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AmerenEnergy Medina Valley CoGen, LLC

Date
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2025 GROUNDWATER MONITORING ANNUAL REPORT

FORMER HUTSONVILLE POWER STATION - ASH POND A

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2025 GROUNDWATER MONITORING ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A

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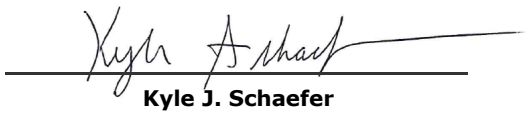

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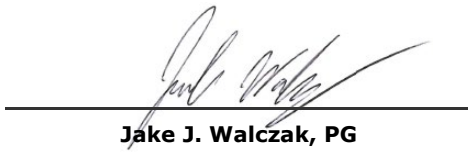

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ACRONYMS AND ABBREVIATIONS

Ameren	AmerenEnergy Medina Valley Cogen, LLC
CCW	Coal Combustion Waste
Collection Trench	Groundwater Collection System
EPA	Environmental Protection Agency
GMZ	Groundwater Management Zone
Hanson	Hanson Professional Services, Inc.
HDPE	High Density Polyethylene
Hutsonville	Former Hutsonville Power Station
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
mg/L	milligrams per liter
NRT	Natural Resource Technology, Inc.
TDS	Total Dissolved Solids

1. INTRODUCTION

1.1 Background

This report has been prepared for AmerenEnergy Medina Valley Cogen, LLC (Ameren) to summarize 2025 groundwater monitoring results for closed Ash Pond A at the former Hutsonville Power Station (Hutsonville). Ash Pond A, constructed with an 80-mil high-density polyethylene (HDPE) liner, received sluiced fly ash between 1986-2011, and is located near the southwest portion of the former power station (**Figure 1-1**). Ash Pond A was closed in 2015-2016 as summarized below.

Hutsonville previously had five coal combustion waste (CCW) ponds: Ash Ponds A, B, C, and D, and the Bottom Ash Sluice Pond. The following summarizes closure activities pertaining to each of these ponds.

Closure activities for Ash Ponds A, B, C, and the Bottom Ash Sluice Pond, were completed in June 2016 in accordance with Ash Ponds Closure, Closure Plan, dated September 15, 2014 (Closure Plan) (Hanson Professional Services, Inc. [Hanson], Natural Resource Technology [NRT], 2014a), and the site-specific rule for closure of Ash Pond D, Part 840 of Title 35 of the Illinois Administrative Code (35 IAC 840), to the extent feasible. Closure activities for Ash Pond A included placement of ash transferred from Ash Ponds B, C, the Bottom Ash Sluice Pond, and spoils from clean-up of the coal yard, and capping with a low permeability geomembrane (40-mil high density polyethylene [HDPE]) covered with protective soil. Ash Ponds B, C, and the Bottom Ash Sluice Pond were clean-closed by relocating accumulated ash to Ash Pond A and re-grading the former pond areas for proper drainage. The Ash Pond A Closure Completion Report (Ameren, 2017) was approved by the Illinois Environmental Protection Agency (EPA) in March 2017.

Ameren completed closure activities for Ash Pond D in 2013 in accordance with 35 IAC 840. These activities included placement of a 40-mil HDPE geomembrane cap covered with a three-foot thick vegetative soil layer, construction of surface water control structures, and construction of a groundwater collection system (i.e., Collection Trench). Operation of the Collection Trench began in April 2015 following discharge authorization under Hutsonville's renewed National Pollutant Discharge Elimination System (NPDES) permit (IL0004120).

Since Ash Ponds B, C, and the Bottom Ash Sluice Pond were clean-closed, the Ash Ponds Closure, Groundwater Monitoring Plan, dated September 15, 2014 (Groundwater Monitoring Plan) (Hanson, NRT, 2014b) and associated annual reports are for Ash Pond A. The Groundwater Monitoring Plan was prepared in accordance with 35 IAC 840.114 and 35 IAC 840.116 and outlines groundwater monitoring and sampling procedures, establishes the parameters and methods to be used for analyzing the groundwater samples, and describes evaluation methods to assess post-closure groundwater quality and trends to demonstrate compliance with the applicable groundwater standards. The Groundwater Monitoring Program Schedule is provided in **Table 1-1**. Monitoring well locations, installation dates, construction information, and the groundwater zone they monitor are provided in **Table 1-2**. Field and laboratory parameters for evaluating groundwater quality are shown in **Table 1-3**.

The groundwater monitoring system for Ash Pond A (**Figure 1-2**), as defined by the Groundwater Monitoring Plan, originally consisted of two background monitoring wells, MW-10 and MW-10D, and nine downgradient compliance monitoring wells MW-2R, MW-2D, MW-3,

MW-3D, MW-4, MW-5, MW-12, MW-22S, and MW-22D. Background wells MW-10 and MW-10D were destroyed due to construction unrelated to Ameren operations after the first quarter 2016 monitoring period. No trace of the former background wells was found using a metal detector, probes, or digging. As a result, these wells were replaced with background monitoring wells MW-23S and MW-23D in November 2017. In addition, several other monitoring wells and piezometers located at Hutsonville are measured for groundwater level so that groundwater elevation contour maps can be created for the entire site.

In conjunction with Ameren's request for approval of the Closure Plan, Ameren submitted a request to establish a groundwater management zone (GMZ) pursuant to 35 IAC 620.250(a)(2), Ash Ponds Closure, Groundwater Management Zone Application, dated September 8, 2014 (GMZ Application) (Hanson, NRT, 2014c), which was approved along with the Closure Plan. The GMZ is a three-dimensional region containing groundwater being managed to mitigate impacts from a potential release of leachate from the facility. Impacts observed during groundwater monitoring conducted 2011-2014 included concentrations for dissolved boron, dissolved sulfate, dissolved manganese, and total dissolved solids (TDS) higher than 35 ICA 620.410 Class I groundwater quality standards within the GMZ. The GMZ is shown on **Figure 1-2**.

Post-closure groundwater monitoring began in 2016. Annual reporting according to the Groundwater Monitoring Plan and the Ash Ponds Closure, Post-Closure Care Plan, dated September 8, 2014 (Post-Closure Care Plan) (Hanson, NRT, 2014e), began after the Closure Completion Report was approved by Illinois EPA in March 2017. This annual report includes the following elements:

- A summary of groundwater monitoring data collected in 2024 and 2025 and used for annual trend and statistical analysis; data tables are included in **Appendix A**.
- Quarterly Site Inspection Forms, including observations and descriptions of any maintenance activities performed on the pond cap, embankment, and Collection Trench and discharge system (**Appendix B**).
- Methodology for the outlier and trend analyses, per Section 7.2.1 of the Groundwater Monitoring Plan, along with results for these analyses including an assessment of any statistically significant increasing trends (**Appendix C**).

1.2 Groundwater Quality Overview – 2017 to 2025

1.2.1 Summary of Cover System Construction and Maintenance

Ash Pond A was constructed with an 80-mil HDPE liner. Closure activities for Ash Pond A included grading according to the Closure Plan and capping with a low-permeability geomembrane (40-mil HDPE) covered with protective soil.

Inspections of the cover system are performed on a quarterly schedule. Routine maintenance activities are performed at Ash Pond A as needed and as soon as practicable after issues are identified. These activities include recontouring the ground surface, repairing drainage channels, repairing and replacing channel lining material, revegetating areas, and removing woody vegetation. Maintenance activities can be found in more detail in the Post-Closure Care Plan (Hanson, NRT, 2014e).

1.2.2 Summary of 2017 to 2025 Groundwater Quality Data Review

Groundwater quality data collected since the approval of the Ash Pond A Closure Completion Report in 2017 were reviewed to assess the overall condition of the groundwater and the performance of the cover system. This review was performed independently from the compliance evaluations required by the Groundwater Monitoring Plan, which are focused on specific compliance criteria and proposed mitigation actions. This review is intended as a holistic view of groundwater quality over time since closure.

Dissolved boron and sulfate were identified as indicator constituents for coal ash leachate impacts to groundwater at Ash Pond A in the Closure Plan. As such, dissolved boron and sulfate were selected for this groundwater quality data review. Dissolved sulfate can have other natural and anthropogenic sources for elevated concentrations in groundwater, and concentrations can decrease in groundwater under strongly reducing conditions. These caveats make dissolved sulfate a less reliable indicator for coal ash impacts than dissolved boron.

Time series plots of dissolved boron observed at each compliance monitoring well from 2017 through 2025 are presented in **Figures 1-3 through 1-7**. The lines through the concentration data represent the best fit linear regressions for dissolved boron concentrations in each well. Best fit linear regression lines are included in the figures to provide a convenient means of evaluating general concentration patterns since closure. It should be noted that the regression lines are not equivalent to the statistical trends discussed in the groundwater compliance section of this report (**Section 3.3**). Sen's estimate of slope and long-term statistically significant trends, identified by Mann-Kendall analysis, are presented in **Appendix C4**.

Dissolved boron concentrations since 2017 are presented in **Figures 1-3 through 1-7**. Generally, dissolved boron concentrations in most compliance monitoring wells have been stable or decreasing since 2017 and are currently below the 35 IAC 620.410 Class I Groundwater Standard (2.0 milligrams per liter [mg/L]) for the majority of the compliance groundwater monitoring wells, with the following exceptions:

- MW-2D – dissolved boron concentrations have increased slightly since closure, but are still well (5 times) below the Class I Groundwater Standard
- MW-3D – dissolved boron concentrations are above the Class I Groundwater Standard and currently exhibiting an increasing trend due to the operation of the Collection Trench, as predicted by groundwater modeling (**Figure A**) completed for the Closure Plan and referenced in the 2024 Groundwater Monitoring Annual Report (Ramboll, 2025)
- MW-22S – dissolved boron concentrations are just above the Class I Groundwater Standard, but exhibit a decreasing trend
- MW-22D – dissolved boron concentrations are above the Class I Groundwater Standard, but exhibit a decreasing trend

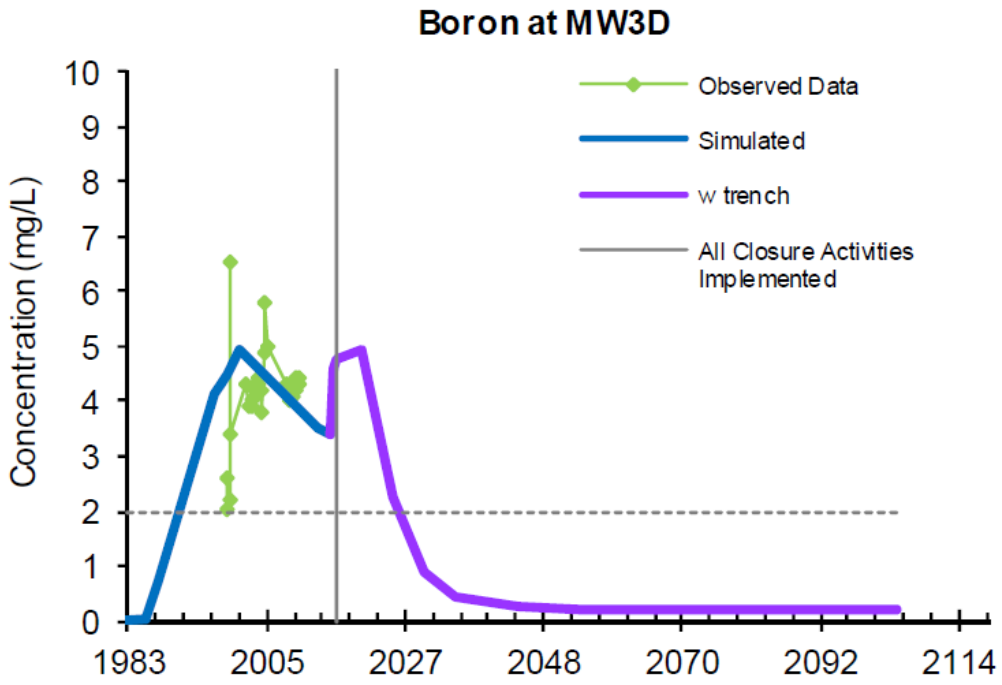

Figure A - Modeled Boron Concentrations at MW-3D from Calibration through the 90-Year Prediction Period (Hanson, NRT, 2014d).

1.2.3 Conclusion

Trends observed in dissolved boron concentrations since the closure of Pond A support that the cover system is functioning to improve overall groundwater quality beneath Pond A and are consistent with the results of groundwater modeling performed to simulate changes in groundwater quality resulting from pond closure as discussed in the Ash Ponds Closure, Groundwater Model Report, dated September 8, 2014 (Hanson, NRT, 2014d). Modeling results suggested that dissolved boron concentrations would stabilize shortly after closure in monitoring wells with low concentrations (*e.g.,* wells MW-5 and MW-9), while other wells were predicted to take as long as 40 years to stabilize (*e.g.,* well MW-3D).

2. GROUNDWATER MONITORING PLAN COMPLIANCE

2.1 Applicable Groundwater Quality Standards

2.1.1 On-Site Groundwater Standards

A GMZ has been established around the maximum predicted area of on-site groundwater impacts associated with Ponds A, B, and C. As described in Section 7.1 of the Groundwater Monitoring Plan and pursuant to 35 IAC 840.16(a):

- Prior to the completion of the post-closure care period, the on-site applicable groundwater quality standards at Ash Pond A are the greater of either the actual groundwater monitoring result, or the Class I Potable Resource Groundwater standard set forth in 35 IAC 620.410.
- After completion of the post-closure care period, if the on-site concentrations of contaminants from Ash Pond A, as determined by groundwater monitoring, exceed the numeric standards for Class I Potable Resource Groundwater set forth in 35 IAC 620.410, the observed concentrations are the applicable groundwater standards at Ash Pond A if the following criteria are addressed to the satisfaction of the IEPA:
  - To the extent practicable, the exceedance has been minimized and beneficial use, as appropriate for the class of groundwater, has been returned on site.
  - Any threat to public health or the environment on site has been minimized.
  - An institutional control prohibiting potable uses of groundwater is placed on Ash Pond A in accordance with the Uniform Environmental Covenants Act (765 Illinois Compiled Statutes (ILCS) 122) or an alternative instrument authorized for environmental uses under Illinois law and approved by the IEPA. Existing potable uses of groundwater may be preserved as long as such uses remain fit for human consumption in accordance with accepted water supply principles.

2.1.2 Off-Site Groundwater Standards

For off-site groundwater compliance, the groundwater quality standards are the Class I potable resource groundwater standards [35 IAC 620.410]. Although the established GMZ does not extend south of the former Hutsonville Power Station's property boundary, an agreement[1] exists between Ameren and the south property owner regarding shallow well drilling. This restriction covers the first 25 feet of the water table and lies within a 500-ft offset south of the southern property boundary of the former Hutsonville Power Station.

2.2 Demonstration of Compliance

Compliance will be based on attainment of groundwater quality that meets the numeric standards for Class I potable resource groundwater as set forth in 35 IAC 620.410. Groundwater quality that does not meet the Class I standard will be considered in compliance when no statistically significant increasing trend can be attributed to the ash ponds at the compliance GMZ boundary for four (4) consecutive years, which must be approved by the IEPA. Post-closure groundwater

[1] Available at: http://www.ipcb.state.il.us/documents/dsweb/Get/Document-65177 as Chapter 9 of the Rulemaking Technical Support Documents.

compliance monitoring will continue for a minimum of ten years from the IEPA's approval of the Closure Plan.

2.2.1 Compliance Determination

As described in Section 7.2.1 of the Groundwater Monitoring Plan:

- GMZ compliance is demonstrated by performing an annual trend analysis for each monitoring well located at the downgradient boundaries of the former Hutsonville Power Station (**Table 1-2**) for all constituents listed in **Table 1-3**. The analysis shall use Sen's Estimate of Slope and be performed on a minimum of four consecutive samples.
- If the results of the trend analysis show a positive slope at any compliance monitoring well located at the downgradient boundaries of the former Hutsonville Power Station, a Mann-Kendall test will be performed at 95 percent confidence to determine whether or not the increasing slope represents a statistically significant increasing trend. Ameren will investigate the cause of a statistically significant increasing trend as described below.
  - 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 over 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 flow for 2025 is represented using groundwater elevation contour maps for each quarterly sampling event (**Figures 3-1 through 3-4**). Groundwater in the upper (shallow) migration zone generally flowed from west to east and northeast towards the Wabash River during 2025, which is consistent with past evaluations. The Collection Trench began operation in April 2015, and following startup, groundwater elevations have exhibited localized flow toward the trench with groundwater elevations generally lower near the trench (**Figure 3-5**). In the depictions of groundwater elevation contours, dashed lines have been used to infer the localized drawdown of groundwater levels resulting from trench operation, which is necessary with a limited number of groundwater monitoring wells situated laterally along the length of the trench.

The horizontal hydraulic gradient in the upper migration zone beneath the northern extent of Ash Pond A was calculated for each quarterly monitoring event between adjacent contours along the northern boundary of Ash Pond A illustrated in **Figures 3-1 through 3-4** and ranged from approximately 0.003 to 0.005 feet/feet during 2025. Horizontal hydraulic gradient was not calculated near the southern end of the pond due to the potential influence of the Collection Trench on groundwater flow.

Groundwater flow within the lower (deep alluvial) migration zone along the edge of the Wabash River valley was not contoured since all of the deep alluvial monitoring wells are within a narrow zone between Ash Pond D and the Wabash River.

3.2 Review of Analytical Data (2024-2025)

Groundwater samples from the most recent eight monitoring events were collected on March 18, 2024; June 17, 24, and 27, 2024; September 23 and 30, 2024; November 11, 2024; March 17 and 18, 2025; May 19 and 20, 2025; September 11 and 12, 2025; and October 30 and 31, 2025. All field and laboratory analytical results are tabulated in **Appendix A**. Sampling anomalies, such as wells that were dry, had water levels too low for sampling, or were not sampled during a sampling event for other reasons, are noted below:

- MW-3: Not sampled in all quarters in 2024 and 2025 due to insufficient water level.
- MW-4: Not sampled in the first, third and fourth quarter of 2024 and in the fourth quarter of 2025 due to insufficient water level.

Results of groundwater monitoring for constituents that exceeded their respective 35 IAC 620.410 Class I Groundwater Standard when the GMZ was established (boron, sulfate, manganese, and TDS) are discussed below:

- Dissolved boron has been identified as the primary indicator constituent for coal ash impacts to groundwater at Ash Pond A (see **Section 1.2.2**). In the 2024-2025 monitoring period, dissolved boron concentrations ranged from <0.025 to 6.93 mg/L in compliance monitoring wells (**Figures 3-6 and 3-7**). Dissolved boron concentrations were highest at MW-22D and MW-3D in 2024 and 2025. As discussed in **Sections 1.2.2 and 1.2.3**, dissolved boron concentrations have been stable or decreasing in the majority of compliance monitoring wells across the site since closure.

- Dissolved sulfate has also been identified as an indicator for coal ash impacts to groundwater at Ash Pond A (see **Section 1.2.2**). In the 2024-2025 monitoring period, dissolved sulfate concentrations ranged from <0.5 to 4,810 mg/L in compliance monitoring wells (**Figures 3-8 and 3-9**). Dissolved sulfate concentrations were highest at MW-22S, MW-22D, and MW-3D in 2024 and 2025; dissolved boron concentrations were also highest at MW-3D and MW-22D.
- Box-whisker plots and timeseries plots illustrating concentrations for the most recent eight monitoring events (2024-2025) were also developed for dissolved manganese and TDS (**Figures 3-10 through 3-13**). Similar to the indicator parameters referenced above, dissolved manganese and TDS concentration trends were generally stable during this reporting period with the exception of MW-22S and MW-3D, for which the dissolved manganese trend was slightly increasing.

3.3 Statistical Analyses

Analytical data were evaluated to identify short-term (compliance) data trends in the 2024-2025 dataset. Trends were evaluated according to the procedure outlined in the Groundwater Monitoring Plan and summarized in **Section 2.2.1**.

3.3.1 Outlier Analysis

The Grubbs outlier test provides statistical evidence of potential outliers by identifying high or low observations that differ significantly from the other data. The test methodology and results are listed in **Appendices C1 and C2**, respectively. Outliers identified during the compliance period (2024-2025) by the Grubbs outlier test based on the date range of 1984-2025 were not eliminated from further statistical analysis due the lack of documentation indicating that they are not representative of actual field conditions. In addition, these identified outliers did not have any influence on the short-term compliance trends at compliance wells since no outliers greater than the Class I Groundwater Standard were identified at wells with statistically significant increasing trends.

3.3.2 Sen's Estimate of Slope

Sen's estimate of 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, with the y-axis being the parameter value and the x-axis being calendar time. The method is robust and fairly insensitive to the presence of a small fraction of outliers and non-detect data values. The test methodology and results are listed in **Appendices C1 and C3**, respectively.

Data collected in 2024-2025 show 18 cases with positive slopes, 20 cases with negative slopes, and 187 cases with no slope (**Table 3-1**). Sen's Estimate of Slope requires a minimum of four consecutive samples. Note that this analysis was not performed for MW-3 and MW-4 as this requirement was not met during 2024-2025 compliance period.

3.3.3 Mann-Kendall Trend Analysis

The 18 cases of positive Sen's slopes referenced above were further evaluated 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 trend (increasing or decreasing). The test

methodology and results are described in **Appendices C1** and **Appendix C3**, respectively. Increasing short-term (compliance) trends are identified in **Tables 3-1**.

The Mann-Kendall test detected three cases of statistically significant increasing trend in the 2024-2025 dataset. These cases occurred for dissolved iron at MW-22S, dissolved chloride at MW-23S, and dissolved sulfate at MW-23S. During this reporting period, dissolved chloride and dissolved sulfate at MW-23S were below their respective 35 IAC 620.410 Class I Groundwater Standards, whereas dissolved iron concentrations at MW-22S exceeded their respective Class I Groundwater Standard.

3.4 Site Inspection

The Post-Closure Care Plan requires quarterly inspections for a minimum of 10 years until completion of the post-closure care period. Inspections are also required after storm events defined as a 25-year, 24-hour event, or 5.37 inches of precipitation. Discontinuation of the 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 and vegetation, as well as fencing, monitoring points, surface water control features, and the Collection Trench.

For 2025, the site inspections were performed on March 31, May 28, August 26, and November 14. Observations and subsequent actions are summarized in **Table A** on the following page.

The other components of the closure system were in good condition. The inspection reports for 2025 are included in **Appendix B**.

Table A. Summary of 2025 Quarterly Site Inspection Observations and Actions.

Inspection Month	Observation	Action Taken
March	Main gate destroyed by unknown driver.	Repair scheduled for early 2025.
March	Very small animal burrows (likely snake holes) were observed on the top of the cap.	Will monitor for issues.
March	Three temporary piezometers[2] were installed in March 2025.	Areas of the cap that had vegetation removed in the process of installation will be reseeded.
March	An animal burrow was observed at the foot of the embankment near the control panels.	Will monitor for issues.
May	Main gate destroyed by unknown driver.	Repair scheduled for 2025. A new fencing contractor has been contacted to install a replacement gate.
May	Minor tire track ruts were observed on the pond cap.	Will monitor for issues.
May	Three temporary piezometers were installed in March 2025. Piezometer abandonment was in progress at the time of the cap inspection, and was completed May 29, 2025.	Areas of the cap that had vegetation removed in the process of installation were reseeded.
August	Main gate destroyed by unknown driver.	Main gate has been replaced.
November	No significant observations.	No actions taken.

[2] Temporary piezometers were installed for legacy CCR surface impoundment investigation in accordance with 40 CFR § 257.100(f)(1)(iii)(A) and were subsequently abandoned in accordance with 77 IAC § 920.120.

4. EVALUATION OF COMPLIANCE

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). Dissolved iron at MW-22S had a statistically significant increasing short-term trend and concentration above the Class I Groundwater Standard during the compliance period (2024-2025). The short-term increasing trend for dissolved iron at MW-22S was isolated and not repeated from the 2023-2024 monitoring period; as such, no further action is required at this time.

5. CONCLUSIONS

Cover system construction and maintenance, as well as stable or decreasing dissolved boron concentrations in the majority of compliance monitoring wells across the site are strong indications that the cover system is functioning 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 Hutsonville Ash Pond A identified both concentrations above the 35 IAC 620.410 Class I Groundwater Standard and a short-term increasing trend for dissolved iron at MW-22S. This was isolated and not repeated from the 2023-2024 monitoring period; as such, no further action is required at this time for short-term increasing trends observed in this 2024-2025 monitoring period for MW-22S. The concentrations of indicator parameters will continue to be monitored and evaluated in 2026.

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TABLES

Table 1-1. Groundwater Monitoring Program Schedule
2025 Annual Report
Former Hutsonville Power Station - Ash Pond A

Frequency	Duration	Sampling Quarter	Report Due Date
Quarterly	Begins: January 2016 Ends: After successful completion of the post-closure activities required and approval of the Illinois EPA.	January- March (1) April - June (2) July - September (3) October - December (4)	May 31 August 31 November 30 February 28

Table 1-2. Groundwater Monitoring System Wells
2025 Annual Report
Former Hutsonville Power Station - Ash Pond A

Well	Installation Date	Surface Elevation[1] (ft, MSL[2])	TOC[1, 3] Elevation (ft, MSL[2])	Top of Screen Elevation[4] (ft, MSL[2])	Bottom of Screen Elevation[4] (ft, MSL[2])	Total Well Depth[5] (ft, BGS[2])	Objective	Position	Monitoring Zone[6]
Ash Pond A Groundwater Monitoring System Wells: Groundwater Quality and Elevations Monitored									
MW-2R	6/4/2012	453.0	455.37	446.0	435.3	17.8	Compliance	Downgradient	UZ - s&g
MW-2D	10/14/2015	452.9	455.42	435.1	430.4	23.1	Compliance	Downgradient	UZ - ss
MW-3	2/9/1984	453.7	454.84	447.7	442.7	11.0	Compliance	Downgradient	UZ - s&g
MW-3D	10/6/1998	453.57	455.01	433.6	428.6	25.0	Compliance	Downgradient	UZ - ss
MW-4	2/13/1984	454.0	456.76	449.4	441.9	12.1	Compliance	Downgradient	UZ - s&g, ss
MW-5	2/13/1984	452.1	454.67	447.3	434.3	17.8	Compliance	Downgradient	UZ - s&g, ss
MW-10[7]	10/7/1998	452.9	454.23	447.2	442.2	10.7	Background	Upgradient	UZ - si s&g, ss
MW-10D[7]	10/7/1998	452.9	454.65	436.6	431.6	21.3	Background	Upgradient	UZ - ss
MW-23S[7]	11/28/2017	453.4	456.03	444.2	438.9	14.5	Background	Upgradient	UZ - s si, si s, ss
MW-23D[7]	11/28/2017	453.5	455.90	434.0	428.7	24.8	Background	Upgradient	UZ - ss, sh
MW-12	10/8/1998	455.5	456.74	448.6	438.6	16.9	Compliance	Downgradient	UZ - s&g
MW-22S	10/14/2015	449.2	451.48	441.9	437.2	12.7	Compliance	Downgradient	UZ - si s&g, ss
MW-22D	10/14/2015	449.1	451.36	431.7	427.0	22.7	Compliance	Downgradient	UZ - si s&g, ss
Other Monitoring Wells and Piezometers: Groundwater Elevations Monitored									
MW-6	2/9/1984	438.7	443.17	433.9	427.5	11.2	- -	- -	UZ - s&g, ss
MW-7	2/8/1984	439.9	442.28	422.9	412.9	27.0	- -	- -	UZ - si s&g
MW-7D	10/5/1998	438.9	442.75	398.2	393.2	45.7	- -	- -	LZ - si s&g
MW-8	2/8/1984	440.0	443.65	422.9	417.9	22.1	- -	- -	UZ - si sand
MW-9	2/14/1984	451.7	454.38	443.5	433.5	18.2	- -	- -	UZ - s&g
MW-11R	10/3/2001	440.4	443.01	435.4	425.4	15.0	- -	- -	UZ - s&g
MW-14	10/3/2001	440.1	442.89	412.9	407.9	32.2	- -	- -	LZ - s&g
MW-115S	5/1/2004	438.7	440.88	408.4	403.4	35.3	- -	- -	LZ - s&g
MW-115D	5/1/2004	439.1	441.39	356.4	351.4	87.7	- -	- -	LZ - s&g
MW-121	10/2/2001	439.2	440.23	403.8	398.8	40.3	- -	- -	LZ - s&g

[O: JJW 4/22/19; C:EDP 4/22/19]

Notes:

1. Well survey data collected by Lamac Engineering November 30, 2017 to December 1, 2017.
2. BGS = below ground surface; MSL = mean sea level.
3. TOC = top of casing
4. Screen elevations presented in the table reflect values provided in boring logs or well construction forms and assume no changes to the screen elevations occurred after well installation.
5. The total well depth is assumed to be equal to the depth to the bottom of screen from ground surface when data is not available in boring logs or well construction forms.
6. UZ = Upper Zone, LZ = Lower Zone (deep alluvial aquifer); s = sand or sandy, s&g = sand and gravel, si = silt or silty, ss = sandstone, sh = shale
7. Background wells MW-10 and MW-10D were damaged and replaced with background wells MW-23D and MW-23S.

- - Not applicable. Wells listed are for development of groundwater elevation contour maps only.

RAMBOLL

Table 1-3. Groundwater Monitoring Program Parameters
2025 Annual Report
Former Hutsonville Power Station - Ash Pond A

Field Parameters	STORET Code
pH[2]	00400
Specific Conductance[2]	00094
Temperature (Fahrenheit)	00011
Depth to Water (BMP)	72109
Elevation of GW Surface[2]	71993
Depth of Well (BGS)[2]	72008
Elevation of Measuring Point	72110
Laboratory Parameters[1]	**STORET Code**
Boron[2]	01020
Iron[2]	01046
Manganese[2]	01056
Sulfate[2]	00946
Total Dissolved Solids (TDS)[2]	70300
Antimony	01095
Arsenic	01000
Barium	01005
Beryllium	01010
Cadmium	01025
Chloride	00941
Chromium	01030
Cobalt	01035
Copper	01040
Cyanide	00720
Fluoride	00950
Lead	01049
Mercury	71890
Nickel	01065
Nitrate as N	00618
Selenium	01145
Silver	01075
Thallium	01057
Vanadiium	01085
Zinc	01090

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

Notes:

[1] Reported as dissolved (filtered) concentrations.

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

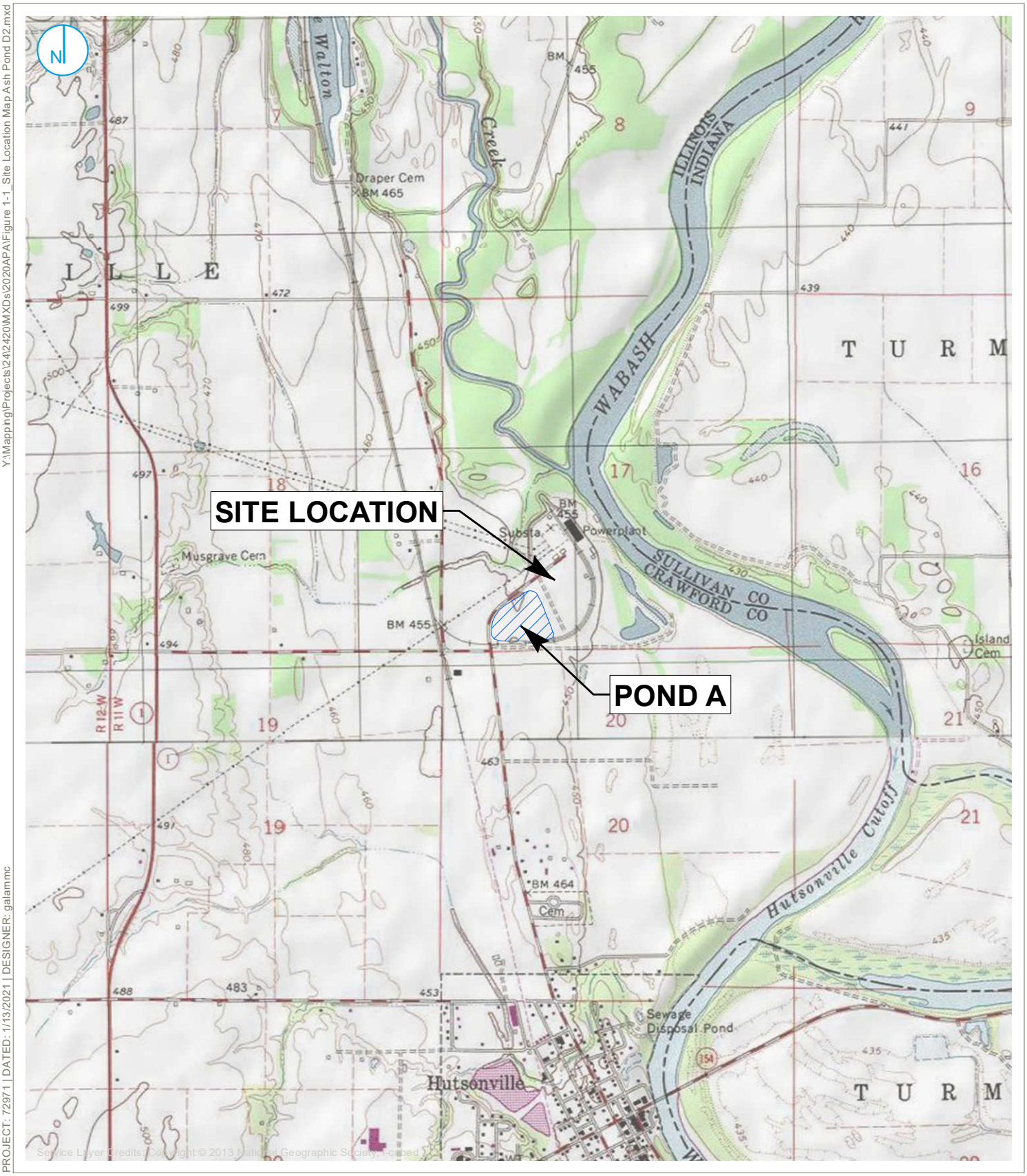
Table 3-1. Trend Analysis Results
2025 Annual Report
Former Hutsonville Power Station - Ash Pond A

	MW-2R	MW-2D	MW-3	MW-3D	MW-4	MW-5	MW-12	MW-22D	MW-22S	MW-23D	MW-23S
Number of Samples	**8**	**8**	**0**	**8**	**4**	**8**	**8**	**8**	**8**	**8**	**8**
Antimony, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Arsenic, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Barium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Beryllium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Boron, dissolved	None	None	ID	+	ID	None	None	None	None	None	None
Cadmium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Chloride, dissolved	-	-	ID	+	ID	None	None	-	-	Decrease	Increase
Chromium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Cobalt, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Copper, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Cyanide, total	None	None	ID	None	ID	None	None	None	None	None	None
Fluoride, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Iron, dissolved	None	-	ID	+	ID	None	None	+	Increase	None	None
Lead, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Manganese, dissolved	None	None	ID	+	ID	None	None	-	+	None	None
Mercury, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Nickel, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Nitrate nitrogen, dissolved	None	None	ID	-	ID	+	+	None	None	None	+
Selenium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Silver, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Sulfate, dissolved	-	+	ID	-	ID	-	+	+	-	-	Increase
Thallium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Total Dissolved Solids	-	-	ID	-	ID	-	+	-	-	+	-
Vanadium, dissolved	None	None	ID	None	ID	None	None	None	None	None	None
Zinc, dissolved	None	None	ID	None	ID	None	None	None	+	None	None

Notes: [O: KJS 1/8/2026, C: LCA 1/9/2025]

- "+" indicates that the Sen's non-parametric estimate of the median slope is positive.
- "-" indicates that the Sen's non-parametric estimate of the median slope is negative.
- "Decrease" indicates a statistically significant decreasing trend
- "Increase" indicates a statistically significant increasing trend
- Mann Kendall Trend analysis done with non-detects at one half the reporting limit.
- The most recent eight sampling events were used for analysis; date range for this analysis is 1/1/2024-12/31/2025.
- Green shading indicates increasing trends as determined using the Mann-Kendall test at 95% confidence for constituents with maximum concentration lower than the Class I groundwater quality standard.
- Yellow shading indicates increasing trends as determined using the Mann-Kendall test at 95% confidence for constituents with maximum concentration higher than the Class I groundwater quality standard.
- ID indicated that there was insufficient data to perform Sen's Estimate of Slope.

FIGURES



Y:\Mapping\Projects\24\24204\MXDs\2020APA\Figure 1-1_Site Location Map Ash Pond D2.mxd

PROJECT: 72971 | DATED: 1/13/2021 | DESIGNER: galammc

KEY MAP

Map Scale: 1:1:24,000;
Map Center: 87°39'45"W 39°7'53"N

0 1,000 2,000 Feet

SITE LOCATION MAP

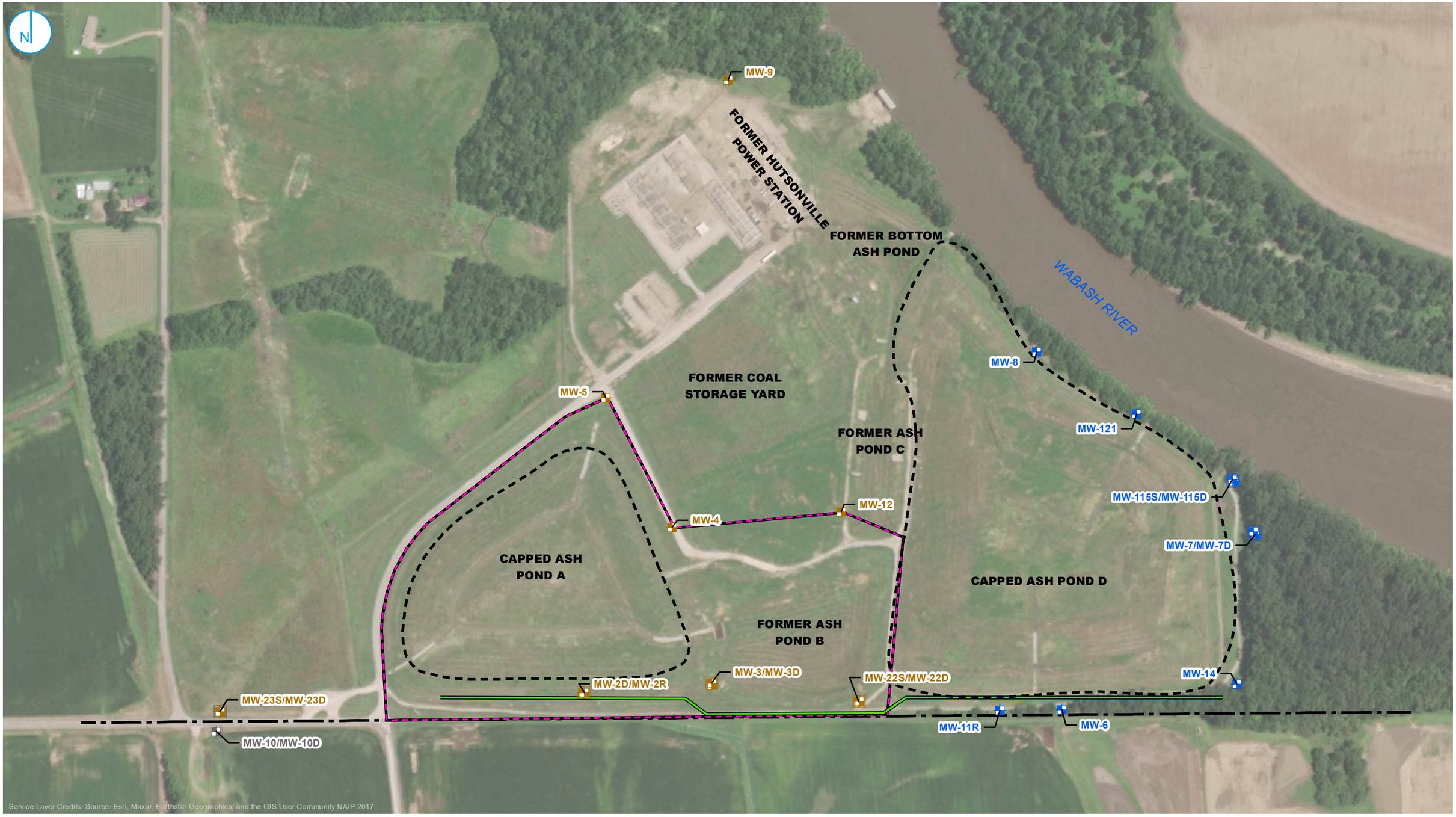
2025 ANNUAL REPORT
FORMER HUTSONVILLE
POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 1-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\2424201MXDs\2022APA\Figure 1-2_Monitoring Well Location Map.mxd



PROJECT: 169000XXXX | DATED: 1/24/2023 | DESIGNER: galamnc

- ASH POND D MONITORING WELL LOCATION
- NESTED ASH POND D MONITORING WELL LOCATION
- ASH POND A MONITORING WELL LOCATION
- NESTED ASH POND A MONITORING WELL LOCATION
- ABANDONED NESTED MONITORING WELL LOCATION
- PROPERTY LINE
- APPROXIMATE BOUNDARY OF CAPPED ASH POND
- GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
- LIMITS OF GROUNDWATER MANAGEMENT ZONE

0 150 300 Feet

MONITORING WELL LOCATION MAP

2025 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 1-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC
A RAMBOLL COMPANY

RAMBOLL

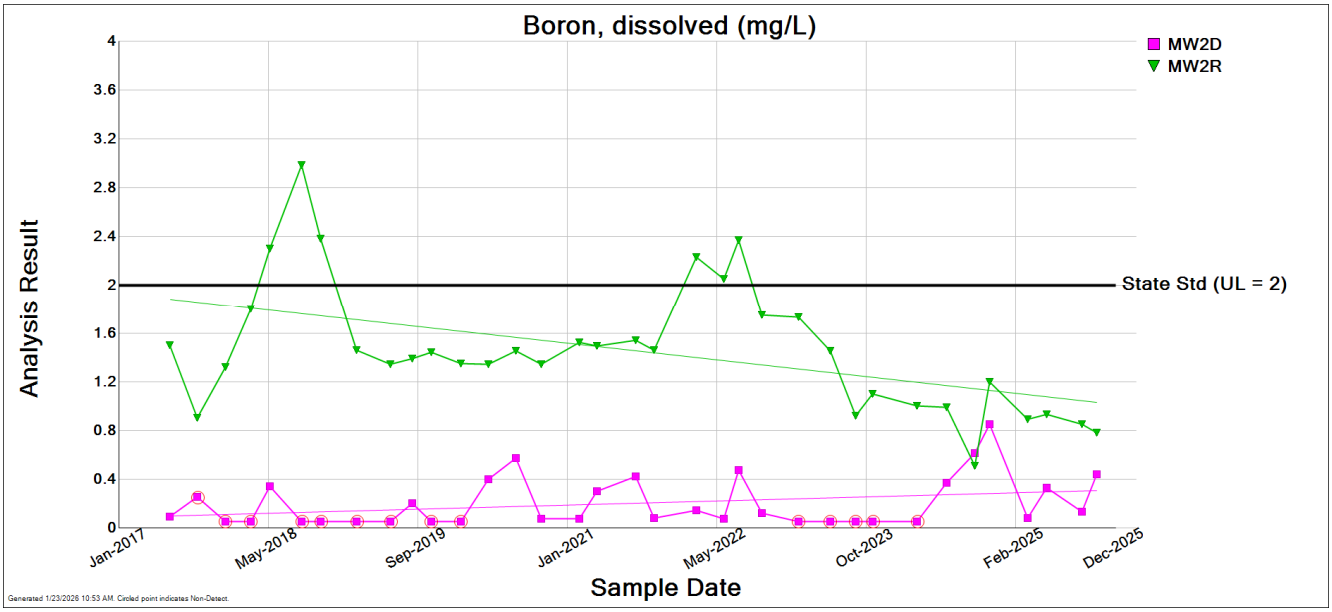


Figure 1-3. Dissolved boron concentrations since 2017 at compliance wells MW-2D and MW-2R. The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.

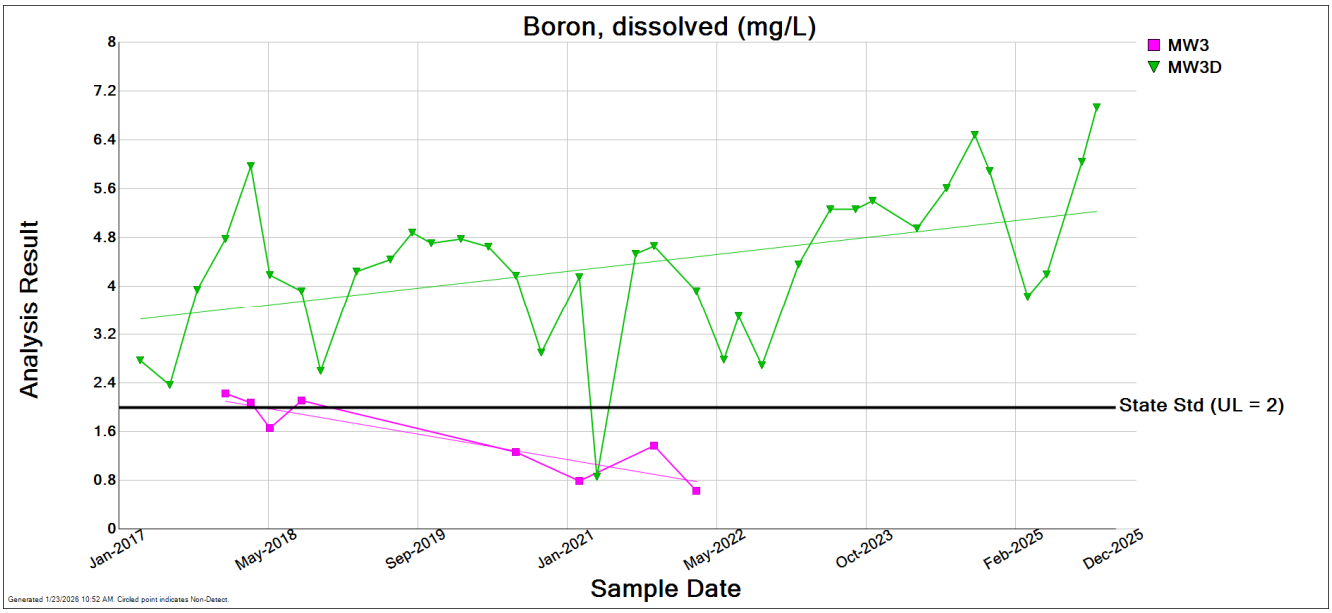


Figure 1-4. Dissolved boron concentrations since 2017 at compliance wells MW-3 and MW-3D. The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only.

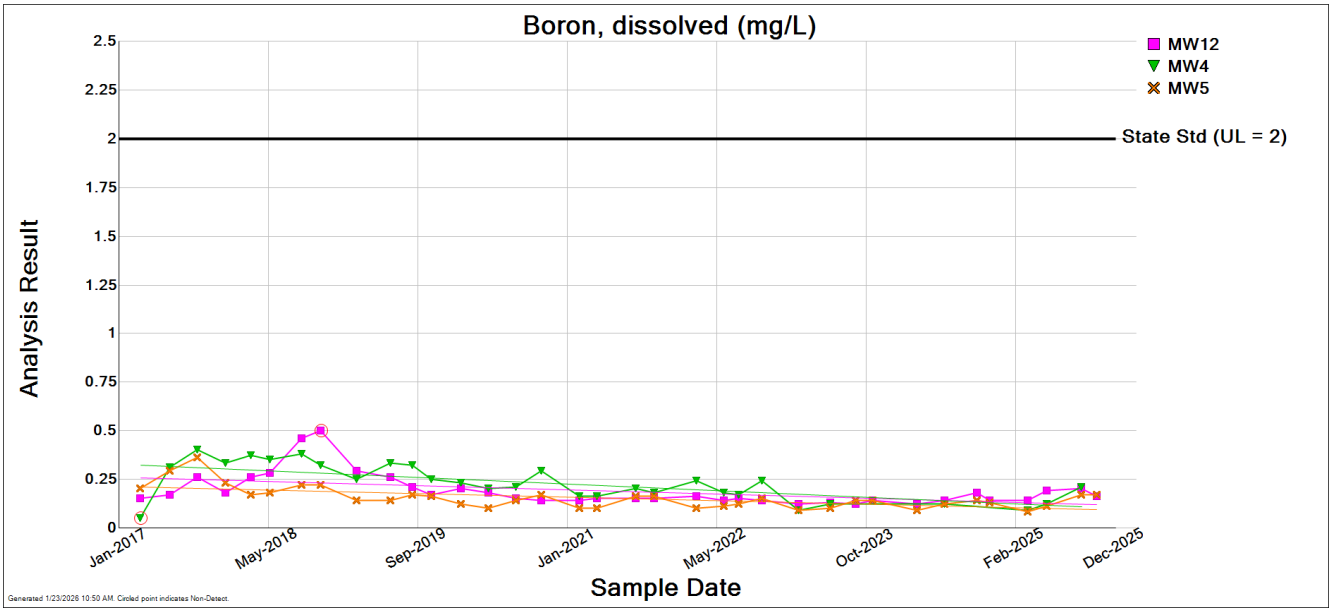


Figure 1-5. Dissolved boron concentrations since 2017 at compliance wells MW-4, MW-5, and MW-12. The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.

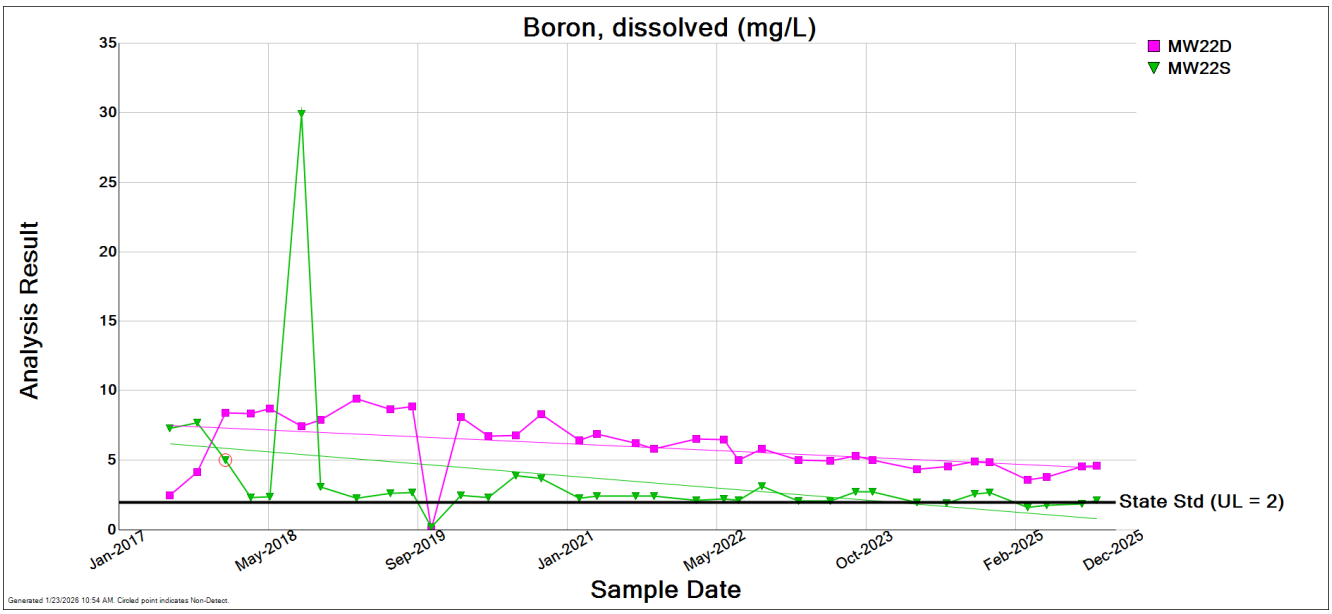


Figure 1-6. Dissolved boron concentrations since 2017 at compliance wells MW-22S and MW-22D. The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.

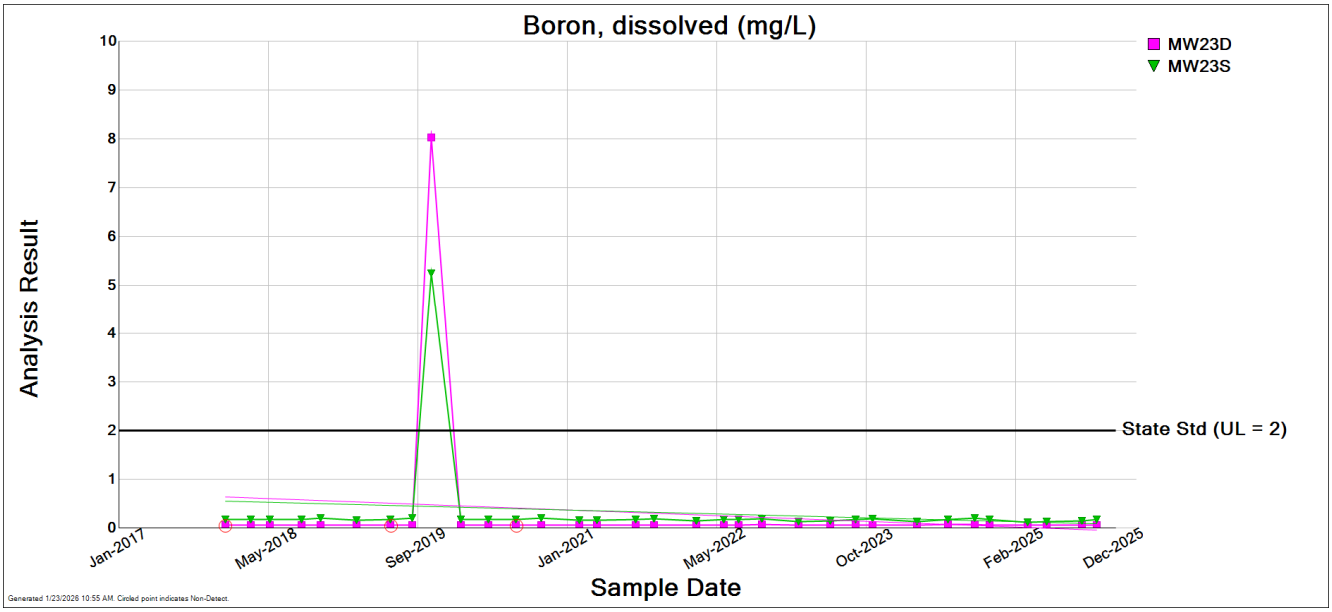
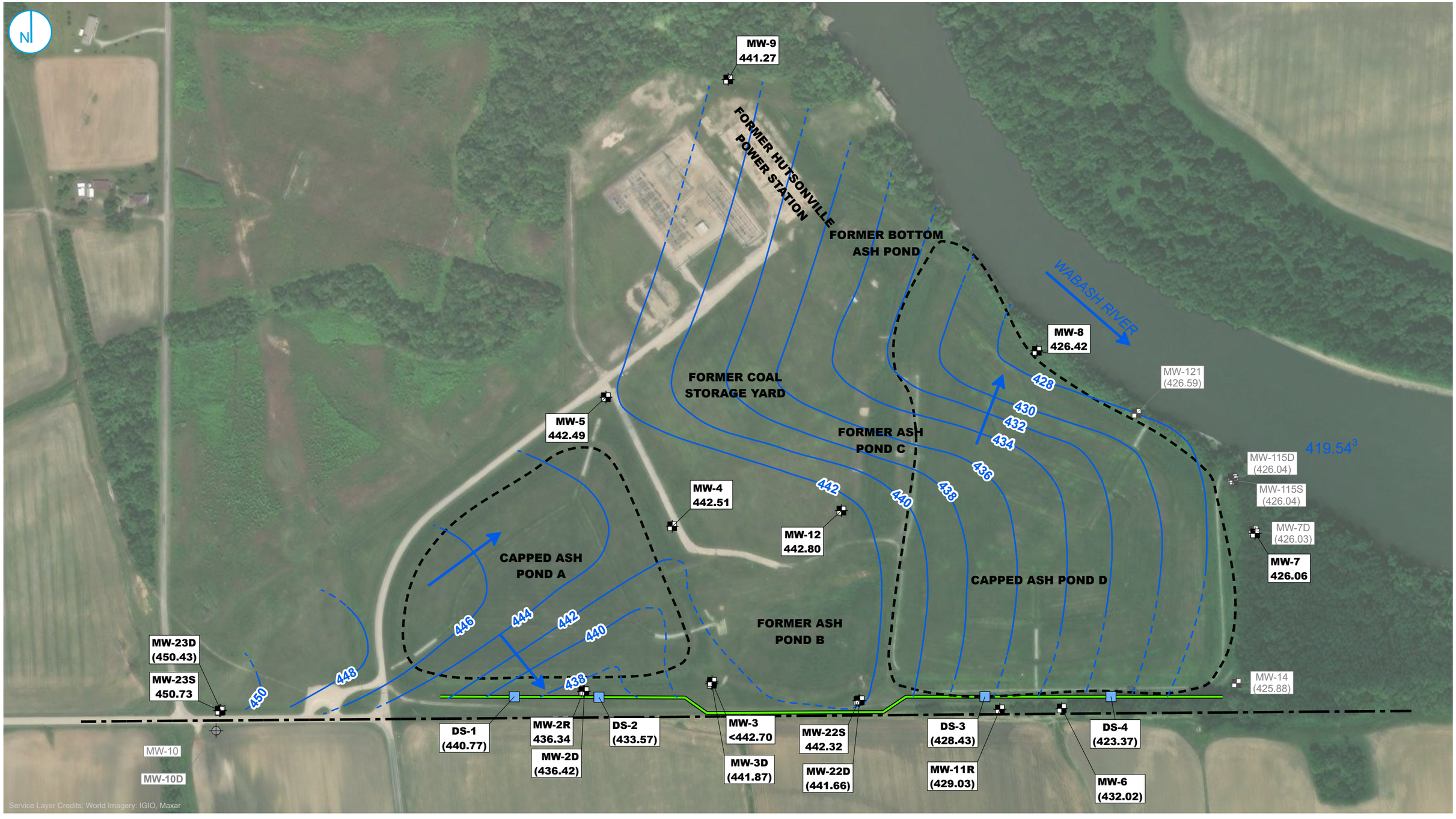


Figure 1-7. Dissolved boron concentrations since 2017 at compliance wells MW-23S and MW-23D. The Class I Groundwater Standard is not applicable within the GMZ and is shown for reference only. Circled results indicate non-detects.

Y:\Mapping\Projects\6\678151\mxd\2024\Hutsonville_2024.aprx

PROJECT: 169000XXXX | DATED: 4/11/2025 | DESIGNER: STOLZSD



UPPER MIGRATION ZONE MONITORING WELL
DEEP MIGRATION ZONE MONITORING WELL
ABANDONED MONITORING WELL LOCATION
DEWATERING SUMP
APPROXIMATE BOUNDARY OF CAPPED ASH POND
PROPERTY LINE

GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL)
GROUNDWATER FLOW DIRECTION
INFERRED GROUNDWATER ELEVATION CONTOUR

0 150 300 Feet

Notes

1) GROUNDWATER AND RIVER ELEVATIONS REPORTED IN FEET NORTH AMERICAN VERTICAL DATUM OF 1988.
2) GROUNDWATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
3) WABASH RIVER ELEVATIONS AS REPORTED BY USGS FROM USGS 03342000 WABASH RIVER AT RIVERTON, IN LOCATED APPROXIMATELY 12.5 RIVER MILES DOWNSTREAM.
4) WATER ELEVATIONS WERE COLLECTED FOR DEWATERING SUMP LOCATIONS ON THE FIRST DAY GROUNDWATER ELEVATIONS WERE RECORDED AND REPRESENT THE AVERAGE RECORDED VALUE AT 12:00PM CST.

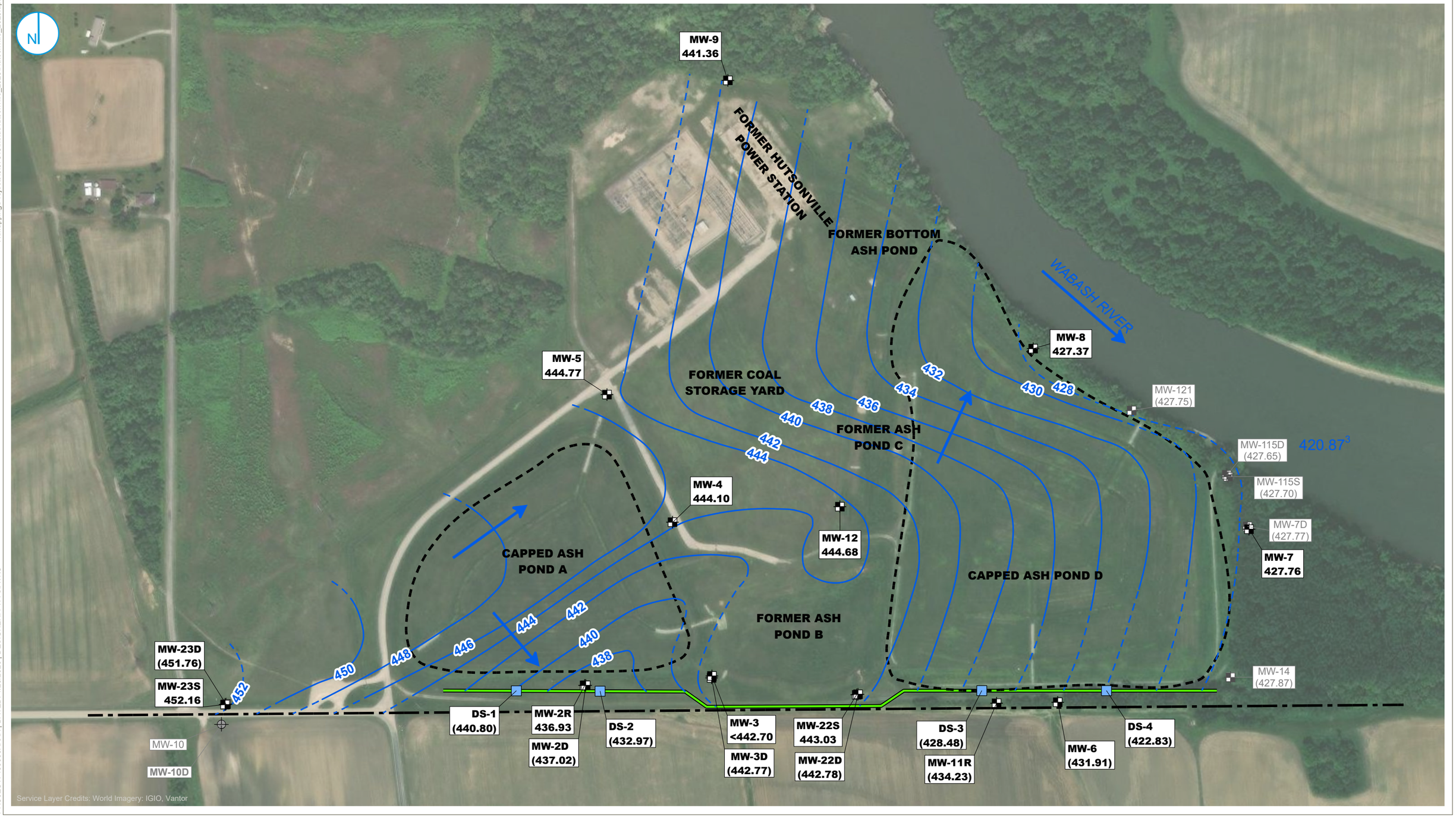
Q1 UPPER MIGRATION ZONE GROUNDWATER ELEVATION CONTOUR MAP MARCH 17-18, 2025

2025 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 3-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC

RAMBOLL



- UPPER MIGRATION ZONE MONITORING WELL
- DEEP MIGRATION ZONE MONITORING WELL
- ABANDONED MONITORING WELL LOCATION
- DEWATERING SUMP
- APPROXIMATE BOUNDARY OF CAPPED ASH POND
- PROPERTY LINE
- GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL)
- GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR

0 150 300 Feet

Notes

1) GROUNDWATER AND RIVER ELEVATIONS REPORTED IN FEET NORTH AMERICAN VERTICAL DATUM OF 1988.
2) GROUNDWATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
3) WABASH RIVER ELEVATIONS AS REPORTED BY USGS FROM USGS 03342000 WABASH RIVER AT RIVERTON, IN LOCATED APPROXIMATELY 12.5 RIVER MILES DOWNSTREAM.
4) WATER ELEVATIONS WERE COLLECTED FOR DEWATERING SUMP LOCATIONS ON THE FIRST DAY GROUNDWATER ELEVATIONS WERE RECORDED AND REPRESENT THE AVERAGE RECORDED VALUE AT 12:00PM CST.

Q2 UPPER MIGRATION ZONE GROUNDWATER ELEVATION CONTOUR MAP MAY 19-20, 2025

2025 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A

AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

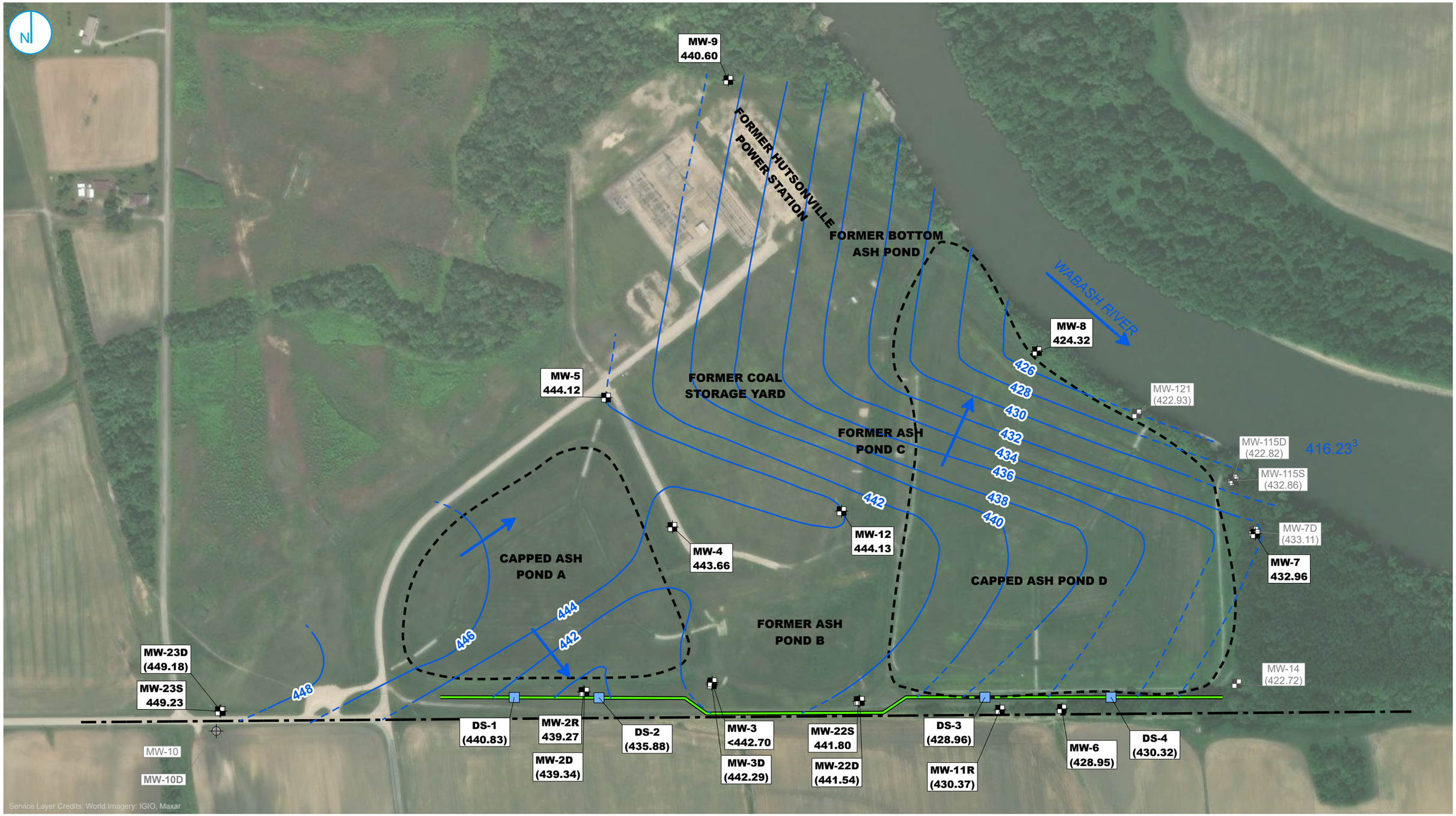
FIGURE 3-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC

RAMBOLL

Y:\Mapping\Projects\6\67815\mxd\2024\Hutsonville_2024.aprx

PROJECT: 169000XXXX | DATED: 10/2/2025 | DESIGNER: GALARNMC



UPPER MIGRATION ZONE MONITORING WELL
DEEP MIGRATION ZONE MONITORING WELL
ABANDONED MONITORING WELL LOCATION
DEWATERING SUMP
APPROXIMATE BOUNDARY OF CAPPED ASH POND
PROPERTY LINE

GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL)
GROUNDWATER FLOW DIRECTION
INFERRED GROUNDWATER ELEVATION CONTOUR

0 150 300 Feet

Notes
1) GROUNDWATER AND RIVER ELEVATIONS REPORTED IN FEET NORTH AMERICAN VERTICAL DATUM OF 1988.
2) GROUNDWATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
3) WABASH RIVER ELEVATIONS AS REPORTED BY USGS FROM USGS 03342000 WABASH RIVER AT RIVERTON, IN LOCATED APPROXIMATELY 12.5 RIVER MILES DOWNSTREAM.
4) WATER ELEVATIONS WERE COLLECTED FOR DEWATERING SUMP LOCATIONS ON THE FIRST DAY GROUNDWATER ELEVATIONS WERE RECORDED AND REPRESENT THE AVERAGE RECORDED VALUE AT 12:00PM CST.

Q3 UPPER MIGRATION ZONE GROUNDWATER ELEVATION CONTOUR MAP SEPTEMBER 11-12, 2025

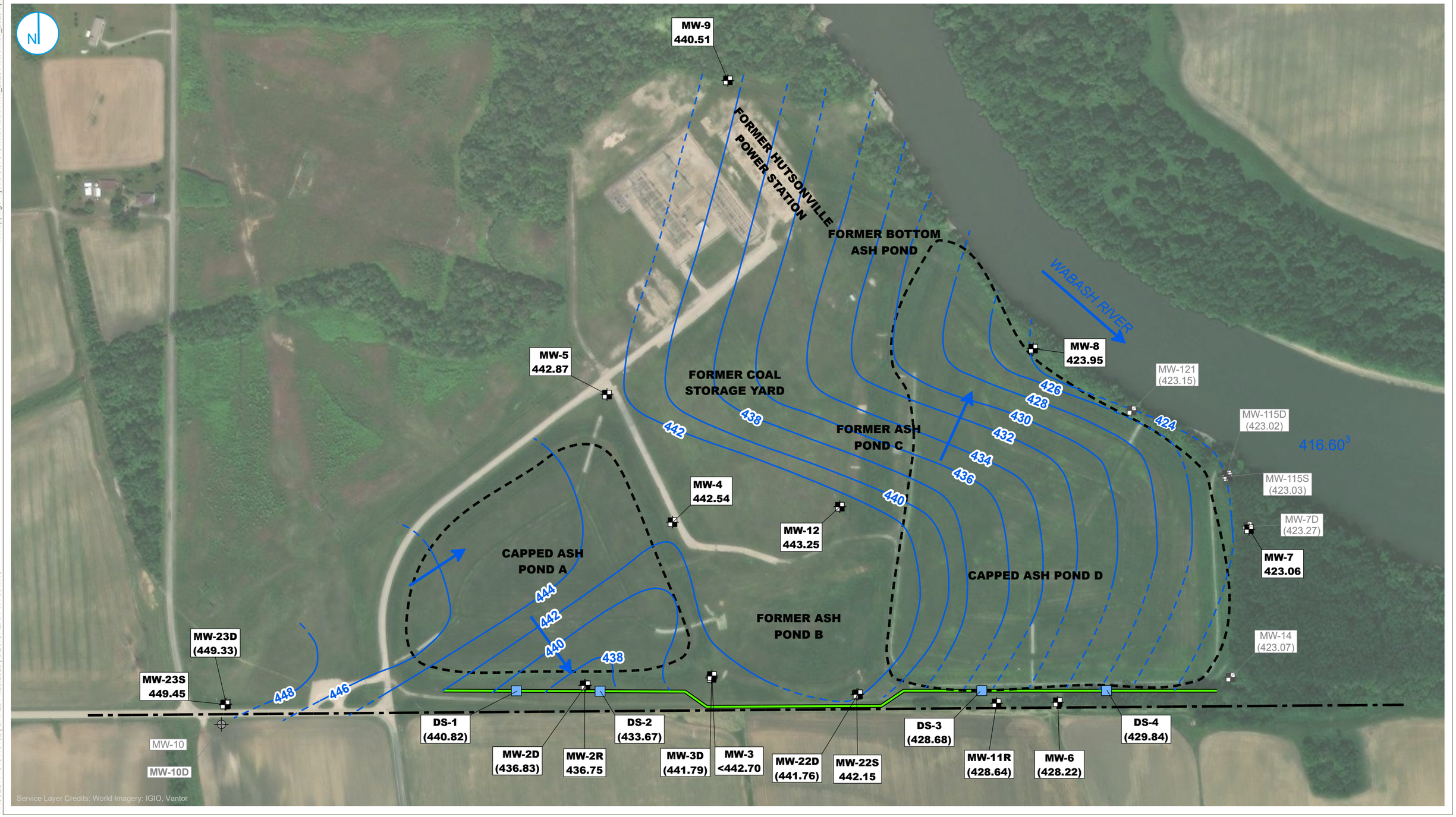
2025 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A

AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 3-3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC

RAMBOLL



PROJECT: 1940118102 | DATED: 1/23/2026 | DESIGNER: PWYSIATKO

- UPPER MIGRATION ZONE MONITORING WELL
- DEEP MIGRATION ZONE MONITORING WELL
- ABANDONED MONITORING WELL LOCATION
- DEWATERING SUMP
- APPROXIMATE BOUNDARY OF CAPPED ASH POND
- PROPERTY LINE
- GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
- GROUNDWATER ELEVATION CONTOUR (2-FT CONTOUR INTERVAL)
- GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR

0 150 300 Feet

Notes

1) GROUNDWATER AND RIVER ELEVATIONS REPORTED IN FEET NORTH AMERICAN VERTICAL DATUM OF 1988.
2) GROUNDWATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING.
3) WABASH RIVER ELEVATIONS AS REPORTED BY USGS FROM USGS 03342000 WABASH RIVER AT RIVERTON, IN LOCATED APPROXIMATELY 12.5 RIVER MILES DOWNSTREAM.
4) WATER ELEVATIONS WERE COLLECTED FOR DEWATERING SUMP LOCATIONS ON THE FIRST DAY GROUNDWATER ELEVATIONS WERE RECORDED AND REPRESENT THE AVERAGE RECORDED VALUE AT 12:00PM CST.

Q4 UPPER MIGRATION ZONE GROUNDWATER ELEVATION CONTOUR MAP OCTOBER 30-31, 2025

2025 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 3-4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC

RAMBOLL

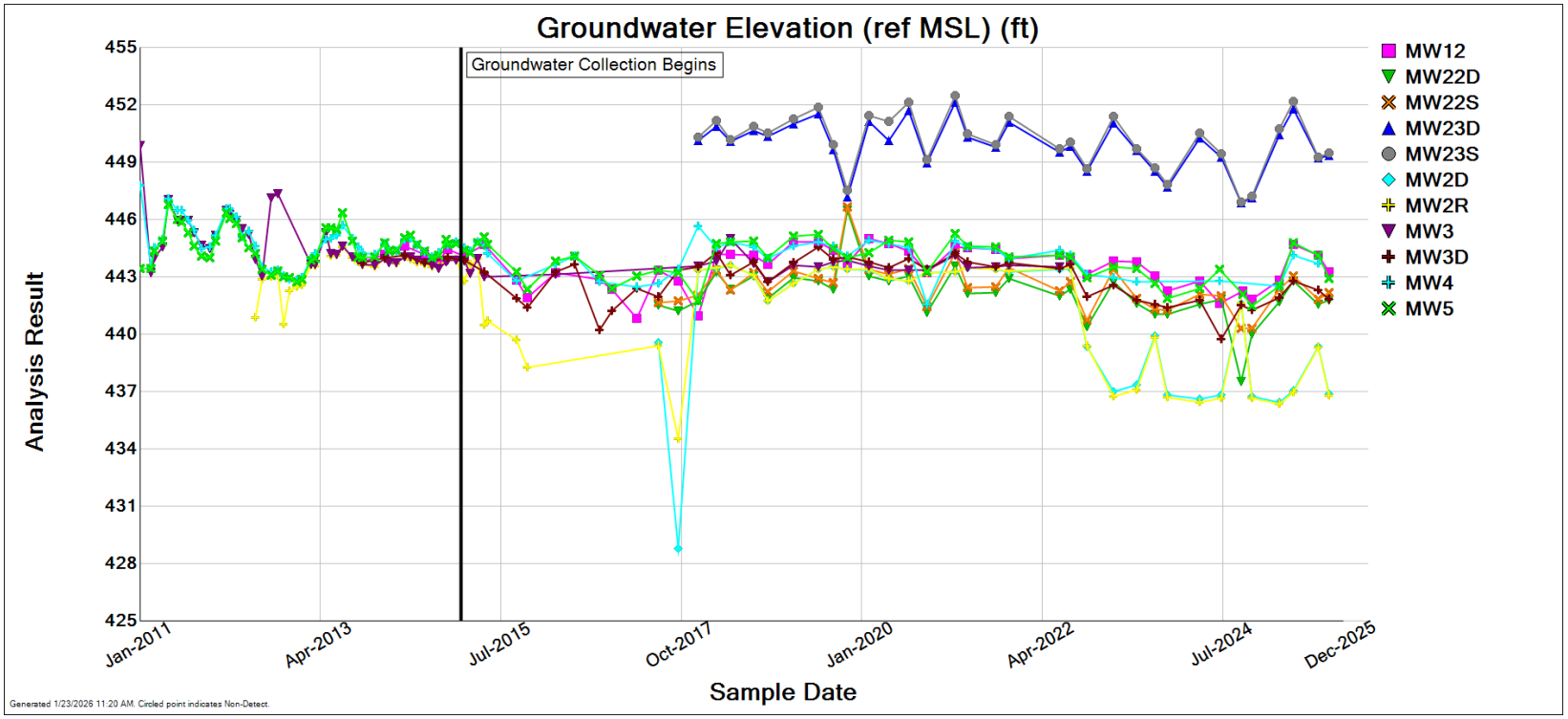


Figure 3-5. Groundwater elevations near groundwater collection trench.

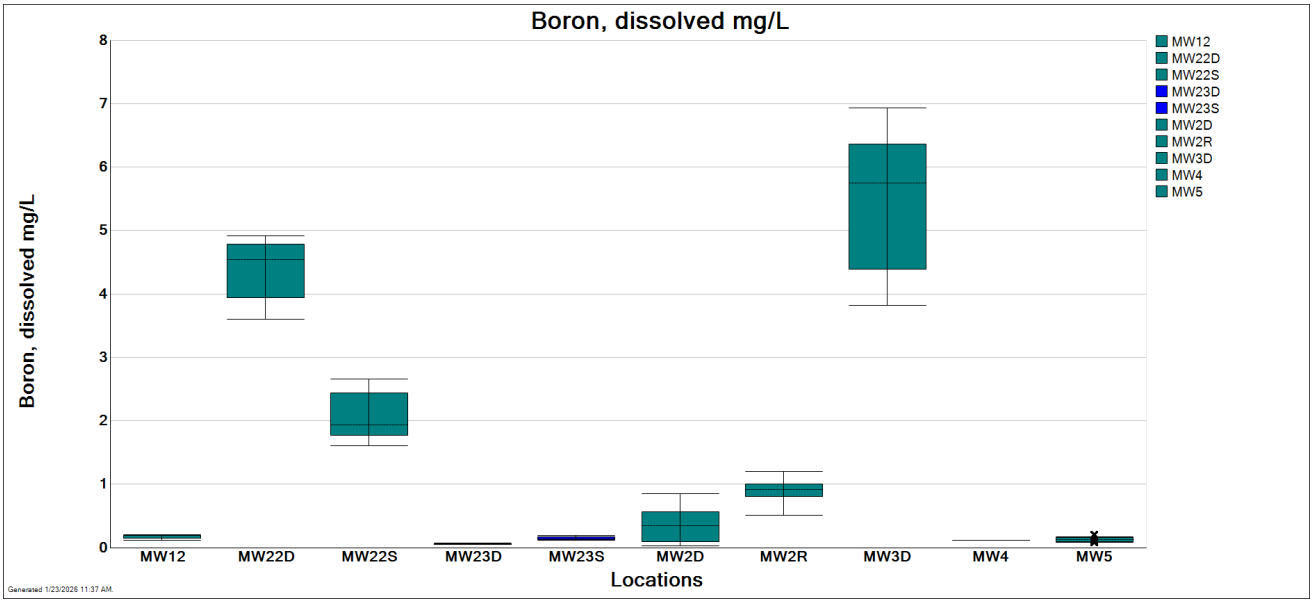


Figure 3-6. Box-whisker plot showing distribution of **dissolved boron** concentrations by monitoring well for data collected in 2024 and 2025. Notes: Box-whisker plots for background wells are blue and box-whisker plots for compliance wells are green. MW-3 was dry during these sampling events and is not shown on this figure.

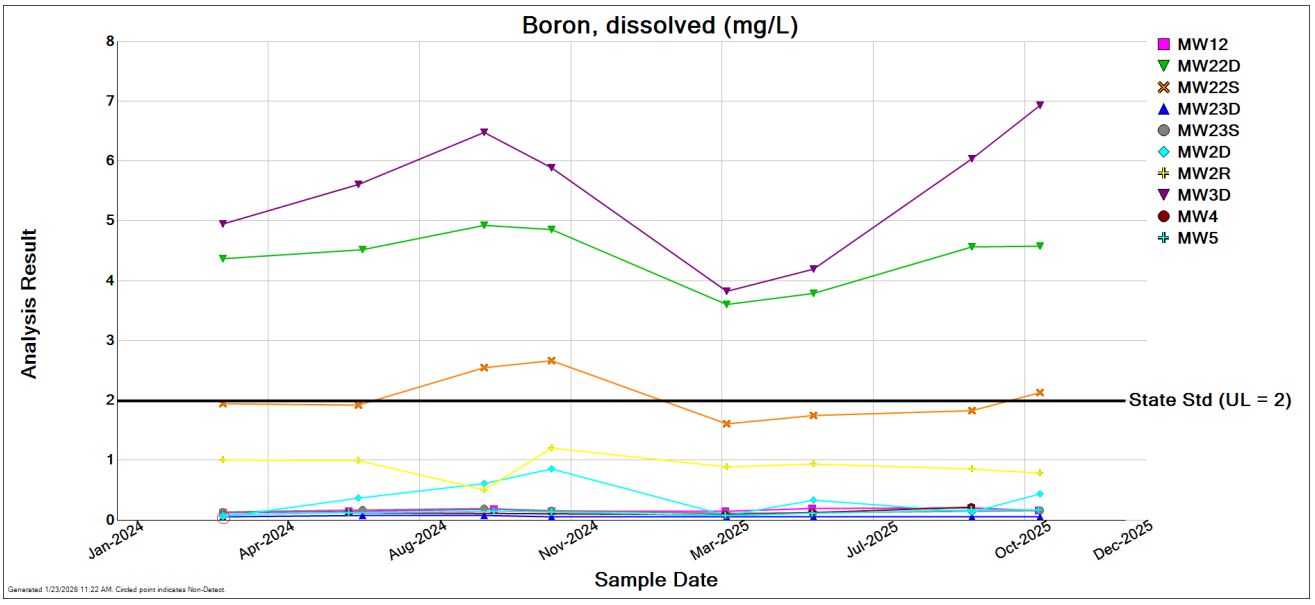


Figure 3-7. Dissolved boron concentrations during the reporting period (2024-2025) at all background and compliance wells. Notes: Circled results indicate non-detects. MW-3 was dry during these sampling events and is not shown on this figure.

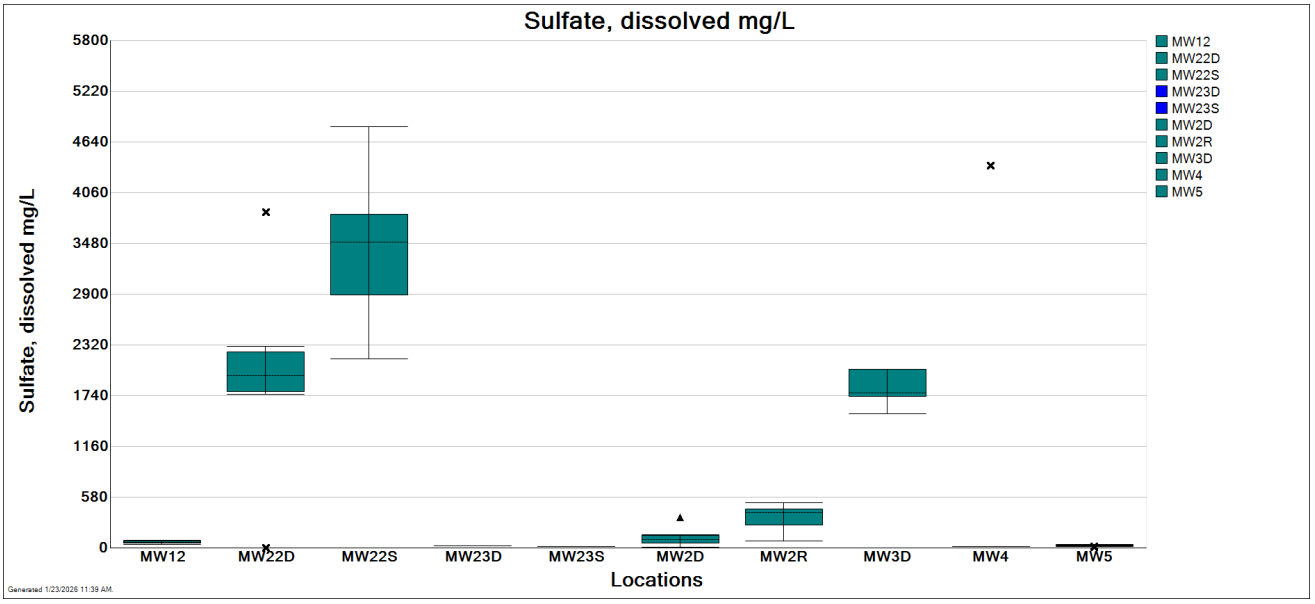


Figure 3-8. Box-whisker plot showing distribution of **dissolved sulfate** concentrations by monitoring well for data collected in 2024 and 2025. Notes: Box-whisker plots for background wells are blue and box-whisker plots for compliance wells are green. MW-3 was dry during these sampling events and is not shown on this figure.

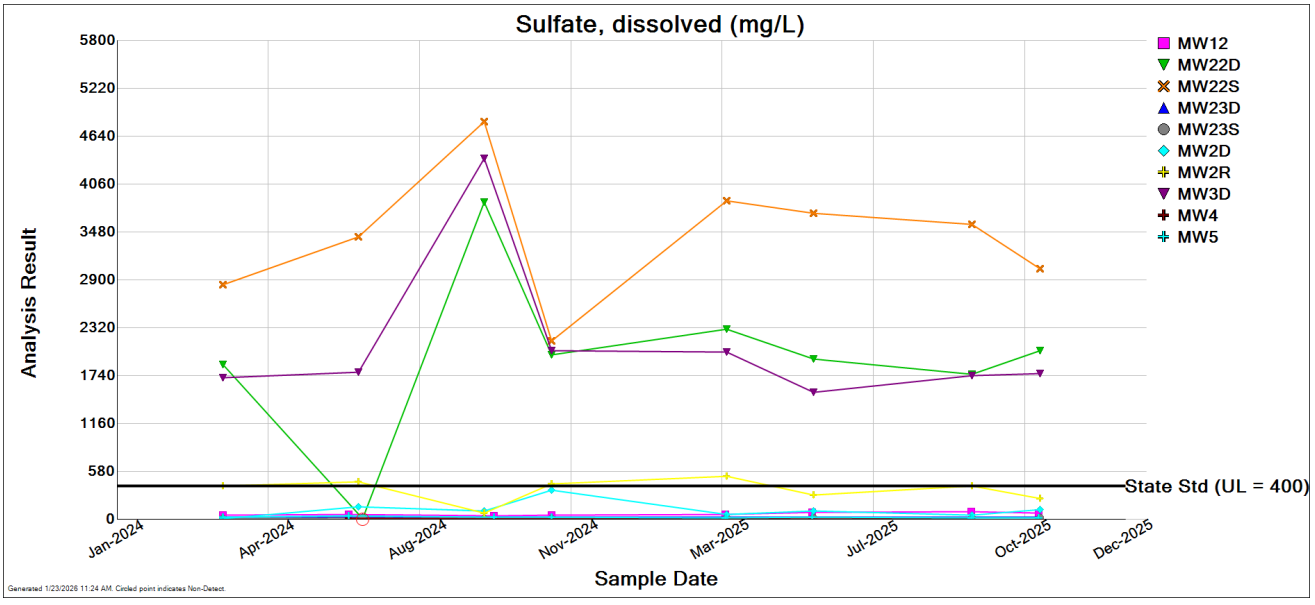


Figure 3-9. Dissolved sulfate concentrations during the reporting period (2024-2025) at all background and compliance wells. Notes: Circled results indicate non-detects. MW-3 was dry during these sampling events and is not shown on this figure.

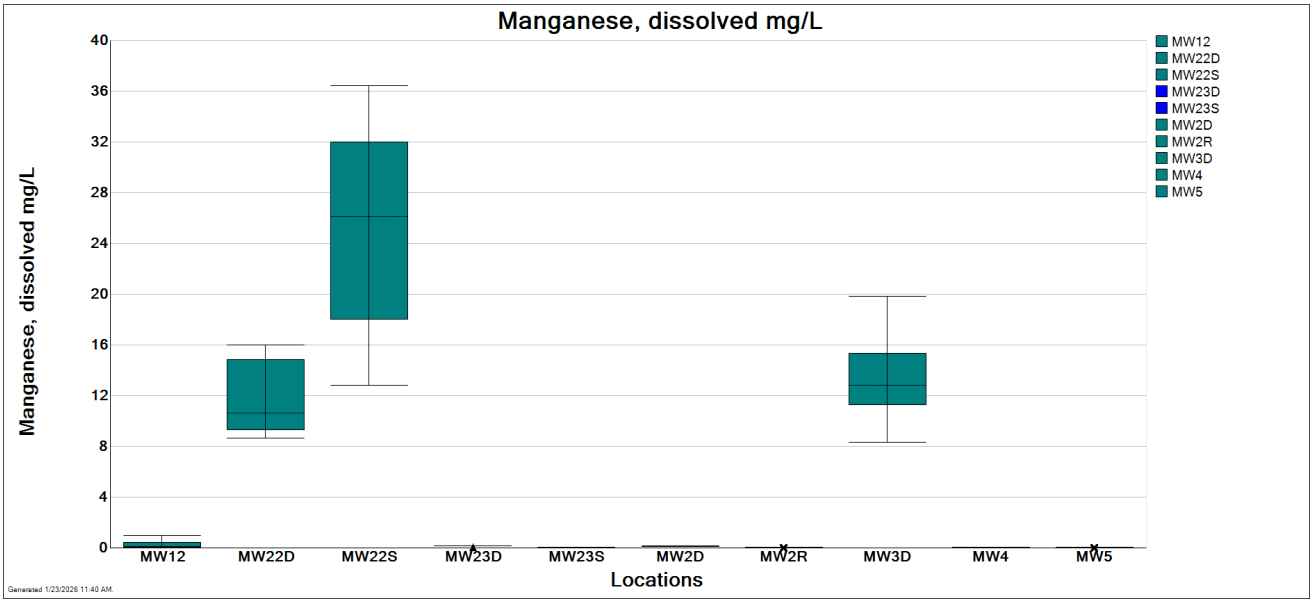


Figure 3-10A. Box-whisker plot showing distribution of **dissolved manganese** concentrations by monitoring well for data collected in 2024 and 2025 at all monitoring wells. Notes: Box-whisker plots for background wells are blue and box-whisker plots for compliance wells are green. MW-3 was dry during these sampling events and is not shown on this figure.

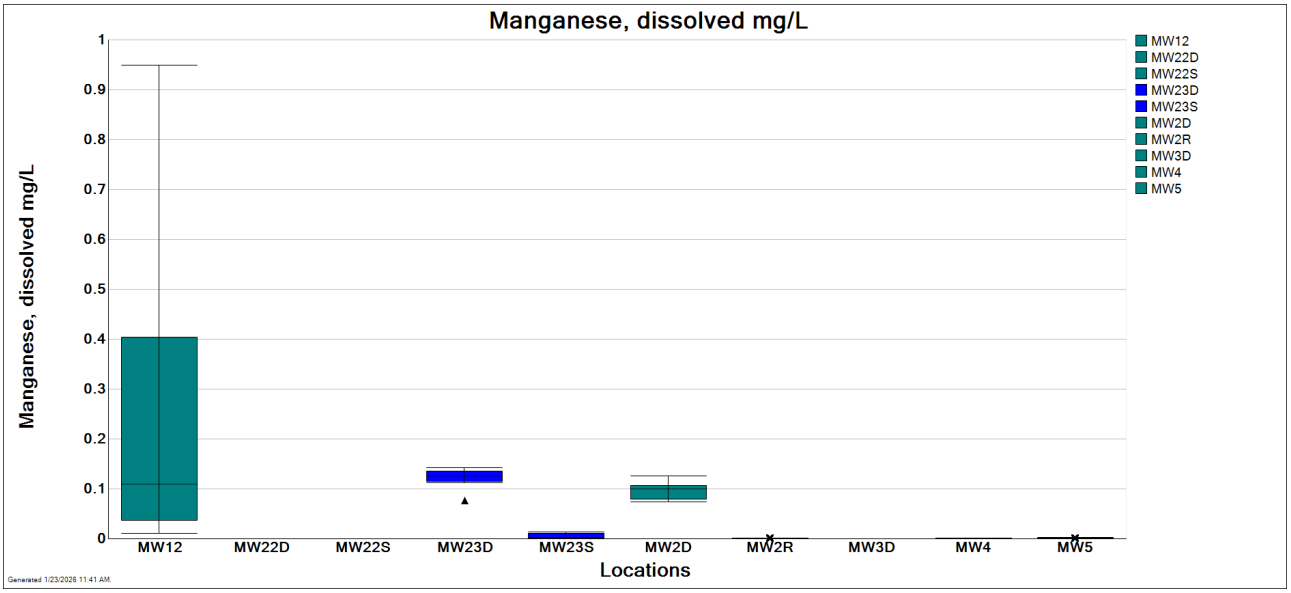


Figure 3-10B. Box-whisker plot showing distribution of **dissolved manganese** concentrations by monitoring well for data collected in 2024 and 2025 at monitoring wells MW12, MW23S, MW23D, MW2R, MW2D, MW4, and MW5 (zoomed in). Notes: Box-whisker plots for background wells are blue and box-whisker plots for compliance wells are green. MW-3 was dry during these sampling events and is not shown on this figure.

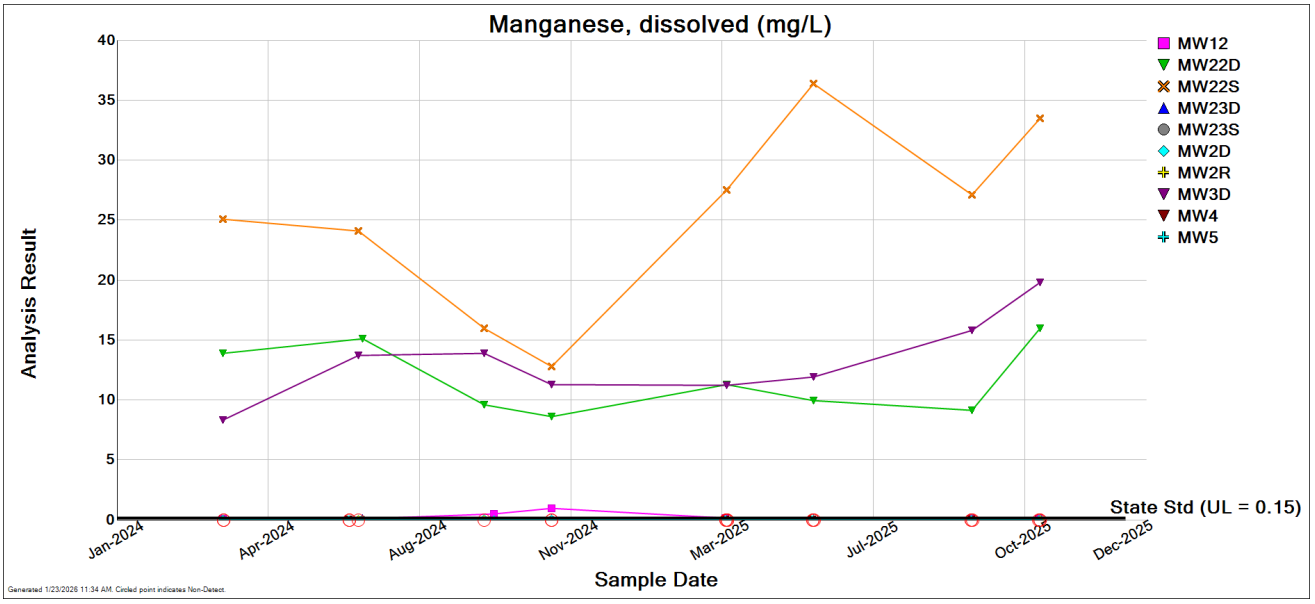


Figure 3-11A. Dissolved manganese concentrations during the reporting period (2024-2025) at all background and compliance wells. Notes: Circled results indicate non-detects. MW-3 was dry during these sampling events and is not shown on this figure.

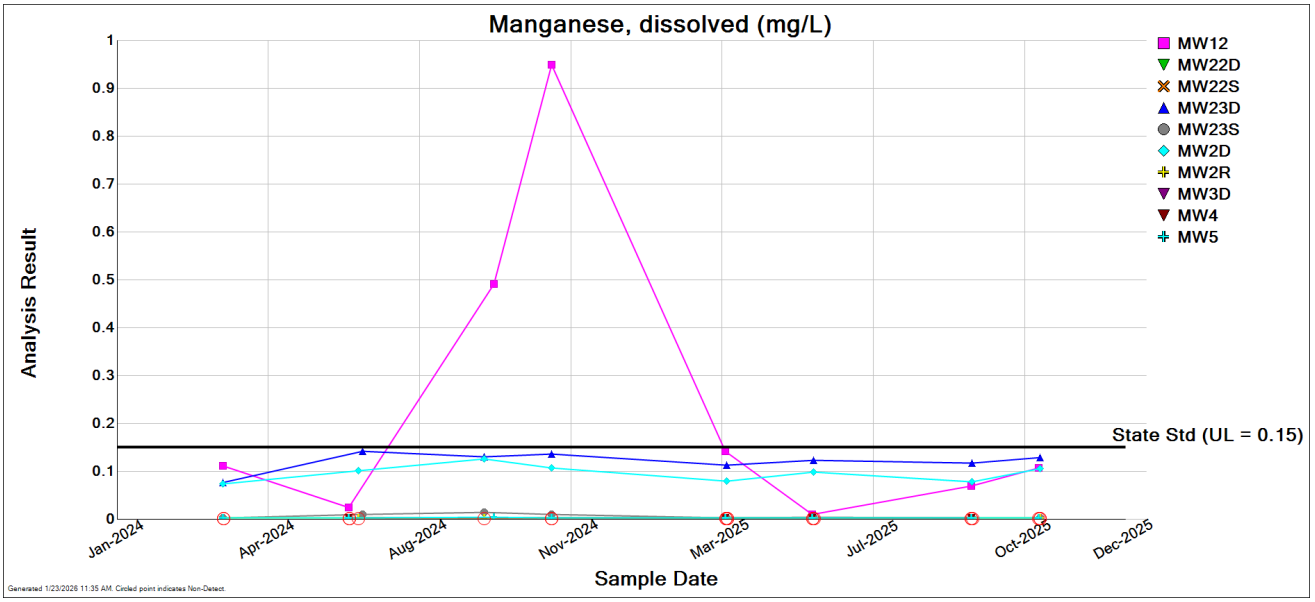


Figure 3-11B. Dissolved manganese concentrations during the reporting period (2024-2025) at MW12, MW23S, MW23D, MW2D, MW2R, MW4, and MW5 zoomed in to show the Class I groundwater standard. Notes: Circled results indicate non-detects. MW-3 was dry during these sampling events and is not shown on this figure.

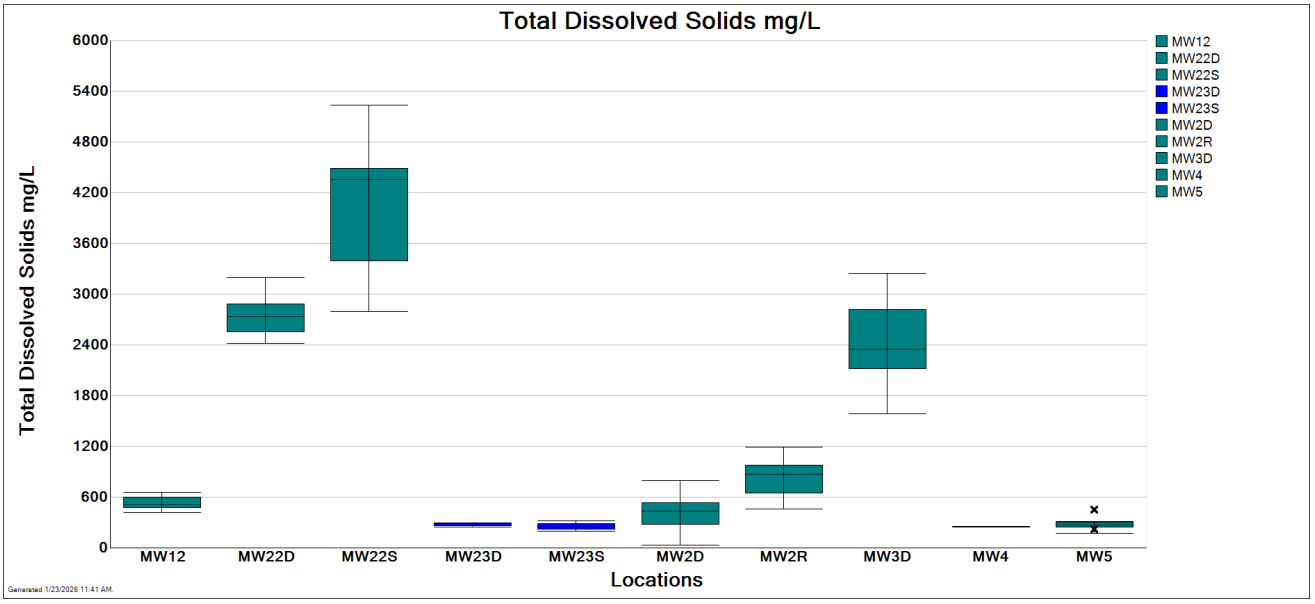


Figure 3-12. Box-whisker plot showing distribution of **total dissolved solids** concentrations by monitoring well for data collected in 2024 and 2025. Note: Box-whisker plots for background wells are blue and box-whisker plots for compliance wells are green. MW-3 was dry during these sampling events and is not shown on this figure.

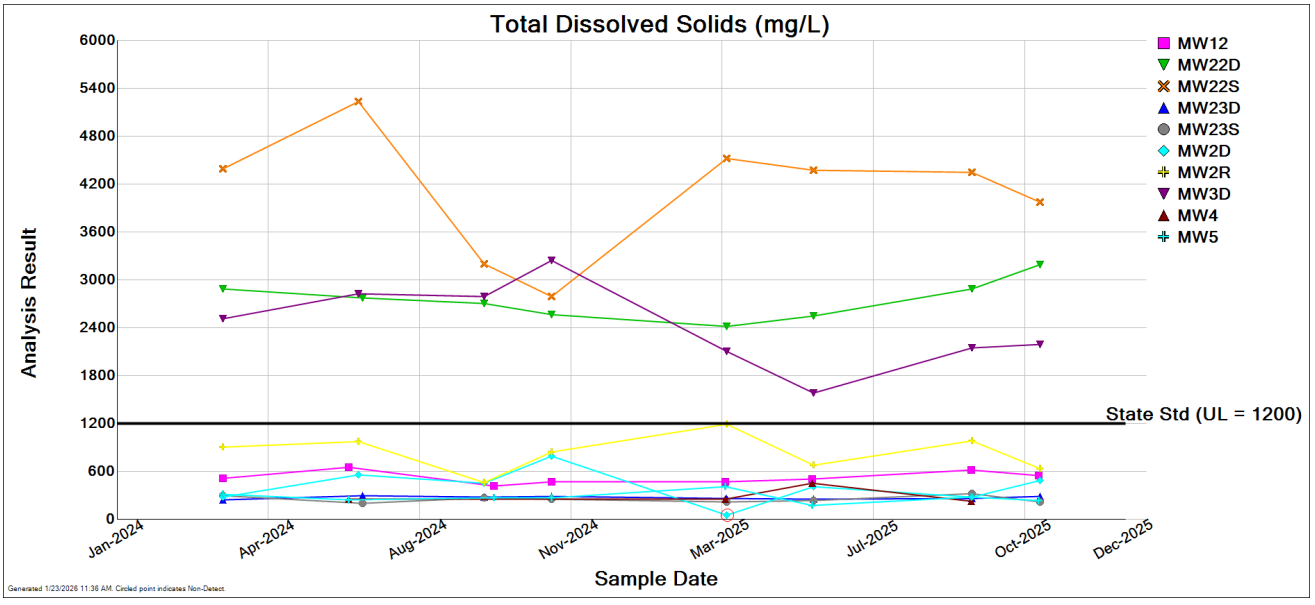


Figure 3-13. Total Dissolved Solids concentrations during the reporting period (2024-2025) at all background and compliance wells. Note: Circled results indicate non-detects. MW-3 was dry during these sampling events and is not shown on this figure.

APPENDIX A
GROUNDWATER MONITORING RESULTS 2024-2025

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW2D

	3/18/2024	6/24/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	0.0086	0.0037	0.0030	0.0025	0.0045	0.0035	0.0057	0.0024
B, diss, mg/L	<0.0250	0.3700	0.6100	0.8500	0.0800	0.3300	0.1300	0.4400
Ba, diss, mg/L	0.084	0.212	0.113	0.252	0.079	0.114	0.072	0.120
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	13.4	10.1	15.2	6.3	13.5	11.9	12.3	11.2
CN, total, mg/L	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	0.2	<0.1	<0.1	0.2	0.2	<0.1	<0.1
Fe, diss, mg/L	1.950	<0.010	0.187	0.455	0.278	0.038	0.028	0.037
GW Depth (TOC), ft	18.82	18.60	13.84	18.70	19.00	18.40	16.08	18.59
GW Elv, ft	436.60	436.82	441.58	436.72	436.42	437.02	439.34	436.83
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	0.0730	0.1010	0.1260	0.1060	0.0796	0.0984	0.0779	0.1050
Ni, diss, mg/L	0.0002	0.0004	0.0014	<0.0003	<0.0003	0.0004	<0.0003	<0.0003
NO3, diss, mg/L	<0.100	0.408	0.883	0.814	<0.100	0.436	0.323	0.893
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.23	7.55	7.47	7.49	7.61	7.06	7.14	7.46
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0005	0.0021	<0.0005	0.0029	<0.0005	0.0034	0.0010	0.0063
SO4, diss, mg/L	7.2	149.0	95.0	352.0	51.3	93.0	43.2	111.0
Spec. Cond. (field), micromho	452	652	458	957	494	489	489	558
TDS, mg/L	274	550	448	790	<25	408	276	484
Temp (Fahrenheit), degrees F	56.0	67.5	63.4	61.0	56.3	60.7	60.7	60.6
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW2R

	3/18/2024	6/24/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
B, diss, mg/L	1.0000	0.9900	0.5100	1.2000	0.8900	0.9300	0.8500	0.7800
Ba, diss, mg/L	0.055	0.054	0.027	0.045	0.044	0.035	0.041	0.030
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	5.9	5.1	16.1	4.4	4.6	5.0	3.3	5.9
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	<0.0010	<0.0010	0.0003	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fe, diss, mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GW Depth (TOC), ft	18.95	18.75	13.79	18.72	19.03	18.44	16.10	18.62
GW Elv, ft	436.42	436.62	441.58	436.65	436.34	436.93	439.27	436.75
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Ni, diss, mg/L	0.0006	0.0010	0.0005	<0.0003	<0.0003	<0.0003	0.0002	<0.0003
NO3, diss, mg/L	1.260	1.290	9.400	1.140	1.220	2.100	0.925	2.540
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.02	7.23	7.33	7.31	7.20	6.80	6.90	7.38
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	0.0054	0.0050	0.0012	0.0038	0.0044	0.0122	0.0042	0.0105
SO4, diss, mg/L	401.0	452.0	72.3	423.0	516.0	287.0	400.0	249.0
Spec. Cond. (field), micromho	1010	1210	576	1150	1280	964	1160	900
TDS, mg/L	898	972	458	840	1190	670	980	632
Temp (Fahrenheit), degrees F	56.5	71.3	64.4	60.9	55.8	60.5	60.6	60.3
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW3D

	3/18/2024	6/24/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	0.0014	0.0011	<0.0003	0.0006	0.0042	0.0052	0.0008	<0.0003
B, diss, mg/L	4.9500	5.6100	6.4700	5.8800	3.8200	4.1900	6.0400	6.9300
Ba, diss, mg/L	0.010	0.011	0.011	0.012	0.009	0.010	0.010	0.011
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0023	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	0.0043	0.0038	0.0019	0.0041	0.0109	0.0098	0.0032	0.0023
Cl, diss, mg/L	14.0	16.7	20.1	16.8	13.8	12.3	18.8	19.4
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Co, diss, mg/L	0.112	0.124	0.061	0.133	0.297	0.250	0.081	0.064
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	0.0013	<0.0005	<0.0005	<0.0005	0.0048	0.0040	<0.0005	<0.0005
F, diss, mg/L	0.4	0.4	0.2	0.2	2.3	1.5	<0.1	<0.1
Fe, diss, mg/L	2.230	1.850	2.010	1.420	0.832	6.820	5.290	8.530
GW Depth (TOC), ft	13.25	15.28	13.52	13.75	13.14	12.24	12.72	13.22
GW Elv, ft	441.76	439.73	441.49	441.26	441.87	442.77	442.29	441.79
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	8.3000	13.7000	13.9000	11.3000	11.2000	11.9000	15.8000	19.8000
Ni, diss, mg/L	0.1860	0.1730	0.1020	0.1680	0.3250	0.2990	0.1270	0.1080
NO3, diss, mg/L	0.769	0.540	<0.100	0.575	0.984	0.836	<0.100	<0.100
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	5.69	6.10	6.21	6.05	4.61	4.39	5.94	5.70
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0050	<0.0025	<0.0005	<0.0050	<0.0005	<0.0100	<0.0025	<0.0005
SO4, diss, mg/L	1710.0	1780.0	4370.0	2040.0	2020.0	1530.0	1740.0	1760.0
Spec. Cond. (field), micromho	1850	2510	2390	4	3640	3640	3760	3300
TDS, mg/L	2510	2820	2790	3240	2100	1580	2140	2190
Temp (Fahrenheit), degrees F	54.6	66.9	62.3	61.1	55.6	59.2	62.9	63.0
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	0.04	0.03	0.02	0.03	0.08	0.08	0.03	0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW4

	6/17/2024	3/17/2025	5/19/2025	9/11/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003
B, diss, mg/L	0.1200	0.0900	0.1200	0.2100
Ba, diss, mg/L	0.009	0.009	0.012	0.014
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	0.4	1.1	0.6	0.6
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	0.0004	0.0004	<0.0010	0.0005
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	0.2	0.2	0.2
Fe, diss, mg/L	<0.010	<0.010	<0.010	<0.010
GW Depth (TOC), ft	14.01	14.25	12.66	13.10
GW Elv, ft	442.75	442.51	444.10	443.66
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010
Ni, diss, mg/L	0.0002	<0.0003	<0.0003	<0.0003
NO3, diss, mg/L	0.635	0.952	0.679	0.600
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.63	7.80	7.43	7.19
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	0.0012	0.0015	0.0022	0.0020
SO4, diss, mg/L	6.7	8.4	15.3	8.4
Spec. Cond. (field), micromho	354	330	334	418
TDS, mg/L	248	246	450	218
Temp (Fahrenheit), degrees F	67.7	43.9	65.5	67.6
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW5

	3/18/2024	6/17/2024	9/30/2024	11/11/2024	3/17/2025	5/19/2025	9/11/2025	10/30/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
B, diss, mg/L	0.0900	0.1200	0.1400	0.1300	0.0800	0.1100	0.1700	0.1700
Ba, diss, mg/L	0.021	0.027	0.037	0.035	0.018	0.018	0.025	0.030
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	5.8	0.5	0.5	0.7	1.8	0.6	0.5	0.6
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	0.0004	0.0004	<0.0010	<0.0010	0.0003	<0.0010	0.0003	0.0003
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fe, diss, mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GW Depth (TOC), ft	12.32	11.31	12.62	13.21	12.18	9.90	10.55	11.80
GW Elv, ft	442.35	443.36	442.05	441.46	442.49	444.77	444.12	442.87
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	0.0020	<0.0010	0.0037	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Ni, diss, mg/L	0.0005	0.0004	0.0009	0.0006	<0.0003	<0.0003	0.0004	0.0004
NO3, diss, mg/L	0.749	0.757	<0.100	0.239	0.795	0.495	0.576	1.060
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	6.82	7.00	6.77	6.77	7.14	6.54	6.06	7.16
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	0.0026	0.0031	0.0015	0.0016	0.0023	0.0026	0.0014	0.0014
SO4, diss, mg/L	18.9	34.4	20.1	25.2	16.3	20.2	12.7	11.5
Spec. Cond. (field), micromho	188	382	399	408	257	284	328	347
TDS, mg/L	306	238	262	268	406	168	270	232
Temp (Fahrenheit), degrees F	48.4	65.8	69.7	68.7	49.3	64.0	70.6	65.6
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW12

	3/18/2024	6/17/2024	9/30/2024	11/11/2024	3/17/2025	5/19/2025	9/11/2025	10/30/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
B, diss, mg/L	0.1200	0.1400	0.1800	0.1400	0.1400	0.1900	0.2000	0.1600
Ba, diss, mg/L	0.014	0.015	0.015	0.011	0.014	0.015	0.018	0.019
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	6.6	1.2	1.1	1.0	1.5	1.2	1.6	1.5
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fe, diss, mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GW Depth (TOC), ft	13.96	15.15	14.50	14.95	13.94	12.06	12.61	13.49
GW Elv, ft	442.78	441.59	442.24	441.79	442.80	444.68	444.13	443.25
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	0.1110	0.0246	0.4900	0.9490	0.1420	0.0101	0.0688	0.1060
Ni, diss, mg/L	0.0007	0.0005	0.0015	0.0022	<0.0003	0.0005	0.0007	0.0007
NO3, diss, mg/L	1.960	0.816	1.830	2.510	1.790	1.390	2.150	2.480
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.04	7.11	6.97	6.90	7.16	6.53	6.73	7.10
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	0.0017	0.0029	0.0011	<0.0005	0.0028	0.0088	0.0060	0.0034
SO4, diss, mg/L	46.3	57.0	38.9	42.8	54.8	76.1	85.7	69.7
Spec. Cond. (field), micromho	633	750	715	778	802	807	882	859
TDS, mg/L	510	650	416	468	468	500	610	542
Temp (Fahrenheit), degrees F	48.0	63.5	65.6	64.6	52.2	61.5	65.2	62.8
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW22D

	3/18/2024	6/27/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	0.0032	0.0054	0.0045	0.0041	0.0038	0.0053	0.0065	0.0045
B, diss, mg/L	4.3600	4.5200	4.9200	4.8500	3.6000	3.7900	4.5600	4.5700
Ba, diss, mg/L	0.019	0.018	0.018	0.019	0.019	0.020	0.019	0.018
Be, diss, mg/L	0.0041	0.0051	0.0034	0.0043	0.0044	0.0045	0.0048	0.0069
Cd, diss, mg/L	0.0026	0.0035	0.0025	0.0028	0.0035	0.0033	0.0036	0.0045
Cl, diss, mg/L	7.5	8.3	8.0	8.3	8.2	8.0	7.6	7.5
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Co, diss, mg/L	0.143	0.154	0.097	0.078	0.103	0.097	0.096	0.097
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	0.0079	0.0064	0.0067	0.0073	0.0074	0.0068	0.0080	0.0088
F, diss, mg/L	0.8	1.1	1.0	0.7	1.0	1.0	0.8	1.1
Fe, diss, mg/L	136.000	189.000	157.000	131.000	143.000	138.000	163.000	270.000
GW Depth (TOC), ft	9.80	9.55	13.84	11.36	9.70	8.58	9.82	9.60
GW Elv, ft	441.56	441.81	437.52	440.00	441.66	442.78	441.54	441.76
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	13.9000	15.1000	9.5800	8.6200	11.3000	9.9600	9.1100	16.0000
Ni, diss, mg/L	0.0937	0.1140	0.0911	0.0815	0.1020	0.1070	0.1110	0.1300
NO3, diss, mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	0.228	<0.100	<0.100
Pb, diss, mg/L	0.013	0.012	0.011	0.015	0.012	0.009	0.007	0.011
pH (field), STD	4.83	4.61	4.87	4.74	4.70	4.73	4.70	4.49
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0500	<0.0250	<0.0250	<0.0500	<0.0250	<0.0050	<0.0250	<0.0250
SO4, diss, mg/L	1870.0	<0.5	3840.0	1990.0	2300.0	1940.0	1750.0	2040.0
Spec. Cond. (field), micromho	1890	1950	1960	3	3830	3750	3530	3790
TDS, mg/L	2880	2770	2700	2560	2410	2540	2880	3190
Temp (Fahrenheit), degrees F	54.3	62.9	63.9	64.4	58.5	59.2	66.2	63.7
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	0.38	<0.01	0.36	0.33	0.41	0.40	0.43	0.58

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW22S

	3/18/2024	6/24/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	0.0085	0.0131	0.0134	0.0104	0.0063	0.0110	0.0156	0.0070
B, diss, mg/L	1.9400	1.9200	2.5400	2.6600	1.6100	1.7400	1.8300	2.1300
Ba, diss, mg/L	0.006	0.006	0.006	0.005	0.005	0.006	<0.005	0.006
Be, diss, mg/L	0.0146	0.0193	0.0090	0.0090	0.0165	0.0230	0.0244	0.0200
Cd, diss, mg/L	0.0098	0.0143	0.0068	0.0070	0.0133	0.0166	0.0177	0.0126
Cl, diss, mg/L	10.9	6.5	9.8	10.8	6.9	6.6	7.5	7.1
CN, total, mg/L	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02
Co, diss, mg/L	0.160	0.188	0.107	0.100	0.194	0.237	0.212	0.162
Cr, diss, mg/L	0.0008	0.0018	0.0005	<0.0010	0.0023	0.0031	0.0031	0.0014
Cu, diss, mg/L	0.0370	0.0502	0.0567	0.0408	0.0347	0.0459	0.0589	0.0330
F, diss, mg/L	0.6	0.4	0.9	1.1	0.7	0.2	0.9	0.8
Fe, diss, mg/L	482.000	634.000	224.000	183.000	572.000	651.000	681.000	710.000
GW Depth (TOC), ft	9.42	9.52	11.20	11.20	9.16	8.45	9.68	9.33
GW Elv, ft	442.06	441.96	440.28	440.28	442.32	443.03	441.80	442.15
Hg, diss, mg/L	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0005	<0.0001
Mn, diss, mg/L	25.1000	24.1000	16.0000	12.8000	27.5000	36.4000	27.1000	33.5000
Ni, diss, mg/L	0.2320	0.3240	0.1920	0.1630	0.3140	0.3710	0.3840	0.2910
NO3, diss, mg/L	0.492	<0.100	0.454	1.220	0.432	<0.100	<0.100	<0.100
Pb, diss, mg/L	0.007	0.009	0.011	0.008	0.010	0.011	0.012	0.009
pH (field), STD	3.49	3.50	3.01	2.91	3.56	3.40	3.25	3.37
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0500	<0.0005	<0.0250	<0.0500	<0.0250	<0.0050	<0.0250	<0.0250
SO4, diss, mg/L	2840.0	3420.0	4810.0	2160.0	3850.0	3700.0	3570.0	3030.0
Spec. Cond. (field), micromho	2530	3390	2730	4	5420	5790	5640	4840
TDS, mg/L	4390	5230	3200	2790	4520	4370	4340	3970
Temp (Fahrenheit), degrees F	51.5	65.5	65.9	65.1	55.4	60.2	67.4	64.2
Tl, diss, mg/L	<0.0003	<0.0003	<0.0005	<0.0003	<0.0003	<0.0003	<0.0013	<0.0003
V, diss, mg/L	0.002	0.003	<0.001	<0.001	0.002	0.003	0.004	0.001
Zn, diss, mg/L	1.19	1.49	1.04	0.92	1.48	1.64	1.74	1.27

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW23D

	3/18/2024	6/27/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	0.0018	0.0014	0.0015	0.0018	0.0016	0.0017	0.0014	0.0015
B, diss, mg/L	0.0500	0.0700	0.0700	0.0500	0.0500	0.0500	0.0500	0.0500
Ba, diss, mg/L	0.047	0.049	0.045	0.048	0.048	0.046	0.046	0.046
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	3.4	3.7	3.2	3.5	3.2	3.3	3.0	3.1
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0015	<0.0005
F, diss, mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fe, diss, mg/L	0.184	<0.010	<0.010	0.073	0.420	<0.010	0.023	0.149
GW Depth (TOC), ft	5.65	6.64	9.06	8.79	5.47	4.14	6.72	6.57
GW Elv, ft	450.25	449.26	446.84	447.11	450.43	451.76	449.18	449.33
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	0.0761	0.1420	0.1290	0.1360	0.1120	0.1220	0.1170	0.1280
Ni, diss, mg/L	<0.0003	<0.0003	0.0004	<0.0003	0.0002	0.0011	0.0065	<0.0003
NO3, diss, mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.17	7.27	7.32	7.42	7.29	6.68	6.74	7.19
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
SO4, diss, mg/L	20.0	22.8	20.2	22.8	20.1	20.5	19.3	19.9
Spec. Cond. (field), micromho	412	338	360	464	467	485	464	467
TDS, mg/L	240	290	270	282	254	252	254	284
Temp (Fahrenheit), degrees F	56.8	62.3	64.5	60.3	59.9	58.7	65.3	60.6
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01

Hutsonville Ash Impoundment
Analysis Results by Date (column) and Parameter (row)

Date Range: 01/01/2024 to 12/30/2025
Well: MW23S

	3/18/2024	6/27/2024	9/23/2024	11/11/2024	3/18/2025	5/20/2025	9/12/2025	10/31/2025
Ag, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
As, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
B, diss, mg/L	0.1300	0.1700	0.1900	0.1600	0.1100	0.1200	0.1400	0.1600
Ba, diss, mg/L	0.035	0.041	0.038	0.039	0.038	0.036	0.038	0.036
Be, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cd, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Cl, diss, mg/L	1.1	2.2	2.4	2.1	3.3	2.9	3.6	3.0
CN, total, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Co, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	<0.001	<0.001
Cr, diss, mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cu, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
F, diss, mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fe, diss, mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GW Depth (TOC), ft	5.51	6.60	9.13	8.82	5.30	3.87	6.80	6.58
GW Elv, ft	450.52	449.43	446.90	447.21	450.73	452.16	449.23	449.45
Hg, diss, mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mn, diss, mg/L	<0.0010	0.0100	0.0136	0.0087	<0.0010	0.0030	0.0021	<0.0010
Ni, diss, mg/L	0.0005	<0.0003	0.0020	0.0005	0.0004	<0.0003	0.0002	<0.0003
NO3, diss, mg/L	0.248	0.650	0.712	0.457	1.890	1.070	1.440	0.867
Pb, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
pH (field), STD	7.08	7.08	7.11	7.05	7.21	6.04	7.05	6.84
Sb, diss, mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Se, diss, mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
SO4, diss, mg/L	8.0	9.0	8.2	8.3	8.5	9.1	9.6	9.1
Spec. Cond. (field), micromho	312	310	360	414	377	346	412	374
TDS, mg/L	290	194	262	252	212	230	320	214
Temp (Fahrenheit), degrees F	57.6	63.5	64.5	61.2	58.2	58.1	69.8	63.4
Tl, diss, mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
V, diss, mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zn, diss, mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

APPENDIX B
SITE INSPECTION REPORTS

Hutsonville Power Station
Ash Pond A Closure Cap - Post-Closure Care Plan
Quarterly Site Inspection Checksheet

Date	03/31/2025
Inspector	AMM
Temperature	50 °F
Weather	Cloudy

	Item	Condition Code *	Comments
Pond Cap	**Vent Pipes**	**GC**	Vent holes clear of pipes inspected, no weed overgrowth inside cement vent barriers.
	Drainage Berms	**GC**	No excessive standing water; no eroded or scoured drainage channels.
	Vegetation	**GC**	No overgrowth observed.
	Erosion on Cap	**GC**	No erosion or gullies 6 inches or deeper.
	Liner	**GC**	No exposed liner; no visual indication of rips, tears, punctures, or other damage to liner.
	Water Control Features (berms, vegetated flumes, etc.)	**GC**	Water control features in good condition.
	Other	**GC**	Very small animal burrows (likely snake holes) were observed on the top of the cap. Will monitor for issues. Three temporary piezometers were installed in March 2025. Areas of the cap that had vegetation removed in the process of installation were reseeded.
Embankment	**Vegetation**	**GC**	No overgrowth or bare patches on embankments.
	Liner	**GC**	No exposure
	Erosion	**GC**	No erosion or gullies 6 inches or deeper on embankments or toe.
	Fencing	**MM**	Main gate destroyed by unknown driver. Repairs scheduled through Dasenbrock Fence Company, Inc. The new gate is on site and is scheduled to be installed in April 2025.
	Drainage Channels (rip-rap, paved flumes, etc.)	**GC**	No overgrowth. Channels in good condition.
	Other	**GC**	An animal burrow was observed at the foot of the emankment near the control panels. Will monitor for issues.

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

Hutsonville Power Station – Ash Pond A

North letdown (facing SW)

East embankment (facing S)

North embankment (facing SW)

West embankment (facing S)

Southwest letdown (facing NE)

South embankment (facing E)

Cap Top

Facing North

Facing West

Facing South

Facing East

Re-Seeded Area on Cap Top

Temporary Piezometer

Small Animal Burrow Observed on Cap Top

Animal Burrow Observed at Base of Embankment

Hutsonville Power Station
Ash Pond A Closure Cap - Post-Closure Care Plan
Quarterly Site Inspection Checksheet

Date	05/28/2025
Inspector	AMM
Temperature	75 °F
Weather	Cloudy/Light Rain

	Item	Condition Code *	Comments
Pond Cap	**Vent Pipes**	**GC**	Vent holes clear of pipes inspected, no weed overgrowth inside cement vent barriers.
	Drainage Berms	**GC**	No excessive standing water; no eroded or scoured drainage channels.
	Vegetation	**GC**	No overgrowth observed.
	Erosion on Cap	**GC**	No erosion or gullies 6 inches or deeper.
	Liner	**GC**	No exposed liner; no visual indication of rips, tears, punctures, or other damage to liner.
	Water Control Features (berms, vegetated flumes, etc.)	**GC**	Water control features in good condition.
	Other	**GC**	Minor tire track ruts were observed. Will monitor for issues. Three temporary piezometers were installed in March 2025. Areas of the cap that had vegetation removed in the process of installation were reseeded. Piezometer abandonment was in progress at the time of the cap inspection, and was completed May 29, 2025.
Embankment	**Vegetation**	**GC**	No overgrowth or bare patches on embankments.
	Liner	**GC**	No exposure
	Erosion	**GC**	No erosion or gullies 6 inches or deeper on embankments or toe.
	Fencing	**MM**	Main gate destroyed by unknown driver. Currently looking for a contractor to replace Dasenbrock Fence Company, Inc. to get the new gate installed.
	Drainage Channels (rip-rap, paved flumes, etc.)	**GC**	No overgrowth. Channels 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

Hutsonville Power Station – Ash Pond A

North letdown (facing SW)

East embankment (facing S)

North embankment (facing SW)

West embankment (facing S)

Southwest letdown (facing NE)

South embankment (facing E)

Cap Top

Facing North

Facing West

Facing South

Facing East

Abandoned temporary piezometer

Hutsonville Power Station
Ash Pond A Closure Cap - Post-Closure Care Plan
Quarterly Site Inspection Checksheet

Date	08/26/2025
Inspector	AMM
Temperature	80 °F
Weather	Sunny

	Item	Condition Code *	Comments
Pond Cap	**Vent Pipes**	**GC**	Vent holes clear of pipes inspected, no weed overgrowth inside cement vent barriers.
	Drainage Berms	**GC**	No excessive standing water; no eroded or scoured drainage channels.
	Vegetation	**GC**	No overgrowth observed.
	Erosion on Cap	**GC**	No erosion or gullies 6 inches or deeper.
	Liner	**GC**	No exposed liner; no visual indication of rips, tears, punctures, or other damage to liner.
	Water Control Features (berms, vegetated flumes, etc.)	**GC**	Water control features in good condition.
	Other	**--**	--
Embankment	**Vegetation**	**GC**	No overgrowth or bare patches on embankments.
	Liner	**GC**	No exposure
	Erosion	**GC**	No erosion or gullies 6 inches or deeper on embankments or toe.
	Fencing	**GC**	Main gate has been replaced and is locked.
	Drainage Channels (rip-rap, paved flumes, etc.)	**GC**	No overgrowth. Channels 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

Hutsonville Power Station – Ash Pond A

North letdown (facing SW)

East embankment (facing S)

North embankment (facing SW)

West embankment (facing S)

Southwest letdown (facing NE)

South embankment (facing E)

Cap Top

Facing North

Facing West

Facing South

Facing East

Hutsonville Power Station
Ash Pond A Closure Cap - Post-Closure Care Plan
Quarterly Site Inspection Checksheet

Date	11/14/2025
Inspector	AMM
Temperature	70 °F
Weather	Sunny

	Item	Condition Code *	Comments
Pond Cap	**Vent Pipes**	**GC**	Vent holes clear of pipes inspected, no weed overgrowth inside cement vent barriers.
	Drainage Berms	**GC**	No excessive standing water; no eroded or scoured drainage channels.
	Vegetation	**GC**	No overgrowth observed.
	Erosion on Cap	**GC**	No erosion or gullies 6 inches or deeper.
	Liner	**GC**	No exposed liner; no visual indication of rips, tears, punctures, or other damage to liner.
	Water Control Features (berms, vegetated flumes, etc.)	**GC**	Water control features in good condition.
	Other	**--**	--
Embankment	**Vegetation**	**GC**	No overgrowth or bare patches on embankments.
	Liner	**GC**	No exposure
	Erosion	**GC**	No erosion or gullies 6 inches or deeper on embankments or toe.
	Fencing	**GC**	Fencing and main gate are in good condition, locked.
	Drainage Channels (rip-rap, paved flumes, etc.)	**GC**	No overgrowth. Channels 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

Hutsonville Power Station – Ash Pond A

North letdown (facing SW)

East embankment (facing S)

North embankment (facing SW)

West embankment (facing S)

Southwest letdown (facing NE)

South embankment (facing E)

Cap Top

Facing North

Facing West

Facing South

Facing East

APPENDIX C
STATISTICAL OUTPUT

APPENDIX C1
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
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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 $\mathrm{sgn}(x_{ij} - x_{jk})$	= 1 if $(x_{ij} - x_{jk}) > 0$ = 0 if $(x_{ij} - x_{jk}) = 0$ = -1 if $(x_{ij} - x_{jk}) < 0$ where $x_{i1}, x_{i2}, \ldots, x_{in}$ 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 $VAR(S_i)$	$VAR(S_i) =$ $\frac{1}{18}\left\{ n_i(n_i-1)(2n_i+5) - \sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(2t_{ip}+5) - \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(2u_{iq}+5) \right\}$ $+ \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1)(t_{ip}-2) \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)(u_{iq}-2)}{9n_i(n_i-1)(n_i-2)}$ $+ \frac{\sum_{p=1}^{g_i} t_{ip}(t_{ip}-1) \sum_{q=1}^{h_i} u_{iq}(u_{iq}-1)}{2n_i(n_i-1)}.$ The variable g_i is the number of tied groups (equal-valued) data in the i-th season, t_{ip} is the number of tied data in the p-th group for the i-th season, h_i is the number of sampling times (or time periods) in the i-th season that contain multiple data, u_{iq} is the number of multiple data in the q-th time period in the i-th season, and n_i is the number of data values in the i-th season.

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

Kruskal-Wallis Analysis (Test for Seasonality)

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

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

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

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

lowest observations in a sample data set. However, the routine will only perform the outlier tests if several conditions are first satisfied. For example, the Dixon outlier algorithm checks the distribution of the sample data for both normality and lognormality using the Shapiro-Wilk W-test. The outlier routine will not proceed with a data set if the W-test fails. In addition, the Dixon outlier test is limited to a minimum of 3 and a maximum sample size n of 25 data values.	
The number of observations taken during a specified scoping period; n	Number of observations, n, where $3 \le n \le 25$.
Sorting the sample data	Sort the data into ascending order, with the minimum data value $X_{(1)}$ first and the maximum data value $X_{(n)}$ last. Use the natural log of the data values if data are lognormally distributed, i.e., $X_{(j)} = Ln[X_{(j)}]$.
Goodness-of fit tests	After temporarily excluding either the minimum or maximum value of the data set, the Shapiro-Wilk's W-test is used to determine if the remaining $n-1$ values are normally or lognormally distributed. If not, the Dixon outlier test can't be used.
Test statistic, T_s, for the minimum data value	Compute the T_s test statistic for $X_{(1)}$ as an outlier: $T_s = \frac{X_{(2)} - X_{(1)}}{X_{(n)} - X_{(1)}}$ *for* $3 \le n \le 7$ $T_s = \frac{X_{(2)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $8 \le n \le 10$ $T_s = \frac{X_{(3)} - X_{(1)}}{X_{(n-1)} - X_{(1)}}$ *for* $11 \le n \le 13$ $T_s = \frac{X_{(3)} - X_{(1)}}{X_{(n-2)} - X_{(1)}}$ *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* $3 \le n \le 7$ $T_s = \frac{X_{(n)} - X_{(n-1)}}{X_{(n)} - X_{(2)}}$ *for* $8 \le n \le 10$ $T_s = \frac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(2)}}$ *for* $11 \le n \le 13$ $T_s = \frac{X_{(n)} - X_{(n-2)}}{X_{(n)} - X_{(3)}}$ *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 α of 0.1, 0.05, and 0.01.
One-sided test with a (1-α) confidence level that there is a single extreme outlier within the n observations.	Dixon's single, one-sided test for statistical evidence of either an extreme low-valued outlier: $X_{(1)}$ *is an outlier if* $T_s \ge T_c$ or an extreme high-valued outlier: $X_{(n)}$ *is an outlier if* $T_s \ge T_c$. The function T_c is the critical value, given in Dixon (1953; page 89) and USEPA (2000; p. A-5, Table A-3). Note that the critical value assumes that the data are either normally or lognormally distributed.

Other Statistical Calculations Used in MANAGES

Sen Estimate of Slope

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

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

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

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

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

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

Coefficient of Skewness for Normality

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

APPENDIX C2
OUTLIER TEST

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Antimony, dissolved, mg/L
Location: MW12

Mean of all data: 0.00178
Standard Deviation of all data: 0.00149
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 5.52
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	<0.0100	True		1

Antimony, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00200
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00200
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

Antimony, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00206
Standard Deviation of all data: 0.000338
Largest Observation Concentration of all data: Xn = 0.00400
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	<0.00400	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Antimony, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00200
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00200
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

Antimony, dissolved, mg/L
Location: MW23S

Mean of all data: 0.00200
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00200
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

Antimony, dissolved, mg/L
Location: MW2D

Mean of all data: 0.00200
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00200
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

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Antimony, dissolved, mg/L
Location: MW2R

Mean of all data: 0.00212
Standard Deviation of all data: 0.00260
Largest Observation Concentration of all data: Xn = 0.0180
Test Statistic, high extreme of all data: Tn = 6.12
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0180	False		1

Antimony, dissolved, mg/L
Location: MW3

Mean of all data: 0.00186
Standard Deviation of all data: 0.00225
Largest Observation Concentration of all data: Xn = 0.00900
Test Statistic, high extreme of all data: Tn = 3.18
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00900	False		1

Antimony, dissolved, mg/L
Location: MW3D

Mean of all data: 0.00159
Standard Deviation of all data: 0.000805
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 0.513
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Antimony, dissolved, mg/L

Location: MW4

Mean of all data: 0.00163
Standard Deviation of all data: 0.00100
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 3.36
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00500	False		1

Antimony, dissolved, mg/L

Location: MW5

Mean of all data: 0.00156
Standard Deviation of all data: 0.000873
Largest Observation Concentration of all data: Xn = 0.00300
Test Statistic, high extreme of all data: Tn = 1.65
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, dissolved, mg/L

Location: MW12

Mean of all data: 0.000208
Standard Deviation of all data: 0.000117
Largest Observation Concentration of all data: Xn = 0.000600
Test Statistic, high extreme of all data: Tn = 3.35
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/13/2017	0.000600	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Arsenic, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00255
Standard Deviation of all data: 0.00176
Largest Observation Concentration of all data: Xn = 0.00650
Test Statistic, high extreme of all data: Tn = 2.25
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00773
Standard Deviation of all data: 0.00373
Largest Observation Concentration of all data: Xn = 0.0160
Test Statistic, high extreme of all data: Tn = 2.22
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00246
Standard Deviation of all data: 0.00157
Largest Observation Concentration of all data: Xn = 0.00980
Test Statistic, high extreme of all data: Tn = 4.68
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/20/2022	0.00980	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Arsenic, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000521
Standard Deviation of all data: 0.00156
Largest Observation Concentration of all data: Xn = 0.00920
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00920	False		1

Arsenic, dissolved, mg/L
Location: MW2D

Mean of all data: 0.00660
Standard Deviation of all data: 0.00259
Largest Observation Concentration of all data: Xn = 0.0138
Test Statistic, high extreme of all data: Tn = 2.78
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Arsenic, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000324
Standard Deviation of all data: 0.000596
Largest Observation Concentration of all data: Xn = 0.00400
Test Statistic, high extreme of all data: Tn = 6.17
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/21/2014	0.00400	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Arsenic, dissolved, mg/L
Location: MW3

Mean of all data: 0.000214
Standard Deviation of all data: 0.000257
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 3.06
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00100	False		1

Arsenic, dissolved, mg/L
Location: MW3D

Mean of all data: 0.00152
Standard Deviation of all data: 0.00210
Largest Observation Concentration of all data: Xn = 0.0112
Test Statistic, high extreme of all data: Tn = 4.61
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	0.0112	False		1

Arsenic, dissolved, mg/L
Location: MW4

Mean of all data: 0.000268
Standard Deviation of all data: 0.000458
Largest Observation Concentration of all data: Xn = 0.00300
Test Statistic, high extreme of all data: Tn = 5.97
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/21/2014	0.00300	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Arsenic, dissolved, mg/L
Location: MW5

Mean of all data: 0.000233
Standard Deviation of all data: 0.000284
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 6.21
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/21/2014	0.00200	False		1

Barium, dissolved, mg/L
Location: MW12

Mean of all data: 0.0174
Standard Deviation of all data: 0.00359
Largest Observation Concentration of all data: Xn = 0.0260
Test Statistic, high extreme of all data: Tn = 2.40
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.0241
Standard Deviation of all data: 0.00712
Largest Observation Concentration of all data: Xn = 0.0490
Test Statistic, high extreme of all data: Tn = 3.50
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0490	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Barium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00903
Standard Deviation of all data: 0.00774
Largest Observation Concentration of all data: Xn = 0.0420
Test Statistic, high extreme of all data: Tn = 4.26
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0420	False		1

Barium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.0454
Standard Deviation of all data: 0.00504
Largest Observation Concentration of all data: Xn = 0.0560
Test Statistic, high extreme of all data: Tn = 2.10
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0290	False	-1	

Barium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.0355
Standard Deviation of all data: 0.00700
Largest Observation Concentration of all data: Xn = 0.0490
Test Statistic, high extreme of all data: Tn = 1.92
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00900	False	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Barium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.0848
Standard Deviation of all data: 0.0409
Largest Observation Concentration of all data: Xn = 0.252
Test Statistic, high extreme of all data: Tn = 4.09
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	0.252	False		1

Barium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.0363
Standard Deviation of all data: 0.00753
Largest Observation Concentration of all data: Xn = 0.0550
Test Statistic, high extreme of all data: Tn = 2.49
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L
Location: MW3

Mean of all data: 0.00743
Standard Deviation of all data: 0.00440
Largest Observation Concentration of all data: Xn = 0.0150
Test Statistic, high extreme of all data: Tn = 1.72
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Barium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.0125
Standard Deviation of all data: 0.00347
Largest Observation Concentration of all data: Xn = 0.0210
Test Statistic, high extreme of all data: Tn = 2.45
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L
Location: MW4

Mean of all data: 0.0180
Standard Deviation of all data: 0.00481
Largest Observation Concentration of all data: Xn = 0.0270
Test Statistic, high extreme of all data: Tn = 1.87
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Barium, dissolved, mg/L
Location: MW5

Mean of all data: 0.0294
Standard Deviation of all data: 0.0129
Largest Observation Concentration of all data: Xn = 0.0710
Test Statistic, high extreme of all data: Tn = 3.22
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/26/2016	0.0710	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Beryllium, dissolved, mg/L
Location: MW12

Mean of all data: 0.000978
Standard Deviation of all data: 0.000965
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 4.17
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	<0.00500	True		1

Beryllium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00321
Standard Deviation of all data: 0.00248
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 2.74
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.0100
Standard Deviation of all data: 0.00532
Largest Observation Concentration of all data: Xn = 0.0244
Test Statistic, high extreme of all data: Tn = 2.70
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Beryllium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00100
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00100
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

Beryllium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.00122
Standard Deviation of all data: 0.00125
Largest Observation Concentration of all data: Xn = 0.00820
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00820	False		1

Beryllium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.00111
Standard Deviation of all data: 0.000676
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	<0.00500	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Beryllium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000833
Standard Deviation of all data: 0.000377
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.442
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L
Location: MW3

Mean of all data: 0.000571
Standard Deviation of all data: 0.000514
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.835
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.000835
Standard Deviation of all data: 0.000509
Largest Observation Concentration of all data: Xn = 0.00230
Test Statistic, high extreme of all data: Tn = 2.88
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Beryllium, dissolved, mg/L
Location: MW4

Mean of all data: 0.000750
Standard Deviation of all data: 0.000439
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.570
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Beryllium, dissolved, mg/L
Location: MW5

Mean of all data: 0.000750
Standard Deviation of all data: 0.000438
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.571
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L
Location: MW12

Mean of all data: 0.173
Standard Deviation of all data: 0.0658
Largest Observation Concentration of all data: Xn = 0.460
Test Statistic, high extreme of all data: Tn = 4.36
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/28/2018	0.460	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Boron, dissolved, mg/L
Location: MW22D

Mean of all data: 5.96
Standard Deviation of all data: 2.04
Largest Observation Concentration of all data: Xn = 9.43
Test Statistic, high extreme of all data: Tn = 1.70
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0500	False	-1	

Boron, dissolved, mg/L
Location: MW22S

Mean of all data: 3.43
Standard Deviation of all data: 4.80
Largest Observation Concentration of all data: Xn = 29.9
Test Statistic, high extreme of all data: Tn = 5.51
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/28/2018	29.9	False		1

Boron, dissolved, mg/L
Location: MW23D

Mean of all data: 0.291
Standard Deviation of all data: 1.39
Largest Observation Concentration of all data: Xn = 8.02
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	8.02	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Boron, dissolved, mg/L
Location: MW23S

Mean of all data: 0.315
Standard Deviation of all data: 0.884
Largest Observation Concentration of all data: Xn = 5.24
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	5.24	False		1

Boron, dissolved, mg/L
Location: MW2D

Mean of all data: 0.189
Standard Deviation of all data: 0.212
Largest Observation Concentration of all data: Xn = 0.850
Test Statistic, high extreme of all data: Tn = 3.12
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	0.850	False		1

Boron, dissolved, mg/L
Location: MW2R

Mean of all data: 1.71
Standard Deviation of all data: 0.749
Largest Observation Concentration of all data: Xn = 3.55
Test Statistic, high extreme of all data: Tn = 2.46
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Boron, dissolved, mg/L
Location: MW3

Mean of all data: 3.03
Standard Deviation of all data: 1.95
Largest Observation Concentration of all data: Xn = 7.78
Test Statistic, high extreme of all data: Tn = 2.43
T Critical of all data: Tcr = 3.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L
Location: MW3D

Mean of all data: 3.97
Standard Deviation of all data: 1.37
Largest Observation Concentration of all data: Xn = 6.93
Test Statistic, high extreme of all data: Tn = 2.15
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Boron, dissolved, mg/L
Location: MW4

Mean of all data: 0.258
Standard Deviation of all data: 0.122
Largest Observation Concentration of all data: Xn = 0.831
Test Statistic, high extreme of all data: Tn = 4.70
T Critical of all data: Tcr = 3.16

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/11/2012	0.831	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Boron, dissolved, mg/L
Location: MW5

Mean of all data: 0.200
Standard Deviation of all data: 0.126
Largest Observation Concentration of all data: Xn = 0.710
Test Statistic, high extreme of all data: Tn = 4.03
T Critical of all data: Tcr = 3.19

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/06/2011	0.710	False		1

Cadmium, dissolved, mg/L
Location: MW12

Mean of all data: 0.000222
Standard Deviation of all data: 0.000186
Largest Observation Concentration of all data: Xn = 0.00125
Test Statistic, high extreme of all data: Tn = 5.52
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	<0.00125	True		1

Cadmium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00216
Standard Deviation of all data: 0.00105
Largest Observation Concentration of all data: Xn = 0.00450
Test Statistic, high extreme of all data: Tn = 2.23
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cadmium, dissolved, mg/L

Location: MW22S

Mean of all data: 0.00585
Standard Deviation of all data: 0.00425
Largest Observation Concentration of all data: Xn = 0.0177
Test Statistic, high extreme of all data: Tn = 2.78
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: MW23D

Mean of all data: 0.000291
Standard Deviation of all data: 0.000235
Largest Observation Concentration of all data: Xn = 0.00160
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00160	False		1

Cadmium, dissolved, mg/L

Location: MW23S

Mean of all data: 0.000397
Standard Deviation of all data: 0.000844
Largest Observation Concentration of all data: Xn = 0.00510
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00510	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cadmium, dissolved, mg/L

Location: MW2D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Cadmium, dissolved, mg/L

Location: MW2R

Mean of all data: 0.000208
Standard Deviation of all data: 0.0000943
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.442
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L

Location: MW3

Mean of all data: 0.000143
Standard Deviation of all data: 0.000128
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.835
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cadmium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.00345
Standard Deviation of all data: 0.00305
Largest Observation Concentration of all data: Xn = 0.0109
Test Statistic, high extreme of all data: Tn = 2.44
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L
Location: MW4

Mean of all data: 0.000188
Standard Deviation of all data: 0.000110
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.570
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cadmium, dissolved, mg/L
Location: MW5

Mean of all data: 0.000188
Standard Deviation of all data: 0.000109
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.571
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chloride, dissolved, mg/L
Location: MW12

Mean of all data: 4.36
Standard Deviation of all data: 3.47
Largest Observation Concentration of all data: Xn = 13.5
Test Statistic, high extreme of all data: Tn = 2.63
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Chloride, dissolved, mg/L
Location: MW22D

Mean of all data: 8.07
Standard Deviation of all data: 1.30
Largest Observation Concentration of all data: Xn = 14.2
Test Statistic, high extreme of all data: Tn = 4.70
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	14.2	False		1

Chloride, dissolved, mg/L
Location: MW22S

Mean of all data: 8.49
Standard Deviation of all data: 3.27
Largest Observation Concentration of all data: Xn = 20.6
Test Statistic, high extreme of all data: Tn = 3.70
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	20.6	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chloride, dissolved, mg/L
Location: MW23D

Mean of all data: 4.64
Standard Deviation of all data: 1.48
Largest Observation Concentration of all data: Xn = 9.70
Test Statistic, high extreme of all data: Tn = 3.41
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	9.70	False		1

Chloride, dissolved, mg/L
Location: MW23S

Mean of all data: 3.12
Standard Deviation of all data: 2.25
Largest Observation Concentration of all data: Xn = 10.1
Test Statistic, high extreme of all data: Tn = 3.11
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	10.1	False		1

Chloride, dissolved, mg/L
Location: MW2D

Mean of all data: 12.2
Standard Deviation of all data: 2.19
Largest Observation Concentration of all data: Xn = 19.5
Test Statistic, high extreme of all data: Tn = 3.34
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/20/2022	19.5	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chloride, dissolved, mg/L
Location: MW2R

Mean of all data: 16.7
Standard Deviation of all data: 7.15
Largest Observation Concentration of all data: Xn = 32.1
Test Statistic, high extreme of all data: Tn = 2.15
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Chloride, dissolved, mg/L
Location: MW3

Mean of all data: 6.60
Standard Deviation of all data: 6.14
Largest Observation Concentration of all data: Xn = 21.9
Test Statistic, high extreme of all data: Tn = 2.49
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/21/2014	21.9	False		1

Chloride, dissolved, mg/L
Location: MW3D

Mean of all data: 13.3
Standard Deviation of all data: 4.59
Largest Observation Concentration of all data: Xn = 21.8
Test Statistic, high extreme of all data: Tn = 1.86
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chloride, dissolved, mg/L
Location: MW4

Mean of all data: 2.39
Standard Deviation of all data: 2.63
Largest Observation Concentration of all data: Xn = 12.4
Test Statistic, high extreme of all data: Tn = 3.81
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	12.4	False		1

Chloride, dissolved, mg/L
Location: MW5

Mean of all data: 3.24
Standard Deviation of all data: 3.16
Largest Observation Concentration of all data: Xn = 16.0
Test Statistic, high extreme of all data: Tn = 4.04
T Critical of all data: Tcr = 2.95

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	16.0	False		1

Chromium, dissolved, mg/L
Location: MW12

Mean of all data: 0.00101
Standard Deviation of all data: 0.00105
Largest Observation Concentration of all data: Xn = 0.00600
Test Statistic, high extreme of all data: Tn = 4.73
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/22/2014	0.00600	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chromium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00116
Standard Deviation of all data: 0.00109
Largest Observation Concentration of all data: Xn = 0.00590
Test Statistic, high extreme of all data: Tn = 4.35
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	0.00590	False		1

Chromium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00105
Standard Deviation of all data: 0.000881
Largest Observation Concentration of all data: Xn = 0.00410
Test Statistic, high extreme of all data: Tn = 3.47
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	0.00410	False		1

Chromium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000979
Standard Deviation of all data: 0.000122
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.174
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/01/2021	0.000300	False	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chromium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000958
Standard Deviation of all data: 0.000170
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.250
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	0.000300	False	-1	

Chromium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000980
Standard Deviation of all data: 0.000118
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.169
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	0.000300	False	-1	

Chromium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.00121
Standard Deviation of all data: 0.00211
Largest Observation Concentration of all data: Xn = 0.0140
Test Statistic, high extreme of all data: Tn = 6.06
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0140	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chromium, dissolved, mg/L
Location: MW3

Mean of all data: 0.00211
Standard Deviation of all data: 0.00388
Largest Observation Concentration of all data: Xn = 0.0140
Test Statistic, high extreme of all data: Tn = 3.06
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0140	False		1

Chromium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.000817
Standard Deviation of all data: 0.000526
Largest Observation Concentration of all data: Xn = 0.00300
Test Statistic, high extreme of all data: Tn = 4.15
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	0.00300	False		1

Chromium, dissolved, mg/L
Location: MW4

Mean of all data: 0.00118
Standard Deviation of all data: 0.00244
Largest Observation Concentration of all data: Xn = 0.0140
Test Statistic, high extreme of all data: Tn = 5.25
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0140	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Chromium, dissolved, mg/L
Location: MW5

Mean of all data: 0.000727
Standard Deviation of all data: 0.00106
Largest Observation Concentration of all data: Xn = 0.00700
Test Statistic, high extreme of all data: Tn = 5.90
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00700	False		1

Cobalt, dissolved, mg/L
Location: MW12

Mean of all data: 0.000789
Standard Deviation of all data: 0.000406
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.520
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L
Location: MW22D

Mean of all data: 0.0927
Standard Deviation of all data: 0.0269
Largest Observation Concentration of all data: Xn = 0.154
Test Statistic, high extreme of all data: Tn = 2.28
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	<0.00100	True	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cobalt, dissolved, mg/L
Location: MW22S

Mean of all data: 0.126
Standard Deviation of all data: 0.0422
Largest Observation Concentration of all data: Xn = 0.237
Test Statistic, high extreme of all data: Tn = 2.63
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	<0.00100	True	-1	

Cobalt, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00450
Standard Deviation of all data: 0.0181
Largest Observation Concentration of all data: Xn = 0.105
Test Statistic, high extreme of all data: Tn = 5.54
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.105	False		1

Cobalt, dissolved, mg/L
Location: MW23S

Mean of all data: 0.00405
Standard Deviation of all data: 0.0157
Largest Observation Concentration of all data: Xn = 0.0910
Test Statistic, high extreme of all data: Tn = 5.53
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0910	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cobalt, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000986
Standard Deviation of all data: 0.0000845
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.169
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	<0.000500	True	-1	

Cobalt, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000821
Standard Deviation of all data: 0.000380
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.470
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L
Location: MW3

Mean of all data: 0.00121
Standard Deviation of all data: 0.00142
Largest Observation Concentration of all data: Xn = 0.00600
Test Statistic, high extreme of all data: Tn = 3.36
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/20/2015	0.00600	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cobalt, dissolved, mg/L
Location: MW3D

Mean of all data: 0.106
Standard Deviation of all data: 0.0870
Largest Observation Concentration of all data: Xn = 0.332
Test Statistic, high extreme of all data: Tn = 2.60
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L
Location: MW4

Mean of all data: 0.000750
Standard Deviation of all data: 0.000439
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.570
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cobalt, dissolved, mg/L
Location: MW5

Mean of all data: 0.000740
Standard Deviation of all data: 0.000437
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.595
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Copper, dissolved, mg/L
Location: MW12

Mean of all data: 0.000511
Standard Deviation of all data: 0.000345
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 4.31
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/20/2015	0.00200	False		1

Copper, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00367
Standard Deviation of all data: 0.00506
Largest Observation Concentration of all data: Xn = 0.0273
Test Statistic, high extreme of all data: Tn = 4.67
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	0.0273	False		1

Copper, dissolved, mg/L
Location: MW22S

Mean of all data: 0.0170
Standard Deviation of all data: 0.0163
Largest Observation Concentration of all data: Xn = 0.0589
Test Statistic, high extreme of all data: Tn = 2.56
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Copper, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000530
Standard Deviation of all data: 0.000174
Largest Observation Concentration of all data: Xn = 0.00150
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/12/2025	0.00150	False		1

Copper, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000900
Standard Deviation of all data: 0.00161
Largest Observation Concentration of all data: Xn = 0.00780
Test Statistic, high extreme of all data: Tn = 4.29
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00780	False		1

Copper, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000500
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000500
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

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Copper, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000560
Standard Deviation of all data: 0.000370
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 3.90
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00200	False		1

Copper, dissolved, mg/L
Location: MW3

Mean of all data: 0.00308
Standard Deviation of all data: 0.00468
Largest Observation Concentration of all data: Xn = 0.0170
Test Statistic, high extreme of all data: Tn = 2.97
T Critical of all data: Tcr = 2.50

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/28/1994	0.0170	False		1

Copper, dissolved, mg/L
Location: MW3D

Mean of all data: 0.00122
Standard Deviation of all data: 0.00212
Largest Observation Concentration of all data: Xn = 0.0130
Test Statistic, high extreme of all data: Tn = 5.56
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.0130	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Copper, dissolved, mg/L
Location: MW4

Mean of all data: 0.00522
Standard Deviation of all data: 0.0294
Largest Observation Concentration of all data: Xn = 0.200
Test Statistic, high extreme of all data: Tn = 6.62
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/27/1991	0.200	False		1

Copper, dissolved, mg/L
Location: MW5

Mean of all data: 0.000606
Standard Deviation of all data: 0.00103
Largest Observation Concentration of all data: Xn = 0.00700
Test Statistic, high extreme of all data: Tn = 6.23
T Critical of all data: Tcr = 2.97

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/28/1994	0.00700	False		1

Cyanide, total, mg/L
Location: MW12

Mean of all data: 0.00898
Standard Deviation of all data: 0.0130
Largest Observation Concentration of all data: Xn = 0.0900
Test Statistic, high extreme of all data: Tn = 6.24
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	0.0900	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cyanide, total, mg/L
Location: MW22D

Mean of all data: 0.0131
Standard Deviation of all data: 0.0139
Largest Observation Concentration of all data: Xn = 0.0700
Test Statistic, high extreme of all data: Tn = 4.08
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	0.0700	False		1

Cyanide, total, mg/L
Location: MW22S

Mean of all data: 0.0110
Standard Deviation of all data: 0.00914
Largest Observation Concentration of all data: Xn = 0.0600
Test Statistic, high extreme of all data: Tn = 5.36
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	0.0600	False		1

Cyanide, total, mg/L
Location: MW23D

Mean of all data: 0.0120
Standard Deviation of all data: 0.0113
Largest Observation Concentration of all data: Xn = 0.0600
Test Statistic, high extreme of all data: Tn = 4.24
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	0.0600	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cyanide, total, mg/L
Location: MW23S

Mean of all data: 0.0102
Standard Deviation of all data: 0.00442
Largest Observation Concentration of all data: Xn = 0.0300
Test Statistic, high extreme of all data: Tn = 4.49
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/20/2022	0.0300	False		1

Cyanide, total, mg/L
Location: MW2D

Mean of all data: 0.0100
Standard Deviation of all data: 0.00437
Largest Observation Concentration of all data: Xn = 0.0300
Test Statistic, high extreme of all data: Tn = 4.57
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/18/2024	0.0300	False		1

Cyanide, total, mg/L
Location: MW2R

Mean of all data: 0.00798
Standard Deviation of all data: 0.00519
Largest Observation Concentration of all data: Xn = 0.0300
Test Statistic, high extreme of all data: Tn = 4.25
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/26/2020	0.0300	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cyanide, total, mg/L
Location: MW3

Mean of all data: 0.00429
Standard Deviation of all data: 0.00432
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 1.32
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cyanide, total, mg/L
Location: MW3D

Mean of all data: 0.00696
Standard Deviation of all data: 0.00415
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 0.734
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Cyanide, total, mg/L
Location: MW4

Mean of all data: 0.00688
Standard Deviation of all data: 0.00434
Largest Observation Concentration of all data: Xn = 0.0150
Test Statistic, high extreme of all data: Tn = 1.87
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Cyanide, total, mg/L
Location: MW5

Mean of all data: 0.00846
Standard Deviation of all data: 0.0100
Largest Observation Concentration of all data: Xn = 0.0700
Test Statistic, high extreme of all data: Tn = 6.14
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/26/2016	0.0700	False		1

Fluoride, dissolved, mg/L
Location: MW12

Mean of all data: 0.108
Standard Deviation of all data: 0.0750
Largest Observation Concentration of all data: Xn = 0.454
Test Statistic, high extreme of all data: Tn = 4.61
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/02/2015	0.454	False		1

Fluoride, dissolved, mg/L
Location: MW22D

Mean of all data: 0.567
Standard Deviation of all data: 0.294
Largest Observation Concentration of all data: Xn = 1.13
Test Statistic, high extreme of all data: Tn = 1.91
T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Fluoride, dissolved, mg/L
Location: MW22S

Mean of all data: 0.668
Standard Deviation of all data: 0.252
Largest Observation Concentration of all data: Xn = 1.17
Test Statistic, high extreme of all data: Tn = 1.99
T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Fluoride, dissolved, mg/L
Location: MW23D

Mean of all data: 0.122
Standard Deviation of all data: 0.0941
Largest Observation Concentration of all data: Xn = 0.600
Test Statistic, high extreme of all data: Tn = 5.08
T Critical of all data: Tcr = 2.77

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.600	False		1

Fluoride, dissolved, mg/L
Location: MW23S

Mean of all data: 0.146
Standard Deviation of all data: 0.164
Largest Observation Concentration of all data: Xn = 0.900
Test Statistic, high extreme of all data: Tn = 4.60
T Critical of all data: Tcr = 2.77

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.900	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Fluoride, dissolved, mg/L
Location: MW2D

Mean of all data: 0.188
Standard Deviation of all data: 0.0783
Largest Observation Concentration of all data: Xn = 0.400
Test Statistic, high extreme of all data: Tn = 2.71
T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Fluoride, dissolved, mg/L
Location: MW2R

Mean of all data: 0.600
Standard Deviation of all data: 3.26
Largest Observation Concentration of all data: Xn = 21.2
Test Statistic, high extreme of all data: Tn = 6.33
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/02/2015	21.2	False		1

Fluoride, dissolved, mg/L
Location: MW3

Mean of all data: 0.252
Standard Deviation of all data: 0.253
Largest Observation Concentration of all data: Xn = 0.984
Test Statistic, high extreme of all data: Tn = 2.89
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/20/2015	0.984	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Fluoride, dissolved, mg/L
Location: MW3D

Mean of all data: 0.405
Standard Deviation of all data: 0.488
Largest Observation Concentration of all data: Xn = 2.29
Test Statistic, high extreme of all data: Tn = 3.86
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/18/2025	2.29	False		1

Fluoride, dissolved, mg/L
Location: MW4

Mean of all data: 0.202
Standard Deviation of all data: 0.103
Largest Observation Concentration of all data: Xn = 0.484
Test Statistic, high extreme of all data: Tn = 2.75
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Fluoride, dissolved, mg/L
Location: MW5

Mean of all data: 0.126
Standard Deviation of all data: 0.0792
Largest Observation Concentration of all data: Xn = 0.418
Test Statistic, high extreme of all data: Tn = 3.68
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/02/2015	0.418	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Iron, dissolved, mg/L
Location: MW12

Mean of all data: 0.0938
Standard Deviation of all data: 0.173
Largest Observation Concentration of all data: Xn = 0.710
Test Statistic, high extreme of all data: Tn = 3.56
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	0.710	False		1

Iron, dissolved, mg/L
Location: MW22D

Mean of all data: 113.
Standard Deviation of all data: 78.7
Largest Observation Concentration of all data: Xn = 354.
Test Statistic, high extreme of all data: Tn = 3.06
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	354.	False		1

Iron, dissolved, mg/L
Location: MW22S

Mean of all data: 404.
Standard Deviation of all data: 193.
Largest Observation Concentration of all data: Xn = 710.
Test Statistic, high extreme of all data: Tn = 1.58
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Iron, dissolved, mg/L
Location: MW23D

Mean of all data: 2.38
Standard Deviation of all data: 12.1
Largest Observation Concentration of all data: Xn = 70.0
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	70.0	False		1

Iron, dissolved, mg/L
Location: MW23S

Mean of all data: 6.22
Standard Deviation of all data: 35.5
Largest Observation Concentration of all data: Xn = 204.
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	204.	False		1

Iron, dissolved, mg/L
Location: MW2D

Mean of all data: 0.644
Standard Deviation of all data: 0.817
Largest Observation Concentration of all data: Xn = 3.56
Test Statistic, high extreme of all data: Tn = 3.57
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/17/2019	3.56	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Iron, dissolved, mg/L
Location: MW2R

Mean of all data: 0.0996
Standard Deviation of all data: 0.153
Largest Observation Concentration of all data: Xn = 0.603
Test Statistic, high extreme of all data: Tn = 3.29
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	0.603	False		1

Iron, dissolved, mg/L
Location: MW3

Mean of all data: 0.276
Standard Deviation of all data: 0.707
Largest Observation Concentration of all data: Xn = 2.89
Test Statistic, high extreme of all data: Tn = 3.70
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	2.89	False		1

Iron, dissolved, mg/L
Location: MW3D

Mean of all data: 4.14
Standard Deviation of all data: 4.34
Largest Observation Concentration of all data: Xn = 15.0
Test Statistic, high extreme of all data: Tn = 2.50
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Iron, dissolved, mg/L
Location: MW4

Mean of all data: 0.0835
Standard Deviation of all data: 0.144
Largest Observation Concentration of all data: Xn = 0.751
Test Statistic, high extreme of all data: Tn = 4.63
T Critical of all data: Tcr = 3.09

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/30/2012	0.751	False		1

Iron, dissolved, mg/L
Location: MW5

Mean of all data: 0.0651
Standard Deviation of all data: 0.129
Largest Observation Concentration of all data: Xn = 0.840
Test Statistic, high extreme of all data: Tn = 6.00
T Critical of all data: Tcr = 3.13

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/22/1991	0.840	False		1

Lead, dissolved, mg/L
Location: MW12

Mean of all data: 0.00109
Standard Deviation of all data: 0.00155
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.0100	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Lead, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00834
Standard Deviation of all data: 0.00425
Largest Observation Concentration of all data: Xn = 0.0160
Test Statistic, high extreme of all data: Tn = 1.80
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00680
Standard Deviation of all data: 0.00253
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 2.06
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00103
Standard Deviation of all data: 0.000174
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.00200	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Lead, dissolved, mg/L
Location: MW23S

Mean of all data: 0.00145
Standard Deviation of all data: 0.00186
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 4.61
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.0100	True		1

Lead, dissolved, mg/L
Location: MW2D

Mean of all data: 0.00100
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.00100
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

Lead, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000857
Standard Deviation of all data: 0.000354
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.403
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Lead, dissolved, mg/L
Location: MW3

Mean of all data: 0.000571
Standard Deviation of all data: 0.000514
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.835
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L
Location: MW3D

Mean of all data: 0.000783
Standard Deviation of all data: 0.000417
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.521
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Lead, dissolved, mg/L
Location: MW4

Mean of all data: 0.000750
Standard Deviation of all data: 0.000439
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.570
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Lead, dissolved, mg/L
Location: MW5

Mean of all data: 0.000750
Standard Deviation of all data: 0.000438
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.571
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Manganese, dissolved, mg/L
Location: MW12

Mean of all data: 0.202
Standard Deviation of all data: 0.334
Largest Observation Concentration of all data: Xn = 1.66
Test Statistic, high extreme of all data: Tn = 4.36
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/28/2018	1.66	False		1

Manganese, dissolved, mg/L
Location: MW22D

Mean of all data: 9.96
Standard Deviation of all data: 4.22
Largest Observation Concentration of all data: Xn = 19.6
Test Statistic, high extreme of all data: Tn = 2.29
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Manganese, dissolved, mg/L
Location: MW22S

Mean of all data: 24.7
Standard Deviation of all data: 15.8
Largest Observation Concentration of all data: Xn = 106.
Test Statistic, high extreme of all data: Tn = 5.15
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	106.	False		1

Manganese, dissolved, mg/L
Location: MW23D

Mean of all data: 0.380
Standard Deviation of all data: 1.48
Largest Observation Concentration of all data: Xn = 8.60
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	8.60	False		1

Manganese, dissolved, mg/L
Location: MW23S

Mean of all data: 0.428
Standard Deviation of all data: 2.35
Largest Observation Concentration of all data: Xn = 13.5
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	13.5	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Manganese, dissolved, mg/L

Location: MW2D

Mean of all data: 0.0783
Standard Deviation of all data: 0.0161
Largest Observation Concentration of all data: Xn = 0.126
Test Statistic, high extreme of all data: Tn = 2.96
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/23/2024	0.126	False		1

Manganese, dissolved, mg/L

Location: MW2R

Mean of all data: 0.00648
Standard Deviation of all data: 0.0114
Largest Observation Concentration of all data: Xn = 0.0534
Test Statistic, high extreme of all data: Tn = 4.13
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/02/2015	0.0534	False		1

Manganese, dissolved, mg/L

Location: MW3

Mean of all data: 0.0693
Standard Deviation of all data: 0.130
Largest Observation Concentration of all data: Xn = 0.708
Test Statistic, high extreme of all data: Tn = 4.90
T Critical of all data: Tcr = 3.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/20/2015	0.708	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Manganese, dissolved, mg/L

Location: MW3D

Mean of all data: 11.6
Standard Deviation of all data: 8.27
Largest Observation Concentration of all data: Xn = 43.7
Test Statistic, high extreme of all data: Tn = 3.88
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/13/2017	43.7	False		1

Manganese, dissolved, mg/L

Location: MW4

Mean of all data: 0.0286
Standard Deviation of all data: 0.148
Largest Observation Concentration of all data: Xn = 1.25
Test Statistic, high extreme of all data: Tn = 8.27
T Critical of all data: Tcr = 3.16

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
07/09/2012	1.25	False		1

Manganese, dissolved, mg/L

Location: MW5

Mean of all data: 0.00355
Standard Deviation of all data: 0.00683
Largest Observation Concentration of all data: Xn = 0.0380
Test Statistic, high extreme of all data: Tn = 5.04
T Critical of all data: Tcr = 3.19

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/27/2014	0.0380	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Mercury, dissolved, mg/L
Location: MW12

Mean of all data: 0.000109
Standard Deviation of all data: 0.000155
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00100	True		1

Mercury, dissolved, mg/L
Location: MW22D

Mean of all data: 0.000100
Standard Deviation of all data: 0.00000000000432
Largest Observation Concentration of all data: Xn = 0.000100
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

Mercury, dissolved, mg/L
Location: MW22S

Mean of all data: 0.000143
Standard Deviation of all data: 0.000165
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 5.19
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00100	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Mercury, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000100
Standard Deviation of all data: 0.00000000000407
Largest Observation Concentration of all data: Xn = 0.000100
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

Mercury, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000127
Standard Deviation of all data: 0.000157
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00100	True		1

Mercury, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000100
Standard Deviation of all data: 0.00000000000432
Largest Observation Concentration of all data: Xn = 0.000100
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

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Mercury, dissolved, mg/L
Location: MW2R

Mean of all data: 0.0000857
Standard Deviation of all data: 0.0000417
Largest Observation Concentration of all data: Xn = 0.000200
Test Statistic, high extreme of all data: Tn = 2.74
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L
Location: MW3

Mean of all data: 0.0000533
Standard Deviation of all data: 0.0000516
Largest Observation Concentration of all data: Xn = 0.000100
Test Statistic, high extreme of all data: Tn = 0.904
T Critical of all data: Tcr = 2.41

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L
Location: MW3D

Mean of all data: 0.0000804
Standard Deviation of all data: 0.0000453
Largest Observation Concentration of all data: Xn = 0.000200
Test Statistic, high extreme of all data: Tn = 2.64
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Mercury, dissolved, mg/L
Location: MW4

Mean of all data: 0.0000775
Standard Deviation of all data: 0.0000480
Largest Observation Concentration of all data: Xn = 0.000200
Test Statistic, high extreme of all data: Tn = 2.55
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Mercury, dissolved, mg/L
Location: MW5

Mean of all data: 0.0000938
Standard Deviation of all data: 0.000126
Largest Observation Concentration of all data: Xn = 0.000900
Test Statistic, high extreme of all data: Tn = 6.39
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.000900	False		1

Nickel, dissolved, mg/L
Location: MW12

Mean of all data: 0.00185
Standard Deviation of all data: 0.00202
Largest Observation Concentration of all data: Xn = 0.00780
Test Statistic, high extreme of all data: Tn = 2.94
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/13/2017	0.00780	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nickel, dissolved, mg/L
Location: MW22D

Mean of all data: 0.0657
Standard Deviation of all data: 0.0294
Largest Observation Concentration of all data: Xn = 0.130
Test Statistic, high extreme of all data: Tn = 2.19
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L
Location: MW22S

Mean of all data: 0.156
Standard Deviation of all data: 0.0896
Largest Observation Concentration of all data: Xn = 0.384
Test Statistic, high extreme of all data: Tn = 2.55
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L
Location: MW23D

Mean of all data: 0.00208
Standard Deviation of all data: 0.00807
Largest Observation Concentration of all data: Xn = 0.0465
Test Statistic, high extreme of all data: Tn = 5.50
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.0465	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nickel, dissolved, mg/L
Location: MW23S

Mean of all data: 0.00408
Standard Deviation of all data: 0.0206
Largest Observation Concentration of all data: Xn = 0.119
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.119	False		1

Nickel, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000346
Standard Deviation of all data: 0.000267
Largest Observation Concentration of all data: Xn = 0.00140
Test Statistic, high extreme of all data: Tn = 3.95
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/23/2024	0.00140	False		1

Nickel, dissolved, mg/L
Location: MW2R

Mean of all data: 0.00109
Standard Deviation of all data: 0.00216
Largest Observation Concentration of all data: Xn = 0.0120
Test Statistic, high extreme of all data: Tn = 5.06
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/03/2014	0.0120	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nickel, dissolved, mg/L
Location: MW3

Mean of all data: 0.00959
Standard Deviation of all data: 0.0116
Largest Observation Concentration of all data: Xn = 0.0300
Test Statistic, high extreme of all data: Tn = 1.76
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L
Location: MW3D

Mean of all data: 0.160
Standard Deviation of all data: 0.0897
Largest Observation Concentration of all data: Xn = 0.369
Test Statistic, high extreme of all data: Tn = 2.33
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nickel, dissolved, mg/L
Location: MW4

Mean of all data: 0.00176
Standard Deviation of all data: 0.00513
Largest Observation Concentration of all data: Xn = 0.0310
Test Statistic, high extreme of all data: Tn = 5.70
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/30/2012	0.0310	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nickel, dissolved, mg/L
Location: MW5

Mean of all data: 0.00108
Standard Deviation of all data: 0.00167
Largest Observation Concentration of all data: Xn = 0.00800
Test Statistic, high extreme of all data: Tn = 4.15
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00800	False		1

Nitrate nitrogen, dissolved, mg/L
Location: MW12

Mean of all data: 1.49
Standard Deviation of all data: 0.607
Largest Observation Concentration of all data: Xn = 3.03
Test Statistic, high extreme of all data: Tn = 2.54
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrate nitrogen, dissolved, mg/L
Location: MW22D

Mean of all data: 0.115
Standard Deviation of all data: 0.0720
Largest Observation Concentration of all data: Xn = 0.450
Test Statistic, high extreme of all data: Tn = 4.65
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/12/2018	0.450	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nitrate nitrogen, dissolved, mg/L
Location: MW22S

Mean of all data: 0.167
Standard Deviation of all data: 0.216
Largest Observation Concentration of all data: Xn = 1.22
Test Statistic, high extreme of all data: Tn = 4.87
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	1.22	False		1

Nitrate nitrogen, dissolved, mg/L
Location: MW23D

Mean of all data: 0.0894
Standard Deviation of all data: 0.0208
Largest Observation Concentration of all data: Xn = 0.100
Test Statistic, high extreme of all data: Tn = 0.511
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Nitrate nitrogen, dissolved, mg/L
Location: MW23S

Mean of all data: 0.367
Standard Deviation of all data: 0.416
Largest Observation Concentration of all data: Xn = 1.89
Test Statistic, high extreme of all data: Tn = 3.66
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/18/2025	1.89	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: MW2D

Mean of all data: 0.183
Standard Deviation of all data: 0.230
Largest Observation Concentration of all data: Xn = 0.893
Test Statistic, high extreme of all data: Tn = 3.09
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	0.893	False		1

Nitrate nitrogen, dissolved, mg/L

Location: MW2R

Mean of all data: 2.12
Standard Deviation of all data: 2.44
Largest Observation Concentration of all data: Xn = 12.7
Test Statistic, high extreme of all data: Tn = 4.33
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	12.7	False		1

Nitrate nitrogen, dissolved, mg/L

Location: MW3

Mean of all data: 1.20
Standard Deviation of all data: 0.987
Largest Observation Concentration of all data: Xn = 3.88
Test Statistic, high extreme of all data: Tn = 2.72
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	3.88	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Nitrate nitrogen, dissolved, mg/L

Location: MW3D

Mean of all data: 0.619
Standard Deviation of all data: 0.603
Largest Observation Concentration of all data: Xn = 2.56
Test Statistic, high extreme of all data: Tn = 3.22
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	2.56	False		1

Nitrate nitrogen, dissolved, mg/L

Location: MW4

Mean of all data: 1.40
Standard Deviation of all data: 1.67
Largest Observation Concentration of all data: Xn = 7.34
Test Statistic, high extreme of all data: Tn = 3.55
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/17/2019	7.34	False		1

Nitrate nitrogen, dissolved, mg/L

Location: MW5

Mean of all data: 1.14
Standard Deviation of all data: 1.17
Largest Observation Concentration of all data: Xn = 5.06
Test Statistic, high extreme of all data: Tn = 3.36
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	5.06	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

pH (field), STD
Location: MW12

Mean of all data: 6.96
Standard Deviation of all data: 0.30
Largest Observation Concentration of all data: Xn = 8.18
Test Statistic, high extreme of all data: Tn = 4.06
T Critical of all data: Tcr = 3.12

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/29/1999	8.18	False		1

pH (field), STD
Location: MW22D

Mean of all data: 5.06
Standard Deviation of all data: 0.54
Largest Observation Concentration of all data: Xn = 7.17
Test Statistic, high extreme of all data: Tn = 3.92
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	7.17	False		1

pH (field), STD
Location: MW22S

Mean of all data: 3.84
Standard Deviation of all data: 0.76
Largest Observation Concentration of all data: Xn = 6.99
Test Statistic, high extreme of all data: Tn = 4.15
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	6.99	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

pH (field), STD
Location: MW23D

Mean of all data: 7.16
Standard Deviation of all data: 0.61
Largest Observation Concentration of all data: Xn = 8.40
Test Statistic, high extreme of all data: Tn = 2.03
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/08/2022	4.83	False	-1	

pH (field), STD
Location: MW23S

Mean of all data: 6.86
Standard Deviation of all data: 0.60
Largest Observation Concentration of all data: Xn = 7.35
Test Statistic, high extreme of all data: Tn = 0.82
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	3.75	False	-1	

pH (field), STD
Location: MW2D

Mean of all data: 7.40
Standard Deviation of all data: 0.28
Largest Observation Concentration of all data: Xn = 7.68
Test Statistic, high extreme of all data: Tn = 1.02
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	6.01	False	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

pH (field), STD
Location: MW2R

Mean of all data: 7.36
Standard Deviation of all data: 0.29
Largest Observation Concentration of all data: Xn = 8.92
Test Statistic, high extreme of all data: Tn = 5.41
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/21/2022	8.92	False		1

pH (field), STD
Location: MW3

Mean of all data: 9.62
Standard Deviation of all data: 34.80
Largest Observation Concentration of all data: Xn = 440.00
Test Statistic, high extreme of all data: Tn = 12.37
T Critical of all data: Tcr = 3.54

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/14/2010	440.00	False		1

pH (field), STD
Location: MW3D

Mean of all data: 5.97
Standard Deviation of all data: 0.60
Largest Observation Concentration of all data: Xn = 7.50
Test Statistic, high extreme of all data: Tn = 2.53
T Critical of all data: Tcr = 3.13

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

pH (field), STD
Location: MW4

Mean of all data: 9.06
Standard Deviation of all data: 24.15
Largest Observation Concentration of all data: Xn = 320.00
Test Statistic, high extreme of all data: Tn = 12.88
T Critical of all data: Tcr = 3.55

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/17/2010	320.00	False		1

pH (field), STD
Location: MW5

Mean of all data: 7.74
Standard Deviation of all data: 10.04
Largest Observation Concentration of all data: Xn = 150.00
Test Statistic, high extreme of all data: Tn = 14.17
T Critical of all data: Tcr = 3.57

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/17/2010	150.00	False		1

Selenium, dissolved, mg/L
Location: MW12

Mean of all data: 0.00262
Standard Deviation of all data: 0.00208
Largest Observation Concentration of all data: Xn = 0.0112
Test Statistic, high extreme of all data: Tn = 4.12
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/12/2018	0.0112	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Selenium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.0124
Standard Deviation of all data: 0.0141
Largest Observation Concentration of all data: Xn = 0.0500
Test Statistic, high extreme of all data: Tn = 2.67
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.0206
Standard Deviation of all data: 0.0192
Largest Observation Concentration of all data: Xn = 0.0504
Test Statistic, high extreme of all data: Tn = 1.55
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Selenium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000636
Standard Deviation of all data: 0.000783
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	<0.00500	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Selenium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000636
Standard Deviation of all data: 0.000783
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	<0.00500	True		1

Selenium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000934
Standard Deviation of all data: 0.00119
Largest Observation Concentration of all data: Xn = 0.00630
Test Statistic, high extreme of all data: Tn = 4.52
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	0.00630	False		1

Selenium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.00546
Standard Deviation of all data: 0.00327
Largest Observation Concentration of all data: Xn = 0.0156
Test Statistic, high extreme of all data: Tn = 3.10
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/02/2015	0.0156	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Selenium, dissolved, mg/L
Location: MW3

Mean of all data: 0.0119
Standard Deviation of all data: 0.00875
Largest Observation Concentration of all data: Xn = 0.0365
Test Statistic, high extreme of all data: Tn = 2.81
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.0365	False		1

Selenium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.00515
Standard Deviation of all data: 0.0103
Largest Observation Concentration of all data: Xn = 0.0500
Test Statistic, high extreme of all data: Tn = 4.34
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/12/2018	<0.0500	True		1

Selenium, dissolved, mg/L
Location: MW4

Mean of all data: 0.00235
Standard Deviation of all data: 0.00190
Largest Observation Concentration of all data: Xn = 0.00970
Test Statistic, high extreme of all data: Tn = 3.86
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	0.00970	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Selenium, dissolved, mg/L
Location: MW5

Mean of all data: 0.00198
Standard Deviation of all data: 0.00123
Largest Observation Concentration of all data: Xn = 0.00480
Test Statistic, high extreme of all data: Tn = 2.29
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, dissolved, mg/L
Location: MW12

Mean of all data: 0.000222
Standard Deviation of all data: 0.000186
Largest Observation Concentration of all data: Xn = 0.00125
Test Statistic, high extreme of all data: Tn = 5.52
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	<0.00125	True		1

Silver, dissolved, mg/L
Location: MW22D

Mean of all data: 0.000314
Standard Deviation of all data: 0.000380
Largest Observation Concentration of all data: Xn = 0.00250
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/03/2020	<0.00250	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Silver, dissolved, mg/L
Location: MW22S

Mean of all data: 0.000257
Standard Deviation of all data: 0.0000423
Largest Observation Concentration of all data: Xn = 0.000500
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/01/2021	<0.000500	True		1

Silver, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Silver, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Silver, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Silver, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000470
Standard Deviation of all data: 0.00115
Largest Observation Concentration of all data: Xn = 0.00600
Test Statistic, high extreme of all data: Tn = 4.82
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	0.00600	False		1

Silver, dissolved, mg/L
Location: MW3

Mean of all data: 0.000271
Standard Deviation of all data: 0.000456
Largest Observation Concentration of all data: Xn = 0.00180
Test Statistic, high extreme of all data: Tn = 3.35
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
01/19/2015	0.00180	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Silver, dissolved, mg/L
Location: MW3D

Mean of all data: 0.000196
Standard Deviation of all data: 0.000104
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.521
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Silver, dissolved, mg/L
Location: MW4

Mean of all data: 0.000196
Standard Deviation of all data: 0.000127
Largest Observation Concentration of all data: Xn = 0.000600
Test Statistic, high extreme of all data: Tn = 3.17
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	0.000600	False		1

Silver, dissolved, mg/L
Location: MW5

Mean of all data: 0.000193
Standard Deviation of all data: 0.000118
Largest Observation Concentration of all data: Xn = 0.000500
Test Statistic, high extreme of all data: Tn = 2.60
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Specific Conductance @ 25C (field), micromhos/cm
Location: MW12

Mean of all data: 812
Standard Deviation of all data: 384
Largest Observation Concentration of all data: Xn = 3090
Test Statistic, high extreme of all data: Tn = 6
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/18/2017	3090	False		1

Specific Conductance @ 25C (field), micromhos/cm
Location: MW22D

Mean of all data: 2156
Standard Deviation of all data: 827
Largest Observation Concentration of all data: Xn = 3830
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: MW22S

Mean of all data: 3162
Standard Deviation of all data: 1199
Largest Observation Concentration of all data: Xn = 5790
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

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Specific Conductance @ 25C (field), micromhos/cm
Location: MW23D

Mean of all data: 501
Standard Deviation of all data: 307
Largest Observation Concentration of all data: Xn = 2180
Test Statistic, high extreme of all data: Tn = 5
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	2180	False		1

Specific Conductance @ 25C (field), micromhos/cm
Location: MW23S

Mean of all data: 444
Standard Deviation of all data: 432
Largest Observation Concentration of all data: Xn = 2800
Test Statistic, high extreme of all data: Tn = 5
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	2800	False		1

Specific Conductance @ 25C (field), micromhos/cm
Location: MW2D

Mean of all data: 516
Standard Deviation of all data: 114
Largest Observation Concentration of all data: Xn = 957
Test Statistic, high extreme of all data: Tn = 4
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	957	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Specific Conductance @ 25C (field), micromhos/cm
Location: MW2R

Mean of all data: 865
Standard Deviation of all data: 145
Largest Observation Concentration of all data: Xn = 1280
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: MW3

Mean of all data: 2262
Standard Deviation of all data: 851
Largest Observation Concentration of all data: Xn = 3990
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: MW3D

Mean of all data: 2254
Standard Deviation of all data: 876
Largest Observation Concentration of all data: Xn = 3760
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

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Specific Conductance @ 25C (field), micromhos/cm
Location: MW4

Mean of all data: 677
Standard Deviation of all data: 233
Largest Observation Concentration of all data: Xn = 1570
Test Statistic, high extreme of all data: Tn = 4
T Critical of all data: Tcr = 3

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/1987	1570	False		1

Specific Conductance @ 25C (field), micromhos/cm
Location: MW5

Mean of all data: 428
Standard Deviation of all data: 153
Largest Observation Concentration of all data: Xn = 925
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: MW12

Mean of all data: 87.4
Standard Deviation of all data: 70.3
Largest Observation Concentration of all data: Xn = 475.
Test Statistic, high extreme of all data: Tn = 5.52
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	475.	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Sulfate, dissolved, mg/L
Location: MW22D

Mean of all data: 1670.
Standard Deviation of all data: 713.
Largest Observation Concentration of all data: Xn = 3840.
Test Statistic, high extreme of all data: Tn = 3.04
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/23/2024	3840.	False		1

Sulfate, dissolved, mg/L
Location: MW22S

Mean of all data: 2730.
Standard Deviation of all data: 1150.
Largest Observation Concentration of all data: Xn = 4810.
Test Statistic, high extreme of all data: Tn = 1.81
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L
Location: MW23D

Mean of all data: 64.1
Standard Deviation of all data: 226.
Largest Observation Concentration of all data: Xn = 1320.
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	1320.	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Sulfate, dissolved, mg/L
Location: MW23S

Mean of all data: 74.6
Standard Deviation of all data: 356.
Largest Observation Concentration of all data: Xn = 2060.
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	2060.	False		1

Sulfate, dissolved, mg/L
Location: MW2D

Mean of all data: 32.3
Standard Deviation of all data: 66.4
Largest Observation Concentration of all data: Xn = 352.
Test Statistic, high extreme of all data: Tn = 4.82
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	352.	False		1

Sulfate, dissolved, mg/L
Location: MW2R

Mean of all data: 208.
Standard Deviation of all data: 88.6
Largest Observation Concentration of all data: Xn = 516.
Test Statistic, high extreme of all data: Tn = 3.48
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/18/2025	516.	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Sulfate, dissolved, mg/L
Location: MW3

Mean of all data: 951.
Standard Deviation of all data: 458.
Largest Observation Concentration of all data: Xn = 1930.
Test Statistic, high extreme of all data: Tn = 2.13
T Critical of all data: Tcr = 3.00

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Sulfate, dissolved, mg/L
Location: MW3D

Mean of all data: 1940.
Standard Deviation of all data: 779.
Largest Observation Concentration of all data: Xn = 4370.
Test Statistic, high extreme of all data: Tn = 3.12
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/23/2024	4370.	False		1

Sulfate, dissolved, mg/L
Location: MW4

Mean of all data: 52.3
Standard Deviation of all data: 47.0
Largest Observation Concentration of all data: Xn = 288.
Test Statistic, high extreme of all data: Tn = 5.02
T Critical of all data: Tcr = 3.16

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/11/2012	288.	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Sulfate, dissolved, mg/L
Location: MW5

Mean of all data: 42.9
Standard Deviation of all data: 34.6
Largest Observation Concentration of all data: Xn = 180.
Test Statistic, high extreme of all data: Tn = 3.96
T Critical of all data: Tcr = 3.19

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
02/22/2011	180.	False		1

Thallium, dissolved, mg/L
Location: MW12

Mean of all data: 0.000272
Standard Deviation of all data: 0.000387
Largest Observation Concentration of all data: Xn = 0.00250
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00250	True		1

Thallium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Thallium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.000357
Standard Deviation of all data: 0.000413
Largest Observation Concentration of all data: Xn = 0.00250
Test Statistic, high extreme of all data: Tn = 5.19
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00250	True		1

Thallium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Thallium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000318
Standard Deviation of all data: 0.000392
Largest Observation Concentration of all data: Xn = 0.00250
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
08/26/2019	<0.00250	True		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Thallium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000250
Standard Deviation of all data: 0.0
Largest Observation Concentration of all data: Xn = 0.000250
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

Thallium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000256
Standard Deviation of all data: 0.000289
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 6.02
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.00200	False		1

Thallium, dissolved, mg/L
Location: MW3

Mean of all data: 0.000300
Standard Deviation of all data: 0.000359
Largest Observation Concentration of all data: Xn = 0.00120
Test Statistic, high extreme of all data: Tn = 2.50
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.00120	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Thallium, dissolved, mg/L
Location: MW3D

Mean of all data: 0.000246
Standard Deviation of all data: 0.000219
Largest Observation Concentration of all data: Xn = 0.00130
Test Statistic, high extreme of all data: Tn = 4.81
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/26/2016	0.00130	False		1

Thallium, dissolved, mg/L
Location: MW4

Mean of all data: 0.000203
Standard Deviation of all data: 0.000123
Largest Observation Concentration of all data: Xn = 0.000600
Test Statistic, high extreme of all data: Tn = 3.22
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/26/2016	0.000600	False		1

Thallium, dissolved, mg/L
Location: MW5

Mean of all data: 0.000188
Standard Deviation of all data: 0.000109
Largest Observation Concentration of all data: Xn = 0.000250
Test Statistic, high extreme of all data: Tn = 0.571
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Total Dissolved Solids, mg/L
Location: MW12

Mean of all data: 519.
Standard Deviation of all data: 131.
Largest Observation Concentration of all data: Xn = 933.
Test Statistic, high extreme of all data: Tn = 3.16
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
05/14/2018	933.	False		1

Total Dissolved Solids, mg/L
Location: MW22D

Mean of all data: 2260.
Standard Deviation of all data: 669.
Largest Observation Concentration of all data: Xn = 3650.
Test Statistic, high extreme of all data: Tn = 2.08
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	126.	False	-1	

Total Dissolved Solids, mg/L
Location: MW22S

Mean of all data: 3640.
Standard Deviation of all data: 951.
Largest Observation Concentration of all data: Xn = 5230.
Test Statistic, high extreme of all data: Tn = 1.67
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	164.	False	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Total Dissolved Solids, mg/L
Location: MW23D

Mean of all data: 309.
Standard Deviation of all data: 269.
Largest Observation Concentration of all data: Xn = 1790.
Test Statistic, high extreme of all data: Tn = 5.50
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	1790.	False		1

Total Dissolved Solids, mg/L
Location: MW23S

Mean of all data: 336.
Standard Deviation of all data: 472.
Largest Observation Concentration of all data: Xn = 2800.
Test Statistic, high extreme of all data: Tn = 5.22
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	2800.	False		1

Total Dissolved Solids, mg/L
Location: MW2D

Mean of all data: 270.
Standard Deviation of all data: 153.
Largest Observation Concentration of all data: Xn = 790.
Test Statistic, high extreme of all data: Tn = 3.39
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
11/11/2024	790.	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Total Dissolved Solids, mg/L
Location: MW2R

Mean of all data: 567.
Standard Deviation of all data: 186.
Largest Observation Concentration of all data: Xn = 1190.
Test Statistic, high extreme of all data: Tn = 3.36
T Critical of all data: Tcr = 3.10

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/18/2025	1190.	False		1

Total Dissolved Solids, mg/L
Location: MW3

Mean of all data: 2350.
Standard Deviation of all data: 677.
Largest Observation Concentration of all data: Xn = 4000.
Test Statistic, high extreme of all data: Tn = 2.43
T Critical of all data: Tcr = 3.54

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Total Dissolved Solids, mg/L
Location: MW3D

Mean of all data: 2580.
Standard Deviation of all data: 424.
Largest Observation Concentration of all data: Xn = 3240.
Test Statistic, high extreme of all data: Tn = 1.56
T Critical of all data: Tcr = 3.11

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/26/2021	1180.	False	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Total Dissolved Solids, mg/L

Location: MW4

Mean of all data: 456.
Standard Deviation of all data: 222.
Largest Observation Concentration of all data: Xn = 1780.
Test Statistic, high extreme of all data: Tn = 5.96
T Critical of all data: Tcr = 3.56

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/09/1987	1780.	False		1

Total Dissolved Solids, mg/L

Location: MW5

Mean of all data: 313.
Standard Deviation of all data: 179.
Largest Observation Concentration of all data: Xn = 1010.
Test Statistic, high extreme of all data: Tn = 3.90
T Critical of all data: Tcr = 3.57

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
12/11/2014	1010.	False		1

Vanadium, dissolved, mg/L

Location: MW12

Mean of all data: 0.00118
Standard Deviation of all data: 0.00132
Largest Observation Concentration of all data: Xn = 0.00850
Test Statistic, high extreme of all data: Tn = 5.54
T Critical of all data: Tcr = 2.88

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/14/2015	0.00850	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Vanadium, dissolved, mg/L
Location: MW22D

Mean of all data: 0.00101
Standard Deviation of all data: 0.000191
Largest Observation Concentration of all data: Xn = 0.00200
Test Statistic, high extreme of all data: Tn = 5.16
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/19/2017	0.00200	False		1

Vanadium, dissolved, mg/L
Location: MW22S

Mean of all data: 0.00207
Standard Deviation of all data: 0.00102
Largest Observation Concentration of all data: Xn = 0.00500
Test Statistic, high extreme of all data: Tn = 2.88
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
06/20/2022	<0.00500	True		1

Vanadium, dissolved, mg/L
Location: MW23D

Mean of all data: 0.000985
Standard Deviation of all data: 0.0000870
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.174
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	<0.000500	True	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Vanadium, dissolved, mg/L
Location: MW23S

Mean of all data: 0.000985
Standard Deviation of all data: 0.0000870
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.174
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	<0.000500	True	-1	

Vanadium, dissolved, mg/L
Location: MW2D

Mean of all data: 0.000986
Standard Deviation of all data: 0.0000845
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.169
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/31/2025	<0.000500	True	-1	

Vanadium, dissolved, mg/L
Location: MW2R

Mean of all data: 0.000932
Standard Deviation of all data: 0.000240
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.281
T Critical of all data: Tcr = 2.84

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
09/14/2015	<0.0	True	-1	

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Vanadium, dissolved, mg/L

Location: MW3

Mean of all data: 0.00172
Standard Deviation of all data: 0.00217
Largest Observation Concentration of all data: Xn = 0.00750
Test Statistic, high extreme of all data: Tn = 2.67
T Critical of all data: Tcr = 2.11

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.00750	False		1

Vanadium, dissolved, mg/L

Location: MW3D

Mean of all data: 0.000845
Standard Deviation of all data: 0.000358
Largest Observation Concentration of all data: Xn = 0.00100
Test Statistic, high extreme of all data: Tn = 0.433
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Vanadium, dissolved, mg/L

Location: MW4

Mean of all data: 0.00106
Standard Deviation of all data: 0.000903
Largest Observation Concentration of all data: Xn = 0.00590
Test Statistic, high extreme of all data: Tn = 5.36
T Critical of all data: Tcr = 2.80

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.00590	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Vanadium, dissolved, mg/L

Location: MW5

Mean of all data: 0.000948
Standard Deviation of all data: 0.000625
Largest Observation Concentration of all data: Xn = 0.00430
Test Statistic, high extreme of all data: Tn = 5.36
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.00430	False		1

Zinc, dissolved, mg/L

Location: MW12

Mean of all data: 0.00509
Standard Deviation of all data: 0.00315
Largest Observation Concentration of all data: Xn = 0.0170
Test Statistic, high extreme of all data: Tn = 3.78
T Critical of all data: Tcr = 2.91

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
03/07/2016	0.0170	False		1

Zinc, dissolved, mg/L

Location: MW22D

Mean of all data: 0.249
Standard Deviation of all data: 0.131
Largest Observation Concentration of all data: Xn = 0.580
Test Statistic, high extreme of all data: Tn = 2.52
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Zinc, dissolved, mg/L
Location: MW22S

Mean of all data: 0.775
Standard Deviation of all data: 0.410
Largest Observation Concentration of all data: Xn = 1.74
Test Statistic, high extreme of all data: Tn = 2.36
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Zinc, dissolved, mg/L
Location: MW23D

Mean of all data: 0.0111
Standard Deviation of all data: 0.0322
Largest Observation Concentration of all data: Xn = 0.190
Test Statistic, high extreme of all data: Tn = 5.55
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.190	False		1

Zinc, dissolved, mg/L
Location: MW23S

Mean of all data: 0.0230
Standard Deviation of all data: 0.104
Largest Observation Concentration of all data: Xn = 0.600
Test Statistic, high extreme of all data: Tn = 5.57
T Critical of all data: Tcr = 2.79

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/28/2019	0.600	False		1

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Zinc, dissolved, mg/L
Location: MW2D

Mean of all data: 0.00514
Standard Deviation of all data: 0.000845
Largest Observation Concentration of all data: Xn = 0.0100
Test Statistic, high extreme of all data: Tn = 5.75
T Critical of all data: Tcr = 2.81

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
10/26/2020	0.0100	False		1

Zinc, dissolved, mg/L
Location: MW2R

Mean of all data: 0.00654
Standard Deviation of all data: 0.00575
Largest Observation Concentration of all data: Xn = 0.0280
Test Statistic, high extreme of all data: Tn = 3.73
T Critical of all data: Tcr = 2.89

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0280	False		1

Zinc, dissolved, mg/L
Location: MW3

Mean of all data: 0.0704
Standard Deviation of all data: 0.0503
Largest Observation Concentration of all data: Xn = 0.172
Test Statistic, high extreme of all data: Tn = 2.02
T Critical of all data: Tcr = 2.37

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Based on Grubbs one-sided outlier test

Hutsonville Ash Impoundment
Outlier Analysis Results

User Supplied Information

Date Range: 01/17/1984 to 10/31/2025
LT Multiplier: x 0.50
Confidence Level: 95%
Number of Outliers: One Outlier
Transform: None

Zinc, dissolved, mg/L
Location: MW3D

Mean of all data: 0.0286
Standard Deviation of all data: 0.0220
Largest Observation Concentration of all data: Xn = 0.0900
Test Statistic, high extreme of all data: Tn = 2.79
T Critical of all data: Tcr = 2.92

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side

No Outliers

Zinc, dissolved, mg/L
Location: MW4

Mean of all data: 0.00570
Standard Deviation of all data: 0.00612
Largest Observation Concentration of all data: Xn = 0.0390
Test Statistic, high extreme of all data: Tn = 5.44
T Critical of all data: Tcr = 2.87

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0390	False		1

Zinc, dissolved, mg/L
Location: MW5

Mean of all data: 0.00559
Standard Deviation of all data: 0.00512
Largest Observation Concentration of all data: Xn = 0.0330
Test Statistic, high extreme of all data: Tn = 5.35
T Critical of all data: Tcr = 2.94

Sample Date	Value	LT_Value	Outlier Low Side	Outlier High Side
04/21/2014	0.0330	False		1

Based on Grubbs one-sided outlier test

APPENDIX C3
SEN SLOPE AND MANN-KENDALL TEST RESULTS – SHORT TERM

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0390	mg/L per period
R-Squared error of fit:	0.0112	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.177	mg/L per period
Lower Confidence Limit of Slope, M1:	-.200	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.425	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.499
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00108	mg/L per period
R-Squared error of fit:	0.165	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00129	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00100	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00348	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000914	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00459	mg/L per period
R-Squared error of fit:	0.264	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000216	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00687	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00127	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.126
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0604	mg/L per period
R-Squared error of fit:	0.577	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0712	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00301	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.110	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000760	mg/L per period
R-Squared error of fit:	0.420	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000823	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000215	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.67
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000886	mg/L per period
R-Squared error of fit:	0.430	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000759	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000179	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.78
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000457	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000345	mg/L per period
R-Squared error of fit:	0.170	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000327	mg/L per period
R-Squared error of fit:	0.0453	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000605	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00177	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000559	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000634	mg/L per period
R-Squared error of fit:	0.0430	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000224	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000220	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000457	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000742	mg/L per period
R-Squared error of fit:	0.323	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000635	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000434	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000172	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.277	mg/L per period
R-Squared error of fit:	0.0559	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0526	mg/L per period
Lower Confidence Limit of Slope, M1:	-1.14	mg/L per period
Upper Confidence Limit of Slope, M2+1:	1.55	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000499	mg/L per period
R-Squared error of fit:	0.0539	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000497	mg/L per period
R-Squared error of fit:	0.0919	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00102	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00228	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000654	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.01
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.638	mg/L per period
R-Squared error of fit:	0.0167	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.152	mg/L per period
Lower Confidence Limit of Slope, M1:	-3.98	mg/L per period
Upper Confidence Limit of Slope, M2+1:	4.08	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000829	mg/L per period
R-Squared error of fit:	0.0113	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000921	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000583	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000658	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000248	mg/L per period
R-Squared error of fit:	0.252	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000234	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000333	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000622	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000516	mg/L per period
R-Squared error of fit:	0.0236	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000167	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000378	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.275
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000287	mg/L per period
R-Squared error of fit:	0.349	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000194	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000000800	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000676	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000447	mg/L per period
R-Squared error of fit:	0.0399	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000962	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00185	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00277	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000234	mg/L per period
R-Squared error of fit:	0.570	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000262	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000000362	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000490	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.99
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000788	mg/L per period
R-Squared error of fit:	0.403	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000585	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000151	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000935	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.27
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000197	mg/L per period
R-Squared error of fit:	0.271	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000339	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000822	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000510	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.104	mg/L per period
R-Squared error of fit:	0.224	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0433	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0795	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.223	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.00000717	mg/L per period
R-Squared error of fit:	0.384	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.00000926	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000113	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00172	mg/L per period
R-Squared error of fit:	0.0156	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00423	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0153	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0111	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000435	mg/L per period
R-Squared error of fit:	0.363	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000534	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000113	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000114	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000459	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000503	mg/L per period
R-Squared error of fit:	0.425	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000333	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000857	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00105	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000381	mg/L per period
R-Squared error of fit:	0.293	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000783	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.16
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.167	mg/L per period
R-Squared error of fit:	0.00206	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.860	mg/L per period
Lower Confidence Limit of Slope, M1:	-2.64	mg/L per period
Upper Confidence Limit of Slope, M2+1:	3.29	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000704	mg/L per period
R-Squared error of fit:	0.148	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.000432	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00155	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-1.46
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000682	mg/L per period
R-Squared error of fit:	0.000966	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00510	mg/L per period
R-Squared error of fit:	0.319	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00604	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0107	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00198	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.619
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.270	mg/L per period
R-Squared error of fit:	0.00528	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.234	mg/L per period
Lower Confidence Limit of Slope, M1:	-3.92	mg/L per period
Upper Confidence Limit of Slope, M2+1:	2.66	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000213	mg/L per period
R-Squared error of fit:	0.0239	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000246	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00122	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00151	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.249
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000774	mg/L per period
R-Squared error of fit:	0.00249	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000000275	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000181	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000113	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000726	mg/L per period
R-Squared error of fit:	0.0875	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000250	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.596
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000162	mg/L per period
R-Squared error of fit:	0.342	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000138	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000626	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000440	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000421	mg/L per period
R-Squared error of fit:	0.0560	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000202	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00138	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00235	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000106	mg/L per period
R-Squared error of fit:	0.298	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.00000958	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000364	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000336	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000287	mg/L per period
R-Squared error of fit:	0.362	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000343	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000483	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000905	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000921	mg/L per period
R-Squared error of fit:	0.163	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000945	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000191	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000293	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000113	mg/L per period
R-Squared error of fit:	0.000573	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000653	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000545	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000526	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.504	mg/L per period
R-Squared error of fit:	0.266	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.390	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0706	mg/L per period
Upper Confidence Limit of Slope, M2+1:	1.42	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000468	mg/L per period
R-Squared error of fit:	0.343	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000513	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000240	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000123	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0209	mg/L per period
R-Squared error of fit:	0.307	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0166	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0150	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0544	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000664	mg/L per period
R-Squared error of fit:	0.159	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000000347	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000208	mg/L per period
R-Squared error of fit:	0.292	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000184	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000173	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000640	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000129	mg/L per period
R-Squared error of fit:	0.0635	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000106	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000349	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000842	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.507
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000635	mg/L per period
R-Squared error of fit:	0.215	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000683	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000879	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00232	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000215	mg/L per period
R-Squared error of fit:	0.0641	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000822	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000503	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.268
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000266	mg/L per period
R-Squared error of fit:	0.159	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000000139	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00442	mg/L per period
R-Squared error of fit:	0.00259	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00282	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0871	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.109	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000801	mg/L per period
R-Squared error of fit:	0.554	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000895	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00136	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000943	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.75
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00297	mg/L per period
R-Squared error of fit:	0.218	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00109	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00808	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00112	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000277	mg/L per period
R-Squared error of fit:	0.126	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000258	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000984	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000797	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.507
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000267	mg/L per period
R-Squared error of fit:	0.172	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000209	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000791	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000259	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.899
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000209	mg/L per period
R-Squared error of fit:	0.226	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000450	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.17
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000459	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000761	mg/L per period
R-Squared error of fit:	0.205	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000280	mg/L per period
R-Squared error of fit:	0.00172	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0000147	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000366	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000545	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.255
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000262	mg/L per period
R-Squared error of fit:	0.0737	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000125	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000595	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000104	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000502	mg/L per period
R-Squared error of fit:	0.234	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000000110	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000147	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000582	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000459	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000585	mg/L per period
R-Squared error of fit:	0.0539	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00213	mg/L per period
R-Squared error of fit:	0.000110	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.102	mg/L per period
Lower Confidence Limit of Slope, M1:	-.156	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.202	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.00161	mg/L per period
R-Squared error of fit:	0.400	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.00139	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000666	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00322	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000918	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00331	mg/L per period
R-Squared error of fit:	0.768	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00319	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00154	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00481	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00194	mg/L per period
R-Squared error of fit:	0.544	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00195	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000609	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00388	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.24
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000186	mg/L per period
R-Squared error of fit:	0.0416	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000412	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000107	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000363	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.642
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000285	mg/L per period
R-Squared error of fit:	0.0490	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000219	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000148	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000172	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000383	mg/L per period
R-Squared error of fit:	0.0424	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000000222	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000109	mg/L per period
R-Squared error of fit:	0.212	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000150	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000306	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000324	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000978	mg/L per period
R-Squared error of fit:	0.118	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000568	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000175	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.67
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000459	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.165	mg/L per period
R-Squared error of fit:	0.0238	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0650	mg/L per period
Lower Confidence Limit of Slope, M1:	-1.03	mg/L per period
Upper Confidence Limit of Slope, M2+1:	1.61	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.000367	mg/L per period
R-Squared error of fit:	0.0551	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.000317	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00131	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00296	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.748
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000197	mg/L per period
R-Squared error of fit:	0.345	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000321	mg/L per period
R-Squared error of fit:	0.000634	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00361	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0125	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00809	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0400	mg/L per period
R-Squared error of fit:	0.00630	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0157	mg/L per period
Lower Confidence Limit of Slope, M1:	-.324	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.394	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000552	mg/L per period
R-Squared error of fit:	0.000440	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000218	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000508	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000390	mg/L per period
R-Squared error of fit:	0.158	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000399	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000110	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000499	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000990	mg/L per period
R-Squared error of fit:	0.101	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000179	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000347	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000171	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000447	mg/L per period
R-Squared error of fit:	0.00112	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000172	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00117	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00293	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000458	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00197	mg/L per period
R-Squared error of fit:	0.403	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000843	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00343	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000742	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000187	mg/L per period
R-Squared error of fit:	0.000486	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000264	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000879	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000934	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000427	mg/L per period
R-Squared error of fit:	0.0505	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000936	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000147	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000458	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000522	mg/L per period
R-Squared error of fit:	0.295	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000483	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000132	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.53
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0862	mg/L per period
R-Squared error of fit:	0.00609	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.238	mg/L per period
Lower Confidence Limit of Slope, M1:	-.933	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.811	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.00183	mg/L per period
R-Squared error of fit:	0.0184	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0000983	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00145	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00351	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00555	mg/L per period
R-Squared error of fit:	0.0835	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00283	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00782	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00380	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0778	mg/L per period
R-Squared error of fit:	0.0135	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.162	mg/L per period
Lower Confidence Limit of Slope, M1:	-.598	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.492	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000299	mg/L per period
R-Squared error of fit:	0.376	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000340	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000558	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000870	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000216	mg/L per period
R-Squared error of fit:	0.0521	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000308	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00107	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000658	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000264	mg/L per period
R-Squared error of fit:	0.0508	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000458	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000979	mg/L per period
R-Squared error of fit:	0.554	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000678	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000148	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.26
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000458	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000843	mg/L per period
R-Squared error of fit:	0.237	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000660	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000361	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000226	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-1.49	mg/L per period
R-Squared error of fit:	0.359	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-1.20	mg/L per period
Lower Confidence Limit of Slope, M1:	-3.38	mg/L per period
Upper Confidence Limit of Slope, M2+1:	1.32	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000605	mg/L per period
R-Squared error of fit:	0.126	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.000853	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00234	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000730	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	-.509	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00316	mg/L per period
R-Squared error of fit:	0.0537	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00509	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0125	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0203	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-1.07	mg/L per period
R-Squared error of fit:	0.0593	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.124	mg/L per period
Lower Confidence Limit of Slope, M1:	-2.29	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.881	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000440	mg/L per period
R-Squared error of fit:	0.0132	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000397	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000867	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00315	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000131	mg/L per period
R-Squared error of fit:	0.0212	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000831	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000507	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000105	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000759	mg/L per period
R-Squared error of fit:	0.0299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000288	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000637	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000244	mg/L per period
R-Squared error of fit:	0.0125	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000912	mg/L per period
R-Squared error of fit:	0.0313	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00197	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00388	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:	0.866
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000200	mg/L per period
R-Squared error of fit:	0.0154	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000169	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000158	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000181	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000278	mg/L per period
R-Squared error of fit:	0.00452	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000245	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000316	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000463	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000138	mg/L per period
R-Squared error of fit:	0.0269	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000287	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000465	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0101	mg/L per period
R-Squared error of fit:	0.557	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00985	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00367	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0187	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0118	mg/L per period
R-Squared error of fit:	0.512	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0117	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000265	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0252	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000176	mg/L per period
R-Squared error of fit:	0.0000196	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000106	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000404	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000381	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000458	mg/L per period
R-Squared error of fit:	0.299	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000446	mg/L per period
R-Squared error of fit:	0.00129	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000921	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000104	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000127	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.385
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000154	mg/L per period
R-Squared error of fit:	0.00980	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000202	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000160	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:	-.518
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0591	mg/L per period
R-Squared error of fit:	0.0332	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0712	mg/L per period
Lower Confidence Limit of Slope, M1:	-.377	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.220	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000399	mg/L per period
R-Squared error of fit:	0.0720	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000566	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000715	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00211	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00488	mg/L per period
R-Squared error of fit:	0.313	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000142	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00920	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000353	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.385
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0239	mg/L per period
R-Squared error of fit:	0.477	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0222	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0473	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00224	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000332	mg/L per period
R-Squared error of fit:	0.00925	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000222	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000329	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000570	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000925	mg/L per period
R-Squared error of fit:	0.342	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000105	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000288	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000229	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000296	mg/L per period
R-Squared error of fit:	0.0330	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000000846	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000182	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000294	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.795
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000457	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000194	mg/L per period
R-Squared error of fit:	0.178	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000234	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.32
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000405	mg/L per period
R-Squared error of fit:	0.163	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000315	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000117	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000518	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.899
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000457	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000180	mg/L per period
R-Squared error of fit:	0.323	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000116	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000409	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000130	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.38
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 01/01/2024 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-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 C4
SEN SLOPE AND MANN-KENDALL TEST RESULTS – LONG TERM

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0557	mg/L per period
R-Squared error of fit:	0.146	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0433	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0853	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0119	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.25
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000151	mg/L per period
R-Squared error of fit:	0.0500	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000180	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000504	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000365	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.32
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000151	mg/L per period
R-Squared error of fit:	0.0113	

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:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.59
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00109	mg/L per period
R-Squared error of fit:	0.0811	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00132	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00198	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000719	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.29
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0396	mg/L per period
R-Squared error of fit:	0.238	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0227	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0339	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0147	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-4.29
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000146	mg/L per period
R-Squared error of fit:	0.114	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.00
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000171	mg/L per period
R-Squared error of fit:	0.0794	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000233	mg/L per period
R-Squared error of fit:	0.387	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000200	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000296	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000122	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.76
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000158	mg/L per period
R-Squared error of fit:	0.0267	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.932
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000363	mg/L per period
R-Squared error of fit:	0.268	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000244	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000410	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000117	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000430	mg/L per period
R-Squared error of fit:	0.0616	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000000614	mg/L per period
R-Squared error of fit:	0.000000131	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000243	mg/L per period
R-Squared error of fit:	0.0787	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000166	mg/L per period
R-Squared error of fit:	0.0366	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.06
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000102	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:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.24
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000363	mg/L per period
R-Squared error of fit:	0.0460	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.52
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000765	mg/L per period
R-Squared error of fit:	0.0414	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000809	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000503	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000227	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.422
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000906	mg/L per period
R-Squared error of fit:	0.0460	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.52
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000903	mg/L per period
R-Squared error of fit:	0.210	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000276	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000514	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000000104	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.68
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000430	mg/L per period
R-Squared error of fit:	0.0616	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000243	mg/L per period
R-Squared error of fit:	0.0787	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000254	mg/L per period
R-Squared error of fit:	0.0304	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.973
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000344	mg/L per period
R-Squared error of fit:	0.0616	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000249	mg/L per period
R-Squared error of fit:	0.0120	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000450	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000836	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.66
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW12**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000363	mg/L per period
R-Squared error of fit:	0.0460	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.52
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.383	mg/L per period
R-Squared error of fit:	0.286	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.430	mg/L per period
Lower Confidence Limit of Slope, M1:	0.289	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.550	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.29
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000102	mg/L per period
R-Squared error of fit:	0.0174	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	0.260	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000505	mg/L per period
R-Squared error of fit:	0.00115	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.59
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000682	mg/L per period
R-Squared error of fit:	0.00240	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000746	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000574	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000243	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.856
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.345	mg/L per period
R-Squared error of fit:	0.205	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.317	mg/L per period
Lower Confidence Limit of Slope, M1:	0.184	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.459	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.42
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000252	mg/L per period
R-Squared error of fit:	0.623	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000280	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000221	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000313	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.26
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000104	mg/L per period
R-Squared error of fit:	0.305	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000137	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000103	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:	4.55
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000192	mg/L per period
R-Squared error of fit:	0.0636	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000317	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000438	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000189	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.08
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000919	mg/L per period
R-Squared error of fit:	0.121	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000128	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000000537	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000159	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.18
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000997	mg/L per period
R-Squared error of fit:	0.209	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00153	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00177	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00119	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-4.40
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000481	mg/L per period
R-Squared error of fit:	0.185	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000000753	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000000509	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000949	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.11
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000332	mg/L per period
R-Squared error of fit:	0.0812	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.164
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000108	mg/L per period
R-Squared error of fit:	0.141	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.00000816	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000144	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000143	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	2.23
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000827	mg/L per period
R-Squared error of fit:	0.0234	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000201	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000130	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000275	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.54
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0460	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0576	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0458	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0711	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.69
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000282	mg/L per period
R-Squared error of fit:	0.384	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000284	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000164	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000399	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.70
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00194	mg/L per period
R-Squared error of fit:	0.186	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00233	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00126	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:	3.12
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000212	mg/L per period
R-Squared error of fit:	0.458	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000256	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000201	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000314	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.86
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000292	mg/L per period
R-Squared error of fit:	0.00516	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.347
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000770	mg/L per period
R-Squared error of fit:	0.142	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.34
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000741	mg/L per period
R-Squared error of fit:	0.280	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.000106	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000819	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000125	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	4.45
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000483	mg/L per period
R-Squared error of fit:	0.103	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000222	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000586	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.37
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.453	mg/L per period
R-Squared error of fit:	0.199	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.350	mg/L per period
Lower Confidence Limit of Slope, M1:	0.143	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.530	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.73
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000787	mg/L per period
R-Squared error of fit:	0.116	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000188	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	2.13
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000267	mg/L per period
R-Squared error of fit:	0.0748	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000167	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.14
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000573	mg/L per period
R-Squared error of fit:	0.0268	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000548	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00118	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000308	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.910
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.333	mg/L per period
R-Squared error of fit:	0.0734	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.365	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0625	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.719	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.85
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000112	mg/L per period
R-Squared error of fit:	0.169	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000107	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000345	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000177	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.58
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000262	mg/L per period
R-Squared error of fit:	0.431	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000248	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000152	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000340	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.19
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000352	mg/L per period
R-Squared error of fit:	0.181	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000835	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000147	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.65
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000454	mg/L per period
R-Squared error of fit:	0.638	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000399	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000296	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000509	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.64
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00164	mg/L per period
R-Squared error of fit:	0.103	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000303	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000491	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000187	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.22
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000365	mg/L per period
R-Squared error of fit:	0.644	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000257	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000187	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000368	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.78
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000158	mg/L per period
R-Squared error of fit:	0.0282	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000113	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000151	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.0720
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000226	mg/L per period
R-Squared error of fit:	0.250	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000183	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000759	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000308	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.87
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000135	mg/L per period
R-Squared error of fit:	0.599	

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:	0.00000574	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000131	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.05
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.113	mg/L per period
R-Squared error of fit:	0.298	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.110	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0659	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.161	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.27
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000188	mg/L per period
R-Squared error of fit:	0.486	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000165	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000110	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000229	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.69
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00189	mg/L per period
R-Squared error of fit:	0.0126	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00177	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000644	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00371	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000000463	mg/L per period
R-Squared error of fit:	0.000110	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.03
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000803	mg/L per period
R-Squared error of fit:	0.704	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0000684	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000514	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000877	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	6.01
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000000578	mg/L per period
R-Squared error of fit:	0.000164	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0495
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.000000321	mg/L per period
R-Squared error of fit:	0.0872	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	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:	1.57
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000374	mg/L per period
R-Squared error of fit:	0.731	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000361	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000290	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000432	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.97
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000000462	mg/L per period
R-Squared error of fit:	0.000164	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0495
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000917	mg/L per period
R-Squared error of fit:	0.200	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000514	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000108	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.07
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW22S**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.00000000185	mg/L per period
R-Squared error of fit:	0.000110	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	1.03
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0434	mg/L per period
R-Squared error of fit:	0.0204	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000899	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0124	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0131	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.0930
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.0000165	mg/L per period
R-Squared error of fit:	0.493	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	3.99	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000184	mg/L per period
R-Squared error of fit:	0.0208	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.93
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00124	mg/L per period
R-Squared error of fit:	0.551	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00112	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00129	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000988	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-5.71
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0429	mg/L per period
R-Squared error of fit:	0.0284	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00410	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00536	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00290	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-4.79
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000296	mg/L per period
R-Squared error of fit:	0.0731	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.79
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000436	mg/L per period
R-Squared error of fit:	0.0606	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000579	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000894	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000000213	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.61
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000243	mg/L per period
R-Squared error of fit:	0.183	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000145	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000262	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.27
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000235	mg/L per period
R-Squared error of fit:	0.0226	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.83
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000406	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000000742	mg/L per period
R-Squared error of fit:	0.00291	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.263
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.00000384	mg/L per period
R-Squared error of fit:	0.0352	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	-2.89	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000553	mg/L per period
R-Squared error of fit:	0.0793	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.52
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00223	mg/L per period
R-Squared error of fit:	0.0265	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000122	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000226	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000403	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.48
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000301	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000261	mg/L per period
R-Squared error of fit:	0.0245	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.00000344	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000105	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000252	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-.899
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.00000117	mg/L per period
R-Squared error of fit:	0.0165	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000000514	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.447
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000286	mg/L per period
R-Squared error of fit:	0.0850	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000481	mg/L per period
R-Squared error of fit:	0.0175	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.377
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000135	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0653	mg/L per period
R-Squared error of fit:	0.0150	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.00558	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0102	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0254	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.574
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.000252	mg/L per period
R-Squared error of fit:	0.287	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0000448	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000207	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	1.59	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000201	mg/L per period
R-Squared error of fit:	0.162	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.59
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000368	mg/L per period
R-Squared error of fit:	0.0211	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.000321	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000791	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000641	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-1.30
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0659	mg/L per period
R-Squared error of fit:	0.0268	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00436	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00511	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00359	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-6.06
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000489	mg/L per period
R-Squared error of fit:	0.0661	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.77
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000269	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000326	mg/L per period
R-Squared error of fit:	0.170	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000234	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000413	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.73
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000217	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000162	mg/L per period
R-Squared error of fit:	0.0263	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.00000910	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000170	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-1.95
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000146	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000178	mg/L per period
R-Squared error of fit:	0.00860	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.490
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000218	mg/L per period
R-Squared error of fit:	0.0151	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.563
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000412	mg/L per period
R-Squared error of fit:	0.0515	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.21
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00615	mg/L per period
R-Squared error of fit:	0.0236	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.99
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000474	mg/L per period
R-Squared error of fit:	0.0512	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.28
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000425	mg/L per period
R-Squared error of fit:	0.0257	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.00000886	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000162	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000232	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	-3.17	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	Downward	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000734	mg/L per period
R-Squared error of fit:	0.0275	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.893
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.00000365	mg/L per period
R-Squared error of fit:	0.0245	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000000605	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000161	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-1.65
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000286	mg/L per period
R-Squared error of fit:	0.0850	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000179	mg/L per period
R-Squared error of fit:	0.0235	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	-.788	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000135	mg/L per period
R-Squared error of fit:	0.0235	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.788
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW23S**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000294	mg/L per period
R-Squared error of fit:	0.0275	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.893
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0788	mg/L per period
R-Squared error of fit:	0.232	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0479	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00499	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0969	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.17
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.000146	mg/L per period
R-Squared error of fit:	0.352	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0000296	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000467	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	4.31	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	Upward	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000157	mg/L per period
R-Squared error of fit:	0.113	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.08
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000389	mg/L per period
R-Squared error of fit:	0.0277	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000676	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000197	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:	2.17
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0352	mg/L per period
R-Squared error of fit:	0.246	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00371	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00183	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0149	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.48
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000544	mg/L per period
R-Squared error of fit:	0.408	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000443	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000687	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.22
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000121	mg/L per period
R-Squared error of fit:	0.190	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000117	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000187	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000000391	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.40
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000178	mg/L per period
R-Squared error of fit:	0.165	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000649	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000161	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000145	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.06
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000000925	mg/L per period
R-Squared error of fit:	0.000164	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0495
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000776	mg/L per period
R-Squared error of fit:	0.117	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000288	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000832	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.87
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000491	mg/L per period
R-Squared error of fit:	0.00151	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.149
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000257	mg/L per period
R-Squared error of fit:	0.0808	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000317	mg/L per period
R-Squared error of fit:	0.132	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000194	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000355	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000804	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.78
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000911	mg/L per period
R-Squared error of fit:	0.280	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000819	mg/L per period
Lower Confidence Limit of Slope, M1:	0.00000388	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000133	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.93
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000538	mg/L per period
R-Squared error of fit:	0.0356	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.127
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000257	mg/L per period
R-Squared error of fit:	0.0808	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000508	mg/L per period
R-Squared error of fit:	0.00316	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.248
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000611	mg/L per period
R-Squared error of fit:	0.231	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.26
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0989	mg/L per period
R-Squared error of fit:	0.309	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0724	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0335	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.133	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.21
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000243	mg/L per period
R-Squared error of fit:	0.00779	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000945	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000353	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000171	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-.710
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000129	mg/L per period
R-Squared error of fit:	0.0872	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.56
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00447	mg/L per period
R-Squared error of fit:	0.307	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00463	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00672	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00210	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.61
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0511	mg/L per period
R-Squared error of fit:	0.238	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0390	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0116	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0671	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.22
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000847	mg/L per period
R-Squared error of fit:	0.0550	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.34
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000000173	mg/L per period
R-Squared error of fit:	0.0367	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.04
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000224	mg/L per period
R-Squared error of fit:	0.0770	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000109	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000131	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000426	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.742
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000278	mg/L per period
R-Squared error of fit:	0.240	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000244	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000354	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000140	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.83
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000000103	mg/L per period
R-Squared error of fit:	0.00234	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-.265
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000257	mg/L per period
R-Squared error of fit:	0.0808	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000121	mg/L per period
R-Squared error of fit:	0.0260	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.14
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000306	mg/L per period
R-Squared error of fit:	0.0503	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000182	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.54
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000491	mg/L per period
R-Squared error of fit:	0.0596	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000000436	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.19
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000257	mg/L per period
R-Squared error of fit:	0.0808	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.63
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000296	mg/L per period
R-Squared error of fit:	0.00107	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.149
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.000000803	mg/L per period
R-Squared error of fit:	0.0983	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.000000345	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000000734	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000882	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW2R**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000346	mg/L per period
R-Squared error of fit:	0.0367	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.04
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.559	mg/L per period
R-Squared error of fit:	0.800	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.593	mg/L per period
Lower Confidence Limit of Slope, M1:	-.757	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.289	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000338	mg/L per period
R-Squared error of fit:	0.00260	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000375	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00126	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000514	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000397	mg/L per period
R-Squared error of fit:	0.916	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.00000347	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000430	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.17
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000446	mg/L per period
R-Squared error of fit:	0.0191	

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:	-.00472	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00313	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.379	mg/L per period
R-Squared error of fit:	0.480	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.288	mg/L per period
Lower Confidence Limit of Slope, M1:	-.585	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.120	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000542	mg/L per period
R-Squared error of fit:	0.491	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000441	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000114	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000158	mg/L per period
R-Squared error of fit:	0.152	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000161	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000393	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000849	mg/L per period
R-Squared error of fit:	0.801	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000956	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00122	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000451	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000484	mg/L per period
R-Squared error of fit:	0.919	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000425	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000575	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.14
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000529	mg/L per period
R-Squared error of fit:	0.148	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000660	mg/L per period
R-Squared error of fit:	0.641	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000639	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000100	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.26
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000133	mg/L per period
R-Squared error of fit:	0.231	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000512	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000265	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000106	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.930
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000443	mg/L per period
R-Squared error of fit:	0.870	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000458	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000586	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000000300	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.14
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000176	mg/L per period
R-Squared error of fit:	0.638	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000208	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000397	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000800	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000525	mg/L per period
R-Squared error of fit:	0.585	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000503	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000105	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000288	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.194	mg/L per period
R-Squared error of fit:	0.101	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.174	mg/L per period
Lower Confidence Limit of Slope, M1:	-.375	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0267	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.95
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000102	mg/L per period
R-Squared error of fit:	0.0265	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000529	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000217	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000951	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-.682
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000157	mg/L per period
R-Squared error of fit:	0.512	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.24
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000439	mg/L per period
R-Squared error of fit:	0.00807	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000539	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000952	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00169	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.586
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000337	mg/L per period
R-Squared error of fit:	0.000000142	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0269	mg/L per period
Lower Confidence Limit of Slope, M1:	-.208	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.279	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.177
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000832	mg/L per period
R-Squared error of fit:	0.0252	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000669	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:	0.208
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000108	mg/L per period
R-Squared error of fit:	0.00219	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000308	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000246	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.192
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000170	mg/L per period
R-Squared error of fit:	0.252	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000155	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000229	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000000715	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.02
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000128	mg/L per period
R-Squared error of fit:	0.00193	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0690
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000564	mg/L per period
R-Squared error of fit:	0.185	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000623	mg/L per period
Lower Confidence Limit of Slope, M1:	0.000273	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000969	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.64
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000356	mg/L per period
R-Squared error of fit:	0.0146	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000566	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000833	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000387	mg/L per period
R-Squared error of fit:	0.000524	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.104
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0000000310	mg/L per period
R-Squared error of fit:	0.000000115	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000440	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000308	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000246	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.232
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.000000300	mg/L per period
R-Squared error of fit:	0.0836	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.10
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00119	mg/L per period
R-Squared error of fit:	0.0884	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000609	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0000156	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00133	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.76
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Upward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000672	mg/L per period
R-Squared error of fit:	0.00616	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.000474	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00166	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00261	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.381
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.0000116	mg/L per period
R-Squared error of fit:	0.0156	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000169	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000407	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000138	mg/L per period
Non-parametric Mann-Kendall Test for Trend		
S Statistic:	-.981	
Z test:	1.64	
At the 95.0 % Confidence Level (two-tailed test):	None	

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000243	mg/L per period
R-Squared error of fit:	0.0788	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	0.00000107	mg/L per period
R-Squared error of fit:	0.00239	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000537	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00000581	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000177	mg/L per period
R-Squared error of fit:	0.0228	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000150	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.66
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW3D**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000305	mg/L per period
R-Squared error of fit:	0.0309	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.963
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0188	mg/L per period
R-Squared error of fit:	0.0426	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0280	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0442	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.00747	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.46
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000114	mg/L per period
R-Squared error of fit:	0.00315	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0000661	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000241	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000214	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.714
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000181	mg/L per period
R-Squared error of fit:	0.517	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.10
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000125	mg/L per period
R-Squared error of fit:	0.00144	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000290	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000707	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.67
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0113	mg/L per period
R-Squared error of fit:	0.445	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0104	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0136	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00736	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-4.44
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000427	mg/L per period
R-Squared error of fit:	0.150	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000598	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.67
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000130	mg/L per period
R-Squared error of fit:	0.0615	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.498
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000421	mg/L per period
R-Squared error of fit:	0.519	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000395	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000551	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.00000265	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.91
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000674	mg/L per period
R-Squared error of fit:	0.390	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000859	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000109	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000656	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-4.29
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000000153	mg/L per period
R-Squared error of fit:	0.292	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.000000119	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000240	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend	
S Statistic:	-2.57
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000471	mg/L per period
R-Squared error of fit:	0.0442	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.16
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000125	mg/L per period
R-Squared error of fit:	0.0224	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000170	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.11
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000304	mg/L per period
R-Squared error of fit:	0.0677	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000446	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000129	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.18
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000342	mg/L per period
R-Squared error of fit:	0.127	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000000570	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.70
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000190	mg/L per period
R-Squared error of fit:	0.0709	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.50
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000817	mg/L per period
R-Squared error of fit:	0.0000642	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.0	mg/L per period
R-Squared error of fit:	0.0	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.0
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000434	mg/L per period
R-Squared error of fit:	0.0459	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000000114	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000385	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000164	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.751
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW4**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000329	mg/L per period
R-Squared error of fit:	0.0261	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.809
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00515**
Location Class:		**Parameter:**	**Total Dissolved Solids**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0214	mg/L per period
R-Squared error of fit:	0.0309	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00292	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0415	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0288	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.177
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00618**
Location Class:		**Parameter:**	**Nitrate nitrogen, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000319	mg/L per period
R-Squared error of fit:	0.0947	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.0000454	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000207	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:	-.613
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00720**
Location Class:		**Parameter:**	**Cyanide, total**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	0.00000157	mg/L per period
R-Squared error of fit:	0.513	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.24
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00941**
Location Class:		**Parameter:**	**Chloride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000540	mg/L per period
R-Squared error of fit:	0.0269	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.000565	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00113	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000118	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00946**
Location Class:		**Parameter:**	**Sulfate, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0132	mg/L per period
R-Squared error of fit:	0.203	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00339	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00804	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.000571	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.91
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**00950**
Location Class:		**Parameter:**	**Fluoride, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000314	mg/L per period
R-Squared error of fit:	0.313	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.48
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01000**
Location Class:		**Parameter:**	**Arsenic, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000107	mg/L per period
R-Squared error of fit:	0.0579	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.414
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01005**
Location Class:		**Parameter:**	**Barium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000350	mg/L per period
R-Squared error of fit:	0.102	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.00000235	mg/L per period
Lower Confidence Limit of Slope, M1:	-.00000562	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.000000548	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.17
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01010**
Location Class:		**Parameter:**	**Beryllium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01020**
Location Class:		**Parameter:**	**Boron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000365	mg/L per period
R-Squared error of fit:	0.369	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	-.0000279	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000426	mg/L per period
Upper Confidence Limit of Slope, M2+1:	-.0000172	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-3.61
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	Downward

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01025**
Location Class:		**Parameter:**	**Cadmium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01030**
Location Class:		**Parameter:**	**Chromium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000891	mg/L per period
R-Squared error of fit:	0.0689	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.0000000604	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.56
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01035**
Location Class:		**Parameter:**	**Cobalt, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000243	mg/L per period
R-Squared error of fit:	0.0787	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01040**
Location Class:		**Parameter:**	**Copper, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000188	mg/L per period
R-Squared error of fit:	0.0470	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.25
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01046**
Location Class:		**Parameter:**	**Iron, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000125	mg/L per period
R-Squared error of fit:	0.0239	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.24
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01049**
Location Class:		**Parameter:**	**Lead, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01056**
Location Class:		**Parameter:**	**Manganese, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.00000000606	mg/L per period
R-Squared error of fit:	0.00000171	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.336
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01057**
Location Class:		**Parameter:**	**Thallium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01065**
Location Class:		**Parameter:**	**Nickel, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000271	mg/L per period
R-Squared error of fit:	0.0748	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000100	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.899
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01075**
Location Class:		**Parameter:**	**Silver, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000115	mg/L per period
R-Squared error of fit:	0.0699	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.54
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01085**
Location Class:		**Parameter:**	**Vanadium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.0000000243	mg/L per period
R-Squared error of fit:	0.0787	

Sen's Non-parametric estimate of the slope (two-tailed test)

Median Slope:	0.0	mg/L per period
Lower Confidence Limit of Slope, M1:	0.0	mg/L 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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01090**
Location Class:		**Parameter:**	**Zinc, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line

Slope (fitted to data):	-.000000198	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:	0.0	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0	mg/L per period

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-.744
Z test:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01095**
Location Class:		**Parameter:**	**Antimony, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**01145**
Location Class:		**Parameter:**	**Selenium, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

Trend Analysis

Trend of the least squares straight line		
Slope (fitted to data):	-.000000317	mg/L per period
R-Squared error of fit:	0.0891	
Sen's Non-parametric estimate of the slope (two-tailed test)		
Median Slope:	-.000000287	mg/L per period
Lower Confidence Limit of Slope, M1:	-.000000657	mg/L per period
Upper Confidence Limit of Slope, M2+1:	0.0000000760	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

Hutsonville Ash Impoundment
Mann-Kendall Trend Analysis

User Supplied Information

Location ID:	**MW5**	**Parameter Code:**	**71890**
Location Class:		**Parameter:**	**Mercury, dissolved**
Location Type:		**Units:**	**mg/L**
Confidence Level:	**95.00%**		

Date Range: 03/01/2017 to 12/31/2025

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:	1.64
At the 95.0 % Confidence Level (two-tailed test):	None