2024 Annual Groundwater Monitoring and Corrective Action Report - Former Emery Pond

Southern Illinois Power Cooperative Marion Power Plant

Prepared Pursuant to 40 CFR §257.90(e)

Submitted to:

Southern Illinois Power Cooperative
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Submitted by:

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EXECUTIVE SUMMARY

This *2024 CCR Annual Groundwater Monitoring and Corrective Action Report* (2024 Annual Report) was prepared on behalf of Southern Illinois Power Cooperative (SIPC) for the Marion Power Plant former Emery Pond located at 11543 Lake of Egypt Road in Marion, Illinois (Site). The former Emery Pond is subject to Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq.* [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)]. Pursuant to the CCR Rule, SIPC is required to complete an annual groundwater monitoring and corrective action report by January 31st of the following year.

This 2024 Annual Report documents the status of the CCR groundwater monitoring and corrective action program for the former Emery Pond, summarizes key actions completed, identifies issues encountered, describes actions taken to resolve identified concerns, and proposes key activities for calendar year 2025. More specifically, this 2024 Annual Report describes the results of the CCR Rule Assessment Monitoring Program and Corrective Action Monitoring Program activities and discusses the progression of future sampling activities pursuant to the CCR Rule and the former Emery Pond Groundwater Monitoring Plan Addendum #1 (GMP, Golder, 2021).

In 2017, following the installation of a groundwater monitoring system, groundwater monitoring at the Site was completed to evaluate background water quality consistent with 40 CFR §257.90. In March 2018, the first round of Detection Monitoring was completed pursuant to the requirements of 40 CFR §257.94. The results of Detection Monitoring required the transition to Assessment Monitoring pursuant to the requirements of 40 CFR §257.95. The first Assessment Monitoring sampling event was completed in August 2018. The results of Assessment Monitoring initiated an Assessment of Corrective Measures (ACM) which was completed in March 2019 and revised in March 2021. The Selection of Remedy Report was completed in June 2019 and revised in March 2021. The selected remedy, closure by removal, was completed in April 2021. The former Emery Pond is currently in quarterly post-closure monitoring of groundwater or Corrective Action Monitoring (CAM).

In accordance with 40 CFR §257.90(e)(6), the following information provides an overview of groundwater monitoring and corrective action status for the Unit:

- The Assessment Monitoring Program was initiated on August 8, 2018.
- The ACM was initiated in January 2019 and completed in March 2019 (Hanson, Revised March 30, 2021).
- Prior to the Selection of Remedy for Emery Pond, a public meeting was held on May 23, 2019 at the Marion Public Library in Marion, Illinois to discuss the results of the ACM in accordance with 40 CFR §257.96(e).
- The remedy was selected for Emery Pond on June 19, 2019 (SIPC, 2019) as required by 40 CFR §257.97.
- The selected remedy included closure by removal of all CCR from Emery Pond, installation of a perimeter drain, and ongoing groundwater monitoring. Closure by removal of CCR was completed on April 5, 2021 and final inspection by a licensed professional engineer was complete as of May 28, 2021 (SIPC, 2021). Upon completion of these closure by removal actions, all references to and reports for the former CCR unit transitioned to the current nomenclature, former Emery Pond.
- Throughout calendar year 2024, CAM was performed at former Emery Pond in accordance with 40 CFR §257.98.

- The following constituents were detected at statistically significant levels (SSLs) above groundwater protection standards (GPS) in 2024: cobalt in monitoring wells EP-2, EP-3, EP-4, and EP-7.

In 2025, SIPC will continue CAM as described in the Site's GMP Addendum #1 (Golder, 2021a).

1.0 INTRODUCTION

On behalf of Southern Illinois Power Cooperative (SIPC), WSP USA Inc. (WSP), prepared this *2024 CCR Annual Groundwater Monitoring and Corrective Action Report* (2024 Annual Report) for the Marion Power Plant's (i.e., Facility's) former Emery Pond, 11543 Lake of Egypt Road, Marion, Williamson County, Illinois (Site, see Figure 1). The former Emery Pond was an on-site settling pond, approximately one (1) acre in size, closed via removal by April 5, 2021. The former Emery Pond is subject to the groundwater monitoring requirements of Title 40 Code of Federal Regulations (CFR) Part 257.50 et seq. [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule: Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)]. Pursuant to the CCR Rule, the Facility is required to complete an annual groundwater monitoring and corrective action report by January 31st of the following year.

This 2024 Annual Report provides the monitoring data and presents the relevant data evaluations from the Corrective Action Monitoring (CAM) events that were performed in December 2023, March 2024, June 2024, and September 2024. An additional CAM event was performed in December 2024; the results from this sampling event will be provided in the 2025 Annual Groundwater Monitoring and Corrective Action Report (2025 Annual Report).

In conformance with the applicable requirements of 40 CFR §257.90(e)(1) through (5), the 2024 Annual Report:

- Documents the status of the groundwater monitoring and corrective action activities.
- Provides figures showing the former Emery Pond, monitoring well locations, and groundwater flow direction(s).
- Summarizes key CCR Rule groundwater activities completed during calendar year 2024.
- Includes CCR Rule groundwater monitoring data obtained in calendar year 2024.
- Describes any problems encountered during the monitoring activities.
- Discusses actions taken to resolve the problems, if applicable.
- Projects key activities anticipated for 2025.

1.1 Key Actions Completed - 2024

SIPC completed the following key actions relative to 40 CFR Part 257 CCR Rule groundwater monitoring and corrective action regulations at the Site in 2024:

- Preparation of the 2023 Groundwater Monitoring and Corrective Action Annual Report in January 2024 (2023 Annual Report) in accordance with 40 CFR §257.90(e).
- Evaluation and notification of detections above Groundwater Protection Standards (GPS) from the eleventh CAM event in February 2024 (40 CFR §257.98).
- Performance of the twelfth CAM event in March 2024 (40 CFR §257.98).
- Evaluation and notification of detections above GPS from the twelfth CAM event in May 2024 (40 CFR §257.98).
- Performance of the thirteenth CAM event in June 2024 (40 CFR §257.98).

- Evaluation and notification of detections above GPS from the thirteenth CAM event in August 2024 (40 CFR §257.98).
- Performance of the fourteenth CAM event in September 2024 (40 CFR § 257.98).
- Evaluation and notification of detections above GPS from the fourteenth CAM event in November 2024 (40 CFR §257.98).
- Performance of the fifteenth CAM event in December 2024 (40 CFR §257.98).

2.0 SITE INFORMATION

The following section summarizes Site information including the current monitoring well network and a description of the Site's geology and hydrogeology.

2.1 Monitoring Well Network

The groundwater monitoring system was installed in 2017 (AECOM, 2017). One background monitoring well (EBG) is located approximately 800 feet upgradient of the former Emery Pond and four downgradient monitoring wells (EP-1, EP-2, EP-3, and EP-4) are located along the southern, eastern, and northeastern boundaries of the former Emery Pond. Three additional wells (EP-5, EP-6, and EP-7) were installed in October 2021 between the former Emery Pond and the Lake of Egypt to evaluate groundwater at the limits of the groundwater management zone (GMZ, Figure 2). The monitoring wells are screened at the unlithified/bedrock unit interface which occurs at the Site at 10 – 20 feet below ground surface (ft bgs) dependent on location. Table 1 provides a summary of the well rationale/purpose and date of installation and monitoring well construction details.

2.2 Geology and Hydrogeology

The following section describes the geology and hydrogeology of the Site as it pertains to potential contaminant transport and fate at the Site.

2.2.1 Geology

The Site is underlain by glacially derived deposits of the Illinoisan Stage overlying the Pennsylvanian Age Bedrock. (Hanson, revised March 24, 2021). WSP's interpretation of the Site's geology is based on soil borings (Appendix A) and bedrock geology maps and includes:

- Fill Materials: Where present, the fill materials generally consist of light gray to yellowish brown gravel with some silt and clay, and trace amounts of sand and asphalt from the ground surface to as deep as 14 ft bgs.
- Silt (upper discontinuous silt layer): Yellowish brown silt with little clay and trace very fine-grained sand from the ground surface to as deep as 8 ft bgs.
- Clay: Yellowish brown to black clay with some silt, little sand, and trace gravel from ground surface to approximately 20 ft bgs.
- Silt (lower discontinuous silt layer): Black to yellowish brown silt with little clay and trace very fine-grained sand from approximately 14 ft bgs to 20 ft bgs.
- Bedrock: Yellowish brown, weathered, sandstone and shale. The upper bedrock layer is at least 190 feet thick. The depth to bedrock is approximately 20 ft bgs.

The uppermost water bearing zone monitored by the groundwater monitoring system extends from the clay layer to the shallowest 11 feet of bedrock.

2.2.2 Site Hydrogeology

The uppermost water bearing zone is a shallow, hydraulically “perched” zone comprised of fill and residuum (silts and clays) from the weathering of underlying bedrock and is not considered a usable water source. No confining layer was identified. The fill and residuum unit has only 3 to 5 feet of saturated thickness. Because the former Emery Pond was constructed directly on top of the bedrock, groundwater monitoring wells are screened at the unlithified/bedrock unit interface. This zone has a low hydraulic conductivity (<1E-04 centimeters per second [cm/s]) and only a few feet of saturated thickness (5-10 feet; Hanson, 2019b).

2.2.3 Groundwater Flow

The 2024 static water levels are summarized in Table 2. Consistent with the requirements of the CCR Rule, the rate and direction of groundwater flow within the uppermost aquifer was determined after each sampling event. The potentiometric surface maps, Figures 3 through 14, were prepared using static water level data obtained monthly in 2024. Groundwater in the vicinity of the former Emery Pond generally flows east/northeast toward the Lake of Egypt. The groundwater elevation varies between approximately 500 to 520 feet above mean sea level (ft amsl) with a depth to groundwater of less than 15 ft bgs.

WSP calculated the horizontal hydraulic gradient (i) for the unconfined aquifer in the vicinity of the former Emery Pond at 0.0278 as shown below using average groundwater elevation data for EP-5 and EP-7 from 2024.

$$i = {}^{h_L}/_{L}$$

Where: i = hydraulic gradient (unitless)

h_L = head loss (elevation difference in feet)

L = length (horizontal distance in feet)

As presented in the following table, the groundwater flow rate between EP-5 and EP-7 was calculated at approximately 6.6-8.4 feet per year using the following formula:

$$V = {}^{ki}/_{\theta}$$

Where: V= Groundwater Velocity (ft/min)
k = Hydraulic conductivity (ft/min)
i = Hydraulic gradient (unitless)
θ = Assumed effective porosity (unitless)

The hydraulic conductivity used to calculate the groundwater flow rate was the geometric mean of the hydraulic conductivities estimated through analysis of slug test data from wells EP-5 and EP-7 (Hanson, 2019b).

Date	Head Loss (h_L, feet)	Flow Length (feet)	Hydraulic Gradient (i)	Effective Porosity (Ø)	Hydraulic Conductivity (k, feet/min)	Estimated Groundwater Velocity	
						(feet/min)	(feet/year)
January 2024	11.4	470	2.41E-02	0.2	1.04E-04	1.26E-05	6.6
February 2024	11.7	470	2.48E-02	0.2	1.04E-04	1.29E-05	6.8
March 2024	11.8	470	2.50E-02	0.2	1.04E-04	1.30E-05	6.8
April 2024	11.6	470	2.46E-02	0.2	1.04E-04	1.28E-05	6.7
May 2024	13.5	470	2.86E-02	0.2	1.04E-04	1.49E-05	7.8
June 2024	14.5	470	3.07E-02	0.2	1.04E-04	1.60E-05	8.4
July 2024	13.5	470	2.86E-02	0.2	1.04E-04	1.49E-05	7.8
August 2024	13.6	470	2.88E-02	0.2	1.04E-04	1.50E-05	7.9
September 2024	13.7	470	2.90E-02	0.2	1.04E-04	1.51E-05	7.9
October 2024	13.6	470	2.88E-02	0.2	1.04E-04	1.50E-05	7.9
November 2024	14.1	470	2.99E-02	0.2	1.04E-04	1.55E-05	8.2
December 2024	13.7	470	2.90E-02	0.2	1.04E-04	1.51E-05	7.9

Notes: feet/min = feet per minute

h_L = Head loss in feet

i = hydraulic gradient

k = hydraulic conductivity

Ø = estimated value based on soil and bedrock properties

3.0 FIELD ACTIVITIES

Pursuant to the requirements in 40 CFR §257.95(d)(1), four quarterly monitoring events were completed for the former Emery Pond in 2024. A summary of the sampling events is presented below.

Monitoring Event	Sample Parameters	Sample Dates
12th Corrective Action Monitoring Event	Appendix III and Appendix IV	March 12 – 14, 2024
13th Corrective Action Monitoring Event	Appendix III and Appendix IV	June 3 - 4, 2024
14th Corrective Action Monitoring Event	Appendix III and Appendix IV	September 4 - 5, 2024
15th Corrective Action Monitoring Event	Appendix III and Appendix IV	December 2 - 4, 2024

During each of the sampling events, the monitoring wells were sampled in accordance with the procedures presented in the Groundwater Monitoring Plan (GMP; Hanson, revised March 24, 2021) and the GMP Addendum #1 (Golder, 2021a). Samples were collected by Teklab, Inc. (Teklab) and delivered to the Teklab laboratory in Collinsville, Illinois in secured coolers under chain-of-custody control. Radium samples were then shipped to Summit Environmental Technologies, Inc. in Cuyahoga Falls, Ohio for analysis.

3.1 Problems Encountered and Follow-Up Corrective Actions

According to the GMP Addendum #1 (Golder, 2021a), groundwater samples are to be collected once a well has achieved a turbidity level below 5 nephelometric turbidity units (NTUs) or when wells were purged for a minimum of two hours and sampled when turbidity appeared to stabilize (e.g., no downward or upward trend over three consecutive readings five minutes apart). During the eleventh CAM event (December 2023), the following groundwater samples were collected with higher 5 NTU turbidity levels:

- EBG; 6.6 NTUs
- EP-3; 5.6 NTUs
- EP-4; 8.7 NTUs
- EP-6; 5.6 NTUs

During the twelfth CAM event (March 2024), the following groundwater samples were collected with higher than 5 NTU turbidity levels:

- EP-1; 9.2 NTUs
- EP-4; 15 NTUs
- EP-7; 6.5 NTUs

During the thirteenth CAM event (June 2024), the following groundwater samples were collected with higher than 5 NTU turbidity levels:

- EBG; 6.4 NTUs
- EP-1; 5.4 NTUs
- EP-7; 13 NTUs

During the fourteenth CAM event (September 2024), the following groundwater samples were collected with higher than 5 NTU turbidity levels:

- EBG; 60 NTUs
- EP-1; 5.7 NTUs
- EP-6; 11 NTUs

WSP's evaluation of the analytical results from these wells suggests that the elevated turbidity levels had no significant effect on the representativeness of the samples of groundwater quality. During future monitoring events, wells will be purged for a minimum of two hours or five well volumes and professional judgement will be used to assess when the purged water is representative of groundwater to be sampled.

4.0 GROUNDWATER MONITORING PROGRAM RESULTS

This section includes a description of the CCR Rule monitoring program history and status, a discussion of the groundwater data collection and evaluation, and a summary of the Corrective Actions completed.

4.1 Background Monitoring

Per the requirements of 40 CFR §257.94, between March 2017 and August 2017 eight independent background groundwater samples were collected from each background and downgradient well. The samples were submitted to a contract laboratory, in accordance with chain of custody and quality assurance/quality control procedures, for analysis of 40 CFR Part 257 Appendix III and Appendix IV constituents. In addition, field water quality parameters were measured including specific conductance, temperature, dissolved oxygen, turbidity, oxidation-reduction potential, and pH. On behalf of SIPC, Hanson Professional Services Inc. (Hanson) used the results of the background monitoring phase to develop appropriate, statistically valid background values for each constituent/monitoring well. The sampling dates, number of groundwater samples collected from each background and downgradient well, purpose of sampling, and analytical results are presented in Table 3.

4.2 Detection Monitoring

The first Detection Monitoring event was completed in March 2018. Pursuant to the requirements of 40 CFR §257.94, a groundwater sample was collected from each background and downgradient well for analysis of Appendix III constituents. Hanson evaluated the results of the first Detection Monitoring sampling event to compare to facility background concentrations. The results of Detection Monitoring indicated statistically significant increases (SSIs) and triggered Assessment Monitoring in 2018 (Hanson, 2019a). The Detection Monitoring analytical results are presented in Table 3. The identified SSIs are summarized in the table below.

Parameter	EP-1	EP-2	EP-3	EP-4
Boron	X	X		X
Calcium	X	X		X
Chloride				X
Fluoride				
pH			X	X
Sulfate	X	X	X	X
Total Dissolved Solids	X	X	X	X

"X" Indicates an SSI

4.3 Assessment Monitoring

The first Assessment Monitoring sampling event was completed in August 2018, followed by a statistical evaluation and data analysis in January 2019. In August 2018, groundwater samples were collected from each background and downgradient well for analysis of Appendix III and Appendix IV constituents per 40 CFR §257.95. Following receipt of laboratory results, Hanson evaluated the Appendix IV constituents results relative to the Unit-specific GPS. In January 2019, Hanson determined that statistically significant levels (SSLs) existed for cobalt and thallium and, as a result, initiated the Assessment of Corrective Measures (ACM). Subsequent Assessment Monitoring sampling events confirmed these SSLs. The Assessment Monitoring analytical results are presented in Table 3. A summary of the SSLs identified by Hanson between 2018-2020 and WSP in 2021 are provided in the Table below.

Assessment Monitoring Event	Identified Statistically Significant Levels
Assessment Monitoring Event #1 (August 2018)	Cobalt: EP-3 and EP-4 Thallium: EP-4
Assessment Monitoring Event #2 (January 2019)	Cobalt: EP-3 and EP-4 Thallium: EP-4
Assessment Monitoring Event #3 (June 2019)	Arsenic: EP-4 Cobalt: EP-3 and EP-4
Assessment Monitoring Event #4 (January 2020)	Arsenic: EP-4 Cobalt: EP-3 and EP-4
Assessment Monitoring Event #5 (June 2020)	Arsenic: EP-4 Cobalt: EP-3 and EP-4 Lead: EP-4
Assessment Monitoring Event #6 (January 2021)	Cobalt: EP-3 and EP-4

4.4 Corrective Action

The ACM was completed in March 2019 and a public meeting was held on May 23, 2019 at the Marion Public Library in Marion, Illinois to discuss the results of the ACM. The "Corrective Action and Selected Remedy Plan" (Hanson, revised March 30, 2021), outlines the selected remedy including:

- Closure of the then-operating Emery Pond and adjacent flue-gas desulfurization (FGD) storage area by removal of all CCR.

- Construction of a composite liner system compliant with 40 CFR Part 257 in the footprint of the former Emery Pond to continue storm water management functions.
- Construction of a perimeter drain at the toe of the liner system to protect the liner from external hydrostatic pressure and recover contaminated groundwater.
- Installation of three new monitoring wells, continuing to monitor groundwater for changes resulting from the natural attenuation of contaminants, source removal and the perimeter drain collection of impacted groundwater, and the establishment of a GMZ.

Emery Pond ceased receipt of CCR materials in the fall of 2020. Closure construction activities began in late 2020. Emery Pond, and the adjacent FGD storage area, were dewatered and excavated. The removal and decontamination of Emery Pond was completed April 5, 2021, and the final inspection was completed May 28, 2021, in accordance with the Site's Closure Plan (Hanson, revised April 15, 2021).

4.5 Corrective Action Monitoring

The former Emery Pond is currently in CAM. In accordance with the Site's Closure Plan (Hanson, revised April 15, 2021) and the GMP Addendum #1 (Golder, 2021a), CAM is completed on a quarterly basis. The first two quarterly CAM events were completed in May and August 2021. The results from the first two CAM events were provided in the 2021 Annual Groundwater Monitoring and Corrective Action Report (2021 Annual Report, Golder, 2022). The third through sixth CAM sampling events were completed in December 2021 and March, May, and September 2022 and the results were provided in the 2022 Annual Groundwater Monitoring and Corrective Action Report (2022 Annual Report, WSP, 2023). The seventh through tenth CAM sampling events were completed in December 2022 and March/May, June, and September 2023 and the results were provided in the 2023 Annual Groundwater Monitoring and Corrective Action Report (2023 Annual Report, WSP, 2024). The eleventh through fifteenth CAM sampling events were completed in December 2023 and March, June, September, and December 2024. The results from the December 2023 and the March, June, and September 2024 sampling events are discussed in Sections 5.1 through 5.5, respectively, and presented in Table 3. The corresponding analytical laboratory reports are provided in Appendix B. The 2024 Data Usability Summary Report is provided in Appendix C. The results from the December 2024 sampling event will be included in the 2025 Annual Report.

5.0 STATISTICAL EVALUATION

The former Emery Pond is currently in CAM. After four quarterly CAM groundwater sampling events were completed, the groundwater sampling results were statistically evaluated to determine whether statistically significant decreases (SSDs) had occurred after closure through removal of the former Emery Pond as described in the Site's GMP Addendum #1 (Golder, 2021a).

In accordance with the procedures identified in GMP Addendum #1 (Golder, 2021a), WSP updated the GPS by recalculating the facility background concentration, including all data collected from the background monitoring well (EBG) prior to the former Emery Pond closure, for each analyte using a tolerance/prediction limit procedure in accordance with 40 CFR §257.95. The updated GPS are the higher value of the Maximum Contaminant Levels (MCL) provided in 40 CFR §257.95(h)(2), 40 CFR §141.62 or 40 CFR §141.66, and the facility background concentration. The GPS for the Site are summarized in Table 4. The results from the statistical analyses from the eleventh through fourteenth CAM events are provided in Appendix D.

5.1 Eleventh Corrective Action Monitoring Event Statistical Analysis

The eleventh CAM event (December 2023) data were compared to GPS established by WSP in 2021. Statistical analyses was completed according to the GMP Addendum #1 (Golder, 2021a), which are summarized in Table 4. The results confirmed the SSLs identified in Assessment Monitoring for cobalt in monitoring wells EP-3 and EP-4 and identified SSLs for cobalt in wells EP-2 and EP-7.

The eleventh CAM event data were also evaluated for SSDs by identifying constituents where SSLs were identified in the pre-closure (March 2017- January 2021) data but not identified in post-closure (May 2021-present) data. No SSDs were identified. The former Emery Pond has completed closure by removal of all CCR material and is in Corrective Action Monitoring, therefore, no actions beyond reporting these exceedances in this Annual Report are required.

5.2 Twelfth Corrective Action Monitoring Event Statistical Analysis

The twelfth CAM event (March 2024) data were compared to GPS established by WSP in 2021. Statistical analyses were completed according to the GMP Addendum #1 (Golder, 2021a). The results confirmed the SSLs identified in Assessment Monitoring for cobalt in monitoring wells EP-3 and EP-4 and identified SSLs for cobalt in wells EP-2 and EP-7. No SSDs were identified.

The former Emery Pond has completed closure by removal of all CCR material and is in Corrective Action Monitoring, therefore, no actions beyond reporting these exceedances in this Annual Report are required.

5.3 Thirteenth Corrective Action Monitoring Event Statistical Analysis

The thirteenth CAM event (June 2024) data were compared to GPS established by WSP in 2021. Statistical analyses were completed according to the GMP Addendum #1 (Golder, 2021a). The results confirmed the SSLs identified in Assessment Monitoring for cobalt in monitoring wells EP-3 and EP-4 and identified SSLs for cobalt in wells EP-2 and EP-7. No SSDs were identified.

The former Emery Pond has completed closure by removal of all CCR material and is in Corrective Action Monitoring, therefore, no actions beyond reporting these exceedances in this Annual Report are required.

5.4 Fourteenth Corrective Action Monitoring Event Statistical Analysis

The fourteenth CAM event (September 2024) data were compared to GPS established by WSP in 2021. Statistical analyses were completed according to the GMP Addendum #1 (Golder, 2021a). The results confirmed the SSLs identified in Assessment Monitoring for cobalt in monitoring wells EP-3 and EP-4 and identified SSLs for cobalt in wells EP-2 and EP-7. No SSDs were identified.

The former Emery Pond has completed closure by removal of all CCR material and is in Corrective Action Monitoring, therefore, no actions beyond reporting these exceedances in this Annual Report are required.

5.5 Fifteenth Corrective Action Monitoring Event Statistical Evaluation

The fifteenth CAM event was completed in December 2024. The laboratory results were not received during calendar year 2024. The data for the fifteenth CAM event will be evaluated in accordance with the CCR Rule timeframes and reported in the 2025 Annual Report.

6.0 KEY ACTIVITIES PROJECTED FOR 2025

During calendar year 2025, SIPC anticipates conducting the following key CCR Rule groundwater monitoring activities for the former Emery Pond:

- Prepare and submit the appropriate notifications according to the CCR Rule.
- Continue quarterly CAM per CCR Rule requirements.
- Inspect and maintain the monitoring system including wells, pumps, and equipment.

7.0 REFERENCES

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TABLES

Table 1: Monitoring Well Construction Details
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

CCR Unit	Monitoring Well Type	Monitoring Well ID	Installation Date	Ground Surface Elevation (ft-msl)	Total Borehole Depth (ft)	Top of Casing Elevation (ft-msl)	Sounded Well Depth (ft-btoc)	Well Material	Screen Length (ft)	Screen Depth		Screen Elevation		
										Top (ft-btoc)	Bottom (ft-btoc)	Top (ft-msl)	Middle (ft-msl)	Bottom (ft-msl)
Former Emery Pond	Background	EBG	2/8/2017	521.74	25.00	524.87	28.13	2" Sch 40 PVC	10	18.13	28.13	506.74	501.74	496.74
	Downgradient	EP-1	2/7/2017	517.07	31.00	519.72	33.65	2" Sch 40 PVC	10	23.65	33.65	496.07	491.07	486.07
	Downgradient	EP-2	2/7/2017	511.15	15.00	513.79	17.64	2" Sch 40 PVC	10	7.64	17.64	506.15	501.15	496.15
	Downgradient	EP-3	2/8/2017	516.24	26.50	518.95	29.21	2" Sch 40 PVC	10	19.21	29.21	499.74	494.74	489.74
	Downgradient	EP-4	2/8/2017	517.07	18.50	519.74	21.17	2" Sch 40 PVC	10	11.17	21.17	508.57	503.57	498.57
	GMZ Boundary	EP-5	10/5/2021	524.64	16.32	527.59	16.32	2" Sch 40 PVC	4.5	11.30	15.79	516.29	514.05	511.80
	GMZ Boundary	EP-6	10/4/2021	502.08	13.62	505.11	13.62	2" Sch 40 PVC	4.5	8.59	13.12	496.52	494.26	491.99
	GMZ Boundary	EP-7	10/4/2021	512.49	18.50	515.44	18.50	2" Sch 40 PVC	9.6	9.36	18.00	506.08	501.26	497.44

Notes:
ft-msl = Feet above mean sea level
ft-btoc = Feet below top of casing
2" Sch 40 PVC = Two-inch diameter well, constructed of schedule 40 polyvinyl chloride materials
AECOM, 2018, 2017 Annual Groundwater Monitoring and Corrective Action Report, January 31, 2018.
GMZ = Groundwater Management Zone

Prepared by: DPJ
Checked by: SLG
Reviewed by: MAH

Table 2: 2024 Groundwater Water Levels
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Monitoring Well ID	Total Depth (feet)	Sounded Well Depth (feet)	Elevation of Top of Casing (feet msl)	1/8/2024		2/19/2024		3/18/2024		4/19/2024		5/20/2024		6/17/2024	
				DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)
EBG	25.00	27.20	524.87	9.6	515.27	9.3	515.57	9.6	515.27	8.5	516.37	8.9	515.97	8.1	516.77
EP-1	31.00	30.30	519.72	6.4	513.32	6.1	513.62	6.1	513.62	6.7	513.02	7.5	512.22	6.4	513.32
EP-2	15.00	17.05	513.79	6.8	506.99	6.9	506.89	6.8	506.99	7.2	506.59	6.8	506.99	5.4	508.39
EP-3	26.50	29.00	518.95	15.9	503.05	15.4	503.55	16.5	502.45	15.4	503.55	16.1	502.85	14.8	504.15
EP-4	18.50	20.90	519.74	8.5	511.24	8.8	510.94	8.3	511.44	8.5	511.24	7.9	511.84	6.4	513.34
EP-5	16.32	18.84	527.59	15.2	512.39	14.6	512.99	14.6	512.99	14.9	512.69	12.5	515.09	11.4	516.19
EP-6	13.62	16.24	505.11	4.1	501.01	4.6	500.51	3.5	501.61	4.2	500.91	4.7	500.41	2.4	502.71
EP-7	18.50	22.00	515.44	14.4	501.04	14.1	501.34	14.2	501.24	14.3	501.14	13.8	501.64	13.7	501.74

Notes:
1.) MSL = mean sea level.
2.) DTW = Depth to Water

Table 2: 2024 Groundwater Water Levels
Former Emery Pond
Southern Illinois Power Cooperative Marion Power
Marion, Illinois

Monitoring Well ID	Total Depth (feet)	Sounded Well Depth (feet)	Elevation of Top of Casing (feet msl)	7/15/2024		8/20/2024		9/9/2024		10/14/2024		11/13/2024		12/12/2024	
				DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)	DTW (feet)	Elevation (feet msl)
EBG	25.00	27.20	524.87	8.2	516.67	7.9	516.97	8.2	516.67	8.1	516.77	8.6	516.27	8.8	516.07
EP-1	31.00	30.30	519.72	6.7	513.02	6.3	513.42	7.1	512.62	7.3	512.42	7.7	512.02	7.8	511.92
EP-2	15.00	17.05	513.79	5.3	508.49	5.3	508.49	4.9	508.89	5.2	508.59	5.5	508.29	5.9	507.89
EP-3	26.50	29.00	518.95	14.6	504.35	14.1	504.85	13.9	505.05	14.3	504.65	14.9	504.05	15.4	503.55
EP-4	18.50	20.90	519.74	6.2	513.54	5.9	513.84	5.4	514.34	5.8	513.94	6.0	513.74	6.3	513.44
EP-5	16.32	18.84	527.59	12.1	515.49	11.5	516.09	11.6	515.99	12.1	515.49	12.9	514.69	13.6	513.99
EP-6	13.62	16.24	505.11	2.9	502.21	2.4	502.71	2.8	502.31	3.3	501.81	4.9	500.21	5.0	500.11
EP-7	18.50	22.00	515.44	13.4	502.04	12.9	502.54	13.1	502.34	13.5	501.94	14.8	500.64	15.1	500.34

Notes:
1.) MSL = mean sea level.
2.) DTW = Depth to Water

Created by: NMD
Checked by: GRD
Revieed by: MAH

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

	Well ID	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG
	Sample Date	3/23/2017	4/3/2017	5/25/2017	6/22/2017	6/29/2017	7/24/2017	8/1/2017	8/31/2017	3/22/2018	8/27/2018	1/11/2019	6/27/2019	1/30/2020	6/22/2020	1/21/2021	5/31/2021	8/30/2021	12/21/2021
	Sample Purpose	Background	Background	Background	Background	Background	Background	Background	Background	Detection Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																		
Boron	mg/L	0.12	0.079	0.1	0.071	0.073	0.079	0.074	0.056	0.033	0.035	0.041	<0.08	<0.5	0.022	<0.5	<0.009	0.010 J	0.013 J
Calcium	mg/L	23	10	30	23	32	37	35	35	14	15	13	15.2	12	13	15	13.3	12.1	11.6
Chloride	mg/L	55	11	84	68	79	27	86	82	12	16	12	18	7.2	12	13	22	17	12
Fluoride	mg/L	<0.029	<0.029	<0.029	<0.029	<0.029	0.64	<0.029	<0.029	0.53	0.55	0.5	<0.06	0.56	<0.5	0.46	0.6	0.58	0.67
pH	SU	6.5	6.8	6.41	6.45	6.53	6.59	6.66	6.26	6.35	6.57	6.85	6.21	6.54	6.5	6.57	6.61	6.58	6.95
Sulfate	mg/L	64	54	42	57	50	61	45	44	63	72	75	77	87	81	78	85	83	84
Total Dissolved Solids	mg/L	480	400	440	470	280	420	380	470	300	360	370	470	280	500	320	344	340	308
Antimony	mg/L	0.00057	0.00085 J	<0.0026	0.00069 J	0.0014 J	<0.0026	0.00022 J	<0.0026		<0.0016		<0.0016		<0.00052		<0.0010	<0.0010	<0.0200
Arsenic	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014		<0.002		<0.002		0.0011		<0.0010	<0.0010	<0.0200
Barium	mg/L	0.13	0.029	0.17	0.049	0.086	0.19	0.18	0.16		0.091		<0.00011		0.068		0.0505	0.0469	0.0475
Beryllium	mg/L	0.00033 J	<0.0002	<0.00055	<0.0002	<0.0002	<0.00055	<0.0002	<0.00055		<0.00015	0.00038 J	<0.00015		<0.00011		<0.0010	<0.0010	<0.0200
Cadmium	mg/L	<0.0001	<0.00075	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015		<0.0015		<0.000018		<0.00002		<0.0010	<0.0010	<0.0200
Chromium	mg/L	0.0062	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031		<0.0031	<0.0026	<0.00014		0.0042		<0.0015	0.0011 J	<0.0300
Cobalt	mg/L	0.008	0.00016 J	0.014	0.00015 J	0.0014 J	0.0093	0.0038 J	0.0073		<0.00063	0.0038	<0.00063		0.0017		<0.0001	0.0003 J	<0.0200
Lead	mg/L	<0.0008	<0.0013	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026		<0.0026	<0.0042	<0.00016		<0.0033		<0.0010	<0.0010	<0.0200
Lithium	mg/L	0.046 J	0.0074 J	<0.0042	0.028 J	0.059 J	<0.0042	0.082 J	<0.0042		<0.0042		<0.04		<0.0042		0.0207	0.0164	<0.0600
Mercury	mg/L		<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019		<0.000093		<0.0001		<0.00019		<0.00020	<0.00020	<0.00020
Molybdenum	mg/L	0.0034 J	0.0043 J	<0.000095	0.0017 J	0.0016 J	<0.00095	0.0024 J	<0.00095		<0.00014		<0.00028		<0.000019		0.0145	0.0014 J	<0.0300
Radium 226	pCi/L	0.878	<0.223	0.805	<0.262	<0.245	0.43	0.28	0.77		0.933		0.703		0.468			<0.21	0.104 J
Radium 228	pCi/L	1.06	<0.496	0.555	<0.0695	<0.371	0.98	1.24	2.22		0.447		0.911		0.514			1.02	<0.194
Radium, 226/228 Combined	pCi/L	1.938	<0.496	1.36	<0.262	<0.371	1.41	1.52	2.99		1.38		1.61		0.983			<1.23	<0.297
Selenium	mg/L	0.0019 J	<0.0005	<0.0028	0.0036 J	0.0019 J	<0.0028	0.0028 J	0.007		<0.00033	0.00079 J	<0.00033		<0.00056		<0.0010	<0.0010	<0.0200
Thallium	mg/L	<0.0007	<0.004	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081		<0.0081	<0.01	<0.00015		<0.004		<0.0020	0.0054	<0.0400
Turbidity	NTU																9.95	28.65	13

Notes:
J = Indicates the result is estimated
< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EBG	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1
Sample Date		3/7/2022	5/24/2022	9/6/2022	12/19/2022	3/21/2023	6/7/2023	9/18/2023	12/11/2023	3/12/2024	6/3/2024	9/4/2024	3/23/2017	4/3/2017	5/25/2017	6/22/2017	6/29/2017	7/24/2017	8/1/2017
Sample Purpose		Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Background	Background	Background	Background	Background	Background	Background
ANALYTE	Unit																		
Boron	mg/L	0.0225	0.019 J	0.012 J	0.014 J	0.011 J	<0.0200	0.016 J	0.0097 J	0.013 J	0.011 J	<0.0200	0.13	0.21	0.28	0.26	0.32	0.21	0.23
Calcium	mg/L	11.9	13.1	10.9	10.4	12	12.1	12.4	9.72	13.6 B	13.8	11.1	220	280	310	310	310	270	250
Chloride	mg/L	15	18	10	9	12	12	11	8	16	18	9.59	54	54	48	50	50	51	48
Fluoride	mg/L	0.58	0.52	0.61	0.68	0.58	0.57	0.63	0.69	0.55	0.44	0.52	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029
pH	SU	6.78	6.55	6.6	Lab Error	6.83	6.4	6.69	6.68	6.71	6.59	6.71	6.94	6.89	6.55	6.52	6.64	6.57	6.82
Sulfate	mg/L	83	90	101	96	85	82	81	91	85	90 S	81.6	820	910	850	850	440	540	520
Total Dissolved Solids	mg/L	428	344	322	340 H	314	336	326	322	348	320	352	2000	2300	2300	2300	2200	2200	2100
Antimony	mg/L	<0.0010	<0.0010	<0.0010	<0.0010 B	<0.0010	<0.0010	<0.001	<0.0010	<0.0010	<0.0010	0.0008 J	0.00043 J	<0.0002	<0.0026	0.00057 J	0.00095 J	<0.0026	<0.0002
Arsenic	mg/L	<0.0010	0.0005 J	<0.0010	<0.0010	0.0004 J	0.0004 J	<0.0010	<0.0010	0.0004 J	<0.0010	0.0005 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Barium	mg/L	0.054	0.0506	0.0491	0.0434	0.0508	0.0441	0.0426	0.0433	0.0560	0.0499	0.0495	0.045	0.04	0.041	0.032	0.033	0.029	0.028
Beryllium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0006 J	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0002	<0.0002	<0.00055	<0.0002	<0.0002	<0.00055	<0.0002
Cadmium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0001	0.006	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
Chromium	mg/L	0.0009 J	0.0007 J	<0.0015	<0.0015	0.0016	<0.0015	0.0008 J	<0.0015	0.0019	<0.0015	0.0012 J	<0.0001	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031
Cobalt	mg/L	0.0005 J	0.0003 J	0.0002 J	0.0002 J	0.003 J	0.0008 J	<0.0010	0.0002 J	0.0002 J	<0.0010	0.0004 J	0.0017 J	0.00079 J	<0.0018	0.00081 J	0.00057 J	<0.00018	0.00074 J
Lead	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0017	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0008	<0.0013	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
Lithium	mg/L	0.0162	0.0166	0.0141	0.0166	0.0191	0.0241	0.0185	0.0141	0.0265	0.0203	0.0200	0.024 J	0.028 J	<0.0042	0.032 J	0.029 J	<0.1	0.024 J
Mercury	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00007 J	<0.00020	<0.00020	<0.00020	<0.00020		<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Molybdenum	mg/L	0.0014 J	0.0021	0.0012 J	0.002	0.0019	0.0016	0.0052	0.0010 J	0.0016	0.0013 J	0.0015 J	0.0028 J	0.0016 J	<0.000095	0.00077 J	0.0018 J	<0.00095	0.0019 J
Radium 226	pCi/L	0.215	<0.0495	<0.0129	<0.0672	0.180 J	0.444	<-0.04	<0.06	<0.04	<0.06	<0.04	0.603	0.341	0.37	0.313	<0.139	0.16	0.38
Radium 228	pCi/L	1.18	2.63	0.315 J	<-0.0292	0.968	1.09 J	0.12	3.21	0.69 J	<0.53	0.72 J	<0.0552	0.55	<0.609	0.496	<0.0387	<0.27	1.04
Radium, 226/228 Combined	pCi/L	1.4	2.68	<0.328	<0.0672	1.15	1.53	0.12	3.27	<0.73	<0.59	<0.76	0.603	0.891	0.37	0.809	<0.139	0.16	1.42
Selenium	mg/L	0.0007 J	0.0007 J	0.0006 J	<0.0010	0.0009 J	0.0011	0.0012	<0.0010	0.0006 J	0.0007 J	<0.0010	0.0012 J	0.0014 J	<0.0028	0.005 J	0.0025 J	<0.0028	0.0011 J
Thallium	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0012 J	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0007	<0.004	<0.0081	<0.01	<0.010	<0.010	<0.010
Turbidity	NTU	16	15	3.5	Lab Error	<1.0	1.8	11	6.6	4.8	6.4	60							

Notes:
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< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
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mg/L = milligrams per liter
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NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
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Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
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Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1	EP-1
Sample Date		8/31/2017	3/22/2018	8/27/2018	1/11/2019	6/27/2019	1/30/2020	6/22/2020	1/21/2021	5/31/2021	8/30/2021	12/21/2021	3/7/2022	5/24/2022	9/6/2022	12/20/2022	3/15/2023	5/24/2023	6/6/2023	9/18/2023
Sample Purpose		Background	Detection Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																			
Boron	mg/L	0.17	0.38	0.92	0.75	1.12	1.1	0.92	1	0.816	0.931	1.07	0.914	0.991	1.16	1.06	0.968 O	0.986	0.945	1.29
Calcium	mg/L	240	330	410	410	444	540	470	460	478	483	506	474	508	476	523	523 O	505	499	548
Chloride	mg/L	48	60	63	70	55	52	34	39	44	48	46	44	38	35	38	32 O	30	30	28
Fluoride	mg/L	<0.029	<0.25	<0.06	<0.06	<0.06	<0.06	<0.5	<0.2	0.22	0.19	0.24	0.19	0.18	0.21	0.24	0.2 O	0.22	0.21	0.29
pH	SU	6.79	6.25	6.36	6.33	6.2	7.39	6.15	6.29	6.18	6.12	6.37	6.19	6.2	6.21	Lab Error	6.31 O	6.19	6.31	6.47
Sulfate	mg/L	440	510	1000	1600	1500	1700	1400	1400	1450	1640	1480	1600	1470	1570	1580	1490 O	1520	1430	1430
Total Dissolved Solids	mg/L	2100	2400	2700	2800	550	2700	2700	2500	2500	2520	2510	2650	2530	2600	2460 H	2350 O	2010	2370	2460
Antimony	mg/L	<0.0026		<0.0016		<0.0016		<0.0026		<0.0010	0.0005 J	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	<0.0010 O	<0.0010	<0.0010	<0.0010
Arsenic	mg/L	<0.0014		<0.002		<0.002		<0.0014		<0.0010	0.0005 J	<0.0200	0.0004 J	<0.0010	0.0004 J	<0.0010	0.0008 JO	0.0007 J	0.0009 J	0.006 J
Barium	mg/L	0.026		0.023		<0.00011		0.019		0.0216	0.02	0.0193	0.0171	0.017	0.017	0.0158	0.0197 O	0.0163	0.0154	0.0196
Beryllium	mg/L	<0.00055		<0.00015	<0.00055	<0.00015		<0.00055		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	0.0006 J	<0.0010 O	<0.0010	<0.0010	<0.0010
Cadmium	mg/L	<0.0015		<0.0015		<0.000018		<0.00002		<0.0010	<0.0010	<0.0200	0.0002 J	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010	<0.0015
Chromium	mg/L	<0.0031		<0.0031	<0.0026	<0.00014		<0.0011		<0.0020	0.0019	<0.0300	<0.0015	<0.0015	<0.0015	0.0026	<0.0015 O	<0.0015	<0.0015	<0.0015
Cobalt	mg/L	<0.00018		<0.00063	0.00056 J	<0.00063		<0.00018		0.0012	0.0010 J	<0.0200	<0.0010	0.0002 J	<0.0010	0.0004 J	0.0002 JO	0.0003 J	<0.0010	0.003 J
Lead	mg/L	<0.0026		<0.0026	<0.0042	<0.00016		<0.0033		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010	<0.0010
Lithium	mg/L	<0.0042		<0.0042		<0.04		<0.0042		0.0141	0.0127	<0.0600	0.012	0.0103	0.012	0.0139	0.0133 O	0.0111	0.0136	0.0099
Mercury	mg/L	<0.0002		<0.000093		<0.0001		<0.00019		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 O	<0.00020	<0.00020	0.00007 J
Molybdenum	mg/L	<0.00095		<0.00014		<0.00028		<0.000095		<0.0015	<0.0015	<0.0300	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015 O	<0.0015	<0.0015	<0.0015
Radium 226	pCi/L	0.24		0.453		0.619		0.42			<0.04	0.501	0.260 J	<0.0628	0.265 J	0.144 J	0.227 J		<0.0926	0.13
Radium 228	pCi/L	1.15		0.992		0.0905		0.405			1.78	<0.255	0.439 J	0.888	<-0.449	0.326 J	0.726		<-0.248	1.28
Radium, 226/228 Combined	pCi/L	1.39		1.445		0.71		0.825			<1.82	0.756 J	0.699	0.95	<0.265	0.470	0.953		<0.0926	1.41
Selenium	mg/L	<0.0028		<0.00033	<0.0028	<0.00033		<0.0028		0.0015	0.0014	<0.0200	0.0017	0.0026	0.0015	0.0021	0.0051 O	0.0073	0.0082	0.0025
Thallium	mg/L	<0.010		<0.0081	<0.01	<0.00015		<0.004		<0.0020	0.0042	<0.0400	<0.0200	<0.0020	<0.0020	<0.0020	<0.0020 O	<0.0020	<0.0020	<0.0020
Turbidity	NTU									49.8	22.65	13	5	<1.0	<1.0	Lab Error	<1.0 O	1.6	<1.0	6.1

Notes:
J = Indicates the result is estimated
< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-1	EP-1	EP-1	EP-1	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2
Sample Date		12/11/2023	3/13/2024	6/3/2024	9/4/2024	3/23/2017	4/3/2017	5/25/2017	6/22/2017	6/29/2017	7/24/2017	8/1/2017	8/31/2017	3/22/2018	8/27/2018	1/11/2019	6/27/2019	1/30/2020	6/22/2020
Sample Purpose		Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Background	Background	Background	Background	Background	Background	Background	Background	Detection Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring
ANALYTE	Unit																		
Boron	mg/L	1.17	1.05	1.19	1.50	0.22	0.19	0.2	0.23	0.29	0.26	0.31	0.23	0.24	0.2	0.37	0.274	0.56	0.47
Calcium	mg/L	477	548	554	579	190	170	200	200	470	200	190	180	230	190	280	236	430	360
Chloride	mg/L	33	40	49	49.0	42	39	36	37	36	36	36	36	30	35	25	29	13	19
Fluoride	mg/L	0.27	0.23	0.20	0.10 J	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.25	<0.06	<0.06	<0.06	<0.06	<0.5
pH	SU	6.08	6.32	6.17	6.21	6.18	6.39	6.31	6.1	5.75	5.86	5.88	6.33	6.27	6.28	6.62	6.18	6.46	5.81
Sulfate	mg/L	1430	1530	1540	1590	860	660	780	780	470	430	770	340	420	740	1100	1100	1100	1200
Total Dissolved Solids	mg/L	2510	2540	2480	2580	1800	1800	1900	1800	1900	1800	1800	1800	1700	1800	1900	400	1900	2200
Antimony	mg/L	0.0005 J	<0.0010	<0.0010	0.0005 J	0.00029 J	<0.0002	<0.0026	0.0004 J	0.00073 J	<0.0026	<0.0002	<0.0026		<0.0016		<0.0016		<0.00052
Arsenic	mg/L	0.0006 J	0.0007 J	<0.0010	0.0004 J	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014		<0.002		<0.002		<0.00027
Barium	mg/L	0.0194	0.0146	0.0169	0.0228	0.039	0.035	0.038	0.03	0.029	0.025	0.025	0.025		0.018		<0.00011		0.019
Beryllium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0002	<0.0002	<0.00055	<0.0002	<0.0002	<0.00055	<0.0002	<0.00055		<0.00015	<0.00055	<0.0016		<0.00011
Cadmium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0001	<0.00075	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015		<0.0015		<0.000018		<0.00002
Chromium	mg/L	0.0015 J	<0.0015	<0.0015	0.0010 J	<0.0001	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031			<0.0026	<0.00014		<0.0011
Cobalt	mg/L	0.0005 J	0.0002 J	<0.0010	0.0004 J	0.052	0.029	0.023	0.016	0.0087	<0.00018	0.00086 J	<0.00018		<0.00063	0.0007 J	<0.00063		<0.000037
Lead	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0008	<0.0013	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026		<0.0026	<0.0042	<0.00016		<0.0033
Lithium	mg/L	0.0143	0.0142	0.0090	0.0145	0.018 J	0.015 J	<0.0042	0.020 J	0.025 J	<0.1	0.021 J	<0.0042		<0.0042		<0.04		<0.0042
Mercury	mg/L	<0.00020	<0.00020	<0.00020	<0.00020		<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.0002		<0.000093		<0.0001		<0.00019
Molybdenum	mg/L	0.0008 J	<0.0015	<0.0015	<0.0015	0.0015 J	0.0017 J	<0.000095	0.0003 J	0.00055 J	<0.00095	0.00082 J	<0.00095		<0.00014		<0.00028		<0.000019
Radium 226	pCi/L	<0.04	<0.01	<0.17	<-0.04	<0.187	0.338	<0.177	0.197	1.9	0.08	0.14	0.08		0		<0.149		0.0467
Radium 228	pCi/L	1.9	1.43	0.75 J	<0.45	0.853	<0.0622	<0.126	<0.127	<0.458	0.4	1.35	0.64		0.443		0.553		0.176
Radium, 226/228 Combined	pCi/L	<1.94	<1.44	<0.92	<0.45	0.853	0.338	<0.177	0.197	1.9	0.48	1.49	0.72		0.443		0.553		0.222
Selenium	mg/L	0.0024	0.0047	0.0033	0.0007 J	0.0038 J	0.0027 J	<0.0028	0.0074	0.0061	0.0054	0.0046 J	<0.0028		<0.00033	0.0055	<0.00033		0.0031
Thallium	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0007	<0.004	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081		<0.0081	<0.01	<0.00015		<0.004
Turbidity	NTU	4.6	9.2	5.4	5.7														

Notes:
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< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-2	EP-3	EP-3	EP-3
Sample Date		1/21/2021	5/31/2021	8/30/2021	12/22/2021	3/7/2022	5/24/2022	9/7/2022	12/20/2022	3/21/2023	5/24/2023	6/6/2023	9/20/2023	12/12/2023	3/13/2024	6/4/2024	9/4/2024	3/23/2017	4/3/2017	5/25/2017
Sample Purpose		Assessment Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Background	Background	Background
ANALYTE	Unit																			
Boron	mg/L	0.49 J	0.544	0.499	0.33	0.508	0.48	0.408	0.276	0.359 O	0.418	0.372		0.274	0.418	0.754	0.403	0.11	0.089	0.081
Calcium	mg/L	340	372	363	299	406	347	349	306	328 O	318	340		293	473	381	514	34	29	45
Chloride	mg/L	28	29	34	43	30	33	44	52	29 O	31	35		62	64	40	67.6	100	120	140
Fluoride	mg/L	0.28	0.62	0.4	0.36	0.69	0.92	0.47	0.39	1.47 O	1.7	1.57		0.33	0.94	1.19	0.20 J	<0.029	<0.029	<0.029
pH	SU	6.37	5.74	5.91	6.32	5.86	5.97	6.19	Lab Error	5.96 O	5.48	6.3		6.23	6.06	5.71	6.20	5.99	5.96	6.03
Sulfate	mg/L	1300	1370	1590	1250	1630	1700	1760	1350	1750 O	1690	1700		1260	2050	1540	2420	120	180	190
Total Dissolved Solids	mg/L	2300	2120	2370	2090	2480	2460	2580	2220 H	2480 O	2380	2570		2270	3250	2260	3890	680	820	1400
Antimony	mg/L		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	<0.0050 O	<0.0040	<0.0040		<0.0010	<0.0010	0.0005 J	<0.0010	0.00022 J	<0.0002	<0.0026
Arsenic	mg/L		<0.0010	0.0005 J	<0.0200	<0.0010	0.0013	0.0016	0.0006 J	<0.0010 O	0.0009 J	0.0023		0.0029	0.0007 J	0.0014	0.0033	<0.0014	0.0088	0.0076
Barium	mg/L		0.0146	0.0198	0.0168	0.0151	0.0208	0.0205	0.017	0.022 O	0.0185	0.0189		0.0213	0.0154	0.0189	0.0255	0.072	0.059	0.059
Beryllium	mg/L		0.0011	0.0003 J	<0.0200	0.0019	0.0056	<0.0010	<0.0010	0.0056 O	0.0082	0.0092		<0.0010	0.0021	0.0049	<0.0010	<0.0002	<0.0002	<0.00055
Cadmium	mg/L		0.0015	0.0016	<0.0200	0.0014	0.0003 J	0.0003 J	0.0002 J	0.0009 JO	0.0002 J	<0.0010		0.0009 J	0.0014	0.0003 J	<0.0010	<0.0001	<0.00075	<0.0015
Chromium	mg/L		<0.0015	<0.0015	<0.0300	<0.0015	<0.0015	<0.0015	<0.0015	0.0018 O	0.0009 J	<0.0015		0.0009 J	0.0017	0.0025	0.0201	<0.0001	<0.0016	<0.0031
Cobalt	mg/L		0.0017	0.0052	<0.0200	0.0159	0.211	0.0325	0.0218	0.115 O	0.273	0.301		0.0467	0.0530	0.162	0.0477	0.11	0.12	0.091
Lead	mg/L		<0.0010	0.0007 J	<0.0200	<0.0010	<0.0020	<0.0010	<0.0010	<0.0050 O	<0.0040	<0.0040		<0.0010	<0.0010	<0.0010	<0.0010	<0.0008	0.0056	<0.0026
Lithium	mg/L		0.0206	0.0148	<0.0600	0.0196	0.0381	0.0123	0.0129	0.0446 O	0.0518	0.0725		0.0153	0.0291	0.0311	0.0197	<0.003	0.0095 J	<0.0042
Mercury	mg/L		<0.00020	<0.00020	0.00006 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 O	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020		<0.00019	<0.00019
Molybdenum	mg/L		<0.0015	<0.0015	<0.0300	<0.0015	<0.0015	0.0009 J	0.0011 J	<0.0015 O	<0.0015	<0.0015		0.0017	<0.0015	0.0009 J	0.0007 J	0.00037 J	0.00045 J	<0.000095
Radium 226	pCi/L			<0.02	0.228 J	<0.0315	<0.0325	0.365	<0.0328	<-0.0164		0.182 J		<0.23	<0.21	<0.25	<0.37	1.64	0.715	1
Radium 228	pCi/L			2.51	<0.145	<0.426 J	0.933	0.899	<0.0435	2.0		<0.162		1.85	0.84 J	0.96 J	1.44	<0.438	1.92	<0.633
Radium, 226/228 Combined	pCi/L			2.53	0.374 J	<0.458 J	0.965	1.26	<0.0763	2.0		<0.343		2.08	<1.05	<1.21	<1.81	1.64	2.635	1
Selenium	mg/L		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	0.0008 J	<0.0010 O	<0.0010	<0.0010		<0.0010	0.0028	<0.0010	<0.0010	0.013	0.011	0.016
Thallium	mg/L		<0.0020	0.009	<0.0400	<0.0020	<0.0040	<0.0020	<0.0020	<0.0100 O	<0.0080	<0.0080		<0.0020	<0.0020	<0.0020	<0.0020	<0.0007	<0.004	<0.0081
Turbidity	NTU		7.34	9.98	1.5	4.9	4.3	<1.0	Lab Error	4.48 O	<1.0	8.2		5.0	3.0	3.2	4.8			

Notes:
J = Indicates the result is estimated
< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3
Sample Date		6/22/2017	6/29/2017	7/24/2017	8/1/2017	8/31/2017	3/22/2018	8/27/2018	1/11/2019	6/27/2019	1/30/2020	6/22/2020	1/21/2021	5/31/2021	8/30/2021	12/22/2021	3/8/2022	5/25/2022	9/7/2022	12/20/2022
Sample Purpose		Background	Background	Background	Background	Background	Detection Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																			
Boron	mg/L	0.057	0.085	0.083	0.09	0.09	0.078	0.082	0.033	<0.08	<0.5	0.024	<0.25	0.0556	0.075	0.0501	0.0702	0.067	0.0708	0.063
Calcium	mg/L	93	30	32	34	33	34	38	94	76.3	40	80	66	40.6	35.5	58.9	36.3	40.1	36.2	42.8
Chloride	mg/L	220	66	110	120	110	110	140	240	150	140	330	230	127	129	183	145	157	147	157
Fluoride	mg/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.25	<0.06	<0.06	<3	<0.06	<0.5	0.35	0.22	0.17	0.51	0.2	0.19	0.21	0.23
pH	SU	6.08	6.01	5.96	6.02	6.13	6.1	6.1	6.11	5.98	6.31	6.01	6.24	6.13	6.07	6.41	6.17	6.04	6.05	Lab Error
Sulfate	mg/L	300	73	130	140	110	110	150	340	160	190	410	300	148	114	178	153	160	151	170
Total Dissolved Solids	mg/L	560	570	720	630	1000	700	690	750	580	750	960	1500	692	672	812	762	728	670	650 H
Antimony	mg/L	0.00026 J	0.00091 J	<0.0026	<0.0002	<0.0026		<0.0016		<0.0016		<0.00052		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B
Arsenic	mg/L	0.0061	<0.0014	0.0093	0.0062	0.0069		<0.002		0.0057 J	0.0067	0.0059	<0.05	0.0075	0.0076	<0.0200	0.0068	0.0075	0.007	0.0083
Barium	mg/L	0.061	0.065	0.064	0.057	0.058		0.064		<0.00011		0.041		0.0819	0.101	0.084	0.0851	0.0846	0.0855	0.0836
Beryllium	mg/L	<0.0002	<0.0002	<0.00055	<0.0002	<0.00055		<0.00015	0.00033 J	<0.00015		<0.00011		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	mg/L	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015		<0.0015		<0.000018		<0.00002		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010
Chromium	mg/L	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031		<0.0031	<0.0026	<0.00014		<0.0011		<0.0015	<0.0015	<0.0300	0.0015 J	<0.0015	<0.0015	<0.0015
Cobalt	mg/L	0.037	0.11	0.12	0.1	0.11		0.088	0.044	0.032	0.087	0.047	0.031	0.0912	0.0882	0.0472	0.0947	0.121	0.104	0.0846
Lead	mg/L	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026		<0.0026	<0.0042	<0.00016		<0.0033		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010
Lithium	mg/L	0.12	0.012 J	<0.1	0.028 J	<0.0042		<0.0042		0.119		0.12		0.0314	0.0169	0.0736	0.0267	0.0321	0.027	0.0425
Mercury	mg/L	<0.00019	<0.00019	<0.00019	<0.00019	<0.0002		<0.000093		<0.0001		<0.00019		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum	mg/L	<0.0002	<0.0002	<0.00095	0.00047 J	<0.00095		<0.00014		<0.00028		<0.000019		<0.0015	<0.0015	<0.0300	<0.0015	<0.0015	<0.0015	0.0007 J
Radium 226	pCi/L	0.366	0.317	0.19	0.43	0.41		0.679		0.0839		0.513			<0.27	0.196 J	0.365	0.132 J	0.141 J	0.551
Radium 228	pCi/L	0.42	<0.397	0.77	2.42	0.77		0.717		0.477		0.304			<0.5	0.768	0.765	1.47	<0.0	1.04
Radium, 226/228 Combined	pCi/L	0.786	0.317	0.96	2.88	1.18		1.396		0.561		0.817			<0.77	0.964	1.13	1.6	<0.141	1.59
Selenium	mg/L	0.028	0.013	0.016	0.012	0.022		<0.00033	<0.0028	<0.00033		<0.00056		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010
Thallium	mg/L	<0.0081	<0.0081	<0.0081	<0.0081	<0.0081		<0.0081	<0.01	<0.00015		<0.004		<0.0020	0.0019 J	<0.0400	<0.0020	<0.0020	<0.0020	<0.0020
Turbidity	NTU													9.96	6.84	4.2	4.9	1.7	0.42	Lab Error

Notes:
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R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-3	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4
Sample Date		3/21/2023	5/24/2023	6/6/2023	9/20/2023	12/12/2023	3/14/2024	6/4/2024	9/5/2024	3/23/2017	4/3/2017	5/25/2017	6/22/2017	6/29/2017	7/24/2017	8/1/2017	8/31/2017	3/22/2018	8/27/2018
Sample Purpose		Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Background	Background	Background	Background	Background	Background	Background	Background	Detection Monitoring	Assessment Monitoring
ANALYTE	Unit																		
Boron	mg/L	0.0615 O	0.069	0.0586	0.0611	0.0724	0.0676	0.0437	0.0587	14	23	14	11	13	11	14	11	13	11
Calcium	mg/L	35.7 O	39.1	36.1	52.6	43.4	35.4 S	67.6	42.5 S	190	170	170	150	190	160	150	150	200	150
Chloride	mg/L	127 O	152	141	144	148	136	231	151	460	290	380	430	250	180	210	210	200	310
Fluoride	mg/L	0.16 O	0.19	0.19	0.25	0.22	0.19	0.35	0.10 J	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.25	<0.5
pH	SU	6.33 O	6.11	6.05	6.26	6.08	6.18	6.17	6.04	5.51	5.88	5.77	5.8	5.81	5.8	5.8	5.85	6.04	5.85
Sulfate	mg/L	83 O	141	129	158	128	105	280	123	620	530	660	730	410	290	330	340	320	520
Total Dissolved Solids	mg/L	535 O	735	735	770	685	650	1170	815	2300	2300	2400	2000	2100	2300	2200	2300	2100	1900
Antimony	mg/L	0.0019 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0015	0.00028 J	<0.0002	<0.0026	0.00033 J	0.00051 J	<0.0026	<0.0002	<0.0026		<0.0016
Arsenic	mg/L	0.0173 O	0.0063	0.009	0.0073	0.0116	0.0085	0.0071	0.0079	0.035	0.039	0.037	0.053	0.044	0.044	0.035	0.049		<0.002
Barium	mg/L	0.168 O	0.0949	0.0973	0.0772	0.0825	0.0970	0.0603	0.0873	0.035	0.026	0.028	0.029	0.037	0.026	0.031	0.023		0.023
Beryllium	mg/L	<0.0010 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0002	<0.0002	<0.00055	<0.0002	<0.0002	<0.00055	<0.0002	<0.00055		
Cadmium	mg/L	0.0004 JO	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0001	0.0052	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015		<0.0015
Chromium	mg/L	0.0067 O	<0.0015	0.0011 J	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0001	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031		0.011
Cobalt	mg/L	0.0795 O	0.0939	0.124	0.0841	0.120	0.0888	0.0835	0.0802	0.39	0.41	0.41	0.44	0.34	0.41	0.42	0.38		0.31
Lead	mg/L	0.0028 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.009	0.013	0.011	0.017	<0.0026	0.011	0.012	0.012		0.015
Lithium	mg/L	0.0053 O	0.0317	0.0311	0.0694	0.0555	0.0196	0.107	0.0382	0.0044 J	0.0062 J	<0.0042	0.0047 J	0.0063 J	<0.1	0.0053 J	<0.0042		<0.0042
Mercury	mg/L	0.00018 JO	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.0002		<0.000093
Molybdenum	mg/L	0.0014 JO	<0.0015	<0.0015	<0.0015	0.0008 J	<0.0015	0.0008 J	0.0013 J	0.00092 J	0.0011 J	<0.000095	<0.0002	0.00058 J	<0.00095	0.0010 J	<0.00095		<0.00014
Radium 226	pCi/L	0.606		0.302	<0.12	<0.12	<0.4	<0.22	<0.1	1.1	1.17	<0.0457	0.18	<0.219	0.3	0.15	0.33		0.262
Radium 228	pCi/L	1.25		0.704 J	0.76 J	1.71	<0.27	0.72 J	1.38	<0.442	<0.353	0.864	0.897	<0.490	0.44	0.96	2.14		0.79
Radium, 226/228 Combined	pCi/L	1.86		1.01 J	0.76 J	<1.83	<0.67	<0.94	<1.48	1.1	1.17	0.864	1.077	<0.490	0.74	1.11	2.47		1.052
Selenium	mg/L	<0.0010 O	<0.0010	0.0008 J	0.0007 J	0.0008 J	0.0009 J	<0.0010	0.0007 J	0.13	0.12	0.13	0.2	0.13	0.13	0.11	0.16		0.021
Thallium	mg/L	<0.0020 O	<0.0020	0.0018 J	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0007	0.065	0.092	0.094	0.058	<0.0081	0.075	0.075		0.14
Turbidity	NTU	114.1 O	<1.0	1.9	8.9	5.6	3.1	4.6	3.5										

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R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
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NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4	EP-4
Sample Date		1/11/2019	6/27/2019	1/30/2020	6/22/2020	1/21/2021	5/31/2021	8/30/2021	12/22/2021	3/8/2022	5/25/2022	9/7/2022	12/20/2022	3/21/2023	5/24/2023	6/7/2023	9/21/2023	12/12/2023	3/14/2024	6/4/2024
Sample Purpose		Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Assessment Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																			
Boron	mg/L	15	11.5	11	9.9	10	11.9	11.8	11.6	11.1	11.8	11.8	10.7	9.68 O	10.6	11.6	10.5	11.2	9.42	10.2
Calcium	mg/L	140	159	170	150	140	179	162	161	171	188	147	165	171 O	184	182	147	157	176	208
Chloride	mg/L	420	440	370	380	390	484	446	477	456	460	478	489	435 O	467	472	448	447	457	459
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.5	<0.2	0.1	0.09 J	0.09 J	0.12	0.12	0.10 J	0.12	0.14 O	0.17	0.15	0.11	0.11	0.16	0.18
pH	SU	6.07	5.86	5.94	5.79	5.91	5.79	5.7	6.05	5.94	5.88	5.7	Lab Error	6.12 O	5.94	5.76	5.93	5.83	6.07	5.99
Sulfate	mg/L	750	710	630	610	580	670	565	567	623	531	673	499	516 O	517	492	525	442	465	517
Total Dissolved Solids	mg/L	2000	130	2000	2500	1900	1860 R	1750	1450	1740	1730	1640	1640 H	1520 O	1840	1690	1700	1510	1600	1750
Antimony	mg/L		<0.0016		<0.00052		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	<0.0010 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic	mg/L		0.026 J	0.019	0.014	<0.05	0.0075	0.0073	<0.0200	0.0053	0.0071	0.0068	0.0068	0.103 O	0.0134	0.0126	0.0089	0.0083	0.0135	0.0412
Barium	mg/L		<0.00011		0.027		0.0248	0.027	0.0255	0.0313	0.0329	0.0236	0.0295	0.046 O	0.0395	0.0348	0.0239	0.0335	0.0355	0.0451
Beryllium	mg/L	<0.00055	<0.00015		<0.00055		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	0.0047	0.0003 JO	<0.0010	0.0006 J	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	mg/L		<0.000018		<0.00002		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chromium	mg/L	<0.0026	<0.00014		<0.0011		<0.0015	<0.0015	<0.0300	0.002	<0.0015	<0.0015	0.0014 J	0.0026 O	<0.0015	<0.0015	<0.0015	0.0383	0.0019	0.0046
Cobalt	mg/L	0.41	0.28	0.26	0.33	0.32	0.287	0.326	0.298	0.200	0.205	0.471	0.258	0.134 O	0.137	0.217	0.267	0.345	0.126	0.0833
Lead	mg/L	<0.0042	<0.00016		0.018	<0.025	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	0.0019 O	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Lithium	mg/L		<0.04		<0.0042		<0.0015	0.0023 J	<0.0600	0.0025 J	0.0025 J	0.0021 J	0.0032	0.0034 O	0.0034	0.0032	0.0026 J	0.0031	0.0025 J	0.0033
Mercury	mg/L		<0.0001		<0.00019		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00017 JO	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum	mg/L		<0.00028		<0.000019		<0.0015	<0.0015	<0.030	<0.0015	<0.0015	<0.0015	<0.0015	0.0014 JO	<0.0015	<0.0015	<0.0015	0.0007 J	0.0010 J	0.0006 J
Radium 226	pCi/L		0.77		0.163			<0.11	0.170 J	0.234	0.144 J	0.276	0.828	0.264 J		<0.048	<0.19	<0.31	<0.19	<0.12
Radium 228	pCi/L		0.929		0.41			<0.14	1.21	0.658	1.25	1.22	0.328 J	1.14		0.564 J	<0.57	1.44	0.95 J	0.81 J
Radium, 226/228 Combined	pCi/L		1.7		0.573			<0.25	1.38	0.893	1.39	1.49	1.16	1.4		0.612 J	<0.76	<1.75	<1.14	<0.93
Selenium	mg/L	<0.0028	<0.00033		0.0012		<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	0.0006 J	<0.0010	<0.0010 O	<0.0010	0.0006 J	<0.0010	0.0007 J	0.0007 J	<0.0010
Thallium	mg/L	0.18	<0.00015		<0.004		<0.0020	0.0012 J	<0.0400	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020 O	<0.0020	0.0015 J	<0.0020	<0.0020	<0.0020	<0.0020
Turbidity	NTU						19.22	9.75	10	5	1.5	<1.0	Lab Error	239.84 O	5.6	3.7	7.5	8.7	15	4.8

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Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
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Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

	Well ID	EP-4	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-5	EP-6	EP-6	EP-6	EP-6
	Sample Date	9/5/2024	12/21/2021	3/7/2022	5/24/2022	9/6/2022	12/20/2022	3/15/2023	5/24/2023	6/7/2023	9/20/2023	12/11/2023	3/13/2024	6/3/2024	9/4/2024	12/22/2021	3/8/2022	5/24/2022	9/6/2022
	Sample Purpose	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																		
Boron	mg/L	10.8	0.0855	0.038	0.0254	0.0222	0.0258	0.0205 O	0.012 J	0.014 J		0.014 J	<0.0200	0.013 J	0.012 J	0.0252	<0.0200	<0.0200	<0.0200
Calcium	mg/L	153	25.4	22.5	21	16.7	17.5	18.8 O	16.6	16.3		13.5	14.6	17.8 S	15.9	4.24	1.92	1.65	1.86
Chloride	mg/L	490	4	3	3	3 J	3 J	3 JO	3 J	3 J		3 J	3 J	3 J	2.6 J	25	23	24	23
Fluoride	mg/L	<0.50	0.48	0.4	0.38	0.38	0.51	0.4 O	0.44	0.41		0.45	0.54	0.35	0.29 J	0.06 J	0.06 J	0.06 J	0.07 J
pH	SU	5.80	7.07	6.73	6.55	6.44	Lab Error	6.95 O	6.46	6.48		6.66	6.67	6.48	6.49	5.28	5.1	5.07	5.09
Sulfate	mg/L	484	119	141	132	114	116	125 O	113	128		104	105	125	99.3	48	67	63	64
Total Dissolved Solids	mg/L	1810	294	326	322	282	282 H	262 O	296	286		264	268	252	274	192	254	238	216
Antimony	mg/L	0.0007 J	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	<0.0010 O	<0.0010	<0.0010		0.0006 J	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010
Arsenic	mg/L	0.0122	<0.0200	0.0004 J	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010
Barium	mg/L	0.0305	0.0478	0.0513	0.0529	0.0506	0.0422	0.0533 O	0.0514	0.0482		0.0434	0.0405	0.0551	0.0527	0.043	0.0345	0.034	0.0366
Beryllium	mg/L	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	0.0004 J	<0.0200	<0.0010	<0.0010	<0.0010
Cadmium	mg/L	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010
Chromium	mg/L	0.0008 J	<0.0300	0.0008 J	<0.0015	<0.0015	0.0014 J	0.0008 JO	0.002	<0.0015		0.0040	0.0013 J	0.0011 J	0.0015 J	<0.0300	0.0013 J	0.0008 J	<0.0015
Cobalt	mg/L	0.217	<0.0200	0.0005 J	<0.0010	<0.0010	0.0002 J	<0.0010 O	0.0002 J	<0.0010		0.0008 J	<0.0010	<0.0010	0.0003 J	0.0040 J	0.0017	0.0007 J	0.0018
Lead	mg/L	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010 O	<0.0010	<0.0010		0.0006 J	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010
Lithium	mg/L	0.0026 J	<0.0600	0.0027 J	0.0023 J	0.0023 J	0.0026 J	0.0029 JO	0.0027 J	0.0026 J		0.0029 J	0.0025 J	0.0031	0.0045	<0.0600	0.0113	0.011	0.0094
Mercury	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020 O	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	0.00010 J	<0.00020	<0.00020	<0.00020
Molybdenum	mg/L	0.0008 J	<0.0300	0.003	0.0027	0.0017	0.0028	0.0017 O	0.0013 J	0.0013 J		0.0022	0.0011 J	0.0009 J	0.0011 J	<0.0300	<0.0015	<0.0015	<0.0015
Radium 226	pCi/L	<0.14	0.564	0.157 J	0.232 J	0.214 J	0.458	0.153 J		0.443		<0.48	<0.16	<0.12	<0.09	<0.0641	0.123 J	0.112 J	0.0891 J
Radium 228	pCi/L	<0.4	<-0.125	0.474 J	<0.287	<-0.235	<-0.281	0.58		<0.154		1.88	0.82 J	<-1.46	<0.62	0.297 J	1.01	<0.183	0.702
Radium, 226/228 Combined	pCi/L	<0.54	0.564 J	0.63	0.519 J	<0.214	0.458 J	0.733		0.597		2.36	<0.98	<0.12	<0.71	0.362 J	1.13	<0.295	0.791
Selenium	mg/L	0.0007 J	<0.0200	0.0017	0.0015	0.0012	0.0007 J	0.0007 JO	<0.0010	0.0007 J		0.0008 J	<0.0010	0.0007 J	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010
Thallium	mg/L	<0.0020	<0.0400	0.0031	<0.0020	<0.0020	<0.0020	<0.0020 O	<0.0020	<0.0020		<0.0020	<0.0020	<0.0020	<0.0020	<0.0400	<0.0200	<0.0020	<0.0020
Turbidity	NTU	3.7	4.9	0.6	<1.0	<1.0	Lab Error	<1.0 O	<1.0	<1.0		5.0	4.3	4.7	2.4	7.5	4.0	3.3	<1.0

Notes:
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< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-6	EP-6	EP-6	EP-6	EP-6	EP-6	EP-6	EP-6	EP-7	EP-7	EP-7	EP-7	EP-7	EP-7	EP-7	EP-7	EP-7	EP-7
Sample Date		12/20/2022	3/15/2023	6/6/2023	9/19/2023	12/11/2023	3/14/2024	6/4/2024	9/4/2024	12/22/2021	3/8/2022	5/25/2022	9/7/2022	12/20/2022	3/21/2023	5/24/2023	6/6/2023	9/19/2023	12/12/2023
Sample Purpose		Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring-Resample	Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit																		
Boron	mg/L	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.984	0.91	0.682	0.667	0.311	1.15 O	0.639	0.679	0.534	0.412
Calcium	mg/L	1.69	1.62	1.49	1.26	1.43	1.54	1.48	2.47	178	170	128	93.5	40.2	245 O	114	126	75.4	44.4
Chloride	mg/L	23	20	22	20	21	19	20	19.7	186	239	254	249	223	176 O	240	252	231	240
Fluoride	mg/L	0.06 J	0.06 J	0.07 J	0.06 J	0.07 J	0.06 J	0.06 J	<0.50	0.33	0.3	0.22	0.2	0.11	0.36 O	0.23	0.24	0.18	0.12
pH	SU	Lab Error	5.15	5.07	5.04	4.80	5.00	4.93	4.96	6.16	5.97	5.74	5.66	Lab Error	6.22 O	5.82	5.82	5.81	5.50
Sulfate	mg/L	56	66	65	53	56	74	78	66.3	549	556	400	326	165	820 O	363	396	250	161
Total Dissolved Solids	mg/L	206 H	222	250	212	222	250	276 H	244	1270	1450	1210	800	762 H	1720 O	1100	1160	1010	820
Antimony	mg/L	<0.0010 B	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	0.0006 JO	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0005 J	<0.0200	0.0173	0.0139	0.0086	0.0081	0.114 O	0.0088	0.0126	0.0069	0.0113
Barium	mg/L	0.0475	0.0422	0.035	0.0307	0.0340	0.0376	0.0368	0.0390	0.0344	0.0271	0.0325	0.036	0.037	0.194 O	0.0354	0.0331	0.0372	0.0422
Beryllium	mg/L	<0.0010	<0.0010	0.0003 J	0.0003 J	<0.0010	<0.0010	<0.0010	0.0003 J	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010	0.0014 O	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	<0.0010	<0.0010 B	0.0007 JO	<0.0010	<0.0010	<0.0010	<0.0010
Chromium	mg/L	0.0009 J	0.0008 J	0.0016	0.0015	0.0027	0.0017	0.0016	0.0348	<0.0300	<0.0015	0.0017	<0.0015	0.0008 J	0.0298 O	0.0021	0.0019	<0.0015	0.0034
Cobalt	mg/L	0.0068	0.0036	0.0031	0.008 J	0.0020	0.0023	0.0013	0.0016	0.110	0.139	0.161	0.19	0.179	0.12 O	0.158	0.203	0.163	0.235
Lead	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	0.0008 J	<0.0010	<0.0010	0.0321 O	<0.0010	0.0008 J	<0.0010	<0.0010
Lithium	mg/L	0.0066	0.0107	0.0182	0.0139	0.0101	0.0112	0.0104	0.0171	<0.0600	<0.00300	0.0019 J	<0.0030	<0.0030	0.0136 O	<0.0030	0.0015 J	<0.0030	<0.0030
Mercury	mg/L	0.00013 J	0.00009 J	<0.00020	0.00008 J	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00019 JO	<0.00020	<0.00020	<0.00020 S	<0.00020
Molybdenum	mg/L	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0300	0.0012 J	0.0007 J	<0.0015	<0.0015	0.0154 O	0.0007 J	0.0015	<0.0015	0.0013 J
Radium 226	pCi/L	<0.137	.124 J	0.174 J	<0.07	<0.01	<0.1	<0.04	<0.07	0.103 J	0.0766 J	0.242 J	0.0538 J	0.168	0.391		<0.0636	<0.25	<0.2
Radium 228	pCi/L	<0	<-0.413	0.419 J	<0.17	<0.49	1.03	<0.19	<0.51	0.0686 J	0.954	1.23	0.731	0.507	1.61		1.06	1.34	4.1
Radium, 226/228 Combined	pCi/L	<0.137	<0.124	0.593 J	<0.24	<0.5	<1.13	<0.23	<0.58	0.172 J	1.03	1.47	0.785	0.675	2		1.12	1.34	4.3
Selenium	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0200	<0.0010	<0.0010	0.0007 J	<0.0010	<0.0010 O	0.0007 J	0.0006 J	<0.0010	0.0016
Thallium	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0400	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020 O	<0.00020	0.0013 J	<0.0020	0.0030
Turbidity	NTU	Lab Error	<1.0	2.2	9.3	4.5	3.8	3.9	11	4.3	14	1.8	<1.0	Lab Error	499.79 O	6.0	4.3	8.2	5.6

Notes:
J = Indicates the result is estimated
< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Created by: NMD

Checked by: CLS
Reviewed by: MAH

Table 3: Analytical Data
Former Emery Pond
Southern Illinois Power Cooperative Marion Power Plant
Marion, Illinois

Well ID		EP-7	EP-7	EP-7
Sample Date		3/14/2024	6/4/2024	9/5/2024
Sample Purpose		Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Monitoring
ANALYTE	Unit			
Boron	mg/L	0.594	0.785	0.469
Calcium	mg/L	109	142	50.5
Chloride	mg/L	236	242	265
Fluoride	mg/L	0.19	0.25	<0.50
pH	SU	5.92	5.86	5.58
Sulfate	mg/L	326	413	201
Total Dissolved Solids	mg/L	1010	482	935
Antimony	mg/L	<0.0010	<0.0010	<0.0010
Arsenic	mg/L	0.0066	0.0072	0.0065
Barium	mg/L	0.0377	0.0328	0.0384
Beryllium	mg/L	<0.0010	<0.0010	0.0003 J
Cadmium	mg/L	<0.0010	<0.0010	<0.0010
Chromium	mg/L	0.0638	0.0035	0.0241
Cobalt	mg/L	0.156	0.130	0.171
Lead	mg/L	<0.0010	<0.0010	<0.0010
Lithium	mg/L	<0.0030	<0.0030	<0.0030
Mercury	mg/L	<0.00020	<0.00020	<0.00020
Molybdenum	mg/L	0.0014 J	0.0011 J	0.0009 J
Radium 226	pCi/L	<0.56	<0.03	<0.18
Radium 228	pCi/L	0.9 J	1.63	0.97 J
Radium, 226/228 Combined	pCi/L	<1.46	<1.66	<1.15
Selenium	mg/L	<0.0010	0.0006 J	0.0007 J
Thallium	mg/L	<0.0020	<0.0020	<0.0020
Turbidity	NTU	6.5	13	4.9

Notes:
J = Indicates the result is estimated
< = Analyte was not detected above the method detection limit or minimum detectable concentration. For all analytes other than radium, the method detection limit is provided. For radium the result reported by the laboratory is provided.
R = relative percent difference for the laboratory duplicate outside recovery limits
mg/L = milligrams per liter
pCi/L = picoCuries per liter
NTU = Nephelometric Turbidity Unit
H = Indicates holding times exceeded
B = Analyte detected in associated Method Blank
Lab Error = Although field parameters were collected according to the Sampling and Analysis Plan (GMP Addendum #1 (Golder, 2021a), the field parameters for the December 2022 event were not recoverable. Documentation of the error is included in the Case Narrative of the final laboratory report.
S = Indicates spike recovery outside recovery limits
O = Indicates the result was removed from the statistical database as an outlier

Table 4: Groundwater Protection Standard Summary

Analyte	Unit	Background Tolerance Limit[1]	40 CFR Standard[2]	GPS[3]
Antimony	mg/L	ND (0.001)	0.006	0.006
Arsenic	mg/L	ND (0.001)	0.01	0.01
Barium	mg/L	0.28	2	2
Beryllium	mg/L	ND (0.001)	0.004	0.004
Cadmium	mg/L	ND (0.001)	0.005	0.005
Chromium	mg/L	ND (0.0015)	0.1	0.1
Cobalt	mg/L	0.018	0.006	0.018
Fluoride	mg/L	0.64	4	4
Lead	mg/L	ND (0.001)	0.0075	0.0075
Lithium	mg/L	0.082	0.04	0.082
Mercury	mg/L	ND (0.0002)	0.002	0.002
Molybdenum	mg/L	0.007	0.10	0.1
Selenium	mg/L	0.017	0.05	0.05
Thallium	mg/L	ND (0.002)	0.002	0.002
Radium 226 and 228	pCi/L	3.48	5	5

Notes:

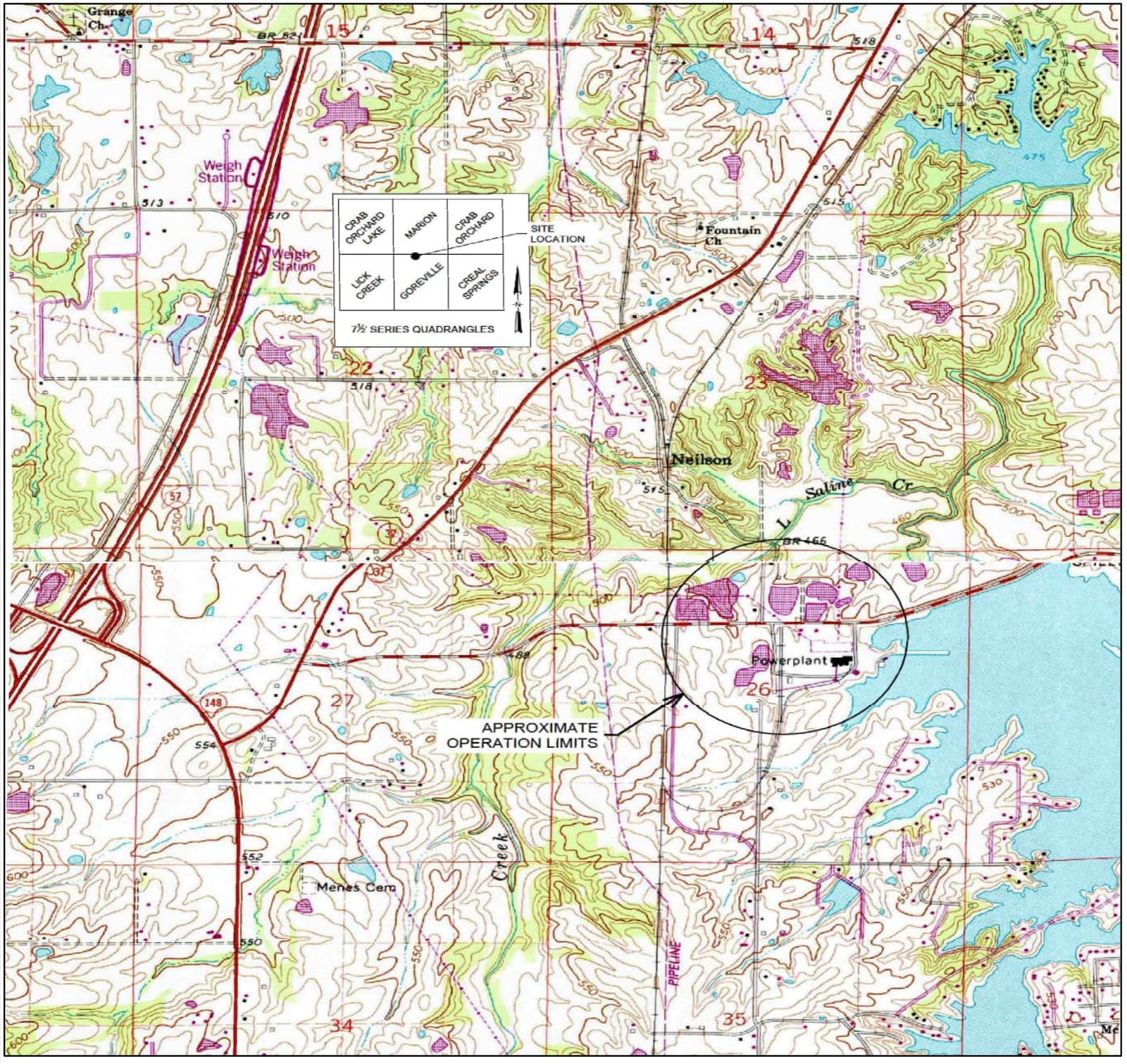
1. The background tolerance limit was calculated using the data collected between March 2017 and January 2021 from background well EBG
2. GPS provided in 40 CFR §257.95(h), 40 CFR §141.62 and 40 CFR §141.66
3. The former Emery Pond GPS is the higher of the background tolerance limit or the GPS provided in 40 CFR §257.95(h)(2), 40 CFR §141.62 and 40 CFR §141.66

Abbreviations:

EPA = Environmental Protection Agency
GPS = Groundwater Protection Standard
mg/L = milligrams per Liter
ND = Non-detect concentration
pCi/L = picoCuries per Liter
pH = potential of Hydrogen

Prepared by: CLS
Checked by: DFSC
Reviewed by: MAH

FIGURES



0 2,000 4,000

1 " = 2,000 Feet Feet

NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: GCS WGS 1984
2. BASEMAP CONSISTS OF USGS 7.5 MINUTE QUADRANGLE MAPS.

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

SITE LOCATION MAP

CONSULTANT

wsp

YYYY-MM-DD	2022-01-12
DESIGNED	DFSC
PREPARED	DTD
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GLA21467997.2353	-	-	1

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

MONITORING WELL LOCATION MAP

CONSULTANT

wsp

YYYY-MM-DD	2022-01-25
DESIGNED	DFSC
PREPARED	DTD
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GLA21467997.2353		-	2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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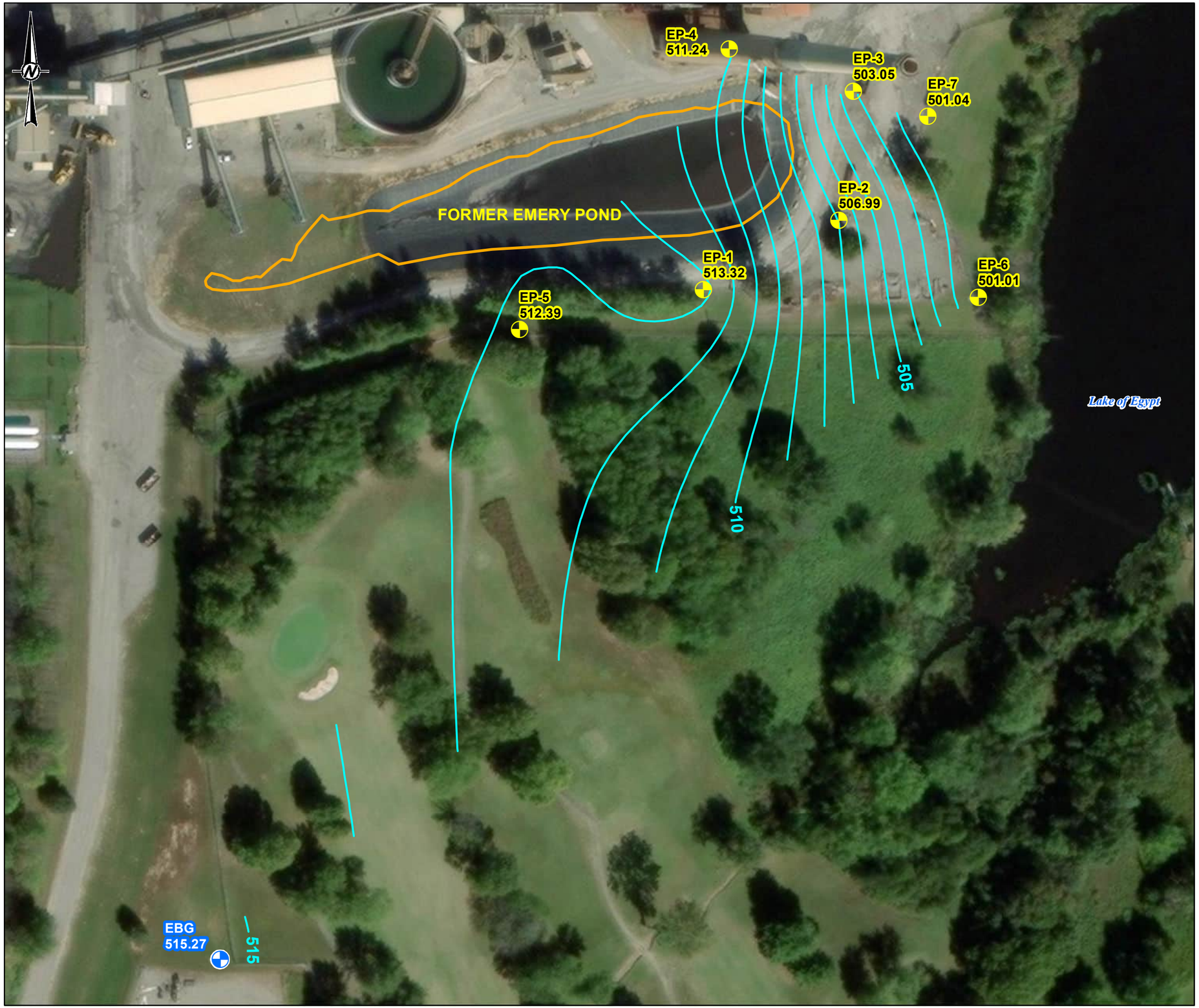

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- January 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON JANUARY 8, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

JANUARY 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO. CONTROL REV. FIGURE
GLA21467997.2353 3

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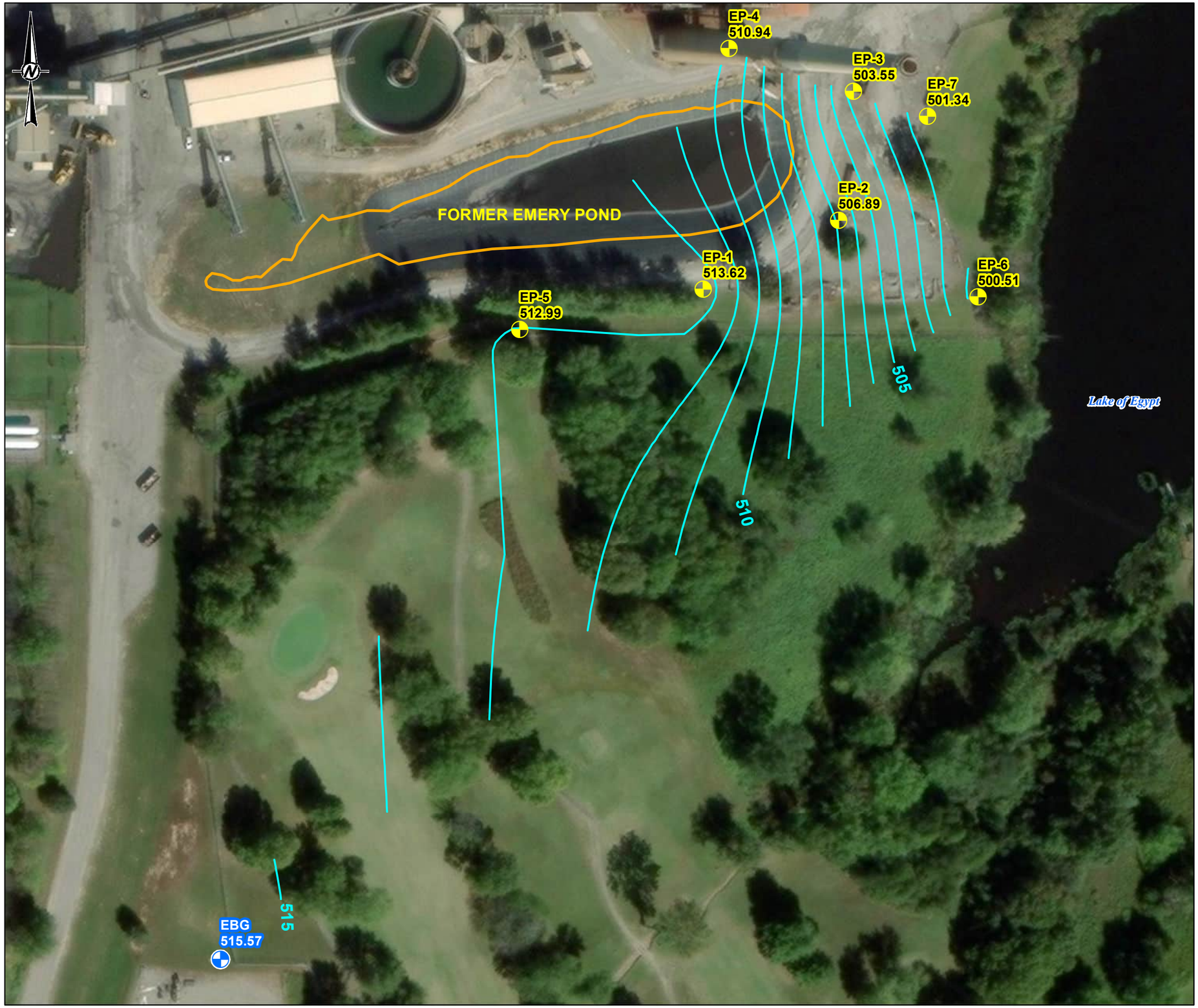
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- February 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON FEBRUARY 19, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

FEBRUARY 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO. CONTROL REV. FIGURE

GLA21467997.2353 4

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- March 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON MARCH 18, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

MARCH 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO. CONTROL REV. FIGURE

GLA21467997.2353 5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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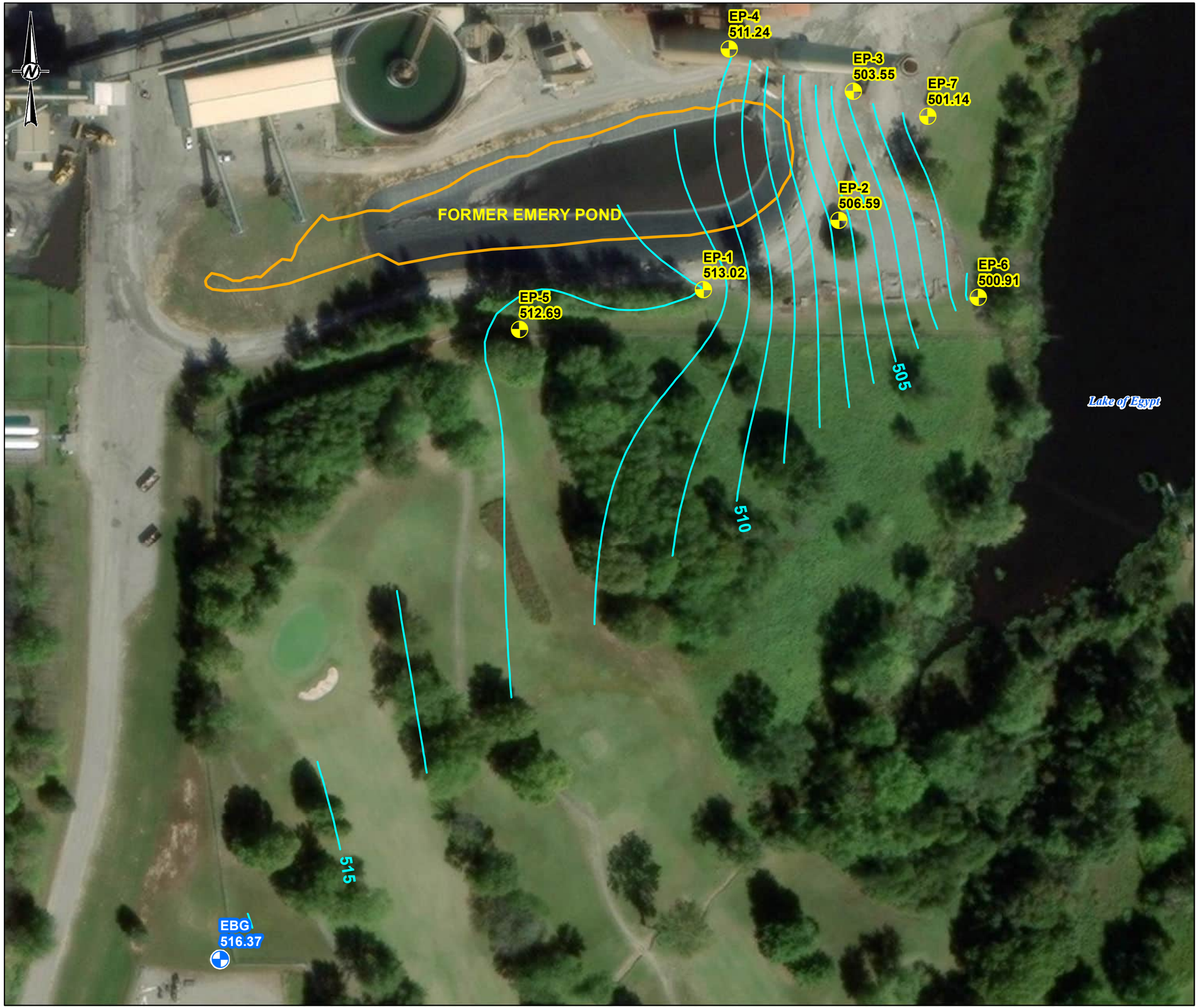

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- April 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON APRIL 19, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

APRIL 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	6

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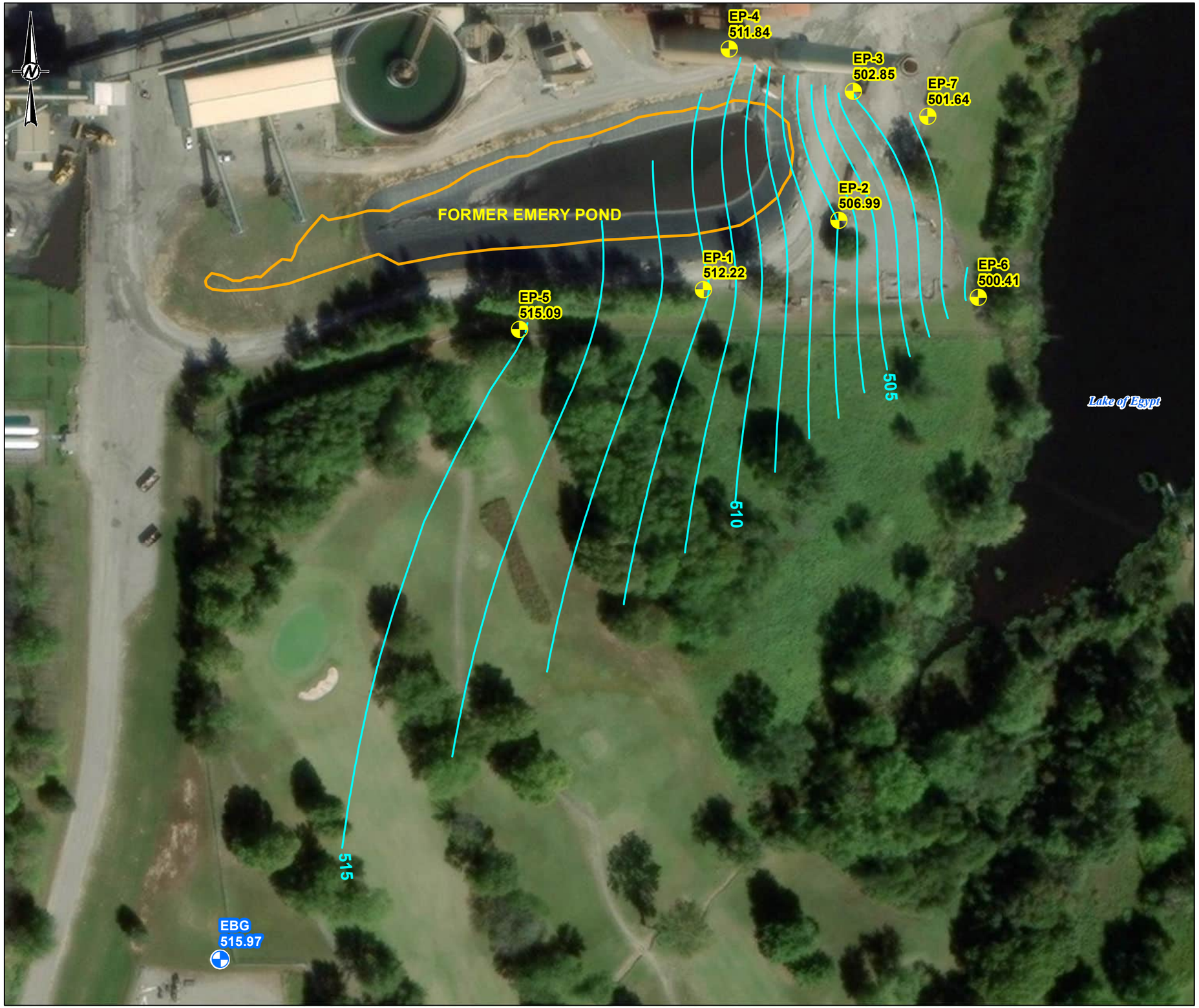
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- May 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON MAY 20, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

MAY 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-25
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	7

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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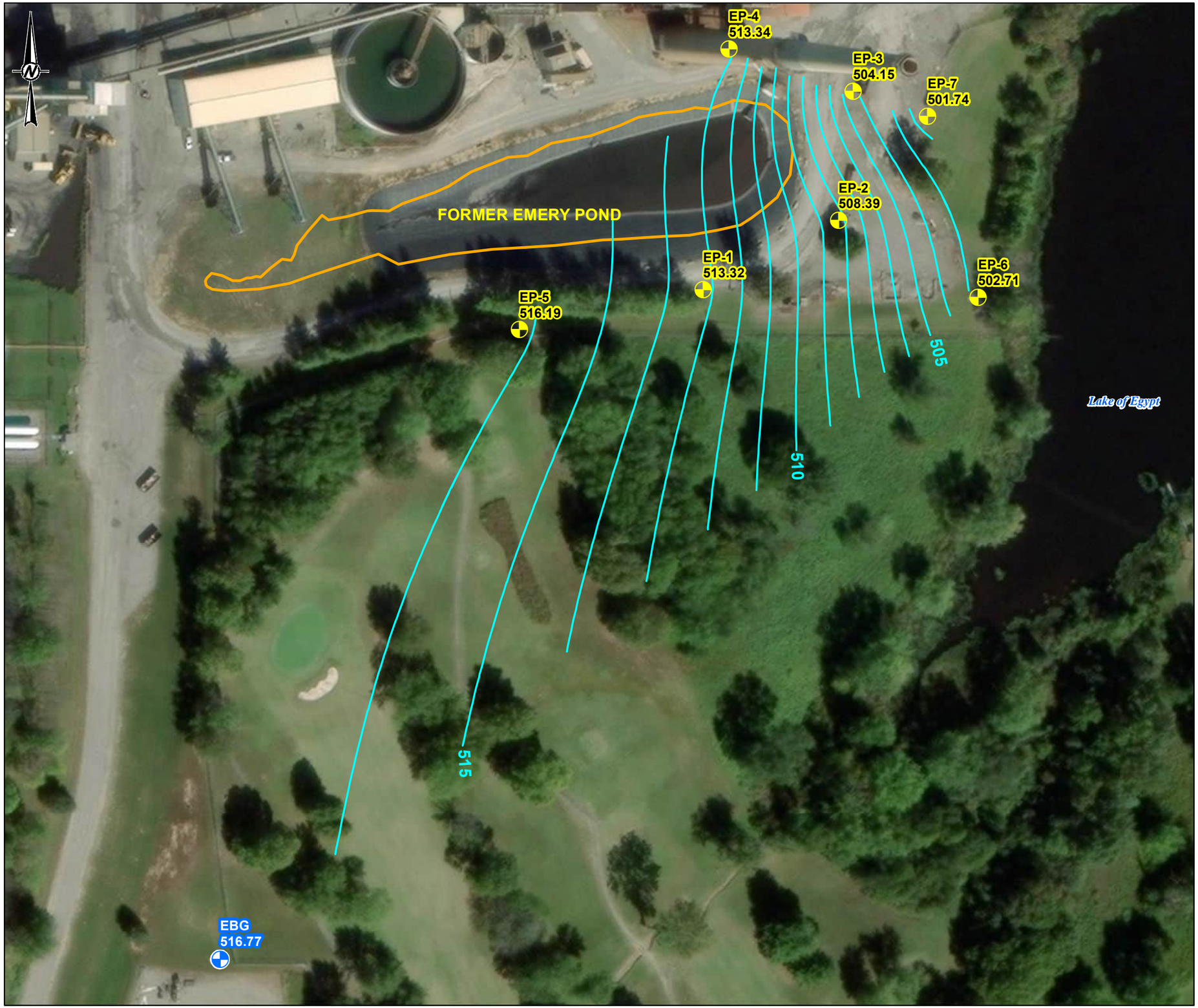


LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- June 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON JUNE 17, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

JUNE 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

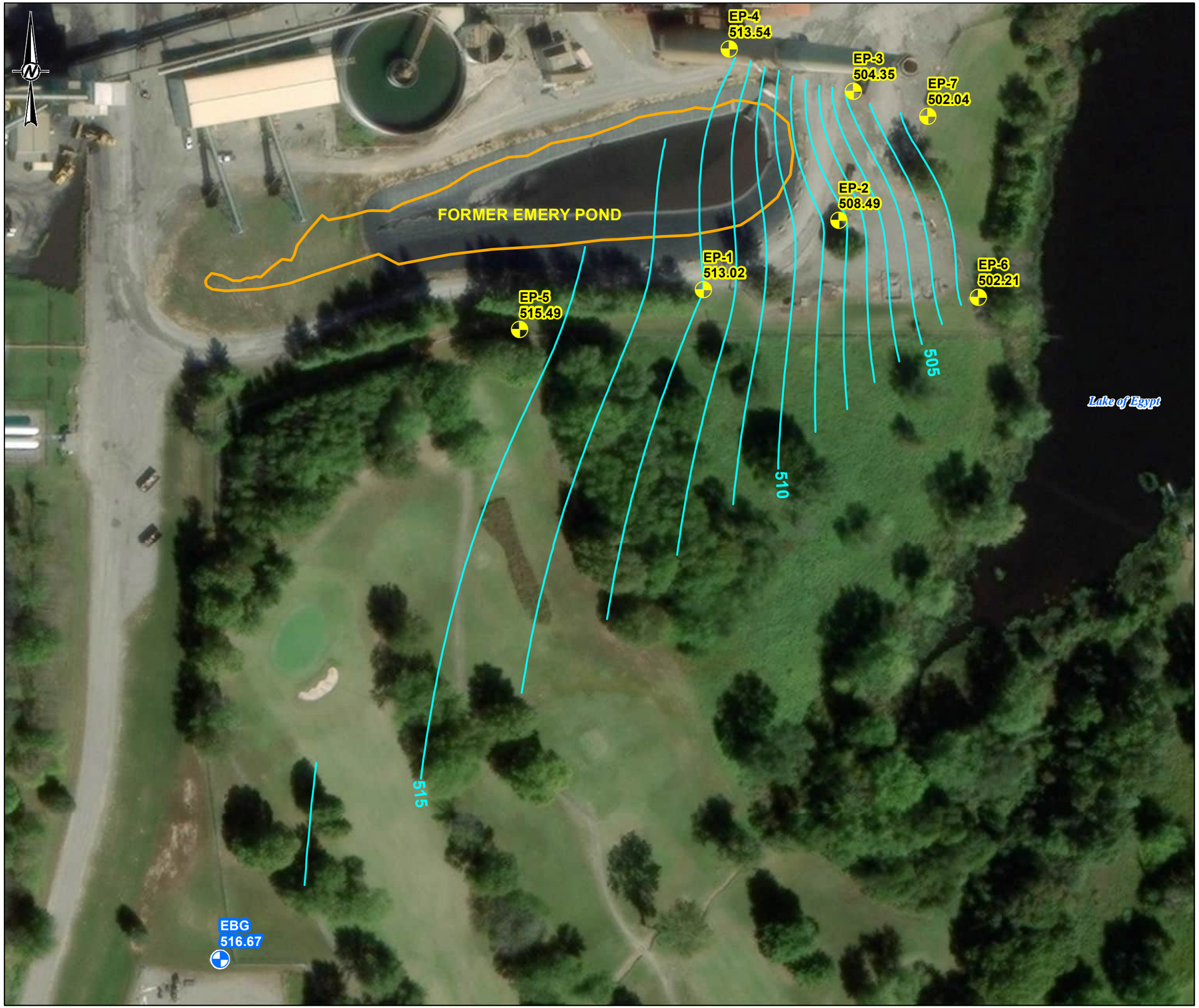
wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	8

B:\Southern_Illinois_Power_Cooperative\Marion_Power_Plant\99_PRO\21467997_Operating_Permit_Application\0006_water_well_contour_20241214\67997-0006-HS-0008.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- July 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON JULY 15, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

JULY 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-25
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	9

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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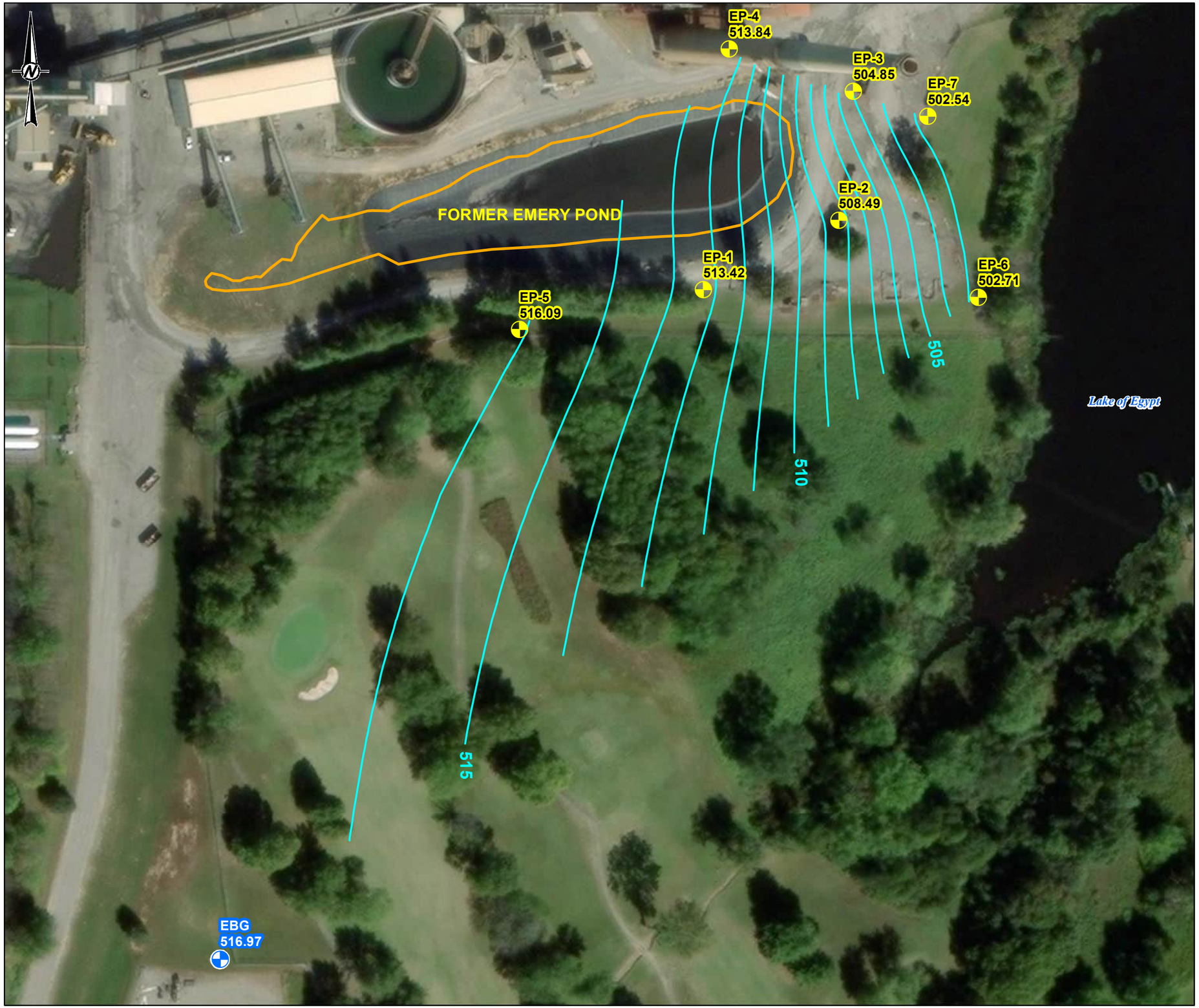

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- August 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON AUGUST 20, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

AUGUST 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	10

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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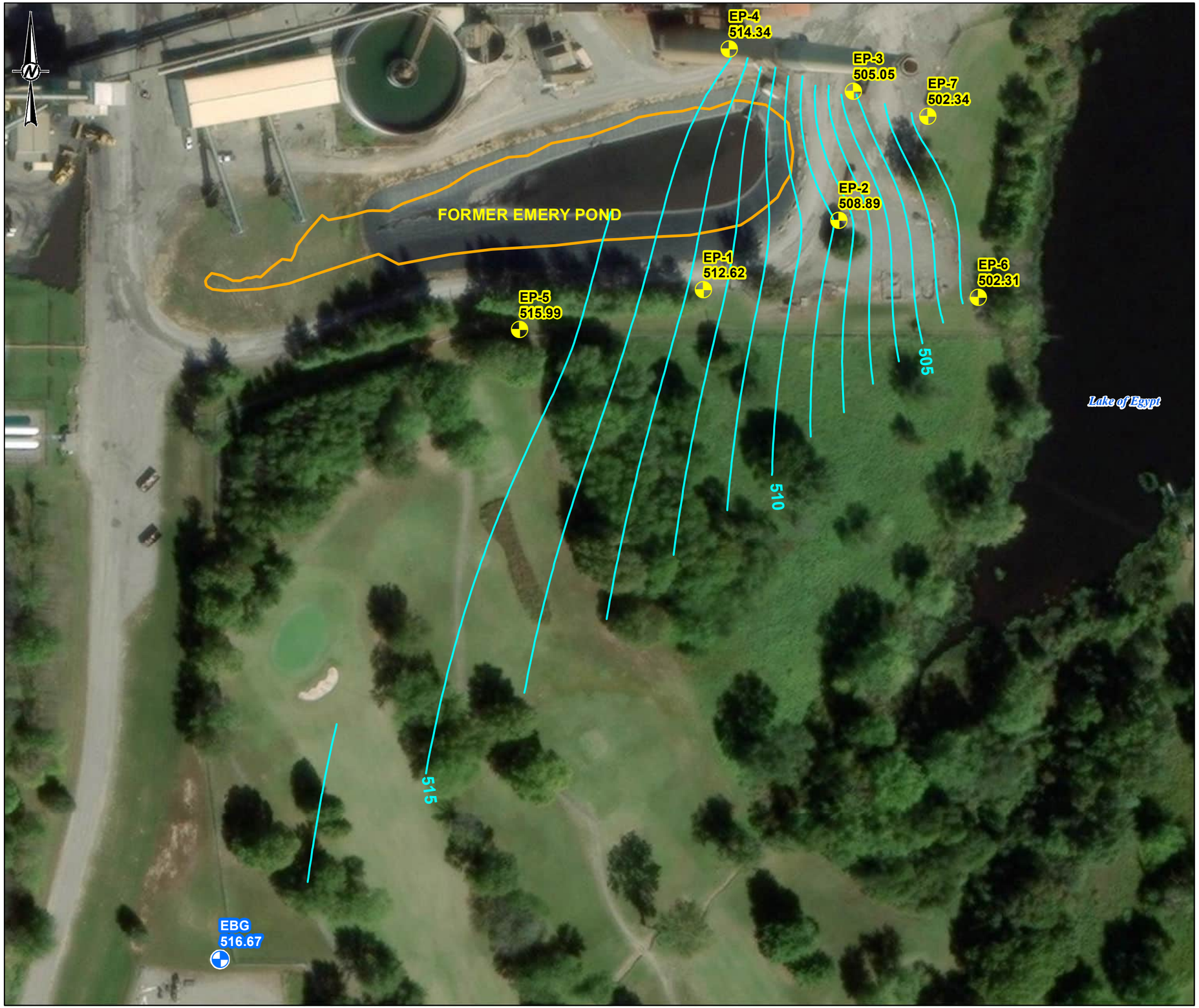

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- September 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON SEPTEMBER 9, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

SEPTEMBER 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-11-25
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	11

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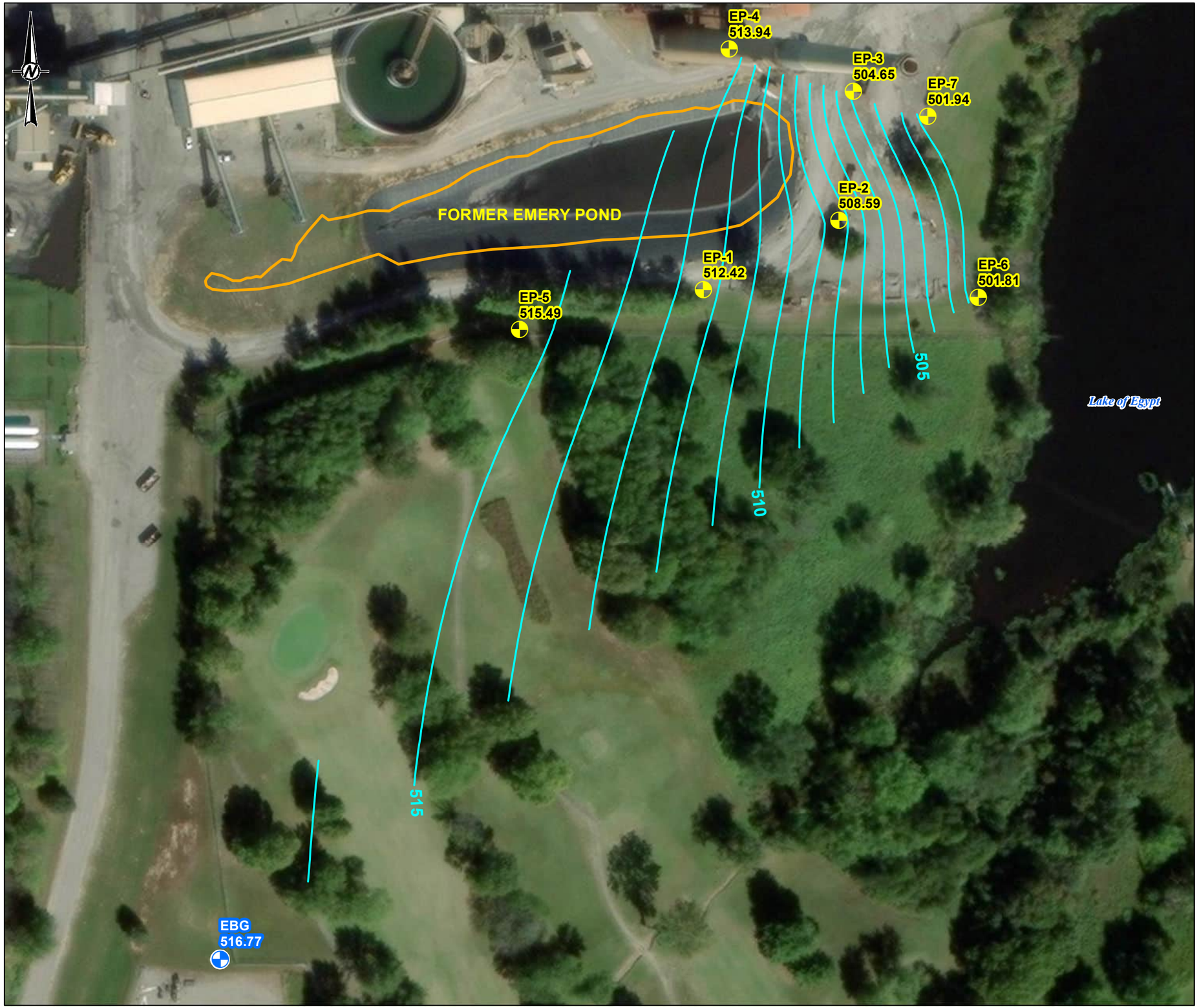

LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- October 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON OCTOBER 14, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
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3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

OCTOBER 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

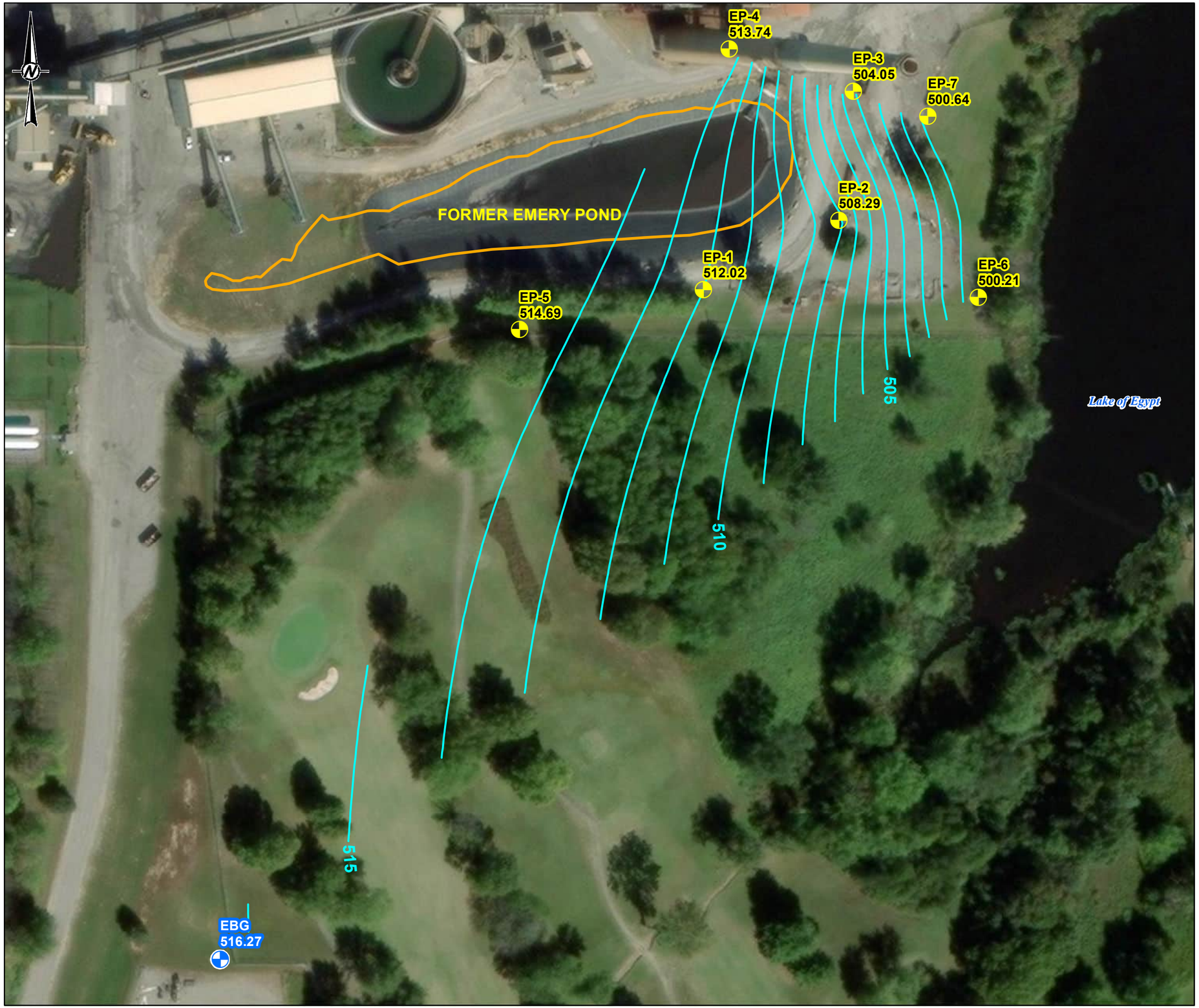
wsp

YYYY-MM-DD	2024-11-25
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	12

B:\Southern_Illinois_Power_Cooperative\Marion_Power_Plant\99_PRO\21467997_Operating_Permit_Application\0006_water_well_contour_20241214\67997-0006-HS-0012.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- November 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON NOVEMBER 13, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

NOVEMBER 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

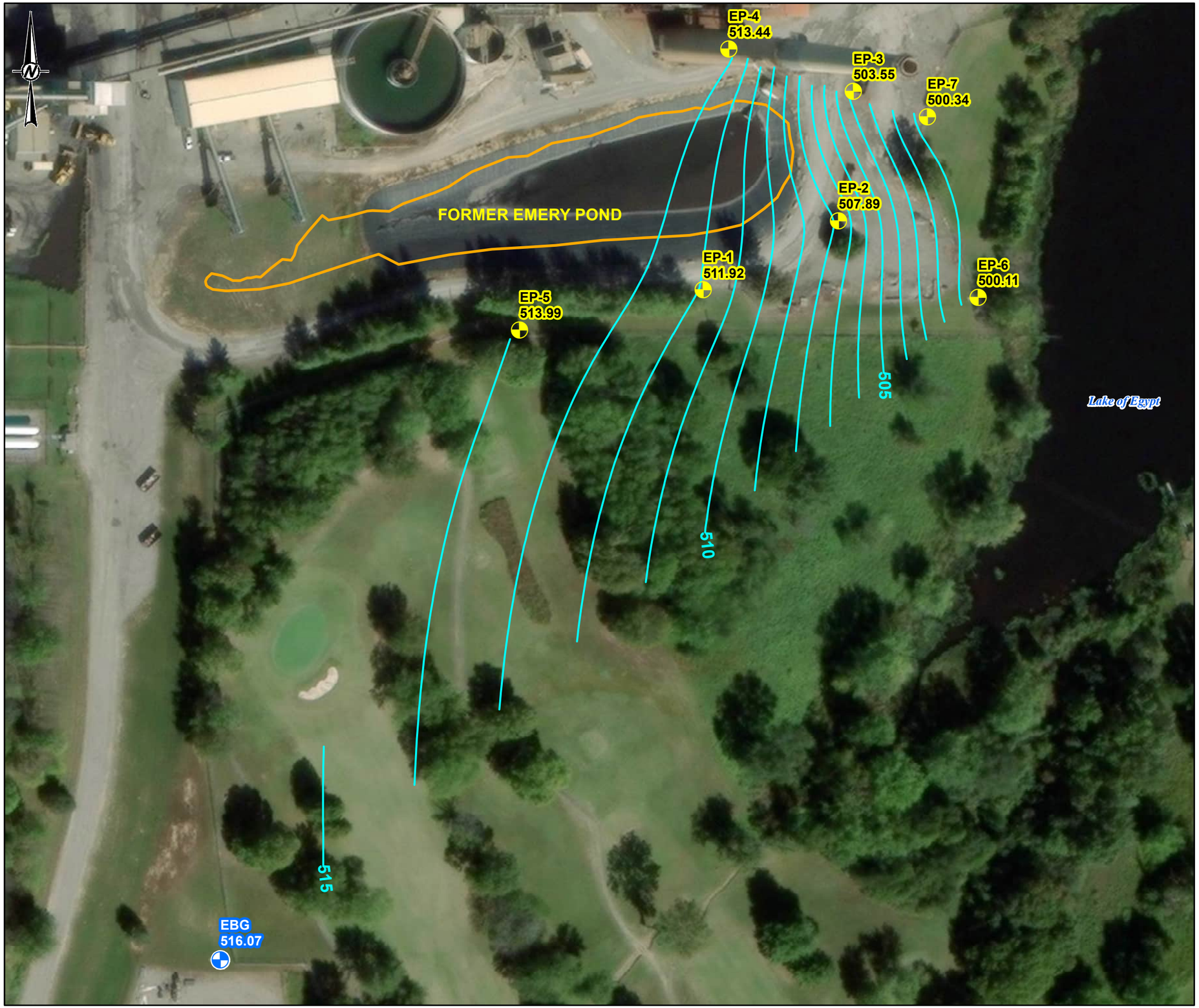
wsp

YYYY-MM-DD	2024-11-27
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	13

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

B:\Southern_Illinois_Power_Cooperative\Marion_Power_Plant\99_PRO\GL21467997_Operating_Permit_Application\0006_water_well_contour_20241214\GL21467997-0006-HS-0013.mxd



LEGEND

- Background Monitoring Well
- Downgradient Monitoring Well
- December 2024 Groundwater Contour
- Approximate Limits of the Former Emery Pond

0 100 200

1 " = 100 Feet Feet

FIGURE NARRATIVE

THIS FIGURE DEPICTS THE GROUNDWATER ELEVATION IN THE UPPER PORTION OF THE SURFICIAL AQUIFER AND IS INTENDED TO REPRESENT THE APPROXIMATE ELEVATION OF THE GROUNDWATER POTENTIOMETRIC SURFACE. THE POSTED DATA WERE CALCULATED FROM DEPTH TO WATER MEASUREMENTS MADE BY SIPC ON DECEMBER 12, 2024. THE DIRECTION OF THE HORIZONTAL GROUNDWATER FLOW AT AND NEAR THE POTENTIOMETRIC SURFACE CAN BE GENERALLY INTERPRETED AS BEING PERPENDICULAR TO THE GROUNDWATER ELEVATION CONTOURS.

NOTE(S)

1. THE COORDINATES FOR THIS SITE ARE ILLINOIS STATE PLANE WEST 1201
2. WELL LOCATIONS AND ELEVATIONS OBTAINED FROM WELL CONSTRUCTION BORING LOGS PROVIDED BY SOUTHERN ILLINOIS POWER COMPANY.
3. GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL.

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. MONITORING WELL LOCATION DATA RECEIVED FROM SOUTHERN ILLINOIS POWER COOPERATIVE

CLIENT

SOUTHERN ILLINOIS POWER COOPERATIVE

PROJECT

ANNUAL GROUNDWATER AND CORRECTIVE ACTION REPORT
FORMER EMERY POND

TITLE

DECEMBER 2024, GROUNDWATER SURFACE ELEVATION CONTOUR MAP

CONSULTANT

wsp

YYYY-MM-DD	2024-12-16
DESIGNED	DFSC
PREPARED	EMM
REVIEWED	DFSC
APPROVED	MAH

PROJECT NO.	CONTROL	REV.	FIGURE
GL21467997.002	-	-	14

B:\Southern_Illinois_Power_Cooperative\Marion_Power_Plant\99_PRO\21467997_Operating_Permit_Application\0006_water_well_contour_20241214\67997-0006-HS-0014.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 1in

APPENDIX A

Boring Logs

KEY TO SYMBOLS

Hanson Professional Services Inc.
1525 S. Sixth Street
Springfield, Illinois 62703
(217) 788-2450

LITHOLOGIC SYMBOLS
(Unified Soil Classification System)

ASPHALT	ASHPALT	
BASALT	BASALT	
BLDRCBBL	BOULDERS AND COBBLES	
BRECCIA	BRECCIA	
CH	HIGH PLASTICITY CLAY	
CL	LOW PLASTICITY CLAY	
COAL	COAL	
CONC.	CONCRETE	
FILL	FILL	
GC	CLAYEY GRAVEL	
GM	SILTY GRAVEL	
GPS	SANDY GRAVEL	
GP	POORLY GRADED GRAVEL	
GW	WELL GRADED GRAVEL	
LIMESTONE		
MH	ELASTIC SILT	
ML	SILT	
OH	HIGH PLASTICITY ORGANIC SILT	
OL	LOW PLASTICITY SILT	
PT	PEAT	
SANDSTONE		
SC	CLAYEY SAND	
SHALE		
SILTSTONE		
SM	SILTY SAND	
SP	POORLY GRADED SAND	
SW	WELL GRADED SAND	
TILL	GLACIAL TILL	
TOPSOIL		

SAMPLER SYMBOLS

- GRAB / AUGER CUTTINGS HAND AUGER [AUG or HA]
- SPLIT SPOON / SPT [SS]
- SHELBY TUBE [SH]
- ROCK CORE [RC]
- CONTINUOUS OR MACROSAMPLER [CS or DP]
- BLIND DRILL [BD]
- MODOFIED CALIFORNIA SAMPLER [MC]

WELL SYMBOLS

- CONCRETE SURFACE SEAL
- HIGH-SOLIDS BENTONITE GROUT
- BENTONITE CHIP SEAL
- SAND PACK W/SOLID RISER
- SAND PACK W/SCREEN

ABBREVIATIONS

LL	-	Liquid Limit (%)
PL	-	Plastic Limit (%)
woh	-	Weight of Hammer
wor	-	Weight of Rods
MaxGS	-	Maximum Grain Size
<#200	-	Percent Passing No. 200 Sieve
NP	-	Non-Plastic
Qu	-	Unconfined Compressive Strength (tsf)
Qp (P)	-	Pocket Penetrometer
TV	-	Torvane
PID	-	Photoionization Detector
ppm	-	Parts per Million

GROUNDWATER LEVELS

- Level during drilling, or as indicated
- Level after 24 hours, or as indicated
- Level as indicated

Client: Southern Illinois Power Cooperative
Project Name: SIPC Marion CCR
Project Location: SIPC Marion
Project Number: 60535846

Log of EBG

Sheet 1 of 1

Date(s) Drilled and Installed	**2/8/2017**	Logged By	**Suzanne Dale**	Reviewed By	
Drilling Method	**Hollow Stem Auger**	Drilling Contractor	**Holcomb Engineering**	Total Depth of Borehole	**25.0 feet, bgs**
Sampling Method	**Split Spoon**	Water Level TOIC	**Not measured**	TOC Elevation Ground Surface	**524.87 ft, msl** **521.74 ft, msl**
Size and Type of Well Casing	**2-Inch Schedule 40 PVC**	Screen Perforation	**0.010 - inch**	Northing (Plant) Easting (Plant)	**346358.14 ft** **804168.155 ft**
Seal or Backfill	**Bentonite Chips**				

Elevation, feet msl	Depth, feet bgs	SAMPLES: Sample Interval	SAMPLES: % Recovery	USCS Code	USCS Graphic Symbol	MATERIAL DESCRIPTION
520	0		NR	ML		Brownish tan, clayey SILT, stiff, non-plastic, moist (ML)
	5		NR	CL		Brownish tan silty CLAY, very soft, medium to high plasticity, moist (CL)
			NR			becomes low to medium plasticity
	10		NR			with black fines
510			NR			becomes brown/orange/gray, trace black fines, low plasticity
	15		NR			trace rust colored oxidation with red mottling
			NR	SHALE		SHALE, gray
	20		NR			
500			NR			
	25		NR			Boring terminated at 25.0 ft. bgs on 2/7/2017. Monitoring well installed to 25.0 ft. bgs on 2/7/2017. NR = Not Recorded
490	30					
	35					

WELL CONSTRUCTION DETAILS

- Riser with protective casing and locking cap
- Concrete
- Bentonite Chips
- 2.0" diameter, SCH 40 PVC Riser
- 2.0" diameter SCH 40 PVC, 0.010" Slotted Screen
- Filter Sand

SIPC MARION SIPC MARION.GPJ 10/9/17

AECOM

Client: Southern Illinois Power Cooperative
Project Name: SIPC Marion CCR
Project Location: SIPC Marion
Project Number: 60535846

Log of EP-1

Sheet 1 of 1

Date(s) Drilled and Installed	**2/7/2017**	Logged By	**Suzanne Dale**	Reviewed By	
Drilling Method	**Hollow Stem Auger**	Drilling Contractor	**Holcomb Engineering**	Total Depth of Borehole	**31.0 feet, bgs**
Sampling Method	**Split Spoon**	Water Level TOIC	**Not measured**	TOC Elevation Ground Surface	**519.72 ft, msl** **517.07 ft, msl**
Size and Type of Well Casing	**2-Inch Schedule 40 PVC**	Screen Perforation	**0.010 - inch**	Northing (Plant) Easting (Plant)	**347042.306 ft** **804661.174 ft**
Seal or Backfill	**Bentonite Chips**				

Elevation, feet msl	Depth, feet bgs	SAMPLES: Sample Interval	SAMPLES: % Recovery	USCS Code	USCS Graphic Symbol	MATERIAL DESCRIPTION
	0		NR	Topsoil		Black TOPSOIL, moist
			NR	CL		Brownish tan silty CLAY, moist, medium plasticity (CL)
	5		NR			
510			NR			becomes orangish with trace coarse sand and gravel, with rust colored mottles
	10		NR			becomes very stiff
			NR			becomes medium-stiff, low plasticity
	15		NR	ML		Brownish tan to oragne clayey SILT, trace gravel and rust colored mottles, stiff, non-plastic, moist (ML)
500			NR	SP		Red orange SAND with orange-brown silty clay, moist (SP)
	20		NR	SNDSTN		SANDSTONE, with interbedded limestone and shale
			NR			
	25		NR			
490			NR			
	30		NR			
	35					Boring terminated at 31.0 ft. bgs on 2/7/2017. Monitoring well installed to 31.0 ft. bgs on 2/7/2017. NR = Not Recorded

WELL CONSTRUCTION DETAILS

- Riser with protective casing and locking cap
- Concrete
- Bentonite Chips
- Filter Sand
- 2.0" diameter SCH 40 PVC Riser
- 2.0" diameter SCH 40 PVC, 0.010" Slotted Screen

SIPC MARION SIPC MARION.GPJ 10/9/17

AECOM

Client: Southern Illinois Power Cooperative
Project Name: SIPC Marion CCR
Project Location: SIPC Marion
Project Number: 60535846

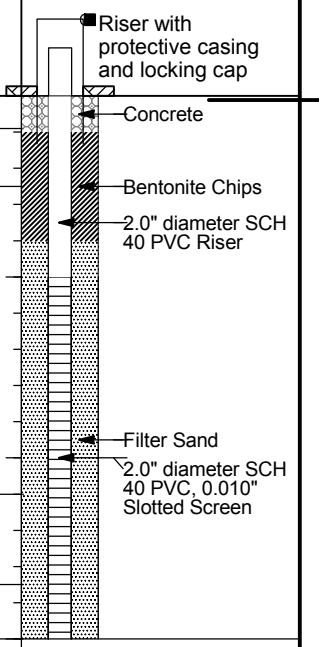
Log of EP-2

Sheet 1 of 1

Date(s) Drilled and Installed	**2/7/2017**	Logged By	**Suzanne Dale**	Reviewed By	
Drilling Method	**Hollow Stem Auger**	Drilling Contractor	**Holcomb Engineering**	Total Depth of Borehole	**15.0 feet, bgs**
Sampling Method	**Split Spoon**	Water Level TOIC	**Not measured**	TOC Elevation Ground Surface	**513.79 ft, msl** **511.15 ft, msl**
Size and Type of Well Casing	**2-Inch Schedule 40 PVC**	Screen Perforation	**0.010 - inch**	Northing (Plant) Easting (Plant)	**347113.029 ft** **804799.408 ft**
Seal or Backfill	**Bentonite Chips**				

Elevation, feet msl	Depth, feet bgs	SAMPLES: Sample Interval	SAMPLES: % Recovery	USCS Code	USCS Graphic Symbol	MATERIAL DESCRIPTION
510	0		NR	Fill		Asphalt and GRAVEL (FILL)
			NR	CL		Brown to tan silty CLAY, medium stiff, moist (CL)
	5		NR	CL		brown to tan silty CLAY, soft to medium, medium to high plasticity, moist (CL) medium plasticity, with rust color oxidation, trace sand and gravel
			NR			
	10		NR			
500			NR	ML		Tan clayey SILT, stiff, low plasticity, moist (ML)
	15		NR	SNDSTN		SANDSTONE
						Boring terminated at 15.0 ft. bgs on 2/7/2017. Monitoring well installed to 15.0 ft. bgs on 2/7/2017. NR = Not Recorded
490	20					
	25					
480	30					
	35					

WELL CONSTRUCTION DETAILS



SIPC MARION SIPC MARION.GPJ 10/9/17

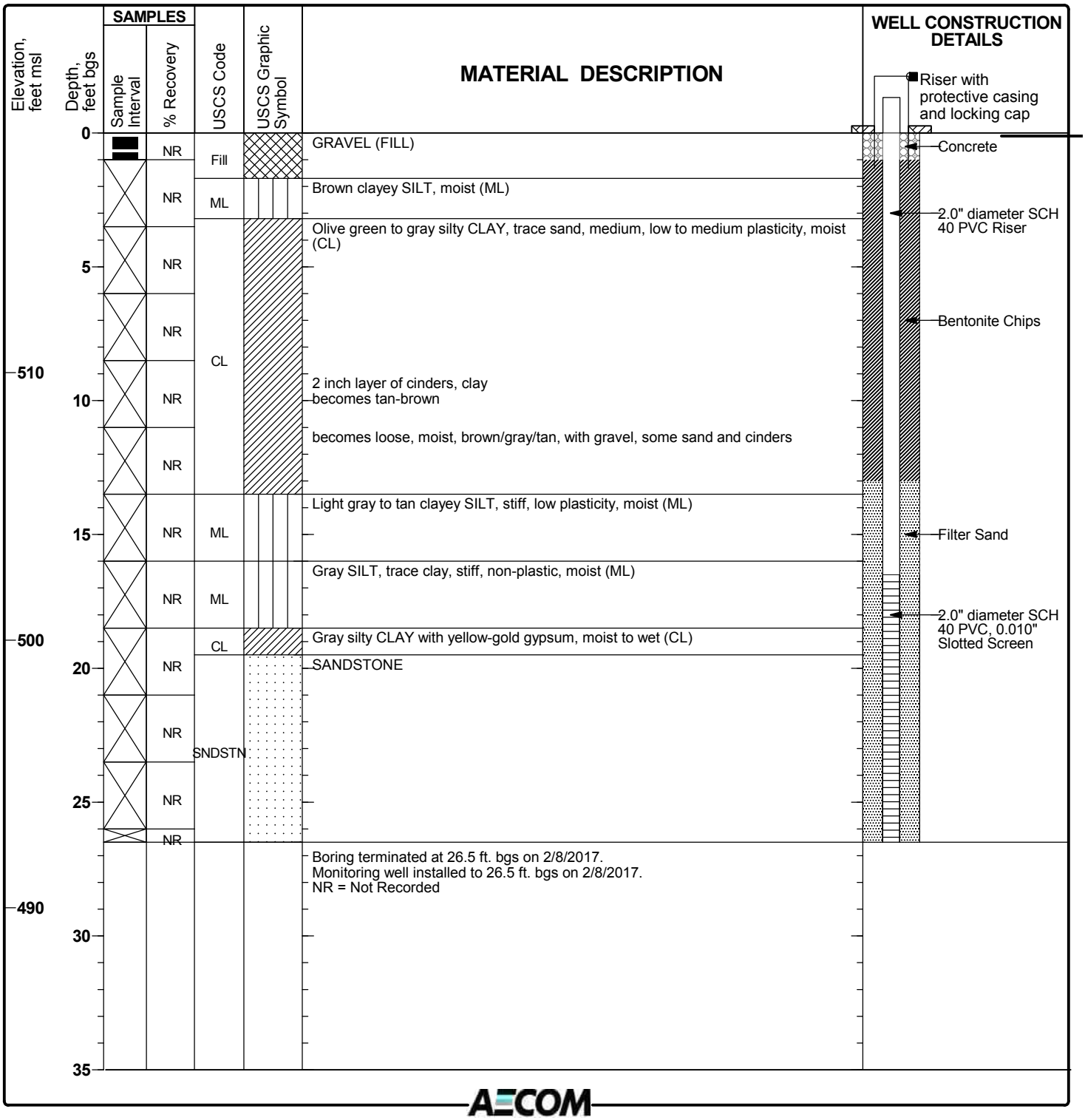
AECOM

Client: Southern Illinois Power Cooperative
Project Name: SIPC Marion CCR
Project Location: SIPC Marion
Project Number: 60535846

Log of EP-3

Sheet 1 of 1

Date(s) Drilled and Installed	**2/8/2017**	Logged By	**Suzanne Dale**	Reviewed By	
Drilling Method	**Hollow Stem Auger**	Drilling Contractor	**Holcomb Engineering**	Total Depth of Borehole	**26.5 feet, bgs**
Sampling Method	**Split Spoon**	Water Level TOIC	**Not measured**	TOC Elevation Ground Surface	**518.95 ft, msl** **518.95 ft, msl**
Size and Type of Well Casing	**2-Inch Schedule 40 PVC**	Screen Perforation	**0.010 - inch**	Northing (Plant) Easting (Plant)	**347245.08 ft** **804814.534 ft**
Seal or Backfill	**Bentonite Chips**				



SIPC MARION SIPC MARION.GPJ 10/9/17

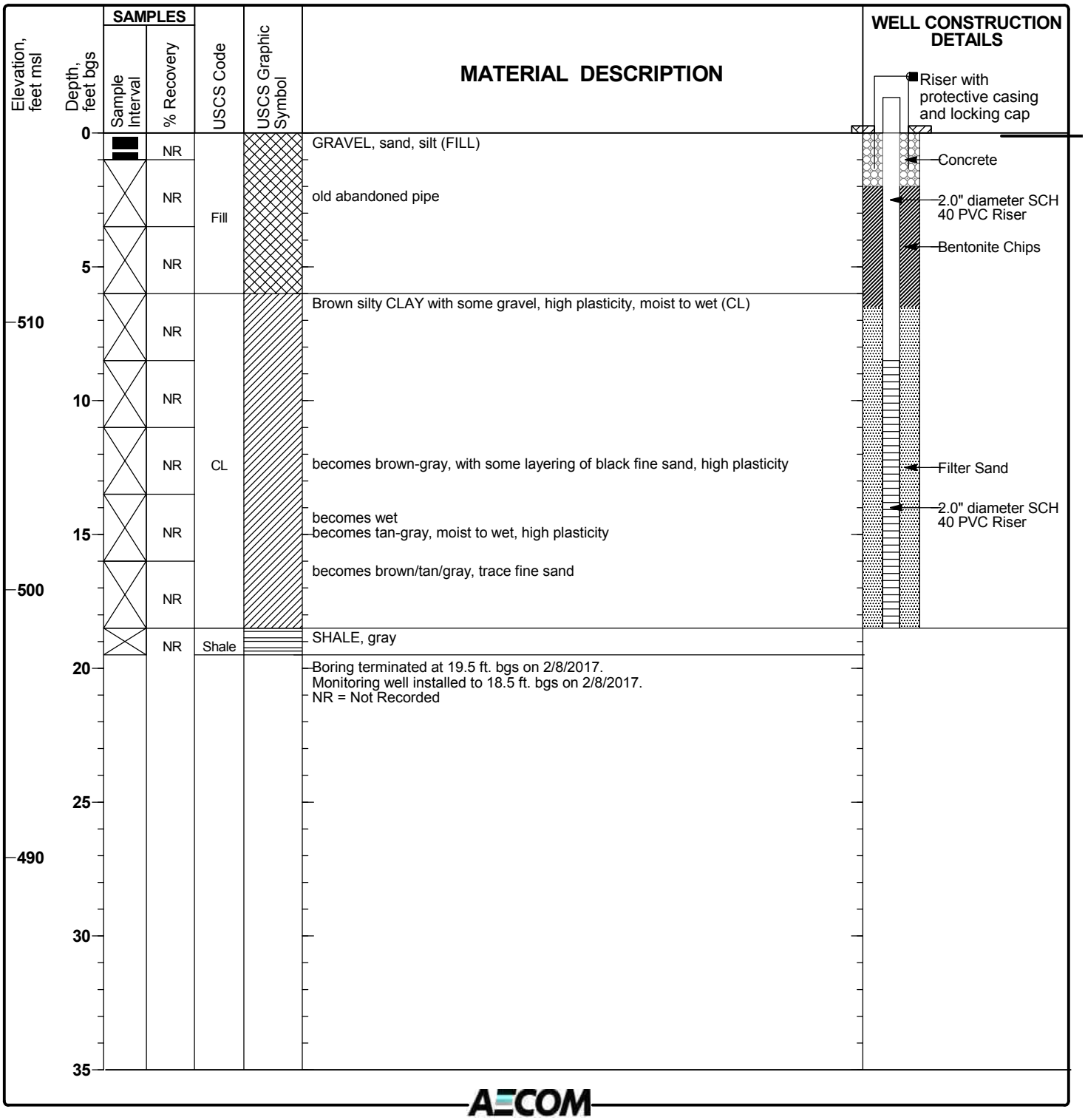
AECOM

Client: Southern Illinois Power Cooperative
Project Name: SIPC Marion CCR
Project Location: SIPC Marion
Project Number: 60535846

Log of EP-4

Sheet 1 of 1

Date(s) Drilled and Installed	**2/8/2017**	Logged By	**Suzanne Dale**	Reviewed By	
Drilling Method	**Hollow Stem Auger**	Drilling Contractor	**Holcomb Engineering**	Total Depth of Borehole	**18.5 feet, bgs**
Sampling Method	**Split Spoon**	Water Level TOIC	**Not measured**	TOC Elevation Ground Surface	**519.74 ft, msl** **517.07 ft, msl**
Size and Type of Well Casing	**2-Inch Schedule 40 PVC**	Screen Perforation	**0.010 - inch**	Northing (Plant) Easting (Plant)	**347288.297 ft** **804687.527 ft**
Seal or Backfill	**Bentonite Chips**				



SIPC MARION SIPC MARION.GPJ 10/9/17

AECOM

FIELD BORING LOG

CLIENT: Southern Illinois Power Cooperative
Site: Storm Water Basin Monitoring Wells
Location: Marion Power Station, Marion, IL
Project: 21E0079
DATES: **Start:** 10/5/2021
Finish: 10/5/2021
WEATHER: Foggy, cool (low 60's)

CONTRACTOR: Holcomb Foundation Engineering Co.
Rig mfg/model: Bobcat T630 with auger attachment
Drilling Method: 3¼" Hollow Stem Auger
FIELD STAFF: **Driller:** J. Carter
Helper: J. Taylor
Eng/Geo: R. Hasenyager

BOREHOLE ID: EP-5
Well ID: EP-5
Surface Elev: 524.64 ft. MSL
Completion: 16.32 ft. BGS
Station: 347,001.63N
804,473.78E

TOPOGRAPHIC MAP INFORMATION:
Quadrangle: Goreville
Township: Southern
Section 26, **Tier** 10S; **Range** 2E

WATER LEVEL INFORMATION:
▽ = Dry - during drilling
▽ = Dry - at completion
▽ =

SAMPLE Number	SAMPLE Recov / Total (in) *% Recovery*	SAMPLE Type	TESTING *Blows / 6 in* N - Value **RQD**	TESTING Water Content (%)	TESTING Dry Density (lb/ft³)	TESTING Qu (tsf) *Qp* (tsf) Failure Type	Depth ft. BGS	Lithologic Description	Borehole Detail	Elevation ft. MSL	Remarks
	0/60 *0%*	AGR					0			524	
							2				
							4			522	
							6			520	
	0/60 *0%*	AGR					8	Yellowish brown (10YR5/6), moist, medium, CLAY with some silt, little sand, and trace gravel.		518	
							10			516	
	0/60 *0%*	AGR					12			514	
							14			512	
	0/16 *0%*	AGR					16	Yellowish brown (10YR5/8), weathered SANDSTONE.		510	

EOB = 16.3 ft.

NOTE(S): Boring drilled adjacent to DP-4d.

FIELD BORING LOG

HANSON

CLIENT: Southern Illinois Power Cooperative
Site: Storm Water Basin Monitoring Wells
Location: Marion Power Station, Marion, IL
Project: 21E0079
DATES: **Start:** 10/4/2021
Finish: 10/4/2021
WEATHER: Sunny, mild (high 70's)

CONTRACTOR: Holcomb Foundation Engineering Co.
Rig mfg/model: CME 550X
Drilling Method: 3¼" Hollow Stem Auger with split spoon
FIELD STAFF: **Driller:** J. Carter
Helper: J. Taylor
Eng/Geo: R. Hasenyager

BOREHOLE ID: EP-6
Well ID: EP-6
Surface Elev: 502.08 ft. MSL
Completion: 13.62 ft. BGS
Station: 347,034.68N
804,941.94E

TOPOGRAPHIC MAP INFORMATION:
Quadrangle: Goreville
Township: Southern
Section 26, **Tier** 10S; **Range** 2E

WATER LEVEL INFORMATION:
▼ = Dry - during drilling
▼ = 13.00 - at completion
▼ =

SAMPLE Number	Recov / Total (in) % Recovery	Type	TESTING Blows / 6 in N - Value RQD	Water Content (%)	Dry Density (lb/ft³)	Qu (tsf) Qp (tsf) Failure Type	Depth ft. BGS	Lithologic Description	Elevation ft. MSL	Remarks
	0/12 0%	BD								
2A	17/24 71%	SS	5-7 7-5 N=14	18.7		3.5	2	Yellowish brown (10YR5/4) mottles, moist, medium, SILT with few clay and trace sand.	500	
3A	24/36 67%	SS	2-2 4-4 N=6	24.6		1.5	4	Gray (10YR5/1) with 10% Yellowish brown (10YR5/6) mottles, moist, medium, CLAY with some silt and trace sand.	498	
4A	23/24 96%	SS	1-1 4-4 N=5	20.7		3.5	6	Yellowish brown (10YR5/6) wuth 20% Gray (10YR6/1) mottles, moist, medium, SILT with few clay, trace sand, and trace gravel.	496	
5A	27/36 75%	SS	7-8 13-13 N=21	12.1		4.0	8	Strong brown (7.5YR5/8), moist, dense, very fine- to coarse-grained SAND with some silt.	494	
6A	21/21 100%	SS	4-10 27-60/3" N=37	15.0		4.0	10	Strong brown (7.5YR5/8) with 10% gray (7.5YHR5/1) mottles, moist, hard, weathered SHALE.	492	
	0/10 0%	BD					12 ▼		490	

EOB = 13.6 ft.

NOTE(S):

FIELD BORING LOG

HANSON

CLIENT: Southern Illinois Power Cooperative
Site: Storm Water Basin Monitoring Wells
Location: Marion Power Station, Marion, IL
Project: 21E0079
DATES: **Start:** 10/4/2021
Finish: 10/4/2021
WEATHER: Sunny, mild (low 70's)

CONTRACTOR: Holcomb Foundation Engineering Co.
Rig mfg/model: CME 550X
Drilling Method: 3¼" Hollow Stem Auger with split spoon
FIELD STAFF: **Driller:** J. Carter
Helper: J. Taylor
Eng/Geo: R. Hasenyager

BOREHOLE ID: EP-7
Well ID: EP-7
Surface Elev: 512.49 ft. MSL
Completion: 18.50 ft. BGS
Station: 347,219.28N
804,890.26E

TOPOGRAPHIC MAP INFORMATION:
Quadrangle: Goreville
Township: Southern
Section 26, **Tier** 10S; **Range** 2E

WATER LEVEL INFORMATION:
▼ = 13.00 - during drilling
▼ = 16.00 - at completion
▼ =

SAMPLE Number	Recov / Total (in) % Recovery	Type	TESTING Blows / 6 in N - Value RQD	Water Content (%)	Dry Density (lb/ft³)	Qu (tsf) Qp (tsf) Failure Type	Depth ft. BGS	Lithologic Description	Borehole Detail	Elevation ft. MSL	Remarks
	0/12 0%	BD						Light bluish gray (5PB8/1), moist, dense, GRAVEL with some sand and some silt.		512	
2A	15/24 63%	SS	2-2 3-3 N=5	14.6		1.0	2	Black (10YR2/1), moist, loose, very fine- to coarse-grained SAND with some silt and trace gravel (Bottom Ash).		510	
3A				17.3		2.0		Yellowish brown (10YR5/6), moist, soft, CLAY with some silt and trace sand.			
	32/36 89%	SS	2-5 13-7 N=18				4			508	
4A				21.4		1.0	6			506	
	16/24 67%	SS	2-1 2-1 N=3					Grayish brown (10YR5/2) with 15% yellowish brown (10YR5/6) mottles, moist, medium CLAY with some silt, trace sand, and trace gravel.			
5A				21.8		1.0	8			504	
	17/36 47%	SS	1-2 2-3 N=4								
6A				24.0			10			502	
	15/24 63%	SS	woh-1 3-4 N=4			1.0	12	Pale brown (10YR6/3), moist, soft, SILT with few clay and trace sand.		500	
7A				26.2			▼				
	27/36 75%	SS	1-2 2-3 N=4			0.5	14	Yellowish brown (10YR5/4), moist, soft, CLAY with some silt and trace sand.		498	
								Gray (10YR5/1), moist, soft, SILT with few clay and trace sand.			
8A				24.3			▼ 16			496	
	20/24 83%	SS	woh-1 4-5 N=5			0.5		Yellowish brown (10YR5/4), moist, soft, CLAY with some silt dand trace sand.			
	0/6 0%	BD					18	Yellowish brown (10YR5/8), moist, dense, very fine- to medium-grained SANDSTONE.		494	

EOB =18.5 ft.

NOTE(S):

APPENDIX B

2024 Groundwater Analytical Reports

January 09, 2024

Jason McLaurin
Southern Illinois Power Cooperation
11543 Lake of Egypt Road
Marion, IL 62959
TEL: (618) 964-1448
FAX:

Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Groundwater Monitoring **WorkOrder:** 23120001

Dear Jason McLaurin:

TEKLAB, INC received 11 samples on 12/12/2023 3:32:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

Report Contents

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24

This reporting package includes the following:

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Abbr Definition

*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Qualifiers

- # - Unknown hydrocarbon
- B - Analyte detected in associated Method Blank
- C - RL shown is a Client Requested Quantitation Limit
- E - Value above quantitation range
- H - Holding times exceeded
- I - Associated internal standard was outside method criteria
- J - Analyte detected below quantitation limits
- M - Manual Integration used to determine area response
- ND - Not Detected at the Reporting Limit
- R - RPD outside accepted recovery limits
- S - Spike Recovery outside recovery limits
- T - TIC(Tentatively identified compound)
- X - Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24

Cooler Receipt Temp: 7.2 °C

An employee of Teklab, Inc. collected the sample(s).

Ra226/228 analyses were performed by Summit Environmental Technologies, Inc. See attached report for results and QC.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2024	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-001 **Client Sample ID:** EBG

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 12:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**10.41**	ft	1	12/11/2023 12:14	R340513
Elevation of groundwater surface	*	0	0		**514.46**	ft	1	12/11/2023 12:14	R340513
Measuring Point Elevation	*	0	0		**524.87**	ft	1	12/11/2023 12:14	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.20**	gal	1	12/11/2023 12:14	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**6.6**	NTU	1	12/11/2023 12:14	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**127**	mV	1	12/11/2023 12:14	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.6137**	mS/cm	1	12/11/2023 12:14	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**13.9**	°C	1	12/11/2023 12:14	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.30**	mg/L	1	12/11/2023 12:14	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.68**		1	12/11/2023 12:14	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**322**	mg/L	1	12/12/2023 12:34	R340491
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**8**	mg/L	1	12/12/2023 13:52	R340454
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**91**	mg/L	5	12/12/2023 13:56	R340452
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.69**	mg/L	1	12/15/2023 9:46	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0433**	mg/L	1	12/14/2023 12:07	215858
Boron	NELAP	0.0090	0.020	J	**0.0097**	mg/L	1	12/14/2023 12:07	215858
Calcium	NELAP	0.0350	0.100		**9.72**	mg/L	1	12/14/2023 12:07	215858
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Chromium	NELAP	0.0012	0.0015		**< 0.0015**	mg/L	5	12/14/2023 15:47	215858
Cobalt	NELAP	0.0001	0.0010	J	**0.0002**	mg/L	5	12/14/2023 15:47	215858
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Lithium	*	0.0015	0.0030		**0.0141**	mg/L	5	12/14/2023 15:47	215858
Molybdenum	NELAP	0.0006	0.0015	J	**0.0010**	mg/L	5	12/14/2023 15:47	215858
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:47	215858
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/18/2023 16:03	215858
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/13/2023 16:03	215840
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-001 **Client Sample ID:** EBG

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 12:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-002 **Client Sample ID:** EP-1

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 14:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**7.81**	ft	1	12/11/2023 14:02	R340513
Elevation of groundwater surface	*	0	0		**511.91**	ft	1	12/11/2023 14:02	R340513
Measuring Point Elevation	*	0	0		**519.72**	ft	1	12/11/2023 14:02	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.90**	gal	1	12/11/2023 14:02	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.6**	NTU	1	12/11/2023 14:02	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**127**	mV	1	12/11/2023 14:02	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.1394**	mS/cm	1	12/11/2023 14:02	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**14.3**	°C	1	12/11/2023 14:02	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.21**	mg/L	1	12/11/2023 14:02	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.08**		1	12/11/2023 14:02	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2510**	mg/L	1	12/12/2023 12:34	R340491
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**33**	mg/L	1	12/12/2023 14:00	R340454
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**1430**	mg/L	50	12/12/2023 14:18	R340452
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.27**	mg/L	1	12/15/2023 9:48	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0194**	mg/L	1	12/14/2023 15:25	215858
Boron	NELAP	0.0090	0.0200		**1.17**	mg/L	1	12/14/2023 15:25	215858
Calcium	NELAP	0.0350	0.100		**477**	mg/L	1	12/14/2023 15:25	215858
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	12/14/2023 14:15	215858
Arsenic	NELAP	0.0004	0.0010	J	**0.0006**	mg/L	5	12/14/2023 14:15	215858
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:15	215858
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:15	215858
Chromium	NELAP	0.0012	0.0015	J	**0.0015**	mg/L	5	12/14/2023 14:15	215858
Cobalt	NELAP	0.0001	0.0010	J	**0.0005**	mg/L	5	12/14/2023 14:15	215858
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:15	215858
Lithium	*	0.0015	0.0030		**0.0143**	mg/L	5	12/14/2023 14:15	215858
Molybdenum	NELAP	0.0006	0.0015	J	**0.0008**	mg/L	5	12/14/2023 14:15	215858
Selenium	NELAP	0.0006	0.0010		**0.0024**	mg/L	5	12/14/2023 14:15	215858
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/18/2023 15:39	215858
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/13/2023 16:06	215840
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24
Lab ID: 23120001-002
Client Sample ID: EP-1
Matrix: GROUNDWATER
Collection Date: 12/11/2023 14:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-003 **Client Sample ID:** EP-2

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**11.65**	ft	1	12/12/2023 12:20	R340513
Elevation of groundwater surface	*	0	0		**502.14**	ft	1	12/12/2023 12:20	R340513
Measuring Point Elevation	*	0	0		**513.79**	ft	1	12/12/2023 12:20	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.80**	gal	1	12/12/2023 12:20	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.0**	NTU	1	12/12/2023 12:20	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**88**	mV	1	12/12/2023 12:20	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**3.249**	mS/cm	1	12/12/2023 12:20	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**16.9**	°C	1	12/12/2023 12:20	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.82**	mg/L	1	12/12/2023 12:20	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.23**		1	12/12/2023 12:20	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2270**	mg/L	1	12/13/2023 13:19	R340566
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	2	20		**62**	mg/L	5	12/14/2023 9:45	R340532
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**1260**	mg/L	50	12/13/2023 20:34	R340498
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.33**	mg/L	1	12/15/2023 9:50	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0213**	mg/L	1	12/14/2023 9:53	215892
Boron	NELAP	0.0090	0.0200		**0.274**	mg/L	1	12/14/2023 9:53	215892
Calcium	NELAP	0.0350	0.100		**293**	mg/L	1	12/14/2023 9:53	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 12:29	215892
Arsenic	NELAP	0.0004	0.0010		**0.0029**	mg/L	5	12/14/2023 13:09	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:09	215892
Cadmium	NELAP	0.0002	0.0010	J	**0.0009**	mg/L	5	12/14/2023 13:09	215892
Chromium	NELAP	0.0007	0.0015	J	**0.0009**	mg/L	5	12/15/2023 12:29	215892
Cobalt	NELAP	0.0001	0.0010		**0.0467**	mg/L	5	12/14/2023 13:09	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:09	215892
Lithium	*	0.0015	0.0030		**0.0153**	mg/L	5	12/14/2023 13:09	215892
Molybdenum	NELAP	0.0006	0.0015		**0.0017**	mg/L	5	12/19/2023 9:44	215892
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/19/2023 9:44	215892
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/14/2023 13:09	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:26	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-003 **Client Sample ID:** EP-2

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-004 **Client Sample ID:** EP-3

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 10:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**18.30**	ft	1	12/12/2023 10:26	R340513
Elevation of groundwater surface	*	0	0		**500.65**	ft	1	12/12/2023 10:26	R340513
Measuring Point Elevation	*	0	0		**518.95**	ft	1	12/12/2023 10:26	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.10**	gal	1	12/12/2023 10:26	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.6**	NTU	1	12/12/2023 10:26	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**15**	mV	1	12/12/2023 10:26	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.6227**	mS/cm	1	12/12/2023 10:26	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.2**	°C	1	12/12/2023 10:26	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.68**	mg/L	1	12/12/2023 10:26	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.08**		1	12/12/2023 10:26	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**685**	mg/L	2.5	12/13/2023 13:19	R340566
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	40		**148**	mg/L	10	12/13/2023 20:37	R340501
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		**128**	mg/L	10	12/13/2023 20:37	R340498
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.22**	mg/L	1	12/15/2023 9:52	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0825**	mg/L	1	12/14/2023 9:54	215892
Boron	NELAP	0.0090	0.0200		**0.0724**	mg/L	1	12/14/2023 9:54	215892
Calcium	NELAP	0.0350	0.100		**43.4**	mg/L	1	12/14/2023 9:54	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 12:35	215892
Arsenic	NELAP	0.0004	0.0010		**0.0116**	mg/L	5	12/14/2023 13:15	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:15	215892
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:15	215892
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	12/15/2023 12:35	215892
Cobalt	NELAP	0.0001	0.0010		**0.120**	mg/L	5	12/14/2023 13:15	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:15	215892
Lithium	*	0.0015	0.0030		**0.0555**	mg/L	5	12/14/2023 13:15	215892
Molybdenum	NELAP	0.0006	0.0015	J	**0.0008**	mg/L	5	12/14/2023 13:15	215892
Selenium	NELAP	0.0006	0.0010	J	**0.0008**	mg/L	5	12/14/2023 13:15	215892
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/14/2023 13:15	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:29	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24
Lab ID: 23120001-004
Client Sample ID: EP-3
Matrix: GROUNDWATER
Collection Date: 12/12/2023 10:26

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**9.23**	ft	1	12/12/2023 12:45	R340513
Elevation of groundwater surface	*	0	0		**510.51**	ft	1	12/12/2023 12:45	R340513
Measuring Point Elevation	*	0	0		**519.74**	ft	1	12/12/2023 12:45	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.60**	gal	1	12/12/2023 12:45	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**8.7**	NTU	1	12/12/2023 12:45	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-33**	mV	1	12/12/2023 12:45	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.1873**	mS/cm	1	12/12/2023 12:45	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**19.0**	°C	1	12/12/2023 12:45	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.70**	mg/L	1	12/12/2023 12:45	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**5.83**		1	12/12/2023 12:45	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**1510**	mg/L	2.5	12/13/2023 13:20	R340566
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	25	200		**447**	mg/L	50	12/13/2023 20:43	R340501
SW-846 9036 (TOTAL)									
Sulfate	NELAP	123	200		**442**	mg/L	20	12/14/2023 13:58	R340579
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.11**	mg/L	1	12/15/2023 9:54	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0335**	mg/L	1	12/14/2023 9:56	215892
Boron	NELAP	0.0090	0.0200		**11.2**	mg/L	1	12/14/2023 9:56	215892
Calcium	NELAP	0.0350	0.100		**157**	mg/L	1	12/14/2023 9:56	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 12:41	215892
Arsenic	NELAP	0.0004	0.0010		**0.0083**	mg/L	5	12/14/2023 13:21	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:21	215892
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:21	215892
Chromium	NELAP	0.0007	0.0015		**0.0383**	mg/L	5	12/15/2023 12:41	215892
Cobalt	NELAP	0.0001	0.0010		**0.345**	mg/L	5	12/14/2023 13:21	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 13:21	215892
Lithium	*	0.0015	0.0030		**0.0031**	mg/L	5	12/14/2023 13:21	215892
Molybdenum	NELAP	0.0006	0.0015	J	**0.0007**	mg/L	5	12/14/2023 13:21	215892
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	12/14/2023 13:21	215892
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/14/2023 13:21	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:32	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-006 **Client Sample ID:** EP-5

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 13:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**15.23**	ft	1	12/11/2023 13:25	R340513
Elevation of groundwater surface	*	0	0		**512.36**	ft	1	12/11/2023 13:25	R340513
Measuring Point Elevation	*	0	0		**527.59**	ft	1	12/11/2023 13:25	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.30**	gal	1	12/11/2023 13:25	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.0**	NTU	1	12/11/2023 13:25	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**110**	mV	1	12/11/2023 13:25	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4982**	mS/cm	1	12/11/2023 13:25	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**15.0**	°C	1	12/11/2023 13:25	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.50**	mg/L	1	12/11/2023 13:25	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.66**		1	12/11/2023 13:25	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**264**	mg/L	1	12/12/2023 12:34	R340491
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4	J	**3**	mg/L	1	12/12/2023 14:21	R340454
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**104**	mg/L	5	12/12/2023 14:26	R340452
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.45**	mg/L	1	12/15/2023 9:57	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0434**	mg/L	1	12/14/2023 19:06	215858
Boron	NELAP	0.0090	0.020	J	**0.014**	mg/L	1	12/14/2023 19:06	215858
Calcium	NELAP	0.0350	0.100		**13.5**	mg/L	1	12/14/2023 19:06	215858
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0006**	mg/L	5	12/14/2023 15:35	215858
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:35	215858
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:35	215858
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:35	215858
Chromium	NELAP	0.0012	0.0015		**0.0040**	mg/L	5	12/14/2023 15:35	215858
Cobalt	NELAP	0.0001	0.0010	J	**0.0008**	mg/L	5	12/14/2023 15:35	215858
Lead	NELAP	0.0006	0.0010	J	**0.0006**	mg/L	5	12/14/2023 15:35	215858
Lithium	*	0.0015	0.0030	J	**0.0029**	mg/L	5	12/14/2023 15:35	215858
Molybdenum	NELAP	0.0006	0.0015		**0.0022**	mg/L	5	12/14/2023 15:35	215858
Selenium	NELAP	0.0006	0.0010	J	**0.0008**	mg/L	5	12/14/2023 15:35	215858
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/18/2023 15:45	215858
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/13/2023 16:08	215840
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24
Lab ID: 23120001-006
Client Sample ID: EP-5
Matrix: GROUNDWATER
Collection Date: 12/11/2023 13:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-007 **Client Sample ID:** EP-6

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**5.07**	ft	1	12/11/2023 12:00	R340513
Elevation of groundwater surface	*	0	0		**500.04**	ft	1	12/11/2023 12:00	R340513
Measuring Point Elevation	*	0	0		**505.11**	ft	1	12/11/2023 12:00	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.80**	gal	1	12/11/2023 12:00	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.5**	NTU	1	12/11/2023 12:00	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**169**	mV	1	12/11/2023 12:00	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.2361**	mS/cm	1	12/11/2023 12:00	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**14.3**	°C	1	12/11/2023 12:00	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**4.17**	mg/L	1	12/11/2023 12:00	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**4.80**		1	12/11/2023 12:00	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**222**	mg/L	1	12/12/2023 12:35	R340491
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**21**	mg/L	1	12/12/2023 14:29	R340454
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		**56**	mg/L	2	12/12/2023 14:34	R340452
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	**0.07**	mg/L	1	12/15/2023 10:06	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0340**	mg/L	1	12/14/2023 19:07	215858
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	12/14/2023 19:07	215858
Calcium	NELAP	0.0350	0.100		**1.43**	mg/L	1	12/14/2023 19:07	215858
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Chromium	NELAP	0.0012	0.0015		**0.0027**	mg/L	5	12/14/2023 15:41	215858
Cobalt	NELAP	0.0001	0.0010		**0.0020**	mg/L	5	12/18/2023 15:51	215858
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Lithium	*	0.0015	0.0030		**0.0101**	mg/L	5	12/14/2023 15:41	215858
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	12/14/2023 15:41	215858
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:41	215858
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/18/2023 15:51	215858
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/13/2023 16:21	215840
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-007 **Client Sample ID:** EP-6

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-008 **Client Sample ID:** EP-7

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 11:23

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**15.13**	ft	1	12/12/2023 11:23	R340513
Elevation of groundwater surface	*	0	0		**500.31**	ft	1	12/12/2023 11:23	R340513
Measuring Point Elevation	*	0	0		**515.44**	ft	1	12/12/2023 11:23	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.50**	gal	1	12/12/2023 11:23	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.6**	NTU	1	12/12/2023 11:23	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**25**	mV	1	12/12/2023 11:23	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1.7694**	mS/cm	1	12/12/2023 11:23	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.2**	°C	1	12/12/2023 11:23	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.10**	mg/L	1	12/12/2023 11:23	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**5.50**		1	12/12/2023 11:23	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**820**	mg/L	2.5	12/13/2023 13:20	R340566
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	40		**240**	mg/L	10	12/13/2023 20:45	R340501
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		**161**	mg/L	10	12/13/2023 20:45	R340498
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.12**	mg/L	1	12/15/2023 10:08	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0422**	mg/L	1	12/14/2023 9:58	215892
Boron	NELAP	0.0090	0.0200		**0.412**	mg/L	1	12/14/2023 9:58	215892
Calcium	NELAP	0.0350	0.100		**44.4**	mg/L	1	12/14/2023 9:58	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 14:00	215892
Arsenic	NELAP	0.0004	0.0010		**0.0113**	mg/L	5	12/14/2023 14:40	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:40	215892
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:40	215892
Chromium	NELAP	0.0007	0.0015		**0.0034**	mg/L	5	12/18/2023 16:59	215892
Cobalt	NELAP	0.0001	0.0010		**0.235**	mg/L	5	12/14/2023 14:40	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:40	215892
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	12/14/2023 14:40	215892
Molybdenum	NELAP	0.0006	0.0015	J	**0.0013**	mg/L	5	12/14/2023 14:40	215892
Selenium	NELAP	0.0006	0.0010		**0.0016**	mg/L	5	12/14/2023 14:40	215892
Thallium	NELAP	0.0010	0.0020		**0.0030**	mg/L	5	12/14/2023 14:40	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:34	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-008 **Client Sample ID:** EP-7

Matrix: GROUNDWATER **Collection Date:** 12/12/2023 11:23

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	12/28/2023 13:45	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-009 **Client Sample ID:** Equipment Blank

Matrix: AQUEOUS **Collection Date:** 12/12/2023 12:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	12/15/2023 8:54	R340683
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4	J	**1**	mg/L	1	12/13/2023 20:51	R340501
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	12/13/2023 20:50	R340498
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	**0.05**	mg/L	1	12/15/2023 11:19	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	12/14/2023 9:59	215892
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	12/14/2023 9:59	215892
Calcium	NELAP	0.035	0.10	J	**0.063**	mg/L	1	12/18/2023 11:18	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 14:06	215892
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	12/18/2023 17:05	215892
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	12/14/2023 14:47	215892
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	12/14/2023 14:47	215892
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 14:47	215892
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/14/2023 14:47	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:36	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448
Radium-228	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-010 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 12/12/2023 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	12/13/2023 13:21	R340566
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**< 4**	mg/L	1	12/13/2023 20:53	R340501
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	12/13/2023 20:53	R340498
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	12/15/2023 10:10	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	12/14/2023 10:01	215892
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	12/14/2023 10:01	215892
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	12/14/2023 10:01	215892
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/15/2023 14:13	215892
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	12/18/2023 17:11	215892
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	12/14/2023 15:36	215892
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	12/14/2023 15:36	215892
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 15:36	215892
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/14/2023 15:36	215892
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/14/2023 11:49	215912
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448
Radium-228	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

Lab ID: 23120001-011 **Client Sample ID:** Field Duplicate

Matrix: GROUNDWATER **Collection Date:** 12/11/2023 12:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**10.41**	ft	1	12/11/2023 12:14	R340513
Elevation of groundwater surface	*	0	0		**514.46**	ft	1	12/11/2023 12:14	R340513
Measuring Point Elevation	*	0	0		**524.87**	ft	1	12/11/2023 12:14	R340513
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.20**	gal	1	12/11/2023 12:14	R340513
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**6.6**	NTU	1	12/11/2023 12:14	R340513
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**127**	mV	1	12/11/2023 12:14	R340513
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.6137**	mS/cm	1	12/11/2023 12:14	R340513
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**13.9**	°C	1	12/11/2023 12:14	R340513
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.30**	mg/L	1	12/11/2023 12:14	R340513
SW-846 9040B FIELD									
pH	*	0	1.00		**6.68**		1	12/11/2023 12:14	R340513
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**315**	mg/L	2.5	12/12/2023 12:35	R340491
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**8**	mg/L	1	12/12/2023 14:37	R340454
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**91**	mg/L	5	12/12/2023 14:42	R340452
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.67**	mg/L	1	12/15/2023 10:13	R340563
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0457**	mg/L	1	12/14/2023 19:09	215858
Boron	NELAP	0.0090	0.020	J	**0.0093**	mg/L	1	12/14/2023 19:09	215858
Calcium	NELAP	0.0350	0.100		**9.67**	mg/L	1	12/14/2023 19:09	215858
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/18/2023 15:57	215858
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	12/14/2023 16:27	215858
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 16:27	215858
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	12/14/2023 16:27	215858
Chromium	NELAP	0.0012	0.0015		**< 0.0015**	mg/L	5	12/14/2023 16:27	215858
Cobalt	NELAP	0.0001	0.0010	J	**0.0003**	mg/L	5	12/14/2023 16:27	215858
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	12/14/2023 16:27	215858
Lithium	*	0.0015	0.0030		**0.0141**	mg/L	5	12/14/2023 16:27	215858
Molybdenum	NELAP	0.0006	0.0015	J	**0.0015**	mg/L	5	12/14/2023 16:27	215858
Selenium	NELAP	0.0006	0.0010	J	**0.0010**	mg/L	5	12/14/2023 16:27	215858
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	12/18/2023 15:57	215858

PQL recovered outside upper control limits for Sb. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

Contamination present in the CCB for Sb. Sample results below the reporting limit are reportable per the TNI Standard.

SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	12/13/2023 16:24	215840

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24
Lab ID: 23120001-011
Client Sample ID: Field Duplicate
Matrix: GROUNDWATER
Collection Date: 12/11/2023 12:14

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448
Radium-228	*	0	0		**See Attached**	pci/L	1	01/02/2024 14:32	R341448

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

STANDARD METHODS 2510 B FIELD

Batch R340513 **SampType:** LCS Units **mS/cm**
SampID: LCS-R340513-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1**	1.412	0	100.5	90	110	12/11/2023

Batch R340513 **SampType:** LCS Units **mS/cm**
SampID: LCS-R340513-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1**	1.412	0	100.1	90	110	12/11/2023

Batch R340513 **SampType:** LCS Units **mS/cm**
SampID: LCS-R340513-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1**	1.412	0	101.6	90	110	12/12/2023

Batch R340513 **SampType:** LCS Units **mS/cm**
SampID: LCS-R340513-4

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1**	1.412	0	100.1	90	110	12/12/2023

SW-846 9040B FIELD

Batch R340513 **SampType:** LCS Units
SampID: LCS-R340513-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.01**	7.000	0	100.1	98.57	101.4	12/11/2023

Batch R340513 **SampType:** LCS Units
SampID: LCS-R340513-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.07**	7.000	0	101.0	98.57	101.4	12/11/2023

Batch R340513 **SampType:** LCS Units
SampID: LCS-R340513-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.04**	7.000	0	100.6	98.57	101.4	12/12/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 9040B FIELD

Batch R340513 **SampType:** LCS Units

SampID: LCS-R340513-4

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.03**	7.000	0	100.4	98.57	101.4	12/12/2023

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R340491 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	12/12/2023

Batch R340491 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**904**	1000	0	90.4	90	110	12/12/2023

Batch R340491 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 23120001-011ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		**320**				315.0	1.57	12/12/2023

Batch R340566 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	12/13/2023

Batch R340566 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**982**	1000	0	98.2	90	110	12/13/2023

Batch R340566 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 23120001-010ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**< 20**				0	0.00	12/13/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R340683 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	12/15/2023
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	12/15/2023

Batch R340683 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**934**	1000	0	93.4	90	110	12/15/2023
Total Dissolved Solids		20		**940**	1000	0	94.0	90	110	12/15/2023

Batch R340683 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 23110002-062ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50	H	**880**				915.0	3.90	12/15/2023

Batch R340683 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 23121193-002BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**544**				494.0	9.63	12/15/2023

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R340454 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	12/12/2023

Batch R340454 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	99.7	90	110	12/12/2023

Batch R340454 **SampType:** MS Units **mg/L**

SampID: 23120637-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4000		**26000**	20000	8289	88.5	85	115	12/12/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R340454 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 23120637-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4000		**26400**	20000	8289	90.5	25980	1.52	12/12/2023

Batch R340501 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	12/13/2023

Batch R340501 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	101.0	90	110	12/13/2023

Batch R340501 **SampType:** MS Units **mg/L**

SampID: 23120958-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		200		**1420**	1000	475.7	94.8	85	115	12/13/2023

Batch R340501 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 23120958-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		200		**1430**	1000	475.7	95.0	1424	0.13	12/13/2023

Batch R340501 **SampType:** MS Units **mg/L**

SampID: 23120987-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		**380**	200.0	204.0	88.1	85	115	12/13/2023

Batch R340501 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 23120987-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		**380**	200.0	204.0	88.0	380.3	0.07	12/13/2023

Batch R340532 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	12/14/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R340532 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	100.4	90	110	12/14/2023

Batch R340532 **SampType:** MS Units **mg/L**
SampID: 23121014-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**27**	20.00	9.200	89.7	85	115	12/14/2023

Batch R340532 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121014-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**27**	20.00	9.200	91.4	27.13	1.25	12/14/2023

Batch R340532 **SampType:** MS Units **mg/L**
SampID: 23121014-007AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**37**	20.00	19.01	88.0	85	115	12/14/2023

Batch R340532 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121014-007AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	19.01	88.9	36.60	0.52	12/14/2023

SW-846 9036 (TOTAL)

Batch R340452 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	12/12/2023

Batch R340452 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	93.6	90	110	12/12/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 9036 (TOTAL)

Batch R340452 **SampType:** MS Units **mg/L**
SampID: 23120502-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		2000		**9300**	4000	5821	86.9	85	115	12/12/2023

Batch R340452 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23120502-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		2000		**9600**	4000	5821	94.4	9295	3.19	12/12/2023

Batch R340452 **SampType:** MS Units **mg/L**
SampID: 23120637-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		1000	SE	**5480**	2000	4158	66.2	90	110	12/12/2023

Batch R340452 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23120637-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		1000	SE	**5500**	2000	4158	67.1	5483	0.33	12/12/2023

Batch R340452 **SampType:** MS Units **mg/L**
SampID: 23120667-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**210**	100.0	124.4	85.7	85	115	12/12/2023

Batch R340452 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23120667-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**214**	100.0	124.4	89.8	210.1	1.92	12/12/2023

Batch R340498 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	12/13/2023

Batch R340498 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	96.0	90	110	12/13/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 9036 (TOTAL)

Batch R340498 **SampType:** MS Units **mg/L**
SampID: 23120598-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50	S	**246**	100.0	168.0	78.2	90	110	12/13/2023

Batch R340498 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23120598-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	S	**246**	100.0	168.0	78.0	246.2	0.07	12/13/2023

Batch R340579 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	12/14/2023

Batch R340579 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	94.0	90	110	12/14/2023

Batch R340579 **SampType:** MS Units **mg/L**
SampID: 23121014-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**289**	200.0	117.9	85.8	85	115	12/14/2023

Batch R340579 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23121014-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**295**	200.0	117.9	88.4	289.5	1.75	12/14/2023

Batch R340579 **SampType:** MS Units **mg/L**
SampID: 23121014-007AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**354**	200.0	169.2	92.2	85	115	12/14/2023

Batch R340579 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 23121014-007AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**351**	200.0	169.2	90.9	353.6	0.72	12/14/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 9214 (TOTAL)

Batch R340563 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	12/14/2023

Batch R340563 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**1.00**	1.000	0	100.0	90	110	12/14/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23120637-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		1.00		**25.6**	20.00	6.430	95.9	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23120637-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		1.00		**26.9**	20.00	6.430	102.4	25.61	4.95	12/15/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23120667-017AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.33**	2.000	0.1860	107.4	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23120667-017AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.17**	2.000	0.1860	99.3	2.334	7.19	12/15/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23120667-020AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.30**	2.000	0.2460	102.9	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23120667-020AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.37**	2.000	0.2460	106.2	2.304	2.78	12/15/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 9214 (TOTAL)

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23121014-008AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.10**	2.000	0	105.0	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121014-008AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.10**	2.000	0	104.8	2.100	0.24	12/15/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23121094-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.28**	2.000	0.2000	104.0	75	125	12/14/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121094-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.26**	2.000	0.2000	103.0	2.279	0.79	12/14/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23121112-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**3.01**	2.000	0.8810	106.5	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121112-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**3.04**	2.000	0.8810	108.0	3.011	0.96	12/15/2023

Batch R340563 **SampType:** MS Units **mg/L**
SampID: 23121247-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.41**	2.000	0.2990	105.5	75	125	12/15/2023

Batch R340563 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23121247-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.43**	2.000	0.2990	106.8	2.409	1.03	12/15/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 215858 **SampType:** MBLK Units **mg/L**

SampID: MBLK-215858

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		**< 0.0250**	0.0087	0	0	-100	100	12/14/2023
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	12/14/2023
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	12/14/2023
Cadmium		0.0020		**< 0.0020**	0.0005	0	0	-100	100	12/18/2023
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	12/14/2023
Chromium		0.0050		**< 0.0050**	0.0028	0	0	-100	100	12/14/2023
Lead		0.0150		**< 0.0150**	0.0040	0	0	-100	100	12/14/2023
Selenium		0.0400		**< 0.0400**	0.0170	0	0	-100	100	12/14/2023

Batch 215858 **SampType:** LCS Units **mg/L**

SampID: LCS-215858

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		**0.477**	0.5000	0	95.3	85	115	12/14/2023
Barium		0.0025		**1.91**	2.000	0	95.5	85	115	12/14/2023
Boron		0.0200		**0.457**	0.5000	0	91.3	85	115	12/14/2023
Cadmium		0.0020		**0.0483**	0.0500	0	96.6	85	115	12/18/2023
Calcium		0.100		**2.46**	2.500	0	98.3	85	115	12/14/2023
Chromium		0.0050		**0.179**	0.2000	0	89.4	85	115	12/14/2023
Lead		0.0150		**0.445**	0.5000	0	89.0	85	115	12/14/2023
Selenium		0.0400		**0.474**	0.5000	0	94.7	85	115	12/14/2023

Batch 215858 **SampType:** MS Units **mg/L**

SampID: 23120001-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**1.99**	2.000	0.04330	97.6	75	125	12/14/2023
Boron		0.0200		**0.486**	0.5000	0.009700	95.3	75	125	12/14/2023
Calcium		0.100		**12.7**	2.500	9.720	118.0	75	125	12/14/2023

Batch 215858 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 23120001-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**1.97**	2.000	0.04330	96.3	1.995	1.26	12/14/2023
Boron		0.0200		**0.478**	0.5000	0.009700	93.7	0.4861	1.66	12/14/2023
Calcium		0.100		**12.3**	2.500	9.720	104.4	12.67	2.72	12/14/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 215858 **SampType:** MS Units **mg/L**

SampID: 23120895-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.44**	2.000	0.3755	103.1	75	125	12/14/2023

Batch 215858 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 23120895-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**2.27**	2.000	0.3755	94.6	2.437	7.22	12/14/2023

Batch 215892 **SampType:** MBLK Units **mg/L**

SampID: MBLK-215892

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		**< 0.0250**	0.0087	0	0	-100	100	12/14/2023
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	12/14/2023
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	12/14/2023
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	12/14/2023
Chromium		0.0050		**< 0.0050**	0.0028	0	0	-100	100	12/14/2023
Lead		0.0150		**< 0.0150**	0.0040	0	0	-100	100	12/14/2023
Selenium		0.0400		**< 0.0400**	0.0170	0	0	-100	100	12/14/2023

Batch 215892 **SampType:** LCS Units **mg/L**

SampID: LCS-215892

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic		0.0250		**0.553**	0.5000	0	110.6	85	115	12/14/2023
Barium		0.0025		**2.09**	2.000	0	104.5	85	115	12/14/2023
Boron		0.0200		**0.527**	0.5000	0	105.4	85	115	12/14/2023
Calcium		0.100		**2.75**	2.500	0	110.1	85	115	12/14/2023
Chromium		0.0050		**0.208**	0.2000	0	104.1	85	115	12/14/2023
Lead		0.0150		**0.522**	0.5000	0	104.5	85	115	12/14/2023
Selenium		0.0400		**0.534**	0.5000	0	106.8	85	115	12/14/2023

Batch 215892 **SampType:** MS Units **mg/L**

SampID: 23120949-054AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium		0.0020		**0.0498**	0.0500	0	99.6	75	125	12/18/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 215892 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 23120949-054AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Cadmium		0.0020		**0.0494**	0.0500	0	98.8	0.04980	0.81	12/18/2023

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 215858 **SampType:** MBLK Units **mg/L**

SampID: MBLK-215858

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	12/14/2023
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	12/14/2023
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	12/14/2023
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	12/14/2023
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	12/14/2023
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	12/14/2023
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	12/14/2023
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	12/14/2023
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	12/14/2023
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	12/14/2023
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	12/15/2023

Batch 215858 **SampType:** LCS Units **mg/L**

SampID: LCS-215858

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.505**	0.5000	0	101.1	80	120	12/14/2023
Arsenic		0.0010		**0.540**	0.5000	0	108.0	80	120	12/14/2023
Beryllium		0.0010		**0.0514**	0.0500	0	102.8	80	120	12/14/2023
Cadmium		0.0010		**0.0510**	0.0500	0	102.0	80	120	12/14/2023
Chromium		0.0015		**0.200**	0.2000	0	100.1	80	120	12/14/2023
Cobalt		0.0010		**0.511**	0.5000	0	102.3	80	120	12/14/2023
Lead		0.0010		**0.525**	0.5000	0	105.0	80	120	12/14/2023
Lithium	*	0.0030		**0.500**	0.5000	0	99.9	80	120	12/14/2023
Molybdenum		0.0015		**0.495**	0.5000	0	99.0	80	120	12/14/2023
Selenium		0.0010		**0.563**	0.5000	0	112.6	80	120	12/14/2023
Thallium		0.0020		**0.251**	0.2500	0	100.5	80	120	12/18/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 215858 **SampType:** MS Units **mg/L**

SampID: 23120001-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.506**	0.5000	0	101.2	75	125	12/14/2023
Arsenic		0.0010		**0.528**	0.5000	0	105.6	75	125	12/14/2023
Beryllium		0.0010		**0.0502**	0.0500	0	100.3	75	125	12/14/2023
Cadmium		0.0010		**0.0501**	0.0500	0	100.2	75	125	12/14/2023
Chromium		0.0015		**0.186**	0.2000	0	93.1	75	125	12/14/2023
Cobalt		0.0010		**0.475**	0.5000	0.0002345	95.0	75	125	12/14/2023
Lead		0.0010		**0.480**	0.5000	0	95.9	75	125	12/14/2023
Lithium	*	0.0030		**0.500**	0.5000	0.01406	97.2	75	125	12/14/2023
Molybdenum		0.0015		**0.486**	0.5000	0.0009997	97.0	75	125	12/14/2023
Selenium		0.0010		**0.557**	0.5000	0	111.5	75	125	12/14/2023
Thallium		0.0020		**0.239**	0.2500	0	95.8	75	125	12/18/2023

Batch 215858 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 23120001-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.487**	0.5000	0	97.3	0.5060	3.87	12/14/2023
Arsenic		0.0010		**0.526**	0.5000	0	105.2	0.5279	0.38	12/14/2023
Beryllium		0.0010		**0.0504**	0.0500	0	100.8	0.05015	0.45	12/14/2023
Cadmium		0.0010		**0.0471**	0.0500	0	94.2	0.05009	6.18	12/14/2023
Chromium		0.0015		**0.197**	0.2000	0	98.3	0.1862	5.40	12/14/2023
Cobalt		0.0010		**0.498**	0.5000	0.0002345	99.6	0.4751	4.74	12/14/2023
Lead		0.0010		**0.496**	0.5000	0	99.2	0.4797	3.34	12/14/2023
Lithium	*	0.0030		**0.509**	0.5000	0.01406	99.1	0.4999	1.90	12/14/2023
Molybdenum		0.0015		**0.491**	0.5000	0.0009997	97.9	0.4858	1.00	12/14/2023
Selenium		0.0010		**0.556**	0.5000	0	111.3	0.5574	0.20	12/14/2023
Thallium		0.0020		**0.243**	0.2500	0	97.1	0.2394	1.35	12/18/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 215892 **SampType:** MBLK Units **mg/L**

SampID: MBLK-215892

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	12/15/2023
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	12/14/2023
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	12/14/2023
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	12/14/2023
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	12/15/2023
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	12/14/2023
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	12/14/2023
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	12/14/2023
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	12/14/2023
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	12/14/2023
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	12/14/2023

Batch 215892 **SampType:** LCS Units **mg/L**

SampID: LCS-215892

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.501**	0.5000	0	100.3	80	120	12/15/2023
Arsenic		0.0010		**0.552**	0.5000	0	110.4	80	120	12/14/2023
Beryllium		0.0010		**0.0506**	0.0500	0	101.2	80	120	12/14/2023
Cadmium		0.0010		**0.0533**	0.0500	0	106.7	80	120	12/14/2023
Chromium		0.0015		**0.204**	0.2000	0	102.2	80	120	12/15/2023
Cobalt		0.0010		**0.546**	0.5000	0	109.2	80	120	12/14/2023
Lead		0.0010		**0.519**	0.5000	0	103.8	80	120	12/14/2023
Lithium	*	0.0030		**0.505**	0.5000	0	101.1	80	120	12/14/2023
Molybdenum		0.0015		**0.521**	0.5000	0	104.2	80	120	12/14/2023
Selenium		0.0010		**0.531**	0.5000	0	106.2	80	120	12/14/2023
Thallium		0.0020		**0.243**	0.2500	0	97.3	80	120	12/14/2023

SW-846 7470A (TOTAL)

Batch 215840 **SampType:** MBLK Units **mg/L**

SampID: MBLK-215840

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	12/13/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 7470A (TOTAL)

Batch 215840 **SampType:** LCS Units **mg/L**
SampID: LCS-215840

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00493**	0.0050	0	98.6	85	115	12/14/2023

Batch 215840 **SampType:** MS Units **mg/L**
SampID: 23120001-006CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00440**	0.0050	0	87.9	75	125	12/13/2023

Batch 215840 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23120001-006CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00455**	0.0050	0	91.1	0.004396	3.54	12/13/2023

Batch 215912 **SampType:** MBLK Units **mg/L**
SampID: MBLK-215912

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	12/14/2023

Batch 215912 **SampType:** LCS Units **mg/L**
SampID: LCS-215912

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00458**	0.0050	0	91.7	85	115	12/14/2023

Batch 215912 **SampType:** MS Units **mg/L**
SampID: 23120001-009CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00381**	0.0050	0	76.2	75	125	12/14/2023

Batch 215912 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 23120001-009CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00418**	0.0050	0	83.6	0.003808	9.25	12/14/2023

Batch 215912 **SampType:** MS Units **mg/L**
SampID: 23120949-009AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00406**	0.0050	0	81.3	75	125	12/14/2023

Client: Southern Illinois Power Cooperation **Work Order:** 23120001

Client Project: Groundwater Monitoring **Report Date:** 09-Jan-24

SW-846 7470A (TOTAL)

Batch **215912** **SampType:** **MSD** Units **mg/L** RPD Limit **15**

SampID: 23120949-009AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00401**	0.0050	0	80.2	0.004064	1.35	12/14/2023

Receiving Check List

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 23120001
Client Project: Groundwater Monitoring
Report Date: 09-Jan-24

Carrier: Justin Colp
Received By: HAW

Completed by: Hannah Walker
On: 12-Dec-23

Reviewed by: Ellie Hopkins
On: 12-Dec-23

Pages to follow: Chain of custody 3 Extra pages included 29

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 7.2
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☑	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

pH strip #90719. - hwalker - 12/12/2023 8:02:45 AM

Samples collected on 12/12/23 were received on 12/12/23 at 1532 (on ice - 9.2 - LTG5). pH strip #90719. Additional nitric acid (94914) was needed in EP-3 upon arrival at the laboratory. LH/MEK 12/12/23 1600

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 23120001

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 7.2 °C LTG# 5

Preserved in: [ ] LAB [X] FIELD

FOR LAB USE ONLY

Lab Notes: pH 90719. HN 12/12

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field = DO, Elevations, ORP, Purge Volume, Conductivity, pH, Temp and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
23120001-001	EBG	12-11-23 / 1214	1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1	12-11-23 / 1402	1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2		1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3		1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4		1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5	12-11-23 / 1325	1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6	12-11-23 / 1200	1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7		1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank		1	3	X		X		X	X	X	X	X	X	X
010	Field Blank		1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	12-11-23 / 1645	[signature]	12/11/23 1645

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 85217

2 Work order # 23120001

TEKLAB, INC. 5445 Horse... ...(618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin **Phone:** (618) 964-1448
E-Mail:	jmclaurin@sipower.org **Fax:**

...ICE ☒ BLUE ICE ☐ NO ICE 9.2 °C LTG# 5

Preserved in: ☒ LAB ☐ FIELD

FOR LAB USE ONLY

Lab Notes: PW 90719 LH 12/12/2023 add HNO3 to EP3 (1849M)

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☒ Yes ☐ No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field = DO, Elevations, ORP, Purge Volume, Conductivity, pH, Temp and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested

☒ Standard ☐ 1-2 Day (100% Surcharge) ☐ Other ____ ☐ 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
23120001-001	EBG		1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1		1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2	12-12-23 / 1220	1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3	12-12-23 / 1026	1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4	12-12-23 / 1245	1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5		1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6		1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7	12-12-23 / 1123	1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank	12-12-23 / 1225	1	3	X		X		X	X	X	X	X	X	X
010	Field Blank	12-12-23 / 1230	1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	12-12-23 / 1532	Mary Kemp	12/12/23 1532

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 85217

CHAIN OF CUSTODY

pg. 2 of 2 Work order # 23120021

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation		
Address:	11543 Lake of Egypt Road		
City / State / Zip	Marion, IL 62959		
Contact:	Jason McLaurin	**Phone:**	(618) 964-1448
E-Mail:	jmclaurin@sipower.org	**Fax:**	

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE _____ °C LTG# _____

Preserved in: ☒ LAB ☒ FIELD

FOR LAB USE ONLY

Lab Notes:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☐ No

Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☐ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☐ No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested

☐ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
23120021-011	Field Duplicate	12-11-23 / 1214	1	3		X	X	X	X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	12-11-23 / 1645	[signature]	12/11/23 1645

BottleOrder: 85217

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

January 04, 2024

Elizabeth Hurley
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 23120001

Dear Elizabeth Hurley:

Order No.: 23121340

Summit Environmental Technologies, Inc. received 11 sample(s) on 12/15/2023 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Jennifer Woolf

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Summit Environmental Technologies, Inc.
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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **23121340**
Date: **1/4/2024**

CLIENT: TEKLAB Inc,
Project: 23120001

WorkOrder Narrative:
23121340: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

 The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-44
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **23121340**
Date: **1/4/2024**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **23121340**
04-Jan-24

CLIENT: TEKLAB Inc,
Project: 23120001

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
23121340-001	23120001-001		12/11/2023 12:14:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-002	23120001-002		12/11/2023 2:02:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-003	23120001-003		12/12/2023 12:20:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-004	23120001-004		12/12/2023 10:26:00 AM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-005	23120001-005		12/12/2023 12:45:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-006	23120001-006		12/11/2023 1:25:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-007	23120001-007		12/11/2023 12:00:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-008	23120001-008		12/12/2023 11:23:00 AM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-009	23120001-009		12/12/2023 12:25:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-010	23120001-010		12/12/2023 12:30:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water
23121340-011	23120001-011		12/11/2023 12:14:00 PM	12/15/2023 10:55:00 AM	Non-Potable Water

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Website: http://www.settek.com

DATES REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,

Project: 23120001

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
23121340-001A	23120001-001	12/11/2023 12:14:00 PM	Non-Potable Water	Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-002A	23120001-002	12/11/2023 2:02:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-003A	23120001-003	12/12/2023 12:20:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-004A	23120001-004	12/12/2023 10:26:00 AM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-005A	23120001-005	12/12/2023 12:45:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-006A	23120001-006	12/11/2023 1:25:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-007A	23120001-007	12/11/2023 12:00:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM
				Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-008A	23120001-008	12/12/2023 11:23:00 AM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/21/2023 3:12:00 PM	12/29/2023 9:54:00 AM

Original

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,

Project: 23120001

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
23121340-008A	23120001-008	12/12/2023 11:23:00 AM	Non-Potable Water	Radium-228 (EPA 904.0)		12/21/2023 3:12:00 PM	12/28/2023 1:45:00 PM
23121340-009A	23120001-009	12/12/2023 12:25:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/28/2023 3:55:48 PM	1/3/2024 10:11:00 AM
				Radium-228 (EPA 904.0)		12/28/2023 3:55:48 PM	1/2/2024 2:32:00 PM
23121340-010A	23120001-010	12/12/2023 12:30:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/28/2023 3:55:48 PM	1/3/2024 10:11:00 AM
				Radium-228 (EPA 904.0)		12/28/2023 3:55:48 PM	1/2/2024 2:32:00 PM
23121340-011A	23120001-011	12/11/2023 12:14:00 PM		Combined Radium (EPA903+904)			1/4/2024 7:05:53 AM
				Radium-226 (EPA 903.0)		12/28/2023 3:55:48 PM	1/3/2024 10:11:00 AM
				Radium-228 (EPA 904.0)		12/28/2023 3:55:48 PM	1/2/2024 2:32:00 PM

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/11/2023 12:14:00 PM

Project: 23120001

Lab ID: 23121340-001

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	3.27	2.00		pCi/L	± 1.01	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.06	1.00	U	pCi/L	± 0.0700	1	12/29/2023 9:54:00 AM
Yield	0.93					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	3.21	1.00		pCi/L	± 0.940	1	12/28/2023 1:45:00 PM
Yield	0.87					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/11/2023 2:02:00 PM

Project: 23120001

Lab ID: 23121340-002

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-002

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.94	2.00	U	pCi/L	± 0.800	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.04	1.00	U	pCi/L	± 0.0500	1	12/29/2023 9:54:00 AM
Yield	0.97					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.9	1.00		pCi/L	± 0.750	1	12/28/2023 1:45:00 PM
Yield	1					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 12:20:00 PM

Project: 23120001

Lab ID: 23121340-003

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-003

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	2.08	2.00		pCi/L	± 0.860	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.23	1.00	U	pCi/L	± 0.100	1	12/29/2023 9:54:00 AM
Yield	0.92					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.85	1.00		pCi/L	± 0.760	1	12/28/2023 1:45:00 PM
Yield	0.92					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 10:26:00 AM

Project: 23120001

Lab ID: 23121340-004

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-004

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.83	2.00	U	pCi/L	± 0.820	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.12	1.00	U	pCi/L	± 0.0800	1	12/29/2023 9:54:00 AM
Yield	0.97					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.71	1.00		pCi/L	± 0.740	1	12/28/2023 1:45:00 PM
Yield	0.99					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 12:45:00 PM

Project: 23120001

Lab ID: 23121340-005

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-005

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.75	2.00	U	pCi/L	± 0.770	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.31	1.00	U	pCi/L	± 0.120	1	12/29/2023 9:54:00 AM
Yield	0.92					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.44	1.00		pCi/L	± 0.650	1	12/28/2023 1:45:00 PM
Yield	1					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/11/2023 1:25:00 PM

Project: 23120001

Lab ID: 23121340-006

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-006

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	2.36	2.00		pCi/L	± 0.920	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.48	1.00	U	pCi/L	± 0.150	1	12/29/2023 9:54:00 AM
Yield	0.86					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.88	1.00		pCi/L	± 0.770	1	12/28/2023 1:45:00 PM
Yield	0.89					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/11/2023 12:00:00 PM

Project: 23120001

Lab ID: 23121340-007

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.5	2.00	U	pCi/L	± 0.540	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.01	1.00	U	pCi/L	± 0.0400	1	12/29/2023 9:54:00 AM
Yield	1					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.49	1.00	U	pCi/L	± 0.500	1	12/28/2023 1:45:00 PM
Yield	1					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 11:23:00 AM

Project: 23120001

Lab ID: 23121340-008

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228				**CALCULATION**			Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	4.3	2.00		pCi/L	± 1.17	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.2	1.00	U	pCi/L	± 0.100	1	12/29/2023 9:54:00 AM
Yield	1					1	12/29/2023 9:54:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	4.1	1.00		pCi/L	± 1.07	1	12/28/2023 1:45:00 PM
Yield	0.88					1	12/28/2023 1:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 12:25:00 PM

Project: 23120001

Lab ID: 23121340-009

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-009

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.05	2.00	U	pCi/L	± 0.580	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.05	1.00	U	pCi/L	± 0.0500	1	1/3/2024 10:11:00 AM
Yield	1					1	1/3/2024 10:11:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **SMZ**
RADIUM-228 (EPA 904.0)							
Radium-228	-0.18	1.00	U	pCi/L	± 0.530	1	1/2/2024 2:32:00 PM
Yield	1					1	1/2/2024 2:32:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/12/2023 12:30:00 PM

Project: 23120001

Lab ID: 23121340-010

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.18	2.00	U	pCi/L	± 0.570	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.06	1.00	U	pCi/L	± 0.0500	1	1/3/2024 10:11:00 AM
Yield	1					1	1/3/2024 10:11:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **SMZ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.12	1.00	U	pCi/L	± 0.520	1	1/2/2024 2:32:00 PM
Yield	0.99					1	1/2/2024 2:32:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **23121340**

Date Reported: **1/4/2024**

CLIENT: TEKLAB Inc,

Collection Date: 12/11/2023 12:14:00 PM

Project: 23120001

Lab ID: 23121340-011

Matrix: NON-POTABLE WATER

Client Sample ID: 23120001-011

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.41	2.00	U	pCi/L	± 0.610	1	1/4/2024 7:05:53 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.01	1.00	U	pCi/L	± 0.0400	1	1/3/2024 10:11:00 AM
Yield	1					1	1/3/2024 10:11:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **SMZ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.4	1.00	U	pCi/L	± 0.570	1	1/2/2024 2:32:00 PM
Yield	1					1	1/2/2024 2:32:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71569**

Sample ID: **MB-71569**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177263**
Client ID: **PBW**	Batch ID: **71569**	TestNo: **E904.0**	**E903-904**	Analysis Date: **12/28/2023**	SeqNo: **4802302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	1.00			0	0						

Sample ID: **LCS-71569**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177263**
Client ID: **LCSW**	Batch ID: **71569**	TestNo: **E904.0**	**E903-904**	Analysis Date: **12/28/2023**	SeqNo: **4802303**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.63	1.00	5.000	0	72.6	70	130				
Yield	1.00			0	0						

Sample ID: **RLC-71569**	SampType: **RLC**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177263**
Client ID: **BatchQC**	Batch ID: **71569**	TestNo: **E904.0**	**E903-904**	Analysis Date: **12/28/2023**	SeqNo: **4802306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.11	1.00	1.000	0	111	50	150				
Yield	1.00			0	0						

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **23121340**
04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71569**

Sample ID: **RLCD-71569** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177263**
Client ID: **BatchQC** Batch ID: **71569** TestNo: **E904.0** **E903-904** Analysis Date: **12/28/2023** SeqNo: **4802307**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.770	1.00	1.000	0	77.0	50	150				J
Yield	1.00			0	0						

Sample ID: **23121247-003ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177263**
Client ID: **BatchQC** Batch ID: **71569** TestNo: **E904.0** **E903-904** Analysis Date: **12/28/2023** SeqNo: **4802312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.33	1.00		0	0			1.140	15.4	20	
Yield	0.970			0	0			0.6100	45.6		

Sample ID: **23121248-003ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177263**
Client ID: **BatchQC** Batch ID: **71569** TestNo: **E904.0** **E903-904** Analysis Date: **12/28/2023** SeqNo: **4802314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0	0	20	U
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71569**

Sample ID: **MB-71569** SampType: **MBLK** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177274**
Client ID: **PBW** Batch ID: **71569** TestNo: **E903.0** **E903-904** Analysis Date: **12/29/2023** SeqNo: **4802496**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	1.00										

Sample ID: **LCS-71569** SampType: **LCS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177274**
Client ID: **LCSW** Batch ID: **71569** TestNo: **E903.0** **E903-904** Analysis Date: **12/29/2023** SeqNo: **4802497**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.18	1.00	5.000	0	104	70	130				

Sample ID: **RLC-71569** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177274**
Client ID: **BatchQC** Batch ID: **71569** TestNo: **E903.0** **E903-904** Analysis Date: **12/29/2023** SeqNo: **4802500**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.03	1.00	1.000	0	103	50	150				

Sample ID: **RLCD-71569** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/21/2023** RunNo: **177274**
Client ID: **BatchQC** Batch ID: **71569** TestNo: **E903.0** **E903-904** Analysis Date: **12/29/2023** SeqNo: **4802501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71569**

Sample ID: **RLCD-71569**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177274**
Client ID: **BatchQC**	Batch ID: **71569**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/29/2023**	SeqNo: **4802501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.980	1.00	1.000	0	98.0	50	150				J

Sample ID: **23121247-003ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177274**
Client ID: **BatchQC**	Batch ID: **71569**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/29/2023**	SeqNo: **4802504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Sample ID: **23121248-003ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/21/2023**	RunNo: **177274**
Client ID: **BatchQC**	Batch ID: **71569**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/29/2023**	SeqNo: **4802506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	0.980							1.000	2.02	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **23121342-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **BatchQC** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.71	1.00		0	0			0	200	30	JR
Yield	0.94			0	0			0.8800	6.59		

Sample ID: **23121342-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **BatchQC** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807389**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.75	1.00		0	0			1.200	46.2	30	JR
Yield	1			0	0			0.9900	1.01		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **MB-71670** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **PBW** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	1.00			0	0						

Sample ID: **LCS-71670** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **LCSW** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807378**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	5.35	1.00	5.000	0	107	70	130				QLR
Yield	1.00			0	0						

Sample ID: **LCSD-71670** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **LCSS02** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807379**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.84	1.00	5.000	0	76.8	70	130	5.350	32.9	20	R
Yield	0.910			0	0			1.000	9.42		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **RLCD-71670** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177460**
Client ID: **BatchQC** Batch ID: **71670** TestNo: **E904.0** **E903-904** Analysis Date: **1/2/2024** SeqNo: **4807382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00	1.000	0	51.0	50	150				
Yield	0.830			0	0						

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **23121342-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177464**
Client ID: **BatchQC** Batch ID: **71670** TestNo: **E903.0** **E903-904** Analysis Date: **1/3/2024** SeqNo: **4807428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.12	1.00						0	0	30	U
Yield	0.99							0.9900	0	0	

Sample ID: **23121342-002ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **12/28/2023** RunNo: **177464**
Client ID: **BatchQC** Batch ID: **71670** TestNo: **E903.0** **E903-904** Analysis Date: **1/3/2024** SeqNo: **4807430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.19	1.00						0	0	30	U
Yield	1							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **MB-71670**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **PBW**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807418**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	1.00										

Sample ID: **LCS-71670**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **LCSW**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.85	1.00	5.000	0	117	70	130				

Sample ID: **LCSD-71670**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **LCSS02**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807420**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.94	1.00	5.000	0	98.8	70	130	5.850	16.9	20	

Sample ID: **RLC-71670**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **BatchQC**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **23121340**

04-Jan-24

Client: TEKLAB Inc,
Project: 23120001 **BatchID:** **71670**

Sample ID: **RLC-71670**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **BatchQC**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.890	1.00	1.000	0	89.0	50	150				J

Sample ID: **RLCD-71670**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **12/28/2023**	RunNo: **177464**
Client ID: **BatchQC**	Batch ID: **71670**	TestNo: **E903.0**	**E903-904**	Analysis Date: **1/3/2024**	SeqNo: **4807423**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.980	1.00	1.000	0	98.0	50	150				J

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

TEKLAB, INC. Chain of Custody

23121340

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☑ With: ☐ Ice ☐ Blue Ice Preserved in: ☐ Lab ☐ Field

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: | Sampler: Justin Colp | QC Level: 2

Project# 23120001

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium (226 and 228) by method EPA903.0/904.0
on your standard turnaround time.
Batch QC is required with the report. Receipt summary requested.

Contact: Elizabeth A. Hurley | Email: EHurley@teklabinc.com
Requested Due Date: 20 business days or less | Billing/PO: 35487
Phone: (618) 344-1004 ext. 33

State of Origin:IL

17.9-0.2=17.7°C; Fedex Cooler

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Any changes to analysis/methods must be approved by Teklab, Inc.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Radium 226	Radium 228											
	23120001-001	12/11/23 1214	HNO3	Groundwater	✔	✔	☐	5	1.34	☐	☐	☐	1	☐	☐	☐	☐
	23120001-002	12/11/23 1402	HNO3	Groundwater	✔	✔	☐	1.47	1.47	☐	☐	☐	1	☐	☐	☐	☐
	23120001-003	12/12/23 1220	HNO3	Groundwater	✔	✔	☐	2.3	2.7	☐	☐	☐	1	☐	☐	☐	☐
	23120001-004	12/12/23 1026	HNO3	Groundwater	✔	✔	☐	2.3	2.7	☐	☐	☐	1	☐	☐	☐	☐
	23120001-005	12/12/23 1245	HNO3	Groundwater	✔	✔	☐	3.8	1.8	☐	☐	☐	1	☐	☐	☐	☐
	23120001-006	12/11/23 1325	HNO3	Groundwater	✔	✔	☐	3.8	5.0	☐	☐	☐	1	☐	☐	☐	☐
	23120001-007	12/11/23 1200	HNO3	Groundwater	✔	✔	☐	4.3	2.3	☐	☐	☐	1	☐	☐	☐	☐
	23120001-008	12/12/23 1123	HNO3	Groundwater	✔	✔	☐	1.8	1.5	☐	☐	☐	1	☐	☐	☐	☐
	23120001-009	12/12/23 1225	HNO3	Aqueous	✔	✔	☐	3.8	1.5	☐	☐	☐	1	☐	☐	☐	☐
	23120001-010	12/12/23 1230	HNO3	Aqueous	✔	✔	☐	2.7	3.4	☐	☐	☐	1	☐	☐	☐	☐
	23120001-011	12/11/23 1214	HNO3	Groundwater	✔	✔	☐	3.1	2.7	☐	☐	☐	1	☐	☐	☐	☐

*Relinquished By	Date/Time	Received By	Date/Time
Mary Kemp	12/13/23 1600	[signature]	12/15/23, 1055

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 23121340 RcptNo: 1

Logged by:	Tegan A. Richards	12/15/2023 10:55:00 AM	Tegan Richards
Completed By:	Tegan A. Richards	12/18/2023 3:42:02 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	12/18/2023 3:50:57 PM	Jennifer Woolf

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☑
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☐ No ☑ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Not required
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	17.7	Good	Not Present			

April 15, 2024

Jason McLaurin
Southern Illinois Power Cooperation
11543 Lake of Egypt Road
Marion, IL 62959
TEL: (618) 964-1448
FAX:

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Groundwater Monitoring **WorkOrder:** 24030002

Dear Jason McLaurin:

TEKLAB, INC received 11 samples on 3/15/2024 8:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24

This reporting package includes the following:

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Abbr Definition

*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Qualifiers

- # - Unknown hydrocarbon
- B - Analyte detected in associated Method Blank
- C - RL shown is a Client Requested Quantitation Limit
- E - Value above quantitation range
- H - Holding times exceeded
- I - Associated internal standard was outside method criteria
- J - Analyte detected below quantitation limits
- M - Manual Integration used to determine area response
- ND - Not Detected at the Reporting Limit
- R - RPD outside accepted recovery limits
- S - Spike Recovery outside recovery limits
- T - TIC(Tentatively identified compound)
- X - Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24

Cooler Receipt Temp: 11.1 °C

An employee of Teklab, Inc. collected the sample(s).

Ra226/228 analysis was performed by Summit Environmental Technologies, Inc. See attached report for results.

This report was revised on April 15, 2024 per Cassandra Sferazo (WSP)'s review. The reason for the revision is to remove a duplicate Lithium value reported for EBG in error. Please replace report dated April 9, 2024 with this report. EAH 4/15/24

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-001 **Client Sample ID:** EBG

Matrix: GROUNDWATER **Collection Date:** 03/12/2024 13:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**9.49**	ft	1	03/12/2024 13:27	R344521
Elevation of groundwater surface	*	0	0		**515.38**	ft	1	03/12/2024 13:27	R344521
Measuring Point Elevation	*	0	0		**524.87**	ft	1	03/12/2024 13:27	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.59**	gal	1	03/12/2024 13:27	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.8**	NTU	1	03/12/2024 13:27	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**138**	mV	1	03/12/2024 13:27	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**500**	µS/cm	1	03/12/2024 13:27	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**19.5**	°C	1	03/12/2024 13:27	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.95**	mg/L	1	03/12/2024 13:27	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.71**		1	03/12/2024 13:27	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**348**	mg/L	1	03/13/2024 8:14	R344358
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**16**	mg/L	1	03/13/2024 12:19	R344318
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**85**	mg/L	5	03/13/2024 12:24	R344317
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.55**	mg/L	1	03/13/2024 11:18	R344290
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0560**	mg/L	1	03/14/2024 14:06	219890
Boron	NELAP	0.0090	0.020	J	**0.013**	mg/L	1	03/14/2024 14:06	219890
Calcium	NELAP	0.0350	0.100	B	**13.6**	mg/L	1	03/14/2024 14:06	219890
Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/20/2024 8:32	219890
Arsenic	NELAP	0.0004	0.0010	J	**0.0004**	mg/L	5	03/14/2024 13:10	219890
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/14/2024 13:10	219890
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/14/2024 13:10	219890
Chromium	NELAP	0.0010	0.0015		**0.0019**	mg/L	5	03/14/2024 13:10	219890
Cobalt	NELAP	0.0001	0.0010	J	**0.0002**	mg/L	5	03/14/2024 13:10	219890
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/14/2024 13:10	219890
Lithium	*	0.0015	0.0030		**0.0265**	mg/L	5	03/14/2024 13:10	219890
Molybdenum	NELAP	0.0006	0.0015		**0.0016**	mg/L	5	03/14/2024 13:10	219890
Selenium	NELAP	0.0006	0.0010	J	**0.0006**	mg/L	5	03/15/2024 22:59	219890
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/14/2024 13:10	219890
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/14/2024 13:59	219856

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-001
Client Sample ID: EBG
Matrix: GROUNDWATER
Collection Date: 03/12/2024 13:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-002 **Client Sample ID:** EP-1

Matrix: GROUNDWATER **Collection Date:** 03/13/2024 13:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**5.93**	ft	1	03/13/2024 13:04	R344521
Elevation of groundwater surface	*	0	0		**513.79**	ft	1	03/13/2024 13:04	R344521
Measuring Point Elevation	*	0	0		**519.72**	ft	1	03/13/2024 13:04	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.59**	gal	1	03/13/2024 13:04	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**9.2**	NTU	1	03/13/2024 13:04	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**157**	mV	1	03/13/2024 13:04	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2430**	µS/cm	1	03/13/2024 13:04	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.8**	°C	1	03/13/2024 13:04	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.98**	mg/L	1	03/13/2024 13:04	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.32**		1	03/13/2024 13:04	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2540**	mg/L	1	03/14/2024 9:35	R344417
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**40**	mg/L	1	03/14/2024 10:27	R344357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**1530**	mg/L	50	03/14/2024 10:32	R344355
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.23**	mg/L	1	03/14/2024 15:49	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0146**	mg/L	1	03/15/2024 18:49	219947
Boron	NELAP	0.0090	0.0200		**1.05**	mg/L	1	03/15/2024 18:49	219947
Calcium	NELAP	0.0350	0.100		**548**	mg/L	1	03/15/2024 18:49	219947
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/20/2024 9:42	219947
Arsenic	NELAP	0.0004	0.0010	J	**0.0007**	mg/L	5	03/16/2024 2:00	219947
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/16/2024 2:00	219947
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/16/2024 2:00	219947
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	03/16/2024 2:00	219947
Cobalt	NELAP	0.0001	0.0010	J	**0.0002**	mg/L	5	03/16/2024 2:00	219947
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/16/2024 2:00	219947
Lithium	*	0.0015	0.0030		**0.0142**	mg/L	5	03/16/2024 2:00	219947
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/16/2024 2:00	219947
Selenium	NELAP	0.0006	0.0010		**0.0047**	mg/L	5	03/16/2024 2:00	219947
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/16/2024 2:00	219947
LCS recovered outside upper control limits for As and Cd. Sample results are below the reporting limit. Data is reportable per the TNI Standard.									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 11:45	220165

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-002
Client Sample ID: EP-1
Matrix: GROUNDWATER
Collection Date: 03/13/2024 13:04

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-003 **Client Sample ID:** EP-2

Matrix: GROUNDWATER **Collection Date:** 03/13/2024 15:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**6.85**	ft	1	03/13/2024 15:27	R344521
Elevation of groundwater surface	*	0	0		**506.94**	ft	1	03/13/2024 15:27	R344521
Measuring Point Elevation	*	0	0		**513.79**	ft	1	03/13/2024 15:27	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.38**	gal	1	03/13/2024 15:27	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.0**	NTU	1	03/13/2024 15:27	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**108**	mV	1	03/13/2024 15:27	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2950**	µS/cm	1	03/13/2024 15:27	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**16.1**	°C	1	03/13/2024 15:27	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.08**	mg/L	1	03/13/2024 15:27	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.06**		1	03/13/2024 15:27	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**3250**	mg/L	1	03/14/2024 9:36	R344417
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	2	20		**64**	mg/L	5	03/14/2024 10:35	R344357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**2050**	mg/L	50	03/14/2024 10:40	R344355
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.94**	mg/L	1	03/14/2024 15:51	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0154**	mg/L	1	03/15/2024 18:50	219947
Boron	NELAP	0.0090	0.0200		**0.418**	mg/L	1	03/15/2024 18:50	219947
Calcium	NELAP	0.0350	0.100		**473**	mg/L	1	03/15/2024 18:50	219947
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/20/2024 9:46	219947
Arsenic	NELAP	0.0004	0.0010	J	**0.0007**	mg/L	5	03/16/2024 2:54	219947
Beryllium	NELAP	0.0002	0.0010		**0.0021**	mg/L	5	03/18/2024 12:49	219947
Cadmium	NELAP	0.0002	0.0010		**0.0014**	mg/L	5	03/21/2024 10:54	220172
Chromium	NELAP	0.0007	0.0015		**0.0017**	mg/L	5	03/16/2024 2:54	219947
Cobalt	NELAP	0.0001	0.0010		**0.0530**	mg/L	5	03/18/2024 12:49	219947
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/16/2024 2:54	219947
Lithium	*	0.0015	0.0030		**0.0291**	mg/L	5	03/19/2024 9:18	219947
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/16/2024 2:54	219947
Selenium	NELAP	0.0006	0.0010		**0.0028**	mg/L	5	03/18/2024 12:49	219947
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/16/2024 2:54	219947

PQL recovered outside upper control limits for Se. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

LCS recovered outside upper control limits for As. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

CCV recovered outside the upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI standard.

SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 11:48	220165

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-003
Client Sample ID: EP-2
Matrix: GROUNDWATER
Collection Date: 03/13/2024 15:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-004 **Client Sample ID:** EP-3

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**16.75**	ft	1	03/14/2024 14:08	R344521
Elevation of groundwater surface	*	0	0		**502.20**	ft	1	03/14/2024 14:08	R344521
Measuring Point Elevation	*	0	0		**518.95**	ft	1	03/14/2024 14:08	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.11**	gal	1	03/14/2024 14:08	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.1**	NTU	1	03/14/2024 14:08	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-30**	mV	1	03/14/2024 14:08	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1120**	µS/cm	1	03/14/2024 14:08	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.6**	°C	1	03/14/2024 14:08	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.19**	mg/L	1	03/14/2024 14:08	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.18**		1	03/14/2024 14:08	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**650**	mg/L	2.5	03/15/2024 12:14	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	40		**136**	mg/L	10	03/18/2024 16:43	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		**105**	mg/L	10	03/18/2024 16:43	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.19**	mg/L	1	03/15/2024 10:04	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0970**	mg/L	1	03/20/2024 16:51	220109
Boron	NELAP	0.0090	0.0200		**0.0676**	mg/L	1	03/20/2024 16:51	220109
Calcium	NELAP	0.0530	0.100	S	**35.4**	mg/L	1	03/20/2024 16:51	220109
Matrix spike control limits are not applicable due to high sample/spike ratio.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:15	220109
Arsenic	NELAP	0.0004	0.0010		**0.0085**	mg/L	5	03/21/2024 15:50	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:15	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:50	220109
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:50	220109
Cobalt	NELAP	0.0001	0.0010		**0.0888**	mg/L	5	03/21/2024 15:50	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:15	220109
Lithium	*	0.0015	0.0030		**0.0196**	mg/L	5	03/21/2024 15:50	220109
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:50	220109
Selenium	NELAP	0.0006	0.0010	J	**0.0009**	mg/L	5	03/21/2024 15:50	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:50	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 11:50	220165

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-004 **Client Sample ID:** EP-3

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 14:08

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 16:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**8.40**	ft	1	03/14/2024 16:06	R344521
Elevation of groundwater surface	*	0	0		**511.34**	ft	1	03/14/2024 16:06	R344521
Measuring Point Elevation	*	0	0		**519.74**	ft	1	03/14/2024 16:06	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.43**	gal	1	03/14/2024 16:06	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**15**	NTU	1	03/14/2024 16:06	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-33**	mV	1	03/14/2024 16:06	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2160**	µS/cm	1	03/14/2024 16:06	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.4**	°C	1	03/14/2024 16:06	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.12**	mg/L	1	03/14/2024 16:06	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.07**		1	03/14/2024 16:06	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**1600**	mg/L	2.5	03/15/2024 12:15	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	10	80		**457**	mg/L	20	03/18/2024 16:46	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	123	200		**465**	mg/L	20	03/18/2024 16:46	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.16**	mg/L	1	03/15/2024 10:07	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0355**	mg/L	1	03/20/2024 16:56	220109
Boron	NELAP	0.0090	0.0200		**9.42**	mg/L	1	03/20/2024 16:56	220109
Calcium	NELAP	0.0530	0.100		**176**	mg/L	1	03/20/2024 16:56	220109
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:48	220109
Arsenic	NELAP	0.0004	0.0010		**0.0135**	mg/L	5	03/21/2024 15:19	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:48	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:19	220109
Chromium	NELAP	0.0007	0.0015		**0.0019**	mg/L	5	03/21/2024 15:19	220109
Cobalt	NELAP	0.0001	0.0010		**0.126**	mg/L	5	03/21/2024 15:19	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:48	220109
Lithium	*	0.0015	0.0030	J	**0.0025**	mg/L	5	03/21/2024 15:19	220109
Molybdenum	NELAP	0.0006	0.0015	J	**0.0010**	mg/L	5	03/21/2024 15:19	220109
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	03/21/2024 15:19	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:19	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 11:52	220165
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 16:06

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-006 **Client Sample ID:** EP-5

Matrix: GROUNDWATER **Collection Date:** 03/13/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**14.84**	ft	1	03/13/2024 10:35	R344521
Elevation of groundwater surface	*	0	0		**512.75**	ft	1	03/13/2024 10:35	R344521
Measuring Point Elevation	*	0	0		**527.59**	ft	1	03/13/2024 10:35	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.06**	gal	1	03/13/2024 10:35	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.3**	NTU	1	03/13/2024 10:35	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**112**	mV	1	03/13/2024 10:35	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**368**	µS/cm	1	03/13/2024 10:35	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**14.9**	°C	1	03/13/2024 10:35	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**6.10**	mg/L	1	03/13/2024 10:35	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.67**		1	03/13/2024 10:35	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**268**	mg/L	1	03/14/2024 9:36	R344417
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4	J	**3**	mg/L	1	03/14/2024 10:59	R344357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**105**	mg/L	5	03/14/2024 11:10	R344355
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.54**	mg/L	1	03/14/2024 15:53	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0405**	mg/L	1	03/15/2024 18:54	219947
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	03/15/2024 18:54	219947
Calcium	NELAP	0.0350	0.100		**14.6**	mg/L	1	03/15/2024 18:54	219947
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/20/2024 10:12	219947
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Chromium	NELAP	0.0007	0.0015	J	**0.0013**	mg/L	5	03/16/2024 3:00	219947
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Lithium	*	0.0015	0.0030	J	**0.0025**	mg/L	5	03/16/2024 3:00	219947
Molybdenum	NELAP	0.0006	0.0015	J	**0.0011**	mg/L	5	03/16/2024 3:00	219947
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/16/2024 3:00	219947
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/16/2024 3:00	219947

LCS recovered outside upper control limits for As. Sample results are below the reporting limit. Data is reportable per the TNI Standard.

CCV recovered outside the upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI standard.

SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 11:55	220165

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-006
Client Sample ID: EP-5
Matrix: GROUNDWATER
Collection Date: 03/13/2024 10:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-007 **Client Sample ID:** EP-6

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 11:54

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**2.97**	ft	1	03/14/2024 11:54	R344521
Elevation of groundwater surface	*	0	0		**502.14**	ft	1	03/14/2024 11:54	R344521
Measuring Point Elevation	*	0	0		**505.11**	ft	1	03/14/2024 11:54	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.19**	gal	1	03/14/2024 11:54	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.8**	NTU	1	03/14/2024 11:54	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**189**	mV	1	03/14/2024 11:54	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**257**	µS/cm	1	03/14/2024 11:54	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**16.2**	°C	1	03/14/2024 11:54	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.53**	mg/L	1	03/14/2024 11:54	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**5.00**		1	03/14/2024 11:54	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**250**	mg/L	2.5	03/15/2024 12:15	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**19**	mg/L	1	03/18/2024 16:51	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		**74**	mg/L	2	03/18/2024 17:18	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	**0.06**	mg/L	1	03/15/2024 10:09	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0376**	mg/L	1	03/20/2024 16:57	220109
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	03/20/2024 16:57	220109
Calcium	NELAP	0.0530	0.100		**1.54**	mg/L	1	03/20/2024 16:57	220109
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:54	220109
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:26	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:54	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:26	220109
Chromium	NELAP	0.0007	0.0015		**0.0017**	mg/L	5	03/21/2024 15:26	220109
Cobalt	NELAP	0.0001	0.0010		**0.0023**	mg/L	5	03/21/2024 15:26	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:54	220109
Lithium	*	0.0015	0.0030		**0.0112**	mg/L	5	03/21/2024 15:26	220109
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:26	220109
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:26	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:26	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/21/2024 12:55	220165
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-007
Client Sample ID: EP-6
Matrix: GROUNDWATER
Collection Date: 03/14/2024 11:54

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-008 **Client Sample ID:** EP-7

Matrix: GROUNDWATER **Collection Date:** 03/14/2024 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**14.03**	ft	1	03/14/2024 13:40	R344521
Elevation of groundwater surface	*	0	0		**501.41**	ft	1	03/14/2024 13:40	R344521
Measuring Point Elevation	*	0	0		**515.44**	ft	1	03/14/2024 13:40	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.32**	gal	1	03/14/2024 13:40	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**6.5**	NTU	1	03/14/2024 13:40	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-4**	mV	1	03/14/2024 13:40	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1520**	µS/cm	1	03/14/2024 13:40	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**22.5**	°C	1	03/14/2024 13:40	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.00**	mg/L	1	03/14/2024 13:40	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**5.92**		1	03/14/2024 13:40	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**1010**	mg/L	2.5	03/15/2024 12:33	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	40		**236**	mg/L	10	03/18/2024 17:29	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		**326**	mg/L	10	03/18/2024 17:29	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.19**	mg/L	1	03/15/2024 10:12	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0377**	mg/L	1	03/20/2024 17:07	220109
Boron	NELAP	0.0090	0.0200		**0.594**	mg/L	1	03/20/2024 17:07	220109
Calcium	NELAP	0.0530	0.100		**109**	mg/L	1	03/20/2024 17:07	220109
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:59	220109
Arsenic	NELAP	0.0004	0.0010		**0.0066**	mg/L	5	03/21/2024 15:32	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:59	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:32	220109
Chromium	NELAP	0.0007	0.0015		**0.0638**	mg/L	5	03/21/2024 15:32	220109
Cobalt	NELAP	0.0001	0.0010		**0.156**	mg/L	5	03/21/2024 15:32	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 14:59	220109
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	03/21/2024 15:32	220109
Molybdenum	NELAP	0.0006	0.0015	J	**0.0014**	mg/L	5	03/21/2024 15:32	220109
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:32	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:32	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00007	0.00020		**< 0.00020**	mg/L	1	03/21/2024 13:39	220166
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-008
Client Sample ID: EP-7
Matrix: GROUNDWATER
Collection Date: 03/14/2024 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-009
Client Sample ID: Equipment Blank
Matrix: AQUEOUS
Collection Date: 03/14/2024 16:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**20**	mg/L	1	03/15/2024 12:33	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**< 4**	mg/L	1	03/18/2024 17:31	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	03/18/2024 17:31	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	03/15/2024 10:13	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	03/20/2024 17:08	220109
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	03/20/2024 17:08	220109
Calcium	NELAP	0.0530	0.100		**0.112**	mg/L	1	03/20/2024 17:08	220109
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:04	220109
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:38	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:04	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:38	220109
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:38	220109
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:38	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:04	220109
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	03/21/2024 15:38	220109
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:38	220109
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:38	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:38	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00007	0.00020		**< 0.00020**	mg/L	1	03/21/2024 13:43	220166
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-010 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 03/14/2024 15:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	03/15/2024 12:33	R344506
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**< 4**	mg/L	1	03/18/2024 17:34	R344517
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	03/18/2024 17:34	R344515
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	03/15/2024 10:16	R344388
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	03/20/2024 17:10	220109
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	03/20/2024 17:10	220109
Calcium	NELAP	0.0530	0.100		**< 0.100**	mg/L	1	03/20/2024 17:10	220109
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:09	220109
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:44	220109
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:09	220109
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:44	220109
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:44	220109
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:44	220109
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/22/2024 15:09	220109
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	03/21/2024 15:44	220109
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	03/21/2024 15:44	220109
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/21/2024 15:44	220109
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/21/2024 15:44	220109
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00007	0.00020		**< 0.00020**	mg/L	1	03/21/2024 13:45	220166
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

Lab ID: 24030002-011 **Client Sample ID:** Field Duplicate

Matrix: GROUNDWATER **Collection Date:** 03/12/2024 13:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**9.49**	ft	1	03/12/2024 13:27	R344521
Elevation of groundwater surface	*	0	0		**515.38**	ft	1	03/12/2024 13:27	R344521
Measuring Point Elevation	*	0	0		**524.87**	ft	1	03/12/2024 13:27	R344521
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.59**	gal	1	03/12/2024 13:27	R344521
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.8**	NTU	1	03/12/2024 13:27	R344521
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**138**	mV	1	03/12/2024 13:27	R344521
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**500**	µS/cm	1	03/12/2024 13:27	R344521
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**19.5**	°C	1	03/12/2024 13:27	R344521
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.95**	mg/L	1	03/12/2024 13:27	R344521
SW-846 9040B FIELD									
pH	*	0	1.00		**6.71**		1	03/12/2024 13:27	R344521
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**342**	mg/L	1	03/13/2024 8:14	R344358
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**16**	mg/L	1	03/13/2024 12:27	R344318
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**84**	mg/L	5	03/13/2024 12:46	R344317
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.58**	mg/L	1	03/13/2024 11:20	R344290
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0544**	mg/L	1	03/14/2024 15:59	219890
Boron	NELAP	0.0090	0.020	J	**0.012**	mg/L	1	03/14/2024 15:59	219890
Calcium	NELAP	0.0350	0.100	BS	**12.8**	mg/L	1	03/14/2024 15:59	219890
Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.									
Matrix spike control limits are not applicable due to high sample/spike ratio.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	03/20/2024 10:36	219890
Arsenic	NELAP	0.0004	0.0010	J	**0.0006**	mg/L	5	03/14/2024 14:13	219890
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/14/2024 14:13	219890
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	03/14/2024 14:13	219890
Chromium	NELAP	0.0010	0.0015		**0.0025**	mg/L	5	03/14/2024 14:13	219890
Cobalt	NELAP	0.0001	0.0010	J	**0.0004**	mg/L	5	03/14/2024 14:13	219890
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/14/2024 14:13	219890
Lithium	*	0.0015	0.0030		**0.0159**	mg/L	5	03/15/2024 23:11	219890
Molybdenum	NELAP	0.0006	0.0015		**0.0036**	mg/L	5	03/14/2024 14:13	219890
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	03/15/2024 23:11	219890
Selenium	NELAP	0.0006	0.0010		**0.0013**	mg/L	5	03/14/2024 14:13	219890
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	03/14/2024 14:13	219890
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	03/14/2024 14:01	219856

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24
Lab ID: 24030002-011
Client Sample ID: Field Duplicate
Matrix: GROUNDWATER
Collection Date: 03/12/2024 13:27

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385
Radium-228	*	0	0		**See Attached**	pci/L	1	04/02/2024 15:02	R345385

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

STANDARD METHODS 2510 B FIELD

Batch R344521 **SampType:** LCS Units **µS/cm**

SampID: LCS-R344521-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1410**	1412	0	99.6	90	110	03/12/2024

Batch R344521 **SampType:** LCS Units **µS/cm**

SampID: LCS-R344521-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1410**	1412	0	99.7	90	110	03/13/2024

Batch R344521 **SampType:** LCS Units **µS/cm**

SampID: LCS-R344521-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1400**	1412	0	99.2	90	110	03/14/2024

SW-846 9040B FIELD

Batch R344521 **SampType:** LCS Units

SampID: LCS-R344521-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.05**	7.000	0	100.7	98.57	101.4	03/12/2024

Batch R344521 **SampType:** LCS Units

SampID: LCS-R344521-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.09**	7.000	0	101.3	98.57	101.4	03/13/2024

Batch R344521 **SampType:** LCS Units

SampID: LCS-R344521-3

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.09**	7.000	0	101.3	98.57	101.4	03/14/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R344358 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	03/13/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R344358 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**950**	1000	0	95.0	90	110	03/13/2024

Batch R344358 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24030866-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**440**				436.0	0.91	03/13/2024

Batch R344417 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	03/14/2024

Batch R344417 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**928**	1000	0	92.8	90	110	03/14/2024

Batch R344506 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	03/15/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	03/15/2024

Batch R344506 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**956**	1000	0	95.6	90	110	03/15/2024
Total Dissolved Solids		20		**968**	1000	0	96.8	90	110	03/15/2024

Batch R344506 **SampType:** DUP Units **mg/L** RPD Limit **10**
SampID: 24030008-013BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**310**				310.0	0.00	03/15/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R344506 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24030008-014BDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**416**				408.0	1.94	03/15/2024

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R344318 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	03/13/2024

Batch R344318 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**21**	20.00	0	102.8	90	110	03/13/2024

Batch R344318 **SampType:** MS Units **mg/L**

SampID: 24030008-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4	E	**52**	20.00	34.34	87.9	85	115	03/13/2024

Batch R344318 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24030008-004BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4	E	**52**	20.00	34.34	87.1	51.92	0.31	03/13/2024

Batch R344318 **SampType:** MS Units **mg/L**

SampID: 24030670-006BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		400		**2970**	2000	1227	86.9	85	115	03/13/2024

Batch R344318 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24030670-006BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		400		**2980**	2000	1227	87.5	2965	0.38	03/13/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R344318 **SampType:** MS Units **mg/L**
SampID: 24030818-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**37**	20.00	19.52	87.8	85	115	03/13/2024

Batch R344318 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030818-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	19.52	87.2	37.07	0.30	03/13/2024

Batch R344318 **SampType:** MS Units **mg/L**
SampID: 24030866-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**46**	20.00	28.67	88.6	85	115	03/13/2024

Batch R344318 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030866-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**47**	20.00	28.67	89.4	46.39	0.32	03/13/2024

Batch R344357 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	03/14/2024

Batch R344357 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**21**	20.00	0	103.2	90	110	03/14/2024

Batch R344357 **SampType:** MS Units **mg/L**
SampID: 24030002-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**22**	20.00	2.700	94.4	85	115	03/14/2024

Batch R344357 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030002-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**21**	20.00	2.700	94.0	21.59	0.46	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R344357 **SampType:** MS Units **mg/L**
SampID: 24030008-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**21**	20.00	2.250	95.9	85	115	03/14/2024

Batch R344357 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030008-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**22**	20.00	2.250	97.0	21.43	0.98	03/14/2024

Batch R344517 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	03/18/2024

Batch R344517 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**21**	20.00	0	103.4	90	110	03/18/2024

Batch R344517 **SampType:** MS Units **mg/L**
SampID: 24030002-007AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**37**	20.00	19.45	88.2	85	115	03/18/2024

Batch R344517 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030002-007AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	19.45	87.4	37.10	0.46	03/18/2024

Batch R344517 **SampType:** MS Units **mg/L**
SampID: 24030008-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40		**260**	200.0	79.21	90.2	85	115	03/18/2024

Batch R344517 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030008-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40		**264**	200.0	79.21	92.4	259.6	1.67	03/18/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9036 (TOTAL)

Batch R344317 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/13/2024

Batch R344317 **SampType:** MBLK Units **mg/L**
SampID: MB-R344317

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/13/2024

Batch R344317 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	98.4	90	110	03/13/2024

Batch R344317 **SampType:** LCS Units **mg/L**
SampID: LCS-R344317

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	98.4	90	110	03/13/2024

Batch R344317 **SampType:** MS Units **mg/L**
SampID: 24030008-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**74**	40.00	37.96	90.9	85	115	03/13/2024

Batch R344317 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030008-004BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**75**	40.00	37.96	93.7	74.30	1.52	03/13/2024

Batch R344317 **SampType:** MS Units **mg/L**
SampID: 24030818-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**87**	40.00	49.00	94.1	85	115	03/13/2024

Batch R344317 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030818-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**89**	40.00	49.00	100.8	86.65	3.03	03/13/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9036 (TOTAL)

Batch R344317 **SampType:** MS Units **mg/L**
SampID: 24030866-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**40**	20.00	21.62	93.6	85	115	03/13/2024

Batch R344317 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030866-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10		**41**	20.00	21.62	97.4	40.34	1.87	03/13/2024

Batch R344355 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/14/2024

Batch R344355 **SampType:** MBLK Units **mg/L**
SampID: MB-R344355

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/14/2024

Batch R344355 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	99.9	90	110	03/14/2024

Batch R344355 **SampType:** LCS Units **mg/L**
SampID: LCS-R344355

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	99.9	90	110	03/14/2024

Batch R344355 **SampType:** MS Units **mg/L**
SampID: 24030002-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**208**	100.0	104.9	102.6	85	115	03/14/2024

Batch R344355 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030002-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**202**	100.0	104.9	97.6	207.5	2.45	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9036 (TOTAL)

Batch R344355 **SampType:** MS Units **mg/L**
SampID: 24030008-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10	S	**26**	20.00	9.440	81.5	85	115	03/14/2024

Batch R344355 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030008-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10	S	**26**	20.00	9.440	81.4	25.74	0.08	03/14/2024

Batch R344515 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/18/2024

Batch R344515 **SampType:** MBLK Units **mg/L**
SampID: MB-R344515

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	03/18/2024

Batch R344515 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	98.0	90	110	03/18/2024

Batch R344515 **SampType:** LCS Units **mg/L**
SampID: LCS-R344515

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**20**	20.00	0	98.0	90	110	03/18/2024

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24030002-007AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20	E	**108**	40.00	74.02	85.6	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030002-007AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20	E	**110**	40.00	74.02	90.7	108.3	1.85	03/18/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9036 (TOTAL)

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24030008-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**30**	20.00	12.59	88.2	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24030008-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10		**31**	20.00	12.59	90.6	30.24	1.51	03/18/2024

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24031148-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**197**	100.0	109.3	88.1	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24031148-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**206**	100.0	109.3	96.5	197.4	4.13	03/18/2024

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24031149-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**432**	200.0	243.3	94.2	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24031149-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**428**	200.0	243.3	92.2	431.7	0.95	03/18/2024

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24031150-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50	E	**253**	100.0	162.8	90.7	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24031150-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	E	**256**	100.0	162.8	93.4	253.5	1.07	03/18/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9036 (TOTAL)

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24031151-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50	E	**262**	100.0	172.9	89.3	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24031151-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	E	**263**	100.0	172.9	90.4	262.2	0.41	03/18/2024

Batch R344515 **SampType:** MS Units **mg/L**
SampID: 24031152-008AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		20		**82**	40.00	45.01	93.3	85	115	03/18/2024

Batch R344515 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 24031152-008AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		20		**83**	40.00	45.01	94.9	82.33	0.77	03/18/2024

SW-846 9214 (TOTAL)

Batch R344290 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	03/13/2024

Batch R344290 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**0.92**	1.000	0	92.2	90	110	03/13/2024

Batch R344290 **SampType:** MS Units **mg/L**
SampID: 24030002-011AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.73**	2.000	0.5760	107.6	75	125	03/13/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9214 (TOTAL)

Batch R344290 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24030002-011AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.80**	2.000	0.5760	111.1	2.729	2.50	03/13/2024

Batch R344388 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	03/14/2024

Batch R344388 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**1.09**	1.000	0	108.7	90	110	03/14/2024

Batch R344388 **SampType:** MS Units **mg/L**

SampID: 24030002-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.87**	2.000	0.5390	116.5	75	125	03/14/2024

Batch R344388 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24030002-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.94**	2.000	0.5390	119.8	2.869	2.31	03/14/2024

Batch R344388 **SampType:** MS Units **mg/L**

SampID: 24030002-010AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**1.98**	2.000	0	98.8	75	125	03/15/2024

Batch R344388 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24030002-010AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.04**	2.000	0	102.0	1.976	3.24	03/15/2024

Batch R344388 **SampType:** MS Units **mg/L**

SampID: 24031032-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**3.06**	2.000	0.7840	113.7	75	125	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 9214 (TOTAL)

Batch R344388 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24031032-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**3.00**	2.000	0.7840	111.0	3.057	1.72	03/14/2024

Batch R344388 **SampType:** MS Units **mg/L**

SampID: 24031115-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.75**	2.000	0.7170	101.6	75	125	03/15/2024

Batch R344388 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24031115-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.72**	2.000	0.7170	100.3	2.749	0.95	03/15/2024

Batch R344388 **SampType:** MS Units **mg/L**

SampID: 24031115-008AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.88**	2.000	0.8430	101.7	75	125	03/15/2024

Batch R344388 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24031115-008AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.76**	2.000	0.8430	95.7	2.877	4.30	03/15/2024

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 219890 **SampType:** MBLK Units **mg/L**

SampID: MBLK-219890

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/14/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/14/2024
Calcium		0.100	S	**0.484**	0.0350	0	1383	-100	100	03/14/2024

Batch 219890 **SampType:** LCS Units **mg/L**

SampID: LCS-219890

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.04**	2.000	0	102.0	85	115	03/14/2024
Boron		0.0200		**0.526**	0.5000	0	105.3	85	115	03/14/2024
Calcium		0.100	B	**2.75**	2.500	0	110.1	85	115	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 219890 **SampType:** MS Units **mg/L**

SampID: 24030002-011CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.15**	2.000	0.05440	104.8	75	125	03/14/2024
Boron		0.0200		**0.555**	0.5000	0.01230	108.6	75	125	03/14/2024
Calcium		0.100	BS	**16.1**	2.500	12.79	131.6	75	125	03/14/2024

Batch 219890 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24030002-011CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**2.17**	2.000	0.05440	105.8	2.150	0.93	03/14/2024
Boron		0.0200		**0.559**	0.5000	0.01230	109.4	0.5553	0.74	03/14/2024
Calcium		0.100	BS	**16.1**	2.500	12.79	132.4	16.08	0.12	03/14/2024

Batch 219890 **SampType:** MS Units **mg/L**

SampID: 24030922-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0200		**1.02**	0.5000	0.4727	109.4	75	125	03/14/2024

Batch 219890 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24030922-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0200		**1.03**	0.5000	0.4727	111.1	1.020	0.83	03/14/2024

Batch 219947 **SampType:** MBLK Units **mg/L**

SampID: MBLK-219947

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/15/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/15/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	03/15/2024

Batch 219947 **SampType:** LCS Units **mg/L**

SampID: LCS-219947

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.03**	2.000	0	101.5	85	115	03/15/2024
Boron		0.0200		**0.503**	0.5000	0	100.5	85	115	03/15/2024
Calcium		0.100		**2.54**	2.500	0	101.6	85	115	03/15/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 220109 **SampType:** MBLK Units **mg/L**
SampID: MBLK-220109

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/20/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/20/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	03/20/2024

Batch 220109 **SampType:** LCS Units **mg/L**
SampID: LCS-220109

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.01**	2.000	0	100.5	85	115	03/20/2024
Boron		0.0200		**0.485**	0.5000	0	97.1	85	115	03/20/2024
Calcium		0.100		**2.44**	2.500	0	97.7	85	115	03/20/2024

Batch 220109 **SampType:** MS Units **mg/L**
SampID: 24030002-004CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**1.98**	2.000	0.09700	94.0	75	125	03/20/2024
Boron		0.0200		**0.535**	0.5000	0.06760	93.4	75	125	03/20/2024
Calcium		0.100	S	**36.8**	2.500	35.41	57.6	75	125	03/20/2024

Batch 220109 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 24030002-004CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**1.96**	2.000	0.09700	92.9	1.976	1.06	03/20/2024
Boron		0.0200		**0.531**	0.5000	0.06760	92.7	0.5346	0.69	03/20/2024
Calcium		0.100	S	**36.4**	2.500	35.41	41.6	36.85	1.09	03/20/2024

Batch 220109 **SampType:** MS Units **mg/L**
SampID: 24031152-008BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0200		**3.29**	0.5000	2.798	99.0	75	125	03/20/2024

Batch 220109 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 24031152-008BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0200		**3.27**	0.5000	2.798	94.9	3.293	0.61	03/20/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 220172 **SampType:** MBLK Units **mg/L**

SampID: MBLK-220172

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/21/2024
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/22/2024
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	03/25/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/25/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/21/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	03/22/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	03/25/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	03/22/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	03/21/2024

Batch 220172 **SampType:** LCS Units **mg/L**

SampID: LCS-220172

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**1.96**	2.000	0	98.2	85	115	03/25/2024
Barium		0.0025		**1.90**	2.000	0	94.9	85	115	03/22/2024
Barium		0.0025		**2.04**	2.000	0	102.0	85	115	03/21/2024
Boron		0.0200		**0.482**	0.5000	0	96.4	85	115	03/25/2024
Boron		0.0200		**0.496**	0.5000	0	99.2	85	115	03/21/2024
Boron		0.0200		**0.468**	0.5000	0	93.5	85	115	03/22/2024
Calcium		0.100		**2.42**	2.500	0	96.9	85	115	03/22/2024
Calcium		0.100		**2.47**	2.500	0	99.0	85	115	03/25/2024
Calcium		0.100		**2.57**	2.500	0	102.9	85	115	03/21/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 219890 **SampType:** MBLK Units **mg/L**

SampID: MBLK-219890

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/20/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/14/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	03/14/2024
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/14/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	03/14/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/14/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/14/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	03/14/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	03/14/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/14/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	03/14/2024

Batch 219890 **SampType:** LCS Units **mg/L**

SampID: LCS-219890

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.503**	0.5000	0	100.7	80	120	03/20/2024
Arsenic		0.0010		**0.526**	0.5000	0	105.3	85	115	03/14/2024
Beryllium		0.0010		**0.0531**	0.0500	0	106.2	85	115	03/14/2024
Cadmium		0.0010		**0.0563**	0.0500	0	112.5	85	115	03/14/2024
Chromium		0.0015		**0.198**	0.2000	0	98.8	85	115	03/14/2024
Cobalt		0.0010		**0.490**	0.5000	0	97.9	85	115	03/14/2024
Lead		0.0010		**0.493**	0.5000	0	98.7	85	115	03/14/2024
Lithium	*	0.0030		**0.531**	0.5000	0	106.2	85	115	03/14/2024
Molybdenum		0.0015		**0.471**	0.5000	0	94.1	85	115	03/14/2024
Selenium		0.0010		**0.484**	0.5000	0	96.8	85	115	03/14/2024
Thallium		0.0020		**0.248**	0.2500	0	99.0	85	115	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 219890 **SampType:** MS Units **mg/L**

SampID: 24030002-011CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.549**	0.5000	0	109.8	75	125	03/20/2024
Arsenic		0.0010		**0.512**	0.5000	0.0005940	102.2	75	125	03/14/2024
Beryllium		0.0010		**0.0535**	0.0500	0	107.0	75	125	03/14/2024
Cadmium		0.0010		**0.0563**	0.0500	0	112.5	75	125	03/14/2024
Chromium		0.0015		**0.198**	0.2000	0.002497	97.7	75	125	03/14/2024
Cobalt		0.0010		**0.469**	0.5000	0.0003830	93.7	75	125	03/14/2024
Lead		0.0010		**0.502**	0.5000	0	100.3	75	125	03/14/2024
Lithium	*	0.0030		**0.515**	0.5000	0.01588	99.8	75	125	03/15/2024
Molybdenum		0.0015		**0.471**	0.5000	0.003606	93.6	75	125	03/14/2024
Selenium		0.0010		**0.502**	0.5000	0	100.4	75	125	03/15/2024
Thallium		0.0020		**0.258**	0.2500	0	103.2	75	125	03/14/2024

Batch 219890 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24030002-011CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.536**	0.5000	0	107.2	0.5489	2.41	03/20/2024
Arsenic		0.0010		**0.560**	0.5000	0.0005940	111.9	0.5115	9.02	03/14/2024
Beryllium		0.0010		**0.0534**	0.0500	0	106.9	0.05350	0.12	03/14/2024
Cadmium		0.0010		**0.0583**	0.0500	0	116.5	0.05627	3.47	03/14/2024
Chromium		0.0015		**0.199**	0.2000	0.002497	98.5	0.1980	0.76	03/14/2024
Cobalt		0.0010		**0.473**	0.5000	0.0003830	94.5	0.4691	0.80	03/14/2024
Lead		0.0010		**0.502**	0.5000	0	100.4	0.5017	0.06	03/14/2024
Lithium	*	0.0030		**0.537**	0.5000	0.01588	104.1	0.5149	4.12	03/15/2024
Molybdenum		0.0015		**0.498**	0.5000	0.003606	98.8	0.4714	5.42	03/14/2024
Selenium		0.0010		**0.523**	0.5000	0	104.6	0.5022	4.08	03/15/2024
Thallium		0.0020		**0.253**	0.2500	0	101.2	0.2580	1.99	03/14/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 219947 **SampType:** MBLK Units **mg/L**

SampID: MBLK-219947

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/20/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/16/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	03/16/2024
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/16/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	03/16/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/16/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/16/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	03/16/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	03/16/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/16/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	03/16/2024

Batch 219947 **SampType:** LCS Units **mg/L**

SampID: LCS-219947

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.545**	0.5000	0	109.0	85	115	03/20/2024
Arsenic		0.0010		**0.539**	0.5000	0	107.7	85	115	03/18/2024
Arsenic		0.0010	S	**0.579**	0.5000	0	115.7	85	115	03/16/2024
Beryllium		0.0010		**0.0519**	0.0500	0	103.7	85	115	03/16/2024
Cadmium		0.0010	S	**0.0601**	0.0500	0	120.1	85	115	03/16/2024
Chromium		0.0015		**0.204**	0.2000	0	102.1	85	115	03/16/2024
Cobalt		0.0010		**0.518**	0.5000	0	103.5	85	115	03/16/2024
Lead		0.0010		**0.493**	0.5000	0	98.6	85	115	03/16/2024
Lithium	*	0.0030		**0.524**	0.5000	0	104.8	85	115	03/16/2024
Molybdenum		0.0015		**0.483**	0.5000	0	96.5	85	115	03/16/2024
Selenium		0.0010		**0.537**	0.5000	0	107.4	85	115	03/16/2024
Thallium		0.0020		**0.256**	0.2500	0	102.5	85	115	03/16/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 220109 **SampType:** MBLK Units **mg/L**

SampID: MBLK-220109

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/22/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	03/21/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	03/22/2024
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/21/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	03/21/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/21/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/22/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	03/21/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	03/21/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	03/21/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	03/21/2024

Batch 220109 **SampType:** LCS Units **mg/L**

SampID: LCS-220109

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.513**	0.5000	0	102.6	80	120	03/22/2024
Arsenic		0.0010		**0.536**	0.5000	0	107.2	80	120	03/21/2024
Beryllium		0.0010		**0.0530**	0.0500	0	106.0	80	120	03/22/2024
Cadmium		0.0010		**0.0538**	0.0500	0	107.7	80	120	03/21/2024
Chromium		0.0015		**0.210**	0.2000	0	105.2	80	120	03/21/2024
Cobalt		0.0010		**0.515**	0.5000	0	103.0	80	120	03/21/2024
Lead		0.0010		**0.545**	0.5000	0	109.0	80	120	03/22/2024
Lithium	*	0.0030		**0.534**	0.5000	0	106.9	80	120	03/21/2024
Molybdenum		0.0015		**0.487**	0.5000	0	97.3	80	120	03/21/2024
Selenium		0.0010		**0.571**	0.5000	0	114.2	80	120	03/21/2024
Thallium		0.0020		**0.245**	0.2500	0	97.8	80	120	03/21/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 220109 **SampType:** MS Units **mg/L**

SampID: 24030002-004CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.521**	0.5000	0	104.1	75	125	03/22/2024
Arsenic		0.0010		**0.543**	0.5000	0.008518	106.8	75	125	03/21/2024
Beryllium		0.0010		**0.0509**	0.0500	0	101.8	75	125	03/22/2024
Cadmium		0.0010		**0.0546**	0.0500	0	109.2	75	125	03/21/2024
Chromium		0.0015		**0.209**	0.2000	0	104.6	75	125	03/21/2024
Cobalt		0.0010		**0.607**	0.5000	0.08877	103.7	75	125	03/21/2024
Lead		0.0010		**0.526**	0.5000	0	105.2	75	125	03/22/2024
Lithium	*	0.0030		**0.540**	0.5000	0.01962	104.2	75	125	03/21/2024
Molybdenum		0.0015		**0.509**	0.5000	0	101.9	75	125	03/21/2024
Selenium		0.0010		**0.562**	0.5000	0.0009374	112.2	75	125	03/21/2024
Thallium		0.0020		**0.244**	0.2500	0	97.6	75	125	03/21/2024

Batch 220109 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24030002-004CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.503**	0.5000	0	100.6	0.5206	3.39	03/22/2024
Arsenic		0.0010		**0.515**	0.5000	0.008518	101.4	0.5427	5.16	03/21/2024
Beryllium		0.0010		**0.0515**	0.0500	0	103.1	0.05091	1.25	03/22/2024
Cadmium		0.0010		**0.0543**	0.0500	0	108.5	0.05459	0.59	03/21/2024
Chromium		0.0015		**0.198**	0.2000	0	99.2	0.2092	5.31	03/21/2024
Cobalt		0.0010		**0.587**	0.5000	0.08877	99.6	0.6073	3.47	03/21/2024
Lead		0.0010		**0.501**	0.5000	0	100.1	0.5261	4.97	03/22/2024
Lithium	*	0.0030		**0.526**	0.5000	0.01962	101.3	0.5404	2.69	03/21/2024
Molybdenum		0.0015		**0.495**	0.5000	0	99.0	0.5093	2.87	03/21/2024
Selenium		0.0010		**0.533**	0.5000	0.0009374	106.5	0.5621	5.24	03/21/2024
Thallium		0.0020		**0.247**	0.2500	0	98.6	0.2441	1.00	03/21/2024

Batch 220172 **SampType:** MBLK Units **mg/L**

SampID: MBLK-220172

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	03/21/2024

Batch 220172 **SampType:** LCS Units **mg/L**

SampID: LCS-220172

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Cadmium		0.0010		**0.0480**	0.0500	0	96.1	80	120	03/21/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 7470A (TOTAL)

Batch 219856 **SampType:** MBLK Units **mg/L**
SampID: MBLK-219856

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	03/14/2024

Batch 219856 **SampType:** LCS Units **mg/L**
SampID: LCS-219856

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00451**	0.0050	0	90.2	85	115	03/14/2024

Batch 219856 **SampType:** MS Units **mg/L**
SampID: 24030631-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00473**	0.0050	0	94.6	75	125	03/14/2024

Batch 219856 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030631-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00476**	0.0050	0	95.2	0.004729	0.69	03/14/2024

Batch 219856 **SampType:** MS Units **mg/L**
SampID: 24030823-011AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00488**	0.0050	0	97.5	75	125	03/14/2024

Batch 219856 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24030823-011AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00482**	0.0050	0	96.3	0.004877	1.25	03/14/2024

Batch 220165 **SampType:** MBLK Units **mg/L**
SampID: MBLK-220165

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	03/21/2024

Batch 220165 **SampType:** LCS Units **mg/L**
SampID: LCS-220165

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00433**	0.0050	0	86.6	85	115	03/21/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 7470A (TOTAL)

Batch 220165 **SampType:** MS Units **mg/L**
SampID: 24031081-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00498**	0.0050	0	99.5	75	125	03/21/2024

Batch 220165 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24031081-001BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00512**	0.0050	0	102.4	0.004976	2.80	03/21/2024

Batch 220165 **SampType:** MS Units **mg/L**
SampID: 24031148-004BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00764**	0.0100	0	76.4	75	125	03/21/2024

Batch 220165 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24031148-004BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00803**	0.0100	0	80.3	0.007644	4.91	03/21/2024

Batch 220166 **SampType:** MBLK Units **mg/L**
SampID: MBLK-220166

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	03/21/2024

Batch 220166 **SampType:** LCS Units **mg/L**
SampID: LCS-220166

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00451**	0.0050	0	90.2	85	115	03/21/2024

Batch 220166 **SampType:** MS Units **mg/L**
SampID: 24031310-001DMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00462**	0.0050	0	92.4	75	125	03/21/2024

Batch 220166 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24031310-001DMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00470**	0.0050	0	94.1	0.004620	1.82	03/21/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24030002

Client Project: Groundwater Monitoring **Report Date:** 15-Apr-24

SW-846 7470A (TOTAL)

Batch 220166 **SampType:** MS Units **mg/L**

SampID: 24031502-002AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00570**	0.0050	0	114.0	75	125	03/22/2024

Batch 220166 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24031502-002AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00576**	0.0050	0	115.2	0.005702	1.02	03/22/2024

Receiving Check List

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24030002
Client Project: Groundwater Monitoring
Report Date: 15-Apr-24

Carrier: Tracy Carroll
Received By: LEH

Completed by: Nick Reed
On: 12-Mar-24

Reviewed by: Ellie Hopkins
On: 15-Mar-24

Pages to follow: Chain of custody 4 Extra pages included 26

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 11.1
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☑	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

Samples were received on 3/12/24 at 16:34 on ice [11.1C - LTG#5]. pH strip #90719. - LM/nickreed - 3/12/2024 5:18:05 PM

Samples were received on 3/13/24 at 1845 on ice [6.5C - LTG5]. pH strip #96651. - ES/amberdilallo - 3/14/2024 8:21:50 AM

Samples were received on 3/15/24 at 0800 on ice [5.5C - LTG5]. Additional Nitric Acid (96331) was needed upon arrival at the laboratory for EP-3. pH strip #96651. - amberdilallo - 3/15/2024 9:02:17 AM

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24030002

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation		
Address:	11543 Lake of Egypt Road		
City / State / Zip	Marion, IL 62959		
Contact:	Jason McLaurin	**Phone:**	(618) 964-1448
E-Mail:	jmclaurin@sipower.org	**Fax:**	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 11.1 °C LTG# 5

Preserved in: [ ] LAB [X] FIELD

FOR LAB USE ONLY

Lab Notes: 9021 9 UM 3/12

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	TCarroll / Danny Crump

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24030002-001	EBG	3/12/24 1327	1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1		1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2		1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3		1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4		1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5		1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6		1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7		1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank		1	3	X		X		X	X	X	X	X	X	X
010	Field Blank		1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Danny Carroll	3/12/24 4:34		3/12/24 16:34

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 86654

CHAIN OF CUSTODY

pg. 2 of 2 Work order # 24030002

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE _____ °C LTG# _____

Preserved in: ☒ LAB ☒ FIELD

FOR LAB USE ONLY

Lab Notes:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☐ No

Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☐ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☐ No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	TCarroll / DCrump

Results Requested

☐ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other ____ ☐ 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24030002-011	Field Duplicate	3/12/24 1327	1	3		X	X	X	X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Tracy Carroll	3/12/24 4:34	[signature]	3/12/24 16:34

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BottleOrder: 86654

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24030002

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin — **Phone:** (618) 964-1448
E-Mail:	jmclaurin@sipower.org — **Fax:**

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 6.5 °C LTG# 5

Preserved in: [ ] LAB [X] FIELD

FOR LAB USE ONLY

Lab Notes: ph ✓ 96651 ES 3/14/24

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	JCarder / DCrump

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24030002-001	EBG		1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1	3/13/24 1304	1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2	3/13/24 1527	1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3		1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4		1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5	3/13/24 1035	1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6		1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7		1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank		1	3	X		X		X	X	X	X	X	X	X
010	Field Blank		1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Jason Carder	3/13/24 1845	[illegible]	3/13/24 1845

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BottleOrder: 86654

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24030002

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 5.5 °C LTG# 5

Preserved in: [X] LAB [ ] FIELD

FOR LAB USE ONLY

Lab Notes: pH ✓ 96651 added HNO3(96331) to EP3 (250ml) LG 3/15/24

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	TCarroll DCrump

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24030002-001	EBG		1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1		1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2		1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3	3/14/24 1408	1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4	3/14/24 1106	1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5		1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6	3/14/24 1154	1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7	1340	1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank	1615	1	3	X		X		X	X	X	X	X	X	X
010	Field Blank	1550	1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Jimmy Carroll	3/15/24 800		3/15/24 810

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BottleOrder: 86654

June 25, 2024

Jason McLaurin
Southern Illinois Power Cooperation
11543 Lake of Egypt Road
Marion, IL 62959
TEL: (618) 964-1448
FAX:

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Groundwater Monitoring **WorkOrder:** 24051567

Dear Jason McLaurin:

TEKLAB, INC received 11 samples on 6/4/2024 3:45:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24

This reporting package includes the following:

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Abbr Definition

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Qualifiers

- # - Unknown hydrocarbon
- B - Analyte detected in associated Method Blank
- C - RL shown is a Client Requested Quantitation Limit
- E - Value above quantitation range
- H - Holding times exceeded
- I - Associated internal standard was outside method criteria
- J - Analyte detected below quantitation limits
- M - Manual Integration used to determine area response
- ND - Not Detected at the Reporting Limit
- R - RPD outside accepted recovery limits
- S - Spike Recovery outside recovery limits
- T - TIC(Tentatively identified compound)
- X - Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24

Cooler Receipt Temp: 16.7 °C

An employee of Teklab, Inc. collected the sample(s).

Ra226/228 analyses were performed by Summit Environmental Technologies, Inc. See attached report for results and QC.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-001 **Client Sample ID:** EBG

Matrix: GROUNDWATER **Collection Date:** 06/03/2024 11:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**8.48**	ft	1	06/03/2024 11:41	R348487
Elevation of groundwater surface	*	0	0		**516.39**	ft	1	06/03/2024 11:41	R348487
Measuring Point Elevation	*	0	0		**524.87**	ft	1	06/03/2024 11:41	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.10**	gal	1	06/03/2024 11:41	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**6.4**	NTU	1	06/03/2024 11:41	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**102**	mV	1	06/03/2024 11:41	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4427**	mS/cm	1	06/03/2024 11:41	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**26.6**	°C	1	06/03/2024 11:41	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.97**	mg/L	1	06/03/2024 11:41	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**6.59**		1	06/03/2024 11:41	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**320**	mg/L	1	06/05/2024 10:04	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**18**	mg/L	1	06/05/2024 21:42	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50	S	**90**	mg/L	5	06/05/2024 22:08	R348343
Matrix spike did not recover within control limits. Results verified by dilution.									
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.44**	mg/L	1	06/05/2024 15:39	R348326
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0499**	mg/L	1	06/06/2024 18:15	223879
Boron	NELAP	0.0090	0.020	J	**0.011**	mg/L	1	06/06/2024 18:15	223879
Calcium	NELAP	0.0640	0.100		**13.8**	mg/L	1	06/06/2024 18:15	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:04	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:49	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:49	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:49	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 11:49	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:49	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:49	223879
Lithium	*	0.0015	0.0030		**0.0203**	mg/L	5	06/07/2024 11:49	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0013**	mg/L	5	06/07/2024 11:49	223879
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	06/07/2024 11:49	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 11:49	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 16:49	224131

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-001
Client Sample ID: EBG
Matrix: GROUNDWATER
Collection Date: 06/03/2024 11:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300
Radium-228	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-002 **Client Sample ID:** EP-1

Matrix: GROUNDWATER **Collection Date:** 06/03/2024 13:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**4.52**	ft	1	06/03/2024 13:34	R348487
Elevation of groundwater surface	*	0	0		**515.20**	ft	1	06/03/2024 13:34	R348487
Measuring Point Elevation	*	0	0		**519.72**	ft	1	06/03/2024 13:34	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.50**	gal	1	06/03/2024 13:34	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.4**	NTU	1	06/03/2024 13:34	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**149**	mV	1	06/03/2024 13:34	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.1805**	mS/cm	1	06/03/2024 13:34	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.9**	°C	1	06/03/2024 13:34	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.62**	mg/L	1	06/03/2024 13:34	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**6.17**		1	06/03/2024 13:34	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2480**	mg/L	1	06/05/2024 10:05	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**49**	mg/L	1	06/05/2024 22:20	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**1540**	mg/L	50	06/05/2024 22:24	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.20**	mg/L	1	06/07/2024 10:42	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0169**	mg/L	1	06/06/2024 18:25	223879
Boron	NELAP	0.0090	0.0200		**1.19**	mg/L	1	06/06/2024 18:25	223879
Calcium	NELAP	0.0640	0.100		**554**	mg/L	1	06/06/2024 18:25	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:09	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:55	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:55	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:55	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 11:55	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:55	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 11:55	223879
Lithium	*	0.0015	0.0030		**0.0090**	mg/L	5	06/07/2024 11:55	223879
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	06/07/2024 11:55	223879
Selenium	NELAP	0.0006	0.0010		**0.0033**	mg/L	5	06/07/2024 11:55	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 11:55	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 16:56	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-002
Client Sample ID: EP-1
Matrix: GROUNDWATER
Collection Date: 06/03/2024 13:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-003 **Client Sample ID:** EP-2

Matrix: GROUNDWATER **Collection Date:** 06/04/2024 12:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**5.18**	ft	1	06/04/2024 12:02	R348487
Elevation of groundwater surface	*	0	0		**508.61**	ft	1	06/04/2024 12:02	R348487
Measuring Point Elevation	*	0	0		**513.79**	ft	1	06/04/2024 12:02	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.20**	gal	1	06/04/2024 12:02	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.2**	NTU	1	06/04/2024 12:02	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-38**	mV	1	06/04/2024 12:02	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.5960**	mS/cm	1	06/04/2024 12:02	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**17.8**	°C	1	06/04/2024 12:02	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.15**	mg/L	1	06/04/2024 12:02	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**5.71**		1	06/04/2024 12:02	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2260**	mg/L	1	06/05/2024 10:05	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	2	20		**40**	mg/L	5	06/05/2024 22:27	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		**1540**	mg/L	50	06/05/2024 22:32	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**1.19**	mg/L	1	06/07/2024 10:44	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0189**	mg/L	1	06/06/2024 18:26	223879
Boron	NELAP	0.0090	0.0200		**0.754**	mg/L	1	06/06/2024 18:26	223879
Calcium	NELAP	0.0640	0.100		**381**	mg/L	1	06/06/2024 18:26	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	06/10/2024 10:38	223879
Arsenic	NELAP	0.0004	0.0010		**0.0014**	mg/L	5	06/10/2024 10:38	223879
Beryllium	NELAP	0.0002	0.0010		**0.0049**	mg/L	5	06/07/2024 12:01	223879
Cadmium	*	0.0002	0.0010	J	**0.0003**	mg/L	5	06/10/2024 10:38	223879
Chromium	NELAP	0.0007	0.0015		**0.0025**	mg/L	5	06/07/2024 12:01	223879
Cobalt	NELAP	0.0001	0.0010		**0.162**	mg/L	5	06/07/2024 12:01	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:38	223879
Lithium	*	0.0015	0.0030		**0.0311**	mg/L	5	06/07/2024 12:01	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0009**	mg/L	5	06/10/2024 10:38	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:38	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/10/2024 10:38	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 16:58	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-003
Client Sample ID: EP-2
Matrix: GROUNDWATER
Collection Date: 06/04/2024 12:02

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-004 **Client Sample ID:** EP-3

Matrix: GROUNDWATER **Collection Date:** 06/04/2024 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**15.90**	ft	1	06/04/2024 12:50	R348487
Elevation of groundwater surface	*	0	0		**503.05**	ft	1	06/04/2024 12:50	R348487
Measuring Point Elevation	*	0	0		**518.95**	ft	1	06/04/2024 12:50	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.80**	gal	1	06/04/2024 12:50	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.6**	NTU	1	06/04/2024 12:50	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-16**	mV	1	06/04/2024 12:50	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1.7836**	mS/cm	1	06/04/2024 12:50	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**21.1**	°C	1	06/04/2024 12:50	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.23**	mg/L	1	06/04/2024 12:50	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**6.17**		1	06/04/2024 12:50	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**1170**	mg/L	1	06/05/2024 10:05	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	10	80		**231**	mg/L	20	06/06/2024 14:41	R348417
SW-846 9036 (TOTAL)									
Sulfate	NELAP	123	200		**280**	mg/L	20	06/06/2024 14:41	R348411
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.35**	mg/L	1	06/07/2024 10:46	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0603**	mg/L	1	06/06/2024 18:28	223879
Boron	NELAP	0.0090	0.0200		**0.0437**	mg/L	1	06/06/2024 18:28	223879
Calcium	NELAP	0.0640	0.100		**67.6**	mg/L	1	06/06/2024 18:28	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:43	223879
Arsenic	NELAP	0.0004	0.0010		**0.0071**	mg/L	5	06/07/2024 12:07	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:07	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:07	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 12:07	223879
Cobalt	NELAP	0.0001	0.0010		**0.0835**	mg/L	5	06/07/2024 12:07	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:07	223879
Lithium	*	0.0015	0.0030		**0.107**	mg/L	5	06/07/2024 12:07	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0008**	mg/L	5	06/07/2024 12:07	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:07	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 12:07	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 17:00	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-004
Client Sample ID: EP-3
Matrix: GROUNDWATER
Collection Date: 06/04/2024 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/19/2024 14:48	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 06/04/2024 10:13

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**6.30**	ft	1	06/04/2024 10:13	R348487
Elevation of groundwater surface	*	0	0		**513.44**	ft	1	06/04/2024 10:13	R348487
Measuring Point Elevation	*	0	0		**519.74**	ft	1	06/04/2024 10:13	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.30**	gal	1	06/04/2024 10:13	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.8**	NTU	1	06/04/2024 10:13	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-46**	mV	1	06/04/2024 10:13	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.2058**	mS/cm	1	06/04/2024 10:13	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**19.8**	°C	1	06/04/2024 10:13	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.58**	mg/L	1	06/04/2024 10:13	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**5.99**		1	06/04/2024 10:13	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**1750**	mg/L	2.5	06/05/2024 10:22	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	10	80		**459**	mg/L	20	06/05/2024 22:57	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	123	200		**517**	mg/L	20	06/05/2024 22:56	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.18**	mg/L	1	06/07/2024 10:48	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0451**	mg/L	1	06/06/2024 18:30	223879
Boron	NELAP	0.0090	0.0200		**10.2**	mg/L	1	06/06/2024 18:30	223879
Calcium	NELAP	0.0640	0.100		**208**	mg/L	1	06/06/2024 18:30	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:49	223879
Arsenic	NELAP	0.0004	0.0010		**0.0412**	mg/L	5	06/07/2024 12:14	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:14	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:14	223879
Chromium	NELAP	0.0007	0.0015		**0.0046**	mg/L	5	06/07/2024 12:14	223879
Cobalt	NELAP	0.0001	0.0010		**0.0833**	mg/L	5	06/07/2024 12:14	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:14	223879
Lithium	*	0.0015	0.0030		**0.0033**	mg/L	5	06/07/2024 12:14	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0006**	mg/L	5	06/07/2024 12:14	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:14	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 12:14	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 17:02	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-005
Client Sample ID: EP-4
Matrix: GROUNDWATER
Collection Date: 06/04/2024 10:13

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-006 **Client Sample ID:** EP-5

Matrix: GROUNDWATER **Collection Date:** 06/03/2024 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**11.61**	ft	1	06/03/2024 12:40	R348487
Elevation of groundwater surface	*	0	0		**515.98**	ft	1	06/03/2024 12:40	R348487
Measuring Point Elevation	*	0	0		**527.59**	ft	1	06/03/2024 12:40	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.10**	gal	1	06/03/2024 12:40	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.7**	NTU	1	06/03/2024 12:40	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**118**	mV	1	06/03/2024 12:40	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.3460**	mS/cm	1	06/03/2024 12:40	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**17.9**	°C	1	06/03/2024 12:40	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**7.64**	mg/L	1	06/03/2024 12:40	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**6.48**		1	06/03/2024 12:40	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**252**	mg/L	1	06/05/2024 10:34	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4	J	**3**	mg/L	1	06/05/2024 22:59	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**125**	mg/L	5	06/05/2024 23:04	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.35**	mg/L	1	06/07/2024 10:50	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0551**	mg/L	1	06/06/2024 18:31	223879
Boron	NELAP	0.0090	0.020	J	**0.013**	mg/L	1	06/06/2024 18:31	223879
Calcium	NELAP	0.0640	0.100	S	**17.8**	mg/L	1	06/06/2024 18:31	223879
Matrix spike control limits are not applicable due to high sample/spike ratio.									
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 11:16	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:26	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:26	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:26	223879
Chromium	NELAP	0.0007	0.0015	J	**0.0011**	mg/L	5	06/07/2024 12:26	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:26	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:26	223879
Lithium	*	0.0015	0.0030		**0.0031**	mg/L	5	06/07/2024 12:26	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0009**	mg/L	5	06/07/2024 12:26	223879
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	06/07/2024 12:26	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 12:26	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/11/2024 17:05	224131

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-006
Client Sample ID: EP-5
Matrix: GROUNDWATER
Collection Date: 06/03/2024 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-007 **Client Sample ID:** EP-6

Matrix: GROUNDWATER **Collection Date:** 06/04/2024 13:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**2.12**	ft	1	06/04/2024 13:15	R348487
Elevation of groundwater surface	*	0	0		**502.99**	ft	1	06/04/2024 13:15	R348487
Measuring Point Elevation	*	0	0		**505.11**	ft	1	06/04/2024 13:15	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.90**	gal	1	06/04/2024 13:15	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.9**	NTU	1	06/04/2024 13:15	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**117**	mV	1	06/04/2024 13:15	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.3065**	mS/cm	1	06/04/2024 13:15	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.7**	°C	1	06/04/2024 13:15	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.25**	mg/L	1	06/04/2024 13:15	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**4.93**		1	06/04/2024 13:15	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20	H	**276**	mg/L	1	06/13/2024 9:58	R348805
Sample required re-analysis out of hold time.									
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**20**	mg/L	1	06/05/2024 23:07	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**78**	mg/L	5	06/05/2024 23:12	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10	J	**0.06**	mg/L	1	06/07/2024 11:07	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0368**	mg/L	1	06/06/2024 18:36	223879
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	06/06/2024 18:36	223879
Calcium	NELAP	0.0640	0.100		**1.48**	mg/L	1	06/06/2024 18:36	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 10:54	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:20	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:20	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:20	223879
Chromium	NELAP	0.0007	0.0015		**0.0016**	mg/L	5	06/07/2024 12:20	223879
Cobalt	NELAP	0.0001	0.0010		**0.0013**	mg/L	5	06/07/2024 12:20	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:20	223879
Lithium	*	0.0015	0.0030		**0.0104**	mg/L	5	06/07/2024 12:20	223879
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	06/07/2024 12:20	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 12:20	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 12:20	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/12/2024 9:09	224131

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-007
Client Sample ID: EP-6
Matrix: GROUNDWATER
Collection Date: 06/04/2024 13:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-008 **Client Sample ID:** EP-7

Matrix: GROUNDWATER **Collection Date:** 06/04/2024 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**13.90**	ft	1	06/04/2024 12:20	R348487
Elevation of groundwater surface	*	0	0		**501.54**	ft	1	06/04/2024 12:20	R348487
Measuring Point Elevation	*	0	0		**515.44**	ft	1	06/04/2024 12:20	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**4.50**	gal	1	06/04/2024 12:20	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**13**	NTU	1	06/04/2024 12:20	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-18**	mV	1	06/04/2024 12:20	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1.5125**	mS/cm	1	06/04/2024 12:20	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.3**	°C	1	06/04/2024 12:20	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.14**	mg/L	1	06/04/2024 12:20	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**5.86**		1	06/04/2024 12:20	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**482**	mg/L	1	06/05/2024 10:40	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	40		**242**	mg/L	10	06/05/2024 23:15	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		**413**	mg/L	10	06/05/2024 23:15	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.25**	mg/L	1	06/07/2024 11:10	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0328**	mg/L	1	06/06/2024 18:38	223879
Boron	NELAP	0.0090	0.0200		**0.785**	mg/L	1	06/06/2024 18:38	223879
Calcium	NELAP	0.0640	0.100		**142**	mg/L	1	06/06/2024 18:38	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 11:00	223879
Arsenic	NELAP	0.0004	0.0010		**0.0072**	mg/L	5	06/07/2024 13:28	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:28	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:28	223879
Chromium	NELAP	0.0007	0.0015		**0.0035**	mg/L	5	06/07/2024 13:28	223879
Cobalt	NELAP	0.0001	0.0010		**0.130**	mg/L	5	06/07/2024 13:28	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:28	223879
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	06/07/2024 13:28	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0011**	mg/L	5	06/10/2024 11:00	223879
Selenium	NELAP	0.0006	0.0010	J	**0.0006**	mg/L	5	06/10/2024 11:00	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 13:28	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/12/2024 9:12	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-008
Client Sample ID: EP-7
Matrix: GROUNDWATER
Collection Date: 06/04/2024 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-009
Client Sample ID: Equipment Blank
Matrix: AQUEOUS
Collection Date: 06/04/2024 13:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	06/05/2024 10:41	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**< 4**	mg/L	1	06/05/2024 23:21	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	06/05/2024 23:20	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	06/07/2024 11:12	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	06/07/2024 10:59	223879
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	06/07/2024 10:59	223879
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	06/07/2024 10:59	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 11:05	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 13:35	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	06/07/2024 13:35	223879
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	06/07/2024 13:35	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:35	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 13:35	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/12/2024 9:14	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-010 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 06/04/2024 12:58

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	06/05/2024 10:41	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**< 4**	mg/L	1	06/05/2024 23:23	R348357
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		**< 10**	mg/L	1	06/05/2024 23:23	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**< 0.10**	mg/L	1	06/07/2024 11:14	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	06/07/2024 11:00	223879
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	06/07/2024 11:00	223879
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	06/07/2024 11:00	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/10/2024 11:11	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 13:41	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	06/07/2024 13:41	223879
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	06/07/2024 13:41	223879
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:41	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 13:41	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	06/12/2024 9:16	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

Lab ID: 24051567-011 **Client Sample ID:** Field Duplicate

Matrix: GROUNDWATER **Collection Date:** 06/03/2024 11:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**8.48**	ft	1	06/03/2024 11:41	R348487
Elevation of groundwater surface	*	0	0		**516.39**	ft	1	06/03/2024 11:41	R348487
Measuring Point Elevation	*	0	0		**524.87**	ft	1	06/03/2024 11:41	R348487
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**2.10**	gal	1	06/03/2024 11:41	R348487
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**6.4**	NTU	1	06/03/2024 11:41	R348487
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**102**	mV	1	06/03/2024 11:41	R348487
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4427**	mS/cm	1	06/03/2024 11:41	R348487
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**26.6**	°C	1	06/03/2024 11:41	R348487
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**3.97**	mg/L	1	06/03/2024 11:41	R348487
SW-846 9040B FIELD									
pH	*	0	1.00		**6.59**		1	06/03/2024 11:41	R348487
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**332**	mg/L	1	06/05/2024 10:41	R348379
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	4		**18**	mg/L	1	06/06/2024 14:43	R348417
SW-846 9036 (TOTAL)									
Sulfate	NELAP	31	50		**88**	mg/L	5	06/05/2024 23:26	R348343
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		**0.50**	mg/L	1	06/07/2024 11:17	R348452
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0531**	mg/L	1	06/07/2024 11:30	223879
Boron	NELAP	0.0090	0.020	J	**0.013**	mg/L	1	06/07/2024 11:30	223879
Calcium	NELAP	0.0350	0.100		**13.8**	mg/L	1	06/07/2024 11:30	223879
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**0.0034**	mg/L	5	06/10/2024 12:24	223879
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:47	223879
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:47	223879
Cadmium	*	0.0002	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:47	223879
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	06/07/2024 13:47	223879
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:47	223879
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	06/07/2024 13:47	223879
Lithium	*	0.0015	0.0030		**0.0191**	mg/L	5	06/07/2024 13:47	223879
Molybdenum	NELAP	0.0006	0.0015	J	**0.0010**	mg/L	5	06/07/2024 13:47	223879
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	06/07/2024 13:47	223879
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	06/07/2024 13:47	223879
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020	J	**0.00014**	mg/L	1	06/12/2024 9:26	224131
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24
Lab ID: 24051567-011
Client Sample ID: Field Duplicate
Matrix: GROUNDWATER
Collection Date: 06/03/2024 11:41

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228									
Radium-228	*	0	0		**See Attached**	pci/L	1	06/20/2024 14:41	R349300

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

STANDARD METHODS 2510 B FIELD

Batch R348487 **SampType:** LCS Units **mS/cm**
SampID: LCS-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1.4130**	1.412	0	100.1	90	110	06/04/2024
Spec. Conductance, Field	*	0		**1.4100**	1.412	0	99.9	90	110	06/03/2024

Batch R348487 **SampType:** LCS Units **mS/cm**
SampID: LCS-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0		**1.4120**	1.412	0	100.0	90	110	06/04/2024

SW-846 9040B FIELD

Batch R348487 **SampType:** LCS Units
SampID: LCS-1

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**6.99**	7.000	0	99.9	98.57	101.4	06/03/2024
pH	*	1.00		**7.05**	7.000	0	100.7	98.57	101.4	06/04/2024

Batch R348487 **SampType:** LCS Units
SampID: LCS-2

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.00**	7.000	0	100.0	98.57	101.4	06/04/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R348379 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	06/05/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	06/05/2024

Batch R348379 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**952**	1000	0	95.2	90	110	06/05/2024
Total Dissolved Solids		20		**902**	1000	0	90.2	90	110	06/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24050124-004ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50	H	**715**				785.0	9.33	06/05/2024

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24050124-017ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50	H	**580**				570.0	1.74	06/05/2024

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24052388-004HDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		**1710**				1615	5.71	06/05/2024

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24060011-019ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		100		**9420**				9240	1.93	06/05/2024

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24060130-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**1920**				1892	1.36	06/05/2024

Batch R348379 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24060133-002ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20		**3910**				3566	9.15	06/05/2024

Batch R348805 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	06/13/2024

Batch R348805 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**976**	1000	0	97.6	90	110	06/13/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R348805 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24051567-007ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		20	H	**272**				276.0	1.46	06/13/2024

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R348357 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	06/05/2024

Batch R348357 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	100.6	90	110	06/05/2024

Batch R348357 **SampType:** MS Units **mg/L**

SampID: 24051567-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**37**	20.00	18.44	91.9	85	115	06/05/2024

Batch R348357 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24051567-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**37**	20.00	18.44	92.1	36.82	0.11	06/05/2024

Batch R348357 **SampType:** MS Units **mg/L**

SampID: 24051913-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**32**	20.00	12.73	96.4	85	115	06/05/2024

Batch R348357 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24051913-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**31**	20.00	12.73	93.0	32.00	2.15	06/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R348357 **SampType:** MS Units **mg/L**
SampID: 24060049-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**28**	20.00	8.520	97.4	85	115	06/05/2024

Batch R348357 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060049-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**28**	20.00	8.520	95.7	28.01	1.29	06/05/2024

Batch R348357 **SampType:** MS Units **mg/L**
SampID: 24060089-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**47**	20.00	29.18	88.6	85	115	06/05/2024

Batch R348357 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060089-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		4		**47**	20.00	29.18	89.6	46.90	0.43	06/05/2024

Batch R348357 **SampType:** MS Units **mg/L**
SampID: 24060133-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		200		**1840**	1000	923.5	91.3	85	115	06/05/2024

Batch R348357 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060133-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		200		**1890**	1000	923.5	96.7	1836	2.90	06/05/2024

Batch R348417 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**< 4**	0.5000	0	0	-100	100	06/06/2024

Batch R348417 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		4		**20**	20.00	0	100.6	90	110	06/06/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R348417 **SampType:** MS Units **mg/L**
SampID: 24060353-003BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		40	E	**501**	200.0	328.1	86.3	85	115	06/06/2024

Batch R348417 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060353-003BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		40	E	**510**	200.0	328.1	91.1	500.7	1.90	06/06/2024

Batch R348417 **SampType:** MS Units **mg/L**
SampID: 24060420-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Chloride		20	E	**319**	100.0	223.5	95.8	85	115	06/06/2024

Batch R348417 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060420-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Chloride		20	E	**331**	100.0	223.5	107.5	319.3	3.60	06/06/2024

SW-846 9036 (TOTAL)

Batch R348343 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	06/05/2024

Batch R348343 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	94.7	90	110	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**
SampID: 24051567-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50	S	**205**	100.0	89.78	115.2	85	115	06/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 9036 (TOTAL)

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24051567-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50	S	**207**	100.0	89.78	117.1	205.0	0.94	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24051913-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10	S	**48**	20.00	35.92	62.3	85	115	06/05/2024

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24051913-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10	S	**48**	20.00	35.92	60.8	48.38	0.60	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24052425-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		200		**616**	400.0	235.9	94.9	85	115	06/05/2024

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24052425-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		200	S	**574**	400.0	235.9	84.4	615.6	7.06	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24060049-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		100		**313**	200.0	130.3	91.5	90	110	06/05/2024

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24060049-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		100		**329**	200.0	130.3	99.2	313.3	4.78	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24060089-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10	SE	**61**	20.00	44.12	85.0	90	110	06/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 9036 (TOTAL)

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24060089-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		10	E	**62**	20.00	44.12	90.4	61.13	1.72	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24060133-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		500		**2400**	1000	1477	92.3	90	110	06/05/2024

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24060133-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		500	E	**2520**	1000	1477	104.2	2400	4.86	06/05/2024

Batch R348343 **SampType:** MS Units **mg/L**

SampID: 24060339-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		1000		**3660**	2000	1781	93.7	90	110	06/06/2024

Batch R348343 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24060339-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		1000		**3670**	2000	1781	94.6	3655	0.47	06/06/2024

Batch R348411 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**< 10**	6.140	0	0	-100	100	06/06/2024

Batch R348411 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		10		**19**	20.00	0	95.9	90	110	06/06/2024

Batch R348411 **SampType:** MS Units **mg/L**

SampID: 24060420-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate		50		**195**	100.0	94.30	100.3	90	110	06/06/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 9036 (TOTAL)

Batch R348411 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 24060420-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate		50		**200**	100.0	94.30	105.4	194.6	2.60	06/06/2024

SW-846 9214 (TOTAL)

Batch R348326 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	06/05/2024

Batch R348326 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**0.99**	1.000	0	99.4	90	110	06/05/2024

Batch R348326 **SampType:** MS Units **mg/L**

SampID: 24051567-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.31**	2.000	0.4440	93.1	75	125	06/05/2024

Batch R348326 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24051567-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.46**	2.000	0.4440	100.9	2.306	6.54	06/05/2024

Batch R348326 **SampType:** MS Units **mg/L**

SampID: 24060049-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.24**	2.000	0.3540	94.1	75	125	06/05/2024

Batch R348326 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24060049-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.50**	2.000	0.3540	107.6	2.235	11.39	06/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 9214 (TOTAL)

Batch R348326 **SampType:** MS Units **mg/L**
SampID: 24060133-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.28**	2.000	0.3530	96.1	75	125	06/05/2024

Batch R348326 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24060133-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.28**	2.000	0.3530	96.4	2.275	0.22	06/05/2024

Batch R348452 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**< 0.10**	0.0500	0	0	-100	100	06/07/2024

Batch R348452 **SampType:** LCS Units **mg/L**
SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**0.93**	1.000	0	92.9	90	110	06/07/2024

Batch R348452 **SampType:** MS Units **mg/L**
SampID: 24051567-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.51**	2.000	0.3510	108.2	75	125	06/07/2024

Batch R348452 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24051567-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.28**	2.000	0.3510	96.5	2.514	9.76	06/07/2024

Batch R348452 **SampType:** MS Units **mg/L**
SampID: 24051567-011AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.10		**2.60**	2.000	0.4970	105.0	75	125	06/07/2024

Batch R348452 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24051567-011AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.10		**2.62**	2.000	0.4970	106.1	2.598	0.81	06/07/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 9214 (TOTAL)

Batch R348452 **SampType:** MS Units **mg/L**

SampID: 24060485-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		1.00		**38.2**	20.00	16.63	107.8	75	125	06/07/2024

Batch R348452 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24060485-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		1.00		**38.0**	20.00	16.63	106.8	38.18	0.50	06/07/2024

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 223879 **SampType:** MBLK Units **mg/L**

SampID: MBLK-223879

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	06/06/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	06/06/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	06/06/2024

Batch 223879 **SampType:** LCS Units **mg/L**

SampID: LCS-223879

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.02**	2.000	0	101.0	85	115	06/06/2024
Boron		0.0200		**0.495**	0.5000	0	99.0	85	115	06/06/2024
Calcium		0.100		**2.45**	2.500	0	97.9	85	115	06/06/2024

Batch 223879 **SampType:** MS Units **mg/L**

SampID: 24051567-006CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.29**	2.000	0.05510	111.7	75	125	06/06/2024
Boron		0.0200		**0.562**	0.5000	0.01300	109.7	75	125	06/06/2024
Calcium		0.100	S	**21.6**	2.500	17.85	148.4	75	125	06/06/2024

Batch 223879 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24051567-006CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**2.25**	2.000	0.05510	109.7	2.290	1.76	06/06/2024
Boron		0.0200		**0.550**	0.5000	0.01300	107.5	0.5617	2.03	06/06/2024
Calcium		0.100	S	**21.1**	2.500	17.85	128.8	21.56	2.30	06/06/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 223879 **SampType:** MBLK Units **mg/L**

SampID: MBLK-223879

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	06/10/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	06/07/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	06/07/2024
Cadmium	*	0.0010		**< 0.0010**	0.0001	0	0	-100	100	06/07/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	06/07/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	06/07/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	06/07/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	06/07/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	06/07/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	06/07/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	06/07/2024

Batch 223879 **SampType:** LCS Units **mg/L**

SampID: LCS-223879

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.522**	0.5000	0	104.3	80	120	06/10/2024
Arsenic		0.0010		**0.520**	0.5000	0	103.9	80	120	06/07/2024
Beryllium		0.0010		**0.0507**	0.0500	0	101.4	80	120	06/07/2024
Cadmium	*	0.0010		**0.0509**	0.0500	0	101.8	80	120	06/07/2024
Chromium		0.0015		**0.206**	0.2000	0	102.8	80	120	06/07/2024
Cobalt		0.0010		**0.475**	0.5000	0	95.0	80	120	06/07/2024
Lead		0.0010		**0.505**	0.5000	0	101.1	80	120	06/07/2024
Lithium	*	0.0030		**0.516**	0.5000	0	103.2	80	120	06/07/2024
Molybdenum		0.0015		**0.466**	0.5000	0	93.2	80	120	06/07/2024
Selenium		0.0010		**0.547**	0.5000	0	109.3	80	120	06/07/2024
Thallium		0.0020		**0.237**	0.2500	0	94.8	80	120	06/07/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 223879 **SampType:** MS Units **mg/L**

SampID: 24051567-006CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.529**	0.5000	0	105.7	75	125	06/10/2024
Arsenic		0.0010		**0.497**	0.5000	0	99.3	75	125	06/07/2024
Beryllium		0.0010		**0.0477**	0.0500	0	95.4	75	125	06/07/2024
Cadmium	*	0.0010		**0.0503**	0.0500	0	100.7	75	125	06/07/2024
Chromium		0.0015		**0.198**	0.2000	0.001145	98.5	75	125	06/07/2024
Cobalt		0.0010		**0.451**	0.5000	0	90.2	75	125	06/07/2024
Lead		0.0010		**0.497**	0.5000	0	99.4	75	125	06/07/2024
Lithium	*	0.0030		**0.493**	0.5000	0.003070	98.1	75	125	06/07/2024
Molybdenum		0.0015		**0.458**	0.5000	0.0009067	91.4	75	125	06/07/2024
Selenium		0.0010		**0.523**	0.5000	0.0007327	104.4	75	125	06/07/2024
Thallium		0.0020		**0.230**	0.2500	0	91.8	75	125	06/07/2024

Batch 223879 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24051567-006CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.515**	0.5000	0	103.0	0.5287	2.60	06/10/2024
Arsenic		0.0010		**0.500**	0.5000	0	100.0	0.4967	0.63	06/07/2024
Beryllium		0.0010		**0.0501**	0.0500	0	100.1	0.04768	4.87	06/07/2024
Cadmium	*	0.0010		**0.0515**	0.0500	0	102.9	0.05035	2.21	06/07/2024
Chromium		0.0015		**0.200**	0.2000	0.001145	99.6	0.1982	1.06	06/07/2024
Cobalt		0.0010		**0.455**	0.5000	0	91.1	0.4508	1.04	06/07/2024
Lead		0.0010		**0.505**	0.5000	0	101.0	0.4972	1.55	06/07/2024
Lithium	*	0.0030		**0.502**	0.5000	0.003070	99.7	0.4935	1.62	06/07/2024
Molybdenum		0.0015		**0.467**	0.5000	0.0009067	93.2	0.4578	1.97	06/07/2024
Selenium		0.0010		**0.531**	0.5000	0.0007327	106.0	0.5226	1.56	06/07/2024
Thallium		0.0020		**0.239**	0.2500	0	95.5	0.2295	3.96	06/07/2024

SW-846 7470A (TOTAL)

Batch 224131 **SampType:** MBLK Units **mg/L**

SampID: MBLK-224131

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	06/11/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24051567

Client Project: Groundwater Monitoring **Report Date:** 25-Jun-24

SW-846 7470A (TOTAL)

Batch 224131 **SampType:** LCS Units **mg/L**

SampID: LCS-224131

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00490**	0.0050	0	98.1	85	115	06/11/2024

Batch 224131 **SampType:** MS Units **mg/L**

SampID: 24051567-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00481**	0.0050	0	96.3	75	125	06/11/2024

Batch 224131 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24051567-001CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00475**	0.0050	0	95.0	0.004814	1.30	06/11/2024

Batch 224131 **SampType:** MS Units **mg/L**

SampID: 24060160-025AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00561**	0.0050	0	112.1	75	125	06/11/2024

Batch 224131 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24060160-025AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00557**	0.0050	0	111.4	0.005606	0.64	06/11/2024

Receiving Check List

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24051567
Client Project: Groundwater Monitoring
Report Date: 25-Jun-24

Carrier: Payton Yoch
Received By: LM

Completed by: Amber Dilallo
On: 04-Jun-24

Reviewed by: Elizabeth A. Hurley
On: 04-Jun-24

Pages to follow: Chain of custody 3 Extra pages included 28

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 16.7
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☑	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

Samples were received on 6/3/24 at 1625 on ice [16.7C - LTG5]. pH strip #96651. - LH/amberdilallo - 6/4/2024 8:42:22 AM

Samples were received on 6/4/24 at 1545 on ice [3.3C - LTG5]. pH strip #96651. Additional Nitric Acid (97737) was needed in EP-3 and EP-4 upon arrival at the laboratory. - NR/amberdilallo - 6/4/2024 4:11:18 PM

CHAIN OF COUSTODY

pg. 1 of 2 Work order # 24051567

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE ~~23.3~~ °C TEUm 6/3 LTG# ~~3~~

Preserved in: [ ] LAB [X] FIELD **FOR LAB USE ONLY**

Lab Notes: PtW 9465l 16.7° #5 LH 6/4/24

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity (reported in mS/cm), Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested: [X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	UNP	HNO3	Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24051567-001	EBG	6-3-24 / 1141	1	3		X	X	X	X	X	X	X	X	X	X
-002	EP-1	6-3-24 / 1334	1	3		X	X	X	X	X	X	X	X	X	X
-003	EP-2		1	3		X	X	X	X	X	X	X	X	X	X
-004	EP-3		1	3		X	X	X	X	X	X	X	X	X	X
-005	EP-4		1	3		X	X	X	X	X	X	X	X	X	X
-006	EP-5	6-3-24 / 1240	1	3		X	X	X	X	X	X	X	X	X	X
-007	EP-6		1	3		X	X	X	X	X	X	X	X	X	X
-008	EP-7		1	3		X	X	X	X	X	X	X	X	X	X
-009	Equipment Blank		1	3	X		X		X	X	X	X	X	X	X
-010	Field Blank		1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
[signature]	6-3-24 / 1625	[signature]	6/3/24 1625

BottleOrder: 89264

CHAIN OF CUSTODY

pg. 2 of 2 Work order # 24051567

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE _____ °C LTG# _____

Preserved in: ☒ LAB ☒ FIELD

FOR LAB USE ONLY

Lab Notes:

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity (reported in mS/cm), Temperature, DO, ORP, and Turbidity

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☐ No

Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☐ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☐ No

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Culp

Results Requested

☐ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24051567-011	Field Duplicate	6-3-24 / 1141	1	3		X	X	X	X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
	6-3-24 / 1625		6/3/24 1625

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder 89264

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24051567

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Southern Illinois Power Cooperation
Address: 11543 Lake of Egypt Road
City / State / Zip: Marion, IL 62959
Contact: Jason McLaurin Phone: (618) 964-1448
E-Mail: jmclaurin@sipower.org Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 3.3 °C LTG# 5
Preserved in: [X] LAB [ ] FIELD **FOR LAB USE ONLY**
Lab Notes: Added HNO_3 (97737) pH ✓ 91005) to sample EP3 + EP4 M 6/4

Client Comments
ICP: Ba B Ca
ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity (reported in mS/cm), Temperature, DO, ORP, and Turbidity

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No
Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested: [X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions:

Lab Use Only	Sample Identification	Date/Time Sampled	UNP	HNO3	Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24051567-001	EBG		1	3		X	X	X	X	X	X	X	X	X	X
-002	EP-1		1	3		X	X	X	X	X	X	X	X	X	X
-003	EP-2	6-4-24 / 1202	1	3		X	X	X	X	X	X	X	X	X	X
-004	EP-3	6-4-24 / 1250	1	3		X	X	X	X	X	X	X	X	X	X
-005	EP-4	6-4-24 / 1013	1	3		X	X	X	X	X	X	X	X	X	X
-006	EP-5		1	3		X	X	X	X	X	X	X	X	X	X
-007	EP-6	6-4-24 / 1315	1	3		X	X	X	X	X	X	X	X	X	X
-008	EP-7	6-4-24 / 1220	1	3		X	X	X	X	X	X	X	X	X	X
-009	Equipment Blank	6-4-24 / 1305	1	3	X		X		X	X	X	X	X	X	X
-010	Field Blank	6-4-24 / 1258	1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	6-4-24 / 1545	Mich Reed	6/4/24 1545

BottleOrder: 89264

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

June 24, 2024

Elizabeth Hurley
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24051567

Dear Elizabeth Hurley:

Order No.: 24060584

Summit Environmental Technologies, Inc. received 11 sample(s) on 6/7/2024 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Jennifer Woolf

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24060584**
Date: **6/24/2024**

CLIENT: TEKLAB Inc,
Project: 24051567

WorkOrder Narrative:
24060584: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

 The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-44&
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **24060584**
Date: **6/24/2024**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **24060584**

24-Jun-24

CLIENT: TEKLAB Inc,
Project: 24051567

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24060584-001	24051567-001		6/3/2024 11:41:00 AM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-002	24051567-002		6/3/2024 1:34:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-003	24051567-003		6/4/2024 12:02:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-004	24051567-004		6/4/2024 12:50:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-005	24051567-005		6/4/2024 10:13:00 AM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-006	24051567-006		6/3/2024 12:40:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-007	24051567-007		6/4/2024 1:15:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-008	24051567-008		6/4/2024 12:20:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-009	24051567-009		6/4/2024 1:05:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-010	24051567-010		6/4/2024 12:58:00 PM	6/7/2024 12:35:00 PM	Non-Potable Water
24060584-011	24051567-011		6/3/2024 11:41:00 AM	6/7/2024 12:35:00 PM	Non-Potable Water

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Summit Environmental Technologies, Inc.
3310 Win St.
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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,

Project: 24051567

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24060584-001A	24051567-001	6/3/2024 11:41:00 AM	Non-Potable Water	Combined Radium (EPA903+904)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-226 (EPA 903.0)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-228 (EPA 904.0)		6/14/2024 11:23:00 AM	6/19/2024 2:48:00 PM
24060584-002A	24051567-002	6/3/2024 1:34:00 PM		Combined Radium (EPA903+904)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-226 (EPA 903.0)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-228 (EPA 904.0)		6/14/2024 11:23:00 AM	6/19/2024 2:48:00 PM
24060584-003A	24051567-003	6/4/2024 12:02:00 PM		Combined Radium (EPA903+904)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-226 (EPA 903.0)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-228 (EPA 904.0)		6/14/2024 11:23:00 AM	6/19/2024 2:48:00 PM
24060584-004A	24051567-004	6/4/2024 12:50:00 PM		Combined Radium (EPA903+904)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-226 (EPA 903.0)		6/14/2024 11:23:00 AM	6/20/2024 9:47:00 AM
				Radium-228 (EPA 904.0)		6/14/2024 11:23:00 AM	6/19/2024 2:48:00 PM
24060584-005A	24051567-005	6/4/2024 10:13:00 AM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-006A	24051567-006	6/3/2024 12:40:00 PM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-007A	24051567-007	6/4/2024 1:15:00 PM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-008A	24051567-008	6/4/2024 12:20:00 PM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM

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DATES REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,

Project: 24051567

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24060584-008A	24051567-008	6/4/2024 12:20:00 PM	Non-Potable Water	Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-009A	24051567-009	6/4/2024 1:05:00 PM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-010A	24051567-010	6/4/2024 12:58:00 PM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM
24060584-011A	24051567-011	6/3/2024 11:41:00 AM		Combined Radium (EPA903+904)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-226 (EPA 903.0)		6/17/2024 10:51:00 AM	6/21/2024 9:37:00 AM
				Radium-228 (EPA 904.0)		6/17/2024 10:51:00 AM	6/20/2024 2:41:00 PM

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/3/2024 11:41:00 AM

Project: 24051567

Lab ID: 24060584-001

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.59	2.00	U	pCi/L	± 0.420	1	6/20/2024 9:47:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.06	1.00	U	pCi/L	± 0.0500	1	6/20/2024 9:47:00 AM
Yield	1.00					1	6/20/2024 9:47:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.53	1.00	U	pCi/L	± 0.370	1	6/19/2024 2:48:00 PM
Yield	1.00					1	6/19/2024 2:48:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

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WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/3/2024 1:34:00 PM

Project: 24051567

Lab ID: 24060584-002

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-002

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.92	2.00	U	pCi/L	± 0.450	1	6/20/2024 9:47:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.17	1.00	U	pCi/L	± 0.0700	1	6/20/2024 9:47:00 AM
Yield	1.00					1	6/20/2024 9:47:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.75	1.00	J	pCi/L	± 0.380	1	6/19/2024 2:48:00 PM
Yield	1.00					1	6/19/2024 2:48:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 12:02:00 PM

Project: 24051567

Lab ID: 24060584-003

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-003

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.21	2.00	U	pCi/L	± 0.510	1	6/20/2024 9:47:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.25	1.00	U	pCi/L	± 0.0800	1	6/20/2024 9:47:00 AM
Yield	1.00					1	6/20/2024 9:47:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.96	1.00	J	pCi/L	± 0.430	1	6/19/2024 2:48:00 PM
Yield	1.00					1	6/19/2024 2:48:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 12:50:00 PM

Project: 24051567

Lab ID: 24060584-004

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-004

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.94	2.00	U	pCi/L	± 0.470	1	6/20/2024 9:47:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.22	1.00	U	pCi/L	± 0.0700	1	6/20/2024 9:47:00 AM
Yield	1.00					1	6/20/2024 9:47:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.72	1.00	J	pCi/L	± 0.400	1	6/19/2024 2:48:00 PM
Yield	1.00					1	6/19/2024 2:48:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 10:13:00 AM

Project: 24051567

Lab ID: 24060584-005

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-005

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.93	2.00	U	pCi/L	± 0.610	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.12	1.00	U	pCi/L	± 0.0600	1	6/21/2024 9:37:00 AM
Yield	1.00					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.81	1.00	J	pCi/L	± 0.550	1	6/20/2024 2:41:00 PM
Yield	1.00					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/3/2024 12:40:00 PM

Project: 24051567

Lab ID: 24060584-006

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-006

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.12	2.00	U	pCi/L	± 0.960	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.12	1.00	U	pCi/L	± 0.0600	1	6/21/2024 9:37:00 AM
Yield	0.990					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	-1.46	1.00	U	pCi/L	± 0.900	1	6/20/2024 2:41:00 PM
Yield	1.00					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 1:15:00 PM

Project: 24051567

Lab ID: 24060584-007

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.23	2.00	U	pCi/L	± 0.440	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.04	1.00	U	pCi/L	± 0.0400	1	6/21/2024 9:37:00 AM
Yield	0.970					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.19	1.00	U	pCi/L	± 0.400	1	6/20/2024 2:41:00 PM
Yield	0.980					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 12:20:00 PM

Project: 24051567

Lab ID: 24060584-008

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.66	2.00	U	pCi/L	± 0.630	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.03	1.00	U	pCi/L	± 0.0400	1	6/21/2024 9:37:00 AM
Yield	0.960					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	1.63	1.00		pCi/L	± 0.590	1	6/20/2024 2:41:00 PM
Yield	0.980					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
U	Samples with CalcVal < MDL
J	Analyte detected below quantitation limits
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 1:05:00 PM

Project: 24051567

Lab ID: 24060584-009

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-009

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.62	2.00	U	pCi/L	± 0.510	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.04	1.00	U	pCi/L	± 0.0400	1	6/21/2024 9:37:00 AM
Yield	1.00					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.58	1.00	U	pCi/L	± 0.470	1	6/20/2024 2:41:00 PM
Yield	1.00					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

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Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/4/2024 12:58:00 PM

Project: 24051567

Lab ID: 24060584-010

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.8	2.00	U	pCi/L	± 0.510	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.13	1.00	U	pCi/L	± 0.0600	1	6/21/2024 9:37:00 AM
Yield	1.00					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.67	1.00	J	pCi/L	± 0.450	1	6/20/2024 2:41:00 PM
Yield	1.00					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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Analytical Report

(consolidated)

WO#: **24060584**

Date Reported: **6/24/2024**

CLIENT: TEKLAB Inc,

Collection Date: 6/3/2024 11:41:00 AM

Project: 24051567

Lab ID: 24060584-011

Matrix: NON-POTABLE WATER

Client Sample ID: 24051567-011

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.67	2.00	U	pCi/L	± 0.510	1	6/21/2024 9:37:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.03	1.00	U	pCi/L	± 0.0300	1	6/21/2024 9:37:00 AM
Yield	1.00					1	6/21/2024 9:37:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.64	1.00	J	pCi/L	± 0.480	1	6/20/2024 2:41:00 PM
Yield	1.00					1	6/20/2024 2:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode
J	Analyte detected below quantitation limits		

Original

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76111**

Sample ID: **MB-76111**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/14/2024**	RunNo: **187858**
Client ID: **PBW**	Batch ID: **76111**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/19/2024**	SeqNo: **5091807**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	1.00			0	0						

Sample ID: **LCS-76111**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/14/2024**	RunNo: **187858**
Client ID: **LCSW**	Batch ID: **76111**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/19/2024**	SeqNo: **5091808**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.41	1.00	5.000	0	68.2	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-76111**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/14/2024**	RunNo: **187858**
Client ID: **LCSS02**	Batch ID: **76111**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/19/2024**	SeqNo: **5091809**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.51	1.00	5.000	0	70.2	50	130	3.410	2.89	20	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76111**

Sample ID: **24060579-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187858**
Client ID: **BatchQC** Batch ID: **76111** TestNo: **E904.0** **E903-904** Analysis Date: **6/19/2024** SeqNo: **5091823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.08	1.00		0	0			1.130	4.52	20	
Yield	1.00			0	0			1.000	0		

Sample ID: **24060580-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187858**
Client ID: **BatchQC** Batch ID: **76111** TestNo: **E904.0** **E903-904** Analysis Date: **6/19/2024** SeqNo: **5091825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0.8200	200	20	RU
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76111**

Sample ID: **MB-76111** SampType: **MBLK** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187863**
Client ID: **PBW** Batch ID: **76111** TestNo: **E903.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5092117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	1.00										

Sample ID: **LCS-76111** SampType: **LCS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187863**
Client ID: **LCSW** Batch ID: **76111** TestNo: **E903.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5092118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.77	1.00	5.000	0	95.4	70	130				

Sample ID: **LCSD-76111** SampType: **LCSD** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187863**
Client ID: **LCSS02** Batch ID: **76111** TestNo: **E903.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5092119**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.71	1.00	5.000	0	94.2	70	130	4.770	1.27	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76111**

Sample ID: **24060579-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/14/2024** RunNo: **187863**
Client ID: **BatchQC** Batch ID: **76111** TestNo: **E903.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5092133**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76249**

Sample ID: **MB-76249**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187992**
Client ID: **PBW**	Batch ID: **76249**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/20/2024**	SeqNo: **5095576**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	0.980			0	0						

Sample ID: **LCS-76249**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187992**
Client ID: **LCSW**	Batch ID: **76249**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/20/2024**	SeqNo: **5095577**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.01	1.00	5.000	0	60.2	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-76249**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187992**
Client ID: **LCSS02**	Batch ID: **76249**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/20/2024**	SeqNo: **5095578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.60	1.00	5.000	0	72.0	50	130	3.010	17.9	20	
Yield	0.970			0	0			1.000	3.05		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76249**

Sample ID: **24060747-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **6/17/2024** RunNo: **187992**
Client ID: **BatchQC** Batch ID: **76249** TestNo: **E904.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5095595**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.960	1.00		0	0			0	200	20	RJ
Yield	1.00			0	0			1.000	0		

Sample ID: **24060865-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **6/17/2024** RunNo: **187992**
Client ID: **BatchQC** Batch ID: **76249** TestNo: **E904.0** **E903-904** Analysis Date: **6/20/2024** SeqNo: **5095597**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0	0	20	U
Yield	0.900			0	0			1.000	10.5		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76249**

Sample ID: **MB-76249**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187997**
Client ID: **PBW**	Batch ID: **76249**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/21/2024**	SeqNo: **5095689**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	0.990										

Sample ID: **LCS-76249**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187997**
Client ID: **LCSW**	Batch ID: **76249**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/21/2024**	SeqNo: **5095690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.75	1.00	5.000	0	95.0	70	130				

Sample ID: **LCSD-76249**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187997**
Client ID: **LCSS02**	Batch ID: **76249**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/21/2024**	SeqNo: **5095691**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.77	1.00	5.000	0	115	70	130	4.750	19.4	20	

Sample ID: **24060747-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **6/17/2024**	RunNo: **187997**
Client ID: **BatchQC**	Batch ID: **76249**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/21/2024**	SeqNo: **5095707**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24060584**

24-Jun-24

Client: TEKLAB Inc,
Project: 24051567 **BatchID:** **76249**

Sample ID: **24060747-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/17/2024** RunNo: **187997**
Client ID: **BatchQC** Batch ID: **76249** TestNo: **E903.0** **E903-904** Analysis Date: **6/21/2024** SeqNo: **5095707**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Sample ID: **24060865-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **6/17/2024** RunNo: **187997**
Client ID: **BatchQC** Batch ID: **76249** TestNo: **E903.0** **E903-904** Analysis Date: **6/21/2024** SeqNo: **5095709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

Original

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

24060584

Are the samples chilled? YES ☐ NO ☑ With: ☐ Ice ☐ Blue Ice Preserved in: ☐ Lab ☐ Field

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

18.6+0.0
19.9+0.0
19.9+0.0

Cooler Temp: 18.6-19.9 Sampler: Client QC Level: 2

Fedex, Cooler

Project# 24051567

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium 226/228 per your usual methods.
Any changes to analysis/methods must be approved by Teklab, Inc. Batch QC is required.
Samples collected from an IL site.

Contact: Elizabeth Hurley Email: ehurley@teklabinc.com
Requested Due Date: Standard TAT Billing/PO: 36433 Phone: (618) 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Radium 226	Radium 228	Combined 226/228									
								cpm					pH			
	24051567-001	6/3/24 1141	HNO3	Groundwater	✔	✔	✔	22, 30					1			
	24051567-002	6/3/24 1334	HNO3	Groundwater	✔	✔	✔	26, 22					1			
	24051567-003	6/4/24 1202	HNO3	Groundwater	✔	✔	✔	24, 26					1			
	24051567-004	6/4/24 1250	HNO3	Groundwater	✔	✔	✔	20, 14					1			
	24051567-005	6/4/24 1013	HNO3	Groundwater	✔	✔	✔	38, 22					1			
	24051567-006	6/3/24 1240	HNO3	Groundwater	✔	✔	✔	14, 32					1			
	24051567-007	6/4/24 1315	HNO3	Groundwater	✔	✔	✔	34, 20					1			
	24051567-008	6/4/24 1220	HNO3	Groundwater	✔	✔	✔	40, 36					1			
	24051567-009	6/4/24 1305	HNO3	Aqueous	✔	✔	✔	30, 34					1			
	24051567-010	6/4/24 1258	HNO3	Aqueous	✔	✔	✔	20, 44					1			
	24051567-011	6/3/24 1141	HNO3	Groundwater	✔	✔	✔	42, 36					1			

*Relinquished By	Date/Time	Received By	Date/Time
[signature]	6/5/24 1700	[signature]	6/7/24, 1235

Summit Environmental Technologies, Inc.
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Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24060584 RcptNo: 1

Logged by:	Tegan A. Richards	6/7/2024 12:35:00 PM	Tegan Richards
Completed By:	Tegan A. Richards	6/8/2024 1:06:31 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	6/10/2024 12:36:15 PM	Jennifer Woolf

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☑
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☐ No ☑ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Not required
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	18.6	Good	Not Present			

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24060584 RcptNo: 1

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	19.9	Good	Not Present			
3	19.9	Good	Not Present			

October 09, 2024

Jason McLaurin
Southern Illinois Power Cooperation
11543 Lake of Egypt Road
Marion, IL 62959
TEL: (618) 964-1448
FAX:

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Groundwater Monitoring **WorkOrder:** 24080520

Dear Jason McLaurin:

TEKLAB, INC received 11 samples on 9/5/2024 3:57:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

Report Contents

Client: Southern Illinois Power Cooperation
Work Order: 24080520
Client Project: Groundwater Monitoring
Report Date: 09-Oct-24

This reporting package includes the following:

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Abbr Definition

*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
C -	RL shown is a Client Requested Quantitation Limit	E -	Value above quantitation range
H -	Holding times exceeded	I -	Associated internal standard was outside method criteria
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	T -	TIC(Tentatively identified compound)
X -	Value exceeds Maximum Contaminant Level		

Case Narrative

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24080520
Client Project: Groundwater Monitoring
Report Date: 09-Oct-24

Cooler Receipt Temp: 10.3 °C

An employee of Teklab, Inc. collected the sample(s).

Ra226/228 analyses were performed by Summit Environmental Technologies, Inc. See attached report for results and QC.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	12/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-001 **Client Sample ID:** EBG

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 12:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**9.68**	ft	1	09/04/2024 12:03	R352857
Elevation of groundwater surface	*	0	0		**515.19**	ft	1	09/04/2024 12:03	R352857
Measuring Point Elevation	*	0	0		**524.87**	ft	1	09/04/2024 12:03	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.50**	gal	1	09/04/2024 12:03	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**60**	NTU	1	09/04/2024 12:03	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**116**	mV	1	09/04/2024 12:03	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4977**	mS/cm	1	09/04/2024 12:03	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.3**	°C	1	09/04/2024 12:03	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**5.25**	mg/L	1	09/04/2024 12:03	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.71**		1	09/04/2024 12:03	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**352**	mg/L	1	09/06/2024 14:15	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**0.52**	mg/L	10	09/05/2024 18:29	R352713
Chloride	*	1.00	5.00		**9.59**	mg/L	10	09/05/2024 18:29	R352713
Sulfate	*	0.33	10.0		**81.6**	mg/L	10	09/05/2024 18:29	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0495**	mg/L	1	09/10/2024 11:41	228042
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	09/10/2024 11:41	228042
Calcium	NELAP	0.0350	0.100		**11.1**	mg/L	1	09/10/2024 11:41	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0008**	mg/L	5	09/10/2024 11:39	228042
Arsenic	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	09/09/2024 16:01	228042
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:09	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:09	228042
Chromium	NELAP	0.0007	0.0015	J	**0.0012**	mg/L	5	09/09/2024 16:01	228042
Cobalt	NELAP	0.0001	0.0010	J	**0.0004**	mg/L	5	09/09/2024 16:01	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:09	228042
Lithium	*	0.0015	0.0030		**0.0200**	mg/L	5	09/09/2024 10:09	228042
Molybdenum	NELAP	0.0006	0.0015	J	**0.0015**	mg/L	5	09/09/2024 16:01	228042
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 16:01	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 10:09	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:24	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-002 **Client Sample ID:** EP-1

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 12:56

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**12.03**	ft	1	09/04/2024 12:56	R352857
Elevation of groundwater surface	*	0	0		**507.69**	ft	1	09/04/2024 12:56	R352857
Measuring Point Elevation	*	0	0		**519.72**	ft	1	09/04/2024 12:56	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.80**	gal	1	09/04/2024 12:56	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**5.7**	NTU	1	09/04/2024 12:56	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**156**	mV	1	09/04/2024 12:56	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.6699**	mS/cm	1	09/04/2024 12:56	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**18.8**	°C	1	09/04/2024 12:56	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.91**	mg/L	1	09/04/2024 12:56	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.21**		1	09/04/2024 12:56	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**2580**	mg/L	1	09/06/2024 14:16	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50	J	**0.10**	mg/L	10	09/05/2024 18:41	R352713
Chloride	*	1.00	5.00		**49.0**	mg/L	10	09/05/2024 18:41	R352713
Sulfate	*	0.33	10.0		**1590**	mg/L	10	09/05/2024 18:41	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0228**	mg/L	1	09/10/2024 11:42	228042
Boron	NELAP	0.0090	0.0200		**1.50**	mg/L	1	09/10/2024 11:42	228042
Calcium	NELAP	0.0350	0.100		**579**	mg/L	1	09/10/2024 11:42	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	09/10/2024 11:44	228042
Arsenic	NELAP	0.0004	0.0010	J	**0.0004**	mg/L	5	09/09/2024 16:07	228042
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:14	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:14	228042
Chromium	NELAP	0.0007	0.0015	J	**0.0010**	mg/L	5	09/09/2024 16:07	228042
Cobalt	NELAP	0.0001	0.0010	J	**0.0004**	mg/L	5	09/09/2024 16:07	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:14	228042
Lithium	*	0.0015	0.0030		**0.0145**	mg/L	5	09/09/2024 10:14	228042
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	09/09/2024 16:07	228042
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	09/09/2024 16:07	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 10:14	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:26	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-003 **Client Sample ID:** EP-2

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 12:34

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**10.75**	ft	1	09/04/2024 12:34	R352857
Elevation of groundwater surface	*	0	0		**503.04**	ft	1	09/04/2024 12:34	R352857
Measuring Point Elevation	*	0	0		**513.79**	ft	1	09/04/2024 12:34	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.30**	gal	1	09/04/2024 12:34	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.8**	NTU	1	09/04/2024 12:34	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-94**	mV	1	09/04/2024 12:34	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**3.2344**	mS/cm	1	09/04/2024 12:34	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**23.9**	°C	1	09/04/2024 12:34	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.81**	mg/L	1	09/04/2024 12:34	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.20**		1	09/04/2024 12:34	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**3890**	mg/L	1	09/06/2024 14:16	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50	J	**0.20**	mg/L	10	09/05/2024 18:53	R352713
Chloride	*	1.00	5.00		**67.6**	mg/L	10	09/05/2024 18:53	R352713
Sulfate	*	0.33	10.0		**2420**	mg/L	10	09/05/2024 18:53	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0255**	mg/L	1	09/10/2024 11:44	228042
Boron	NELAP	0.0090	0.0200		**0.403**	mg/L	1	09/10/2024 11:44	228042
Calcium	NELAP	0.0350	0.100		**514**	mg/L	1	09/10/2024 11:44	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 11:49	228042
Arsenic	NELAP	0.0004	0.0010		**0.0033**	mg/L	5	09/09/2024 16:12	228042
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:20	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:20	228042
Chromium	NELAP	0.0007	0.0015		**0.0201**	mg/L	5	09/09/2024 16:12	228042
Cobalt	NELAP	0.0001	0.0010		**0.0477**	mg/L	5	09/09/2024 16:12	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:20	228042
Lithium	*	0.0015	0.0030		**0.0197**	mg/L	5	09/09/2024 10:20	228042
Molybdenum	NELAP	0.0006	0.0015	J	**0.0007**	mg/L	5	09/09/2024 16:12	228042
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 16:12	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 10:20	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:28	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-004 **Client Sample ID:** EP-3

Matrix: GROUNDWATER **Collection Date:** 09/05/2024 12:37

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**17.62**	ft	1	09/05/2024 12:37	R352857
Elevation of groundwater surface	*	0	0		**501.33**	ft	1	09/05/2024 12:37	R352857
Measuring Point Elevation	*	0	0		**518.95**	ft	1	09/05/2024 12:37	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.60**	gal	1	09/05/2024 12:37	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.5**	NTU	1	09/05/2024 12:37	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-53**	mV	1	09/05/2024 12:37	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1.1618**	mS/cm	1	09/05/2024 12:37	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**22.8**	°C	1	09/05/2024 12:37	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.31**	mg/L	1	09/05/2024 12:37	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.04**		1	09/05/2024 12:37	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**815**	mg/L	2.5	09/06/2024 14:16	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50	J	**0.10**	mg/L	10	09/06/2024 10:07	R352784
Chloride	*	1.00	5.00		**151**	mg/L	10	09/06/2024 10:07	R352784
Sulfate	*	0.33	10.0		**123**	mg/L	10	09/06/2024 10:07	R352784
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0873**	mg/L	1	09/09/2024 15:29	228074
Boron	NELAP	0.0090	0.0200		**0.0587**	mg/L	1	09/09/2024 15:29	228074
Calcium	NELAP	0.0350	0.100		**42.5**	mg/L	1	09/09/2024 15:29	228074
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**0.0015**	mg/L	5	09/10/2024 10:44	228074
Arsenic	NELAP	0.0004	0.0010		**0.0079**	mg/L	5	09/09/2024 14:46	228074
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 8:54	228074
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 8:54	228074
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	09/09/2024 14:46	228074
Cobalt	NELAP	0.0001	0.0010		**0.0802**	mg/L	5	09/09/2024 14:46	228074
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 8:54	228074
Lithium	*	0.0015	0.0030		**0.0382**	mg/L	5	09/09/2024 8:54	228074
Molybdenum	NELAP	0.0006	0.0015	J	**0.0013**	mg/L	5	09/09/2024 8:54	228074
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	09/09/2024 14:46	228074
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 8:54	228074
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/09/2024 10:42	228093
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-005 **Client Sample ID:** EP-4

Matrix: GROUNDWATER **Collection Date:** 09/05/2024 13:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**7.22**	ft	1	09/05/2024 13:35	R352857
Elevation of groundwater surface	*	0	0		**512.52**	ft	1	09/05/2024 13:35	R352857
Measuring Point Elevation	*	0	0		**519.74**	ft	1	09/05/2024 13:35	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.40**	gal	1	09/05/2024 13:35	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**3.7**	NTU	1	09/05/2024 13:35	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**-38**	mV	1	09/05/2024 13:35	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**2.0274**	mS/cm	1	09/05/2024 13:35	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**21.9**	°C	1	09/05/2024 13:35	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.21**	mg/L	1	09/05/2024 13:35	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**5.80**		1	09/05/2024 13:35	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**1810**	mg/L	2.5	09/06/2024 14:41	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**ND**	mg/L	10	09/06/2024 10:42	R352784
Chloride	*	1.00	5.00		**490**	mg/L	10	09/06/2024 10:42	R352784
Sulfate	*	0.33	10.0		**484**	mg/L	10	09/06/2024 10:42	R352784
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0305**	mg/L	1	09/09/2024 15:30	228074
Boron	NELAP	0.0090	0.0200		**10.8**	mg/L	1	09/09/2024 15:30	228074
Calcium	NELAP	0.0350	0.100		**153**	mg/L	1	09/09/2024 15:30	228074
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010	J	**0.0007**	mg/L	5	09/10/2024 10:49	228074
Arsenic	NELAP	0.0004	0.0010		**0.0122**	mg/L	5	09/09/2024 14:52	228074
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:00	228074
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:00	228074
Chromium	NELAP	0.0007	0.0015	J	**0.0008**	mg/L	5	09/09/2024 14:52	228074
Cobalt	NELAP	0.0001	0.0010		**0.217**	mg/L	5	09/09/2024 14:52	228074
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:00	228074
Lithium	*	0.0015	0.0030	J	**0.0026**	mg/L	5	09/09/2024 9:00	228074
Molybdenum	NELAP	0.0006	0.0015	J	**0.0008**	mg/L	5	09/09/2024 9:00	228074
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	09/09/2024 14:52	228074
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 9:00	228074
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/09/2024 10:44	228093
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-006 **Client Sample ID:** EP-5

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 13:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**13.99**	ft	1	09/04/2024 13:45	R352857
Elevation of groundwater surface	*	0	0		**513.60**	ft	1	09/04/2024 13:45	R352857
Measuring Point Elevation	*	0	0		**527.59**	ft	1	09/04/2024 13:45	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**0.80**	gal	1	09/04/2024 13:45	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**2.4**	NTU	1	09/04/2024 13:45	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**146**	mV	1	09/04/2024 13:45	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4035**	mS/cm	1	09/04/2024 13:45	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.2**	°C	1	09/04/2024 13:45	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**5.90**	mg/L	1	09/04/2024 13:45	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.49**		1	09/04/2024 13:45	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**274**	mg/L	1	09/06/2024 14:41	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50	J	**0.29**	mg/L	10	09/05/2024 19:04	R352713
Chloride	*	1.0	5.0	J	**2.6**	mg/L	10	09/05/2024 19:04	R352713
Sulfate	*	0.33	10.0		**99.3**	mg/L	10	09/05/2024 19:04	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0527**	mg/L	1	09/10/2024 12:04	228042
Boron	NELAP	0.0090	0.020	J	**0.012**	mg/L	1	09/10/2024 12:04	228042
Calcium	NELAP	0.0350	0.100		**15.9**	mg/L	1	09/10/2024 12:04	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 11:54	228042
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/09/2024 16:18	228042
Beryllium	NELAP	0.0002	0.0010	J	**0.0004**	mg/L	5	09/09/2024 10:26	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:26	228042
Chromium	NELAP	0.0007	0.0015	J	**0.0015**	mg/L	5	09/09/2024 16:18	228042
Cobalt	NELAP	0.0001	0.0010	J	**0.0003**	mg/L	5	09/09/2024 16:18	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:26	228042
Lithium	*	0.0015	0.0030		**0.0045**	mg/L	5	09/09/2024 10:26	228042
Molybdenum	NELAP	0.0006	0.0015	J	**0.0011**	mg/L	5	09/09/2024 16:18	228042
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 16:18	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 10:26	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:31	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-007 **Client Sample ID:** EP-6

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 15:21

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**4.93**	ft	1	09/04/2024 15:21	R352857
Elevation of groundwater surface	*	0	0		**500.18**	ft	1	09/04/2024 15:21	R352857
Measuring Point Elevation	*	0	0		**505.11**	ft	1	09/04/2024 15:21	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**1.10**	gal	1	09/04/2024 15:21	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**11**	NTU	1	09/04/2024 15:21	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**220**	mV	1	09/04/2024 15:21	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.2600**	mS/cm	1	09/04/2024 15:21	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**27.6**	°C	1	09/04/2024 15:21	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**1.06**	mg/L	1	09/04/2024 15:21	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**4.96**		1	09/04/2024 15:21	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**244**	mg/L	1	09/06/2024 14:42	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**ND**	mg/L	10	09/05/2024 19:39	R352713
Chloride	*	1.00	5.00		**19.7**	mg/L	10	09/05/2024 19:39	R352713
Sulfate	*	0.33	10.0		**66.3**	mg/L	10	09/05/2024 19:39	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0390**	mg/L	1	09/10/2024 11:46	228042
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	09/10/2024 11:46	228042
Calcium	NELAP	0.0350	0.100		**2.47**	mg/L	1	09/10/2024 11:46	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 12:08	228042
Arsenic	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	09/09/2024 16:24	228042
Beryllium	NELAP	0.0002	0.0010	J	**0.0003**	mg/L	5	09/09/2024 10:32	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:32	228042
Chromium	NELAP	0.0007	0.0015		**0.0348**	mg/L	5	09/09/2024 16:24	228042
Cobalt	NELAP	0.0001	0.0010		**0.0016**	mg/L	5	09/09/2024 16:24	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 10:32	228042
Lithium	*	0.0015	0.0030		**0.0171**	mg/L	5	09/09/2024 10:32	228042
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	09/09/2024 16:24	228042
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 16:24	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 10:32	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:33	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-008 **Client Sample ID:** EP-7

Matrix: GROUNDWATER **Collection Date:** 09/05/2024 11:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**14.86**	ft	1	09/05/2024 11:35	R352857
Elevation of groundwater surface	*	0	0		**500.58**	ft	1	09/05/2024 11:35	R352857
Measuring Point Elevation	*	0	0		**515.44**	ft	1	09/05/2024 11:35	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.70**	gal	1	09/05/2024 11:35	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**4.9**	NTU	1	09/05/2024 11:35	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**6**	mV	1	09/05/2024 11:35	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**1.2281**	mS/cm	1	09/05/2024 11:35	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.9**	°C	1	09/05/2024 11:35	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**0.26**	mg/L	1	09/05/2024 11:35	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**5.58**		1	09/05/2024 11:35	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	40	50		**935**	mg/L	2.5	09/06/2024 14:42	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**ND**	mg/L	10	09/06/2024 12:04	R352784
Chloride	*	1.00	5.00		**265**	mg/L	10	09/06/2024 12:04	R352784
Sulfate	*	0.33	10.0		**201**	mg/L	10	09/06/2024 12:04	R352784
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0384**	mg/L	1	09/09/2024 15:31	228074
Boron	NELAP	0.0090	0.0200		**0.469**	mg/L	1	09/09/2024 15:31	228074
Calcium	NELAP	0.0350	0.100		**50.5**	mg/L	1	09/09/2024 15:31	228074
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 10:54	228074
Arsenic	NELAP	0.0004	0.0010		**0.0065**	mg/L	5	09/09/2024 14:58	228074
Beryllium	NELAP	0.0002	0.0010	J	**0.0003**	mg/L	5	09/09/2024 9:05	228074
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:05	228074
Chromium	NELAP	0.0007	0.0015		**0.0241**	mg/L	5	09/09/2024 14:58	228074
Cobalt	NELAP	0.0001	0.0010		**0.171**	mg/L	5	09/09/2024 14:58	228074
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:05	228074
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	09/09/2024 9:05	228074
Molybdenum	NELAP	0.0006	0.0015	J	**0.0009**	mg/L	5	09/09/2024 9:05	228074
Selenium	NELAP	0.0006	0.0010	J	**0.0007**	mg/L	5	09/09/2024 14:58	228074
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 9:05	228074
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/09/2024 11:24	228093
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-009 **Client Sample ID:** Equipment Blank

Matrix: AQUEOUS **Collection Date:** 09/05/2024 13:48

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	09/06/2024 14:42	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**ND**	mg/L	10	09/06/2024 12:15	R352784
Chloride	*	1.00	5.00		**ND**	mg/L	10	09/06/2024 12:15	R352784
Sulfate	*	0.33	10.0		**ND**	mg/L	10	09/06/2024 12:15	R352784
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	09/09/2024 15:31	228074
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	09/09/2024 15:31	228074
Calcium	NELAP	0.035	0.10	J	**0.075**	mg/L	1	09/09/2024 15:31	228074
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 10:59	228074
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:03	228074
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:11	228074
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:11	228074
Chromium	NELAP	0.0007	0.0015		**0.0022**	mg/L	5	09/09/2024 15:03	228074
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:03	228074
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:11	228074
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	09/09/2024 9:11	228074
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	09/09/2024 9:11	228074
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:03	228074
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 9:11	228074
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/09/2024 11:19	228093
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-010 **Client Sample ID:** Field Blank

Matrix: AQUEOUS **Collection Date:** 09/05/2024 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**< 20**	mg/L	1	09/06/2024 15:13	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**ND**	mg/L	10	09/06/2024 12:27	R352784
Chloride	*	1.00	5.00		**ND**	mg/L	10	09/06/2024 12:27	R352784
Sulfate	*	0.33	10.0		**ND**	mg/L	10	09/06/2024 12:27	R352784
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**< 0.0025**	mg/L	1	09/09/2024 15:34	228074
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	09/09/2024 15:34	228074
Calcium	NELAP	0.0350	0.100		**< 0.100**	mg/L	1	09/09/2024 15:34	228074
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**0.0011**	mg/L	5	09/10/2024 11:34	228074
Arsenic	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:49	228074
Beryllium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:57	228074
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:57	228074
Chromium	NELAP	0.0007	0.0015		**< 0.0015**	mg/L	5	09/09/2024 15:49	228074
Cobalt	NELAP	0.0001	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:49	228074
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 9:57	228074
Lithium	*	0.0015	0.0030		**< 0.0030**	mg/L	5	09/09/2024 9:57	228074
Molybdenum	NELAP	0.0006	0.0015		**< 0.0015**	mg/L	5	09/09/2024 15:49	228074
Selenium	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 15:49	228074
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 9:57	228074
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/09/2024 11:22	228093
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	09/30/2024 15:41	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

Lab ID: 24080520-011 **Client Sample ID:** Field Duplicate

Matrix: GROUNDWATER **Collection Date:** 09/04/2024 12:03

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS									
Depth to water from measuring point	*	0	0		**9.68**	ft	1	09/04/2024 12:03	R352857
Elevation of groundwater surface	*	0	0		**515.19**	ft	1	09/04/2024 12:03	R352857
Measuring Point Elevation	*	0	0		**524.87**	ft	1	09/04/2024 12:03	R352857
FIELD PURGE VOLUME									
Purge Volume	*	0	0		**3.50**	gal	1	09/04/2024 12:03	R352857
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		**60**	NTU	1	09/04/2024 12:03	R352857
STANDARD METHODS 18TH ED. 2580 B FIELD									
Oxidation-Reduction Potential	*	-300	-300		**116**	mV	1	09/04/2024 12:03	R352857
STANDARD METHODS 2510 B FIELD									
Spec. Conductance, Field	*	0	0		**0.4977**	mS/cm	1	09/04/2024 12:03	R352857
STANDARD METHODS 2550 B FIELD									
Temperature	*	0	0		**20.3**	°C	1	09/04/2024 12:03	R352857
STANDARD METHODS 4500-O G FIELD									
Oxygen, Dissolved	*	0	0		**5.25**	mg/L	1	09/04/2024 12:03	R352857
SW-846 9040B FIELD									
pH	*	0	1.00		**6.71**		1	09/04/2024 12:03	R352857
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		**344**	mg/L	1	09/06/2024 15:15	R352853
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY									
Fluoride	*	0.03	0.50		**0.52**	mg/L	10	09/05/2024 20:26	R352713
Chloride	*	1.00	5.00		**8.16**	mg/L	10	09/05/2024 20:26	R352713
Sulfate	*	0.33	10.0		**79.1**	mg/L	10	09/05/2024 20:26	R352713
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		**0.0488**	mg/L	1	09/10/2024 12:06	228042
Boron	NELAP	0.0090	0.0200		**< 0.0200**	mg/L	1	09/10/2024 12:06	228042
Calcium	NELAP	0.0350	0.100		**10.6**	mg/L	1	09/10/2024 12:06	228042
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		**< 0.0010**	mg/L	5	09/10/2024 11:59	228042
Arsenic	NELAP	0.0004	0.0010	J	**0.0005**	mg/L	5	09/09/2024 17:21	228042
Beryllium	NELAP	0.0002	0.0010	J	**0.0006**	mg/L	5	09/09/2024 11:12	228042
Cadmium	NELAP	0.0002	0.0010		**< 0.0010**	mg/L	5	09/09/2024 11:12	228042
Chromium	NELAP	0.0007	0.0015	J	**0.0009**	mg/L	5	09/09/2024 17:21	228042
Cobalt	NELAP	0.0001	0.0010	J	**0.0005**	mg/L	5	09/09/2024 17:21	228042
Lead	NELAP	0.0006	0.0010		**< 0.0010**	mg/L	5	09/09/2024 11:12	228042
Lithium	*	0.0015	0.0030		**0.0207**	mg/L	5	09/09/2024 11:12	228042
Molybdenum	NELAP	0.0006	0.0015	J	**0.0013**	mg/L	5	09/10/2024 11:59	228042
Selenium	NELAP	0.0006	0.0010	J	**0.0008**	mg/L	5	09/09/2024 17:21	228042
Thallium	NELAP	0.0010	0.0020		**< 0.0020**	mg/L	5	09/09/2024 11:12	228042
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		**< 0.00020**	mg/L	1	09/06/2024 8:35	227990
EPA 903.0/904.0, RADIUM 226/228									
Radium-226	*	0	0		**See Attached**	pci/L	1	10/07/2024 14:14	R354316
Radium-228	*	0	0		**See Attached**	pci/L	1	10/07/2024 14:14	R354316

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

STANDARD METHODS 2510 B FIELD

Batch R352857 **SampType:** LCS Units **mS/cm**
SampID: LCS-1-JC

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0	S	**1.4110**	1412	0	0.1	90	110	09/04/2024

Batch R352857 **SampType:** LCS Units **mS/cm**
SampID: LCS-1-TC

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0	S	**1.4130**	1412	0	0.1	90	110	09/04/2024

Batch R352857 **SampType:** LCS Units **mS/cm**
SampID: LCS-2-PY

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Spec. Conductance, Field	*	0	S	**1.4100**	1412	0	0.1	90	110	09/05/2024

SW-846 9040B FIELD

Batch R352857 **SampType:** LCS Units
SampID: LCS-1-JC

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.00**	7.000	0	100.0	98.57	101.4	09/04/2024

Batch R352857 **SampType:** LCS Units
SampID: LCS-1-TC

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.05**	7.000	0	100.7	98.57	101.4	09/04/2024

Batch R352857 **SampType:** LCS Units
SampID: LCS-2-PY

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
pH	*	1.00		**7.06**	7.000	0	100.9	98.57	101.4	09/05/2024

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R352853 **SampType:** MBLK Units **mg/L**
SampID: MBLK

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	09/06/2024
Total Dissolved Solids		20		**< 20**	16.00	0	0	-100	100	09/06/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R352853 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		**904**	1000	0	90.4	90	110	09/06/2024
Total Dissolved Solids		20		**906**	1000	0	90.6	90	110	09/06/2024

Batch R352853 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24090189-005ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50	H	**5080**				5330	4.90	09/06/2024

Batch R352853 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24090197-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		100		**480**				490.0	2.06	09/06/2024

Batch R352853 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24090254-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		50		**5540**				5535	0.09	09/06/2024

Batch R352853 **SampType:** DUP Units **mg/L** RPD Limit **10**

SampID: 24090264-001ADUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Dissolved Solids		1000		**563000**				613500	8.55	09/06/2024

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R352713 **SampType:** MBLK Units **mg/L**

SampID: MBLK/ICB

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		**ND**						09/05/2024
Chloride		0.50		**ND**						09/05/2024
Sulfate		1.00		**ND**						09/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R352713 **SampType:** LCS Units **mg/L**

SampID: LCS/ICV/QCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		**0.98**	1.000	0	97.8	90	110	09/05/2024
Chloride		0.50		**20.5**	20.00	0	102.3	90	110	09/05/2024
Sulfate		1.00		**18.8**	20.00	0	94.2	90	110	09/05/2024

Batch R352713 **SampType:** MS Units **mg/L**

SampID: 24080520-006AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	*	0.50		**10.2**	10.00	0.2860	98.9	80	120	09/05/2024
Chloride	*	5.00		**209**	200.0	2.565	103.1	80	120	09/05/2024
Sulfate	*	10.0		**291**	200.0	99.33	96.0	80	120	09/05/2024

Batch R352713 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24080520-006AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	*	0.50		**10.2**	10.00	0.2860	98.9	10.18	0.06	09/05/2024
Chloride	*	5.00		**209**	200.0	2.565	103.3	208.7	0.20	09/05/2024
Sulfate	*	10.0		**293**	200.0	99.33	96.6	291.4	0.40	09/05/2024

Batch R352713 **SampType:** MS Units **mg/L**

SampID: 24090185-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	*	0.50		**10.1**	10.00	0.1640	99.1	80	120	09/05/2024
Chloride	*	5.00		**225**	200.0	16.04	104.5	80	120	09/05/2024
Sulfate	*	10.0		**525**	200.0	319.5	103.0	80	120	09/05/2024

Batch R352713 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090185-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	*	0.50		**10.1**	10.00	0.1640	99.3	10.08	0.19	09/05/2024
Chloride	*	5.00		**225**	200.0	16.04	104.6	225.0	0.15	09/05/2024
Sulfate	*	10.0		**524**	200.0	319.5	102.4	525.4	0.23	09/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R352713 **SampType:** MS Units **mg/L**

SampID: 24090186-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.06		**1.65**	1.100	0.6379	92.3	80	120	09/05/2024
Chloride		0.55		**52.8**	22.00	29.88	104.1	80	120	09/05/2024
Sulfate		1.10		**51.2**	22.00	30.48	94.3	80	120	09/05/2024

Batch R352713 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090186-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.06		**1.66**	1.100	0.6379	92.7	1.653	0.28	09/05/2024
Chloride		0.55		**52.8**	22.00	29.88	104.1	52.77	0.02	09/05/2024
Sulfate		1.10		**51.2**	22.00	30.48	94.3	51.22	0.00	09/05/2024

Batch R352713 **SampType:** MS Units **mg/L**

SampID: 24090189-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	*	0.50		**10.1**	10.00	0.2160	99.3	80	120	09/05/2024
Chloride	*	5.00		**231**	200.0	20.96	104.9	80	120	09/05/2024
Sulfate	*	10.0		**385**	200.0	185.8	99.4	80	120	09/05/2024

Batch R352713 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090189-004AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	*	0.50		**10.2**	10.00	0.2160	99.6	10.14	0.28	09/05/2024
Chloride	*	5.00		**231**	200.0	20.96	105.0	230.7	0.13	09/05/2024
Sulfate	*	10.0		**385**	200.0	185.8	99.6	384.6	0.10	09/05/2024

Batch R352713 **SampType:** MS Units **mg/L**

SampID: 24090207-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.06		**1.67**	1.100	0.6508	93.0	80	120	09/05/2024
Chloride		0.55		**64.9**	22.00	42.05	103.9	80	120	09/05/2024
Sulfate		1.10		**34.4**	22.00	14.18	92.0	80	120	09/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R352713 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090207-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.06		**1.68**	1.100	0.6508	93.5	1.674	0.33	09/05/2024
Chloride		0.55		**64.9**	22.00	42.05	104.0	64.91	0.05	09/05/2024
Sulfate		1.10		**34.4**	22.00	14.18	92.1	34.41	0.11	09/05/2024

Batch R352713 **SampType:** DUP Units **mg/L** RPD Limit **15**

SampID: 24080856-002CDUP

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate	*	10.0	HH	**50.7**				51.31	1.11	09/05/2024

Batch R352784 **SampType:** MBLK Units **mg/L**

SampID: MBLK/ICB

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		**ND**						09/06/2024
Chloride		0.50		**ND**						09/06/2024
Sulfate		1.00		**ND**						09/06/2024

Batch R352784 **SampType:** LCS Units **mg/L**

SampID: LCS/ICV/QCS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.05		**0.99**	1.000	0	99.0	90	110	09/06/2024
Chloride		0.50		**20.5**	20.00	0	102.3	90	110	09/06/2024
Sulfate		1.00		**18.8**	20.00	0	94.1	90	110	09/06/2024

Batch R352784 **SampType:** MS Units **mg/L**

SampID: 24080520-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	*	0.50		**9.99**	10.00	0.09900	98.9	80	120	09/06/2024
Chloride	*	5.00		**376**	200.0	150.6	112.6	80	120	09/06/2024
Sulfate	*	10.0		**321**	200.0	123.1	98.7	80	120	09/06/2024

Batch R352784 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24080520-004AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	*	0.50		**9.97**	10.00	0.09900	98.7	9.992	0.20	09/06/2024
Chloride	*	5.00		**371**	200.0	150.6	110.3	375.8	1.23	09/06/2024
Sulfate	*	10.0		**317**	200.0	123.1	97.0	320.5	1.08	09/06/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY

Batch R352784 **SampType:** MS Units **mg/L**

SampID: 24080520-005AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	*	0.50		**9.84**	10.00	0	98.4	80	120	09/06/2024
Chloride	*	5.00		**717**	200.0	490.1	113.4	80	120	09/06/2024
Sulfate	*	10.0		**702**	200.0	484.4	108.8	80	120	09/06/2024

Batch R352784 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24080520-005AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	*	0.50		**9.83**	10.00	0	98.3	9.843	0.14	09/06/2024
Chloride	*	5.00		**704**	200.0	490.1	106.8	716.8	1.86	09/06/2024
Sulfate	*	10.0		**689**	200.0	484.4	102.4	702.1	1.86	09/06/2024

Batch R352784 **SampType:** MS Units **mg/L**

SampID: 24090216-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride		0.50		**10.4**	10.00	1.401	89.8	80	120	09/06/2024
Chloride		5.00		**378**	200.0	152.4	112.8	80	120	09/06/2024
Sulfate		10.0		**216**	200.0	24.56	95.5	80	120	09/06/2024

Batch R352784 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090216-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride		0.50		**10.3**	10.00	1.401	89.2	10.38	0.55	09/06/2024
Chloride		5.00		**378**	200.0	152.4	112.7	378.1	0.07	09/06/2024
Sulfate		10.0		**214**	200.0	24.56	94.6	215.5	0.82	09/06/2024

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 228042 **SampType:** MBLK Units **mg/L**

SampID: MBLK-228042

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	09/09/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	09/09/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 228042 **SampType:** LCS Units **mg/L**

SampID: LCS-228042

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.26**	2.000	0	113.0	85	115	09/09/2024
Boron		0.0200		**0.538**	0.5000	0	107.6	85	115	09/09/2024
Calcium		0.100		**2.80**	2.500	0	112.0	85	115	09/09/2024

Batch 228042 **SampType:** MS Units **mg/L**

SampID: 24080520-007CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.13**	2.000	0.03900	104.6	75	125	09/10/2024
Boron		0.0200		**0.509**	0.5000	0	101.7	75	125	09/10/2024
Calcium		0.100		**4.96**	2.500	2.468	99.7	75	125	09/10/2024

Batch 228042 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080520-007CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**2.11**	2.000	0.03900	103.6	2.130	0.94	09/10/2024
Boron		0.0200		**0.508**	0.5000	0	101.5	0.5086	0.18	09/10/2024
Calcium		0.100		**4.96**	2.500	2.468	99.7	4.960	0.00	09/10/2024

Batch 228074 **SampType:** MBLK Units **mg/L**

SampID: MBLK-228074

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**< 0.0025**	0.0007	0	0	-100	100	09/09/2024
Boron		0.0200		**< 0.0200**	0.0090	0	0	-100	100	09/09/2024
Calcium		0.100		**< 0.100**	0.0350	0	0	-100	100	09/09/2024

Batch 228074 **SampType:** LCS Units **mg/L**

SampID: LCS-228074

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.13**	2.000	0	106.5	85	115	09/09/2024
Boron		0.0200		**0.512**	0.5000	0	102.4	85	115	09/09/2024
Calcium		0.100		**2.55**	2.500	0	101.9	85	115	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 228074 **SampType:** MS Units **mg/L**

SampID: 24080520-009CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		**2.10**	2.000	0	105.0	75	125	09/09/2024
Boron		0.0200		**0.514**	0.5000	0	102.7	75	125	09/09/2024
Calcium		0.100		**2.65**	2.500	0.07490	102.9	75	125	09/09/2024

Batch 228074 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080520-009CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		**2.11**	2.000	0	105.5	2.100	0.48	09/09/2024
Boron		0.0200		**0.520**	0.5000	0	104.0	0.5135	1.26	09/09/2024
Calcium		0.100		**2.66**	2.500	0.07490	103.5	2.648	0.52	09/09/2024

Batch 228074 **SampType:** MS Units **mg/L**

SampID: 24090417-004AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Boron		0.0200		**0.761**	0.5000	0.2511	101.9	75	125	09/09/2024

Batch 228074 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24090417-004AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Boron		0.0200		**0.770**	0.5000	0.2511	103.8	0.7608	1.19	09/09/2024

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 228042 **SampType:** MBLK Units **mg/L**

SampID: MBLK-228042

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	09/10/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	09/09/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	09/09/2024
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	09/09/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	09/09/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	09/09/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	09/09/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	09/09/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	09/09/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	09/09/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 228042 **SampType:** LCS Units **mg/L**

SampID: LCS-228042

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.572**	0.5000	0	114.4	85	115	09/10/2024
Arsenic		0.0010		**0.507**	0.5000	0	101.4	85	115	09/09/2024
Beryllium		0.0010		**0.0476**	0.0500	0	95.3	85	115	09/09/2024
Cadmium		0.0010		**0.0496**	0.0500	0	99.2	85	115	09/09/2024
Chromium		0.0015		**0.198**	0.2000	0	98.8	85	115	09/09/2024
Cobalt		0.0010		**0.509**	0.5000	0	101.7	85	115	09/09/2024
Lead		0.0010		**0.491**	0.5000	0	98.2	85	115	09/09/2024
Lithium	*	0.0030		**0.481**	0.5000	0	96.3	85	115	09/09/2024
Molybdenum		0.0015		**0.484**	0.5000	0	96.7	85	115	09/09/2024
Selenium		0.0010		**0.485**	0.5000	0	97.0	85	115	09/09/2024
Thallium		0.0020		**0.236**	0.2500	0	94.6	85	115	09/09/2024

Batch 228042 **SampType:** MS Units **mg/L**

SampID: 24080520-007CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.543**	0.5000	0	108.7	75	125	09/10/2024
Arsenic		0.0010		**0.491**	0.5000	0.0004551	98.1	75	125	09/09/2024
Beryllium		0.0010		**0.0520**	0.0500	0.0002544	103.5	75	125	09/09/2024
Cadmium		0.0010		**0.0485**	0.0500	0	96.9	75	125	09/09/2024
Chromium		0.0015		**0.231**	0.2000	0.03478	98.3	75	125	09/09/2024
Cobalt		0.0010		**0.498**	0.5000	0.001636	99.3	75	125	09/09/2024
Lead		0.0010		**0.493**	0.5000	0	98.6	75	125	09/09/2024
Lithium	*	0.0030		**0.529**	0.5000	0.01708	102.3	75	125	09/09/2024
Molybdenum		0.0015		**0.446**	0.5000	0	89.3	75	125	09/09/2024
Selenium		0.0010		**0.476**	0.5000	0	95.3	75	125	09/09/2024
Thallium		0.0020		**0.236**	0.2500	0	94.3	75	125	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 228042 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080520-007CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.574**	0.5000	0	114.9	0.5435	5.54	09/10/2024
Arsenic		0.0010		**0.500**	0.5000	0.0004551	99.9	0.4912	1.80	09/09/2024
Beryllium		0.0010		**0.0515**	0.0500	0.0002544	102.5	0.05200	0.94	09/09/2024
Cadmium		0.0010		**0.0485**	0.0500	0	97.1	0.04845	0.15	09/09/2024
Chromium		0.0015		**0.233**	0.2000	0.03478	99.3	0.2314	0.83	09/09/2024
Cobalt		0.0010		**0.507**	0.5000	0.001636	101.1	0.4979	1.82	09/09/2024
Lead		0.0010		**0.486**	0.5000	0	97.2	0.4932	1.52	09/09/2024
Lithium	*	0.0030		**0.537**	0.5000	0.01708	103.9	0.5286	1.49	09/09/2024
Molybdenum		0.0015		**0.463**	0.5000	0	92.5	0.4465	3.54	09/09/2024
Selenium		0.0010		**0.486**	0.5000	0	97.3	0.4765	2.08	09/09/2024
Thallium		0.0020		**0.233**	0.2500	0	93.2	0.2357	1.13	09/09/2024

Batch 228042 **SampType:** MS Units **mg/L**

SampID: 24090253-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Selenium		0.0010		**0.493**	0.5000	0.006771	97.3	70	130	09/10/2024

Batch 228042 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24090253-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Selenium		0.0010		**0.496**	0.5000	0.006771	97.9	0.4934	0.56	09/10/2024

Batch 228074 **SampType:** MBLK Units **mg/L**

SampID: MBLK-228074

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**< 0.0010**	0.0004	0	0	-100	100	09/10/2024
Arsenic		0.0010		**< 0.0010**	0.0004	0	0	-100	100	09/09/2024
Beryllium		0.0010		**< 0.0010**	0.0002	0	0	-100	100	09/09/2024
Cadmium		0.0010		**< 0.0010**	0.0001	0	0	-100	100	09/09/2024
Chromium		0.0015		**< 0.0015**	0.0007	0	0	-100	100	09/09/2024
Cobalt		0.0010		**< 0.0010**	0.0001	0	0	-100	100	09/09/2024
Lead		0.0010		**< 0.0010**	0.0006	0	0	-100	100	09/09/2024
Lithium	*	0.0030		**< 0.0030**	0.0015	0	0	-100	100	09/09/2024
Molybdenum		0.0015		**< 0.0015**	0.0006	0	0	-100	100	09/09/2024
Selenium		0.0010		**< 0.0010**	0.0006	0	0	-100	100	09/09/2024
Thallium		0.0020		**< 0.0020**	0.0010	0	0	-100	100	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 228074 **SampType:** LCS Units **mg/L**

SampID: LCS-228074

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.546**	0.5000	0	109.1	80	120	09/10/2024
Arsenic		0.0010		**0.515**	0.5000	0	103.0	85	115	09/09/2024
Beryllium		0.0010		**0.0472**	0.0500	0	94.5	85	115	09/09/2024
Cadmium		0.0010		**0.0486**	0.0500	0	97.2	85	115	09/09/2024
Chromium		0.0015		**0.202**	0.2000	0	100.8	85	115	09/09/2024
Cobalt		0.0010		**0.516**	0.5000	0	103.3	85	115	09/09/2024
Lead		0.0010		**0.489**	0.5000	0	97.7	85	115	09/09/2024
Lithium	*	0.0030		**0.476**	0.5000	0	95.2	85	115	09/09/2024
Molybdenum		0.0015		**0.469**	0.5000	0	93.9	85	115	09/09/2024
Selenium		0.0010		**0.500**	0.5000	0	100.0	85	115	09/09/2024
Thallium		0.0020		**0.232**	0.2500	0	93.0	85	115	09/09/2024

Batch 228074 **SampType:** MS Units **mg/L**

SampID: 24080520-009CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		**0.549**	0.5000	0	109.7	75	125	09/10/2024
Arsenic		0.0010		**0.514**	0.5000	0	102.7	75	125	09/09/2024
Beryllium		0.0010		**0.0494**	0.0500	0	98.9	75	125	09/09/2024
Cadmium		0.0010		**0.0493**	0.0500	0	98.5	75	125	09/09/2024
Chromium		0.0015		**0.203**	0.2000	0.002247	100.5	75	125	09/09/2024
Cobalt		0.0010		**0.518**	0.5000	0	103.7	75	125	09/09/2024
Lead		0.0010		**0.489**	0.5000	0	97.8	75	125	09/09/2024
Lithium	*	0.0030		**0.484**	0.5000	0	96.8	75	125	09/09/2024
Molybdenum		0.0015		**0.469**	0.5000	0	93.8	75	125	09/09/2024
Selenium		0.0010		**0.493**	0.5000	0	98.5	75	125	09/09/2024
Thallium		0.0020		**0.236**	0.2500	0	94.5	75	125	09/09/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 228074 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 24080520-009CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		**0.546**	0.5000	0	109.2	0.5486	0.47	09/10/2024
Arsenic		0.0010		**0.524**	0.5000	0	104.8	0.5137	1.94	09/09/2024
Beryllium		0.0010		**0.0498**	0.0500	0	99.5	0.04943	0.66	09/09/2024
Cadmium		0.0010		**0.0498**	0.0500	0	99.7	0.04927	1.14	09/09/2024
Chromium		0.0015		**0.204**	0.2000	0.002247	100.9	0.2032	0.41	09/09/2024
Cobalt		0.0010		**0.528**	0.5000	0	105.6	0.5184	1.80	09/09/2024
Lead		0.0010		**0.494**	0.5000	0	98.8	0.4892	0.96	09/09/2024
Lithium	*	0.0030		**0.497**	0.5000	0	99.3	0.4841	2.58	09/09/2024
Molybdenum		0.0015		**0.475**	0.5000	0	94.9	0.4689	1.21	09/09/2024
Selenium		0.0010		**0.504**	0.5000	0	100.9	0.4925	2.35	09/09/2024
Thallium		0.0020		**0.234**	0.2500	0	93.7	0.2363	0.82	09/09/2024

SW-846 7470A (TOTAL)

Batch 227990 **SampType:** MBLK Units **mg/L**

SampID: MBLK-227990

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	09/05/2024

Batch 227990 **SampType:** LCS Units **mg/L**

SampID: LCS-227990

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00495**	0.0050	0	99.0	85	115	09/05/2024

Batch 227990 **SampType:** MS Units **mg/L**

SampID: 24090192-002BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00490**	0.0050	0	98.0	75	125	09/05/2024

Batch 227990 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 24090192-002BMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00485**	0.0050	0	97.1	0.004898	0.89	09/05/2024

Client: Southern Illinois Power Cooperation **Work Order:** 24080520

Client Project: Groundwater Monitoring **Report Date:** 09-Oct-24

SW-846 7470A (TOTAL)

Batch 228093 **SampType:** MBLK Units **mg/L**
SampID: MBLK-228093

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**< 0.00020**	0.0001	0	0	-100	100	09/09/2024

Batch 228093 **SampType:** LCS Units **mg/L**
SampID: LCS-228093

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00498**	0.0050	0	99.6	85	115	09/09/2024

Batch 228093 **SampType:** MS Units **mg/L**
SampID: 24080520-005CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		**0.00421**	0.0050	0	84.3	75	125	09/09/2024

Batch 228093 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 24080520-005CMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury		0.00020		**0.00422**	0.0050	0	84.4	0.004213	0.20	09/09/2024

Receiving Check List

http://www.teklabinc.com/

Client: Southern Illinois Power Cooperation
Work Order: 24080520
Client Project: Groundwater Monitoring
Report Date: 09-Oct-24

Carrier: Tracy Carroll
Received By: PRS

Completed by: Amber Dilallo
On: 05-Sep-24

Reviewed by: Elizabeth A. Hurley
On: 05-Sep-24

Pages to follow: Chain of custody 4 Extra pages included 27

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	10.3	
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice	☐	
Chain of custody present?	Yes ☑	No ☐				
Chain of custody signed when relinquished and received?	Yes ☑	No ☐				
Chain of custody agrees with sample labels?	Yes ☑	No ☐				
Samples in proper container/bottle?	Yes ☑	No ☐				
Sample containers intact?	Yes ☑	No ☐				
Sufficient sample volume for indicated test?	Yes ☑	No ☐				
All samples received within holding time?	Yes ☑	No ☐				
Reported field parameters measured:	Field ☑	Lab ☐	NA ☐			
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐				

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☐	No ☐	No VOA vials ☑
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

Any No responses must be detailed below or on the COC.

Samples were received on 9/4/24 at 1723 on ice [10.3C - LTG#5]. pH strip #96651. - PS/amberdilallo - 9/5/2024 8:04:56 AM

Samples were received on 9/5/24 at 1557 on ice [10.7C - LTG#5]. pH strip #96651. - PS/amberdilallo - 9/5/2024 4:09:25 PM

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24080520

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Southern Illinois Power Cooperation
Address: 11543 Lake of Egypt Road
City / State / Zip: Marion, IL 62959
Contact: Jason McLaurin Phone: (618) 964-1448
E-Mail: jmclaurin@sipower.org Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 10.3 °C LTG# 5
Preserved in: [ ] LAB [X] FIELD **FOR LAB USE ONLY**
Lab Notes: pH/9/4/51
PS 9/5

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No
Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca
ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Colp

Results Requested: [X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	UNP	HNO3	Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24080520-001	EBG	9-4-24 / 1203	1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1	9-4-24 / 1256	1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2	9-4-24 / 1234	1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3		1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4		1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5	9-4-24 / 1345	1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6	9-4-24 / 1521	1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7		1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank		1	3	X		X		X	X	X	X	X	X	X
010	Field Blank		1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Troy Carroll J. Colp	9-4-24 1723	Paul [illegible]	9/4/24 1723

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See www.teklabinc.com for terms and conditions.

BottleOrder: 92248

CHAIN OF CUSTODY

pg. 2 of 2 Work order # 24080520

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation		
Address:	11543 Lake of Egypt Road		
City / State / Zip	Marion, IL 62959		
Contact:	Jason McLaurin	**Phone:**	(618) 964-1448
E-Mail:	jmclaurin@sipower.org	**Fax:**	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE ____ °C LTG# ____

Preserved in: [ ] LAB [ ] FIELD

FOR LAB USE ONLY

Lab Notes:

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca
ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	Justin Gdp

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24080520-011	Field Duplicate	9-4-24 / 1203	1	3		X	X	X	X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Lisa Carroll J. Gdp	9-4-24 1723	Paul	9/4/24 1723

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BottleOrder: 92248

CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24080520

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation		
Address:	11543 Lake of Egypt Road		
City / State / Zip	Marion, IL 62959		
Contact:	Jason McLaurin	**Phone:**	(618) 964-1448
E-Mail:	jmclaurin@sipower.org	**Fax:**	

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 10.2 °C LTG# 5

Preserved in: ☐ LAB ☒ FIELD

FOR LAB USE ONLY

Lab Notes: pH✓ 96451 85915

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? If yes, include details of the hazard. ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☒ Yes ☐ No

Client Comments

ICP: Ba B Ca
ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	TCarroll

Results Requested
☒ Standard ☐ 1-2 Day (100% Surcharge) ☐ Other ____ ☐ 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24080520-001	EBG		1	3		X	X	X	X	X	X	X	X	X	X
002	EP-1		1	3		X	X	X	X	X	X	X	X	X	X
003	EP-2		1	3		X	X	X	X	X	X	X	X	X	X
004	EP-3	9.5.24 1237	1	3		X	X	X	X	X	X	X	X	X	X
005	EP-4	9.5.24 1335	1	3		X	X	X	X	X	X	X	X	X	X
006	EP-5		1	3		X	X	X	X	X	X	X	X	X	X
007	EP-6		1	3		X	X	X	X	X	X	X	X	X	X
008	EP-7	9.5.24 1135	1	3		X	X	X	X	X	X	X	X	X	X
009	Equipment Blank	9/5/24 1348	1	3	X		X		X	X	X	X	X	X	X
010	Field Blank	9/5/24 1110	1	3	X		X		X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Tiffany Carroll	9/5/24 1557	[illegible]	9/5/24 1557

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BottleOrder: 92248

CHAIN OF CUSTODY

pg. 2 of 2 Work order # 24080520

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Southern Illinois Power Cooperation
Address:	11543 Lake of Egypt Road
City / State / Zip	Marion, IL 62959
Contact:	Jason McLaurin
Phone:	(618) 964-1448
E-Mail:	jmclaurin@sipower.org
Fax:	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE ____ °C LTG# ____

Preserved in: [ ] LAB [ ] FIELD

FOR LAB USE ONLY

Lab Notes:

Are these samples known to be involved in litigation? If yes, a surcharge will apply [ ] Yes [X] No

Are these samples known to be hazardous? If yes, include details of the hazard. [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [X] Yes [ ] No

Client Comments

ICP: Ba B Ca

ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Tl

Field Parameters = Elevations, Purge Volume, pH, Conductivity, Temperature, DO, ORP, and Turbidity

Project Name/Number	Sample Collector's Name
Groundwater Monitoring	

Results Requested

[X] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Aqueous	Groundwater	INDICATE ANALYSIS REQUESTED: Chloride	Field Parameters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Ra226/228	Sulfate	TDS
24080520-011	Field Duplicate		1	3		X	X	X	X	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Tracy Carroll	9.5.24 1557	[illegible]	9/5/24 1557

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BottleOrder: 92248

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

October 08, 2024

Elizabeth Hurley
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24080520

Dear Elizabeth Hurley:

Order No.: 24090490

Summit Environmental Technologies, Inc. received 11 sample(s) on 9/9/2024 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Jennifer Woolf

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24090490**
Date: **10/8/2024**

CLIENT: TEKLAB Inc,
Project: 24080520

WorkOrder Narrative:
24090490: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

 The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-448
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **24090490**
Date: **10/8/2024**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **24090490**
08-Oct-24

CLIENT: TEKLAB Inc,
Project: 24080520

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24090490-001	24080520-001		9/4/2024 12:03:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-002	24080520-002		9/4/2024 12:56:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-003	24080520-003		9/4/2024 12:34:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-004	24080520-004		9/5/2024 12:37:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-005	24080520-005		9/5/2024 1:35:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-006	24080520-006		9/4/2024 1:45:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-007	24080520-007		9/4/2024 3:21:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-008	24080520-008		9/5/2024 11:35:00 AM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-009	24080520-009		9/5/2024 1:48:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-010	24080520-010		9/5/2024 11:10:00 AM	9/9/2024 1:30:00 PM	Non-Potable Water
24090490-011	24080520-011		9/4/2024 12:03:00 PM	9/9/2024 1:30:00 PM	Non-Potable Water

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **24090490**

08-Oct-24

Client: TEKLAB Inc,

Project: 24080520

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24090490-001A	24080520-001	9/4/2024 12:03:00 PM	Non-Potable Water	Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-002A	24080520-002	9/4/2024 12:56:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-003A	24080520-003	9/4/2024 12:34:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-004A	24080520-004	9/5/2024 12:37:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-005A	24080520-005	9/5/2024 1:35:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-006A	24080520-006	9/4/2024 1:45:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-007A	24080520-007	9/4/2024 3:21:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-008A	24080520-008	9/5/2024 11:35:00 AM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM

Original

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **24090490**

08-Oct-24

Client: TEKLAB Inc,

Project: 24080520

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24090490-008A	24080520-008	9/5/2024 11:35:00 AM	Non-Potable Water	Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-009A	24080520-009	9/5/2024 1:48:00 PM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-010A	24080520-010	9/5/2024 11:10:00 AM		Combined Radium (EPA903+904)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-226 (EPA 903.0)		9/25/2024 1:29:35 PM	10/1/2024 10:53:00 AM
				Radium-228 (EPA 904.0)		9/25/2024 1:29:35 PM	9/30/2024 3:41:00 PM
24090490-011A	24080520-011	9/4/2024 12:03:00 PM		Combined Radium (EPA903+904)		10/3/2024 12:12:01 PM	10/8/2024 10:25:08 AM
				Radium-226 (EPA 903.0)		10/3/2024 12:12:01 PM	10/8/2024 10:25:08 AM
				Radium-228 (EPA 904.0)		10/3/2024 12:12:01 PM	10/7/2024 2:14:55 PM

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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Analytical Report

(consolidated)

WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 12:03:00 PM

Project: 24080520

Lab ID: 24090490-001

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.76	2.00	U	pCi/L	± 0.440	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.04	1.00	U	pCi/L	± 0.0500	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.72	1.00	J	pCi/L	± 0.390	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 12:56:00 PM

Project: 24080520

Lab ID: 24090490-002

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-002

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.45	2.00	U	pCi/L	± 0.390	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	-0.04	1.00	U	pCi/L	± 0.0500	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.45	1.00	U	pCi/L	± 0.340	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 12:34:00 PM

Project: 24080520

Lab ID: 24090490-003

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-003

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.81	2.00	U	pCi/L	± 0.590	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.37	1.00	U	pCi/L	± 0.110	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	1.44	1.00		pCi/L	± 0.480	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/5/2024 12:37:00 PM

Project: 24080520

Lab ID: 24090490-004

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-004

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.48	2.00	U	pCi/L	± 0.550	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.1	1.00	U	pCi/L	± 0.0700	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	1.38	1.00		pCi/L	± 0.480	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/5/2024 1:35:00 PM

Project: 24080520

Lab ID: 24090490-005

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-005

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.54	2.00	U	pCi/L	± 0.460	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.14	1.00	U	pCi/L	± 0.0800	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.4	1.00	U	pCi/L	± 0.380	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 1:45:00 PM

Project: 24080520

Lab ID: 24090490-006

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-006

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.71	2.00	U	pCi/L	± 0.430	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.09	1.00	U	pCi/L	± 0.0600	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.62	1.00	U	pCi/L	± 0.370	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 3:21:00 PM

Project: 24080520

Lab ID: 24090490-007

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.58	2.00	U	pCi/L	± 0.390	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.07	1.00	U	pCi/L	± 0.0500	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.51	1.00	U	pCi/L	± 0.340	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/5/2024 11:35:00 AM

Project: 24080520

Lab ID: 24090490-008

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.15	2.00	U	pCi/L	± 0.480	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0.18	1.00	U	pCi/L	± 0.0800	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.97	1.00	J	pCi/L	± 0.400	1	9/30/2024 3:41:00 PM
Yield	1					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

(consolidated)

WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/5/2024 1:48:00 PM

Project: 24080520

Lab ID: 24090490-009

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-009

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.77	2.00	U	pCi/L	± 0.480	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	-0.04	1.00	U	pCi/L	± 0.0500	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	0.77	1.00	J	pCi/L	± 0.430	1	9/30/2024 3:41:00 PM
Yield	0.94					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/5/2024 11:10:00 AM

Project: 24080520

Lab ID: 24090490-010

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **DHF**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.34	2.00	U	pCi/L	± 0.520	1	10/1/2024 10:53:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **DHF**
RADIUM-226 (EPA 903.0)							
Radium-226	0	1.00	U	pCi/L	± 0.0400	1	10/1/2024 10:53:00 AM
Yield	1					1	10/1/2024 10:53:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **DHF**
RADIUM-228 (EPA 904.0)							
Radium-228	1.34	1.00		pCi/L	± 0.480	1	9/30/2024 3:41:00 PM
Yield	0.9					1	9/30/2024 3:41:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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Analytical Report

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WO#: **24090490**

Date Reported: **10/8/2024**

CLIENT: TEKLAB Inc,

Collection Date: 9/4/2024 12:03:00 PM

Project: 24080520

Lab ID: 24090490-011

Matrix: NON-POTABLE WATER

Client Sample ID: 24080520-011

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**	**E903-904**	Analyst: **SMZ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.78	2.00	U	pCi/L	± 0.410	1	10/8/2024 10:25:08 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **SMZ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.04	1.00	U	pCi/L	± 0.0400	1	10/8/2024 10:25:08 AM
Yield	1					1	10/8/2024 10:25:08 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **SMZ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.740	1.00	J	pCi/L	± 0.370	1	10/7/2024 2:14:55 PM
Yield	1.00					1	10/7/2024 2:14:55 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as specified at testcode

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QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **78862**

Sample ID: **MB-78862**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194298**
Client ID: **PBW**	Batch ID: **78862**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/30/2024**	SeqNo: **5258811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	1.00			0	0						

Sample ID: **LCS-78862**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194298**
Client ID: **LCSW**	Batch ID: **78862**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/30/2024**	SeqNo: **5258812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.30	1.00	5.000	0	66.0	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-78862**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194298**
Client ID: **LCSS02**	Batch ID: **78862**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/30/2024**	SeqNo: **5258813**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	2.73	1.00	5.000	0	54.6	50	130	3.300	18.9	20	
Yield	0.970			0	0			1.000	3.05		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **78862**

Sample ID: **24090452-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **9/25/2024** RunNo: **194298**
Client ID: **BatchQC** Batch ID: **78862** TestNo: **E904.0** **E903-904** Analysis Date: **9/30/2024** SeqNo: **5258818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0.9500	200	20	RU
Yield	1.00			0	0			1.000	0		

Sample ID: **24090452-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **9/25/2024** RunNo: **194298**
Client ID: **BatchQC** Batch ID: **78862** TestNo: **E904.0** **E903-904** Analysis Date: **9/30/2024** SeqNo: **5258820**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.900	1.00		0	0			0	200	20	JR
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **78862**

Sample ID: **MB-78862**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194301**
Client ID: **PBW**	Batch ID: **78862**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/1/2024**	SeqNo: **5258897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	1.00										

Sample ID: **LCS-78862**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194301**
Client ID: **LCSW**	Batch ID: **78862**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/1/2024**	SeqNo: **5258898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.00	1.00	5.000	0	100	70	130				

Sample ID: **LCSD-78862**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194301**
Client ID: **LCSS02**	Batch ID: **78862**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/1/2024**	SeqNo: **5258899**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.44	1.00	5.000	0	109	70	130	5.000	8.43	20	

Sample ID: **24090452-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/25/2024**	RunNo: **194301**
Client ID: **BatchQC**	Batch ID: **78862**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/1/2024**	SeqNo: **5268619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24090490**

08-Oct-24

Client: TEKLAB Inc,

Project: 24080520 **BatchID:** **78862**

Sample ID: **24090452-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **9/25/2024** RunNo: **194301**

Client ID: **BatchQC** Batch ID: **78862** TestNo: **E903.0** **E903-904** Analysis Date: **10/1/2024** SeqNo: **5268619**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **79103**

Sample ID: **MB-79103**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194688**
Client ID: **PBW**	Batch ID: **79103**	TestNo: **E904.0**	**E903-904**	Analysis Date: **10/7/2024**	SeqNo: **5269455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						U
Yield	1.00			0	0						

Sample ID: **LCS-79103**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194688**
Client ID: **LCSW**	Batch ID: **79103**	TestNo: **E904.0**	**E903-904**	Analysis Date: **10/7/2024**	SeqNo: **5269456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.35	1.00	5.000	0	67.0	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-79103**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194688**
Client ID: **LCSS02**	Batch ID: **79103**	TestNo: **E904.0**	**E903-904**	Analysis Date: **10/7/2024**	SeqNo: **5269457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.33	1.00	5.000	0	66.6	50	130	3.350	0.599	20	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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Analytical Laboratories

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **79103**

Sample ID: **24090543-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **10/3/2024** RunNo: **194688**
Client ID: **BatchQC** Batch ID: **79103** TestNo: **E904.0** **E903-904** Analysis Date: **10/7/2024** SeqNo: **5269462**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0	0	20	U
Yield	1.00			0	0			1.000	0		

Sample ID: **24090605-003ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **10/3/2024** RunNo: **194688**
Client ID: **BatchQC** Batch ID: **79103** TestNo: **E904.0** **E903-904** Analysis Date: **10/7/2024** SeqNo: **5269464**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0	0	20	U
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **79103**

Sample ID: **MB-79103**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194694**
Client ID: **PBW**	Batch ID: **79103**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/8/2024**	SeqNo: **5269549**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	1.00										

Sample ID: **LCS-79103**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194694**
Client ID: **LCSW**	Batch ID: **79103**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/8/2024**	SeqNo: **5269550**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.80	1.00	5.000	0	96.0	70	130				

Sample ID: **LCSD-79103**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194694**
Client ID: **LCSS02**	Batch ID: **79103**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/8/2024**	SeqNo: **5269551**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.60	1.00	5.000	0	92.0	70	130	4.800	4.26	20	

Sample ID: **24090605-003ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **10/3/2024**	RunNo: **194694**
Client ID: **BatchQC**	Batch ID: **79103**	TestNo: **E903.0**	**E903-904**	Analysis Date: **10/8/2024**	SeqNo: **5269556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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QC SUMMARY REPORT

WO#: **24090490**
08-Oct-24

Client: TEKLAB Inc,
Project: 24080520 **BatchID:** **79103**

Sample ID: **24090605-003ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **10/3/2024** RunNo: **194694**
Client ID: **BatchQC** Batch ID: **79103** TestNo: **E903.0** **E903-904** Analysis Date: **10/8/2024** SeqNo: **5269556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	20	U
Yield	1.00							1.000	0	0	

Qualifiers:

H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine area respons
ND	Not Detected	PL	Permit Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	U	Samples with CalcVal < MDL	W	Sample container temperature is out of limit as spe

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Pg 1 of 1 24090490

TEKLAB, INC. Chain of Custody

5445 Horseshoe Lake Road, Collinsville, IL 62234 Phone (618) 344-1004 Fax (618) 344-1005

Are the samples chilled? YES ☐ NO ☑ With: ☐ Ice ☐ Blue Ice Preserved in: ☐ Lab ☐ Field

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: | Sampler: Teklab, Inc. | QC Level: 2

Comments: **Please Issue reports and invoices via email only**
Please analyze for Ra226, Ra228 and Combined Radium per your usual methods.
Changes to analysis/methods must be approved by Teklab, Inc. Batch QC is required.
Samples collected from an IL site.

Project# 24080520

Contact: Elizabeth Hurley | Email: ehurley@teklabinc.com
Requested Due Date: Standard TAT | Billing/PO: 36792 | Phone: (618) 344-1004 ext. 33

PLEASE NOTE:

NELAP accreditation is required on the requested analytes and must be documented as such on the final report. If your laboratory does not currently hold a NELAP accreditation for the requested method and/or analytes, please contact Teklab immediately. If your laboratory loses accreditation or is suspended for any analyte/method during the life of the contract, you must contact Teklab immediately.

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Radium 226/228	Radium 226	Radium 228	pH	CPU
	24080520-001	9/4/2024 12:03:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	18,22
	24080520-002	9/4/2024 12:56:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	11,37
	24080520-003	9/4/2023 12:34:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	30,21
	24080520-004	9/5/2024 12:37:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	20,33
	24080520-005	9/5/2024 1:35:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	11,12
	24080520-006	9/4/2024 1:45:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	30,26
	24080520-007	9/4/2024 3:21:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	20,15
	24080520-008	9/5/2024 11:35:00 AM	HNO3	Groundwater	✔	✔	✔	1,1	35,41
	24080520-009	9/5/2024 1:48:00 PM	HNO3	Aqueous	✔	✔	✔	1,1	22,37
	24080520-010	9/5/2024 11:10:00 AM	HNO3	Aqueous	✔	✔	✔	1,1	28,22
	24080520-011	9/4/2024 12:03:00 PM	HNO3	Groundwater	✔	✔	✔	1,1	30,41

*Relinquished By	Date/Time	Received By	Date/Time
[signature]	9/6/24 1700		
		C Stefan fedex 18.6-0=18.6	9/9/24 1330

SubCocRevA
3/2/2016

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3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24090490 RcptNo: 1

Logged by:	Christopher Stefan	9/9/2024 1:30:00 PM	Christopher Stefan
Completed By:	Spencer M. Hartwell	9/10/2024 11:56:21 AM	Spencer M. Hartwell
Reviewed By:	Jennifer Woolf	9/10/2024 12:00:06 PM	Jennifer Woolf

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? FedEx

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☑ No ☐ Not Present ☐
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☐ No ☑ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Not required
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	18.6	Good	Not Present			

APPENDIX C

2024 Data Usability Assessment Report

QA LEVEL I - DATA VERIFICATION CHECKLIST

Project Name: SIPC Groundwater Monitoring
Project Number: GL21467997.002
Reviewing Company: WSP USA
Project Manager: Danielle Sylvia Cofelice
Data Evaluator: Gabriel Dixon
Data Evaluation Date: February 1, 2024
Checked by: Danielle Sylvia Cofelice
Review Date: February 8, 2024
Laboratory: : Teklab, Inc., Summit Environmental Technologies, Inc.
Lab Job #: 23120001

Matrix: ☒ Aqueous ☐ Soil ☐ Sediment ☐ Waste ☐ Air ☐ Other:

Analytical Methods: Total dissolved solids by SM 2540C; chloride by 4500-CL E; sulfate by SW-846 9036; fluoride by SW-846 9214; total metals by SW-846 3005A, 6010B and 6020A; mercury by SW-846 7470A; Radium226/228 by EPA 903.0/904.0

Sample Information: See Table 1.

Data Qualification: No qualifications required.

Work Plan or QAPP reference: None

Data Validation Guidance: EPA Guidance on Environmental Data Verification and Data Validation (EPA QA/G-8)

Chain of Custody (COC) and Sample Receipt	**YES**	**NO**	**NA**	**COMMENT**
a) COC complete and correct? (Project location, contacts, sample IDs, sample dates, field QC samples, analyses identified, et c.)	☒	☐		
b) COC documents release of custody (signed and dated)?	☒	☐		
c) Field QC types provided (note types)?	☒	☐	☐	EB, FB, FD
d) Did the cooler contents match the COC?	☒	☐		
e) Were samples received in good condition?	☒	☐		
f) Were cooler temperatures within control limits?	☒	☐		

Data Package Information	**YES**	**NO**	**NA**	**COMMENT**
a) Laboratory name and location documented?	☒	☐		
b) All samples on COC reported in data package?	☒	☐		
c) Requested analytical methods used?	☒	☐		
d) Requested analyte list reported?	☒	☐		
e) Requested units reported?	☒	☐	☐	
f) Did the laboratory define the qualifiers used?	☒	☐		
g) Data package contains all information necessary to complete the data quality review?	☒	☐		

Analytical Assessment	**YES**	**NO**	**NA**	**COMMENT**
a) Solid samples reported on a dry-weight basis?	☐	☐	☒	
b) Were solid samples percent moisture criteria acceptable?	☐	☐	☒	
c) Were sample dilutions noted?	☒	☐		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	☒	☐		
e) All detected sample results within the calibrated range?	☒	☐		
f) Did the laboratory satisfy the requested sensitivity requirements?	☒	☐		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	☐	☒	☐	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	☐	☒		See Note 1
b) Were holding times met for sample preparation and/or extraction?	☒	☐	☐	
c) Were holding times met for sample analysis?	☒	☐		

Blanks	YES	NO	NA	COMMENTS
a) No analytes detected in the associated preparation/method blank(s)?	☒	☐		
b) No analytes detected in the associated trip blank(s)?	☐	☐	☒	
c) No analytes detected in the associated field or equipment/rinsate blank(s)?	☐	☒	☐	See Note 2

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates reported?	☒	☐	☐	
b) Was field duplicate RPD or absolute difference criteria acceptable?	☐	☒	☐	See Note 3

Overall Evaluation	YES	NO	NA	COMMENTS
a) No other technical problems that lead to data rejection identified by laboratory?	☒	☐		
b) Were data acceptable and usable, except where noted?	☒	☐		

Comments/Notes:

1) The laboratory receiving checklist indicates that sample EP-3 was received with a pH not within quality control limits. Laboratory staff added additional nitric acid to bring pH within acceptable limits. No further action was required.

2) Analytes were detected in an equipment blank, as shown in the table below. Equipment and field blanks are compared to primary samples collected on the same day. Associated detected results are considered potentially biased high.

Sample Name	Parameter	Analyte	Blank Result	RL/MDC	Units
Equipment Blank	Anions	Chloride	1 J	4	mg/L
Equipment Blank	Anions	Fluoride	0.05 J	0.10	mg/L
Equipment Blank	Metals	Calcium	0.063 J	0.10	mg/L

3. Field duplicate RPDs did not meet acceptance criteria. Reporting limits were used to calculate RPDs for non-detect results. Using professional judgment, RPDs were first calculated, and analytes with RPDs above 30% were evaluated.

Using professional judgement for inorganics, when the results are less than 5x the reporting limit and the absolute difference between the results is less than the reporting limit, no bias is suspected.

Primary Sample Name	Parameter	Analyte	Primary Sample Result	Duplicate Sample Result	RL/MDA Primary Sample	RL/MDA Duplicate Sample	Unit	RPD (%)
EBG	Metals	Cobalt	0.0002 J	0.0003 J	0.0010	0.0010	mg/L	**40**
EBG	Metals	Molybdenum	0.0010 J	0.0015 J	0.0015	0.0015	mg/L	**40**
EBG	Radium	Radium-228	3.21	1.00 U	1.00	1.00	pCi/L	**105**
EBG	Radium	Combined Radium	3.27	2.00 U	2.00	2.00	pCi/L	**48.2**

TABLE 1

Sample Collection and Analysis Summary
SIPC CCR Groundwater Monitoring

Lab ID	*Field Identification*	*Collection Date*	*Location*	*Matrix*	*QC Samples*	Chloride	Field Paramaters	Fluoride	ICP Metals	Mercury	Radium-226/228	Sulfate	TDS
23120001-001	EBG	12/11/2023	EBG	GW	-	X	X	X	X	X	X	X	X
23120001-002	EP-1	12/11/2023	EP-1	GW	-	X	X	X	X	X	X	X	X
23120001-003	EP-2	12/12/2023	EP-2	GW	-	X	X	X	X	X	X	X	X
23120001-004	EP-3	12/12/2023	EP-3	GW	-	X	X	X	X	X	X	X	X
23120001-005	EP-4	12/12/2023	EP-4	GW	-	X	X	X	X	X	X	X	X
23120001-006	EP-5	12/11/2023	EP-5	GW	-	X	X	X	X	X	X	X	X
23120001-007	EP-6	12/11/2023	EP-6	GW	-	X	X	X	X	X	X	X	X
23120001-008	EP-7	12/12/2023	EP-7	GW	-	X	X	X	X	X	X	X	X
23120001-009	Equipment Blank	12/12/2023	-	WQ	EB	X	-	X	X	X	X	X	X
23120001-010	Field Blank	12/12/2023	-	WQ	FB	X	-	X	X	X	X	X	X
23120001-011	Field Duplicate	12/11/2023	EBG	GW	FD	X	X	X	X	X	X	X	X

Notes:
All analyses performed by Teklab in Collinsville, IL and Summit Environmental Technologies in Cuyahoga Falls, OH

Abbreviations:
EB: Equipment Blank
FB: Field Blank
FD: Field Duplicate
GW: Ground Water
QC: Quality Control
TDS: Total Dissolved Solids
WQ: Water Quality

QA LEVEL I - DATA VERIFICATION CHECKLIST

Project Name: SIPC Groundwater Monitoring
Reviewing Company: WSP USA
Data Evaluator: Candace Cocca
Checked by: Danielle Sylvia Cofelice
Laboratory: Teklab, Inc., Summit Environmental Technologies, Inc.

Project Number: GL21467997.002
Project Manager: Danielle Sylvia Cofelice
Data Evaluation Date: May 3, 2024
Review Date: May 10, 2024
Lab Job #: 24030002

Matrix: ☒ Aqueous ☐ Soil ☐ Sediment ☐ Waste ☐ Air ☐ Other:

Analytical Methods: Total dissolved solids by SM 2540C; chloride by 4500-CL E; sulfate by SW-846 9036; fluoride by SW-846 9214; total metals by SW-846 3005A, 6010B and 6020A; mercury by SW-846 7470A; Radium226/228 by EPA 903.0/904.0

Sample Information: See Table 1.

Data Qualification: No qualifications required.

Work Plan or QAPP reference: None

Data Validation Guidance: EPA Guidance on Environmental Data Verification and Data Validation (EPA QA/G-8)

Chain of Custody (COC) and Sample Receipt	YES	NO	NA	COMMENT
a) COC complete and correct? (Project location, contacts, sample IDs, sample dates, field QC samples, analyses identified, et c.)	☒	☐		
b) COC documents release of custody (signed and dated)?	☒	☐		
c) Field QC types provided (note types)?	☒	☐	☐	EB, FB, FD
d) Did the cooler contents match the COC?	☒	☐		
e) Were samples received in good condition?	☒	☐		
f) Were cooler temperatures within control limits?	☐	☒		See Note 1

Data Package Information	YES	NO	NA	COMMENT
a) Laboratory name and location documented?	☒	☐		
b) All samples on COC reported in data package?	☒	☐		
c) Requested analytical methods used?	☒	☐		
d) Requested analyte list reported?	☒	☐		
e) Requested units reported?	☒	☐	☐	
f) Did the laboratory define the qualifiers used?	☒	☐		
g) Data package contains all information necessary to complete the data quality review?	☒	☐		See Note 2

Analytical Assessment	YES	NO	NA	COMMENT
a) Solid samples reported on a dry-weight basis?	☐	☐	☒	
b) Were solid samples percent moisture criteria acceptable?	☐	☐	☒	
c) Were sample dilutions noted?	☒	☐		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	☒	☐		
e) All detected sample results within the calibrated range?	☒	☐		
f) Did the laboratory satisfy the requested sensitivity requirements?	☒	☐		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	☐	☒	☐	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	☐	☒		See Note 3
b) Were holding times met for sample preparation and/or extraction?	☒	☐	☐	
c) Were holding times met for sample analysis?	☒	☐		

Blanks	YES	NO	NA	COMMENTS
a) No analytes detected in the associated preparation/method blank(s)?	☐	☒		See Note 4
b) No analytes detected in the associated trip blank(s)?	☐	☐	☒	
c) No analytes detected in the associated field or equipment/rinsate blank(s)?	☐	☒	☐	See Note 4

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates reported?	☒	☐	☐	
b) Was field duplicate RPD or absolute difference criteria acceptable?	☐	☒	☐	See Note 5

Overall Evaluation	YES	NO	NA	COMMENTS
a) No other technical problems that lead to data rejection identified by laboratory?	☒	☐		
b) Were data acceptable and usable, except where noted?	☒	☐		

Comments/Notes:

1) The cooler temperatures were outside QC limits (4 ± 2ºC) upon receipt to the laboratory (11.1°C and 6.5°C). Following Guidelines and using professional judgment, no qualifications were required as samples were submitted on ice to the laboratory on the same day as sample collection.

2) The laboratory receiving checklist indicates that sample EP-3 was received with a pH not within quality control limits. Laboratory staff added additional nitric acid to bring pH within acceptable limits. No further action was required.

3) Analytes were detected in method and equipment blanks, as shown in the table below. Equipment and field blanks are compared to primary samples collected on the same day. Associated detected results are considered potentially biased high.

Sample Name	Parameter	Analyte	Blank Result	RL/MDC	Units
MBLK-219890	Metals	Calcium	0.484	0.100	mg/L
Equipment Blank	TDS	Total Dissolved Solids	20	20	mg/L
Equipment Blank	Metals	Calcium	0.112 J	0.100	mg/L

4) Field duplicate RPDs did not meet acceptance criteria. Reporting limits were used to calculate RPDs for non-detect results. Using professional judgment, RPDs were first calculated, and analytes with RPDs above 30% were evaluated. Using professional judgement for inorganics, when the results are less than 5x the reporting limit and the absolute difference between the results is less than the reporting limit, no bias is suspected. When the results are less than 5x the reporting limit and the absolute difference between the results is greater than the reporting limit, associated detected results are considered potentially biased. When the results are greater than 5x the reporting limit and the RPD is greater than 30%, associated detected results are considered potentially biased.

Primary Sample Name	Parameter	Analyte	Primary Sample Result	Duplicate Sample Result	RL/MDA Primary Sample	RL/MDA Duplicate Sample	Unit	RPD (%)
EBG	Metals	Arsenic	0.0004 J	0.0006 J	0.0010	0.0010	mg/L	**40**
EBG	Metals	Cobalt	0.0002 J	0.0004 J	0.0010	0.0010	mg/L	**67**
EBG	Metals	Lithium	0.0265	0.0159	0.0030	0.0030	mg/L	**50.0**
EBG	Metals	Molybdenum	0.0016	0.0036	0.0015	0.0015	mg/L	**77**
EBG	Metals	Selenium	0.0006 J	0.0010 U	0.0010	0.0010	mg/L	**74**
EBG	Radium	Radium-228	0.69 J	1.00 U	1.00	1.00	pCi/L	**37**

TABLE 1

Sample Collection and Analysis Summary
SIPC CCR Groundwater Monitoring

Lab ID	*Field Identification*	*Collection Date*	*Location*	*Matrix*	*QC Samples*	Chloride	Field Paramaters	Fluoride	ICP Metals	Mercury	Radium-226/228	Sulfate	TDS
24030002-001	EBG	3/12/2024	EBG	GW	-	X	X	X	X	X	X	X	X
24030002-002	EP-1	3/13/2024	EP-1	GW	-	X	X	X	X	X	X	X	X
24030002-003	EP-2	3/13/2024	EP-2	GW	-	X	X	X	X	X	X	X	X
24030002-004	EP-3	3/14/2024	EP-3	GW	-	X	X	X	X	X	X	X	X
24030002-005	EP-4	3/14/2024	EP-4	GW	-	X	X	X	X	X	X	X	X
24030002-006	EP-5	3/13/2024	EP-5	GW	-	X	X	X	X	X	X	X	X
24030002-007	EP-6	3/14/2024	EP-6	GW	-	X	X	X	X	X	X	X	X
24030002-008	EP-7	3/14/2024	EP-7	GW	-	X	X	X	X	X	X	X	X
24030002-009	Equipment Blank	3/14/2024	-	WQ	EB	X	-	X	X	X	X	X	X
24030002-010	Field Blank	3/14/2024	-	WQ	FB	X	-	X	X	X	X	X	X
24030002-011	Field Duplicate	3/12/2024	EBG	GW	FD	X	X	X	X	X	X	X	X

Notes:
All analyses performed by Teklab in Collinsville, IL and Summit Environmental Technologies in Cuyahoga Falls, OH

Abbreviations:
EB: Equipment Blank
FB: Field Blank
FD: Field Duplicate
GW: Ground Water
QC: Quality Control
TDS: Total Dissolved Solids
WQ: Water Quality

QA LEVEL I - DATA VERIFICATION CHECKLIST

Project Name: SIPC Groundwater Monitoring
Project Number: GL21467997.002
Reviewing Company: WSP USA
Project Manager: Danielle Sylvia Cofelice
Data Evaluator: Nathan Demers
Data Evaluation Date: July 11, 2024
Checked by: Danielle Sylvia Cofelice
Review Date: July 11, 2024
Laboratory: Teklab, Inc., Summit Environmental Technologies, Inc.
Lab Job #: 24051567

Matrix: ☒ Aqueous ☐ Soil ☐ Sediment ☐ Waste ☐ Air ☐ Other:

Analytical Methods: Total dissolved solids by SM 2540C; chloride by 4500-CL E; sulfate by SW-846 9036; fluoride by SW-846 9214; total metals by SW-846 3005A, 6010B and 6020A; mercury by SW-846 7470A; Radium226/228 by EPA 903.0/904.0

Sample Information: See Table 1.

Data Qualification: No qualifications required.

Work Plan or QAPP reference: None

Data Validation Guidance: EPA Guidance on Environmental Data Verification and Data Validation (EPA QA/G-8)

Chain of Custody (COC) and Sample Receipt	**YES**	**NO**	**NA**	**COMMENT**
a) COC complete and correct? (Project location, contacts, sample IDs, sample dates, field QC samples, analyses identified, et c.)	☒	☐		
b) COC documents release of custody (signed and dated)?	☒	☐		
c) Field QC types provided (note types)?	☒	☐	☐	EB, FB, FD
d) Did the cooler contents match the COC?	☒	☐		
e) Were samples received in good condition?	☒	☐		See Note 2
f) Were cooler temperatures within control limits?	☐	☒		See Note 1

Data Package Information	**YES**	**NO**	**NA**	**COMMENT**
a) Laboratory name and location documented?	☒	☐		
b) All samples on COC reported in data package?	☒	☐		
c) Requested analytical methods used?	☒	☐		
d) Requested analyte list reported?	☒	☐		
e) Requested units reported?	☒	☐	☐	
f) Did the laboratory define the qualifiers used?	☒	☐		
g) Data package contains all information necessary to complete the data quality review?	☒	☐		

Analytical Assessment	**YES**	**NO**	**NA**	**COMMENT**
a) Solid samples reported on a dry-weight basis?	☐	☐	☒	
b) Were solid samples percent moisture criteria acceptable?	☐	☐	☒	
c) Were sample dilutions noted?	☒	☐		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	☒	☐		
e) All detected sample results within the calibrated range?	☒	☐		
f) Did the laboratory satisfy the requested sensitivity requirements?	☒	☐		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	☒	☐	☐	See Note 3

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	☐	☒		See Note 2
b) Were holding times met for sample preparation and/or extraction?	☒	☐	☐	
c) Were holding times met for sample analysis?	☐	☒		See Note 3

Blanks	YES	NO	NA	COMMENTS
a) No analytes detected in the associated preparation/method blank(s)?	☒	☐		
b) No analytes detected in the associated trip blank(s)?	☐	☐	☒	
c) No analytes detected in the associated field or equipment/rinsate blank(s)?	☐	☒	☐	See Note 4

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates reported?	☒	☐	☐	
b) Was field duplicate RPD or absolute difference criteria acceptable?	☐	☒	☐	See Note 5

Overall Evaluation	YES	NO	NA	COMMENTS
a) No other technical problems that lead to data rejection identified by laboratory?	☒	☐		
b) Were data acceptable and usable, except where noted?	☒	☐		

Comments/Notes:

1) The cooler temperature for samples EBG, EP-1, EP-5, and Field Duplicate was outside QC limits (4 ± 2ºC) upon receipt to the laboratory (16.7°C). Following Guidelines and using professional judgment, no qualifications were required as samples were submitted on ice to the laboratory on the same day as sample collection.

2) The laboratory receiving checklist indicates that samples EP-3 and EP-4 were received with a pH not within quality control limits. Laboratory staff added additional nitric acid to bring pH within acceptable limits. No further action was required.

3) The holding time for the Total Dissolved Solids analysis is 7 days. Sample EP-6 required re-analysis for Total Dissolved Solids outside of acceptable holding times. The sample was analyzed approximately 9 days after sample collection. No further action was required other than to note. The matrix spike for calcium in sample EP-5 recovered at 148%, outside of the acceptable limits of 75-125%. The concentration of calcium in sample EP-5 was greater than 4x the spiking concentration and no further action is required.

4) Analytes were detected in method and equipment blanks, as shown in the table below. Equipment and field blanks are compared to primary samples collected on the same day. Associated detected results are considered potentially biased high.

Sample Name	Parameter	Analyte	Blank Result	RL/MDC	Units
Field Blank	Radium	Radium 228	0.67 J	1.00	pCi/L

5) Field duplicate RPDs did not meet acceptance criteria. Reporting limits were used to calculate RPDs for non-detect results. Using professional judgment, RPDs were first calculated, and analytes with RPDs above 30% were evaluated. Using professional judgement for inorganics, when the results are less than 5x the reporting limit and the absolute difference between the results is less than the reporting limit, no bias is suspected. When the results are less than 5x the reporting limit and the absolute difference between the results is greater than the reporting limit, associated detected results are considered potentially biased.

Primary Sample Name	Parameter	Analyte	Primary Sample Result	Duplicate Sample Result	RL/MDA Primary Sample	RL Duplicate Sample	Unit	RPD (%)
EBG	Metals	Antimony	0.0010 U	0.0034	0.0010	0.0010	mg/L	**110**
EBG	Mercury	Mercury	0.00020 U	0.00014 J	0.00020	0.00020	mg/L	**35**

TABLE 1

Sample Collection and Analysis Summary
SIPC CCR Groundwater Monitoring

Lab ID	*Field Identification*	*Collection Date*	*Location*	*Matrix*	*QC Samples*	Chloride	Field Paramaters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Radium-226/228	Sulfate	TDS
24030002-001	EBG	6/3/2024	EBG	GW	-	X	X	X	X	X	X	X	X	X
24030002-002	EP-1	6/3/2024	EP-1	GW	-	X	X	X	X	X	X	X	X	X
24030002-003	EP-2	6/4/2024	EP-2	GW	-	X	X	X	X	X	X	X	X	X
24030002-004	EP-3	6/4/2024	EP-3	GW	-	X	X	X	X	X	X	X	X	X
24030002-005	EP-4	6/4/2024	EP-4	GW	-	X	X	X	X	X	X	X	X	X
24030002-006	EP-5	6/3/2024	EP-5	GW	-	X	X	X	X	X	X	X	X	X
24030002-007	EP-6	6/4/2024	EP-6	GW	-	X	X	X	X	X	X	X	X	X
24030002-008	EP-7	6/4/2024	EP-7	GW	-	X	X	X	X	X	X	X	X	X
24030002-009	Equipment Blank	6/4/2024	-	WQ	EB	X	-	X	X	X	X	X	X	X
24030002-010	Field Blank	6/4/2024	-	WQ	FB	X	-	X	X	X	X	X	X	X
24030002-011	Field Duplicate	6/3/2024	EBG	GW	FD	X	X	X	X	X	X	X	X	X

Notes:
All analyses performed by Teklab in Collinsville, IL and Summit Environmental Technologies in Cuyahoga Falls, OH

Abbreviations:
EB: Equipment Blank
FB: Field Blank
FD: Field Duplicate
GW: Ground Water
QC: Quality Control
TDS: Total Dissolved Solids
WQ: Water Quality

QA LEVEL I - DATA VERIFICATION CHECKLIST

Project Name: SIPC Groundwater Monitoring
Reviewing Company: WSP USA
Data Evaluator: Nathan Demers
Checked by: Danielle Sylvia Cofelice
Laboratory: Teklab, Inc., Summit Environmental Technologies, Inc.

Project Number: GL21467997.002
Project Manager: Danielle Sylvia Cofelice
Data Evaluation Date: October 21, 2024
Review Date: October 22, 2024
Lab Job #: 24080520

Matrix: ☒ Aqueous ☐ Soil ☐ Sediment ☐ Waste ☐ Air ☐ Other:

Analytical Methods: Total dissolved solids by SM 2540C; chloride by 4500-CL E; sulfate by SW-846 9036; fluoride by SW-846 9214; total metals by SW-846 3005A, 6010B and 6020A; mercury by SW-846 7470A; Radium226/228 by EPA 903.0/904.0

Sample Information: See Table 1.

Data Qualification: No qualifications required.

Work Plan or QAPP reference: None

Data Validation Guidance: EPA Guidance on Environmental Data Verification and Data Validation (EPA QA/G-8)

Chain of Custody (COC) and Sample Receipt	YES	NO	NA	COMMENT
a) COC complete and correct? (Project location, contacts, sample IDs, sample dates, field QC samples, analyses identified, et c.)	☒	☐		
b) COC documents release of custody (signed and dated)?	☒	☐		
c) Field QC types provided (note types)?	☒	☐	☐	EB, FB, FD
d) Did the cooler contents match the COC?	☒	☐		
e) Were samples received in good condition?	☒	☐		
f) Were cooler temperatures within control limits?	☐	☒		See Note 1.

Data Package Information	YES	NO	NA	COMMENT
a) Laboratory name and location documented?	☒	☐		
b) All samples on COC reported in data package?	☒	☐		
c) Requested analytical methods used?	☒	☐		
d) Requested analyte list reported?	☒	☐		
e) Requested units reported?	☒	☐	☐	
f) Did the laboratory define the qualifiers used?	☒	☐		
g) Data package contains all information necessary to complete the data quality review?	☒	☐		

Analytical Assessment	YES	NO	NA	COMMENT
a) Solid samples reported on a dry-weight basis?	☐	☐	☒	
b) Were solid samples percent moisture criteria acceptable?	☐	☐	☒	
c) Were sample dilutions noted?	☒	☐		

Analytical Assessment	YES	NO	NA	COMMENT
d) Were detected concentrations less than the QL qualified by the laboratory?	☒	☐		
e) All detected sample results within the calibrated range?	☒	☐		
f) Did the laboratory satisfy the requested sensitivity requirements?	☒	☐		

Laboratory Case Narrative	YES	NO	NA	COMMENT
a) Do the laboratory narrative or laboratory qualifiers indicate deficiencies?	☐	☒	☐	

Sample Preservation and Holding Time	YES	NO	NA	COMMENT
a) Were samples properly preserved?	☒	☐		
b) Were holding times met for sample preparation and/or extraction?	☒	☐	☐	
c) Were holding times met for sample analysis?	☒	☐		

Blanks	YES	NO	NA	COMMENTS
a) No analytes detected in the associated preparation/method blank(s)?	☒	☐		
b) No analytes detected in the associated trip blank(s)?	☐	☐	☒	
c) No analytes detected in the associated field or equipment/rinsate blank(s)?	☐	☒	☐	See Note 2.

Duplicates	YES	NO	NA	COMMENTS
a) Were field duplicates reported?	☒	☐	☐	
b) Was field duplicate RPD or absolute difference criteria acceptable?	☒	☐	☐	

Overall Evaluation	YES	NO	NA	COMMENTS
a) No other technical problems that lead to data rejection identified by laboratory?	☒	☐		
b) Were data acceptable and usable, except where noted?	☒	☐		

Comments/Notes:

1) The cooler temperature for all samples was outside QC limits (4 ± 2ºC) upon receipt to the laboratory (10.3°C). Following Guidelines and using professional judgment, no qualifications were required as samples were submitted on ice to the laboratory on the same day as sample collection.

2) Analytes were detected in method and equipment blanks, as shown in the table below. Equipment and field blanks are compared to primary samples collected on the same day. Associated detected results are considered potentially biased high.

Sample Name	Parameter	Analyte	Blank Result	RL	Units
Field Blank	ICP Metals	Antimony	0.0011	0.0010	mg/L
Equipment Blank	ICP Metals	Calcium	0.075 J	0.10	mg/L
Equipment Blank	ICP Metals	Chromium	0.0022	0.0015	mg/L
Equipment Blank	Radium	Radium-228	0.77 J	1.00	pCi/L
Field Blank	Radium	Radium-228	1.34	1.00	pCi/L

TABLE 1

Sample Collection and Analysis Summary
SIPC CCR Groundwater Monitoring

Lab ID	*Field Identification*	*Collection Date*	*Location*	*Matrix*	*QC Samples*	Chloride	Field Paramaters	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Radium-226/228	Sulfate	TDS
24080520-001	EBG	9/4/2024	EBG	GW	-	X	X	X	X	X	X	X	X	X
24080520-002	EP-1	9/4/2024	EP-1	GW	-	X	X	X	X	X	X	X	X	X
24080520-003	EP-2	9/4/2024	EP-2	GW	-	X	X	X	X	X	X	X	X	X
24080520-004	EP-3	9/5/2024	EP-3	GW	-	X	X	X	X	X	X	X	X	X
24080520-005	EP-4	9/5/2024	EP-4	GW	-	X	X	X	X	X	X	X	X	X
24080520-006	EP-5	9/4/2024	EP-5	GW	-	X	X	X	X	X	X	X	X	X
24080520-007	EP-6	9/4/2024	EP-6	GW	-	X	X	X	X	X	X	X	X	X
24080520-008	EP-7	9/5/2024	EP-7	GW	-	X	X	X	X	X	X	X	X	X
24080520-009	Equipment Blank	9/5/2024	-	WQ	EB	X	-	X	X	X	X	X	X	X
24080520-010	Field Blank	9/5/2024	-	WQ	FB	X	-	X	X	X	X	X	X	X
24080520-011	Field Duplicate	9/4/2024	EBG	GW	FD	X	X	X	X	X	X	X	X	X

Notes:
All analyses performed by Teklab in Collinsville, IL and Summit Environmental Technologies in Cuyahoga Falls, OH

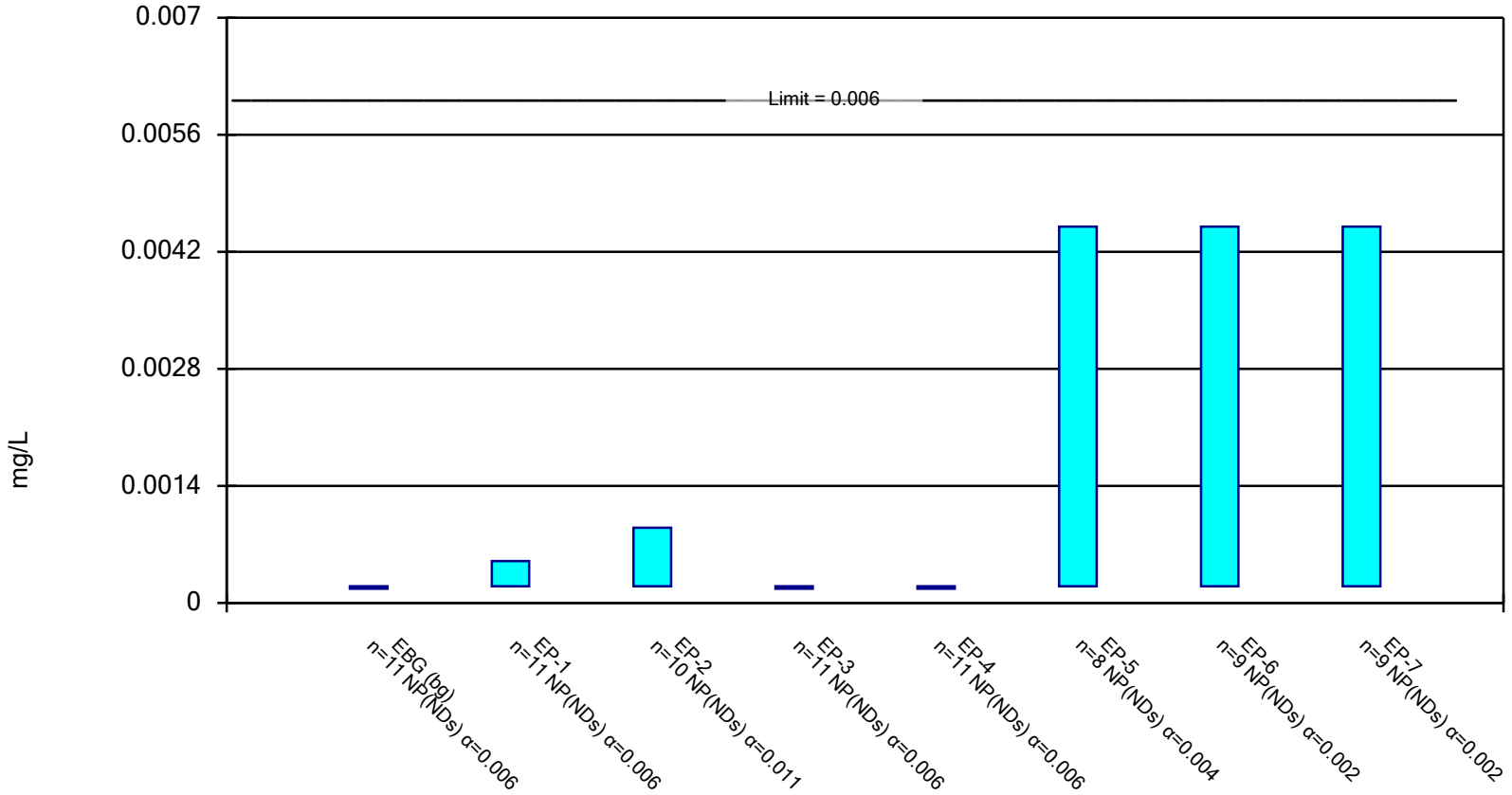
Abbreviations:
EB: Equipment Blank
FB: Field Blank
FD: Field Duplicate
GW: Ground Water
QC: Quality Control
TDS: Total Dissolved Solids
WQ: Water Quality

APPENDIX D

2024 Statistical Evaluation

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

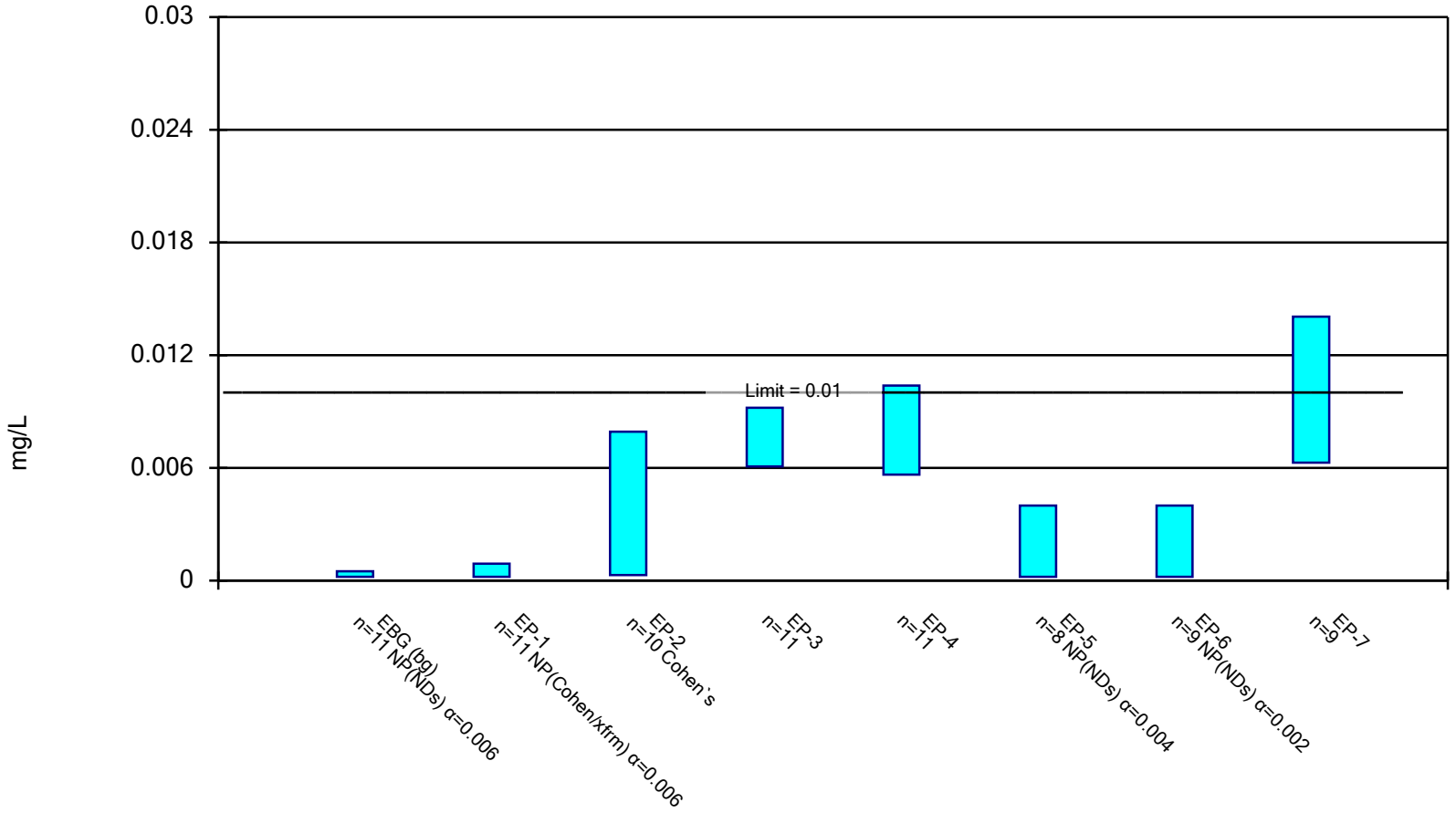


Constituent: Antimony Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

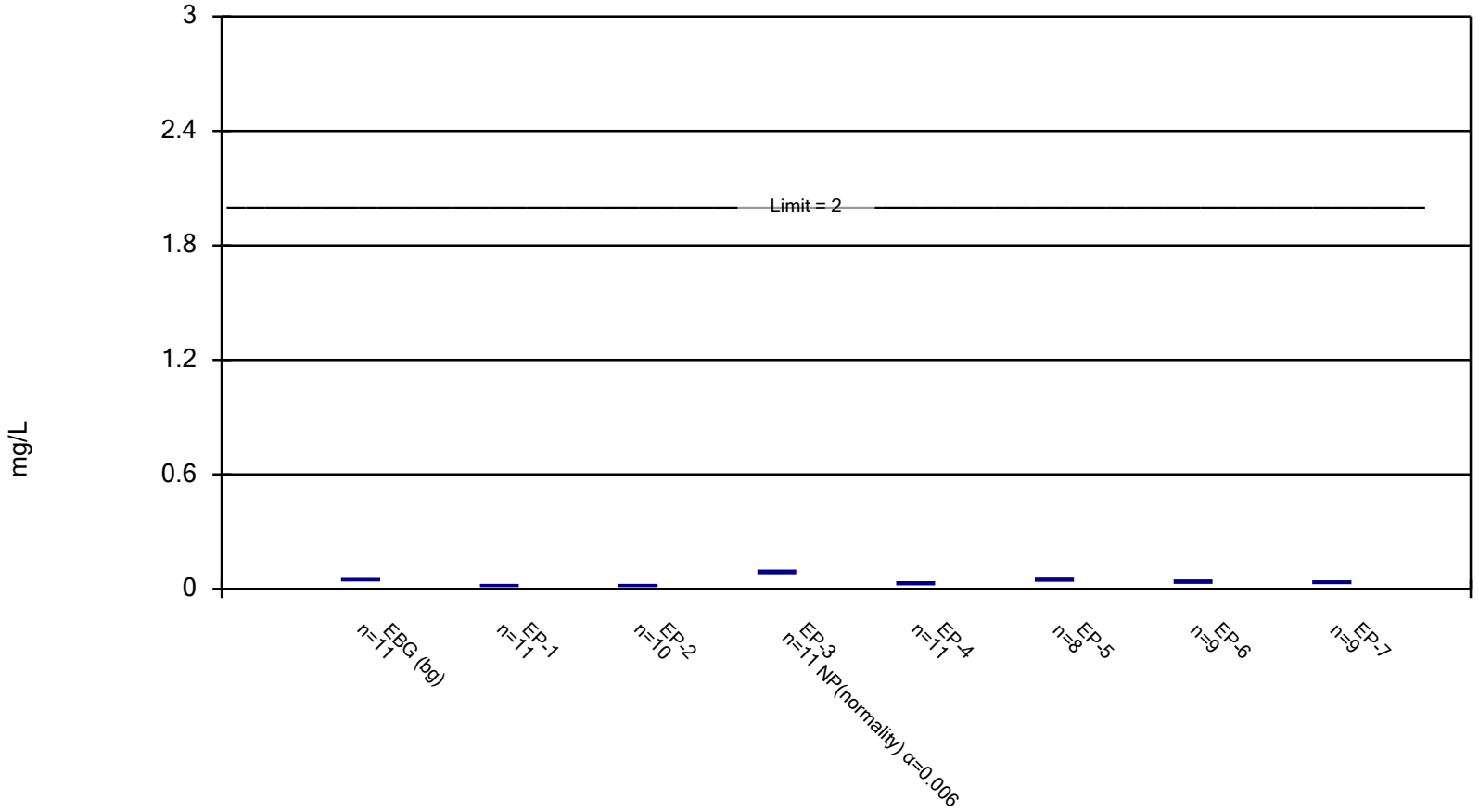


Constituent: Arsenic Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

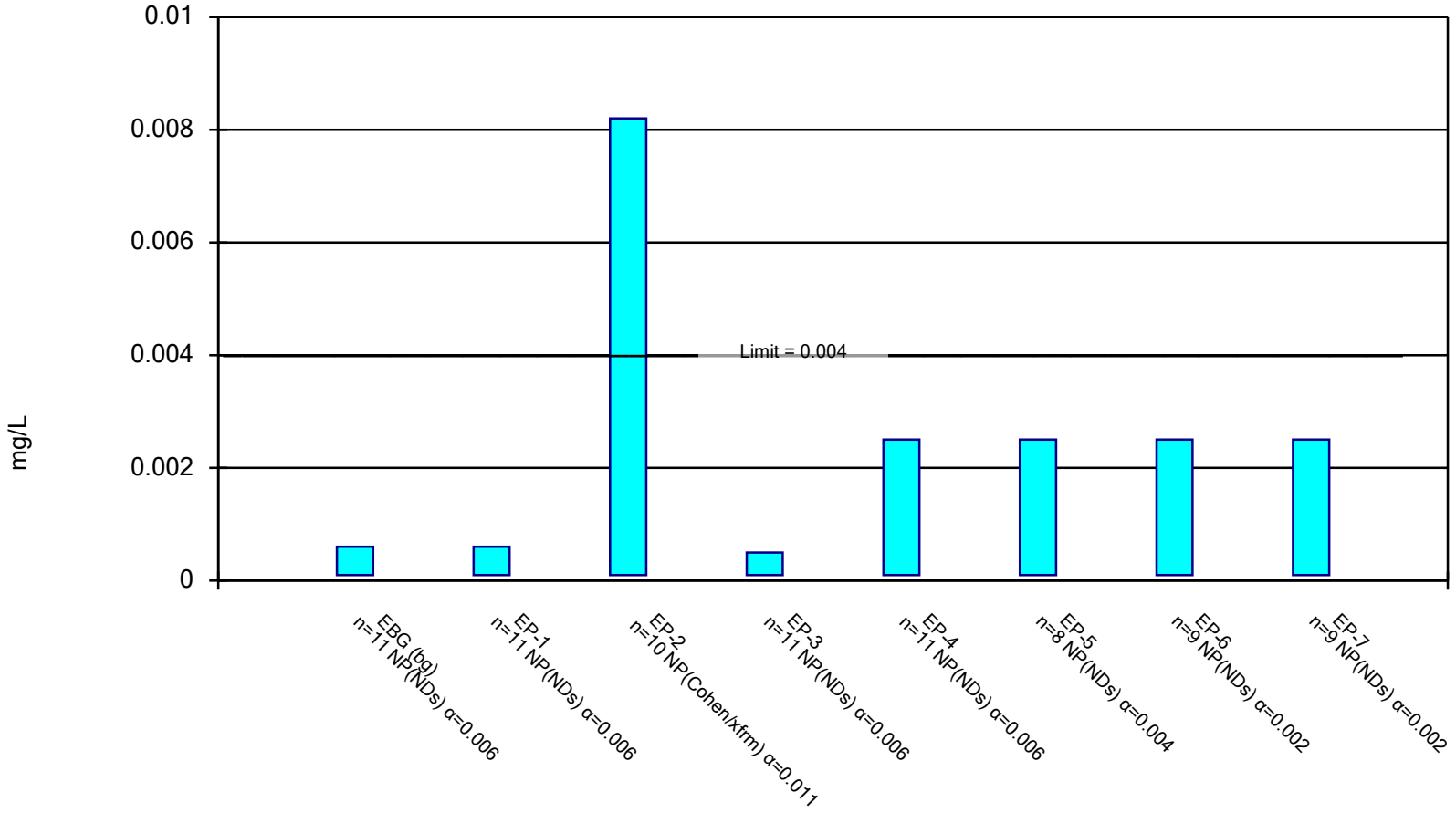


Constituent: Barium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

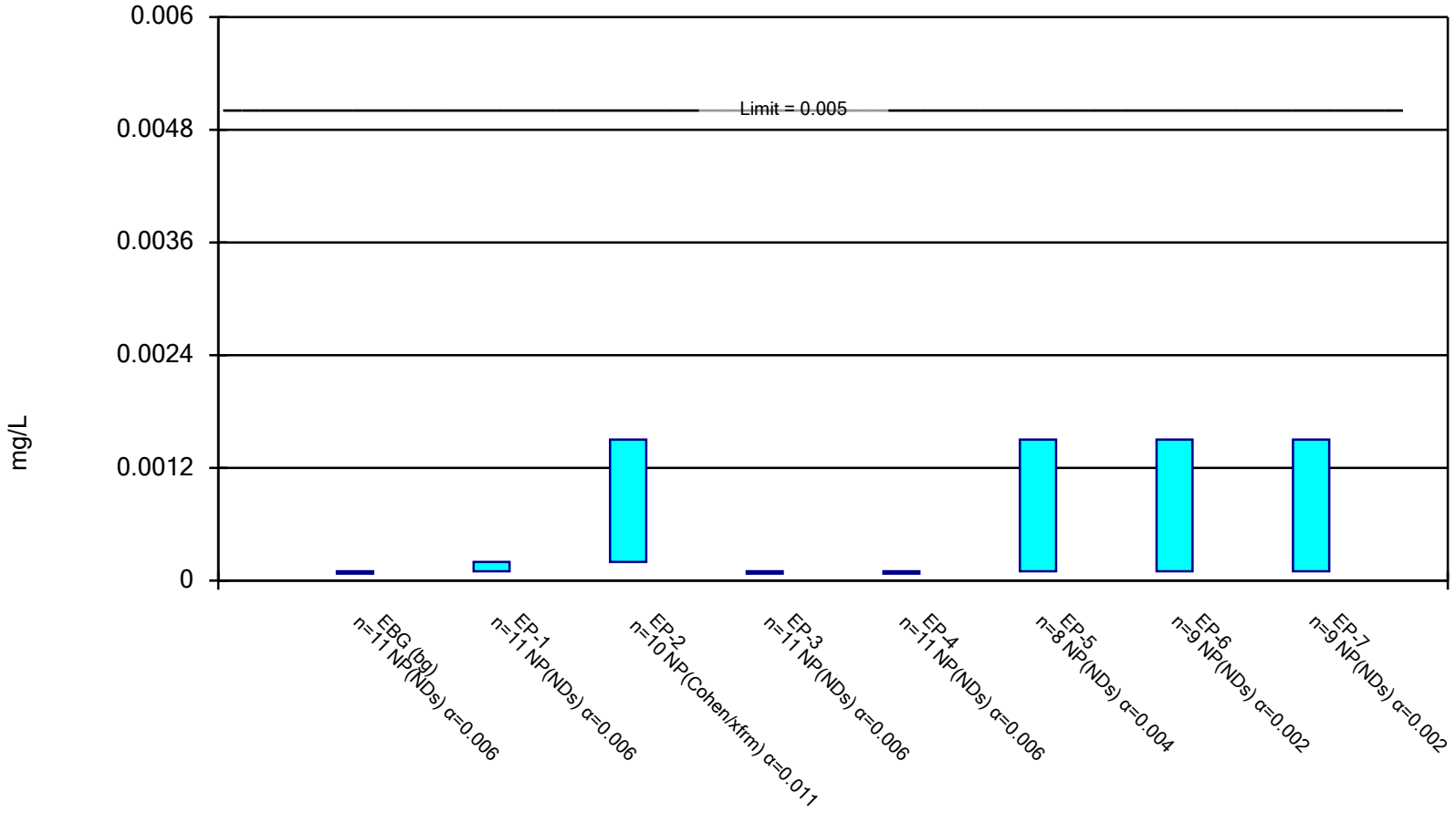


Constituent: Beryllium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

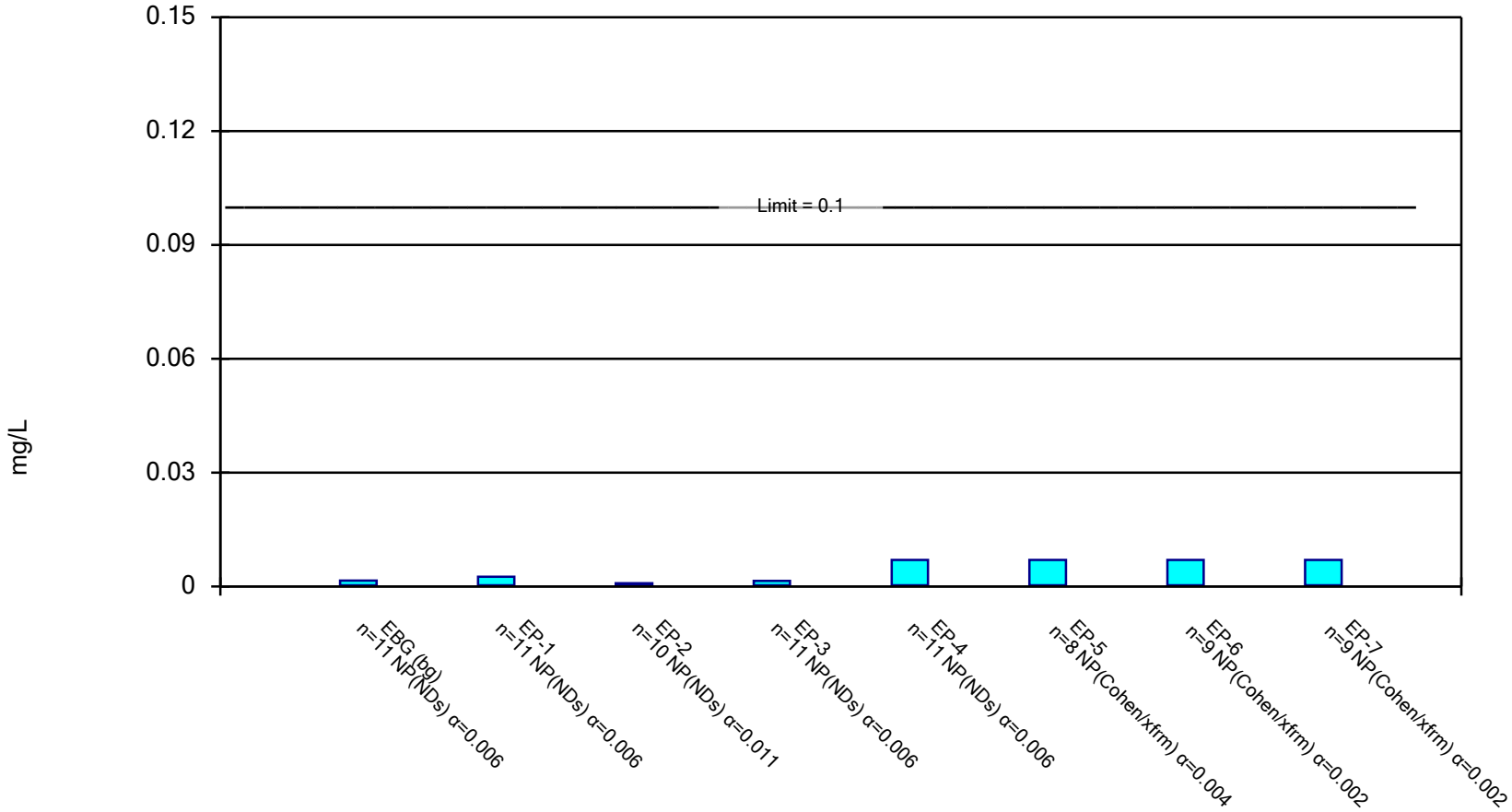


Constituent: Cadmium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

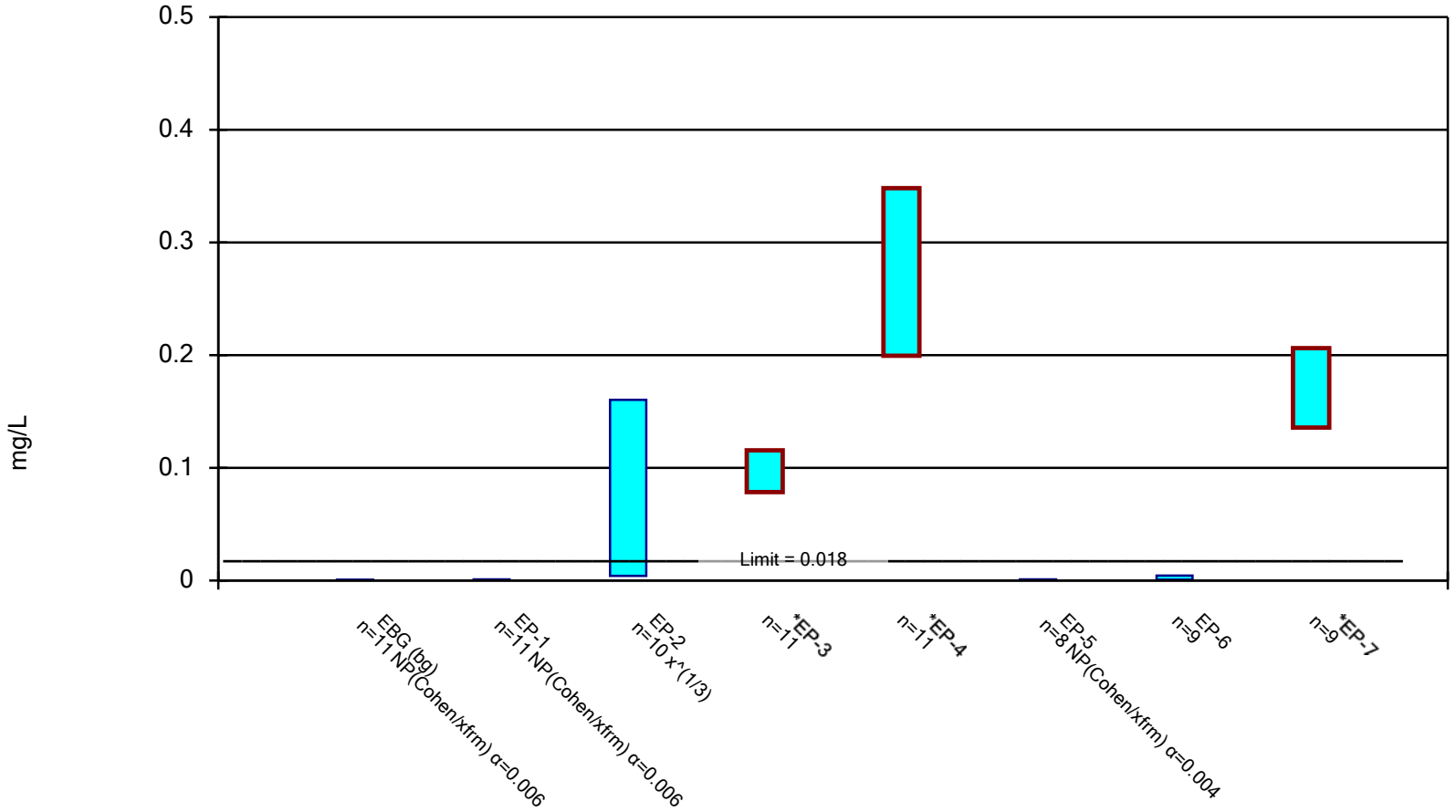


Constituent: Chromium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

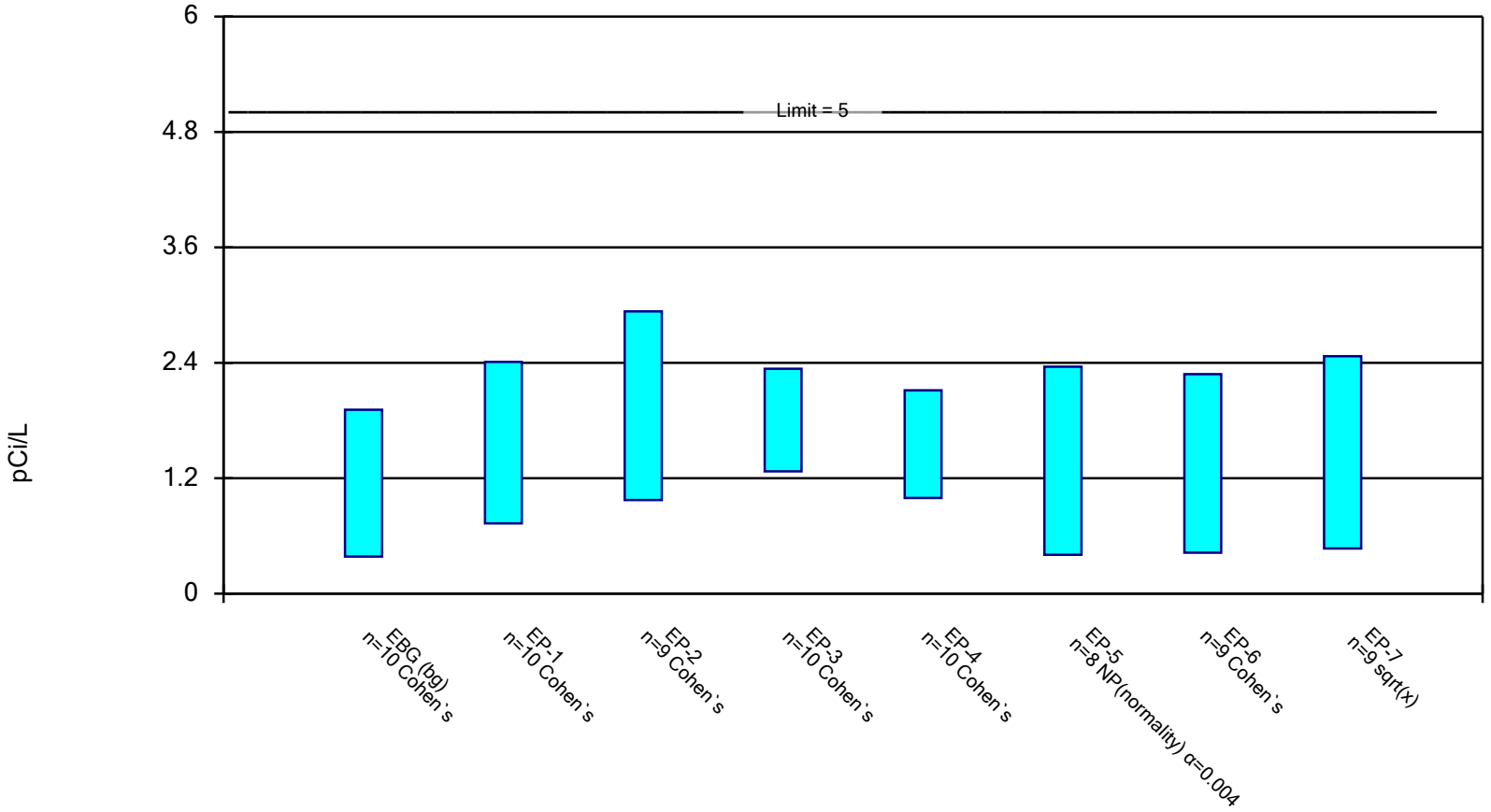


Constituent: Cobalt Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

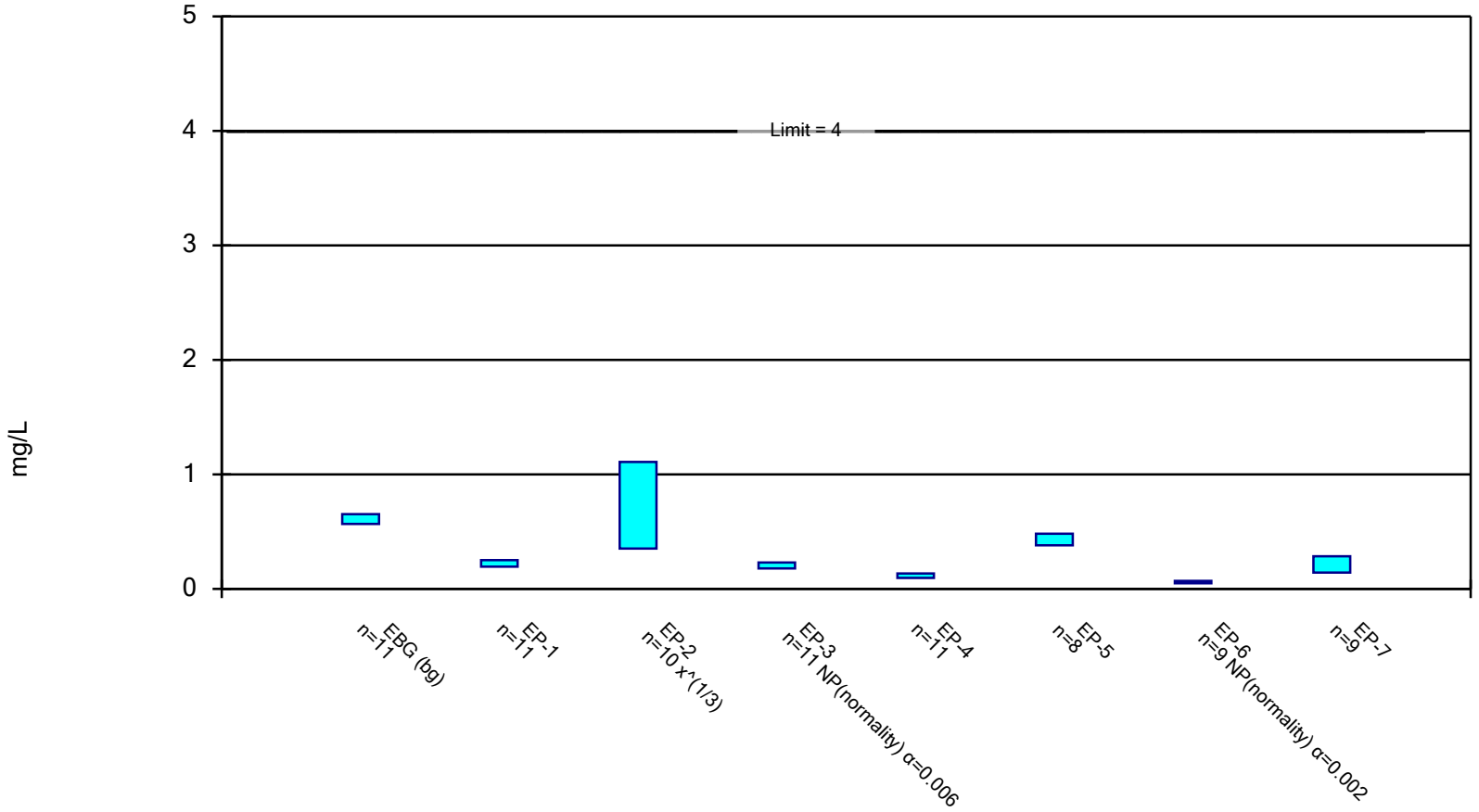


Constituent: Combined Radium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

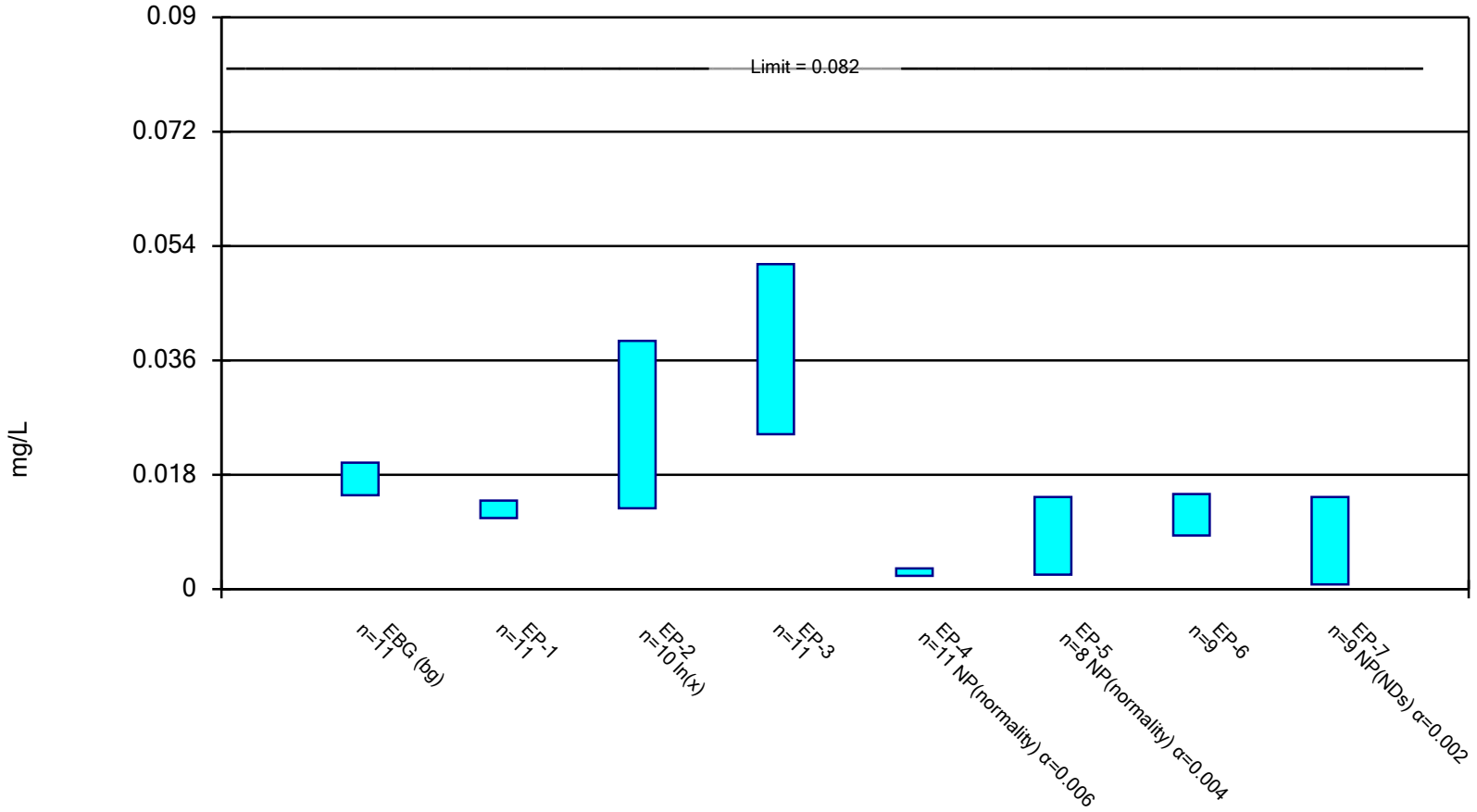


Constituent: Fluoride Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

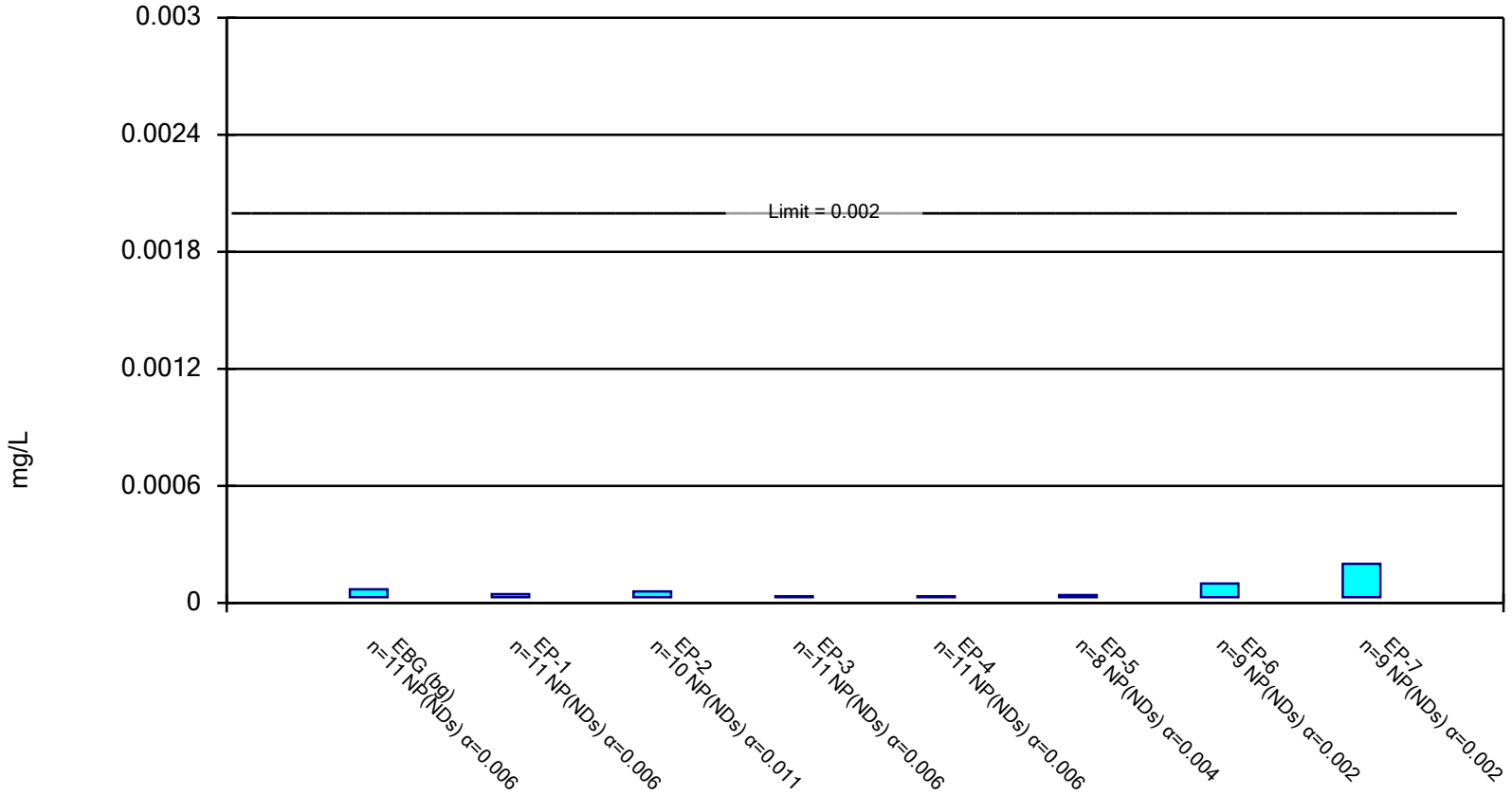


Constituent: Lithium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

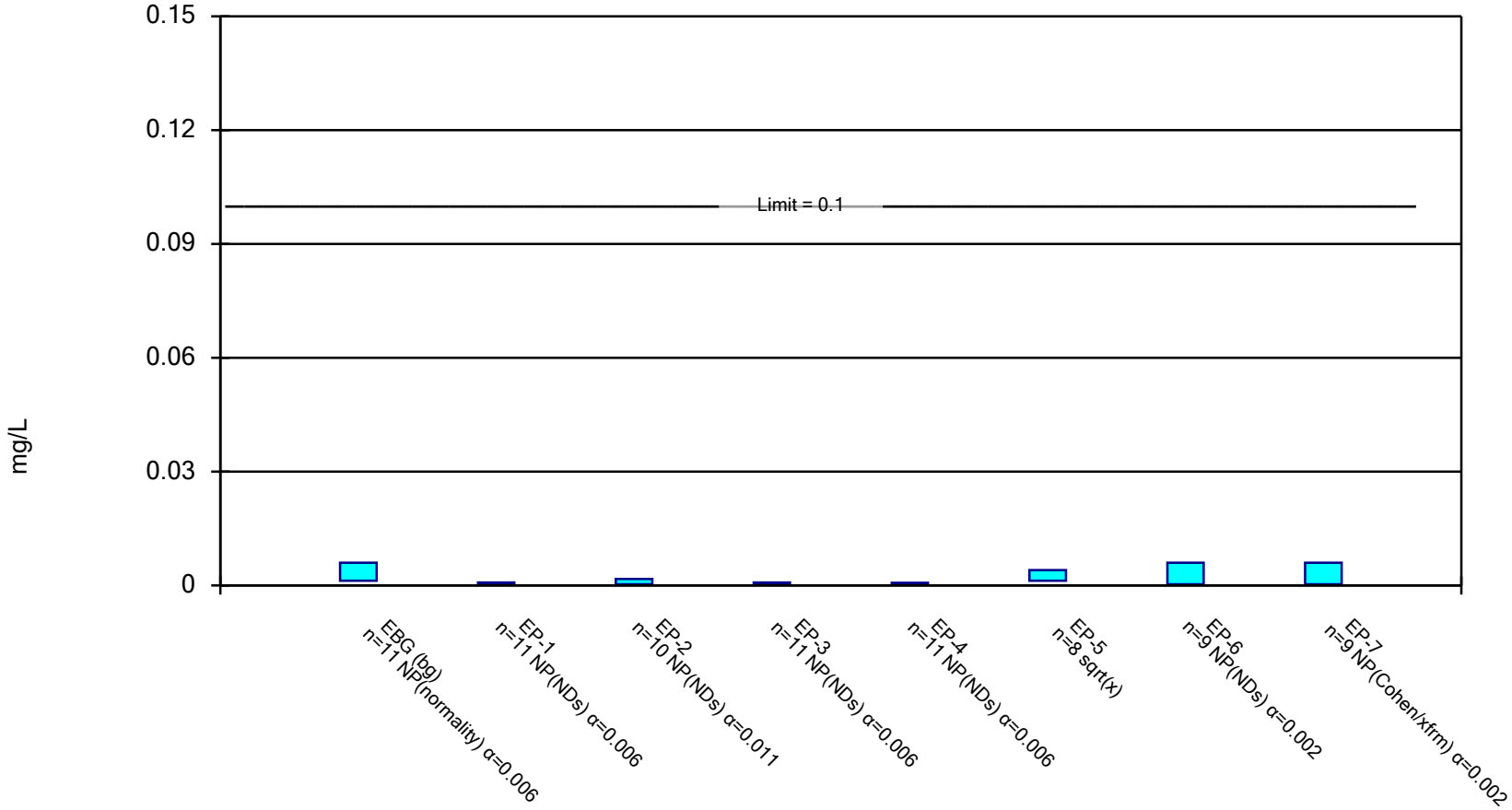


Constituent: Mercury Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

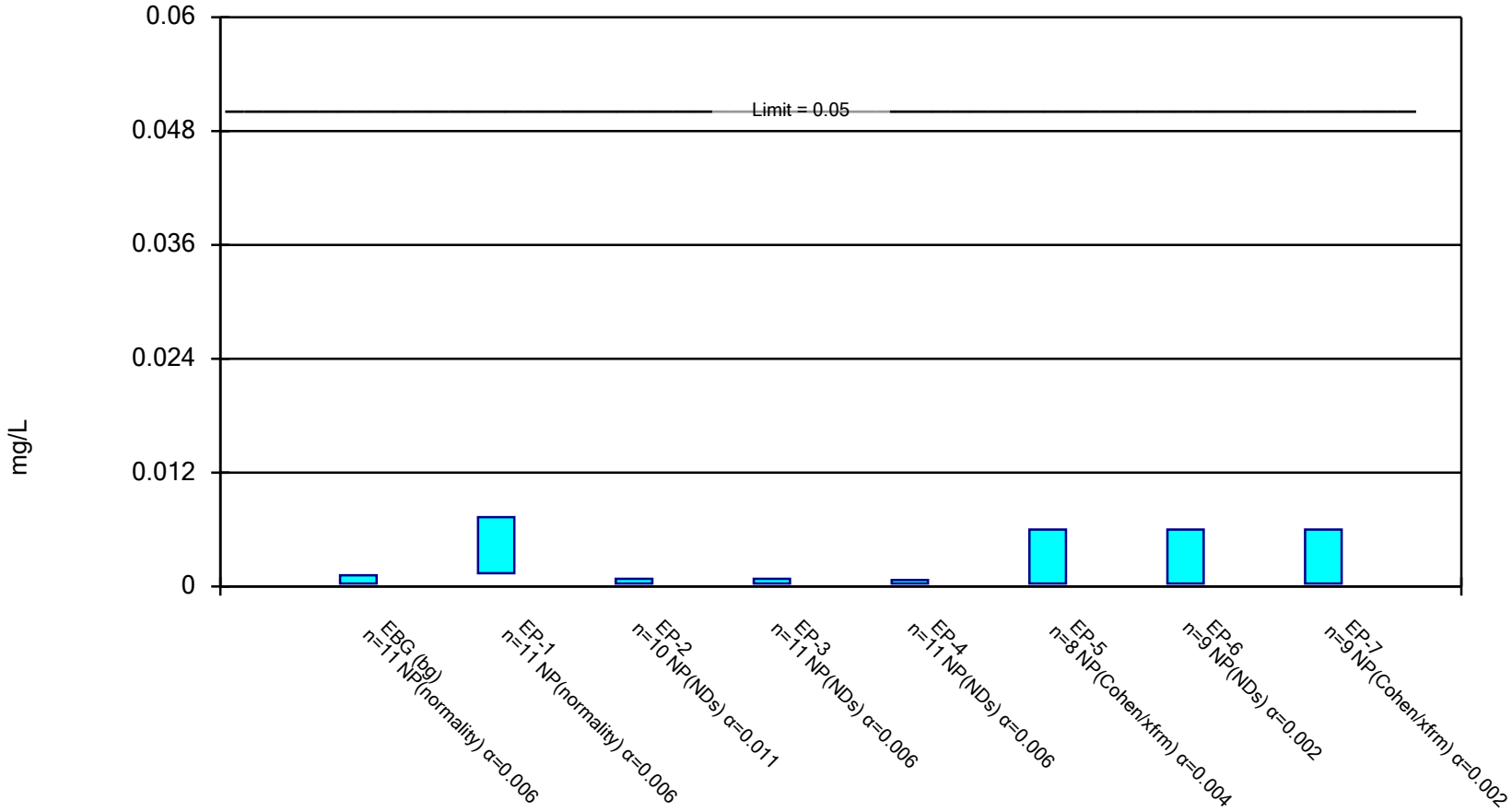


Constituent: Molybdenum Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

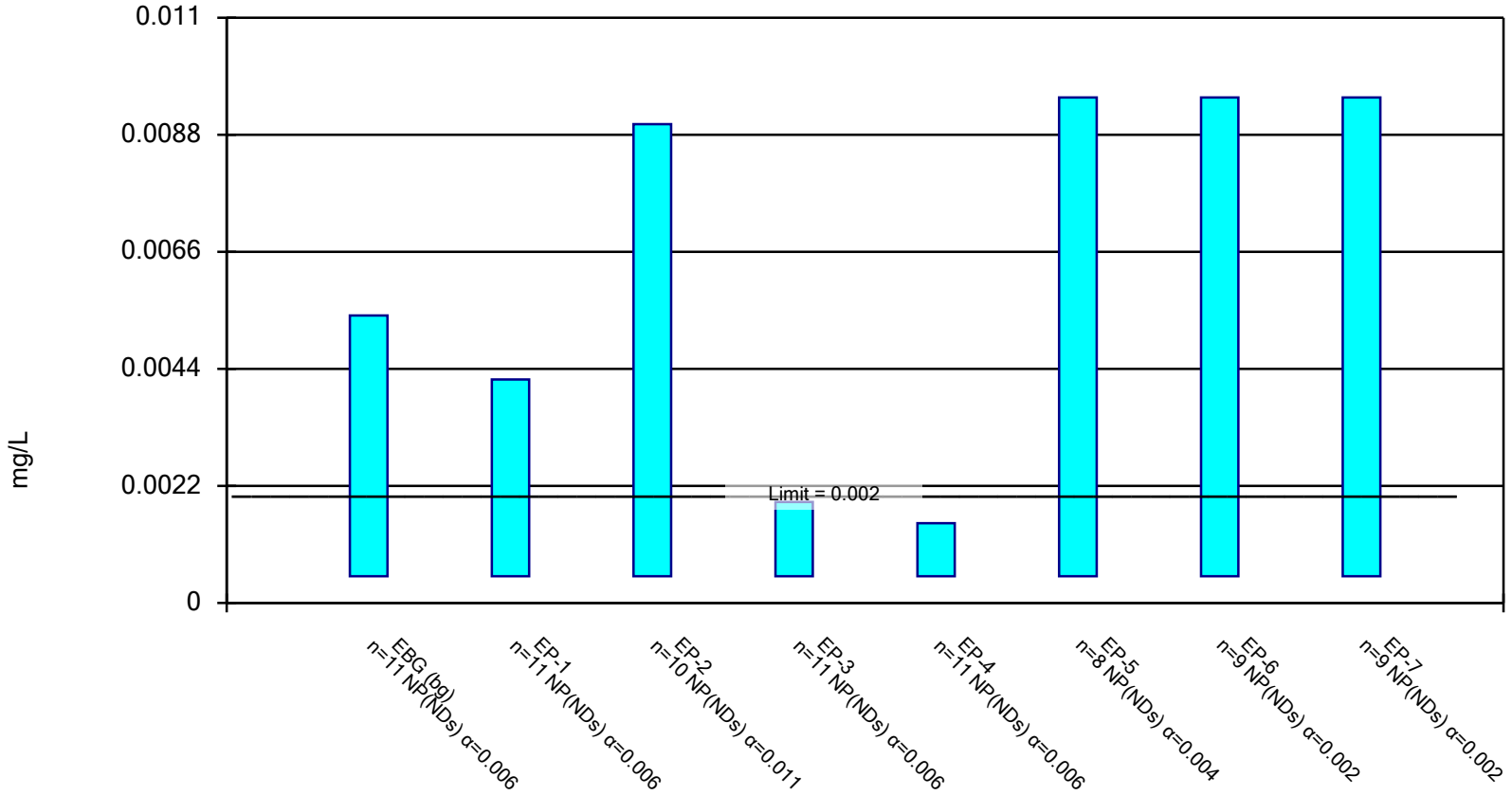


Constituent: Selenium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



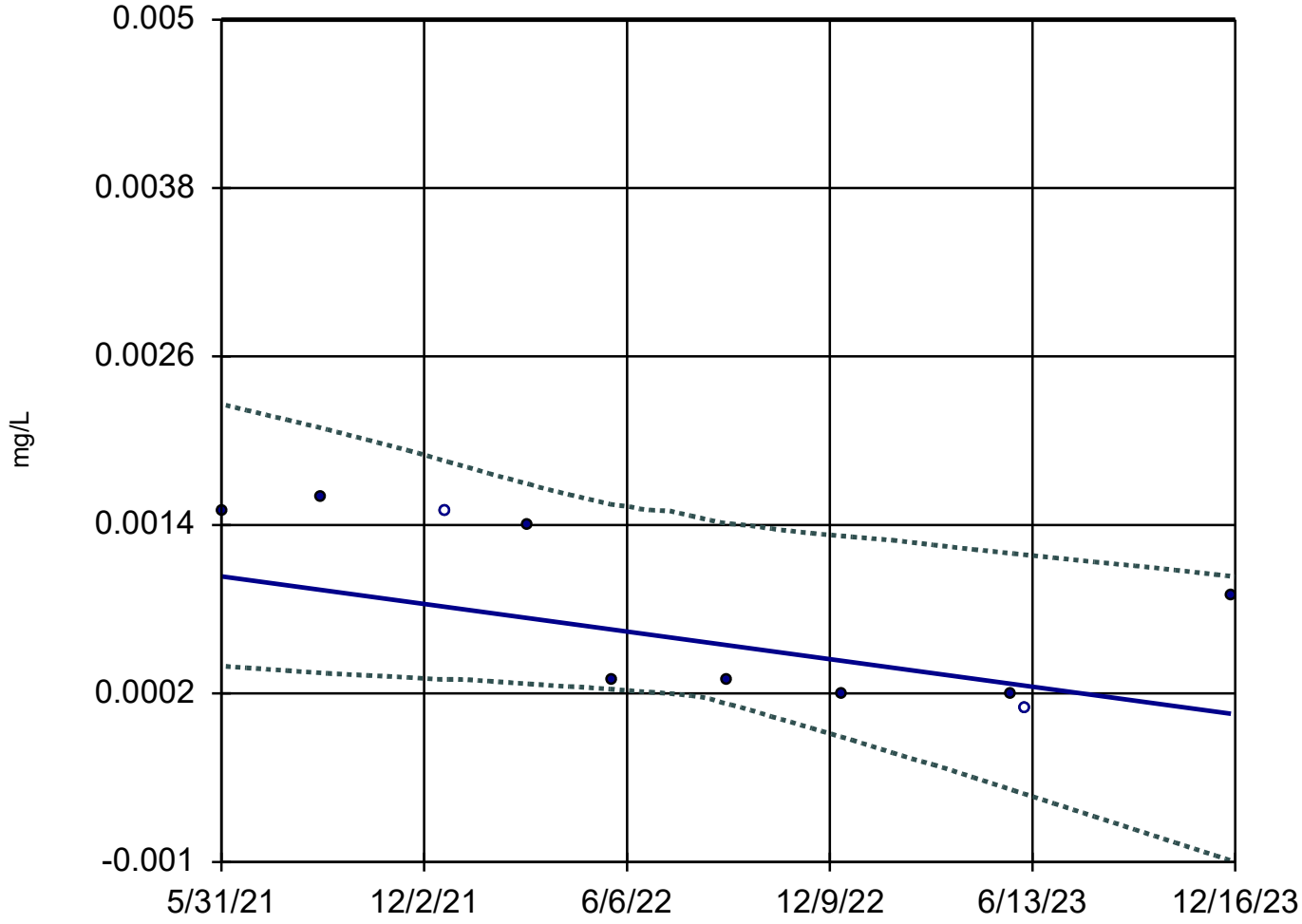
Constituent: Thallium Analysis Run 2/2/2024 5:08 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Hollow symbols indicate censored values.

Cadmium

EP-2



n = 10

Slope = -0.0003862 units per year.

Mann-Kendall statistic = -30
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Confidence band is below (0.005).

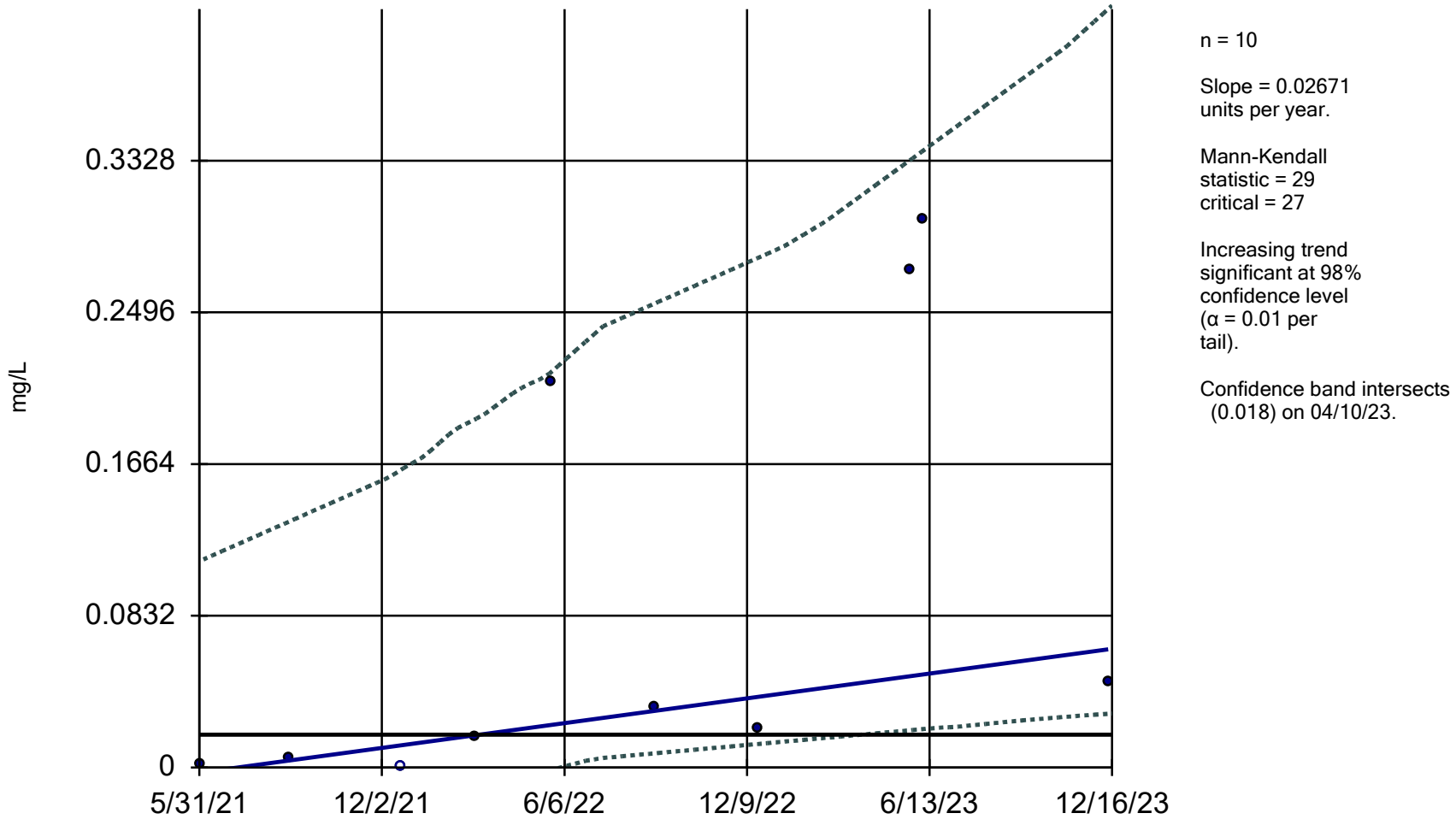
Sen's Slope and 95% Confidence Band Analysis Run 2/2/2024 4:21 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Hollow symbols indicate censored values.

Cobalt

EP-2



n = 10

Slope = 0.02671 units per year.

Mann-Kendall statistic = 29
critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

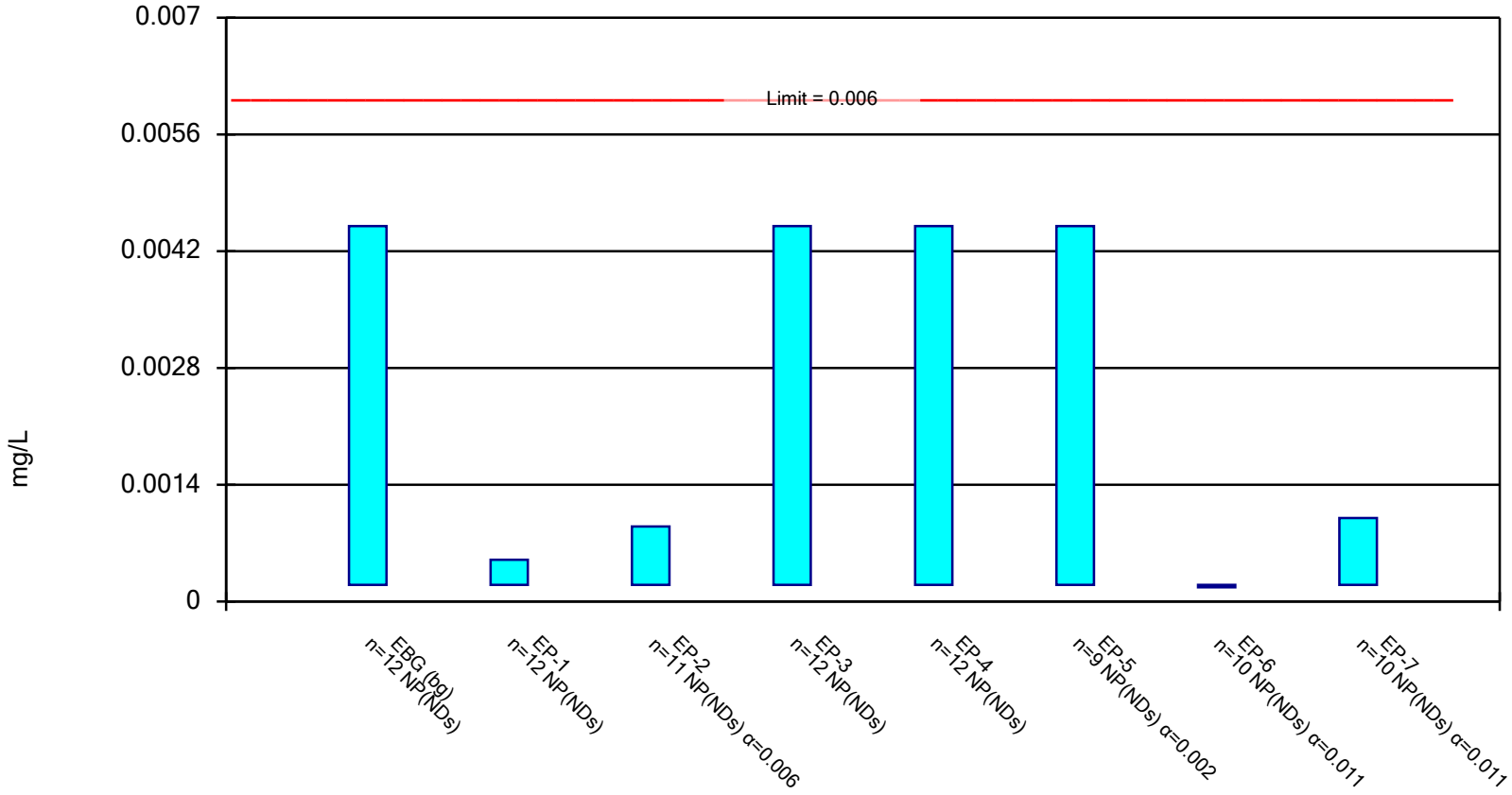
Confidence band intersects (0.018) on 04/10/23.

Sen's Slope and 95% Confidence Band Analysis Run 2/2/2024 4:21 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database outliers flagged

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

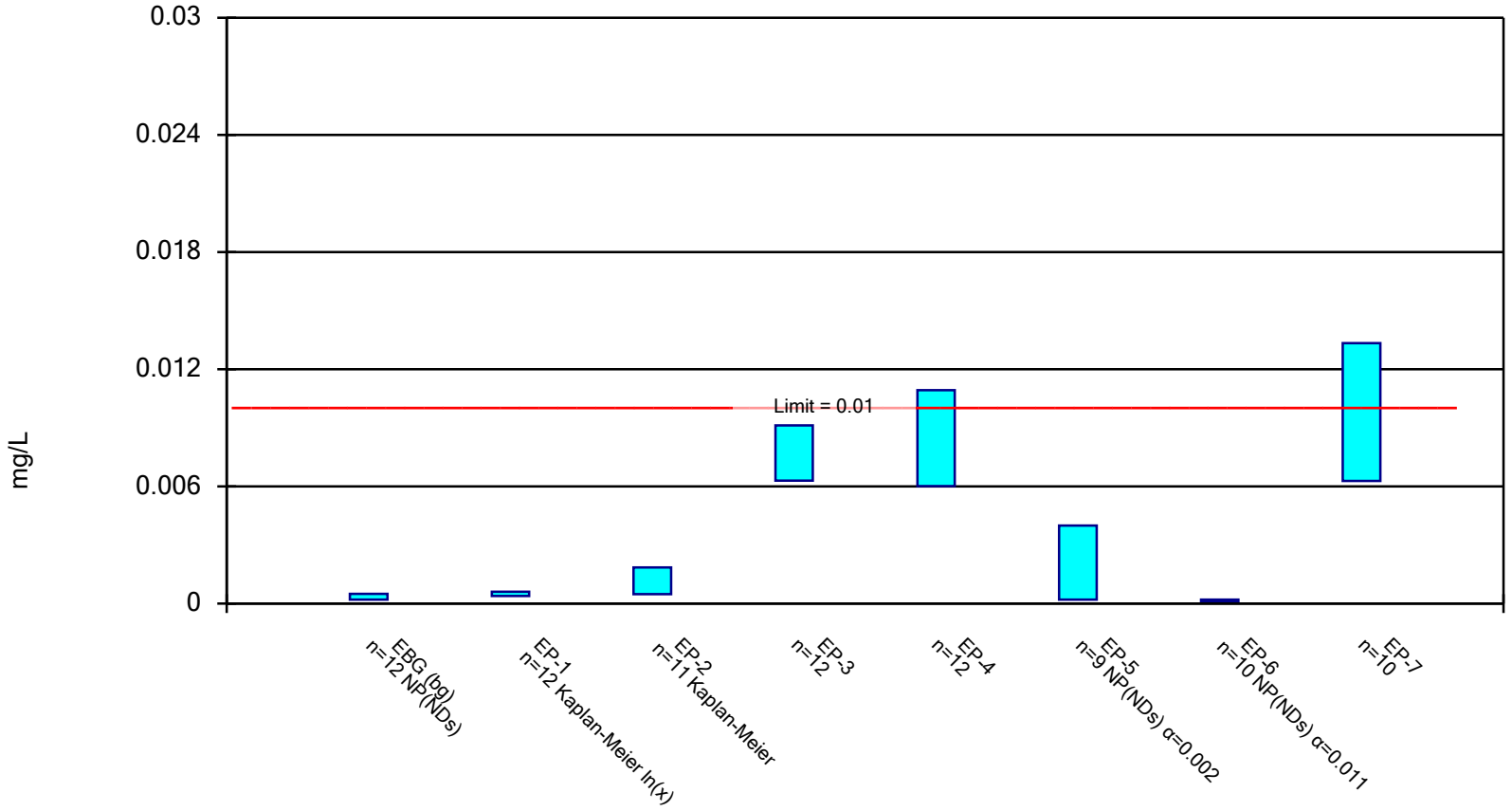


Constituent: Antimony Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

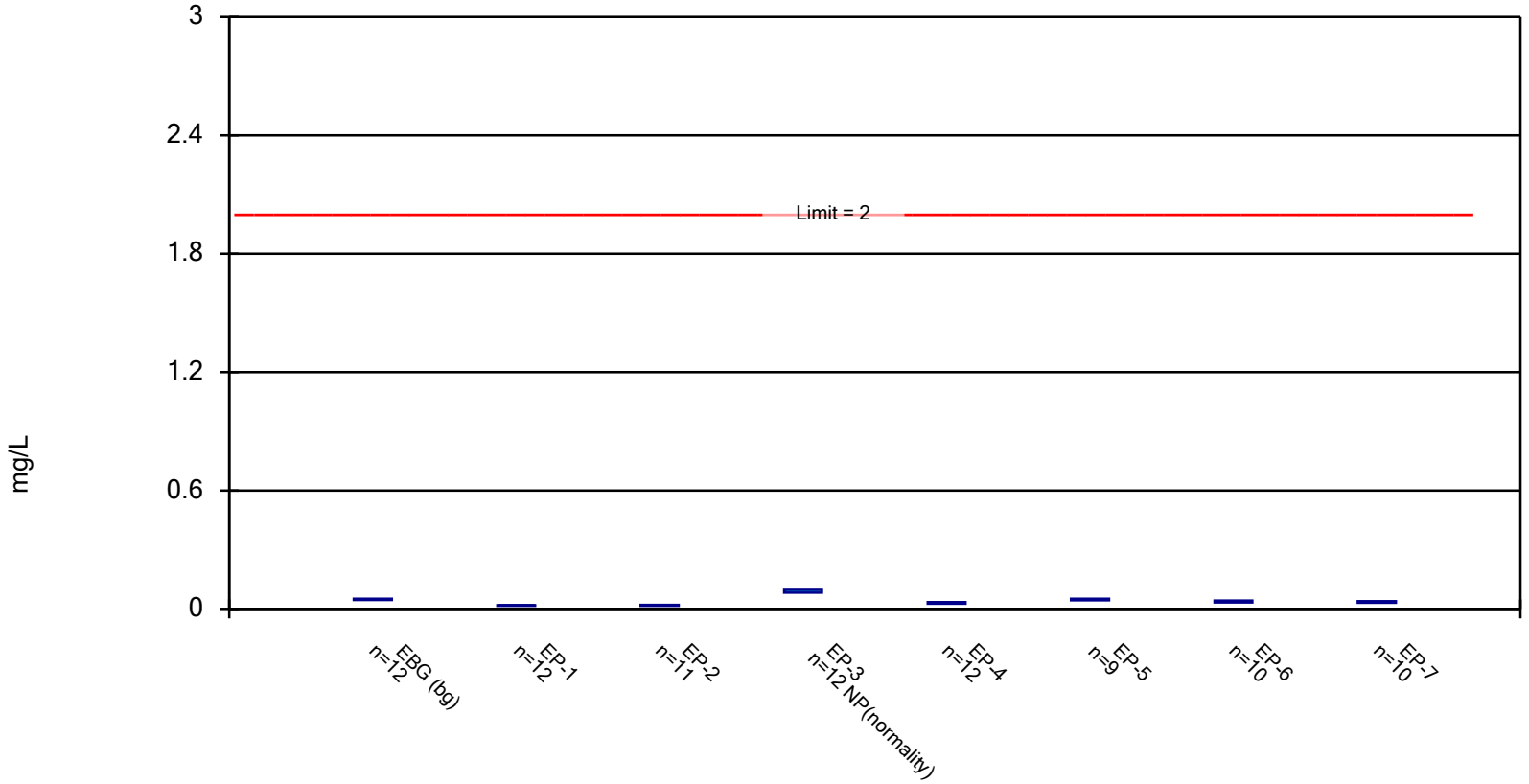


Constituent: Arsenic Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

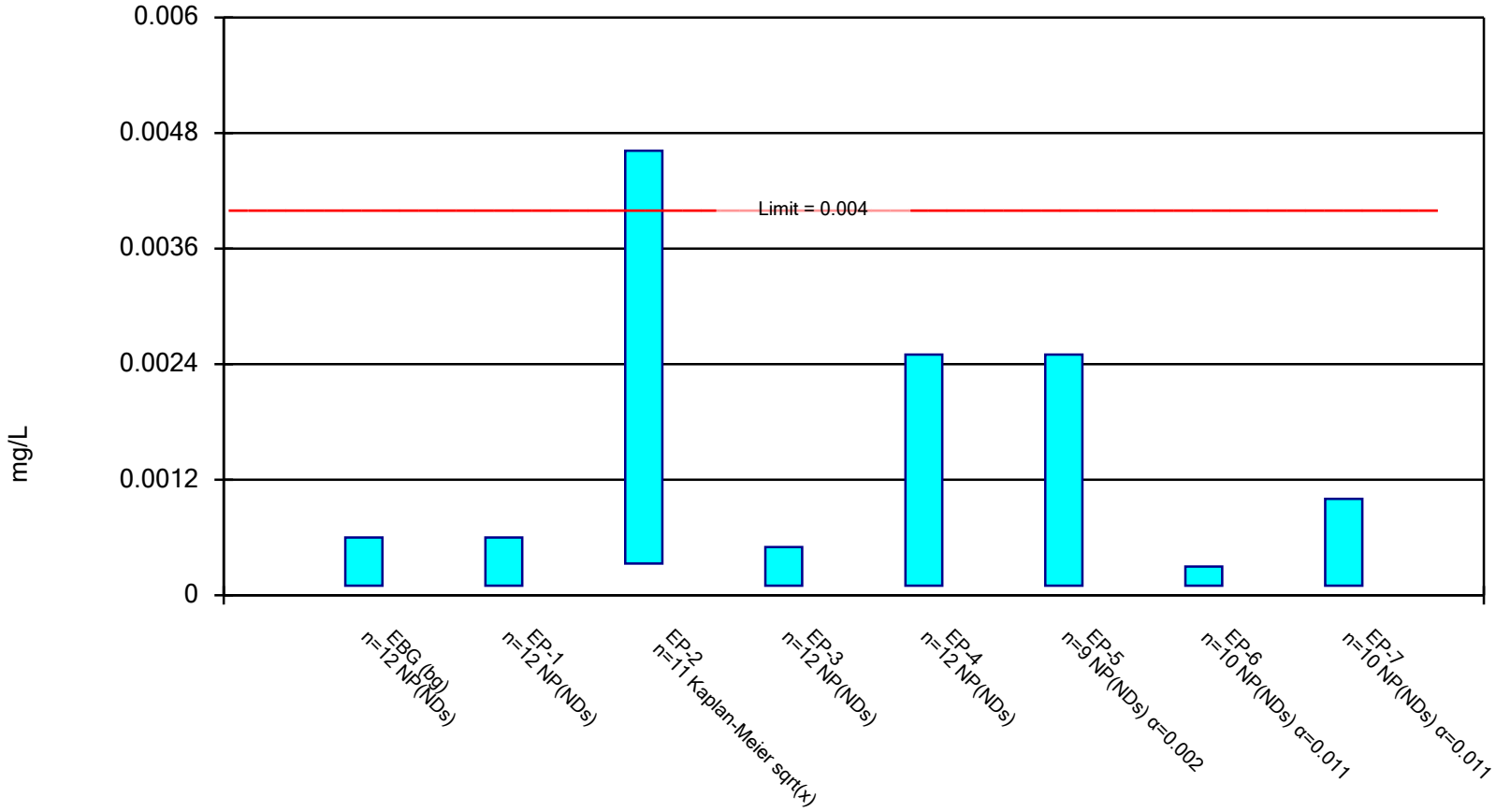


Constituent: Barium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

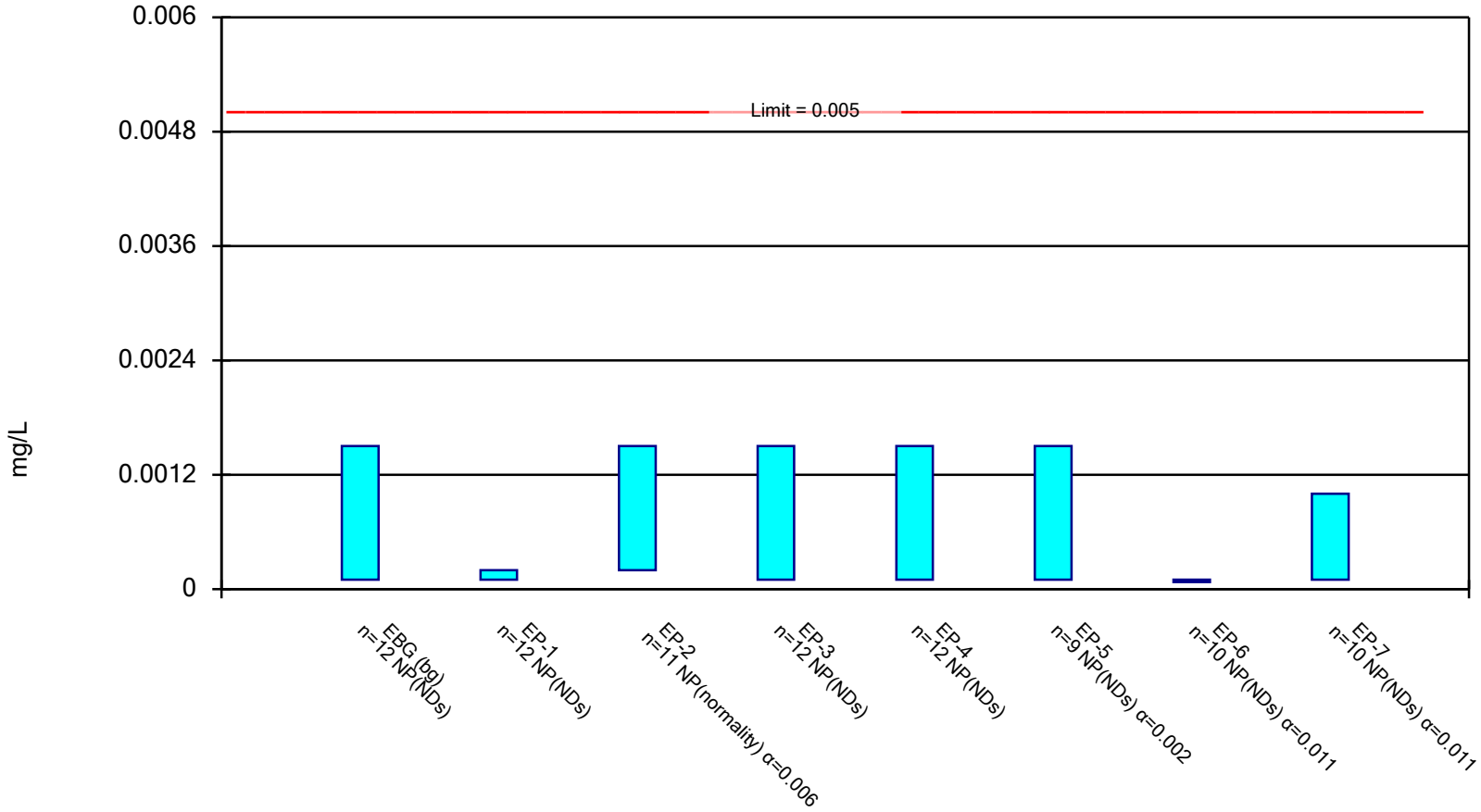


Constituent: Beryllium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

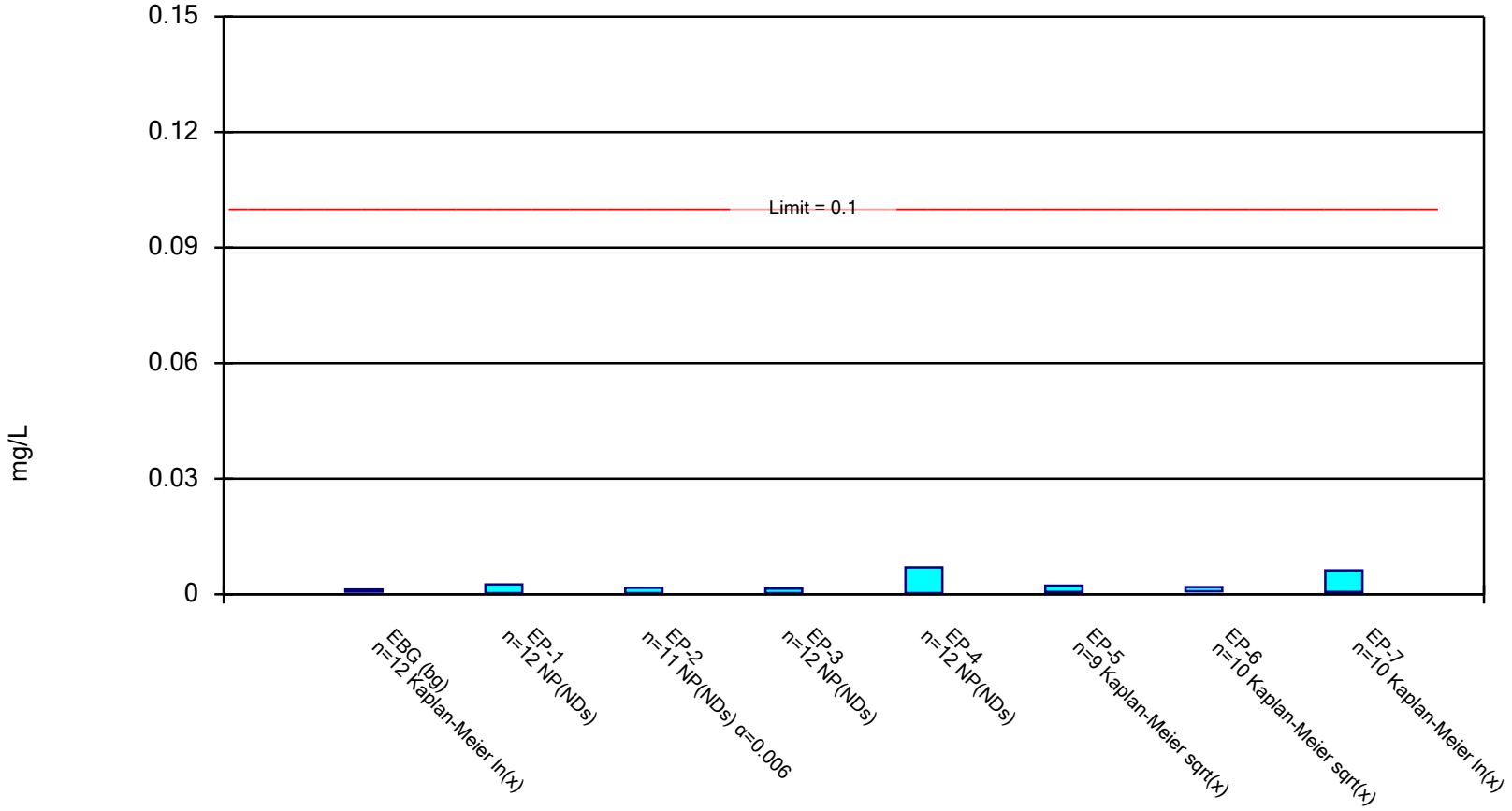


Constituent: Cadmium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

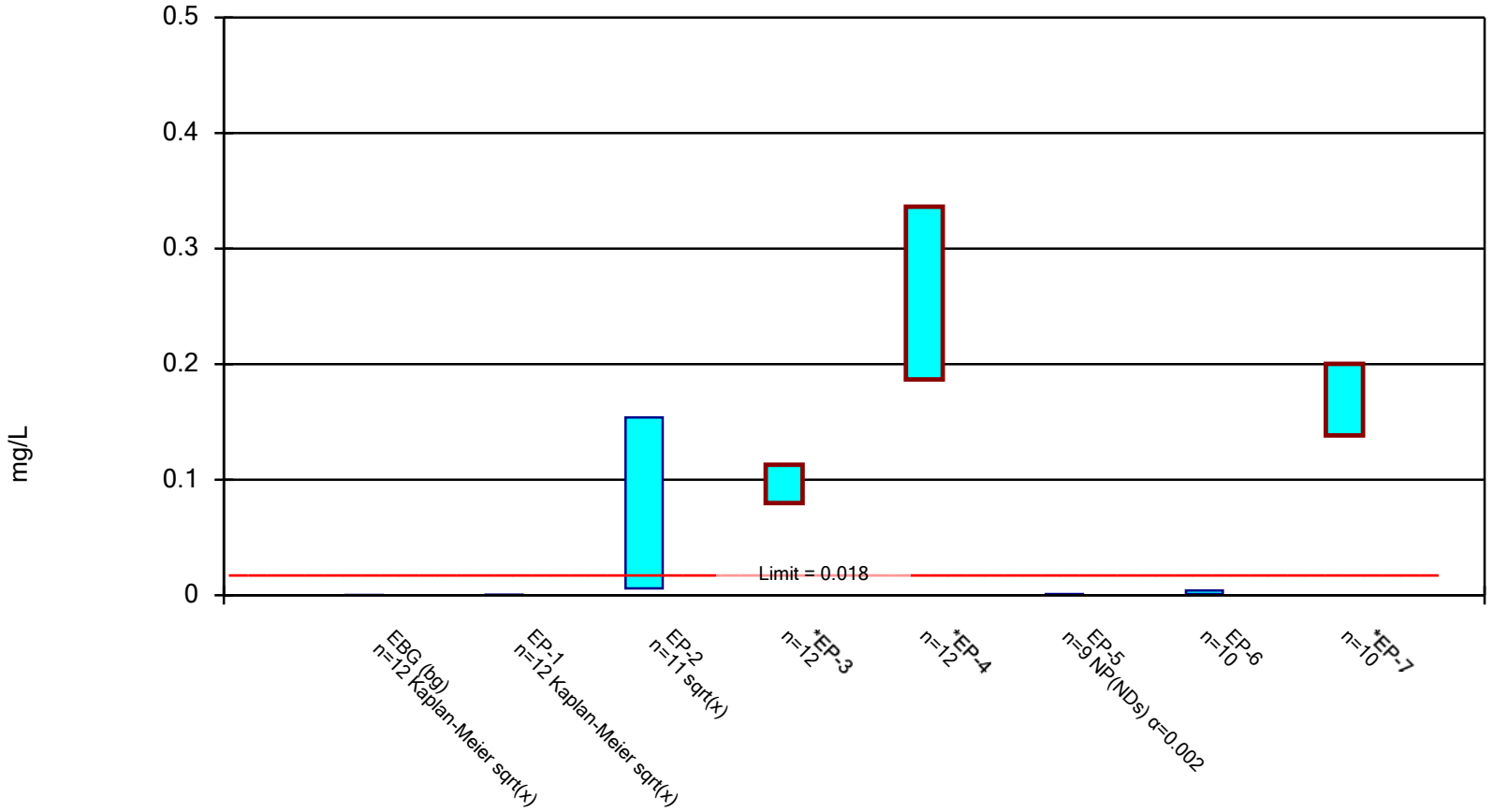


Constituent: Chromium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

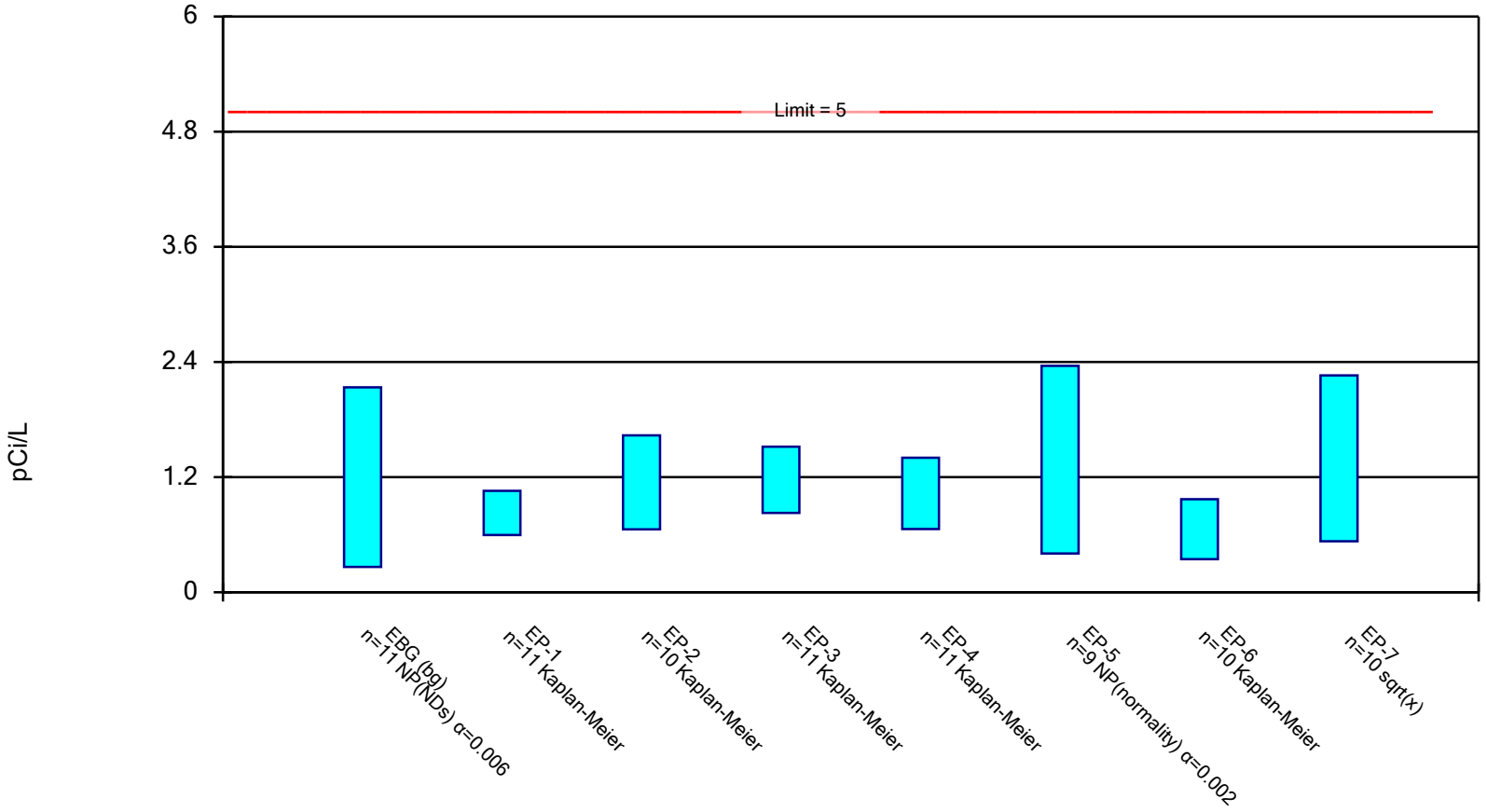


Constituent: Cobalt Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

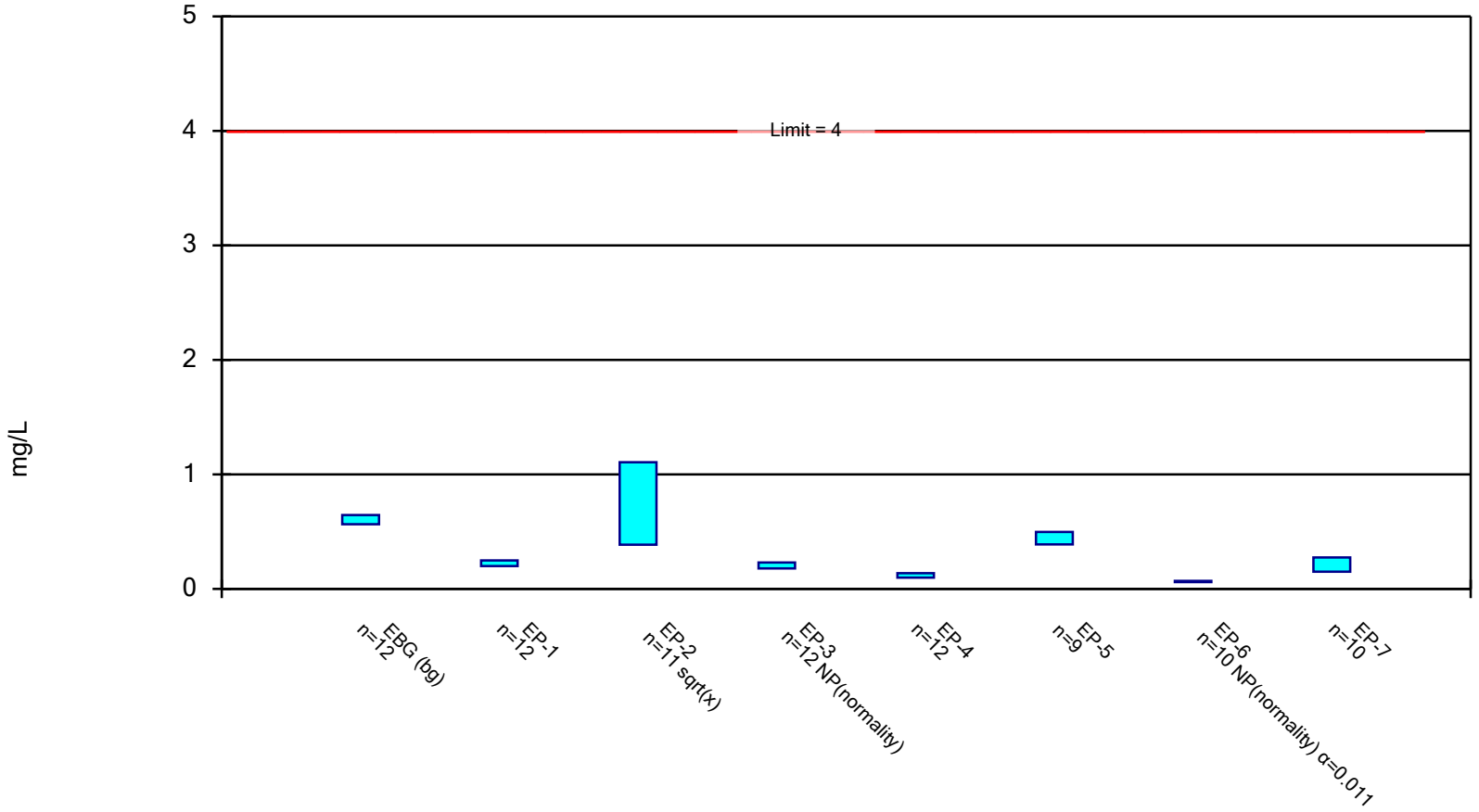


Constituent: Combined Radium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

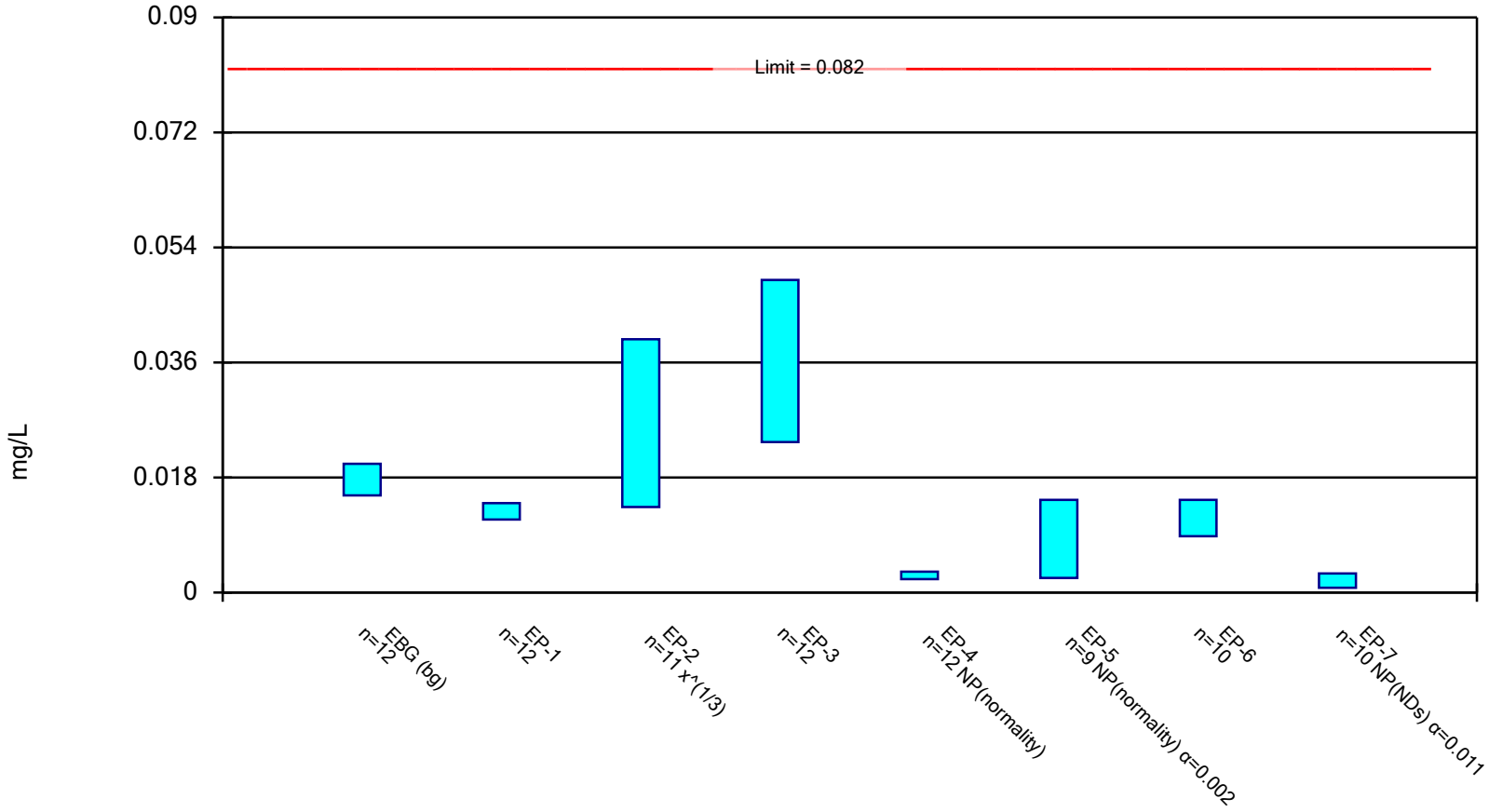


Constituent: Fluoride Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

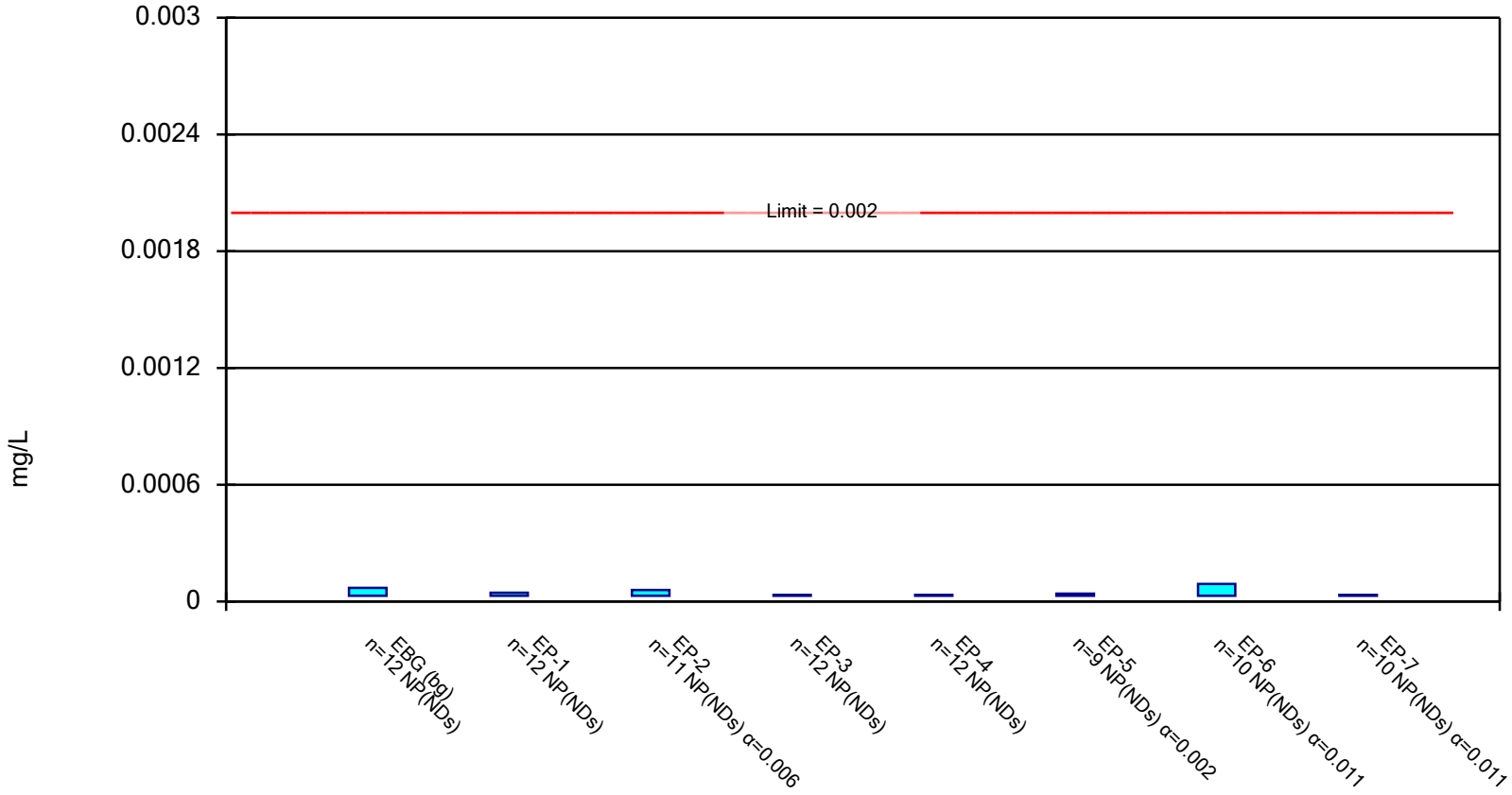


Constituent: Lithium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

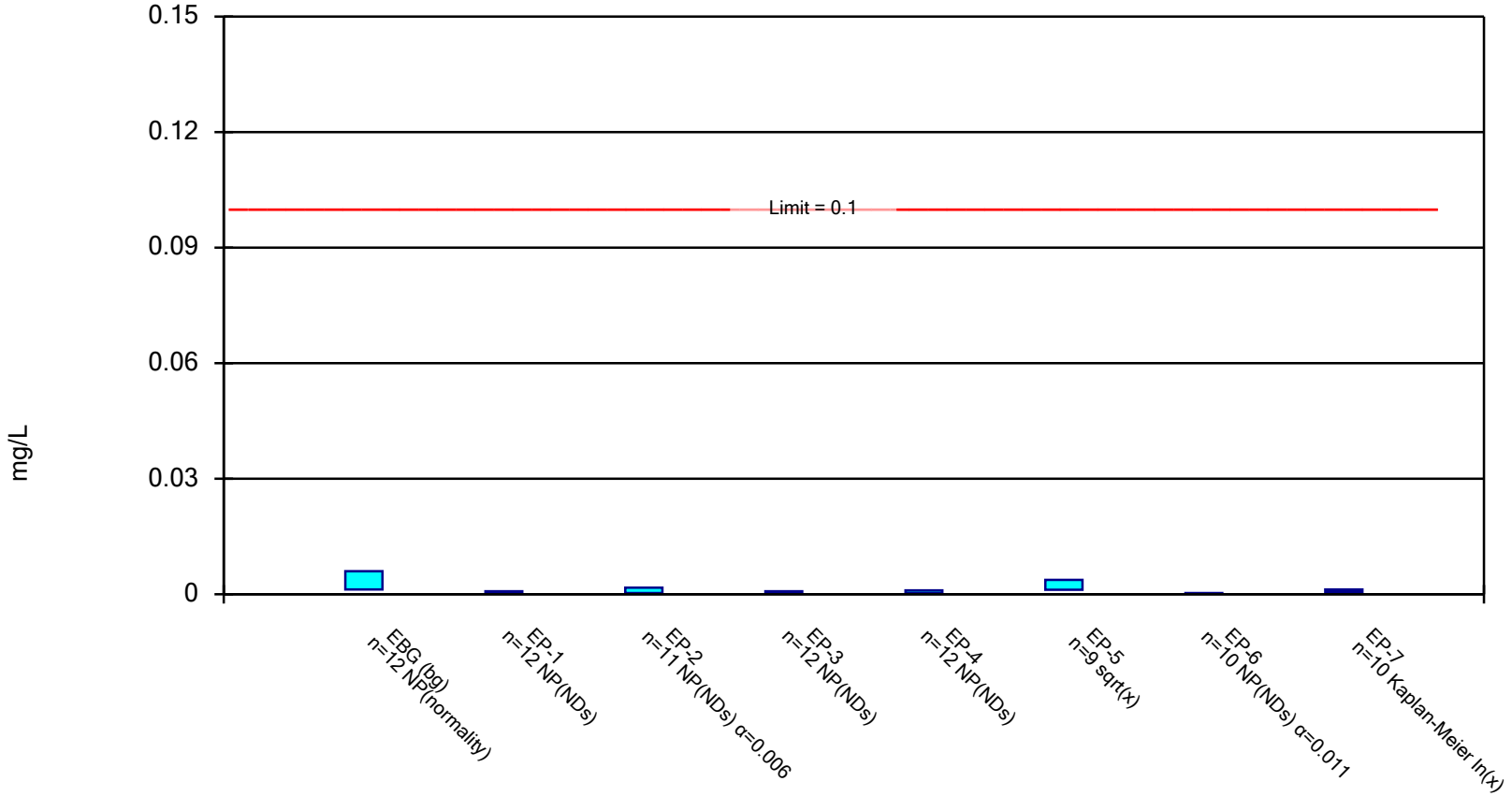


Constituent: Mercury Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

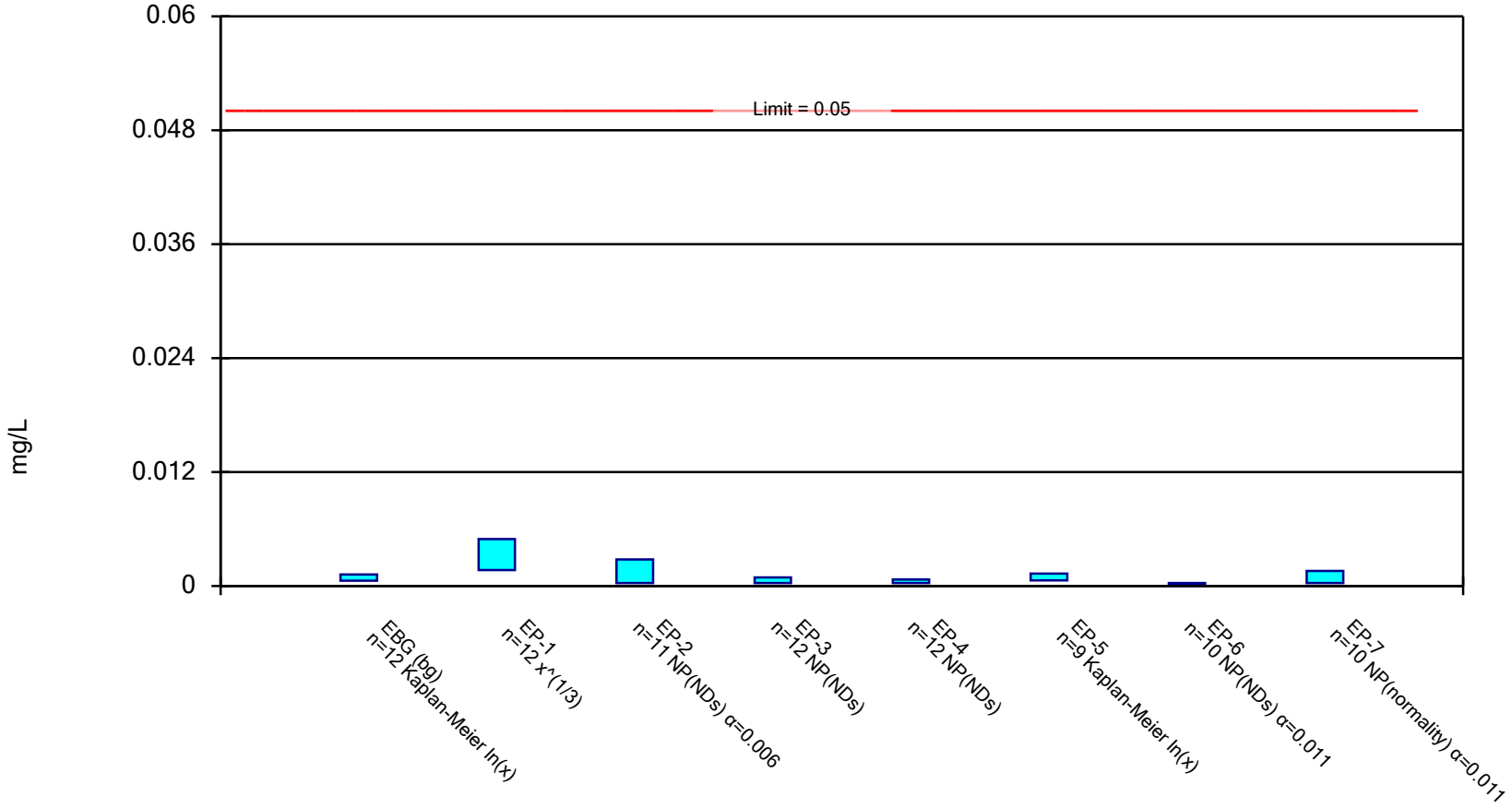


Constituent: Molybdenum Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

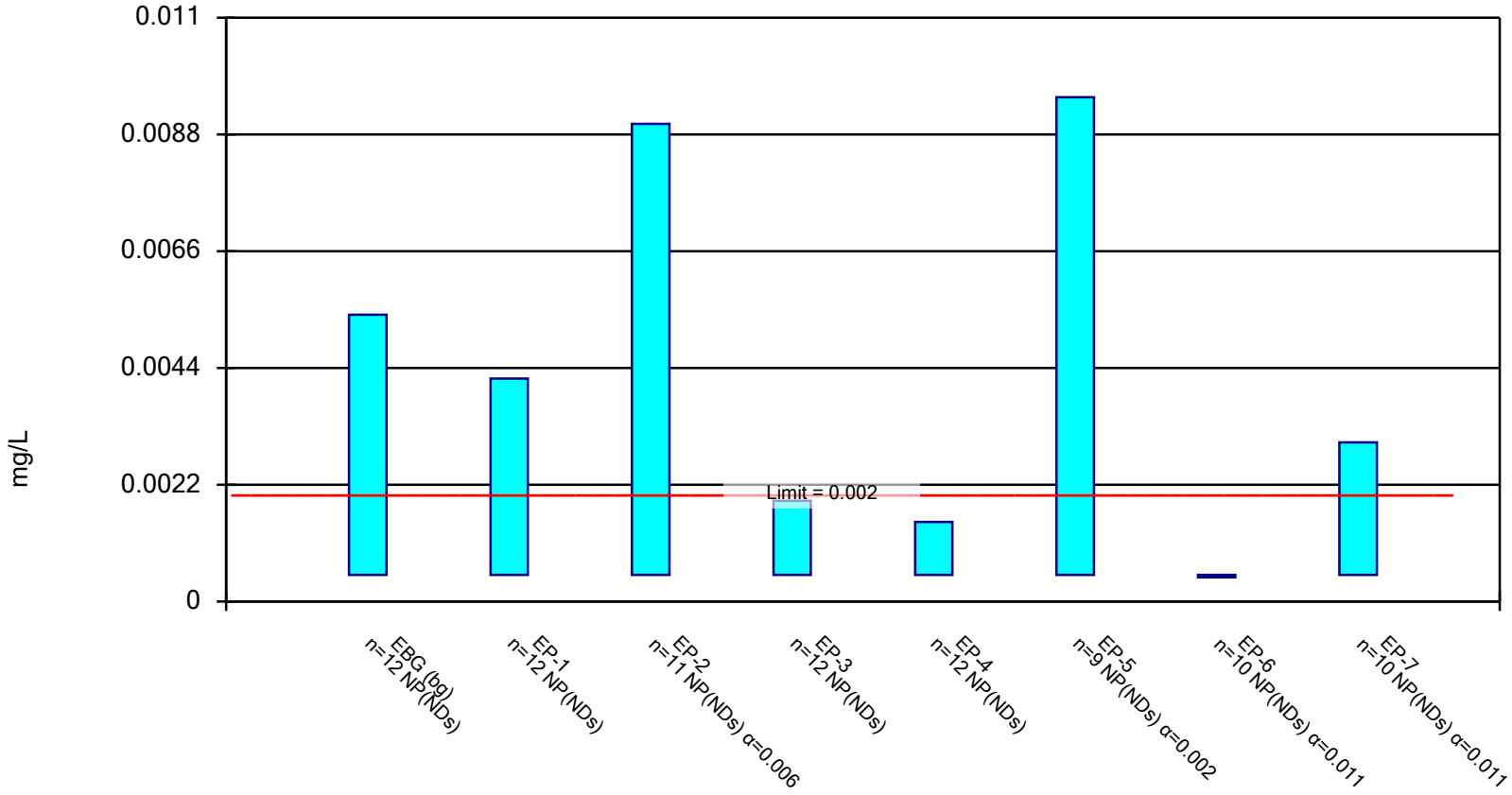


Constituent: Selenium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Non-Parametric Confidence Interval

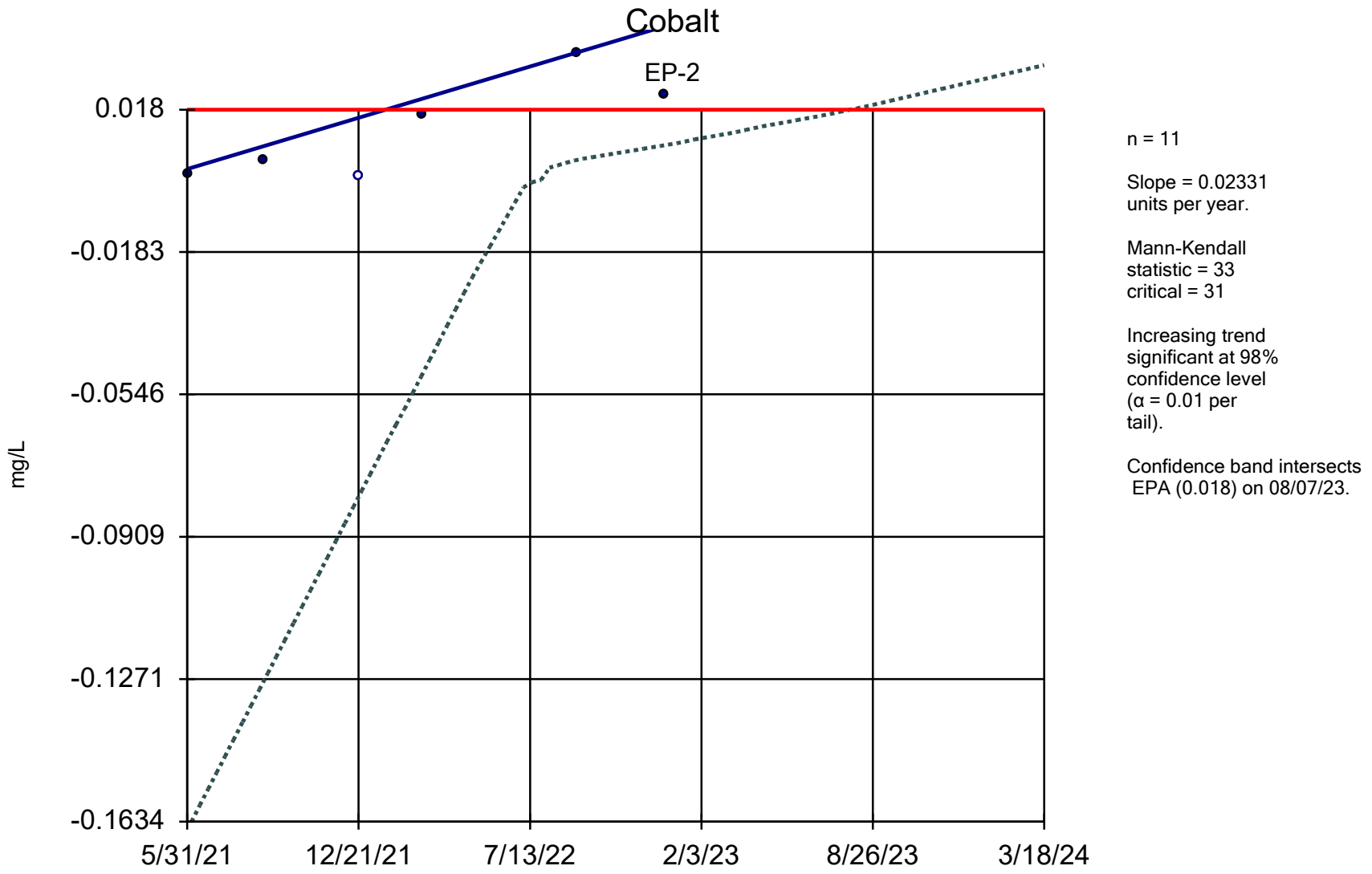
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Thallium Analysis Run 4/22/2024 12:12 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Hollow symbols indicate censored values.



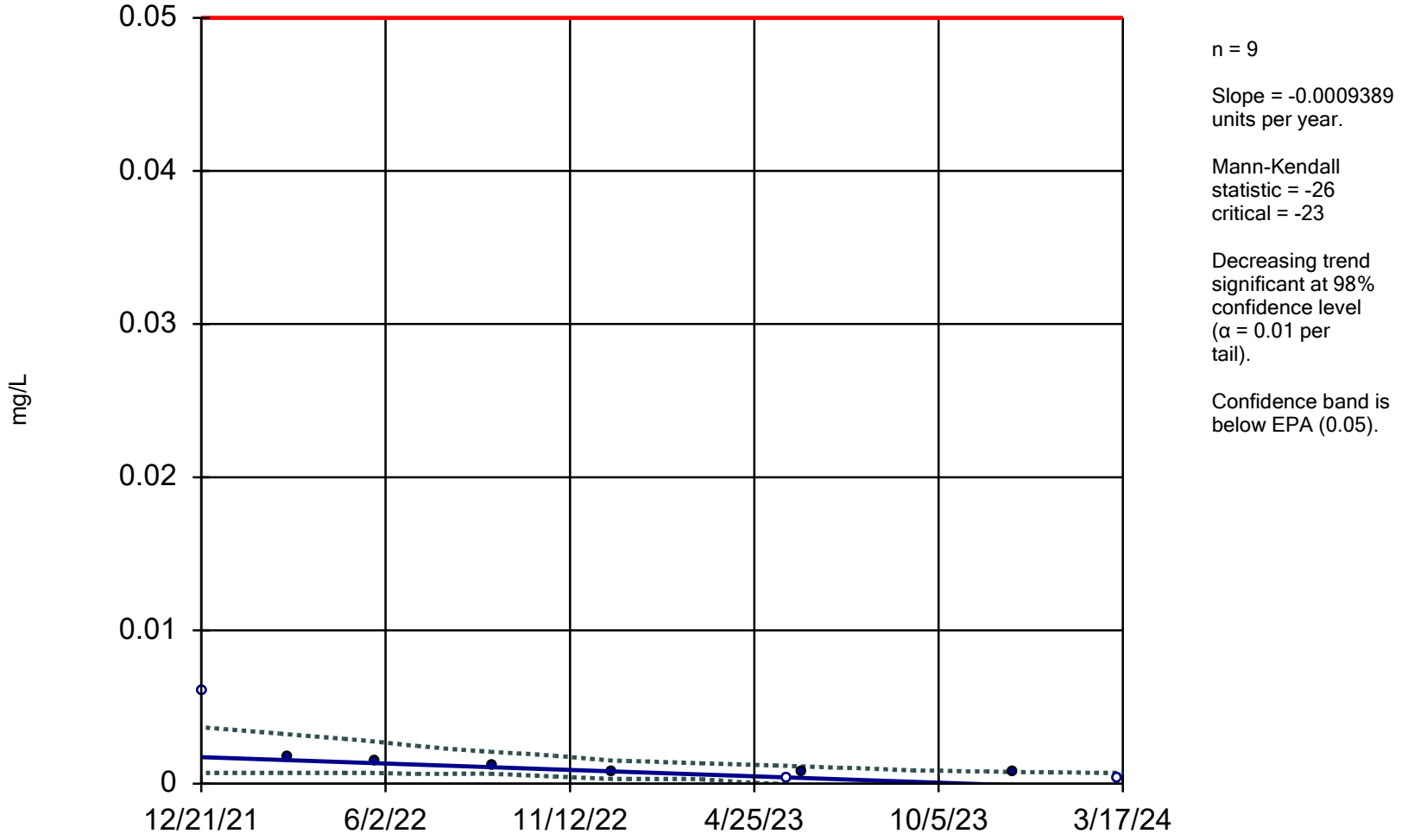
Sen's Slope and 95% Confidence Band Analysis Run 4/22/2024 10:38 AM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Hollow symbols indicate censored values.

Selenium

EP-5



n = 9

Slope = -0.0009389 units per year.

Mann-Kendall statistic = -26
critical = -23

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

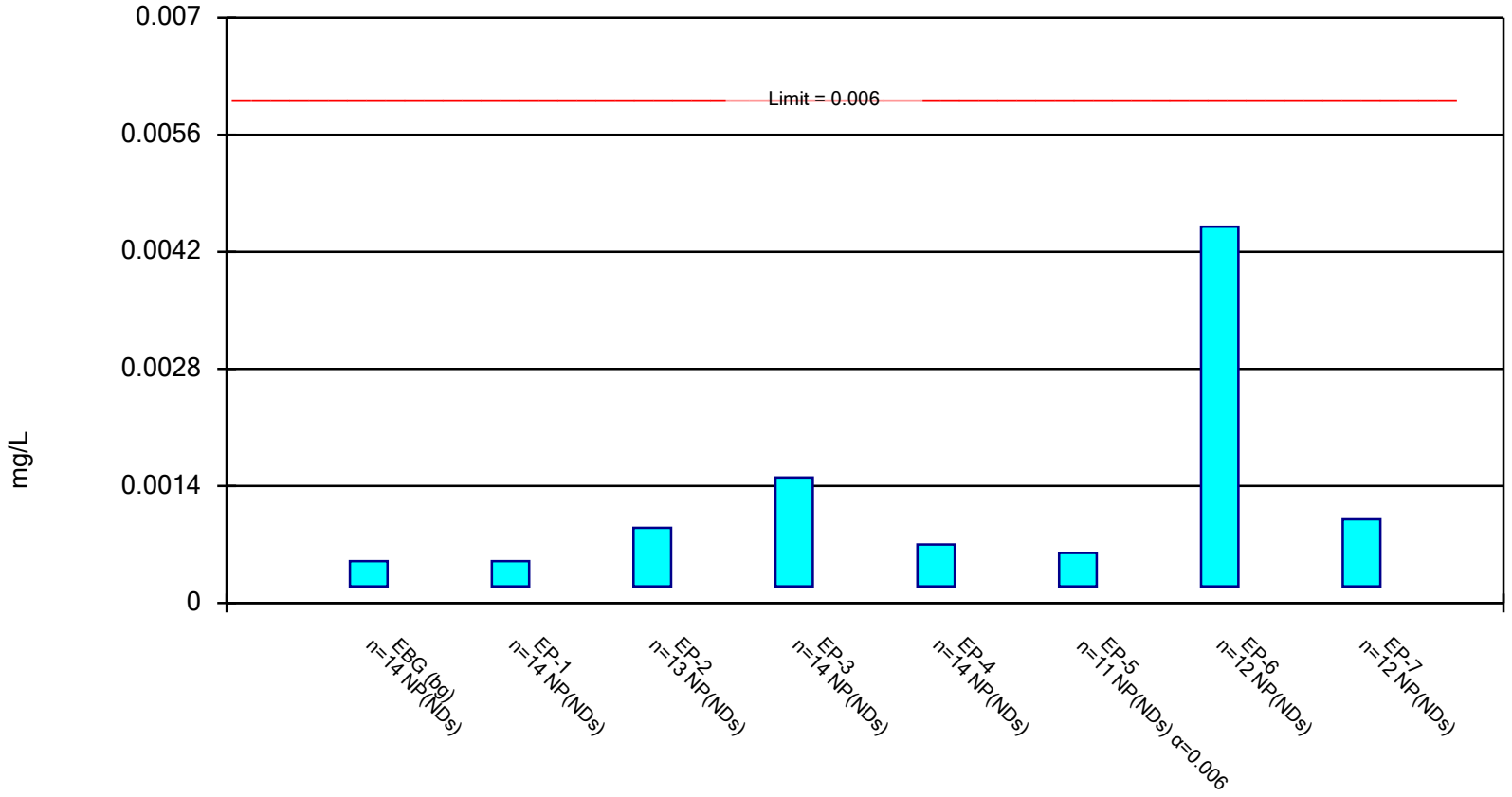
Confidence band is below EPA (0.05).

Sen's Slope and 95% Confidence Band Analysis Run 4/22/2024 10:39 AM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2023 Q4

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

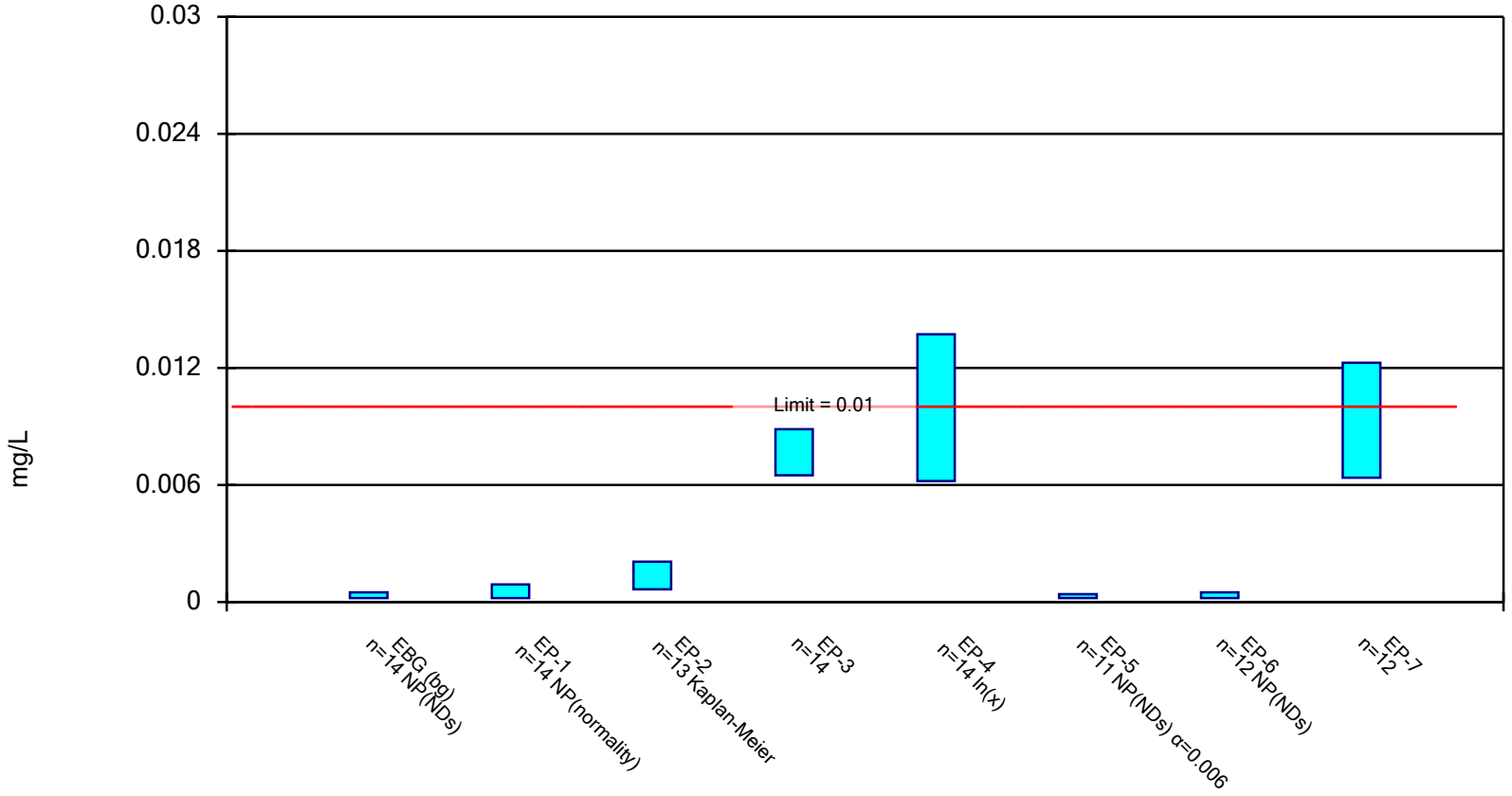


Constituent: Antimony Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

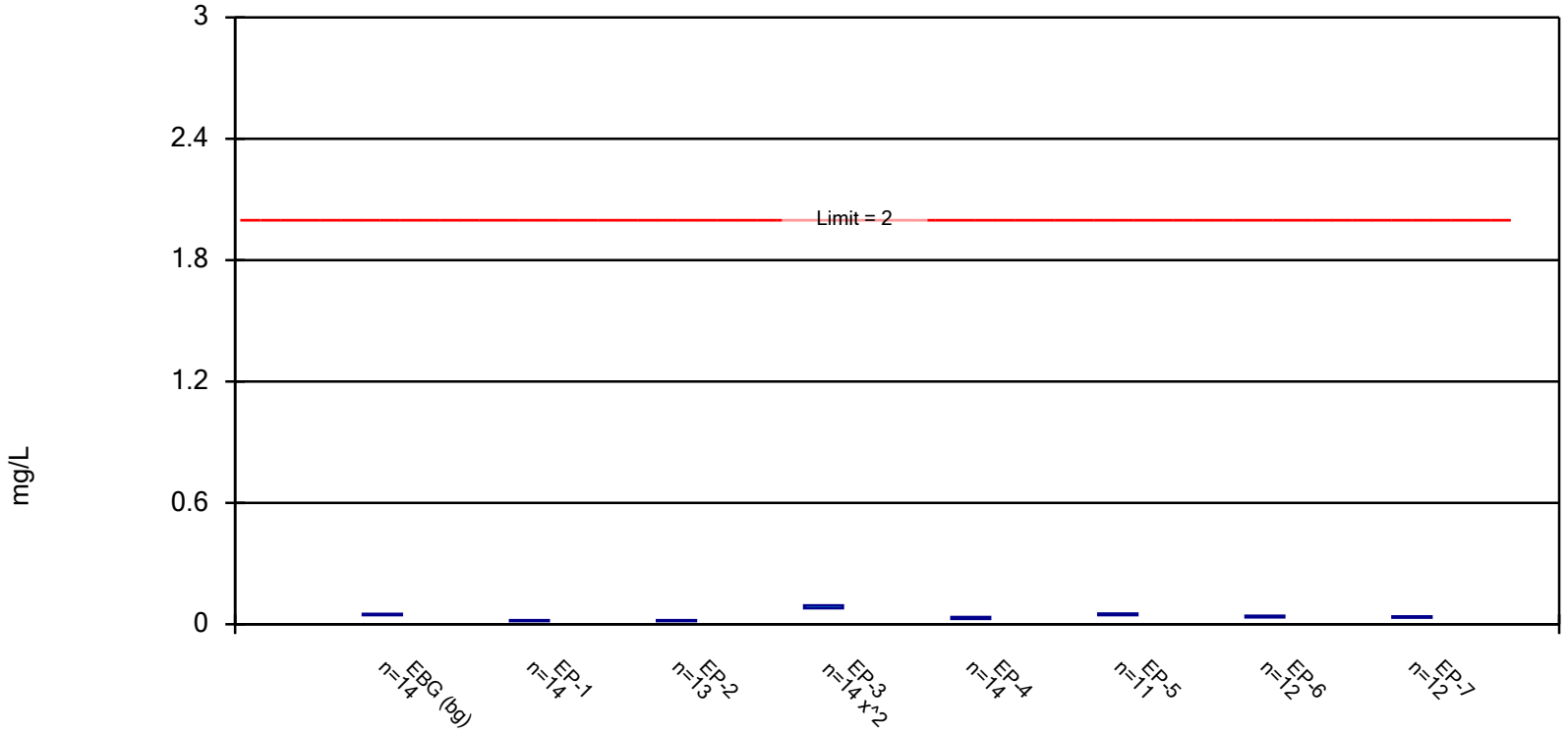


Constituent: Arsenic Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

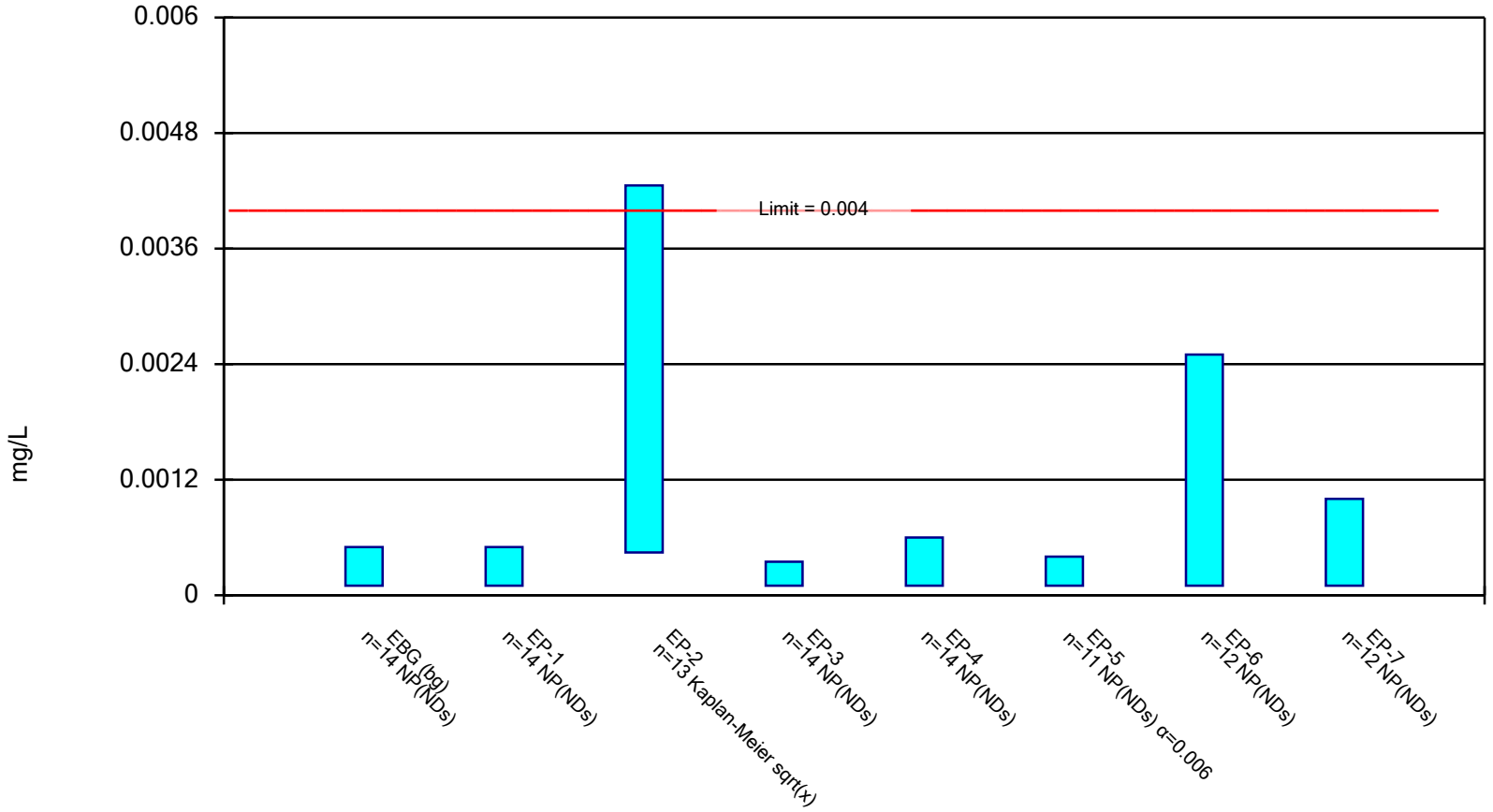


Constituent: Barium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

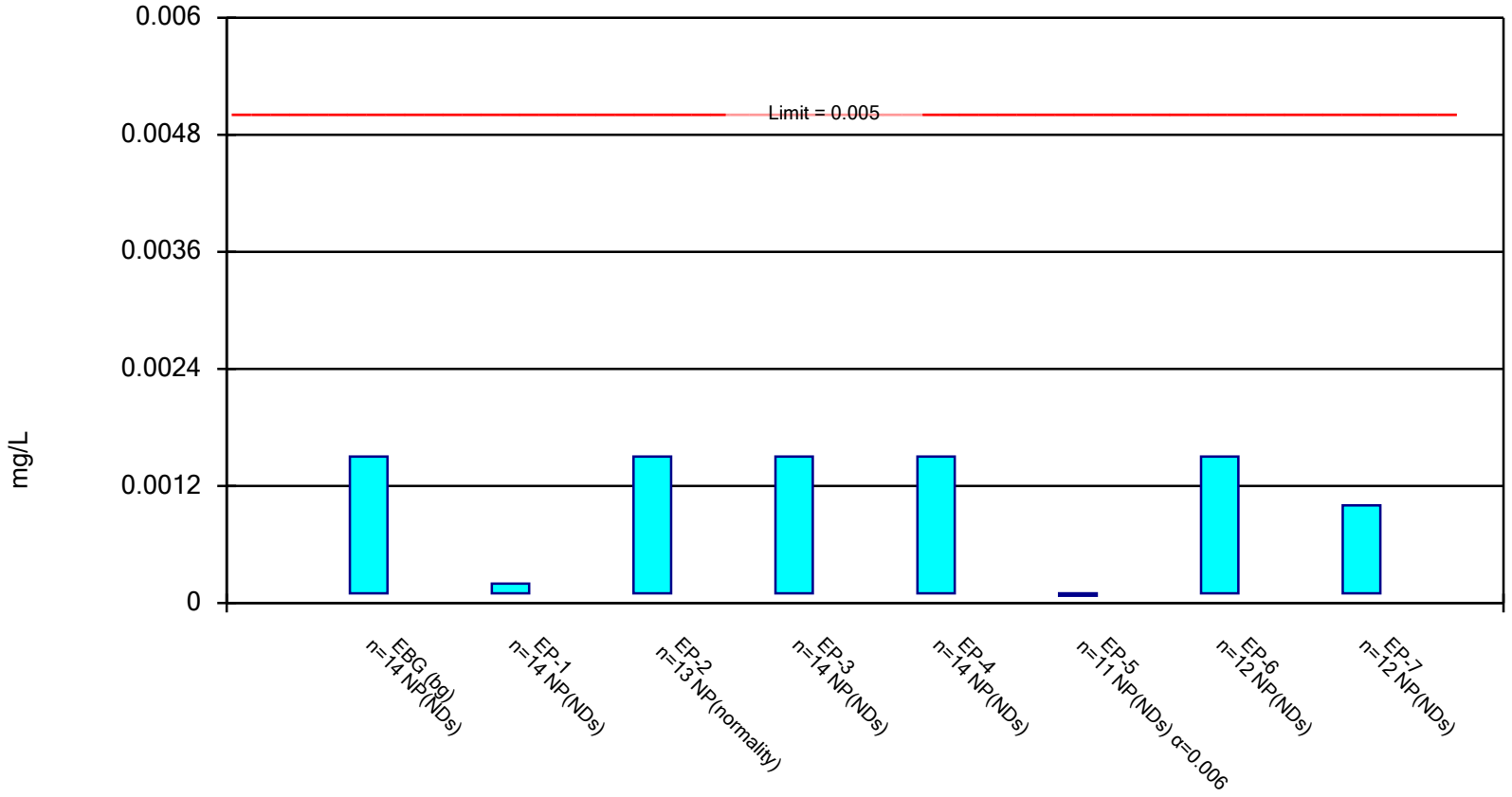


Constituent: Beryllium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

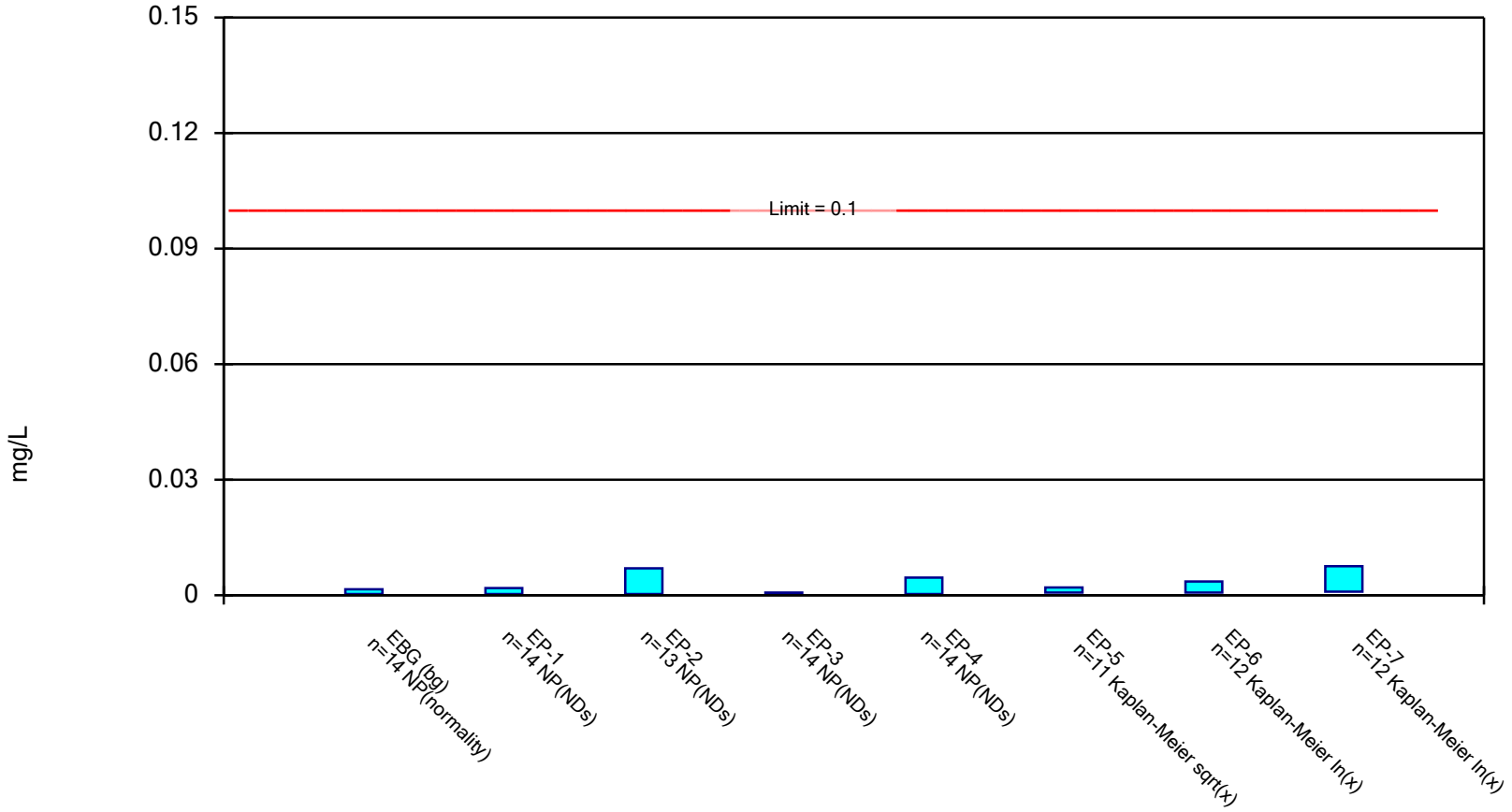


Constituent: Cadmium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

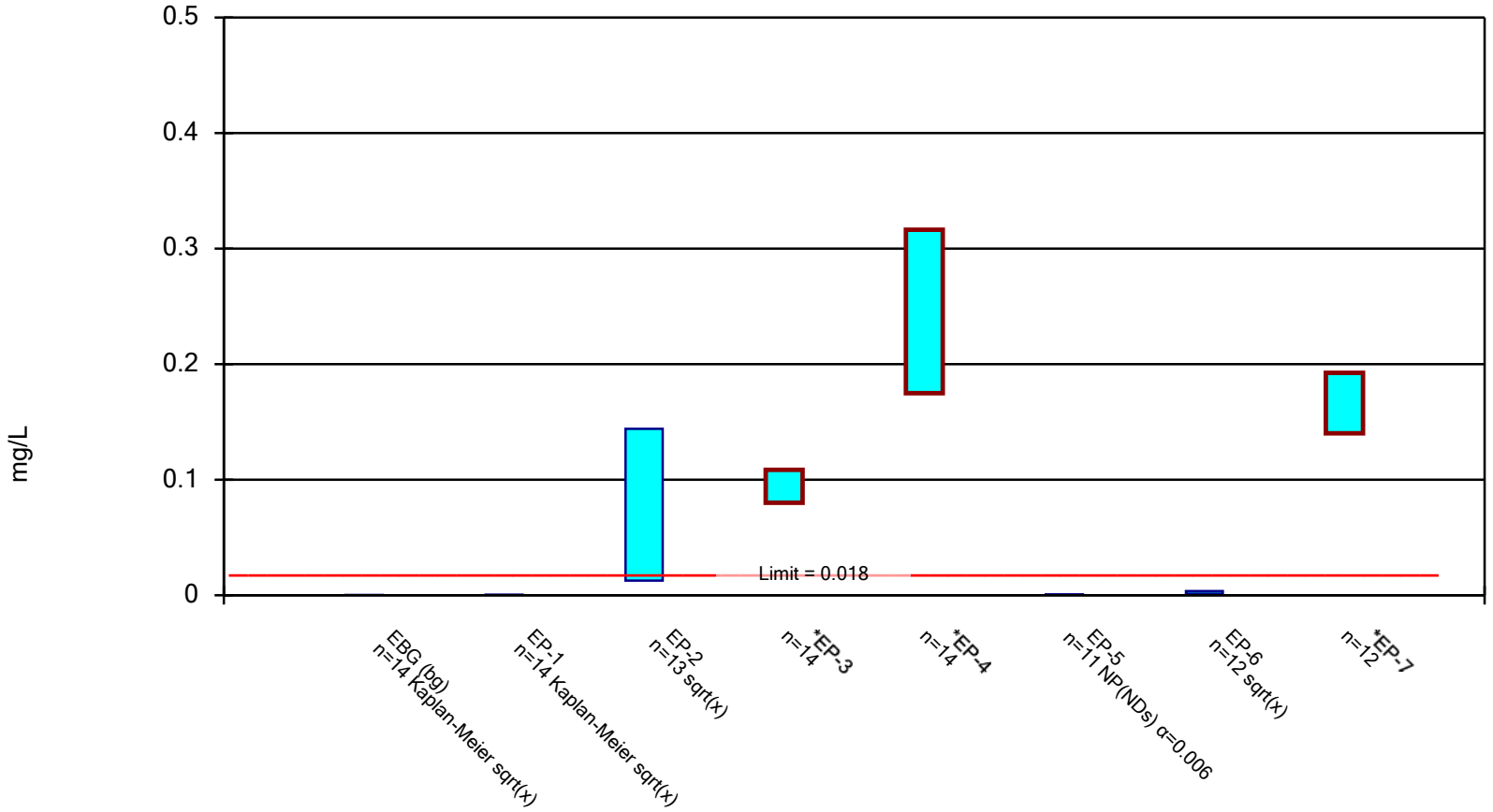


Constituent: Chromium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

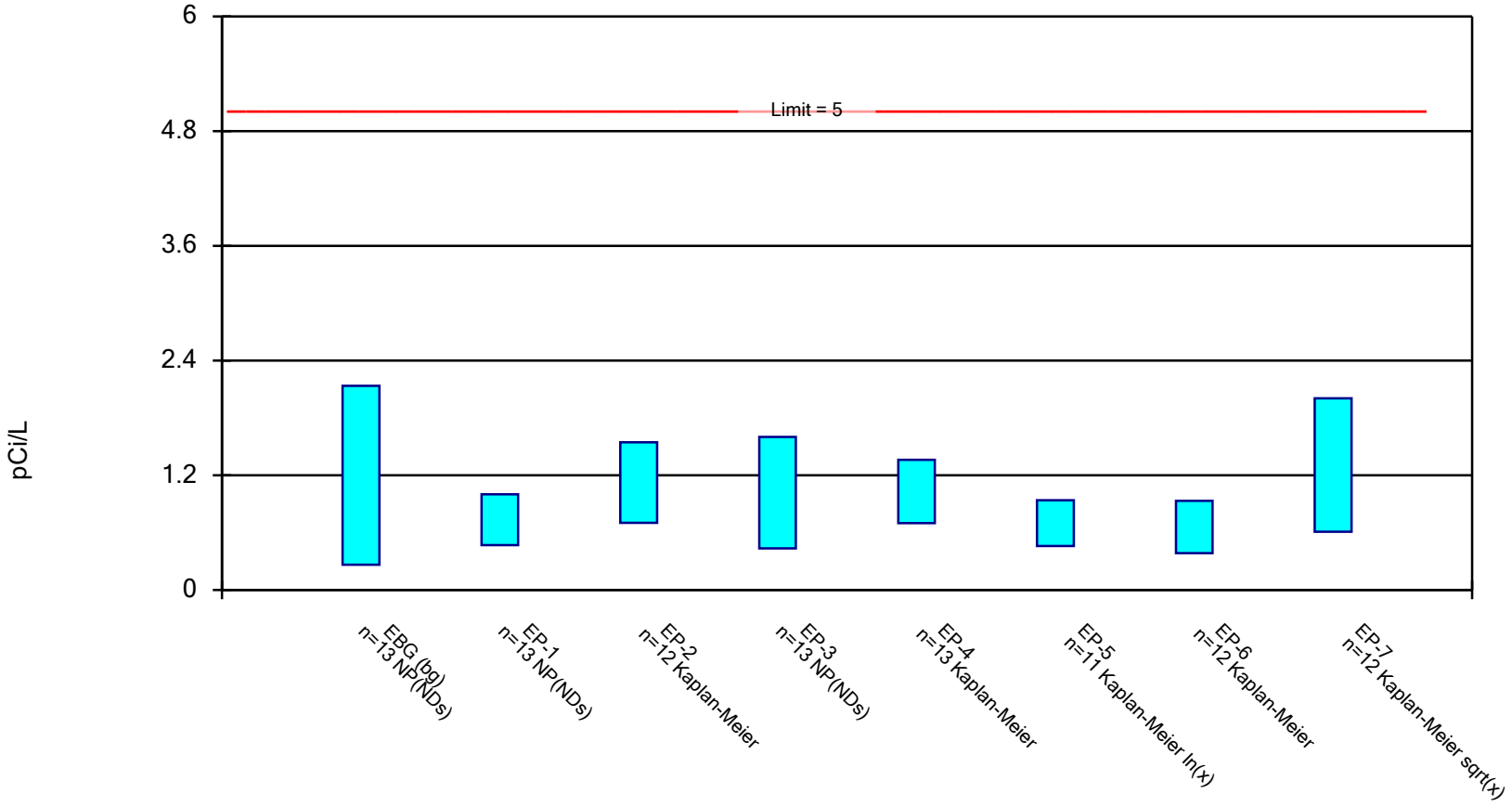


Constituent: Cobalt Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

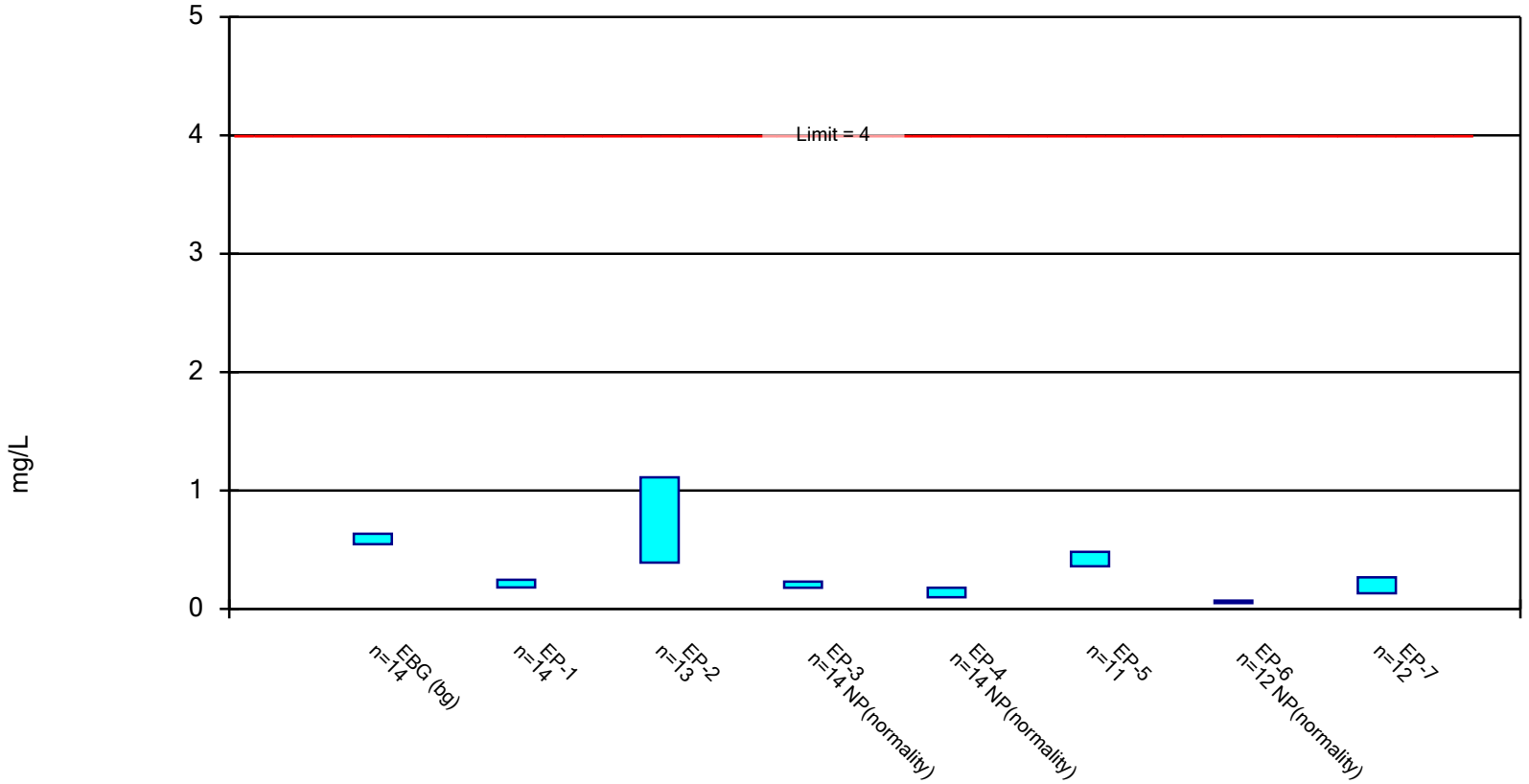


Constituent: Combined Radium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

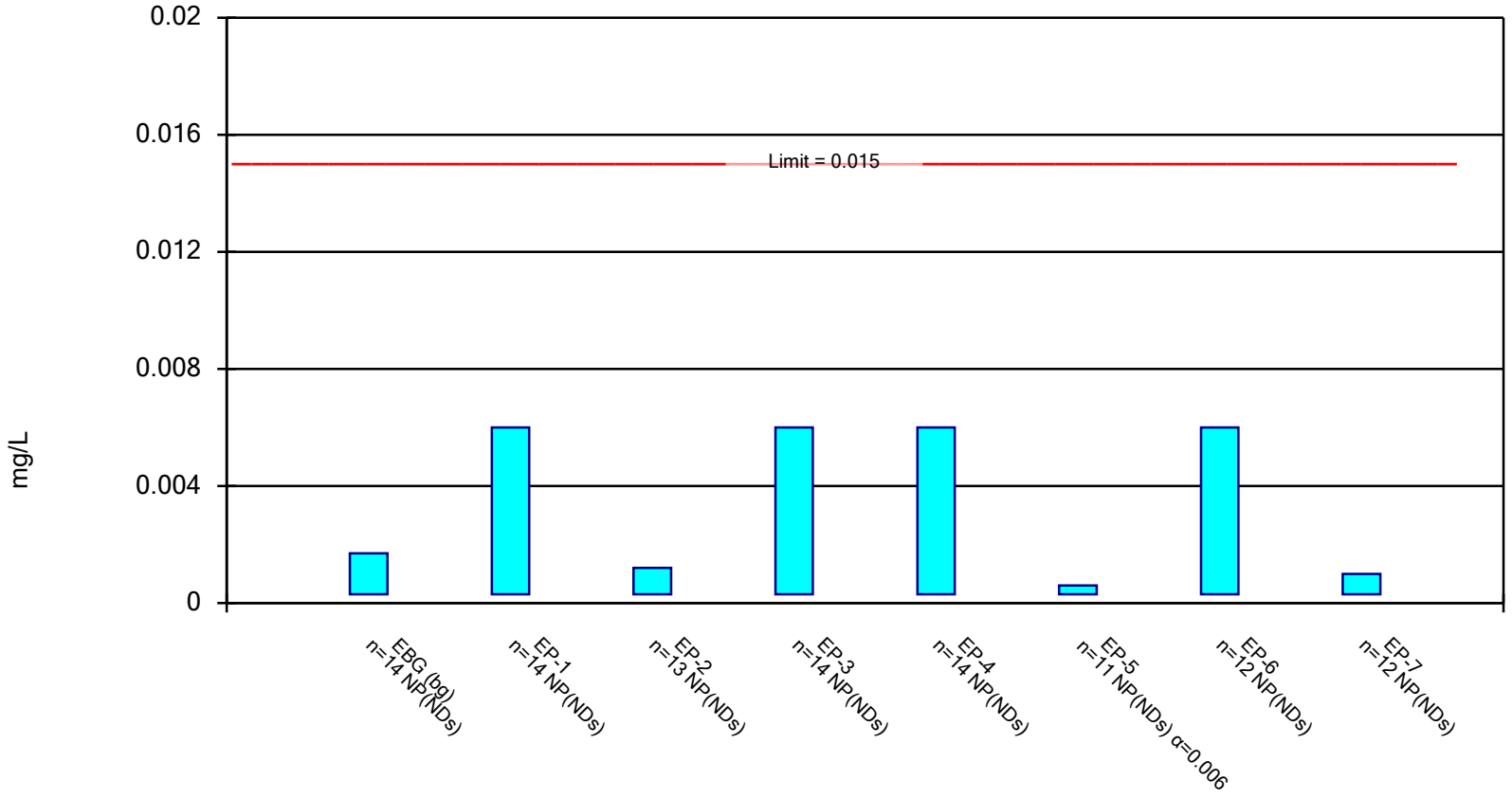


Constituent: Fluoride Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

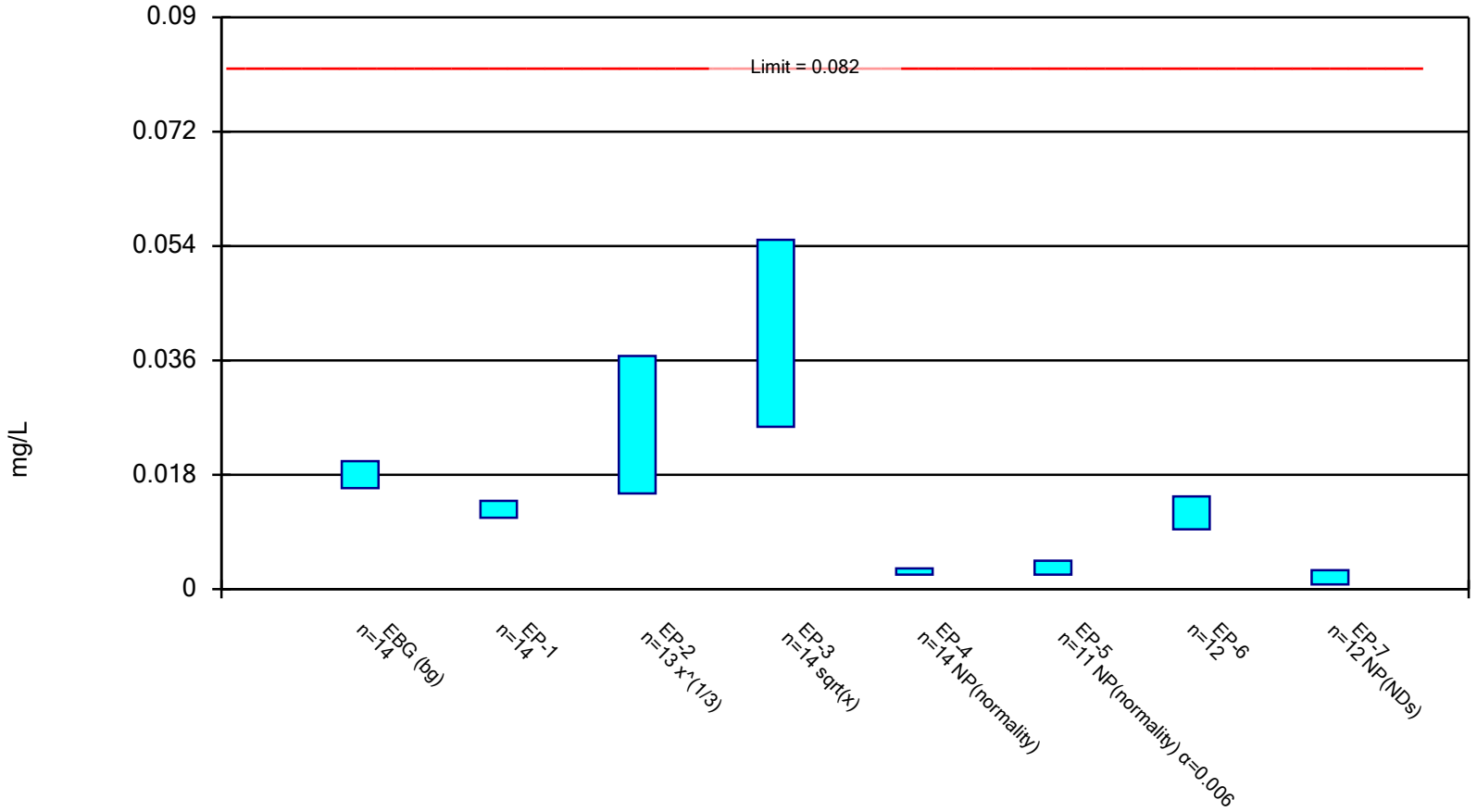


Constituent: Lead Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

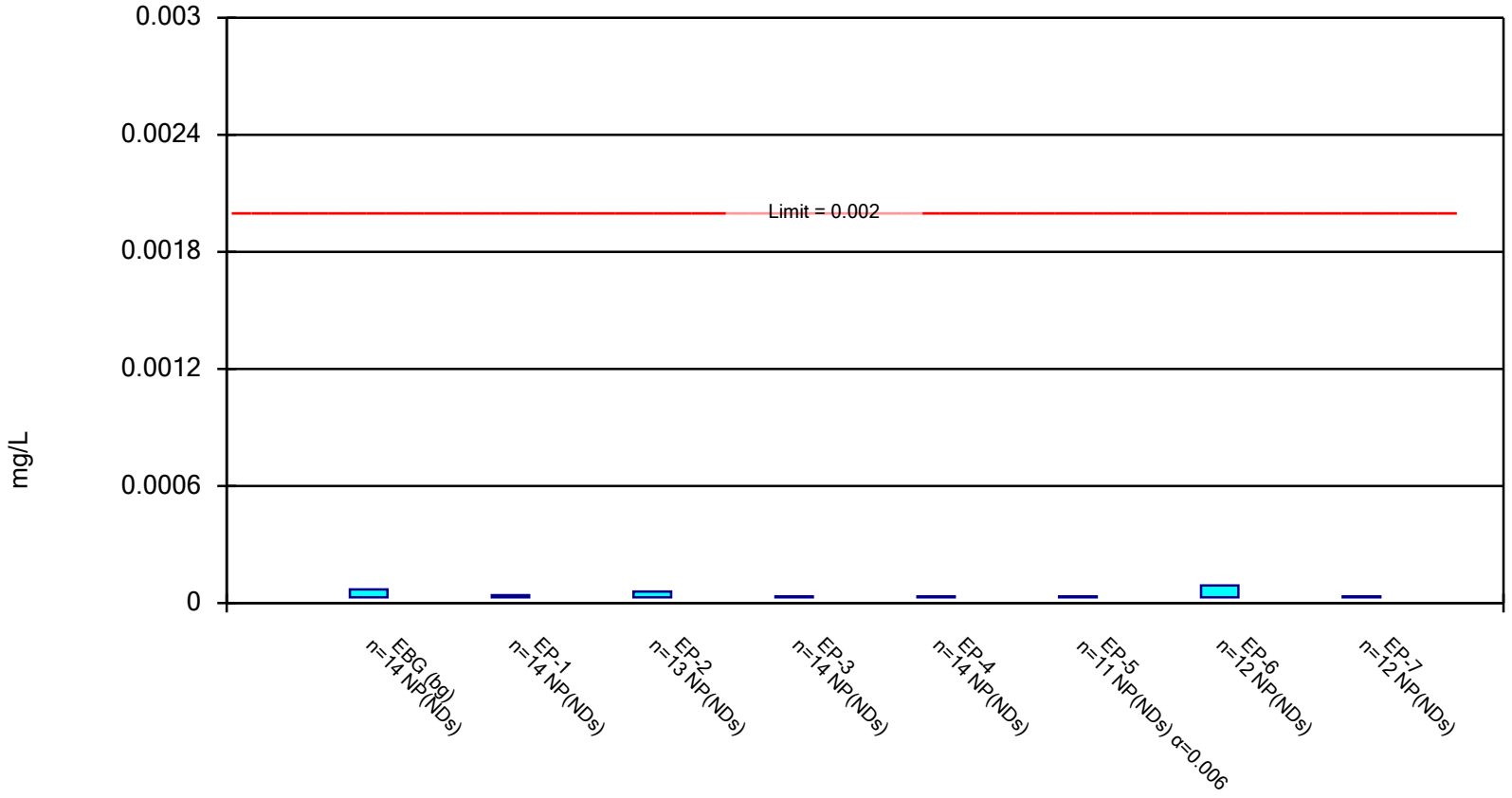


Constituent: Lithium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

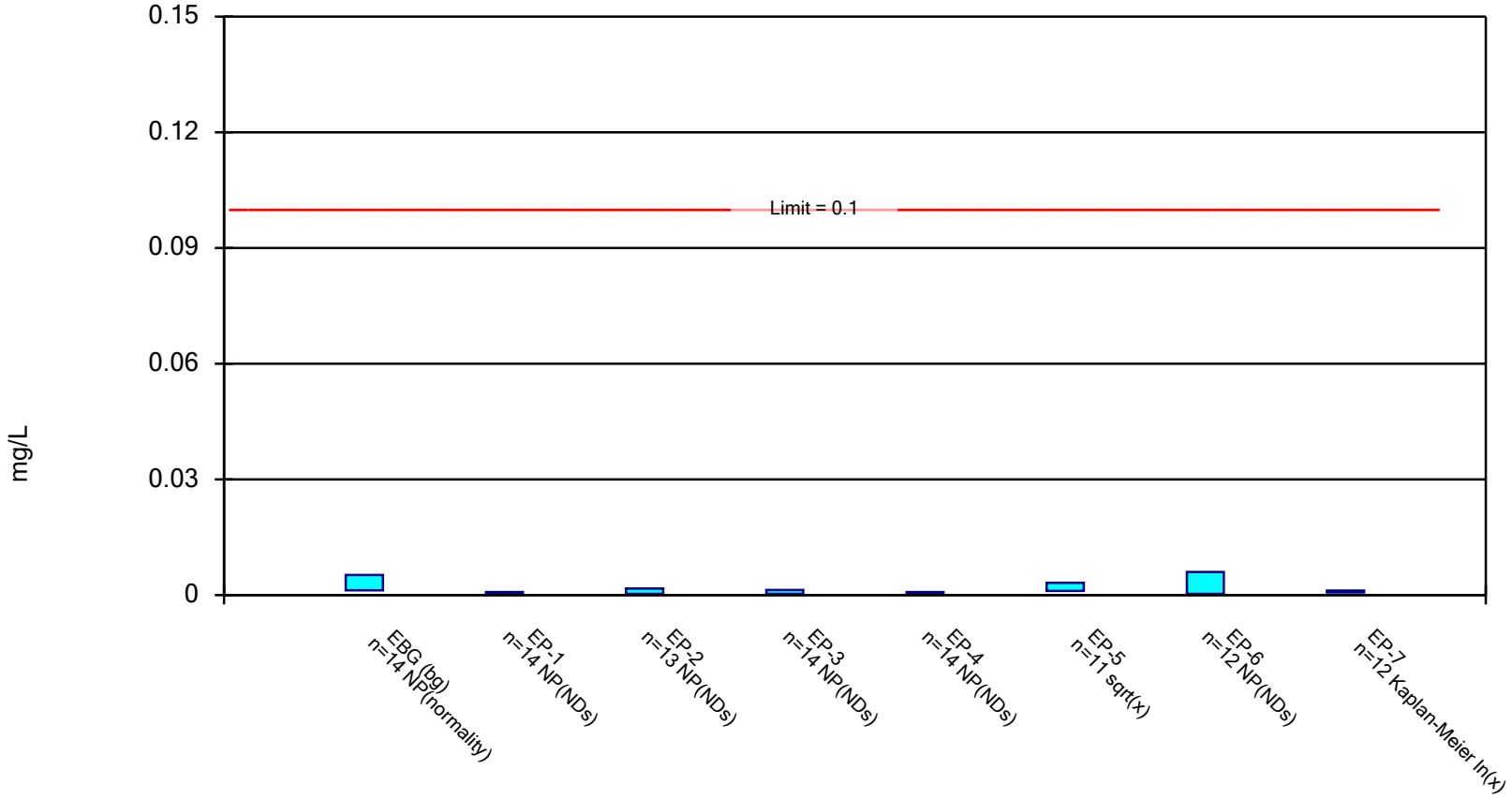


Constituent: Mercury Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

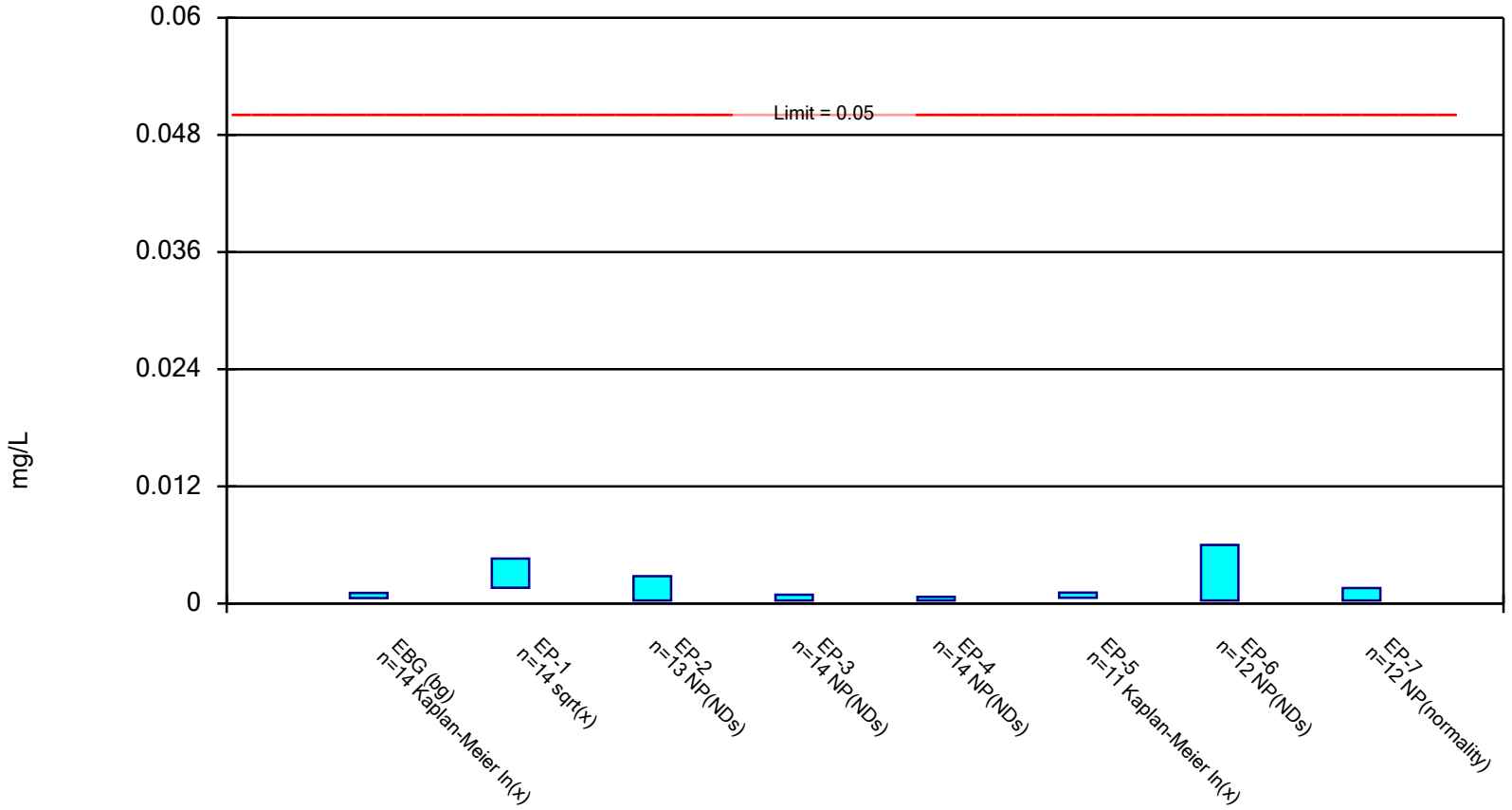


Constituent: Molybdenum Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

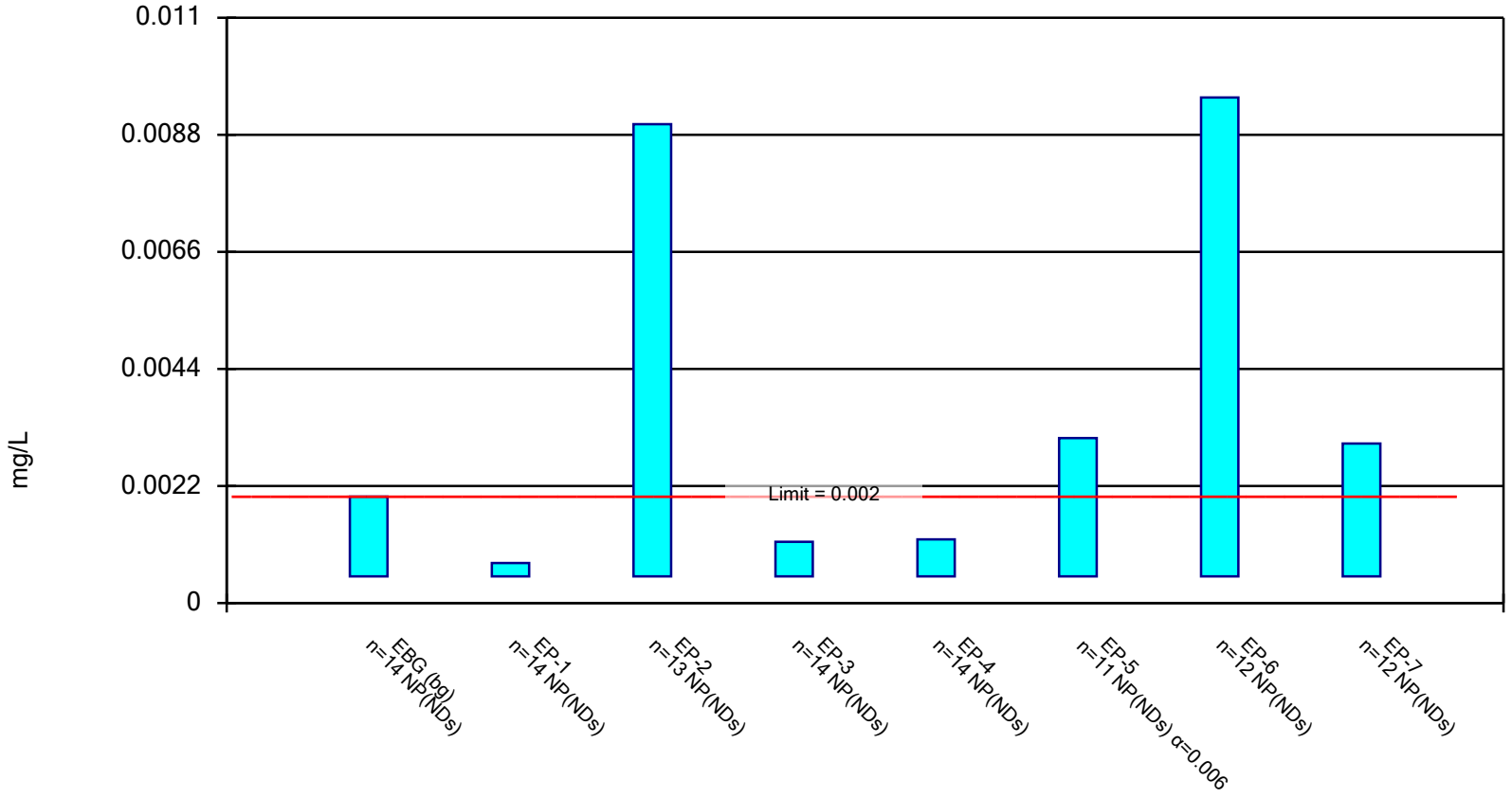


Constituent: Selenium Analysis Run 10/17/2024 4:40 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

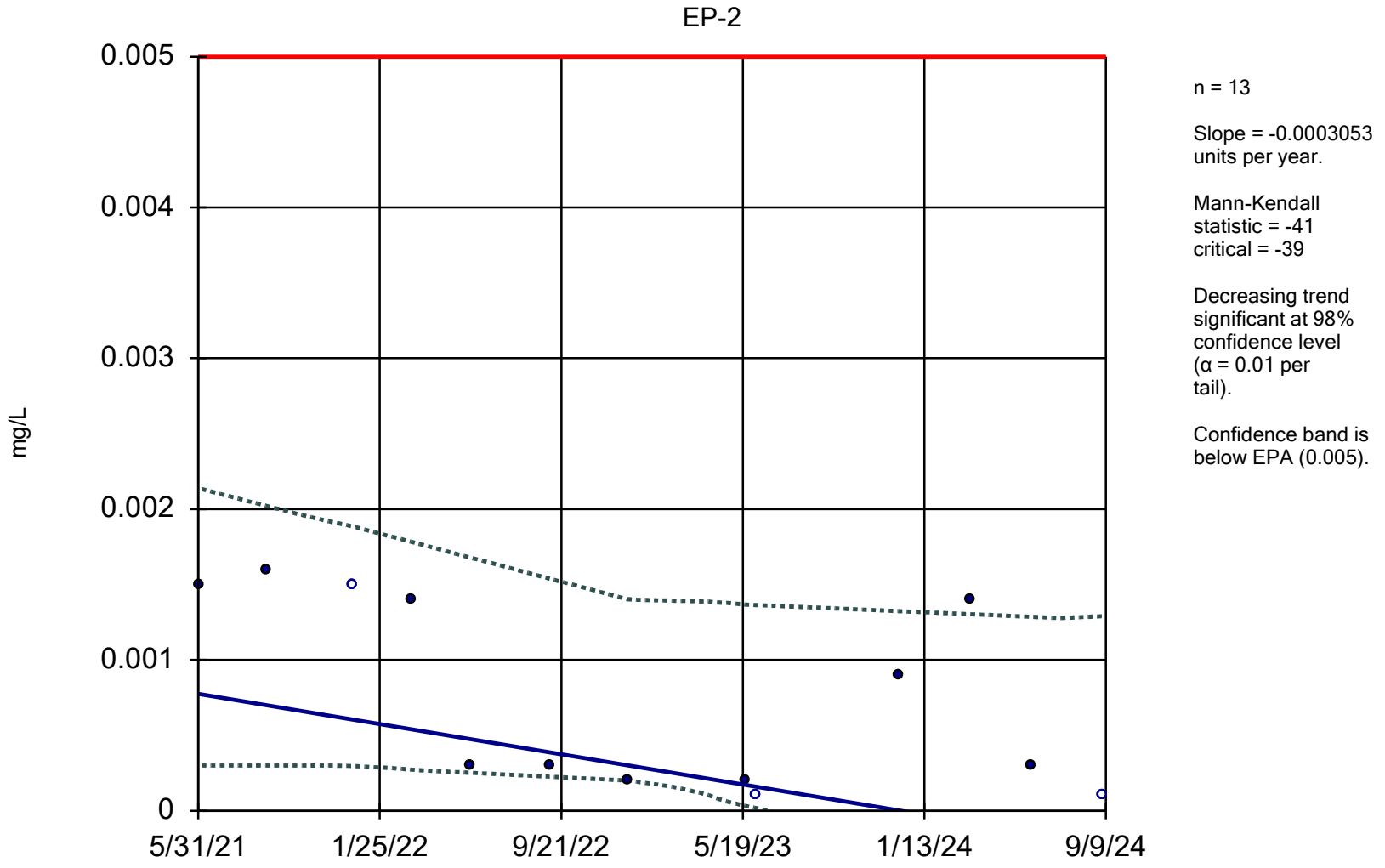


Constituent: Thallium Analysis Run 10/17/2024 4:40 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

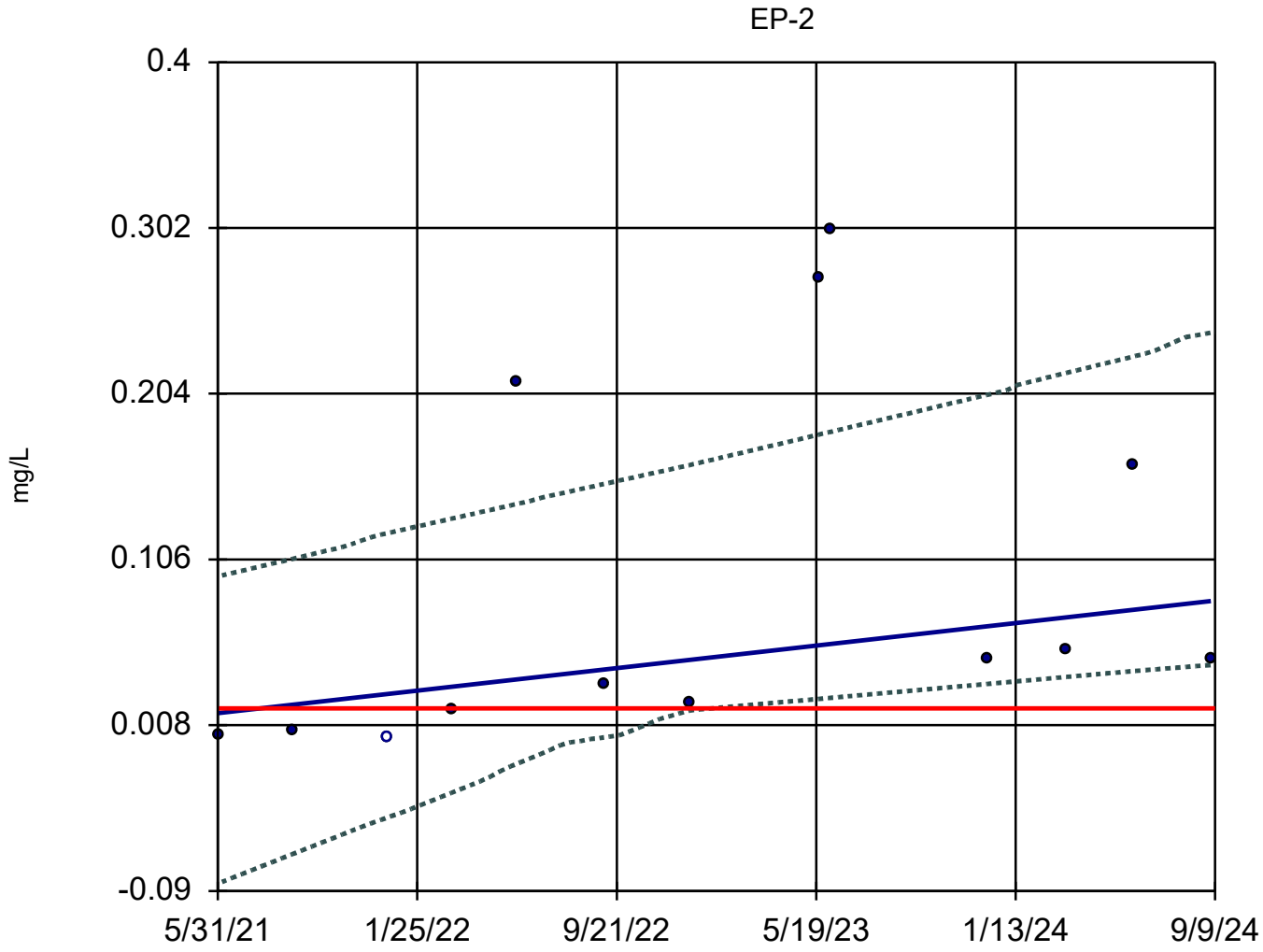


Constituent: Cadmium Analysis Run 10/17/2024 3:56 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 13

Slope = 0.02029 units per year.

Mann-Kendall statistic = 40
critical = 39

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

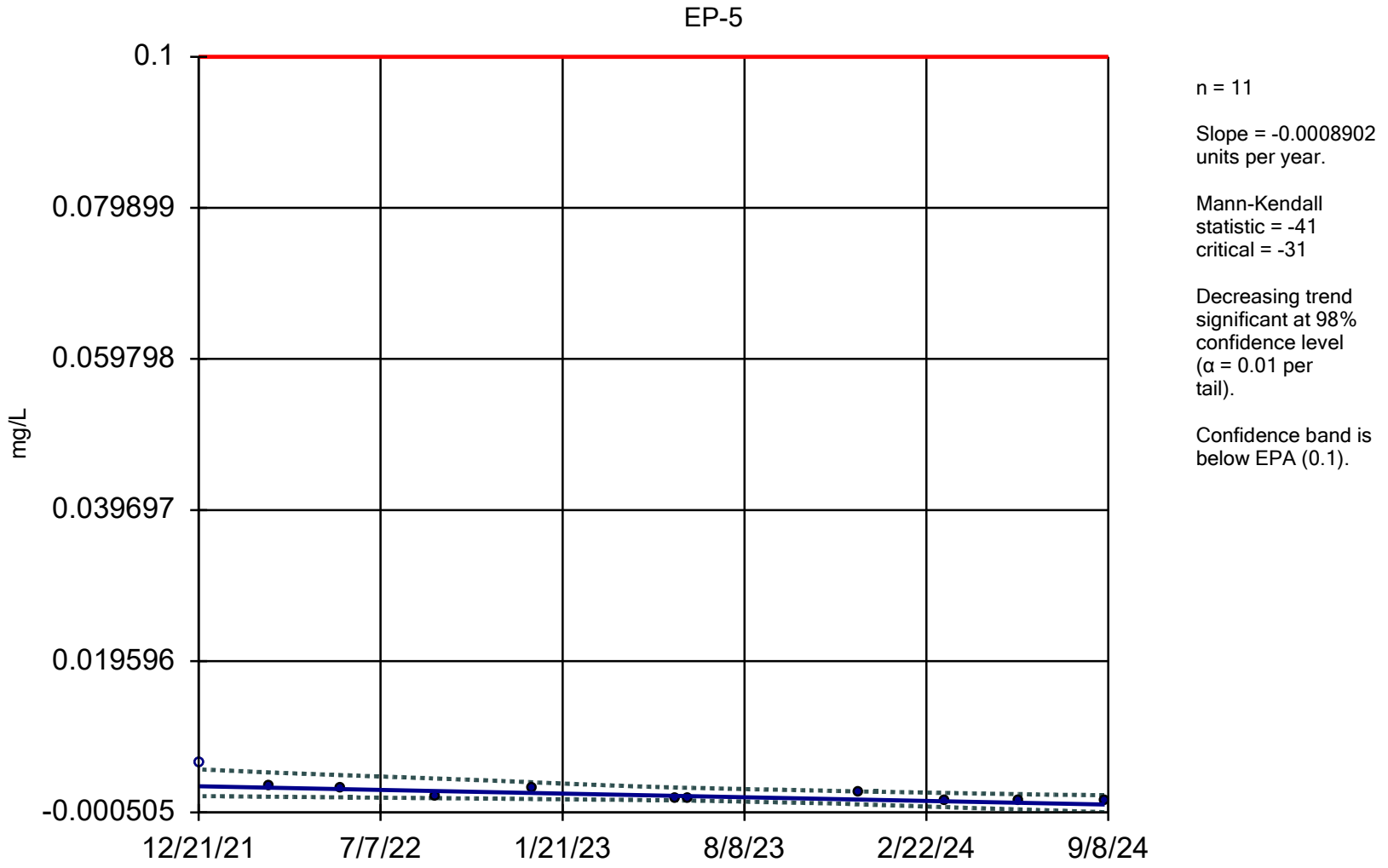
Confidence band intersects EPA (0.018) on 01/22/23.

Constituent: Cobalt Analysis Run 10/17/2024 3:57 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 11

Slope = -0.0008902 units per year.

Mann-Kendall statistic = -41
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

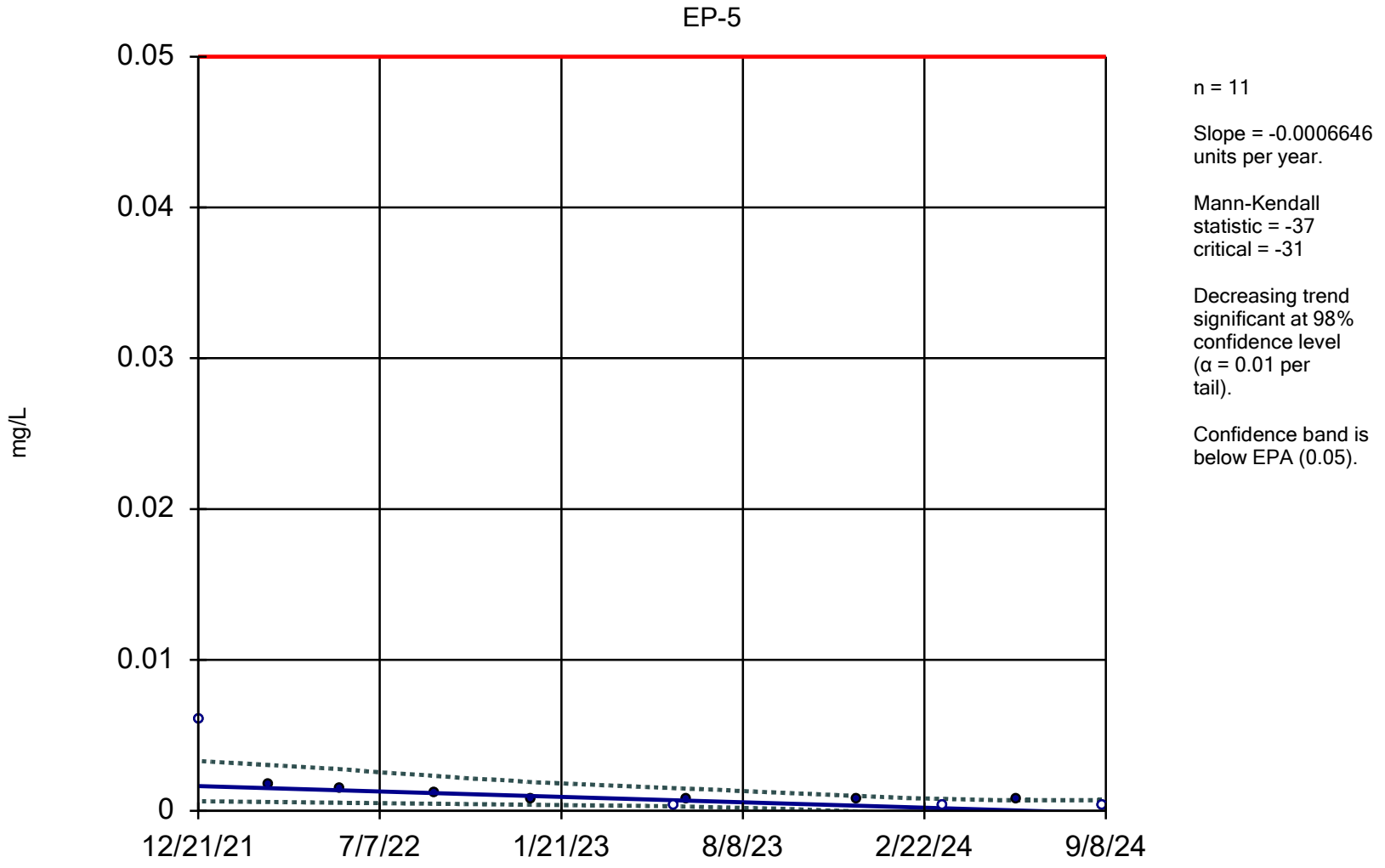
Confidence band is below EPA (0.1).

Constituent: Molybdenum Analysis Run 10/17/2024 3:57 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

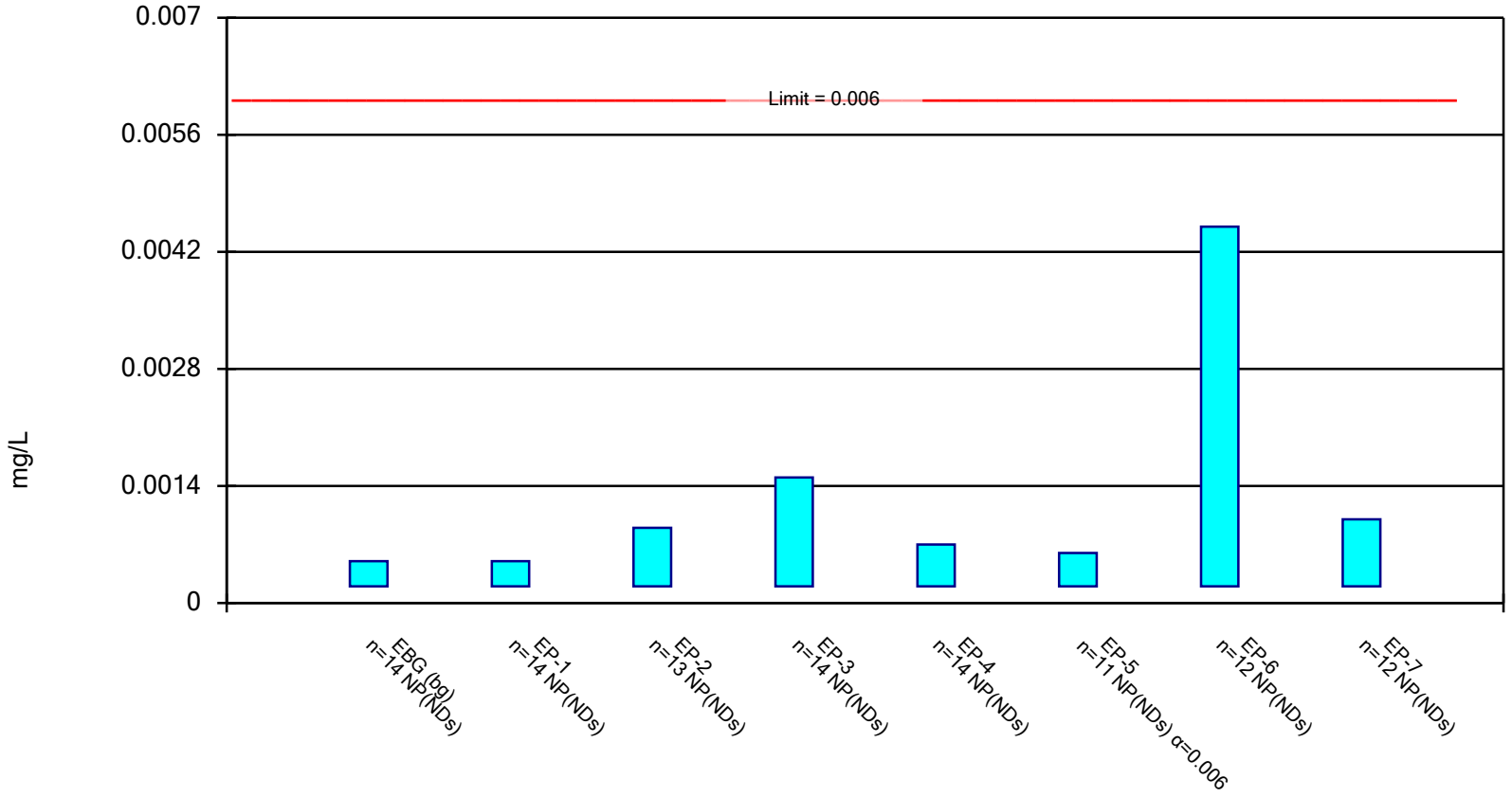


Constituent: Selenium Analysis Run 10/17/2024 3:58 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

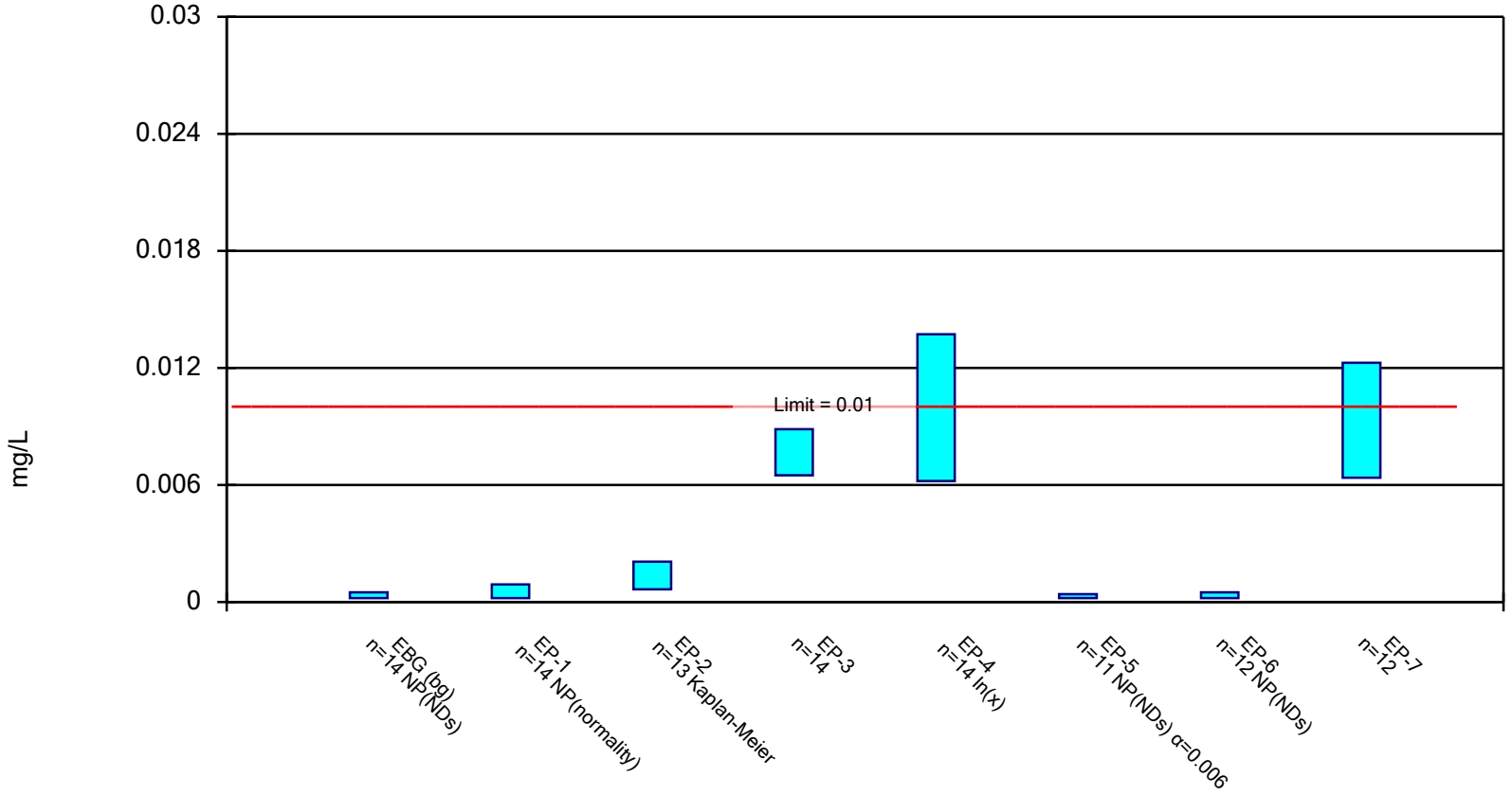


Constituent: Antimony Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

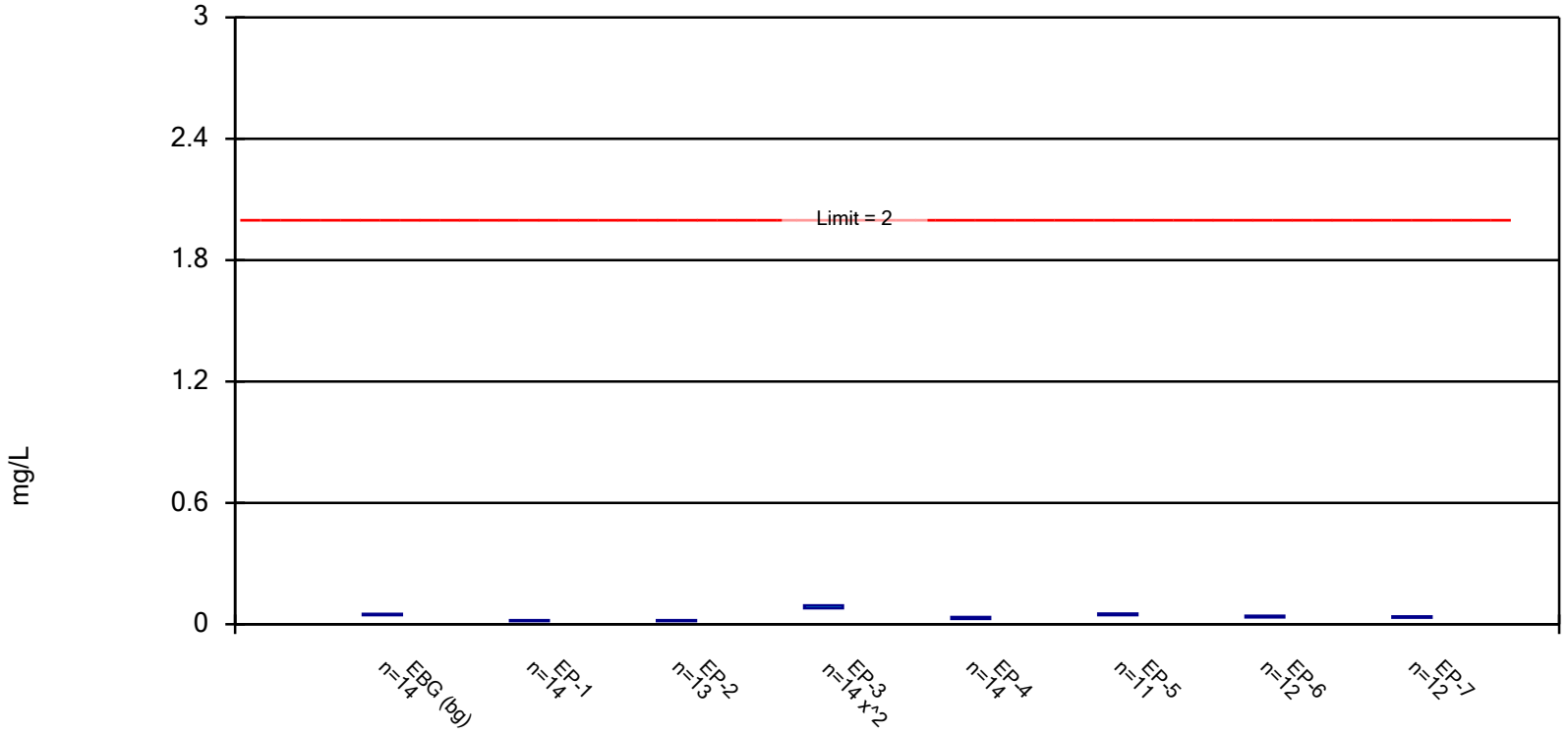


Constituent: Arsenic Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

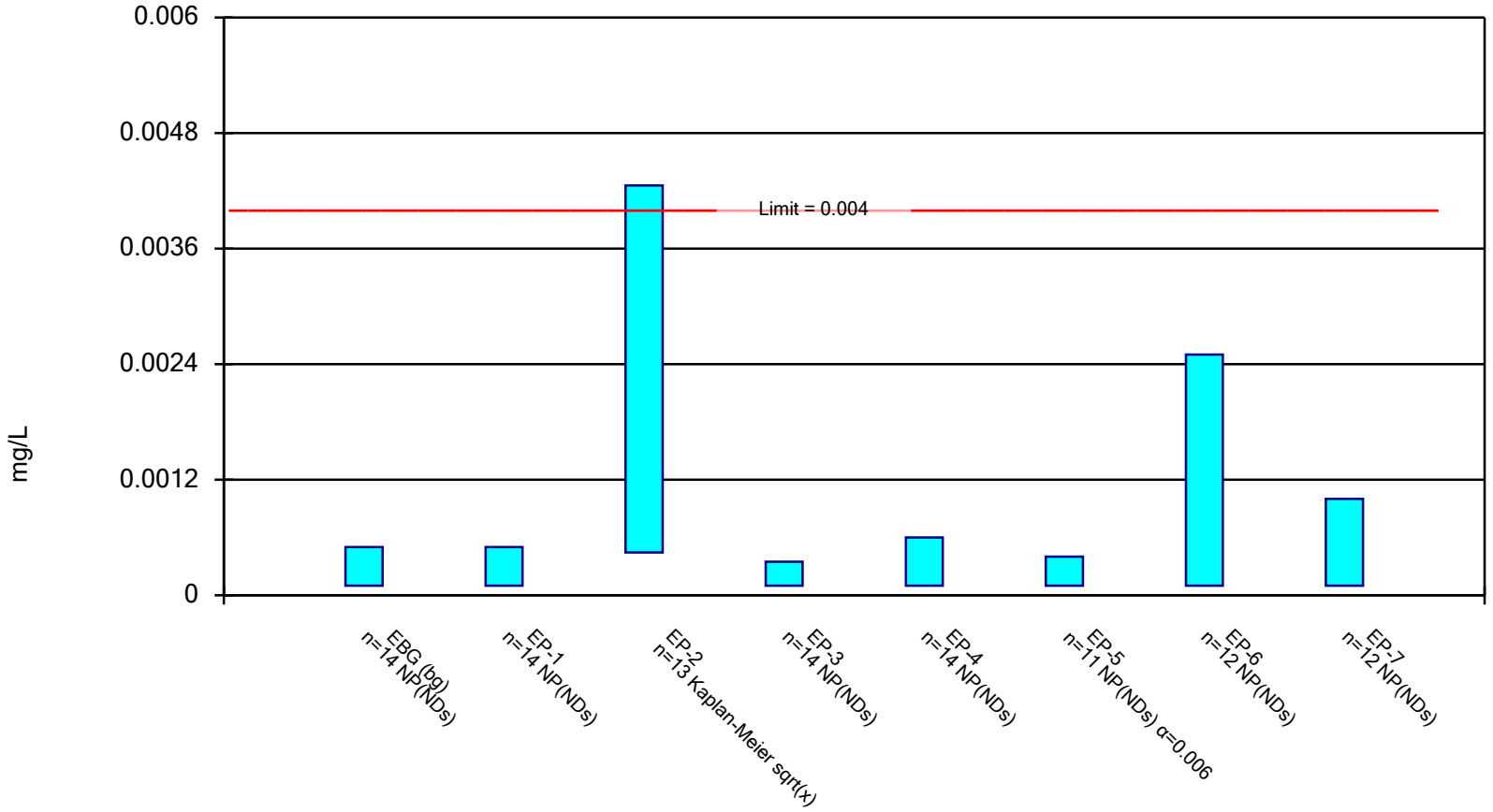


Constituent: Barium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

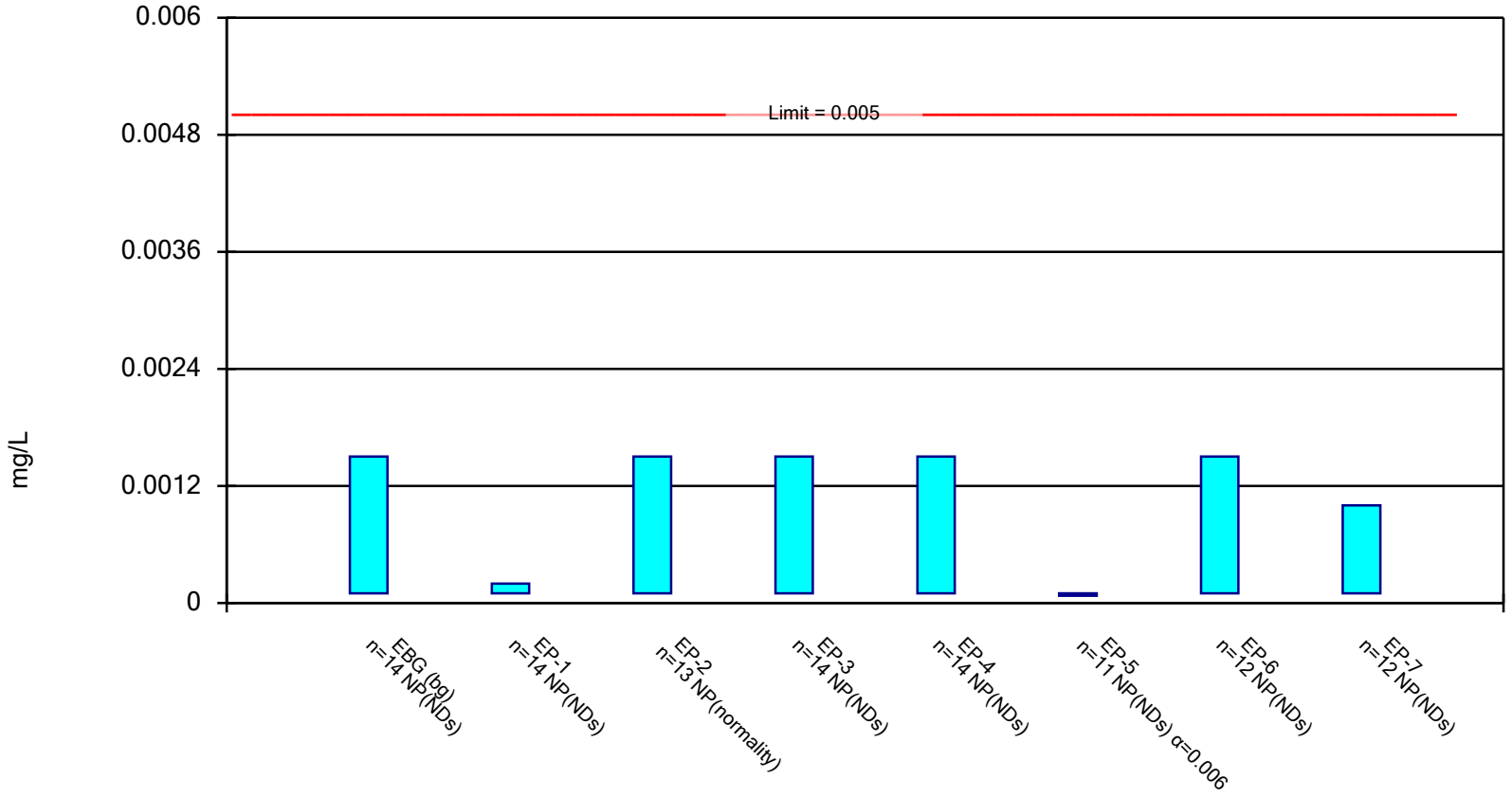


Constituent: Beryllium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

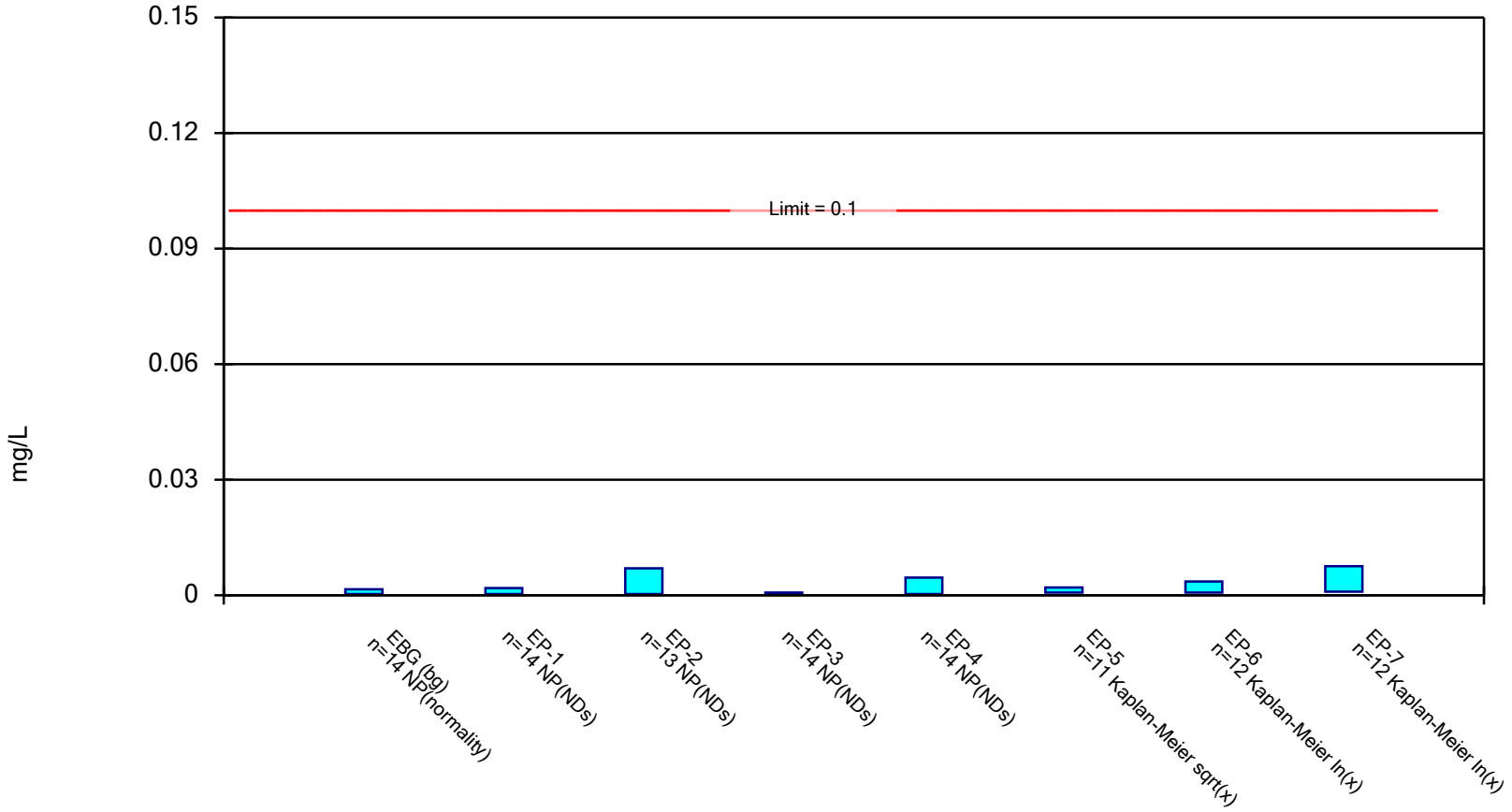


Constituent: Cadmium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

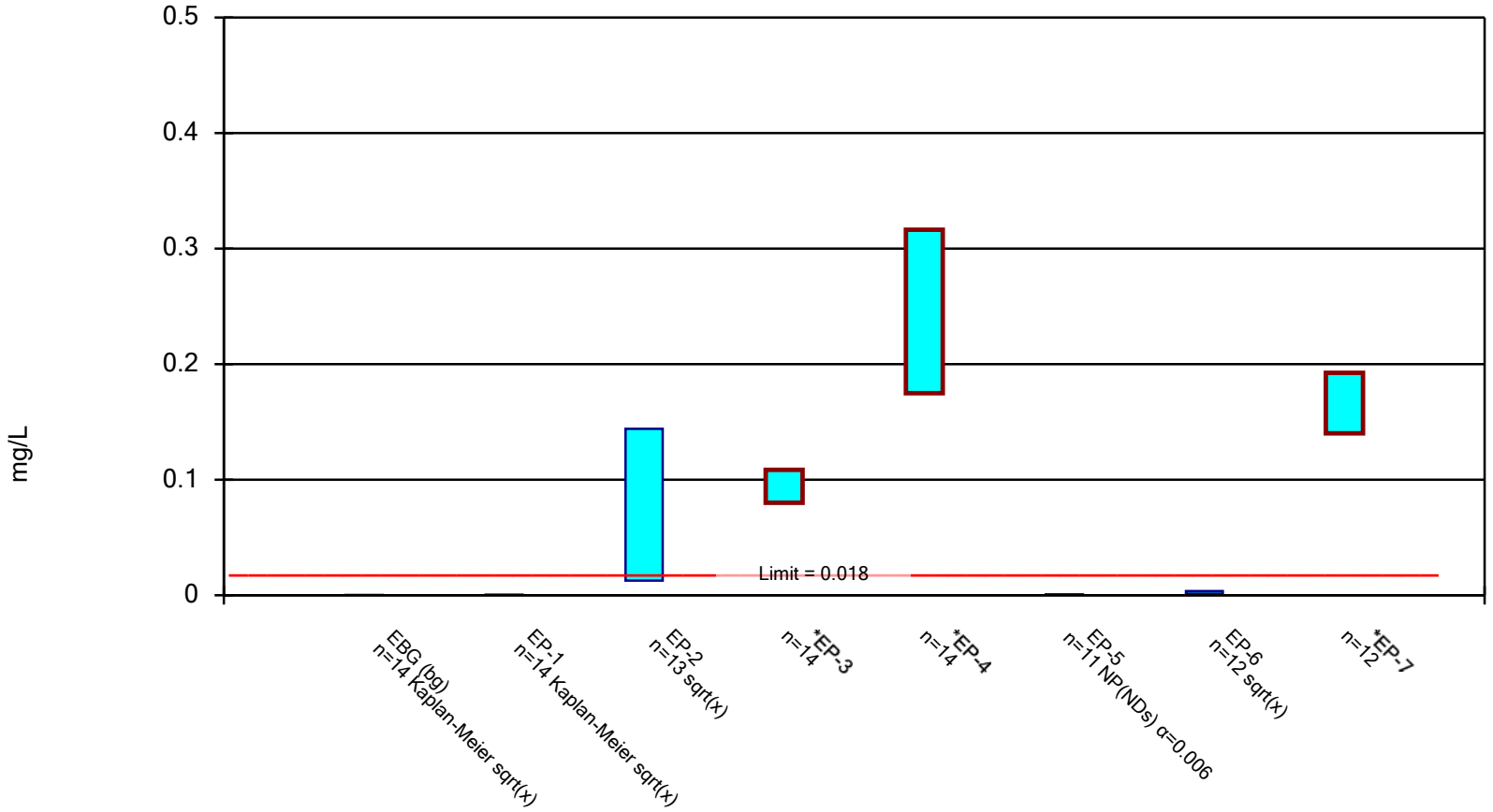


Constituent: Chromium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

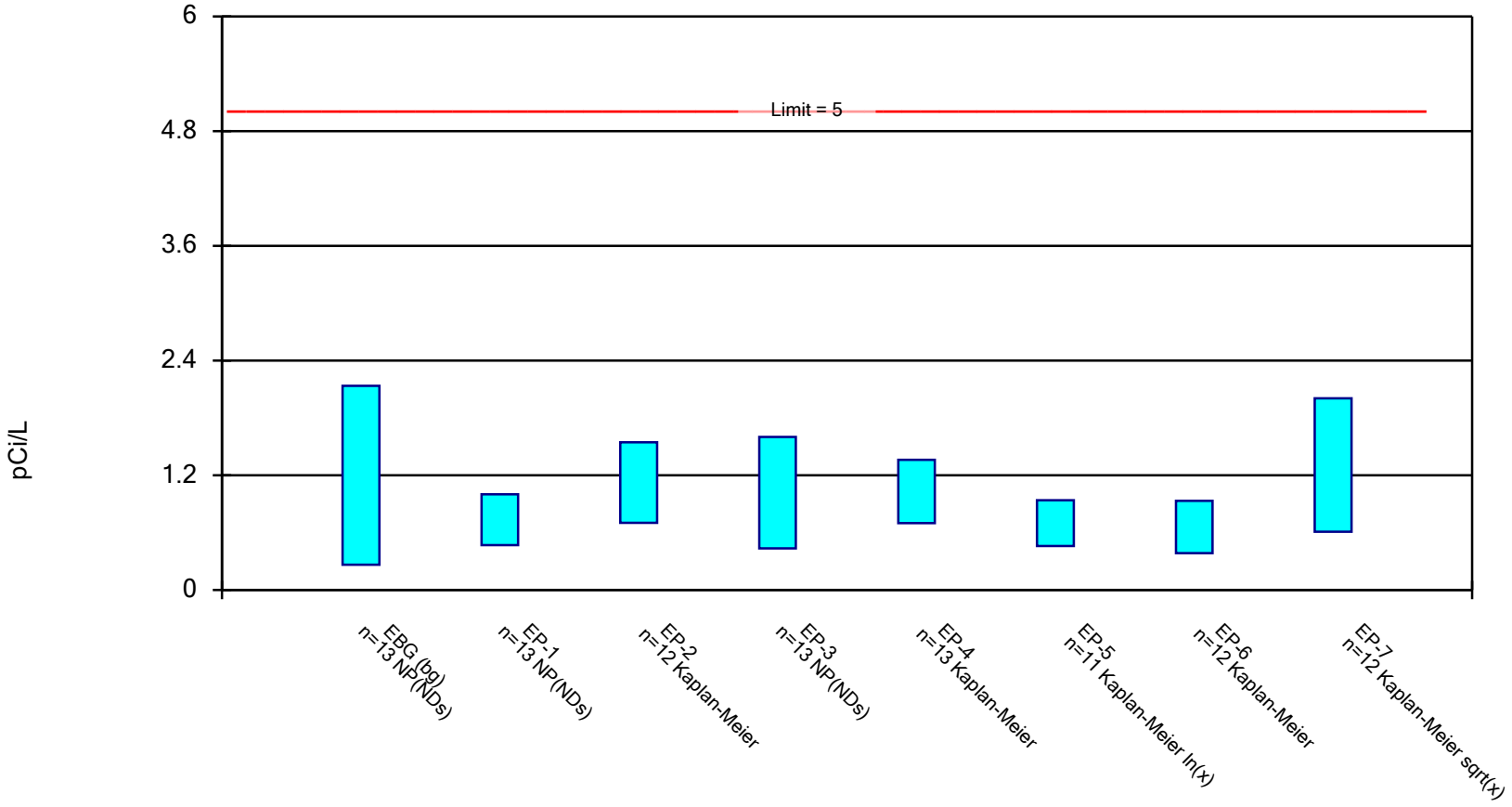


Constituent: Cobalt Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

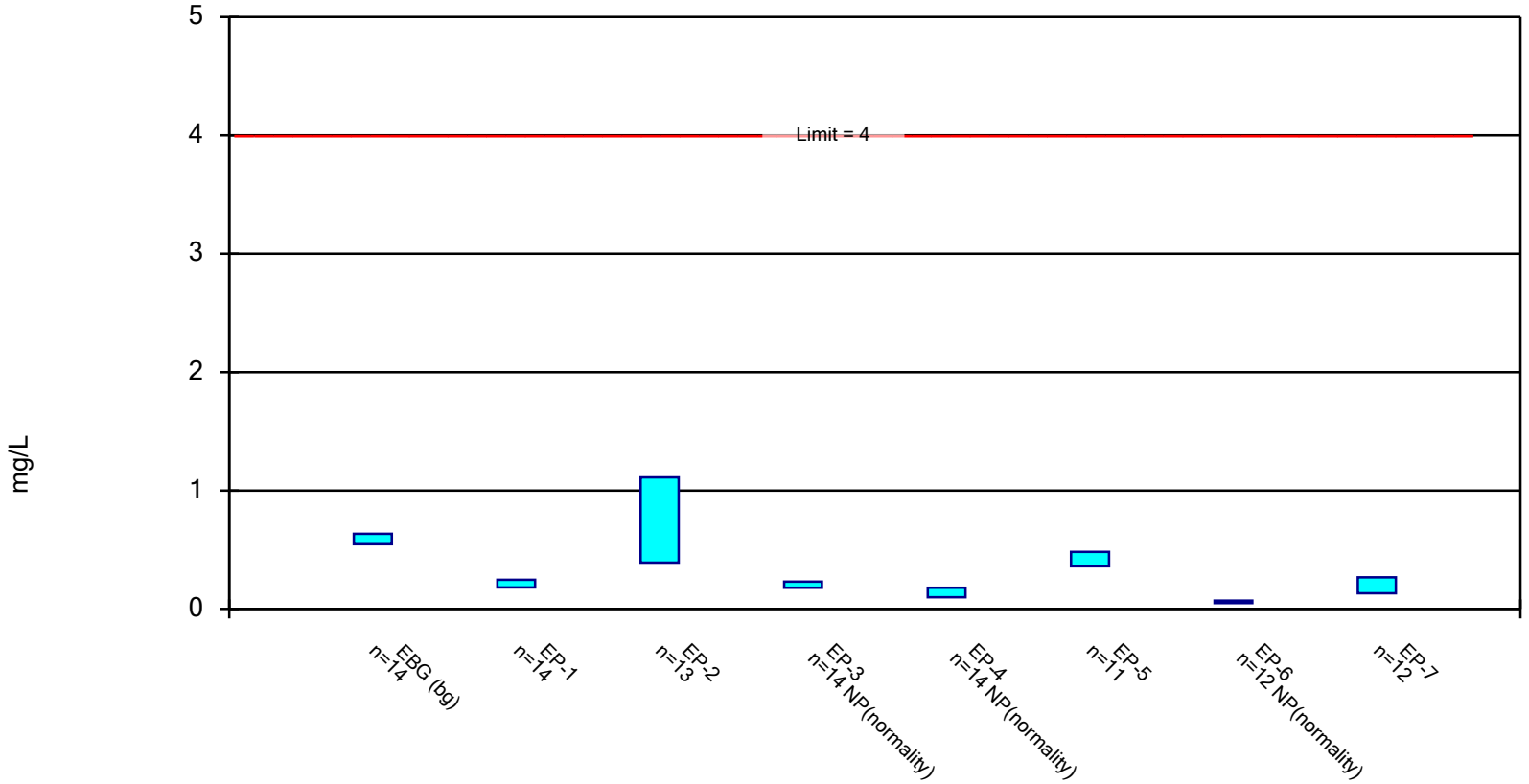


Constituent: Combined Radium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

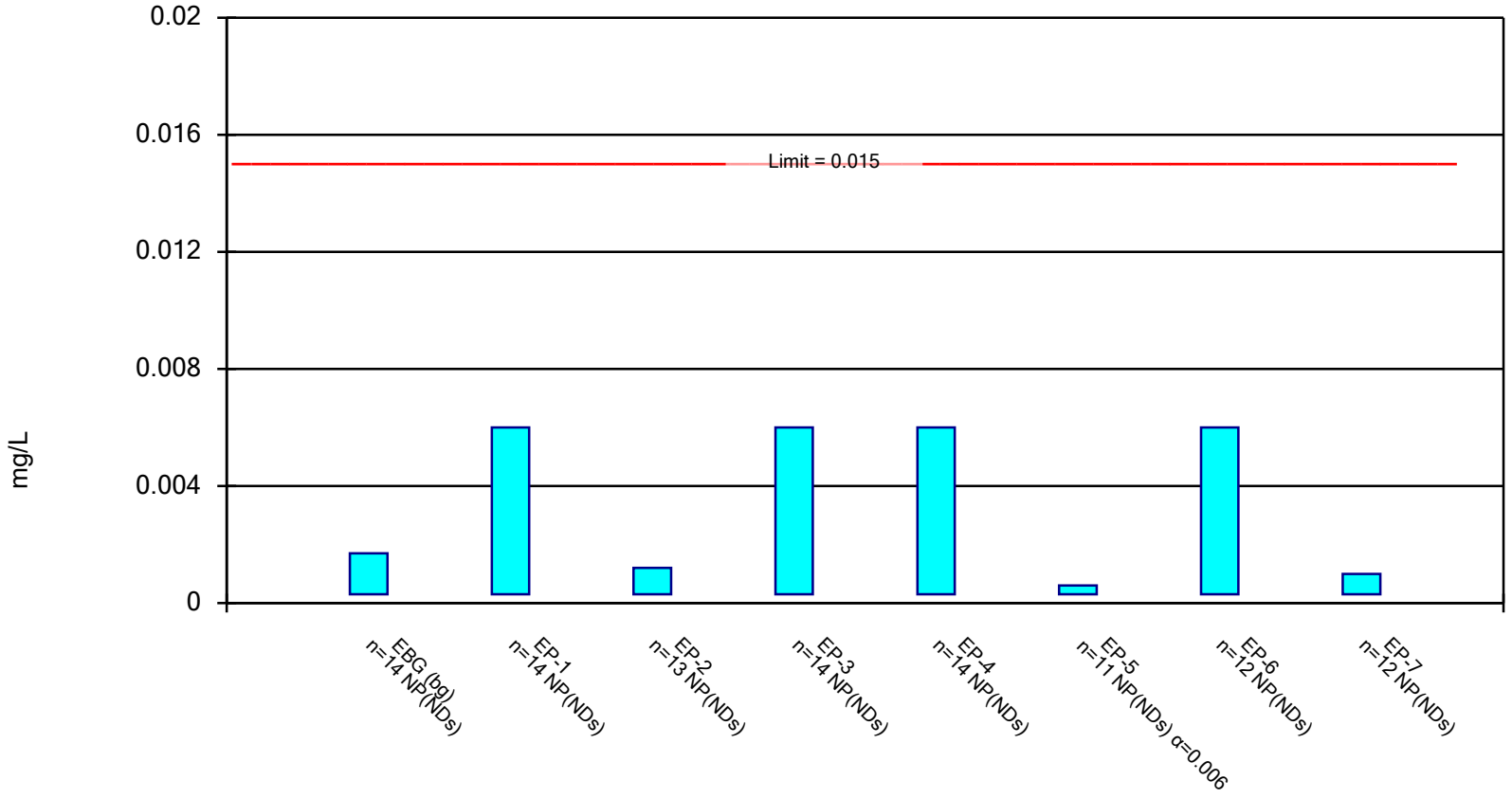


Constituent: Fluoride Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

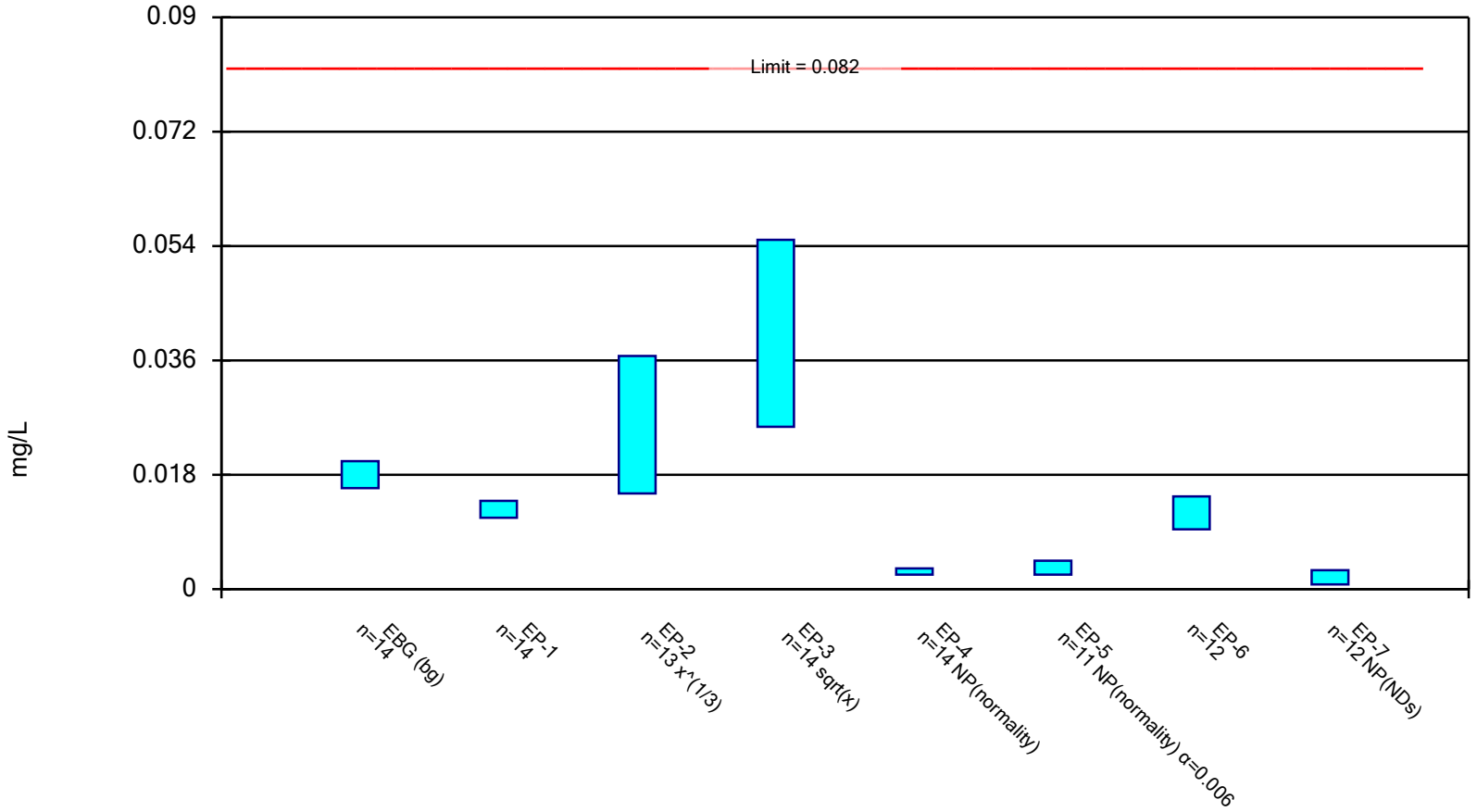


Constituent: Lead Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

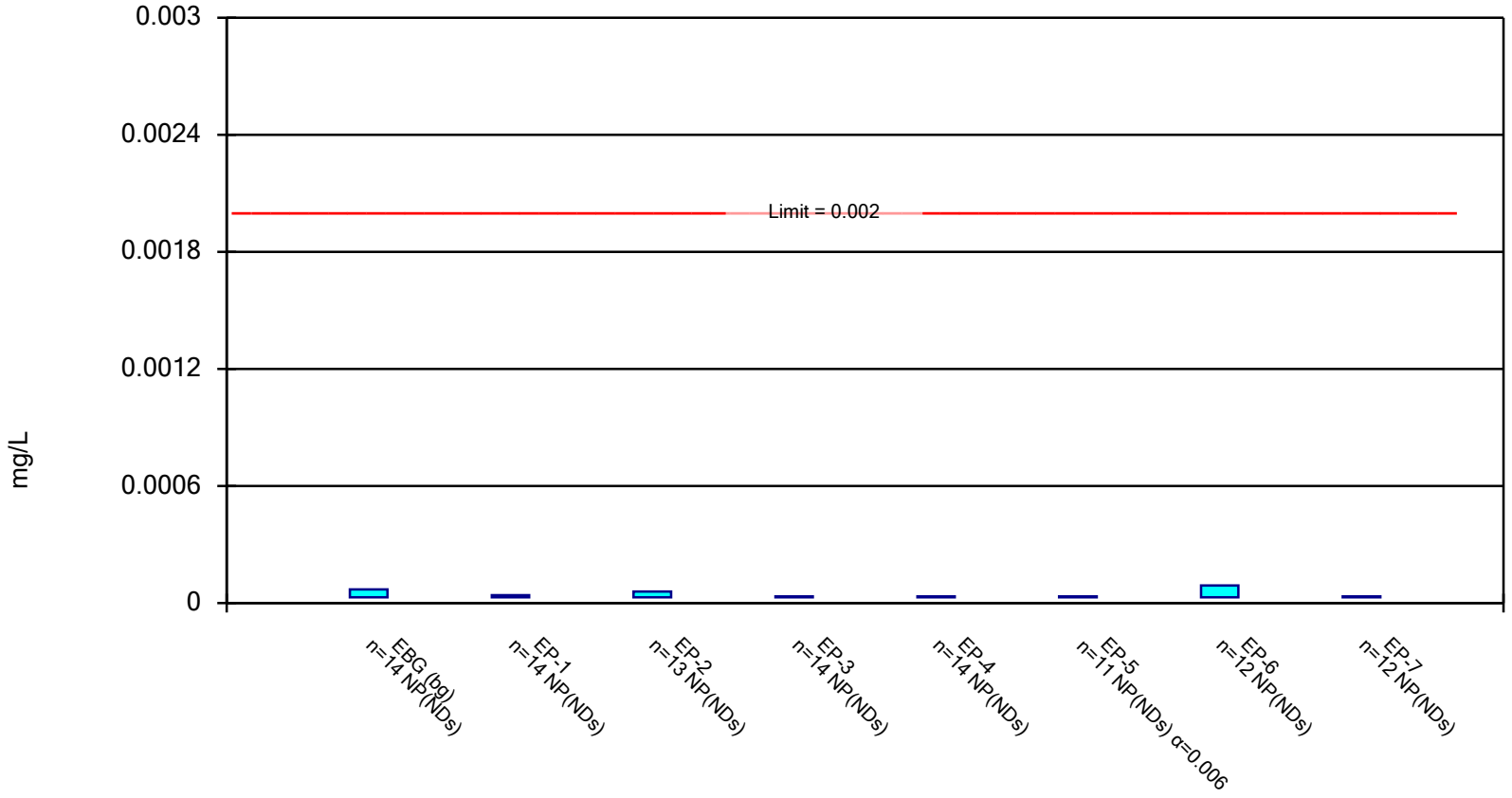


Constituent: Lithium Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

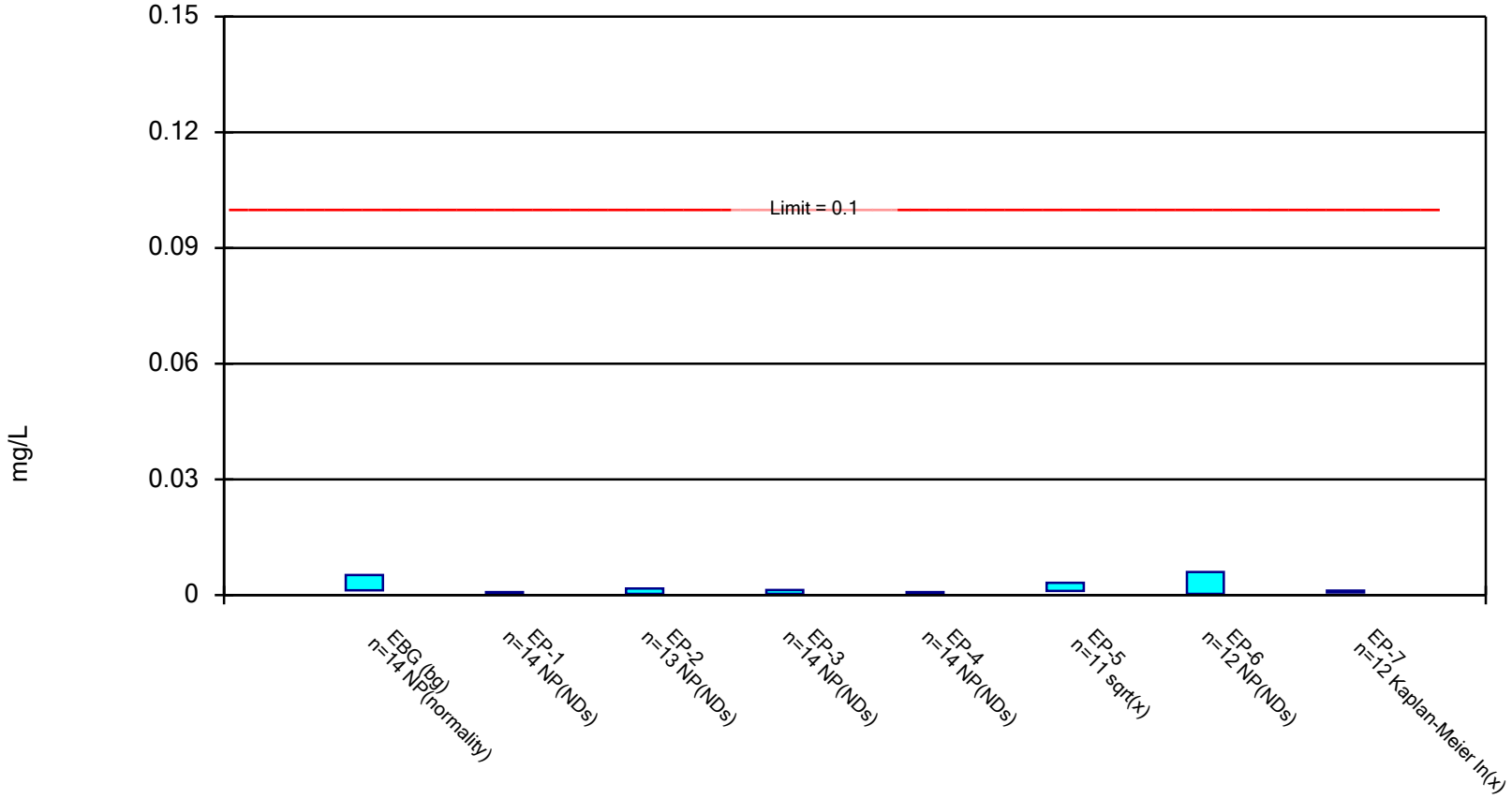


Constituent: Mercury Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

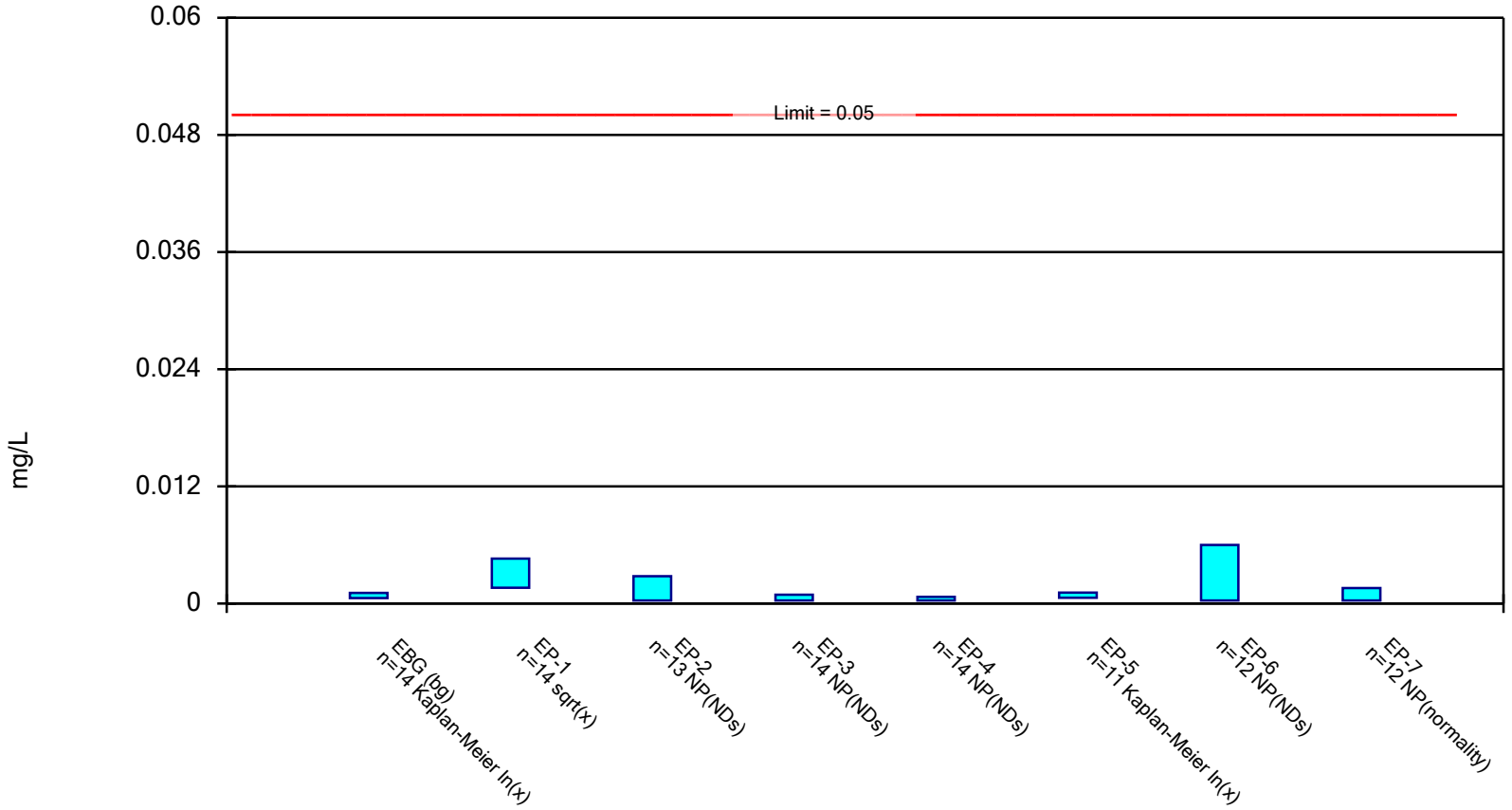


Constituent: Molybdenum Analysis Run 10/17/2024 4:39 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

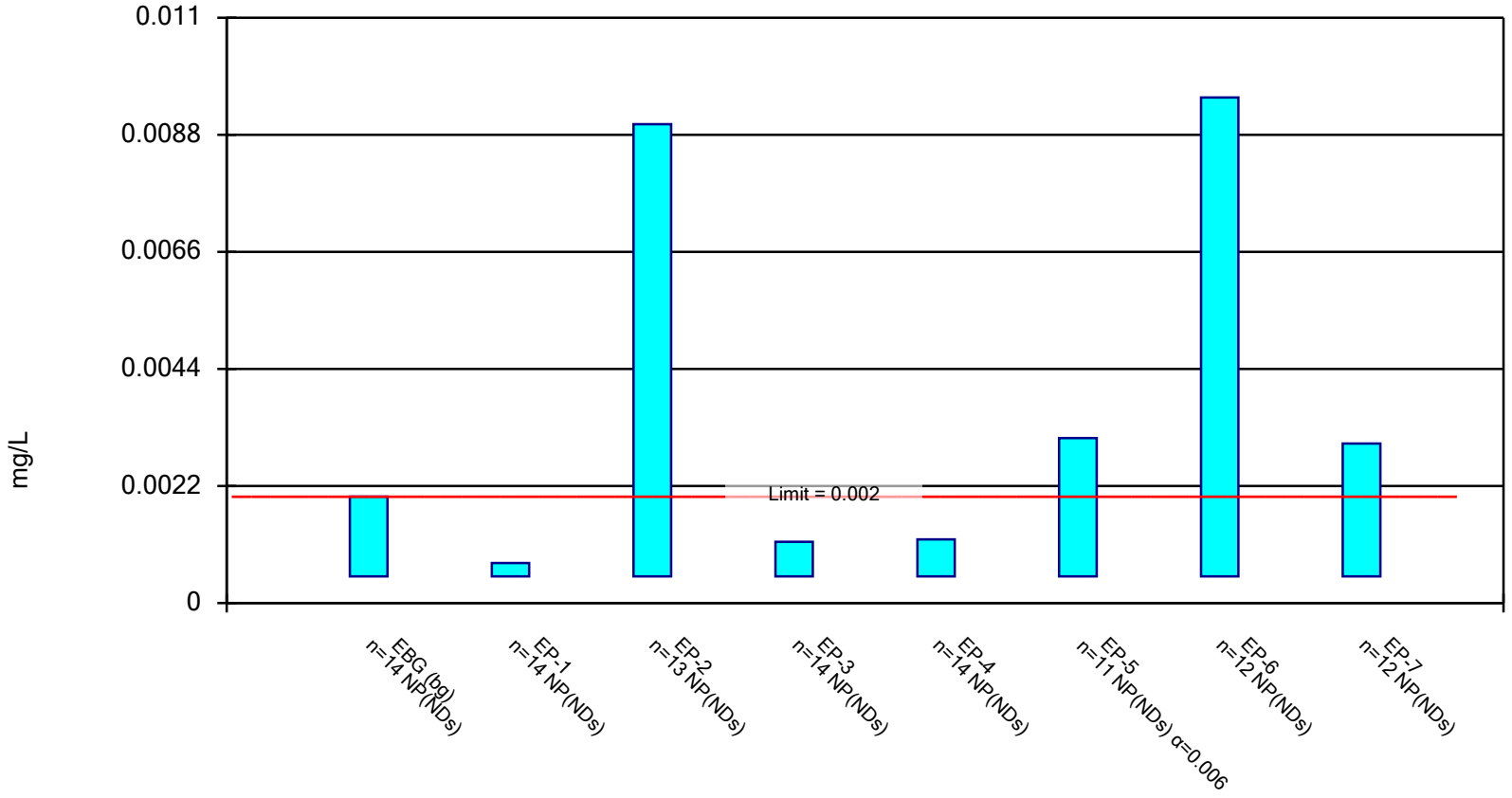


Constituent: Selenium Analysis Run 10/17/2024 4:40 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

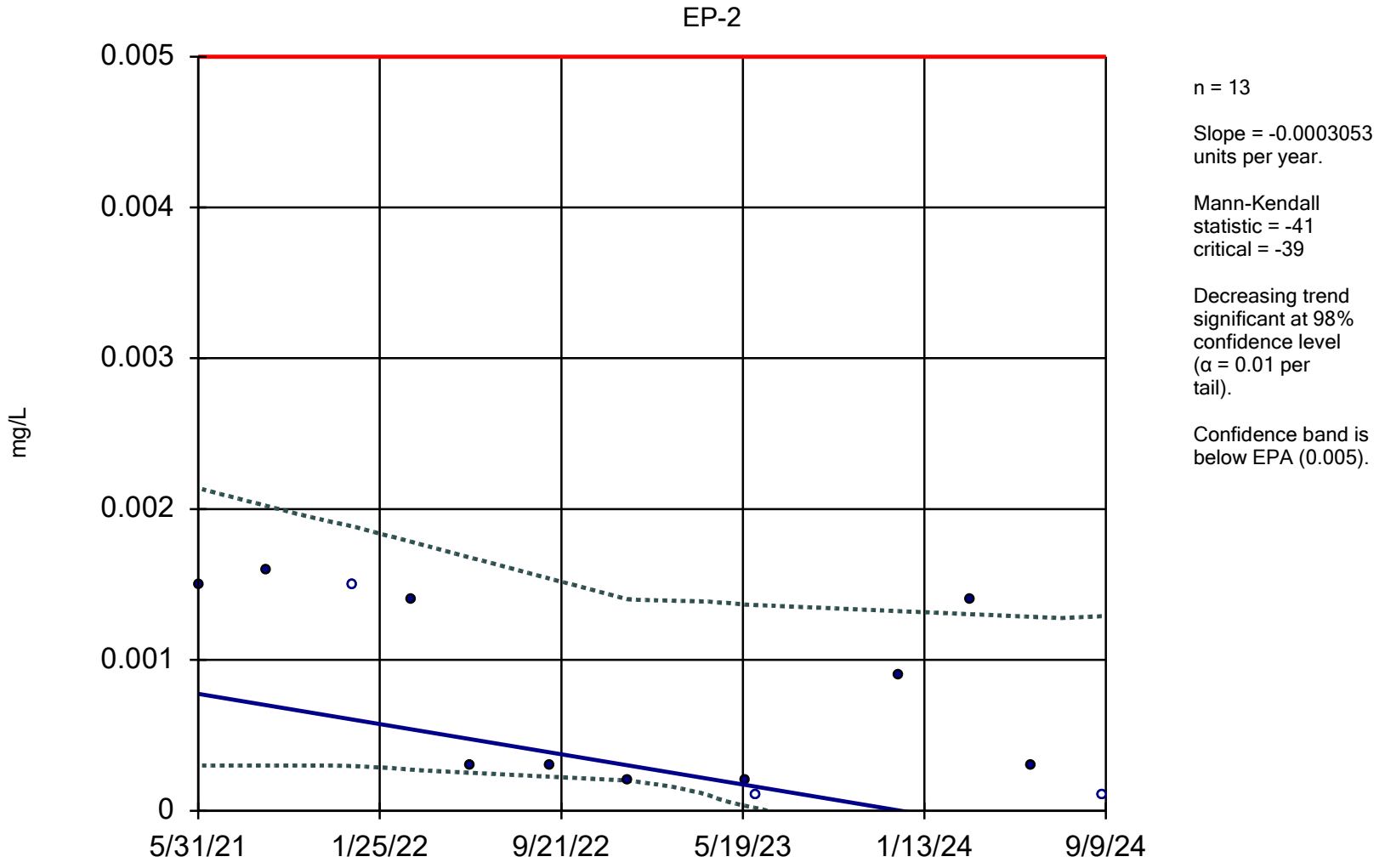


Constituent: Thallium Analysis Run 10/17/2024 4:40 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band

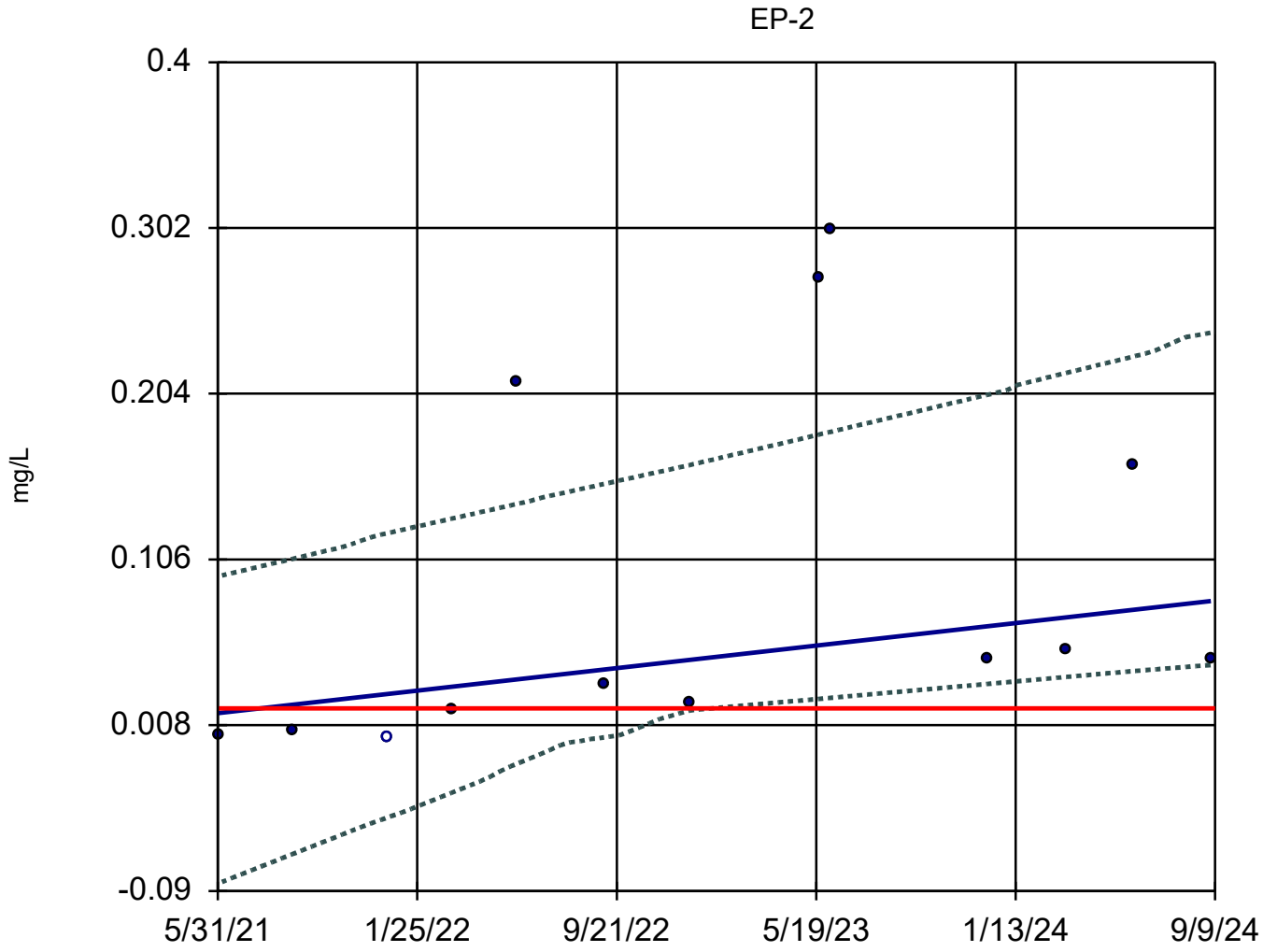


Constituent: Cadmium Analysis Run 10/17/2024 3:56 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 13

Slope = 0.02029 units per year.

Mann-Kendall statistic = 40
critical = 39

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

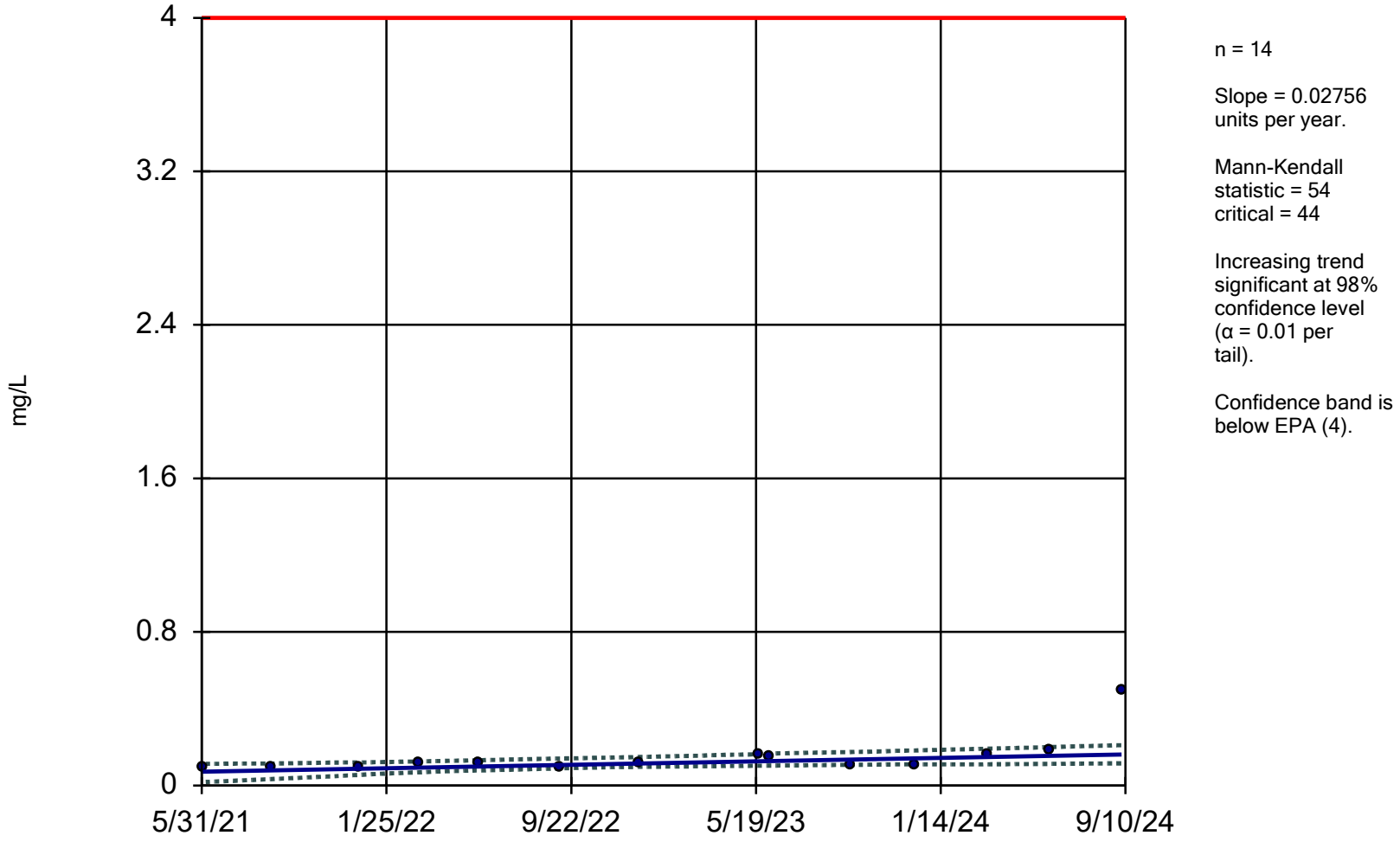
Confidence band intersects EPA (0.018) on 01/22/23.

Constituent: Cobalt Analysis Run 10/17/2024 3:57 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Sen's Slope and 95% Confidence Band

EP-4



n = 14

Slope = 0.02756 units per year.

Mann-Kendall statistic = 54
critical = 44

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

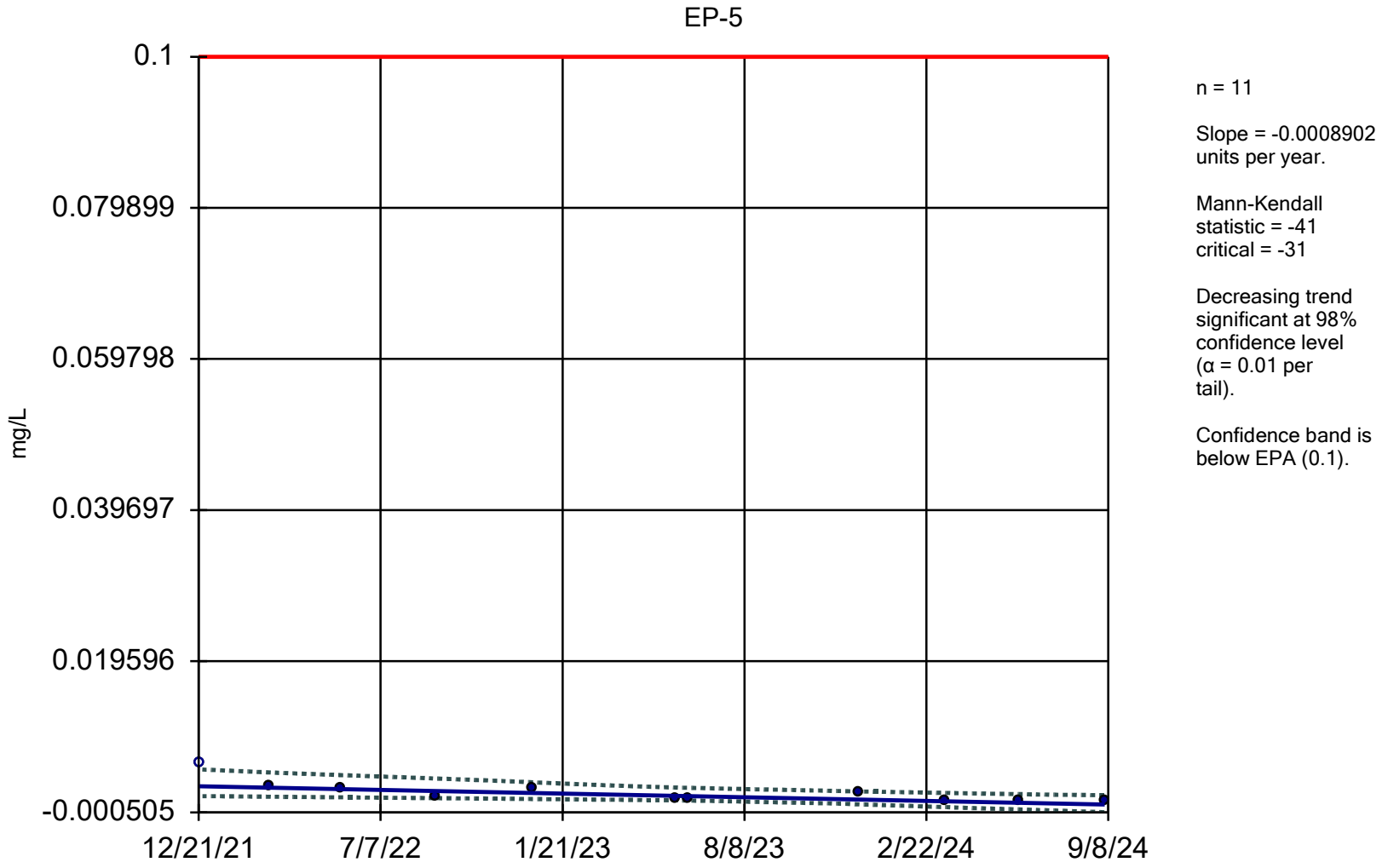
Confidence band is below EPA (4).

Constituent: Fluoride Analysis Run 10/17/2024 3:57 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



n = 11

Slope = -0.0008902 units per year.

Mann-Kendall statistic = -41
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

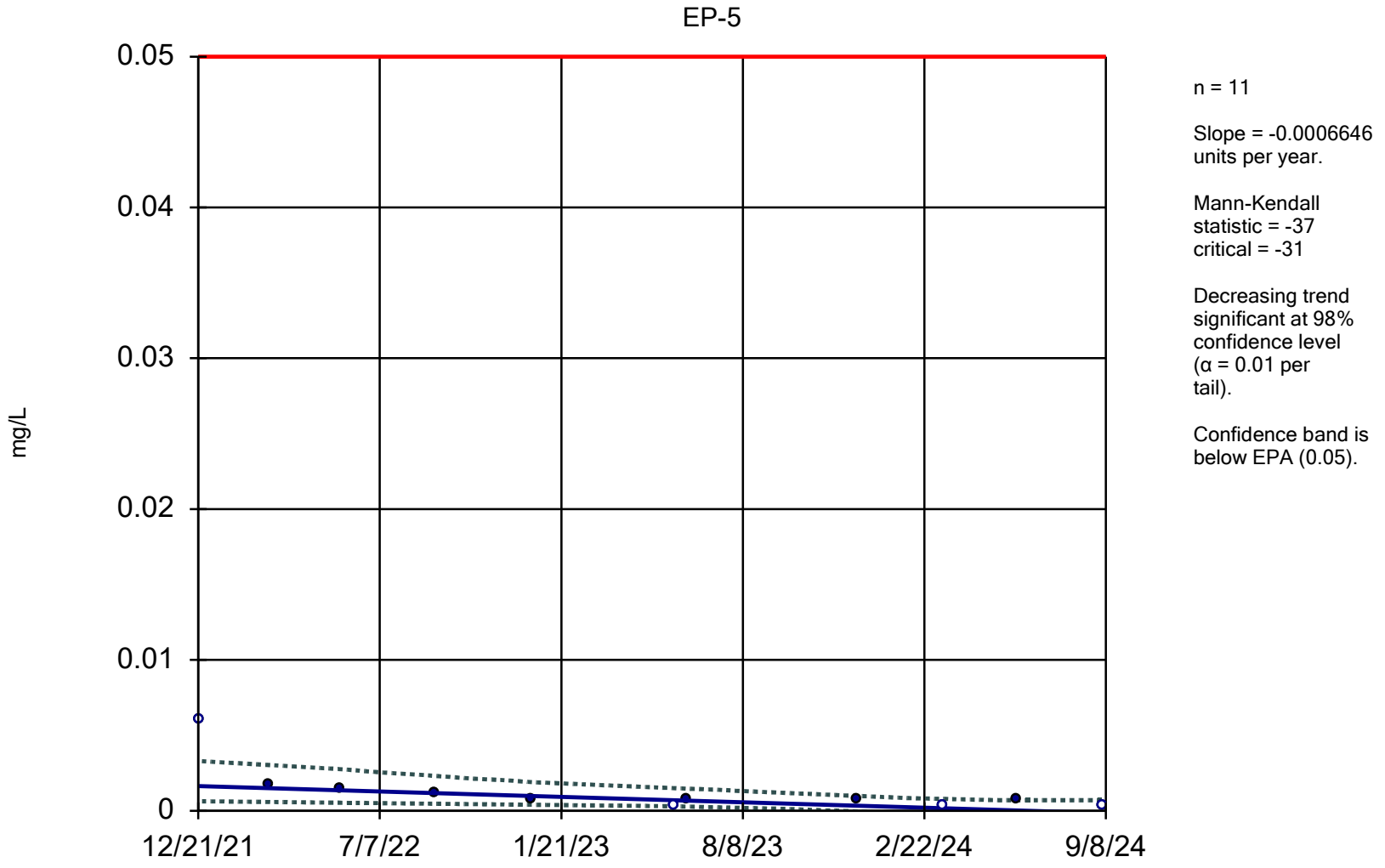
Confidence band is below EPA (0.1).

Constituent: Molybdenum Analysis Run 10/17/2024 3:57 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3

Hollow symbols indicate censored values.

Sen's Slope and 95% Confidence Band



Constituent: Selenium Analysis Run 10/17/2024 3:58 PM

Marion Power Plant Client: SIPC Data: SIPC Statistical Database 2024 Q3