg/L per period |
| R-Squared error of fit: | 0.0860 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000400 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000792 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000164 | 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-8** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01059** |
| **Location Class:** | | **Parameter:** | **Thallium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000746 | mg/L per period |
| R-Squared error of fit: | 0.0663 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-8** | **Parameter Code:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000582 | mg/L per period |
| R-Squared error of fit: | 0.0663 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-8** | **Parameter Code:** | **01090** |
| **Location Class:** | | **Parameter:** | **Zinc, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000826 | 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: | 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-8** | **Parameter Code:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000146 | mg/L per period |
| R-Squared error of fit: | 0.000775 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000216 | mg/L per period |
| R-Squared error of fit: | 0.0663 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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-8** | **Parameter Code:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000664 | mg/L per period |
| R-Squared error of fit: | 0.577 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000839 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.97 |
| 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:** | **01147** |
| **Location Class:** | | **Parameter:** | **Selenium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000739 | mg/L per period |
| R-Squared error of fit: | 0.646 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000760 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000100 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.15 |
| 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:** | **71890** |
| **Location Class:** | | **Parameter:** | **Mercury, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00400** |
| **Location Class:** | | **Parameter:** | **pH (field)** |
| **Location Type:** | | **Units:** | **STD** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## 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: | -0.25 |
| 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-9** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00151 | mg/L per period |
| R-Squared error of fit: | 0.00000537 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00683 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.635 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.539 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000896 | mg/L per period |
| R-Squared error of fit: | 0.126 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00135 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000890 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00511 | 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-9** | **Parameter Code:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000828 | mg/L per period |
| R-Squared error of fit: | 0.567 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00111 | 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 |

# 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0492 | mg/L per period |
| R-Squared error of fit: | 0.0216 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0154 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.191 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.366 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000187 | mg/L per period |
| R-Squared error of fit: | 0.145 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000713 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000441 | mg/L 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-9** | **Parameter Code:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000126 | mg/L per period |
| R-Squared error of fit: | 0.494 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000000959 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000230 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.18 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000656 | mg/L per period |
| R-Squared error of fit: | 0.559 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000000720 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000112 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.93 |
| 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:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000193 | mg/L per period |
| R-Squared error of fit: | 0.0146 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000154 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000186 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000964 | 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000525 | mg/L per period |
| R-Squared error of fit: | 0.0299 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000460 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000313 | 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: | 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-9** | **Parameter Code:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000794 | mg/L per period |
| R-Squared error of fit: | 0.00208 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000536 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000429 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00118 | 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-9** | **Parameter Code:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000465 | mg/L per period |
| R-Squared error of fit: | 0.0316 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000449 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00204 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000959 | 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-9** | **Parameter Code:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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:** | **01037** |
| **Location Class:** | | **Parameter:** | **Cobalt, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000114 | mg/L per period |
| R-Squared error of fit: | 0.0214 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000483 | mg/L per period |
| R-Squared error of fit: | 0.0774 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-9** | **Parameter Code:** | **01042** |
| **Location Class:** | | **Parameter:** | **Copper, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000576 | mg/L per period |
| R-Squared error of fit: | 0.0765 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000000311 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.329 |
| 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-9** | **Parameter Code:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000379 | mg/L per period |
| R-Squared error of fit: | 0.137 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000814 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00117 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000709 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000303 | mg/L per period |
| R-Squared error of fit: | 0.000870 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000232 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000842 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000124 | 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-9** | **Parameter Code:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000217 | mg/L per period |
| R-Squared error of fit: | 0.0774 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-9** | **Parameter Code:** | **01092** |
| **Location Class:** | | **Parameter:** | **Zinc, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000265 | mg/L per period |
| R-Squared error of fit: | 0.0774 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per 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-9** | **Parameter Code:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000412 | 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: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000217 | mg/L per period |
| R-Squared error of fit: | 0.0671 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L 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:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.64 |
| 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: 01/01/2024 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-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 B4
# SEN SLOPE AND MANN-KENDALL TEST RESULTS - LONG 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.03 | |

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: | 0.36 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.047904 | mg/L per period |
| R-Squared error of fit: | 0.21533 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.047252 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.025380 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.072895 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.6671 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Upward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.00025038 | mg/L per period |
| R-Squared error of fit: | 0.017923 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.00018419 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00071144 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00082010 | mg/L per period |
| Non-parametric Mann-Kendall Test for Trend | | |
| S Statistic: | 0.23712 | |
| Z test: | 1.6449 | |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **00941** |
| **Location Class:** | | **Parameter:** | **Chloride, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0092297 | mg/L per period |
| R-Squared error of fit: | 0.039610 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0086502 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0057680 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.021312 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0471 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0010003 | mg/L per period |
| R-Squared error of fit: | 0.084016 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00074160 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0020728 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2371 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000088469 | mg/L per period |
| R-Squared error of fit: | 0.36225 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000064146 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000040076 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000095566 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.3555 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Upward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000038024 | mg/L per period |
| R-Squared error of fit: | 0.019727 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000018489 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000010076 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000045933 | mg/L per period |
| R-Squared error of fit: | 0.0093706 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000036611 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000019687 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000092771 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.59335 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000011758 | mg/L per period |
| R-Squared error of fit: | 0.010235 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000019156 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000022906 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000020047 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.059270 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000019644 | mg/L per period |
| R-Squared error of fit: | 0.049870 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.1142 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000015861 | mg/L per period |
| R-Squared error of fit: | 0.42126 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000015348 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000021716 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000084023 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.7150 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000016944 | mg/L per period |
| R-Squared error of fit: | 0.41865 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000014681 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000020944 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000080504 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.3784 |
| Z test: | 1.6449 |
| 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000063366 | mg/L per period |
| R-Squared error of fit: | 0.021278 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.70386 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000015462 | mg/L per period |
| R-Squared error of fit: | 0.032824 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.66453 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000010567 | mg/L per period |
| R-Squared error of fit: | 0.0095617 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.49519 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000030035 | mg/L per period |
| R-Squared error of fit: | 0.060152 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.7451 |
| Z test: | 1.6449 |
| 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:** | **01045** |
| **Location Class:** | | **Parameter:** | **Iron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00057291 | mg/L per period |
| R-Squared error of fit: | 0.018699 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000045880 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00046556 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00041906 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.27665 |
| Z test: | 1.6449 |
| 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000062079 | mg/L per period |
| R-Squared error of fit: | 0.088564 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.4856 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000039609 | mg/L per period |
| R-Squared error of fit: | 0.0081932 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000081312 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000045050 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.41900 |
| Z test: | 1.6449 |
| 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:** | **01055** |
| **Location Class:** | | **Parameter:** | **Manganese, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00010326 | mg/L per period |
| R-Squared error of fit: | 0.042780 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000064698 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000037083 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000061296 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.21732 |
| Z test: | 1.6449 |
| 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000010501 | mg/L per period |
| R-Squared error of fit: | 0.33026 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000030065 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.6115 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Upward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000017499 | mg/L per period |
| R-Squared error of fit: | 0.016115 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000014915 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000081047 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.12260 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000072289 | mg/L per period |
| R-Squared error of fit: | 0.035852 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.62382 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000069269 | mg/L per period |
| R-Squared error of fit: | 0.060557 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2380 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000033872 | mg/L per period |
| R-Squared error of fit: | 0.038951 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.42342 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## 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: | -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-10** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0067760 | mg/L per period |
| R-Squared error of fit: | 0.014686 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0074708 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.013652 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.029047 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.65316 |
| Z test: | 1.6449 |
| 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:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00040554 | mg/L per period |
| R-Squared error of fit: | 0.29691 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00033747 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00056390 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00010909 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.8673 |
| Z test: | 1.6449 |
| 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:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **00941** |
| **Location Class:** | | **Parameter:** | **Chloride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00039023 | mg/L per period |
| R-Squared error of fit: | 0.036617 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00031824 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.97099 |
| Z test: | 1.6449 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0060861 | mg/L per period |
| R-Squared error of fit: | 0.033657 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0055116 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0078091 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.019888 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.59304 |
| Z test: | 1.6449 |
| 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:** | **00950** |
| **Location Class:** | | **Parameter:** | **Fluoride, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000078546 | mg/L per period |
| R-Squared error of fit: | 0.49976 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.6673 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000050130 | mg/L per period |
| R-Squared error of fit: | 0.011528 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000014206 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000000092401 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.16025 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000017062 | mg/L per period |
| R-Squared error of fit: | 0.00038743 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000011669 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000035753 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000023366 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.71445 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000040120 | mg/L per period |
| R-Squared error of fit: | 0.016491 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000056568 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000052945 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000014955 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.73194 |
| Z test: | 1.6449 |
| 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000078439 | mg/L per period |
| R-Squared error of fit: | 0.0000065005 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000042860 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000010762 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000023201 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.69175 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000017327 | mg/L per period |
| R-Squared error of fit: | 0.076090 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000016588 | mg/L per period |
| R-Squared error of fit: | 0.0039536 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.24759 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00024062 | mg/L per period |
| R-Squared error of fit: | 0.11465 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00021365 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000079558 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00046825 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.1856 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00025125 | mg/L per period |
| R-Squared error of fit: | 0.10143 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00021171 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00014052 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00049006 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.90898 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000068378 | mg/L per period |
| R-Squared error of fit: | 0.000043397 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.69249 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000048682 | mg/L per period |
| R-Squared error of fit: | 0.00031262 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000097375 | mg/L per period |
| R-Squared error of fit: | 0.076090 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000095409 | mg/L per period |
| R-Squared error of fit: | 0.089382 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.5862 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000050245 | mg/L per period |
| R-Squared error of fit: | 0.000019363 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00028546 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00061703 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000059903 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.3237 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000042424 | mg/L per period |
| R-Squared error of fit: | 0.10749 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.6094 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000039039 | mg/L per period |
| R-Squared error of fit: | 0.096571 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6094 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000017483 | mg/L per period |
| R-Squared error of fit: | 0.00022100 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000031401 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000070426 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4637 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000016230 | mg/L per period |
| R-Squared error of fit: | 0.00035779 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000014179 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000040503 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000041281 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.3237 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000035670 | mg/L per period |
| R-Squared error of fit: | 0.11573 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.6932 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000014816 | mg/L per period |
| R-Squared error of fit: | 0.0013851 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.1706 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000067444 | mg/L per period |
| R-Squared error of fit: | 0.000021254 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.62382 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000043316 | mg/L per period |
| R-Squared error of fit: | 0.076090 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000043750 | mg/L per period |
| R-Squared error of fit: | 0.010736 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.5340 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000012285 | mg/L per period |
| R-Squared error of fit: | 0.0095633 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.49519 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000036165 | mg/L per period |
| R-Squared error of fit: | 0.0082229 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.77796 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.24 | |

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: | -2.41 |
| 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-11** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0013391 | mg/L per period |
| R-Squared error of fit: | 0.000063032 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.011821 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.018434 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.054188 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.88985 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000033720 | mg/L per period |
| R-Squared error of fit: | 0.031658 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.80000 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00036889 | mg/L per period |
| R-Squared error of fit: | 0.047182 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00040765 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00093473 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00019050 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0671 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00026642 | mg/L per period |
| R-Squared error of fit: | 0.0081431 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00032930 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.49372 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0049699 | mg/L per period |
| R-Squared error of fit: | 0.0032148 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0024755 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.021153 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.017717 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.17788 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000069727 | mg/L per period |
| R-Squared error of fit: | 0.40376 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.5342 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000034663 | mg/L per period |
| R-Squared error of fit: | 0.076117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000031754 | mg/L per period |
| R-Squared error of fit: | 0.11919 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000034775 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000074871 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.8495 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000079959 | mg/L per period |
| R-Squared error of fit: | 0.016795 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000066365 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000079820 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000025091 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.69175 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000068776 | mg/L per period |
| R-Squared error of fit: | 0.10600 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000014403 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000047503 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000089308 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0475 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000071102 | mg/L per period |
| R-Squared error of fit: | 0.060544 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2380 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000018974 | mg/L per period |
| R-Squared error of fit: | 0.00011786 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000077214 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00023399 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00043474 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.41505 |
| Z test: | 1.6449 |
| 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:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000010237 | mg/L per period |
| R-Squared error of fit: | 0.000030195 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00014377 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00020146 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00055240 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.69175 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000031502 | mg/L per period |
| R-Squared error of fit: | 0.081319 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.9648 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000063406 | mg/L per period |
| R-Squared error of fit: | 0.090543 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.1892 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000047593 | mg/L per period |
| R-Squared error of fit: | 0.085940 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.8714 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000059068 | mg/L per period |
| R-Squared error of fit: | 0.049426 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.86208 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0045518 | mg/L per period |
| R-Squared error of fit: | 0.10271 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00040632 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00094397 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00022078 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.2081 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000091931 | mg/L per period |
| R-Squared error of fit: | 0.087052 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4856 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000039050 | mg/L per period |
| R-Squared error of fit: | 0.096604 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6094 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000047190 | mg/L per period |
| R-Squared error of fit: | 0.098016 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.6907 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00021237 | mg/L per period |
| R-Squared error of fit: | 0.053643 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000027595 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000097759 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000072679 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2842 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000010798 | mg/L per period |
| R-Squared error of fit: | 0.030095 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.1629 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000011686 | mg/L per period |
| R-Squared error of fit: | 0.096570 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.6385 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000050229 | mg/L per period |
| R-Squared error of fit: | 0.072629 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.6932 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000019966 | mg/L per period |
| R-Squared error of fit: | 0.076117 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000013390 | mg/L per period |
| R-Squared error of fit: | 0.083531 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.5480 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01097** |
| **Location Class:** | | **Parameter:** | **Antimony, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000012984 | mg/L per period |
| R-Squared error of fit: | 0.060544 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2380 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000087842 | mg/L per period |
| R-Squared error of fit: | 0.019092 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.61898 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000096869 | mg/L per period |
| R-Squared error of fit: | 0.019092 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.61898 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## 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: | -1.23 |
| Z test: | 1.64 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.029788 | mg/L per period |
| R-Squared error of fit: | 0.047662 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.066079 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.024031 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.097686 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.1681 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000029769 | mg/L per period |
| R-Squared error of fit: | 0.063101 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2197 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00026255 | mg/L per period |
| R-Squared error of fit: | 0.013584 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00019839 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00000030866 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00069621 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.7544 |
| Z test: | 1.6449 |
| 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:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0048552 | mg/L per period |
| R-Squared error of fit: | 0.085859 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0041551 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0085169 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00080376 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4402 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00034747 | mg/L per period |
| R-Squared error of fit: | 0.00023667 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0051307 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0043061 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.012188 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.98101 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000039929 | mg/L per period |
| R-Squared error of fit: | 0.36565 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000045161 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000065709 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000025206 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.4716 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000000083704 | mg/L per period |
| R-Squared error of fit: | 0.00066495 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.27745 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000088490 | mg/L per period |
| R-Squared error of fit: | 0.0061606 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000048375 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.83199 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000020607 | mg/L per period |
| R-Squared error of fit: | 0.21860 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000011440 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000026312 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000014395 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.8361 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000021138 | mg/L per period |
| R-Squared error of fit: | 0.055336 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000056657 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000023793 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000057342 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.93872 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000028302 | mg/L per period |
| R-Squared error of fit: | 0.0048071 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.32097 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000027222 | mg/L per period |
| R-Squared error of fit: | 0.072453 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000019097 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000018583 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000053910 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0007 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000026690 | mg/L per period |
| R-Squared error of fit: | 0.061235 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000023661 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000020815 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000062025 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.83424 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000077855 | mg/L per period |
| R-Squared error of fit: | 0.0048079 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.27745 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000024067 | mg/L per period |
| R-Squared error of fit: | 0.017467 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000035479 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0000000091738 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000051103 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.6380 |
| Z test: | 1.6449 |
| 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:** | **01040** |
| **Location Class:** | | **Parameter:** | **Copper, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000033940 | mg/L per period |
| R-Squared error of fit: | 0.049373 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0913 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000022772 | mg/L per period |
| R-Squared error of fit: | 0.00016057 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.51868 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0012652 | mg/L per period |
| R-Squared error of fit: | 0.0070170 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00021010 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00068960 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000031723 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.3136 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000020293 | mg/L per period |
| R-Squared error of fit: | 0.0019789 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.27745 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000010955 | mg/L per period |
| R-Squared error of fit: | 0.0048071 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.32097 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000011670 | mg/L per period |
| R-Squared error of fit: | 0.010247 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.1989 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0015682 | mg/L per period |
| R-Squared error of fit: | 0.20830 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0015106 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0010118 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0019362 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.9192 |
| Z test: | 1.6449 |
| 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00033896 | mg/L per period |
| R-Squared error of fit: | 0.26357 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00033771 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00013901 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00055717 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.5647 |
| Z test: | 1.6449 |
| 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:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000025563 | mg/L per period |
| R-Squared error of fit: | 0.0048071 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.32097 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000014702 | mg/L per period |
| R-Squared error of fit: | 0.13024 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000012324 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000029400 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.7174 |
| Z test: | 1.6449 |
| 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:** | **01067** |
| **Location Class:** | | **Parameter:** | **Nickel, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000010750 | mg/L per period |
| R-Squared error of fit: | 0.0018359 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000027941 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00000030208 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000046851 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.0430 |
| Z test: | 1.6449 |
| 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000015475 | mg/L per period |
| R-Squared error of fit: | 0.0047821 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.27745 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000025636 | mg/L per period |
| R-Squared error of fit: | 0.0029080 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.51868 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000015600 | mg/L per period |
| R-Squared error of fit: | 0.0000056119 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.36993 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01147** |
| **Location Class:** | | **Parameter:** | **Selenium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.03 | |

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: | -0.92 |
| Z test: | 1.64 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.076341 | mg/L per period |
| R-Squared error of fit: | 0.39081 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.070175 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.099668 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.029360 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1284 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000047337 | mg/L per period |
| R-Squared error of fit: | 0.00045341 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.092877 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0081037 | mg/L per period |
| R-Squared error of fit: | 0.58857 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0069235 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0096681 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0033643 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1432 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.013296 | mg/L per period |
| R-Squared error of fit: | 0.77188 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.010989 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.013653 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0088375 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -5.5608 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000031938 | mg/L per period |
| R-Squared error of fit: | 0.0056246 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000012278 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.70218 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000057404 | mg/L per period |
| R-Squared error of fit: | 0.21321 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000045172 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000091661 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000000048886 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.2087 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000047211 | mg/L per period |
| R-Squared error of fit: | 0.080251 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000045070 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000084617 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.7988 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000075494 | mg/L per period |
| R-Squared error of fit: | 0.44972 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000065197 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000098275 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000026633 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.8591 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000020472 | mg/L per period |
| R-Squared error of fit: | 0.0064589 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000055682 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000011819 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000035258 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0217 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00057823 | mg/L per period |
| R-Squared error of fit: | 0.55168 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00048886 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00065907 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00035627 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.6697 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00060092 | mg/L per period |
| R-Squared error of fit: | 0.54009 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00053327 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00069835 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00037802 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.7948 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000016522 | mg/L per period |
| R-Squared error of fit: | 0.011744 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.44936 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000013959 | mg/L per period |
| R-Squared error of fit: | 0.011744 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.44936 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000012773 | mg/L per period |
| R-Squared error of fit: | 0.059264 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2023 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00091515 | mg/L per period |
| R-Squared error of fit: | 0.064575 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00046962 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00026090 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0011221 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.1051 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000054260 | mg/L per period |
| R-Squared error of fit: | 0.019147 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000037131 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000067118 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.27869 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000000070033 | mg/L per period |
| R-Squared error of fit: | 0.0011091 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.064194 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000014622 | mg/L per period |
| R-Squared error of fit: | 0.021567 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.86727 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000046752 | mg/L per period |
| R-Squared error of fit: | 0.040099 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000027207 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00010611 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000026864 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.68840 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000090984 | mg/L per period |
| R-Squared error of fit: | 0.21578 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000082316 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00014289 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000021749 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.4182 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000020522 | mg/L per period |
| R-Squared error of fit: | 0.090163 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.4765 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000085496 | mg/L per period |
| R-Squared error of fit: | 0.0030860 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01077** |
| **Location Class:** | | **Parameter:** | **Silver, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000018232 | mg/L per period |
| R-Squared error of fit: | 0.011744 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.44936 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000065390 | mg/L per period |
| R-Squared error of fit: | 0.0077185 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.84888 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000028630 | mg/L per period |
| R-Squared error of fit: | 0.024210 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.70613 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000071511 | mg/L per period |
| R-Squared error of fit: | 0.0055562 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.19250 |
| Z test: | 1.6449 |
| 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:** | **01145** |
| **Location Class:** | | **Parameter:** | **Selenium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0 | mg/L per period |
| R-Squared error of fit: | 0.0 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.50 | |

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: | -4.25 |
| 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-3** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.10277 | mg/L per period |
| R-Squared error of fit: | 0.52348 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.10822 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.071938 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.13366 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.7941 |
| Z test: | 1.6449 |
| 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:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000016497 | mg/L per period |
| R-Squared error of fit: | 0.062861 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2197 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0018338 | mg/L per period |
| R-Squared error of fit: | 0.054148 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0030651 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0062677 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0010426 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.5552 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00095982 | mg/L per period |
| R-Squared error of fit: | 0.00075508 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0071429 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0049354 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.018551 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2308 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000011115 | mg/L per period |
| R-Squared error of fit: | 0.081518 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000084296 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000020305 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.57244 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000024984 | mg/L per period |
| R-Squared error of fit: | 0.15755 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000024648 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000044503 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000069481 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.0022 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000030874 | mg/L per period |
| R-Squared error of fit: | 0.13743 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000031860 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000055442 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000015509 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.5876 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000041039 | mg/L per period |
| R-Squared error of fit: | 0.69781 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000041206 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000029536 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000048408 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 4.9637 |
| Z test: | 1.6449 |
| 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000038057 | mg/L per period |
| R-Squared error of fit: | 0.62243 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000037349 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000025291 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000048469 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 4.9001 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000062041 | mg/L per period |
| R-Squared error of fit: | 0.076908 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3481 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00068124 | mg/L per period |
| R-Squared error of fit: | 0.023681 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00097773 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0025305 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00063284 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.1056 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00076978 | mg/L per period |
| R-Squared error of fit: | 0.025331 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0011509 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0027843 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00066848 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0643 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000016412 | mg/L per period |
| R-Squared error of fit: | 0.0039623 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.092483 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000013662 | mg/L per period |
| R-Squared error of fit: | 0.011695 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.44936 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000068252 | mg/L per period |
| R-Squared error of fit: | 0.12539 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.7572 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000024065 | mg/L per period |
| R-Squared error of fit: | 0.15392 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.6315 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0022254 | mg/L per period |
| R-Squared error of fit: | 0.34910 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0020754 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0014167 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0027869 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 4.1277 |
| Z test: | 1.6449 |
| 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:** | **01046** |
| **Location Class:** | | **Parameter:** | **Iron, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0018815 | mg/L per period |
| R-Squared error of fit: | 0.64659 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0017291 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0012443 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0023430 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 4.7531 |
| Z test: | 1.6449 |
| 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000015855 | mg/L per period |
| R-Squared error of fit: | 0.0073221 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.37681 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00043625 | mg/L per period |
| R-Squared error of fit: | 0.86190 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00041563 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00035843 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00049283 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 6.0261 |
| Z test: | 1.6449 |
| 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00043503 | mg/L per period |
| R-Squared error of fit: | 0.85599 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00040421 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00034354 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00047695 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 6.0126 |
| Z test: | 1.6449 |
| 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:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000030174 | mg/L per period |
| R-Squared error of fit: | 0.010863 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.57775 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000024568 | mg/L per period |
| R-Squared error of fit: | 0.00018795 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000031308 | mg/L per period |
| R-Squared error of fit: | 0.011695 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.44936 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000093073 | mg/L per period |
| R-Squared error of fit: | 0.0091460 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.46439 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.26 | |

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: | -3.01 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.019490 | mg/L per period |
| R-Squared error of fit: | 0.068306 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.023388 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0026592 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.042714 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.5639 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **00618** |
| **Location Class:** | | **Parameter:** | **Nitrate nitrogen, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00051421 | mg/L per period |
| R-Squared error of fit: | 0.12131 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000080000 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00010259 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.4372 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Upward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0072516 | mg/L per period |
| R-Squared error of fit: | 0.25786 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0082564 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.012148 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0031763 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.0696 |
| Z test: | 1.6449 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.00062293 | mg/L per period |
| R-Squared error of fit: | 0.0015330 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.00034843 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0053898 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0070561 | mg/L per period |

| | |
|---|---|
| Non-parametric Mann-Kendall Test for Trend | |
| S Statistic: | 0.083460 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000078088 | mg/L per period |
| R-Squared error of fit: | 0.66662 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000068729 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000094245 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000046353 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.6570 |
| Z test: | 1.6449 |
| 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:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000071575 | mg/L per period |
| R-Squared error of fit: | 0.53253 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000064364 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000082584 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000045516 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.2988 |
| Z test: | 1.6449 |
| 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:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000071646 | mg/L per period |
| R-Squared error of fit: | 0.20632 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000066586 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000089145 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000044780 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.6073 |
| Z test: | 1.6449 |
| 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:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000065481 | mg/L per period |
| R-Squared error of fit: | 0.19937 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000065217 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000073968 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000010608 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.5010 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000049757 | mg/L per period |
| R-Squared error of fit: | 0.0061446 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000065839 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000028785 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000015079 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.1674 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00014029 | mg/L per period |
| R-Squared error of fit: | 0.19285 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00013988 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00024716 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000020634 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.8558 |
| Z test: | 1.6449 |
| 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:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00014864 | mg/L per period |
| R-Squared error of fit: | 0.20120 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00012940 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00024444 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000050665 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.7317 |
| Z test: | 1.6449 |
| 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000064931 | mg/L per period |
| R-Squared error of fit: | 0.0034100 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.27745 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000032181 | mg/L per period |
| R-Squared error of fit: | 0.049362 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0913 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000011208 | mg/L per period |
| R-Squared error of fit: | 0.025182 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.63394 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0047631 | mg/L per period |
| R-Squared error of fit: | 0.077357 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0040338 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0059720 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0018433 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.8381 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0042607 | mg/L per period |
| R-Squared error of fit: | 0.62529 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0043192 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0053707 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0028730 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.1295 |
| Z test: | 1.6449 |
| 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000014611 | mg/L per period |
| R-Squared error of fit: | 0.0048097 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.32097 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000028947 | mg/L per period |
| R-Squared error of fit: | 0.028798 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4741 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00021964 | mg/L per period |
| R-Squared error of fit: | 0.16031 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00020000 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00035216 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000069397 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.5658 |
| Z test: | 1.6449 |
| 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:** | **01056** |
| **Location Class:** | | **Parameter:** | **Manganese, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00032954 | mg/L per period |
| R-Squared error of fit: | 0.37314 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00026585 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00044484 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00013563 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.2967 |
| Z test: | 1.6449 |
| 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:** | **01057** |
| **Location Class:** | | **Parameter:** | **Thallium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000020459 | mg/L per period |
| R-Squared error of fit: | 0.089282 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4765 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000096799 | mg/L per period |
| R-Squared error of fit: | 0.0048097 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.32097 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000011754 | mg/L per period |
| R-Squared error of fit: | 0.014818 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.75280 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000000097756 | mg/L per period |
| R-Squared error of fit: | 0.00078981 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.36993 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000042908 | mg/L per period |
| R-Squared error of fit: | 0.037557 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.46241 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

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: | -0.65 |
| Z test: | 1.64 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0043241 | mg/L per period |
| R-Squared error of fit: | 0.0042783 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0074284 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.013681 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.030291 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.43473 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00045004 | mg/L per period |
| R-Squared error of fit: | 0.25254 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00049632 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00027884 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00074519 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 3.2203 |
| Z test: | 1.6449 |
| 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:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0016558 | mg/L per period |
| R-Squared error of fit: | 0.071179 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00099052 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0035302 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00065567 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.85186 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0071765 | mg/L per period |
| R-Squared error of fit: | 0.20643 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0050394 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.010638 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.5636 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.000070012 | mg/L per period |
| R-Squared error of fit: | 0.87138 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.000069961 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000064283 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000076295 | mg/L per period |
| Non-parametric Mann-Kendall Test for Trend | | |
| S Statistic: | 6.0124 | |
| Z test: | 1.6449 | |
| 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:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000011058 | mg/L per period |
| R-Squared error of fit: | 0.036592 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.98028 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000010431 | mg/L per period |
| R-Squared error of fit: | 0.22362 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000011992 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00000055781 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000019528 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.5123 |
| Z test: | 1.6449 |
| 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000017568 | mg/L per period |
| R-Squared error of fit: | 0.25145 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000016806 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.00000057820 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000029648 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.4320 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | 0.0000013037 | mg/L per period |
| R-Squared error of fit: | 0.0072688 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | 0.0000010902 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000059505 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000062662 | mg/L per period |
| Non-parametric Mann-Kendall Test for Trend | | |
| S Statistic: | 0.35583 | |
| Z test: | 1.6449 | |
| 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:** | **01022** |
| **Location Class:** | | **Parameter:** | **Boron, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000019913 | mg/L per period |
| R-Squared error of fit: | 0.017530 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000027758 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000068099 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000057462 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.079072 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000054862 | mg/L per period |
| R-Squared error of fit: | 0.0056656 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.37139 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000024999 | mg/L per period |
| R-Squared error of fit: | 0.041203 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.99038 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000038772 | mg/L per period |
| R-Squared error of fit: | 0.076157 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000066293 | mg/L per period |
| R-Squared error of fit: | 0.11399 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.8714 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000083893 | mg/L per period |
| R-Squared error of fit: | 0.012556 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000027854 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00011552 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000086249 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.67761 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000000020327 | mg/L per period |
| R-Squared error of fit: | 0.00010220 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000019544 | mg/L per period |
| R-Squared error of fit: | 0.056135 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.4290 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000010413 | mg/L per period |
| R-Squared error of fit: | 0.014840 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000022155 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000013729 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000019530 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.37601 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000032141 | mg/L per period |
| R-Squared error of fit: | 0.041203 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.99038 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000014922 | mg/L per period |
| R-Squared error of fit: | 0.0062908 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.33341 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01077** |
| **Location Class:** | | **Parameter:** | **Silver, total** |
| **Location Type:** | **Groundwater** | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000018658 | mg/L per period |
| R-Squared error of fit: | 0.076157 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000033192 | mg/L per period |
| R-Squared error of fit: | 0.099859 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.8714 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000021830 | mg/L per period |
| R-Squared error of fit: | 0.010565 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.71293 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.05 | |

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: | -1.13 |
| 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-6** | **Parameter Code:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000038657 | mg/L per period |
| R-Squared error of fit: | 0.00000034086 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.022841 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.024278 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.019798 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00010193 | mg/L per period |
| R-Squared error of fit: | 0.040801 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000012367 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000057254 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000095583 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.13835 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0031697 | mg/L per period |
| R-Squared error of fit: | 0.14290 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00041824 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0022407 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.8603 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00026228 | mg/L per period |
| R-Squared error of fit: | 0.00051800 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0039718 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0036351 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.059487 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000029945 | mg/L per period |
| R-Squared error of fit: | 0.19116 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000015091 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000044960 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3637 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000048622 | mg/L per period |
| R-Squared error of fit: | 0.076357 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000022127 | mg/L per period |
| R-Squared error of fit: | 0.087833 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2167 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000019591 | mg/L per period |
| R-Squared error of fit: | 0.24882 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000015807 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000030028 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00000023073 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.9577 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000013444 | mg/L per period |
| R-Squared error of fit: | 0.073356 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000013560 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000030476 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000041199 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.3237 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000093100 | mg/L per period |
| R-Squared error of fit: | 0.039739 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000025737 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00019008 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00011623 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.37537 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000044892 | mg/L per period |
| R-Squared error of fit: | 0.0081903 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000013709 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00016935 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00017202 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.17781 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000023130 | mg/L per period |
| R-Squared error of fit: | 0.076357 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000032783 | mg/L per period |
| R-Squared error of fit: | 0.091666 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.9606 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00028707 | mg/L per period |
| R-Squared error of fit: | 0.11528 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000095410 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000012157 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00036704 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6204 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01049** |
| **Location Class:** | | **Parameter:** | **Lead, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000072210 | mg/L per period |
| R-Squared error of fit: | 0.14435 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3323 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000017780 | mg/L per period |
| R-Squared error of fit: | 0.096396 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000074365 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000021687 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6030 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000012787 | mg/L per period |
| R-Squared error of fit: | 0.00068438 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0002 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000036119 | mg/L per period |
| R-Squared error of fit: | 0.063547 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2380 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000011183 | mg/L per period |
| R-Squared error of fit: | 0.076357 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000019304 | mg/L per period |
| R-Squared error of fit: | 0.11123 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.9606 |
| Z test: | 1.6449 |
| 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:** | **01095** |
| **Location Class:** | | **Parameter:** | **Antimony, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000062057 | mg/L per period |
| R-Squared error of fit: | 0.063194 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2476 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000028463 | mg/L per period |
| R-Squared error of fit: | 0.10634 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6041 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000011624 | mg/L per period |
| R-Squared error of fit: | 0.041135 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.99038 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.03 | |

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: | -0.77 |
| Z test: | 1.64 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0041981 | mg/L per period |
| R-Squared error of fit: | 0.0059893 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0078431 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0090019 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.025890 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.77375 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00039707 | mg/L per period |
| R-Squared error of fit: | 0.044102 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00066964 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.000099295 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0011862 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.9179 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Upward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0039482 | mg/L per period |
| R-Squared error of fit: | 0.099830 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0047619 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0095597 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00083332 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.8789 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0044136 | mg/L per period |
| R-Squared error of fit: | 0.25065 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0042084 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0075956 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0011500 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.1565 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000057930 | mg/L per period |
| R-Squared error of fit: | 0.013404 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000017357 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000011258 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.16927 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000021170 | mg/L per period |
| R-Squared error of fit: | 0.0014354 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.076942 |
| Z test: | 1.6449 |
| 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:** | **01005** |
| **Location Class:** | | **Parameter:** | **Barium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000039053 | mg/L per period |
| R-Squared error of fit: | 0.14350 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000045221 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000077395 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000016190 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.1264 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000034640 | mg/L per period |
| R-Squared error of fit: | 0.065383 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000051103 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000085972 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000016363 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.0013 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000022330 | mg/L per period |
| R-Squared error of fit: | 0.26021 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000012422 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000026728 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000044652 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.4000 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000022906 | mg/L per period |
| R-Squared error of fit: | 0.17905 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000011967 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000029008 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000021923 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4394 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01027** |
| **Location Class:** | | **Parameter:** | **Cadmium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000077857 | mg/L per period |
| R-Squared error of fit: | 0.049465 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0913 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000016801 | mg/L per period |
| R-Squared error of fit: | 0.049465 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0913 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000012684 | mg/L per period |
| R-Squared error of fit: | 0.00022052 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000063348 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000044209 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00023762 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.91726 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000088528 | mg/L per period |
| R-Squared error of fit: | 0.094529 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.8466 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000052624 | mg/L per period |
| R-Squared error of fit: | 0.014288 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.64738 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000043029 | mg/L per period |
| R-Squared error of fit: | 0.062146 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000022244 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000053827 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000030984 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2925 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000042375 | mg/L per period |
| R-Squared error of fit: | 0.14745 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000030517 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.9005 |
| Z test: | 1.6449 |
| At the 95.0 % Confidence Level (two-tailed test): | Downward |

# 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000011856 | mg/L per period |
| R-Squared error of fit: | 0.090184 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.4765 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000036043 | mg/L per period |
| R-Squared error of fit: | 0.030988 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.83235 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000054441 | mg/L per period |
| R-Squared error of fit: | 0.049465 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.0913 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000076154 | mg/L per period |
| R-Squared error of fit: | 0.12600 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.7572 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000036999 | mg/L per period |
| R-Squared error of fit: | 0.040327 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.96291 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000010073 | mg/L per period |
| R-Squared error of fit: | 0.10502 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.5722 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.03 | |

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: | -0.65 |
| Z test: | 1.64 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.11337 | mg/L per period |
| R-Squared error of fit: | 0.68459 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.11517 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.14866 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.088526 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.9796 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00071306 | mg/L per period |
| R-Squared error of fit: | 0.41018 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00065888 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0011144 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00045308 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.3988 |
| Z test: | 1.6449 |
| 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:** | **00720** |
| **Location Class:** | | **Parameter:** | **Cyanide, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00063695 | mg/L per period |
| R-Squared error of fit: | 0.025411 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0012932 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0029844 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4521 |
| Z test: | 1.6449 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.095523 | mg/L per period |
| R-Squared error of fit: | 0.74350 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.099929 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.11808 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.075988 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -5.1585 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000035072 | mg/L per period |
| R-Squared error of fit: | 0.11538 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0000061647 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000056854 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2558 |
| Z test: | 1.6449 |
| 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:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000014980 | mg/L per period |
| R-Squared error of fit: | 0.17976 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.00000013193 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000022024 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.2477 |
| Z test: | 1.6449 |
| 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:** | **01002** |
| **Location Class:** | | **Parameter:** | **Arsenic, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000012091 | mg/L per period |
| R-Squared error of fit: | 0.027332 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000000097755 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00000027559 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.4196 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000072501 | mg/L per period |
| R-Squared error of fit: | 0.34374 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000066471 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000010648 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000037848 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1030 |
| Z test: | 1.6449 |
| 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000013777 | mg/L per period |
| R-Squared error of fit: | 0.16179 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000082856 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000013714 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000035621 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.7462 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000040178 | mg/L per period |
| R-Squared error of fit: | 0.060535 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.2380 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0014852 | mg/L per period |
| R-Squared error of fit: | 0.74414 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0015359 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0018101 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0011658 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -5.0379 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0015916 | mg/L per period |
| R-Squared error of fit: | 0.72782 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0017325 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0019681 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0012640 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -4.7613 |
| Z test: | 1.6449 |
| 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:** | **01025** |
| **Location Class:** | | **Parameter:** | **Cadmium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000089592 | mg/L per period |
| R-Squared error of fit: | 0.00011663 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000025352 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000018525 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000016167 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.15823 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000013927 | mg/L per period |
| R-Squared error of fit: | 0.013811 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000025652 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000027249 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000015559 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.39521 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000041928 | mg/L per period |
| R-Squared error of fit: | 0.049850 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.17823 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000048516 | mg/L per period |
| R-Squared error of fit: | 0.10528 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.9080 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000015375 | mg/L per period |
| R-Squared error of fit: | 0.0037070 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 2.4295 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0018365 | mg/L per period |
| R-Squared error of fit: | 0.029201 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000082751 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000071676 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00011737 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.15817 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000039032 | mg/L per period |
| R-Squared error of fit: | 0.096551 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.6094 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000023004 | mg/L per period |
| R-Squared error of fit: | 0.035363 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.29897 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00012565 | mg/L per period |
| R-Squared error of fit: | 0.033610 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000066940 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000010908 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **01059** |
| **Location Class:** | | **Parameter:** | **Thallium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000063486 | mg/L per period |
| R-Squared error of fit: | 0.045923 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.032674 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000022286 | mg/L per period |
| R-Squared error of fit: | 0.033303 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.17823 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000012276 | mg/L per period |
| R-Squared error of fit: | 0.076217 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3618 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000058533 | mg/L per period |
| R-Squared error of fit: | 0.026872 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.55568 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000033712 | mg/L per period |
| R-Squared error of fit: | 0.066190 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0002 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000023278 | mg/L per period |
| R-Squared error of fit: | 0.49220 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000022765 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000030898 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000012113 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.5023 |
| Z test: | 1.6449 |
| 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:** | **01147** |
| **Location Class:** | | **Parameter:** | **Selenium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000022004 | mg/L per period |
| R-Squared error of fit: | 0.48286 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000021924 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000030497 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.000011562 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.5876 |
| Z test: | 1.6449 |
| 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:** | **71890** |
| **Location Class:** | | **Parameter:** | **Mercury, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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:** | **00400** |
| **Location Class:** | | **Parameter:** | **pH (field)** |
| **Location Type:** | | **Units:** | **STD** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00 | STD per period |
| R-Squared error of fit: | 0.05 | |

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: | 0.79 |
| Z test: | 1.64 |
| 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:** | **00515** |
| **Location Class:** | | **Parameter:** | **Total Dissolved Solids** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.21989 | mg/L per period |
| R-Squared error of fit: | 0.41400 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.22704 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.32430 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.096354 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.2535 |
| Z test: | 1.6449 |
| 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:** | **00613** |
| **Location Class:** | | **Parameter:** | **Nitrite nitrogen, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

| | | |
|---|---|---|
| Trend of the least squares straight line | | |
| Slope (fitted to data): | -.00049819 | mg/L per period |
| R-Squared error of fit: | 0.086464 | |
| Sen's Non-parametric estimate of the slope (two-tailed test) | | |
| Median Slope: | -.00022526 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00056279 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00011599 | mg/L per period |
| Non-parametric Mann-Kendall Test for Trend | | |
| S Statistic: | -.85491 | |
| Z test: | 1.6449 | |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.012109 | mg/L per period |
| R-Squared error of fit: | 0.49005 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0027685 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.010542 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.00039489 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1312 |
| Z test: | 1.6449 |
| 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:** | **00946** |
| **Location Class:** | | **Parameter:** | **Sulfate, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.11311 | mg/L per period |
| R-Squared error of fit: | 0.32712 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.12634 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.17918 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.068556 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.2521 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000042990 | mg/L per period |
| R-Squared error of fit: | 0.093835 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.000038835 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000049314 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00011561 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.2779 |
| Z test: | 1.6449 |
| 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:** | **01000** |
| **Location Class:** | | **Parameter:** | **Arsenic, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000041508 | mg/L per period |
| R-Squared error of fit: | 0.013596 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000000065532 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.87643 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000032629 | mg/L per period |
| R-Squared error of fit: | 0.10904 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.00000014760 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00000028864 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.1065 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000080409 | mg/L per period |
| R-Squared error of fit: | 0.40378 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000069512 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000010657 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000030519 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1486 |
| Z test: | 1.6449 |
| 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:** | **01007** |
| **Location Class:** | | **Parameter:** | **Barium, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000098283 | mg/L per period |
| R-Squared error of fit: | 0.32891 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000079422 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000013774 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | -.0000027815 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.7732 |
| Z test: | 1.6449 |
| 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:** | **01010** |
| **Location Class:** | | **Parameter:** | **Beryllium, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000030553 | mg/L per period |
| R-Squared error of fit: | 0.0039904 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000035698 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00016359 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00012910 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.37541 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000093228 | mg/L per period |
| R-Squared error of fit: | 0.00027054 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000029412 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00016420 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.00011171 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.33370 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000080989 | mg/L per period |
| R-Squared error of fit: | 0.12643 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.7866 |
| Z test: | 1.6449 |
| 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:** | **01037** |
| **Location Class:** | | **Parameter:** | **Cobalt, total** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000013032 | mg/L per period |
| R-Squared error of fit: | 0.11864 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000000024145 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.6199 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000075495 | mg/L per period |
| R-Squared error of fit: | 0.077027 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3481 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000090922 | mg/L per period |
| R-Squared error of fit: | 0.077524 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.84888 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00028984 | mg/L per period |
| R-Squared error of fit: | 0.053190 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.000094336 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.00020531 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.000074155 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.0840 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000028567 | mg/L per period |
| R-Squared error of fit: | 0.088682 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4765 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000033816 | mg/L per period |
| R-Squared error of fit: | 0.060624 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4601 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000028645 | mg/L per period |
| R-Squared error of fit: | 0.041579 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | -.0000044272 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.000014338 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0000087738 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.66710 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.00000035220 | mg/L per period |
| R-Squared error of fit: | 0.088682 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -1.4765 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000021205 | mg/L per period |
| R-Squared error of fit: | 0.27001 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -2.8173 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000039521 | mg/L per period |
| R-Squared error of fit: | 0.33427 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | -.0000019616 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -3.1410 |
| Z test: | 1.6449 |
| 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:** | **01075** |
| **Location Class:** | | **Parameter:** | **Silver, dissolved** |
| **Location Type:** | | **Units:** | **mg/L** |
| **Confidence Level:** | **95.00%** | | |

**Date Range: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000033845 | mg/L per period |
| R-Squared error of fit: | 0.077027 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 1.3481 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.0000037910 | mg/L per period |
| R-Squared error of fit: | 0.063681 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.30777 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.000000045439 | mg/L per period |
| R-Squared error of fit: | 0.043176 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.97211 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.000000024369 | mg/L per period |
| R-Squared error of fit: | 0.0039299 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | -.13590 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | -.0000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: 01/01/2019 to 10/15/2025**

## Trend Analysis

Trend of the least squares straight line

| | | |
|---|---|---|
| Slope (fitted to data): | 0.00000000000000 | mg/L per period |
| R-Squared error of fit: | 0.00000000000000 | |

Sen's Non-parametric estimate of the slope (two-tailed test)

| | | |
|---|---|---|
| Median Slope: | 0.0 | mg/L per period |
| Lower Confidence Limit of Slope, M1: | 0.0 | mg/L per period |
| Upper Confidence Limit of Slope, M2+1: | 0.0 | mg/L per period |

Non-parametric Mann-Kendall Test for Trend

| | |
|---|---|
| S Statistic: | 0.0 |
| Z test: | 1.6449 |
| 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: Austin Nieman

Inspection Date: 02/25/2025
Temperature: 50 °F
Weather: Sunny

River Level 421.34
gage at Meredosia 3.34
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom is at 430.00' MSL

Owner Representative: n/a

Initial Closure Turf Installation: Sep-2018

**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

| | |
|---|---|
| **Date** | 02/25/2025 |
| **Inspector** | Austin Nieman |
| **Temperature** | 50 °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** | Closure turf is in good condition. Bubbling in the turf was observed in multiple locations, likely due to recent temperature changes. |
| | **Riprap Outlet Flumes** | **GC** | Flumes are in good condiiton. |
| | **Other** | **NE** | Four temporary piezometers were installed in the FAP between 2/27/2025 and 2/28/2025. It is expected these will be removed and the cap will be patched before the Q2 inspection. |
| **Embankment** | **Riprap** | **GC** | Riprap is in good condition. |
| | **Vegetation in riprap** | **MM** | No overgrowth of weeds. Mowing occurred in December 2024. Some samplings identified at Outlets 5 and 6, will have mowers remove during the next vegetation management visit. |
| | **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** | 02/25/2025 |
| **Inspector** | Austin Nieman |
| **Temperature** | 50 °F |
| **Weather** | Sunny |

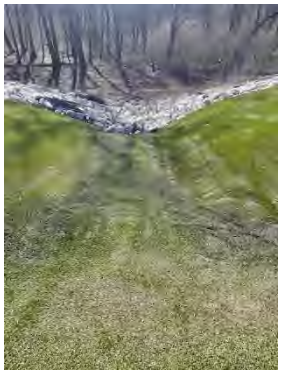
| | Item | Condition Code * | Comments |
|---|---|---|---|
| **Roadway** | **Gravel Road** | **GC** | Roadway gravel is compacted and smooth. |
| | **Drainage** | **GC** | No drainage problems at this time. |
| | **Other** | **GC** | No issues. |
| **Embankment** | **Vegetation at Toe** | **GC** | Vegetation at toe is minimal. Mowing occurred in December 2024. |
| | **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. |
| | **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. 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**

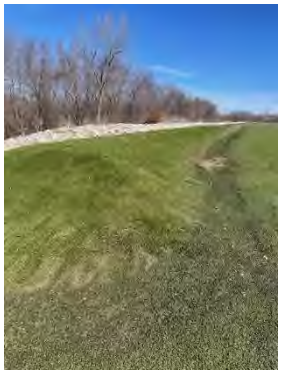
| |
|---|
| **IM** = Item needing Immediate Maintenance. Remediation should be completed within 1 month. |
| **MM** = Item needing Minor Maintenance and/or repairs within the year. |
| **OB** = Condition requires regular observation to ensure that the condition does not become worse. |
| **GC** = Good Condition. Working properly. |
| **NE** = No Evidence of a problem. |
| **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)

Fly Ash Pond Cap – Temporary Piezometer

Fly Ash Pond Cap – Bubbling under turf

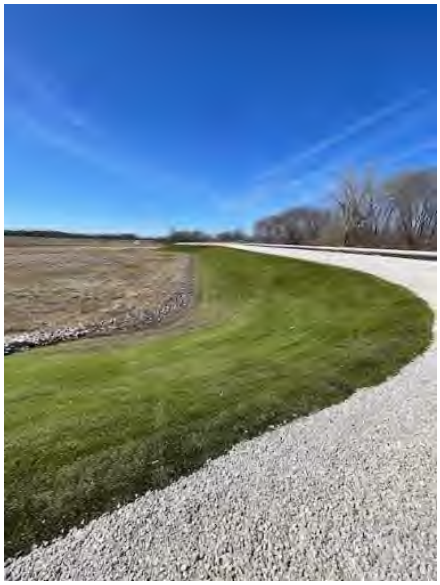
**Bottom Ash CAP**

North Embankment

South embankment

Southwest corner

Letdown



**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: Austin Nieman

Owner Representative: n/a

Initial Closure Turf Installation: Sep-2018

Inspection Date: 05/28/2025
Temperature: 70 °F
Weather: Cloudy

River Level gage at Meredosia: 424.79 / 6.79
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom is at 430.00' MSL

**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

| | |
|---|---|
| **Date** | 05/28/2025 |
| **Inspector** | Austin Nieman |
| **Temperature** | 70 °F |
| **Weather** | Cloudy |

| | 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** | Closure turf is in good condition. |
| | **Riprap Outlet Flumes** | **GC** | Flumes are in good condiiton. |
| | **Other** | **NE** | Four temporary piezometers installed in the FAP were abandoned by sealing with 3/8" bentoninte tablets on 5/27/2025 in accordance with Illinois Administrative Code §920.120. HDPE liner and closure turf repair was completed on 5/28/2025. |
| **Embankment** | **Riprap** | **GC** | Riprap is in good condition. |
| | **Vegetation in riprap** | **MM** | Saplings were observed in the riprap at Outlets 2 and 3, some ~1" in diameter. The north, west, and east embankments are beginning to get growth that is is ~1" in diameter. The first herbicide application of 2025 was June 21 - 22, 2025, and mowing will occur before the end of June. |
| | **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

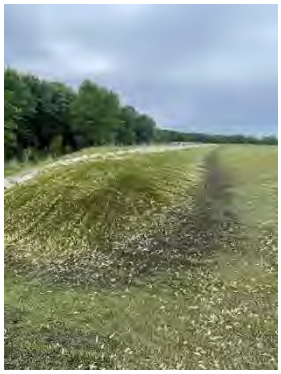
| | |
|---|---|
| **Date** | 05/28/2025 |
| **Inspector** | Austin Nieman |
| **Temperature** | 70 °F |
| **Weather** | Cloudy |

| | 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. The first herbicide application of 2025 was June 21 - 22, 2025, and mowing will occur before the end of June. |
| | **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. |
| | **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. 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**

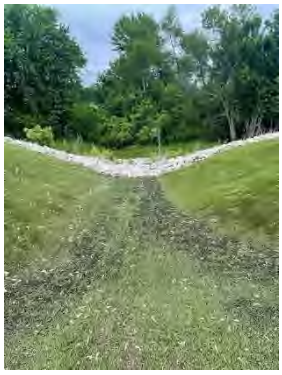
| |
|---|
| **IM** = Item needing Immediate Maintenance. Remediation should be completed within 1 month. |
| **MM** = Item needing Minor Maintenance and/or repairs within the year. |
| **OB** = Condition requires regular observation to ensure that the condition does not become worse. |
| **GC** = Good Condition. Working properly. |
| **NE** = No Evidence of a problem. |
| **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)

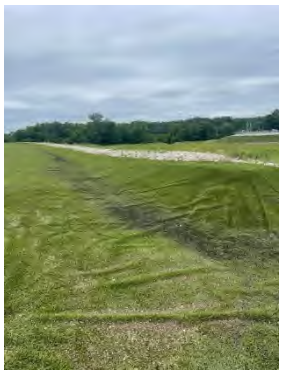
Fly Ash Pond Cap – Outlet 3 and embankment (facing north and south)



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)



Fly Ash Pond Cap – Looking North

Fly Ash Pond Cap – Looking South

Fly Ash Pond Cap – North Embankment

Fly Ash Pond Cap – South Embankment

Fly Ash Pond Cap – West Embankment

Fly Ash Pond Cap – Piezometer Abandonment

**Bottom Ash CAP**

North Embankment

South embankment

Southwest corner

Letdown

**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: Austin Nieman

Inspection Date: 09/05/2025
Temperature: 80 °F
Weather: Cloudy

River Level 420.65
gage at Meredosia 2.65
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom is at 430.00' MSL

Owner Representative: n/a

Initial Closure Turf Installation: Sep-2018

**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

| | |
|---|---|
| **Date** | 09/05/2025 |
| **Inspector** | Annie Muehlfarth |
| **Temperature** | 80 °F |
| **Weather** | Cloudy |

| | 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** | Closure turf is in good condition. |
| | **Riprap Outlet Flumes** | **GC** | Flumes are in good condiiton. |
| | **Other** | **--** | -- |
| Embankment | **Riprap** | **GC** | Riprap is in good condition. |
| | **Vegetation in riprap** | **GC** | Dead saplings were observed along the riprap at the fly ash pond cap. Herbicide was applied to these samplings earlier in the summer in June 2025. |
| | **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** | 09/05/2025 |
| **Inspector** | Annie Muehlfarth |
| **Temperature** | 80 °F |
| **Weather** | Cloudy |

| | 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. The first herbicide application of 2025 was June 21 - 22, 2025, and a second mowing will occur before the end of the year. |
| | **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. |
| | **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. 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. |
| **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)

Fly Ash Pond Cap – Looking North

Fly Ash Pond Cap – Looking South

**Bottom Ash CAP**

North Embankment

South embankment

Southwest corner

Letdown

**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

Inspection Date: 11/13/2025
Temperature: 70 °F
Weather: Sunny

River Level gage at Meredosia: 420.22 / 2.22
Gage 0' = 418.00' MSL
Bottom Ash Pond bottom is at 430.00' MSL

Owner Representative: n/a

Initial Closure Turf Installation: Sep-2018

**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

| | |
|---|---|
| **Date** | 11/13/2025 |
| **Inspector** | Annie Muehlfarth |
| **Temperature** | 70 °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** | Closure turf is in good condition. |
| | **Riprap Outlet Flumes** | **GC** | Flumes are in good condiiton. |
| | **Other** | **--** | -- |
| **Embankment** | **Riprap** | **GC** | Riprap is in good condition. |
| | **Vegetation in riprap** | **GC** | Dead saplings were observed along the riprap at the fly ash pond cap. Herbicide was applied to these samplings earlier in the summer in June 2025. |
| | **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** | 11/13/2025 |
| **Inspector** | Annie Muehlfarth |
| **Temperature** | 70 °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. |
| | **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. 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. |
| **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)

Fly Ash Pond Cap – Looking North

Fly Ash Pond Cap – Looking South

**Bottom Ash CAP**

North Embankment

South embankment

Southwest corner

Letdown

**Old East Pond**

East embankment

West embankment

North embankment

South embankment

# EXHIBIT 9

**Exhibit 9**

**TABLE OF REGULATIONS PROPOSED FOR EXEMPTION IN OLD MEREDOSIA ADJUSTED STANDARD**

**Exempted Regulations from Closure and Post-Closure Requirements**

| Regulation Number | Regulation Language |
|---|---|
| 845.400(g) | All unlined CCR surface impoundments are subject to the requirements of Section 845.700 |
| 845.550(a)(4) & (a)(5) | a) By January 31 of each year, the owner or operator of the CCR surface impoundment must prepare an annual consolidated report for the preceding calendar year that includes the following:<br>* * *<br>4) CCR storage unit pad, or geomembrane, barrier and berm monthly inspection and repair documentation under Section 845.740(c)(4).<br>5) CCR storage unit demonstration under Section 845.740(c)(4)(F). |
| 845.610(c) | Once the groundwater monitoring system and the groundwater monitoring program have been established at the CCR surface impoundment as required by this Subpart, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR surface impoundment or the time period specified in Section 845.740(b) when closure is by removal. |
| 845. 610(e)(4)(H) | (e)(4) A section at the beginning of the annual report must provide an overview of the current status of groundwater monitoring program and corrective action plan for the CCR surface impoundment. At a minimum, the summary must:<br>* * *<br>H) Specify whether remedial activities were initiated or are ongoing under Section 845.780 during the current annual reporting period. |
| All of Subpart G | SUBPART G: CLOSURE AND POST-CLOSURE CARE (845.700-845.780) |
| 845.800(b) | Unless specified otherwise, each file must be retained for at least three years past the date the Agency approved the owner's or operator's request to terminate post- closure care, when closure is with a final cover system, or the completion of groundwater monitoring under Section 845.740(b), when closure is by removal |
| 845.800(d)(20) through (32) | d) Unless otherwise required below, the owner or operator of a CCR surface impoundment must place the following information, as it becomes available, in the facility's operating record:<br>[*all of the records associated with a Part 845 Subpart G closure]* |

**Exempted Regulations from Operating and Construction Permit Applications**

| Regulation Number | Regulation Language |
|---|---|
| 845.230(d)(1) | d) Initial Operating Permit for Existing, Inactive and Inactive Closed CCR Surface Impoundments<br>1) The owner or operator of an existing, inactive or inactive closed CCR surface impoundment who has not completed post-closure care must submit an initial operating permit application to the Agency by October 31, 2021; |
| 845.220(a)(1)(E), (F), (G), (H), (I), and (J) | a) All construction permit applications must contain the following information and documents.<br>* * *<br>E) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR surface impoundment; the method of site preparation and construction of each zone of the CCR surface impoundment; and the approximate dates of construction of each successive stage of construction of the CCR surface impoundment.<br>F) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR surface impoundment, detailed dimensional drawings of<br>the CCR surface impoundment, including a plan view and crosssections of the length and width of the CCR surface impoundment, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak<br>discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR surface impoundment due to malfunction or mis-operation.<br>G) A description of the type, purpose, and location of existing instrumentation.<br>H) Area-capacity curves for the CCR surface impoundment.<br>I) A description of each spillway and diversion design features and capacities and calculations used in their determination.<br>J) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR surface impoundment. |
| 845.220(a)(2)(A), (C), (D), and (E) | Narrative Description of the Facility. The permit application must contain a written description of the facility with supporting documentation describing the procedures and plans that will be used at the facility to comply with the requirements of this Part. The descriptions must include, but are not limited to, the following information: |

| Regulation Number | Regulation Language |
|---|---|
| | A) The types of CCR expected in the CCR surface impoundment, including a chemical analysis of each type of expected CCR;<br>* * *<br>C) The rate at which CCR and non-CCR waste streams currently enter the CCR surface impoundment in gallons per day and dry tons;<br>D) The estimated length of time the CCR surface impoundment will receive CCR and non-CCR waste streams;<br>E) An on-site transportation plan that includes all existing and planned roads in the facility that will be used during the operation of the CCR surface impoundment. |
| 845.220(a)(5) | A narrative description of the proposed construction of, or modification to, a CCR surface impoundment and any projected changes in the volume or nature of the CCR or non-CCR waste streams. |
| 845.220(a)(6) | Plans and specifications fully describing the design, nature, function and interrelationship of each individual component of the facility |
| 845.220(d) | Closure Construction. In addition to the requirements in subsection (a), all construction permit applications for closure of the CCR surface impoundment under Subpart G must contain the following information and documents:<br>1) Closure prioritization category , if applicable (see Section 845.700(g));<br>2) Final closure plan (see Section 845.720(b)), including the closure alternatives analysis required by Section 845.710;<br>3) Groundwater modeling, including:<br>A) The results of groundwater contaminant transport modeling and calculations showing how the closure will achieve compliance with the applicable groundwater standards;<br>B) All modeling inputs and assumptions;<br>C) Description of the fate and transport of contaminants, with the selected closure over time;<br>D) Capture zone modeling, if applicable; and<br>E) Any necessary licenses and software needed to review and access both the model and the data contained within the model.<br>4) Proposed schedule to complete closure; and<br>5) Post-closure care plan specified in Section 845.780(d), if applicable. |
| 845.290 | Construction Quality Assurance Program |

**Exempted Regulations for Demonstrating Completion of Closure and Cessation of Operating Permit**

| Regulation Number | Regulation Language |
|---|---|
| 845.200(a)(5) | 5) A CCR surface impoundment must maintain an operating permit until:<br>A) The completion of post-closure care when the CCR surface impoundment is closed with a final cover system; or<br>B) The completion of groundwater monitoring under Section 845.740(b) when the CCR surface impoundment is closed by removal. |
| 845.230(c) | The owner or operator of a CCR surface impoundment conducting post-closure care under Section 845.780 must maintain an operating permit until the completion of post-closure care. Any changes to the post-closure care plan, groundwater monitoring system, groundwater sampling and analysis program, and groundwater monitoring program must be submitted to the Agency in an operating permit application |
| Subpart I | Financial Assurance |

# EXHIBIT 10

# Old Ash Pond, Meredosia Power Station
# In Situ Boron Treatment
# Preliminary Draft Work Plan

## Old Ash Pond
## Meredosia Power Station

800 South Washington Street,
Meredosia, IL 62665

Prepared for

Ameren Missouri

1901 Chouteau Avenue

St. Louis, MO 63103

**Loureiro Engineering Associates, Inc.**

9700 Mackenzie Road, Suite 214 • Affton, MO 63125 • www.Loureiro.com

An Employee-Owned Company

**Affirmative Action / Equal Opportunity Employer**

# Old Ash Pond, Meredosia Power Station
# In Situ Boron Treatment
# Preliminary Draft Work Plan

**800 South Washington Street**
**Meredosia, IL 62665**

**April 14, 2026**

**Prepared for**

**Ameren Missouri**
**1901 Chouteau Avenue**
**St. Louis, MO 63103**

**Prepared by**

**LOUREIRO ENGINEERING ASSOCIATES, INC.**
**9700 Mackenzie Road, Suite 214**
**Affton, MO 63125**

***An Employee-Owned Company***

## TABLE OF CONTENTS


**Pageo**

**1. INTRODUCTION 1**

1.1 Alternative Remedy Overview 1

**2. PRB DESIGN & IMPLEMENTATION 2**

2.1 PRB Design 2
2.1.1 PRB Lateral Extent 2
2.1.2 PRB Target Depth Interval 3
2.2 PRB Installation 3

**3. SAMPLING AND PRB PERFORMANCE EVALUATION 4**

**4. SCHEDULE 5**

# 1. INTRODUCTION

Loureiro Engineering Associates, Inc. (LEA) has prepared this Preliminary Draft Work Plan (Work Plan) to outline the treatment approach proposed by Ameren Energy Medina Valley Cogen, LLC (Ameren) to address groundwater impacts associated with the inactive Old Ash Pond (Old Meredosia) at Meredosia Power Station (MPS). Old Meredosia ceased operations in the 1970's, allowing the development of a significant ecosystem that supports a variety of plants and animals, including threatened and sensitive species. Due to the presence of this ecosystem, a treatability study was conducted to evaluate alternative methods for treating groundwater flowing beneath Old Meredosia. Based on the treatability results, a groundwater treatment system has been identified that will effectively address groundwater impacts while preserving the established ecosystem on the surface. This remedy will be proposed as an alternative closure method to support Ameren's amendment to its Petition for an Adjusted Standard from the Part 845 Illinois Standards for the Disposal of Coal Combustion Residuals (CCRs) in Surface Impoundments (35 Ill. Adm. Code 845). This Work Plan presents a preliminary overview of the proposed remedy implementation; a final Work Plan will be submitted with the Construction Permit Application.

## 1.1 Alternative Remedy Overview

The proposed alternative treatment remedy consists of an adsorption amendment, Rembind 100x, to be installed as an in situ permeable reactive barrier (PRB) located adjacent to and downgradient of Old Meredosia, oriented perpendicular to the direction of groundwater flow. The PRB will be designed with appropriate dimensions to reduce boron concentrations in groundwater to below the standards in Section 845.600 (a) of the Illinois Pollution Control Board (Board) Rules. 35 Ill. Adm. Code 845.600(a) ("CCR Standards"). The treatability testing was simulated at the site-specific groundwater velocity (100 feet [ft] per year) to ensure the findings could be reliably scaled for the PRB design. Because boron was the constituent consistently above the CCR Standard of 2.0 milligrams per liter (mg/L), the focus of the study was on boron. However, it is anticipated that Rembind 100x similarly reduces concentrations of the other metals in the CCR Standard. The treatability testing demonstrated that Rembind 100x provides sufficient residence time (i.e., contact time) between groundwater and the amendment to effectively reduce boron concentrations to below CCR standards.[1]

[1] A review of the most recent groundwater data shows that the concentrations of the other constituents in Section 845.600(a) are below the CCR Standards.

## 2. PRB DESIGN & IMPLEMENTATION

### 2.1 PRB Design

#### 2.1.1 PRB Lateral Extent

The PRB dimensions and depth interval for emplacement were determined from historical groundwater level measurements, groundwater flow direction contours, and boron data. In addition, boron data was collected from closely spaced groundwater sampling points in November 2025 to refine the extent and concentrations in the proposed location of the PRB downgradient of Old Meredosia. The proposed PRB, shown as the red line downgradient of Old Meredosia on Figure 1, trends in a north-northeast to south-southwest direction perpendicular to groundwater flow. As shown on the figure, the data indicate an approximate 200-ft transect of boron concentrations exceeding the CCR Standard at three sample locations (TB-1, TB-2, and TB-3), ranging from 2.83 to 3.27 mg/L. To ensure adequate capture under potential variability in groundwater flow direction, the PRB is designed to extend 170 ft north-northeast of TB-1 and 100 ft south-southwest of TB-3, for a total length of 470 linear ft.

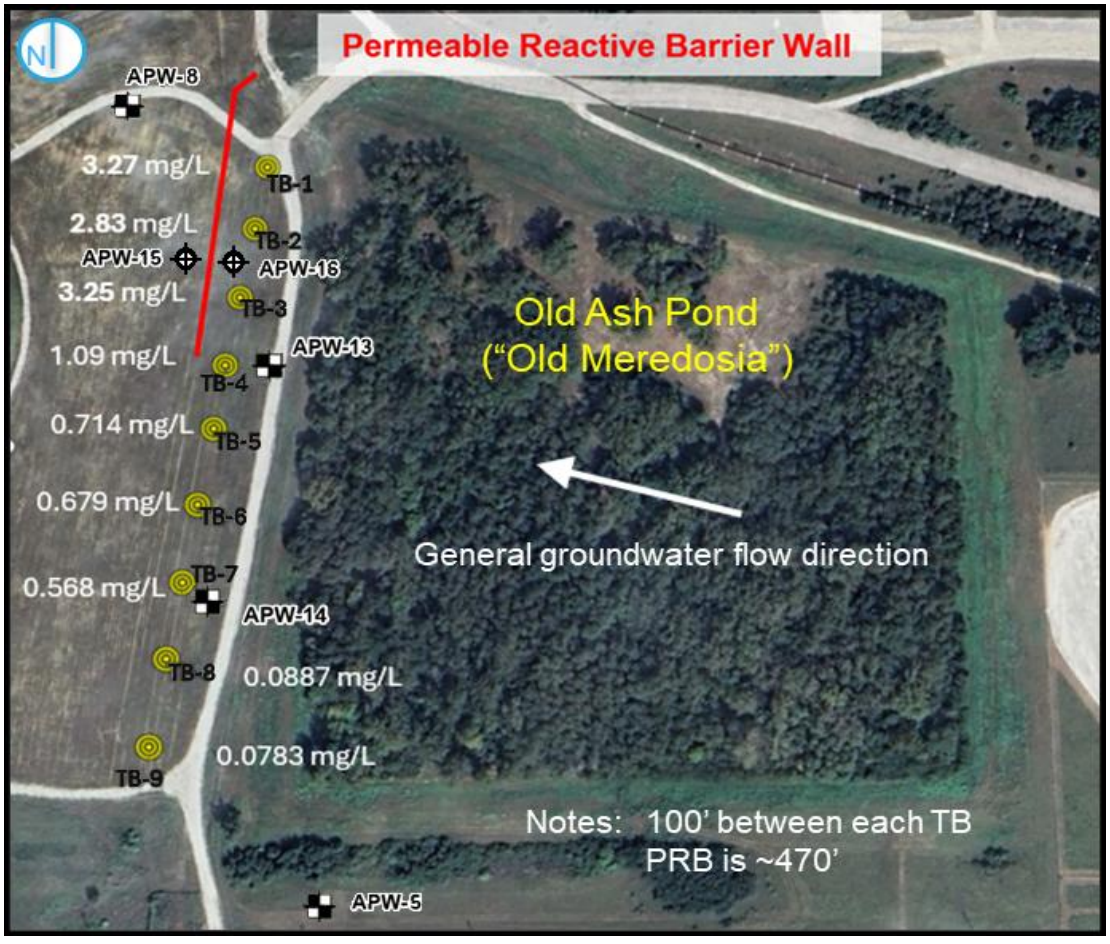



Figure 1. Site Map with Proposed Location of PRB Downgradient of Old Meredosia and Proposed location of new monitoring wells APW-15 and APW-16.

### 2.1.2 PRB Target Depth Interval

A combination of historical groundwater level data and boron data collected from monitoring wells screened within the saturated zone, upgradient and downgradient of Old Meredosia, was used to determine the depth interval of the PRB. The design thickness of the PRB is 10 ft, as determined based on the results of the treatability study results As shown in Figure 2, the PRB will be installed to target a depth interval zone of approximately 422 to 432 ft above mean sea level (30 to 40 ft below the ground surface of Old Meredosia and 20 to 30 ft below the construction area ground surface). The exact elevation of the treatment depth interval will be refined following a review of recent groundwater table data. These design details will be provided in the final Work Plan submitted as part of the Construction Permit Application.

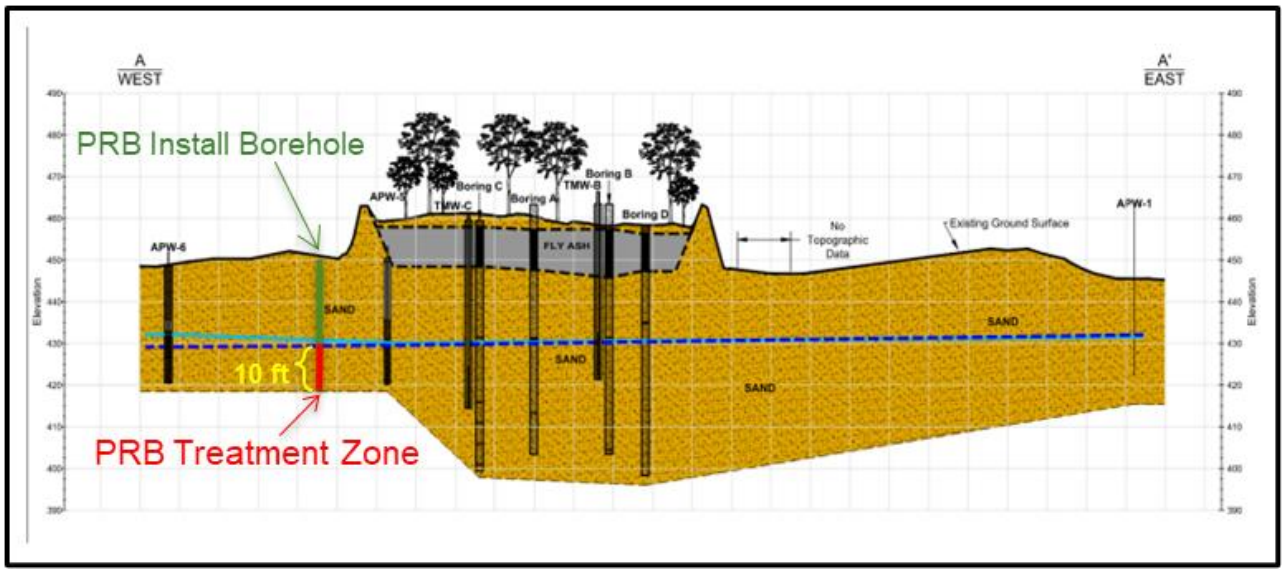



Figure 2. Cross-section of PRB Depth Interval Emplacement.

## 2.2 PRB Installation

Rembind 100x is a carbon-based product that can be prepared as an injectable slurry for an in situ application. The amendment concentrations / ratios that were used in the treatability study will be mixed into a slurry and injected through hollow-stem / flight augers to the target zone depth utilizing an overlapping auger-hole methodology, as illustrated in Figure 3 below. Eight-ft diameter augers will be used to install the material in two overlapping rows along the PRB transect. This configuration is designed to deliver the required quantity of amendment, as determined by the treatability study, while ensuring continuous coverage through offset auger holes in each row.

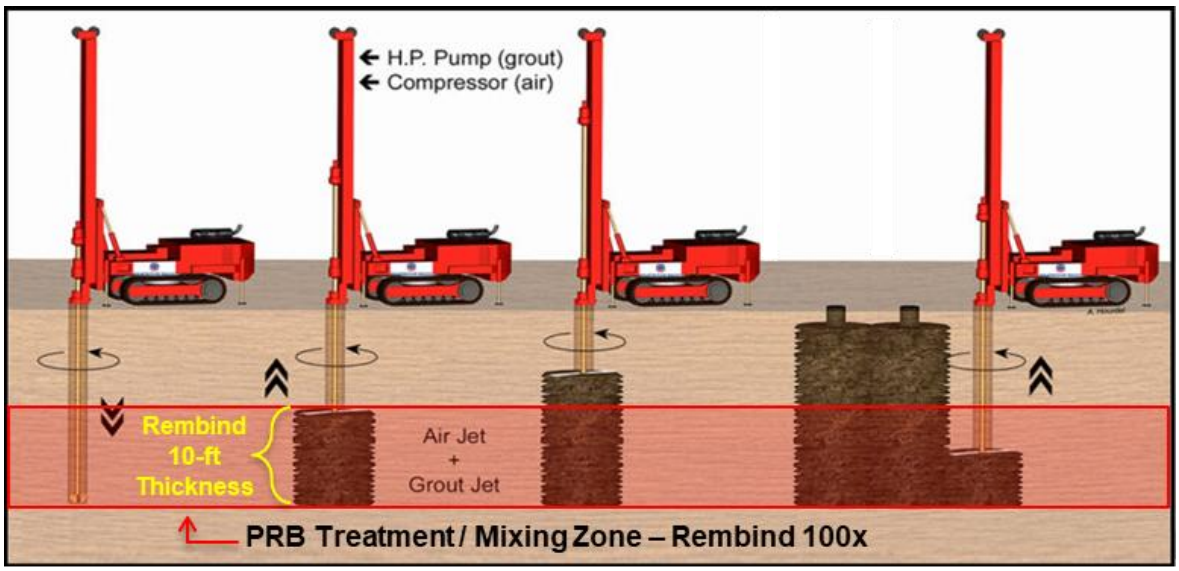



Figure 3. Schematic of PRB Emplacement Strategy.

## 3. SAMPLING AND PRB PERFORMANCE EVALUATION

In addition to ongoing routine groundwater monitoring (e.g., quarterly sampling), data will be collected from newly installed monitoring wells to evaluate the treatment effectiveness of the PRB. Existing wells APW-13 and APW-14 (upgradient) and APW-8 (downgradient), shown on Figure 1, were originally considered for assessing groundwater conditions before and after passage through the PRB; however, these wells have been dry during recent monitoring events (APW-8 has only recently been dry as of October 2025).

To address this recent water table level limitation in data collection, new monitoring wells will be installed upgradient and downgradient of the PRB in the vicinity of TB-2 and TB-3 and will be constructed with deeper screened intervals (Refer to Figure 1). Upgradient monitoring well APW-16 will be located approximately 20 ft east of the PRB and will be used to characterize influent boron concentrations. Likewise, downgradient well APW-15 will be installed approximately 20 ft west of the PRB and will be used to evaluate PRB treatment performance. Final locations and design details for the compliance monitoring wells will be provided in the final Work Plan submitted as part of the Construction Permit Application.

Monitoring parameters will include groundwater level measurements and groundwater analyses specific to boron.

## 4. SCHEDULE

An approximate timeline following the Board's approval of the amended Petition through the projected time to achieve treatment goals is outlined below. This schedule will be refined in the final Work Plan that will be submitted with the Construction Permit Application.

| Estimated Month/Year | Task |
|---|---|
| April 2026 – December 2026 | Amended Petition, Draft Work Plan, and Board Approval |
| January 2027 – March 2027 | Final Work Plan and Construction Permit |
| April 2027 – June 2027 | Final Approval, Bidding, and Construction Preparation |
| July 2027 – September 2027 | PRB Construction |
| October 2027 – December 2027 | Initial PRB Stabilization Phase |
| December 2027 – December 2031 | PRB Treatment |
| January 2032 – February 2032 | Approximate, Projected Date to Meet Compliance Goals * |

* Based on trends in quarterly groundwater boron data collected at APW-8 from January 2019 through October 2025, natural attenuation alone is projected to achieve regulatory criteria within approximately four to five years. Implementation of the PRB is expected to reduce this timeframe by approximately three years or more. Following PRB installation, approximately three to six months are estimated until PRB treatment effectiveness is observed in the newly installed downgradient well APW-15.