CITY WATER, LIGHT AND POWER
CITY OF SPRINGFIELD, ILLINOIS
MISTY BUSCHER, MAYOR
DOUG BROWN, CHIEF UTILITY ENGINEER

VIA E-MAIL: dierich.andrea@epa.gov

June 13, 2025

Andrea Dierich
EPA Project Officer
US EPA, Region 5
77 W Jackson Blvd
Chicago, IL 60604

RE: Updated Sampling Report
Confirmatory Sampling Report
2023, 2024 and Background Sampling

Dear Ms. Dierich:

Provided herein is the FGDS Development Unit 2 Landfill Updated Sampling Report and Confirmatory Sampling Report in accordance with paragraphs 283 and 284 of the Consent Agreement and Final Order (CAFO) effective January 14, 2025.

City Water, Light and Power (CWLP) agreed to provide to EPA an Updated Sampling Report within 150 days of the effective date of the CAFO and a Confirmatory Sampling Report within 180 days of the effective date of the CAFO covering the time period from October 2023 through 2024 and the 2025 background sampling required by paragraph 278 of the CAFO. The Updated Sampling Report is required to include an updated table with recalculated background concentrations and Groundwater Protection Standards (GWPS) compared to the sampling required by paragraph 278 of the CAFO. The Confirmatory Sampling Report requires the results of confirmatory sampling, a summary table of Statistically Significant Levels (SSLs) and all associated data.

FGDS Unit 2 Landfill 40 CFR 257 Groundwater Monitoring Network

As of February 13, 2025, the FGDS Unit 2 Landfill 40 CFR 257 groundwater monitoring network covered by this combined report consists of upgradient monitoring well R101 and downgradient monitoring wells AW-2, P07D, G121 and G122. Monitoring well P07D was incorporated into the 40 CFR 257 network in August 2024. No analytical data under the 40 CFR 257 program is available for P07D prior to August 2024.

Recalculated Backgrounds and GWPS

CWLP has recalculated backgrounds for Appendix III and Appendix IV parameters using data obtained from upgradient monitoring well R101 over eight consecutive sampling events from October 2023 through April 2025.

For the evaluation of background groundwater monitoring data CWLP has utilized a tolerance or prediction interval procedure as outlined in 40 CFR 257.93(f)(3). The prediction limit for each Appendix III constituent was calculated using the mean, standard deviation, and the appropriate t value. The statistical analysis uses a one-tailed test to determine an upper limit of significance. The upper prediction limit is the concentration for the probability that the constituent can be measured without constituting a statistical increase above the background. Any concentration found below this limit is regarded as falling within the normal statistical population.

The background calculations from the eight consecutive sampling events at R101 are provided in Appendix A. The statistical method for determination of backgrounds as described above was conducted in accordance with Statistical Method for Determination of Backgrounds, Appendix D of the June 2024 Groundwater Monitoring Program. For reference, the Statistical Method for Determination of Backgrounds and Engineer Certification is provided in Appendix A. Laboratory analytical reports for upgradient well R101 used in the calculation of backgrounds are included in Appendix B.

CWLP has established background concentrations for the Appendix III constituents as identified in the table below:

Constituents	**Units**	**Maximum Contaminant Level (MCL), 40 CFR 141.62 and 141.66**	**Background Concentration R101**
pH	S.U.	NA	6.34-7.33
Boron, total	mg/l	NA	0.13375
Calcium, total	mg/l	NA	172.04
Chloride, total	mg/l	NA	114.35
Fluoride, total	mg/l	4	0.5
Sulfate, total	mg/l	NA	279.78
Total Dissolved Solids	mg/l	NA	1024.52

Using the same tolerance or prediction limit interval procedures described above, CWLP has calculated background concentrations for the Appendix IV constituents. The GWPS has been established for the Appendix IV constituents using the greater of either the calculated background concentration or the Maximum Concentration Level (MCL) published in 40 CFR 141.62 and 141.66. MCLs for Cobalt, Lead, Lithium and Molybdenum are based on 40 CFR 257.95(h)(2).. CWLP has established GWPS for the Appendix IV constituents as identified in the table below.

Constituents	Units	Maximum Contaminant Level (MCL), 40 CFR 141.62 and 141.66	Background Concentration R101	Groundwater Protection Standards
Antimony, total	mg/l	0.006	0.001	0.006
Arsenic, total	mg/l	0.01	0.001	0.01
Barium, total	mg/l	2.0	0.06236	2.0
Beryllium, total	mg/l	0.004	0.0005	0.004
Cadmium, total	mg/l	0.005	0.005	0.005
Chromium, total	mg/l	0.100	0.005	0.100
Cobalt, total	mg/l	0.006	0.005	0.006
Fluoride, total	mg/l	4.0	0.500	4.0
Lead, total	mg/l	0.015	0.0075	0.015
Lithium, total	mg/l	0.04	0.0524	0.0524
Mercury, total	mg/l	0.002	0.0002	0.002
Molybdenum, total	mg/l	0.1	0.01	0.1
Selenium, total	mg/l	0.05	0.001	0.05
Thallium, total	mg/l	0.002	0.002	0.002
Radium 226 and 228 combined	pCi/l	5	2.34	5.0

Notes:
1. MCLs for cobalt, lead, lithium and molybdenum based on 40 CFR 257.95(h)(2)
2. The higher of the two values is used for determination of the Groundwater Protection Standard.

Updated Sampling Report

Summary tables for the Appendix III and Appendix IV constituents and laboratory analytical reports covering the period from October 2023 through 2024, as well as the background sampling conducted in 2025 are provided in Appendix B. Each table provides a comparison of the Appendix III and Appendix IV constituents to their respective backgrounds/GWPS. The laboratory reports contain all available information, including available field data sheets, sample well logs and available groundwater sampling stabilization records.

CWLP has retroactively applied the recalculated backgrounds and GWPS to groundwater data from October 2023, all of 2024 and the background sampling conducted in 2025. Per CWLP's Groundwater Monitoring Program, confirmation sampling of Appendix III and/or Appendix IV constituents exhibiting an SSI or SSL may be conducted. If the concentration from the confirmation sampling does not exceed the applicable background/GWPS, no confirmed SSI/SSL is deemed to have occurred. If the concentration from the confirmation sampling exceeds the applicable background/GWPS, then the SSI/SSL is confirmed.

For the Appendix III constituents presented in the tables of Appendix B, a confirmed SSI is identified by bold text and a shaded cell. Similarly, an Appendix IV confirmed SSL is identified by bold text and a shaded cell.

Confirmatory Sampling Report

As agreed to in paragraph 284 of the CAFO, CWLP retroactively applied the recently established backgrounds and GWPS to monitoring data collected in October 2023, 2024 and 2025. Under CWLP's Groundwater Monitoring Program, confirmed SSIs and SSLs were observed during the period covered by the Updated Sampling Report. As such, the April 2025 sampling event qualifies as the confirmatory sampling event for the observed SSIs and SSLs identified in the summary tables of Appendix B. Arsenic is the only Appendix IV constituent exhibiting confirmed SSLs.

CWLP will prepare a post to our federal CCR web site a single notice of SSIs and SSLs including the sampling data and associated well location in addition to a notice of initiation of assessment monitoring.

Should you have any questions or require additional information, please contact me at 217-757-8610 ext. 1110.

Sincerely,

PJ Becker
Environmental Health and Safety Manager

Certification of City Water, Light and Power

City of Springfield, Office of Public Utilities, d/b/a City Water, Light and Power provides the following certification as required by paragraph 300 of the Consent Agreement and Final Order effective January 14, 2025.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____
Name: PJ Becker
Title: Environmental Health and Safety Manager
Date: 6/13/2025

Appendix A

R101 Background Calculations
Statistical Method for Determination of Background
Engineer Certification

R101 Background Calculations

City Water, Light and Power
FGDS Landfill
Background Calculations - Interwell Prediction Limits
40 CFR 257 Appendix III Parameters
Summary

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Distribution [1]	Proposed Interwell Value
R101	Boron, total	ug/L	126	126	128	121	126	125	134	124	Normal Dataset - Standard Prediction Limit Calculations were utilized.	133.75
R101	Calcium, total	mg/L	162	161	147	162	164	159	166	152	Normal Dataset - Standard Prediction Limit Calculations were utilized.	172.04
R101	Chloride, total	mg/L	112	106	108	109	106	98.4	101	103	Normal Dataset - Standard Prediction Limit Calculations were utilized.	114.35
R101	Fluoride, total	mg/L	0.13	0.13	0.12	0.12	< 0.5	< 0.5	< 0.5	< 0.5	[2] Data set failed the Shapiro-Wilk Normality Test. The proposed interwell value will be set at the current reporting limit.	0.50
R101	pH	s.u.	6.81	6.91	6.92	6.54	6.55	7.07	7.03	6.86	Normal Dataset - Standard Prediction Limit Calculations were utilized.	6.34 - 7.33
R101	Sulfate, total	mg/L	271	275	252	268	265	254	263	256	Normal Dataset - Standard Prediction Limit Calculations were utilized.	279.78
R101	Total Dissolved Solids	mg/L	840	830	700	834	905	940	888	956	Normal Dataset - Standard Prediction Limit Calculations were utilized.	1024.52

Notes:
1. Shapiro-Wilk method was utilized to determine whether the data set follows a normal distribution.
2. Due to the change in laboratory reporting limit, the current reporting limit is set as the prediction limit.

City Water, Light and Power

FGDS Landfill

Background Calculations - Interwell Prediction Limits

40 CFR 257 Appendix III Parameters

Outlier Analysis

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Number of Samples	Mean	Standard Deviation [s]	Critical Values
R101	Boron, total	ug/L	126	126	128	121	126	125	134	124	8	126.25	3.73210014	2.221
R101	Calcium, total	mg/L	162	161	147	162	164	159	166	152	8	159.125	6.42400632	2.221
R101	Chloride, total	mg/L	112	106	108	109	106	98.4	101	103	8	105.425	4.44192687	2.221
R101	pH	s.u.	6.81	6.91	6.92	6.54	6.55	7.07	7.03	6.86	8	6.83625	0.19841785	2.221
R101	Sulfate, total	mg/L	271	275	252	268	265	254	263	256	8	263	8.34950811	2.221
R101	Total Dissolved Solids	mg/L	840	830	700	834	905	940	888	956	8	861.625	81.0466136	2.221

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025
R101	Boron, total	ug/L	-0.066986	-0.066986	0.4689049	-1.406715	-0.066986	-0.334932	2.0765788	-0.602878
R101	Calcium, total	mg/L	0.44754	0.2918739	-1.887451	0.44754	0.7588722	-0.019458	1.0702044	-1.109121
R101	Chloride, total	mg/L	1.4802135	0.1294483	0.5797034	0.8048309	0.1294483	-1.581521	-0.996189	-0.545934
R101	pH	s.u.	-0.132297	0.3716904	0.422089	-1.493061	-1.442663	1.1780694	0.9764747	0.1196969
R101	Sulfate, total	mg/L	0.9581403	1.4372104	-1.317443	0.5988377	0.2395351	-1.077908	0	-0.838373
R101	Total Dissolved Solids	mg/L	-0.266822	-0.390208	-1.994223	-0.340853	0.5351858	0.9670361	0.32543	1.1644533

Notes:

1. Outlier method presented above is outlined in ASTM paper E178-75 (Grubb's Test).
2. No outliers are observed.

City Water, Light and Power

FGDS Landfill

Background Calculations - Interwell Prediction Limits

40 CFR 257 Appendix III Parameters

Non-Detect Percentage Analysis

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Number of Samples	Number of ND's	% ND	ND Treatment
R101	Boron, total	ug/L	126	126	128	121	126	125	134	124	8	0	0%	NO ADJ
R101	Calcium, total	mg/L	162	161	147	162	164	159	166	152	8	0	0%	NO ADJ
R101	Chloride, total	mg/L	112	106	108	109	106	98.4	101	103	8	0	0%	NO ADJ
R101	pH	s.u.	6.81	6.91	6.92	6.54	6.55	7.07	7.03	6.86	8	0	0%	NO ADJ
R101	Sulfate, total	mg/L	271	275	252	268	265	254	263	256	8	0	0%	NO ADJ
R101	Total Dissolved Solids	mg/L	840	830	700	834	905	940	888	956	8	0	0%	NO ADJ

Notes:

** Due to the change in laboratory reporting limit, the current reporting limit is set as the prediction limit.

1. For data sets that do not include non-detect values, no adjustment to the mean and standard deviation are required prior to calculating the prediction limit.
2. For data sets that contain less than 15% non-detect values, one-half (1/2) the reported PQL is substituted for the non-detect value.
3. For data sets that contain 15% to 50% non-detect values, adjustments to the mean and standard deviation (SD) are required by utilizing Cohen's Adjustment or Kaplan-Meier. Kaplan-Meier is used when more than one reporting limit or PQL is observed within the dataset.
4. For data sets that contain greater than 50%, but not 100% non-detect values, the highest recorded concentration is utilized as the prediction limit. The exception is when the current reporting limit is greater than the highest detection.
5. The laboratory reporting limit or PQL is utilized as the Prediction Limit for datasets which contain 100% non-detects.

City Water, Light and Power

FGDS Landfill

Background Calculations - Interwell Prediction Limits

40 CFR 257 Appendix III Parameters

Prediction Limit x + st[1+(1/n)]^*½

Prediction Limit Calculation

Confidence Leve 95%

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	ND Treatment	Mean [x]	Standard Deviation [s]	Number of Samples	T Value [t]	Prediction Limit	
R101	Boron, total	ug/L	126	126	128	121	126	125	134	124	NO ADJ	126.25	3.73	8	1.895	133.7513	
R101	Calcium, total	mg/L	162	161	147	162	164	159	166	152	NO ADJ	159.125	6.42	8	1.895	172.0369	
R101	Chloride, total	mg/L	112	106	108	109	106	98.4	101	103	NO ADJ	105.425	4.44	8	1.895	114.3531	
R101	pH	s.u.	6.81	6.91	6.92	6.54	6.55	7.07	7.03	6.86	NO ADJ	6.83625	0.20	8	2.365	6.3385	7.3340
R101	Sulfate, total	mg/L	271	275	252	268	265	254	263	256	NO ADJ	263	8.35	8	1.895	279.7821	
R101	Total Dissolved Solids	mg/L	840	830	700	834	905	940	888	956	NO ADJ	861.625	81.05	8	1.895	1024.5247	

City Water, Light and Power
FGDS Landfill
Background Calculations - Interwell Prediction Limits
40 CFR 257 Appendix IV Parameters
Summary

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Distribution[1]	Proposed Interwell Value
R101	Antimony, total	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	100% NDs - Interwell value set at the laboratory PQL	1
R101	Arsenic, total	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	100% NDs - Interwell value set at the laboratory PQL	1
R101	Barium, total	ug/L	62.1	30.2	20.9	35	34.2	8.6	25.4	10.1	Normal Dataset - Calculate Interwell Prediction Limit	62.36
R101	Beryllium, total	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	100% NDs - Interwell value set at the laboratory PQL	0.5
R101	Cadmium, total	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	100% NDs - Interwell value set at the laboratory PQL	2
R101	Chromium, total	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	100% NDs - Interwell value set at the laboratory PQL	5
R101	Cobalt, total	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	100% NDs - Interwell value set at the laboratory PQL	5
R101	Lead, total	ug/L	< 0.015	< 15	< 15	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	100% NDs - Interwell value set at the laboratory PQL	7.5
R101	Lithium	mg/L	0.0524	0.0139	< 0.05	0.0188	0.0167	0.0135	0.015	0.0156	Failed Shapiro Wilks - Interwell value set at the highest detected value.	0.0524
R101	Mercury, total	ug/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	100% NDs - Interwell value set at the laboratory PQL	0.2
R101	Molybdenum, total	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	100% NDs - Interwell value set at the laboratory PQL	10
R101	Radium-226	pCi/L	0.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1	[2] Data set failed the Shapiro-Wilk Normality Test. The proposed interwell value will be set at the current reporting limit.	1
R101	Radium-228	pCi/L	0.62	< 1	< 1	1.34	< 1	< 1	< 1	< 1	> 50% NDs - Interwell value set at the highest detected value.	1.34
R101	Radium-226 & 228	pCi/L	0.65	2	2	2.34	2	2	2	2	Combined Radium 226 and 228 are the sum of the isotopes (< 1 + 1.34)	2.34
R101	Selenium, total	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	100% NDs - Interwell value set at the laboratory PQL	1
R101	Thallium, total	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	100% NDs - Interwell value set at the laboratory PQL	2

Notes:

1. Shapiro-Wilk method was utilized to determine whether the data set follows a normal distribution.
2. Due to the change in laboratory reporting limit, the current reporting limit is set as the prediction limit.

City Water, Light and Power
FGDS Landfill
Background Calculations - Interwell Prediction Limits
40 CFR 257 Appendix IV Parameters
Outlier Analysis

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Number of Samples	Mean	Standard Deviation [s]	Critical Values
R101	Barium, total	ug/L	62.1	30.2	20.9	35	34.2	8.6	25.4	10.1	8	28.3125	16.937907	2.221

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025
R101	Barium, total	ug/L	1.994786	0.111436	-0.43763	0.394824	0.347593	-1.16381	-0.17195	-1.07525

Notes:
1. Outlier method presented above is outlined in ASTM paper E178-75 (Grubb's Test).

City Water, Light and Power

FGDS Landfill

Background Calculations - Interwell Prediction Limits

40 CFR 257 Appendix IV Parameters

Non-Detect Percentage Analysis

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	Number of Samples	Number of ND's	% ND	ND Treatment
R101	Barium, total	ug/L	62.1	30.2	20.9	35	34.2	8.6	25.4	10.1	8	0	0%	NO ADJ

Notes:

1. For datasets that do not include non-detected values, no adjustment to the mean and standard deviation are required prior to calculating the prediction limit.
2. For datasets that contain less than 15% non-detect values, one-half (1/2) the reported PQL is substituted for the non-detect value.
3. For datasets that contain 15% to 50% non-detect values, adjustments to the mean and standard deviation (SD) are required by utilizing Cohen's Adjustment or Kaplan-Meier. Kaplan-Meier is used when more than one reporting limit or PQL is observed within the dataset.
4. For data sets that contain greater than 50%, but not 100% non-detect values, the highest recorded concentration is utilized as the prediction limit. The exception is when the current reporting limit is greater than the highest detection.

City Water, Light and Power
FGDS Landfill
Background Calculations - Interwell Prediction Limits
40 CFR 257 Appendix IV Parameters
Prediction Limit Calculation

Prediction Limit = x + st[1+(1/n)]^*½
Confidence Level = 95%

Well	Parameter	Units	10/25/2023	02/23/2024	05/13/2024	08/12/2024	11/11/2024	02/21/2025	03/18/2025	04/24/2025	ND Treatment	Mean [x]	Standard Deviation [s]	Number of Samples	T Value [t]	Prediction Limit
R101	Barium, total	ug/L	62.1	30.2	20.9	35	34.2	8.6	25.4	10.1	NO ADJ	28.3125	16.9379	8	1.895	62.3569

Statistical Method for Determination of Background
Engineer Certification

Statistical Analysis Plan - Method for Determination of Background Concentrations

1. Introduction

The US Environmental Protection Agency (EPA) published the final rule for the management of Coal Combustion Residuals (CCR) on April 17, 2015. The CCR rule is formally promulgated in the U.S. Code of Federal Regulations, Title 40, Parts 257 and 261 (EPA, 2015) along with amendments to the rule published in July, 2018 (EPA, 2018) and August, 2020 (EPA, 2020).

This rule is applicable to the CCR units owned and operated by City Water, Light and Power (CWLP). These CCR units and are located north and east of the former Lakeside Power Generating Station and Dallman Power Generating Station in the Eastern ½ of Section 12, Township 15 North, Range 5 West, in Springfield, Illinois (see Figure 1).

Pursuant to the 40 CFR §257.90(b)(1), a groundwater sampling and analysis program must be developed in accordance with 40 CFR, §257.93. The program must address the selection of statistical methods, and the selected statistical method(s) must be certified by a Qualified Professional Engineer.

This Statistical Analysis Plan (Plan) describes the method(s) to be used in identifying a statistically significant increase (SSI) over the upgradient or background groundwater quality. This plan is included as Appendix C of the Groundwater Monitoring Program. The Groundwater Monitoring Program contains additional information on the site-specific hydrogeology, groundwater monitoring system, sampling and analysis procedures, and reporting requirements.

2. Statistical Method

The statistical methods will evaluate if a statistically significant increase (SSI) of contaminant concentrations has occurred in groundwater samples when comparing a compliance monitoring sample analytical result with background (baseline) groundwater analytical results.

The chosen statistical methods will be in compliance with 40 CFR 257.93 and the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (EPA, March 2009). The primary software that will be used to conduct the statistical evaluations is the U.S.EPA's ProUCL (v. 5.2) software package. ProUCL was developed for analysis of environmental data sets with and without non-detect (ND) observations. ProUCL is a comprehensive statistical software package with statistical methods and graphical tools to address many environmental sampling and statistical issues.

The requirements for statistical analysis of groundwater quality data collected under the CCR Rule are given in 40 CFR 257.93(f)-(h). The owner or operator of a CCR unit must select one of the statistical methods specified in the Section to evaluate the groundwater data. The methods include:

1. A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures;
2. An ANOVA based on ranks followed by multiple comparisons procedures to identify significant evidence of contamination;
3. A tolerance or prediction interval procedure;
4. A control chart approach that gives control limits for each constituent; or
5. Another statistical test method that meets the performance standards specified by the CCR rule.

As groundwater monitoring progresses, the use of the selected statistical method will be subject to ongoing review. CWLP reserves the right to use other statistical tests in place of, or in addition to, the methods specified in this Plan if such methods are better suited for analysis of future results. Additionally, the methods in this Plan have been developed in accordance with the requirements of the CCR rule as published on April 17, 2015 (EPA, 2015), and as amended, and modifications to this Plan may occur if further revisions or amendments are made to the CCR rule. If test methods are changed this work plan will be revised, as appropriate, and its certification updated.

3. Statistical Analysis

Using the Unified Guidance and ProUCL, a preliminary statistical analysis was performed on the eight rounds of baseline groundwater quality data to assess the background constituent data and determine the most appropriate statistical method(s) for data analysis and comparisons. The following sections present a summary of the statistical analyses methodology.

3.1. Data Distribution Testing

The pooled background data for each parameter were tested using statistical software (ProUCL v.5.2) to determine the underlying data distribution (normal, lognormal, or unknown/no discernable distribution). Data distribution testing was conducted using the Shapiro-Wilks test test for datasets with less than or equal to 50 values. The data distribution tests were conducted at a 95 percent significance level.

If data were found to be normally or lognormally (test of lognormal transformed data) distributed at a 95 percent significance level, and the data contain less than or equal to 50 percent non-detects, parametric statistical methods are applied. If data were found to be not normally or lognormally distributed (unknown or no discernable distribution), or the data contain greater less than 50 percent non-detects non-parametric statistical methods are applied.

3.2. Outlier Testing

Prior to statistical analyses the background dataset was pooled and parameter was screened for the existence of outliers using the Grubbs test. Outliers are defined as data points that vary significantly from the mean value for that data set. Outliers may represent sampling error, contamination from surface run-off, analytical laboratory error, or anomalous site conditions. Outliers, if not removed from the data set, can erroneously increase the calculated background value and minimize the occurrence of an

exceedances related to a release from a waste unit. Once a statistical outlier has been identified, the concentrations are evaluated to determine the cause. If a valid reason has been determined for the outlier, the data point will be removed from the data set. If no specific reason can be documented, the point will be considered representative and included in the analysis.

3.3. Handling of Non-Detects (NDs)

Non-detect values (NDs) were handled according to the percentage of on-detects (%ND) present in the background sampling. The %ND was calculated for each parameter from the pooled background data of each well set. The data treatment was done according to the following criteria:

a) For under 0% NDs, no adjustment is made to the values in the data set.

b) For under 15% NDs, the value of one-half (½) the reported Detection Limit (DL) was substituted for the ND value, and the mean and standard deviation were calculated using detected values with the substituted ND values.

c) For 15-50% NDs, Cohen's Adjustment was used to adjust the mean and standard deviation. The adjusted mean and standard deviation was then used to calculate the prediction limit.

d) For over 50% but not 100% NDs, the highest recorded concentration was substituted for the prediction limit.

e) For 100% NDs, the Practical Quantitation Limit (PQL) will be substituted for the ND value. The mean and standard deviation was calculated using the substituted ND values.

3.4. Tolerance or Prediction Interval Procedure

The prediction limit for each parameter was calculated using the mean, standard deviation, and the appropriate t value. The statistical analysis uses a one-tailed test to determine an upper limit of significance. The upper prediction limit is the concentration for the probability that the constituent can be measured without constituting a statistical increase above the background. Any concentration found below this limit is regarded as falling within the normal statistical population.

3.5. Prediction Limit

The statistical procedure was conducted according to the following steps:

a) Calculate arithmetic mean - the arithmetic mean was calculated using the pooled data for each parameter.

   The arithmetic mean (X_b) was calculated using the following equation:

$$X_b = \frac{X_1 + X_2 + ... + X_n}{n}$$

where: X_b = Average background value
X_n = Individual background value for *n* sample
n = Number of background values

b) Calculate standard deviation - the standard deviation was calculated using the pooled data for each parameter.

The standard deviation was calculated using the following equation:

$$S_b = \sqrt{\frac{(X_1 - X_b) + (X_2 - X_b) + ... + (X_n - X_b)}{n - 1}}$$

where: S_b = Population standard deviation
X_n = Individual background value for *n* sample
X_b = Mean (1)
n = Number of background samples

c) Calculate the Upper Prediction Limit - the Upper Prediction Limit was calculated for each parameter using the mean (1), the standard deviation (2), the number of background samples, and the Student's t value.

The Student's t value σ, is determined by the facility permit whether it is $\sigma = 0.05$ (95% Confidence). The Student's t value also varies upon the number of background samples utilized in the calculations. For those parameters with 15% to 50%% NDs, the Cohen Method was utilized to calculate the Prediction Limit. The methodology described in the Unified Guidance was used to calculate the Cohen Prediction Limit. The Upper Prediction Limit for the remaining parameters was calculated using the following equation:

$$PL = X_b \pm S_b \bullet t \bullet \sqrt{1 + \frac{1}{n}}$$

where: PL = Upper Prediction Limit (Upper and Lower for pH)
X_b = Mean (1)
S_b = Standard Deviation (2)
t = Student's t value at 0.05 significance
n = Number of background samples

4. References

1. Andrews Engineering, Inc., 2024. Groundwater Monitoring Program, City Water, Light and Power, CCR Ash Impoundments, Springfield, Illinois.

2. Code of Federal Regulations (CFR), Title 40: Protection of the Environment. Part 257: Criteria for Classification of Solid Waste Disposal Facilities and Practices. Subpart D: Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments.

3. USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance. EPA 530/R-09-007. March 2009.

4. USEPA. 2022. ProUCL: Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations. Version 5.2. https://www.epa.gov/land-research/proucl-software.

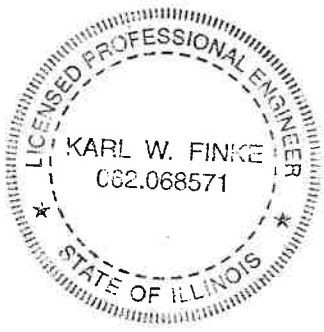
Professional Engineer Certification – Statistical Analysis Plan

40 CFR § 257.93(f)(6) Statistical Method Certification

In accordance with Title 40 Code of Federal Regulations (40 CFR) Part 257, Subpart D, Section 257.93(f)(6), the owner or operator of a coal combustion residual (CCR) unit must obtain a certification from a qualified professional engineer that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area.

This certification is based on the description of the statistical methods selected to evaluate groundwater as presented in the Statistical Analysis Plan, prepared for City Water, Light, and Power, and dated February 6, 2024. The procedures described in the plan will be used to establish background conditions and implement detection, assessment, and corrective action monitoring as necessary and required by 40 CFR §257.93-257.95. The Statistical Analysis Plan was prepared in accordance with the requirements of 40 CFR §257.93, with reference to the acceptable statistical procedures provided in USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (March 2009), and is intended to provide a logical process and framework for conducting the statistical analysis of the data obtained during groundwater monitoring. In accordance with 40 CFR §257.93(f), the statistical method chosen for analysis of groundwater monitoring data will initially be the prediction interval procedure or control chart approach for each Appendix III constituent, and either the tolerance interval or the prediction interval procedure for each Appendix IV constituent at this CCR unit per 40 CFR §257.93(f)(3), in which the interval is established from the background data and compared to the level of each Appendix III constituent in each compliance well, or a confidence interval for each Appendix IV constituent in each compliance well.

I, Karl W. Finke, a qualified professional engineer in good standing in the State of Illinois, certify that the statistical methods described in this document, as supported by the Statistical Analysis Plan in the facility's Operating Record, are appropriate for evaluating the groundwater monitoring data for the CCR management area.



Signature: Karl Finke

Illinois L.P.E. No: 062.068571

Date: 06/27/24

Appendix B

Appendix III and Appendix IV Analytical Summary Tables
Laboratory Analytical Reports by Sampling Date

Appendix III and Appendix IV Summary Tables

CITY WATER LIGHT AND POWER

FGDS Unit 2 Landfill Groundwater Monitoring Program

Well	Appendix III	Units	40 CFR 257 MCL	Background	257 GWPS	10/26/23	2/23/24	5/13/2024	8/12/24	11/11/24	2/21/25	3/18/25	4/24/25
R101	pH	S.U.	NA	6.34-7.33	6.34-7.33	6.81	6.91	6.92	6.54	6.55	7.07	7.03	6.86
AW2	pH	S.U.	NA	6.34-7.33	6.34-7.33	6.89	6.71	6.83	6.65	6.73	7.05	7.01	6.81
P07D	pH	S.U.	NA	6.34-7.33	6.34-7.33				6.7	6.64	6.78	6.84	6.7
G121	pH	S.U.	NA	6.34-7.33	6.34-7.33	6.83	6.62	6.76	6.9	6.75	6.95	7	6.65
G122	pH	S.U.	NA	6.34-7.33	6.34-7.33	6.7	6.56	6.64	6.8	6.64	6.75	6.76	6.54
R101	Boron	mg/l	NA	0.13375	0.13375	0.126	0.126	0.128	0.121	0.126	0.125	0.13375	0.124
AW2	Boron	mg/l	NA	0.13375	0.13375	**2.92**	**2.79**	**2.71**	**2.99**	**2.46**	**1.48**	**1.9**	**1.77**
P07D	Boron	mg/l	NA	0.13375	0.13375				**5.95**	**5.4**	**5.26**	**5.65**	**5.22**
G121	Boron	mg/l	NA	0.13375	0.13375	**3.09**	**3.3**	**3.48**	**3.04**	**3.68**	**3.54**	**3.05**	**3.65**
G122	Boron	mg/l	NA	0.13375	0.13375	**12**	**11.3**	**12.7**	**10.8**	**11.7**	**10.3**	**10.9**	**12**
R101	Calcium	mg/l	NA	172.04	172.04	162	161	147	162	164	159	166	152
AW2	Calcium	mg/l	NA	172.04	172.04	151	150	139	152	144	111	128	115
P07D	Calcium	mg/l	NA	172.04	172.04				**205**	**189**	**179**	**195**	**175**
G121	Calcium	mg/l	NA	172.04	172.04	**180**	**189**	**188**	164	**191**	169	**186**	**173**
G122	Calcium	mg/l	NA	172.04	172.04	**252**	**251**	**260**	**225**	**246**	**220**	**250**	**241**
R101	Chloride	mg/l	NA	114.35	114.35	112	106	108	109	106	98.4	101	103
AW2	Chloride	mg/l	NA	114.35	114.35	32	31	32	34	25.7	19.5	21.2	21.2
P07D	Chloride	mg/l	NA	114.35	114.35				37	32.2	31.4	31.7	31.9
G121	Chloride	mg/l	NA	114.35	114.35	31	30	32	30	29	28	28.8	28.1
G122	Chloride	mg/l	NA	114.35	114.35	40	40	41	39	37.6	35	34.5	36.4
R101	Fluoride	mg/l	4	0.5	4	0.13	0.13	0.12	0.12	<0.5	<0.5	<0.5	<0.5
AW2	Fluoride	mg/l	4	0.5	4	0.13	0.12	0.12	0.12	<0.5	<0.5	<0.5	<0.5
P07D	Fluoride	mg/l	4	0.5	4				0.1	<0.5	<0.5	<0.5	<0.5
G121	Fluoride	mg/l	4	0.5	4	0.18	0.17	0.17	0.17	<0.5	<0.5	<0.5	<0.5
G122	Fluoride	mg/l	4	0.5	4	0.16	0.13	0.15	0.14	<0.5	<0.5	<0.5	<0.5
R101	Sulfate	mg/l	NA	279.78	279.78	271	275	252	268	265	254	263	256
AW2	Sulfate	mg/l	NA	279.78	279.78	163	155	130	153	99.2	53.7	66.1	65.8
P07D	Sulfate	mg/l	NA	279.78	279.78				**332**	**305**	287	**298**	283
G121	Sulfate	mg/l	NA	279.78	279.78	**293**	**290**	**337**	260	**311**	**314**	**281**	**310**
G122	Sulfate	mg/l	NA	279.78	279.78	**554**	**532**	**588**	**523**	**547**	**510**	**499**	**537**
R101	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	840	830	700	834	905	940	888	956
AW2	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	850	760	715	774	795	588	632	650
P07D	Total Dissolved Solids	mg/l	NA	1024.52	1024.52				1090	1020	990	990	1160
G121	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	1040	1000	990	936	**1040**	**1240**	**1710**	**1240**
G122	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	**1470**	**1270**	**1350**	**1380**	**1360**	**1320**	**2000**	**1200**

An Appendix III confirmed SSI is indicated in bold text and shaded cell

CITY WATER LIGHT AND POWER

FGDS Unit 2 Landfill Groundwater Monitoring Program

Well	Appendix IV	Units	40 CFR 257 MCL	Background	257 GWPS	10/26/23	2/23/24	5/13/2024	8/12/24	11/11/24	2/21/25	3/18/25	4/24/25
R101	Antimony	mg/l	0.006	0.001	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AW2	Antimony	mg/l	0.006	0.001	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
P07D	Antimony	mg/l	0.006	0.001	0.006				<0.001	<0.001	<0.001	<0.001	<0.001
G121	Antimony	mg/l	0.006	0.001	0.006	<0.001	<0.001	<0.001	0.0087	<0.001	<0.001	<0.001	<0.001
G122	Antimony	mg/l	0.006	0.001	0.006	<0.001	<0.001	<0.001	0.0029	<0.001	<0.001	<0.001	<0.001
R101	Arsenic	mg/l	0.01	0.001	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AW2	Arsenic	mg/l	0.01	0.001	0.01	**0.0266**	**0.0235**	**0.0219**	**0.018**	**0.013**	0.0017	0.0012	0.0014
P07D	Arsenic	mg/l	0.01	0.001	0.01				**0.0394**	**0.036**	**0.0276**	**0.0292**	**0.0262**
G121	Arsenic	mg/l	0.01	0.001	0.01	**0.0221**	**0.0173**	**0.015**	0.0084	**0.016**	**0.0169**	<0.001	**0.0145**
G122	Arsenic	mg/l	0.01	0.001	0.01	0.0046	0.0028	0.0042	0.0019	0.0029	0.001	0.0016	0.0032
R101	Barium	mg/l	2	0.06236	2	0.0621	0.0302	0.0209	0.035	0.0342	0.0086	0.0254	0.0101
AW2	Barium	mg/l	2	0.06236	2	0.629	0.626	0.663	0.644	0.516	0.283	0.316	0.299
P07D	Barium	mg/l	2	0.06236	2				1	0.857	0.913	0.943	0.847
G121	Barium	mg/l	2	0.06236	2	0.527	0.555	0.582	0.5	0.626	0.56	0.274	0.573
G122	Barium	mg/l	2	0.06236	2	0.396	0.474	0.494	0.497	0.468	0.22	0.524	0.491
R101	Beryllium	mg/l	0.004	0.0005	0.004	<0.0005	<000005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
AW2	Beryllium	mg/l	0.004	0.0005	0.004	<0.0005	<000005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
P07D	Beryllium	mg/l	0.004	0.0005	0.004				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
G121	Beryllium	mg/l	0.004	0.0005	0.004	<0.0005	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
G122	Beryllium	mg/l	0.004	0.0005	0.004	<0.0005	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
R101	Cadmium	mg/l	0.005	0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
AW2	Cadmium	mg/l	0.005	0.002	0.005	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
P07D	Cadmium	mg/l	0.005	0.002	0.005				<0.002	<0.002	<0.002	<0.002	<0.002
G121	Cadmium	mg/l	0.005	0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
G122	Cadmium	mg/l	0.005	0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
R101	Chromium	mg/l	0.1	0.005	0.1	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
AW2	Chromium	mg/l	0.1	0.005	0.1	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P07D	Chromium	mg/l	0.1	0.005	0.1				<0.005	<0.005	<0.005	<0.005	<0.005
G121	Chromium	mg/l	0.1	0.005	0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G122	Chromium	mg/l	0.1	0.005	0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
R101	Cobalt	mg/l	0.006	0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
AW2	Cobalt	mg/l	0.006	0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P07D	Cobalt	mg/l	0.006	0.005	0.006				<0.005	<0.005	<0.005	<0.005	<0.005
G121	Cobalt	mg/l	0.006	0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G122	Cobalt	mg/l	0.006	0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
R101	Fluoride	mg/l	4	0.5	4	0.13	0.13	0.12	0.12	<0.5	<0.5	<0.5	<0.5
AW2	Fluoride	mg/l	4	0.5	4	0.13	0.12	0.12	0.12	<0.5	<0.5	<0.5	<0.5
P07D	Fluoride	mg/l	4	0.5	4				0.1	<0.5	<0.5	<0.5	<0.5
G121	Fluoride	mg/l	4	0.5	4	0.18	0.17	0.17	0.17	<0.5	<0.5	<0.5	<0.5
G122	Fluoride	mg/l	4	0.5	4	0.16	0.13	0.15	0.14	<0.5	<0.5	<0.5	<0.5

CITY WATER LIGHT AND POWER

FGDS Unit 2 Landfill Groundwater Monitoring Program

Well	Appendix IV	Units	40 CFR 257 MCL	Background	257 GWPS	10/26/23	2/23/24	5/13/2024	8/12/24	11/11/24	2/21/25	3/18/25	4/24/25
R101	Lead	mg/l	0.015	0.0075	0.015	<0.015	<0.015	<0.015	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075
AW2	Lead	mg/l	0.015	0.0075	0.015	<0.015	<0.015	<0.015	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075
P07D	Lead	mg/l	0.015	0.0075	0.015				<0.0075	<0.0075	<0.0075	<0.0075	<0.0075
G121	Lead	mg/l	0.015	0.0075	0.015	<0.015	<0.015	<0.015	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075
G122	Lead	mg/l	0.015	0.0075	0.015	<0.015	<0.015	<0.015	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075
R101	Lithium	mg/l	0.04	0.0524	0.0524	0.0524	0.0139	<0.05	0.0188	0.0167	0.0135	0.015	0.0156
AW2	Lithium	mg/l	0.04	0.0524	0.0524	0.0381	0.0064	<0.05	0.0071	0.0062	0.0051	0.0053	0.0054
P07D	Lithium	mg/l	0.04	0.0524	0.0524				0.0085	0.0095	0.0081	0.0081	0.0076
G121	Lithium	mg/l	0.04	0.0524	0.0524	0.0433	0.0073	<0.05	0.0083	0.0079	0.008	0.0073	0.0068
G122	Lithium	mg/l	0.04	0.0524	0.0524	0.0567	0.007	<0.05	0.0082	0.007	0.0091	0.007	0.0062
R101	Mercury	mg/l	0.002	0.0002	0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002
AW2	Mercury	mg/l	0.002	0.0002	0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002
P07D	Mercury	mg/l	0.002	0.0002	0.002				<0.0002	<0.0002	<0.002	<0.0002	<0.0002
G121	Mercury	mg/l	0.002	0.0002	0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002
G122	Mercury	mg/l	0.002	0.0002	0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.002	<0.0002	<0.0002
R101	Molybdenum	mg/l	0.1	0.01	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AW2	Molybdenum	mg/l	0.1	0.01	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
P07D	Molybdenum	mg/l	0.1	0.01	0.1				<0.01	<0.01	<0.01	<0.01	<0.01
G121	Molybdenum	mg/l	0.1	0.01	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
G122	Molybdenum	mg/l	0.1	0.01	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
R101	Radium-226 + 228	pCi/l	5	2.34	5	0.65	<2	<2	2.34	<2	<2	<2	<2
AW2	Radium-226 + 228	pCi/l	5	2.34	5	1.02	<2	<2	<2	1.55	<2	<2	<2
P07D	Radium-226 + 228	pCi/l	5	2.34	5				<2	1.39	2.49	2.73	<2
G121	Radium-226 + 228	pCi/l	5	2.34	5	3.1	<2	<2	<2	1.59	2.97	<2	<2
G122	Radium-226 + 228	pCi/l	5	2.34	5	1.19	<2	<2	<2	2.39	<2	<2	2
R101	Selenium	mg/l	0.05	0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AW2	Selenium	mg/l	0.05	0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
P07D	Selenium	mg/l	0.05	0.001	0.05				<0.001	<0.001	<0.001	<0.001	<0.001
G121	Selenium	mg/l	0.05	0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
G122	Selenium	mg/l	0.05	0.001	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
R101	Thallium	mg/l	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
AW2	Thallium	mg/l	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
P07D	Thallium	mg/l	0.002	0.002	0.002				<0.002	<0.002	<0.002	<0.002	<0.002
G121	Thallium	mg/l	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
G122	Thallium	mg/l	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

An Appendix IV confirmed SSL is indicated in bold text and shaded cell

P07D incorporated into the network August 2024

October 2023 Laboratory Analytical Report

November 14, 2023

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

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

RE: Landfill Monitoring Wells **WorkOrder:** 23101166

Dear Eric Staley:

TEKLAB, INC received 12 samples on 10/25/2023 5:15:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 23101166
Client Project: Landfill Monitoring Wells
Report Date: 14-Nov-23

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	19
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 23101166

Client Project: Landfill Monitoring Wells **Report Date:** 14-Nov-23

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: City Water, Light & Power

Work Order: 23101166

Client Project: Landfill Monitoring Wells

Report Date: 14-Nov-23

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: City Water, Light & Power
Client Project: Landfill Monitoring Wells

Work Order: 23101166
Report Date: 14-Nov-23

Cooler Receipt Temp: 4.8 °C

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

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: City Water, Light & Power

Work Order: 23101166

Client Project: Landfill Monitoring Wells

Report Date: 14-Nov-23

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2024	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: City Water, Light & Power **Work Order:** 23101166

Client Project: Landfill Monitoring Wells **Report Date:** 14-Nov-23

Lab ID: 23101166-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 10/25/2023 14:42

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	10/25/2023 14:42	R338510
Depth to water	*	-5.00		**5.93**	ft	1	10/25/2023 14:42	R338510
Depth to water from measuring point	*	0		**8.73**	ft	1	10/25/2023 14:42	R338510
Elevation of groundwater surface	*	0		**538.07**	ft	1	10/25/2023 14:42	R338510
Measuring Point Elevation	*	0		**546.80**	ft	1	10/25/2023 14:42	R338510
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.2**	°F	1	10/25/2023 14:42	R338510
SW-846 9040B								
pH, Field	*	1.00		**6.81**		1	10/25/2023 14:42	R338510
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1200**	µmhos/cm @25C	1	10/25/2023 14:42	R338510
EPA 600 350.1 (DISSOLVED)								
Nitrogen, Ammonia (as N)	NELAP	0.10	S	**< 0.10**	mg/L	1	10/27/2023 10:39	R338368
Matrix spike did not recover within control limits due to matrix interference.								
EPA 600 353.2 R2.0 (DISSOLVED)								
Nitrogen, Nitrate (as N)	NELAP	0.050		**< 0.050**	mg/L	1	10/26/2023 13:20	R338390
STANDARD METHODS 2540 C (DISSOLVED) 1997, 2011								
Total Dissolved Solids	NELAP	20		**800**	mg/L	1	10/30/2023 12:49	R338538
SW-846 9012A (TOTAL)								
Cyanide	NELAP	0.005		**< 0.005**	mg/L	1	10/31/2023 15:40	213865
SW-846 9036 (DISSOLVED)								
Sulfate	NELAP	100		**267**	mg/L	10	10/27/2023 16:51	R338425
SW-846 9251 (DISSOLVED)								
Chloride	NELAP	20		**117**	mg/L	5	10/27/2023 16:45	R338455
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Boron	NELAP	20.0		**120**	µg/L	1	10/31/2023 9:31	213944
Cadmium	NELAP	2.0		**< 2.0**	µg/L	1	10/31/2023 9:31	213944
Chromium	NELAP	4.0		**< 4.0**	µg/L	1	10/31/2023 9:31	213944
Magnesium	NELAP	0.050		**64.1**	mg/L	1	10/31/2023 9:31	213944
Zinc	NELAP	10.0		**< 10.0**	µg/L	1	10/31/2023 9:31	213944
SW-846 3005A, 6020A, METALS BY ICPMS (DISSOLVED)								
Arsenic	NELAP	1.0		**< 1.0**	µg/L	5	10/31/2023 2:10	213944
Lead	NELAP	1.0		**< 1.0**	µg/L	5	10/31/2023 2:10	213944
SW-846 7470A (DISSOLVED)								
Mercury	NELAP	0.20		**< 0.20**	µg/L	1	11/01/2023 12:49	214030

Client: City Water, Light & Power
Work Order: 23101166
Client Project: Landfill Monitoring Wells
Report Date: 14-Nov-23
Lab ID: 23101166-007
Client Sample ID: G121
Matrix: GROUNDWATER
Collection Date: 10/25/2023 12:01

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	10/25/2023 12:01	R338510
Depth to water	*	-5.00		**28.67**	ft	1	10/25/2023 12:01	R338510
Depth to water from measuring point	*	0		**30.54**	ft	1	10/25/2023 12:01	R338510
Elevation of groundwater surface	*	0		**525.06**	ft	1	10/25/2023 12:01	R338510
Measuring Point Elevation	*	0		**555.60**	ft	1	10/25/2023 12:01	R338510
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**59.0**	°F	1	10/25/2023 12:01	R338510
SW-846 9040B								
pH, Field	*	1.00		**6.83**		1	10/25/2023 12:01	R338510
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1410**	µmhos/cm @25C	1	10/25/2023 12:01	R338510
EPA 600 350.1 (DISSOLVED)								
Nitrogen, Ammonia (as N)	NELAP	1.00		**7.23**	mg/L	10	10/30/2023 9:29	R338430
EPA 600 353.2 R2.0 (DISSOLVED)								
Nitrogen, Nitrate (as N)	NELAP	0.050		**0.476**	mg/L	1	10/26/2023 13:44	R338390
STANDARD METHODS 2540 C (DISSOLVED) 1997, 2011								
Total Dissolved Solids	NELAP	50		**925**	mg/L	2.5	10/30/2023 12:51	R338538
SW-846 9012A (TOTAL)								
Cyanide	NELAP	0.005		**< 0.005**	mg/L	1	10/31/2023 15:58	213865
SW-846 9036 (DISSOLVED)								
Sulfate	NELAP	100		**286**	mg/L	10	10/27/2023 17:15	R338425
SW-846 9251 (DISSOLVED)								
Chloride	NELAP	4		**31**	mg/L	1	10/27/2023 17:09	R338455
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Boron	NELAP	20.0		**2870**	µg/L	1	11/01/2023 15:38	214021
Cadmium	NELAP	2.0		**< 2.0**	µg/L	1	11/01/2023 15:38	214021
Chromium	NELAP	4.0		**< 4.0**	µg/L	1	11/01/2023 15:38	214021
Magnesium	NELAP	0.050		**74.0**	mg/L	1	11/01/2023 15:38	214021
Zinc	NELAP	10.0		**< 10.0**	µg/L	1	11/01/2023 15:38	214021
SW-846 3005A, 6020A, METALS BY ICPMS (DISSOLVED)								
Arsenic	NELAP	1.0		**19.9**	µg/L	5	11/01/2023 20:09	214021
Lead	NELAP	1.0		**< 1.0**	µg/L	5	11/01/2023 20:09	214021
SW-846 7470A (DISSOLVED)								
Mercury	NELAP	0.20		**< 0.20**	µg/L	1	11/01/2023 13:07	214030

Client: City Water, Light & Power **Work Order:** 23101166

Client Project: Landfill Monitoring Wells **Report Date:** 14-Nov-23

Lab ID: 23101166-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 10/25/2023 11:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	10/25/2023 11:29	R338510
Depth to water	*	-5.00		**30.50**	ft	1	10/25/2023 11:29	R338510
Depth to water from measuring point	*	0		**32.24**	ft	1	10/25/2023 11:29	R338510
Elevation of groundwater surface	*	0		**522.16**	ft	1	10/25/2023 11:29	R338510
Measuring Point Elevation	*	0		**554.40**	ft	1	10/25/2023 11:29	R338510
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.4**	°F	1	10/25/2023 11:29	R338510
SW-846 9040B								
pH, Field	*	1.00		**6.70**		1	10/25/2023 11:29	R338510
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1670**	µmhos/cm @25C	1	10/25/2023 11:29	R338510
EPA 600 350.1 (DISSOLVED)								
Nitrogen, Ammonia (as N)	NELAP	0.10		**2.75**	mg/L	1	10/27/2023 10:56	R338368
EPA 600 353.2 R2.0 (DISSOLVED)								
Nitrogen, Nitrate (as N)	NELAP	0.050		**< 0.050**	mg/L	1	10/26/2023 13:47	R338390
STANDARD METHODS 2540 C (DISSOLVED) 1997, 2011								
Total Dissolved Solids	NELAP	50		**1430**	mg/L	2.5	10/30/2023 12:52	R338538
SW-846 9012A (TOTAL)								
Cyanide	NELAP	0.005	SR	**< 0.005**	mg/L	1	10/31/2023 16:06	213865
RPD for MS/MSD was outside control limits.								
Matrix spike did not recover within control limits. Results verified by re-prep and re-analysis without matrix spikes due to insufficient sample volume.								
SW-846 9036 (DISSOLVED)								
Sulfate	NELAP	200		**550**	mg/L	20	10/27/2023 17:39	R338425
SW-846 9251 (DISSOLVED)								
Chloride	NELAP	4		**44**	mg/L	1	10/27/2023 17:33	R338455
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Boron	NELAP	20.0		**11400**	µg/L	1	11/01/2023 15:44	214021
Cadmium	NELAP	2.0		**< 2.0**	µg/L	1	11/01/2023 15:44	214021
Chromium	NELAP	4.0		**< 4.0**	µg/L	1	11/01/2023 15:44	214021
Magnesium	NELAP	0.050		**91.7**	mg/L	1	11/01/2023 15:44	214021
Zinc	NELAP	10.0		**< 10.0**	µg/L	1	11/01/2023 15:44	214021
SW-846 3005A, 6020A, METALS BY ICPMS (DISSOLVED)								
Arsenic	NELAP	1.0		**4.0**	µg/L	5	11/01/2023 20:14	214021
Lead	NELAP	1.0		**< 1.0**	µg/L	5	11/01/2023 20:14	214021
SW-846 7470A (DISSOLVED)								
Mercury	NELAP	0.20		**< 0.20**	µg/L	1	11/01/2023 13:14	214030

Client: City Water, Light & Power
Work Order: 23101166
Client Project: Landfill Monitoring Wells
Report Date: 14-Nov-23
Lab ID: 23101166-010
Client Sample ID: AW-2
Matrix: GROUNDWATER
Collection Date: 10/25/2023 13:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	10/25/2023 13:18	R338510
Depth to water	*	-5.00		**4.11**	ft	1	10/25/2023 13:18	R338510
Depth to water from measuring point	*	0		**7.41**	ft	1	10/25/2023 13:18	R338510
Elevation of groundwater surface	*	0		**522.57**	ft	1	10/25/2023 13:18	R338510
Measuring Point Elevation	*	0		**529.98**	ft	1	10/25/2023 13:18	R338510
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**62.1**	°F	1	10/25/2023 13:18	R338510
SW-846 9040B								
pH, Field	*	1.00		**6.89**		1	10/25/2023 13:18	R338510
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1200**	µmhos/cm @25C	1	10/25/2023 13:18	R338510
EPA 600 350.1 (DISSOLVED)								
Nitrogen, Ammonia (as N)	NELAP	0.10		**4.76**	mg/L	1	10/27/2023 13:41	R338368
EPA 600 353.2 R2.0 (DISSOLVED)								
Nitrogen, Nitrate (as N)	NELAP	0.050		**< 0.050**	mg/L	1	10/26/2023 13:51	R338390
STANDARD METHODS 2540 C (DISSOLVED) 1997, 2011								
Total Dissolved Solids	NELAP	50		**820**	mg/L	2.5	11/01/2023 10:19	R338670
SW-846 9012A (TOTAL)								
Cyanide	NELAP	0.005		**< 0.005**	mg/L	1	10/31/2023 16:45	213865
SW-846 9036 (DISSOLVED)								
Sulfate	NELAP	50		**162**	mg/L	5	10/27/2023 17:55	R338425
SW-846 9251 (DISSOLVED)								
Chloride	NELAP	4		**32**	mg/L	1	10/27/2023 17:49	R338455
SW-846 3005A, 6010B, METALS BY ICP (DISSOLVED)								
Boron	NELAP	20.0		**2710**	µg/L	1	11/02/2023 9:06	214021
Cadmium	NELAP	2.0		**< 2.0**	µg/L	1	11/01/2023 15:45	214021
Chromium	NELAP	4.0		**< 4.0**	µg/L	1	11/01/2023 15:45	214021
Magnesium	NELAP	0.050		**59.4**	mg/L	1	11/01/2023 15:45	214021
Zinc	NELAP	10.0		**< 10.0**	µg/L	1	11/01/2023 15:45	214021
SW-846 3005A, 6020A, METALS BY ICPMS (DISSOLVED)								
Arsenic	NELAP	1.0		**26.9**	µg/L	5	11/01/2023 20:25	214021
Lead	NELAP	1.0		**< 1.0**	µg/L	5	11/01/2023 20:25	214021
SW-846 7470A (DISSOLVED)								
Mercury	NELAP	0.20		**< 0.20**	µg/L	1	11/01/2023 13:19	214030

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: Landfill Monitoring Wells

Work Order: 23101166
Report Date: 14-Nov-23

Carrier: Justin Colp

Received By: HAW

Completed by: Timothy W. Mathis
On: 26-Oct-23

Reviewed by: Ellie Hopkins
On: 26-Oct-23

Pages to follow: Chain of custody 3 Extra pages included 12

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	4.8	
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 #90719/79929 CET. - TMathis - 10/26/2023 12:35:55 PM

Additional NaOH (81662) was needed in all Cyanide containers; Additional H2SO4 (90128) was needed upon arrival at the laboratory in G120.- TMathis - 10/26/2023 12:36:37 PM

Samples collected on 10/26/23 were delivered to the laboratory on 10/26/23 at 1707 (on ice - 2.4C - LTG1). - AMD/ERH 10/27/23

Additional NaOH (81662) was needed upon arrival at the laboratory in G113. - amberdilallo - 10/27/2023 9:42:38 AM

pH strip #79929/90719. - amberdilallo - 10/27/2023 9:42:58 AM

Print PDF

CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23011606

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☑ ICE ☐ BLUE ICE ☐ NO ICE 4.8 °C CTG
Preserved in: ☑ LAB ☐ FIELD FOR LAB USE ONLY
LAB NOTES: pH 7/9/7/29. added NaOH(81662) to all NaOH samples. Added H2SO4(907185) to G120.

Client Comments: CTG 10-26-23
Quarters 1, 3, & 4
*elevations, pH, conductivity, temperature
**As B Cd Cr Pb Mg Hg Zn
XTE SAH 11/6/23

PROJECT NAME/NUMBER: Landfill Monitoring Wells
SAMPLE COLLECTOR'S NAME: Justin Colp

RESULTS REQUESTED: ☑ Standard ☐ 1-2 Day (100% Surcharge) ☐ Other ☐ 3 Day (50% Surcharge)
BILLING INSTRUCTIONS:

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl SO4 TDS (D)	Metals (D)**	Cyanide	Nitrate (D)	Ammonia (D)
23011606-001	R101	10-25-23 / 1442	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
002	G110		Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
003	R111		Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
004	G112	10-25-23 / 1053	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
005	G113		Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
006	G120	10-25-23 / 1339	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
007	G121	1201	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
008	G122	1129	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
009	AW-1	0959	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
010	AW-2	1318	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔
011	RW-3	10-25-23 / 1235	Groundwater	2	1	1	1						✔	✔	✔	✔	✔	✔

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	10-25-23 1715	[signature]	10/25/23 1715

*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

CTG 10-26-23

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CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 23101166

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

Client: City Water, Light & Power

Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building

City/State/Zip: Springfield IL 62712

Contact: Eric Staley Phone: (217) 757-8610

Email: eric.staley@cwlp.com Fax:

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C

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? ☐ 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 Permit on file

Client Comments:

Quarters 1, 3, & 4

*elevations, pH, conductivity, temperature

**As B Cd Cr Pb Mg Hg Zn

PROJECT NAME/NUMBER

Landfill Monitoring Wells

SAMPLE COLLECTOR'S NAME

Justin Colp

RESULTS REQUESTED

☑ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl SO4 TDS (D)	Metals (D)**	Cyanide	Nitrate (D)	Ammonia (D)
23101166-012	DUPLICATE	10-25-23 1201	Groundwater	1	1	1	1							✔	✔	✔	✔	✔
			Groundwater															
			Groundwater															
			Groundwater															
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			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	10-25-23 1715	[signature]	10/25/23 1715

*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

Print PDF

CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23101166

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 2.4 °C
Preserved in: ☒ LAB ☐ FIELD FOR LAB USE ONLY LTCL
LAB NOTES: added NaOH (filtered) to G113. pH ✓
XTE 8/11/16/23 7009/9079

Client Comments:
Quarters 1, 3, & 4
*elevations, pH, conductivity, temperature
**As B Cd Cr Pb Mg Hg Zn

10/27/23

PROJECT NAME/NUMBER
Landfill Monitoring Wells

SAMPLE COLLECTOR'S NAME
Justin Colp

RESULTS REQUESTED
☑ Standard ☐ 1-2 Day (100% Surcharge)
☐ Other ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl SO4 TDS (D)	Metals (D)**	Cyanide	Nitrate (D)	Ammonia (D)
23101166-001	R101		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
002	G110	10-25-23 / 1270	Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
003	R111	10-25-23 / 1135	Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
004	G112		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
005	G113	10-25-23 / ~~1422~~ 1421	Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
006	G120	1422 ~~1415~~ *	Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
007	G121		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
008	G122		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	2	1	1	1						✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
[signature]	10-26-23 1707	[signature]	10/26/23 1707

*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

Site Samping Event: CWLP- 4Q 2023
LIMS Workorder: 23101166
Technician(s): JC, BG

Groundwater Sampling Field Form- Groundwater Quality Parameters
CWLP- 4Q 2023

Well ID	Date	Time	DTW	Temp (deg C)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
R101	10/25/2023	14:36	8.73	13.6	7.00	1,208.2	1,208.2	3.95	13.42	-104.5
R101	10/25/2023	14:39	8.73	14.0	6.86	1,203.6	1,203.6	2.99	12.73	-85.3
R101	10/25/2023	14:42	8.73	14.6	6.81	1,201.5	1,201.5	2.81	13.78	-76.1

Site Samping Event: CWLP- 4Q 2023
LIMS Workorder: 23101166
Technician(s): JC, BG

Groundwater Sampling Field Form- Groundwater Quality Parameters
CWLP- 4Q 2023

Well ID	Date	Time	DTW	Temp (deg C)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G121	10/25/2023	11:49	30.54	14.7	6.83	1,402.0	1,402.0	1.1	17.33	-86.3
G121	10/25/2023	11:52	30.54	15.1	6.83	1,405.7	1,405.7	0.94	15.48	-97.8
G121	10/25/2023	11:55	30.54	15.2	6.83	1,408.8	1,408.8	0.84	13.7	-104.5
G121	10/25/2023	11:58	30.54	15.1	6.83	1,409.9	1,409.9	0.77	14.05	-108.9
G121	10/25/2023	12:01	30.54	15.0	6.83	1,409.2	1,409.2	0.71	14.82	-111.9

Site Samping Event: CWLP- 4Q 2023
LIMS Workorder: 23101166
Technician(s): JC, BG

Groundwater Sampling Field Form- Groundwater Quality Parameters
CWLP- 4Q 2023

Well ID	Date	Time	DTW	Temp (deg C)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G122	10/25/2023	11:23	32.24	14.6	6.72	1,623.5	1,623.5	1.12	15.04	-76
G122	10/25/2023	11:26	32.24	14.7	6.70	1,650.4	1,650.4	0.92	9.29	-83.4
G122	10/25/2023	11:29	32.24	14.7	6.70	1,666.1	1,666.1	0.82	7.04	-88.9

Site Samping Event: CWLP- 4Q 2023
LIMS Workorder: 23101166
Technician(s): JC, BG

Groundwater Sampling Field Form- Groundwater Quality Parameters
CWLP- 4Q 2023

Well ID	Date	Time	DTW	Temp (deg C)	pH (SU)	Sp Cond (µS/cm)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
AW-2	10/25/2023	12:54	7.41	16.7	6.96	1,151.6	1,151.6	3.89	16.12	-66.3
AW-2	10/25/2023	12:57	7.41	17.1	6.90	1,179.7	1,179.7	2.15	14.72	-90.5
AW-2	10/25/2023	13:00	7.41	17.2	6.89	1,192.8	1,192.8	1.72	28.68	-98.4
AW-2	10/25/2023	13:03	7.41	17.0	6.89	1,198.4	1,198.4	1.46	35.49	-103.8
AW-2	10/25/2023	13:06	7.41	17.1	6.89	1,199.1	1,199.1	1.27	29.18	-107.5
AW-2	10/25/2023	13:09	7.41	16.8	6.89	1,200.0	1,200.0	1.13	25.13	-110.4
AW-2	10/25/2023	13:12	7.41	16.7	6.89	1,198.6	1,198.6	1.05	25.23	-112.5
AW-2	10/25/2023	13:15	7.41	16.6	6.89	1,198.8	1,198.8	0.99	20.08	-113.7
AW-2	10/25/2023	13:18	7.41	16.7	6.89	1,198.1	1,198.1	0.92	20.56	-115

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

November 28, 2023

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 23101165

Dear Shelly Hennessy:

Order No.: 23110123

Summit Environmental Technologies, Inc. received 11 sample(s) on 11/1/2023 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.
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#: **23110123**
Date: **11/28/2023**

CLIENT: TEKLAB Inc,
Project: 23101165

WorkOrder Narrative:
23110123: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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#: **23110123**
Date: **11/28/2023**

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#: **23110123**

28-Nov-23

CLIENT: TEKLAB Inc,
Project: 23101165

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
23110123-001	23101165-001		10/25/2023 2:42:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-002	23101165-002		10/26/2023 12:20:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-003	23101165-003		10/26/2023 11:35:00 AM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-004	23101165-004		10/25/2023 10:53:00 AM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-005	23101165-005		10/26/2023 2:15:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-006	23101165-006		10/25/2023 1:39:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-007	23101165-007		10/25/2023 12:01:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-008	23101165-008		10/25/2023 11:29:00 AM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-009	23101165-009		10/25/2023 9:59:00 AM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-010	23101165-010		10/25/2023 1:18:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water
23110123-011	23101165-011		10/25/2023 12:35:00 PM	11/1/2023 11:45:00 AM	Non-Potable Water

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

DATES REPORT

WO#: **23110123**

28-Nov-23

Client: TEKLAB Inc,

Project: 23101165

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
23110123-001A	23101165-001	10/25/2023 2:42:00 PM	Non-Potable Water	Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-002A	23101165-002	10/26/2023 12:20:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-003A	23101165-003	10/26/2023 11:35:00 AM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-004A	23101165-004	10/25/2023 10:53:00 AM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-005A	23101165-005	10/26/2023 2:15:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-006A	23101165-006	10/25/2023 1:39:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-007A	23101165-007	10/25/2023 12:01:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/9/2023 2:11:46 PM	11/15/2023 10:35:00 AM
				Radium-228 (EPA 904.0)		11/9/2023 2:11:46 PM	11/14/2023 2:13:00 PM
23110123-008A	23101165-008	10/25/2023 11:29:00 AM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/21/2023 12:03:19 PM	11/22/2023 9:43:00 AM

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DATES REPORT

WO#: **23110123**

28-Nov-23

Client: TEKLAB Inc,

Project: 23101165

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
23110123-008A	23101165-008	10/25/2023 11:29:00 AM	Non-Potable Water	Radium-228 (EPA 904.0)		11/21/2023 12:03:19 PM	11/21/2023 2:30:00 PM
23110123-009A	23101165-009	10/25/2023 9:59:00 AM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/21/2023 12:03:19 PM	11/22/2023 9:43:00 AM
				Radium-228 (EPA 904.0)		11/21/2023 12:03:19 PM	11/21/2023 2:30:00 PM
23110123-010A	23101165-010	10/25/2023 1:18:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/21/2023 12:03:19 PM	11/22/2023 9:43:00 AM
				Radium-228 (EPA 904.0)		11/21/2023 12:03:19 PM	11/21/2023 2:30:00 PM
23110123-011A	23101165-011	10/25/2023 12:35:00 PM		Combined Radium (EPA903+904)			11/28/2023 8:32:00 AM
				Radium-226 (EPA 903.0)		11/21/2023 12:03:19 PM	11/22/2023 9:43:00 AM
				Radium-228 (EPA 904.0)		11/21/2023 12:03:19 PM	11/21/2023 2:30:00 PM

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Analytical Report

(consolidated)

WO#: **23110123**

Date Reported: **11/28/2023**

CLIENT: TEKLAB Inc,

Collection Date: 10/25/2023 2:42:00 PM

Project: 23101165

Lab ID: 23110123-001

Matrix: NON-POTABLE WATER

Client Sample ID: 23101165-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	0.65	2.00	U	pCi/L	± 0.500	1	11/28/2023 8:32:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.03	1.00	U	pCi/L	± 0.0500	1	11/15/2023 10:35:00 A
Yield	0.98					1	11/15/2023 10:35:00 A
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.62	1.00	U	pCi/L	± 0.450	1	11/14/2023 2:13:00 PM
Yield	0.87					1	11/14/2023 2:13:00 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#: **23110123**

Date Reported: **11/28/2023**

CLIENT: TEKLAB Inc,

Collection Date: 10/25/2023 12:01:00 PM

Project: 23101165

Lab ID: 23110123-007

Matrix: NON-POTABLE WATER

Client Sample ID: 23101165-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	3.1	2.00		pCi/L	± 0.820	1	11/28/2023 8:32:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.21	1.00	U	pCi/L	± 0.0800	1	11/15/2023 10:35:00 A
Yield	0.99					1	11/15/2023 10:35:00 A
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	2.89	1.00		pCi/L	± 0.740	1	11/14/2023 2:13:00 PM
Yield	0.86					1	11/14/2023 2:13:00 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#: **23110123**

Date Reported: **11/28/2023**

CLIENT: TEKLAB Inc,

Collection Date: 10/25/2023 11:29:00 AM

Project: 23101165

Lab ID: 23110123-008

Matrix: NON-POTABLE WATER

Client Sample ID: 23101165-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.19	2.00	U	pCi/L	± 0.660	1	11/28/2023 8:32:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.11	1.00	U	pCi/L	± 0.0700	1	11/22/2023 9:43:00 AM
Yield	0.94					1	11/22/2023 9:43:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.08	1.00		pCi/L	± 0.590	1	11/21/2023 2:30:00 PM
Yield	0.93					1	11/21/2023 2:30:00 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#: **23110123**

Date Reported: **11/28/2023**

CLIENT: TEKLAB Inc,

Collection Date: 10/25/2023 1:18:00 PM

Project: 23101165

Lab ID: 23110123-010

Matrix: NON-POTABLE WATER

Client Sample ID: 23101165-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **CXS**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	1.02	2.00	U	pCi/L	± 0.640	1	11/28/2023 8:32:00 AM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	0.2	1.00	U	pCi/L	± 0.0900	1	11/22/2023 9:43:00 AM
Yield	0.93					1	11/22/2023 9:43:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	0.82	1.00	J	pCi/L	± 0.550	1	11/21/2023 2:30:00 PM
Yield	0.93					1	11/21/2023 2:30:00 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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70385**

Sample ID: **23110328-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174694**
Client ID: **BatchQC** Batch ID: **70385** TestNo: **E904.0** **E903-904** Analysis Date: **11/14/2023** SeqNo: **4725143**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			0.7700	200	30	RU
Yield	0.840			0	0			0.9100	8.00		

Sample ID: **23110328-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174694**
Client ID: **BatchQC** Batch ID: **70385** TestNo: **E904.0** **E903-904** Analysis Date: **11/14/2023** SeqNo: **4725145**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.910	1.00		0	0			0	200	30	JR
Yield	0.730			0	0			0.9600	27.2		

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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70385**

Sample ID: **MB-70385**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174694**
Client ID: **PBW**	Batch ID: **70385**	TestNo: **E904.0**	**E903-904**	Analysis Date: **11/14/2023**	SeqNo: **4725103**

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-70385**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174694**
Client ID: **LCSW**	Batch ID: **70385**	TestNo: **E904.0**	**E903-904**	Analysis Date: **11/14/2023**	SeqNo: **4725104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.03	1.00	5.000	0	80.6	70	130				
Yield	0.850			0	0						

Sample ID: **RLC-70385**	SampType: **RLC**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174694**
Client ID: **BatchQC**	Batch ID: **70385**	TestNo: **E904.0**	**E903-904**	Analysis Date: **11/14/2023**	SeqNo: **4725107**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.930	1.00	1.000	0	93.0	50	150				J
Yield	0.920			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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,

Project: 23101165 **BatchID:** **70385**

Sample ID: **23110328-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174727**

Client ID: **BatchQC** Batch ID: **70385** TestNo: **E903.0** **E903-904** Analysis Date: **11/15/2023** SeqNo: **4726100**

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

Sample ID: **23110328-002ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174727**

Client ID: **BatchQC** Batch ID: **70385** TestNo: **E903.0** **E903-904** Analysis Date: **11/15/2023** SeqNo: **4726102**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	30	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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70385**

Sample ID: **MB-70385**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174727**
Client ID: **PBW**	Batch ID: **70385**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/15/2023**	SeqNo: **4726091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	0.960										

Sample ID: **LCS-70385**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174727**
Client ID: **LCSW**	Batch ID: **70385**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/15/2023**	SeqNo: **4726092**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.82	1.00	5.000	0	116	70	130				

Sample ID: **LCSD-70385**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174727**
Client ID: **LCSS02**	Batch ID: **70385**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/15/2023**	SeqNo: **4726093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.96	1.00	5.000	0	99.2	70	130	5.820	16.0	20	

Sample ID: **RLC-70385**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/9/2023**	RunNo: **174727**
Client ID: **BatchQC**	Batch ID: **70385**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/15/2023**	SeqNo: **4726095**

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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70385**

Sample ID: **RLC-70385** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174727**
Client ID: **BatchQC** Batch ID: **70385** TestNo: **E903.0** **E903-904** Analysis Date: **11/15/2023** SeqNo: **4726095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00	1.000	0	60.0	50	150				

Sample ID: **RLCD-70385** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/9/2023** RunNo: **174727**
Client ID: **BatchQC** Batch ID: **70385** TestNo: **E903.0** **E903-904** Analysis Date: **11/15/2023** SeqNo: **4726096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	0.820	1.00	1.000	0	82.0	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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70713**

Sample ID: **MB-70713** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **PBW** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740877**

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	0.840			0	0						

Sample ID: **LCSD-70713** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **LCSS02** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.75	1.00	5.000	0	75.0	70	130	3.140	17.7	20	
Yield	0.740			0	0			0.8300	11.5		

Sample ID: **RLC-70713** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **BatchQC** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740881**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	0.860	1.00	1.000	0	86.0	50	150				J
Yield	0.760			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	S	Spike Recovery outside accepted recovery limits	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#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70713**

Sample ID: **RLCD-70713** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **BatchQC** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740882**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.24	1.00	1.000	0	124	50	150				
Yield	0.860			0	0						

Sample ID: **23110535-001AMS** SampType: **MS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **BatchQC** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740883**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.76	1.00	5.000	0.7200	60.8	70	130				S
Yield	0.840			0.9000	0						

Sample ID: **23111150-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/21/2023** RunNo: **175217**
Client ID: **BatchQC** Batch ID: **70713** TestNo: **E904.0** **E903-904** Analysis Date: **11/21/2023** SeqNo: **4740888**

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	0.800			0	0			0.8100	1.24		

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	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **23110123**

28-Nov-23

Client: TEKLAB Inc,
Project: 23101165 **BatchID:** **70713**

Sample ID: **MB-70713**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **PBW**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741049**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									U
Yield	0.850										

Sample ID: **LCS-70713**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **LCSW**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	6.04	1.00	5.000	0	121	70	130				

Sample ID: **RLC-70713**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **BatchQC**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.08	1.00	1.000	0	108	50	150				

Sample ID: **RLCD-70713**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **BatchQC**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741054**

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	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **23110123**

28-Nov-23

Client: TEKLAB Inc,

Project: 23101165 **BatchID:** **70713**

Sample ID: **RLCD-70713**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **BatchQC**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.12	1.00	1.000	0	112	50	150				

Sample ID: **23110535-001AMS**	SampType: **MS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/21/2023**	RunNo: **175228**
Client ID: **BatchQC**	Batch ID: **70713**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/22/2023**	SeqNo: **4741055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.80	1.00	5.000	0	116	70	130				

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	S	Spike Recovery outside accepted recovery limits	U	Samples with CalcVal < MDL
W	Sample container temperature is out of limit as specified at testcode				

Original

Pg __ of __

TEKLAB, INC. Chain of Custody

2311012 3

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: 1

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium (226, 228, and combined) by method EPA903.0/904.0
on standard TAT Please include negative values (no ND).
Batch QC and CCR EDD are required. Receipt summary requested.

Project# 23101165

Contact: Shelly Hennessy Email: shennessy
Requested Due Date: 20 business days or less Billing/PO: 35259
Phone: 618 344 1004

State of Origin: IL

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.

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Radium 226	Radium 228	Combined Radium								pH		
	23101165-001	10/25/23 1442	HNO3	Groundwater	✔	✔	✔									1	21
	23101165-002	10/26/23 1220	HNO3	Groundwater	✔	✔	✔									1	27
	23101165-003	10/26/23 1135	~~Unpres~~ HNO3	Groundwater	✔	✔	✔									1	29
	23101165-004	10/25/23 1053	~~Unpres~~	Groundwater	✔	✔	✔									1	21
	23101165-005	10/26/23 1415	~~Unpres~~	Groundwater	✔	✔	✔									1	29
	23101165-006	10/25/23 1339	~~Unpres~~	Groundwater	✔	✔	✔									1	33
	23101165-007	10/25/23 1201	~~Unpres~~	Groundwater	✔	✔	✔									1	31
	23101165-008	10/25/23 1129	~~Unpres~~	Groundwater	✔	✔	✔									1	39
	23101165-009	10/25/23 0959	~~Unpres~~	Groundwater	✔	✔	✔									1	29
	23101165-010	10/25/23 1318	~~Unpres~~	Groundwater	✔	✔	✔									1	23
	23101165-011	10/25/23 1235	~~Unpres~~	Groundwater	✔	✔	✔									1	NOT Rcvd

CPM

*Relinquished By	Date/Time	Received By	Date/Time
		Jackie Reed	11-16-23/ 11:45

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

SubCocRevA 3/2/2016

17.7, 13.5, 13.6 / Coolers / FedEx

17.6, 13.4, 13.5

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

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 23110123 RcptNo: 1

Logged by:	Jacqueline Rasile	11/1/2023 11:45:00 AM	Jackie Rasile
Completed By:	Jacqueline Rasile	11/2/2023 11:30:48 AM	Jackie Rasile
Reviewed By:	Jennifer Woolf	11/2/2023 1:55:28 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 ☑
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:

Sample 23101165-011 not indicated on COC sample is the same as 23101164-001

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By

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: 23110123 RcptNo: 1

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	13.6	Good	Not Present			
3	17.7	Good	Not Present			

February 2024 Laboratory Analytical Report

February 21, 2024

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

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

RE: FGDS Landfill **WorkOrder:** 24010118

Dear Eric Staley:

TEKLAB, INC received 11 samples on 2/1/2024 4:45:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 24010118
Client Project: FGDS Landfill
Report Date: 21-Feb-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	13
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 24010118

Client Project: FGDS Landfill **Report Date:** 21-Feb-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)

Definitions

Client: City Water, Light & Power
Work Order: 24010118
Client Project: FGDS Landfill
Report Date: 21-Feb-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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24010118
Report Date: 21-Feb-24

Cooler Receipt Temp: 8.5 °C

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

R101, G112, G113, AW-2 and RW-3 will be recollected at a later date.

Radium-226 and Radium-228 analysis was performed by Summit Environmental Technologies, Inc. See attached report for results.

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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24010118
Report Date: 21-Feb-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		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Client: City Water, Light & Power **Work Order:** 24010118

Client Project: FGDS Landfill **Report Date:** 21-Feb-24

Lab ID: 24010118-007 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 02/02/2024 10:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	02/02/2024 10:29	R342908
Depth to water	*	-5.00		**24.67**	ft	1	02/02/2024 10:29	R342908
Depth to water from measuring point	*	0		**26.54**	ft	1	02/02/2024 10:29	R342908
Elevation of groundwater surface	*	0		**529.06**	ft	1	02/02/2024 10:29	R342908
Measuring Point Elevation	*	0		**555.60**	ft	1	02/02/2024 10:29	R342908
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	02/02/2024 10:29	R342908
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**8.3**	NTU	1	02/02/2024 10:29	R342908
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**54.5**	°F	1	02/02/2024 10:29	R342908
SW-846 9040B								
pH, Field	*	1.00		**6.62**		1	02/02/2024 10:29	R342908
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1200**	µmhos/cm @25C	1	02/02/2024 10:29	R342908
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	100		**1000**	mg/L	5	02/05/2024 9:56	R342697
SW-846 9036 (TOTAL)								
Sulfate	NELAP	200		**290**	mg/L	20	02/05/2024 15:52	R342640
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.17**	mg/L	1	02/07/2024 14:41	R342758
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**30**	mg/L	1	02/05/2024 15:47	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.555**	mg/L	1	02/06/2024 12:18	218254
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/06/2024 12:18	218254
Boron	NELAP	0.0200		**3.30**	mg/L	1	02/06/2024 12:18	218254
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/06/2024 12:18	218254
Calcium	NELAP	0.100		**189**	mg/L	1	02/06/2024 12:18	218254
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/06/2024 12:18	218254
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/06/2024 12:18	218254
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	02/06/2024 12:18	218254
Lithium	NELAP	0.0050		**0.0073**	mg/L	1	02/06/2024 12:18	218254
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/06/2024 12:18	218254
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/07/2024 2:42	218254
Arsenic	NELAP	0.0010		**0.0173**	mg/L	5	02/07/2024 2:42	218254
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/07/2024 2:42	218254
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/09/2024 16:53	218254
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/06/2024 11:12	218284
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	02/19/2024 14:24	R343341
Radium-228	*	0		**See Attached**	pci/L	1	02/19/2024 14:24	R343341

Client: City Water, Light & Power **Work Order:** 24010118

Client Project: FGDS Landfill **Report Date:** 21-Feb-24

Lab ID: 24010118-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 02/02/2024 10:54

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	02/02/2024 10:54	R342908
Depth to water	*	-5.00		**24.97**	ft	1	02/02/2024 10:54	R342908
Depth to water from measuring point	*	0		**26.71**	ft	1	02/02/2024 10:54	R342908
Elevation of groundwater surface	*	0		**527.69**	ft	1	02/02/2024 10:54	R342908
Measuring Point Elevation	*	0		**554.40**	ft	1	02/02/2024 10:54	R342908
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	02/02/2024 10:54	R342908
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**9.4**	NTU	1	02/02/2024 10:54	R342908
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**55.2**	°F	1	02/02/2024 10:54	R342908
SW-846 9040B								
pH, Field	*	1.00		**6.56**		1	02/02/2024 10:54	R342908
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1390**	µmhos/cm @25C	1	02/02/2024 10:54	R342908
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	100		**1270**	mg/L	5	02/05/2024 9:56	R342697
SW-846 9036 (TOTAL)								
Sulfate	NELAP	500		**532**	mg/L	50	02/07/2024 9:49	R342767
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.13**	mg/L	1	02/07/2024 14:43	R342758
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**40**	mg/L	1	02/05/2024 16:11	R342647
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.474**	mg/L	1	02/06/2024 12:19	218254
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/06/2024 12:19	218254
Boron	NELAP	0.0200		**11.3**	mg/L	1	02/06/2024 12:19	218254
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/06/2024 12:19	218254
Calcium	NELAP	0.100		**251**	mg/L	1	02/06/2024 12:19	218254
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/06/2024 12:19	218254
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/06/2024 12:19	218254
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	02/06/2024 12:19	218254
Lithium	NELAP	0.0050		**0.0070**	mg/L	1	02/06/2024 12:19	218254
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/06/2024 12:19	218254
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/07/2024 2:47	218254
Arsenic	NELAP	0.0010		**0.0028**	mg/L	5	02/07/2024 2:47	218254
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/07/2024 2:47	218254
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/09/2024 16:58	218254
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/06/2024 11:14	218284
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	02/19/2024 14:24	R343341
Radium-228	*	0		**See Attached**	pci/L	1	02/19/2024 14:24	R343341

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 24010118
Client Project: FGDS Landfill
Report Date: 21-Feb-24

Carrier: Tracy Carroll
Received By: AMD

Completed by: Amber Dilallo
On: 02-Feb-24

Reviewed by: Ellie Hopkins
On: 05-Feb-24

Pages to follow: Chain of custody 2 Extra pages included 29

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 8.5
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. - amberdilallo - 2/2/2024 8:41:47 AM

pH strip #90719. - nickreed - 2/2/2024 3:02:17 PM

Samples collected on 2/2/24 were received at 7.3 degrees C on Ice (LTG#5) -NR 2/2/24

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder# ~~24010110~~ 24010118

TE 2/2 1/2/24

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

Client: City Water, Light & Power

Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building

City/State/Zip: Springfield IL 62712

Contact: Eric Staley Phone: (217) 757-8610

Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 8.5 °C #5

Preserved in: [ ] LAB [X] FIELD FOR LAB USE ONLY

LAB NOTES: 907A 2/2/24

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

Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:

*elevations, pH, conductivity, temperature

**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo

Quarterly monitoring 4Q2023-3Q2025

RW-3 report data from Ash Pond sampling event. 24010117-001

PROJECT NAME/NUMBER

FGDS Landfill

SAMPLE COLLECTOR'S NAME

TCarroll

RESULTS REQUESTED

[✓] Standard [ ] 1-2 Day (100% Surcharge)

[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers									INDICATE ANALYSIS REQUESTED												
				UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity								
24010118 001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
002	G110	2/1/24 1316	Groundwater	1	2								✓	✓	✓	✓	✓	✓								
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
009	AW-1	2/1/24 1427	Groundwater	1	2								✓	✓	✓	✓	✓	✓								
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓								
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓								

Relinquished By	Date/Time	Received By	Date/Time
Tracy Carroll	2/1/24 1645	Emma Qualls	2/1/24 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

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder# ~~240110~~ 24010118 TE 2/2/24

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 7.3 °C LTG3
Preserved in: [ ] LAB [x] FIELD FOR LAB USE ONLY
LAB NOTES: pH 2/2/24 DS 2/2

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? [ ] 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 Permit on file

Client Comments: Courier
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24010117-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Colp

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24010118-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111	2/2/24 1102	Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120	2/2/24 1007	Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121	2/2/24 1029	Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122	2/2/24 1054	Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	2-2-24 1300		2/2 1300

*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 DS 2/2

Site Samping Event: CWLP-LF 1Q24
LIMS Workorder: 24010118
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- 1Q 2024

			Weather				Well Condition				
WO Sample	**Well ID**	**Program/ Sample Type**	**Temp (°F)**	**Precipitation**	**Wind Direction**	**Sky**	**Well Pad**	**Casing**	**Protective Cover**	**Reference Mark/ ID**	**Well Locked**
002	G110	Groundwater Sample	56.0	None	SW	Cloudy	Good	Good	Good	No	No
003	R111	Groundwater Sample	42.0	None	E	Partly cloudy	Good	Good	Good	Yes	No
006	G120	Groundwater Sample	39.0	None	W	Cloudy	Good	Good	Good	Yes	No
007	G121	Groundwater Sample	41.0	None	W	Cloudy	Good	Good	Good	Yes	No
008	G122	Groundwater Sample	42.0	None	W	Partly cloudy	Good	Good	Good	Yes	No
009	AW-1	Groundwater Sample	56.0	None	SW	Cloudy	Good	Good	Good	Yes	No
012	DUPLICATE	QA/QC Sample	42.0	None	E	Partly cloudy	Good	Good	Good	Yes	No

Site Samping Event: CWLP-LF 1Q24
LIMS Workorder: 24010118
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- 1Q 2024

		GW Level Measurement				Purge Activities							
WO Sample	**Well ID**	**Sampler Initials**	**Date/Time**	**DTW (ft)**	**DTB (ft)**	**Sampler Initials**	**Purge Date**	**Purge Start Time**	**Purge End Time**	**Purging Device**	**Well Diameter (in)**	**Actual Volume Purged (L)**	**Purge Rate (mL/min)**
002	G110	TAC	2/1/24 12:45	23.36	57.15	TAC	2/1/2024	12:50	13:16	Peristaltic Pump	2"	5.0	192.3
003	R111	DC	2/2/24 10:36	24.34	55.75	TAC	2/2/2024	10:40	11:02	Peristaltic Pump	2"	4.0	181.8
006	G120	JC	2/2/24 9:50	14.63	50.37	JC	2/2/2024	09:55	10:07	Submersible Pump	2"	4.0	333.3
007	G121	JC	2/2/24 10:17	26.54	58.56	JC	2/2/2024	10:19	10:29	Submersible Pump	2"	4.0	**400.0**
008	G122	JC	2/2/24 10:44	26.71	49.29	JC	2/2/2024	10:44	10:54	Submersible Pump	2"	3.0	300.0
009	AW-1	DC	2/1/24 13:47	11.87	54.81	TAC	2/1/2024	14:00	14:27	Submersible Pump	2"	6.0	222.2
012	DUPLICATE	DC	2/2/24 11:22	24.34		TAC	2/2/2024	10:40	11:02	Peristaltic Pump	2"	4.0	181.8

Site Samping Event: CWLP-LF 1Q24
LIMS Workorder: 24010118
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- 1Q 2024

WO Sample	Well ID	Sampling Activities and Observations									
		Sampler Initials	Date	Time	Sampling Method	Field Filtered	Appearance	Odor	Color	Post-Sample DTW (ft)	Drawdown (ft)
002	G110	DC	02/01/24	13:16	Low Flow	Yes	Clear	Slight	None	23.38	0.02
003	R111	DC	02/02/24	11:02	Low Flow	Yes	Clear	None	None	24.45	0.11
006	G120	JC	02/02/24	10:07	Low Flow	Yes	Clear	None	none	19.04	**4.41**
007	G121	JC	02/02/24	10:29	Low Flow	Yes	Clear	None	none	31.10	**4.56**
008	G122	JC	02/02/24	10:54	Low Flow	Yes	Clear	None	none	28.57	**1.86**
009	AW-1	DC	02/01/24	14:27	Low Flow	Yes	Slightly cloudy	None	Lt Brown	15.90	**4.03**
012	DUPLICATE	DC	02/02/24	11:02	Low Flow	Yes	Clear	None	None	24.45	0.11

Site Samping Event: CWLP-LF 1Q24
LIMS Workorder: 24010118
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- 1Q 2024

WO Sample	Well ID	COMMENTS
002	G110	
003	R111	
006	G120	
007	G121	
008	G122	
009	AW-1	
012	DUPLICATE	

Site Samping Event: CWLP-LF 1Q24
LIMS Workorder: 24010118
Technician(s): DC, JC, TC, BG

Stabilized Field Parameters Summary
CWLP- 1Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
G110	2/01/2024	13:16	14.5	58.1	6.85	657.8	1.89	6.40	-61.3	23.36	24010116-002A
R111	2/02/2024	11:02	13.0	55.4	6.14	90.9	2.47	4.87	135.4	24.34	24010116-003A
G120	2/02/2024	10:07	13.7	56.7	6.47	1,462.1	1.67	10.45	144.9	14.63	24010116-006A
G121	2/02/2024	10:29	12.5	54.5	6.62	1,195.9	1.91	8.32	143.8	26.54	24010116-007A
G122	2/02/2024	10:54	12.9	55.2	6.56	1,390.5	1.72	9.40	143.3	26.71	24010116-008A
AW-1	2/01/2024	14:27	13.8	56.8	6.55	1,025.6	0.56	155.98	-79.6	11.87	24010116-009A
DUPLICATE	2/02/2024	11:02	13.0	55.4	6.14	90.9	2.47	4.87	135.4	24.34	24010116-012A

Site Samping Event: CWLP-LF 1Q24 **Groundwater Sampling Forms- Groundwter Quality Parameters**
LIMS Workorder: 24010118 **CWLP- 1Q 2024**
Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G121	2/02/2024	10:23	26.54	12.0	53.6	6.67	1,176.4	3.660	24.3	143.8
G121	2/02/2024	10:26	26.54	12.2	54.0	6.63	1,195.2	2.460	12.5	144.5
G121	2/02/2024	10:29	26.54	12.5	54.5	6.62	1,195.9	1.910	8.3	143.8

Site Samping Event: CWLP-LF 1Q24 **Groundwater Sampling Forms- Groundwter Quality Parameters**
LIMS Workorder: 24010118 **CWLP- 1Q 2024**
Technician(s): DC, JC, TC, BG

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G122	2/02/2024	10:48	26.71	12.8	55.0	6.59	1,368.6	2.790	17.4	143.6
G122	2/02/2024	10:51	26.71	12.9	55.2	6.57	1,372.2	2.100	14.3	143.9
G122	2/02/2024	10:54	26.71	12.9	55.2	6.56	1,390.5	1.720	9.4	143.3

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

February 21, 2024

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24010118

Dear Shelly Hennessy:

Order No.: 24020447

Summit Environmental Technologies, Inc. received 6 sample(s) on 2/7/2024 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.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24020447**
Date: **2/21/2024**

CLIENT: TEKLAB Inc,
Project: 24010118

WorkOrder Narrative:
24020447: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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#: **24020447**
Date: **2/21/2024**

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#: **24020447**
21-Feb-24

CLIENT: TEKLAB Inc,
Project: 24010118

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24020447-001	24010118-002		2/1/2024 1:16:00 PM	2/7/2024 11:30:00 AM	Non-Potable Water
24020447-002	24010118-003		2/2/2024 11:02:00 AM	2/7/2024 11:30:00 AM	Non-Potable Water
24020447-003	24010118-006		2/2/2024 10:07:00 AM	2/7/2024 11:30:00 AM	Non-Potable Water
24020447-004	24010118-007		2/2/2024 10:29:00 AM	2/7/2024 11:30:00 AM	Non-Potable Water
24020447-005	24010118-008		2/2/2024 10:54:00 AM	2/7/2024 11:30:00 AM	Non-Potable Water
24020447-006	24010118-009		2/1/2024 2:27:00 PM	2/7/2024 11:30:00 AM	Non-Potable Water

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

DATES REPORT

WO#: **24020447**

21-Feb-24

Client: TEKLAB Inc,

Project: 24010118

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24020447-001A	24010118-002	2/1/2024 1:16:00 PM	Non-Potable Water	Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM
24020447-002A	24010118-003	2/2/2024 11:02:00 AM		Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM
24020447-003A	24010118-006	2/2/2024 10:07:00 AM		Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM
24020447-004A	24010118-007	2/2/2024 10:29:00 AM		Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM
24020447-005A	24010118-008	2/2/2024 10:54:00 AM		Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM
24020447-006A	24010118-009	2/1/2024 2:27:00 PM		Radium-226 (EPA 903.0)		2/14/2024 12:42:04 PM	2/20/2024 4:53:33 PM
				Radium-228 (EPA 904.0)		2/14/2024 12:42:04 PM	2/19/2024 2:24:00 PM

Original

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Analytical Laboratories

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **24020447**

Date Reported: **2/21/2024**

CLIENT: TEKLAB Inc,

Collection Date: 2/2/2024 10:29:00 AM

Project: 24010118

Lab ID: 24020447-004

Matrix: NON-POTABLE WATER

Client Sample ID: 24010118-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.140	1	2/20/2024 4:53:33 PM
Yield	1.00					1	2/20/2024 4:53:33 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.310	1	2/19/2024 2:24:00 PM
Yield	1.00					1	2/19/2024 2:24:00 PM

Qualifiers:

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

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#: **24020447**

Date Reported: **2/21/2024**

CLIENT: TEKLAB Inc,

Collection Date: 2/2/2024 10:54:00 AM

Project: 24010118

Lab ID: 24020447-005

Matrix: NON-POTABLE WATER

Client Sample ID: 24010118-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.130	1	2/20/2024 4:53:33 PM
Yield	1.00					1	2/20/2024 4:53:33 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.300	1	2/19/2024 2:24:00 PM
Yield	1.00					1	2/19/2024 2:24:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24020447**

21-Feb-24

Client: TEKLAB Inc,
Project: 24010118 **BatchID:** **72958**

Sample ID: **MB-72958**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180457**
Client ID: **PBW**	Batch ID: **72958**	TestNo: **E904.0**	**E903-904**	Analysis Date: **2/19/2024**	SeqNo: **4892947**

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

Sample ID: **LCS-72958**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180457**
Client ID: **LCSW**	Batch ID: **72958**	TestNo: **E904.0**	**E903-904**	Analysis Date: **2/19/2024**	SeqNo: **4892948**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.28	1.00	7.170	0	59.7	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-72958**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180457**
Client ID: **LCSS02**	Batch ID: **72958**	TestNo: **E904.0**	**E903-904**	Analysis Date: **2/19/2024**	SeqNo: **4892949**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.67	1.00	7.170	0	65.1	50	130	4.280	8.72	20	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

Summit Environmental Technologies, Inc.
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Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24020447**

21-Feb-24

Client: TEKLAB Inc,
Project: 24010118 **BatchID:** **72958**

Sample ID: **RLC1-72958** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/14/2024** RunNo: **180457**
Client ID: **BatchQC** Batch ID: **72958** TestNo: **E904.0** **E903-904** Analysis Date: **2/19/2024** SeqNo: **4892951**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00	0.8962	0	74.8	50	150				
Yield	1.00			0	0						

Sample ID: **RLC2-72958** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/14/2024** RunNo: **180457**
Client ID: **BatchQC** Batch ID: **72958** TestNo: **E904.0** **E903-904** Analysis Date: **2/19/2024** SeqNo: **4892952**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.32	1.00	0.8962	0	147	50	150				
Yield	1.00			0	0						

Sample ID: **24020780-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/14/2024** RunNo: **180457**
Client ID: **BatchQC** Batch ID: **72958** TestNo: **E904.0** **E903-904** Analysis Date: **2/19/2024** SeqNo: **4892954**

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	R
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24020447**

21-Feb-24

Client: TEKLAB Inc,
Project: 24010118 **BatchID:** **72958**

Sample ID: **MB-72958**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180466**
Client ID: **PBW**	Batch ID: **72958**	TestNo: **E903.0**	**E903-904**	Analysis Date: **2/20/2024**	SeqNo: **4893053**

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

Sample ID: **LCS-72958**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180466**
Client ID: **LCSW**	Batch ID: **72958**	TestNo: **E903.0**	**E903-904**	Analysis Date: **2/20/2024**	SeqNo: **4893054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	7.56	1.00	8.260	0	91.5	70	130				

Sample ID: **LCSD-72958**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180466**
Client ID: **LCSS02**	Batch ID: **72958**	TestNo: **E903.0**	**E903-904**	Analysis Date: **2/20/2024**	SeqNo: **4893055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	6.97	1.00	8.260	0	84.4	70	130	7.560	8.12	20	

Sample ID: **RLC3-72958**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **2/14/2024**	RunNo: **180466**
Client ID: **BatchQC**	Batch ID: **72958**	TestNo: **E903.0**	**E903-904**	Analysis Date: **2/20/2024**	SeqNo: **4893057**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24020447**

21-Feb-24

Client: TEKLAB Inc,
Project: 24010118 **BatchID:** **72958**

Sample ID: **RLC3-72958** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **2/14/2024** RunNo: **180466**
Client ID: **BatchQC** Batch ID: **72958** TestNo: **E903.0** **E903-904** Analysis Date: **2/20/2024** SeqNo: **4893057**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.02	1.00	1.000	0	102	50	150				

Sample ID: **RLC4-72958** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **2/14/2024** RunNo: **180466**
Client ID: **BatchQC** Batch ID: **72958** TestNo: **E903.0** **E903-904** Analysis Date: **2/20/2024** SeqNo: **4893058**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00	1.000	0	79.0	50	150				

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
W	Sample container temperature is out of limit as specified at testcode				

Original

TEKLAB, INC. Chain of Custody

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

24020447

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

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

12.6-0.2: Cooler Temp: 12.4c Sampler: Teklab Sampler QC Level: 2

Fedex, cooler

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.

Project# 24010118

Contact: Shelly Hennessy Email: shennessy@teklabinc.com
Requested Due Date: 20 business days or less Billing/PO: 35748
Phone: (618) 344-1004 ext. 36

State of Origin: IL

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		cpm					pH			
	24010118-002	2/1/24 1316	HNO3	Groundwater	✔	✔		15					1			
	24010118-003	2/2/24 1102	HNO3	Groundwater	✔	✔		15					1			
	24010118-006	2/2/24 1007	HNO3	Groundwater	✔	✔		31					1			
	24010118-007	2/2/24 1029	HNO3	Groundwater	✔	✔		34					1			
	24010118-008	2/2/24 1054	HNO3	Groundwater	✔	✔		31					1			
	24010118-009	2/1/24 1427	HNO3	Groundwater	✔	✔		27					1			
			Unpres	Aqueous												
			Unpres	Aqueous												
			Unpres	Aqueous												
			Unpres	Aqueous												
			Unpres	Aqueous												

*Relinquished By	Date/Time	Received By	Date/Time
[illegible]	2/5/24 1700	[signature]	2/7/24, 1130

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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: 24020447 RcptNo: 1

Logged by:	Tegan A. Richards	2/7/2024 11:30:00 AM	Tegan Richards
Completed By:	Tegan A. Richards	2/7/2024 1:22:39 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	2/7/2024 2:34:24 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	12.4	Good	Not Present			

March 21, 2024

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 24020902

Dear Eric Staley:

TEKLAB, INC received 5 samples on 2/23/2024 1:07:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24020902
Report Date: 21-Mar-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	12
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 24020902

Client Project: FGDS Landfill **Report Date:** 21-Mar-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: City Water, Light & Power
Work Order: 24020902
Client Project: FGDS Landfill
Report Date: 21-Mar-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: City Water, Light & Power
Work Order: 24020902
Client Project: FGDS Landfill
Report Date: 21-Mar-24

Cooler Receipt Temp: 3.3 °C

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

Radium-226 & -228 analysis was performed by Summit Environmental Technologies, Inc. See attached report for results.

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: City Water, Light & Power
Work Order: 24020902
Client Project: FGDS Landfill
Report Date: 21-Mar-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		3/14/2024	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: City Water, Light & Power **Work Order:** 24020902

Client Project: FGDS Landfill **Report Date:** 21-Mar-24

Lab ID: 24020902-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 02/23/2024 10:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	02/23/2024 10:00	R343711
Depth to water	*	-5.00		**3.86**	ft	1	02/23/2024 10:00	R343711
Depth to water from measuring point	*	0		**6.66**	ft	1	02/23/2024 10:00	R343711
Elevation of groundwater surface	*	0		**540.14**	ft	1	02/23/2024 10:00	R343711
Measuring Point Elevation	*	0		**546.80**	ft	1	02/23/2024 10:00	R343711
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	02/23/2024 10:00	R343711
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**12**	NTU	1	02/23/2024 10:00	R343711
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**50.9**	°F	1	02/23/2024 10:00	R343711
SW-846 9040B								
pH, Field	*	1.00		**6.91**		1	02/23/2024 10:00	R343711
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1270**	µmhos/cm @25C	1	02/23/2024 10:00	R343711
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**830**	mg/L	2.5	02/26/2024 12:48	R343638
SW-846 9036 (TOTAL)								
Sulfate	NELAP	100		**275**	mg/L	10	02/28/2024 15:25	R343726
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.13**	mg/L	1	02/26/2024 13:12	R343547
SW-846 9251 (TOTAL)								
Chloride	NELAP	20		**106**	mg/L	5	02/28/2024 15:20	R343732
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0302**	mg/L	1	02/26/2024 19:46	219154
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/26/2024 19:46	219154
Boron	NELAP	0.0200		**0.126**	mg/L	1	02/26/2024 19:46	219154
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/26/2024 19:46	219154
Calcium	NELAP	0.100		**161**	mg/L	1	02/26/2024 19:46	219154
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/26/2024 19:46	219154
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/26/2024 19:46	219154
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	02/26/2024 19:46	219154
Lithium	NELAP	0.0050		**0.0139**	mg/L	1	02/26/2024 19:46	219154
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/26/2024 19:46	219154
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010	B	**< 0.0010**	mg/L	5	02/28/2024 16:16	219154
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	02/28/2024 16:16	219154
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/28/2024 16:16	219154
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/28/2024 16:16	219154
Contamination present in the MBLK for Sb. Sample results below the reporting limit are reportable per the TNI Standard.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/06/2024 11:10	219512
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/08/2024 0:00	R344590
Radium-228	*	0		**See Attached**	pci/L	1	03/08/2024 0:00	R344590

Client: City Water, Light & Power **Work Order:** 24020902

Client Project: FGDS Landfill **Report Date:** 21-Mar-24

Lab ID: 24020902-004 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 02/21/2024 10:51

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	02/21/2024 10:51	R343711
Depth to water	*	-5.00		**0.57**	ft	1	02/21/2024 10:51	R343711
Depth to water from measuring point	*	0		**3.87**	ft	1	02/21/2024 10:51	R343711
Elevation of groundwater surface	*	0		**526.11**	ft	1	02/21/2024 10:51	R343711
Measuring Point Elevation	*	0		**529.98**	ft	1	02/21/2024 10:51	R343711
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	02/21/2024 10:51	R343711
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**37**	NTU	1	02/21/2024 10:51	R343711
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**55.9**	°F	1	02/21/2024 10:51	R343711
SW-846 9040B								
pH, Field	*	1.00		**6.71**		1	02/21/2024 10:51	R343711
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1110**	µmhos/cm @25C	1	02/21/2024 10:51	R343711
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	100		**760**	mg/L	5	02/23/2024 13:45	R343558
SW-846 9036 (TOTAL)								
Sulfate	NELAP	50		**155**	mg/L	5	02/22/2024 22:21	R343452
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.12**	mg/L	1	02/23/2024 13:21	R343485
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**31**	mg/L	1	02/22/2024 22:16	R343454
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.626**	mg/L	1	02/26/2024 19:54	219134
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/26/2024 19:54	219134
Boron	NELAP	0.0200		**2.79**	mg/L	1	02/26/2024 19:54	219134
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/26/2024 19:54	219134
Calcium	NELAP	0.100	S	**150**	mg/L	1	02/26/2024 19:54	219134
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/26/2024 19:54	219134
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/26/2024 19:54	219134
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	02/26/2024 19:54	219134
Lithium	NELAP	0.0050		**0.0064**	mg/L	1	02/26/2024 19:54	219134
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/26/2024 19:54	219134
Matrix spike control limits are not applicable due to high sample/spike ratio.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/28/2024 3:31	219134
Arsenic	NELAP	0.0010		**0.0235**	mg/L	5	02/28/2024 17:34	219134
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/28/2024 3:31	219134
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/28/2024 17:34	219134
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/06/2024 11:17	219512
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/11/2024 0:00	R344590
Radium-228	*	0		**See Attached**	pci/L	1	03/11/2024 0:00	R344590

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 24020902
Client Project: FGDS Landfill
Report Date: 21-Mar-24

Carrier: Tracy Carroll
Received By: AMD

Completed by: Amber Dilallo
On: 22-Feb-24

Reviewed by: Ellie Hopkins
On: 23-Feb-24

Pages to follow: Chain of custody 3 Extra pages included 33

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	3.3	
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.

pH strip #90719. - amberdilallo - 2/22/2024 8:43:14 AM

Samples were received on 2/22/24 at 15:40 on ice [7.3C - LTG5]. pH strip #90719. - amberdilallo - 2/22/2024 4:38:19 PM

Samples were received on 2/23/24 at 13:07 on ice [6.7C - LTG#7]. pH strip #90719. Additional Nitric Acid (96331) was needed for R101 & G113 upon arrival at the laboratory. - nickreed - 2/23/2024 2:44:53 PM

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24020902

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 3.3 °C
Preserved in: [ ] LAB [X] FIELD FOR LAB USE ONLY LTGS
LAB NOTES: 0014

Are these samples known to be involved in litigation? If yes, a surcharge will apply: [ ] Yes [✓] No
Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24010117-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
TGandi

RESULTS REQUESTED
[✓] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24020902-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-002	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-003	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-004	AW-2	2/21/24 1051	Groundwater	1	2								✓	✓	✓	✓	✓	✓
-005	RW-3	2/21/24 1138	Groundwater	0	0								✓	✓	✓	✓	✓	✓
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
TGandi	2/21/24 1715		2/21/24 1715

*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

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24020902

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 1.3 °C
Preserved in: [ ] LAB [X] FIELD FOR LAB USE ONLY LTCS
LAB NOTES: 90719

Are these samples known to be involved in litigation? If yes, a surcharge will apply: [ ] Yes [✓] No
Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24010117-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
TCarrd

RESULTS REQUESTED
[✓] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24020902-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-002	G112	2/22/24 1249	Groundwater	1	2								✓	✓	✓	✓	✓	✓
-003	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-004	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-005	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
Tracy Carrell	2/22/24 3:40	Emily Sackett	2/22/24 1540

*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

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24020902

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 6.7 °C 7
Preserved in: [x] LAB [ ] FIELD FOR LAB USE ONLY
LAB NOTES: ph ✓ 90719 added HNO3 to 2 liters ES 2/23/24 (960331)

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24010117-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Culp

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24020902-001	R101	2-23-24 / 1000	Groundwater	1	2								✓	✓	✓	✓	✓	✓
-002	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-003	G113	2-23-24 / 0928	Groundwater	1	2								✓	✓	✓	✓	✓	✓
-004	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
-005	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
Daniel Coup	2-23-24 1:07	Whitney Glynn	2/23/24 1:07

*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

ES

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- Landfill- 1Q 2024

			Weather				Well Condition				
WO Sample	**Well ID**	**Program/ Sample Type**	**Temp (°F)**	**Precipitation**	**Wind Direction**	**Sky**	**Well Pad**	**Casing**	**Protective Cover**	**Reference Mark/ ID**	**Well Locked**
001	R101	Groundwater Sample	43.0	None	SE	Clear	Good	Good	Good	Yes	Yes
002	G112	Groundwater Sample	62.0	None	W	Clear	Good	Good	Good	Yes	**No**
003	G113	Groundwater Sample	42.0	None	SE	Clear	Good	Good	Good	Yes	**No**
004	AW-2	Groundwater Sample	54.0	None	N	Clear	Good	Good	Good	Yes	**No**
005	RW-3	Groundwater Sample	57.0	None	N	Clear	Good	Good	Good	Yes	**No**

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- Landfill- 1Q 2024

		GW Level Measurement					Purge Activities							
WO Sample	**Well ID**	**Sampler Initials**	**Date/Time**	**DTW (ft)**	**DTB (ft)**	**Water Column**	**Sampler Initials**	**Purge Date**	**Purge Start Time**	**Purge End Time**	**Purging Device**	**Well Diameter (in)**	**Actual Volume Purged (L)**	**Purge Rate (mL/min)**
001	R101	JC	2/23/24 9:47	6.66	35.27	28.61	JC	2/23/2024	09:47	10:00	Submersible Pump	2"	3.0	230.8
002	G112	TAC	2/22/24 12:25	26.50	58.81	32.31	DC	2/22/2024	12:25	12:49	Submersible Pump	2"	7.0	291.7
003	G113	JC	2/23/24 9:11	4.12	12.85	8.73	JC	2/23/2024	09:18	09:28	Submersible Pump	2"	2.5	250.0
004	AW-2	DC	2/21/24 10:07	3.87	32.64	28.77	DC	2/21/2024	10:26	10:51	Peristaltic Pump	2"	6.0	240.0
005	RW-3	DC	2/21/24 11:20	9.10	44.01	34.91	DC	2/21/2024	11:21	11:38	Bladder Pump	2"	4.0	235.3

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- Landfill- 1Q 2024

		Sampling Activities and Observations									
WO Sample	**Well ID**	**Sampler Initials**	**Date**	**Time**	**Sampling Method**	**Field Filtered**	**Appearance**	**Odor**	**Color**	**Post-Sample DTW (ft)**	**Drawdown (ft)**
001	R101	JC	02/23/24	10:00	Low Flow	Yes	Clear	Slight	none	9.12	**2.46**
002	G112	TAC	02/22/24	12:49	Low Flow	Yes	Clear	None	None	32.75	**6.25**
003	G113	JC	02/23/24	09:28	Low Flow	Yes	Clear	Moderate	none	7.21	**3.09**
004	AW-2	TAC	02/21/24	10:51	Low Flow	Yes	Clear	None	Lt Rust	4.00	0.13
005	RW-3	TAC	02/21/24	11:38	Low Flow	Yes	Clear	None	None	13.25	**4.15**

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Summary
CWLP- Landfill- 1Q 2024

WO Sample	Well ID	COMMENTS
001	R101	
002	G112	
003	G113	
004	AW-2	
005	RW-3	

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Stabilized Field Parameters Summary
CWLP- Landfill- 1Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
R101	2/23/2024	10:00	10.5	50.9	6.91	1,266.9	6.73	12.31	14.7	6.66	24020902-001A
G112	2/22/2024	12:49	13.1	55.6	6.93	1,022.2	0.48	11.94	-55.2	26.50	24020902-002A
G113	2/23/2024	9:28	8.3	46.9	6.08	1,981.9	4.34	15.80	-104.4	4.12	24020902-003A
AW-2	2/21/2024	10:51	13.3	55.9	6.71	1,106.3	1.45	36.78	-66.4	3.87	24020902-004A
RW-3	2/21/2024	11:38	14.0	57.2	7.10	647.6	0.78	124.34	-134.4	9.10	24020902-005A

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Form- Groundwater Quality Parameters
CWLP- Landfill- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
R101	2/23/2024	9:51	6.66	10.4	50.7	6.92	1,279.1	7.66	18.12	-0.8
R101	2/23/2024	9:54	6.66	10.8	51.4	6.91	1,267.1	7.08	16.26	4.7
R101	2/23/2024	9:57	6.66	10.5	50.9	6.91	1,265.3	6.88	14.27	10.0
R101	2/23/2024	10:00	6.66	10.5	50.9	6.91	1,266.9	6.73	12.31	14.7

Site Samping Event: CWLP Landfill- 1Q24
LIMS Workorder: 24020902
Technician(s): DC, JC, TC, BG

Groundwater Sampling Form- Groundwater Quality Parameters
CWLP- Landfill- 1Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µS/cm)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
AW-2	2/21/2024	10:42	3.87	13.2	55.8	6.70	1,123.6	1.69	67.26	-33.8
AW-2	2/21/2024	10:45	3.87	13.3	55.9	6.70	1,119.4	1.61	84.98	-49.2
AW-2	2/21/2024	10:48	3.87	13.3	55.9	6.71	1,111.8	1.52	61.84	-59.2
AW-2	2/21/2024	10:51	3.87	13.3	55.9	6.71	1,106.3	1.45	36.78	-66.4

Summit Environmental Technologies, Inc.
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March 19, 2024

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24020902

Dear Shelly Hennessy:

Order No.: 24030042

Summit Environmental Technologies, Inc. received 5 sample(s) on 2/29/2024 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

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Case Narrative

WO#: **24030042**
Date: **3/19/2024**

CLIENT: TEKLAB Inc,
Project: 24020902

WorkOrder Narrative:
24030042: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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.

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Qualifiers and Acronyms

WO#: **24030042**
Date: **3/19/2024**

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.

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Workorder Sample Summary

WO#: **24030042**

19-Mar-24

CLIENT: TEKLAB Inc,
Project: 24020902

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24030042-001	24020902-001		2/23/2024 1:00:00 PM	2/29/2024 12:25:00 PM	Non-Potable Water
24030042-002	24020902-002		2/22/2024 12:49:00 PM	2/29/2024 12:25:00 PM	Non-Potable Water
24030042-003	24020902-003		2/23/2024 9:28:00 AM	2/29/2024 12:25:00 PM	Non-Potable Water
24030042-004	24020902-004		2/21/2024 10:51:00 AM	2/29/2024 12:25:00 PM	Non-Potable Water
24030042-005	24020902-005		2/21/2024 11:38:00 AM	2/29/2024 12:25:00 PM	Non-Potable Water

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DATES REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,

Project: 24020902

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24030042-001A	24020902-001	2/23/2024 1:00:00 PM	Non-Potable Water	Combined Radium (EPA903+904)			3/12/2024 10:27:00 AM
				Radium-226 (EPA 903.0)		3/5/2024 11:12:34 AM	3/11/2024 10:03:00 AM
				Radium-228 (EPA 904.0)		3/5/2024 11:12:34 AM	3/8/2024 2:17:00 PM
24030042-002A	24020902-002	2/22/2024 12:49:00 PM		Combined Radium (EPA903+904)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-226 (EPA 903.0)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-228 (EPA 904.0)		3/6/2024 11:47:00 AM	3/11/2024 2:23:26 PM
24030042-003A	24020902-003	2/23/2024 9:28:00 AM		Combined Radium (EPA903+904)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-226 (EPA 903.0)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-228 (EPA 904.0)		3/6/2024 11:47:00 AM	3/11/2024 2:23:26 PM
24030042-004A	24020902-004	2/21/2024 10:51:00 AM		Combined Radium (EPA903+904)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-226 (EPA 903.0)		3/6/2024 11:47:00 AM	3/12/2024 10:27:00 AM
				Radium-228 (EPA 904.0)		3/6/2024 11:47:00 AM	3/11/2024 2:23:26 PM
24030042-005A	24020902-005	2/21/2024 11:38:00 AM		Combined Radium (EPA903+904)		3/5/2024 11:12:34 AM	3/15/2024 7:25:39 AM
				Radium-226 (EPA 903.0)		3/5/2024 11:12:34 AM	3/11/2024 10:03:00 AM
				Radium-228 (EPA 904.0)		3/5/2024 11:12:34 AM	3/8/2024 2:17:00 PM

Original

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Analytical Report

(consolidated)

WO#: **24030042**

Date Reported: **3/19/2024**

CLIENT: TEKLAB Inc,

Collection Date: 2/23/2024 1:00:00 PM

Project: 24020902

Lab ID: 24030042-001

Matrix: NON-POTABLE WATER

Client Sample ID: 24020902-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
COMBINED RADIUM (EPA903+904)				**CALCULATION**			Analyst: **DHF**
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.310	1	3/12/2024 10:27:00 AM
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0400	1	3/11/2024 10:03:00 AM
Yield	1.00					1	3/11/2024 10:03:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.270	1	3/8/2024 2:17:00 PM
Yield	1.00					1	3/8/2024 2:17:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Analytical Report

(consolidated)

WO#: **24030042**

Date Reported: **3/19/2024**

CLIENT: TEKLAB Inc,

Collection Date: 2/21/2024 10:51:00 AM

Project: 24020902

Lab ID: 24030042-004

Matrix: NON-POTABLE WATER

Client Sample ID: 24020902-004

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
COMBINED RADIUM (EPA903+904)					**CALCULATION**	**E903-904**	Analyst: **DHF**
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.530	1	3/12/2024 10:27:00 AM
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **DHF**
Radium-226	ND	1.00		pCi/L	± 0.110	1	3/12/2024 10:27:00 AM
Yield	0.960					1	3/12/2024 10:27:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.420	1	3/11/2024 2:23:26 PM
Yield	0.960					1	3/11/2024 2:23:26 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73522**

Sample ID: **MB-73522**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **PBW**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923941**

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

Sample ID: **LCS-73522**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **LCSW**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.32	1.00	5.000	0	66.4	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-73522**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **LCSS02**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.49	1.00	5.000	0	69.8	50	130	3.320	4.99	20	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73522**

Sample ID: **RLC-73522**	SampType: **RLC**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.01	1.00	1.000	0	101	50	150				
Yield	1.00			0	0						

Sample ID: **RLCD-73522**	SampType: **RLC**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923946**

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	70.0	50	150				
Yield	1.00			0	0						

Sample ID: **24030092-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181655**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/8/2024**	SeqNo: **4923950**

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	R
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,

Project: 24020902 **BatchID:** **73522**

Sample ID: **24030092-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/5/2024** RunNo: **181655**

Client ID: **BatchQC** Batch ID: **73522** TestNo: **E904.0** **E903-904** Analysis Date: **3/8/2024** SeqNo: **4923952**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	2.41	1.00		0	0			2.380	1.25	20	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73522**

Sample ID: **MB-73522**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **PBW**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924195**

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

Sample ID: **LCS-73522**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **LCSW**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924196**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.34	1.00	5.000	0	107	70	130				

Sample ID: **LCSD-73522**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **LCSS02**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924197**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.64	1.00	5.000	0	92.8	70	130	5.340	14.0	20	

Sample ID: **RLC-73522**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924199**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73522**

Sample ID: **RLC-73522**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924199**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00	1.000	0	91.0	50	150				

Sample ID: **RLCD-73522**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924200**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00	1.000	0	78.0	50	150				

Sample ID: **24030092-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2024**	RunNo: **181663**
Client ID: **BatchQC**	Batch ID: **73522**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4924202**

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	
Yield	1.00							1.000	0	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73663**

Sample ID: **MB-73663**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181768**
Client ID: **PBW**	Batch ID: **73663**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4926106**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0						
Yield	0.770			0	0						

Sample ID: **LCS-73663**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181768**
Client ID: **LCSW**	Batch ID: **73663**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4926107**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.53	1.00	5.000	0	70.6	50	130				
Yield	0.990			0	0						

Sample ID: **LCSD-73663**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181768**
Client ID: **LCSS02**	Batch ID: **73663**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/11/2024**	SeqNo: **4926108**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.34	1.00	5.000	0	66.8	50	130	3.530	5.53	20	
Yield	1.00			0	0			0.9900	1.01		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73663**

Sample ID: **RLC-73663** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181768**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E904.0** **E903-904** Analysis Date: **3/11/2024** SeqNo: **4926110**

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	59.0	50	150				
Yield	0.950			0	0						

Sample ID: **24030092-003ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181768**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E904.0** **E903-904** Analysis Date: **3/11/2024** SeqNo: **4926113**

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	R
Yield	0.990			0	0			0.9900	0		

Sample ID: **24030092-004ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181768**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E904.0** **E903-904** Analysis Date: **3/11/2024** SeqNo: **4926115**

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	
Yield	0.990			0	0			1.000	1.01		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73663**

Sample ID: **MB-73663**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181778**
Client ID: **PBW**	Batch ID: **73663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/12/2024**	SeqNo: **4926223**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									
Yield	0.750										

Sample ID: **LCS-73663**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181778**
Client ID: **LCSW**	Batch ID: **73663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/12/2024**	SeqNo: **4926224**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.66	1.00	5.000	0	93.2	70	130				

Sample ID: **LCSD-73663**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181778**
Client ID: **LCSS02**	Batch ID: **73663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/12/2024**	SeqNo: **4926225**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.53	1.00	5.000	0	90.6	70	130	4.660	2.83	20	

Sample ID: **RLC-73663**	SampType: **RLC**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/6/2024**	RunNo: **181778**
Client ID: **BatchQC**	Batch ID: **73663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/12/2024**	SeqNo: **4926227**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73663**

Sample ID: **RLC-73663** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181778**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E903.0** **E903-904** Analysis Date: **3/12/2024** SeqNo: **4926227**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.00	1.00	1.000	0	100	50	150				

Sample ID: **RLCD-73663** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181778**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E903.0** **E903-904** Analysis Date: **3/12/2024** SeqNo: **4926228**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.30	1.00	1.000	0	130	50	150				

Sample ID: **24030092-003ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181778**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E903.0** **E903-904** Analysis Date: **3/12/2024** SeqNo: **4926230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	1.04	1.00						1.070	2.84	20	
Yield	0.980							0.9800	0	0	

Sample ID: **24030092-004ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181778**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E903.0** **E903-904** Analysis Date: **3/12/2024** SeqNo: **4926232**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24030042**

19-Mar-24

Client: TEKLAB Inc,
Project: 24020902 **BatchID:** **73663**

Sample ID: **24030092-004ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/6/2024** RunNo: **181778**
Client ID: **BatchQC** Batch ID: **73663** TestNo: **E903.0** **E903-904** Analysis Date: **3/12/2024** SeqNo: **4926232**

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	
Yield	0.960							0.9900	3.08	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

TEKLAB, INC. Chain of Custody

240300 42

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

11.2-0.2= 11.0°C
13.5-0.2= 13.3°C
11.0-0.2= 10.8°C
Fedex, cooler

Cooler Temp: | Sampler: T. Carrol/ J. Colp | QC Level: 2

Project# 24020902

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium (226, 228, and combined) on your standard turnaround time.
Please report 24020902-005 from 24020117-001.
Receipt summary requested.

Contact: Shelly Hennessy | Email: shennessy@teklabinc.com
Requested Due Date: 20 business days or less | Billing/PO: 35851
Phone: 618 344 1004 ext 36

State of Origin: IL

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.

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

Lab Use	Sample ID	Sample Date/Time	Preservative	Matrix	Radium 226	Radium 228	Combined Radium		CPM			PH				
	24020902-001	2/23/24 1300	HNO3	Groundwater	✔	✔	✔	☐	38	☐	☐	1	☐	☐	☐	☐
	24020902-002	2/22/24 1249	HNO3	Groundwater	✔	✔	✔	☐	38	☐	☐	1	☐	☐	☐	☐
	24020902-003	2/23/24 0928	HNO3	Groundwater	✔	✔	✔	☐	34	☐	☐	1	☐	☐	☐	☐
	24020902-004	2/21/24 1051	HNO3	Groundwater	✔	✔	✔	☐	43	☐	☐	1	☐	☐	☐	☐
	24020902-005	2/21/24 1138	HNO3	Groundwater	✔	✔	✔	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐
			Unpres	Groundwater	☐	☐	☐	☐		☐	☐		☐	☐	☐	☐

*Relinquished By	Date/Time	Received By	Date/Time
			2/29/24, 1225

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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Analytical Laboratories

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Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24030042 RcptNo: 1

Logged by:	Tegan A. Richards	2/29/2024 12:25:00 PM	Tegan Richards
Completed By:	Salwa A. Najjar	3/1/2024 1:28:55 PM	Salwa Najjar
Reviewed By:	Jennifer Woolf	3/1/2024 2:18:07 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	10.8	Good	Not Present			

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Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24030042 RcptNo: 1

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	11.0	Good	Not Present			
3	13.3	Good	Not Present			

May 2024 Laboratory Analytical Report

June 18, 2024

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 24050002

Dear Eric Staley:

TEKLAB, INC received 11 samples on 5/13/2024 4:10:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 24050002
Client Project: FGDS Landfill
Report Date: 18-Jun-24

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Client: City Water, Light & Power **Work Order:** 24050002

Client Project: FGDS Landfill **Report Date:** 18-Jun-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)

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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: City Water, Light & Power
Work Order: 24050002
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Cooler Receipt Temp: 13.5 °C

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

Radium-226 & -228 analysis was performed by Summit Environmental Technologies, Inc. See attached report for results.

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: City Water, Light & Power
Work Order: 24050002
Client Project: FGDS Landfill
Report Date: 18-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: City Water, Light & Power **Work Order:** 24050002

Client Project: FGDS Landfill **Report Date:** 18-Jun-24

Lab ID: 24050002-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 05/13/2024 12:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	05/13/2024 12:20	R347527
Depth to water	*	-5.00		**3.15**	ft	1	05/13/2024 12:20	R347527
Depth to water from measuring point	*	0		**5.95**	ft	1	05/13/2024 12:20	R347527
Elevation of groundwater surface	*	0		**540.85**	ft	1	05/13/2024 12:20	R347527
Measuring Point Elevation	*	0		**546.80**	ft	1	05/13/2024 12:20	R347527
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	05/13/2024 12:20	R347527
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**16**	NTU	1	05/13/2024 12:20	R347527
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**56.9**	°F	1	05/13/2024 12:20	R347527
SW-846 9040B								
pH, Field	*	1.00		**6.92**		1	05/13/2024 12:20	R347527
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**805**	µmhos/cm @25C	1	05/13/2024 12:20	R347527
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**700**	mg/L	2.5	05/17/2024 9:49	R347497
SW-846 9036 (TOTAL)								
Sulfate	NELAP	100		**252**	mg/L	10	05/20/2024 19:20	R347580
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.12**	mg/L	1	05/17/2024 11:34	R347462
SW-846 9251 (TOTAL)								
Chloride	NELAP	20		**108**	mg/L	5	05/20/2024 19:15	R347642
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0209**	mg/L	1	05/21/2024 10:27	223159
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	05/21/2024 10:27	223159
Boron	NELAP	0.0200		**0.128**	mg/L	1	05/17/2024 16:29	222940
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	05/21/2024 10:27	223159
Calcium	NELAP	0.100		**147**	mg/L	1	05/21/2024 10:27	223159
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	05/21/2024 10:27	223159
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	05/21/2024 10:27	223159
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	05/21/2024 10:27	223159
Lithium	NELAP	0.0500		**< 0.0500**	mg/L	1	05/23/2024 17:56	223159
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	05/21/2024 10:27	223159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	05/22/2024 14:05	223159
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	05/21/2024 14:21	223159
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	05/21/2024 14:21	223159
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	05/21/2024 14:21	223159
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	05/22/2024 15:06	223231
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779
Radium-228	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779

Client: City Water, Light & Power **Work Order:** 24050002

Client Project: FGDS Landfill **Report Date:** 18-Jun-24

Lab ID: 24050002-007 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 05/09/2024 11:19

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	05/09/2024 11:19	R347527
Depth to water	*	-5.00		**24.89**	ft	1	05/09/2024 11:19	R347527
Depth to water from measuring point	*	0		**26.76**	ft	1	05/09/2024 11:19	R347527
Elevation of groundwater surface	*	0		**528.84**	ft	1	05/09/2024 11:19	R347527
Measuring Point Elevation	*	0		**555.60**	ft	1	05/09/2024 11:19	R347527
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	05/09/2024 11:19	R347527
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**8.2**	NTU	1	05/09/2024 11:19	R347527
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**59.0**	°F	1	05/09/2024 11:19	R347527
SW-846 9040B								
pH, Field	*	1.00		**6.76**		1	05/09/2024 11:19	R347527
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1040**	µmhos/cm @25C	1	05/09/2024 11:19	R347527
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**990**	mg/L	2.5	05/15/2024 11:57	R347402
SW-846 9036 (TOTAL)								
Sulfate	NELAP	200		**337**	mg/L	20	05/15/2024 0:52	R347268
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.17**	mg/L	1	05/17/2024 12:05	R347462
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**32**	mg/L	1	05/15/2024 0:48	R347274
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.582**	mg/L	1	05/15/2024 13:34	222813
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	05/15/2024 13:34	222813
Boron	NELAP	0.0200		**3.48**	mg/L	1	05/15/2024 13:34	222813
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	05/15/2024 13:34	222813
Calcium	NELAP	0.100		**188**	mg/L	1	05/15/2024 13:34	222813
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	05/15/2024 13:34	222813
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	05/15/2024 13:34	222813
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	05/15/2024 13:34	222813
Lithium	NELAP	0.0500		**< 0.0500**	mg/L	1	05/20/2024 11:18	222813
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	05/15/2024 13:34	222813
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	05/14/2024 16:20	222813
Arsenic	NELAP	0.0010		**0.0150**	mg/L	5	05/14/2024 16:20	222813
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	05/14/2024 16:20	222813
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	05/15/2024 16:50	222813
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	05/24/2024 14:50	222922
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779
Radium-228	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779

Client: City Water, Light & Power **Work Order:** 24050002

Client Project: FGDS Landfill **Report Date:** 18-Jun-24

Lab ID: 24050002-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 05/09/2024 11:53

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	05/09/2024 11:53	R347527
Depth to water	*	-5.00		**25.93**	ft	1	05/09/2024 11:53	R347527
Depth to water from measuring point	*	0		**27.67**	ft	1	05/09/2024 11:53	R347527
Elevation of groundwater surface	*	0		**526.73**	ft	1	05/09/2024 11:53	R347527
Measuring Point Elevation	*	0		**554.40**	ft	1	05/09/2024 11:53	R347527
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	05/09/2024 11:53	R347527
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**2.9**	NTU	1	05/09/2024 11:53	R347527
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.2**	°F	1	05/09/2024 11:53	R347527
SW-846 9040B								
pH, Field	*	1.00		**6.64**		1	05/09/2024 11:53	R347527
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1230**	µmhos/cm @25C	1	05/09/2024 11:53	R347527
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**1350**	mg/L	2.5	05/15/2024 11:58	R347402
SW-846 9036 (TOTAL)								
Sulfate	NELAP	200		**588**	mg/L	20	05/15/2024 1:00	R347268
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.15**	mg/L	1	05/20/2024 10:41	R347555
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**41**	mg/L	1	05/15/2024 0:56	R347274
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.494**	mg/L	1	05/15/2024 13:34	222813
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	05/15/2024 13:34	222813
Boron	NELAP	0.0200		**12.7**	mg/L	1	05/15/2024 13:34	222813
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	05/15/2024 13:34	222813
Calcium	NELAP	0.100		**260**	mg/L	1	05/15/2024 13:34	222813
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	05/15/2024 13:34	222813
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	05/15/2024 13:34	222813
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	05/15/2024 13:34	222813
Lithium	NELAP	0.0500		**< 0.0500**	mg/L	1	05/20/2024 11:19	222813
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	05/15/2024 13:34	222813
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	05/14/2024 16:25	222813
Arsenic	NELAP	0.0010		**0.0042**	mg/L	5	05/14/2024 16:25	222813
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	05/14/2024 16:25	222813
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	05/15/2024 16:55	222813
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	05/23/2024 13:01	222958
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779
Radium-228	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779

Client: City Water, Light & Power **Work Order:** 24050002

Client Project: FGDS Landfill **Report Date:** 18-Jun-24

Lab ID: 24050002-010 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 05/13/2024 10:52

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	05/13/2024 10:52	R347527
Depth to water	*	-5.00		**-0.01**	ft	1	05/13/2024 10:52	R347527
Depth to water from measuring point	*	0		**3.29**	ft	1	05/13/2024 10:52	R347527
Elevation of groundwater surface	*	0		**526.69**	ft	1	05/13/2024 10:52	R347527
Measuring Point Elevation	*	0		**529.98**	ft	1	05/13/2024 10:52	R347527
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	05/13/2024 10:52	R347527
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**8.1**	NTU	1	05/13/2024 10:52	R347527
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**59.0**	°F	1	05/13/2024 10:52	R347527
SW-846 9040B								
pH, Field	*	1.00		**6.83**		1	05/13/2024 10:52	R347527
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**784**	µmhos/cm @25C	1	05/13/2024 10:52	R347527
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**715**	mg/L	2.5	05/17/2024 9:49	R347497
SW-846 9036 (TOTAL)								
Sulfate	NELAP	50		**130**	mg/L	5	05/20/2024 19:28	R347580
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.12**	mg/L	1	05/20/2024 12:59	R347555
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**32**	mg/L	1	05/20/2024 19:23	R347642
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.663**	mg/L	1	05/21/2024 10:27	223159
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	05/21/2024 10:27	223159
Boron	NELAP	0.0200		**2.71**	mg/L	1	05/21/2024 10:27	223159
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	05/21/2024 10:27	223159
Calcium	NELAP	0.100		**139**	mg/L	1	05/21/2024 10:27	223159
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	05/21/2024 10:27	223159
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	05/21/2024 10:27	223159
Lead	NELAP	0.0150		**< 0.0150**	mg/L	1	05/21/2024 10:27	223159
Lithium	NELAP	0.0500		**< 0.0500**	mg/L	1	05/23/2024 17:57	223159
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	05/21/2024 10:27	223159
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	05/22/2024 14:10	223159
Arsenic	NELAP	0.0010		**0.0219**	mg/L	5	05/21/2024 14:27	223159
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	05/21/2024 14:27	223159
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	05/21/2024 14:27	223159
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	05/22/2024 16:17	223231
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779
Radium-228	*	0		**See Attached**	pci/L	1	06/07/2024 0:00	R348779

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 24050002
Client Project: FGDS Landfill
Report Date: 18-Jun-24

Carrier: Daniel Stupar
Received By: WAO

Completed by: Amber Dilallo
On: 08-May-24

Reviewed by: Ellie Hopkins
On: 14-May-24

Pages to follow: Chain of custody 4 Extra pages included 50

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	13.5	
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 5/8/24 at 1505 on ice [13.5C - LTG5]. pH strip #96651. - amberdilallo - 5/8/2024 4:32:04 PM

Samples were received on 5/9/2024 at 16:35 on ice [12.1C - LTG#5]. - pschultz - 5/10/2024 9:12:30 AM
pH strip #96651. Additional Nitric Acid (97737) was needed for samples G112 and G113 upon arrival at the laboratory. - pschultz - 5/10/2024 9:12:38 AM

Samples were received on 5/10/2024 at 13:30 on ice [10.7C - LTG#7]. - pschultz - 5/10/2024 2:35:09 PM
pH strip #96651. WO - pschultz - 5/10/2024 2:35:10 PM

Samples were received on 5/13/24 at 1610 on ice [19.3C - LTG7]. pH strip #[96651#]. - amberdilallo - 5/14/2024 8:15:38 AM

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24050002

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 13.5 °C 5
Preserved in: [ ] LAB [x] FIELD
LAB NOTES: PWS 96651 DSS/8

FOR LAB USE ONLY

TEKLAB

Courier

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Tracy Carrol / Danny Crump

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24050002-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110	5/8/24 1114	Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111	5/8/24 1244	Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
Daniel Crump	5-8-1505	Whitney Owen	5/8/24 1505

*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

DSS/8

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24050002

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 12.1 °C
Preserved in: [x] LAB [ ] FIELD
FOR LAB USE ONLY
LAB NOTES: pH in 96651
Added HNO3 (9773) to G112 + G113 PS 5/10

Client Comments: * per COC for 24050001
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

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? [ ] 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 Permit on file

PROJECT NAME/NUMBER: FGDS Landfill
SAMPLE COLLECTOR'S NAME: TCarroll

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24050002-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112	5/9/24 1232	Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113	1348	Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120	1028	Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121	1119	Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122	1153	Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3	5/9 1212*	Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
Daniel Crump	5-9 / 1635	Nick Reed	5/9/24 1635

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24050002

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

LTG-7

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 10.7 °C
Preserved in: ☐ LAB ☒ FIELD FOR LAB USE ONLY
LAB NOTES: pH 4 unit 5110 30

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER: FGDS Landfill
SAMPLE COLLECTOR'S NAME: Justin Colp

RESULTS REQUESTED: ☑ Standard ☐ 1-2 Day (100% Surcharge) ☐ Other ☐ 3 Day (50% Surcharge)
BILLING INSTRUCTIONS:

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24050002-001	R101		Groundwater	1	2								✔	✔	✔	✔	✔	✔
002	G110		Groundwater	1	2								✔	✔	✔	✔	✔	✔
003	R111		Groundwater	1	2								✔	✔	✔	✔	✔	✔
004	G112		Groundwater	1	2								✔	✔	✔	✔	✔	✔
005	G113		Groundwater	1	2								✔	✔	✔	✔	✔	✔
006	G120		Groundwater	1	2								✔	✔	✔	✔	✔	✔
007	G121		Groundwater	1	2								✔	✔	✔	✔	✔	✔
008	G122		Groundwater	1	2								✔	✔	✔	✔	✔	✔
009	AW-1	5-10-24 / 1037	Groundwater	1	2								✔	✔	✔	✔	✔	✔
010	AW-2		Groundwater	1	2								✔	✔	✔	✔	✔	✔
011	RW-3		Groundwater	0	0								✔	✔	✔	✔	✔	✔

Relinquished By	Date/Time	Received By	Date/Time
J Colp	5-10-24 / 1330	Whitney Clapp	5/10/24 1330

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CHAIN OF CUSTODY

Pg 1 of 1 Workorder # 24050002

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 19.3 °C LTC7
Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY
LAB NOTES: pH/96151 PS 5/14

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Culp

RESULTS REQUESTED
☑ Standard ☐ 1-2 Day (100% Surcharge)
☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers									INDICATE ANALYSIS REQUESTED												
				UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity								
24050002-001	R101	5-13-24 / 1220	Groundwater	1	2								✔	✔	✔	✔	✔	✔								
002	G110		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
003	R111		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
004	G112		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
005	G113		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
006	G120		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
007	G121		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
008	G122		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
009	AW-1		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
010	AW-2	5-13-24 / 1052	Groundwater	1	2								✔	✔	✔	✔	✔	✔								
011	RW-3		Groundwater	0	0								✔	✔	✔	✔	✔	✔								

Relinquished By	Date/Time	Received By	Date/Time
Daniel Crump	5-8/ 1505	Shawn Dilsaver	5/13/24 1610

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Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Summary
CWLP- FGDS LF- 2Q 2024

			Weather				Well Condition				
WO Sample	**Well ID**	**Program/ Sample Type**	**Temp (°F)**	**Precipitation**	**Wind Direction**	**Sky**	**Well Pad**	**Casing**	**Protective Cover**	**Reference Mark/ ID**	**Well Locked**
001	R101	Groundwater Sample	72.0	None	S	Cloudy	Good	Good	Good	Yes	No
002	G110	Groundwater Sample	75.0	Light	S	Cloudy	Good	Good	Good	Yes	No
003	R111	Groundwater Sample	75.0	Light	S	Cloudy	Good	Good	Good	Yes	No
004	G112	Groundwater Sample	71.0	None	W	Cloudy	Good	Good	Good	Yes	No
005	G113	Groundwater Sample	72.0	None	W	Cloudy	Good	Good	Good	Yes	No
006	G120	Groundwater Sample	68.0	None	W	Cloudy	Good	Good	Good	Yes	No
007	G121	Groundwater Sample	69.0	None	W	Partly cloudy	Good	Good	Good	Yes	No
008	G122	Groundwater Sample	71.0	None	W	Cloudy	Good	Good	Good	Yes	No
009	AW-1	Groundwater Sample	59.0	None	NW	Partly cloudy	Good	Good	Good	Yes	No
010	AW-2	Groundwater Sample	71.0	None	S	Cloudy	Good	Good	Good	Yes	No
011	RW-3	Groundwater Sample	73.0	None	S	Partly cloudy	Good	Good	Good	Yes	No

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Summary
CWLP- FGDS LF- 2Q 2024

		GW Level Measurement				Purge Activities							
WO Sample	Well ID	Sampler Initials	Date/Time	DTW (ft)	DTB (ft)	Sampler Initials	Purge Date	Purge Start Time	Purge End Time	Purging/Sampling Device	Well Diameter (in)	Actual Volume Purged (L)	Purge Rate (mL/min)
001	R101	JC	5/13/24 11:56	5.95	35.27	JC	5/13/2024	11:58	12:20	Submersible Pump	2"	7.0	318.2
002	G110	DC	5/8/24 10:22	23.19	57.15	DC	5/8/2024	10:27	11:14	Peristaltic Pump	2"	6.0	127.7
003	R111	DC	5/8/24 12:04	24.22	55.75	DC	5/8/2024	12:09	12:44	Peristaltic Pump	2"	7.0	200.0
004	G112	JC	5/9/24 12:06	26.99	58.81	JC	5/9/2024	12:19	12:32	Submersible Pump	2"	5.0	384.6
005	G113	JC	5/9/24 13:31	3.85	12.85	JC	5/9/2024	13:34	13:48	Submersible Pump	2"	3.0	214.3
006	G120	JC	5/9/24 9:58	14.79	50.37	JC	5/9/2024	10:00	10:28	Submersible Pump	2"	11.0	392.9
007	G121	JC	5/9/24 11:03	26.76	58.56	JC	5/9/2024	11:03	11:19	Submersible Pump	2"	6.0	375.0
008	G122	JC	5/9/24 11:29	27.67	49.29	JC	5/9/2024	11:39	11:53	Submersible Pump	2"	6.0	428.6
009	AW-1	JC	5/10/24 9:39	12.63	54.81	JC	5/10/2024	09:44	10:37	Submersible Pump	2"	17.0	320.8
010	AW-2	JC	5/13/24 10:11	3.29	32.64	JC	5/13/2024	10:12	10:52	Submersible Pump	2"	14.0	350.0
011	RW-3	TAC	5/9/24 11:19	7.87	44.01	TAC	5/9/2024	11:23	12:12	Bladder Pump	2"	9.0	183.7

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Summary
CWLP- FGDS LF- 2Q 2024

		Sampling Activities and Observations									
WO Sample	**Well ID**	**Sampler Initials**	**Date**	**Time**	**Sampling Method**	**Field Filtered**	**Appearance**	**Odor**	**Color**	**Post-Sample DTW (ft)**	**Drawdown (ft)**
001	R101	JC	05/13/24	12:20	Low Flow	Yes	Clear	None	none	6.23	0.28
002	G110	TAC	05/08/24	11:14	Low Flow	Yes	Clear	None	None	23.38	0.19
003	R111	TAC	05/08/24	12:44	Low Flow	Yes	Clear	None	None	24.33	0.11
004	G112	JC	05/09/24	12:32	Low Flow	Yes	Clear	None	none	27.09	0.10
005	G113	JC	05/09/24	13:48	Low Flow	Yes	Clear	Strong	none	3.97	0.12
006	G120	JC	05/09/24	10:28	Low Flow	Yes	Clear	Slight	none	15.36	**0.57**
007	G121	JC	05/09/24	11:19	Low Flow	Yes	Clear	None	none	27.15	0.39
008	G122	JC	05/09/24	11:53	Low Flow	Yes	Clear	None	none	27.97	0.30
009	AW-1	JC	05/10/24	10:37	Low Flow	Yes	Clear	None	none	12.98	0.35
010	AW-2	JC	05/13/24	10:52	Low Flow	Yes	Slightly cloudy	Slight	lt brown	4.67	**1.38**
011	RW-3	TAC	05/09/24	12:12	Low Flow	Yes	Clear	None	None	14.87	**7.00**

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Summary
CWLP- FGDS LF- 2Q 2024

WO Sample	Well ID	COMMENTS
001	R101	
002	G110	
003	R111	
004	G112	
005	G113	
006	G120	Flush Mount well
007	G121	
008	G122	
009	AW-1	
010	AW-2	
011	RW-3	

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Stabilized Field Parameters Summary
CWLP- FGDS LF- 2Q 2024

Well ID	Date	Time	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	LIMS ID
R101	5/13/2024	12:20	13.8	56.9	6.92	804.8	2.63	16.14	77.6	5.95	24050001-001A
G110	5/8/2024	11:14	15.5	60.0	6.54	783.4	1.42	4.97	-62.3	23.19	24050001-002A
R111	5/8/2024	12:44	14.5	58.0	6.01	120.4	3.91	2.71	66.5	24.22	24050001-003A
G112	5/9/2024	12:32	14.6	58.3	6.97	1,066.2	0.17	4.06	-136.2	26.99	24050001-004A
G113	5/9/2024	13:48	15.5	59.8	6.27	1,357.4	0.17	5.05	-273.2	3.85	24050001-005A
G120	5/9/2024	10:28	17.5	63.4	6.65	1,294.2	0.11	7.19	-147.1	14.79	24050001-006A
G121	5/9/2024	11:19	15.0	59.0	6.76	1,041.5	0.15	8.16	-144.6	26.76	24050001-007A
G122	5/9/2024	11:53	14.6	58.2	6.64	1,225.7	0.28	2.93	-119.2	27.67	24050001-008A
AW-1	5/10/2024	10:37	14.5	58.1	6.58	1,063.8	0.14	25.85	-122.3	12.63	24050001-009A
AW-2	5/13/2024	10:52	15.0	59.0	6.83	783.6	0.07	8.08	-160.7	3.29	24050001-010A
RW-3	5/9/2024	12:12	15.1	59.1	6.70	644.4	0.82	23.4	-105.9	7.87	24050001-011A

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Field Forms- GW Quality Parameters
CWLP- FGDS LF- 2Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
R101	5/13/2024	12:11	5.95	12.9	55.3	6.89	804.9	2.67	20.15	78.8
R101	5/13/2024	12:14	5.95	13.5	56.3	6.92	804.6	2.65	18.08	78.3
R101	5/13/2024	12:17	5.95	13.4	56.2	6.92	805.4	2.65	16.91	79.0
R101	5/13/2024	12:20	5.95	13.8	56.9	6.92	804.8	2.63	16.14	77.6

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Field Forms- GW Quality Parameters
CWLP- FGDS LF- 2Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G121	5/9/2024	11:07	26.76	14.9	58.9	6.79	952.5	0.35	32.06	-91.7
G121	5/9/2024	11:10	26.76	14.8	58.7	6.78	1,009.7	0.23	19.47	-129.7
G121	5/9/2024	11:13	26.76	15.0	58.9	6.76	1,037.3	0.18	15.54	-139.8
G121	5/9/2024	11:16	26.76	15.1	59.1	6.76	1,040.6	0.16	10.83	-143.1
G121	5/9/2024	11:19	26.76	15.0	59.0	6.76	1,041.5	0.15	8.16	-144.6

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Field Forms- GW Quality Parameters
CWLP- FGDS LF- 2Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
G122	5/9/2024	11:44	27.67	14.6	58.2	6.66	1,183.5	0.62	10.83	-101.8
G122	5/9/2024	11:47	27.67	14.1	57.4	6.66	1,190.2	0.38	6.05	-114.3
G122	5/9/2024	11:50	27.67	14.5	58.2	6.64	1,213.2	0.30	4.39	-117.9
G122	5/9/2024	11:53	27.67	14.6	58.2	6.64	1,225.7	0.28	2.93	-119.2

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Groundwater Sampling Field Forms- GW Quality Parameters
CWLP- FGDS LF- 2Q 2024

Well ID	Date	Time	DTW	Temp (°C)	Temp (°F)	pH (SU)	Sp Cond (µmhos/cm @25C)	ODO (mg/L)	Turbidity (NTU)	ORP (mV)
AW-2	5/13/2024	10:25	3.29	15.0	59.0	6.83	679.4	0.22	49.10	-101.0
AW-2	5/13/2024	10:28	3.29	15.1	59.2	6.78	759.9	0.18	42.57	-136.3
AW-2	5/13/2024	10:31	3.29	15.2	59.4	6.83	778.0	0.15	24.94	-152.7
AW-2	5/13/2024	10:34	3.29	15.1	59.2	6.83	779.2	0.13	22.03	-156.3
AW-2	5/13/2024	10:37	3.29	15.2	59.4	6.83	781.1	0.12	27.98	-157.7
AW-2	5/13/2024	10:40	3.29	15.1	59.3	6.83	781.7	0.10	19.55	-158.7
AW-2	5/13/2024	10:43	3.29	15.0	59.1	6.83	782.5	0.09	15.90	-159.2
AW-2	5/13/2024	10:46	3.29	15.0	59.0	6.83	783.4	0.08	11.59	-160.0
AW-2	5/13/2024	10:49	3.29	15.0	59.0	6.83	784.4	0.07	10.85	-160.5
AW-2	5/13/2024	10:52	3.29	15.0	59.0	6.83	783.6	0.07	8.08	-160.7

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 26599 Technician(s): B. Gillihan Date: 5/9/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/9/24 9:25
7.0 Buffer	WC240307F	7.00	5/9/24 9:37
10.0 Buffer	WC231027D	10.01	5/9/24 9:40
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/9/24 9:42

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.5	5/9/24 9:51
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	5/9/24 18:30	18.96	7.00	1,412	1.5		
CCV-1	CCV	5/9/24 18:29	20.62	7.02	1,413	1.5		

Comments:

Field Meter ID: Pine 26599 Technician(s): B. Gillihan Date: 5/10/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.01	5/10/24 8:54
7.0 Buffer	WC240307F	7.02	5/10/24 16:36
10.0 Buffer	WC231027D	10.00	5/10/24 16:36
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1413	5/10/24 16:38

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.5	5/10/24 16:38
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	5/10/24 16:38	18.65	7.01	1,413	1.5		
CCV-2	CCV	5/10/24 16:39	20.64	7.02	1,415	1.4		

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 26599 Technician(s): B. Gillihan Date: 5/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/13/24 9:29
7.0 Buffer	WC240307F	7.03	5/13/24 9:36
10.0 Buffer	WC231027D	10.01	5/13/24 9:42
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1415	5/13/24 9:51

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	1.6	5/13/24 9:58
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-3	LCS	5/13/24 10:05	19.72	7.02	1,415	1.6		
CCV-3	CCV	5/13/24 11:05	20.01	7.01	1,415	1.5		

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45986 Technician(s): Daniel Crump/Tracy Carroll Date: 5/8/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/8/24 10:09
7.0 Buffer	WC240307F	7.01	5/8/24 10:07
10.0 Buffer	WC230619B	10.00	5/8/24 10:11
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/8/24 10:14

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	5/8/24 10:16	22.9	7.09	1,413			
CCV-1	CCV	5/8/24 13:21	21	7.02	1,439			

Comments:

Field Meter ID: Pine 45986 Technician(s): Tracy Carroll Date: 5/9/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/9/24 11:02
7.0 Buffer	WC240307F	7.02	5/9/24 11:01
10.0 Buffer	WC230619B	10.00	5/9/24 11:03
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/9/24 11:11

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	5/9/24 11:16	24.2	7.06	1,413			
CCV-2	CCV	5/9/24 15:03	25.2	7.08	1,488			

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45986 Technician(s): Tracy Carroll Date: 5/10/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/10/24 9:28
7.0 Buffer	WC240307F	7.04	5/10/24 9:25
10.0 Buffer	WC230619B	10.00	5/10/24 9:31
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/10/24 9:32

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-3	LCS	5/10/24 9:36	14.5	7.05	1,414	1.95		
CCV-3	CCV	5/10/24 10:55	15.2	7.04	1,488			

Comments:

Field Meter ID: Pine 45986 Technician(s): Tracy Carroll/Payton Yoch Date: 5/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/13/24 10:00
7.0 Buffer	WC240307F	7.01	5/13/24 9:57
10.0 Buffer	WC230619B	10.00	5/13/24 10:04
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/13/24 10:09

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-4	LCS	5/13/24 10:14	23.7	6.99	1,411			
CCV-4	CCV	5/13/24 14:33	28	6.90	1,435			

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45986 Technician(s): Tracy Carroll/Payton Yoch Date: 5/14/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230830B	4.00	5/14/24 10:22
7.0 Buffer	WC240307F	7.01	5/14/24 10:22
10.0 Buffer	WC230619B	10.00	5/14/24 10:23
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/14/24 10:23

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-5	LCS	5/14/24 10:25	23.7	6.99	1,412			
CCV-5	CCV	5/14/24 13:30	22.9	7.02	1,455			

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218083 Technician(s): justin colp Date: 5/9/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	3.99	5/9/24 9:29
7.0 Buffer	wc240307f	7.01	5/9/24 9:23
10.0 Buffer	wc231027d	10.00	5/9/24 9:37
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1409	5/9/24 9:41

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.93	5/9/24 9:42
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1	LCS	5/9/24 9:44	20.5	7.01	1,409	0.93		
CCV-M-1	CCV	5/9/24 12:11	21.7	7.03	1,421	0.96		
CCV-1	CCV	5/9/24 14:35	22.8	7.03	1,424	1.04		

Comments:

Field Meter ID: Pine 218083 Technician(s): justin colp Date: 5/10/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.00	5/10/24 9:32
7.0 Buffer	wc240307f	7.02	5/10/24 9:30
10.0 Buffer	wc231027d	9.98	5/10/24 9:35
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1410	5/10/24 9:40

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.87	5/10/24 9:40
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2	LCS	5/10/24 9:43	18.8	7.02	1,410	0.87		
CCV-2	CCV	5/10/24 10:58	19.7	7.02	1,416	0.89		

Comments:

Site Samping Event: CWLP- 2Q24
LIMS Workorder: 24050002
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- FGDS LF- 2Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218083 Technician(s): justin colp Date: 5/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	4.01	5/13/24 9:49
7.0 Buffer	wc240307f	7.01	5/13/24 9:43
10.0 Buffer	wc231027d	9.98	5/13/24 9:58
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1412	5/13/24 9:58

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.86	5/13/24 9:58
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-3	LCS	5/13/24 10:00	21.7	7.01	1,412	0.86		
CCV-3	CCV	5/13/24 14:28	22.1	7.03	1,420	0.92		

Comments:

Field Meter ID: Pine 218083 Technician(s): justin colp Date: 5/14/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230830b	3.98	5/14/24 9:25
7.0 Buffer	wc240307f	7.00	5/14/24 9:21
10.0 Buffer	wc231027d	9.99	5/14/24 9:28
LCS/CCV (7.0 Buffer)			

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	95009	1410	5/14/24 9:35

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.96	5/14/24 9:35
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-4	LCS	5/14/24 9:37	20.2	7.00	1,410	0.96		
CCV-4	CCV	5/14/24 12:17	21	7.01	1,418	0.99		

Comments:

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 12, 2024

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24050002

Order No.: 24051621

Dear Shelly Hennessy:

Summit Environmental Technologies, Inc. received 11 sample(s) on 5/17/2024 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.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24051621**
Date: **6/12/2024**

CLIENT: TEKLAB Inc,
Project: 24050002

WorkOrder Narrative:
24051621: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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.

Analytical Sequence QC Notes:
LCS/LCSD-75740 Radium-226_DW(903.0): LCS/LCSD exhibit a high RPD, individually each LCS/LCSD meet required criteria.

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#: **24051621**
Date: **6/12/2024**

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.

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Workorder Sample Summary

WO#: **24051621**
12-Jun-24

CLIENT: TEKLAB Inc,
Project: 24050002

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24051621-001	24050002-001		5/13/2024 12:20:00 PM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-002	24050002-002		5/8/2024 11:14:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-003	24050002-003		5/8/2024 12:44:00 PM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-004	24050002-004		5/9/2024 12:32:00 PM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-005	24050002-005		5/9/2024 1:48:00 PM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-006	24050002-006		5/9/2024 10:28:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-007	24050002-007		5/9/2024 11:19:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-008	24050002-008		5/9/2024 11:53:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-009	24050002-009		5/10/2024 10:37:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-010	24050002-010		5/13/2024 10:52:00 AM	5/17/2024 12:15:00 PM	Non-Potable Water
24051621-011	24050002-011		5/9/2024 12:12:00 PM	5/17/2024 12:15:00 PM	Non-Potable Water

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DATES REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,

Project: 24050002

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24051621-001A	24050002-001	5/13/2024 12:20:00 PM	Non-Potable Water	Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-002A	24050002-002	5/8/2024 11:14:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-003A	24050002-003	5/8/2024 12:44:00 PM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-004A	24050002-004	5/9/2024 12:32:00 PM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-005A	24050002-005	5/9/2024 1:48:00 PM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-006A	24050002-006	5/9/2024 10:28:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-007A	24050002-007	5/9/2024 11:19:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-008A	24050002-008	5/9/2024 11:53:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-009A	24050002-009	5/10/2024 10:37:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-010A	24050002-010	5/13/2024 10:52:00 AM		Radium-226 (EPA 903.0)		5/30/2024 1:15:00 PM	6/10/2024 12:05:07 PM
				Radium-228 (EPA 904.0)		5/30/2024 1:15:00 PM	6/7/2024 12:56:15 PM
24051621-011A	24050002-011	5/9/2024 12:12:00 PM		Radium-226 (EPA 903.0)		5/28/2024 10:05:00 AM	6/4/2024 9:57:00 AM
				Radium-228 (EPA 904.0)		5/28/2024 10:05:00 AM	6/3/2024 2:37:00 PM

Original

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Analytical Report

(consolidated)

WO#: **24051621**

Date Reported: **6/12/2024**

CLIENT: TEKLAB Inc,

Collection Date: 5/13/2024 12:20:00 PM

Project: 24050002

Lab ID: 24051621-001

Matrix: NON-POTABLE WATER

Client Sample ID: 24050002-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.0600	1	6/10/2024 12:05:07 PM
Yield	1.00					1	6/10/2024 12:05:07 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.350	1	6/7/2024 12:56:15 PM
Yield	0.890					1	6/7/2024 12:56:15 PM

Qualifiers:

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

Original

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Analytical Report

(consolidated)

WO#: **24051621**

Date Reported: **6/12/2024**

CLIENT: TEKLAB Inc,

Collection Date: 5/9/2024 11:19:00 AM

Project: 24050002

Lab ID: 24051621-007

Matrix: NON-POTABLE WATER

Client Sample ID: 24050002-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.160	1	6/10/2024 12:05:07 PM
Yield	0.960					1	6/10/2024 12:05:07 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.400	1	6/7/2024 12:56:15 PM
Yield	0.910					1	6/7/2024 12:56:15 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24051621**

Date Reported: **6/12/2024**

CLIENT: TEKLAB Inc,

Collection Date: 5/9/2024 11:53:00 AM

Project: 24050002

Lab ID: 24051621-008

Matrix: NON-POTABLE WATER

Client Sample ID: 24050002-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.130	1	6/10/2024 12:05:07 PM
Yield	1.00					1	6/10/2024 12:05:07 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	ND	1.00		pCi/L	± 0.560	1	6/7/2024 12:56:15 PM
Yield	0.910					1	6/7/2024 12:56:15 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24051621**

Date Reported: **6/12/2024**

CLIENT: TEKLAB Inc,

Collection Date: 5/13/2024 10:52:00 AM

Project: 24050002

Lab ID: 24051621-010

Matrix: NON-POTABLE WATER

Client Sample ID: 24050002-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.130	1	6/10/2024 12:05:07 PM
Yield	1.00					1	6/10/2024 12:05:07 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	1.06	1.00		pCi/L	± 0.590	1	6/7/2024 12:56:15 PM
Yield	0.860					1	6/7/2024 12:56:15 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
W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75651**

Sample ID: **MB-75651**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/28/2024**	RunNo: **186770**
Client ID: **PBW**	Batch ID: **75651**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/3/2024**	SeqNo: **5060869**

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

Sample ID: **LCSD-75651**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/28/2024**	RunNo: **186770**
Client ID: **LCSS02**	Batch ID: **75651**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/3/2024**	SeqNo: **5060871**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.50	1.00	5.000	0	90.0	50	130	3.520	24.4	20	R
Yield	1.00			0	0			1.000	0		

Sample ID: **24051612-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/28/2024**	RunNo: **186770**
Client ID: **BatchQC**	Batch ID: **75651**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/3/2024**	SeqNo: **5060876**

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	30	R
Yield	0.970			0	0			1.000	3.05		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,

Project: 24050002 **BatchID:** **75651**

Sample ID: **24051613-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186770**

Client ID: **BatchQC** Batch ID: **75651** TestNo: **E904.0** **E903-904** Analysis Date: **6/3/2024** SeqNo: **5060878**

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	30	R
Yield	0.950			0	0			0.9500	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75651**

Sample ID: **24051612-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186773**
Client ID: **BatchQC** Batch ID: **75651** TestNo: **E903.0** **E903-904** Analysis Date: **6/4/2024** SeqNo: **5061011**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	30	
Yield	0.960							1.000	4.08	0	

Sample ID: **24051613-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186773**
Client ID: **BatchQC** Batch ID: **75651** TestNo: **E903.0** **E903-904** Analysis Date: **6/4/2024** SeqNo: **5061013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00						0	0	30	
Yield	0.940							0.9500	1.06	0	

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75651**

Sample ID: **MB-75651** SampType: **MBLK** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186773**
Client ID: **PBW** Batch ID: **75651** TestNo: **E903.0** **E903-904** Analysis Date: **6/4/2024** SeqNo: **5061004**

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

Sample ID: **LCS-75651** SampType: **LCS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186773**
Client ID: **LCSW** Batch ID: **75651** TestNo: **E903.0** **E903-904** Analysis Date: **6/4/2024** SeqNo: **5061005**

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				

Sample ID: **LCSD-75651** SampType: **LCSD** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/28/2024** RunNo: **186773**
Client ID: **LCSS02** Batch ID: **75651** TestNo: **E903.0** **E903-904** Analysis Date: **6/4/2024** SeqNo: **5061006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.48	1.00	5.000	0	89.6	70	130	4.940	9.77	20	

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75740**

Sample ID: **MB-75740**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187287**
Client ID: **PBW**	Batch ID: **75740**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/7/2024**	SeqNo: **5075299**

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

Sample ID: **LCS-75740**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187287**
Client ID: **LCSW**	Batch ID: **75740**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/7/2024**	SeqNo: **5075300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.94	1.00	5.000	0	78.8	50	130				
Yield	0.890			0	0						

Sample ID: **LCSD-75740**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187287**
Client ID: **LCSS02**	Batch ID: **75740**	TestNo: **E904.0**	**E903-904**	Analysis Date: **6/7/2024**	SeqNo: **5075301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.07	1.00	5.000	0	81.4	50	130	3.940	3.25	20	
Yield	0.860			0	0			0.8900	3.43		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75740**

Sample ID: **24050773-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/30/2024** RunNo: **187287**
Client ID: **BatchQC** Batch ID: **75740** TestNo: **E904.0** **E903-904** Analysis Date: **6/7/2024** SeqNo: **5075306**

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	R
Yield	0.910			0	0			0.8900	2.22		

Sample ID: **24052198-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/30/2024** RunNo: **187287**
Client ID: **BatchQC** Batch ID: **75740** TestNo: **E904.0** **E903-904** Analysis Date: **6/7/2024** SeqNo: **5075324**

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	R
Yield	0.930			0	0			0.9600	3.17		

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
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75740**

Sample ID: **MB-75740**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187303**
Client ID: **PBW**	Batch ID: **75740**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/10/2024**	SeqNo: **5075489**

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

Sample ID: **LCS-75740**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187303**
Client ID: **LCSW**	Batch ID: **75740**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/10/2024**	SeqNo: **5075490**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.05	1.00	5.000	0	81.0	70	130				QLR

Sample ID: **LCSD-75740**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187303**
Client ID: **LCSS02**	Batch ID: **75740**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/10/2024**	SeqNo: **5075491**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.95	1.00	5.000	0	99.0	70	130	4.050	20.0	20	R

Sample ID: **24050773-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **5/30/2024**	RunNo: **187303**
Client ID: **BatchQC**	Batch ID: **75740**	TestNo: **E903.0**	**E903-904**	Analysis Date: **6/10/2024**	SeqNo: **5075496**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24051621**

12-Jun-24

Client: TEKLAB Inc,
Project: 24050002 **BatchID:** **75740**

Sample ID: **24050773-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/30/2024** RunNo: **187303**
Client ID: **BatchQC** Batch ID: **75740** TestNo: **E903.0** **E903-904** Analysis Date: **6/10/2024** SeqNo: **5075496**

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	
Yield	1.00							0.9400	6.19	0	

Sample ID: **24052198-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/30/2024** RunNo: **187303**
Client ID: **BatchQC** Batch ID: **75740** TestNo: **E903.0** **E903-904** Analysis Date: **6/10/2024** SeqNo: **5075514**

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	
Yield	0.960							1.000	4.08	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

Pg 1 of 1

24051621

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

Cooler Temp: 20.3-21.3 Sampler: Client QC Level: 2

20.3+0.0=
21.3+0.0= Fedex, Cooler

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

Project# 24050002

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: Shelly Hennessy Email: shennessy@TekLabInc.com
Requested Due Date: Standard TAT Billing/PO: 36304 Phone: (618) 344-1004 ext. 36

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												
						Comm				DH							
	24050002-001	5/13/2024 12:20	HNO3	Groundwater	✔	28				1							
	24050002-002	5/8/2024 11:14	HNO3	Groundwater	✔	18				1							
	24050002-003	5/8/2024 12:44	HNO3	Groundwater	✔	32				1							
	24050002-004	5/9/2024 12:32	HNO3	Groundwater	✔	18				1							
	24050002-005	5/9/2024 13:48	HNO3	Groundwater	✔	38				1							
	24050002-006	5/9/2024 10:28	HNO3	Groundwater	✔	28				1							
	24050002-007	5/9/2024 11:19	HNO3	Groundwater	✔	38				1							
	24050002-008	5/9/2024 11:53	HNO3	Groundwater	✔	12				1							
	24050002-009	5/10/2024 10:37	HNO3	Groundwater	✔	22				1							
	24050002-010	5/13/2024 10:52	HNO3	Groundwater	✔	34				1							
	24050002-011	5/9/2024 12:12	HNO3	Groundwater	✔			Did not receive -011									

*Relinquished By	Date/Time	Received By	Date/Time
Karl Reddy	5/14/24		5/17/24. 1215

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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: 24051621 RcptNo: 1

Logged by:	Tegan A. Richards	5/17/2024 12:15:00 PM	Tegan Richards
Completed By:	Tegan A. Richards	5/21/2024 2:09:09 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	5/21/2024 2:33:59 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:

same as Summit ID 240516201-001 per email
Did not receive -011

Cooler Information

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: 24051621 RcptNo: 1

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	20.3	Good	Not Present			
2	21.3	Good	Not Present			

August 2024 Laboratory Analytical Report

September 18, 2024

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 24080243

Dear Eric Staley:

TEKLAB, INC received 12 samples on 8/13/2024 2:27:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 24080243
Client Project: FGDS Landfill
Report Date: 18-Sep-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	20
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-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: City Water, Light & Power
Work Order: 24080243
Client Project: FGDS Landfill
Report Date: 18-Sep-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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24080243
Report Date: 18-Sep-24

Cooler Receipt Temp: 12.1 °C

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

Radium-226 & -228 analysis was performed by Summit Environmental Technologies, Inc. See attached report for results.

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: City Water, Light & Power
Work Order: 24080243
Client Project: FGDS Landfill
Report Date: 18-Sep-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: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-24

Lab ID: 24080243-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 08/12/2024 11:32

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	08/12/2024 11:32	R352006
Depth to water	*	-5.00		**4.76**	ft	1	08/12/2024 11:32	R352006
Depth to water from measuring point	*	0		**7.56**	ft	1	08/12/2024 11:32	R352006
Elevation of groundwater surface	*	0		**539.24**	ft	1	08/12/2024 11:32	R352006
Measuring Point Elevation	*	0		**546.80**	ft	1	08/12/2024 11:32	R352006
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	08/12/2024 11:32	R352006
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**13**	NTU	1	08/12/2024 11:32	R352006
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.9**	°F	1	08/12/2024 11:32	R352006
SW-846 9040B								
pH, Field	*	1.00		**6.54**		1	08/12/2024 11:32	R352006
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1220**	umhos/cm @25C	1	08/12/2024 11:32	R352006
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**834**	mg/L	1	08/16/2024 11:59	R351892
SW-846 9036 (TOTAL)								
Sulfate	NELAP	100		**268**	mg/L	10	08/20/2024 15:54	R352032
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.12**	mg/L	1	08/19/2024 10:27	R351930
SW-846 9251 (TOTAL)								
Chloride	NELAP	20		**109**	mg/L	5	08/20/2024 15:43	R352062
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0350**	mg/L	1	08/14/2024 17:45	227065
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	08/14/2024 17:45	227065
Boron	NELAP	0.0200		**0.121**	mg/L	1	08/14/2024 17:45	227065
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	08/14/2024 17:45	227065
Calcium	NELAP	0.100	S	**162**	mg/L	1	08/14/2024 17:45	227065
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 17:45	227065
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 17:45	227065
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	08/14/2024 17:45	227065
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	08/14/2024 17:45	227065
Matrix spike control limits are not applicable due to high sample/spike ratio.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 11:39	227065
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 0:35	227065
Lithium	*	0.0030		**0.0188**	mg/L	5	08/15/2024 11:39	227065
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 0:35	227065
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	08/15/2024 0:35	227065
CCV recovered outside the upper control limits for Tl. Sample results are below the reporting limit. Data is reportable per the TNI standard.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	08/14/2024 13:19	227055
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Client: City Water, Light & Power
Work Order: 24080243
Client Project: FGDS Landfill
Report Date: 18-Sep-24
Lab ID: 24080243-001
Client Sample ID: R101
Matrix: GROUNDWATER
Collection Date: 08/12/2024 11:32

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 903.0/904.0, RADIUM 226/228								
Radium-228	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Client: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-24

Lab ID: 24080243-007 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 08/13/2024 10:41

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	08/13/2024 10:41	R352006
Depth to water	*	-5.00		**27.47**	ft	1	08/13/2024 10:41	R352006
Depth to water from measuring point	*	0		**29.34**	ft	1	08/13/2024 10:41	R352006
Elevation of groundwater surface	*	0		**526.26**	ft	1	08/13/2024 10:41	R352006
Measuring Point Elevation	*	0		**555.60**	ft	1	08/13/2024 10:41	R352006
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	08/13/2024 10:41	R352006
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**22**	NTU	1	08/13/2024 10:41	R352006
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**63.0**	°F	1	08/13/2024 10:41	R352006
SW-846 9040B								
pH, Field	*	1.00		**6.90**		1	08/13/2024 10:41	R352006
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1530**	umhos/cm @25C	1	08/13/2024 10:41	R352006
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**936**	mg/L	1	08/16/2024 12:18	R351892
SW-846 9036 (TOTAL)								
Sulfate	NELAP	100		**260**	mg/L	10	08/20/2024 17:32	R352032
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.17**	mg/L	1	08/19/2024 10:38	R351930
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**30**	mg/L	1	08/20/2024 17:27	R352062
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.500**	mg/L	1	08/15/2024 16:05	227124
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	08/15/2024 16:05	227124
Boron	NELAP	0.0200		**3.04**	mg/L	1	08/15/2024 16:05	227124
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	08/15/2024 16:05	227124
Calcium	NELAP	0.100		**164**	mg/L	1	08/15/2024 16:05	227124
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	08/15/2024 16:05	227124
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	08/15/2024 16:05	227124
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	08/15/2024 16:05	227124
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	08/15/2024 16:05	227124
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**0.0087**	mg/L	5	08/15/2024 15:36	227124
Arsenic	NELAP	0.0010		**0.0084**	mg/L	5	08/15/2024 15:36	227124
Lithium	*	0.0030		**0.0083**	mg/L	5	08/15/2024 15:36	227124
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 15:36	227124
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	08/15/2024 15:36	227124
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	08/15/2024 16:37	227118
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302
Radium-228	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Client: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-24

Lab ID: 24080243-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 08/13/2024 10:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	08/13/2024 10:14	R352006
Depth to water	*	-5.00		**29.47**	ft	1	08/13/2024 10:14	R352006
Depth to water from measuring point	*	0		**31.21**	ft	1	08/13/2024 10:14	R352006
Elevation of groundwater surface	*	0		**523.19**	ft	1	08/13/2024 10:14	R352006
Measuring Point Elevation	*	0		**554.40**	ft	1	08/13/2024 10:14	R352006
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	08/13/2024 10:14	R352006
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**17**	NTU	1	08/13/2024 10:14	R352006
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**62.5**	°F	1	08/13/2024 10:14	R352006
SW-846 9040B								
pH, Field	*	1.00		**6.80**		1	08/13/2024 10:14	R352006
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1790**	umhos/cm @25C	1	08/13/2024 10:14	R352006
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**1380**	mg/L	1	08/16/2024 12:18	R351892
SW-846 9036 (TOTAL)								
Sulfate	NELAP	200		**523**	mg/L	20	08/20/2024 17:40	R352032
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.14**	mg/L	1	08/19/2024 10:41	R351930
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**39**	mg/L	1	08/20/2024 17:35	R352062
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.497**	mg/L	1	08/15/2024 16:06	227124
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	08/15/2024 16:06	227124
Boron	NELAP	0.0200		**10.8**	mg/L	1	08/15/2024 16:06	227124
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	08/15/2024 16:06	227124
Calcium	NELAP	0.100		**225**	mg/L	1	08/15/2024 16:06	227124
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	08/15/2024 16:06	227124
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	08/15/2024 16:06	227124
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	08/15/2024 16:06	227124
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	08/15/2024 16:06	227124
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**0.0029**	mg/L	5	08/15/2024 15:42	227124
Arsenic	NELAP	0.0010		**0.0019**	mg/L	5	08/15/2024 15:42	227124
Lithium	*	0.0030		**0.0082**	mg/L	5	08/15/2024 15:42	227124
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 15:42	227124
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	08/15/2024 15:42	227124
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	08/15/2024 16:40	227118
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302
Radium-228	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Client: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-24

Lab ID: 24080243-010 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 08/12/2024 11:23

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	08/12/2024 11:23	R352006
Depth to water	*	-5.00		**2.99**	ft	1	08/12/2024 11:23	R352006
Depth to water from measuring point	*	0		**6.29**	ft	1	08/12/2024 11:23	R352006
Elevation of groundwater surface	*	0		**523.69**	ft	1	08/12/2024 11:23	R352006
Measuring Point Elevation	*	0		**529.98**	ft	1	08/12/2024 11:23	R352006
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	08/12/2024 11:23	R352006
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**2.8**	NTU	1	08/12/2024 11:23	R352006
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**64.2**	°F	1	08/12/2024 11:23	R352006
SW-846 9040B								
pH, Field	*	1.00		**6.65**		1	08/12/2024 11:23	R352006
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**963**	umhos/cm @25C	1	08/12/2024 11:23	R352006
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**774**	mg/L	1	08/16/2024 12:19	R351892
SW-846 9036 (TOTAL)								
Sulfate	NELAP	50		**153**	mg/L	5	08/20/2024 17:56	R352032
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.12**	mg/L	1	08/19/2024 10:53	R351930
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**34**	mg/L	1	08/20/2024 17:51	R352062
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.644**	mg/L	1	08/14/2024 18:00	227065
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	08/14/2024 18:00	227065
Boron	NELAP	0.0200		**2.99**	mg/L	1	08/14/2024 18:00	227065
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	08/14/2024 18:00	227065
Calcium	NELAP	0.100		**152**	mg/L	1	08/14/2024 18:00	227065
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 18:00	227065
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 18:00	227065
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	08/14/2024 18:00	227065
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	08/14/2024 18:00	227065
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 13:05	227065
Arsenic	NELAP	0.0010		**0.0180**	mg/L	5	08/15/2024 1:39	227065
Lithium	*	0.0030		**0.0071**	mg/L	5	08/15/2024 13:05	227065
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 1:39	227065
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	08/15/2024 1:39	227065
CCV recovered outside the upper control limits for Tl. Sample results are below the reporting limit. Data is reportable per the TNI standard.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	08/14/2024 13:26	227055
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302
Radium-228	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Client: City Water, Light & Power **Work Order:** 24080243

Client Project: FGDS Landfill **Report Date:** 18-Sep-24

Lab ID: 24080243-012 **Client Sample ID:** P07D

Matrix: GROUNDWATER **Collection Date:** 08/12/2024 12:21

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**494.89**	ft	1	08/12/2024 12:21	R352006
Depth to water	*	-5.00		**3.42**	ft	1	08/12/2024 12:21	R352006
Depth to water from measuring point	*	0		**5.43**	ft	1	08/12/2024 12:21	R352006
Elevation of groundwater surface	*	0		**522.00**	ft	1	08/12/2024 12:21	R352006
Measuring Point Elevation	*	0		**527.43**	ft	1	08/12/2024 12:21	R352006
Measuring Point Height Above Land Surface	*	0		**2.01**	ft	1	08/12/2024 12:21	R352006
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**170**	NTU	1	08/12/2024 12:21	R352006
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**59.8**	°F	1	08/12/2024 12:21	R352006
SW-846 9040B								
pH, Field	*	1.00		**6.70**		1	08/12/2024 12:21	R352006
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1170**	umhos/cm @25C	1	08/12/2024 12:21	R352006
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**1090**	mg/L	1	08/16/2024 12:27	R351892
SW-846 9036 (TOTAL)								
Sulfate	NELAP	100		**332**	mg/L	10	08/20/2024 18:18	R352032
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.10**	mg/L	1	08/19/2024 10:56	R351930
SW-846 9251 (TOTAL)								
Chloride	NELAP	4		**37**	mg/L	1	08/20/2024 17:59	R352062
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**1.00**	mg/L	1	08/14/2024 18:02	227065
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	08/14/2024 18:02	227065
Boron	NELAP	0.0200		**5.95**	mg/L	1	08/14/2024 18:02	227065
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	08/14/2024 18:02	227065
Calcium	NELAP	0.100		**205**	mg/L	1	08/14/2024 18:02	227065
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 18:02	227065
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	08/14/2024 18:02	227065
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	08/14/2024 18:02	227065
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	08/14/2024 18:02	227065
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 13:11	227065
Arsenic	NELAP	0.0010		**0.0394**	mg/L	5	08/15/2024 1:44	227065
Lithium	*	0.0030		**0.0085**	mg/L	5	08/15/2024 13:11	227065
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	08/15/2024 1:44	227065
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	08/15/2024 1:44	227065
CCV recovered outside the upper control limits for Tl. Sample results are below the reporting limit. Data is reportable per the TNI standard.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	08/14/2024 13:33	227055
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302
Radium-228	*	0		**See Attached**	pci/L	1	09/13/2024 0:00	R353302

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24080243
Report Date: 18-Sep-24

Carrier: Justin Colp

Received By: PRS

Completed by: Amber Dilallo
On: 13-Aug-24

Reviewed by: Ellie Hopkins
On: 13-Aug-24

Pages to follow: Chain of custody 4 Extra pages included 40

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	12.1
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 8/12/24 at 1635 on ice [12.1C - LTG#9]. pH strip #96651. - amberdilallo - 8/13/2024 8:26:48 AM

Samples were received on 8/13/24 at 1427 on ice [3.7C - LTG#5]. pH strip #96651. - amberdilallo - 8/13/2024 3:27:12 PM

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 24080243

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 12.1 °C UC9
Preserved in: [ ] LAB [X] FIELD FOR LAB USE ONLY
LAB NOTES: pH/Guest PS 8/13

Are these samples known to be involved in litigation? If yes, a surcharge will apply: [ ] Yes [✓] No
Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24080242-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Colp

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

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24080243-001	R101	8-12-24 1132	Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111	8.12.24 1315	Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113	8-12-24 1035	Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2	8.12.24 1123	Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3	8.12.24 1018	Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
J-Colp	8.12.24 1635		8/12/24 1635

*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

CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 24080243

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

Client: City Water, Light & Power

Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building

City/State/Zip: Springfield IL 62712

Contact: Eric Staley Phone: (217) 757-8610

Email: eric.staley@cwlp.com Fax:

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

Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C

Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY

LAB NOTES:

*new well 3Q2024 KH 8/5/24

Client Comments:

*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025

PROJECT NAME/NUMBER	SAMPLE COLLECTOR'S NAME
FGDS Landfill	J. Colp

RESULTS REQUESTED

☑ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24080243-12	P07D *	8.12.24 1221	Groundwater	1	2								✔	✔	✔	✔	✔	✔
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	8.12.24 1635	Paul Zettler	8/12/24 1635

*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

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 24080243

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 3.7 °C
Preserved in: [ ] LAB [X] FIELD
LAB NOTES: PWS96057

FOR LAB USE ONLY
LH 8/13/24

Are these samples known to be involved in litigation? If yes, a surcharge will apply: [ ] Yes [✓] No
Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24080242-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME

RESULTS REQUESTED
[✓] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers									INDICATE ANALYSIS REQUESTED													
				UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity									
24080243-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓									
002	G110	8-13-24 1215	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓									
004	G112	8.13.24 0933	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓									
006	G120	8.13.24 1134	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
007	G121	8.13.24 1041	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
008	G122	8.13.24 1014	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
009	AW-1	8-13-24 951	Groundwater	1	2								✓	✓	✓	✓	✓	✓									
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓									
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓									

Relinquished By	Date/Time	Received By	Date/Time
	8-13-24 1427		8/13/24 1427

*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

CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 24080243

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

Client: City Water, Light & Power

Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building

City/State/Zip: Springfield IL 62712

Contact: Eric Staley Phone: (217) 757-8610

Email: eric.staley@cwlp.com Fax:

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

Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C

Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY

LAB NOTES:

*new well 3Q2024 KTH 8/5/24

Client Comments:

*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025

PROJECT NAME/NUMBER

FGDS Landfill

SAMPLE COLLECTOR'S NAME

RESULTS REQUESTED

☑ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers									INDICATE ANALYSIS REQUESTED													
				UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity								
24080243-12	P07D *		Groundwater	1	2								✔	✔	✔	✔	✔	✔								
			Groundwater																							
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Relinquished By	Date/Time	Received By	Date/Time
	8-13-24 14:27		8/13/24 14:27

*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

Field Data Sheet

Project Name: CWLP- FGDS Landfill **Monitoring Point:** R101

Project Location: Springfield, IL

W.O. Number (s): 24080243 **Date (s):** 8/12/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 76 °F Wind Direction: N S E (W) (circle two if needed)

Precipitation: (None) Light Heavy Sky: (Cloudy) Sunny Partly

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Good			

Groundwater Level Measurements

Date/Time Measured: 8/12/2024 11:04

Static Water Level: 7.56 feet below TOC

Total Depth: 35.27 feet below TOC

Water Column: 27.71 feet

Purging Activities

Purged By: Brett Gillihan Purge Date: 8/12/2024

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 27.71 ft. x 35.27 = 0.78 L x 3 Vol. = 2.34 L **Based on 3 water volumes in 3/8" tubing.*

Actual Purge Volume (L): 6.1

Physical appearance of purge water: Clear Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µmhos/cm)	Temp (°F)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:04	0.0	214	purge start time						
11:20	3.5	↓	6.60	1,226	58.8	1.55	-33.3	20.34	
11:23	4.2		6.57	1,227	59.0	1.46	-28.4	16.84	
11:26	4.8		6.56	1,226	58.9	1.38	-24.5	15.51	
11:29	5.5		6.55	1,227	58.8	1.31	-20.1	13.84	
11:32	6.1		6.54	1,223	58.9	1.27	-18	12.87	

Sampling Activities

Sampled By: Brett Gillihan Sample Date/Time: 8/12/2024 11:32

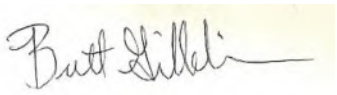
Sample Method: Low-Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.54 pH 1,223 Spec. Cond. 58.9 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 9.19 feet below TOC Drawdown: 1.63 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)



Form Completed By: **Date:** 8/12/2024

Field Data Sheet

Project Name: CWLP- FGDS Landfill
Monitoring Point: G121
Project Location: Springfield, IL
W.O. Number (s): 24080243
Date (s): 8/13/2024

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 72 °F Wind Direction: N S E (W) (circle two if needed)
Precipitation: (None) Light Heavy Sky: (Cloudy) Sunny Partly

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Good			

Groundwater Level Measurements

Date/Time Measured: 8/13/2024 10:21
Static Water Level: 29.34 feet below TOC
Total Depth: 58.56 feet below TOC
Water Column: 29.22 feet

Purging Activities

Purged By: Justin Colp Purge Date: 8/13/2024
Purge Method: Submersible Pump Well Diameter: 2"
Purge Volume Calculation (L): 29.22 ft. x 58.56 = 1.29 L x 3 Vol. = 3.87 L **Based on 3 water volumes in 3/8" tubing.*
Actual Purge Volume (L): 4.0
Physical appearance of purge water: Clear Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µmhos/cm)	Temp (°F)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:22	0.0	211	purge start time						
10:29	1.5	↓	7.00	1,433	63.0	1.41	-98.4	28.89	
10:32	2.1		6.96	1,442	66.0	1.22	-104.4	26.61	
10:35	2.8		6.94	1,472	64.5	1.05	-110.1	27.56	
10:38	3.4		6.90	1,527	63.2	0.93	-113.6	23.40	
10:41	4.0		6.90	1,530	63.0	0.85	-117.8	22.37	

Sampling Activities

Sampled By: Justin Colp Sample Date/Time: 8/13/2024 10:41
Sample Method: Low-Flow Sample Equipment: Submersible Pump
Sample Parameters: 6.90 pH 1,530 Spec. Cond. 63.0 Temp
Field Filtered: Yes Filter Type: Inline Disposable
Water Level: 30.00 feet below TOC Drawdown: 0.66 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

Form Completed By: Justin Colp **Date:** 8/13/2024

Field Data Sheet

Project Name: CWLP- FGDS Landfill
Monitoring Point: G122
Project Location: Springfield, IL
W.O. Number (s): 24080243
Date (s): 8/13/2024

Field Team Members

Name: Justin Colp — Affiliation: TekLab, Inc.
Name: — Affiliation:

Weather Conditions

Temp: 70 °F — Wind Direction: N S E (W) (circle two if needed)
Precipitation: (None) Light Heavy — Sky: Cloudy Sunny (Partly)

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Good			

Groundwater Level Measurements

Date/Time Measured: 8/13/2024 9:48
Static Water Level: 31.21 feet below TOC
Total Depth: 49.29 feet below TOC
Water Column: 18.08 feet

Purging Activities

Purged By: Justin Colp — Purge Date: 8/13/2024
Purge Method: Submersible Pump — Well Diameter: 2"
Purge Volume Calculation (L): 18.08 ft. x 49.29 = 1.08 L x 3 Vol. = 3.24 L **Based on 3 water volumes in 3/8" tubing.*
Actual Purge Volume (L): 5.0
Physical appearance of purge water: Clear — Odor: None — Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µmhos/cm)	Temp (°F)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:49	0.0	200	purge start time						
10:02	2.6	↓	6.86	1,724	63.1	2.00	-86.7	20.54	
10:05	3.2		6.84	1,734	62.5	1.66	-91.5	20.95	
10:08	3.8		6.82	1,765	60.9	1.32	-94.3	17.97	
10:11	4.4		6.81	1,781	59.8	1.12	-97.5	17.85	
10:14	5.0		6.80	1,793	62.5	1.01	-100.6	17.43	

Sampling Activities

Sampled By: Justin Colp — Sample Date/Time: 8/13/2024 10:14
Sample Method: Low-Flow — Sample Equipment: Submersible Pump
Sample Parameters: 6.80 pH — 1,793 Spec. Cond. — 62.5 Temp
Field Filtered: Yes — Filter Type: Inline Disposable
Water Level: 33.07 feet below TOC — Drawdown: 1.86 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

Form Completed By: Justin Colp — **Date:** 8/13/2024

Field Data Sheet

Project Name: CWLP- FGDS Landfill **Monitoring Point:** AW-2

Project Location: Springfield, IL

W.O. Number (s): 24080243 **Date (s):** 8/12/2024

Field Team Members

Name: Tracy Carroll Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 72 °F Wind Direction: N S E (W) (circle two if needed)

Precipitation: (None) Light Heavy Sky: (Cloudy) Sunny Partly

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Good			

Groundwater Level Measurements

Date/Time Measured: 8/12/2024 10:50

Static Water Level: 6.29 feet below TOC

Total Depth: 32.64 feet below TOC

Water Column: 26.35 feet

Purging Activities

Purged By: Tracy Carroll Purge Date: 8/12/2024

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 26.35 ft. x 32.64 = 0.72 L x 3 Vol. = 2.16 L **Based on 3 water volumes in 3/8" tubing.*

Actual Purge Volume (L): 6.6

Physical appearance of purge water: Clear Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µmhos/cm)	Temp (°F)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:57	0.0	250	purge start time						
11:11	3.6	↓	6.63	951	65.5	3.21	-106.8	9.84	
11:14	4.3		6.64	957	65.1	3.05	-105.3	5.87	
11:17	5.1		6.64	962	64.6	2.94	-121.1	3.39	
11:20	5.8		6.65	962	64.4	2.87	-111.4	3.44	
11:23	6.6		6.65	963	64.2	2.85	-106.1	2.85	

Sampling Activities

Sampled By: Tracy Carroll Sample Date/Time: 8/12/2024 11:23

Sample Method: Low-Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.65 pH 963 Spec. Cond. 64.2 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 6.36 feet below TOC Drawdown: 0.07 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

Form Completed By: Tracy Carroll **Date:** 8/12/2024

Field Data Sheet

Project Name: CWLP- FGDS Landfill **Monitoring Point:** P07D

Project Location: Springfield, IL

W.O. Number (s): 24080243 **Date (s):** 8/12/2024

Field Team Members

Name: Tracy Carroll Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 73 °F Wind Direction: (N) S E W (circle two if needed)

Precipitation: (None) Light Heavy Sky: (Cloudy) Sunny Partly

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Good

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 8/12/2024 11:46

Static Water Level: 5.43 feet below TOC

Total Depth: 32.54 feet below TOC

Water Column: 27.11 feet

Purging Activities

Purged By: Tracy Carroll Purge Date: 8/12/2024

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 27.11 ft. x 32.54 = 0.72 L x 3 Vol. = 2.16 L **Based on 3 water volumes in 3/8" tubing.*

Actual Purge Volume (L): 7.5

Physical appearance of purge water: Clear Odor: None Color: Light orange

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µmhos/cm)	Temp (°F)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:53	0.0	268	purge start time						
12:09	4.3	↓	6.69	1,173	60.4	0.83	-119.1	217.46	
12:12	5.1		6.69	1,173	60.4	0.78	-120.1	161.59	
12:15	5.9		6.70	1,173	60.4	0.74	-120.5	104.52	
12:18	6.7		6.70	1,172	60.2	0.72	-121.0	134.96	
12:21	7.5		6.70	1,172	59.8	0.70	-120.1	172.06	

Sampling Activities

Sampled By: Tracy Carroll Sample Date/Time: 8/12/2024 12:21

Sample Method: Low-Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.70 pH 1,172 Spec. Cond. 59.8 Temp

Field Filtered: No Filter Type:

Water Level: 5.63 feet below TOC Drawdown: 0.20 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

Form Completed By: Tracy Carroll **Date:** 8/12/2024

Site Samping Event: FGDS Landfill
LIMS Workorder: 24080243
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 3Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45985 Technician(s): Brett Gillihan Date: 8/12/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC240612A	4.01	8/12/24 9:59
7.0 Buffer	WC240307F	6.99	8/12/24 9:54
10.0 Buffer	WC240625B	9.99	8/12/24 10:02
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1410	8/12/24 10:09

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.4	8/12/24 10:15
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-BG	LCS	8/12/24 10:19	22.4	7.01	1,410			
CCV-1-BG	CCV	8/12/24 15:30	23.6	7.04	1,416			

Comments:

Field Meter ID: Pine 45985 Technician(s): Brett Gillihan Date: 8/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC240612A	4.02	8/13/24 8:58
7.0 Buffer	WC240307F	7.00	8/13/24 8:54
10.0 Buffer	WC240625B	10.01	8/13/24 9:01
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	8/13/24 9:05

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.9	8/13/24 9:15
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2-BG	LCS	8/13/24 9:20	23.5	7.01	1,411			
CCV-2-BG	CCV	8/13/24 12:19	24.5	7.02	1,420			

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 24080243
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 3Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 223344 Technician(s): Tracy Carroll Date: 8/12/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC240612A	4.01	8/12/24 10:31
7.0 Buffer	WC240307F	7.01	8/12/24 10:23
10.0 Buffer	WC240625B	10.00	8/12/24 10:39
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	8/12/24 10:39

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-TC	LCS	8/12/24 10:44	24.6	7.03	1,410			
CCV-1-TC	CCV	8/12/24 14:28	25.2	7.08	1,453			

Comments:

Field Meter ID: Pine 223344 Technician(s): Tracy Carroll Date: 8/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC240612A	4.00	8/13/24 9:38
7.0 Buffer	WC240307F	7.01	8/13/24 9:35
10.0 Buffer	WC240625B	10.00	8/13/24 9:41
LCS/CCV (7.0 Buffer)	WC231207A		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1412	8/13/24 9:37

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2-TC	LCS	8/13/24 9:42	21	7.02	1,413			
CCV-2-TC	CCV	8/13/24 14:18	22.5	7.06	1,422			

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 24080243
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 3Q 2024

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 218074 Technician(s): justin colp Date: 8/12/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc240612a	4.00	8/12/24 9:33
7.0 Buffer	wc240307f	6.99	8/12/24 9:30
10.0 Buffer	wc240625b	9.99	8/12/24 9:36
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1413	8/12/24 9:39

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.41	8/12/24 9:42
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-JC	LCS	8/12/24 9:45	23.2	6.99	1,413	0.41		
CCV-1-JC	CCV	8/12/24 14:44	24.49	7.01	1,427	0.47		

Comments:

Field Meter ID: Pine 218074 Technician(s): justin colp Date: 8/13/2024

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc240612a	3.99	8/13/24 8:55
7.0 Buffer	wc240307f	7.00	8/13/24 8:57
10.0 Buffer	wc240625b	10.00	8/13/24 8:59
LCS/CCV (7.0 Buffer)	wc231207a		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	98627	1410	8/13/24 9:04

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.43	8/13/24 9:07
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2-JC	LCS	8/13/24 9:10	23.1	7.00	1,410	0.43		
CCV-2-JC	CCV	8/13/24 11:36	24.8	7.02	1,416	0.47		

Comments:

Summit Environmental Technologies, Inc.
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September 17, 2024

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

RE: 24080243

Dear Elizabeth Hurley:

Order No.: 24081420

Summit Environmental Technologies, Inc. received 12 sample(s) on 8/19/2024 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

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Case Narrative

WO#: **24081420**
Date: **9/17/2024**

CLIENT: TEKLAB Inc,
Project: 24080243

WorkOrder Narrative:
24081420: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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
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Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **24081420**
Date: **9/17/2024**

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.

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Workorder Sample Summary

WO#: **24081420**

17-Sep-24

CLIENT: TEKLAB Inc,
Project: 24080243

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24081420-001	24080243-001		8/12/2024 11:32:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-002	24080243-002		8/13/2024 12:15:00 PM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-003	24080243-003		8/12/2024 1:15:00 PM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-004	24080243-004		8/13/2024 9:33:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-005	24080243-005		8/12/2024 10:35:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-006	24080243-006		8/13/2024 11:34:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-007	24080243-007		8/13/2024 10:41:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-008	24080243-008		8/13/2024 10:14:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-009	24080243-009		8/13/2024 9:51:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-010	24080243-010		8/12/2024 11:23:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-011	24080243-011		8/12/2024 10:18:00 AM	8/19/2024 12:30:00 PM	Non-Potable Water
24081420-012	24080243-012		8/12/2024 12:21:00 PM	8/19/2024 12:30:00 PM	Non-Potable Water

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DATES REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,

Project: 24080243

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24081420-001A	24080243-001	8/12/2024 11:32:00 AM	Non-Potable Water	Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-002A	24080243-002	8/13/2024 12:15:00 PM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-003A	24080243-003	8/12/2024 1:15:00 PM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-004A	24080243-004	8/13/2024 9:33:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-005A	24080243-005	8/12/2024 10:35:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-006A	24080243-006	8/13/2024 11:34:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-007A	24080243-007	8/13/2024 10:41:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-008A	24080243-008	8/13/2024 10:14:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM

Original

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DATES REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,

Project: 24080243

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24081420-008A	24080243-008	8/13/2024 10:14:00 AM	Non-Potable Water	Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-009A	24080243-009	8/13/2024 9:51:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-010A	24080243-010	8/12/2024 11:23:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-011A	24080243-011	8/12/2024 10:18:00 AM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM
24081420-012A	24080243-012	8/12/2024 12:21:00 PM		Combined Radium (EPA903+904)			9/17/2024 12:00:15 PM
				Radium-226 (EPA 903.0)		9/10/2024 2:19:00 PM	9/16/2024 11:23:00 AM
				Radium-228 (EPA 904.0)		9/10/2024 2:19:00 PM	9/13/2024 2:18:00 PM

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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Analytical Report

(consolidated)

WO#: **24081420**

Date Reported: **9/17/2024**

CLIENT: TEKLAB Inc,

Collection Date: 8/12/2024 11:32:00 AM

Project: 24080243

Lab ID: 24081420-001

Matrix: NON-POTABLE WATER

Client Sample ID: 24080243-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **HDJ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.501	1	9/17/2024 12:00:15 PM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	ND	1.00		pCi/L	± 0.0500	1	9/16/2024 11:23:00 AM
Yield	1.00					1	9/16/2024 11:23:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.34	1.00		pCi/L	± 0.451	1	9/13/2024 2:18:00 PM
Yield	1.00					1	9/13/2024 2:18:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Analytical Report

(consolidated)

WO#: **24081420**

Date Reported: **9/17/2024**

CLIENT: TEKLAB Inc,

Collection Date: 8/13/2024 10:41:00 AM

Project: 24080243

Lab ID: 24081420-007

Matrix: NON-POTABLE WATER

Client Sample ID: 24080243-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **HDJ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.549	1	9/17/2024 12:00:15 PM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	ND	1.00		pCi/L	± 0.130	1	9/16/2024 11:23:00 AM
Yield	1.00					1	9/16/2024 11:23:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	ND	1.00		pCi/L	± 0.419	1	9/13/2024 2:18:00 PM
Yield	0.987					1	9/13/2024 2:18:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Analytical Report

(consolidated)

WO#: **24081420**

Date Reported: **9/17/2024**

CLIENT: TEKLAB Inc,

Collection Date: 8/13/2024 10:14:00 AM

Project: 24080243

Lab ID: 24081420-008

Matrix: NON-POTABLE WATER

Client Sample ID: 24080243-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **HDJ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.503	1	9/17/2024 12:00:15 PM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	ND	1.00		pCi/L	± 0.0900	1	9/16/2024 11:23:00 AM
Yield	1.00					1	9/16/2024 11:23:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	ND	1.00		pCi/L	± 0.413	1	9/13/2024 2:18:00 PM
Yield	1.00					1	9/13/2024 2:18:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Analytical Report

(consolidated)

WO#: **24081420**

Date Reported: **9/17/2024**

CLIENT: TEKLAB Inc,

Collection Date: 8/12/2024 11:23:00 AM

Project: 24080243

Lab ID: 24081420-010

Matrix: NON-POTABLE WATER

Client Sample ID: 24080243-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **HDJ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.485	1	9/17/2024 12:00:15 PM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	ND	1.00		pCi/L	± 0.0900	1	9/16/2024 11:23:00 AM
Yield	1.00					1	9/16/2024 11:23:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	ND	1.00		pCi/L	± 0.395	1	9/13/2024 2:18:00 PM
Yield	1.00					1	9/13/2024 2:18:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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Analytical Report

(consolidated)

WO#: **24081420**

Date Reported: **9/17/2024**

CLIENT: TEKLAB Inc,

Collection Date: 8/12/2024 12:21:00 PM

Project: 24080243

Lab ID: 24081420-012

Matrix: NON-POTABLE WATER

Client Sample ID: 24080243-012

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RAD226/228					**CALCULATION**		Analyst: **HDJ**
COMBINED RADIUM (EPA903+904)							
Radium-226/Radium-228	ND	2.00		pCi/L	± 0.612	1	9/17/2024 12:00:15 PM
RAD226/228					**E903.0**	**E903-904**	Analyst: **HDJ**
RADIUM-226 (EPA 903.0)							
Radium-226	ND	1.00		pCi/L	± 0.122	1	9/16/2024 11:23:00 AM
Yield	1.00					1	9/16/2024 11:23:00 AM
RAD226/228					**E904.0**	**E903-904**	Analyst: **HDJ**
RADIUM-228 (EPA 904.0)							
Radium-228	1.36	1.00		pCi/L	± 0.490	1	9/13/2024 2:18:00 PM
Yield	1.00					1	9/13/2024 2:18:00 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,
Project: 24080243 **BatchID:** **78532**

Sample ID: **MB-78532**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193266**
Client ID: **PBW**	Batch ID: **78532**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/13/2024**	SeqNo: **5230723**

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

Sample ID: **LCS-78532**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193266**
Client ID: **LCSW**	Batch ID: **78532**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/13/2024**	SeqNo: **5230724**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.26	1.00	5.000	0	65.2	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-78532**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193266**
Client ID: **LCSS02**	Batch ID: **78532**	TestNo: **E904.0**	**E903-904**	Analysis Date: **9/13/2024**	SeqNo: **5230725**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.71	1.00	5.000	0	74.2	50	130	3.259	12.9	20	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,
Project: 24080243 **BatchID:** **78532**

Sample ID: **24081891-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **9/10/2024** RunNo: **193266**
Client ID: **BatchQC** Batch ID: **78532** TestNo: **E904.0** **E903-904** Analysis Date: **9/13/2024** SeqNo: **5230761**

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	R
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,
Project: 24080243 **BatchID:** **78532**

Sample ID: **MB-78532**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193273**
Client ID: **PBW**	Batch ID: **78532**	TestNo: **E903.0**	**E903-904**	Analysis Date: **9/16/2024**	SeqNo: **5230910**

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

Sample ID: **LCS-78532**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193273**
Client ID: **LCSW**	Batch ID: **78532**	TestNo: **E903.0**	**E903-904**	Analysis Date: **9/16/2024**	SeqNo: **5230911**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.33	1.00	5.000	0	86.7	70	130				

Sample ID: **LCSD-78532**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193273**
Client ID: **LCSS02**	Batch ID: **78532**	TestNo: **E903.0**	**E903-904**	Analysis Date: **9/16/2024**	SeqNo: **5230912**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.53	1.00	5.000	0	90.7	70	130	4.334	4.53	20	

Sample ID: **24081891-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **9/10/2024**	RunNo: **193273**
Client ID: **BatchQC**	Batch ID: **78532**	TestNo: **E903.0**	**E903-904**	Analysis Date: **9/16/2024**	SeqNo: **5230934**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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

QC SUMMARY REPORT

WO#: **24081420**

17-Sep-24

Client: TEKLAB Inc,
Project: 24080243 **BatchID:** **78532**

Sample ID: **24081891-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **9/10/2024** RunNo: **193273**
Client ID: **BatchQC** Batch ID: **78532** TestNo: **E903.0** **E903-904** Analysis Date: **9/16/2024** SeqNo: **5230934**

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	
Yield	1.00							1.000	0	0	

Sample ID: **24081894-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **9/10/2024** RunNo: **193273**
Client ID: **BatchQC** Batch ID: **78532** TestNo: **E903.0** **E903-904** Analysis Date: **9/16/2024** SeqNo: **5230936**

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	
Yield	1.00							1.000	0	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

TEKLAB, INC. Chain of Custody

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

24080420

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 Combinded 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. Report 24080243-011 from 24080242-001. *

Project# 24080243

Contact: Shelly Hennessy Email: shennessy@teklabinc.com
Requested Due Date: Standard TAT Billing/PO: 36828 Phone: (618) 344-1004 ext. 36

no containers shipped for 24080243-011 SAH 8/14/24

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										
	24080243-001	8/12/24 1132	HNO3	Groundwater	✔	✔	✔	plt	1		cpm	14					
	24080243-002	8/13/24 1215	HNO3	Groundwater	✔	✔	✔		1			19					
	24080243-003	8/12/24 1315	HNO3	Groundwater	✔	✔	✔		1			56					
	24080243-004	8/13/24 0933	HNO3	Groundwater	✔	✔	✔		1			37					
	24080243-005	8/12/24 1035	HNO3	Groundwater	✔	✔	✔		1			26					
	24080243-006	8/13/24 1134	HNO3	Groundwater	✔	✔	✔		1			18					
	24080243-007	8/13/24 1041	HNO3	Groundwater	✔	✔	✔		1			30					
	24080243-008	8/13/24 1014	HNO3	Groundwater	✔	✔	✔		1			6					
	24080243-009	8/13/24 0951	HNO3	Groundwater	✔	✔	✔		1			24					
	24080243-010	8/12/24 1123	HNO3	Groundwater	✔	✔	✔	✓	1			32					
	24080243-011 *	8/12/24 1018	HNO3	Groundwater	✔	✔	✔		1								

21.6 - 0.1 = 21.5, Feder Cooler

*Relinquished By	Date/Time	Received By	Date/Time
Amber Duvall	8/13/24 1700	Anthony Buttons	AUG 19 2024 1230

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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

Project# 24080243

Comments: **Please Issue reports and invoices via email only**
Please analyze for Ra226, Ra228 and Combinded 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. Report 24080243-011 from 24080242-001.

Contact: Shelly Hennessy | Email: shennessy@teklabinc.com
Requested Due Date: Standard TAT | Billing/PO: 36828 | Phone: (618) 344-1004 ext. 36

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									
	24080243-012	8/12/24 1221	HNO3	Groundwater	✔	✔	✔	pH	1	12=Cpm						
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												
			HNO3	Groundwater												

21.6 - 0.1 = 21.5, Fedex Coder

*Relinquished By	Date/Time	Received By	Date/Time
Shelby DeWalls	8/13/24 1700	Anthony Burton	AUG 19 2024 1230

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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: 24081420 RcptNo: 1

Logged by:	Anthony W. Britton	8/19/2024 12:30:00 PM	Anthony Britton
Completed By:	Anthony W. Britton	8/20/2024 1:40:48 PM	Anthony Britton
Reviewed By:	Jennifer Woolf	8/20/2024 7:57:52 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	21.5	Good	Not Present			

November 2024 Laboratory Analytical Report

December 09, 2024

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 24110121

Dear Eric Staley:

TEKLAB, INC received 12 samples on 11/13/2024 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 24110121
Client Project: FGDS Landfill
Report Date: 09-Dec-24

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	19
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-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: City Water, Light & Power
Work Order: 24110121
Client Project: FGDS Landfill
Report Date: 09-Dec-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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24110121
Report Date: 09-Dec-24

Cooler Receipt Temp: 10.9 °C

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

Radium-226 & -228 analysis was performed by Summit Environmental Technologies. See attached report for results.

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: City Water, Light & Power

Work Order: 24110121

Client Project: FGDS Landfill

Report Date: 09-Dec-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: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-24

Lab ID: 24110121-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 11/11/2024 10:26

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	11/11/2024 10:26	R356376
Depth to water	*	-5.00		**4.65**	ft	1	11/11/2024 10:26	R356376
Depth to water from measuring point	*	0		**7.45**	ft	1	11/11/2024 10:26	R356376
Elevation of groundwater surface	*	0		**539.35**	ft	1	11/11/2024 10:26	R356376
Measuring Point Elevation	*	0		**546.80**	ft	1	11/11/2024 10:26	R356376
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	11/11/2024 10:26	R356376
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**11**	NTU	1	11/11/2024 10:26	R356376
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**56.4**	°F	1	11/11/2024 10:26	R356376
SW-846 9040B								
pH, Field	*	1.00		**6.55**		1	11/11/2024 10:26	R356376
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1180**	µmhos/cm @25C	1	11/11/2024 10:26	R356376
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**905**	mg/L	2.5	11/14/2024 12:21	R356260
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	11/13/2024 18:30	R355975
Chloride	NELAP	5.00		**106**	mg/L	10	11/13/2024 18:30	R355975
Sulfate	NELAP	10.0		**265**	mg/L	10	11/13/2024 18:30	R355975
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0342**	mg/L	1	11/12/2024 19:32	231056
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	11/12/2024 19:32	231056
Boron	NELAP	0.0200		**0.126**	mg/L	1	11/12/2024 19:32	231056
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	11/12/2024 19:32	231056
Calcium	NELAP	0.100		**164**	mg/L	1	11/12/2024 19:32	231056
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:32	231056
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:32	231056
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	11/12/2024 19:32	231056
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	11/12/2024 19:32	231056
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010	B	**< 0.0010**	mg/L	5	11/16/2024 1:06	231056
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	11/15/2024 4:56	231056
Lithium	*	0.0030		**0.0167**	mg/L	5	11/20/2024 9:00	231056
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	11/15/2024 4:56	231056
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	11/15/2024 4:56	231056

LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.
Contamination present in the MBLK. Sample results below the reporting limit are reportable per the TNI Standard.

SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	11/14/2024 12:46	231146
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	11/27/2024 0:00	R357220
Radium-228	*	0		**See Attached**	pci/L	1	11/27/2024 0:00	R357220

Client: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-24

Lab ID: 24110121-007 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 11/11/2024 13:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	11/11/2024 13:30	R356376
Depth to water	*	-5.00		**32.66**	ft	1	11/11/2024 13:30	R356376
Depth to water from measuring point	*	0		**34.53**	ft	1	11/11/2024 13:30	R356376
Elevation of groundwater surface	*	0		**521.07**	ft	1	11/11/2024 13:30	R356376
Measuring Point Elevation	*	0		**555.60**	ft	1	11/11/2024 13:30	R356376
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	11/11/2024 13:30	R356376
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**12**	NTU	1	11/11/2024 13:30	R356376
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.2**	°F	1	11/11/2024 13:30	R356376
SW-846 9040B								
pH, Field	*	1.00		**6.75**		1	11/11/2024 13:30	R356376
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1370**	µmhos/cm @25C	1	11/11/2024 13:30	R356376
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**1040**	mg/L	2.5	11/14/2024 12:22	R356260
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	11/13/2024 19:52	R355975
Chloride	NELAP	5.00		**29.0**	mg/L	10	11/13/2024 19:52	R355975
Sulfate	NELAP	10.0		**311**	mg/L	10	11/13/2024 19:52	R355975
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.626**	mg/L	1	11/12/2024 19:38	231056
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	11/12/2024 19:38	231056
Boron	NELAP	0.0200		**3.68**	mg/L	1	11/12/2024 19:38	231056
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	11/12/2024 19:38	231056
Calcium	NELAP	0.100		**191**	mg/L	1	11/12/2024 19:38	231056
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:38	231056
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:38	231056
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	11/12/2024 19:38	231056
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	11/12/2024 19:38	231056
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010	B	**< 0.0010**	mg/L	5	11/16/2024 1:51	231056
Arsenic	NELAP	0.0010		**0.0160**	mg/L	5	11/15/2024 5:18	231056
Lithium	*	0.0030		**0.0079**	mg/L	5	11/20/2024 10:10	231056
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	11/15/2024 5:18	231056
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	11/15/2024 5:18	231056

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

Contamination present in the MBLK. Sample results below the reporting limit are reportable per the TNI Standard.

SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	11/14/2024 13:02	231146
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220
Radium-228	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220

Client: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-24

Lab ID: 24110121-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 11/11/2024 14:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	11/11/2024 14:10	R356376
Depth to water	*	-5.00		**28.50**	ft	1	11/11/2024 14:10	R356376
Depth to water from measuring point	*	0		**30.24**	ft	1	11/11/2024 14:10	R356376
Elevation of groundwater surface	*	0		**524.16**	ft	1	11/11/2024 14:10	R356376
Measuring Point Elevation	*	0		**554.40**	ft	1	11/11/2024 14:10	R356376
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	11/11/2024 14:10	R356376
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**5.7**	NTU	1	11/11/2024 14:10	R356376
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.4**	°F	1	11/11/2024 14:10	R356376
SW-846 9040B								
pH, Field	*	1.00		**6.64**		1	11/11/2024 14:10	R356376
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1590**	µmhos/cm @25C	1	11/11/2024 14:10	R356376
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**1360**	mg/L	2.5	11/14/2024 12:22	R356260
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	11/13/2024 20:04	R355975
Chloride	NELAP	5.00		**37.6**	mg/L	10	11/13/2024 20:04	R355975
Sulfate	NELAP	10.0		**547**	mg/L	10	11/13/2024 20:04	R355975
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.468**	mg/L	1	11/12/2024 19:40	231056
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	11/12/2024 19:40	231056
Boron	NELAP	0.0200	S	**11.7**	mg/L	1	11/12/2024 19:40	231056
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	11/12/2024 19:40	231056
Calcium	NELAP	0.100	S	**246**	mg/L	1	11/12/2024 19:40	231056
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:40	231056
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	11/12/2024 19:40	231056
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	11/12/2024 19:40	231056
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	11/12/2024 19:40	231056
Matrix spike control limits are not applicable due to high sample/spike ratio.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010	BS	**< 0.0010**	mg/L	5	11/16/2024 1:14	231056
Arsenic	NELAP	0.0010		**0.0029**	mg/L	5	11/15/2024 5:24	231056
Lithium	*	0.0030		**0.0070**	mg/L	5	11/20/2024 9:17	231056
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	11/15/2024 5:24	231056
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	11/15/2024 5:24	231056
Matrix spike recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable.								
LCS recovered outside upper control limits. Sample results are below the reporting limit. Data is reportable per the TNI Standard.								
Contamination present in the MBLK. Sample results below the reporting limit are reportable per the TNI Standard.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	11/14/2024 13:17	231146
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220
Radium-228	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220

Client: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-24

Lab ID: 24110121-010 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 11/13/2024 12:38

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	11/13/2024 12:38	R356376
Depth to water	*	-5.00		**1.21**	ft	1	11/13/2024 12:38	R356376
Depth to water from measuring point	*	0		**4.51**	ft	1	11/13/2024 12:38	R356376
Elevation of groundwater surface	*	0		**525.47**	ft	1	11/13/2024 12:38	R356376
Measuring Point Elevation	*	0		**529.98**	ft	1	11/13/2024 12:38	R356376
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	11/13/2024 12:38	R356376
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**6.6**	NTU	1	11/13/2024 12:38	R356376
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.6**	°F	1	11/13/2024 12:38	R356376
SW-846 9040B								
pH, Field	*	1.00		**6.73**		1	11/13/2024 12:38	R356376
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**840**	µmhos/cm @25C	1	11/13/2024 12:38	R356376
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50	H	**795**	mg/L	2.5	11/21/2024 17:12	R356629
Sample analysis did not meet hold time requirements.								
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	11/15/2024 10:51	R356222
Chloride	NELAP	5.00		**25.7**	mg/L	10	11/15/2024 10:51	R356222
Sulfate	NELAP	10.0		**99.2**	mg/L	10	11/15/2024 10:51	R356222
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.516**	mg/L	1	11/18/2024 12:16	231260
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	11/18/2024 12:16	231260
Boron	NELAP	0.0200		**2.46**	mg/L	1	11/18/2024 12:16	231260
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	11/18/2024 12:16	231260
Calcium	NELAP	0.100		**144**	mg/L	1	11/18/2024 12:16	231260
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	11/18/2024 12:16	231260
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	11/18/2024 12:16	231260
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	11/18/2024 12:16	231260
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	11/18/2024 12:16	231260
Sample result(s) for Ca exceed 10 times the CCB. Data is reportable per the TNI Standard.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	11/20/2024 4:18	231194
Arsenic	NELAP	0.0010		**0.0130**	mg/L	5	11/20/2024 4:18	231194
Lithium	*	0.0030		**0.0062**	mg/L	5	11/20/2024 11:17	231194
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	11/20/2024 4:18	231194
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	11/20/2024 4:18	231194
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	11/18/2024 12:24	231196
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220
Radium-228	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220

Client: City Water, Light & Power **Work Order:** 24110121

Client Project: FGDS Landfill **Report Date:** 09-Dec-24

Lab ID: 24110121-012 **Client Sample ID:** P07D

Matrix: GROUNDWATER **Collection Date:** 11/13/2024 12:06

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**528.25**	ft	1	11/13/2024 12:06	R356376
Depth to water	*	-5.00		**1.37**	ft	1	11/13/2024 12:06	R356376
Depth to water from measuring point	*	0		**4.37**	ft	1	11/13/2024 12:06	R356376
Elevation of groundwater surface	*	0		**523.88**	ft	1	11/13/2024 12:06	R356376
Measuring Point Elevation	*	0		**528.25**	ft	1	11/13/2024 12:06	R356376
Measuring Point Height Above Land Surface	*	0		**3.00**	ft	1	11/13/2024 12:06	R356376
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**12**	NTU	1	11/13/2024 12:06	R356376
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.0**	°F	1	11/13/2024 12:06	R356376
SW-846 9040B								
pH, Field	*	1.00		**6.64**		1	11/13/2024 12:06	R356376
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1110**	µmhos/cm @25C	1	11/13/2024 12:06	R356376
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50	H	**1020**	mg/L	2.5	11/21/2024 17:12	R356629
Sample analysis did not meet hold time requirements.								
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	11/15/2024 11:37	R356222
Chloride	NELAP	5.00		**32.2**	mg/L	10	11/15/2024 11:37	R356222
Sulfate	NELAP	10.0		**305**	mg/L	10	11/15/2024 11:37	R356222
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.857**	mg/L	1	11/18/2024 12:47	231260
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	11/18/2024 12:47	231260
Boron	NELAP	0.0200		**5.40**	mg/L	1	11/18/2024 12:47	231260
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	11/18/2024 12:47	231260
Calcium	NELAP	0.100		**189**	mg/L	1	11/18/2024 12:47	231260
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	11/18/2024 12:47	231260
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	11/18/2024 12:47	231260
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	11/18/2024 12:47	231260
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	11/18/2024 12:47	231260
Sample result(s) for Ca exceed 10 times the CCB. Data is reportable per the TNI Standard.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	11/20/2024 4:24	231194
Arsenic	NELAP	0.0010		**0.0360**	mg/L	5	11/20/2024 4:24	231194
Lithium	*	0.0030		**0.0095**	mg/L	5	11/20/2024 11:22	231194
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	11/20/2024 4:24	231194
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	11/20/2024 4:24	231194
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	11/18/2024 12:27	231196
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220
Radium-228	*	0		**See Attached**	pci/L	1	12/03/2024 0:00	R357220

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 24110121
Report Date: 09-Dec-24

Carrier: Brett Gillihan
Received By: JMD

Completed by: Amber Dilallo
On: 11-Nov-24

Reviewed by: Ellie Hopkins
On: 14-Nov-24

Pages to follow: Chain of custody 4 Extra pages included 42

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	10.9
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 #96651. - JD/amberdilallo - 11/11/2024 4:58:57 PM

Samples were received on 11/13/24 at 15:45 on ice [10.5C - LTG#5]. ph strip #96651. Additional nitric acid (100984) was needed for P07D upon arrival at the laboratory.- lhenson - 11/14/2024 8:39:22 AM

CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 24110121

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 1.2.9 °C 5
Preserved in: [ ] LAB [x] FIELD FOR LAB USE ONLY
LAB NOTES: PA 96051
SD 11/11/24

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24110120-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Brett Gillihan

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24110121-001	R101	11-11-24 1026	Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111	11/11/24 1129	Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112	11/11/24 1227	Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113	11-11-24 1116	Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121	11-11-24 1330	Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122	11-11-24 1410	Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1	11-11-24 1206	Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3	11-11-24 1103	Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
Brett Gillihan	11-11-24 1610	Jackie Davis	11/11/24 16:10

*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

CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 24110124

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C
Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY
LAB NOTES:

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME

RESULTS REQUESTED
☑ Standard ☐ 1-2 Day (100% Surcharge)
☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24110124 - 012	P07D		Groundwater	1	2								✔	✔	✔	✔	✔	✔
			Groundwater															
			Groundwater															
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			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
[signature]	11-11 / 1610	Jackie Davis	11/11/24 16:10

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 24110121

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 10.5°C 5
Preserved in: [x] LAB [ ] FIELD FOR LAB USE ONLY
LAB NOTES: PW 96057
added HNO3 (1009849) pH<2 LM 11/14/24

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event. 24110120-001

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
T Carroll

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
24110121-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110	11/13/24 1024	Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120	11/13/24 1118	Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2	11/13/24 1238	Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
	11-13/1545		11/13/24 1545

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CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 24110121

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

Client: City Water, Light & Power

Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building

City/State/Zip: Springfield IL 62712

Contact: Eric Staley Phone: (217) 757-8610

Email: eric.staley@cwlp.com Fax:

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

Are these samples known to be hazardous? ☐ 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 Permit on file

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C

Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY

LAB NOTES:

Client Comments:

*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025

PROJECT NAME/NUMBER

FGDS Landfill

SAMPLE COLLECTOR'S NAME

TCarroll

RESULTS REQUESTED

☑ Standard ☐ 1-2 Day (100% Surcharge)

☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers									INDICATE ANALYSIS REQUESTED													
				UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity								
24110121 - 012	P07D	11/13/24 1200	Groundwater	1	2								✓	✓	✓	✓	✓	✓								
			Groundwater																							
			Groundwater																							
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Relinquished By	Date/Time	Received By	Date/Time
	11-13/1545		11/13/24 1545

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Field Data Sheet

Project Name: FGDS Landfill
Project Location: Springfield, IL
W.O. Number (s): 24110121
Monitoring Point: R101
Sample ID: 001
Date (s): 11/11/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 55 °F
Wind Direction: ☐ N ☐ S ☐ W ☑ E ☐ SE ☐ SW ☐ NE ☐ NW
Precipitation: ☑ None ☐ Light ☐ Heavy
Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 11/11/2024 10:00
Static Water Level: 7.45 feet below TOC
Total Depth: 35.27 feet below TOC
Water Column: 27.82 feet

Purging Activities

Purged By: BG Purge Date: 11/11/2024
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 27.82 ft. x 0.022 = 0.61 L x 3 Vol. = 1.83 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 4.00 L
Physical appearance of purge water: Clear Odor: Slight Color: clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:00	0.0	154	purge start time						
10:11	1.7	↓	6.50	1,179.40	13.55	0.97	-8.70	13.48	
10:14	2.2		6.52	1,179.10	13.57	0.92	-6.80	14.93	
10:17	2.6		6.53	1,178.90	13.60	0.88	-10.40	16.39	
10:20	3.1		6.54	1,179.10	13.60	0.87	-15.10	13.59	
10:23	3.5		6.54	1,178.70	13.60	0.85	-19.90	12.12	
10:26	4.0		6.55	1,178.70	13.58	0.84	-24.30	10.74	

Sampling Activities

Sampled By: BG Sample Date/Time: 11/11/2024 10:26
Sample Method: Low Flow Sample Equipment: Peristaltic Pump
Sample Parameters: 6.55 pH 1,178.70 Spec. Cond. 13.58 Temp
Field Filtered: Yes Filter Type: Inline Disposable
Water Level: 7.56 feet below TOC Drawdown: 0.11 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210760

Form Completed By: Brett Gillihan Date: 11/11/2024

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	G121
Project Location:	Springfield, IL	**Sample ID:**	007
W.O. Number (s):	24110121	**Date (s):**	11/11/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.

Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 61 °F Wind Direction: ☐ N ☐ S ☐ W ☑ E ☐ SE ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

		Locks	Yes	No
Well Pad	Good	Protective Casing		X
Casing	Good	Well		X
Protective Casing	Good			
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 11/11/2024 13:07

Static Water Level: 34.53 feet below TOC

Total Depth: 58.56 feet below TOC

Water Column: 24.03 feet

Purging Activities

Purged By: BG Purge Date: 11/11/2024

Purge Method: Submersible Pump Well Diameter: 2"

Purge Volume Calculation (L): 24.03 ft. x 0.022 = 0.53 L x 3 Vol. = 1.59 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 7.00 L

Physical appearance of purge water: Slightly cloudy Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
13:07	0.0	304	purge start time						
13:21	4.3	↓	6.77	1,375.80	14.29	0.72	-126.20	21.03	
13:24	5.2		6.76	1,375.00	14.39	0.70	-127.60	16.22	
13:27	6.1		6.75	1,372.30	14.56	0.67	-128.80	14.20	
13:30	7.0		6.75	1,372.70	14.54	0.65	-129.80	12.07	

Sampling Activities

Sampled By: BG Sample Date/Time: 11/11/2024 13:30

Sample Method: Low Flow Sample Equipment: Submersible Pump

Sample Parameters: 6.75 pH 1,372.70 Spec. Cond. 14.54 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 35.76 feet below TOC Drawdown: 1.23 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210760

Form Completed By: Brett Gillihan **Date:** 11/11/2024

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	G122
Project Location:	Springfield, IL	**Sample ID:**	008
W.O. Number (s):	24110121	**Date (s):**	11/11/2024

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.

Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 62 °F Wind Direction: ☐ N ☐ S ☐ W ☑ E ☐ SE ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 11/11/2024 13:46

Static Water Level: 30.24 feet below TOC

Total Depth: 49.29 feet below TOC

Water Column: 19.05 feet

Purging Activities

Purged By: BG Purge Date: 11/11/2024

Purge Method: Submersible Pump Well Diameter: 2"

Purge Volume Calculation (L): 19.05 ft. x 0.022 = 0.42 L x 3 Vol. = 1.26 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 7.00 L

Physical appearance of purge water: Slightly cloudy Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
13:46	0.0	292	purge start time						
13:58	3.5	↓	6.70	1,560.70	14.16	1.82	-86.50	13.00	
14:01	4.4		6.67	1,573.10	14.21	1.62	-88.90	9.64	
14:04	5.3		6.66	1,583.50	14.16	1.42	-90.70	10.31	
14:07	6.1		6.65	1,589.40	14.13	1.26	-92.60	9.34	
14:10	7.0		6.64	1,593.40	14.13	1.12	-94.50	5.71	

Sampling Activities

Sampled By: BG Sample Date/Time: 11/11/2024 14:10

Sample Method: Low Flow Sample Equipment: Submersible Pump

Sample Parameters: 6.64 pH 1,593.40 Spec. Cond. 14.13 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 31.15 feet below TOC Drawdown: 0.91 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210760

Form Completed By: Brett Gillihan **Date:** 11/11/2024

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	AW-2
Project Location:	Springfield, IL	**Sample ID:**	010
W.O. Number (s):	24110121	**Date (s):**	11/13/2024

Field Team Members

Name: Tracy Carroll Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 50 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE ☑ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 11/13/2024 12:17

Static Water Level: 4.51 feet below TOC

Total Depth: 32.64 feet below TOC

Water Column: 28.13 feet

Purging Activities

Purged By: TC Purge Date: 11/13/2024

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 28.13 ft. x 0.022 = 0.62 L x 3 Vol. = 1.86 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 5.50 L

Physical appearance of purge water: Clear Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
12:22	0.0	344	purge start time						
12:29	2.4	↓	6.74	831.00	14.99	1.22	-161.90	8.74	
12:32	3.4		6.74	831.40	14.97	1.03	-165.70	6.42	
12:35	4.5		6.74	834.50	14.88	0.92	-168.10	5.54	
12:38	5.5		6.73	840.40	14.78	0.84	-169.60	6.63	

Sampling Activities

Sampled By: TC Sample Date/Time: 11/13/2024 12:38

Sample Method: Low Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.73 pH 840.40 Spec. Cond. 14.78 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 4.68 feet below TOC Drawdown: 0.17 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 45720

Form Completed By: Tracy Carroll **Date:** 11/13/2024

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	P07D
Project Location:	Springfield, IL	**Sample ID:**	012
W.O. Number (s):	24110121	**Date (s):**	11/13/2024

Field Team Members

Name: Tracy Carroll Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 49 °F Wind Direction: ☐ N ☐ S ☐ W ☐ E ☐ SE ☐ SW ☐ NE ☑ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 11/13/2024 11:32

Static Water Level: 4.37 feet below TOC

Total Depth: 32.54 feet below TOC

Water Column: 28.17 feet

Purging Activities

Purged By: TC Purge Date: 11/13/2024

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 28.17 ft. x 0.022 = 0.62 L x 3 Vol. = 1.86 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 12.00 L

Physical appearance of purge water: Clear Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
11:32	0.0	353	purge start time						
11:42	3.5	↓	6.64	1,105.90	13.81	0.90	-170.80	46.43	
11:45	4.6		6.64	1,105.30	13.78	0.76	-173.00	28.62	
11:48	5.6		6.64	1,104.40	13.79	0.68	-174.30	15.93	
11:51	6.7		6.64	1,105.30	13.78	0.60	-176.00	263.87	
11:54	7.8		*Tubing disconnected from flow cell*						
11:57	8.8		6.64	1,105.50	13.72	1.35	-162.50	11.85	
12:00	9.9		6.64	1,105.80	13.77	0.81	-169.30	7.34	
12:03	10.9		6.64	1,106.30	13.90	0.65	-172.60	8.25	
12:06	12.0		6.64	1,106.20	13.88	0.58	-174.30	12.08	

Sampling Activities

Sampled By: TC Sample Date/Time: 11/13/2024 12:06

Sample Method: Low Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.64 pH 1,106.20 Spec. Cond. 13.88 Temp

Field Filtered: No Filter Type:

Water Level: 4.70 feet below TOC Drawdown: 0.33 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 45720

Form Completed By: Tracy Carroll **Date:** 11/13/2024

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

December 06, 2024

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 24110121

Order No.: 24111568

Dear Shelly Hennessy:

Summit Environmental Technologies, Inc. received 12 sample(s) on 11/20/2024 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.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **24111568**
Date: **12/6/2024**

CLIENT: TEKLAB Inc,
Project: 24110121

WorkOrder Narrative:
24111568: 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 information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. 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

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Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **24111568**
Date: **12/6/2024**

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.

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Workorder Sample Summary

WO#: **24111568**
06-Dec-24

CLIENT: TEKLAB Inc,
Project: 24110121

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
24111568-001	24110121-001		11/11/2024 10:26:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-002	24110121-002		11/13/2024 10:24:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-003	24110121-003		11/11/2024 11:29:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-004	24110121-004		11/11/2024 12:27:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-005	24110121-005		11/11/2024 11:16:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-006	24110121-006		11/13/2024 11:18:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-007	24110121-007		11/11/2024 1:30:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-008	24110121-008		11/11/2024 2:10:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-009	24110121-009		11/11/2024 12:06:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-010	24110121-010		11/11/2024 12:38:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-011	24110121-011		11/11/2024 11:03:00 AM	11/20/2024 1:00:00 PM	Non-Potable Water
24111568-012	24110121-012		11/13/2024 12:06:00 PM	11/20/2024 1:00:00 PM	Non-Potable Water

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DATES REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24111568-001A	24110121-001	11/11/2024 10:26:00 AM	Non-Potable Water	Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-002A	24110121-002	11/13/2024 10:24:00 AM		Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-003A	24110121-003	11/11/2024 11:29:00 AM		Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-004A	24110121-004	11/11/2024 12:27:00 PM		Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-005A	24110121-005	11/11/2024 11:16:00 AM		Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-006A	24110121-006	11/13/2024 11:18:00 AM		Radium-226 (EPA 903.0)		11/22/2024 11:34:00 AM	11/29/2024 9:41:00 AM
				Radium-228 (EPA 904.0)		11/22/2024 11:34:00 AM	11/27/2024 2:09:00 PM
24111568-007A	24110121-007	11/11/2024 1:30:00 PM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM
				Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM
24111568-008A	24110121-008	11/11/2024 2:10:00 PM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM
				Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM
24111568-009A	24110121-009	11/11/2024 12:06:00 PM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM
				Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM
24111568-010A	24110121-010	11/11/2024 12:38:00 PM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM
				Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM
24111568-011A	24110121-011	11/11/2024 11:03:00 AM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM
				Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM
24111568-012A	24110121-012	11/13/2024 12:06:00 PM		Radium-226 (EPA 903.0)		11/23/2024 8:45:00 AM	12/4/2024 9:31:52 AM

Original

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DATES REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,

Project: 24110121

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
24111568-012A	24110121-012	11/13/2024 12:06:00 PM	Non-Potable Water	Radium-228 (EPA 904.0)		11/23/2024 8:45:00 AM	12/3/2024 4:29:04 PM

Original

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Analytical Report

(consolidated)

WO#: **24111568**

Date Reported: **12/6/2024**

CLIENT: TEKLAB Inc,
Project: 24110121
Lab ID: 24111568-001
Client Sample ID: 24110121-001

Collection Date: 11/11/2024 10:26:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **DHF**
Radium-226	ND	1.00		pCi/L	± 0.0600	1	11/29/2024 9:41:00 AM
Yield	1.00					1	11/29/2024 9:41:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **DHF**
Radium-228	ND	1.00		pCi/L	± 0.370	1	11/27/2024 2:09:00 PM
Yield	1.00					1	11/27/2024 2:09:00 PM

Qualifiers:

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

Original

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Analytical Report

(consolidated)

WO#: **24111568**

Date Reported: **12/6/2024**

CLIENT: TEKLAB Inc,
Collection Date: 11/11/2024 1:30:00 PM
Project: 24110121
Lab ID: 24111568-007
Matrix: NON-POTABLE WATER
Client Sample ID: 24110121-007

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.180	1	12/4/2024 9:31:52 AM
Yield	1.00					1	12/4/2024 9:31:52 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	1.59	1.00		pCi/L	± 0.720	1	12/3/2024 4:29:04 PM
Yield	0.910					1	12/3/2024 4:29:04 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
W	Sample container temperature is out of limit as specified at testcode		

Original

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Analytical Report

(consolidated)

WO#: **24111568**

Date Reported: **12/6/2024**

CLIENT: TEKLAB Inc,

Collection Date: 11/11/2024 2:10:00 PM

Project: 24110121

Lab ID: 24111568-008

Matrix: NON-POTABLE WATER

Client Sample ID: 24110121-008

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.210	1	12/4/2024 9:31:52 AM
Yield	0.670					1	12/4/2024 9:31:52 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	2.39	1.00		pCi/L	± 0.980	1	12/3/2024 4:29:04 PM
Yield	0.680					1	12/3/2024 4:29:04 PM

Qualifiers:

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

Original

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Analytical Report

(consolidated)

WO#: **24111568**

Date Reported: **12/6/2024**

CLIENT: TEKLAB Inc,
Collection Date: 11/11/2024 12:38:00 PM
Project: 24110121
Lab ID: 24111568-010
Matrix: NON-POTABLE WATER
Client Sample ID: 24110121-010

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.130	1	12/4/2024 9:31:52 AM
Yield	0.950					1	12/4/2024 9:31:52 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	1.55	1.00		pCi/L	± 0.790	1	12/3/2024 4:29:04 PM
Yield	0.760					1	12/3/2024 4:29:04 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **24111568**

Date Reported: **12/6/2024**

CLIENT: TEKLAB Inc,
Collection Date: 11/13/2024 12:06:00 PM
Project: 24110121
Lab ID: 24111568-012
Matrix: NON-POTABLE WATER
Client Sample ID: 24110121-012

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **SMZ**
Radium-226	ND	1.00		pCi/L	± 0.140	1	12/4/2024 9:31:52 AM
Yield	1.00					1	12/4/2024 9:31:52 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **SMZ**
Radium-228	1.34	1.00		pCi/L	± 0.620	1	12/3/2024 4:29:04 PM
Yield	1.00					1	12/3/2024 4:29:04 PM

Qualifiers:

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

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QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80533**

Sample ID: **MB-80533** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197941**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E904.0** **E903-904** Analysis Date: **11/27/2024** SeqNo: **5352672**

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

Sample ID: **LCS-80533** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197941**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E904.0** **E903-904** Analysis Date: **11/27/2024** SeqNo: **5352673**

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-80533** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197941**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E904.0** **E903-904** Analysis Date: **11/27/2024** SeqNo: **5352674**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.37	1.00	5.000	0	67.4	50	130	3.410	1.18	20	
Yield	1.00			0	0			1.000	0		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80533**

Sample ID: **24111225-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197941**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E904.0** **E903-904** Analysis Date: **11/27/2024** SeqNo: **5352689**

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	R
Yield	1.00			0	0			1.000	0		

Sample ID: **24111363-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197941**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E904.0** **E903-904** Analysis Date: **11/27/2024** SeqNo: **5352692**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	1.11	1.00		0	0			0.9300	17.6	20	
Yield	1.00			0	0			1.000	0		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80533**

Sample ID: **MB-80533**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/22/2024**	RunNo: **197943**
Client ID: **BatchQC**	Batch ID: **80533**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/29/2024**	SeqNo: **5352721**

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

Sample ID: **LCS-80533**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/22/2024**	RunNo: **197943**
Client ID: **BatchQC**	Batch ID: **80533**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/29/2024**	SeqNo: **5352722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.06	1.00	5.000	0	101	70	130				

Sample ID: **LCSD-80533**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/22/2024**	RunNo: **197943**
Client ID: **BatchQC**	Batch ID: **80533**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/29/2024**	SeqNo: **5352723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.18	1.00	5.000	0	83.6	70	130	5.060	19.0	20	

Sample ID: **24111225-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/22/2024**	RunNo: **197943**
Client ID: **BatchQC**	Batch ID: **80533**	TestNo: **E903.0**	**E903-904**	Analysis Date: **11/29/2024**	SeqNo: **5352733**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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

QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80533**

Sample ID: **24111225-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197943**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E903.0** **E903-904** Analysis Date: **11/29/2024** SeqNo: **5352733**

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	
Yield	1.00							1.000	0	0	

Sample ID: **24111363-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/22/2024** RunNo: **197943**
Client ID: **BatchQC** Batch ID: **80533** TestNo: **E903.0** **E903-904** Analysis Date: **11/29/2024** SeqNo: **5352735**

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	
Yield	1.00							1.000	0	0	

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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

QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80535**

Sample ID: **MB-80535** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198153**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E904.0** **E903-904** Analysis Date: **12/3/2024** SeqNo: **5358242**

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

Sample ID: **LCS-80535** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198153**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E904.0** **E903-904** Analysis Date: **12/3/2024** SeqNo: **5358243**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.46	1.00	5.000	0	89.2	50	130				
Yield	0.970			0	0						

Sample ID: **LCSD-80535** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198153**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E904.0** **E903-904** Analysis Date: **12/3/2024** SeqNo: **5358244**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	5.32	1.00	5.000	0	106	50	130	4.460	17.6	20	
Yield	0.970			0	0			0.9700	0		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

Summit Environmental Technologies, Inc.
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Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80535**

Sample ID: **24111317-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198153**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E904.0** **E903-904** Analysis Date: **12/3/2024** SeqNo: **5358249**

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	
Yield	1.00			0	0			0.7500	28.6		

Sample ID: **24111607-001DDUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198153**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E904.0** **E903-904** Analysis Date: **12/3/2024** SeqNo: **5358269**

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	
Yield	0.910			0	0			1.000	9.42		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80535**

Sample ID: **MB-80535**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/23/2024**	RunNo: **198160**
Client ID: **BatchQC**	Batch ID: **80535**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/4/2024**	SeqNo: **5358431**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	ND	1.00									
Yield	0.990										

Sample ID: **LCS-80535**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/23/2024**	RunNo: **198160**
Client ID: **BatchQC**	Batch ID: **80535**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/4/2024**	SeqNo: **5358432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.81	1.00	5.000	0	116	70	130				

Sample ID: **LCSD-80535**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/23/2024**	RunNo: **198160**
Client ID: **BatchQC**	Batch ID: **80535**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/4/2024**	SeqNo: **5358433**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.22	1.00	5.000	0	104	70	130	5.810	10.7	20	

Sample ID: **24111317-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **11/23/2024**	RunNo: **198160**
Client ID: **BatchQC**	Batch ID: **80535**	TestNo: **E903.0**	**E903-904**	Analysis Date: **12/4/2024**	SeqNo: **5358438**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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

QC SUMMARY REPORT

WO#: **24111568**

06-Dec-24

Client: TEKLAB Inc,
Project: 24110121 **BatchID:** **80535**

Sample ID: **24111317-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198160**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E903.0** **E903-904** Analysis Date: **12/4/2024** SeqNo: **5358438**

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	
Yield	1.00							0.8200	19.8	0	

Sample ID: **24111607-001DDUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/23/2024** RunNo: **198160**
Client ID: **BatchQC** Batch ID: **80535** TestNo: **E903.0** **E903-904** Analysis Date: **12/4/2024** SeqNo: **5358458**

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	
Yield	0.980							1.000	2.02	0	

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

TEKLAB, INC. Chain of Custody

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

24111568

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

Teklab Inc 17.2-0.0= 17.2°C
5445 Horseshoe Lake Road 17.7-0.0= 17.7°C
Collinsville, IL 62234

Cooler Temp: 17.2-17.7°C Sampler: Client QC Level: 2

Fedex, Cooler

CS intact 11/18/24

Project# 24110121

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. 24110121-011 report from 24110120-001.

Contact: Shelly Hennessy Email: shennessy@TekLabInc.com
Requested Due Date: Standard TAT Billing/PO: 37435 Phone: (618) 344-1004 ext. 36

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		cpm					pH				
	24110121-001	11/11/24 1026	HNO3	Groundwater	✔		20					1				
	24110121-002	11/13/24 1024	HNO3	Groundwater	✔		42					1				
	24110121-003	11/11/24 1129	HNO3	Groundwater	✔		32					1				
	24110121-004	11/11/24 1227	HNO3	Groundwater	✔		24					1				
	24110121-005	11/11/24 1116	HNO3	Groundwater	✔		34					1				
	24110121-006	11/13/24 1118	HNO3	Groundwater	✔		32					1				
	24110121-007	11/11/24 1330	HNO3	Groundwater	✔		36					1				
	24110121-008	11/11/24 1410	HNO3	Groundwater	✔		22					1				
	24110121-009	11/11/24 1206	HNO3	Groundwater	✔		32					1				
	24110121-010	11/11/24 1238	HNO3	Groundwater	✔		18					1				
	24110121-011	11/11/24 1103	HNO3	Groundwater	✔		Did not receive									

*Relinquished By	Date/Time	Received By	Date/Time
			11/20/24, 1300

Teklab maintains a strict policy of client confidentiality and as such does not provide client or sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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

17.2-0.0 = 17.2c
17.7-0.0 = 17.7c

Teklab Inc
5445 Horseshoe Lake Road
Collinsville, IL 62234

Fedex, cooler
CS intact 11/18/24

Cooler Temp: 17.2-17.7 c Sampler: Client QC Level: 2

Project# 24110121

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. 24110121-011 report from 24110120-001.

Contact: Shelly Hennessy Email: shennessy@TekLabInc.com
Requested Due Date: Standard TAT Billing/PO: 37435 Phone: (618) 344-1004 ext. 36

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												
						cpm						pCi					
	24110121-012	11/13/24 1206	HNO3	Groundwater	✓	30						1					
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													

*Relinquished By	Date/Time	Received By	Date/Time
Brian Dilorello			11/20/24 1300

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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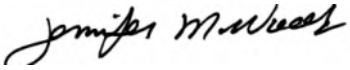
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 24111568 RcptNo: 1

Logged by:	Anthony W. Britton	11/20/2024 1:00:00 PM	
Completed By:	Anthony W. Britton	11/21/2024 1:02:25 PM	
Reviewed By:	Jennifer Woolf	11/26/2024 10:57:53 AM	

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: 11/18/2024 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	Yes		11/18/2024	

Summit Environmental Technologies, Inc.
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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: 24111568 RcptNo: 1

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	17.2	Good	Yes		11/18/2024	

February 2025 Laboratory Analytical Report

March 31, 2025

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 25020750

Dear Eric Staley:

TEKLAB, INC received 12 samples on 2/21/2025 12:22:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 25020750
Client Project: FGDS Landfill
Report Date: 31-Mar-25

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	19
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

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: City Water, Light & Power
Work Order: 25020750
Client Project: FGDS Landfill
Report Date: 31-Mar-25

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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 25020750
Report Date: 31-Mar-25

Cooler Receipt Temp: 9.9 °C

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

Radium 226/228 analysis was performed by Alliance Technical Group. See attached report for results.

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
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Address 1319 Butterfield Rd.
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Email arenner@teklabinc.com

Client: City Water, Light & Power

Work Order: 25020750

Client Project: FGDS Landfill

Report Date: 31-Mar-25

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2026	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2026	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	8/31/2025	Collinsville
Arkansas	ADEQ	88-0966		3/14/2026	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	KWLCP	KY98050		12/31/2025	Collinsville
Kentucky	KWLCP	KY98006		12/31/2025	Collinsville
Kentucky	UST	0073		1/31/2026	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2028	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

Lab ID: 25020750-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 02/21/2025 10:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	02/21/2025 10:20	R360884
Depth to water	*	-5.00		**4.09**	ft	1	02/21/2025 10:20	R360884
Depth to water from measuring point	*	0		**6.89**	ft	1	02/21/2025 10:20	R360884
Elevation of groundwater surface	*	0		**539.91**	ft	1	02/21/2025 10:20	R360884
Measuring Point Elevation	*	0		**546.80**	ft	1	02/21/2025 10:20	R360884
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	02/21/2025 10:20	R360884
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**3.1**	NTU	1	02/21/2025 10:20	R360884
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**49.0**	°F	1	02/21/2025 10:20	R360884
SW-846 9040B								
pH, Field	*	1.00		**7.07**		1	02/21/2025 10:20	R360884
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**680**	µmhos/cm @25C	1	02/21/2025 10:20	R360884
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**940**	mg/L	1	02/24/2025 14:54	R360789
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	02/21/2025 21:22	R360629
Chloride	NELAP	5.00		**98.4**	mg/L	10	02/21/2025 21:22	R360629
Sulfate	NELAP	10.0		**254**	mg/L	10	02/21/2025 21:22	R360629
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0086**	mg/L	1	02/24/2025 10:03	235106
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/24/2025 10:03	235106
Boron	NELAP	0.0200		**0.125**	mg/L	1	02/24/2025 10:03	235106
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/24/2025 10:03	235106
Calcium	NELAP	0.100	S	**159**	mg/L	1	02/24/2025 10:03	235106
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 10:03	235106
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 10:03	235106
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	02/24/2025 10:03	235106
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/24/2025 10:03	235106
Matrix spike control limits are not applicable due to high sample/spike ratio.								
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 14:57	235106
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 14:57	235106
Lithium	*	0.0030		**0.0135**	mg/L	5	02/25/2025 11:22	235106
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/25/2025 11:22	235106
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/24/2025 14:57	235106
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/25/2025 10:03	235158
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/25/2025 0:00	R362556
Radium-228	*	0		**See Attached**	pci/L	1	03/25/2025 0:00	R362556

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

Lab ID: 25020750-007 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 02/20/2025 13:25

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	02/20/2025 13:25	R360884
Depth to water	*	-5.00		**26.38**	ft	1	02/20/2025 13:25	R360884
Depth to water from measuring point	*	0		**28.25**	ft	1	02/20/2025 13:25	R360884
Elevation of groundwater surface	*	0		**527.35**	ft	1	02/20/2025 13:25	R360884
Measuring Point Elevation	*	0		**555.60**	ft	1	02/20/2025 13:25	R360884
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	02/20/2025 13:25	R360884
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**30**	NTU	1	02/20/2025 13:25	R360884
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**54.8**	°F	1	02/20/2025 13:25	R360884
SW-846 9040B								
pH, Field	*	1.00		**6.95**		1	02/20/2025 13:25	R360884
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1570**	µmhos/cm @25C	1	02/20/2025 13:25	R360884
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	200		**1240**	mg/L	10	02/21/2025 14:58	R360717
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	02/21/2025 14:22	R360629
Chloride	NELAP	5.00		**28.0**	mg/L	10	02/21/2025 14:22	R360629
Sulfate	NELAP	10.0		**314**	mg/L	10	02/21/2025 14:22	R360629
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.560**	mg/L	1	02/24/2025 11:12	235055
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/24/2025 11:12	235055
Boron	NELAP	0.0200		**3.54**	mg/L	1	02/24/2025 11:12	235055
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/24/2025 11:12	235055
Calcium	NELAP	0.100		**169**	mg/L	1	02/24/2025 11:12	235055
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:12	235055
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:12	235055
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	02/24/2025 11:12	235055
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/24/2025 11:12	235055
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 10:13	235055
Arsenic	NELAP	0.0010		**0.0169**	mg/L	5	02/25/2025 11:05	235055
Lithium	*	0.0030		**0.0080**	mg/L	5	02/24/2025 10:13	235055
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 10:13	235055
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/25/2025 11:05	235055
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/21/2025 14:41	235075
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556
Radium-228	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

Lab ID: 25020750-008 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 02/20/2025 13:39

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	02/20/2025 13:39	R360884
Depth to water	*	-5.00		**27.98**	ft	1	02/20/2025 13:39	R360884
Depth to water from measuring point	*	0		**29.72**	ft	1	02/20/2025 13:39	R360884
Elevation of groundwater surface	*	0		**524.68**	ft	1	02/20/2025 13:39	R360884
Measuring Point Elevation	*	0		**554.40**	ft	1	02/20/2025 13:39	R360884
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	02/20/2025 13:39	R360884
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**14**	NTU	1	02/20/2025 13:39	R360884
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**50.2**	°F	1	02/20/2025 13:39	R360884
SW-846 9040B								
pH, Field	*	1.00		**6.75**		1	02/20/2025 13:39	R360884
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1420**	µmhos/cm @25C	1	02/20/2025 13:39	R360884
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	25		**1320**	mg/L	1.25	02/21/2025 14:59	R360717
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	02/21/2025 15:09	R360629
Chloride	NELAP	5.00		**35.0**	mg/L	10	02/21/2025 15:09	R360629
Sulfate	NELAP	10.0		**510**	mg/L	10	02/21/2025 15:09	R360629
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.220**	mg/L	1	02/24/2025 11:13	235055
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/24/2025 11:13	235055
Boron	NELAP	0.0200		**10.3**	mg/L	1	02/24/2025 11:13	235055
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/24/2025 11:13	235055
Calcium	NELAP	0.100		**220**	mg/L	1	02/24/2025 11:13	235055
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:13	235055
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:13	235055
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	02/24/2025 11:13	235055
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/24/2025 11:13	235055
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 10:18	235055
Arsenic	NELAP	0.0010		**0.0010**	mg/L	5	02/25/2025 11:11	235055
Lithium	*	0.0030		**0.0091**	mg/L	5	02/24/2025 10:18	235055
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 10:18	235055
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/25/2025 11:11	235055
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/21/2025 14:44	235075
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556
Radium-228	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

Lab ID: 25020750-010 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 02/20/2025 10:18

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	02/20/2025 10:18	R360884
Depth to water	*	-5.00		**1.23**	ft	1	02/20/2025 10:18	R360884
Depth to water from measuring point	*	0		**4.53**	ft	1	02/20/2025 10:18	R360884
Elevation of groundwater surface	*	0		**525.45**	ft	1	02/20/2025 10:18	R360884
Measuring Point Elevation	*	0		**529.98**	ft	1	02/20/2025 10:18	R360884
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	02/20/2025 10:18	R360884
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**18**	NTU	1	02/20/2025 10:18	R360884
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**41.9**	°F	1	02/20/2025 10:18	R360884
SW-846 9040B								
pH, Field	*	1.00		**7.05**		1	02/20/2025 10:18	R360884
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**764**	µmhos/cm @25C	1	02/20/2025 10:18	R360884
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**588**	mg/L	1	02/21/2025 15:00	R360717
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	02/21/2025 15:32	R360629
Chloride	NELAP	5.00		**19.5**	mg/L	10	02/21/2025 15:32	R360629
Sulfate	NELAP	10.0		**53.7**	mg/L	10	02/21/2025 15:32	R360629
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.283**	mg/L	1	02/24/2025 11:19	235055
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/24/2025 11:19	235055
Boron	NELAP	0.0200		**1.48**	mg/L	1	02/24/2025 11:19	235055
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/24/2025 11:19	235055
Calcium	NELAP	0.100		**111**	mg/L	1	02/24/2025 11:19	235055
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:19	235055
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:19	235055
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	02/24/2025 11:19	235055
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/24/2025 11:19	235055
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 11:02	235055
Arsenic	NELAP	0.0010		**0.0017**	mg/L	5	02/25/2025 12:25	235055
Lithium	*	0.0030		**0.0051**	mg/L	5	02/25/2025 12:25	235055
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 11:02	235055
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/25/2025 12:25	235055
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/21/2025 14:58	235075
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556
Radium-228	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556

Client: City Water, Light & Power **Work Order:** 25020750

Client Project: FGDS Landfill **Report Date:** 31-Mar-25

Lab ID: 25020750-012 **Client Sample ID:** P07D

Matrix: GROUNDWATER **Collection Date:** 02/20/2025 11:12

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**528.25**	ft	1	02/20/2025 11:12	R360884
Depth to water	*	-5.00		**1.49**	ft	1	02/20/2025 11:12	R360884
Depth to water from measuring point	*	0		**4.49**	ft	1	02/20/2025 11:12	R360884
Elevation of groundwater surface	*	0		**523.76**	ft	1	02/20/2025 11:12	R360884
Measuring Point Elevation	*	0		**528.25**	ft	1	02/20/2025 11:12	R360884
Measuring Point Height Above Land Surface	*	0		**3.00**	ft	1	02/20/2025 11:12	R360884
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**40**	NTU	1	02/20/2025 11:12	R360884
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**46.8**	°F	1	02/20/2025 11:12	R360884
SW-846 9040B								
pH, Field	*	1.00		**6.78**		1	02/20/2025 11:12	R360884
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1250**	µmhos/cm @25C	1	02/20/2025 11:12	R360884
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**990**	mg/L	2.5	02/21/2025 15:01	R360717
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	02/21/2025 15:44	R360629
Chloride	NELAP	5.00		**31.4**	mg/L	10	02/21/2025 15:44	R360629
Sulfate	NELAP	10.0		**287**	mg/L	10	02/21/2025 15:44	R360629
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.913**	mg/L	1	02/24/2025 11:20	235055
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	02/24/2025 11:20	235055
Boron	NELAP	0.0200		**5.26**	mg/L	1	02/24/2025 11:20	235055
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	02/24/2025 11:20	235055
Calcium	NELAP	0.100		**179**	mg/L	1	02/24/2025 11:20	235055
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:20	235055
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	02/24/2025 11:20	235055
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	02/24/2025 11:20	235055
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	02/24/2025 11:20	235055
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 11:07	235055
Arsenic	NELAP	0.0010		**0.0276**	mg/L	5	02/25/2025 12:31	235055
Lithium	*	0.0030		**0.0081**	mg/L	5	02/25/2025 12:31	235055
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	02/24/2025 11:07	235055
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	02/25/2025 12:31	235055
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	02/21/2025 15:00	235075
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556
Radium-228	*	0		**See Attached**	pci/L	1	03/21/2025 0:00	R362556

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 25020750
Report Date: 31-Mar-25

Carrier: Justin Colp
Received By: AMD

Completed by: Amber Dilallo
On: 18-Feb-25

Reviewed by: Ellie Hopkins
On: 21-Feb-25

Pages to follow: Chain of custody 5 Extra pages included 49

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 9.9
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 2/18/25 at 1500 on ice [9.9, 11.5C - LTG#5]. pH strip #101358. - amberdilallo - 2/18/2025 3:33:57 PM

Samples were received on 2/19/25 at 15.50 on ice [temp10.1C - LTG#9]. pH#101358 -EK/ lhenson - 2/19/2025 4:09:47 PM

Samples were received on 2/20/25 at 15.55 on ice [temp5.7C, 5.9C - LTG#9]. pH#101358. Added nitric acid (102194) to G121 and AW-1. - lhenson - 2/20/2025 4:39:14 PM

Samples were received on 12/21/25 at 12.22 on ice [temp5.5C - LTG#9]. pH#101358/98858. Added nitric acid (102194) to G113 and G120. - EK/lhenson - 2/21/2025 1:04:17 PM

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 25020750

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 9.9 - 11.5°C #5
Preserved in: [ ] LAB [X] FIELD
LAB NOTES: 101358 dm 2/18/25

FOR LAB USE ONLY

Are these samples known to be involved in litigation? If yes, a surcharge will apply: [ ] Yes [✓] No
Are these samples known to be hazardous? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Colp

RESULTS REQUESTED
[✓] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
25020750-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3	2-18-25 1700	Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
J. Colp	2-18-25 1500	Amber Quall	2/18/25 1500

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 25020750

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 10.1 °C #9
Preserved in: [ ] LAB [x] FIELD
FOR LAB USE ONLY
LAB NOTES: pH V 101358 EIC 2119 2025

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Gdp

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
25020750-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110	2-19-25 / 1325	Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
	2-19 / 1550		2/19/25 15:50

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 25020750

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 5.7/5.9 °C #9
Preserved in: [x] LAB [ ] FIELD
FOR LAB USE ONLY
LAB NOTES: Added HNO3(102194) to G121 2 liter and AW-1 2 liter. PHV101358 EK 2/20/2025

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Colp

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
25020750-001	R101		Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111	2-20-25 / 1141	Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112	2-20-25 / 1255	Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113		Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120		Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121	2-20-25 / 1325	Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122	2-20-25 / 1334	Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1	2-20-25 / 1221	Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2	2-20-25 / 1018	Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
	2-20 / 1555		2/20/25 1555

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CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 25020750

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: ☐ ICE ☐ BLUE ICE ☐ NO ICE _____ °C
Preserved in: ☐ LAB ☐ FIELD FOR LAB USE ONLY
LAB NOTES:

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025

Are these samples known to be involved in litigation? If yes, a surcharge will apply: ☐ Yes ☑ No
Are these samples known to be hazardous? ☐ 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 Permit on file

PROJECT NAME/NUMBER: FGDS Landfill
SAMPLE COLLECTOR'S NAME: Justin Colp

RESULTS REQUESTED
☑ Standard ☐ 1-2 Day (100% Surcharge)
☐ Other _____ ☐ 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
25020750 02	P07D	2-20-25 / 1112	Groundwater	1	2								✔	✔	✔	✔	✔	✔
			Groundwater															
			Groundwater															
			Groundwater															
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			Groundwater															
			Groundwater															
			Groundwater															

Relinquished By	Date/Time	Received By	Date/Time
	2-20 / 1555		2/20/25 1555

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CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 25020750

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

Client: City Water, Light & Power
Address: 3100 Stevenson Drive, 2nd Floor Maintenance Building
City/State/Zip: Springfield IL 62712
Contact: Eric Staley Phone: (217) 757-8610
Email: eric.staley@cwlp.com Fax:

Samples on: [x] ICE [ ] BLUE ICE [ ] NO ICE 5.5 °C #9
Preserved in: [x] LAB [ ] FIELD FOR LAB USE ONLY
LAB NOTES: Added HNO3 (102194) to G113 and G120. PhV98858, 101358 EK 2/21/2025

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? [ ] 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 Permit on file

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Hg Mo
Quarterly monitoring 4Q2023-3Q2025
RW-3 report data from Ash Pond sampling event.

PROJECT NAME/NUMBER
FGDS Landfill

SAMPLE COLLECTOR'S NAME
Justin Colp

RESULTS REQUESTED
[x] Standard [ ] 1-2 Day (100% Surcharge)
[ ] Other _____ [ ] 3 Day (50% Surcharge)

BILLING INSTRUCTIONS

Lab Use Only	Sample ID	Date/Time Sampled	Matrix	# and Type of Containers: UNP	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	TSP	Other	INDICATE ANALYSIS REQUESTED: Field parameters*	Cl F SO4 TDS (T)	Metals (T)**	Radium-226	Radium-228	Field Turbidity
25020750-001	R101	2-21-25 / 1020	Groundwater	1	2								✓	✓	✓	✓	✓	✓
002	G110		Groundwater	1	2								✓	✓	✓	✓	✓	✓
003	R111		Groundwater	1	2								✓	✓	✓	✓	✓	✓
004	G112		Groundwater	1	2								✓	✓	✓	✓	✓	✓
005	G113	2-21-25 / 0942	Groundwater	1	2								✓	✓	✓	✓	✓	✓
006	G120	2-21-25 / 0936	Groundwater	1	2								✓	✓	✓	✓	✓	✓
007	G121		Groundwater	1	2								✓	✓	✓	✓	✓	✓
008	G122		Groundwater	1	2								✓	✓	✓	✓	✓	✓
009	AW-1		Groundwater	1	2								✓	✓	✓	✓	✓	✓
010	AW-2		Groundwater	1	2								✓	✓	✓	✓	✓	✓
011	RW-3		Groundwater	0	0								✓	✓	✓	✓	✓	✓

Relinquished By	Date/Time	Received By	Date/Time
Tracy Carrell	2/21/25 1222	Emily Kosakoski	2/21/2025 1222

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Field Data Sheet

Project Name:	FGDS LF	**Monitoring Point:**	R101
Project Location:	Springfield, IL	**Sample ID:**	001
W.O. Number (s):	25020750	**Date (s):**	2/21/2025

Field Team Members

Name: Tracy Carroll — Affiliation: TekLab, Inc.

Name: Danny Crump — Affiliation: TekLab, Inc.

Weather Conditions

Temp: 15 °F — Wind Direction: ☐ N ☐ S ☑ E ☐ EW ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy — Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 2/21/2025 9:52

Static Water Level: 6.89 feet below TOC

Total Depth: 35.27 feet below TOC

Water Column: 28.38 feet

Purging Activities

Purged By: TC — Purge Date: 2/21/2025

Purge Method: Peristaltic Pump — Well Diameter: 4"

Purge Volume Calculation (L): 28.38 ft. x 0.022 = 0.62 L x 3 Vol. = 1.86 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 8.00 L

Physical appearance of purge water: Clear — Odor: None — Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:54	0.0	308	purge start time						
10:02	2.5	↓	7.01	681.10	9.04	7.11	68.90	5.04	
10:05	3.4		7.03	681.10	8.94	6.96	69.60	6.98	
10:08	4.3		7.04	680.60	9.10	6.78	70.30	5.30	
10:11	5.2		7.05	680.30	9.12	6.57	71.10	3.96	
10:14	6.2		7.06	681.50	9.11	6.44	71.80	3.31	
10:17	7.1		7.07	681.00	8.82	6.31	72.70	3.08	
10:20	8.0		7.07	679.80	9.47	6.27	73.10	3.06	

Sampling Activities

Sampled By: TC — Sample Date/Time: 2/21/2025 10:20

Sample Method: Low Flow — Sample Equipment: Peristaltic Pump

Sample Parameters: 7.07 pH — 679.80 Spec. Cond. — 9.47 Temp

Field Filtered: Yes — Filter Type: Inline Disposable

Water Level: 10.02 feet below TOC — Drawdown: 3.13 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210756

Form Completed By: Tracy Carroll — **Date:** 2/21/2025

Field Data Sheet

Project Name:	FGDS LF	**Monitoring Point:**	G121
Project Location:	Springfield, IL	**Sample ID:**	007
W.O. Number (s):	25020750	**Date (s):**	2/20/2025

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.

Name: Danny Crump Affiliation: TekLab, Inc.

Weather Conditions

Temp: 17 °F Wind Direction: ☐ N ☐ S ☐ E ☐ EW ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

			Yes	No
Well Pad	Good	**Locks**		
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 2/21/2025 13:01

Static Water Level: 28.25 feet below TOC

Total Depth: 58.56 feet below TOC

Water Column: 30.31 feet

Purging Activities

Purged By: BG Purge Date: 2/20/2025

Purge Method: Submersible Pump Well Diameter: 2"

Purge Volume Calculation (L): 30.31 ft. x 0.022 = 0.67 L x 3 Vol. = 2.01 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 10.00 L

Physical appearance of purge water: Cloudy Odor: None Color: Clear

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
13:01	0.0	417	purge start time						
13:13	5.0	↓	6.95	1,563.90	12.00	3.36	-117.40	41.75	
13:16	6.3		6.95	1,579.30	12.12	2.80	-121.70	27.75	
13:19	7.5		6.95	1,565.20	12.25	2.47	-123.30	33.21	
13:22	8.8		6.95	1,564.30	12.48	2.19	-126.30	30.81	
13:25	10.0		6.95	1,565.50	12.64	1.97	-128.70	30.48	

Sampling Activities

Sampled By: BG Sample Date/Time: 2/20/2025 13:25

Sample Method: Low Flow Sample Equipment: Submersible Pump

Sample Parameters: 6.95 pH 1,565.50 Spec. Cond. 12.64 Temp

Field Filtered: Yes Filter Type: Inline Disposable

Water Level: 29.31 feet below TOC Drawdown: 1.06 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210756

Form Completed By: Brett Gillihan **Date:** 2/20/2025

Field Data Sheet

Project Name: FGDS LF
Project Location: Springfield, IL
W.O. Number (s): 25020750
Monitoring Point: G122
Sample ID: 008
Date (s): 2/20/2025

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Payton Yoch Affiliation: TekLab, Inc.

Weather Conditions

Temp: 18 °F Wind Direction: ☐ N ☑ S ☐ E ☐ EW ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 2/20/2025 13:21
Static Water Level: 29.72 feet below TOC
Total Depth: 49.29 feet below TOC
Water Column: 19.57 feet

Purging Activities

Purged By: JC Purge Date: 2/20/2025
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 19.57 ft. x 0.022 = 0.43 L x 3 Vol. = 1.29 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 4.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
13:21	0.0	222	purge start time						
13:24	0.7	↓	6.95	1,403.30	11.69	3.44	-26.40	13.20	
13:27	1.3		6.84	1,426.70	10.26	2.18	-15.00	13.16	
13:30	2.0		6.80	1,417.30	10.09	1.92	-9.40	12.82	
13:33	2.7		6.78	1,421.70	10.05	1.78	-6.40	12.78	
13:36	3.3		6.76	1,419.90	10.15	1.56	-4.50	13.40	
13:39	4.0		6.75	1,424.40	10.11	1.48	-3.20	14.15	

Sampling Activities

Sampled By: JC Sample Date/Time: 2/20/2025 13:39
Sample Method: Low Flow Sample Equipment: Peristaltic Pump
Sample Parameters: 6.75 pH 1,424.40 Spec. Cond. 10.11 Temp
Field Filtered: Yes Filter Type: Inline Disposable
Water Level: 29.76 feet below TOC Drawdown: 0.04 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 50115

Form Completed By: Justin Colp **Date:** 2/20/2025

Field Data Sheet

Project Name:	FGDS LF	**Monitoring Point:**	AW-2
Project Location:	Springfield, IL	**Sample ID:**	010
W.O. Number (s):	25020750	**Date (s):**	2/20/2025

Field Team Members

Name: Justin Colp — Affiliation: TekLab, Inc.

Name: Payton Yoch — Affiliation: TekLab, Inc.

Weather Conditions

Temp: 6 °F — Wind Direction: ☐ N ☑ S ☐ E ☐ EW ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy — Sky: ☑ Clear ☐ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 2/20/2025 9:42

Static Water Level: 4.53 feet below TOC

Total Depth: 32.64 feet below TOC

Water Column: 28.11 feet

Purging Activities

Purged By: JC — Purge Date: 2/20/2025

Purge Method: Peristaltic Pump — Well Diameter: 2"

Purge Volume Calculation (L): 28.11 ft. x 0.022 = 0.62 L x 3 Vol. = 1.86 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 6.00 L

Physical appearance of purge water: Clear — Odor: None — Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:53	0.0	240	purge start time						
9:57	1.0	↓	7.08	771.10	5.54	2.16	47.20	37.34	
10:00	1.7		7.05	764.70	4.92	1.87	35.40	40.57	
10:03	2.4		7.05	763.70	5.38	1.63	18.90	30.93	
10:06	3.1		7.05	764.50	5.25	1.51	7.50	25.69	
10:09	3.8		7.05	765.40	5.92	1.38	4.20	26.14	
10:12	4.6		7.05	767.40	5.19	1.34	1.30	17.26	
10:15	5.3		7.05	766.70	5.52	1.29	0.40	13.58	
10:18	6.0		7.05	763.60	5.52	1.27	-0.10	17.95	

Sampling Activities

Sampled By: JC — Sample Date/Time: 2/20/2025 10:18

Sample Method: Low Flow — Sample Equipment: Peristaltic Pump

Sample Parameters: 7.05 pH — 763.60 Spec. Cond. — 5.52 Temp

Field Filtered: Yes — Filter Type: Inline Disposable

Water Level: 5.49 feet below TOC — Drawdown: 0.96 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 50115

Form Completed By: Justin Colp — **Date:** 2/20/2025

Field Data Sheet

Project Name: FGDS LF
Project Location: Springfield, IL
W.O. Number (s): 25020750
Monitoring Point: P07D
Sample ID: 012
Date (s): 2/20/2025

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Payton Yoch Affiliation: TekLab, Inc.

Weather Conditions

Temp: 7 °F Wind Direction: ☐ N ☑ S ☐ E ☐ EW ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☐ Clear ☐ Partly Cloudy ☑ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 2/20/2025 10:31
Static Water Level: 4.49 feet below TOC
Total Depth: 32.54 feet below TOC
Water Column: 28.05 feet

Purging Activities

Purged By: JC Purge Date: 2/20/2025
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 28.05 ft. x 0.022 = 0.62 L x 3 Vol. = 1.86 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 7.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: ltbrown

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:34	0.0	184	purge start time						
11:00	4.8	↓	6.77	1,251.80	8.06	1.22	-106.10	63.75	
11:03	5.3		6.78	1,248.00	7.78	1.21	-109.50	55.28	
11:06	5.9		6.77	1,250.70	7.60	1.08	-111.70	46.90	
11:09	6.4		6.77	1,251.50	8.27	1.01	-113.80	40.37	
11:12	7.0		6.78	1,252.30	8.21	0.99	-115.20	40.04	

Sampling Activities

Sampled By: JC Sample Date/Time: 2/20/2025 11:12
Sample Method: Low Flow Sample Equipment: Bladder Pump
Sample Parameters: 7.10 pH 622.80 Spec. Cond. 11.96 Temp
Field Filtered: No Filter Type:
Water Level: 4.55 feet below TOC Drawdown: 0.06 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 50115

Form Completed By: Justin Colp **Date:** 2/20/2025

Site Samping Event: FGDS Landfill
LIMS Workorder: 25020750
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 1Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 50115 Technician(s): justin colp Date: 2/18/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230619c	4.00	2/18/25 9:30
7.0 Buffer	wc240913b	7.00	2/18/25 9:26
10.0 Buffer	wc240625b	10.00	2/18/25 9:34
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/18/25 9:42

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.5	2/18/25 9:42
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-JC	LCS	2/18/25 9:44	17.5	7.02	1,410	0.51		
CCV-1-JC	CCV	2/18/25 13:20	18.5	7.06	1,423	0.57		

Comments:

Field Meter ID: Pine 50115 Technician(s): justn colp Date: 2/19/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230619c	4.00	2/19/25 10:31
7.0 Buffer	wc240913b	7.00	2/19/25 10:28
10.0 Buffer	wc240625b	10.00	2/19/25 10:36
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/19/25 10:47

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.49	2/19/25 10:53
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2-JC	LCS	2/19/25 10:55	9.1	7.01	1,411	0.47		
CCV-2-JC	CCV	2/19/25 14:29	11.1	7.03	1,417	0.56		

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 25020750
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 1Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 50115 Technician(s): justin colp Date: 2/20/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230619c	4.00	2/20/25 8:56
7.0 Buffer	wc240913b	7.00	2/20/25 8:51
10.0 Buffer	wc240625b	10.00	2/20/25 9:00
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/20/25 9:06

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.5	2/20/25 9:06
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-3-JC	LCS	2/20/25 9:08	9.3	6.99	1,415	0.5		
CCV-3-JC	CCV	2/20/25 13:42	10.4	7.02	1,426	0.54		

Comments:

Field Meter ID: Pine 50115 Technician(s): justin colp Date: 2/21/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc230619c	4.00	2/21/25 8:41
7.0 Buffer	wc240913b	7.00	2/21/25 8:37
10.0 Buffer	wc240625b	10.00	2/21/25 8:45
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/21/25 8:53

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.6	2/21/25 8:53
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-4-JC	LCS	2/21/25 8:55	9.4	7.02	1,413	0.62		
CCV-4-JC	CCV	2/21/25 10:30	9.7	7.02	1,418	0.61		

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 25020750
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 1Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 210756 Technician(s): Tracy Carroll Date: 2/19/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230619C	4.01	2/19/25 11:14
7.0 Buffer	WC240913B	7.00	2/19/25 11:11
10.0 Buffer	WC240625B	10.00	2/19/25 11:19
LCS/CCV (7.0 Buffer)	WC240913C		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/19/25 11:05

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-TC	LCS	2/19/25 11:21	0.3	7.06	1,413			
CCV-1-TC	CCV	2/19/25 14:27	13.7	7.08	1,321			

Comments:

Field Meter ID: Pine 210756 Technician(s): Tracy Carroll Date: 2/20/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230619C	4.00	2/20/25 9:55
7.0 Buffer	WC240913B	7.00	2/20/25 9:49
10.0 Buffer	WC240625B	10.00	2/20/25 10:12
LCS/CCV (7.0 Buffer)	WC240913C		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/20/25 10:13

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-2-TC	LCS	2/20/25 10:25	0.6	7.09	1,417			
CCV-2-TC	CCV	2/20/25 14:35	0.8	7.09	1,423			

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 25020750
Technician(s): DC, JC, TC, BG, PY

Field Calibration Log(s)
CWLP- 1Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 210756 Technician(s): Tracy Carroll Date: 2/21/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC230619C	4.01	2/21/25 9:29
7.0 Buffer	WC240913B	7.00	2/21/25 9:21
10.0 Buffer	WC240625B	10.00	2/21/25 9:33
LCS/CCV (7.0 Buffer)	WC240913C		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	102040	1412	2/21/25 9:41

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1		
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-3-TC	LCS	2/21/25 9:44	0.2	7.05	1,415			
CCV-3-TC	CCV	2/21/25 10:46	0.2	7.06	1,404			

Comments:

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

March 31, 2025

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 25020750

Order No.: 25030052

Dear Shelly Hennessy:

Alliance Technical Group - Akron received 12 sample(s) on 2/27/2025 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

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Case Narrative

WO#: **25030052**
Date: **3/31/2025**

CLIENT: TEKLAB Inc,
Project: 25020750

WorkOrder Narrative:
25030052: 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 Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group 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 information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group 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.

Analytical Sequence QC Notes:
LCS/LCSD-82663 Radium-228_DW(904.0): LCS/LCSD exhibited a high RPD, individually each LCS/LCSD meets the required criteria.

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Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **25030052**
Date: **3/31/2025**

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.

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Workorder Sample Summary

WO#: **25030052**

31-Mar-25

CLIENT: TEKLAB Inc,
Project: 25020750

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25030052-001	25020750-001		2/21/2025 10:20:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-002	25020750-002		2/19/2025 1:25:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-003	25020750-003		2/20/2025 11:41:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-004	25020750-004		2/20/2025 12:55:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-005	25020750-005		2/21/2025 9:42:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-006	25020750-006		2/21/2025 9:36:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-007	25020750-007		2/20/2025 1:25:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-008	25020750-008		2/20/2025 1:39:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-009	25020750-009		2/20/2025 12:21:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-010	25020750-010		2/20/2025 10:18:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-011	25020750-011		2/18/2025 12:00:00 PM	2/27/2025 11:30:00 AM	Non-Potable Water
25030052-012	25020750-012		2/20/2025 11:12:00 AM	2/27/2025 11:30:00 AM	Non-Potable Water

Alliance Technical Group - Akron
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Website: http://www.settek.com

DATES REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,

Project: 25020750

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25030052-001A	25020750-001	2/21/2025 10:20:00 AM	Non-Potable Water	Radium-226 (EPA 903.0)		3/5/2025 10:47:15 AM	3/26/2025 9:39:00 AM
				Radium-228 (EPA 904.0)		3/5/2025 10:47:15 AM	3/25/2025 2:10:00 PM
25030052-002A	25020750-002	2/19/2025 1:25:00 PM		Radium-226 (EPA 903.0)		3/5/2025 10:47:15 AM	3/26/2025 9:39:00 AM
				Radium-228 (EPA 904.0)		3/5/2025 10:47:15 AM	3/25/2025 2:10:00 PM
25030052-003A	25020750-003	2/20/2025 11:41:00 AM		Radium-226 (EPA 903.0)		3/5/2025 10:47:15 AM	3/26/2025 9:39:00 AM
				Radium-228 (EPA 904.0)		3/5/2025 10:47:15 AM	3/25/2025 2:10:00 PM
25030052-004A	25020750-004	2/20/2025 12:55:00 PM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-005A	25020750-005	2/21/2025 9:42:00 AM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-006A	25020750-006	2/21/2025 9:36:00 AM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-007A	25020750-007	2/20/2025 1:25:00 PM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-008A	25020750-008	2/20/2025 1:39:00 PM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-009A	25020750-009	2/20/2025 12:21:00 PM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-010A	25020750-010	2/20/2025 10:18:00 AM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM
				Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM
25030052-011A	25020750-011	2/18/2025 12:00:00 PM		Radium-226 (EPA 903.0)		3/4/2025 11:20:02 AM	3/27/2025 10:25:00 AM
				Radium-228 (EPA 904.0)		3/4/2025 11:20:02 AM	3/26/2025 3:34:00 PM
25030052-012A	25020750-012	2/20/2025 11:12:00 AM		Radium-226 (EPA 903.0)		3/8/2025 1:30:00 PM	3/23/2025 1:04:00 PM

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DATES REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,

Project: 25020750

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25030052-012A	25020750-012	2/20/2025 11:12:00 AM	Non-Potable Water	Radium-228 (EPA 904.0)		3/8/2025 1:30:00 PM	3/21/2025 2:04:00 PM

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Analytical Report

(consolidated)

WO#: **25030052**

Date Reported: **3/31/2025**

CLIENT: TEKLAB Inc,

Collection Date: 2/21/2025 10:20:00 AM

Project: 25020750

Lab ID: 25030052-001

Matrix: NON-POTABLE WATER

Client Sample ID: 25020750-001

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.100	1	3/26/2025 9:39:00 AM
Yield	1.00					1	3/26/2025 9:39:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.380	1	3/25/2025 2:10:00 PM
Yield	1.00					1	3/25/2025 2:10:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25030052**

Date Reported: **3/31/2025**

CLIENT: TEKLAB Inc,
Project: 25020750
Lab ID: 25030052-007
Client Sample ID: 25020750-007

Collection Date: 2/20/2025 1:25:00 PM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	1.97	1.00		pCi/L	± 0.300	1	3/23/2025 1:04:00 PM
Yield	1.00					1	3/23/2025 1:04:00 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.460	1	3/21/2025 2:04:00 PM
Yield	1.00					1	3/21/2025 2:04:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25030052**

Date Reported: **3/31/2025**

CLIENT: TEKLAB Inc,
Project: 25020750
Lab ID: 25030052-008
Client Sample ID: 25020750-008

Collection Date: 2/20/2025 1:39:00 PM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0800	1	3/23/2025 1:04:00 PM
Yield	1.00					1	3/23/2025 1:04:00 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.280	1	3/21/2025 2:04:00 PM
Yield	1.00					1	3/21/2025 2:04:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25030052**

Date Reported: **3/31/2025**

CLIENT: TEKLAB Inc,
Project: 25020750
Lab ID: 25030052-010
Client Sample ID: 25020750-010

Collection Date: 2/20/2025 10:18:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.110	1	3/23/2025 1:04:00 PM
Yield	1.00					1	3/23/2025 1:04:00 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.290	1	3/21/2025 2:04:00 PM
Yield	1.00					1	3/21/2025 2:04:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25030052**

Date Reported: **3/31/2025**

CLIENT: TEKLAB Inc,

Collection Date: 2/20/2025 11:12:00 AM

Project: 25020750

Lab ID: 25030052-012

Matrix: NON-POTABLE WATER

Client Sample ID: 25020750-012

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	1.17	1.00		pCi/L	± 0.240	1	3/23/2025 1:04:00 PM
Yield	1.00					1	3/23/2025 1:04:00 PM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	1.32	1.00		pCi/L	± 0.500	1	3/21/2025 2:04:00 PM
Yield	1.00					1	3/21/2025 2:04:00 PM

Qualifiers:

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

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82663**

Sample ID: **MB-82663** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205809**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E904.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5509486**

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

Sample ID: **LCS-82663** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205809**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E904.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5509487**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	6.47	1.00	5.000	0	129	50	130				QLR
Yield	0.580			0	0						

Sample ID: **LCSD-82663** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205809**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E904.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5509488**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.45	1.00	5.000	0	89.0	50	130	6.470	37.0	20	R
Yield	1.00			0	0			0.5800	53.2		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82663**

Sample ID: **25021873-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205809**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E904.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5509493**

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	R
Yield	1.00			0	0			1.000	0		

Sample ID: **25021875-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205809**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E904.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5509495**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	ND	1.00		0	0			1.260	200	20	R
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82663**

Sample ID: **MB-82663**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/4/2025**	RunNo: **205811**
Client ID: **BatchQC**	Batch ID: **82663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/27/2025**	SeqNo: **5509528**

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

Sample ID: **LCS-82663**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/4/2025**	RunNo: **205811**
Client ID: **BatchQC**	Batch ID: **82663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/27/2025**	SeqNo: **5509529**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	3.65	1.00	5.000	0	73.0	70	130				QLR

Sample ID: **LCSD-82663**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/4/2025**	RunNo: **205811**
Client ID: **BatchQC**	Batch ID: **82663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/27/2025**	SeqNo: **5509530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.97	1.00	5.000	0	99.4	70	130	3.650	30.6	20	R

Sample ID: **25021873-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/4/2025**	RunNo: **205811**
Client ID: **BatchQC**	Batch ID: **82663**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/27/2025**	SeqNo: **5509535**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82663**

Sample ID: **25021873-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205811**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E903.0** **E903-904** Analysis Date: **3/27/2025** SeqNo: **5509535**

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	
Yield	1.00							1.000	0	0	

Sample ID: **25021875-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/4/2025** RunNo: **205811**
Client ID: **BatchQC** Batch ID: **82663** TestNo: **E903.0** **E903-904** Analysis Date: **3/27/2025** SeqNo: **5509537**

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	
Yield	1.00							1.000	0	0	

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82683**

Sample ID: **MB-82683**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205677**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/25/2025**	SeqNo: **5506861**

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

Sample ID: **LCS-82683**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205677**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/25/2025**	SeqNo: **5506862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.54	1.00	5.000	0	70.8	50	130				
Yield	0.900			0	0						

Sample ID: **LCSD-82683**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205677**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/25/2025**	SeqNo: **5506863**

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	3.540	5.52	20	
Yield	1.00			0	0			0.9000	10.5		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82683**

Sample ID: **25030002-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205677**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/25/2025**	SeqNo: **5506868**

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	R
Yield	1.00			0	0			1.000	0		

Sample ID: **25030004-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205677**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/25/2025**	SeqNo: **5506870**

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	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82683**

Sample ID: **MB-82683**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205680**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/26/2025**	SeqNo: **5506940**

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

Sample ID: **LCS-82683**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205680**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/26/2025**	SeqNo: **5506941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.48	1.00	5.000	0	89.6	70	130				

Sample ID: **LCSD-82683**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205680**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/26/2025**	SeqNo: **5506942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.61	1.00	5.000	0	92.2	70	130	4.480	2.86	20	

Sample ID: **25030002-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/5/2025**	RunNo: **205680**
Client ID: **BatchQC**	Batch ID: **82683**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/26/2025**	SeqNo: **5506947**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82683**

Sample ID: **25030002-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/5/2025** RunNo: **205680**
Client ID: **BatchQC** Batch ID: **82683** TestNo: **E903.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5506947**

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	
Yield	1.00							1.000	0	0	

Sample ID: **25030004-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **3/5/2025** RunNo: **205680**
Client ID: **BatchQC** Batch ID: **82683** TestNo: **E903.0** **E903-904** Analysis Date: **3/26/2025** SeqNo: **5506949**

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	
Yield	1.00							1.000	0	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82776**

Sample ID: **MB-82776**	SampType: **MBLK**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205482**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/21/2025**	SeqNo: **5502453**

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

Sample ID: **LCS-82776**	SampType: **LCS**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205482**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/21/2025**	SeqNo: **5502454**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.46	1.00	5.000	0	69.2	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-82776**	SampType: **LCSD**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205482**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/21/2025**	SeqNo: **5502455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.00	1.00	5.000	0	80.0	50	130	3.460	14.5	20	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82776**

Sample ID: **25030057-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205482**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/21/2025**	SeqNo: **5502474**

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	
Yield	1.00			0	0			1.000	0		

Sample ID: **25030059-001ADUP**	SampType: **DUP**	TestCode: **Radium-228_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205482**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E904.0**	**E903-904**	Analysis Date: **3/21/2025**	SeqNo: **5502476**

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	
Yield	1.00			0	0			1.000	0		

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
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82776**

Sample ID: **MB-82776**	SampType: **MBLK**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502642**

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

Sample ID: **LCS-82776**	SampType: **LCS**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502643**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.72	1.00	5.000	0	94.4	70	130				

Sample ID: **LCSD-82776**	SampType: **LCSD**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502644**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	5.29	1.00	5.000	0	106	70	130	4.720	11.4	20	

Sample ID: **25030057-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502658**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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

QC SUMMARY REPORT

WO#: **25030052**

31-Mar-25

Client: TEKLAB Inc,
Project: 25020750 **BatchID:** **82776**

Sample ID: **25030057-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502658**

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	R
Yield	1.00							1.000	0	0	

Sample ID: **25030059-001ADUP**	SampType: **DUP**	TestCode: **Radium-226_**	Units: **pCi/L**	Prep Date: **3/8/2025**	RunNo: **205492**
Client ID: **BatchQC**	Batch ID: **82776**	TestNo: **E903.0**	**E903-904**	Analysis Date: **3/23/2025**	SeqNo: **5502660**

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	
Yield	1.00							1.000	0	0	

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
W	Sample container temperature is out of limit as specified at testcode				

Original

TEKLAB, INC. Chain of Custody

25030052

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: Client | QC Level: 2

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.

Project# 25020750

Contact: Shelly Hennessy | Email: shennessy@TekLabInc.com
Requested Due Date: Standard TAT | Billing/PO: 38001 | Phone: (618) 344-1004 ext. 36

Report data from 25020749-001

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												
	25020750-001	2/21/25 1020	HNO3	Groundwater	✔	pH	1	CPM	28								
	25020750-002	2/19/25 1325	HNO3	Groundwater	✔		1		23								
	25020750-003	2/20/25 1141	HNO3	Groundwater	✔		1		52								
	25020750-004	2/20/25 1255	HNO3	Groundwater	✔		1		46								
	25020750-005	2/21/25 0942	HNO3	Groundwater	✔		1		30								
	25020750-006	2/21/25 ~~935~~ 0936	HNO3	Groundwater	✔		1		33								
	25020750-007	2/20/25 1325	HNO3	Groundwater	✔		1		38								
	25020750-008	2/20/25 1339	HNO3	Groundwater	✔		1		22								
	25020750-009	2/20/25 1221	HNO3	Groundwater	✔		1		28								
	25020750-010	2/20/25 1018	HNO3	Groundwater	✔		1		30								
	25020750-011	2/18/25 1200	HNO3	Groundwater	✔												

18.8-0.6 = 18.8 cs intact 02/25 - Fedex Box/cooler

*Relinquished By	Date/Time	Received By	Date/Time
[signature]		[signature]	02/27/25 1136

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sample information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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: Client | QC Level: 2

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.

Project# 25020750

Contact: Shelly Hennessy | Email: shennessy@TekLabInc.com
Requested Due Date: Standard TAT | Billing/PO: 38001 | Phone: (618) 344-1004 ext.

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												
	25020750-012	2/20/25 1112	HNO3	Groundwater	✔	pH 1	CPM 52										
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													

18.8-0.9=18.8, CS intact 02/25 - Fedex Box/cooler

*Relinquished By	Date/Time	Received By	Date/Time
Shelly Hennessy			02/27/25 1130

Teklab maintains a strict policy of client confidentiality and as such does not provide client or sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

Alliance Technical Group - Akron
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: 25030052 RcptNo: 1

Logged by:	Anthony W. Britton	2/27/2025 11:30:00 AM	Anthony Britton
Completed By:	Tegan A. Richards	3/1/2025 6:16:55 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	3/3/2025 11:03:50 AM	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: 2/25/2025 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:
    Relinquish time & dare not included

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	18.8	Good	Yes		2/25/2025	

March 2025 Laboratory Analytical Report

April 22, 2025

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 25030753

Dear Eric Staley:

TEKLAB, INC received 9 samples on 3/18/2025 3:05:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 25030753
Client Project: FGDS Landfill
Report Date: 22-Apr-25

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	16
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 25030753

Client Project: FGDS Landfill **Report Date:** 22-Apr-25

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: City Water, Light & Power
Work Order: 25030753
Client Project: FGDS Landfill
Report Date: 22-Apr-25

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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 25030753
Report Date: 22-Apr-25

Cooler Receipt Temp: 13.7 °C

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

Radium 226/228 analysis was performed by Alliance Technical Group. See attached report for results.

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
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Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
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Collinsville Air

Address 5445 Horseshoe Lake Road
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Chicago

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

Client: City Water, Light & Power
Work Order: 25030753
Client Project: FGDS Landfill
Report Date: 22-Apr-25

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2026	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2026	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2026	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2025	Collinsville
Arkansas	ADEQ	88-0966		3/14/2026	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	KWLCP	KY98050		12/31/2025	Collinsville
Kentucky	KWLCP	KY98006		12/31/2025	Collinsville
Kentucky	UST	0073		1/31/2026	Collinsville
Mississippi	MSDH			4/30/2025	Collinsville
Missouri	MDNR	930		1/31/2028	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Client: City Water, Light & Power **Work Order:** 25030753

Client Project: FGDS Landfill **Report Date:** 22-Apr-25

Lab ID: 25030753-005 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 03/18/2025 13:03

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	03/18/2025 13:03	R362264
Depth to water	*	-5.00		**1.73**	ft	1	03/18/2025 13:03	R362264
Depth to water from measuring point	*	0		**4.53**	ft	1	03/18/2025 13:03	R362264
Elevation of groundwater surface	*	0		**542.27**	ft	1	03/18/2025 13:03	R362264
Measuring Point Elevation	*	0		**546.80**	ft	1	03/18/2025 13:03	R362264
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	03/18/2025 13:03	R362264
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**28**	NTU	1	03/18/2025 13:03	R362264
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**56.1**	°F	1	03/18/2025 13:03	R362264
SW-846 9040B								
pH, Field	*	1.00		**7.03**		1	03/18/2025 13:03	R362264
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**2090**	µmhos/cm @25C	1	03/18/2025 13:03	R362264
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**888**	mg/L	1	03/19/2025 13:53	R362089
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	03/19/2025 10:15	R362092
Chloride	NELAP	5.00		**101**	mg/L	10	03/19/2025 10:15	R362092
Sulfate	NELAP	10.0		**263**	mg/L	10	03/19/2025 10:15	R362092
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0254**	mg/L	1	03/21/2025 16:42	236195
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	03/20/2025 15:41	236195
Boron	NELAP	0.0200		**0.134**	mg/L	1	03/21/2025 16:42	236195
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	03/20/2025 15:41	236195
Calcium	NELAP	0.100		**166**	mg/L	1	03/21/2025 16:42	236195
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:41	236195
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:41	236195
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	03/20/2025 15:41	236195
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	03/20/2025 15:41	236195
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 14:53	236195
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 14:53	236195
Lithium	*	0.0030		**0.0150**	mg/L	5	03/21/2025 14:53	236195
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 14:53	236195
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	03/21/2025 14:53	236195
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/19/2025 16:42	236206
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684
Radium-228	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684

Client: City Water, Light & Power **Work Order:** 25030753

Client Project: FGDS Landfill **Report Date:** 22-Apr-25

Lab ID: 25030753-006 **Client Sample ID:** P07D

Matrix: GROUNDWATER **Collection Date:** 03/18/2025 11:39

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**528.25**	ft	1	03/18/2025 11:39	R362264
Depth to water	*	-5.00		**1.18**	ft	1	03/18/2025 11:39	R362264
Depth to water from measuring point	*	0		**4.18**	ft	1	03/18/2025 11:39	R362264
Elevation of groundwater surface	*	0		**524.07**	ft	1	03/18/2025 11:39	R362264
Measuring Point Elevation	*	0		**528.25**	ft	1	03/18/2025 11:39	R362264
Measuring Point Height Above Land Surface	*	0		**3.00**	ft	1	03/18/2025 11:39	R362264
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**20**	NTU	1	03/18/2025 11:39	R362264
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**55.4**	°F	1	03/18/2025 11:39	R362264
SW-846 9040B								
pH, Field	*	1.00		**6.84**		1	03/18/2025 11:39	R362264
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**2340**	µmhos/cm @25C	1	03/18/2025 11:39	R362264
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**990**	mg/L	2.5	03/19/2025 13:52	R362089
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	03/19/2025 10:50	R362092
Chloride	NELAP	5.00		**31.7**	mg/L	10	03/19/2025 10:50	R362092
Sulfate	NELAP	10.0		**298**	mg/L	10	03/19/2025 10:50	R362092
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.943**	mg/L	1	03/21/2025 16:43	236195
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	03/20/2025 15:41	236195
Boron	NELAP	0.0200		**5.65**	mg/L	1	03/21/2025 16:43	236195
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	03/20/2025 15:41	236195
Calcium	NELAP	0.100		**195**	mg/L	1	03/21/2025 16:43	236195
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:41	236195
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:41	236195
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	03/20/2025 15:41	236195
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	03/20/2025 15:41	236195
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:38	236195
Arsenic	NELAP	0.0010		**0.0292**	mg/L	5	03/21/2025 15:38	236195
Lithium	*	0.0030		**0.0081**	mg/L	5	03/24/2025 11:34	236195
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:38	236195
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	03/21/2025 15:38	236195
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/19/2025 16:45	236206
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684
Radium-228	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684

Client: City Water, Light & Power
Work Order: 25030753
Client Project: FGDS Landfill
Report Date: 22-Apr-25
Lab ID: 25030753-007
Client Sample ID: AW-2
Matrix: GROUNDWATER
Collection Date: 03/18/2025 11:14

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	03/18/2025 11:14	R362264
Depth to water	*	-5.00		**-0.31**	ft	1	03/18/2025 11:14	R362264
Depth to water from measuring point	*	0		**2.99**	ft	1	03/18/2025 11:14	R362264
Elevation of groundwater surface	*	0		**526.99**	ft	1	03/18/2025 11:14	R362264
Measuring Point Elevation	*	0		**529.98**	ft	1	03/18/2025 11:14	R362264
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	03/18/2025 11:14	R362264
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**12**	NTU	1	03/18/2025 11:14	R362264
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**55.1**	°F	1	03/18/2025 11:14	R362264
SW-846 9040B								
pH, Field	*	1.00		**7.01**		1	03/18/2025 11:14	R362264
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1740**	µmhos/cm @25C	1	03/18/2025 11:14	R362264
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**632**	mg/L	1	03/19/2025 13:52	R362089
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	03/19/2025 11:01	R362092
Chloride	NELAP	5.00		**21.2**	mg/L	10	03/19/2025 11:01	R362092
Sulfate	NELAP	10.0		**66.1**	mg/L	10	03/19/2025 11:01	R362092
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.316**	mg/L	1	03/21/2025 16:44	236195
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	03/20/2025 15:42	236195
Boron	NELAP	0.0200		**1.90**	mg/L	1	03/21/2025 16:44	236195
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	03/20/2025 15:42	236195
Calcium	NELAP	0.100		**128**	mg/L	1	03/21/2025 16:44	236195
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:42	236195
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:42	236195
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	03/20/2025 15:42	236195
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	03/20/2025 15:42	236195
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:44	236195
Arsenic	NELAP	0.0010		**0.0012**	mg/L	5	03/21/2025 15:44	236195
Lithium	*	0.0030		**0.0053**	mg/L	5	03/24/2025 11:41	236195
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:44	236195
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	03/21/2025 15:44	236195
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/19/2025 16:47	236206
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684
Radium-228	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684

Client: City Water, Light & Power **Work Order:** 25030753

Client Project: FGDS Landfill **Report Date:** 22-Apr-25

Lab ID: 25030753-008 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 03/18/2025 13:31

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	03/18/2025 13:31	R362264
Depth to water	*	-5.00		**25.56**	ft	1	03/18/2025 13:31	R362264
Depth to water from measuring point	*	0		**27.43**	ft	1	03/18/2025 13:31	R362264
Elevation of groundwater surface	*	0		**528.17**	ft	1	03/18/2025 13:31	R362264
Measuring Point Elevation	*	0		**555.60**	ft	1	03/18/2025 13:31	R362264
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	03/18/2025 13:31	R362264
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**11**	NTU	1	03/18/2025 13:31	R362264
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**58.8**	°F	1	03/18/2025 13:31	R362264
SW-846 9040B								
pH, Field	*	1.00		**7.00**		1	03/18/2025 13:31	R362264
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**2320**	µmhos/cm @25C	1	03/18/2025 13:31	R362264
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**1710**	mg/L	1	03/19/2025 13:52	R362089
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	03/19/2025 11:13	R362092
Chloride	NELAP	5.00		**28.8**	mg/L	10	03/19/2025 11:13	R362092
Sulfate	NELAP	10.0		**281**	mg/L	10	03/19/2025 11:13	R362092
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.274**	mg/L	1	03/21/2025 16:44	236195
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	03/20/2025 15:43	236195
Boron	NELAP	0.0200		**3.05**	mg/L	1	03/21/2025 16:44	236195
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	03/20/2025 15:43	236195
Calcium	NELAP	0.100		**186**	mg/L	1	03/21/2025 16:44	236195
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:43	236195
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:43	236195
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	03/20/2025 15:43	236195
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	03/20/2025 15:43	236195
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:49	236195
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:49	236195
Lithium	*	0.0030		**0.0073**	mg/L	5	03/24/2025 11:47	236195
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	03/24/2025 11:47	236195
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	03/21/2025 15:49	236195
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/19/2025 16:49	236206
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684
Radium-228	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684

Client: City Water, Light & Power **Work Order:** 25030753

Client Project: FGDS Landfill **Report Date:** 22-Apr-25

Lab ID: 25030753-009 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 03/18/2025 10:45

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	03/18/2025 10:45	R362264
Depth to water	*	-5.00		**27.45**	ft	1	03/18/2025 10:45	R362264
Depth to water from measuring point	*	0		**29.19**	ft	1	03/18/2025 10:45	R362264
Elevation of groundwater surface	*	0		**525.21**	ft	1	03/18/2025 10:45	R362264
Measuring Point Elevation	*	0		**554.40**	ft	1	03/18/2025 10:45	R362264
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	03/18/2025 10:45	R362264
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**6.9**	NTU	1	03/18/2025 10:45	R362264
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**56.9**	°F	1	03/18/2025 10:45	R362264
SW-846 9040B								
pH, Field	*	1.00		**6.76**		1	03/18/2025 10:45	R362264
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**2750**	µmhos/cm @25C	1	03/18/2025 10:45	R362264
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	50		**2000**	mg/L	2.5	03/19/2025 13:52	R362089
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	03/19/2025 11:25	R362092
Chloride	NELAP	5.00		**34.5**	mg/L	10	03/19/2025 11:25	R362092
Sulfate	NELAP	10.0		**499**	mg/L	10	03/19/2025 11:25	R362092
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.524**	mg/L	1	03/21/2025 16:45	236195
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	03/20/2025 15:54	236195
Boron	NELAP	0.0200		**10.9**	mg/L	1	03/21/2025 16:45	236195
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	03/20/2025 15:54	236195
Calcium	NELAP	0.100		**250**	mg/L	1	03/21/2025 16:45	236195
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:54	236195
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	03/20/2025 15:54	236195
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	03/20/2025 15:54	236195
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	03/20/2025 15:54	236195
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	03/21/2025 15:55	236195
Arsenic	NELAP	0.0010		**0.0016**	mg/L	5	03/21/2025 15:55	236195
Lithium	*	0.0030		**0.0070**	mg/L	5	03/24/2025 11:53	236195
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	03/24/2025 11:53	236195
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	03/21/2025 15:55	236195
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	03/19/2025 17:01	236206
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684
Radium-228	*	0		**See Attached**	pci/L	1	04/18/2025 0:00	R363684

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 25030753
Report Date: 22-Apr-25

Carrier: Daniel Crump

Received By: JMD

Completed by: Laura E Henson
On: 18-Mar-25

Reviewed by: Elizabeth A. Hurley
On: 18-Mar-25

Pages to follow: Chain of custody 1 Extra pages included 16

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 13.7
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.

pH strip #101358. - JD/lhenson - 3/18/2025 3:58:02 PM

Additional nitric acid (102194) was needed in G122 upon arrival at the laboratory. - JD/lhenson - 3/18/2025 3:58:18 PM

Drop off Location
☐ Downers Grove, IL ☐ Lenexa, KS
☐ Springfield, IL ☒ Collinsville, IL

CHAIN OF CUSTODY

pg. 1 of 1 Work order # 25030753

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

Client:	City Water, Light & Power		
Address:	3100 Stevenson Drive		
City / State / Zip	Springfield, IL 62712		
Contact:	Eric Staley	**Phone:**	(217) 757-8610
E-Mail:	eric.staley@cwlp.com	**Fax:**	

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 13.7 °C LTG# 9

Preserved in: ☒ LAB ☐ FIELD

FOR LAB USE ONLY

Lab Notes: pH 101358 Added HNO3 (102194) 2/2 G122 IL SD 3/18/25

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 On file

Client Comments Report QC LVL:___

*Elevations, pH, conductivity, temperature

**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Mo Hg

Project Name/Number: FGDS Landfill

Sample Collector's Name: Brett Gillihan

Results Requested (call for PFAS TAT and surcharges)
☒ Standard ☐ 1-2 Day (100% Surcharge)
☐ Date ____ ☐ 3 Day (50% Surcharge)

Billing/PO#

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Groundwater	INDICATE ANALYSIS REQUESTED: As (T)-ICPMS	Cl SO4 TDS F (T)	Field parameters*	Field Turbidity	Metals (T)**	Radium-226/228
25030753 001	R111	3/18/25 1031		1	X	X					
002	G112	1107		1	X	X					
003	G120	1317		1	X	X					
004	P06D	1145		1	X	X					
005	R101	3-18-25 1303	1	3	X		X	X	X	X	X
006	P07D	1139	1	3	X		X	X	X	X	X
007	AW-2	1114	1	3	X		X	X	X	X	X
008	G121	1331	1	3	X		X	X	X	X	X
009	G122	1045	1	3	X		X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
	3-18 / 1505		3/18/25 15:05

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: 98070

Alliance Technical Group - Akron
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Website: http://www.settek.com

April 22, 2025

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 25030753

Order No.: 25031749

Dear Shelly Hennessy:

Alliance Technical Group - Akron received 5 sample(s) on 3/21/2025 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,

Salwa Najjar

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

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Case Narrative

WO#: **25031749**
Date: **4/22/2025**

CLIENT: TEKLAB Inc,
Project: 25030753

WorkOrder Narrative:
25031749: 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 Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group 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 information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group 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.

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Qualifiers and Acronyms

WO#: **25031749**
Date: **4/22/2025**

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.

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Workorder Sample Summary

WO#: **25031749**

22-Apr-25

CLIENT: TEKLAB Inc,
Project: 25030753

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25031749-001	25030753-005		3/18/2025 1:03:00 PM	3/21/2025 12:45:00 PM	Non-Potable Water
25031749-002	25030753-006		3/18/2025 11:39:00 AM	3/21/2025 12:45:00 PM	Non-Potable Water
25031749-003	25030753-007		3/18/2025 11:14:00 AM	3/21/2025 12:45:00 PM	Non-Potable Water
25031749-004	25030753-008		3/18/2025 1:31:00 PM	3/21/2025 12:45:00 PM	Non-Potable Water
25031749-005	25030753-009		3/18/2025 10:45:00 AM	3/21/2025 12:45:00 PM	Non-Potable Water

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DATES REPORT

WO#: **25031749**

22-Apr-25

Client: TEKLAB Inc,
Project: 25030753

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25031749-001A	25030753-005	3/18/2025 1:03:00 PM	Non-Potable Water	Radium-226 (EPA 903.0)		4/14/2025 4:00:36 PM	4/21/2025 10:58:00 AM
				Radium-228 (EPA 904.0)		4/14/2025 4:00:36 PM	4/18/2025 2:20:00 PM
25031749-002A	25030753-006	3/18/2025 11:39:00 AM		Radium-226 (EPA 903.0)		4/14/2025 4:00:36 PM	4/21/2025 10:58:00 AM
				Radium-228 (EPA 904.0)		4/14/2025 4:00:36 PM	4/18/2025 2:20:00 PM
25031749-003A	25030753-007	3/18/2025 11:14:00 AM		Radium-226 (EPA 903.0)		4/14/2025 4:00:36 PM	4/21/2025 10:58:00 AM
				Radium-228 (EPA 904.0)		4/14/2025 4:00:36 PM	4/18/2025 2:20:00 PM
25031749-004A	25030753-008	3/18/2025 1:31:00 PM		Radium-226 (EPA 903.0)		4/14/2025 4:00:36 PM	4/21/2025 10:58:00 AM
				Radium-228 (EPA 904.0)		4/14/2025 4:00:36 PM	4/18/2025 2:20:00 PM
25031749-005A	25030753-009	3/18/2025 10:45:00 AM		Radium-226 (EPA 903.0)		4/14/2025 4:00:36 PM	4/21/2025 10:58:00 AM
				Radium-228 (EPA 904.0)		4/14/2025 4:00:36 PM	4/18/2025 2:20:00 PM

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Analytical Report

(consolidated)

WO#: **25031749**

Date Reported: **4/22/2025**

CLIENT: TEKLAB Inc,
Project: 25030753
Lab ID: 25031749-001
Client Sample ID: 25030753-005

Collection Date: 3/18/2025 1:03:00 PM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0300	1	4/21/2025 10:58:00 AM
Yield	1.00					1	4/21/2025 10:58:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.380	1	4/18/2025 2:20:00 PM
Yield	1.00					1	4/18/2025 2:20:00 PM

Qualifiers:

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

Original

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Analytical Report

(consolidated)

WO#: **25031749**

Date Reported: **4/22/2025**

CLIENT: TEKLAB Inc,
Project: 25030753
Lab ID: 25031749-002
Client Sample ID: 25030753-006

Collection Date: 3/18/2025 11:39:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.110	1	4/21/2025 10:58:00 AM
Yield	1.00					1	4/21/2025 10:58:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	1.73	1.00		pCi/L	± 0.620	1	4/18/2025 2:20:00 PM
Yield	1.00					1	4/18/2025 2:20:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25031749**

Date Reported: **4/22/2025**

CLIENT: TEKLAB Inc,
Project: 25030753
Lab ID: 25031749-003
Client Sample ID: 25030753-007

Collection Date: 3/18/2025 11:14:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0700	1	4/21/2025 10:58:00 AM
Yield	1.00					1	4/21/2025 10:58:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.400	1	4/18/2025 2:20:00 PM
Yield	1.00					1	4/18/2025 2:20:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25031749**

Date Reported: **4/22/2025**

CLIENT: TEKLAB Inc,
Project: 25030753
Lab ID: 25031749-004
Client Sample ID: 25030753-008

Collection Date: 3/18/2025 1:31:00 PM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0800	1	4/21/2025 10:58:00 AM
Yield	1.00					1	4/21/2025 10:58:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.410	1	4/18/2025 2:20:00 PM
Yield	1.00					1	4/18/2025 2:20:00 PM

Qualifiers:

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

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Analytical Report

(consolidated)

WO#: **25031749**

Date Reported: **4/22/2025**

CLIENT: TEKLAB Inc,

Collection Date: 3/18/2025 10:45:00 AM

Project: 25030753

Lab ID: 25031749-005

Matrix: NON-POTABLE WATER

Client Sample ID: 25030753-009

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0600	1	4/21/2025 10:58:00 AM
Yield	1.00					1	4/21/2025 10:58:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.290	1	4/18/2025 2:20:00 PM
Yield	1.00					1	4/18/2025 2:20:00 PM

Qualifiers:

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

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QC SUMMARY REPORT

WO#: **25031749**

22-Apr-25

Client: TEKLAB Inc,
Project: 25030753 **BatchID:** **83646**

Sample ID: **MB-83646** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207342**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E904.0** **E903-904** Analysis Date: **4/18/2025** SeqNo: **5548239**

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

Sample ID: **LCS-83646** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207342**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E904.0** **E903-904** Analysis Date: **4/18/2025** SeqNo: **5548240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.42	1.00	5.000	0	68.4	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-83646** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207342**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E904.0** **E903-904** Analysis Date: **4/18/2025** SeqNo: **5548241**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	2.87	1.00	5.000	0	57.4	50	130	3.420	17.5	20	
Yield	1.00			0	0			1.000	0		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25031749**

22-Apr-25

Client: TEKLAB Inc,
Project: 25030753 **BatchID:** **83646**

Sample ID: **25031742-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207342**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E904.0** **E903-904** Analysis Date: **4/18/2025** SeqNo: **5548246**

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	R
Yield	0.800			0	0			0.9800	20.2		

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

Alliance TECHNICAL GROUP

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

QC SUMMARY REPORT

WO#: **25031749**

22-Apr-25

Client: TEKLAB Inc,
Project: 25030753 **BatchID:** **83646**

Sample ID: **MB-83646** SampType: **MBLK** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549116**

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

Sample ID: **LCS-83646** SampType: **LCS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	3.91	1.00	5.000	0	78.2	70	130				QLR

Sample ID: **LCSD-83646** SampType: **LCSD** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.90	1.00	5.000	0	98.0	70	130	3.910	22.5	20	R

Sample ID: **25031742-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549123**

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	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **25031749**

22-Apr-25

Client: TEKLAB Inc,
Project: 25030753 **BatchID:** **83646**

Sample ID: **25031742-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549123**

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	
Yield	1.00							1.000	0	0	

Sample ID: **25031743-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/14/2025** RunNo: **207393**
Client ID: **BatchQC** Batch ID: **83646** TestNo: **E903.0** **E903-904** Analysis Date: **4/21/2025** SeqNo: **5549125**

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	
Yield	1.00							1.000	0	0	

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
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

Pg ___ of ___ 25031749

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 18.2-0.0=
5445 Horseshoe Lake Road
Collinsville, IL 62234

Cooler Temp: 18.2 Sampler: teklab employee QC Level: 2

Fedex, Cooler CS intact 3/19/25

Project# 25030753

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium 226/228.
Method changes require Teklab authorization. Samples collected from an IL site.
Batch QC is required for all analyses requested.

Contact: Shelly Hennessy Email: shennessy@teklabinc.com
Requested Due Date: Standard TAT Billing/PO: 38179 Phone: (618) 344-1004 ex 36

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	Ra226/228												
						COM						pH					
	25030753-005	3/18/25 13:03	HNO3	Groundwater	✔	10,	38					1,1					
	25030753-006	3/18/25 11:39	HNO3	Groundwater	✔	24,	26					3,3					
	25030753-007	3/18/25 11:14	HNO3	Groundwater	✔	46,	18					2,2					
	25030753-008	3/18/25 13:31	HNO3	Groundwater	✔	32,	22					2,2					
	25030753-009	3/18/25 10:45	HNO3	Groundwater	✔	32,	22					1,1					
			HNO3	Aqueous													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													
			HNO3	Groundwater													

*Relinquished By	Date/Time	Received By	Date/Time
			3/21/25, 1245

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

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Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 25031749 RcptNo: 1

Logged by:	Tegan A. Richards	3/21/2025 12:45:00 PM	Tegan Richards
Completed By:	Tegan A. Richards	3/22/2025 4:25:35 PM	Tegan Richards
Reviewed By:	Jennifer Woolf	3/24/2025 12:37:49 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: 3/13/2025 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:

relinquish date & time not included
Both containers of 25030753-006 had pH 3

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	18.2	Good	Yes		3/19/2025	

April 2025 Laboratory Analytical Report

May 09, 2025

Eric Staley
City Water, Light & Power
3100 Stevenson Drive
2nd Floor Maintenance Building
Springfield, IL 62712
TEL: (217) 757-8610
FAX: (217) 757-8615

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: FGDS Landfill **WorkOrder:** 25041334

Dear Eric Staley:

TEKLAB, INC received 5 samples on 4/24/2025 12:27:00 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,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: City Water, Light & Power
Work Order: 25041334
Client Project: FGDS Landfill
Report Date: 09-May-25

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	12
Chain of Custody	Appended

Client: City Water, Light & Power **Work Order:** 25041334

Client Project: FGDS Landfill **Report Date:** 09-May-25

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: City Water, Light & Power
Work Order: 25041334
Client Project: FGDS Landfill
Report Date: 09-May-25

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: City Water, Light & Power
Client Project: FGDS Landfill

Work Order: 25041334
Report Date: 09-May-25

Cooler Receipt Temp: 10.5 °C

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

Radium 226/228 analysis was performed by Alliance Technical Group. See attached report for results.

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: City Water, Light & Power

Work Order: 25041334

Client Project: FGDS Landfill

Report Date: 09-May-25

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2026	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2026	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2026	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2025	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2025	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2025	Collinsville
Arkansas	ADEQ	88-0966		3/14/2026	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2026	Collinsville
Kentucky	KWLCP	KY98050		12/31/2025	Collinsville
Kentucky	KWLCP	KY98006		12/31/2025	Collinsville
Kentucky	UST	0073		1/31/2026	Collinsville
Mississippi	MSDH			4/30/2026	Collinsville
Missouri	MDNR	930		1/31/2028	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville

Client: City Water, Light & Power **Work Order:** 25041334

Client Project: FGDS Landfill **Report Date:** 09-May-25

Lab ID: 25041334-001 **Client Sample ID:** R101

Matrix: GROUNDWATER **Collection Date:** 04/24/2025 10:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**511.53**	ft	1	04/24/2025 10:29	R363926
Depth to water	*	-5.00		**2.39**	ft	1	04/24/2025 10:29	R363926
Depth to water from measuring point	*	0		**5.19**	ft	1	04/24/2025 10:29	R363926
Elevation of groundwater surface	*	0		**541.61**	ft	1	04/24/2025 10:29	R363926
Measuring Point Elevation	*	0		**546.80**	ft	1	04/24/2025 10:29	R363926
Measuring Point Height Above Land Surface	*	0		**2.80**	ft	1	04/24/2025 10:29	R363926
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**5.1**	NTU	1	04/24/2025 10:29	R363926
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.9**	°F	1	04/24/2025 10:29	R363926
SW-846 9040B								
pH, Field	*	1.00		**6.86**		1	04/24/2025 10:29	R363926
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1340**	µmhos/cm @25C	1	04/24/2025 10:29	R363926
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**956**	mg/L	1	04/29/2025 14:48	R364192
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	04/25/2025 18:04	R363968
Chloride	NELAP	5.00		**103**	mg/L	10	04/25/2025 18:04	R363968
Sulfate	NELAP	10.0		**256**	mg/L	10	04/25/2025 18:04	R363968
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.0101**	mg/L	1	04/25/2025 9:13	238084
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	04/25/2025 9:13	238084
Boron	NELAP	0.0200		**0.124**	mg/L	1	04/25/2025 9:13	238084
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	04/25/2025 9:13	238084
Calcium	NELAP	0.100		**152**	mg/L	1	04/25/2025 9:13	238084
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:13	238084
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:13	238084
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	04/25/2025 9:13	238084
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	04/25/2025 9:13	238084
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:38	238084
Arsenic	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:38	238084
Lithium	*	0.0030		**0.0156**	mg/L	5	04/25/2025 15:38	238084
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:38	238084
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	04/25/2025 15:38	238084
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/28/2025 17:14	238209
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677
Radium-228	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677

Client: City Water, Light & Power
Work Order: 25041334
Client Project: FGDS Landfill
Report Date: 09-May-25
Lab ID: 25041334-002
Client Sample ID: P07D
Matrix: GROUNDWATER
Collection Date: 04/24/2025 10:02

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**528.25**	ft	1	04/24/2025 10:02	R363926
Depth to water	*	-5.00		**0.99**	ft	1	04/24/2025 10:02	R363926
Depth to water from measuring point	*	0		**3.99**	ft	1	04/24/2025 10:02	R363926
Elevation of groundwater surface	*	0		**524.26**	ft	1	04/24/2025 10:02	R363926
Measuring Point Elevation	*	0		**528.25**	ft	1	04/24/2025 10:02	R363926
Measuring Point Height Above Land Surface	*	0		**3.00**	ft	1	04/24/2025 10:02	R363926
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**11**	NTU	1	04/24/2025 10:02	R363926
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.1**	°F	1	04/24/2025 10:02	R363926
SW-846 9040B								
pH, Field	*	1.00		**6.70**		1	04/24/2025 10:02	R363926
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1550**	µmhos/cm @25C	1	04/24/2025 10:02	R363926
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	33		**1160**	mg/L	1.67	04/29/2025 14:47	R364192
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	04/25/2025 18:16	R363968
Chloride	NELAP	5.00		**31.9**	mg/L	10	04/25/2025 18:16	R363968
Sulfate	NELAP	10.0		**283**	mg/L	10	04/25/2025 18:16	R363968
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.847**	mg/L	1	04/25/2025 9:14	238084
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	04/25/2025 9:14	238084
Boron	NELAP	0.0200		**5.22**	mg/L	1	04/25/2025 9:14	238084
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	04/25/2025 9:14	238084
Calcium	NELAP	0.100		**175**	mg/L	1	04/25/2025 9:14	238084
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:14	238084
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:14	238084
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	04/25/2025 9:14	238084
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	04/25/2025 9:14	238084
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:44	238084
Arsenic	NELAP	0.0010		**0.0262**	mg/L	5	04/25/2025 15:44	238084
Lithium	*	0.0030		**0.0076**	mg/L	5	04/25/2025 15:44	238084
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:44	238084
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	04/25/2025 15:44	238084
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/28/2025 17:16	238209
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677
Radium-228	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677

Client: City Water, Light & Power **Work Order:** 25041334

Client Project: FGDS Landfill **Report Date:** 09-May-25

Lab ID: 25041334-003 **Client Sample ID:** AW-2

Matrix: GROUNDWATER **Collection Date:** 04/24/2025 9:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.34**	ft	1	04/24/2025 9:29	R363926
Depth to water	*	-5.00		**0.49**	ft	1	04/24/2025 9:29	R363926
Depth to water from measuring point	*	0		**3.79**	ft	1	04/24/2025 9:29	R363926
Elevation of groundwater surface	*	0		**526.19**	ft	1	04/24/2025 9:29	R363926
Measuring Point Elevation	*	0		**529.98**	ft	1	04/24/2025 9:29	R363926
Measuring Point Height Above Land Surface	*	0		**3.30**	ft	1	04/24/2025 9:29	R363926
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**6.0**	NTU	1	04/24/2025 9:29	R363926
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**59.0**	°F	1	04/24/2025 9:29	R363926
SW-846 9040B								
pH, Field	*	1.00		**6.81**		1	04/24/2025 9:29	R363926
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1060**	µmhos/cm @25C	1	04/24/2025 9:29	R363926
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	20		**650**	mg/L	1	04/29/2025 14:45	R364192
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	04/25/2025 18:27	R363968
Chloride	NELAP	5.00		**21.2**	mg/L	10	04/25/2025 18:27	R363968
Sulfate	NELAP	10.0		**65.8**	mg/L	10	04/25/2025 18:27	R363968
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.299**	mg/L	1	04/25/2025 9:15	238084
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	04/25/2025 9:15	238084
Boron	NELAP	0.0200		**1.77**	mg/L	1	04/25/2025 9:15	238084
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	04/25/2025 9:15	238084
Calcium	NELAP	0.100		**115**	mg/L	1	04/25/2025 9:15	238084
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:15	238084
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:15	238084
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	04/25/2025 9:15	238084
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	04/25/2025 9:15	238084
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:49	238084
Arsenic	NELAP	0.0010		**0.0014**	mg/L	5	04/25/2025 15:49	238084
Lithium	*	0.0030		**0.0054**	mg/L	5	04/25/2025 15:49	238084
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:49	238084
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	04/25/2025 15:49	238084
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/28/2025 17:19	238209
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677
Radium-228	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677

Client: City Water, Light & Power **Work Order:** 25041334

Client Project: FGDS Landfill **Report Date:** 09-May-25

Lab ID: 25041334-004 **Client Sample ID:** G121

Matrix: GROUNDWATER **Collection Date:** 04/24/2025 10:36

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**497.04**	ft	1	04/24/2025 10:36	R363926
Depth to water	*	-5.00		**25.26**	ft	1	04/24/2025 10:36	R363926
Depth to water from measuring point	*	0		**27.13**	ft	1	04/24/2025 10:36	R363926
Elevation of groundwater surface	*	0		**528.47**	ft	1	04/24/2025 10:36	R363926
Measuring Point Elevation	*	0		**555.60**	ft	1	04/24/2025 10:36	R363926
Measuring Point Height Above Land Surface	*	0		**1.87**	ft	1	04/24/2025 10:36	R363926
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**78**	NTU	1	04/24/2025 10:36	R363926
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.0**	°F	1	04/24/2025 10:36	R363926
SW-846 9040B								
pH, Field	*	1.00		**6.65**		1	04/24/2025 10:36	R363926
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1500**	µmhos/cm @25C	1	04/24/2025 10:36	R363926
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	25		**1240**	mg/L	1.25	04/29/2025 14:44	R364192
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	04/25/2025 18:39	R363968
Chloride	NELAP	5.00		**28.1**	mg/L	10	04/25/2025 18:39	R363968
Sulfate	NELAP	10.0		**310**	mg/L	10	04/25/2025 18:39	R363968
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.573**	mg/L	1	04/25/2025 9:15	238084
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	04/25/2025 9:15	238084
Boron	NELAP	0.0200		**3.65**	mg/L	1	04/25/2025 9:15	238084
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	04/25/2025 9:15	238084
Calcium	NELAP	0.100		**173**	mg/L	1	04/25/2025 9:15	238084
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:15	238084
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 9:15	238084
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	04/25/2025 9:15	238084
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	04/25/2025 9:15	238084
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:55	238084
Arsenic	NELAP	0.0010		**0.0145**	mg/L	5	04/25/2025 15:55	238084
Lithium	*	0.0030		**0.0068**	mg/L	5	04/25/2025 15:55	238084
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 15:55	238084
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	04/25/2025 15:55	238084
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/28/2025 17:21	238209
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677
Radium-228	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677

Client: City Water, Light & Power **Work Order:** 25041334

Client Project: FGDS Landfill **Report Date:** 09-May-25

Lab ID: 25041334-005 **Client Sample ID:** G122

Matrix: GROUNDWATER **Collection Date:** 04/24/2025 10:03

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
FIELD ELEVATION MEASUREMENTS								
Bottom of well elevation	*	0		**505.11**	ft	1	04/24/2025 10:03	R363926
Depth to water	*	-5.00		**27.05**	ft	1	04/24/2025 10:03	R363926
Depth to water from measuring point	*	0		**28.79**	ft	1	04/24/2025 10:03	R363926
Elevation of groundwater surface	*	0		**525.61**	ft	1	04/24/2025 10:03	R363926
Measuring Point Elevation	*	0		**554.40**	ft	1	04/24/2025 10:03	R363926
Measuring Point Height Above Land Surface	*	0		**1.74**	ft	1	04/24/2025 10:03	R363926
STANDARD METHODS 2130 B FIELD								
Turbidity	*	1.0		**52**	NTU	1	04/24/2025 10:03	R363926
STANDARD METHODS 2550 B FIELD								
Temperature	*	0		**57.2**	°F	1	04/24/2025 10:03	R363926
SW-846 9040B								
pH, Field	*	1.00		**6.54**		1	04/24/2025 10:03	R363926
SW-846 9050A								
Spec. Conductance, Field	*	1.00		**1770**	µmhos/cm @25C	1	04/24/2025 10:03	R363926
STANDARD METHODS 2540 C (TOTAL) 1997, 2011								
Total Dissolved Solids	NELAP	33		**1200**	mg/L	1.67	04/29/2025 14:38	R364192
SW846 9056A TOTAL ANIONIC COMPOUNDS BY ION CHROMATOGRAPHY								
Fluoride	NELAP	0.50		**ND**	mg/L	10	04/25/2025 19:26	R363968
Chloride	NELAP	5.00		**36.4**	mg/L	10	04/25/2025 19:26	R363968
Sulfate	NELAP	10.0		**537**	mg/L	10	04/25/2025 19:26	R363968
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Barium	NELAP	0.0025		**0.491**	mg/L	1	04/25/2025 10:09	238084
Beryllium	NELAP	0.0005		**< 0.0005**	mg/L	1	04/25/2025 10:09	238084
Boron	NELAP	0.0200		**12.0**	mg/L	1	04/25/2025 10:09	238084
Cadmium	NELAP	0.0020		**< 0.0020**	mg/L	1	04/25/2025 10:09	238084
Calcium	NELAP	0.100		**241**	mg/L	1	04/25/2025 10:09	238084
Chromium	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 10:09	238084
Cobalt	NELAP	0.0050		**< 0.0050**	mg/L	1	04/25/2025 10:09	238084
Lead	NELAP	0.0075		**< 0.0075**	mg/L	1	04/25/2025 10:09	238084
Molybdenum	NELAP	0.0100		**< 0.0100**	mg/L	1	04/25/2025 10:09	238084
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)								
Antimony	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 16:41	238084
Arsenic	NELAP	0.0010		**0.0032**	mg/L	5	04/25/2025 16:41	238084
Lithium	*	0.0030		**0.0062**	mg/L	5	04/25/2025 16:41	238084
Selenium	NELAP	0.0010		**< 0.0010**	mg/L	5	04/25/2025 16:41	238084
Thallium	NELAP	0.0020		**< 0.0020**	mg/L	5	04/25/2025 16:41	238084
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020		**< 0.00020**	mg/L	1	04/28/2025 17:23	238209
EPA 903.0/904.0, RADIUM 226/228								
Radium-226	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677
Radium-228	*	0		**See Attached**	pci/L	1	05/07/2025 0:00	R364677

Receiving Check List

http://www.teklabinc.com/

Client: City Water, Light & Power
Work Order: 25041334
Client Project: FGDS Landfill
Report Date: 09-May-25

Carrier: Brett Gillihan
Received By: JMD

Completed by: Amber Dilallo
On: 24-Apr-25

Reviewed by: Ellie Hopkins
On: 24-Apr-25

Pages to follow: Chain of custody 1 Extra pages included 23

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 10.5
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.

Additional Nitric Acid (103505) was needed for R101, P07D, AW-2, G121 and G122 upon arrival at the laboratory. - JD/amberdilallo - 4/24/2025 2:30:20 PM

pH strip #101358. - JD/amberdilallo - 4/24/2025 2:30:23 PM

Drop off Location
☐ Downers Grove, IL ☐ Lenexa, KS
☐ Springfield, IL ☒ Collinsville, IL

CHAIN OF CUSTODY

pg. 1 of 1 Work order # 25041334

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

Client:	City Water, Light & Power		
Address:	3100 Stevenson Drive		
City / State / Zip	Springfield, IL 62712		
Contact:	Eric Staley	**Phone:**	(217) 757-8610
E-Mail:	eric.staley@cwlp.com	**Fax:**	

Samples on: ☒ ICE ☐ BLUE ICE ☐ NO ICE 10.5 °C LTG# 5

Preserved in: ☐ LAB ☒ FIELD

FOR LAB USE ONLY

Lab Notes: PH 101358 Added HNO3(103505) 2/2 1-Liter R101, P07D AW-2, G121, G122 JD 4/24/25

Client Comments Report QC LVL:___

*Elevations, pH, conductivity, temperature
**Sb As Se Li Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Mo Hg

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 On file

Project Name/Number: FGDS Landfill

Sample Collector's Name: Justin Gip

Results Requested (call for PFAS TAT and surcharges)
☒ Standard ☐ 1-2 Day (100% Surcharge)
☐ Date ___ ☐ 3 Day (50% Surcharge)

Billing/PO#

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNP	HNO3	MATRIX: Groundwater	INDICATE ANALYSIS REQUESTED: Cl SO4 TDS F (T)	Field parameters*	Field Turbidity	Metals (T)**	Radium-226/228
25041334-001	R101	4-24-25 / 1029	1	3	X	X	X	X	X	X
002	P07D	1002	1	3	X	X	X	X	X	X
003	AW-2	929	1	3	X	X	X	X	X	X
004	G121	1036	1	3	X	X	X	X	X	X
005	G122	1003	1	3	X	X	X	X	X	X

Relinquished By	Date/Time	Received By	Date/Time
Justin Gip	4-24-25 1227	[signature]	4/24/25 12:27

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: 99065

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

May 08, 2025

Shelly Hennessy
TEKLAB Inc,
5445 Horseshoe lake Road
Collinsville, IL 62234
TEL:
FAX:

RE: 25041334

Order No.: 25042163

Dear Shelly Hennessy:

Alliance Technical Group - Akron received 5 sample(s) on 4/28/2025 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

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

Case Narrative

WO#: **25042163**
Date: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334

WorkOrder Narrative:
25042163: 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 Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group 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 information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group 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.

Alliance Technical Group - Akro
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-448
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **25042163**
Date: **5/8/2025**

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.

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

Workorder Sample Summary

WO#: **25042163**
08-May-25

CLIENT: TEKLAB Inc,
Project: 25041334

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25042163-001	25041334-001		4/24/2025 10:29:00 AM	4/28/2025 1:00:00 PM	Non-Potable Water
25042163-002	25041334-002		4/24/2025 10:02:00 AM	4/28/2025 1:00:00 PM	Non-Potable Water
25042163-003	25041334-003		4/24/2025 9:29:00 AM	4/28/2025 1:00:00 PM	Non-Potable Water
25042163-004	25041334-004		4/24/2025 10:36:00 AM	4/28/2025 1:00:00 PM	Non-Potable Water
25042163-005	25041334-005		4/24/2025 10:03:00 AM	4/28/2025 1:00:00 PM	Non-Potable Water

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DATES REPORT

WO#: **25042163**

08-May-25

Client: TEKLAB Inc,

Project: 25041334

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25042163-001A	25041334-001	4/24/2025 10:29:00 AM	Non-Potable Water	Radium-226 (EPA 903.0)		5/1/2025 11:04:28 AM	5/8/2025 9:37:00 AM
				Radium-228 (EPA 904.0)		5/1/2025 11:04:28 AM	5/7/2025 2:45:00 PM
25042163-002A	25041334-002	4/24/2025 10:02:00 AM		Radium-226 (EPA 903.0)		5/1/2025 11:04:28 AM	5/8/2025 9:37:00 AM
				Radium-228 (EPA 904.0)		5/1/2025 11:04:28 AM	5/7/2025 2:45:00 PM
25042163-003A	25041334-003	4/24/2025 9:29:00 AM		Radium-226 (EPA 903.0)		5/1/2025 11:04:28 AM	5/8/2025 9:37:00 AM
				Radium-228 (EPA 904.0)		5/1/2025 11:04:28 AM	5/7/2025 2:45:00 PM
25042163-004A	25041334-004	4/24/2025 10:36:00 AM		Radium-226 (EPA 903.0)		5/1/2025 11:04:28 AM	5/8/2025 9:37:00 AM
				Radium-228 (EPA 904.0)		5/1/2025 11:04:28 AM	5/7/2025 2:45:00 PM
25042163-005A	25041334-005	4/24/2025 10:03:00 AM		Radium-226 (EPA 903.0)		5/1/2025 11:04:28 AM	5/8/2025 9:37:00 AM
				Radium-228 (EPA 904.0)		5/1/2025 11:04:28 AM	5/7/2025 2:45:00 PM

Original

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Analytical Report

(consolidated)

WO#: **25042163**

Date Reported: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334
Lab ID: 25042163-001
Client Sample ID: 25041334-001

Collection Date: 4/24/2025 10:29:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0500	1	5/8/2025 9:37:00 AM
Yield	1.00					1	5/8/2025 9:37:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.320	1	5/7/2025 2:45:00 PM
Yield	1.00					1	5/7/2025 2:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
M	Manual Integration used to determine area response
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **25042163**

Date Reported: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334
Lab ID: 25042163-002
Client Sample ID: 25041334-002

Collection Date: 4/24/2025 10:02:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.110	1	5/8/2025 9:37:00 AM
Yield	1.00					1	5/8/2025 9:37:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.370	1	5/7/2025 2:45:00 PM
Yield	1.00					1	5/7/2025 2:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
M	Manual Integration used to determine area response
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **25042163**

Date Reported: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334
Lab ID: 25042163-003
Client Sample ID: 25041334-003

Collection Date: 4/24/2025 9:29:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0900	1	5/8/2025 9:37:00 AM
Yield	1.00					1	5/8/2025 9:37:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.380	1	5/7/2025 2:45:00 PM
Yield	1.00					1	5/7/2025 2:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
M	Manual Integration used to determine area response
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **25042163**

Date Reported: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334
Lab ID: 25042163-004
Client Sample ID: 25041334-004

Collection Date: 4/24/2025 10:36:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.160	1	5/8/2025 9:37:00 AM
Yield	1.00					1	5/8/2025 9:37:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	1.00	1.00		pCi/L	± 0.510	1	5/7/2025 2:45:00 PM
Yield	1.00					1	5/7/2025 2:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
M	Manual Integration used to determine area response
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode

Original

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Analytical Report

(consolidated)

WO#: **25042163**

Date Reported: **5/8/2025**

CLIENT: TEKLAB Inc,
Project: 25041334
Lab ID: 25042163-005
Client Sample ID: 25041334-005

Collection Date: 4/24/2025 10:03:00 AM
Matrix: NON-POTABLE WATER

Analyses	Result	RL	Qual	Units	Uncertainty	DF	Date Analyzed
RADIUM-226 (EPA 903.0)					**E903.0**	**E903-904**	Analyst: **HDJ**
Radium-226	ND	1.00		pCi/L	± 0.0700	1	5/8/2025 9:37:00 AM
Yield	1.00					1	5/8/2025 9:37:00 AM
RADIUM-228 (EPA 904.0)					**E904.0**	**E903-904**	Analyst: **HDJ**
Radium-228	ND	1.00		pCi/L	± 0.380	1	5/7/2025 2:45:00 PM
Yield	1.00					1	5/7/2025 2:45:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
M	Manual Integration used to determine area response
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode

Original

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QC SUMMARY REPORT

WO#: **25042163**

08-May-25

Client: TEKLAB Inc,
Project: 25041334 **BatchID:** **84183**

Sample ID: **MB-84183** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208450**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E904.0** **E903-904** Analysis Date: **5/7/2025** SeqNo: **5574285**

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

Sample ID: **LCS-84183** SampType: **LCS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208450**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E904.0** **E903-904** Analysis Date: **5/7/2025** SeqNo: **5574286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	3.58	1.00	5.000	0	71.6	50	130				
Yield	1.00			0	0						

Sample ID: **LCSD-84183** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208450**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E904.0** **E903-904** Analysis Date: **5/7/2025** SeqNo: **5574287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-228	4.07	1.00	5.000	0	81.4	50	130	3.580	12.8	20	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as spec

Original

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QC SUMMARY REPORT

WO#: **25042163**

08-May-25

Client: TEKLAB Inc,
Project: 25041334 **BatchID:** **84183**

Sample ID: **25040649-003ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208450**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E904.0** **E903-904** Analysis Date: **5/7/2025** SeqNo: **5574292**

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	
Yield	1.00			0	0			1.000	0		

Sample ID: **25040649-004ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208450**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E904.0** **E903-904** Analysis Date: **5/7/2025** SeqNo: **5574294**

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	
Yield	1.00			0	0			1.000	0		

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as spec

Original

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QC SUMMARY REPORT

WO#: **25042163**

08-May-25

Client: TEKLAB Inc,
Project: 25041334 **BatchID:** **84183**

Sample ID: **MB-84183** SampType: **MBLK** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208463**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E903.0** **E903-904** Analysis Date: **5/8/2025** SeqNo: **5574574**

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

Sample ID: **LCS-84183** SampType: **LCS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208463**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E903.0** **E903-904** Analysis Date: **5/8/2025** SeqNo: **5574575**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Radium-226	4.12	1.00	5.000	0	82.4	70	130				

Sample ID: **LCSD-84183** SampType: **LCSD** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/1/2025** RunNo: **208463**
Client ID: **BatchQC** Batch ID: **84183** TestNo: **E903.0** **E903-904** Analysis Date: **5/8/2025** SeqNo: **5574576**

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	4.120	11.0	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as spec

Original

Pg ___ of ___ 25042163

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 Sampler | QC Level: 2

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.

Project# 25041334

Contact: Shelly Hennessy | Email: shennessy@TekLabInc.com
Requested Due Date: ~~Standard TAT~~ 5/9/25 TE dm | Billing/PO: 38414 | Phone: (618) 344-1004 ext. 36

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	CPM=		pH=									
	25041334-001	4/24/25 1029	HNO3	Groundwater	✔	16.13		1.1									
	25041334-002	4/24/25 1002	HNO3	Groundwater	✔	12.19		1.1									
	25041334-003	4/24/25 0929	HNO3	Groundwater	✔	20.19		1.1									
	25041334-004	4/24/25 1036	HNO3	Groundwater	✔	9.9		1.1									
	25041334-005	4/24/25 1003	HNO3	Groundwater	✔	9.09		1.1									
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													
			Other	Aqueous													

*Relinquished By	Date/Time	Received By	Date/Time
[signature]	4/24/25 1700	[signature]	4/25/25 1300 Fedex box/code 200-00-20C C.S. intact 4703

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sample information without proper authorization. and proprietary rights, Teklab, Inc. protects clients' confidential information as directed by local, state or federal laws. (Teklab QAM Section 9.1, TNI V1 M2 Section 4.1.5 c)

SubCocRevA
3/2/2016

Alliance Technical Group - Akron
3310 Win St.
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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: 25042163 RcptNo: 1

Logged by:	Christina N. Gemma	4/28/2025 1:00:00 PM	C. Gemma
Completed By:	Christina N. Gemma	4/29/2025 9:14:17 AM	C. Gemma
Reviewed By:	Jennifer Woolf	4/29/2025 11:13:50 AM	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
Box	20.0					

Field Data Sheet

Project Name: FGDS Landfill
Project Location: Springfield, IL
W.O. Number (s): 25041334
Monitoring Point: R101
Sample ID: 001
Date (s): 4/24/2025

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.
Name: Affiliation:

Weather Conditions

Temp: 73 °F Wind Direction: ☐ N ☐ S ☐ E ☐ SE ☐ SW ☐ NE ☑ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☐ Clear ☑ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 4/24/2025 10:16
Static Water Level: 5.19 feet below TOC
Total Depth: 35.27 feet below TOC
Water Column: 30.08 feet

Purging Activities

Purged By: JC Purge Date: 4/24/2025
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 30.08 ft. x 0.022 = 0.66 L x 3 Vol. = 1.98 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 3.50 L
Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:17	0.0	292	purge start time						
10:20	0.9	↓	6.95	1,341.60	14.47	3.79	64.10	5.57	
10:23	1.8		6.89	1,339.30	14.74	3.52	63.30	5.16	
10:26	2.6		6.87	1,339.60	14.68	3.46	62.50	5.68	
10:29	3.5		6.86	1,341.50	14.38	3.42	61.90	5.07	

Sampling Activities

Sampled By: JC Sample Date/Time: 4/24/2025 10:29
Sample Method: Low Flow Sample Equipment: Peristaltic Pump
Sample Parameters: 6.86 pH 1,341.50 Spec. Cond. 14.38 Temp
Field Filtered: No Filter Type:
Water Level: 7.03 feet below TOC Drawdown: 1.84 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210756

Form Completed By: Justin Colp **Date:** 4/24/2025

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	P07D
Project Location:	Springfield, IL	**Sample ID:**	002
W.O. Number (s):	25041334	**Date (s):**	4/24/2025

Field Team Members

Name: Justin Colp Affiliation: TekLab, Inc.

Name: Affiliation:

Weather Conditions

Temp: 71 °F Wind Direction: ☐ N ☐ S ☐ E ☐ SE ☐ SW ☐ NE ☑ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☐ Clear ☑ Partly Cloudy ☐ Cloudy

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 4/24/2025 9:40

Static Water Level: 3.99 feet below TOC

Total Depth: 32.54 feet below TOC

Water Column: 28.55 feet

Purging Activities

Purged By: JC Purge Date: 4/24/2025

Purge Method: Peristaltic Pump Well Diameter: 2"

Purge Volume Calculation (L): 28.55 ft. x 0.022 = 0.63 L x 3 Vol. = 1.89 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 6.00 L

Physical appearance of purge water: Clear Odor: None Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:40	0.0	273	purge start time						
9:44	1.1	↓	6.79	1,525.50	14.11	1.49	84.50	268.11	
9:47	1.9		6.74	1,530.00	14.19	1.06	83.40	56.68	
9:50	2.7		6.72	1,543.10	14.07	0.93	82.40	28.59	
9:53	3.5		6.71	1,545.90	14.09	0.85	81.00	21.49	
9:56	4.4		6.71	1,548.80	14.17	0.82	79.40	14.70	
9:59	5.2		6.70	1,552.50	14.09	0.81	77.80	11.92	
10:02	6.0		6.70	1,551.60	13.94	0.79	76.20	10.97	

Sampling Activities

Sampled By: JC Sample Date/Time: 4/24/2025 10:02

Sample Method: Low Flow Sample Equipment: Peristaltic Pump

Sample Parameters: 6.70 pH 1,551.60 Spec. Cond. 13.94 Temp

Field Filtered: No Filter Type:

Water Level: 4.25 feet below TOC Drawdown: 0.26 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210756

Form Completed By: Justin Colp **Date:** 4/24/2025

Field Data Sheet

Project Name:	FGDS Landfill	**Monitoring Point:**	AW-2
Project Location:	Springfield, IL	**Sample ID:**	003
W.O. Number (s):	25041334	**Date (s):**	4/24/2025

Field Team Members

Name: Justin Colp — Affiliation: TekLab, Inc.

Name: — Affiliation:

Weather Conditions

Temp: 68 °F — Wind Direction: ☐ N ☐ S ☐ E ☐ SE ☐ SW ☐ NE ☑ NW

Precipitation: ☑ None ☐ Light ☐ Heavy — Sky: ☐ Clear ☑ Partly Cloudy ☐ Cloudy

Well Observations

Well Pad	Good
Casing	Good
Protective Casing	Good
Reference Mark/Identification	Yes

Locks	Yes	No
Protective Casing		X
Well		X

Groundwater Level Measurements

Date/Time Measured: 4/24/2025 9:11

Static Water Level: 3.79 feet below TOC

Total Depth: 32.64 feet below TOC

Water Column: 28.85 feet

Purging Activities

Purged By: JC — Purge Date: 4/24/2025

Purge Method: Peristaltic Pump — Well Diameter: 2"

Purge Volume Calculation (L): 28.85 ft. x 0.022 = 0.63 L x 3 Vol. = 1.89 L **Based on Low-Flow (3/8" discharge)*

Actual Purge Volume (L): 4.50 L

Physical appearance of purge water: Clear — Odor: None — Color: none

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:11	0.0	250	purge start time						
9:14	0.8	↓	6.78	1,056.00	13.91	1.75	65.60	17.13	
9:17	1.5		6.78	1,057.20	13.94	1.34	63.90	10.67	
9:20	2.3		6.78	1,051.80	14.95	1.43	63.00	10.36	
9:23	3.0		6.80	1,058.80	15.22	1.52	62.90	7.70	
9:26	3.8		6.80	1,060.40	15.19	1.39	63.10	7.79	
9:29	4.5		6.81	1,060.10	15.02	1.32	63.50	5.98	

Sampling Activities

Sampled By: JC — Sample Date/Time: 4/24/2025 9:29

Sample Method: Low Flow — Sample Equipment: Peristaltic Pump

Sample Parameters: 6.81 pH — 1,060.10 Spec. Cond. — 15.02 Temp

Field Filtered: No — Filter Type:

Water Level: 3.86 feet below TOC — Drawdown: 0.07 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 210756

Form Completed By: Justin Colp — **Date:** 4/24/2025

Field Data Sheet

Project Name: FGDS Landfill
Project Location: Springfield, IL
W.O. Number (s): 25041334
Monitoring Point: G121
Sample ID: 004
Date (s): 4/24/2025

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Payton Yoch Affiliation: TekLab, Inc.

Weather Conditions

Temp: 73 °F Wind Direction: ☐ N ☐ S ☐ E ☑ SE ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☐ Clear ☑ Partly Cloudy ☐ Cloudy

Well Observations

		Locks	Yes	No
Well Pad	Good	Protective Casing		X
Casing	Good	Well		X
Protective Casing	Good			
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 4/24/2025 9:31
Static Water Level: 27.13 feet below TOC
Total Depth: 58.56 feet below TOC
Water Column: 31.43 feet

Purging Activities

Purged By: BG Purge Date: 4/24/2025
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 31.43 ft. x 0.022 = 0.69 L x 3 Vol. = 2.07 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 7.50 L
Physical appearance of purge water: Clear Odor: Slight Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
10:19	0.0	441	purge start time						
10:24	2.2	↓	6.64	1,513.80	13.75	0.61	-127.80	14.06	
10:27	3.5		6.64	1,511.60	13.82	0.51	-132.50	15.64	
10:30	4.9		6.64	1,508.70	13.83	0.45	-135.40	18.78	
10:33	6.2		6.64	1,506.00	13.85	0.42	-138.00	29.33	
10:36	7.5		6.65	1,503.40	13.89	0.39	-140.00	77.86	

Sampling Activities

Sampled By: PY Sample Date/Time: 4/24/2025 10:36
Sample Method: Low Flow Sample Equipment: Peristaltic Pump
Sample Parameters: 6.65 pH 1,503.40 Spec. Cond. 13.89 Temp
Field Filtered: No Filter Type:
Water Level: 27.67 feet below TOC Drawdown: 0.54 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 45280

Form Completed By: Payton K **Date:** 4/24/2025

Field Data Sheet

Project Name: FGDS Landfill
Project Location: Springfield, IL
W.O. Number (s): 25041334
Monitoring Point: G122
Sample ID: 005
Date (s): 4/24/2025

Field Team Members

Name: Brett Gillihan Affiliation: TekLab, Inc.
Name: Payton Yoch Affiliation: TekLab, Inc.

Weather Conditions

Temp: 68 °F Wind Direction: ☐ N ☐ S ☐ E ☑ SE ☐ SW ☐ NE ☐ NW

Precipitation: ☑ None ☐ Light ☐ Heavy Sky: ☐ Clear ☑ Partly Cloudy ☐ Cloudy

Well Observations

		Locks	Yes	No
Well Pad	Good			
Casing	Good	Protective Casing		X
Protective Casing	Good	Well		X
Reference Mark/Identification	Yes			

Groundwater Level Measurements

Date/Time Measured: 4/24/2025 9:28
Static Water Level: 28.79 feet below TOC
Total Depth: 49.29 feet below TOC
Water Column: 20.50 feet

Purging Activities

Purged By: BG Purge Date: 4/24/2025
Purge Method: Peristaltic Pump Well Diameter: 2"
Purge Volume Calculation (L): 20.5 ft. x 0.022 = 0.45 L x 3 Vol. = 1.35 L **Based on Low-Flow (3/8" discharge)*
Actual Purge Volume (L): 11.00 L
Physical appearance of purge water: Slightly cloudy Odor: None Color: None

Purge Time	Cumulative Purge Vol.(L)	Purge Rate (mL/m)	pH (S.U.)	Specific Conductivity (µS/cm)	Temp (°C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)	Other
9:39	0.0	458	purge start time						
9:51	5.5	↓	6.54	1,776.30	13.76	0.63	-124.80	37.94	
9:54	6.9		6.55	1,777.40	13.87	0.53	-127.80	41.97	
9:57	8.3		6.55	1,774.50	13.91	0.50	-129.50	45.09	
10:00	9.6		6.54	1,771.90	13.92	0.47	-130.40	48.42	
10:03	11.0		6.54	1,769.50	13.98	0.44	-131.40	52.50	

Sampling Activities

Sampled By: PY Sample Date/Time: 4/24/2025 10:03
Sample Method: Low Flow Sample Equipment: Peristaltic Pump
Sample Parameters: 6.54 pH 1,769.50 Spec. Cond. 13.98 Temp
Field Filtered: No Filter Type:
Water Level: 28.99 feet below TOC Drawdown: 0.20 feet

Observations/Comments: (i.e., equipment malfunctions, contamination sources, sampling difficulties; duplicate sample)

- Field Meter: 45280

Form Completed By: Payton K **Date:** 4/24/2025

Site Samping Event: FGDS Landfill
LIMS Workorder: 25041334
Technician(s): JC, BG, PY

Field Calibration Log(s)
CWLP- 2Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 210756 Technician(s): justin colp Date: 4/24/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	wc250102a	4.00	4/24/25 8:39
7.0 Buffer	wc240913b	7.00	4/24/25 8:34
10.0 Buffer	wc240625a	10.00	4/24/25 8:43
LCS/CCV (7.0 Buffer)	wc240913c		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	103743	1412	4/24/25 8:50

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.13	4/24/25 8:51
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-JC	LCS	4/24/25 8:53	19.2	7.03	1,396	0.15		
CCV-1-JC	CCV	4/24/25 10:54	24	7.06	1,388	0.07		

Comments:

Site Samping Event: FGDS Landfill
LIMS Workorder: 25041334
Technician(s): JC, BG, PY

Field Calibration Log(s)
CWLP- 2Q 2025

Field Temp SOP 1156 - SM 2550 B
Field pH SOP 1152 - SW-846 9040B - SM 4500-H B
Field Cond. SOP 1155 - SW-846 9050A - SM 2510 B

Field Meter ID: Pine 45280 Technician(s): Payton Yoch Date: 4/24/2025

pH Standards	LIMS ID	Calibration reading	Date/Time
4.0 Buffer	WC250102A	4.00	4/24/25 9:05
7.0 Buffer	WC240913B	7.00	4/24/25 9:04
10.0 Buffer	WC240625A	10.00	4/24/25 9:08
LCS/CCV (7.0 Buffer)	WC240913C		

Conductivity Standard	LIMS ID	Reading	Date/Time
1,412 µS Std.	10374	1412	4/24/25 9:11

Turbidity Standard	LIMS ID	Reading	Date/Time
0 NTU (DI Water)	1	0.34	4/24/25 9:15
124 NTU	95834		

ORP Standard	LIMS ID/Lot#	Reading	Date/Time

D.O. Saturation	LIMS ID/Lot#	Reading	Date/Time
100%	N/A		

Sample ID	Sample Type	Date/Time	Temp. °C	pH S.U.	Conductivity µS	Turbidity NTU	ORP mV	D.O. %
LCS-1-PY	LCS	4/24/25 9:16	20.3	7.07	1,412	0.34		
CCV-1-PY	CCV	4/24/25 10:44	20.9	7.07	1,426	0.43		

Comments: