**Ex. 38**

**City Water, Light & Power**
**Coal Combustion Residuals Surface Impoundments**

# Annual Groundwater Monitoring and Corrective Action Report Year Ending December 31, 2023

**January 2024**

*Prepared for:*
City Water, Light & Power
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ILLINOIS | MISSOURI | INDIANA

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# 1. INTRODUCTION

In accordance with 35 Ill. Adm. Code 845.550(a)(3) provided herein is the Annual Groundwater Monitoring and Corrective Action Report for year ending December 31, 2023. Pursuant to Section 845.610(e)(1), the Annual Groundwater Monitoring and Corrective Action Report must be included as part of the annual consolidated report required by Section 845.550.

City Water, Light and Power (CWLP) owns and operates two (2) existing coal combustion residual (CCR) surface impoundments. The CWLP CCR surface impoundments 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). These CCR surface impoundments are identified as the Lakeside Ash Pond and the Dallman Ash Pond (see Figure 2).

The former Lakeside Power Generating Station and Dallman Power Generating Station are situated on the northwestern bank of Lake Springfield in Springfield, Illinois. The Lakeside Ash Pond is immediately north of Spaulding Dam at the northern end of Lake Springfield. The Dallman Ash Pond is immediately northwest of the Lakeside Ash Pond. Placed into service prior to 1958, the Lakeside Ash Pond is primarily a diked embankment. The Lakeside Ash Pond consists of four separate ponds (i.e., three lime ponds and a settling pond) totaling approximately 35.0 acres. The Lakeside Ash Pond ceased receiving ash in 2009. The Dallman Ash Pond was placed into service in approximately 1976 and is also a diked embankment. The Dallman Ash Pond is approximately 34.5 acres and ceased receiving ash in 2021.

As of October 13, 2023, all CCR and non-CCR waste streams ceased flowing into the Lakeside Ash Pond and Dallman Ash Pond.

***Status of the Groundwater Monitoring and Corrective Action Programs***

Pursuant to Section 845.610(e)(4), the annual report must provide an overview of the groundwater monitoring program and corrective action plan. The summary must:

A) Specify whether groundwater monitoring data shows a statistically significant increase over background concentrations for one or more constituents listed in Section 845.600;

Pursuant to 35 Ill. Adm. Code 845.600, CWLP submitted to the Illinois EPA and placed into the facility record a Groundwater Monitoring Program (GMP) for the CCR surface impoundments on October 28, 2021. The background concentrations presented in the GMP are based upon eight independent samples collected from each background and downgradient well and analyzed for the monitoring parameters listed in Section 845.600:

- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium
- Cobalt
- Fluoride
- Lead
- Lithium
- Mercury
- Molybdenum
- pH
- Radium 226/228
- Selenium
- Sulfate
- Thallium
- Total Dissolved Solids

The initial eight independent samples were collected over the second quarter 2015 through first quarter 2017. The detection monitoring program was initiated with the first sampling event on November 9, 2017. At that time, the groundwater monitoring network was comprised of two upgradient wells (AP-4 and AP-5) and four downgradient wells (AW-3, AP-1R, AP-2A and AP-3).

The present groundwater monitoring network includes two upgradient wells (wells AP-4 and AP-5), eight downgradient wells (RW-3, AP-1R, AP-2A, AP-3, AP-6, AP-7, AP-8, AP-10 and AP-14) and five compliance boundary wells (AP-7, AP-9, AP-11, AP-12 and AP-13). During 2023, groundwater analytical results were compared to the groundwater protection/background values as presented in the October 28, 2021 submittal (see Table 1). Reports documenting exceedances of the calculated background were submitted to the Illinois EPA and placed into the facility record for 2023.

As indicated in the section identified as Groundwater Monitoring Information [35 Ill. Adm. Code 845.230(d)(2)(I)] of the Illinois EPA's October 10, 2023 review letter regarding CWLP's CCR Surface Impoundment Operating and Construction Permit Application and supporting information submitted October 28, 2021 and February 1, 2022, groundwater protection/background values should be recalculated. CWLP will be revising the background values for the groundwater analytical parameters based upon the Illinois EPA's guidance.

Pursuant to 35 Ill. Adm. Code 845.640(d) the background groundwater quality has been established for each of the constituents listed in 35 Ill. Adm. Code 845.600 by using the upgradient and background wells described under 35 Ill. Adm. Code 845.630(a)(1), as applicable for groundwater monitoring requirements (35 Ill. Adm. Code 845.650). The upgradient and background wells include AP-4 and AP-5.

Pursuant to 35 Ill. Adm. Code 845.640(f), the selected statistical method used to evaluate groundwater monitoring data for each constituent is the Prediction Interval Procedure under 35 Ill. Adm. Code 845.640(f)(1)(C). For this procedure, an interval for each constituent is established from the distribution of the background data and then the level of each constituent in each

compliance well (i.e., well/constituent) is compared to the upper prediction limit to assess if a statistically significant increase (SSI) over background has occurred.

Based upon this evaluation groundwater monitoring data for 2023 exhibits a statistically significant increase (SSI) over background concentrations for multiple constituents listed in Section 845.600.

B) Identify those constituents having a statistically significant increase over background concentrations and the names of the monitoring wells associated with the increase;

The constituents and wells that exhibit an SSI over background concentrations in 2023 are:

| *Parameter* | *AP-1* | *AP-2* | *AP-3* | *AP-4* | *AP-5* | *AP-6* | *AP-7* | *AP-8* | *AP-9* | *AP-10* | *AP-11* | *AP-12* | *AP-13* | *AP-14* | *RW-3* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Arsenic, total* | | | | | | | | | | | | | | | *X* |
| *Boron, total* | *X* | *X* | *X* | | | | | | | *X* | | | | *X* | |
| *Calcium, total* | *X* | *X* | *X* | | | | | | | | | *X* | | *X* | |
| *Chloride, total* | *X* | *X* | *X* | | | *X* | *X* | *X* | *X* | *X* | *X* | *X* | *X* | *X* | *X* |
| *pH* | *X* | *X* | *X* | | | | | | | *X* | *X* | *X* | *X* | | |
| *Sulfate, total* | *X* | *X* | *X* | | | | | | | *X* | *X* | *X* | *X* | *X* | |
| *Total Dissolved Solids* | *X* | *X* | *X* | | | | | | | *X* | *X* | *X* | | *X* | |

C) Specify whether there have been any exceedances of the groundwater protection standards for one or more constituents listed in Section 845.600;

Pursuant to Section 845.120, "Exceedance of the groundwater protection standard" means:

For existing CCR surface impoundments and inactive CCR surface impoundments:

- an analytical result with a concentration greater than the numerical value of the constituents listed in Section 845.600(a), in a down gradient well; or
- when the up gradient background concentration of a constituent exceeds the numerical value listed in Section 845.600(a), an analytical result with a concentration at a statistically significant level above the up gradient background concentration, in a down gradient well.

Based upon this evaluation, groundwater monitoring data for 2023 exhibits a SSI of the groundwater protection standards (GWPS) for multiple constituents listed in Section 845.600.

D) Identify those constituents with exceedances of the groundwater protection standards in Section 845.600 and the names of the monitoring wells associated with the exceedance;

The constituents that exhibit an SSI of a GWPS in 2023 are:

| Parameter | AP-1 | AP-2 | AP-3 | AP-4 | AP-5 | AP-6 | AP-7 | AP-8 | AP-9 | AP-10 | AP-11 | AP-12 | AP-13 | AP-14 | RW-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic, total | | | | | | | | | | | | | | | X |
| Boron, total | X | X | X | | | | | | | X | | | | X | |
| Calcium, total | X | X | X | | | | | | | | | X | | X | |
| pH | | X | | | | | | | | | X | X | | | |
| Sulfate, total | X | X | X | | | | | | | | | X | | X | |
| Total Dissolved Solids | X | | | | | | | | | | | X | | X | |

E) Provide the date when the assessment of corrective measures was initiated for the CCR surface impoundment;

The assessment of corrective measures was initiated May 2021.

F) Provide the date when the assessment of corrective measures was completed for the CCR surface impoundment

An assessment of alternatives containing an assessment of corrective measures and closure alternatives analysis was completed and posted on the facility's CCR compliance website on October 25, 2021. A public meeting occurred on December 2, 2021 to present the closure alternatives and corrective action analysis and to receive and respond to public comments. Based on the assessment of closure alternatives it has been determined that closure-in-place with a final cover system is most appropriate.

As provided in Section 845.660(e), the owner/operator may combine the corrective measures assessment and the closure alternatives analysis into one assessment of alternatives. The groundwater monitoring program has identified constituent concentrations in downgradient wells that require implementation of assessment of corrective measures. The facility anticipates conducting closure activities simultaneously with corrective action based on results from groundwater sampling and analyses.

G) Specify whether a remedy was selected under Section 845.670 during the current annual reporting period, and if so, the date of remedy selection; and

Pursuant to Section 845.710 closure of the surface impoundments may be completed by either:

- leaving the CCR in place and installing a final cover system, or;
- through removal of the CCR and decontamination of the surface impoundments.

At this time, CWLP has chosen closure in place with a final cover system as the most appropriate remedy. CWLP submitted a construction permit application for closure by installing a final cover system pursuant to Section 845.750 on February 1, 2022. CWLP received a review letter from the Illinois EPA dated October 10, 2023. CWLP is in the process of addressing the Illinois EPA comments.

H) Specify whether remedial activities were initiated or are ongoing under Section 845.780 during the current annual reporting period.

In April 2019, CWLP submitted notification of intent to comply with the Alternative Closure Requirements of 40 CFR 257.103(a) since no alternative disposal capacity is currently available. Since then, CWLP has shut down Dallman Units 31, 32 and 33 and has completed the relocation of the lime ponds. All CCR and non-CCR waste streams ceased flowing into the impoundments since October 2023. While it has been CWLP's intent to commence closure of the Lakeside Ash Pond and the Dallman Ash Pond with the completion of the new lime pond processing area, closure of the CCR ash impoundments cannot begin until a closure construction permit is issued by IEPA. CWLP submitted an Operating Permit Application to the Illinois EPA on October 28, 2021 and a Construction Permit Application to the Illinois EPA on February 1, 2022. CWLP is in the process of addressing the Illinois EPA comments presented in the October 10, 2023 review letter.

## 2. GROUNDWATER MONITORING PROGRAM

As required Section 845.650(a), CWLP prepared and placed into the facility record a Groundwater Monitoring Program for the CCR surface impoundments on October 28, 2021. The current monitoring network includes two upgradient wells (wells AP-4 and AP-5) and thirteen downgradient wells (AP-1R, AP-2A, AP-3, AP-6, AP-7, AP-8, AP-9, AP-10, AP-11, AP-12, AP-13, AP-14 and RW-3). Wells AP-7, AP-9, AP-11, AP-12 and AP-13 are compliance boundary wells. The well locations are depicted in Figure 2.

A Groundwater Monitoring System Certification has been provided for the Groundwater Monitoring Program, placed in the site record and uploaded to the facility Illinois CCR Compliance website - https://www.cwlp.com/IllinoisCCRCompliance.aspx.

The following sections of the report address the annual groundwater monitoring and corrective action report requirements outlined in Section 845(e)(2) and (3).

# 3. SECTION 845.610(E)(2): KEY ACTIONS, PROBLEMS ENCOUNTERED, AND KEY ACTIVITIES FOR 2024

## 3.1 Key Actions

The following items identify key actions that occurred in 2023 specifically related to the Groundwater Monitoring Program.

### *3.1.1 Assessment Monitoring*

In accordance with Section 845.660(a) CWLP has initiated an assessment of corrective measures in response to the statistically significant increase (SSI) over background concentrations or the groundwater quality standards for one or more parameters listed in Section 845.600(a). Pursuant to Section 845.660(b), CWLP shall continue to monitor groundwater in accordance with the monitoring program as specified in Section 845.650.

Assessment monitoring, which includes all Section 845.600(a) parameters, calcium and turbidity, continued throughout 2023 for all wells in the groundwater monitoring system. A summary of the 2023 groundwater analytical results is The analytical reports and field sampling notes are provided in Table 1.

### *3.1.2 Assessment Monitoring Investigation*

Pursuant to Section 845.650(d)(1), the nature and extent of affected groundwater must be determined such that potential remedies can be evaluated and selected, if necessary. Characterization of the nature and extent of affected groundwater is regulated pursuant to Section 845.650(d)(1)(A-D).

Seven wells were installed in February 2021 to augment the monitor well network and evaluate exceedances of the GWPSs, all in conformance with Section 845.650(d)(1). Wells AP-10 and AP-14 were installed along the west side of the impoundments and compliance boundary wells AP-9, AP-11, AP-12 and AP-13 were installed west of the creek.

GWPS exceedances were observed and confirmed in downgradient wells (AP-1R, AP-2A, AP-3, AP-10, AP-14 and RW-3) and compliance boundary wells (AP-11 and AP-12) during the 2023 quarterly groundwater sampling events (see Table 2).

Pursuant to 35 Ill. Adm. Code 845.650(d) CWLP has submitted notification of the exceedances of the GWPS to the Illinois EPA and posting each notification to their Illinois EPA CCR Compliance web page (https://www.cwlp.com/IllinoisCCRCompliance.aspx).

An alternate source demonstration pursuant to 35 Ill. Adm. Code 845.650(e) was submitted to the Illinois EPA on September 12, 2022 to address the exceedances observed at monitoring well AP-12. The remaining exceedances (i.e., at wells AP-1R, AP-2A, AP-3, AP-10, AP-14 and RW-3) have been delineated pursuant to 35 Ill. Adm. Code 845.650(d)(1). The alternate source demonstration is currently under review by the Illinois EPA.

Assessment monitoring data collected for the 2023 quarterly sampling events are provided in tabular format in Table 1. The data includes the sample dates and identifies the Section 845.600 parameters.

Assessment monitoring shall continue at the CWLP CCR surface impoundments pursuant to Section 845.660(b).

## 3.2 Assessment of Corrective Measures

As provided in Section 845.660(e), the owner/operator may combine the assessment of corrective measures and the closure analysis into one assessment of closure alternatives. The groundwater monitoring program has identified constituent concentrations in downgradient wells that require implementation of assessment of corrective measures. The facility anticipates conducting closure activities simultaneously with corrective action based on results from groundwater sampling and analyses. The assessment of corrective measures has been conducted pursuant to Section 845.660 and is incorporated into the assessment of alternatives pursuant to Section 845.660(e).

Pursuant to Section 845.700(b) the surface impoundments must either retrofit and/or close, which are the long term corrective measures. The closure alternative analysis was completed and posted to the facility website on October 25, 2021. A public meeting was held on December 2, 2021 to present the closure alternatives assessment and assessment of corrective measures and to receive and respond to public comments. Based on the assessment of closure alternatives it has been determined that closure-in-place with a final cover system is most appropriate. Once the ash impoundments are capped, it will take approximately 13 years to achieve the groundwater protection standards.

Both of these assessments were submitted to the Illinois EPA on February 1, 2022 as part of the closure construction permit application prepared pursuant to Section 845.700(c), and containing a final closure plan in accordance with the application schedule under Section 845.700(h). CWLP is in the process of addressing the Illinois EPA comments presented in the October 10, 2023 review letter.

## 3.3 Problems Encountered

All activities which occurred in 2023 are discussed in Section 3.1 and 3.2 above. No problems were encountered.

### 3.4 Key Activities for Upcoming Year (2024)

Assessment monitoring shall continue at the CWLP CCR surface impoundments pursuant to Section 845.660(b).

Closure of the CCR ash impoundments cannot begin until a closure construction permit is issued by IEPA. CWLP submitted an Operating Permit Application to the Illinois EPA on October 28, 2021 and a Construction Permit Application to the Illinois EPA on February 1, 2022. The Illinois EPA has provided comments in response to the applications; a meeting was held November 16, 2023 to discuss the comments, in part. It is expected that additional information will be submitted in 2024 that may affect the impoundment closure process.

CWLP is currently in the process of recalculating backgrounds at the request of U.S. EPA and will be submitting proposed revised backgrounds for the 845 program for Illinois EPA approval in the near future.

## 4. SECTION 845.610(E)(3)(A-F)

Additional requirements for the Annual Groundwater Monitoring and Corrective Action Report are detailed in Section 854.610(e)(3)(A-F). Each of the requirements is reproduced below along with the response.

A map, aerial image, or diagram showing the CCR surface impoundment, all background (or upgradient) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the CCR surface impoundment, and a visual delineation of any exceedances of the groundwater protection standards.

Maps depicting the CCR surface impoundments, all background and downgradient monitoring wells and delineation of the identified exceedances of the groundwater protection standards are provided in Appendix A.

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken.

No CCR surface impoundment monitoring wells were installed or decommissioned in 2023.

A potentiometric surface map for each groundwater elevation sampling event required by Section 845.650(b)(2).

Potentiometric surface maps for each of the monthly sampling events are provided in Appendix B.

As depicted on the potentiometric surface maps, groundwater generally flows radially from the CCR surface impoundment locations with an overall northerly groundwater flow.

In addition to all the monitoring data obtained under this Subpart, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, and the dates the samples were collected.

Pursuant to Section 845.650(b)(1), groundwater samples are collected on a quarterly basis. The laboratory analytical reports for the parameters at Section 845.600(a), calcium, and turbidity for each of the quarterly groundwater sampling events are provided in Appendix C.

A narrative discussion of any statistically significant increases over background levels for the constituents listed in Section 845.600; and

Sampling and analyses has occurred at each of the wells listed above for the parameters identified in Section 845.600(a)(1) including calcium and turbidity. The results of 2023 quarterly sampling indicate exceedance of the GWPSs for seven parameters: arsenic, boron, calcium, pH, sulfate and TDS. A summary table of the exceedances is provided as Table 2. The exceedances of the GWPSs for these parameters are discussed below.

*Arsenic, total*

Confirmed exceedances of the GWPS occurred for total arsenic (0.0724 mg/L) at downgradient groundwater monitoring well RW-3 during 2023.

The total arsenic concentrations at well RW-3 ranged from 0.0831 to 0.74 mg/L, respectively. Total arsenic concentrations at well RW-3 have historically been above the statistically derived background groundwater concentration with no upward or downward trend. The concentrations at this location appear to be related to some spatial variation. Total arsenic concentrations are typically low to non-detect (<0.025 mg/L) in other downgradient groundwater monitoring wells. There are two wells located downgradient/north of RW-3. These wells are AP-6 and compliance boundary well AP-7.

The total arsenic concentrations at groundwater monitoring well AP-6 installed at a distance of 83 feet downgradient of RW-3, were non-detect (<0.25 mg/L) for the first and second quarters of 2023 and 0.004 mg/L and 0.0183 mg/L for the third and fourth quarters 2023, respectively. At compliance boundary well AP-7, located further north of RW-3, at a distance of 298 feet downgradient of RW-3 total arsenic was non-detect (<0.25 mg/L) for the first quarter 2023 and 0.0462 mg/L, 0.0412 mg/L and 0.075 mg/L for the second, third and fourth quarters 2023. Slightly higher than that detected at AP-6, located closer to RW-3.

*Boron, total*

Confirmed exceedances of the total boron GWPS (2 mg/L) occurred at downgradient wells AP-1R, AP-2A, AP-3, AP-10 and AP-14 during each of the quarterly groundwater sampling events for 2023.

The concentrations of total boron at well AP-1R ranged from 21.2 to 23.2 mg/L. At well AP-2A total boron concentrations ranged from 3.23 to 3.94 mg/L. Well AP-3 concentrations ranged from 14 to 15.2 mg/L. At well AP-10 total boron concentrations ranged from 3.32 to 3.81 mg/L. Lastly, at well AP-14 total boron concentrations ranged from 21.3 to 23 mg/L.

Groundwater monitoring wells AP-7, AP-9, AP-11, AP-12 and AP-13 are located adjacent to the impoundments but on the opposite bank of Sugar Creek. The analytical results for these compliance boundary wells demonstrate that the GWPS for total boron is not exceeded beyond the limits of Sugar Creek in this area.

The concentrations of total boron detected at wells AP-1R, AP-2A, AP-3, AP-10 and AP-14 have consistently been above the GWPS with no upward or downward trend.

*Calcium, total*

There were confirmed exceedances of the GWPS for total calcium (176.63 mg/L) at downgradient groundwater monitoring wells AP-1R, AP-2A, AP-3, AP-12 and AP-14 during 2023. The calcium concentrations at AP-1R ranged from 229 to 285 mg/L. At AP-2A, calcium concentrations ranged from 204 to 244 mg/L. The total calcium concentration at AP-3 ranged from 161 to 189 mg/L. At AP-12 total calcium concentrations ranged from 265 to 271 mg/L. Lastly at well AP-14 total calcium ranged from 209 to 278 mg/L.

Total calcium concentrations at wells AP-1R, AP-2A, AP-3, AP-12 and AP-14 are consistent with historical concentrations. There does not appear to be any upward or downward trend. It should be pointed out that the concentrations at AP-12, located on the bank of Sugar Creek opposite the CCR surface impoundment are consistently higher than the concentrations of calcium observed in monitoring wells located adjacent to the CCR surface impoundments. This supports the September 12, 2022 alternate source demonstration that the GWPS exceedances for total calcium observed at compliance boundary well AP-12 are likely a result of an off-site source. The September 12, 2022 alternate source demonstration is still under review by the Illinois EPA.

*pH (Field)*

There were confirmed exceedances of the field measured water quality parameter pH GWPS (6.5 to 9 pH units) at wells AP-2A, AP-11 and AP-12. At well AP-2A, pH values ranged from 6.4 to 6.44 s.u. over the first three quarters of 2023. However, the pH returned to the limits of the GWPS

during the fourth quarter 2023 (6.57 s.u.). At well AP-11 pH for the first and second quarters of 2023 were 6.42 and 6.45 s.u. with the pH returning to the GWPS during the third and fourth quarter 2023 (6.64 and 6.6 s.u., respectively). Similar to AP-11, the pH at well AP-12 exceeded the GWPS during the first and second quarters of 2023 (6.47 and 6.43 s.u.) and returned to the GWPS during the third and fourth quarter 2023 (6.57 and 6.62 s.u., respectively). There is not upward or downward trend in pH for the ash pond groundwater monitoring wells.

*Sulfate, total*

There were confirmed exceedances of the GWPS for total sulfate (400 mg/L) at downgradient groundwater monitoring wells AP-1R, AP-2A, AP-3, AP-12 and AP-14 during year 2023 groundwater sampling events. The concentrations at well AP-1R ranged from 443 to 781 mg/L. At well AP-2A total sulfate concentrations ranged from 380 to 795 mg/L. The total sulfate concentrations at AP-3 ranged from 461 to 495 mg/L. Well AP-12 total sulfate concentrations ranged from 563 to 659 mg/L. At well AP-14 total sulfate ranged from 699 to 806 mg/L.

Total sulfate concentrations at wells in wells AP-1R, AP-2A, AP-3, AP-12 and AP-14 are consistent with historical concentrations. There does not appear to be any upward or downward trend.

*Total Dissolved Solids*

There were confirmed exceedances of the GWPS (1200 mg/L) for total dissolved solids (TDS) at downgradient monitoring wells AP-1R, AP-12 and AP-14 for the 2023 review period. TDS concentrations at AP-1R ranged from 1190 to 1540 mg/L. At well AP-12, the TDS concentrations ranged from 1320 to 1640 mg/L. Total dissolved solids at well AP-14 ranged from 1280 to 1480 mg/L.

TDS concentrations at well AP-1R has historically been elevated. TDS is the sum of the cations and anions in the water. TDS provides a qualitative measure of the amount of dissolved ions but not the nature or ion relationships. The elevated TDS in these wells is likely an indicator of the higher boron, calcium, chloride and sulfate concentrations detected in these wells.

The elevated TDS concentrations at compliance boundary well AP-12 are similarly attributed to elevated cation and anion concentrations in groundwater. However, the TDS concentrations at AP-12 do not appear to be attributed to the CCR surface impoundments but to an offsite sources west of Sugar Creek.

Other information required to be included in the annual report as specified in 35 Ill. Adm. Code 845.Subpart F.

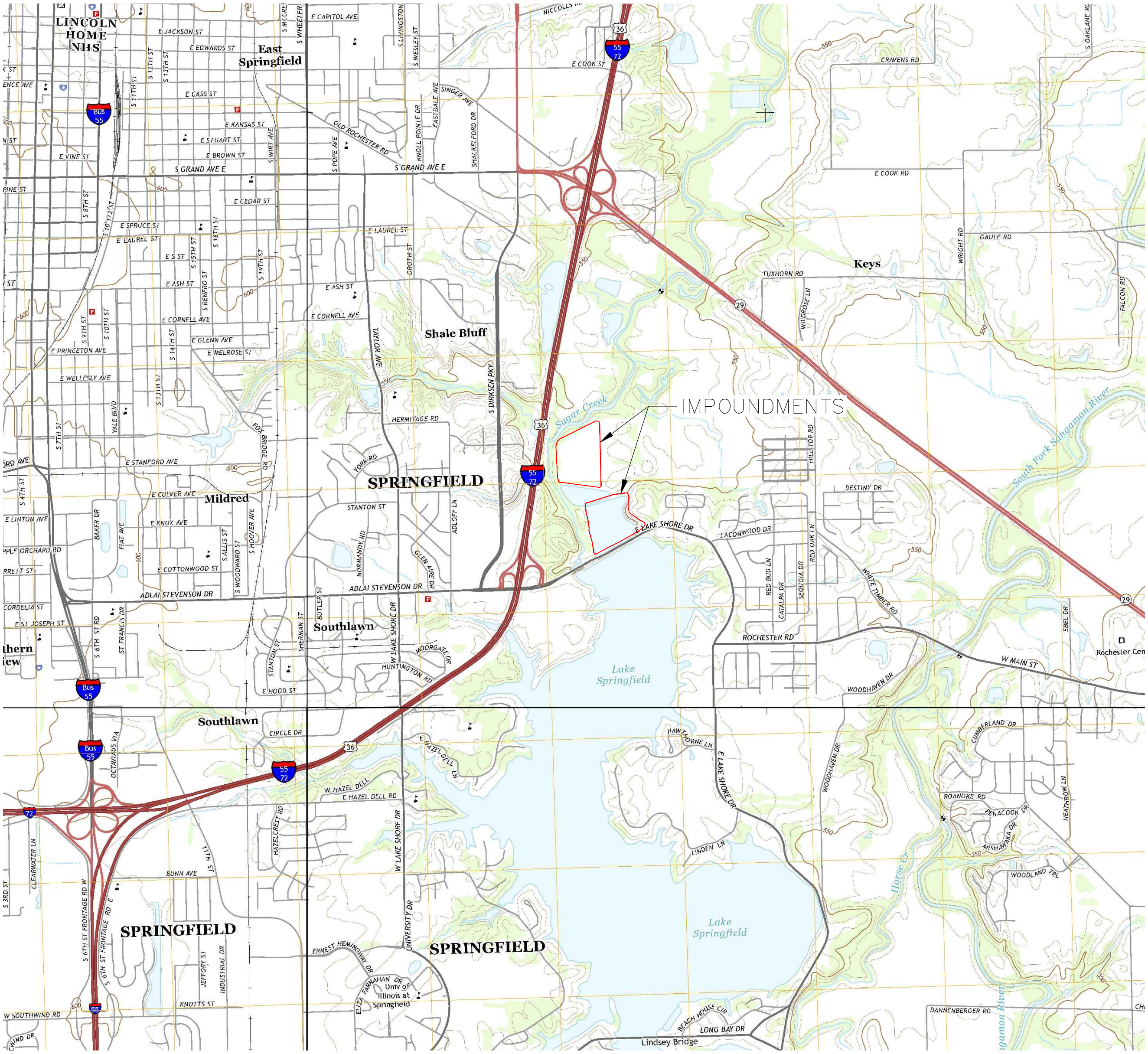
All applicable information has been provided in the narrative above.

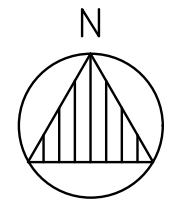
## 5. CONCLUSION

This annual groundwater monitoring and corrective action report has been provided in accordance with Section 845.550(a)(3). The next annual report for monitoring year 2024 will be provided by January 31, 2025.

# FIGURES

J:\S\Springfield CWLP\CWLP\dwg\2021\Site Map.dwg     Tab: Layout1




0 200 4000 8000

SCALE: IN FEET




NOTE:

BACKGROUND IMAGE COURTESY OF
UNITED STATES GEOLOGICAL SURVEY.


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| | | |
|---|---|---|
| APPROVED BY: BJH | DESIGNED BY: BJH | DRAWN BY: MPN |

SITE LOCATION

PLANS PREPARED FOR

CITY, WATER, LIGHT & POWER

SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

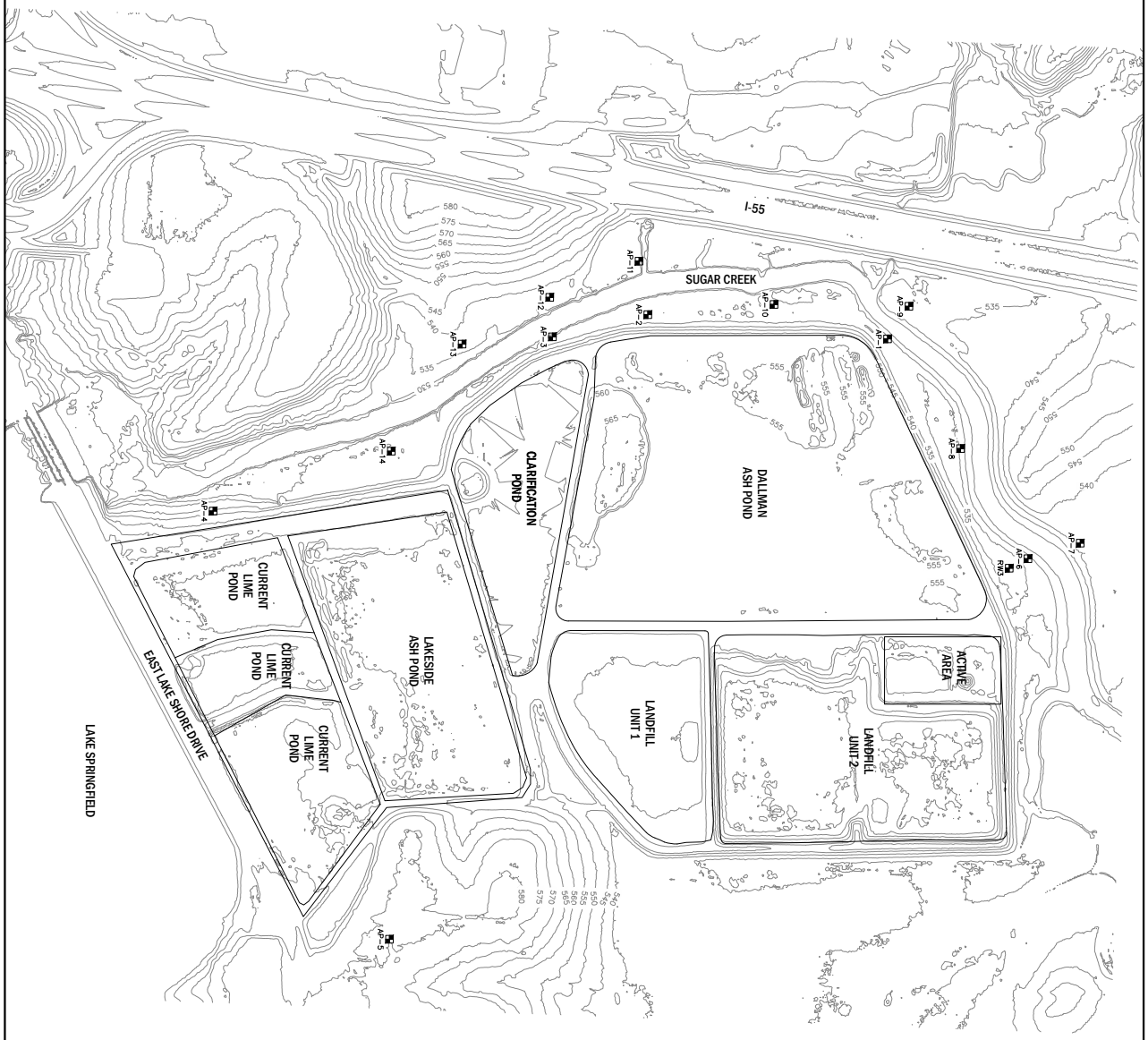
DATE: JANUARY 2023

PROJECT ID: 200387/0026

SHEET NUMBER: FIGURE 1

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SC_016




0 200 400 800
SCALE: IN FEET

N

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2019).

## LEGEND

MONITORING WELL

FIG 2

SITE DETAILS MAP

PREPARED FOR

CITY WATER, LIGHT, AND POWER

SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2023
PROJECT ID: 200387.0003
SHEET NUMBER:

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APPROVED BY: BJH | DESIGNED BY: MTH | DRAWN BY: BCK

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

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# TABLE

# TABLE 1:

## 2023 GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| AP-1 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-2 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-3 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-4 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-5 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-6 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-7 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-8 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-9 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-10 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-11 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-12 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | 0.0015 | < 0.001 | < 0.001 | < 0.001 |
| AP-13 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-14 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| RW-3 | Antimony, total | mg/l | 0.006 | 0.016 | 0.016 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-1 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | < 0.001 | < 0.001 |
| AP-2 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.002 | 0.002 |
| AP-3 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.0109 | 0.0182 |
| AP-4 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | 0.025 | 0.0239 | 0.0225 |
| AP-5 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | < 0.001 | < 0.001 |
| AP-6 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.004 | 0.0183 |
| AP-7 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | 0.0462 | 0.0412 | 0.075 |
| AP-8 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | 0.0336 | 0.0348 | 0.0513 | 0.0395 |
| AP-9 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.0114 | 0.0062 |
| AP-10 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.0013 | < 0.001 |
| AP-11 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | < 0.001 | < 0.001 |
| AP-12 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | < 0.001 | 0.0149 |
| AP-13 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.0031 | 0.0075 |
| AP-14 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | < 0.025 | < 0.025 | 0.0018 | 0.0036 |
| RW-3 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | 0.169 | 0.185 | 0.0831 | 0.74 |
| AP-1 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.236 | 0.329 | 0.271 | 0.262 |
| AP-2 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.0744 | 0.0656 | 0.0719 | 0.0716 |
| AP-3 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.111 | 0.103 | 0.0993 | 0.113 |
| AP-4 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.39 | 0.404 | 0.396 | 0.381 |
| AP-5 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.0408 | 0.0451 | 0.0461 | 0.0471 |
| AP-6 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.0938 | 0.111 | 0.0844 | 0.16 |
| AP-7 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.111 | 0.162 | 0.106 | 0.158 |
| AP-8 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.36 | 0.375 | 0.378 | 0.374 |
| AP-9 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.284 | 0.295 | 0.324 | 0.399 |
| AP-10 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.509 | 0.602 | 0.596 | 0.583 |
| AP-11 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.37 | 0.161 | 0.113 | 0.126 |
| AP-12 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.0794 | 0.0649 | 0.0481 | 0.138 |
| AP-13 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.175 | 0.128 | 0.121 | 0.177 |
| AP-14 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.0413 | 0.0389 | 0.0349 | 0.0636 |
| RW-3 | Barium, total | mg/l | 2 | 5.24 | 5.24 | 0.168 | 0.172 | 0.106 | 0.165 |
| AP-1 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-2 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-3 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-4 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-5 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-6 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-7 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-8 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-9 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-10 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-11 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | 0.0009 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-12 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | 0.0015 |
| AP-13 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | 0.0009 |
| AP-14 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| RW-3 | Beryllium, total | mg/l | 0.004 | 0.0164 | 0.0164 | < 0.0005 | < 0.0005 | < 0.0005 | < 0.0005 |
| AP-1 | Boron, total | mg/l | 2 | 0.787 | 2 | 23.2 | 21.2 | 22.5 | 21.7 |
| AP-2 | Boron, total | mg/l | 2 | 0.787 | 2 | 3.94 | 3.7 | 3.73 | 3.23 |
| AP-3 | Boron, total | mg/l | 2 | 0.787 | 2 | 14.5 | 14.3 | 14 | 15.2 |
| AP-4 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0918 | 0.101 | 0.0845 | 0.0841 |
| AP-5 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0353 | 0.0311 | 0.0323 | 0.0455 |
| AP-6 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.13 | 0.174 | 0.0753 | 0.214 |
| AP-7 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.18 | 0.391 | 0.141 | 0.331 |
| AP-8 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0849 | 0.11 | 0.0932 | 0.0896 |
| AP-9 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0973 | 0.102 | 0.0807 | 0.0956 |
| AP-10 | Boron, total | mg/l | 2 | 0.787 | 2 | 3.32 | 3.76 | 3.81 | 3.6 |
| AP-11 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.282 | 0.241 | 0.24 | 0.256 |
| AP-12 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0277 | < 0.02 | < 0.02 | 0.038 |
| AP-13 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.0485 | 0.0328 | 0.0235 | 0.0386 |
| AP-14 | Boron, total | mg/l | 2 | 0.787 | 2 | 21.3 | 23 | 22.6 | 22.1 |
| RW-3 | Boron, total | mg/l | 2 | 0.787 | 2 | 0.175 | 0.186 | 0.0595 | 0.117 |
| AP-1 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-2 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-3 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-4 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-5 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-6 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-7 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-8 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-9 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-10 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-11 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-12 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-13 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-14 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| RW-3 | Cadmium, total | mg/l | 0.005 | 0.0128 | 0.0128 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-1 | Calcium, total | mg/l | na | 176.63 | 176.63 | 230 | 242 | 285 | 229 |
| AP-2 | Calcium, total | mg/l | na | 176.63 | 176.63 | 217 | 210 | 244 | 204 |
| AP-3 | Calcium, total | mg/l | na | 176.63 | 176.63 | 161 | 168 | 189 | 181 |
| AP-4 | Calcium, total | mg/l | na | 176.63 | 176.63 | 115 | 125 | 132 | 118 |
| AP-5 | Calcium, total | mg/l | na | 176.63 | 176.63 | 78.3 | 80.4 | 96.3 | 90.7 |
| AP-6 | Calcium, total | mg/l | na | 176.63 | 176.63 | 52.4 | 60.9 | 49 | 65.8 |
| AP-7 | Calcium, total | mg/l | na | 176.63 | 176.63 | 49.3 | 53.6 | 49.6 | 50.6 |
| AP-8 | Calcium, total | mg/l | na | 176.63 | 176.63 | 95.1 | 99.1 | 107 | 101 |
| AP-9 | Calcium, total | mg/l | na | 176.63 | 176.63 | 105 | 108 | 86.1 | 97.8 |
| AP-10 | Calcium, total | mg/l | na | 176.63 | 176.63 | 139 | 144 | 138 | 138 |
| AP-11 | Calcium, total | mg/l | na | 176.63 | 176.63 | 169 | 145 | 118 | 134 |
| AP-12 | Calcium, total | mg/l | na | 176.63 | 176.63 | 265 | 269 | 271 | 268 |
| AP-13 | Calcium, total | mg/l | na | 176.63 | 176.63 | 107 | 105 | 106 | 122 |
| AP-14 | Calcium, total | mg/l | na | 176.63 | 176.63 | 209 | 233 | 235 | 278 |
| RW-3 | Calcium, total | mg/l | na | 176.63 | 176.63 | 67.8 | 70.5 | 52.8 | 58.7 |
| AP-1 | Chloride, total | mg/l | 200 | 24.2 | 200 | 58 | 60 | 36 | 53 |
| AP-2 | Chloride, total | mg/l | 200 | 24.2 | 200 | 36 | 37 | 54 | 40 |
| AP-3 | Chloride, total | mg/l | 200 | 24.2 | 200 | 60 | 59 | 51 | 57 |
| AP-4 | Chloride, total | mg/l | 200 | 24.2 | 200 | 14 | 14 | 13 | 14 |
| AP-5 | Chloride, total | mg/l | 200 | 24.2 | 200 | 3 | 4 | 4 | 5 |
| AP-6 | Chloride, total | mg/l | 200 | 24.2 | 200 | 27 | 31 | 28 | 33 |
| AP-7 | Chloride, total | mg/l | 200 | 24.2 | 200 | 45 | 70 | 39 | 60 |
| AP-8 | Chloride, total | mg/l | 200 | 24.2 | 200 | 26 | 26 | 25 | 25 |
| AP-9 | Chloride, total | mg/l | 200 | 24.2 | 200 | 36 | 60 | 28 | 26 |
| AP-10 | Chloride, total | mg/l | 200 | 24.2 | 200 | 27 | 28 | 28 | 27 |
| AP-11 | Chloride, total | mg/l | 200 | 24.2 | 200 | 140 | 123 | 79 | 90 |
| AP-12 | Chloride, total | mg/l | 200 | 24.2 | 200 | 140 | 142 | 139 | 124 |
| AP-13 | Chloride, total | mg/l | 200 | 24.2 | 200 | 29 | 26 | 26 | 27 |

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| AP-14 | Chloride, total | mg/l | 200 | 24.2 | 200 | 59 | 71 | 73 | 89 |
| RW-3 | Chloride, total | mg/l | 200 | 24.2 | 200 | 29 | 32 | 28 | 31 |
| AP-1 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-2 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-3 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-4 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-5 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-6 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-7 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-8 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-9 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-10 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-11 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | 0.0213 | < 0.005 | < 0.005 | < 0.005 |
| AP-12 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | 0.0332 |
| AP-13 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | 0.0059 | < 0.005 | < 0.005 | 0.019 |
| AP-14 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | 0.0058 | < 0.005 | < 0.005 | < 0.005 |
| RW-3 | Chromium, total | mg/l | 0.1 | 0.811 | 0.811 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-1 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-2 | Cobalt, total | mg/l | 1 | 0.297 | 1 | 0.0091 | 0.0102 | 0.0085 | 0.0091 |
| AP-3 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | 0.0054 | < 0.005 | 0.0051 |
| AP-4 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-5 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-6 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-7 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-8 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-9 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-10 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-11 | Cobalt, total | mg/l | 1 | 0.297 | 1 | 0.011 | < 0.005 | 0.0055 | < 0.005 |
| AP-12 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | 0.0236 |
| AP-13 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | 0.0127 |
| AP-14 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | 0.0051 | < 0.005 |
| RW-3 | Cobalt, total | mg/l | 1 | 0.297 | 1 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| AP-1 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.2 | 0.27 | 0.24 | 0.26 |
| AP-2 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.24 | 0.22 | 0.2 | 0.27 |
| AP-3 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.22 | 0.22 | 0.21 | 0.25 |
| AP-4 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.14 | 0.14 | 0.14 | 0.16 |
| AP-5 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.34 | 0.32 | 0.31 | 0.37 |
| AP-6 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.38 | 0.51 | 0.26 | 0.5 |
| AP-7 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.36 | 0.53 | 0.34 | 0.53 |
| AP-8 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.3 | 0.33 | 0.29 | 0.31 |
| AP-9 | Fluoride, total | mg/L | 4 | 0.62 | 4 | 0.22 | 0.2 | 0.23 | 0.29 |
| AP-10 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.3 | 0.36 | 0.32 | 0.35 |
| AP-11 | Fluoride, total | mg/L | 4 | 0.62 | 4 | 0.18 | 0.2 | 0.21 | 0.65 |
| AP-12 | Fluoride, total | mg/L | 4 | 0.62 | 4 | 0.17 | 0.18 | 0.18 | 0.2 |
| AP-13 | Fluoride, total | mg/L | 4 | 0.62 | 4 | 0.2 | 0.23 | 0.22 | 0.24 |
| AP-14 | Fluoride, total | mg/L | 4 | 0.62 | 4 | 0.25 | 0.28 | 0.27 | 0.29 |
| RW-3 | Fluoride, total | mg/l | 4 | 0.62 | 4 | 0.46 | 0.52 | 0.27 | 0.44 |
| AP-1 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-2 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-3 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-4 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-5 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-6 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-7 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-8 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-9 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-10 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-11 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-12 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | 0.0161 |

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| AP-13 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| AP-14 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.015 | < 0.015 | < 0.015 |
| RW-3 | Lead, total | mg/l | 0.0075 | 0.638 | 0.638 | < 0.015 | < 0.001 | < 0.015 | < 0.015 |
| AP-1 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0566 | < 0.005 | 0.0109 | 0.0085 |
| AP-2 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0476 | < 0.005 | 0.0063 | 0.0056 |
| AP-3 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0501 | < 0.005 | 0.0063 | 0.0051 |
| AP-4 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0196 | < 0.005 | 0.0078 | 0.0051 |
| AP-5 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0142 | 0.0074 | 0.0046 | < 0.005 |
| AP-6 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.014 | < 0.005 | < 0.003 | < 0.005 |
| AP-7 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | < 0.005 | 0.0113 | 0.0047 | < 0.005 |
| AP-8 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0201 | < 0.005 | 0.0074 | < 0.005 |
| AP-9 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | < 0.005 | 0.0067 | 0.0054 | < 0.005 |
| AP-10 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | < 0.005 | < 0.005 | 0.01 | < 0.005 |
| AP-11 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0115 | 0.0068 | 0.0045 | < 0.005 |
| AP-12 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | < 0.005 | 0.006 | 0.0072 | 0.0352 |
| AP-13 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0167 | 0.0152 | 0.0133 | 0.0237 |
| AP-14 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0716 | < 0.005 | 0.0076 | < 0.005 |
| RW-3 | Lithium | mg/l | 0.04 | 0.05 | 0.05 | 0.0179 | < 0.005 | < 0.003 | 0.0147 |
| AP-1 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-2 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-3 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-4 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-5 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-6 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-7 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-8 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-9 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-10 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-11 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-12 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-13 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-14 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| RW-3 | Mercury, total | mg/l | 0.002 | 0.0008 | 0.002 | < 0.0002 | < 0.0002 | < 0.0002 | < 0.0002 |
| AP-1 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-2 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-3 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-4 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-5 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-6 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-7 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-8 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-9 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-10 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-11 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-12 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-13 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-14 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| RW-3 | Molybdenum | mg/l | 0.1 | 0.025 | 0.1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| AP-1 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.6 | 6.52 | 6.51 | 6.71 |
| AP-2 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.46 | 6.44 | 6.4 | 6.57 |
| AP-3 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.58 | 6.64 | 6.53 | 6.69 |
| AP-4 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.99 | 6.82 | 6.86 | 6.99 |
| AP-5 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 7.06 | 7.08 | 7.16 | 7.17 |
| AP-6 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 7.07 | 7.02 | 7.06 | 7.17 |
| AP-7 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 7.2 | 7.11 | 7.28 | 7.15 |
| AP-8 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.86 | 6.77 | 6.75 | 7.01 |
| AP-9 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.85 | 6.69 | 6.88 | 6.81 |
| AP-10 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.58 | 6.68 | 6.57 | 6.82 |
| AP-11 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.42 | 6.45 | 6.64 | 6.6 |

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| AP-12 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.47 | 6.43 | 6.57 | 6.62 |
| AP-13 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.62 | 6.54 | 6.66 | 6.74 |
| AP-14 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.69 | 6.97 | 6.93 | 7.06 |
| RW-3 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.15 | 7.06 | 7.13 | 7.31 |
| AP-1 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 1.38 | 1.4 | < 2 | 0.85 |
| AP-2 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 0.87 | 2.5 | < 2 | 0.42 |
| AP-3 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 0.54 | 0.36 | < 2 | 0.65 |
| AP-4 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 1.04 | 2.89 | 1.12 | 1.58 |
| AP-5 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 1.29 | 0.57 | < 2 | 1.26 |
| AP-6 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 0.47 | 1.29 | < 2 | 0.52 |
| AP-7 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2 | 1.54 | < 2 | 0.8 |
| AP-8 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 1.98 | 2.88 | < 2 | 1.55 |
| AP-9 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2 | 0.15 | < 2 | 0.64 |
| AP-10 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2.04 | 2.66 | 1.12 | 3.14 |
| AP-11 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2 | 0.47 | < 2 | 0.52 |
| AP-12 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2 | 1.07 | 2 | 0.91 |
| AP-13 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 1.22 | 0.24 | 2.54 | 0.69 |
| AP-14 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 2 | 0.45 | < 2 | 0.86 |
| RW-3 | Radium-226 + Radium-228 | pCi/l | 5 | 12.2 | 12.2 | 0.28 | 0.48 | < 2 | 2.46 |
| AP-1 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-2 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-3 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-4 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-5 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-6 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-7 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-8 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-9 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-10 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-11 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | 0.0018 | < 0.001 | < 0.001 | < 0.001 |
| AP-12 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-13 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-14 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| RW-3 | Selenium, total | mg/l | 0.05 | 0.0079 | 0.05 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| AP-1 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 781 | 768 | 443 | 740 |
| AP-2 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 485 | 462 | 795 | 380 |
| AP-3 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 461 | 483 | 467 | 495 |
| AP-4 | Sulfate, total | mg/l | 400 | 84.5 | 400 | < 10 | < 10 | < 10 | < 10 |
| AP-5 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 37 | 44 | 43 | 45 |
| AP-6 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 12 | 11 | 22 | 13 |
| AP-7 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 16 | < 10 | 20 | 15 |
| AP-8 | Sulfate, total | mg/l | 400 | 84.5 | 400 | < 10 | < 10 | < 10 | < 10 |
| AP-9 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 38 | 64 | 24 | 23 |
| AP-10 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 96 | 100 | 100 | 91 |
| AP-11 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 105 | 89 | 65 | 81 |
| AP-12 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 641 | 659 | 632 | 563 |
| AP-13 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 133 | 146 | 139 | 151 |
| AP-14 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 699 | 707 | 714 | 806 |
| RW-3 | Sulfate, total | mg/l | 400 | 84.5 | 400 | < 10 | < 10 | 22 | 16 |
| AP-1 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-2 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-3 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-4 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-5 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-6 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-7 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-8 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-9 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-10 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |

**City Water, Light and Power**
**Power Plant Ash Impoundment**
**2023 Groundwater Analytical Results Summary Table**

| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| AP-11 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-12 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-13 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-14 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| RW-3 | Thallium, total | mg/l | 0.002 | 0.00556 | 0.00556 | < 0.002 | < 0.002 | < 0.002 | < 0.002 |
| AP-1 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1520 | 1540 | 1190 | 1360 |
| AP-2 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1180 | 1100 | 1600 | 1020 |
| AP-3 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1040 | 984 | 990 | 1080 |
| AP-4 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 515 | 534 | 560 | 420 |
| AP-5 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 374 | 404 | 400 | 396 |
| AP-6 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 322 | 380 | 268 | 322 |
| AP-7 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 328 | 444 | 300 | 352 |
| AP-8 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 555 | 544 | 555 | 430 |
| AP-9 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 586 | 638 | 515 | 524 |
| AP-10 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 778 | 756 | 725 | 732 |
| AP-11 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 820 | 726 | 670 | 640 |
| AP-12 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1440 | 1580 | 1640 | 1320 |
| AP-13 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 495 | 538 | 530 | 465 |
| AP-14 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1280 | 1330 | 1480 | 1440 |
| RW-3 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 420 | 430 | 290 | 340 |

Notes:
1. The 35 Ill. Adm. Code 845.600 list requires Radium-226 and Radium-228 combined. The established MCL is for the combined parameters. However, these parameters require two separate analysis and have been reported separately by the analytical laboratory. The sum of the values has been provided and compared to the MCL.

# TABLE 2:

## 2023 GROUNDWATER ANALYTICAL RESULTS EXCEEDANCE SUMMARY TABLE

**City Water, Light and Power**

**Power Plant Ash Impoundment**

**2023 Groundwater Analytical Results Exceedance Summary Table**

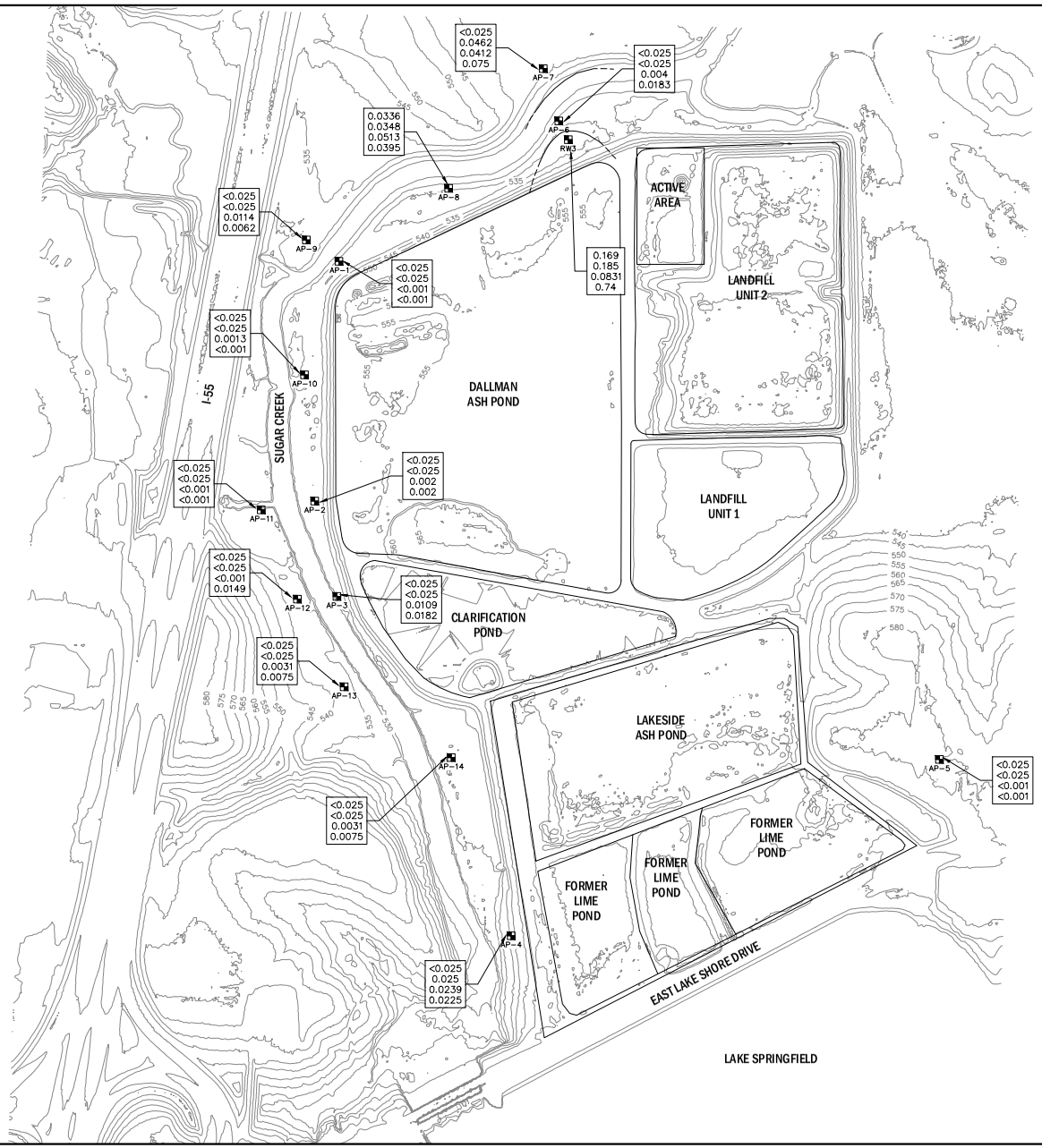
| Well | Parameter | Units | 35 IAC 845.600 | BKGRD | GWPS | 2023-Q1 | 2023-Q2 | 2023-Q3 | 2023-Q4 |
|---|---|---|---|---|---|---|---|---|---|
| RW-3 | Arsenic, total | mg/l | 0.01 | 0.0724 | 0.0724 | 0.169 | 0.185 | 0.0831 | 0.74 |
| AP-1 | Boron, total | mg/l | 2 | 0.787 | 2 | 23.2 | 21.2 | 22.5 | 21.7 |
| AP-2 | Boron, total | mg/l | 2 | 0.787 | 2 | 3.94 | 3.7 | 3.73 | 3.23 |
| AP-3 | Boron, total | mg/l | 2 | 0.787 | 2 | 14.5 | 14.3 | 14 | 15.2 |
| AP-10 | Boron, total | mg/l | 2 | 0.787 | 2 | 3.32 | 3.76 | 3.81 | 3.6 |
| AP-14 | Boron, total | mg/l | 2 | 0.787 | 2 | 21.3 | 23 | 22.6 | 22.1 |
| AP-1 | Calcium, total | mg/l | na | 176.63 | 176.63 | 230 | 242 | 285 | 229 |
| AP-2 | Calcium, total | mg/l | na | 176.63 | 176.63 | 217 | 210 | 244 | 204 |
| AP-3 | Calcium, total | mg/l | na | 176.63 | 176.63 | 161 | 168 | 189 | 181 |
| AP-12 | Calcium, total | mg/l | na | 176.63 | 176.63 | 265 | 269 | 271 | 268 |
| AP-14 | Calcium, total | mg/l | na | 176.63 | 176.63 | 209 | 233 | 235 | 278 |
| AP-2 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.46 | 6.44 | 6.4 | 6.57 |
| AP-11 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.42 | 6.45 | 6.64 | 6.6 |
| AP-12 | pH (field) | units | 6.5-9.0 | 6.76 - 7.63 | 6.5-9.0 | 6.47 | 6.43 | 6.57 | 6.62 |
| AP-1 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 781 | 768 | 443 | 740 |
| AP-2 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 485 | 462 | 795 | 380 |
| AP-3 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 461 | 483 | 467 | 495 |
| AP-12 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 641 | 659 | 632 | 563 |
| AP-14 | Sulfate, total | mg/l | 400 | 84.5 | 400 | 699 | 707 | 714 | 806 |
| AP-1 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1520 | 1540 | 1190 | 1360 |
| AP-12 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1440 | 1580 | 1640 | 1320 |
| AP-14 | Total Dissolved Solids | mg/l | 1200 | 597.94 | 1200 | 1280 | 1330 | 1480 | 1440 |

Notes:

1. The 35 Ill. Adm. Code 845.600 list requires Radium-226 and Radium-228 combined. The established MCL is for the combined parameters. However, these parameters require two separate analysis and have been reported separately by the analytical laboratory. The sum of the values has been provided and compared to the MCL.

SC_027

# APPENDIX A:
## 2023 GWPS EXCEEDANCE MAPS




## LEGEND

- MONITORING WELL
- DATA CALLOUTS
  - Q1 – 02/16/2023
  - Q2 – 05/31/2023
  - Q3 – 08/23/2023
  - Q4 – 11/8/2023
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. ARSENIC, TOTAL: GWPS = 0.0724 mg/L

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_029

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ARSENIC GW EXCEEDANCE MAP 2023

PREPARED FOR
CITY WATER, LIGHT, ANS POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

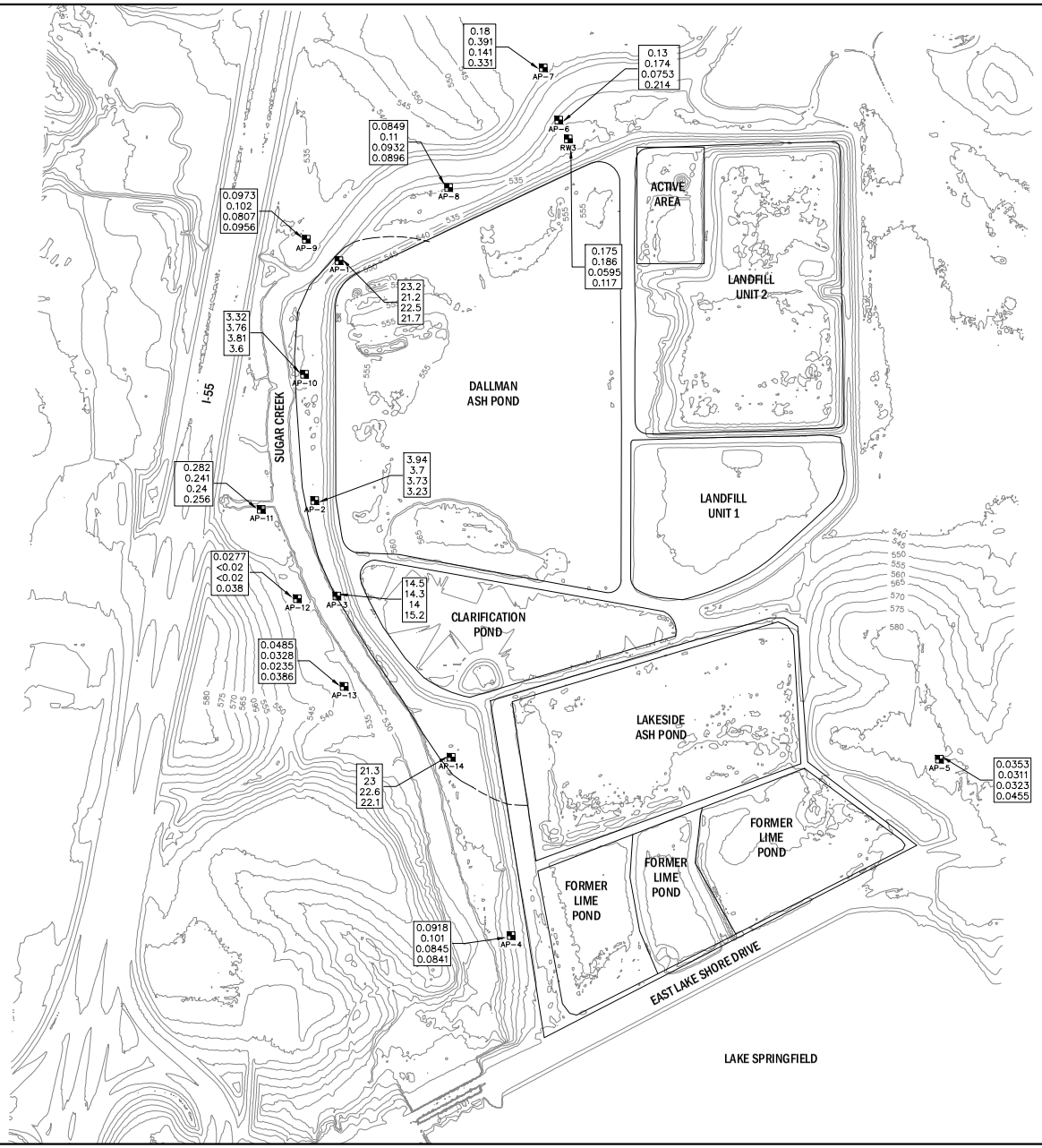
DATE: JANUARY 2024

PROJECT ID: 220408/0003

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Tab: ARSENIC Last Saved: January 22, 2024, by Ben Karpus Plotted: Monday, January 22, 2024 2:38:47 PM
J:\S\Springfield CMLP_CMLP Ash Pond\GWA\2024\GW base map.dwg




## LEGEND

- MONITORING WELL
- Q1 – 02/16/2023
  Q2 – 05/31/2023
  Q3 – 08/23/2023
  Q4 – 11/8/2023
  DATA CALLOUTS
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. BORON, TOTAL: GWPS = 2 mg/L

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

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BORON GW EXCEEDANCE MAP 2023

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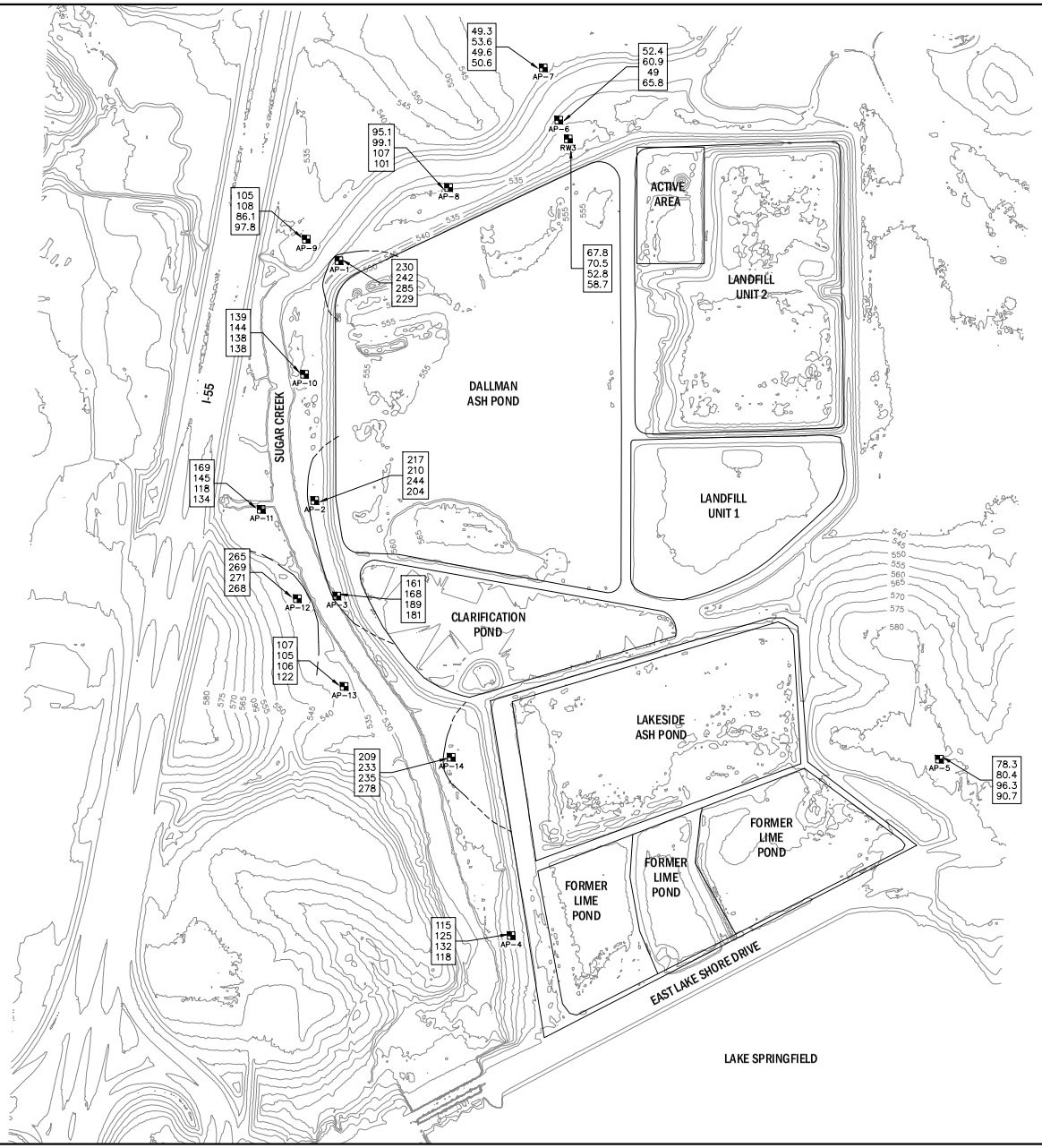
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J:\IS\Springfield CWLP\CWLP Ash Pond\GWA\2024\GW base map.dwg

SC_030




## LEGEND

- MONITORING WELL
- DATA CALLOUTS
  - Q1 – 02/16/2023
  - Q2 – 05/31/2023
  - Q3 – 08/23/2023
  - Q4 – 11/8/2023
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. CALCIUM, TOTAL: GWPS = 176.63 mg/L.

N

0 200 400 800

SCALE: IN FEET

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CALCIUM GW EXCEEDANCE MAP 2023

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DATE: JANUARY 2024

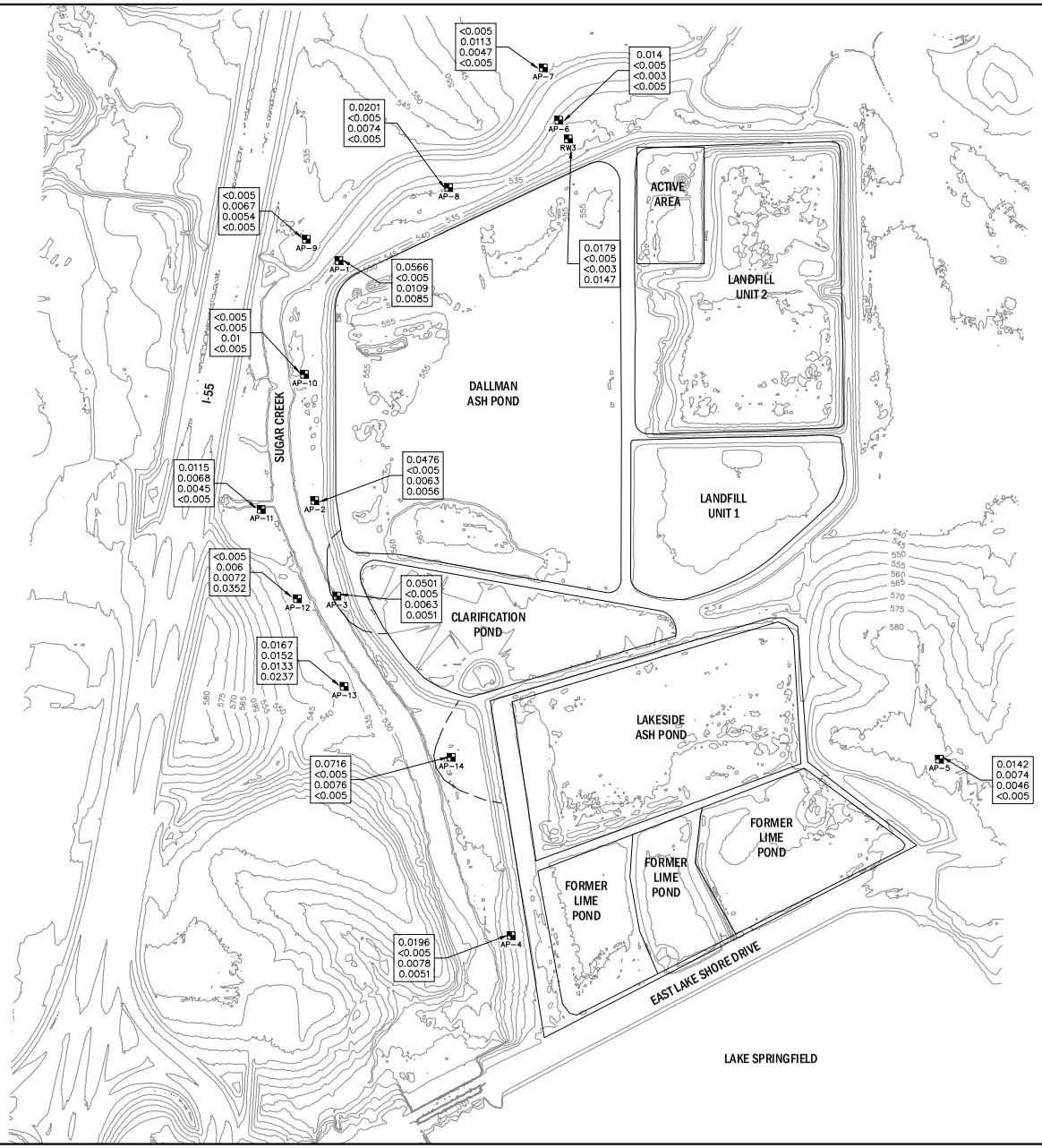
PROJECT ID: 220408/0003

SHEET NUMBER: 3

SC_031

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J:\S\Springfield CMLP_CMLP Ash Pond\GWA\2024\GW base map.dwg




## LEGEND

- MONITORING WELL
- Q1 – 02/16/2023
  Q2 – 05/31/2023
  Q3 – 08/23/2023
  Q4 – 11/8/2023
  DATA CALLOUTS
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. LITHIUM, TOTAL: GWPS = 0.05 mg/L

N

0 200 400 800

SCALE: IN FEET

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|---|---|---|---|

SC_032

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LITHIUM GW EXCEEDANCE MAP 2023

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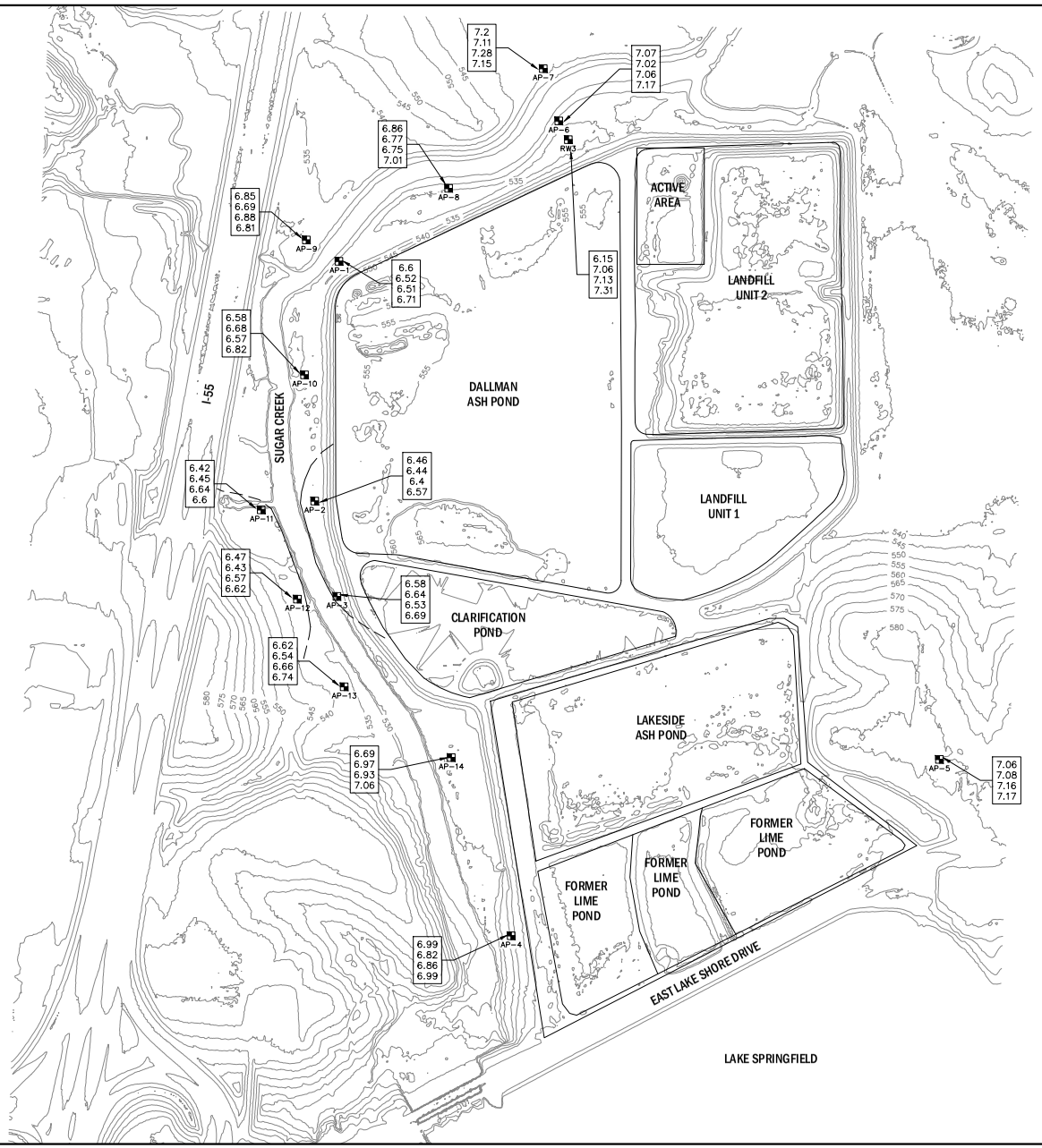
DATE: JANUARY 2024

PROJECT ID: 220408/0003

SHEET NUMBER: 4

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## LEGEND

- MONITORING WELL
- Q1 – 02/16/2023
  Q2 – 05/31/2023
  Q3 – 08/23/2023
  Q4 – 11/8/2023
  DATA CALLOUTS
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. pH, TOTAL: GWPS = 6.5–9 UNITS

N

0 200 400 800

SCALE: IN FEET

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SC_033

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pH GW EXCEEDANCE MAP 2023

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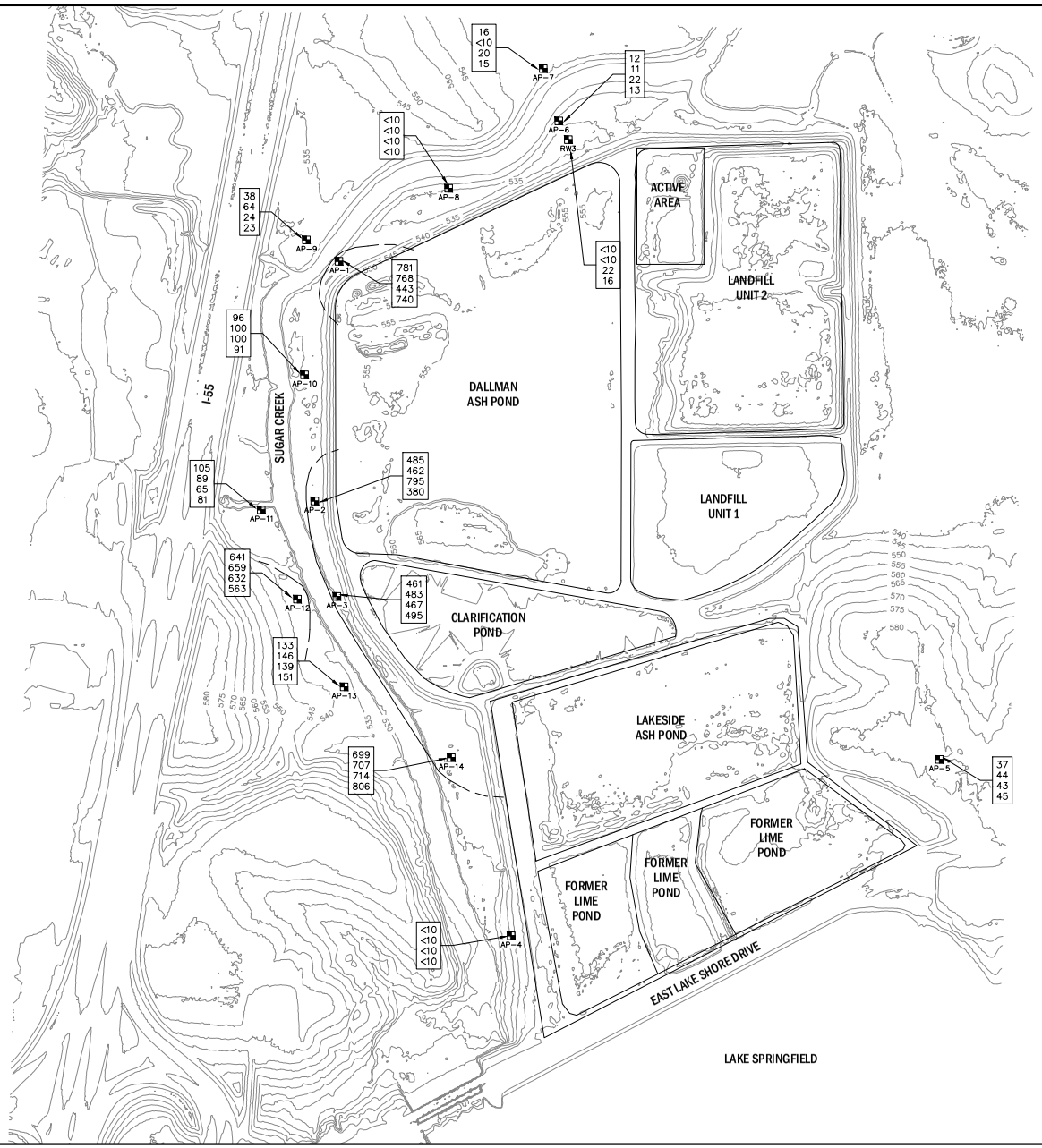
DATE: JANUARY 2024

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## LEGEND

- MONITORING WELL
- Q1 – 02/16/2023
  Q2 – 05/31/2023
  Q3 – 08/23/2023
  Q4 – 11/8/2023
  DATA CALLOUTS
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. SULFATE, TOTAL: GWPS = 400 mg/L

N

0 200 400 800

SCALE: IN FEET

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SC_034

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SULFATE GW EXCEEDANCE MAP 2023

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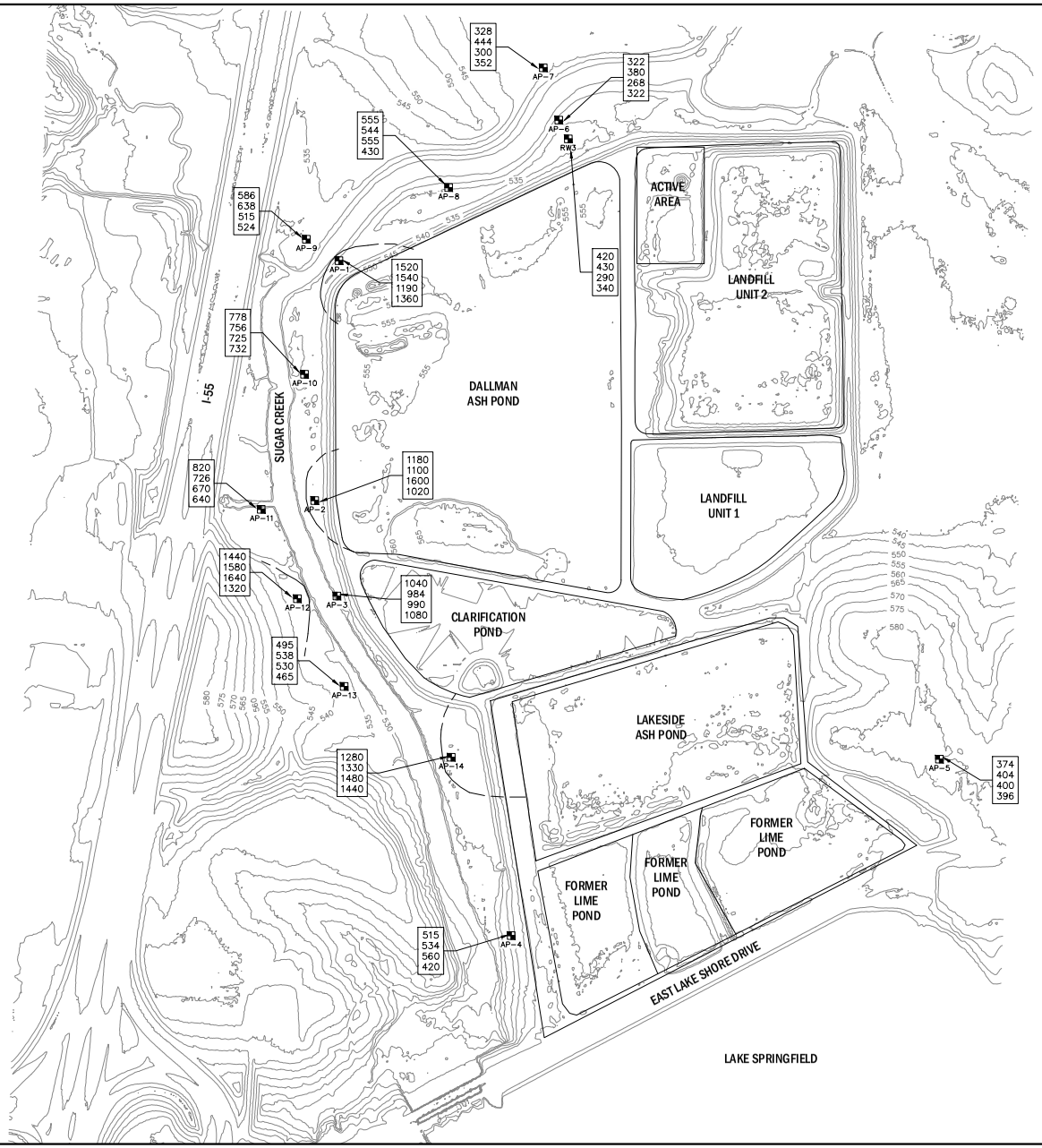
DATE: JANUARY 2024

PROJECT ID: 220408/0003

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Tab: SULFATE Last Saved: January 4, 2024, by Ben Karpus Plotted: Thursday, January 4, 2024 11:58:28 AM
J:\S\Springfield CWLP_CWLP Ash Pond\DWG\2024\GW base map.dwg




## LEGEND

- MONITORING WELL
- Q1 – 02/16/2023
  Q2 – 05/31/2023
  Q3 – 08/23/2023
  Q4 – 11/8/2023
  DATA CALLOUTS
- GWPS ISOCONTOUR

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. TDS, TOTAL: GWPS = 1200 mg/L

N

0 200 400 800

SCALE: IN FEET

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SC_035

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TOTAL DISSOLVED SOLIDS GW EXCEEDANCE MAP 2023

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DATE: JANUARY 2024

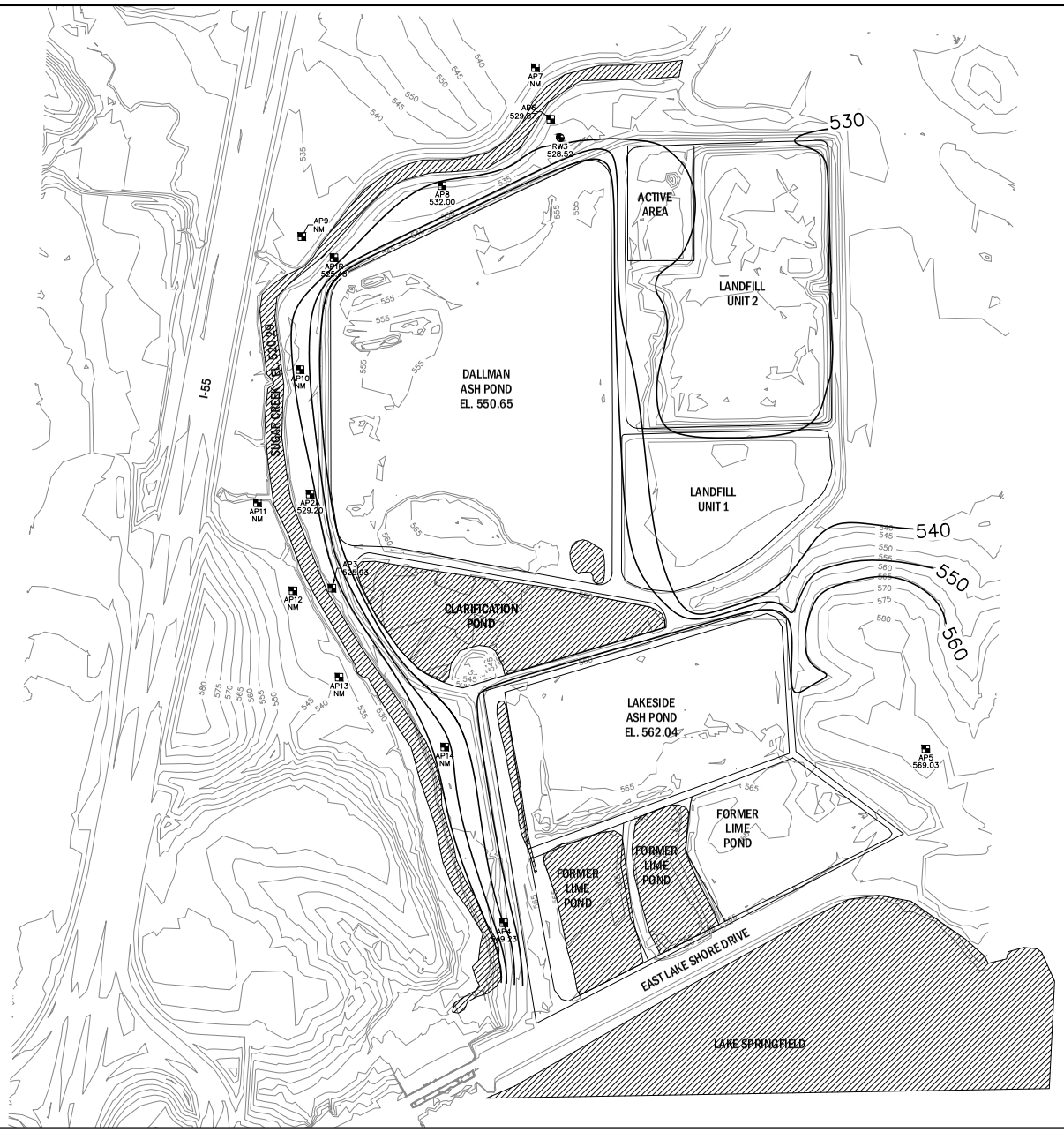
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J:\JS\Springfield CWLP\CWLP Ash Pond\GWA\2024\GW base map.dwg

# APPENDIX B:
## 2023 POTENTIOMETRIC SURFACE MAPS




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 1/27/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 1/27/2023.
6. "NM" – NOT MEASURED. WELL FROZEN AND GROUNDWATER ELEVATION COULD NOT BE COLLECTED.
7. DEPICTED BOUNDARIES OF SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

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SC_037

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GROUNDWATER SURFACE MAP
JANUARY 27, 2023

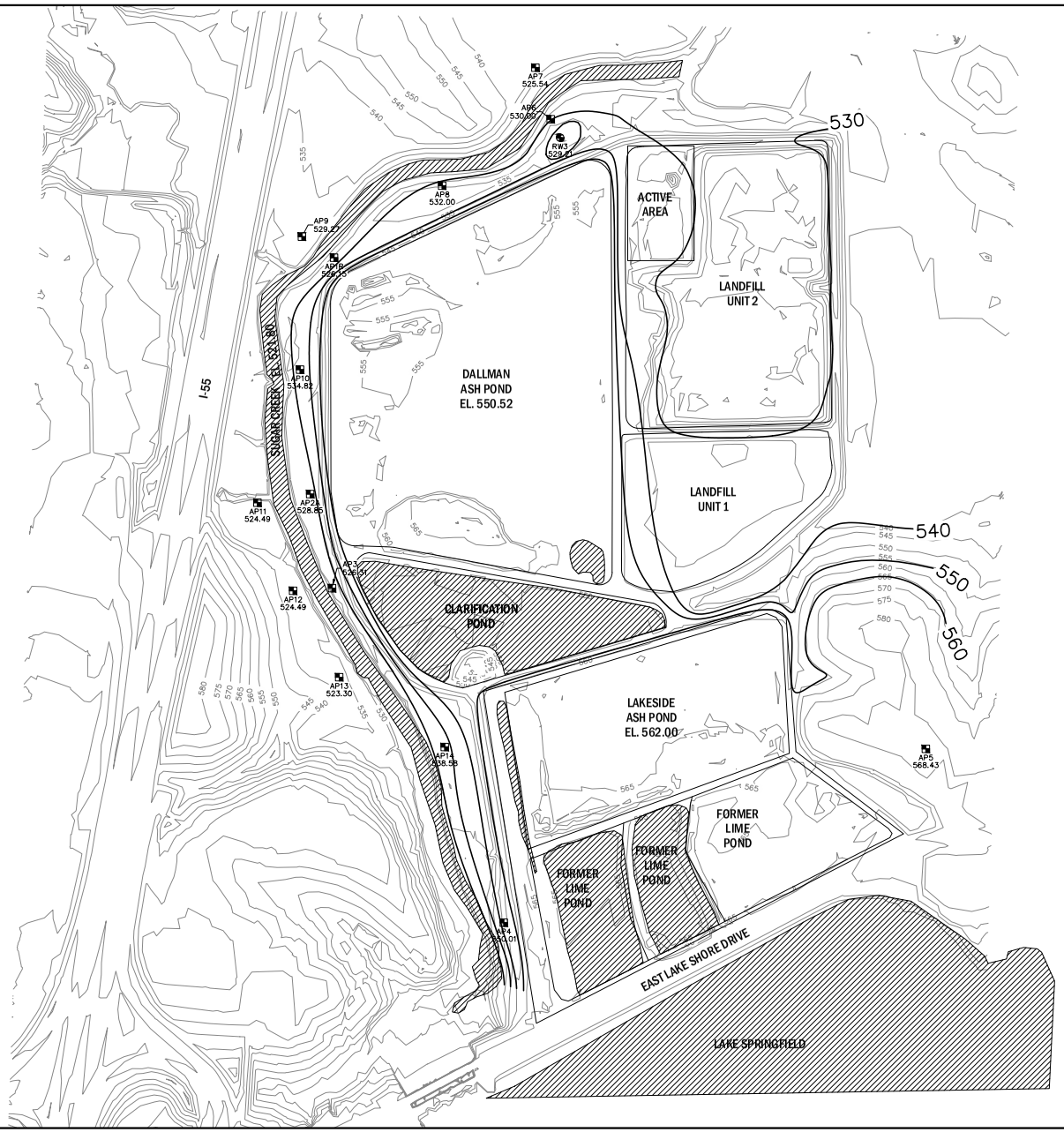
PREPARED FOR
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DATE: JANUARY 2024
PROJECT ID: 220408/0008
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FIG. 1

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:12:38 PM
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## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 2/16/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 2/16/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_038

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GROUNDWATER SURFACE MAP
FEBRUARY 16, 2023

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DATE: JANUARY 2024

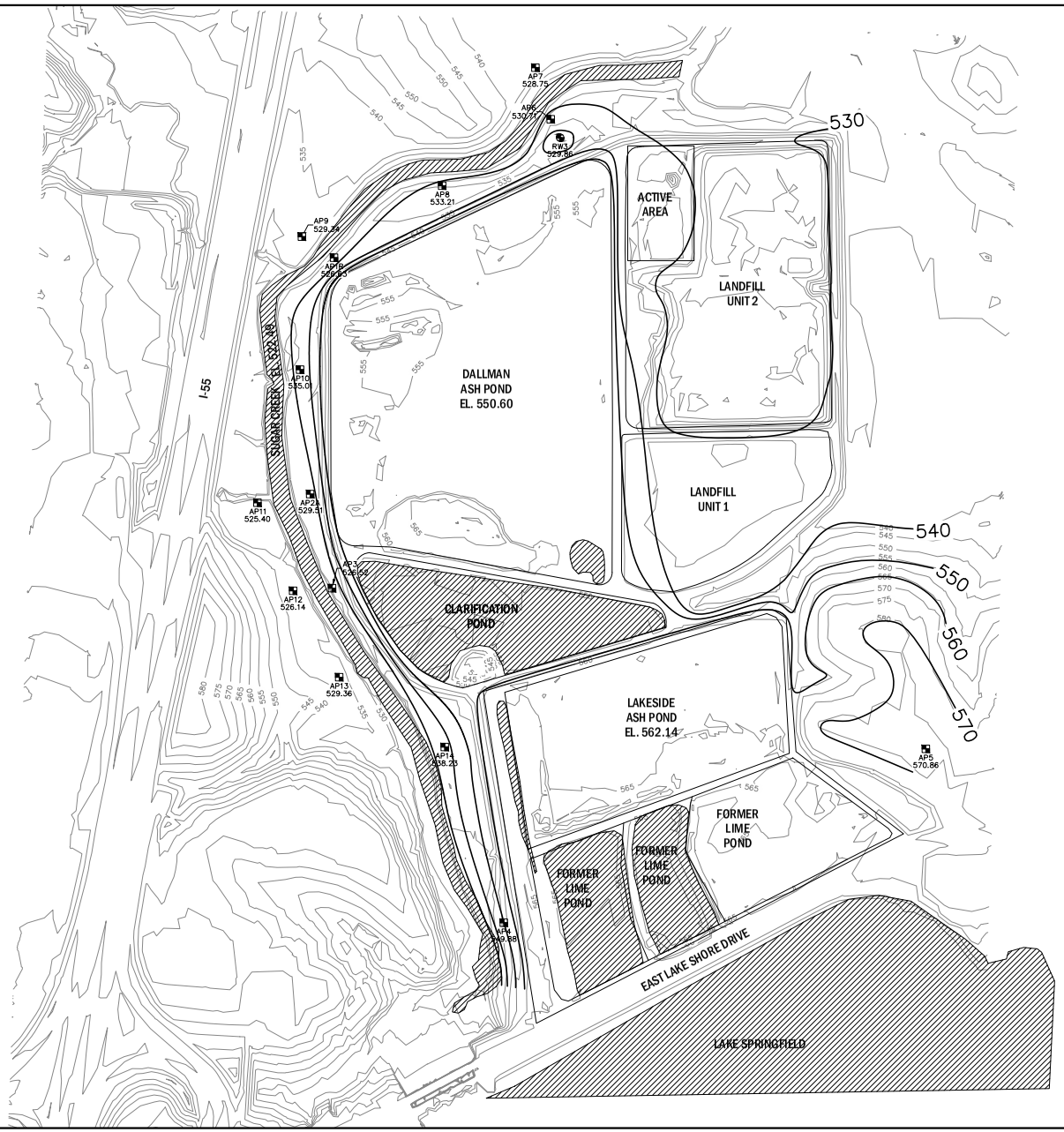
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FIG. 2

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:14:29 PM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\MAPS\2024\2-16-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 3/29/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 3/29/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

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SC_039

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GROUNDWATER SURFACE MAP
MARCH 29, 2023

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DATE: JANUARY 2024

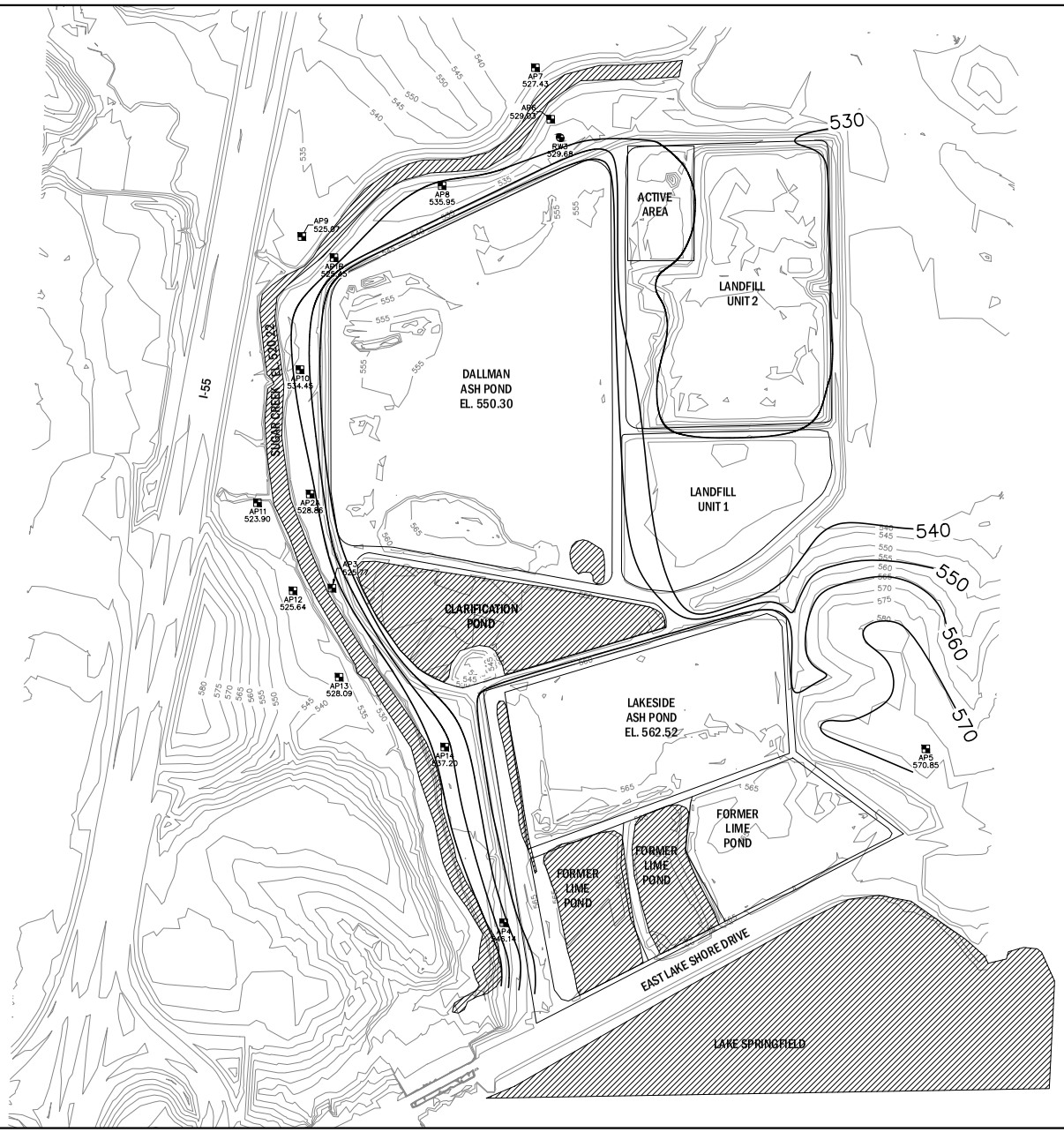
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FIG. 3

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J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\PMAPS\2024\3-29-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 4/12/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 4/12/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_040

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GROUNDWATER SURFACE MAP
APRIL 12, 2023

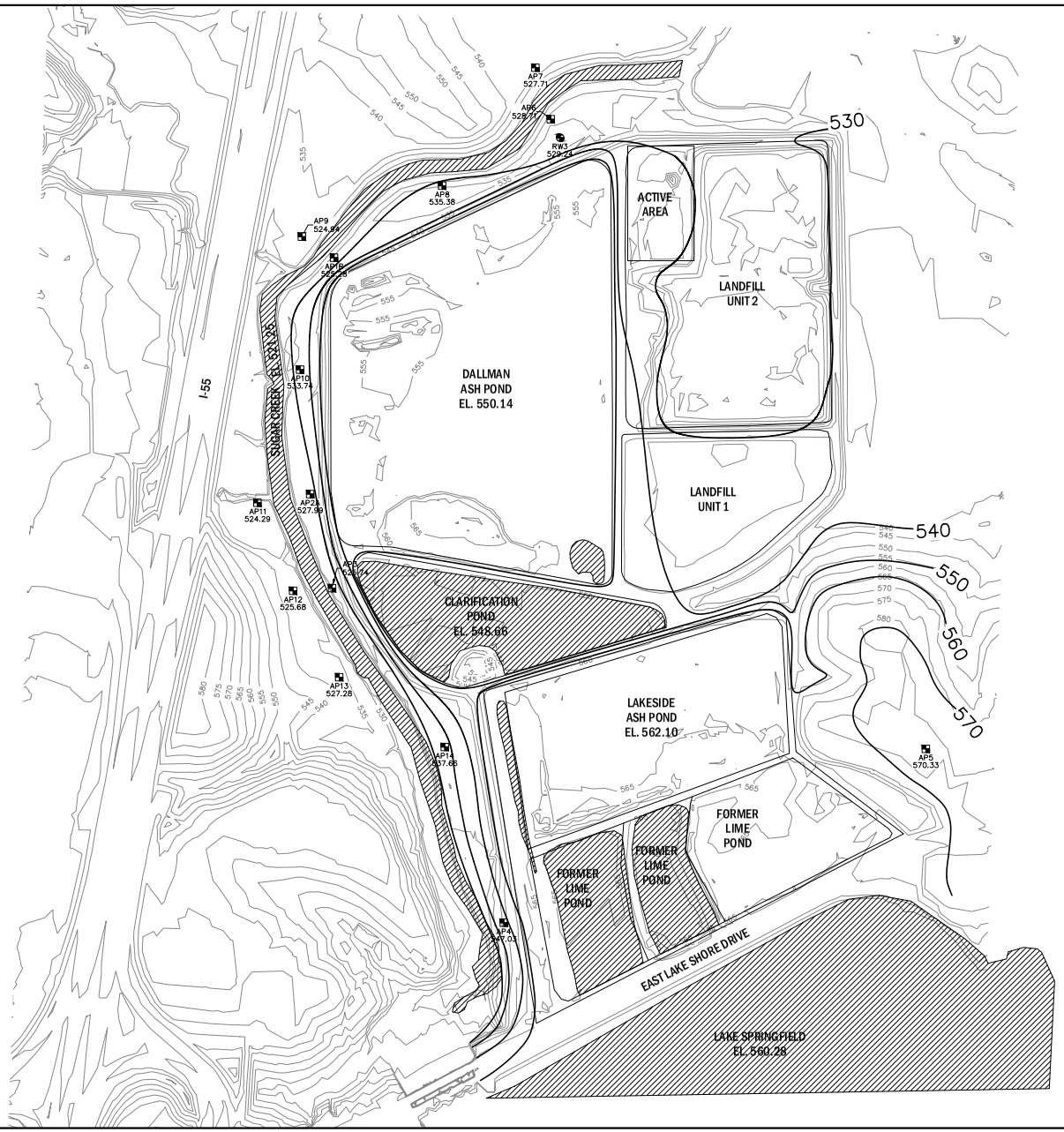
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FIG. 4

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:19:11 PM
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## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 5/30/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 5/30/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
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SC_041

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GROUNDWATER SURFACE MAP
MAY 30, 2023

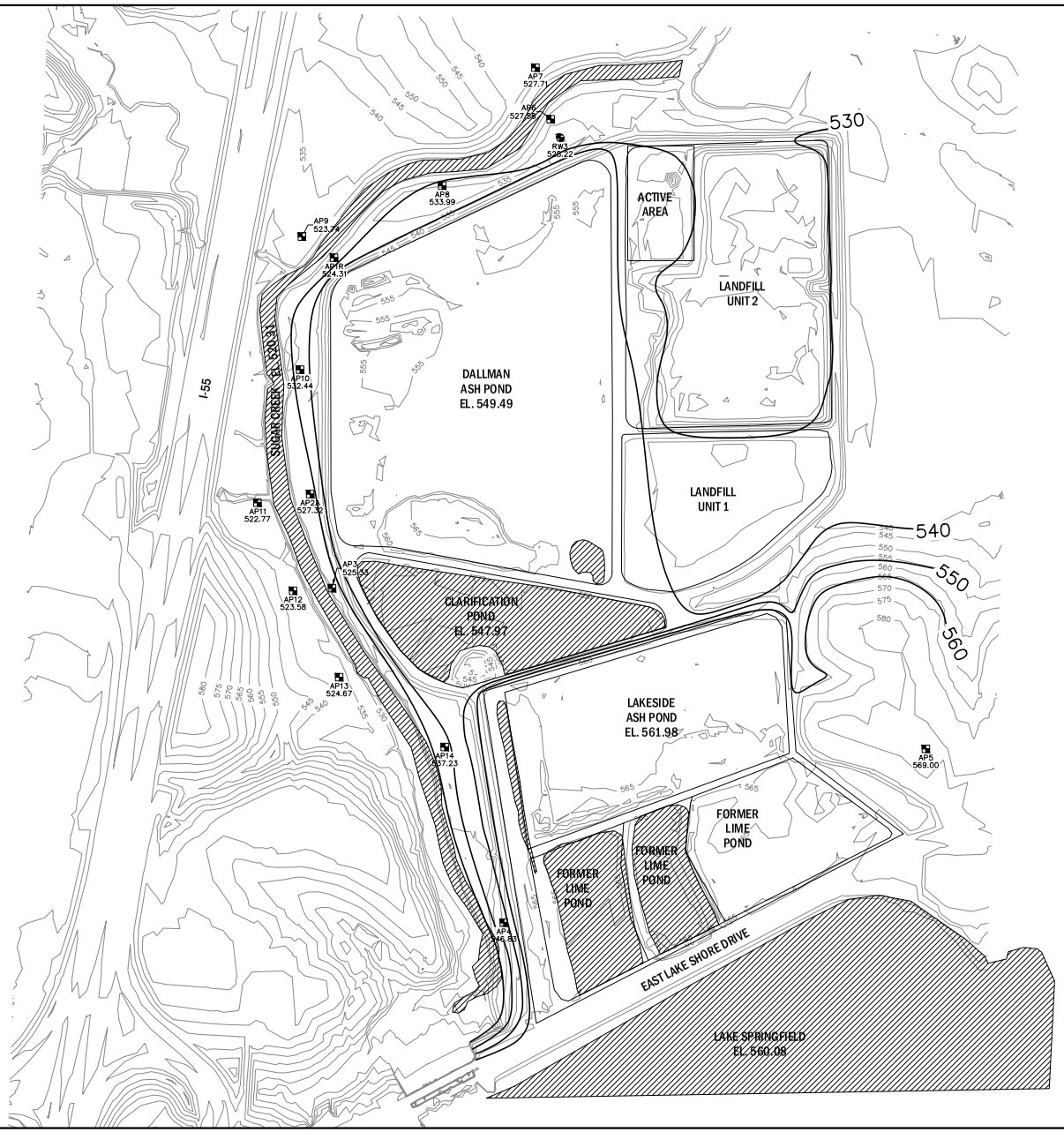
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DATE: JANUARY 2024
PROJECT ID: 220408/0008
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FIG. 5

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Tab: Layout1 Last Saved: January 24, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 8:56:52 AM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\PMAPS\2024\05-30-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 6/15/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 6/15/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_042

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GROUNDWATER SURFACE MAP
JUNE 15, 2023

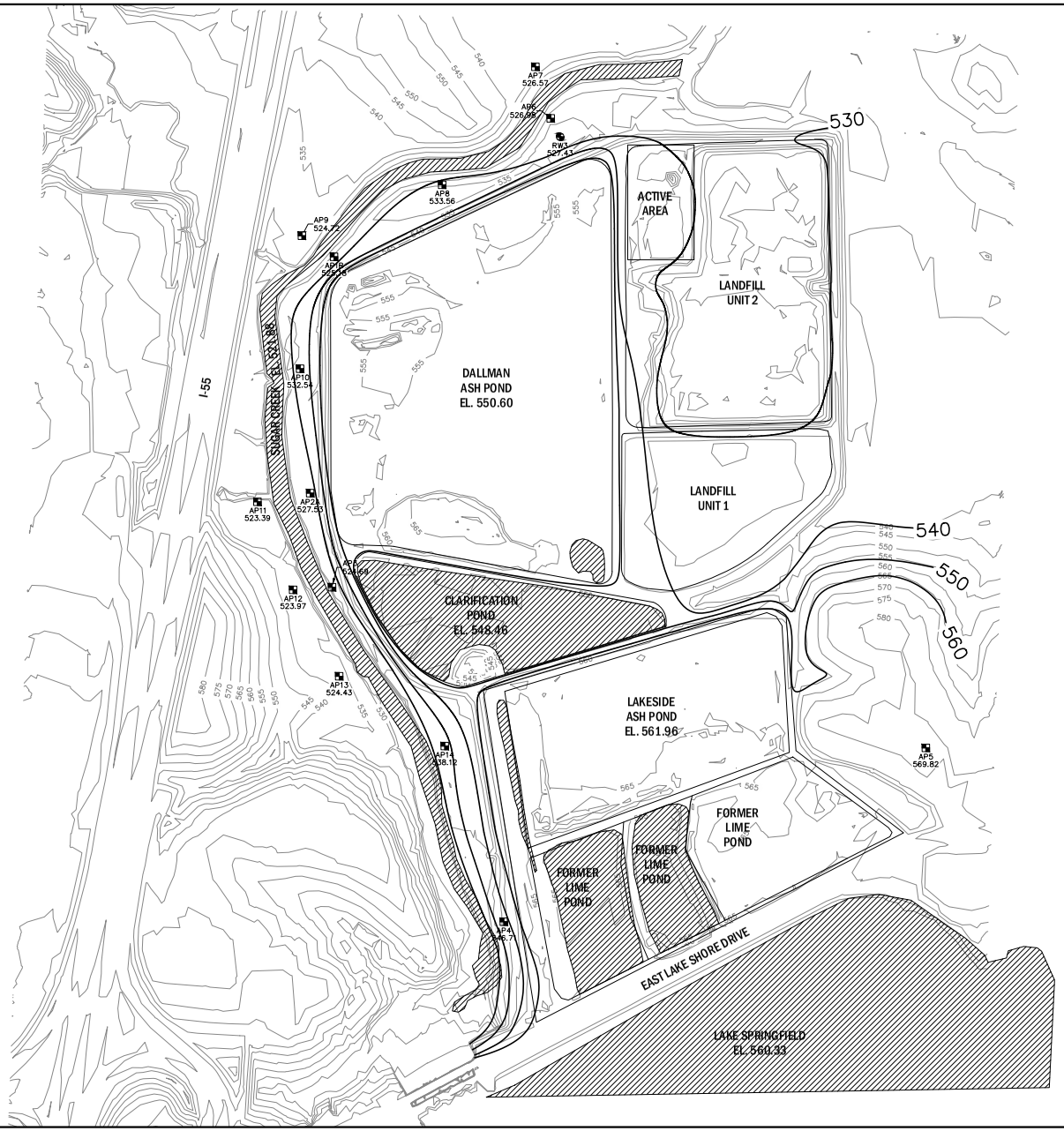
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DATE: JANUARY 2024
PROJECT ID: 220408/0008
SHEET NUMBER:

FIG. 6

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Tab: Layout1 Last Saved: January 24, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 8:57:34 AM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\MAPS\2024\06-15-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 7/6/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 7/6/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_043

ANDREWS ENGINEERING
3300 GINGER CREEK DRIVE
SPRINGFIELD, ILLINOIS 62711-7233
PH (217) 787-2334 WWW.ANDREWSENG.COM
PONTIAC, IL • LOMBARD, IL • INDIANAPOLIS, IN • WARRENTON, MO

APPROVED BY: MTH | DESIGNED BY: MTH | DRAWN BY: BCK

GROUNDWATER SURFACE MAP
JULY 6, 2023

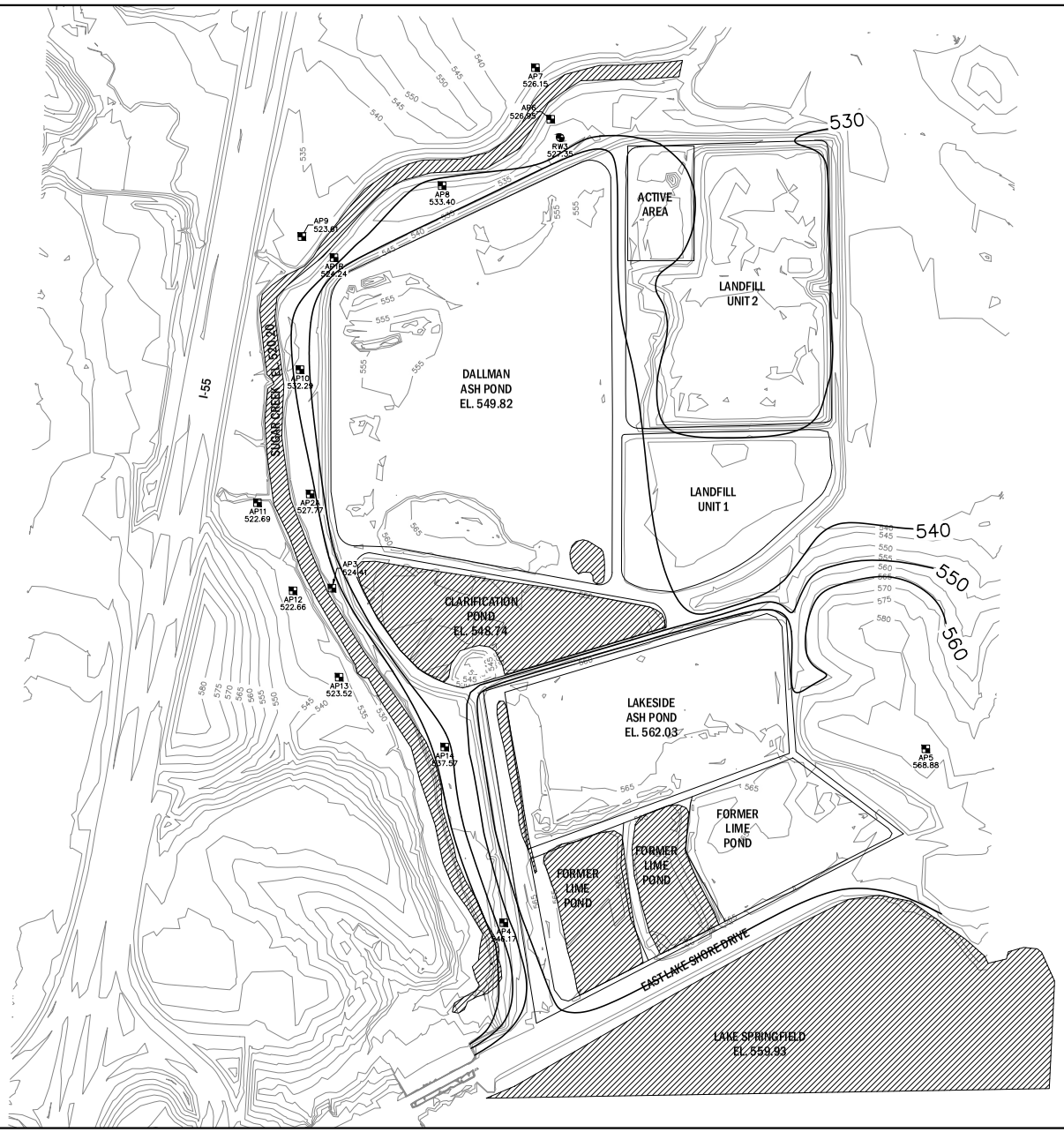
PREPARED FOR
CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024
PROJECT ID: 220408/0008
SHEET NUMBER:

FIG. 7

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Tab: Layout1 Last Saved: January 24, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 8:58:06 AM
J:\S\Springfield CWLP\CWLP Ash Pond\DWG\MAPS\2024\7-6-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 8/31/2022.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 8/31/2022.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_044

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GROUNDWATER SURFACE MAP
AUGUST 31, 2023

PREPARED FOR
CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024

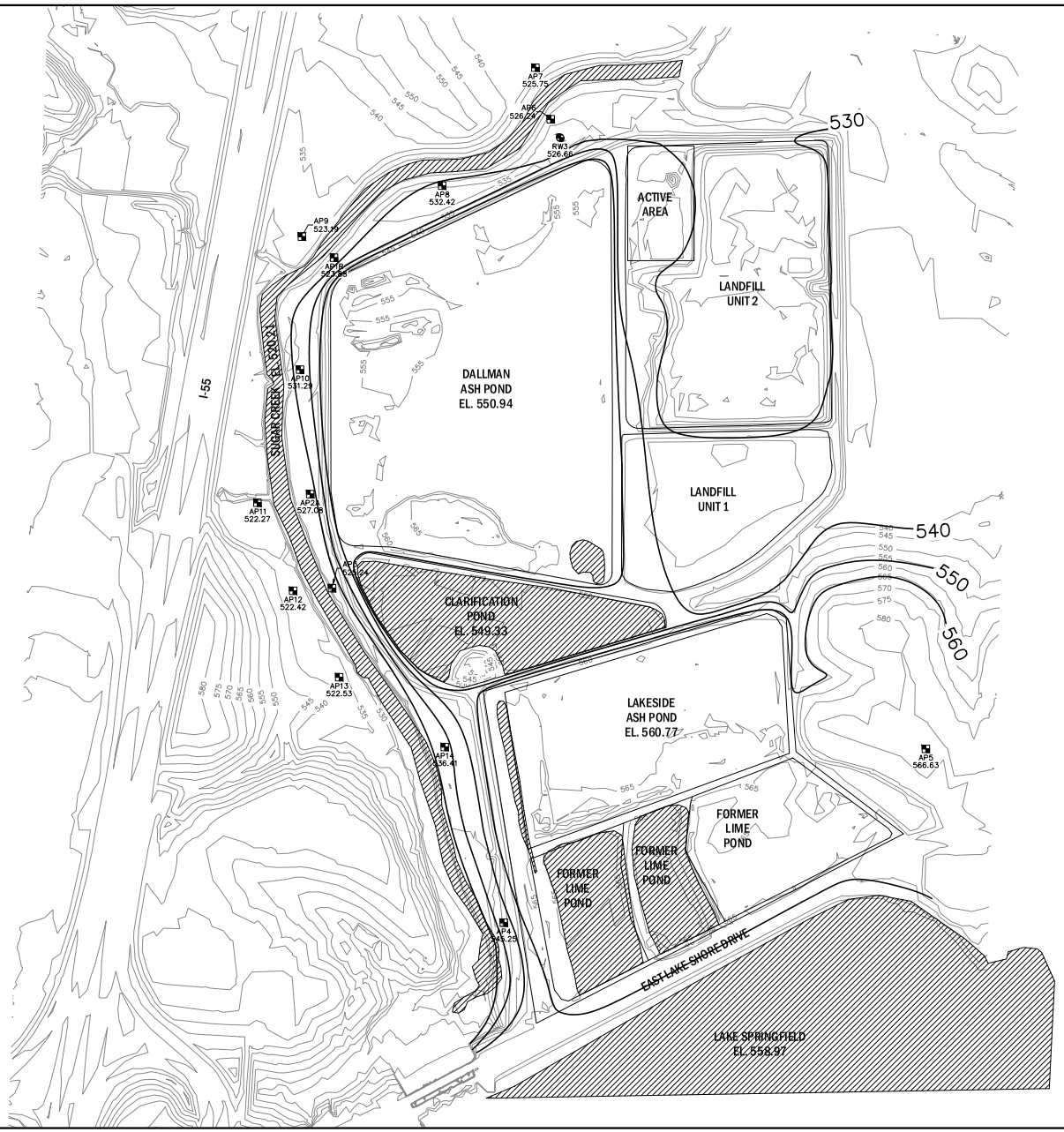
PROJECT ID: 220408/0008

SHEET NUMBER:

FIG. 8

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:35:12 PM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\MAPS\2024\8-31-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 9/16/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 9/16/2023.
6. "NM" – NOT MEASURED
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_045

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3300 GINGER CREEK DRIVE
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APPROVED BY: MTH | DESIGNED BY: MTH | DRAWN BY: BCK

GROUNDWATER SURFACE MAP
SEPTEMBER 16, 2023

PREPARED FOR

CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024

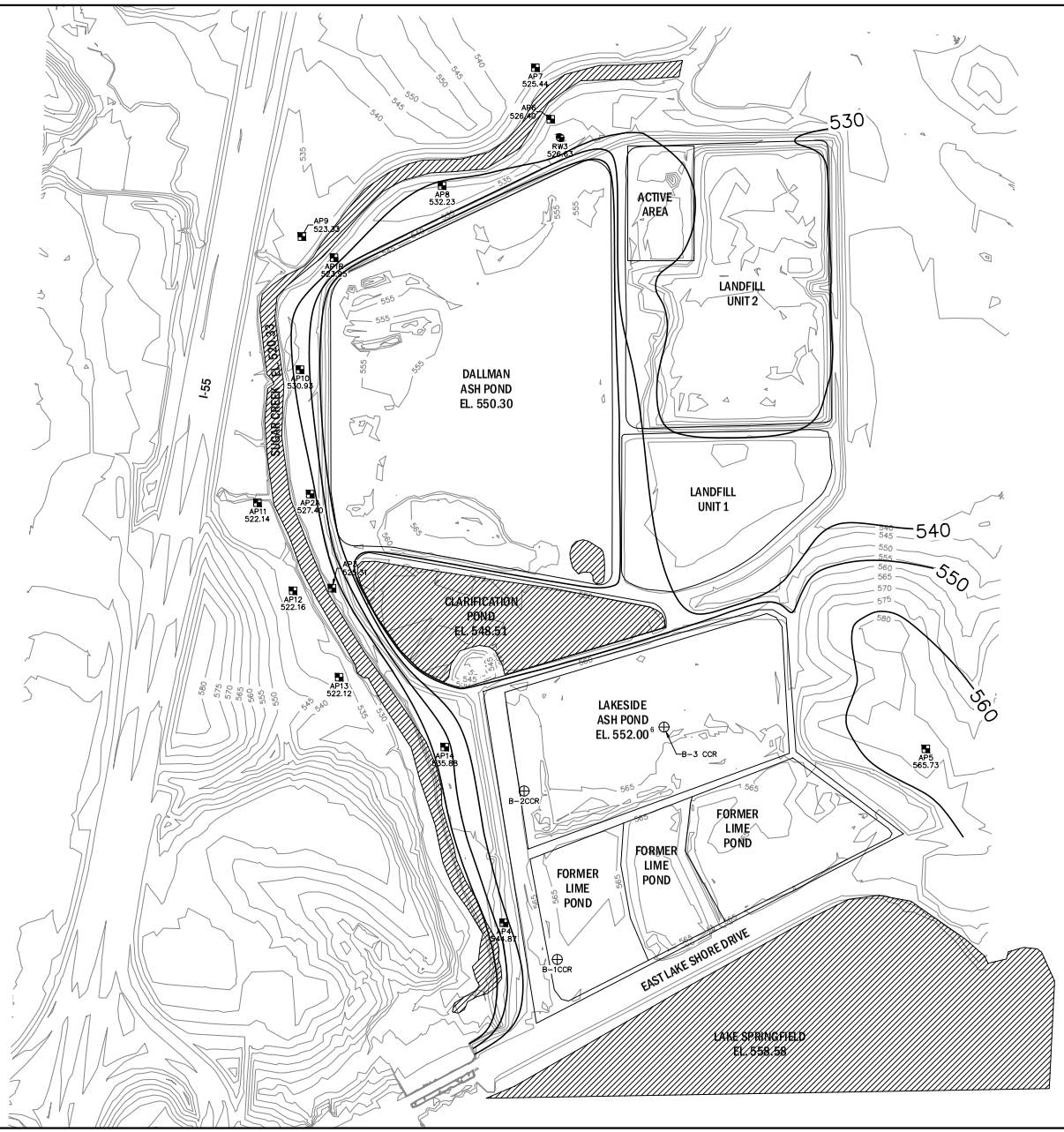
PROJECT ID: 220408/0008

SHEET NUMBER:

FIG. 9

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:36:56 PM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\MAPS\2024\9-18-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY
- VIBRATING WIRE PIEZOMETER

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 10/26/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 10/26/2023.
6. ESTIMATED GROUNDWATER ELEVATION OF 552 FT MSL IS BASED ON VIBRATING WIRE PIEZOMETERS B-1CCR, B-2CCR, AND B-3CCR INSTALLED IN AND ADJACENT TO THE LAKESIDE ASH POND.
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_046

ANDREWS ENGINEERING
3300 GINGER CREEK DRIVE
SPRINGFIELD, ILLINOIS 62711-7233
PH (217) 787-2334 WWW.ANDREWSENG.COM
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APPROVED BY: MTH | DESIGNED BY: MTH | DRAWN BY: BCK

GROUNDWATER SURFACE MAP
OCTOBER 26, 2023

PREPARED FOR

CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024

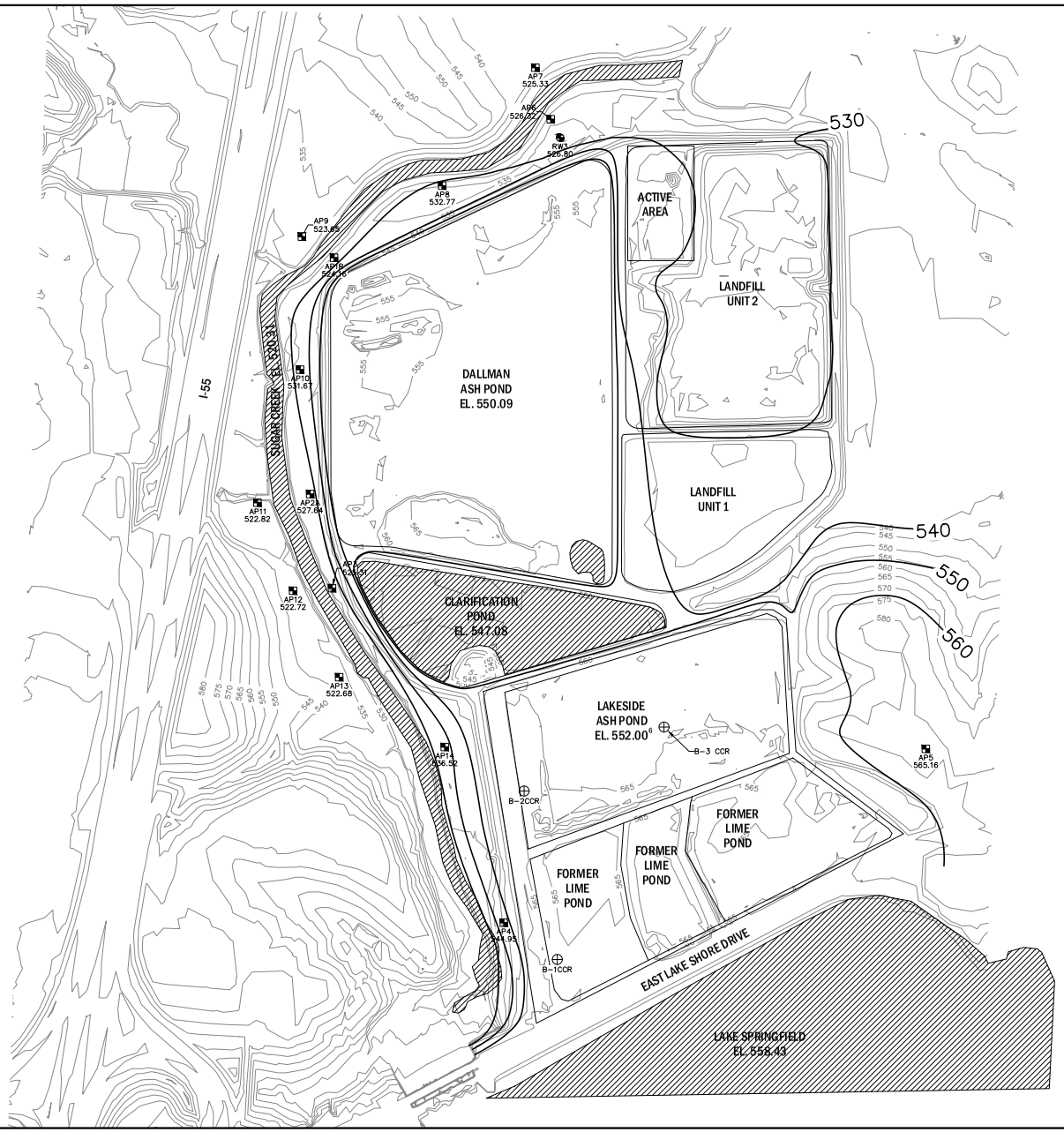
PROJECT ID: 220408/0008

SHEET NUMBER:

FIG. 10

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:40:55 PM
J:\IS\Springfield CWLP\CWLP Ash Pond\DWG\PMAPS\2024\10-26-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY
- VIBRATING WIRE PIEZOMETER

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 11/27/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 11/27/2023.
6. ESTIMATED GROUNDWATER ELEVATION OF 552 FT MSL IS BASED ON VIBRATING WIRE PIEZOMETERS B-1CCR, B-2CCR, AND B-3CCR INSTALLED IN AND ADJACENT TO THE LAKESIDE ASH POND.
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|

SC_047

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3300 GINGER CREEK DRIVE
SPRINGFIELD, ILLINOIS 62711-7233
PH (217) 787-2334 WWW.ANDREWSENG.COM
PONTIAC, IL • LOMBARD, IL • INDIANAPOLIS, IN • WARRENTON, MO

APPROVED BY: MTH | DESIGNED BY: MTH | DRAWN BY: BCK

GROUNDWATER SURFACE MAP
NOVEMBER 27, 2023

PREPARED FOR

CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024

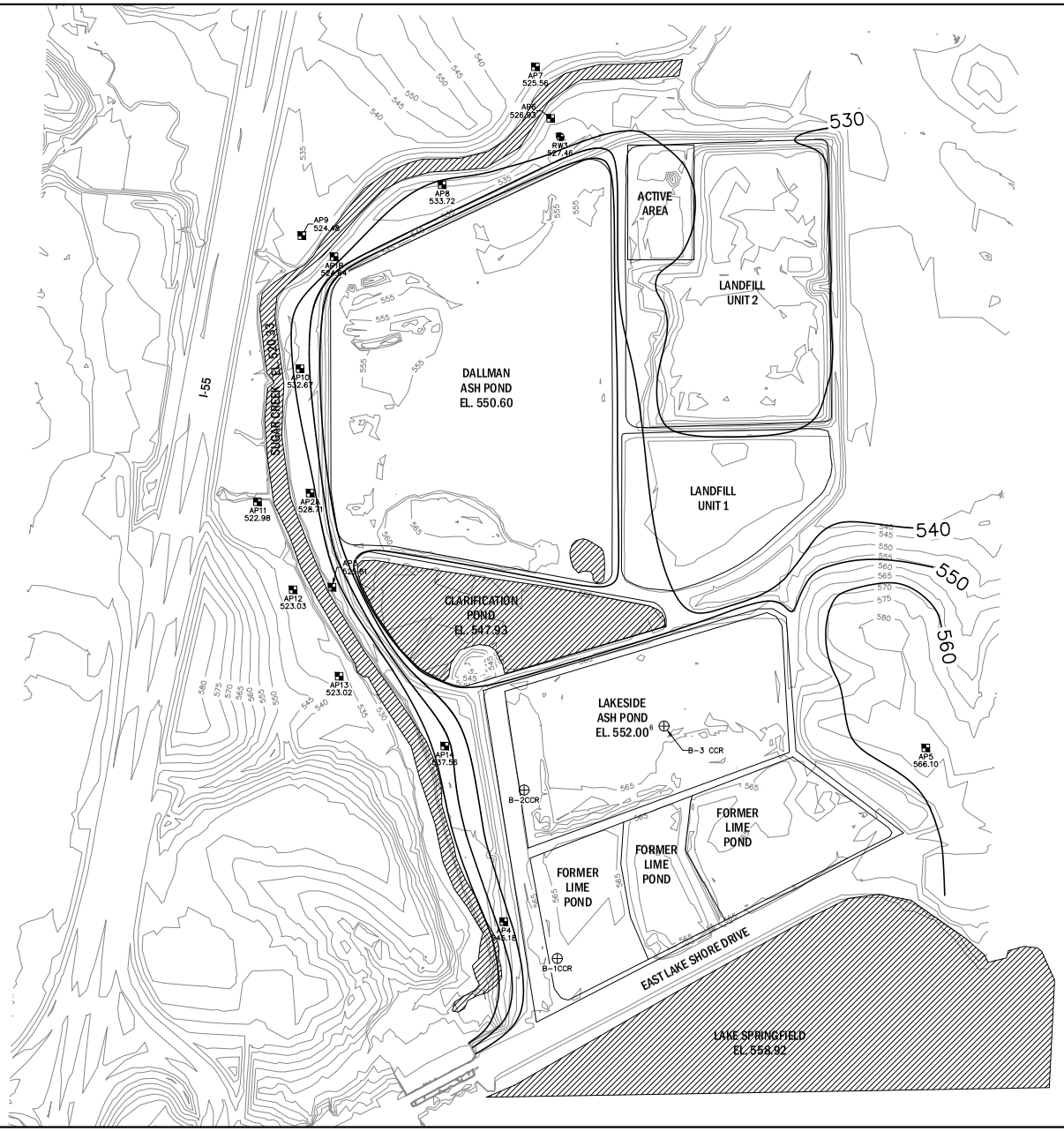
PROJECT ID: 220408/0008

SHEET NUMBER:

FIG. 11

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:46:50 PM
J:\IS\Springfield CMLP\CMLP Ash Pond\DWG\MAPS\2024\11-27-23.dwg




## LEGEND

- EXISTING GROUND CONTOURS
- GROUNDWATER CONTOURS
- CCR SURFACE IMPOUNDMENT WELL
- FGDS LANDFILL WELL
- APPROXIMATE LIMITS OF SURFACE WATER BODY
- VIBRATING WIRE PIEZOMETER

## NOTES

1. LIDAR DATA DERIVED FROM USGS WEBSITE (FLIGHT DATE: OCTOBER 15, 2018).
2. POTENTIOMETRIC CONTOUR INTERVAL SHOWN IS 10 FEET.
3. TOPOGRAPHIC CONTOUR INTERVAL SHOWN IS 5 FEET.
4. SAMPLING DATE: 12/27/2023.
5. SUGAR CREEK SURFACE WATER ELEVATION IS BASED ON AVERAGE OF USGS GAGE 05576250 FOR 12/27/2023.
6. ESTIMATED GROUNDWATER ELEVATION OF 552 FT MSL IS BASED ON VIBRATING WIRE PIEZOMETERS B-1CCR, B-2CCR, AND B-3CCR INSTALLED IN AND ADJACENT TO THE LAKESIDE ASH POND.
7. BOUNDARIES OF THE SITE FEATURES ARE APPROXIMATE.

N

0 200 400 800

SCALE: IN FEET

| NO. | DATE | REVISION DESCRIPTION | BY |
|---|---|---|---|
| | | | |

SC_048

ANDREWS ENGINEERING
3300 GINGER CREEK DRIVE
SPRINGFIELD, ILLINOIS 62711-7233
PH (217) 787-2334 WWW.ANDREWSENG.COM
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APPROVED BY: MTH | DESIGNED BY: MTH | DRAWN BY: BCK

GROUNDWATER SURFACE MAP
DECEMBER 27, 2023

PREPARED FOR

CITY WATER, LIGHT, AND POWER
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

DATE: JANUARY 2024

PROJECT ID: 220408/0008

SHEET NUMBER:

FIG. 12

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Tab: Layout1 Last Saved: January 25, 2024, by Ben Korpus Plotted: Thursday, January 25, 2024 2:48:37 PM
J:\S\Springfield CWLP\CWLP Ash Pond\DWG\PMAPS\2024\12-27-23.dwg

# APPENDIX C:
## 2023 LABORATORY ANALYTICAL REPORTS AND FIELD SAMPLING NOTES

March 07, 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:** Ash Pond Monitoring Wells **WorkOrder:** 23010325

Dear Eric Staley:

TEKLAB, INC received 15 samples on 1/30/2023 9:20:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,

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:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-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 | 16 |
| Chain of Custody | Appended |

**Client:** City Water, Light & Power **Work Order:** 23010325

**Client Project:** Ash Pond Monitoring Wells **Report Date:** 07-Mar-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:** 23010325

**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-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:** Ash Pond Monitoring Wells

**Work Order:** 23010325
**Report Date:** 07-Mar-23

**Cooler Receipt Temp:** 0.0 °C

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

Wells AP-7, AP-9, AP-10, AP-11, AP-12, AP-13 and AP-14 were frozen and could not be collected. JR/JC 1/30/23

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<br>Collinsville, IL 62234-7425 |
| **Phone** | (618) 344-1004 |
| **Fax** | (618) 344-1005 |
| **Email** | jhriley@teklabinc.com |

### Springfield

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

### Kansas City

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

### Collinsville Air

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

### Chicago

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

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|---|---|---|---|---|---|
| Illinois | IEPA | 100226 | NELAP | 1/31/2024 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2023 | Collinsville |
| Louisiana | LDEQ | 05002 | NELAP | 6/30/2023 | Collinsville |
| Louisiana | LDEQ | 05003 | NELAP | 6/30/2023 | Collinsville |
| Oklahoma | ODEQ | 9978 | NELAP | 8/31/2023 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2023 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2023 | 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:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-001
**Client Sample ID:** RW-3
**Matrix:** GROUNDWATER
**Collection Date:** 01/26/2023 14:40

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **495.49** | ft | 1 | 01/26/2023 14:40 | R324367 |
| Depth to water | * | -5.00 | | **6.60** | ft | 1 | 01/26/2023 14:40 | R324367 |
| Depth to water from measuring point | * | 0 | | **9.30** | ft | 1 | 01/26/2023 14:40 | R324367 |
| Elevation of groundwater surface | * | 0 | | **530.20** | ft | 1 | 01/26/2023 14:40 | R324367 |
| Measuring Point Elevation | * | 0 | | **539.50** | ft | 1 | 01/26/2023 14:40 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.70** | ft | 1 | 01/26/2023 14:40 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **170** | NTU | 1 | 01/26/2023 14:40 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **41.9** | °F | 1 | 01/26/2023 14:40 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.15** | | 1 | 01/26/2023 14:40 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1640** | µmhos/cm @25C | 1 | 01/26/2023 14:40 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **435** | mg/L | 2.5 | 01/31/2023 8:38 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 02/06/2023 13:57 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.46** | mg/L | 1 | 02/07/2023 9:56 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **29** | mg/L | 1 | 02/06/2023 13:57 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.169** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Barium | NELAP | 0.0025 | | **0.168** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Boron | NELAP | 0.0200 | | **0.175** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Calcium | NELAP | 0.100 | | **67.8** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0179** | mg/L | 1 | 02/06/2023 17:28 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 12:40 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 0:32 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:36 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:36 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:13 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-002
**Client Sample ID:** AP-1
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 11:19

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **504.29** | ft | 1 | 01/27/2023 11:19 | R324367 |
| Depth to water | * | -5.00 | | **7.62** | ft | 1 | 01/27/2023 11:19 | R324367 |
| Depth to water from measuring point | * | 0 | | **9.89** | ft | 1 | 01/27/2023 11:19 | R324367 |
| Elevation of groundwater surface | * | 0 | | **525.48** | ft | 1 | 01/27/2023 11:19 | R324367 |
| Measuring Point Elevation | * | 0 | | **535.37** | ft | 1 | 01/27/2023 11:19 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.27** | ft | 1 | 01/27/2023 11:19 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **7.4** | NTU | 1 | 01/27/2023 11:19 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.8** | °F | 1 | 01/27/2023 11:19 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.60** | | 1 | 01/27/2023 11:19 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **3060** | µmhos/cm @25C | 1 | 01/27/2023 11:19 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1520** | mg/L | 2.5 | 01/31/2023 8:38 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **781** | mg/L | 20 | 02/06/2023 14:25 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 02/07/2023 9:58 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 5 | | **58** | mg/L | 5 | 02/06/2023 14:19 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Barium | NELAP | 0.0025 | | **0.236** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Boron | NELAP | 0.200 | S | **23.2** | mg/L | 10 | 02/06/2023 17:24 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Calcium | NELAP | 0.100 | S | **230** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0566** | mg/L | 1 | 02/06/2023 17:39 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 12:42 | 202449 |
| *Matrix spike control limits for B are not applicable due to high sample/spike ratio.* | | | | | | | | |
| *Matrix spike control limits for Ca 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 | 02/07/2023 1:32 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:41 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:41 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:15 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-002
**Client Sample ID:** AP-1
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 11:19

| 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 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-003
**Client Sample ID:** AP-2
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 10:55

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.77** | ft | 1 | 01/27/2023 10:55 | R324367 |
| Depth to water | * | -5.00 | | **4.40** | ft | 1 | 01/27/2023 10:55 | R324367 |
| Depth to water from measuring point | * | 0 | | **6.90** | ft | 1 | 01/27/2023 10:55 | R324367 |
| Elevation of groundwater surface | * | 0 | | **529.20** | ft | 1 | 01/27/2023 10:55 | R324367 |
| Measuring Point Elevation | * | 0 | | **536.10** | ft | 1 | 01/27/2023 10:55 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.50** | ft | 1 | 01/27/2023 10:55 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **8.9** | NTU | 1 | 01/27/2023 10:55 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.6** | °F | 1 | 01/27/2023 10:55 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.46** | | 1 | 01/27/2023 10:55 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **2440** | µmhos/cm @25C | 1 | 01/27/2023 10:55 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1180** | mg/L | 2.5 | 01/31/2023 8:39 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **485** | mg/L | 20 | 02/06/2023 14:45 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.24** | mg/L | 1 | 02/07/2023 10:00 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **36** | mg/L | 1 | 02/06/2023 14:27 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Barium | NELAP | 0.0025 | | **0.0744** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Boron | NELAP | 0.0200 | | **3.94** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Calcium | NELAP | 0.100 | | **217** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Cobalt | NELAP | 0.0050 | | **0.0091** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0476** | mg/L | 1 | 02/06/2023 17:30 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:13 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:00 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:09 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:09 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:17 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-004
**Client Sample ID:** AP-3
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 10:35

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.45** | ft | 1 | 01/27/2023 10:35 | R324367 |
| Depth to water | * | -5.00 | | **7.77** | ft | 1 | 01/27/2023 10:35 | R324367 |
| Depth to water from measuring point | * | 0 | | **9.47** | ft | 1 | 01/27/2023 10:35 | R324367 |
| Elevation of groundwater surface | * | 0 | | **525.93** | ft | 1 | 01/27/2023 10:35 | R324367 |
| Measuring Point Elevation | * | 0 | | **535.40** | ft | 1 | 01/27/2023 10:35 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **1.70** | ft | 1 | 01/27/2023 10:35 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **< 1.0** | NTU | 1 | 01/27/2023 10:35 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.9** | °F | 1 | 01/27/2023 10:35 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.58** | | 1 | 01/27/2023 10:35 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **2090** | µmhos/cm @25C | 1 | 01/27/2023 10:35 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1040** | mg/L | 2.5 | 01/31/2023 8:39 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 100 | | **461** | mg/L | 10 | 02/06/2023 14:53 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.22** | mg/L | 1 | 02/07/2023 10:01 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 5 | | **60** | mg/L | 5 | 02/06/2023 14:48 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Barium | NELAP | 0.0025 | | **0.111** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Boron | NELAP | 0.0200 | | **14.5** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Calcium | NELAP | 0.100 | | **161** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0501** | mg/L | 1 | 02/06/2023 17:44 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:15 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:05 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:14 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:14 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:24 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-005
**Client Sample ID:** AP-4
**Matrix:** GROUNDWATER
**Collection Date:** 01/26/2023 13:51

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **498.79** | ft | 1 | 01/26/2023 13:51 | R324367 |
| Depth to water | * | -5.00 | | **4.67** | ft | 1 | 01/26/2023 13:51 | R324367 |
| Depth to water from measuring point | * | 0 | | **9.97** | ft | 1 | 01/26/2023 13:51 | R324367 |
| Elevation of groundwater surface | * | 0 | | **549.23** | ft | 1 | 01/26/2023 13:51 | R324367 |
| Measuring Point Elevation | * | 0 | | **559.20** | ft | 1 | 01/26/2023 13:51 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **5.30** | ft | 1 | 01/26/2023 13:51 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **2.4** | NTU | 1 | 01/26/2023 13:51 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.7** | °F | 1 | 01/26/2023 13:51 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.99** | | 1 | 01/26/2023 13:51 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1160** | µmhos/cm @25C | 1 | 01/26/2023 13:51 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **515** | mg/L | 2.5 | 01/31/2023 8:44 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 02/06/2023 14:56 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.14** | mg/L | 1 | 02/07/2023 10:03 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **14** | mg/L | 1 | 02/06/2023 14:56 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Barium | NELAP | 0.0025 | | **0.390** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Boron | NELAP | 0.0200 | | **0.0918** | mg/L | 1 | 02/06/2023 17:22 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Calcium | NELAP | 0.100 | | **115** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0196** | mg/L | 1 | 02/06/2023 17:22 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:16 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:11 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:19 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:19 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:26 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-006
**Client Sample ID:** AP-5
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 12:40

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **552.63** | ft | 1 | 01/27/2023 12:40 | R324367 |
| Depth to water | * | -5.00 | | **12.57** | ft | 1 | 01/27/2023 12:40 | R324367 |
| Depth to water from measuring point | * | 0 | | **14.87** | ft | 1 | 01/27/2023 12:40 | R324367 |
| Elevation of groundwater surface | * | 0 | | **569.03** | ft | 1 | 01/27/2023 12:40 | R324367 |
| Measuring Point Elevation | * | 0 | | **583.90** | ft | 1 | 01/27/2023 12:40 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.30** | ft | 1 | 01/27/2023 12:40 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **3.7** | NTU | 1 | 01/27/2023 12:40 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.4** | °F | 1 | 01/27/2023 12:40 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.06** | | 1 | 01/27/2023 12:40 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1000** | µmhos/cm @25C | 1 | 01/27/2023 12:40 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **374** | mg/L | 1 | 01/31/2023 8:44 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 20 | | **37** | mg/L | 2 | 02/06/2023 15:17 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.34** | mg/L | 1 | 02/07/2023 10:06 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **3** | mg/L | 1 | 02/06/2023 15:06 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Barium | NELAP | 0.0025 | | **0.0408** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Boron | NELAP | 0.0200 | | **0.0353** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Calcium | NELAP | 0.100 | | **78.3** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0142** | mg/L | 1 | 02/06/2023 17:46 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:18 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:16 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:25 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:25 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:33 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-007
**Client Sample ID:** AP-6
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 12:05

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **498.20** | ft | 1 | 01/27/2023 12:05 | R324367 |
| Depth to water | * | -5.00 | | **5.53** | ft | 1 | 01/27/2023 12:05 | R324367 |
| Depth to water from measuring point | * | 0 | | **7.95** | ft | 1 | 01/27/2023 12:05 | R324367 |
| Elevation of groundwater surface | * | 0 | | **529.87** | ft | 1 | 01/27/2023 12:05 | R324367 |
| Measuring Point Elevation | * | 0 | | **537.82** | ft | 1 | 01/27/2023 12:05 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.42** | ft | 1 | 01/27/2023 12:05 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **< 1.0** | NTU | 1 | 01/27/2023 12:05 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **54.7** | °F | 1 | 01/27/2023 12:05 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.07** | | 1 | 01/27/2023 12:05 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **866** | µmhos/cm @25C | 1 | 01/27/2023 12:05 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **322** | mg/L | 1 | 01/31/2023 8:51 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **12** | mg/L | 1 | 02/06/2023 15:44 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.38** | mg/L | 1 | 02/07/2023 10:07 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **27** | mg/L | 1 | 02/06/2023 15:44 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Barium | NELAP | 0.0025 | | **0.0938** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Boron | NELAP | 0.0200 | | **0.130** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Calcium | NELAP | 0.100 | | **52.4** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0140** | mg/L | 1 | 02/06/2023 17:47 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:20 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:21 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/03/2023 16:30 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/03/2023 16:30 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:35 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

**Client:** City Water, Light & Power
**Work Order:** 23010325
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 07-Mar-23
**Lab ID:** 23010325-009
**Client Sample ID:** AP-8
**Matrix:** GROUNDWATER
**Collection Date:** 01/27/2023 11:45

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **497.60** | ft | 1 | 01/27/2023 11:45 | R324367 |
| Depth to water | * | -5.00 | | **2.30** | ft | 1 | 01/27/2023 11:45 | R324367 |
| Depth to water from measuring point | * | 0 | | **5.20** | ft | 1 | 01/27/2023 11:45 | R324367 |
| Elevation of groundwater surface | * | 0 | | **532.00** | ft | 1 | 01/27/2023 11:45 | R324367 |
| Measuring Point Elevation | * | 0 | | **537.20** | ft | 1 | 01/27/2023 11:45 | R324367 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 01/27/2023 11:45 | R324367 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **2.0** | NTU | 1 | 01/27/2023 11:45 | R324367 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.5** | °F | 1 | 01/27/2023 11:45 | R324367 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.86** | | 1 | 01/27/2023 11:45 | R324367 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1570** | µmhos/cm @25C | 1 | 01/27/2023 11:45 | R324367 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **555** | mg/L | 2.5 | 01/31/2023 8:51 | R324271 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 02/06/2023 15:47 | R324440 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.30** | mg/L | 1 | 02/07/2023 10:09 | R324472 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 1 | | **26** | mg/L | 1 | 02/06/2023 15:46 | R324453 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.0336** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Barium | NELAP | 0.0025 | | **0.360** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Boron | NELAP | 0.0200 | | **0.0849** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Calcium | NELAP | 0.100 | | **95.1** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| Lithium | NELAP | 0.0050 | | **0.0201** | mg/L | 1 | 02/06/2023 17:49 | 202449 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/02/2023 13:21 | 202449 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:27 | 202449 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/07/2023 1:27 | 202449 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/07/2023 1:27 | 202449 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/01/2023 18:38 | 202480 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 02/14/2023 0:00 | R325259 |

# Receiving Check List

http://www.teklabinc.com/

**Client:** City Water, Light & Power
**Client Project:** Ash Pond Monitoring Wells

**Work Order:** 23010325
**Report Date:** 07-Mar-23

**Carrier:** John Riley

**Completed by:** Lindsey Maddox
**On:** 30-Jan-23

**Received By:** ANC

**Reviewed by:** Shelly A. Hennessy
**On:** 30-Jan-23

**Pages to follow:** Chain of custody 2 Extra pages included 23

| | | | | |
|---|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ | Temp °C 0.0 |
| 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 #87147 TSM. - lmaddox - 1/30/2023 10:36:29 AM

Additional Nitric Acid (86511) was needed in the 2 liter containers of AP-1, AP-2, AP-3, AP-4(2 of 2) upon arrival at the laboratory. - lmaddox - 1/30/2023 10:36:48 AM

Print PDF

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23010325

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 0 °C #5
Preserved in: ☒ LAB ☐ FIELD
FOR LAB USE ONLY
LAB NOTES: 87147 TM Added $HNO_3$(8051) to AP-1, AP-2, AP-3, AP-4 (1 of 2) (TOF2)

**Client Comments:**
*elevations, pH, conductivity, temperature
**Sb Se Tl (ICPMS) As Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
TALEY/JCP

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23010325-001 | RW-3 | ~~*14:40~~ 01/26/23 *1400 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 002 | AP-1 | *11:19 01/27/23 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 003 | AP-2 | 01/27/23 1056 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 004 | AP-3 | 01/27/23 1035 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 005 | AP-4 | 01/26/23 1351 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 006 | AP-5 | 01/27/23 1240 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 007 | AP-6 | 01/27/23 1205 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 008 | AP-7 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 009 | AP-8 | 01/27/23 1145 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 010 | AP-9 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 011 | AP-10 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 01/31/23 0920 | Allison Colin | 1/20/23 0920 |

*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

SC_066

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# CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 23010325

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23010325-012 | AP-11 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 013 | AP-12 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 014 | AP-13 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 015 | AP-14 | FROZEN | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 01/30/23 0720 | | |

*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

SC_067

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_068

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-7 | 2/16/2023 | 14:45 | 13.48 | | | | | |
| AP-7 | 2/16/2023 | 14:48 | 13.48 | 10.8 | 51.4 | 7.15 | 649.0 | 40.43 |
| AP-7 | 2/16/2023 | 14:51 | 13.48 | 10.8 | 51.4 | 7.18 | 627.0 | 22.44 |
| AP-7 | 2/16/2023 | 14:54 | 13.48 | 10.8 | 51.4 | 7.20 | 626.0 | 21.87 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_069

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-9 | 2/16/2023 | 15:02 | 11.03 | | | | | |
| AP-9 | 2/16/2023 | 15:05 | 11.03 | 11.3 | 52.3 | 6.78 | 1,086.0 | 4.80 |
| AP-9 | 2/16/2023 | 15:08 | 11.03 | 11.6 | 52.9 | 6.81 | 1,117.0 | 39.31 |
| AP-9 | 2/16/2023 | 15:11 | 11.03 | 11.7 | 53.1 | 6.85 | 1,120.0 | 34.28 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_070

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-10 | 2/16/2023 | 11:25 | 2.68 | | | | | |
| AP-10 | 2/16/2023 | 11:28 | 2.68 | 10.2 | 50.4 | 6.65 | 1,363.0 | 43.57 |
| AP-10 | 2/16/2023 | 11:31 | 2.68 | 8.1 | 46.6 | 6.61 | 1,334.0 | 29.60 |
| AP-10 | 2/16/2023 | 11:34 | 2.68 | 9.7 | 49.5 | 6.58 | 1,327.0 | 41.59 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_071

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-11 | 2/16/2023 | 12:45 | 13.61 | | | | | |
| AP-11 | 2/16/2023 | 12:48 | 13.61 | 11.3 | 52.3 | 6.37 | 1,539.0 | 50.21 |
| AP-11 | 2/16/2023 | 12:51 | 13.61 | 11.8 | 53.2 | 6.40 | 1,528.0 | 143.64 |
| AP-11 | 2/16/2023 | 12:54 | 13.61 | 12.0 | 53.6 | 6.42 | 1,533.0 | 160.29 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_072

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-12 | 2/16/2023 | 13:01 | 16.21 | | | | | |
| AP-12 | 2/16/2023 | 13:04 | 16.21 | 12.0 | 53.6 | 6.43 | 2,144.0 | 37.77 |
| AP-12 | 2/16/2023 | 13:07 | 16.21 | 12.1 | 53.8 | 6.44 | 2,189.0 | 361.88 |
| AP-12 | 2/16/2023 | 13:10 | 16.21 | 12.3 | 54.1 | 6.47 | 2,193.0 | 279.37 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_073

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-13 | 2/16/2023 | 13:16 | 18.7 | | | | | |
| AP-13 | 2/16/2023 | 13:19 | 18.7 | 12.0 | 53.6 | 6.66 | 999.0 | 43.05 |
| AP-13 | 2/16/2023 | 13:22 | 18.7 | 11.7 | 53.1 | 6.65 | 912.0 | 26.66 |
| AP-13 | 2/16/2023 | 13:25 | 18.7 | 12.1 | 53.8 | 6.62 | 905.0 | 193.37 |

**Site Samping Event:** CWLP- 1Q 2023
**LIMS Workorder:** 23020985
**Technician(s):** JC, JR

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 1Q 2023**

SC_074

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Turbidity (NTU) |
|---|---|---|---|---|---|---|---|---|
| AP-14 | 2/16/2023 | 13:45 | 1.02 | | | | | |
| AP-14 | 2/16/2023 | 13:48 | 1.02 | 7.2 | 45.0 | 6.70 | 1,628.0 | 19.5 |
| AP-14 | 2/16/2023 | 13:51 | 1.02 | 6.7 | 44.1 | 6.67 | 1,540.0 | 29.27 |
| AP-14 | 2/16/2023 | 14:51 | 1.02 | 7.7 | 45.9 | 6.69 | 1,681.0 | 30.51 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_075

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| RW-3 | 7/6/2023 | 12:17 | 10.99 | 13.7 | 56.7 | 7.29 | 420.4 | 1.23 | 6.12 | -42.0 |
| RW-3 | 7/6/2023 | 12:20 | 10.99 | 13.7 | 56.7 | 7.18 | 429.4 | 0.94 | 4.40 | -50.9 |
| RW-3 | 7/6/2023 | 12:23 | 10.99 | 13.6 | 56.5 | 7.13 | 437.4 | 0.81 | 3.32 | -56.5 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_076

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-1 | 7/7/2023 | 10:59 | 10.19 | 14.3 | 57.7 | 6.58 | 1,702.8 | 1.07 | 16.06 | -7.1 |
| AP-1 | 7/7/2023 | 11:02 | 10.19 | 14.3 | 57.7 | 6.53 | 1,749.1 | 0.77 | 11.99 | -18.3 |
| AP-1 | 7/7/2023 | 11:05 | 10.19 | 14.3 | 57.7 | 6.51 | 1,798.9 | 0.64 | 8.79 | -24.0 |
| AP-1 | 7/7/2023 | 11:08 | 10.19 | 14.3 | 57.7 | 6.51 | 1,810.4 | 0.57 | 6.84 | -28.3 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_077

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-2 | 7/7/2023 | 12:22 | 8.57 | 13.6 | 56.5 | 6.46 | 1,339.0 | 0.85 | 3.93 | 44.9 |
| AP-2 | 7/7/2023 | 12:25 | 8.57 | 13.6 | 56.5 | 6.43 | 1,352.9 | 0.67 | 5.11 | 42.7 |
| AP-2 | 7/7/2023 | 12:28 | 8.57 | 13.6 | 56.5 | 6.41 | 1,371.7 | 0.58 | 2.96 | 40.5 |
| AP-2 | 7/7/2023 | 12:31 | 8.57 | 13.5 | 56.3 | 6.40 | 1,391.3 | 0.52 | 2.27 | 38.6 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-3 | 7/7/2023 | 13:10 | 10.71 | 14.7 | 58.5 | 6.53 | 1,227.8 | 0.68 | 8.71 | -13.9 |
| AP-3 | 7/7/2023 | 13:13 | 10.71 | 14.7 | 58.5 | 6.52 | 1,228.3 | 0.66 | 7.19 | -15.7 |
| AP-3 | 7/7/2023 | 13:16 | 10.71 | 14.7 | 58.5 | 6.53 | 1,226.6 | 0.60 | 5.23 | -17.6 |

SC_078

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-4 | 7/7/2023 | 11:36 | 8.95 | 18.5 | 65.3 | 6.89 | 868.0 | 30.60 | 17.69 | 45.8 |
| AP-4 | 7/7/2023 | 11:39 | 8.95 | 20.3 | 68.5 | 6.86 | 868.0 | 24.50 | 16.59 | 15.6 |
| AP-4 | 7/7/2023 | 11:42 | 8.95 | 21.4 | 70.5 | 6.86 | 875.0 | 22.90 | 15.77 | -4.1 |

SC_079

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_080

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-5 | 7/7/2023 | 13:06 | 14.08 | 13.0 | 55.4 | 7.53 | 656.0 | 32.30 | 3.19 | 80.3 |
| AP-5 | 7/7/2023 | 0:00 | 14.08 | 12.8 | 55.0 | 7.24 | 652.0 | 23.40 | 2.66 | 76.9 |
| AP-5 | 7/7/2023 | 13:12 | 14.08 | 12.8 | 55.0 | 7.16 | 653.0 | 20.70 | 1.70 | 75.7 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_081

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-6 | 7/6/2023 | 13:21 | 9.48 | 13.6 | 56.5 | 7.38 | 409.2 | 1.62 | 3.97 | 2.2 |
| AP-6 | 7/6/2023 | 13:24 | 9.48 | 13.4 | 56.1 | 7.24 | 394.2 | 1.05 | 3.32 | 6.3 |
| AP-6 | 7/6/2023 | 13:27 | 9.48 | 13.4 | 56.1 | 7.13 | 398.8 | 0.75 | 3.34 | 8.5 |
| AP-6 | 7/6/2023 | 13:30 | 9.48 | 13.3 | 55.9 | 7.06 | 406.8 | 0.62 | 3.66 | 7.1 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-7 | 7/7/2023 | 12:17 | 11.32 | 14.6 | 58.3 | 7.58 | 774.0 | 14.20 | 5.94 | 23.8 |
| AP-7 | 7/7/2023 | 12:23 | 11.32 | 15.1 | 59.2 | 7.28 | 586.0 | 8.60 | 10.95 | -51.3 |

SC_082

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_083

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-8 | 7/7/2023 | 10:30 | 6.74 | 13.8 | 56.8 | 7.00 | 909.0 | 1.20 | 17.43 | 22.8 |
| AP-8 | 7/7/2023 | 10:33 | 6.74 | 13.8 | 56.8 | 6.83 | 906.6 | 0.78 | 7.97 | 2.3 |
| AP-8 | 7/7/2023 | 10:36 | 6.74 | 13.7 | 56.7 | 6.77 | 906.3 | 0.67 | 5.84 | -11.4 |
| AP-8 | 7/7/2023 | 10:39 | 6.74 | 13.8 | 56.8 | 6.75 | 906.2 | 0.54 | 4.55 | -21.8 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-9 | 7/7/2023 | 12:34 | 12.48 | 14.5 | 58.1 | 6.95 | 896.0 | 15.30 | 8.29 | 18.9 |
| AP-9 | 7/7/2023 | 12:37 | 12.48 | 13.9 | 57.0 | 6.90 | 889.0 | 8.80 | 15.40 | -5.6 |
| AP-9 | 7/7/2023 | 12:40 | 12.48 | 13.9 | 57.0 | 6.88 | 892.0 | 7.50 | 8.39 | -19.0 |

SC_084

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-11 | 7/7/2023 | 14:28 | 14.71 | 14.2 | 57.6 | 6.70 | 964.0 | 14.60 | 20.73 | -27.4 |
| AP-11 | 7/7/2023 | 14:31 | 14.71 | 14.5 | 58.1 | 6.66 | 965.0 | 12.70 | 20.78 | -24.3 |
| AP-11 | 7/7/2023 | 14:31 | 14.71 | 14.4 | 57.9 | 6.64 | 963.0 | 11.40 | 32.67 | -21.2 |

SC_085

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_086

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-10 | 7/7/2023 | 11:38 | 4.96 | 13.6 | 56.5 | 6.63 | 1,173.7 | 0.80 | 6.28 | -31.5 |
| AP-10 | 7/7/2023 | 11:41 | 4.96 | 13.6 | 56.5 | 6.59 | 1,174.0 | 0.62 | 4.11 | -36.5 |
| AP-10 | 7/7/2023 | 11:44 | 4.96 | 13.6 | 56.5 | 6.57 | 1,173.9 | 0.53 | 3.57 | -40.7 |
| AP-10 | 7/7/2023 | 11:47 | 4.96 | 13.5 | 56.3 | 6.57 | 1,174.1 | 0.47 | 3.21 | -44.5 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_087

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-12 | 7/7/2023 | 14:10 | 16.63 | 13.7 | 56.7 | 6.57 | 2,023.0 | 10.30 | 57.57 | -69.9 |
| AP-12 | 7/7/2023 | 14:13 | 16.63 | 13.8 | 56.8 | 6.57 | 2,020.0 | 10.10 | 55.20 | -71.5 |
| AP-12 | 7/7/2023 | 14:16 | 16.63 | 13.7 | 56.7 | 6.57 | 2,016.0 | 9.90 | 55.10 | -72.4 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_088

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-13 | 7/7/2023 | 13:35 | 17.57 | 13.2 | 55.8 | 6.69 | 818.0 | 8.00 | 19.22 | -58.5 |
| AP-13 | 7/7/2023 | 13:38 | 17.57 | 13.2 | 55.8 | 6.68 | 794.0 | 7.50 | 30.10 | -60.2 |
| AP-13 | 7/7/2023 | 13:41 | 17.57 | 13.9 | 57.0 | 6.67 | 782.0 | 18.60 | 99.17 | -56.9 |
| AP-13 | 7/7/2023 | 13:44 | 17.57 | 13.8 | 56.8 | 6.66 | 821.0 | 13.30 | 37.17 | -49.8 |
| AP-13 | 7/7/2023 | 13:47 | 17.57 | 14.2 | 57.6 | 6.66 | 825.0 | 19.40 | 27.11 | -41.7 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_089

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-14 | 7/7/2023 | 11:15 | 1.48 | 14.3 | 57.7 | 7.01 | 1,661.0 | 32.10 | 15.26 | 110.5 |
| AP-14 | 7/7/2023 | 11:18 | 1.48 | 14.2 | 57.6 | 6.94 | 1,664.0 | 19.50 | 36.64 | 86.7 |
| AP-14 | 7/7/2023 | 11:21 | 1.48 | 14.1 | 57.4 | 6.93 | 1,660.0 | 16.20 | 28.12 | 76.4 |

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*

February 22, 2023

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

RE: 23010325

Dear Shelly Hennessy:

Order No.: 23020178

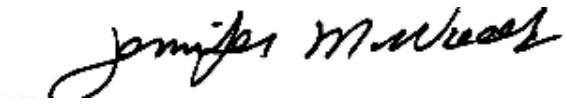
Summit Environmental Technologies, Inc. received 8 sample(s) on 2/2/2023 for the analyses presented in the following report.

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#: **23020178**
Date: **2/22/2023**

**CLIENT:** TEKLAB Inc,
**Project:** 23010325

WorkOrder Narrative:
23020178: 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:
LCSD-62679 Radium-226_DW(903.0): LCSD-62679 exhibited a high recovery and RPD, the batch is in control by LCS/QCS-62679

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#: **23020178**
Date: **2/22/2023**

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.**

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Website: http://www.settek.com

# Workorder Sample Summary

WO#: **23020178**

***22-Feb-23***

**CLIENT:** TEKLAB Inc,
**Project:** 23010325

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 23020178-001 | 23010325-001 | | 1/26/2023 2:20:00 PM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-002 | 23010325-002 | | 1/27/2023 1:19:00 PM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-003 | 23010325-003 | | 1/27/2023 10:55:00 AM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-004 | 23010325-004 | | 1/27/2023 10:35:00 AM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-005 | 23010325-005 | | 1/26/2023 1:51:00 PM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-006 | 23010325-006 | | 1/27/2023 12:40:00 PM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-007 | 23010325-007 | | 1/27/2023 12:05:00 PM | 2/2/2023 1:05:00 PM | Non-Potable Water |
| 23020178-008 | 23010325-009 | | 1/27/2023 11:45:00 AM | 2/2/2023 1:05:00 PM | Non-Potable Water |

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*Website: http://www.settek.com*

# DATES REPORT

WO#: **23020178**

***22-Feb-23***

SC_094

**Client:** TEKLAB Inc,
**Project:** 23010325

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23020178-001A | 23010325-001 | 1/26/2023 2:20:00 PM | Non-Potable Water | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-002A | 23010325-002 | 1/27/2023 1:19:00 PM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-003A | 23010325-003 | 1/27/2023 10:55:00 AM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-004A | 23010325-004 | 1/27/2023 10:35:00 AM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-005A | 23010325-005 | 1/26/2023 1:51:00 PM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-006A | 23010325-006 | 1/27/2023 12:40:00 PM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-007A | 23010325-007 | 1/27/2023 12:05:00 PM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |
| | | | | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |
| 23020178-008A | 23010325-009 | 1/27/2023 11:45:00 AM | | Combined Radium (EPA903+904) | | 2/7/2023 10:11:00 AM | 2/17/2023 5:17:57 PM |
| | | | | Radium-226 (EPA 903.0) | | 2/7/2023 10:11:00 AM | 2/15/2023 |

Original

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Website: http://www.settek.com

# DATES REPORT

WO#: **23020178**

***22-Feb-23***

SC_095

**Client:** TEKLAB Inc,
**Project:** 23010325

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23020178-008A | 23010325-009 | 1/27/2023 11:45:00 AM | Non-Potable Water | Radium-228 (EPA 904.0) | | 2/7/2023 10:11:00 AM | 2/14/2023 1:39:00 PM |

Original

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/26/2023 2:20:00 PM

**Project:** 23010325

**Lab ID:** 23020178-001

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-001

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.28 | 2.00 | U | pCi/L | ± 0.54 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.28 | 1.00 | U | pCi/L | ± 0.11 | 1 | 2/15/2023 |
| Yield | 1 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | -0.37 | 1.00 | U | pCi/L | ± 0.43 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 0.98 | | | | | 1 | 2/14/2023 1:39:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/27/2023 1:19:00 PM

**Project:** 23010325

**Lab ID:** 23020178-002

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-002

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.38 | 2.00 | U | pCi/L | ± 0.64 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.45 | 1.00 | U | pCi/L | ± 0.14 | 1 | 2/15/2023 |
| Yield | 0.96 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.93 | 1.00 | J | pCi/L | ± 0.5 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 0.96 | | | | | 1 | 2/14/2023 1:39:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/27/2023 10:55:00 AM

**Project:** 23010325

**Lab ID:** 23020178-003

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-003

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.87 | 2.00 | U | pCi/L | ± 0.56 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.41 | 1.00 | U | pCi/L | ± 0.14 | 1 | 2/15/2023 |
| Yield | 0.91 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.46 | 1.00 | U | pCi/L | ± 0.42 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 0.92 | | | | | 1 | 2/14/2023 1:39:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/27/2023 10:35:00 AM

**Project:** 23010325

**Lab ID:** 23020178-004

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-004

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228 COMBINED RADIUM (EPA903+904)** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| Radium-226/Radium-228 | 0.54 | 2.00 | U | pCi/L | ± 0.53 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228 RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.13 | 1.00 | U | pCi/L | ± 0.08 | 1 | 2/15/2023 |
| Yield | 0.97 | | | | | 1 | 2/15/2023 |
| **RAD226/228 RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.41 | 1.00 | U | pCi/L | ± 0.45 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 0.97 | | | | | 1 | 2/14/2023 1:39:00 PM |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/26/2023 1:51:00 PM

**Project:** 23010325

**Lab ID:** 23020178-005

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-005

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.04 | 2.00 | U | pCi/L | ± 0.56 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.58 | 1.00 | U | pCi/L | ± 0.15 | 1 | 2/15/2023 |
| Yield | 1 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.46 | 1.00 | U | pCi/L | ± 0.41 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 1 | | | | | 1 | 2/14/2023 1:39:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/27/2023 12:40:00 PM

**Project:** 23010325

**Lab ID:** 23020178-006

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-006

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.29 | 2.00 | U | pCi/L | ± 0.62 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.1 | 1.00 | U | pCi/L | ± 0.07 | 1 | 2/15/2023 |
| Yield | 1 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 1.19 | 1.00 | | pCi/L | ± 0.55 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 1 | | | | | 1 | 2/14/2023 1:39:00 PM |

| **Qualifiers:** | | | | | |
|---|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 1/27/2023 12:05:00 PM

**Project:** 23010325

**Lab ID:** 23020178-007

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-007

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.47 | 2.00 | U | pCi/L | ± 0.51 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.32 | 1.00 | U | pCi/L | ± 0.13 | 1 | 2/15/2023 |
| Yield | 0.96 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.15 | 1.00 | U | pCi/L | ± 0.38 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 0.98 | | | | | 1 | 2/14/2023 1:39:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23020178**

Date Reported: **2/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 1/27/2023 11:45:00 AM

**Project:** 23010325

**Lab ID:** 23020178-008
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23010325-009

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | **E903-904** | Analyst: **HDJ** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.98 | 2.00 | U | pCi/L | ± 0.75 | 1 | 2/17/2023 5:17:57 PM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 1.11 | 1.00 | | pCi/L | ± 0.21 | 1 | 2/15/2023 |
| Yield | 1 | | | | | 1 | 2/15/2023 |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.87 | 1.00 | J | pCi/L | ± 0.54 | 1 | 2/14/2023 1:39:00 PM |
| Yield | 1 | | | | | 1 | 2/14/2023 1:39:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

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

# QC SUMMARY REPORT

WO#: **23020178**

***22-Feb-23***

SC_104

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

Sample ID: **23020178-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/7/2023** RunNo: **158366**
Client ID: **23010325-001** Batch ID: **62679** TestNo: **E904.0** **E903-904** Analysis Date: **2/14/2023** SeqNo: **4210556**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.44 | 1.00 | | 0 | 0 | | | 0 | 0 | 30 | U |
| Yield | 1 | | | 0 | 0 | | | 0.9800 | 2.02 | | |

Sample ID: **23020178-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/7/2023** RunNo: **158366**
Client ID: **23010325-002** Batch ID: **62679** TestNo: **E904.0** **E903-904** Analysis Date: **2/14/2023** SeqNo: **4210558**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.24 | 1.00 | | 0 | 0 | | | 0.9300 | 28.6 | 30 | |
| Yield | 1 | | | 0 | 0 | | | 0.9600 | 4.08 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23020178**

***22-Feb-23***

SC_105

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

| Sample ID: **MB-62679** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210547** |

| 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 | 0.810 | | | 0 | 0 | | | | | | |

| Sample ID: **LCS-62679** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210548** |

| 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 | 70 | 130 | | | | |
| Yield | 0.920 | | | 0 | 0 | | | | | | |

| Sample ID: **LCSD-62679** | SampType: **LCSD** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210549** |

| 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 | 70 | 130 | 3.710 | 4.69 | 20 | |
| Yield | 0.860 | | | 0 | 0 | | | 0.9200 | 6.74 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23020178**

***22-Feb-23***

SC_106

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

| Sample ID: **RLC-62679** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210551** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.21 | 1.00 | 1.000 | 0 | 121 | 50 | 150 | | | | |
| Yield | 0.920 | | | 0 | 0 | | | | | | |

| Sample ID: **RLCD-62679** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210552** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.900 | 1.00 | 1.000 | 0 | 90.0 | 50 | 150 | | | | J |
| Yield | 0.910 | | | 0 | 0 | | | | | | |

| Sample ID: **23020315-001AMS** | SampType: **MS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158366** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E904.0** | **E903-904** | Analysis Date: **2/14/2023** | SeqNo: **4210553** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 4.22 | 1.00 | 5.000 | 0 | 84.4 | 70 | 130 | | | | |
| Yield | 1.00 | | | 0.9700 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23020178**

***22-Feb-23***

SC_107

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

Sample ID: **23020178-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **2/7/2023** RunNo: **158369**
Client ID: **23010325-001** Batch ID: **62679** TestNo: **E903.0** **E903-904** Analysis Date: **2/15/2023** SeqNo: **4210647**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.39 | 1.00 | | | | | | 0 | 0 | 30 | U |
| Yield | 0.99 | | | | | | | 1.000 | 1.01 | 0 | |

Sample ID: **23020178-002ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **2/7/2023** RunNo: **158369**
Client ID: **23010325-002** Batch ID: **62679** TestNo: **E903.0** **E903-904** Analysis Date: **2/15/2023** SeqNo: **4210649**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.64 | 1.00 | | | | | | 0 | 0 | 30 | U |
| Yield | 0.98 | | | | | | | 0.9600 | 2.06 | 0 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23020178**
***22-Feb-23***

SC_108

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

| Sample ID: **MB-62679** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210638** |

| 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-62679** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210639** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.28 | 1.00 | 5.000 | 0 | 106 | 70 | 130 | | | | QLR |

| Sample ID: **RLC-62679** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210642** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.29 | 1.00 | 1.000 | 0 | 129 | 50 | 150 | | | | |

| Sample ID: **RLCD-62679** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210643** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23020178**

***22-Feb-23***

SC_109

**Client:** TEKLAB Inc,
**Project:** 23010325 **BatchID:** **62679**

| Sample ID: **RLCD-62679** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210643** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.22 | 1.00 | 1.000 | 0 | 122 | 50 | 150 | | | | |

| Sample ID: **23020315-001AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/7/2023** | RunNo: **158369** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **62679** | TestNo: **E903.0** | **E903-904** | Analysis Date: **2/15/2023** | SeqNo: **4210644** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.63 | 1.00 | 5.000 | 0 | 113 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

# 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: QC Level: 3

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

23020178

Project# 23010325

Contact: Shelly A Hennessy Email: SHennessy@TeklabInc.com
Requested Due Date: 20 business days or less Billing/PO: 33924 Phone: 618-344-1004

State of Origin:

**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 | GPM | | pH | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23010325-001 | 1/26/23 1420 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 37 | 23 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-002 | 1/27/23 1319 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 24 | 23 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-003 | 1/27/23 1055 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 20 | 23 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-004 | 1/27/23 1035 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 30 | 10 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-005 | 1/26/23 1351 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 16 | 20 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-006 | 1/27/23 1240 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 20 | 27 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-007 | 1/27/23 1205 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 23 | 27 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23010325-009 | 1/27/23 1145 | HNO3 | Groundwater | ☑ | ☑ | ☑ | 16 | 40 | 1 | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | | Unpres | Aqueous | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | | Unpres | Aqueous | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | | | Unpres | Aqueous | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 1/30/23 | | |
| | | | |
| | | | |
| | | | |
| | | Fedex | 2/2/23 1305 |

2 coolers @ 4.6+0.3 = 4.9 @ 4.5+0.3 = 4.8

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

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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: **23020178** RcptNo: **1**

| | | | |
|---|---|---|---|
| Logged by: | **Anthony W. Britton** | **2/2/2023 1:05:00 PM** | Anthony Britton |
| Completed By: | **Anthony W. Britton** | **2/2/2023 7:00:57 PM** | Anthony Britton |
| Reviewed By: | **Jennifer Woolf** | **2/3/2023 10:02:23 AM** | Jennifer Woolf |

## *Chain of Custody*

| | | | | |
|---|---|---|---|---|
| 1. | Were seals intact? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | Is Chain of Custody complete? | Yes ☐ | No ☑ | Not Present ☐ |
| 3. | How was the sample delivered? | FedEx | | |

## *Log In*

| | | | | |
|---|---|---|---|---|
| 4. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| 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:

IL per email
project address not included

**Cooler Information**

| Cooler No | Temp ºC | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 4.8 | Good | Not Present | | | |

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# Sample Log-In Check List

Client Name: **TEK-IL-62234-A** Work Order Number: **23020178** RcptNo: **1**

| Cooler No | Temp ºC | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 2 | 4.9 | Good | Not Present | | | |

March 13, 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:** Ash Pond Monitoring Wells **WorkOrder:** 23020985

Dear Eric Staley:

TEKLAB, INC received 7 samples on 2/17/2023 8:50:00 AM for the analysis presented in the following report.

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

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

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

Sincerely,

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:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23

**This reporting package includes the following:**


| | |
|---|---|
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| Definitions | 3 |
| Case Narrative | 5 |
| Accreditations | 6 |
| Laboratory Results | 7 |
| Receiving Check List | 14 |
| Chain of Custody | Appended |

**Client:** City Water, Light & Power **Work Order:** 23020985

**Client Project:** Ash Pond Monitoring Wells **Report Date:** 13-Mar-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:** 23020985

**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-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:** Ash Pond Monitoring Wells

**Work Order:** 23020985
**Report Date:** 13-Mar-23

**Cooler Receipt Temp:** 1.2 °C

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

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<br>Collinsville, IL 62234-7425 |
| **Phone** | (618) 344-1004 |
| **Fax** | (618) 344-1005 |
| **Email** | jhriley@teklabinc.com |

### Springfield

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

### Kansas City

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

### Collinsville Air

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

### Chicago

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

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23

| State | Dept | Cert # | NELAP | Exp Date | Lab |
|---|---|---|---|---|---|
| Illinois | IEPA | 100226 | NELAP | 1/31/2024 | Collinsville |
| Kansas | KDHE | E-10374 | NELAP | 4/30/2023 | Collinsville |
| Louisiana | LDEQ | 05002 | NELAP | 6/30/2023 | Collinsville |
| Louisiana | LDEQ | 05003 | NELAP | 6/30/2023 | Collinsville |
| Oklahoma | ODEQ | 9978 | NELAP | 8/31/2023 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2023 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2023 | 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:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-001
**Client Sample ID:** AP-7
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 14:54

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **496.50** | ft | 1 | 02/16/2023 14:54 | R325158 |
| Depth to water | * | -5.00 | | **10.82** | ft | 1 | 02/16/2023 14:54 | R325158 |
| Depth to water from measuring point | * | 0 | | **13.48** | ft | 1 | 02/16/2023 14:54 | R325158 |
| Elevation of groundwater surface | * | 0 | | **525.54** | ft | 1 | 02/16/2023 14:54 | R325158 |
| Measuring Point Elevation | * | 0 | | **539.02** | ft | 1 | 02/16/2023 14:54 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.66** | ft | 1 | 02/16/2023 14:54 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **22** | NTU | 1 | 02/16/2023 14:54 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **51.4** | °F | 1 | 02/16/2023 14:54 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.20** | | 1 | 02/16/2023 14:54 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **626** | µmhos/cm @25C | 1 | 02/16/2023 14:54 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **328** | mg/L | 1 | 02/20/2023 9:58 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **16** | mg/L | 1 | 02/27/2023 16:13 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.36** | mg/L | 1 | 02/24/2023 9:35 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **45** | mg/L | 2 | 02/27/2023 16:40 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Barium | NELAP | 0.0025 | | **0.111** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Boron | NELAP | 0.0200 | | **0.180** | mg/L | 1 | 02/22/2023 17:56 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Calcium | NELAP | 0.100 | | **49.3** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/21/2023 23:57 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 20:58 | 203052 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 20:58 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 20:58 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:22 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-002
**Client Sample ID:** AP-9
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 15:11

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **501.80** | ft | 1 | 02/16/2023 15:11 | R325158 |
| Depth to water | * | -5.00 | | **7.93** | ft | 1 | 02/16/2023 15:11 | R325158 |
| Depth to water from measuring point | * | 0 | | **11.03** | ft | 1 | 02/16/2023 15:11 | R325158 |
| Elevation of groundwater surface | * | 0 | | **529.27** | ft | 1 | 02/16/2023 15:11 | R325158 |
| Measuring Point Elevation | * | 0 | | **540.30** | ft | 1 | 02/16/2023 15:11 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 02/16/2023 15:11 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **34** | NTU | 1 | 02/16/2023 15:11 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **53.1** | °F | 1 | 02/16/2023 15:11 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.85** | | 1 | 02/16/2023 15:11 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1120** | µmhos/cm @25C | 1 | 02/16/2023 15:11 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **586** | mg/L | 1 | 02/20/2023 9:58 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **38** | mg/L | 1 | 02/27/2023 16:51 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.22** | mg/L | 1 | 02/24/2023 9:37 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **36** | mg/L | 1 | 02/27/2023 16:51 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Barium | NELAP | 0.0025 | | **0.284** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Boron | NELAP | 0.0200 | | **0.0973** | mg/L | 1 | 02/22/2023 17:59 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Calcium | NELAP | 0.100 | | **105** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/22/2023 0:15 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 21:05 | 203052 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 21:05 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 21:05 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:25 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-003
**Client Sample ID:** AP-10
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 11:34

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **499.43** | ft | 1 | 02/16/2023 11:34 | R325158 |
| Depth to water | * | -5.00 | | **-0.42** | ft | 1 | 02/16/2023 11:34 | R325158 |
| Depth to water from measuring point | * | 0 | | **2.68** | ft | 1 | 02/16/2023 11:34 | R325158 |
| Elevation of groundwater surface | * | 0 | | **534.82** | ft | 1 | 02/16/2023 11:34 | R325158 |
| Measuring Point Elevation | * | 0 | | **537.50** | ft | 1 | 02/16/2023 11:34 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 02/16/2023 11:34 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **42** | NTU | 1 | 02/16/2023 11:34 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **49.5** | °F | 1 | 02/16/2023 11:34 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.58** | | 1 | 02/16/2023 11:34 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1330** | µmhos/cm @25C | 1 | 02/16/2023 11:34 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **778** | mg/L | 1 | 02/20/2023 9:58 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **96** | mg/L | 5 | 02/27/2023 17:04 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.30** | mg/L | 1 | 02/24/2023 9:39 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **27** | mg/L | 1 | 02/27/2023 16:59 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Barium | NELAP | 0.0025 | | **0.509** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Boron | NELAP | 0.0200 | | **3.32** | mg/L | 1 | 02/22/2023 18:03 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Calcium | NELAP | 0.100 | | **139** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/22/2023 0:19 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 21:11 | 203052 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 21:11 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 21:11 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:27 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-004
**Client Sample ID:** AP-11
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 12:54

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **515.15** | ft | 1 | 02/16/2023 12:54 | R325158 |
| Depth to water | * | -5.00 | | **10.81** | ft | 1 | 02/16/2023 12:54 | R325158 |
| Depth to water from measuring point | * | 0 | | **13.61** | ft | 1 | 02/16/2023 12:54 | R325158 |
| Elevation of groundwater surface | * | 0 | | **524.49** | ft | 1 | 02/16/2023 12:54 | R325158 |
| Measuring Point Elevation | * | 0 | | **538.10** | ft | 1 | 02/16/2023 12:54 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 02/16/2023 12:54 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **160** | NTU | 1 | 02/16/2023 12:54 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **53.6** | °F | 1 | 02/16/2023 12:54 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.42** | | 1 | 02/16/2023 12:54 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1530** | µmhos/cm @25C | 1 | 02/16/2023 12:54 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **820** | mg/L | 2.5 | 02/20/2023 9:59 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **105** | mg/L | 5 | 02/28/2023 16:15 | R325380 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.18** | mg/L | 1 | 02/24/2023 9:43 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 10 | | **140** | mg/L | 10 | 02/28/2023 21:29 | R325413 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Barium | NELAP | 0.0025 | | **0.370** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Beryllium | NELAP | 0.0005 | | **0.0009** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Boron | NELAP | 0.0200 | | **0.282** | mg/L | 1 | 02/22/2023 18:07 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Calcium | NELAP | 0.100 | | **169** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Chromium | NELAP | 0.0050 | | **0.0213** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Cobalt | NELAP | 0.0050 | | **0.0110** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Lithium | NELAP | 0.0050 | | **0.0115** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/22/2023 0:23 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 21:17 | 203052 |
| Selenium | NELAP | 0.0010 | | **0.0018** | mg/L | 5 | 02/20/2023 21:17 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 21:17 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:34 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-005
**Client Sample ID:** AP-12
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 13:10

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **510.30** | ft | 1 | 02/16/2023 13:10 | R325158 |
| Depth to water | * | -5.00 | | **13.31** | ft | 1 | 02/16/2023 13:10 | R325158 |
| Depth to water from measuring point | * | 0 | | **16.21** | ft | 1 | 02/16/2023 13:10 | R325158 |
| Elevation of groundwater surface | * | 0 | | **524.49** | ft | 1 | 02/16/2023 13:10 | R325158 |
| Measuring Point Elevation | * | 0 | | **540.70** | ft | 1 | 02/16/2023 13:10 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 02/16/2023 13:10 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **280** | NTU | 1 | 02/16/2023 13:10 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **54.1** | °F | 1 | 02/16/2023 13:10 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.47** | | 1 | 02/16/2023 13:10 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **2190** | µmhos/cm @25C | 1 | 02/16/2023 13:10 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1440** | mg/L | 2.5 | 02/20/2023 9:59 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **641** | mg/L | 20 | 02/27/2023 17:33 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.17** | mg/L | 1 | 02/24/2023 9:52 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **140** | mg/L | 5 | 02/27/2023 17:28 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Barium | NELAP | 0.0025 | | **0.0794** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Boron | NELAP | 0.0200 | | **0.0277** | mg/L | 1 | 02/22/2023 18:10 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Calcium | NELAP | 0.100 | | **265** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/22/2023 0:27 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **0.0015** | mg/L | 5 | 02/20/2023 23:09 | 203052 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 23:09 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 23:09 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:36 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-006
**Client Sample ID:** AP-13
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 13:25

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **511.00** | ft | 1 | 02/16/2023 13:25 | R325158 |
| Depth to water | * | -5.00 | | **15.30** | ft | 1 | 02/16/2023 13:25 | R325158 |
| Depth to water from measuring point | * | 0 | | **18.70** | ft | 1 | 02/16/2023 13:25 | R325158 |
| Elevation of groundwater surface | * | 0 | | **523.30** | ft | 1 | 02/16/2023 13:25 | R325158 |
| Measuring Point Elevation | * | 0 | | **542.00** | ft | 1 | 02/16/2023 13:25 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.40** | ft | 1 | 02/16/2023 13:25 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **190** | NTU | 1 | 02/16/2023 13:25 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **53.8** | °F | 1 | 02/16/2023 13:25 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.62** | | 1 | 02/16/2023 13:25 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **905** | µmhos/cm @25C | 1 | 02/16/2023 13:25 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **495** | mg/L | 2.5 | 02/20/2023 9:59 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **133** | mg/L | 5 | 02/27/2023 17:41 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 02/24/2023 9:54 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **29** | mg/L | 1 | 02/27/2023 17:36 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Barium | NELAP | 0.0025 | | **0.175** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Boron | NELAP | 0.0200 | | **0.0485** | mg/L | 1 | 02/22/2023 18:14 | 203052 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Calcium | NELAP | 0.100 | | **107** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Chromium | NELAP | 0.0050 | | **0.0059** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Lithium | NELAP | 0.0050 | | **0.0167** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/22/2023 0:30 | 203052 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 23:15 | 203052 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 23:15 | 203052 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/20/2023 23:15 | 203052 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:39 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23
**Lab ID:** 23020985-007
**Client Sample ID:** AP-14
**Matrix:** GROUNDWATER
**Collection Date:** 02/16/2023 12:13

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **508.40** | ft | 1 | 02/16/2023 12:13 | R325158 |
| Depth to water | * | -5.00 | | **-1.78** | ft | 1 | 02/16/2023 12:13 | R325158 |
| Depth to water from measuring point | * | 0 | | **1.02** | ft | 1 | 02/16/2023 12:13 | R325158 |
| Elevation of groundwater surface | * | 0 | | **538.58** | ft | 1 | 02/16/2023 12:13 | R325158 |
| Measuring Point Elevation | * | 0 | | **539.60** | ft | 1 | 02/16/2023 12:13 | R325158 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 02/16/2023 12:13 | R325158 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **31** | NTU | 1 | 02/16/2023 12:13 | R325158 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **45.9** | °F | 1 | 02/16/2023 12:13 | R325158 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.69** | | 1 | 02/16/2023 12:13 | R325158 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1680** | µmhos/cm @25C | 1 | 02/16/2023 12:13 | R325158 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1280** | mg/L | 1 | 02/20/2023 9:59 | R325069 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **699** | mg/L | 20 | 02/27/2023 17:49 | R325321 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.25** | mg/L | 1 | 02/24/2023 9:56 | R325243 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **59** | mg/L | 5 | 02/27/2023 17:44 | R325333 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Barium | NELAP | 0.0025 | | **0.0413** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 02/21/2023 12:30 | 203063 |
| Boron | NELAP | 0.200 | | **21.3** | mg/L | 10 | 02/21/2023 12:28 | 203063 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Calcium | NELAP | 0.100 | | **209** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Chromium | NELAP | 0.0050 | | **0.0058** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Lithium | NELAP | 0.0050 | | **0.0716** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 02/20/2023 17:39 | 203063 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 20:08 | 203063 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 02/20/2023 20:08 | 203063 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 02/21/2023 11:15 | 203063 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 02/18/2023 9:41 | 203036 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 03/08/2023 0:00 | R325892 |

# Receiving Check List

http://www.teklabinc.com/

**Client:** City Water, Light & Power
**Work Order:** 23020985
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 13-Mar-23

**Carrier:** Joe Riley
**Received By:** ANC

**Completed by:** Timothy W. Mathis
**On:** 17-Feb-23

**Reviewed by:** Elizabeth A. Hurley
**On:** 17-Feb-23

**Pages to follow:** Chain of custody 2 Extra pages included 19

| | | | | |
|---|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ | Temp °C 1.2 |
| Type of thermal preservation? | None ☐ | Ice ☑ | Blue Ice ☐ | Dry Ice ☐ |
| Chain of custody present? | Yes ☑ | No ☐ | | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | | |
| Sample containers intact? | Yes ☑ | No ☐ | | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | | |
| All samples received within holding time? | Yes ☑ | No ☐ | | |
| Reported field parameters measured: | Field ☑ | Lab ☐ | NA ☐ | |
| Container/Temp Blank temperature in compliance? | Yes ☑ | No ☐ | | |
| *When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.* | | | | |
| Water – at least one vial per sample has zero headspace? | Yes ☐ | No ☐ | No VOA vials ☑ | |
| Water - TOX containers have zero headspace? | Yes ☐ | No ☐ | No TOX containers ☑ | |
| Water - pH acceptable upon receipt? | Yes ☑ | No ☐ | NA ☐ | |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes ☐ | No ☐ | NA ☑ | |

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

pH strip #87147. - CET/ehurley - 2/17/2023 11:18:53 AM

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23021159 / 23020985

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 °C CTB
Preserved in: [ ] LAB [X] FIELD FOR LAB USE ONLY
LAB NOTES: PWS 7147-Cert 2-17-23.

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
J. RILEY

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ~~BW-3~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-1~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-2~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-3~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-4~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-5~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-6~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 23020985 01 | AP-7 | 02/16/23 1454 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | ~~AP-8~~ | | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 002 | AP-9 | 02/16/23 1517 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 003 | AP-10 | 02/16/23 1134 | Groundwater | 1 | 3 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 02/17/23 0850 | Allison Colin | 2/17/23 850 |

*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

CRS 2-17-23

SC_127

# CHAIN OF CUSTODY

Pg 2 of 2 Workorder # _____

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

SC_128

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

Quarterly monitoring

**PROJECT NAME/NUMBER**

Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**

J. Kelley

**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 | | | | | | | |
| 23020885 004 | AP-11 | 02/16/23 1254 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| 005 | AP-12 | 02/16/23 1310 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| 006 | AP-13 | 02/16/23 1325 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| 007 | AP-14 | 02/16/23 1213 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| | | | Groundwater | | | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| | | | Groundwater | | | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 02/17/23 0850 | Allison Colin | 2/17/23 850 |
| | | | |
| | | | |
| | | | |
| | | | |

*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

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

March 10, 2023

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

RE: 23020985

Dear Shelly Hennessy:

Order No.: 23021632

Summit Environmental Technologies, Inc. received 7 sample(s) on 2/22/2023 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

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*Cuyahoga Falls, Ohio 44223*
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# Case Narrative

WO#: **23021632**
Date: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Project:** 23020985

WorkOrder Narrative:
23021632: 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 Sample Notes:
23021632-001A thru -007A Radium-228_NPW(904.0): Samples contained sediment

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#: **23021632**
Date: **3/10/2023**

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.**

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*Website: http://www.settek.com*

# Workorder Sample Summary

WO#: **23021632**
***10-Mar-23***

**CLIENT:** TEKLAB Inc,
**Project:** 23020985

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 23021632-001 | 23020985-001 | | 2/16/2023 2:54:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-002 | 23020985-002 | | 2/16/2023 3:11:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-003 | 23020985-003 | | 2/16/2023 11:34:00 AM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-004 | 23020985-004 | | 2/16/2023 12:54:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-005 | 23020985-005 | | 2/16/2023 1:10:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-006 | 23020985-006 | | 2/16/2023 1:25:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |
| 23021632-007 | 23020985-007 | | 2/16/2023 12:13:00 PM | 2/22/2023 11:10:00 AM | Non-Potable Water |

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# DATES REPORT

WO#: **23021632**

***10-Mar-23***

SC_133

**Client:** TEKLAB Inc,
**Project:** 23020985

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23021632-001A | 23020985-001 | 2/16/2023 2:54:00 PM | Non-Potable Water | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-002A | 23020985-002 | 2/16/2023 3:11:00 PM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-003A | 23020985-003 | 2/16/2023 11:34:00 AM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-004A | 23020985-004 | 2/16/2023 12:54:00 PM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-005A | 23020985-005 | 2/16/2023 1:10:00 PM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-006A | 23020985-006 | 2/16/2023 1:25:00 PM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |
| 23021632-007A | 23020985-007 | 2/16/2023 12:13:00 PM | | Radium-226 (EPA 903.0) | | 2/27/2023 11:11:00 AM | 3/9/2023 2:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 2/27/2023 11:11:00 AM | 3/8/2023 2:24:00 PM |

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 2:54:00 PM
**Project:** 23020985
**Lab ID:** 23021632-001
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-001

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.12 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 1.00 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.45 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 1.00 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 3:11:00 PM
**Project:** 23020985
**Lab ID:** 23021632-002
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-002

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.11 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.960 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.41 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.980 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 11:34:00 AM
**Project:** 23020985
**Lab ID:** 23021632-003
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-003

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.18 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.960 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 2.04 | 1.00 | | pCi/L | ± 0.58 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.980 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 12:54:00 PM
**Project:** 23020985
**Lab ID:** 23021632-004
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-004

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 2.00 | | pCi/L | ± 0.33 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.950 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 2.00 | | pCi/L | ± 0.65 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.930 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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Analytical Laboratories

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*Cuyahoga Falls, Ohio 44223*
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# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 1:10:00 PM
**Project:** 23020985
**Lab ID:** 23021632-005
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-005

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 5.00 | | pCi/L | ± 0.57 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.920 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 5.00 | | pCi/L | ± 0.34 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.880 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 1:25:00 PM
**Project:** 23020985
**Lab ID:** 23021632-006
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23020985-006

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.2 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.950 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.22 | 1.00 | | pCi/L | ± 0.55 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.960 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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#: **23021632**

Date Reported: **3/10/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 2/16/2023 12:13:00 PM

**Project:** 23020985

**Lab ID:** 23021632-007
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23020985-007

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.08 | 1 | 3/9/2023 2:05:00 PM |
| Yield | 0.960 | | | | | 1 | 3/9/2023 2:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.46 | 1 | 3/8/2023 2:24:00 PM |
| Yield | 0.980 | | | | | 1 | 3/8/2023 2:24:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23021632**
***10-Mar-23***

SC_141

**Client:** TEKLAB Inc,
**Project:** 23020985 **BatchID:** **63147**

| Sample ID: **MB-63147** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241639** |

| 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-63147** | SampType: **LCSD** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241641** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.62 | 1.00 | 5.000 | 0 | 72.4 | 70 | 130 | 2.390 | 40.9 | 20 | R |
| Yield | 0.950 | | | 0 | 0 | | | 0.9900 | 4.12 | | |

| Sample ID: **RLC-63147** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241643** |

| 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 | 81.0 | 50 | 150 | | | | |
| Yield | 0.970 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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

# QC SUMMARY REPORT

WO#: **23021632**
***10-Mar-23***

SC_142

**Client:** TEKLAB Inc,
**Project:** 23020985 **BatchID:** **63147**

| Sample ID: **RLCD-63147** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241644** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.15 | 1.00 | 1.000 | 0 | 115 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **23021630-001AMS** | SampType: **MS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241645** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.99 | 1.00 | 5.000 | 0 | 79.8 | 70 | 130 | | | | |
| Yield | 0.850 | | | 0.9400 | 0 | | | | | | |

| Sample ID: **23021631-001ADUP** | SampType: **DUP** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159591** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E904.0** | **E903-904** | Analysis Date: **3/8/2023** | SeqNo: **4241650** |

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23021632**

***10-Mar-23***

SC_143

**Client:** TEKLAB Inc,
**Project:** 23020985 **BatchID:** **63147**

Sample ID: **23021637-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **2/27/2023** RunNo: **159591**
Client ID: **BatchQC** Batch ID: **63147** TestNo: **E904.0** **E903-904** Analysis Date: **3/8/2023** SeqNo: **4241652**

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23021632**
***10-Mar-23***

SC_144

**Client:** TEKLAB Inc,
**Project:** 23020985 **BatchID:** **63147**

| Sample ID: **MB-63147** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241980** |

| 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-63147** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241981** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.76 | 1.00 | 5.000 | 0 | 115 | 70 | 130 | | | | |

| Sample ID: **LCSD-63147** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241982** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.46 | 1.00 | 5.000 | 0 | 109 | 70 | 130 | 5.760 | 5.35 | 20 | |

| Sample ID: **RLC-63147** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241984** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23021632**
***10-Mar-23***

SC_145

**Client:** TEKLAB Inc,
**Project:** 23020985 **BatchID:** **63147**

| Sample ID: **RLC-63147** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241984** |

| 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 | 85.0 | 50 | 150 | | | | |

| Sample ID: **RLCD-63147** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241985** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.24 | 1.00 | 1.000 | 0 | 124 | 50 | 150 | | | | |

| Sample ID: **23021637-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **2/27/2023** | RunNo: **159596** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **63147** | TestNo: **E903.0** | **E903-904** | Analysis Date: **3/9/2023** | SeqNo: **4241987** |

| 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 | | | | | | | 0.9600 | 4.08 | 0 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

# TEKLAB, INC. Chain of Custody

23021632

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: Sampler: CLIENT QC Level: 2

**Teklab Inc**
**5445 Horseshoe Lake Road**
**Collinsville, IL 62234**

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# 23020985

Contact: Shelly Hennessey Email: shennessey@teklabinc.com
Requested Due Date: 20 business days or less Billing/PO: 34003
Phone: (618) 344-1004 ext. 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 dunng 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 | |
|---|---|---|---|---|---|---|---|---|
| | 23020985-001 | 2/16/23 1454 | HNO3 | Aqueous | ✓ | ✓ | 11 | 1 |
| | 23020985-002 | 2/16/23 1511 | HNO3 | Aqueous | ✓ | ✓ | 20 | 1 |
| | 23020985-003 | 2/16/23 1134 | HNO3 | Aqueous | ✓ | ✓ | 23 | 1 |
| | 23020985-004 | 2/16/23 1254 | HNO3 | Aqueous | ✓ | ✓ | 21 | 1 |
| | 23020985-005 | 2/16/23 1310 | HNO3 | Aqueous | ✓ | ✓ | 11 | 1 |
| | 23020985-006 | 2/16/23 1325 | HNO3 | Aqueous | ✓ | ✓ | 20 | 1 |
| | 23020985-007 | 2/16/23 1213 | HNO3 | Aqueous | ✓ | ✓ | 20 | 1 |
| | | | Unpres | Aqueous | | | | |
| | | | Unpres | Aqueous | | | | |
| | | | Unpres | Aqueous | | | | |
| | | | Unpres | Aqueous | | | | |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 2-20-23 | | 2/22/23 1110 |
| | | | 17.0+0.3=17.3 |

Fedex Ground noile

Teklab maintains a strict policy of client confidentiality and as such does not provide client/sampler information without proper authorization. and proprietary rights,

SubCocRevA

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

*Summit Environmental Technologies, Inc.*
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*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: **23021632** RcptNo: **1**

| | | | |
|---|---|---|---|
| Logged by: | **Anthony W. Britton** | **2/22/2023 11:10:00 AM** | Anthony Britton |
| Completed By: | **Anthony W. Britton** | **2/24/2023 9:19:09 AM** | Anthony Britton |
| Reviewed By: | **Jennifer Woolf** | **2/24/2023 10:27:12 AM** | Jennifer Woolf |

## *Chain of Custody*

| | | | | |
|---|---|---|---|---|
| 1. | Were seals intact? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 3. | How was the sample delivered? | FedEx | | |

## *Log In*

| | | | | |
|---|---|---|---|---|
| 4. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| 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 | 17.3 | Good | Not Present | | | |

May 24, 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:** Ash Pond Monitoring Wells **WorkOrder:** 23040094

Dear Eric Staley:

TEKLAB, INC received 15 samples on 4/17/2023 6:34:00 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:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-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 | 22 |
| Chain of Custody | Appended |

**Client:** City Water, Light & Power **Work Order:** 23040094

**Client Project:** Ash Pond Monitoring Wells **Report Date:** 24-May-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:** 23040094

**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-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

**Client:** City Water, Light & Power
**Client Project:** Ash Pond Monitoring Wells

**Work Order:** 23040094
**Report Date:** 24-May-23

**Cooler Receipt Temp:** 7.8 °C

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

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<br>Collinsville, IL 62234-7425 |
| **Phone** | (618) 344-1004 |
| **Fax** | (618) 344-1005 |
| **Email** | jhriley@teklabinc.com |

### Springfield

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

### Kansas City

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

### Collinsville Air

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

### Chicago

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

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-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 | 6/30/2023 | Collinsville |
| Louisiana | LDEQ | 05003 | NELAP | 6/30/2023 | Collinsville |
| Oklahoma | ODEQ | 9978 | NELAP | 8/31/2023 | Collinsville |
| Arkansas | ADEQ | 88-0966 | | 3/14/2024 | Collinsville |
| Illinois | IDPH | 17584 | | 5/31/2023 | 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:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-001
**Client Sample ID:** RW-3
**Matrix:** GROUNDWATER
**Collection Date:** 04/11/2023 12:24

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **495.49** | ft | 1 | 04/11/2023 12:24 | R327742 |
| Depth to water | * | -5.00 | | **6.04** | ft | 1 | 04/11/2023 12:24 | R327742 |
| Depth to water from measuring point | * | 0 | | **8.74** | ft | 1 | 04/11/2023 12:24 | R327742 |
| Elevation of groundwater surface | * | 0 | | **530.76** | ft | 1 | 04/11/2023 12:24 | R327742 |
| Measuring Point Elevation | * | 0 | | **539.50** | ft | 1 | 04/11/2023 12:24 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.70** | ft | 1 | 04/11/2023 12:24 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **4.5** | NTU | 1 | 04/11/2023 12:24 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.6** | °F | 1 | 04/11/2023 12:24 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.06** | | 1 | 04/11/2023 12:24 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **749** | µmhos/cm @25C | 1 | 04/11/2023 12:24 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **426** | mg/L | 1 | 04/14/2023 10:00 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 04/17/2023 20:21 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.52** | mg/L | 1 | 04/13/2023 11:01 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **31** | mg/L | 1 | 04/17/2023 20:21 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.145** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Barium | NELAP | 0.0025 | | **0.172** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Boron | NELAP | 0.0200 | | **0.186** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Calcium | NELAP | 0.100 | | **70.5** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:13 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:30 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:30 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 19:30 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:00 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-002
**Client Sample ID:** AP-1
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 12:49

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **504.29** | ft | 1 | 04/12/2023 12:49 | R327742 |
| Depth to water | * | -5.00 | | **7.65** | ft | 1 | 04/12/2023 12:49 | R327742 |
| Depth to water from measuring point | * | 0 | | **9.92** | ft | 1 | 04/12/2023 12:49 | R327742 |
| Elevation of groundwater surface | * | 0 | | **525.45** | ft | 1 | 04/12/2023 12:49 | R327742 |
| Measuring Point Elevation | * | 0 | | **535.37** | ft | 1 | 04/12/2023 12:49 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.27** | ft | 1 | 04/12/2023 12:49 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **13** | NTU | 1 | 04/12/2023 12:49 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.2** | °F | 1 | 04/12/2023 12:49 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.52** | | 1 | 04/12/2023 12:49 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1910** | µmhos/cm @25C | 1 | 04/12/2023 12:49 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1540** | mg/L | 1 | 04/14/2023 10:00 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **768** | mg/L | 20 | 04/17/2023 20:33 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.27** | mg/L | 1 | 04/13/2023 11:03 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **60** | mg/L | 5 | 04/17/2023 20:29 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Barium | NELAP | 0.0025 | | **0.329** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Boron | NELAP | 0.200 | | **21.2** | mg/L | 10 | 04/19/2023 17:57 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Calcium | NELAP | 0.100 | | **242** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:17 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:36 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:36 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 19:36 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:02 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/08/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/08/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-003
**Client Sample ID:** AP-2
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 14:49

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.77** | ft | 1 | 04/12/2023 14:49 | R327742 |
| Depth to water | * | -5.00 | | **4.74** | ft | 1 | 04/12/2023 14:49 | R327742 |
| Depth to water from measuring point | * | 0 | | **7.24** | ft | 1 | 04/12/2023 14:49 | R327742 |
| Elevation of groundwater surface | * | 0 | | **528.86** | ft | 1 | 04/12/2023 14:49 | R327742 |
| Measuring Point Elevation | * | 0 | | **536.10** | ft | 1 | 04/12/2023 14:49 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.50** | ft | 1 | 04/12/2023 14:49 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **9.2** | NTU | 1 | 04/12/2023 14:49 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.6** | °F | 1 | 04/12/2023 14:49 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.44** | | 1 | 04/12/2023 14:49 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1470** | µmhos/cm @25C | 1 | 04/12/2023 14:49 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1100** | mg/L | 1 | 04/14/2023 10:00 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **462** | mg/L | 20 | 04/17/2023 20:42 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.22** | mg/L | 1 | 04/13/2023 11:05 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **37** | mg/L | 1 | 04/17/2023 20:36 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Barium | NELAP | 0.0025 | | **0.0656** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Boron | NELAP | 0.0200 | | **3.70** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Calcium | NELAP | 0.100 | | **210** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Cobalt | NELAP | 0.0050 | | **0.0102** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:20 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:43 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:43 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 19:43 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:04 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-004
**Client Sample ID:** AP-3
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 15:26

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.45** | ft | 1 | 04/12/2023 15:26 | R327742 |
| Depth to water | * | -5.00 | | **7.93** | ft | 1 | 04/12/2023 15:26 | R327742 |
| Depth to water from measuring point | * | 0 | | **9.63** | ft | 1 | 04/12/2023 15:26 | R327742 |
| Elevation of groundwater surface | * | 0 | | **525.77** | ft | 1 | 04/12/2023 15:26 | R327742 |
| Measuring Point Elevation | * | 0 | | **535.40** | ft | 1 | 04/12/2023 15:26 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **1.70** | ft | 1 | 04/12/2023 15:26 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **6.2** | NTU | 1 | 04/12/2023 15:26 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.6** | °F | 1 | 04/12/2023 15:26 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.64** | | 1 | 04/12/2023 15:26 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1300** | µmhos/cm @25C | 1 | 04/12/2023 15:26 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **984** | mg/L | 1 | 04/14/2023 10:01 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 100 | | **483** | mg/L | 10 | 04/17/2023 21:05 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.22** | mg/L | 1 | 04/13/2023 11:06 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **59** | mg/L | 5 | 04/17/2023 21:00 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Barium | NELAP | 0.0025 | | **0.103** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Boron | NELAP | 0.0200 | | **14.3** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Calcium | NELAP | 0.100 | | **168** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Cobalt | NELAP | 0.0050 | | **0.0054** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:39 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:49 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:49 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 19:49 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:11 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-005
**Client Sample ID:** AP-4
**Matrix:** GROUNDWATER
**Collection Date:** 04/13/2023 10:13

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **492.46** | ft | 1 | 04/13/2023 10:13 | R327742 |
| Depth to water | * | -5.00 | | **6.38** | ft | 1 | 04/13/2023 10:13 | R327742 |
| Depth to water from measuring point | * | 0 | | **9.52** | ft | 1 | 04/13/2023 10:13 | R327742 |
| Elevation of groundwater surface | * | 0 | | **546.08** | ft | 1 | 04/13/2023 10:13 | R327742 |
| Measuring Point Elevation | * | 0 | | **555.60** | ft | 1 | 04/13/2023 10:13 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.14** | ft | 1 | 04/13/2023 10:13 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **10** | NTU | 1 | 04/13/2023 10:13 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **60.4** | °F | 1 | 04/13/2023 10:13 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.82** | | 1 | 04/13/2023 10:13 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **969** | µmhos/cm @25C | 1 | 04/13/2023 10:13 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **534** | mg/L | 1 | 04/14/2023 11:14 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 05/01/2023 17:02 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.14** | mg/L | 1 | 04/21/2023 12:37 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **14** | mg/L | 1 | 04/17/2023 21:08 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.0250** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Barium | NELAP | 0.0025 | B | **0.404** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Boron | NELAP | 0.0200 | | **0.101** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Calcium | NELAP | 0.100 | | **125** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/17/2023 13:48 | 204986 |
| *Sample result(s) for Ba exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 15:42 | 204986 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 15:42 | 204986 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 15:42 | 204986 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/17/2023 11:09 | 204996 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-006
**Client Sample ID:** AP-5
**Matrix:** GROUNDWATER
**Collection Date:** 04/13/2023 11:27

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **552.63** | ft | 1 | 04/13/2023 11:27 | R327742 |
| Depth to water | * | -5.00 | | **10.75** | ft | 1 | 04/13/2023 11:27 | R327742 |
| Depth to water from measuring point | * | 0 | | **13.05** | ft | 1 | 04/13/2023 11:27 | R327742 |
| Elevation of groundwater surface | * | 0 | | **570.85** | ft | 1 | 04/13/2023 11:27 | R327742 |
| Measuring Point Elevation | * | 0 | | **583.90** | ft | 1 | 04/13/2023 11:27 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.30** | ft | 1 | 04/13/2023 11:27 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **5.3** | NTU | 1 | 04/13/2023 11:27 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **54.7** | °F | 1 | 04/13/2023 11:27 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.08** | | 1 | 04/13/2023 11:27 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **698** | µmhos/cm @25C | 1 | 04/13/2023 11:27 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **404** | mg/L | 1 | 04/14/2023 11:15 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **44** | mg/L | 1 | 04/17/2023 21:17 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.32** | mg/L | 1 | 04/21/2023 12:40 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **4** | mg/L | 1 | 04/17/2023 21:16 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Barium | NELAP | 0.0025 | | **0.0451** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Boron | NELAP | 0.0200 | | **0.0311** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Calcium | NELAP | 0.100 | | **80.4** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0074** | mg/L | 1 | 04/24/2023 18:12 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:40 | 205144 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 21:04 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 21:04 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 21:04 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:15 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-007
**Client Sample ID:** AP-6
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 11:03

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **498.20** | ft | 1 | 04/12/2023 11:03 | R327742 |
| Depth to water | * | -5.00 | | **5.01** | ft | 1 | 04/12/2023 11:03 | R327742 |
| Depth to water from measuring point | * | 0 | | **7.43** | ft | 1 | 04/12/2023 11:03 | R327742 |
| Elevation of groundwater surface | * | 0 | | **530.39** | ft | 1 | 04/12/2023 11:03 | R327742 |
| Measuring Point Elevation | * | 0 | | **537.82** | ft | 1 | 04/12/2023 11:03 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.42** | ft | 1 | 04/12/2023 11:03 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **4.0** | NTU | 1 | 04/12/2023 11:03 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.2** | °F | 1 | 04/12/2023 11:03 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.02** | | 1 | 04/12/2023 11:03 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **642** | µmhos/cm @25C | 1 | 04/12/2023 11:03 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **380** | mg/L | 1 | 04/14/2023 11:15 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **11** | mg/L | 1 | 04/17/2023 21:24 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.51** | mg/L | 1 | 04/13/2023 11:08 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **31** | mg/L | 1 | 04/17/2023 21:24 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Barium | NELAP | 0.0025 | | **0.111** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Boron | NELAP | 0.0200 | | **0.174** | mg/L | 1 | 04/19/2023 17:56 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Calcium | NELAP | 0.100 | | **60.9** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:43 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:55 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 19:55 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 19:55 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:13 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-008
**Client Sample ID:** AP-7
**Matrix:** GROUNDWATER
**Collection Date:** 04/17/2023 15:59

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **496.50** | ft | 1 | 04/17/2023 15:59 | R327742 |
| Depth to water | * | -5.00 | | **7.80** | ft | 1 | 04/17/2023 15:59 | R327742 |
| Depth to water from measuring point | * | 0 | | **10.46** | ft | 1 | 04/17/2023 15:59 | R327742 |
| Elevation of groundwater surface | * | 0 | | **528.56** | ft | 1 | 04/17/2023 15:59 | R327742 |
| Measuring Point Elevation | * | 0 | | **539.02** | ft | 1 | 04/17/2023 15:59 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.66** | ft | 1 | 04/17/2023 15:59 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **25** | NTU | 1 | 04/17/2023 15:59 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **54.7** | °F | 1 | 04/17/2023 15:59 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.11** | | 1 | 04/17/2023 15:59 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **712** | µmhos/cm @25C | 1 | 04/17/2023 15:59 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **444** | mg/L | 1 | 04/19/2023 9:21 | R327565 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 05/01/2023 17:23 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.53** | mg/L | 1 | 04/21/2023 12:41 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **70** | mg/L | 2 | 05/01/2023 17:28 | R328107 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.0462** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Barium | NELAP | 0.0025 | | **0.162** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Boron | NELAP | 0.0200 | | **0.391** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Calcium | NELAP | 0.100 | | **53.6** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0113** | mg/L | 1 | 04/24/2023 18:16 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:41 | 205144 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:08 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:08 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 22:08 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:17 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-009
**Client Sample ID:** AP-8
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 12:12

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **497.60** | ft | 1 | 04/12/2023 12:12 | R327742 |
| Depth to water | * | -5.00 | | **1.45** | ft | 1 | 04/12/2023 12:12 | R327742 |
| Depth to water from measuring point | * | 0 | | **4.35** | ft | 1 | 04/12/2023 12:12 | R327742 |
| Elevation of groundwater surface | * | 0 | | **532.85** | ft | 1 | 04/12/2023 12:12 | R327742 |
| Measuring Point Elevation | * | 0 | | **537.20** | ft | 1 | 04/12/2023 12:12 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 04/12/2023 12:12 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **13** | NTU | 1 | 04/12/2023 12:12 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.0** | °F | 1 | 04/12/2023 12:12 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.77** | | 1 | 04/12/2023 12:12 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **970** | µmhos/cm @25C | 1 | 04/12/2023 12:12 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **544** | mg/L | 1 | 04/14/2023 11:15 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 04/17/2023 21:32 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.33** | mg/L | 1 | 04/13/2023 11:10 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **26** | mg/L | 1 | 04/17/2023 21:32 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **0.0348** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Barium | NELAP | 0.0025 | | **0.375** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Boron | NELAP | 0.0200 | | **0.110** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Calcium | NELAP | 0.100 | | **99.1** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:46 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 20:01 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 20:01 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 20:01 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:16 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-010
**Client Sample ID:** AP-9
**Matrix:** GROUNDWATER
**Collection Date:** 04/17/2023 15:21

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **501.80** | ft | 1 | 04/17/2023 15:21 | R327742 |
| Depth to water | * | -5.00 | | **9.03** | ft | 1 | 04/17/2023 15:21 | R327742 |
| Depth to water from measuring point | * | 0 | | **12.13** | ft | 1 | 04/17/2023 15:21 | R327742 |
| Elevation of groundwater surface | * | 0 | | **528.17** | ft | 1 | 04/17/2023 15:21 | R327742 |
| Measuring Point Elevation | * | 0 | | **540.30** | ft | 1 | 04/17/2023 15:21 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 04/17/2023 15:21 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **20** | NTU | 1 | 04/17/2023 15:21 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.7** | °F | 1 | 04/17/2023 15:21 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.69** | | 1 | 04/17/2023 15:21 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **950** | µmhos/cm @25C | 1 | 04/17/2023 15:21 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **638** | mg/L | 1 | 04/19/2023 9:21 | R327565 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 20 | | **64** | mg/L | 2 | 05/01/2023 17:52 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 04/21/2023 12:43 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **60** | mg/L | 2 | 05/01/2023 17:52 | R328107 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Barium | NELAP | 0.0025 | | **0.295** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Boron | NELAP | 0.0200 | | **0.102** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Calcium | NELAP | 0.100 | | **108** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0067** | mg/L | 1 | 04/24/2023 18:31 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:43 | 205144 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:13 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:13 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 22:13 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:19 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-011
**Client Sample ID:** AP-10
**Matrix:** GROUNDWATER
**Collection Date:** 04/12/2023 13:50

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **499.43** | ft | 1 | 04/12/2023 13:50 | R327742 |
| Depth to water | * | -5.00 | | **-0.05** | ft | 1 | 04/12/2023 13:50 | R327742 |
| Depth to water from measuring point | * | 0 | | **3.05** | ft | 1 | 04/12/2023 13:50 | R327742 |
| Elevation of groundwater surface | * | 0 | | **534.45** | ft | 1 | 04/12/2023 13:50 | R327742 |
| Measuring Point Elevation | * | 0 | | **537.50** | ft | 1 | 04/12/2023 13:50 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 04/12/2023 13:50 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **5.7** | NTU | 1 | 04/12/2023 13:50 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.8** | °F | 1 | 04/12/2023 13:50 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.68** | | 1 | 04/12/2023 13:50 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1250** | µmhos/cm @25C | 1 | 04/12/2023 13:50 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **756** | mg/L | 1 | 04/14/2023 11:15 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **100** | mg/L | 5 | 04/17/2023 22:01 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.36** | mg/L | 1 | 04/13/2023 11:11 | R327239 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **28** | mg/L | 1 | 04/17/2023 21:56 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Barium | NELAP | 0.0025 | | **0.602** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Boron | NELAP | 0.0200 | | **3.76** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Calcium | NELAP | 0.100 | | **144** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/14/2023 16:50 | 204956 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 20:33 | 204956 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 20:33 | 204956 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 20:33 | 204956 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/14/2023 15:18 | 204954 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-012
**Client Sample ID:** AP-11
**Matrix:** GROUNDWATER
**Collection Date:** 04/17/2023 13:49

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **515.15** | ft | 1 | 04/17/2023 13:49 | R327742 |
| Depth to water | * | -5.00 | | **11.40** | ft | 1 | 04/17/2023 13:49 | R327742 |
| Depth to water from measuring point | * | 0 | | **14.20** | ft | 1 | 04/17/2023 13:49 | R327742 |
| Elevation of groundwater surface | * | 0 | | **523.90** | ft | 1 | 04/17/2023 13:49 | R327742 |
| Measuring Point Elevation | * | 0 | | **538.10** | ft | 1 | 04/17/2023 13:49 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 04/17/2023 13:49 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **1.3** | NTU | 1 | 04/17/2023 13:49 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **52.7** | °F | 1 | 04/17/2023 13:49 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.45** | | 1 | 04/17/2023 13:49 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1070** | µmhos/cm @25C | 1 | 04/17/2023 13:49 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **726** | mg/L | 1 | 04/19/2023 9:22 | R327565 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **89** | mg/L | 5 | 05/01/2023 18:01 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 04/21/2023 12:53 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **123** | mg/L | 5 | 05/01/2023 18:00 | R328107 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Barium | NELAP | 0.0025 | | **0.161** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Boron | NELAP | 0.0200 | | **0.241** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Calcium | NELAP | 0.100 | | **145** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0068** | mg/L | 1 | 04/24/2023 19:01 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:45 | 205144 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:19 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:19 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 22:19 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:21 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-013
**Client Sample ID:** AP-12
**Matrix:** GROUNDWATER
**Collection Date:** 04/17/2023 13:12

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **510.30** | ft | 1 | 04/17/2023 13:12 | R327742 |
| Depth to water | * | -5.00 | | **12.06** | ft | 1 | 04/17/2023 13:12 | R327742 |
| Depth to water from measuring point | * | 0 | | **14.96** | ft | 1 | 04/17/2023 13:12 | R327742 |
| Elevation of groundwater surface | * | 0 | | **525.74** | ft | 1 | 04/17/2023 13:12 | R327742 |
| Measuring Point Elevation | * | 0 | | **540.70** | ft | 1 | 04/17/2023 13:12 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 04/17/2023 13:12 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **60** | NTU | 1 | 04/17/2023 13:12 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.8** | °F | 1 | 04/17/2023 13:12 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.43** | | 1 | 04/17/2023 13:12 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1630** | µmhos/cm @25C | 1 | 04/17/2023 13:12 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1580** | mg/L | 1 | 04/19/2023 9:22 | R327565 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **659** | mg/L | 20 | 05/01/2023 18:08 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.18** | mg/L | 1 | 04/21/2023 12:56 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **142** | mg/L | 5 | 05/01/2023 18:03 | R328107 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Barium | NELAP | 0.0025 | | **0.0649** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Boron | NELAP | 0.0200 | | **< 0.0200** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Calcium | NELAP | 0.100 | S | **269** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0060** | mg/L | 1 | 04/26/2023 15:58 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:56 | 205144 |
| *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 | 04/20/2023 22:45 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:45 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 22:45 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:28 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-014
**Client Sample ID:** AP-13
**Matrix:** GROUNDWATER
**Collection Date:** 04/17/2023 11:34

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **511.00** | ft | 1 | 04/17/2023 11:34 | R327742 |
| Depth to water | * | -5.00 | | **10.51** | ft | 1 | 04/17/2023 11:34 | R327742 |
| Depth to water from measuring point | * | 0 | | **13.91** | ft | 1 | 04/17/2023 11:34 | R327742 |
| Elevation of groundwater surface | * | 0 | | **528.09** | ft | 1 | 04/17/2023 11:34 | R327742 |
| Measuring Point Elevation | * | 0 | | **542.00** | ft | 1 | 04/17/2023 11:34 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.40** | ft | 1 | 04/17/2023 11:34 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **94** | NTU | 1 | 04/17/2023 11:34 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **54.5** | °F | 1 | 04/17/2023 11:34 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.54** | | 1 | 04/17/2023 11:34 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **780** | µmhos/cm @25C | 1 | 04/17/2023 11:34 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **538** | mg/L | 1 | 04/19/2023 9:22 | R327565 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **146** | mg/L | 5 | 05/01/2023 18:15 | R328161 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.23** | mg/L | 1 | 04/21/2023 12:59 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **26** | mg/L | 1 | 05/01/2023 18:11 | R328107 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Barium | NELAP | 0.0025 | | **0.128** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Boron | NELAP | 0.0200 | | **0.0328** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Calcium | NELAP | 0.100 | | **105** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| Lithium | NELAP | 0.0050 | | **0.0152** | mg/L | 1 | 04/24/2023 19:05 | 205144 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/20/2023 18:46 | 205144 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:24 | 205144 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/20/2023 22:24 | 205144 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/20/2023 22:24 | 205144 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/19/2023 15:35 | 205181 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

**Client:** City Water, Light & Power
**Work Order:** 23040094
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 24-May-23
**Lab ID:** 23040094-015
**Client Sample ID:** AP-14
**Matrix:** GROUNDWATER
**Collection Date:** 04/13/2023 11:06

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **508.40** | ft | 1 | 04/13/2023 11:06 | R327742 |
| Depth to water | * | -5.00 | | **-0.40** | ft | 1 | 04/13/2023 11:06 | R327742 |
| Depth to water from measuring point | * | 0 | | **2.40** | ft | 1 | 04/13/2023 11:06 | R327742 |
| Elevation of groundwater surface | * | 0 | | **537.20** | ft | 1 | 04/13/2023 11:06 | R327742 |
| Measuring Point Elevation | * | 0 | | **539.60** | ft | 1 | 04/13/2023 11:06 | R327742 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 04/13/2023 11:06 | R327742 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **12** | NTU | 1 | 04/13/2023 11:06 | R327742 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.2** | °F | 1 | 04/13/2023 11:06 | R327742 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.97** | | 1 | 04/13/2023 11:06 | R327742 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1720** | µmhos/cm @25C | 1 | 04/13/2023 11:06 | R327742 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1330** | mg/L | 1 | 04/14/2023 11:16 | R327370 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **707** | mg/L | 20 | 04/17/2023 22:09 | R327359 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.28** | mg/L | 1 | 04/21/2023 13:01 | R327650 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **71** | mg/L | 5 | 04/17/2023 22:04 | R327452 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Arsenic | NELAP | 0.0250 | | **< 0.0250** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Barium | NELAP | 0.0150 | | **0.0389** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Boron | NELAP | 0.200 | | **23.0** | mg/L | 10 | 04/18/2023 13:22 | 204986 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Calcium | NELAP | 0.100 | | **233** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 04/17/2023 14:11 | 204986 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 16:29 | 204986 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 04/17/2023 16:29 | 204986 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 04/17/2023 16:29 | 204986 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 04/17/2023 11:11 | 204996 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |
| Radium-228 | * | 0 | | **See attached** | pci/L | 1 | 05/09/2023 0:00 | R329224 |

# Receiving Check List

http://www.teklabinc.com/

**Client:** City Water, Light & Power
**Client Project:** Ash Pond Monitoring Wells

**Work Order:** 23040094
**Report Date:** 24-May-23

**Carrier:** Tracy Carroll

**Completed by:** Lindsey Maddox
**On:** 18-Apr-23

**Received By:** LM

**Reviewed by:** Elizabeth A. Hurley
**On:** 18-Apr-23

**Pages to follow:** Chain of custody 6 Extra pages included 52

| | | | | |
|---|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ | Temp °C 7.8 |
| 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.**

RW-3 was received on 4/11/23 at 1745 (on ice 10.2C - LTG1). - EAH 4/13/23

pH strip #87147. - acolin - 4/12/2023 12:43:58 PM

AP-1, AP-2, AP-3, AP-6, AP-8, and AP-10 were received on 4/12/23 at 1755 (on ice 3.8C - LTG 1). - EAH 4/13/23

pH strip #88374. - CET/TMathis - 4/13/2023 7:45:17 AM

AP-4, AP-5, and AP-14 were received on 4/13/23 at 1510 (on ice 9.0C - LTG 1). - EAH 4/13/23

AP-7, AP-9, AP-11, AP-12 and AP-13 were received on 4/17/23 at 1634 (on ice 7.8C - LTG 5). - lmaddox 4/18/23

pH strip #88374. - CET/lmaddox - 4/18/2023 9:26:13 AM

Additional Nitric Acid (89071) was needed in AP-11 upon arrival at the laboratory. - CET/lmaddox - 4/18/2023 9:26:50 AM

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23040094

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 10.2 °C

Preserved in: ☐ LAB ☑ FIELD FOR LAB USE ONLY

LAB NOTES: PH 8/14/7 AC 4/12/23

## Client Comments:

*elevations, pH, conductivity, temperature
**Sb Se Tl (ICPMS) As Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

PROJECT NAME/NUMBER: Ash Pond Monitoring Wells

SAMPLE COLLECTOR'S NAME: Colp Tondl

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 pH<2 4/13/23 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-001 | RW-3 8.74 | 4-11-23/ 1224 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 002 | AP-1 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 003 | AP-2 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 004 | AP-3 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 005 | AP-4 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 006 | AP-5 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 007 | AP-6 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 008 | AP-7 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 009 | AP-8 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 010 | AP-9 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 011 | AP-10 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Tracy Carroll | 4/11/23 1745 | Allen Coker | 4/11/23 1745 |

*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

SC_170

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 230400094

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 3.8 °C LTG
Preserved in: ☐ LAB ☒ FIELD FOR LAB USE ONLY
LAB NOTES: PWS 8837A.005 4-13-23.

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
CWLP + 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-001 | RW-3 | ~~7.74~~ | ~~4/11/23 1224~~ | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 002 | AP-1 | 9.92 | 4-12-23/ 1249 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 003 | AP-2 | 7.24 | 4-12-23/ 1449 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 004 | AP-3 | 9.63 | 4-12-23/ 1526 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 005 | AP-4 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 006 | AP-5 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 007 | AP-6 | 7.43 | 4-12-23/ 1103 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 008 | AP-7 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 009 | AP-8 | 4.35 | 4-12-23/ 1212 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 010 | AP-9 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 011 | AP-10 | 3.05 | 4-12-23/ 1350 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jenny Carroll J. Glo | 4-12-23 1755 | | 4-12-23 1755 |
| | | | |
| | | | |
| | | | |

*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

4-13-23

SC_171

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23040094

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 9.0 °C CR
Preserved in: ☐ LAB ☒ FIELD FOR LAB USE ONLY
LAB NOTES: pH 8374, CRS 4-13-23.

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
JCalp & TCandy

**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* | CIF SO4 TDS (T) | Metals (T)** | Radium-226 | Radium-228 | Field Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-001 | RW-3 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 002 | AP-1 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 003 | AP-2 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 004 | AP-3 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 005 | AP-4 | 9.52 | 4-13-23 / 1013 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 006 | AP-5 | 13.05 | 4-13-23 / 1127 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 007 | AP-6 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 008 | AP-7 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 009 | AP-8 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 010 | AP-9 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 011 | AP-10 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jennifer Carroll J. Sold | 4-13-23 / 1449 | Maryam Peter | 4/13/23 1510 1449 temp |
| | | | |
| | | | |
| | | | |

*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

CRS 4-13-23

SC_172

# CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 23040094

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

SC_173

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

Quarterly monitoring

**PROJECT NAME/NUMBER**

Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**

J Cole & T Carroll

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-012 | AP-11 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 013 | AP-12 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 014 | AP-13 | | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 015 | AP-14 | 2.40 | 4-13-23 1106 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | | Groundwater | | | | | | | | | | | | | | | |
| | | | | Groundwater | | | | | | | | | | | | | | | |
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| | | | | Groundwater | | | | | | | | | | | | | | | |
| | | | | Groundwater | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jenny Carroll J. Cole | 4-13-23 1449 | Maryan Perin | 4/13/23 1449 |
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*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 1 of 2 Workorder # 23040094

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 7.8 °C
Preserved in: [X] LAB [X] FIELD TE COT 4-18-23 FOR LAB USE ONLY 23405
LAB NOTES: pH<2 8374. Added HNO3 (89071) to 2L Amb. COT 4-18-23

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
JCalp & 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-001 | RW-3 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 002 | AP-1 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 003 | AP-2 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 004 | AP-3 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 005 | AP-4 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 006 | AP-5 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 007 | AP-6 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 008 | AP-7 | 10.46 | 4-17-23 | 1559 Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 009 | AP-8 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 010 | AP-9 | 12.13 | 4-17-23 | 1521 Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 011 | AP-10 | | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Tracy Carroll | 4/17/23 18:34 | AMP | 4/17/23 18:34 |
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*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

COT 4-18-23

SC_174

# CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 23040094

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

SC_175

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

| PROJECT NAME/NUMBER | SAMPLE COLLECTOR'S NAME |
|---|---|
| Ash Pond Monitoring Wells | T Carroll J Cain |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23040094-012 | AP-11 14.20 | 4-17-23 1349 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 013 | AP-12 14.96 | 4-17-23 1312 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 014 | AP-13 13.91 | 4-17-23 1134 | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 015 | AP-14 | | Groundwater | 1 | 3 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | | | | | | |
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| | | | Groundwater | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jenny Carroll | 4/17/23 1834 | | 4/17/23 1834 |

*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

SC_176

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWIP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J. Cobb / T. Carroll Finish Date: 4-11-23 Time: 1224

## WELL INFORMATION

Well ID: RW-3
Casing ID: inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1157 | | 8.74 | | | | | | | | |
| | 1212 | 0.65 | | | 14.1 | 7.13 | 737 | 2.24 | 12.81 | -108.0 | |
| | 1215 | 0.78 | | | 14.1 | 7.11 | 740 | 2.12 | 9.92 | -110.2 | |
| | 1218 | 0.91 | | | 14.1 | 7.09 | 743 | 2.00 | 8.42 | -112.5 | |
| | 1221 | 1.04 | | | 14.2 | 7.08 | 745 | 1.89 | 4.60 | -114.4 | |
| | 1224 | 1.17 | | 14.90 | 14.2 | 7.06 | 749 | 1.78 | 4.49 | -116.3 | |
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## NOTES (continued)

Bladder pump / Clear / No turbidity / Slight odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_177

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP  Client:

Project Number:  Task #:  Start Date:  Time:

Field Personnel: J. Cobb / T. Carroll  Finish Date: 9-12-23  Time: 1249

## WELL INFORMATION

Well ID: MW-1

Casing ID:  inches

## EVENT TYPE

Well Development

Well Volume Approach Sampling

Low-Flow / Low Stress Sampling Other

(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1225 | | 9.92 | | | | | | | | |
| | 1243 | 0.78 | | | 14.1 | 6.52 | 1898 | 0.99 | 13.43 | -113.2 | |
| | 1246 | 0.91 | | | 14.0 | 6.52 | 1903 | 0.91 | 12.19 | -115.5 | |
| | 1249 | 1.04 | | 10.15 | 14.0 | 6.52 | 1908 | 0.86 | 12.95 | -116.7 | |
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## NOTES (continued)

Bladder pump / Clear / no odor / no turbidity

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_178

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: CWCP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J. Cobb / T. Carroll Finish Date: 4-12-23 Time: 1449

### WELL INFORMATION

Well ID: AP-2
Casing ID: inches

### EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

### WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1401 | | 7.24 | | | | | | | | |
| | 1437 | 1.56 | | | 13.1 | 6.45 | 1450 | 0.70 | 11.34 | -2.1 | |
| | 1440 | 1.69 | | | 13.1 | 6.45 | 1453 | 0.69 | 11.01 | -2.4 | |
| | 1443 | 1.82 | | | 13.0 | 6.45 | 1460 | 0.67 | 10.17 | -2.7 | |
| | 1446 | 1.82 | | | 13.1 | 6.45 | 1465 | 0.66 | 8.94 | -2.9 | |
| | 1449 | 1.95 | | 7.38 | 13.1 | 6.44 | 1469 | 0.64 | 9.24 | -3.2 | |
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### NOTES (continued)

Bladder Pump / Slight turbidity / Strong odor / Clear

### ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_179

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CwLP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J.Cole/T. Carroll Finish Date: 4-12-23 Time: 1526

## WELL INFORMATION

Well ID: AP3
Casing ID: inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1505 | | 9.63 | | | | | | | | |
| | 1520 | 0.65 | | | 13.1 | 6.64 | 1302 | 1.09 | 7.99 | -78.7 | |
| | 1523 | 0.78 | | | 13.0 | 6.64 | 1303 | 0.99 | 6.92 | -79.7 | |
| | 1526 | 0.91 | | 9.70 | 13.1 | 6.64 | 1300 | 0.91 | 6.21 | -80.6 | |
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## NOTES (continued)

Bladder Pump/Clear/no odor/no turbidity

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_180

## WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

### PROJECT INFORMATION

Site: CWCP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J. Galp / B. Gillihan Finish Date: 4-13-23 Time: 1013

### WELL INFORMATION

Well ID: ~~MW-4~~ x MW-4
Casing ID: inches

### EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

### WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0958 | | 9.52 | | | | | | | | |
| | 1004 | .26 | | | 15.8 | 6.74 | 965 | 2.90 | 9.02 | -66.0 | |
| | 1007 | .39 | | | 15.8 | 6.78 | 969 | 2.12 | 8.17 | -98.1 | |
| | 1010 | .52 | | | 15.8 | 6.80 | 970 | 1.72 | 10.08 | -114.9 | |
| | 1013 | .65 | | 9.6 | 15.8 | 6.82 | 969 | 1.38 | 10.35 | -125.7 | |
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### NOTES (continued)

Bladder pump / Clear / Slight odor / no turbidity

### ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_181

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP  Client:

Project Number:  Task #:  Start Date:  Time:

Field Personnel: J. Cap / B. Gillighan  Finish Date: 4-13-23  Time: 1127

## WELL INFORMATION

Well ID: AP-5

Casing ID:  inches

## EVENT TYPE

Well Development  Low-Flow / Low Stress Sampling Other

Well Volume Approach Sampling  (Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1118 | | 13.05 | | | | | | | | |
| | 1121 | .13 | | | 12.6 | 7.15 | 698 | 5.38 | 3.56 | 28.2 | |
| | 1124 | .26 | | | 12.5 | 7.10 | 698 | 4.18 | 4.23 | 32.3 | |
| | 1127 | .39 | | 14.95 | 12.6 | 7.08 | 698 | 3.80 | 5.33 | 36.4 | |
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## NOTES (continued)

Bladder pump / Clear / no turbidity / no ~~odor~~ odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_182

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWCP Client:

Project Number: Task #: Start Date: Time:

Field Personnel: J. Cobb / T. Carroll Finish Date: 4-12-23 Time: 1103

## WELL INFORMATION

Well ID: AP-6

Casing ID: inches

## EVENT TYPE

Well Development

Well Volume Approach Sampling

Low-Flow / Low Stress Sampling Other

(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1045 | | 7.43 | | | | | | | | |
| | 1057 | 0.52 | | | 12.9 | 7.06 | 636 | 5.32 | 14.46 | 75.5 | |
| | 1100 | 0.65 | | | 13.0 | 7.04 | 638 | 5.13 | 3.70 | 66.6 | |
| | 1103 | 0.78 | | 17.1 | 12.9 | 7.02 | 642 | 5.05 | 3.98 | 56.6 | |
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## NOTES (continued)

Bladder pump

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_183

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP
Client:
Project Number:
Task #:
Start Date:
Time:
Field Personnel: J-Cap / T. Carroll
Finish Date: 4-17-23
Time: 1559

## WELL INFORMATION

Well ID: AP-7
Casing ID: inches

## EVENT TYPE

☐ Well Development ☐ Low-Flow / Low Stress Sampling
☐ Well Volume Approach Sampling ☐ Other (Specify):

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1532 | | 10.46 | | | | | | | | |
| | 1547 | 0.65 | | | 12.5 | 7.10 | 675 | 3.4 | 19.88 | -96.9 | |
| | 1550 | 0.78 | | | 12.5 | 7.09 | 681 | 3.1 | 26.30 | -99.1 | |
| | 1553 | 0.91 | | | 12.5 | 7.08 | 689 | 2.8 | 30.54 | -102.2 | |
| | 1556 | 1.04 | | | 12.6 | 7.09 | 698 | 2.7 | 25.70 | -104.0 | |
| | 1559 | 1.17 | | 19.15 | 12.6 | 7.11 | 712 | 2.6 | 24.53 | -104.4 | |
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## NOTES (continued)

Bladder Pump / odor moderate / clear / slight turbidity /

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing
na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential
SEC - Specific Electrical Conductance
SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_184

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J.GP / T. Carroll Finish Date: 4-12-23 Time: 1212

## WELL INFORMATION

Well ID: AO-6
Casing ID: inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1127 | | 4.35 | | | | | | | | |
| | 1154 | 1.17 | | | 13.6 | 6.80 | 971 | 0.76 | 22.90 | -159.8 | |
| | 1157 | 1.30 | | | 13.6 | 6.80 | 970 | 0.73 | 22.41 | -160.5 | |
| | 1200 | 1.43 | | | 13.6 | 6.79 | 969 | 0.70 | 17.84 | -160.7 | |
| | 1203 | 1.56 | | | 13.8 | 6.79 | 970 | 0.66 | 14.62 | -160.3 | |
| | 1206 | 1.69 | | | 13.8 | 6.78 | 970 | 0.67 | 13.26 | -160.2 | |
| | 1209 | 1.82 | | | 13.9 | 6.78 | 971 | 0.66 | 12.88 | -160.1 | |
| | 1212 | 1.95 | | 4.52 | 13.9 | 6.77 | 970 | 0.65 | 12.83 | -159.6 | |
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## NOTES (continued)

Submersible pump / Clear / Slight turbidity / no odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_185

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J. Cob / T. Carroll Finish Date: 4-17-23 Time: 1521

## WELL INFORMATION

Well ID: AP-9
Casing ID: inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1430 | | 12.13 | | | | | | | | |
| | 1512 | 1.82 | | | 13.7 | 6.68 | 953 | 2.2 | 23.88 | -9.4 | |
| | 1515 | 1.95 | | | 13.7 | 6.68 | 952 | 2.2 | 21.89 | -13.5 | |
| | 1518 | 2.08 | | | 13.8 | 6.68 | 949 | 2.0 | 18.79 | -19.7 | |
| | 1521 | 2.21 | | 16.06 | 13.7 | 6.69 | 950 | 1.9 | 19.69 | -24.3 | |
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## NOTES (continued)

Submersible pump / clear / slight turbidity / no odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_186

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP  Client: Vistra
Project Number:  Task #:  Start Date:  Time:
Field Personnel: J. Gap / T. Carroll  Finish Date: 4-12-23  Time: 1350

## WELL INFORMATION

Well ID: AP-10
Casing ID:  inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1305 | | 3.05 | | | | | | | | |
| | 1332 | 1.17 | | | 13.8 | 6.69 | 1249 | 0.69 | 17.21 | -134.4 | |
| | 1335 | 1.30 | | | 13.8 | 6.69 | 1248 | 0.67 | 11.01 | -134.9 | |
| | 1338 | 1.43 | | | 13.8 | 6.68 | 1250 | 0.65 | 8.45 | -135.5 | |
| | 1341 | 1.56 | | | 13.8 | 6.68 | 1250 | 0.63 | 10.82 | -136.1 | |
| | 1344 | 1.69 | | | 13.8 | 6.68 | 1250 | 0.61 | 6.50 | -136.7 | |
| | 1347 | 1.82 | | | 13.8 | 6.68 | 1249 | 0.60 | 5.80 | -137.2 | |
| | 1350 | 1.95 | | 3.23 | 13.8 | 6.68 | 1250 | 0.59 | 5.71 | -137.8 | |
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## NOTES (continued)

Submersible Pump / Moderate turbidity / yellowish / slight odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_187

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: Curp Client:
Project Number: Task #: Start Date: Time:
Field Personnel: J. Gelp / T. Cunnell Finish Date: 7-17-23 Time: 1349

## WELL INFORMATION

Well ID: AP-11
Casing ID: inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 13:19 | | 14.20 | | | | | | | | |
| | 1337 | 0.78 | | | 11.4 | 6.47 | 1077 | 0.7 | 10.82 | 89.6 | |
| | 1340 | 0.91 | | | 11.4 | 6.46 | 1076 | 0.4 | 4.68 | 89.5 | |
| | 1343 | 1.04 | | | 11.4 | 6.46 | 1075 | 0.3 | 3.40 | 89.3 | |
| | 1346 | 1.17 | | | 11.5 | 6.45 | 1074 | 0.2 | 1.74 | 88.9 | |
| | 1349 | 1.30 | | | 11.5 | 6.45 | 1073 | 0.1 | 1.31 | 88.6 | |
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## NOTES (continued)

Submersible pump / clear / no odor / no turbidity

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_188

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CW 40 Client: ~~Vistra~~

Project Number: Task #: Start Date: Time:

Field Personnel: J. Colp / P. Carroll Finish Date: 4-17-23 Time: 1312

## WELL INFORMATION

Well ID: AP-12

Casing ID: inches

## EVENT TYPE

Well Development

Well Volume Approach Sampling

Low-Flow / Low Stress Sampling Other

(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1145 | | 14.96 | | ~~13.2~~ | ~~6.43~~ | ~~1638~~ | ~~-0.1~~ | ~~147.37~~ | ~~39.5~~ | |
| | 1300 | 3.25 | | | 13.2 | 6.43 | 1658 | -0.1 | 147.37 | 39.5 | |
| | 1303 | 3.38 | | | 13.2 | 6.43 | 1637 | -0.1 | 94.43 | 39.2 | |
| | 1306 | 3.51 | | | 13.2 | 6.43 | 1657 | -0.1 | 70.97 | 38.9 | |
| | 1309 | 3.64 | | | 13.2 | 6.43 | 1636 | -0.1 | 59.15 | 38.6 | |
| | 1312 | 3.77 | | 18.66 | 13.2 | 6.43 | 1634 | -0.1 | 59.72 | 38.2 | |
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## NOTES (continued)

Submersible pump / Slight odor / ~~Clear~~ / Slight turbidity - murky

Slight Color - Yellowish

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

SC_189

## PROJECT INFORMATION

Site: CWCP Client: ~~Vista~~

Project Number: Task #: Start Date: Time:

Field Personnel: J. Colp | T. Carroll Finish Date: 4-17-23 Time: 1134

## WELL INFORMATION

Well ID: MW-13

Casing ID: inches

## EVENT TYPE

Well Development

Well Volume Approach Sampling

Low-Flow / Low Stress Sampling Other

(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1031 | | 13.91 | | | | | | | | |
| | 1128 | 2.47 | | | 17.5 | 6.54 | 787 | -0.3 | 97.15 | -3.9 | |
| | 1131 | 2.60 | | | 17.5 | 6.54 | 783 | -0.3 | 99.44 | -4.0 | |
| | 1134 | 2.73 | | 16.57 | 17.5 | 6.54 | 780 | -0.3 | 93.84 | -4.4 | |
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## NOTES (continued)

Submersible pump / clear / slight odor / slight turbidity - murky

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

SC_190

# WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

## PROJECT INFORMATION

Site: CWLP  Client:
Project Number:  Task #:  Start Date:  Time:
Field Personnel: J.Cobb / B. Gillihan  Finish Date: 4-13-23  Time: 1106

## WELL INFORMATION

Well ID: AP-14
Casing ID:  inches

## EVENT TYPE

Well Development
Well Volume Approach Sampling
Low-Flow / Low Stress Sampling Other
(Specify): Low Flow

## WATER QUALITY INDICATOR PARAMETERS (continued)

| Sampling Stage | Time (military) | Volume Removed (gallons) | Depth to Water (Feet) | Drawdown (Feet) | Temp. (°C) | pH (SU) | SEC or Cond. (µs/cm) | Dissolved Oxygen (mg/L) | Turbidity (NTU) | ORP (mV) | Visual Clarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1036 | | 2.40 | | | | | | | | |
| | 1057 | .91 | | | 12.9 | 6.97 | 1724 | 1.20 | 10.90 | -53.4 | |
| | 1100 | 1.04 | | | 13.0 | 6.97 | 1724 | 1.08 | 12.25 | -54.1 | |
| | 1103 | 1.17 | | | 13.0 | 6.97 | 1723 | 0.97 | 11.40 | -55.1 | |
| | 1106 | 1.30 | | 2.80 | 12.9 | 6.97 | 1724 | 0.92 | 12.46 | -56.0 | |
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## NOTES (continued)

Submersible Pump / Clear / no turbidity / no odor

## ABBREVIATIONS

Cond. - Actual Conductivity
FT BTOC - Feet Below Top of Casing na - Not Applicable
nm - Not Measured
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units
Temp - Temperature
°C - Degrees Celcius

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

May 23, 2023

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

RE: 23040094

Dear Shelly Hennessy:

Order No.: 23041812

Summit Environmental Technologies, Inc. received 15 sample(s) on 4/26/2023 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.*
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*Website: http://www.settek.com*

# Case Narrative

WO#: **23041812**
Date: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Project:** 23040094

WorkOrder Narrative:
23041812: 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#: **23041812**
Date: **5/23/2023**

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.
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Website: http://www.settek.com

# Workorder Sample Summary

WO#: **23041812**

***23-May-23***

**CLIENT:** TEKLAB Inc,
**Project:** 23040094

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 23041812-001 | 23040094-001 | | 4/11/2023 12:24:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-002 | 23040094-002 | | 4/12/2023 12:49:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-003 | 23040094-003 | | 4/12/2023 2:49:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-004 | 23040094-004 | | 4/12/2023 3:26:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-005 | 23040094-005 | | 4/13/2023 10:13:00 AM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-006 | 23040094-006 | | 4/13/2023 11:27:00 AM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-007 | 23040094-007 | | 4/12/2023 11:03:00 AM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-008 | 23040094-008 | | 4/17/2023 3:59:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-009 | 23040094-009 | | 4/12/2023 12:12:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-010 | 23040094-010 | | 4/17/2023 3:21:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-011 | 23040094-011 | | 4/12/2023 1:50:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-012 | 23040094-012 | | 4/17/2023 1:49:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-013 | 23040094-013 | | 4/17/2023 1:12:00 PM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-014 | 23040094-014 | | 4/17/2023 11:34:00 AM | 4/26/2023 1:10:00 PM | Non-Potable Water |
| 23041812-015 | 23040094-015 | | 4/13/2023 11:06:00 AM | 4/26/2023 1:10:00 PM | Non-Potable Water |

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*Website: http://www.settek.com*

# DATES REPORT

WO#: **23041812**

***23-May-23***

SC_195

**Client:** TEKLAB Inc,
**Project:** 23040094

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23041812-001A | 23040094-001 | 4/11/2023 12:24:00 PM | Non-Potable Water | Radium-226 (EPA 903.0) | | 4/28/2023 9:55:00 AM | 5/9/2023 12:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 4/28/2023 9:55:00 AM | 5/8/2023 2:58:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 5/11/2023 9:48:00 AM | 5/16/2023 3:00:00 PM |
| 23041812-002A | 23040094-002 | 4/12/2023 12:49:00 PM | | Radium-226 (EPA 903.0) | | 4/28/2023 9:55:00 AM | 5/9/2023 12:05:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 4/28/2023 9:55:00 AM | 5/8/2023 2:58:00 PM |
| 23041812-003A | 23040094-003 | 4/12/2023 2:49:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-004A | 23040094-004 | 4/12/2023 3:26:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-005A | 23040094-005 | 4/13/2023 10:13:00 AM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-006A | 23040094-006 | 4/13/2023 11:27:00 AM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-007A | 23040094-007 | 4/12/2023 11:03:00 AM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-008A | 23040094-008 | 4/17/2023 3:59:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-009A | 23040094-009 | 4/12/2023 12:12:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-010A | 23040094-010 | 4/17/2023 3:21:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-011A | 23040094-011 | 4/12/2023 1:50:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |

Original

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Website: http://www.settek.com

# DATES REPORT

WO#: **23041812**

***23-May-23***

SC_196

**Client:** TEKLAB Inc,
**Project:** 23040094

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23041812-012A | 23040094-012 | 4/17/2023 1:49:00 PM | Non-Potable Water | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-013A | 23040094-013 | 4/17/2023 1:12:00 PM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-014A | 23040094-014 | 4/17/2023 11:34:00 AM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |
| 23041812-015A | 23040094-015 | 4/13/2023 11:06:00 AM | | Radium-226 (EPA 903.0) | | 5/1/2023 12:25:00 PM | 5/10/2023 9:46:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 5/1/2023 12:25:00 PM | 5/9/2023 3:21:00 PM |

Original

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/11/2023 12:24:00 PM

**Project:** 23040094

**Lab ID:** 23041812-001
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-001

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.19 | 1.00 | U | pCi/L | ± 0.1 | 1 | 5/9/2023 12:05:00 PM |
| Yield | 0.96 | | | | | 1 | 5/9/2023 12:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.29 | 1.00 | U | pCi/L | ± 0.43 | 1 | 5/16/2023 3:00:00 PM |
| Yield | 0.9 | | | | | 1 | 5/16/2023 3:00:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/12/2023 12:49:00 PM

**Project:** 23040094

**Lab ID:** 23041812-002
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-002

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.29 | 1.00 | U | pCi/L | ± 0.14 | 1 | 5/9/2023 12:05:00 PM |
| Yield | 0.98 | | | | | 1 | 5/9/2023 12:05:00 PM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.11 | 1.00 | | pCi/L | ± 0.54 | 1 | 5/8/2023 2:58:00 PM |
| Yield | 1 | | | | | 1 | 5/8/2023 2:58:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 4/12/2023 2:49:00 PM

**Project:** 23040094

**Lab ID:** 23041812-003

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-003

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.29 | 1.00 | U | pCi/L | ± 0.16 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.94 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 2.21 | 1.00 | | pCi/L | ± 0.92 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.94 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/12/2023 3:26:00 PM

**Project:** 23040094

**Lab ID:** 23041812-004
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-004

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | -0.03 | 1.00 | U | pCi/L | ± 0.17 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.9 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.39 | 1.00 | U | pCi/L | ± 0.72 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.96 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/13/2023 10:13:00 AM

**Project:** 23040094

**Lab ID:** 23041812-005
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-005

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.57 | 1.00 | U | pCi/L | ± 0.2 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.98 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 2.32 | 1.00 | | pCi/L | ± 0.96 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.98 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/13/2023 11:27:00 AM

**Project:** 23040094

**Lab ID:** 23041812-006
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-006

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.07 | 1.00 | U | pCi/L | ± 0.15 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.98 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.5 | 1.00 | U | pCi/L | ± 0.67 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.99 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/12/2023 11:03:00 AM
**Project:** 23040094
**Lab ID:** 23041812-007
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23040094-007

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.12 | 1.00 | U | pCi/L | ± 0.14 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.98 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.17 | 1.00 | | pCi/L | ± 0.88 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 1 | | | | | 1 | 5/9/2023 3:21:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/17/2023 3:59:00 PM

**Project:** 23040094

**Lab ID:** 23041812-008
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-008

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.37 | 1.00 | U | pCi/L | ± 0.17 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.94 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.17 | 1.00 | | pCi/L | ± 0.89 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.94 | | | | | 1 | 5/9/2023 3:21:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/12/2023 12:12:00 PM

**Project:** 23040094

**Lab ID:** 23041812-009
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-009

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 1.22 | 1.00 | | pCi/L | ± 0.28 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 1 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.66 | 1.00 | | pCi/L | ± 0.94 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 1 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | |
|---|---|
| B | Analyte detected in the associated Method Blank |
| E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded |
| M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. |
| N | Tentatively identified compounds |
| ND | Not Detected |
| OG1 | |
| P | Second column confirmation exceeds |
| PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/17/2023 3:21:00 PM

**Project:** 23040094

**Lab ID:** 23041812-010
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-010

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.62 | 1.00 | U | pCi/L | ± 0.2 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.96 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | -0.47 | 1.00 | U | pCi/L | ± 0.81 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.96 | | | | | 1 | 5/9/2023 3:21:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/12/2023 1:50:00 PM

**Project:** 23040094

**Lab ID:** 23041812-011
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-011

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 1.29 | 1.00 | | pCi/L | ± 0.29 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.99 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.37 | 1.00 | | pCi/L | ± 0.94 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.92 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/17/2023 1:49:00 PM

**Project:** 23040094

**Lab ID:** 23041812-012
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-012

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.12 | 1.00 | U | pCi/L | ± 0.13 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.98 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.35 | 1.00 | U | pCi/L | ± 0.71 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 1 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/17/2023 1:12:00 PM

**Project:** 23040094

**Lab ID:** 23041812-013
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-013

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.36 | 1.00 | U | pCi/L | ± 0.16 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.98 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.71 | 1.00 | J | pCi/L | ± 0.76 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.96 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/17/2023 11:34:00 AM

**Project:** 23040094

**Lab ID:** 23041812-014
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-014

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 0.52 | 1.00 | U | pCi/L | ± 0.18 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 0.96 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | -0.28 | 1.00 | U | pCi/L | ± 0.84 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 1 | | | | | 1 | 5/9/2023 3:21:00 PM |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23041812**

Date Reported: **5/23/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 4/13/2023 11:06:00 AM

**Project:** 23040094

**Lab ID:** 23041812-015
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23040094-015

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | -0.24 | 1.00 | U | pCi/L | ± 0.23 | 1 | 5/10/2023 9:46:00 AM |
| Yield | 1 | | | | | 1 | 5/10/2023 9:46:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 0.69 | 1.00 | J | pCi/L | ± 0.86 | 1 | 5/9/2023 3:21:00 PM |
| Yield | 0.98 | | | | | 1 | 5/9/2023 3:21:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_212

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64709**

| Sample ID: **MB-64709** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163427** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **64709** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/8/2023** | SeqNo: **4346663** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.640 | 1.00 | | 0 | 0 | | | | | | J |
| Yield | 0.980 | | | 0 | 0 | | | | | | |

| Sample ID: **LCS-64709** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163427** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **64709** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/8/2023** | SeqNo: **4346664** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 4.43 | 1.00 | 5.000 | 0 | 88.6 | 70 | 130 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **RLCD-64709** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163427** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/8/2023** | SeqNo: **4346668** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.970 | 1.00 | 1.000 | 0 | 97.0 | 50 | 150 | | | | J |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_213

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64709**

Sample ID: **23041659-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **4/28/2023** RunNo: **163427**
Client ID: **BatchQC** Batch ID: **64709** TestNo: **E904.0** **E903-904** Analysis Date: **5/8/2023** SeqNo: **4346672**

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_214

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64709**

| Sample ID: **MB-64709** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346930** |

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

| Sample ID: **LCS-64709** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346931** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.16 | 1.00 | 5.000 | 0 | 103 | 70 | 130 | | | | |

| Sample ID: **LCSD-64709** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346932** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.38 | 1.00 | 5.000 | 0 | 108 | 70 | 130 | 5.160 | 4.17 | 20 | |

| Sample ID: **RLC-64709** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346934** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_215

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64709**

| Sample ID: **RLC-64709** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346934** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.21 | 1.00 | 1.000 | 0 | 121 | 50 | 150 | | | | |

| Sample ID: **RLCD-64709** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346935** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.09 | 1.00 | 1.000 | 0 | 109 | 50 | 150 | | | | |

| Sample ID: **23041658-001AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346936** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.09 | 1.00 | 5.000 | 0 | 102 | 70 | 130 | | | | |

| Sample ID: **23041659-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **4/28/2023** | RunNo: **163434** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64709** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4346939** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_216

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64709**

Sample ID: **23041659-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **4/28/2023** RunNo: **163434**
Client ID: **BatchQC** Batch ID: **64709** TestNo: **E903.0** **E903-904** Analysis Date: **5/9/2023** SeqNo: **4346939**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yield | 0.970 | | | | | | | 0.9600 | 1.04 | 0 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_217

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

| Sample ID: **MB-64851** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163841** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **64851** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4362722** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.930 | 1.00 | | 0 | 0 | | | | | | J |
| Yield | 0.880 | | | 0 | 0 | | | | | | |

| Sample ID: **LCS-64851** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163841** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **64851** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4362723** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.60 | 1.00 | 5.000 | 0 | 72.0 | 70 | 130 | | | | |
| Yield | 0.880 | | | 0 | 0 | | | | | | |

| Sample ID: **RLC-64851** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163841** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4362726** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.69 | 1.00 | 1.000 | 0 | 269 | 50 | 150 | | | | S |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | 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*

# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_218

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

| Sample ID: **RLCD-64851** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163841** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/9/2023** | SeqNo: **4362727** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.99 | 1.00 | 1.000 | 0 | 199 | 50 | 150 | | | | S |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_219

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

Sample ID: **23041819-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **5/1/2023** RunNo: **163841**
Client ID: **BatchQC** Batch ID: **64851** TestNo: **E904.0** **E903-904** Analysis Date: **5/9/2023** SeqNo: **4362731**

| 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 | 0.930 | | | 0 | 0 | | | 0.9800 | 5.24 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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*3310 Win St.*
*Cuyahoga Falls, Ohio 44223*
*TEL: (330) 253-8211 FAX: (330) 253-4489*
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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_220

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

| Sample ID: **MB-64851** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363196** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | ND | 1.00 | | | | | | | | | U |
| Yield | 0.880 | | | | | | | | | | |

| Sample ID: **LCS-64851** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363197** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.48 | 1.00 | 5.000 | 0 | 110 | 70 | 130 | | | | |

| Sample ID: **LCSD-64851** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363198** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.17 | 1.00 | 5.000 | 0 | 103 | 70 | 130 | 5.480 | 5.82 | 20 | |

| Sample ID: **RLCD-64851** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363201** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_221

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

| Sample ID: **RLCD-64851** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363201** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.34 | 1.00 | 1.000 | 0 | 134 | 50 | 150 | | | | |

| Sample ID: **23041815-001AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363202** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.61 | 1.00 | 5.000 | 0.9600 | 93.0 | 70 | 130 | | | | |

| Sample ID: **23041819-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363205** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | ND | 1.00 | | | | | | 0 | 0 | 20 | U |
| Yield | 0.940 | | | | | | | 0.9600 | 2.11 | 0 | |

| Sample ID: **23041990-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **5/1/2023** | RunNo: **163869** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **64851** | TestNo: **E903.0** | **E903-904** | Analysis Date: **5/10/2023** | SeqNo: **4363207** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_222

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **64851**

Sample ID: **23041990-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **5/1/2023** RunNo: **163869**
Client ID: **BatchQC** Batch ID: **64851** TestNo: **E903.0** **E903-904** Analysis Date: **5/10/2023** SeqNo: **4363207**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 0.760 | 1.00 | | | | | | 0 | 200 | 20 | JR |
| Yield | 0.990 | | | | | | | 0.9700 | 2.04 | 0 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
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# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_223

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **65044**

| Sample ID: **MB-65044** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/11/2023** | RunNo: **163963** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **65044** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/16/2023** | SeqNo: **4366735** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 0.660 | 1.00 | | 0 | 0 | | | | | | J |
| Yield | 0.890 | | | 0 | 0 | | | | | | |

| Sample ID: **LCS-65044** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/11/2023** | RunNo: **163963** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **65044** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/16/2023** | SeqNo: **4366736** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.81 | 1.00 | 5.000 | 0 | 56.2 | 70 | 130 | | | | |
| Yield | 0.910 | | | 0 | 0 | | | | | | |

| Sample ID: **LCSD-65044** | SampType: **LCSD** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/11/2023** | RunNo: **163963** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **65044** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/16/2023** | SeqNo: **4366737** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.74 | 1.00 | 5.000 | 0 | 74.8 | 70 | 130 | 2.810 | 28.4 | 20 | |
| Yield | 0.960 | | | 0 | 0 | | | 0.9100 | 5.35 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23041812**

***23-May-23***

SC_224

**Client:** TEKLAB Inc,
**Project:** 23040094 **BatchID:** **65044**

| Sample ID: **RLCD-65044** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **5/11/2023** | RunNo: **163963** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **65044** | TestNo: **E904.0** | **E903-904** | Analysis Date: **5/16/2023** | SeqNo: **4366740** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.23 | 1.00 | 1.000 | 0 | 123 | 50 | 150 | | | | |
| Yield | 0.960 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

Pg ___ of ___

# TEKLAB, INC. Chain of Custody

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

23041812

Are the samples chilled? YES ☐ NO ☑ With: ☐ Ice ☐ Blue Ice Preserved in: ☐ ~~ice~~ ☐ field

**Teklab Inc**
**5445 Horseshoe Lake Road**
**Collinsville, IL 62234**

Cooler Temp: | Sampler: Tracy Carroll/TEKLAB | QC Level: 2

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium 226/228 on your standard turn around time.
Samples collected from an IL site.
Batch QC is required for all analyses requested. EDD requested..

Project# 23040094

Contact: Shelly Hennessey | Email: shennessey@teklabinc.com
Requested Due Date: Standard TAT | Billing/PO: 34257 | Phone: (618) 344-1004

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 | Ra226/228 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23040094-001 | 4/11/23 1224 | HNO3 | Groundwater | ☑ | PH | 1 | CPM | 23 | | | | | | | | |
| | 23040094-002 | 4/12/23 1249 | HNO3 | Groundwater | ☑ | | 1 | | 29 | | | | | | | | |
| | 23040094-003 | 4/12/23 1449 | HNO3 | Groundwater | ☑ | | 1 | | 31 | | | | | | | | |
| | 23040094-004 | 4/12/23 1526 | HNO3 | Groundwater | ☑ | | 1 | | 36 | | | | | | | | |
| | 23040094-005 | 4/13/23 1013 | HNO3 | Groundwater | ☑ | | 1 | | 24 | | | | | | | | |
| | 23040094-006 | 4/13/23 1127 | HNO3 | Groundwater | ☑ | | 1 | | 35 | | | | | | | | |
| | 23040094-007 | 4/12/23 1103 | HNO3 | Groundwater | ☑ | | 1 | | 21 | | | | | | | | |
| | 23040094-008 | 4/17/23 1559 | HNO3 | Groundwater | ☑ | | 1 | | 27 | | | | | | | | |
| | 23040094-009 | 4/12/23 1212 | HNO3 | Groundwater | ☑ | | 1 | | 32 | | | | | | | | |
| | 23040094-010 | 4/17/23 1521 | HNO3 | Groundwater | ☑ | | 1 | | 39 | | | | | | | | |
| | 23040094-011 | 4/12/23 1350 | HNO3 | Groundwater | ☑ | ☑ | 1 | ☑ | 41 | | | | | | | | |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| DMP | 4/18/23 | | 04/26/23 1310 |
| | | | |
| | | | |
| | | | |

13.1 + 0.1 = 13.2, Fedex cooler

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

# 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: Tracy Carroll/TEKLAB | QC Level: 2

Comments: **Please Issue reports and invoices via email only**
Please analyze for Radium 226/228 on your standard turn around time.
Samples collected from an IL site.
Batch QC is required for all analyses requested. EDD requested..

Project# 23040094

Contact: Shelly Hennessey | Email: shennessey@teklabinc.com
Requested Due Date: Standard TAT | Billing/PO: 34257 | Phone: (618) 344-1004

**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 | Ra226/228 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23040094-012 | 4/17/23 1349 | HNO3 | Groundwater | ☑ | PH | 1 | CBM | 16 | | | | | | | | |
| | 23040094-013 | 4/17/23 1312 | HNO3 | Groundwater | ☑ | | 1 | 1 | 20 | | | | | | | | |
| | 23040094-014 | 4/17/23 1134 | HNO3 | Groundwater | ☑ | 1 | 1 | 1 | 19 | | | | | | | | |
| | 23040094-015 | 4/13/23 1106 | HNO3 | Groundwater | ☑ | V | 1 | ✓ | 28 | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |
| | | | HNO3 | Groundwater | ☐ | | | | | | | | | | | | |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| JMP | 4/18/23 | | |
| | | | |
| | | | |
| | | | |

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

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: **23041812** RcptNo: **1**

| | | | |
|---|---|---|---|
| Logged by: | **Anthony W. Britton** | **4/26/2023 1:10:00 PM** | Anthony Britton |
| Completed By: | **Anthony W. Britton** | **4/26/2023 4:55:12 PM** | Anthony Britton |
| Reviewed By: | **Jennifer Woolf** | **4/26/2023 6:42:30 PM** | Jennifer Woolf |

## Chain of Custody

| | | | | |
|---|---|---|---|---|
| 1. | Were seals intact? | Yes ☑ | No ☐ | Not Present ☐ |
| 2. | Is Chain of Custody complete? | Yes ☑ | No ☐ | Not Present ☐ |
| 3. | How was the sample delivered? | FedEx | | |

## Log In

| | | | | |
|---|---|---|---|---|
| 4. | Coolers are present? | Yes ☐ | No ☑ | NA ☐ |
| 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 | 13.2 | Good | Not Present | | | |

August 16, 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:** Ash Pond Monitoring Wells **WorkOrder:** 23070002

Dear Eric Staley:

TEKLAB, INC received 15 samples on 7/7/2023 4:44:00 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:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-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 | 25 |
| Chain of Custody | Appended |

**Client:** City Water, Light & Power **Work Order:** 23070002

**Client Project:** Ash Pond Monitoring Wells **Report Date:** 16-Aug-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:** 23070002

**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-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

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23

**Cooler Receipt Temp:** 5.2 °C

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

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

## Locations


### Collinsville

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

### Springfield

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

### Kansas City

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

### Collinsville Air

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

### Chicago

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

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-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 | 8/31/2023 | 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:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-001
**Client Sample ID:** RW-3
**Matrix:** GROUNDWATER
**Collection Date:** 07/06/2023 12:23

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **495.49** | ft | 1 | 07/06/2023 12:23 | R332756 |
| Depth to water | * | -5.00 | | **8.29** | ft | 1 | 07/06/2023 12:23 | R332756 |
| Depth to water from measuring point | * | 0 | | **10.99** | ft | 1 | 07/06/2023 12:23 | R332756 |
| Elevation of groundwater surface | * | 0 | | **528.51** | ft | 1 | 07/06/2023 12:23 | R332756 |
| Measuring Point Elevation | * | 0 | | **539.50** | ft | 1 | 07/06/2023 12:23 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.70** | ft | 1 | 07/06/2023 12:23 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **3.3** | NTU | 1 | 07/06/2023 12:23 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.5** | °F | 1 | 07/06/2023 12:23 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.13** | | 1 | 07/06/2023 12:23 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **437** | µmhos/cm @25C | 1 | 07/06/2023 12:23 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **290** | mg/L | 2.5 | 07/07/2023 15:00 | R331380 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **22** | mg/L | 1 | 07/24/2023 14:05 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.27** | mg/L | 1 | 07/11/2023 12:53 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **28** | mg/L | 1 | 07/24/2023 14:06 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.106** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Boron | NELAP | 0.0200 | | **0.0595** | mg/L | 1 | 07/12/2023 13:56 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Calcium | NELAP | 0.100 | B | **52.8** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:26 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 2:05 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0831** | mg/L | 5 | 07/12/2023 2:05 | 208261 |
| Lithium | * | 0.0030 | | **< 0.0030** | mg/L | 5 | 07/17/2023 11:48 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 2:05 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 2:05 | 208261 |
| *LCS recovered outside upper control limits. 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 | 07/11/2023 15:26 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-001
**Client Sample ID:** RW-3
**Matrix:** GROUNDWATER
**Collection Date:** 07/06/2023 12:23

| 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 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-002
**Client Sample ID:** AP-1
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 11:08

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **504.29** | ft | 1 | 07/07/2023 11:08 | R332756 |
| Depth to water | * | -5.00 | | **7.92** | ft | 1 | 07/07/2023 11:08 | R332756 |
| Depth to water from measuring point | * | 0 | | **10.19** | ft | 1 | 07/07/2023 11:08 | R332756 |
| Elevation of groundwater surface | * | 0 | | **525.18** | ft | 1 | 07/07/2023 11:08 | R332756 |
| Measuring Point Elevation | * | 0 | | **535.37** | ft | 1 | 07/07/2023 11:08 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.27** | ft | 1 | 07/07/2023 11:08 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **6.8** | NTU | 1 | 07/07/2023 11:08 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.7** | °F | 1 | 07/07/2023 11:08 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.51** | | 1 | 07/07/2023 11:08 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1810** | µmhos/cm @25C | 1 | 07/07/2023 11:08 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1190** | mg/L | 1 | 07/11/2023 10:29 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **443** | mg/L | 20 | 07/24/2023 14:31 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.24** | mg/L | 1 | 07/11/2023 12:55 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **36** | mg/L | 2 | 07/24/2023 14:27 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.271** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Boron | NELAP | 0.200 | | **22.5** | mg/L | 10 | 07/12/2023 20:37 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Calcium | NELAP | 0.100 | B | **285** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:28 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 2:11 | 208261 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 2:11 | 208261 |
| Lithium | * | 0.0030 | | **0.0109** | mg/L | 5 | 07/17/2023 11:53 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 2:11 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 2:11 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:29 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-003
**Client Sample ID:** AP-2
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 12:31

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.77** | ft | 1 | 07/07/2023 12:31 | R332756 |
| Depth to water | * | -5.00 | | **6.07** | ft | 1 | 07/07/2023 12:31 | R332756 |
| Depth to water from measuring point | * | 0 | | **8.57** | ft | 1 | 07/07/2023 12:31 | R332756 |
| Elevation of groundwater surface | * | 0 | | **527.53** | ft | 1 | 07/07/2023 12:31 | R332756 |
| Measuring Point Elevation | * | 0 | | **536.10** | ft | 1 | 07/07/2023 12:31 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.50** | ft | 1 | 07/07/2023 12:31 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **2.3** | NTU | 1 | 07/07/2023 12:31 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.3** | °F | 1 | 07/07/2023 12:31 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.40** | | 1 | 07/07/2023 12:31 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1390** | µmhos/cm @25C | 1 | 07/07/2023 12:31 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1600** | mg/L | 2.5 | 07/11/2023 10:29 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **795** | mg/L | 20 | 07/24/2023 14:39 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 07/11/2023 12:58 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **54** | mg/L | 2 | 07/26/2023 19:46 | R333204 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0719** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Boron | NELAP | 0.0200 | | **3.73** | mg/L | 1 | 07/12/2023 20:40 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Calcium | NELAP | 0.100 | B | **244** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Cobalt | NELAP | 0.0050 | | **0.0085** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:30 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:13 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0020** | mg/L | 5 | 07/12/2023 3:13 | 208261 |
| Lithium | * | 0.0030 | | **0.0063** | mg/L | 5 | 07/17/2023 11:58 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:13 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:13 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:31 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-004
**Client Sample ID:** AP-3
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 13:16

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.45** | ft | 1 | 07/07/2023 13:16 | R332756 |
| Depth to water | * | -5.00 | | **9.01** | ft | 1 | 07/07/2023 13:16 | R332756 |
| Depth to water from measuring point | * | 0 | | **10.71** | ft | 1 | 07/07/2023 13:16 | R332756 |
| Elevation of groundwater surface | * | 0 | | **524.69** | ft | 1 | 07/07/2023 13:16 | R332756 |
| Measuring Point Elevation | * | 0 | | **535.40** | ft | 1 | 07/07/2023 13:16 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **1.70** | ft | 1 | 07/07/2023 13:16 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **5.2** | NTU | 1 | 07/07/2023 13:16 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **58.5** | °F | 1 | 07/07/2023 13:16 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.53** | | 1 | 07/07/2023 13:16 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1230** | µmhos/cm @25C | 1 | 07/07/2023 13:16 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **990** | mg/L | 2.5 | 07/11/2023 10:29 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 100 | | **467** | mg/L | 10 | 07/24/2023 14:48 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.21** | mg/L | 1 | 07/11/2023 13:00 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **51** | mg/L | 2 | 07/24/2023 14:43 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0993** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Boron | NELAP | 0.200 | | **14.0** | mg/L | 10 | 07/12/2023 20:39 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Calcium | NELAP | 0.100 | B | **189** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:31 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:18 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0109** | mg/L | 5 | 07/12/2023 3:18 | 208261 |
| Lithium | * | 0.0030 | | **0.0063** | mg/L | 5 | 07/17/2023 12:03 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:18 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:18 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:33 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-005
**Client Sample ID:** AP-4
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 11:42

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **492.46** | ft | 1 | 07/07/2023 11:42 | R332756 |
| Depth to water | * | -5.00 | | **5.81** | ft | 1 | 07/07/2023 11:42 | R332756 |
| Depth to water from measuring point | * | 0 | | **8.95** | ft | 1 | 07/07/2023 11:42 | R332756 |
| Elevation of groundwater surface | * | 0 | | **546.65** | ft | 1 | 07/07/2023 11:42 | R332756 |
| Measuring Point Elevation | * | 0 | | **555.60** | ft | 1 | 07/07/2023 11:42 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.14** | ft | 1 | 07/07/2023 11:42 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **16** | NTU | 1 | 07/07/2023 11:42 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **70.5** | °F | 1 | 07/07/2023 11:42 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.86** | | 1 | 07/07/2023 11:42 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **875** | µmhos/cm @25C | 1 | 07/07/2023 11:42 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **560** | mg/L | 2.5 | 07/11/2023 10:30 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 07/24/2023 14:50 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.14** | mg/L | 1 | 07/11/2023 13:03 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **13** | mg/L | 1 | 07/24/2023 14:51 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.396** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Boron | NELAP | 0.0200 | | **0.0845** | mg/L | 1 | 07/12/2023 20:36 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Calcium | NELAP | 0.100 | B | **132** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:33 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:24 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0239** | mg/L | 5 | 07/12/2023 3:24 | 208261 |
| Lithium | * | 0.0030 | | **0.0078** | mg/L | 5 | 07/17/2023 12:37 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:24 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:24 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:35 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/24/2023 15:18 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-006
**Client Sample ID:** AP-5
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 13:12

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **552.63** | ft | 1 | 07/07/2023 13:12 | R332756 |
| Depth to water | * | -5.00 | | **11.78** | ft | 1 | 07/07/2023 13:12 | R332756 |
| Depth to water from measuring point | * | 0 | | **14.08** | ft | 1 | 07/07/2023 13:12 | R332756 |
| Elevation of groundwater surface | * | 0 | | **569.82** | ft | 1 | 07/07/2023 13:12 | R332756 |
| Measuring Point Elevation | * | 0 | | **583.90** | ft | 1 | 07/07/2023 13:12 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.30** | ft | 1 | 07/07/2023 13:12 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **1.7** | NTU | 1 | 07/07/2023 13:12 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.0** | °F | 1 | 07/07/2023 13:12 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.16** | | 1 | 07/07/2023 13:12 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **653** | µmhos/cm @25C | 1 | 07/07/2023 13:12 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **400** | mg/L | 1 | 07/11/2023 10:30 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **43** | mg/L | 1 | 07/24/2023 14:59 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.31** | mg/L | 1 | 07/11/2023 13:06 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **4** | mg/L | 1 | 07/24/2023 14:59 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0461** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Boron | NELAP | 0.0200 | | **0.0323** | mg/L | 1 | 07/15/2023 16:20 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Calcium | NELAP | 0.100 | BS | **96.3** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:44 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| *Matrix spike control limits for 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 | 07/12/2023 3:41 | 208261 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:41 | 208261 |
| Lithium | * | 0.0030 | | **0.0046** | mg/L | 5 | 07/18/2023 8:56 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:41 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:41 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 8:24 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/26/2023 16:09 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-006
**Client Sample ID:** AP-5
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 13:12

| 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 | 07/26/2023 16:09 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-007
**Client Sample ID:** AP-6
**Matrix:** GROUNDWATER
**Collection Date:** 07/06/2023 13:30

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **498.20** | ft | 1 | 07/06/2023 13:30 | R332756 |
| Depth to water | * | -5.00 | | **7.06** | ft | 1 | 07/06/2023 13:30 | R332756 |
| Depth to water from measuring point | * | 0 | | **9.48** | ft | 1 | 07/06/2023 13:30 | R332756 |
| Elevation of groundwater surface | * | 0 | | **528.34** | ft | 1 | 07/06/2023 13:30 | R332756 |
| Measuring Point Elevation | * | 0 | | **537.82** | ft | 1 | 07/06/2023 13:30 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.42** | ft | 1 | 07/06/2023 13:30 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **3.7** | NTU | 1 | 07/06/2023 13:30 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **55.9** | °F | 1 | 07/06/2023 13:30 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.06** | | 1 | 07/06/2023 13:30 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **407** | µmhos/cm @25C | 1 | 07/06/2023 13:30 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **268** | mg/L | 1 | 07/07/2023 15:00 | R331380 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **22** | mg/L | 1 | 07/24/2023 15:20 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.26** | mg/L | 1 | 07/11/2023 13:07 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **28** | mg/L | 1 | 07/24/2023 15:20 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0844** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Boron | NELAP | 0.0200 | | **0.0753** | mg/L | 1 | 07/12/2023 20:44 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Calcium | NELAP | 0.100 | B | **49.0** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:34 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:30 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0040** | mg/L | 5 | 07/12/2023 3:30 | 208261 |
| Lithium | * | 0.0030 | | **< 0.0030** | mg/L | 5 | 07/17/2023 12:41 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:30 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:30 | 208261 |
| *LCS recovered outside upper control limits. 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 | 07/11/2023 15:49 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-007
**Client Sample ID:** AP-6
**Matrix:** GROUNDWATER
**Collection Date:** 07/06/2023 13:30

| 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 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-008
**Client Sample ID:** AP-7
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 12:23

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **496.50** | ft | 1 | 07/07/2023 12:23 | R332756 |
| Depth to water | * | -5.00 | | **8.66** | ft | 1 | 07/07/2023 12:23 | R332756 |
| Depth to water from measuring point | * | 0 | | **11.32** | ft | 1 | 07/07/2023 12:23 | R332756 |
| Elevation of groundwater surface | * | 0 | | **527.70** | ft | 1 | 07/07/2023 12:23 | R332756 |
| Measuring Point Elevation | * | 0 | | **539.02** | ft | 1 | 07/07/2023 12:23 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.66** | ft | 1 | 07/07/2023 12:23 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **11** | NTU | 1 | 07/07/2023 12:23 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **59.2** | °F | 1 | 07/07/2023 12:23 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.28** | | 1 | 07/07/2023 12:23 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **586** | µmhos/cm @25C | 1 | 07/07/2023 12:23 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **300** | mg/L | 2.5 | 07/11/2023 10:30 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **20** | mg/L | 1 | 07/24/2023 15:28 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.34** | mg/L | 1 | 07/11/2023 13:09 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **39** | mg/L | 1 | 07/24/2023 15:28 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.106** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Boron | NELAP | 0.0200 | | **0.141** | mg/L | 1 | 07/15/2023 16:25 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Calcium | NELAP | 0.100 | B | **49.6** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:49 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:35 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0412** | mg/L | 5 | 07/12/2023 3:35 | 208261 |
| Lithium | * | 0.0030 | | **0.0047** | mg/L | 5 | 07/17/2023 12:46 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 3:35 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 3:35 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:51 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-009
**Client Sample ID:** AP-8
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 10:39

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **497.60** | ft | 1 | 07/07/2023 10:39 | R332756 |
| Depth to water | * | -5.00 | | **3.84** | ft | 1 | 07/07/2023 10:39 | R332756 |
| Depth to water from measuring point | * | 0 | | **6.74** | ft | 1 | 07/07/2023 10:39 | R332756 |
| Elevation of groundwater surface | * | 0 | | **530.46** | ft | 1 | 07/07/2023 10:39 | R332756 |
| Measuring Point Elevation | * | 0 | | **537.20** | ft | 1 | 07/07/2023 10:39 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 07/07/2023 10:39 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **4.6** | NTU | 1 | 07/07/2023 10:39 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.8** | °F | 1 | 07/07/2023 10:39 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.75** | | 1 | 07/07/2023 10:39 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **906** | µmhos/cm @25C | 1 | 07/07/2023 10:39 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **555** | mg/L | 2.5 | 07/11/2023 10:52 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 07/24/2023 15:36 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.29** | mg/L | 1 | 07/11/2023 13:18 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **25** | mg/L | 1 | 07/24/2023 15:36 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.378** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Boron | NELAP | 0.0200 | | **0.0932** | mg/L | 1 | 07/15/2023 16:27 | 208261 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Calcium | NELAP | 0.100 | B | **107** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 18:50 | 208261 |
| *Sample result(s) for Ca exceed 10 times the method blank contamination. Data is reportable per the TNI Standard.* | | | | | | | | |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 4:20 | 208261 |
| Arsenic | NELAP | 0.0010 | | **0.0513** | mg/L | 5 | 07/12/2023 4:20 | 208261 |
| Lithium | * | 0.0030 | | **0.0074** | mg/L | 5 | 07/17/2023 12:51 | 208261 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/12/2023 4:20 | 208261 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/12/2023 4:20 | 208261 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:54 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-010
**Client Sample ID:** AP-9
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 12:40

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **501.80** | ft | 1 | 07/07/2023 12:40 | R332756 |
| Depth to water | * | -5.00 | | **9.38** | ft | 1 | 07/07/2023 12:40 | R332756 |
| Depth to water from measuring point | * | 0 | | **12.48** | ft | 1 | 07/07/2023 12:40 | R332756 |
| Elevation of groundwater surface | * | 0 | | **527.82** | ft | 1 | 07/07/2023 12:40 | R332756 |
| Measuring Point Elevation | * | 0 | | **540.30** | ft | 1 | 07/07/2023 12:40 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 07/07/2023 12:40 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **8.4** | NTU | 1 | 07/07/2023 12:40 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.0** | °F | 1 | 07/07/2023 12:40 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.88** | | 1 | 07/07/2023 12:40 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **892** | µmhos/cm @25C | 1 | 07/07/2023 12:40 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **515** | mg/L | 2.5 | 07/11/2023 10:52 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 20 | | **24** | mg/L | 2 | 07/24/2023 15:44 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.23** | mg/L | 1 | 07/11/2023 13:20 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **28** | mg/L | 2 | 07/24/2023 15:44 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.324** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Boron | NELAP | 0.0200 | | **0.0807** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Calcium | NELAP | 0.100 | | **86.1** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:03 | 208262 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:22 | 208262 |
| Arsenic | NELAP | 0.0010 | | **0.0114** | mg/L | 5 | 07/13/2023 21:22 | 208262 |
| Lithium | * | 0.0030 | | **0.0054** | mg/L | 5 | 07/17/2023 10:36 | 208262 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:22 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 21:22 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/11/2023 15:56 | 208286 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-011
**Client Sample ID:** AP-10
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 11:47

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **499.43** | ft | 1 | 07/07/2023 11:47 | R332756 |
| Depth to water | * | -5.00 | | **1.86** | ft | 1 | 07/07/2023 11:47 | R332756 |
| Depth to water from measuring point | * | 0 | | **4.96** | ft | 1 | 07/07/2023 11:47 | R332756 |
| Elevation of groundwater surface | * | 0 | | **532.54** | ft | 1 | 07/07/2023 11:47 | R332756 |
| Measuring Point Elevation | * | 0 | | **537.50** | ft | 1 | 07/07/2023 11:47 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 07/07/2023 11:47 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **3.2** | NTU | 1 | 07/07/2023 11:47 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.3** | °F | 1 | 07/07/2023 11:47 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.57** | | 1 | 07/07/2023 11:47 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1170** | µmhos/cm @25C | 1 | 07/07/2023 11:47 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **725** | mg/L | 2.5 | 07/11/2023 10:52 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **100** | mg/L | 5 | 07/24/2023 15:52 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.32** | mg/L | 1 | 07/11/2023 13:22 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **28** | mg/L | 5 | 07/24/2023 15:52 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.596** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Boron | NELAP | 0.0200 | | **3.81** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Calcium | NELAP | 0.100 | | **138** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:28 | 208262 |
| Arsenic | NELAP | 0.0010 | | **0.0013** | mg/L | 5 | 07/13/2023 21:28 | 208262 |
| Lithium | * | 0.0030 | | **0.0100** | mg/L | 5 | 07/17/2023 11:29 | 208262 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:28 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 21:28 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 13:56 | 208287 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-012
**Client Sample ID:** AP-11
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 14:34

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **515.15** | ft | 1 | 07/07/2023 14:34 | R332756 |
| Depth to water | * | -5.00 | | **11.91** | ft | 1 | 07/07/2023 14:34 | R332756 |
| Depth to water from measuring point | * | 0 | | **14.71** | ft | 1 | 07/07/2023 14:34 | R332756 |
| Elevation of groundwater surface | * | 0 | | **523.39** | ft | 1 | 07/07/2023 14:34 | R332756 |
| Measuring Point Elevation | * | 0 | | **538.10** | ft | 1 | 07/07/2023 14:34 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 07/07/2023 14:34 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **33** | NTU | 1 | 07/07/2023 14:34 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.9** | °F | 1 | 07/07/2023 14:34 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.64** | | 1 | 07/07/2023 14:34 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **963** | µmhos/cm @25C | 1 | 07/07/2023 14:34 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **670** | mg/L | 1 | 07/11/2023 10:53 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **65** | mg/L | 5 | 07/24/2023 16:13 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.21** | mg/L | 1 | 07/11/2023 13:24 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **79** | mg/L | 5 | 07/24/2023 16:14 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.113** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Boron | NELAP | 0.0200 | | **0.240** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Calcium | NELAP | 0.100 | S | **118** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Cobalt | NELAP | 0.0050 | | **0.0055** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:04 | 208262 |
| *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 | 07/13/2023 22:59 | 208262 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 22:59 | 208262 |
| Lithium | * | 0.0030 | | **0.0045** | mg/L | 5 | 07/18/2023 8:37 | 208557 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 22:59 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 22:59 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 13:58 | 208287 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-013
**Client Sample ID:** AP-12
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 14:16

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **510.30** | ft | 1 | 07/07/2023 14:16 | R332756 |
| Depth to water | * | -5.00 | | **13.73** | ft | 1 | 07/07/2023 14:16 | R332756 |
| Depth to water from measuring point | * | 0 | | **16.63** | ft | 1 | 07/07/2023 14:16 | R332756 |
| Elevation of groundwater surface | * | 0 | | **524.07** | ft | 1 | 07/07/2023 14:16 | R332756 |
| Measuring Point Elevation | * | 0 | | **540.70** | ft | 1 | 07/07/2023 14:16 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 07/07/2023 14:16 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **55** | NTU | 1 | 07/07/2023 14:16 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **56.7** | °F | 1 | 07/07/2023 14:16 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.57** | | 1 | 07/07/2023 14:16 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **2020** | µmhos/cm @25C | 1 | 07/07/2023 14:16 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1640** | mg/L | 2.5 | 07/11/2023 10:53 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **632** | mg/L | 20 | 07/24/2023 16:26 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.18** | mg/L | 1 | 07/11/2023 13:26 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **139** | mg/L | 5 | 07/24/2023 16:22 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0481** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Boron | NELAP | 0.0200 | | **< 0.0200** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Calcium | NELAP | 0.100 | | **271** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:06 | 208262 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:34 | 208262 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:34 | 208262 |
| Lithium | * | 0.0030 | | **0.0072** | mg/L | 5 | 07/17/2023 11:34 | 208262 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:34 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 21:34 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 14:05 | 208287 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-014
**Client Sample ID:** AP-13
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 13:47

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **511.00** | ft | 1 | 07/07/2023 13:47 | R332756 |
| Depth to water | * | -5.00 | | **14.17** | ft | 1 | 07/07/2023 13:47 | R332756 |
| Depth to water from measuring point | * | 0 | | **17.57** | ft | 1 | 07/07/2023 13:47 | R332756 |
| Elevation of groundwater surface | * | 0 | | **524.43** | ft | 1 | 07/07/2023 13:47 | R332756 |
| Measuring Point Elevation | * | 0 | | **542.00** | ft | 1 | 07/07/2023 13:47 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.40** | ft | 1 | 07/07/2023 13:47 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **27** | NTU | 1 | 07/07/2023 13:47 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.6** | °F | 1 | 07/07/2023 13:47 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.66** | | 1 | 07/07/2023 13:47 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **825** | µmhos/cm @25C | 1 | 07/07/2023 13:47 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **530** | mg/L | 2.5 | 07/11/2023 10:53 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **139** | mg/L | 5 | 07/24/2023 16:34 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.22** | mg/L | 1 | 07/11/2023 13:28 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **26** | mg/L | 1 | 07/24/2023 16:30 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.121** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Boron | NELAP | 0.0200 | | **0.0235** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Calcium | NELAP | 0.100 | | **106** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:20 | 208262 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:40 | 208262 |
| Arsenic | NELAP | 0.0010 | | **0.0031** | mg/L | 5 | 07/13/2023 21:40 | 208262 |
| Lithium | * | 0.0030 | | **0.0133** | mg/L | 5 | 07/17/2023 11:39 | 208262 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 21:40 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 21:40 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 14:07 | 208287 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/26/2023 10:02 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/26/2023 10:02 | R335080 |

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23
**Lab ID:** 23070002-015
**Client Sample ID:** AP-14
**Matrix:** GROUNDWATER
**Collection Date:** 07/07/2023 11:21

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **508.40** | ft | 1 | 07/07/2023 11:21 | R332756 |
| Depth to water | * | -5.00 | | **-1.32** | ft | 1 | 07/07/2023 11:21 | R332756 |
| Depth to water from measuring point | * | 0 | | **1.48** | ft | 1 | 07/07/2023 11:21 | R332756 |
| Elevation of groundwater surface | * | 0 | | **538.12** | ft | 1 | 07/07/2023 11:21 | R332756 |
| Measuring Point Elevation | * | 0 | | **539.60** | ft | 1 | 07/07/2023 11:21 | R332756 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 07/07/2023 11:21 | R332756 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **28** | NTU | 1 | 07/07/2023 11:21 | R332756 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.4** | °F | 1 | 07/07/2023 11:21 | R332756 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.93** | | 1 | 07/07/2023 11:21 | R332756 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1660** | µmhos/cm @25C | 1 | 07/07/2023 11:21 | R332756 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1480** | mg/L | 2.5 | 07/11/2023 10:53 | R331470 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **714** | mg/L | 20 | 07/24/2023 16:42 | R333047 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.27** | mg/L | 1 | 07/11/2023 13:30 | R331398 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **73** | mg/L | 5 | 07/24/2023 16:38 | R333070 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0349** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Boron | NELAP | 0.200 | | **22.6** | mg/L | 10 | 07/11/2023 17:21 | 208262 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Calcium | NELAP | 0.100 | | **235** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Cobalt | NELAP | 0.0050 | | **0.0051** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 07/11/2023 11:21 | 208262 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 22:53 | 208262 |
| Arsenic | NELAP | 0.0010 | | **0.0018** | mg/L | 5 | 07/13/2023 22:53 | 208262 |
| Lithium | * | 0.0030 | | **0.0076** | mg/L | 5 | 07/17/2023 11:43 | 208262 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 07/13/2023 22:53 | 208262 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 07/13/2023 22:53 | 208262 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 07/12/2023 14:09 | 208287 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 07/25/2023 15:30 | R335080 |

# Receiving Check List

http://www.teklabinc.com/

**Client:** City Water, Light & Power
**Work Order:** 23070002
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 16-Aug-23

**Carrier:** Tracy Carroll
**Received By:** ANC

**Completed by:** Allison Colin
**On:** 10-Jul-23

**Reviewed by:** Ellie Hopkins
**On:** 10-Jul-23

**Pages to follow:** Chain of custody 3 Extra pages included 42

| | | | | |
|---|---|---|---|---|
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | Not Present ☐ | Temp °C 5.2 |
| Type of thermal preservation? | None ☐ | Ice ☑ | Blue Ice ☐ | Dry Ice ☐ |
| Chain of custody present? | Yes ☑ | No ☐ | | |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ | | |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ | | |
| Samples in proper container/bottle? | Yes ☑ | No ☐ | | |
| Sample containers intact? | Yes ☑ | No ☐ | | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | | |
| All samples received within holding time? | Yes ☑ | No ☐ | | |
| Reported field parameters measured: | Field ☐ | Lab ☐ | NA ☑ | |
| Container/Temp Blank temperature in compliance? | Yes ☑ | No ☐ | | |
| *When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.* | | | | |
| Water – at least one vial per sample has zero headspace? | Yes ☐ | No ☐ | No VOA vials ☑ | |
| Water - TOX containers have zero headspace? | Yes ☐ | No ☐ | No TOX containers ☑ | |
| Water - pH acceptable upon receipt? | Yes ☐ | No ☑ | NA ☐ | |
| NPDES/CWA TCN interferences checked/treated in the field? | Yes ☐ | No ☐ | NA ☑ | |

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

pH strip #90719. - acolin - 7/10/2023 9:09:38 AM

Additional nitric acid (90404) was needed in AP2 2L, AP3 2L, AP4 2L, AP8 2L, AP9 2L, AP10 2L, AP12 250 & 2L upon arrival at the laboratory. - acolin - 7/10/2023 9:09:41 AM

Samples collected on 7/7/23 were delivered to the laboratory on 7/7/23 at 1644 (on ice - 5.2C - LTG#1). pH strip #90719 - ERH 7/10/23

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23070002

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

SC_253

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 5.2 °C GTG
Preserved in: [ ] LAB [x] FIELD FOR LAB USE ONLY
LAB NOTES: pH 9079.Ceo 7-6-23.

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

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
JCarroll

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23070002-001 | RW-3 | 7/6/23 1223 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 002 | AP-1 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 003 | AP-2 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 004 | AP-3 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 005 | AP-4 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 006 | AP-5 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 007 | AP-6 | 7/6/23 1330 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 008 | AP-7 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 009 | AP-8 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 010 | AP-9 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 011 | AP-10 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jeremy Carroll | 7/6/23 1703 | | 7-6-23 1703 |
| | | | |
| | | | |
| | | | |

*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

7-6-23

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# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23070002

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

SC_254

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 5.2 °C #1
Preserved in: [x] LAB [ ] FIELD FOR LAB USE ONLY
LAB NOTES: PH 90719
Added HNO3(90404) to AP2(2L), AP3(2L), AP4(2L), AP8(2L), AP9(2L), AP10(2L), AP12(250+2L) ANC 7/10/23

Client Comments:
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

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**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
Justin Colp 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23070002-001 | RW-3 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 002 | AP-1 | 7/7/23 1108 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 003 | AP-2 | 1231 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 004 | AP-3 | 1316 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 005 | AP-4 | 7-7-23/ 1142 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 006 | AP-5 | 7-7-23/ 1312 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 007 | AP-6 | | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 008 | AP-7 | 7-7-23/ 1223 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 009 | AP-8 | 7/7/23 1039 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 010 | AP-9 | 7-7-23/ 1240 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 011 | AP-10 | 7/7/23 1147 | Groundwater | 1 | 2 | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Jerry Carroll | 7/7/23 1644 | | 7/7/23 1644 |

*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 2 of 2 Workorder # 23070002

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

SC_255

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:**
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
Justin Colp 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23070002-012 | AP-11 | 7-7-23 / 1434 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 013 | AP-12 | / 1416 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 014 | AP-13 | / 1347 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 015 | AP-14 | ↓ / 1121 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Tracy Carroll | 7/7/23 1644 | Allison Cole | 7/7 1644 |

*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- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_256

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| RW-3 | 7/6/2023 | 12:17 | 10.99 | 13.7 | 56.7 | 7.29 | 420.4 | 1.23 | 6.12 | -42.0 |
| RW-3 | 7/6/2023 | 12:20 | 10.99 | 13.7 | 56.7 | 7.18 | 429.4 | 0.94 | 4.40 | -50.9 |
| RW-3 | 7/6/2023 | 12:23 | 10.99 | 13.6 | 56.5 | 7.13 | 437.4 | 0.81 | 3.32 | -56.5 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_257

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-1 | 7/7/2023 | 10:59 | 10.19 | 14.3 | 57.7 | 6.58 | 1,702.8 | 1.07 | 16.06 | -7.1 |
| AP-1 | 7/7/2023 | 11:02 | 10.19 | 14.3 | 57.7 | 6.53 | 1,749.1 | 0.77 | 11.99 | -18.3 |
| AP-1 | 7/7/2023 | 11:05 | 10.19 | 14.3 | 57.7 | 6.51 | 1,798.9 | 0.64 | 8.79 | -24.0 |
| AP-1 | 7/7/2023 | 11:08 | 10.19 | 14.3 | 57.7 | 6.51 | 1,810.4 | 0.57 | 6.84 | -28.3 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_258

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-2 | 7/7/2023 | 12:22 | 8.57 | 13.6 | 56.5 | 6.46 | 1,339.0 | 0.85 | 3.93 | 44.9 |
| AP-2 | 7/7/2023 | 12:25 | 8.57 | 13.6 | 56.5 | 6.43 | 1,352.9 | 0.67 | 5.11 | 42.7 |
| AP-2 | 7/7/2023 | 12:28 | 8.57 | 13.6 | 56.5 | 6.41 | 1,371.7 | 0.58 | 2.96 | 40.5 |
| AP-2 | 7/7/2023 | 12:31 | 8.57 | 13.5 | 56.3 | 6.40 | 1,391.3 | 0.52 | 2.27 | 38.6 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_259

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-3 | 7/7/2023 | 13:10 | 10.71 | 14.7 | 58.5 | 6.53 | 1,227.8 | 0.68 | 8.71 | -13.9 |
| AP-3 | 7/7/2023 | 13:13 | 10.71 | 14.7 | 58.5 | 6.52 | 1,228.3 | 0.66 | 7.19 | -15.7 |
| AP-3 | 7/7/2023 | 13:16 | 10.71 | 14.7 | 58.5 | 6.53 | 1,226.6 | 0.60 | 5.23 | -17.6 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_260

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-4 | 7/7/2023 | 11:36 | 8.95 | 18.5 | 65.3 | 6.89 | 868.0 | 30.60 | 17.69 | 45.8 |
| AP-4 | 7/7/2023 | 11:39 | 8.95 | 20.3 | 68.5 | 6.86 | 868.0 | 24.50 | 16.59 | 15.6 |
| AP-4 | 7/7/2023 | 11:42 | 8.95 | 21.4 | 70.5 | 6.86 | 875.0 | 22.90 | 15.77 | -4.1 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_261

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-5 | 7/7/2023 | 13:06 | 14.08 | 13.0 | 55.4 | 7.53 | 656.0 | 32.30 | 3.19 | 80.3 |
| AP-5 | 7/7/2023 | 0:00 | 14.08 | 12.8 | 55.0 | 7.24 | 652.0 | 23.40 | 2.66 | 76.9 |
| AP-5 | 7/7/2023 | 13:12 | 14.08 | 12.8 | 55.0 | 7.16 | 653.0 | 20.70 | 1.70 | 75.7 |

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_262

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-6 | 7/6/2023 | 13:21 | 9.48 | 13.6 | 56.5 | 7.38 | 409.2 | 1.62 | 3.97 | 2.2 |
| AP-6 | 7/6/2023 | 13:24 | 9.48 | 13.4 | 56.1 | 7.24 | 394.2 | 1.05 | 3.32 | 6.3 |
| AP-6 | 7/6/2023 | 13:27 | 9.48 | 13.4 | 56.1 | 7.13 | 398.8 | 0.75 | 3.34 | 8.5 |
| AP-6 | 7/6/2023 | 13:30 | 9.48 | 13.3 | 55.9 | 7.06 | 406.8 | 0.62 | 3.66 | 7.1 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-7 | 7/7/2023 | 12:17 | 11.32 | 14.6 | 58.3 | 7.58 | 774.0 | 14.20 | 5.94 | 23.8 |
| AP-7 | 7/7/2023 | 12:23 | 11.32 | 15.1 | 59.2 | 7.28 | 586.0 | 8.60 | 10.95 | -51.3 |

SC_263

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_264

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-8 | 7/7/2023 | 10:30 | 6.74 | 13.8 | 56.8 | 7.00 | 909.0 | 1.20 | 17.43 | 22.8 |
| AP-8 | 7/7/2023 | 10:33 | 6.74 | 13.8 | 56.8 | 6.83 | 906.6 | 0.78 | 7.97 | 2.3 |
| AP-8 | 7/7/2023 | 10:36 | 6.74 | 13.7 | 56.7 | 6.77 | 906.3 | 0.67 | 5.84 | -11.4 |
| AP-8 | 7/7/2023 | 10:39 | 6.74 | 13.8 | 56.8 | 6.75 | 906.2 | 0.54 | 4.55 | -21.8 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_265

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-9 | 7/7/2023 | 12:34 | 12.48 | 14.5 | 58.1 | 6.95 | 896.0 | 15.30 | 8.29 | 18.9 |
| AP-9 | 7/7/2023 | 12:37 | 12.48 | 13.9 | 57.0 | 6.90 | 889.0 | 8.80 | 15.40 | -5.6 |
| AP-9 | 7/7/2023 | 12:40 | 12.48 | 13.9 | 57.0 | 6.88 | 892.0 | 7.50 | 8.39 | -19.0 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-11 | 7/7/2023 | 14:28 | 14.71 | 14.2 | 57.6 | 6.70 | 964.0 | 14.60 | 20.73 | -27.4 |
| AP-11 | 7/7/2023 | 14:31 | 14.71 | 14.5 | 58.1 | 6.66 | 965.0 | 12.70 | 20.78 | -24.3 |
| AP-11 | 7/7/2023 | 14:31 | 14.71 | 14.4 | 57.9 | 6.64 | 963.0 | 11.40 | 32.67 | -21.2 |

SC_266

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_267

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-10 | 7/7/2023 | 11:38 | 4.96 | 13.6 | 56.5 | 6.63 | 1,173.7 | 0.80 | 6.28 | -31.5 |
| AP-10 | 7/7/2023 | 11:41 | 4.96 | 13.6 | 56.5 | 6.59 | 1,174.0 | 0.62 | 4.11 | -36.5 |
| AP-10 | 7/7/2023 | 11:44 | 4.96 | 13.6 | 56.5 | 6.57 | 1,173.9 | 0.53 | 3.57 | -40.7 |
| AP-10 | 7/7/2023 | 11:47 | 4.96 | 13.5 | 56.3 | 6.57 | 1,174.1 | 0.47 | 3.21 | -44.5 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-12 | 7/7/2023 | 14:10 | 16.63 | 13.7 | 56.7 | 6.57 | 2,023.0 | 10.30 | 57.57 | -69.9 |
| AP-12 | 7/7/2023 | 14:13 | 16.63 | 13.8 | 56.8 | 6.57 | 2,020.0 | 10.10 | 55.20 | -71.5 |
| AP-12 | 7/7/2023 | 14:16 | 16.63 | 13.7 | 56.7 | 6.57 | 2,016.0 | 9.90 | 55.10 | -72.4 |

SC_268

**Site Sampling Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_269

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-13 | 7/7/2023 | 13:35 | 17.57 | 13.2 | 55.8 | 6.69 | 818.0 | 8.00 | 19.22 | -58.5 |
| AP-13 | 7/7/2023 | 13:38 | 17.57 | 13.2 | 55.8 | 6.68 | 794.0 | 7.50 | 30.10 | -60.2 |
| AP-13 | 7/7/2023 | 13:41 | 17.57 | 13.9 | 57.0 | 6.67 | 782.0 | 18.60 | 99.17 | -56.9 |
| AP-13 | 7/7/2023 | 13:44 | 17.57 | 13.8 | 56.8 | 6.66 | 821.0 | 13.30 | 37.17 | -49.8 |
| AP-13 | 7/7/2023 | 13:47 | 17.57 | 14.2 | 57.6 | 6.66 | 825.0 | 19.40 | 27.11 | -41.7 |

**Site Samping Event**: CWLP- 3Q 2023
**LIMS Workorder:** 23070002
**Technician(s):** JC, TC

**Groundwater Sampling Field Form- Groundwater Quality Parameters**
**CWLP- 3Q 2023**

SC_270

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|
| AP-14 | 7/7/2023 | 11:15 | 1.48 | 14.3 | 57.7 | 7.01 | 1,661.0 | 32.10 | 15.26 | 110.5 |
| AP-14 | 7/7/2023 | 11:18 | 1.48 | 14.2 | 57.6 | 6.94 | 1,664.0 | 19.50 | 36.64 | 86.7 |
| AP-14 | 7/7/2023 | 11:21 | 1.48 | 14.1 | 57.4 | 6.93 | 1,660.0 | 16.20 | 28.12 | 76.4 |

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

August 15, 2023

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

RE: 23070002

Dear Shelly Hennessy:

Order No.: 23070747

Summit Environmental Technologies, Inc. received 15 sample(s) on 7/12/2023 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#: **23070747**
Date: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Project:** 23070002

WorkOrder Narrative:
23070747: 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#: **23070747**
Date: **8/15/2023**

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#: **23070747**

***15-Aug-23***

**CLIENT:** TEKLAB Inc,
**Project:** 23070002

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 23070747-001 | 23070002-001 | | 7/6/2023 12:23:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-002 | 23070002-002 | | 7/7/2023 11:08:00 AM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-003 | 23070002-003 | | 7/7/2023 12:31:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-004 | 23070002-004 | | 7/7/2023 1:16:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-005 | 23070002-005 | | 7/7/2023 11:42:00 AM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-006 | 23070002-006 | | 7/7/2023 1:12:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-007 | 23070002-007 | | 7/6/2023 1:30:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-008 | 23070002-008 | | 7/7/2023 12:23:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-009 | 23070002-009 | | 7/7/2023 10:39:00 AM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-010 | 23070002-010 | | 7/7/2023 12:40:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-011 | 23070002-011 | | 7/7/2023 11:47:00 AM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-012 | 23070002-012 | | 7/7/2023 2:34:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-013 | 23070002-013 | | 7/7/2023 2:16:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-014 | 23070002-014 | | 7/7/2023 1:47:00 PM | 7/12/2023 12:00:00 PM | Non-Potable Water |
| 23070747-015 | 23070002-015 | | 7/7/2023 11:21:00 AM | 7/12/2023 12:00:00 PM | Non-Potable Water |

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*3310 Win St.*
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*Website: http://www.settek.com*

# DATES REPORT

WO#: **23070747**

***15-Aug-23***

SC_275

**Client:** TEKLAB Inc,
**Project:** 23070002

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23070747-001A | 23070002-001 | 7/6/2023 12:23:00 PM | Non-Potable Water | Radium-226 (EPA 903.0) | | 7/17/2023 2:35:11 PM | 7/25/2023 9:25:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/17/2023 2:35:11 PM | 7/24/2023 3:18:00 PM |
| 23070747-002A | 23070002-002 | 7/7/2023 11:08:00 AM | | Radium-226 (EPA 903.0) | | 7/17/2023 2:35:11 PM | 7/25/2023 9:25:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/17/2023 2:35:11 PM | 7/24/2023 3:18:00 PM |
| 23070747-003A | 23070002-003 | 7/7/2023 12:31:00 PM | | Radium-226 (EPA 903.0) | | 7/17/2023 2:35:11 PM | 7/25/2023 9:25:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/17/2023 2:35:11 PM | 7/24/2023 3:18:00 PM |
| 23070747-004A | 23070002-004 | 7/7/2023 1:16:00 PM | | Radium-226 (EPA 903.0) | | 7/17/2023 2:35:11 PM | 7/25/2023 9:25:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/17/2023 2:35:11 PM | 7/24/2023 3:18:00 PM |
| 23070747-005A | 23070002-005 | 7/7/2023 11:42:00 AM | | Radium-226 (EPA 903.0) | | 7/17/2023 2:35:11 PM | 7/25/2023 9:25:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/17/2023 2:35:11 PM | 7/24/2023 3:18:00 PM |
| 23070747-006A | 23070002-006 | 7/7/2023 1:12:00 PM | | Radium-226 (EPA 903.0) | | 7/21/2023 11:56:00 AM | 7/27/2023 10:01:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/21/2023 11:56:00 AM | 7/26/2023 4:09:00 PM |
| 23070747-007A | 23070002-007 | 7/6/2023 1:30:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-008A | 23070002-008 | 7/7/2023 12:23:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-009A | 23070002-009 | 7/7/2023 10:39:00 AM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-010A | 23070002-010 | 7/7/2023 12:40:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-011A | 23070002-011 | 7/7/2023 11:47:00 AM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-012A | 23070002-012 | 7/7/2023 2:34:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |

Original

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Website: http://www.settek.com

# DATES REPORT

WO#: **23070747**

***15-Aug-23***

SC_276

**Client:** TEKLAB Inc,
**Project:** 23070002

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23070747-012A | 23070002-012 | 7/7/2023 2:34:00 PM | Non-Potable Water | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-013A | 23070002-013 | 7/7/2023 2:16:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| 23070747-014A | 23070002-014 | 7/7/2023 1:47:00 PM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 8/10/2023 4:23:11 PM | 8/14/2023 3:29:00 PM |
| | | | | Radium-228 (EPA 904.0) | | 7/27/2023 11:50:00 AM | 8/3/2023 4:04:00 PM |
| 23070747-015A | 23070002-015 | 7/7/2023 11:21:00 AM | | Radium-226 (EPA 903.0) | | 7/19/2023 2:03:37 PM | 7/26/2023 10:02:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 7/19/2023 2:03:37 PM | 7/25/2023 3:30:00 PM |

Original

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/6/2023 12:23:00 PM

**Project:** 23070002

**Lab ID:** 23070747-001
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-001

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.06 | 1 | 7/25/2023 9:25:00 AM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 9:25:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.74 | 1 | 7/24/2023 3:18:00 PM |
| Yield | 1.00 | | | | | 1 | 7/24/2023 3:18:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 7/7/2023 11:08:00 AM

**Project:** 23070002

**Lab ID:** 23070747-002

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-002

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.09 | 1 | 7/25/2023 9:25:00 AM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 9:25:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.63 | 1 | 7/24/2023 3:18:00 PM |
| Yield | 1.00 | | | | | 1 | 7/24/2023 3:18:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 12:31:00 PM

**Project:** 23070002

**Lab ID:** 23070747-003
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-003

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.09 | 1 | 7/25/2023 9:25:00 AM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 9:25:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.74 | 1 | 7/24/2023 3:18:00 PM |
| Yield | 1.00 | | | | | 1 | 7/24/2023 3:18:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 1:16:00 PM

**Project:** 23070002

**Lab ID:** 23070747-004
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-004

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.05 | 1 | 7/25/2023 9:25:00 AM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 9:25:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.87 | 1 | 7/24/2023 3:18:00 PM |
| Yield | 1.00 | | | | | 1 | 7/24/2023 3:18:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 11:42:00 AM
**Project:** 23070002
**Lab ID:** 23070747-005
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23070002-005

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.12 | 1 | 7/25/2023 9:25:00 AM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 9:25:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.12 | 1.00 | | pCi/L | ± 0.88 | 1 | 7/24/2023 3:18:00 PM |
| Yield | 1.00 | | | | | 1 | 7/24/2023 3:18:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 1:12:00 PM

**Project:** 23070002

**Lab ID:** 23070747-006
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-006

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.05 | 1 | 7/27/2023 10:01:00 AM |
| Yield | 1.00 | | | | | 1 | 7/27/2023 10:01:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.4 | 1 | 7/26/2023 4:09:00 PM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 4:09:00 PM |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| | MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| | ND | Not Detected | OG1 | |
| | P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/6/2023 1:30:00 PM
**Project:** 23070002
**Lab ID:** 23070747-007
**Matrix:** NON-POTABLE WATER
**Client Sample ID:** 23070002-007

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.04 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.49 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 0.930 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 12:23:00 PM

**Project:** 23070002

**Lab ID:** 23070747-008
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-008

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.06 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.53 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 0.910 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 10:39:00 AM

**Project:** 23070002

**Lab ID:** 23070747-009
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-009

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.17 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.54 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 12:40:00 PM

**Project:** 23070002

**Lab ID:** 23070747-010
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-010

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.07 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.48 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 0.990 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 11:47:00 AM

**Project:** 23070002

**Lab ID:** 23070747-011
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-011

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.11 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | 1.12 | 1.00 | | pCi/L | ± 0.6 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 2:34:00 PM

**Project:** 23070002

**Lab ID:** 23070747-012
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-012

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.06 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.55 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 0.930 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 2:16:00 PM

**Project:** 23070002

**Lab ID:** 23070747-013
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-013

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.09 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.53 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 1:47:00 PM

**Project:** 23070002

**Lab ID:** 23070747-014
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-014

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | 2.54 | 1.00 | | pCi/L | ± 0.28 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 10.0 | | pCi/L | ± 6.71 | 1 | 8/14/2023 3:29:00 PM |
| Yield | 0.710 | | | | | 1 | 8/14/2023 3:29:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# Analytical Report

(consolidated)

WO#: **23070747**

Date Reported: **8/15/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 7/7/2023 11:21:00 AM

**Project:** 23070002

**Lab ID:** 23070747-015
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23070002-015

| Analyses | Result | PQL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RADIUM-226 (EPA 903.0)** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| Radium-226 | ND | 1.00 | | pCi/L | ± 0.03 | 1 | 7/26/2023 10:02:00 AM |
| Yield | 1.00 | | | | | 1 | 7/26/2023 10:02:00 AM |
| **RADIUM-228 (EPA 904.0)** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| Radium-228 | ND | 1.00 | | pCi/L | ± 0.57 | 1 | 7/25/2023 3:30:00 PM |
| Yield | 1.00 | | | | | 1 | 7/25/2023 3:30:00 PM |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | M | Manual Integration used to determine area response |
| MC | Value is below Minimum Compound Limit. | N | Tentatively identified compounds |
| ND | Not Detected | OG1 | |
| P | Second column confirmation exceeds | PL | Permit Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_292

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

Sample ID: **MB-66938** SampType: **MBLK** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/17/2023** RunNo: **167890**
Client ID: **PBW** Batch ID: **66938** TestNo: **E904.0** **E903-904** Analysis Date: **7/24/2023** SeqNo: **4506021**

| 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 | 0.950 | | | 0 | 0 | | | | | | |

Sample ID: **LCSD-66938** SampType: **LCSD** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/17/2023** RunNo: **167890**
Client ID: **LCSS02** Batch ID: **66938** TestNo: **E904.0** **E903-904** Analysis Date: **7/24/2023** SeqNo: **4506023**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 4.74 | 1.00 | 5.000 | 0 | 94.8 | 70 | 130 | 3.440 | 31.8 | 20 | R |
| Yield | 1.00 | | | 0 | 0 | | | 1.000 | 0 | | |

Sample ID: **RLC-66938** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/17/2023** RunNo: **167890**
Client ID: **BatchQC** Batch ID: **66938** TestNo: **E904.0** **E903-904** Analysis Date: **7/24/2023** SeqNo: **4506025**

| 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 | 78.0 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_293

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

| Sample ID: **RLCD-66938** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167890** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/24/2023** | SeqNo: **4506026** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.02 | 1.00 | 1.000 | 0 | 102 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **23070595-001AMS** | SampType: **MS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167890** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/24/2023** | SeqNo: **4506027** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.04 | 1.00 | 5.000 | 0 | 40.8 | 70 | 130 | | | | S |
| Yield | 1.00 | | | 1.000 | 0 | | | | | | |

| Sample ID: **23070596-001ADUP** | SampType: **DUP** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167890** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/24/2023** | SeqNo: **4506030** |

| 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 | | | 0.9500 | 4.30 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_294

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

Sample ID: **23070597-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/17/2023** RunNo: **167890**
Client ID: **BatchQC** Batch ID: **66938** TestNo: **E904.0** **E903-904** Analysis Date: **7/24/2023** SeqNo: **4506032**

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_295

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

| Sample ID: **MB-66938** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506087** |

| 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-66938** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506088** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.00 | 1.00 | 5.000 | 0 | 100 | 70 | 130 | | | | |

| Sample ID: **LCSD-66938** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506089** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.16 | 1.00 | 5.000 | 0 | 103 | 70 | 130 | 5.000 | 3.15 | 20 | |

| Sample ID: **RLC-66938** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506091** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_296

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

| Sample ID: **RLC-66938** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506091** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.34 | 1.00 | 1.000 | 0 | 134 | 50 | 150 | | | | |

| Sample ID: **RLCD-66938** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506092** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.11 | 1.00 | 1.000 | 0 | 111 | 50 | 150 | | | | |

| Sample ID: **23070595-001AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506093** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.35 | 1.00 | 5.000 | 0 | 87.0 | 70 | 130 | | | | |

| Sample ID: **23070596-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506096** |

| 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 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_297

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **66938**

| Sample ID: **23070596-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506096** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yield | 1.00 | | | | | | | 1.000 | 0 | 0 | |

| Sample ID: **23070597-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/17/2023** | RunNo: **167894** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **66938** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506098** |

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_298

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67011**

| Sample ID: **MB-67011** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167896** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **67011** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506126** |

| 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-67011** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167896** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **67011** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506127** |

| 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 | 70 | 130 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **RLCD-67011** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167896** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/25/2023** | SeqNo: **4506131** |

| 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 | 78.0 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_299

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67011**

Sample ID: **23071031-001AMS** SampType: **MS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/19/2023** RunNo: **167896**
Client ID: **BatchQC** Batch ID: **67011** TestNo: **E904.0** **E903-904** Analysis Date: **7/25/2023** SeqNo: **4506132**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.64 | 1.00 | 5.000 | 0 | 52.8 | 70 | 130 | | | | S |
| Yield | 1.00 | | | 1.000 | 0 | | | | | | |

Sample ID: **23071032-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/19/2023** RunNo: **167896**
Client ID: **BatchQC** Batch ID: **67011** TestNo: **E904.0** **E903-904** Analysis Date: **7/25/2023** SeqNo: **4506135**

| 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 | | | 0.9100 | 9.42 | | |

Sample ID: **23070816-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/19/2023** RunNo: **167896**
Client ID: **BatchQC** Batch ID: **67011** TestNo: **E904.0** **E903-904** Analysis Date: **7/25/2023** SeqNo: **4506137**

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**
***15-Aug-23***

SC_300

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67011**

| Sample ID: **MB-67011** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506168** |

| 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-67011** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506169** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.50 | 1.00 | 5.000 | 0 | 90.0 | 70 | 130 | | | | |

| Sample ID: **LCSD-67011** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506170** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.42 | 1.00 | 5.000 | 0 | 88.4 | 70 | 130 | 4.500 | 1.79 | 20 | |

| Sample ID: **RLC-67011** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506172** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_301

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67011**

| Sample ID: **RLC-67011** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506172** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.07 | 1.00 | 1.000 | 0 | 107 | 50 | 150 | | | | |

| Sample ID: **RLCD-67011** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506173** |

| 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: **23071031-001AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506174** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.43 | 1.00 | 5.000 | 0 | 88.6 | 70 | 130 | | | | |

| Sample ID: **23071032-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506177** |

| 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 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_302

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67011**

| Sample ID: **23071032-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506177** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Yield | 1.00 | | | | | | | 1.000 | 0 | 0 | |

| Sample ID: **23070816-002ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/19/2023** | RunNo: **167898** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67011** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4506179** |

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_303

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67083**

| Sample ID: **MB-67083** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168035** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **67083** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4510072** |

| 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-67083** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168035** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **67083** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4510073** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.91 | 1.00 | 5.000 | 0 | 78.2 | 70 | 130 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **RLC-67083** | SampType: **RLC** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168035** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67083** | TestNo: **E904.0** | **E903-904** | Analysis Date: **7/26/2023** | SeqNo: **4510076** |

| 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 | 76.0 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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*Website: http://www.settek.com*

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_304

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67083**

Sample ID: **23071034-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **7/21/2023** RunNo: **168035**
Client ID: **BatchQC** Batch ID: **67083** TestNo: **E904.0** **E903-904** Analysis Date: **7/26/2023** SeqNo: **4510107**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 2.31 | 1.00 | | 0 | 0 | | | 2.560 | 10.3 | 20 | |
| Yield | 1.00 | | | 0 | 0 | | | 1.000 | 0 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**
***15-Aug-23***

SC_305

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67083**

| Sample ID: **MB-67083** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168045** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **67083** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/27/2023** | SeqNo: **4510502** |

| 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: **LCSD-67083** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168045** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **67083** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/27/2023** | SeqNo: **4510504** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.56 | 1.00 | 5.000 | 0 | 111 | 70 | 130 | 6.720 | 18.9 | 20 | |

| Sample ID: **RLC-67083** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168045** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67083** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/27/2023** | SeqNo: **4510506** |

| 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 | 75.0 | 50 | 150 | | | | |

| Sample ID: **RLCD-67083** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **7/21/2023** | RunNo: **168045** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **67083** | TestNo: **E903.0** | **E903-904** | Analysis Date: **7/27/2023** | SeqNo: **4510507** |

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | 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*

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_306

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67083**

Sample ID: **RLCD-67083** SampType: **RLC** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **7/21/2023** RunNo: **168045**
Client ID: **BatchQC** Batch ID: **67083** TestNo: **E903.0** **E903-904** Analysis Date: **7/27/2023** SeqNo: **4510507**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.22 | 1.00 | 1.000 | 0 | 122 | 50 | 150 | | | | |

Sample ID: **23071033-001AMS** SampType: **MS** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **7/21/2023** RunNo: **168045**
Client ID: **BatchQC** Batch ID: **67083** TestNo: **E903.0** **E903-904** Analysis Date: **7/27/2023** SeqNo: **4510508**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.44 | 1.00 | 5.000 | 0 | 109 | 70 | 130 | | | | |

Sample ID: **23071096-002ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **7/21/2023** RunNo: **168045**
Client ID: **BatchQC** Batch ID: **67083** TestNo: **E903.0** **E903-904** Analysis Date: **7/27/2023** SeqNo: **4510518**

| 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:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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

# QC SUMMARY REPORT

WO#: **23070747**
***15-Aug-23***

SC_307

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67719**

Sample ID: **23072069-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **8/10/2023** RunNo: **169062**
Client ID: **BatchQC** Batch ID: **67719** TestNo: **E904.0** **E903-904** Analysis Date: **8/14/2023** SeqNo: **4541097**

| 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 | |
| Yield | 0.970 | | | 0 | 0 | | | 0.8900 | 8.60 | | |

Sample ID: **23072069-002ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **8/10/2023** RunNo: **169062**
Client ID: **BatchQC** Batch ID: **67719** TestNo: **E904.0** **E903-904** Analysis Date: **8/14/2023** SeqNo: **4541099**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.04 | 1.00 | | 0 | 0 | | | 1.340 | 25.2 | 30 | |
| Yield | 0.900 | | | 0 | 0 | | | 0.8700 | 3.39 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

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

# QC SUMMARY REPORT

WO#: **23070747**

***15-Aug-23***

SC_308

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67719**

| Sample ID: **MB-67719** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **8/10/2023** | RunNo: **169062** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **67719** | TestNo: **E904.0** | **E903-904** | Analysis Date: **8/14/2023** | SeqNo: **4541078** |

| 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-67719** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **8/10/2023** | RunNo: **169062** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **67719** | TestNo: **E904.0** | **E903-904** | Analysis Date: **8/14/2023** | SeqNo: **4541079** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.61 | 1.00 | 5.000 | 0 | 72.2 | 70 | 130 | | | | |
| Yield | 0.980 | | | 0 | 0 | | | | | | |

| Sample ID: **LCSD-67719** | SampType: **LCSD** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **8/10/2023** | RunNo: **169062** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **67719** | TestNo: **E904.0** | **E903-904** | Analysis Date: **8/14/2023** | SeqNo: **4541080** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.50 | 1.00 | 5.000 | 0 | 70.0 | 70 | 130 | 3.610 | 3.09 | 20 | |
| Yield | 1.00 | | | 0 | 0 | | | 0.9800 | 2.02 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

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# QC SUMMARY REPORT

WO#: **23070747**
***15-Aug-23***

SC_309

**Client:** TEKLAB Inc,
**Project:** 23070002 **BatchID:** **67719**

Sample ID: **RLC-67719** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **8/10/2023** RunNo: **169062**
Client ID: **BatchQC** Batch ID: **67719** TestNo: **E904.0** **E903-904** Analysis Date: **8/14/2023** SeqNo: **4541082**

| 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 | 64.0 | 50 | 150 | | | | |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

Sample ID: **23080067-001AMS** SampType: **MS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **8/10/2023** RunNo: **169062**
Client ID: **BatchQC** Batch ID: **67719** TestNo: **E904.0** **E903-904** Analysis Date: **8/14/2023** SeqNo: **4541084**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 5.78 | 1.00 | 5.000 | 0 | 116 | 70 | 130 | | | | |
| Yield | 1.00 | | | 1.000 | 0 | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range | H | Holding times for preparation or analy |
| J | Analyte detected below quantitation limits | M | Manual Integration used to determine area response | MC | Value is below Minimum Compound |
| ND | Not Detected | OG1 | | P | Second column confirmation exceeds |
| PL | Permit Limit | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |

Original

Pg ___ of ___ 23070747

# 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: QC Level: 2

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. Collected in IL SAH 7/10/23

Project# 23070002

Contact: Shelly Hennessy Email: shennessy@teklabinc.com
Requested Due Date: NTAT Billing/PO: 34677 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.

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

| Lab Use | Sample ID | Sample Date/Time | Preservative | Matrix | Radium 226 | Radium 228 | com= | | pH= | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23070002-001 | 7/6/23 12.23 | HNO3 | Groundwater | ✔ | ✔ | 35 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-002 | 7/7/23 11.08 | HNO3 | Groundwater | ✔ | ✔ | 16 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-003 | 7/7/23 12.31 | HNO3 | Groundwater | ✔ | ✔ | 33 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-004 | 7/7/23 13.16 | HNO3 | Groundwater | ✔ | ✔ | 34 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-005 | 7/7/23 11.42 | HNO3 | Groundwater | ✔ | ✔ | 31 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-006 | 7/7/23 13.12 | HNO3 | Groundwater | ✔ | ✔ | 36 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-007 | 7/6/23 13.30 | HNO3 | Groundwater | ✔ | ✔ | 23 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-008 | 7/7/23 12.23 | HNO3 | Groundwater | ✔ | ✔ | OK | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-009 | 7/7/23 10.39 | HNO3 | Groundwater | ✔ | ✔ | 36 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-010 | 7/7/23 12.40 | HNO3 | Groundwater | ✔ | ✔ | 39 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| | 23070002-011 | 7/7/23 11.47 | HNO3 | Groundwater | ✔ | ✔ | 36 | ☐ | 1 | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Allison Colin (fedex) | 7/10/23 | [illegible] | 7/12/23 1200 |
| | | | |
| | | | |
| | | TWO DOT received, no 004 | |

23.4 TO 0 = 23.4 adj COOLER

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

Pg ___ of 23070747

# 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: QC Level: 2

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.

Project# 23070002

Contact: Shelly Hennessy Email: shennessy@teklabinc.com
Requested Due Date: NTAT Billing/PO: 34677 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.

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

| Lab Use | Sample ID | Sample Date/Time | Preservative | Matrix | Radium 226 | Radium 228 | CDN DT | |
|---|---|---|---|---|---|---|---|---|
| | 23070002-012 | 7/7/23 14.34 | HNO3 | Groundwater | ✔ | ✔ | 18 | 1 |
| | 23070002-013 | 7/7/23 14.16 | HNO3 | Groundwater | ✔ | ✔ | 32 | 1 |
| | 23070002-014 | 7/7/23 13.47 | HNO3 | Groundwater | ✔ | ✔ | 33 | 1 |
| | 23070002-015 | 7/7/23 11.21 | HNO3 | Groundwater | ✔ | ✔ | 28 | 1 |
| | | | HNO3 | Groundwater | | | | |
| | | | HNO3 | Groundwater | | | | |
| | | | HNO3 | Groundwater | | | | |
| | | | HNO3 | Groundwater | | | | |
| | | | HNO3 | Groundwater | | | | |
| | | | HNO3 | Groundwater | | | | |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| Allison Cole (fedex) | 7/10/23 | | |
| | | | |
| | | | |
| | | | |

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SubCocRevA
3/2/2016

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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: **23070747** RcptNo: **1**

| | | |
|---|---|---|
| Logged by: | **Christina N. Gemma** | **7/12/2023 12:00:00 PM** |
| Completed By: | **Jacqueline Rasile** | **7/13/2023 1:07:43 AM** |
| Reviewed By: | **Jennifer Woolf** | **7/13/2023 6:52:05 PM** |

## *Chain of Custody*

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | Were seals intact? | Yes | ☑ | No ☐ | Not Present | ☐ |
| 2. | Is Chain of Custody complete? | Yes | ☐ | No ☑ | Not Present | ☐ |
| 3. | How was the sample delivered? | FedEx | | | | |

## *Log In*

| | | | | | | |
|---|---|---|---|---|---|---|
| 4. | Coolers are present? | Yes | ☑ | No ☐ | NA | ☐ |
| 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:

confirmed with clinet second bottle labled -001 is the -004 bottle
Two 001 bottles rec'd, no 004 bottle.

**Cooler Information**

| Cooler No | Temp ºC | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 23.4 | Good | Not Present | | | |

November 27, 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:** Ash Pond Monitoring Wells **WorkOrder:** 23101164

Dear Eric Staley:

TEKLAB, INC received 15 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:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-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 | 22 |
| Chain of Custody | Appended |

**Client:** City Water, Light & Power **Work Order:** 23101164

**Client Project:** Ash Pond Monitoring Wells **Report Date:** 27-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:** 23101164

**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-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:** Ash Pond Monitoring Wells

**Work Order:** 23101164
**Report Date:** 27-Nov-23

**Cooler Receipt Temp:** 4.8 °C

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

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

## Locations


### Collinsville

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

### Springfield

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

### Kansas City

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

### Collinsville Air

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

### Chicago

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

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-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:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-001
**Client Sample ID:** RW-3
**Matrix:** GROUNDWATER
**Collection Date:** 10/25/2023 12:34

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **495.49** | ft | 1 | 10/25/2023 12:34 | R338505 |
| Depth to water | * | -5.00 | | **9.09** | ft | 1 | 10/25/2023 12:34 | R338505 |
| Depth to water from measuring point | * | 0 | | **11.79** | ft | 1 | 10/25/2023 12:34 | R338505 |
| Elevation of groundwater surface | * | 0 | | **527.71** | ft | 1 | 10/25/2023 12:34 | R338505 |
| Measuring Point Elevation | * | 0 | | **539.50** | ft | 1 | 10/25/2023 12:34 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.70** | ft | 1 | 10/25/2023 12:34 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **8.6** | NTU | 1 | 10/25/2023 12:34 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **60.3** | °F | 1 | 10/25/2023 12:34 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.31** | | 1 | 10/25/2023 12:34 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **632** | µmhos/cm @25C | 1 | 10/25/2023 12:34 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 100 | | **340** | mg/L | 5 | 10/30/2023 11:49 | R338538 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **16** | mg/L | 1 | 10/27/2023 19:42 | R338425 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.44** | mg/L | 1 | 11/02/2023 14:55 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **31** | mg/L | 1 | 10/27/2023 19:41 | R338455 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.165** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Boron | NELAP | 0.0200 | | **0.117** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Calcium | NELAP | 0.100 | | **58.7** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Lithium | NELAP | 0.0050 | | **0.0147** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 11/02/2023 10:47 | 213836 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/02/2023 19:03 | 213836 |
| Arsenic | NELAP | 0.0010 | | **0.740** | mg/L | 5 | 11/02/2023 19:03 | 213836 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/02/2023 19:03 | 213836 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/02/2023 19:03 | 213836 |
| *PQL recovered outside upper control limits for Sb. 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 | 10/31/2023 13:26 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-002
**Client Sample ID:** AP-1
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 12:22

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **504.29** | ft | 1 | 10/26/2023 12:22 | R338505 |
| Depth to water | * | -5.00 | | **9.15** | ft | 1 | 10/26/2023 12:22 | R338505 |
| Depth to water from measuring point | * | 0 | | **11.42** | ft | 1 | 10/26/2023 12:22 | R338505 |
| Elevation of groundwater surface | * | 0 | | **523.95** | ft | 1 | 10/26/2023 12:22 | R338505 |
| Measuring Point Elevation | * | 0 | | **535.37** | ft | 1 | 10/26/2023 12:22 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.27** | ft | 1 | 10/26/2023 12:22 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **12** | NTU | 1 | 10/26/2023 12:22 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **59.7** | °F | 1 | 10/26/2023 12:22 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.71** | | 1 | 10/26/2023 12:22 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1710** | µmhos/cm @25C | 1 | 10/26/2023 12:22 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1360** | mg/L | 2.5 | 10/31/2023 10:18 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **740** | mg/L | 20 | 10/30/2023 13:41 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.26** | mg/L | 1 | 11/02/2023 13:54 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **53** | mg/L | 2 | 11/01/2023 13:44 | R338688 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.262** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Boron | NELAP | 0.200 | | **21.7** | mg/L | 10 | 11/01/2023 13:01 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Calcium | NELAP | 0.100 | | **229** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0085** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 17:39 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 9:31 | 213879 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 9:31 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 9:31 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 9:31 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:41 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-003
**Client Sample ID:** AP-2
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 13:05

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.77** | ft | 1 | 10/26/2023 13:05 | R338505 |
| Depth to water | * | -5.00 | | **6.20** | ft | 1 | 10/26/2023 13:05 | R338505 |
| Depth to water from measuring point | * | 0 | | **8.70** | ft | 1 | 10/26/2023 13:05 | R338505 |
| Elevation of groundwater surface | * | 0 | | **527.40** | ft | 1 | 10/26/2023 13:05 | R338505 |
| Measuring Point Elevation | * | 0 | | **536.10** | ft | 1 | 10/26/2023 13:05 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.50** | ft | 1 | 10/26/2023 13:05 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **15** | NTU | 1 | 10/26/2023 13:05 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **61.9** | °F | 1 | 10/26/2023 13:05 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.57** | | 1 | 10/26/2023 13:05 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1380** | µmhos/cm @25C | 1 | 10/26/2023 13:05 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1020** | mg/L | 1 | 10/31/2023 10:25 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **380** | mg/L | 20 | 10/30/2023 13:50 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.27** | mg/L | 1 | 11/02/2023 14:58 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **40** | mg/L | 2 | 10/30/2023 13:44 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0716** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Boron | NELAP | 0.0200 | | **3.23** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Calcium | NELAP | 0.100 | | **204** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Cobalt | NELAP | 0.0050 | | **0.0091** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0056** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 17:43 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 10:52 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0020** | mg/L | 5 | 11/01/2023 10:52 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 10:52 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 10:52 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:43 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-004
**Client Sample ID:** AP-3
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 13:25

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **514.45** | ft | 1 | 10/26/2023 13:25 | R338505 |
| Depth to water | * | -5.00 | | **8.39** | ft | 1 | 10/26/2023 13:25 | R338505 |
| Depth to water from measuring point | * | 0 | | **10.09** | ft | 1 | 10/26/2023 13:25 | R338505 |
| Elevation of groundwater surface | * | 0 | | **525.31** | ft | 1 | 10/26/2023 13:25 | R338505 |
| Measuring Point Elevation | * | 0 | | **535.40** | ft | 1 | 10/26/2023 13:25 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **1.70** | ft | 1 | 10/26/2023 13:25 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **11** | NTU | 1 | 10/26/2023 13:25 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **64.8** | °F | 1 | 10/26/2023 13:25 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.69** | | 1 | 10/26/2023 13:25 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1290** | µmhos/cm @25C | 1 | 10/26/2023 13:25 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1080** | mg/L | 2.5 | 10/31/2023 10:26 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **495** | mg/L | 20 | 11/02/2023 12:38 | R338709 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.25** | mg/L | 1 | 11/02/2023 14:02 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | S | **57** | mg/L | 2 | 10/30/2023 14:08 | R338509 |
| *Matrix spike did not recover within control limits due to matrix interference.* | | | | | | | | |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.113** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Boron | NELAP | 0.0200 | | **15.2** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Calcium | NELAP | 0.100 | | **181** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Cobalt | NELAP | 0.0050 | | **0.0051** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0051** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 17:46 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 10:58 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0182** | mg/L | 5 | 11/01/2023 10:58 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 10:58 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 10:58 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:45 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-005
**Client Sample ID:** AP-4
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 14:06

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **492.46** | ft | 1 | 10/26/2023 14:06 | R338505 |
| Depth to water | * | -5.00 | | **7.65** | ft | 1 | 10/26/2023 14:06 | R338505 |
| Depth to water from measuring point | * | 0 | | **10.79** | ft | 1 | 10/26/2023 14:06 | R338505 |
| Elevation of groundwater surface | * | 0 | | **544.81** | ft | 1 | 10/26/2023 14:06 | R338505 |
| Measuring Point Elevation | * | 0 | | **555.60** | ft | 1 | 10/26/2023 14:06 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.14** | ft | 1 | 10/26/2023 14:06 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **8.8** | NTU | 1 | 10/26/2023 14:06 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **66.4** | °F | 1 | 10/26/2023 14:06 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.99** | | 1 | 10/26/2023 14:06 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **866** | µmhos/cm @25C | 1 | 10/26/2023 14:06 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **420** | mg/L | 2.5 | 10/31/2023 10:26 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 10/30/2023 14:29 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.16** | mg/L | 1 | 11/02/2023 15:00 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **14** | mg/L | 1 | 10/30/2023 14:29 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.381** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0841** | mg/L | 1 | 11/01/2023 12:57 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Calcium | NELAP | 0.100 | | **118** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0051** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 17:50 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:03 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0225** | mg/L | 5 | 11/01/2023 11:03 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:03 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 11:03 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:47 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-006
**Client Sample ID:** AP-5
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 14:44

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **552.63** | ft | 1 | 10/26/2023 14:44 | R338505 |
| Depth to water | * | -5.00 | | **15.87** | ft | 1 | 10/26/2023 14:44 | R338505 |
| Depth to water from measuring point | * | 0 | | **18.17** | ft | 1 | 10/26/2023 14:44 | R338505 |
| Elevation of groundwater surface | * | 0 | | **565.73** | ft | 1 | 10/26/2023 14:44 | R338505 |
| Measuring Point Elevation | * | 0 | | **583.90** | ft | 1 | 10/26/2023 14:44 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.30** | ft | 1 | 10/26/2023 14:44 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **2.0** | NTU | 1 | 10/26/2023 14:44 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.9** | °F | 1 | 10/26/2023 14:44 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.17** | | 1 | 10/26/2023 14:44 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **653** | µmhos/cm @25C | 1 | 10/26/2023 14:44 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **396** | mg/L | 1 | 10/31/2023 10:26 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **45** | mg/L | 1 | 10/30/2023 14:38 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.37** | mg/L | 1 | 11/02/2023 16:05 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **5** | mg/L | 1 | 10/30/2023 14:37 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0471** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0455** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Calcium | NELAP | 0.100 | | **90.7** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 18:12 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:37 | 213879 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:37 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:37 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 11:37 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:50 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-007
**Client Sample ID:** AP-6
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 9:09

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **498.20** | ft | 1 | 10/26/2023 9:09 | R338505 |
| Depth to water | * | -5.00 | | **7.64** | ft | 1 | 10/26/2023 9:09 | R338505 |
| Depth to water from measuring point | * | 0 | | **10.06** | ft | 1 | 10/26/2023 9:09 | R338505 |
| Elevation of groundwater surface | * | 0 | | **527.76** | ft | 1 | 10/26/2023 9:09 | R338505 |
| Measuring Point Elevation | * | 0 | | **537.82** | ft | 1 | 10/26/2023 9:09 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.42** | ft | 1 | 10/26/2023 9:09 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **9.5** | NTU | 1 | 10/26/2023 9:09 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **59.4** | °F | 1 | 10/26/2023 9:09 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.17** | | 1 | 10/26/2023 9:09 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **609** | µmhos/cm @25C | 1 | 10/26/2023 9:09 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **322** | mg/L | 1 | 10/31/2023 12:05 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **13** | mg/L | 1 | 10/30/2023 15:01 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.50** | mg/L | 1 | 11/02/2023 15:01 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **33** | mg/L | 1 | 10/30/2023 15:01 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.160** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Boron | NELAP | 0.0200 | | **0.214** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Calcium | NELAP | 0.100 | | **65.8** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 17:54 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:09 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0183** | mg/L | 5 | 11/01/2023 11:09 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 11:09 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 11:09 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:57 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-008
**Client Sample ID:** AP-7
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 13:58

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **496.50** | ft | 1 | 10/26/2023 13:58 | R338505 |
| Depth to water | * | -5.00 | | **9.79** | ft | 1 | 10/26/2023 13:58 | R338505 |
| Depth to water from measuring point | * | 0 | | **12.45** | ft | 1 | 10/26/2023 13:58 | R338505 |
| Elevation of groundwater surface | * | 0 | | **526.57** | ft | 1 | 10/26/2023 13:58 | R338505 |
| Measuring Point Elevation | * | 0 | | **539.02** | ft | 1 | 10/26/2023 13:58 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.66** | ft | 1 | 10/26/2023 13:58 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **7.8** | NTU | 1 | 10/26/2023 13:58 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **58.1** | °F | 1 | 10/26/2023 13:58 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.15** | | 1 | 10/26/2023 13:58 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **478** | µmhos/cm @25C | 1 | 10/26/2023 13:58 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **352** | mg/L | 1 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **15** | mg/L | 1 | 10/30/2023 15:04 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.53** | mg/L | 1 | 11/02/2023 13:57 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 8 | | **60** | mg/L | 2 | 11/01/2023 14:16 | R338688 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.158** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Boron | NELAP | 0.0200 | | **0.331** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Calcium | NELAP | 0.100 | | **50.6** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 18:23 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:17 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0750** | mg/L | 5 | 11/01/2023 12:17 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:17 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:17 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 14:59 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-009
**Client Sample ID:** AP-8
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 9:30

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **497.60** | ft | 1 | 10/26/2023 9:30 | R338505 |
| Depth to water | * | -5.00 | | **5.17** | ft | 1 | 10/26/2023 9:30 | R338505 |
| Depth to water from measuring point | * | 0 | | **8.07** | ft | 1 | 10/26/2023 9:30 | R338505 |
| Elevation of groundwater surface | * | 0 | | **529.13** | ft | 1 | 10/26/2023 9:30 | R338505 |
| Measuring Point Elevation | * | 0 | | **537.20** | ft | 1 | 10/26/2023 9:30 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 10/26/2023 9:30 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **9.1** | NTU | 1 | 10/26/2023 9:30 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **59.4** | °F | 1 | 10/26/2023 9:30 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.01** | | 1 | 10/26/2023 9:30 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **926** | µmhos/cm @25C | 1 | 10/26/2023 9:30 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **430** | mg/L | 2.5 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **< 10** | mg/L | 1 | 10/30/2023 15:06 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.31** | mg/L | 1 | 11/02/2023 15:04 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **25** | mg/L | 1 | 10/30/2023 15:07 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.374** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0896** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Calcium | NELAP | 0.100 | | **101** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 18:27 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:23 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0395** | mg/L | 5 | 11/01/2023 12:23 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:23 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:23 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 15:01 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-010
**Client Sample ID:** AP-9
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 14:46

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **501.80** | ft | 1 | 10/26/2023 14:46 | R338505 |
| Depth to water | * | -5.00 | | **10.77** | ft | 1 | 10/26/2023 14:46 | R338505 |
| Depth to water from measuring point | * | 0 | | **13.87** | ft | 1 | 10/26/2023 14:46 | R338505 |
| Elevation of groundwater surface | * | 0 | | **526.43** | ft | 1 | 10/26/2023 14:46 | R338505 |
| Measuring Point Elevation | * | 0 | | **540.30** | ft | 1 | 10/26/2023 14:46 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 10/26/2023 14:46 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **10** | NTU | 1 | 10/26/2023 14:46 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **62.8** | °F | 1 | 10/26/2023 14:46 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.81** | | 1 | 10/26/2023 14:46 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **743** | µmhos/cm @25C | 1 | 10/26/2023 14:46 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **524** | mg/L | 1 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 10 | | **23** | mg/L | 1 | 10/30/2023 15:15 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.29** | mg/L | 1 | 11/02/2023 15:14 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **26** | mg/L | 1 | 10/30/2023 15:15 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.399** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0956** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Calcium | NELAP | 0.100 | | **97.8** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 18:31 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:28 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0062** | mg/L | 5 | 11/01/2023 12:28 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:28 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:28 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 15:03 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-011
**Client Sample ID:** AP-10
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 12:43

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **499.43** | ft | 1 | 10/26/2023 12:43 | R338505 |
| Depth to water | * | -5.00 | | **3.47** | ft | 1 | 10/26/2023 12:43 | R338505 |
| Depth to water from measuring point | * | 0 | | **6.57** | ft | 1 | 10/26/2023 12:43 | R338505 |
| Elevation of groundwater surface | * | 0 | | **530.93** | ft | 1 | 10/26/2023 12:43 | R338505 |
| Measuring Point Elevation | * | 0 | | **537.50** | ft | 1 | 10/26/2023 12:43 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.10** | ft | 1 | 10/26/2023 12:43 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **12** | NTU | 1 | 10/26/2023 12:43 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **58.8** | °F | 1 | 10/26/2023 12:43 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.82** | | 1 | 10/26/2023 12:43 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1180** | µmhos/cm @25C | 1 | 10/26/2023 12:43 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **732** | mg/L | 1 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **91** | mg/L | 5 | 10/30/2023 15:17 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.35** | mg/L | 1 | 11/02/2023 15:16 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **27** | mg/L | 5 | 10/30/2023 15:17 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.583** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Boron | NELAP | 0.0200 | | **3.60** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Calcium | NELAP | 0.100 | S | **138** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 18:34 | 213879 |
| *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 | 11/01/2023 12:56 | 213879 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:56 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:56 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:56 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 15:10 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-012
**Client Sample ID:** AP-11
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 11:52

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **515.15** | ft | 1 | 10/26/2023 11:52 | R338505 |
| Depth to water | * | -5.00 | | **13.16** | ft | 1 | 10/26/2023 11:52 | R338505 |
| Depth to water from measuring point | * | 0 | | **15.96** | ft | 1 | 10/26/2023 11:52 | R338505 |
| Elevation of groundwater surface | * | 0 | | **522.14** | ft | 1 | 10/26/2023 11:52 | R338505 |
| Measuring Point Elevation | * | 0 | | **538.10** | ft | 1 | 10/26/2023 11:52 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 10/26/2023 11:52 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **12** | NTU | 1 | 10/26/2023 11:52 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **62.1** | °F | 1 | 10/26/2023 11:52 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.60** | | 1 | 10/26/2023 11:52 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1040** | µmhos/cm @25C | 1 | 10/26/2023 11:52 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **640** | mg/L | 1 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **81** | mg/L | 5 | 10/30/2023 15:28 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.65** | mg/L | 1 | 11/02/2023 13:59 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 40 | | **90** | mg/L | 10 | 11/01/2023 14:21 | R338688 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.126** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Boron | NELAP | 0.0200 | | **0.256** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Calcium | NELAP | 0.100 | | **134** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 19:00 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:34 | 213879 |
| Arsenic | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:34 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:34 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:34 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 15:12 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-013
**Client Sample ID:** AP-12
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 11:20

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **510.30** | ft | 1 | 10/26/2023 11:20 | R338505 |
| Depth to water | * | -5.00 | | **15.54** | ft | 1 | 10/26/2023 11:20 | R338505 |
| Depth to water from measuring point | * | 0 | | **18.44** | ft | 1 | 10/26/2023 11:20 | R338505 |
| Elevation of groundwater surface | * | 0 | | **522.26** | ft | 1 | 10/26/2023 11:20 | R338505 |
| Measuring Point Elevation | * | 0 | | **540.70** | ft | 1 | 10/26/2023 11:20 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.90** | ft | 1 | 10/26/2023 11:20 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **63** | NTU | 1 | 10/26/2023 11:20 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **60.3** | °F | 1 | 10/26/2023 11:20 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.62** | | 1 | 10/26/2023 11:20 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1820** | µmhos/cm @25C | 1 | 10/26/2023 11:20 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **1320** | mg/L | 2.5 | 10/31/2023 12:06 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **563** | mg/L | 20 | 10/30/2023 15:57 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.20** | mg/L | 1 | 11/02/2023 15:18 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 40 | | **124** | mg/L | 10 | 10/30/2023 15:52 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.138** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Beryllium | NELAP | 0.0005 | | **0.0015** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0380** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Calcium | NELAP | 0.100 | | **268** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Chromium | NELAP | 0.0050 | | **0.0332** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Cobalt | NELAP | 0.0050 | | **0.0236** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Lead | NELAP | 0.0150 | | **0.0161** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0352** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 19:04 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:39 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0149** | mg/L | 5 | 11/01/2023 12:39 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:39 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:39 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 10/31/2023 15:15 | 213968 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/10/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-014
**Client Sample ID:** AP-13
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 10:33

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **511.00** | ft | 1 | 10/26/2023 10:33 | R338505 |
| Depth to water | * | -5.00 | | **16.48** | ft | 1 | 10/26/2023 10:33 | R338505 |
| Depth to water from measuring point | * | 0 | | **19.88** | ft | 1 | 10/26/2023 10:33 | R338505 |
| Elevation of groundwater surface | * | 0 | | **522.12** | ft | 1 | 10/26/2023 10:33 | R338505 |
| Measuring Point Elevation | * | 0 | | **542.00** | ft | 1 | 10/26/2023 10:33 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **3.40** | ft | 1 | 10/26/2023 10:33 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **160** | NTU | 1 | 10/26/2023 10:33 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **59.9** | °F | 1 | 10/26/2023 10:33 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **6.74** | | 1 | 10/26/2023 10:33 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **821** | µmhos/cm @25C | 1 | 10/26/2023 10:33 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 50 | | **465** | mg/L | 2.5 | 10/31/2023 12:07 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 50 | | **151** | mg/L | 5 | 10/30/2023 16:05 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.24** | mg/L | 1 | 11/02/2023 15:20 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 4 | | **27** | mg/L | 1 | 10/30/2023 16:00 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.177** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Beryllium | NELAP | 0.0005 | | **0.0009** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Boron | NELAP | 0.0200 | | **0.0386** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Calcium | NELAP | 0.100 | | **122** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Chromium | NELAP | 0.0050 | | **0.0190** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Cobalt | NELAP | 0.0050 | | **0.0127** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Lithium | NELAP | 0.0050 | | **0.0237** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 19:08 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:45 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0075** | mg/L | 5 | 11/01/2023 12:45 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:45 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:45 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 11/01/2023 10:26 | 214005 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/14/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/14/2023 0:00 | R339727 |

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23
**Lab ID:** 23101164-015
**Client Sample ID:** AP-14
**Matrix:** GROUNDWATER
**Collection Date:** 10/26/2023 13:51

| Analyses | Certification | RL | Qual | Result | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|---|
| **FIELD ELEVATION MEASUREMENTS** | | | | | | | | |
| Bottom of well elevation | * | 0 | | **508.40** | ft | 1 | 10/26/2023 13:51 | R338505 |
| Depth to water | * | -5.00 | | **0.92** | ft | 1 | 10/26/2023 13:51 | R338505 |
| Depth to water from measuring point | * | 0 | | **3.72** | ft | 1 | 10/26/2023 13:51 | R338505 |
| Elevation of groundwater surface | * | 0 | | **535.88** | ft | 1 | 10/26/2023 13:51 | R338505 |
| Measuring Point Elevation | * | 0 | | **539.60** | ft | 1 | 10/26/2023 13:51 | R338505 |
| Measuring Point Height Above Land Surface | * | 0 | | **2.80** | ft | 1 | 10/26/2023 13:51 | R338505 |
| **STANDARD METHODS 2130 B FIELD** | | | | | | | | |
| Turbidity | * | 1.0 | | **6.9** | NTU | 1 | 10/26/2023 13:51 | R338505 |
| **STANDARD METHODS 2550 B FIELD** | | | | | | | | |
| Temperature | * | 0 | | **57.7** | °F | 1 | 10/26/2023 13:51 | R338505 |
| **SW-846 9040B** | | | | | | | | |
| pH, Field | * | 1.00 | | **7.06** | | 1 | 10/26/2023 13:51 | R338505 |
| **SW-846 9050A** | | | | | | | | |
| Spec. Conductance, Field | * | 1.00 | | **1740** | µmhos/cm @25C | 1 | 10/26/2023 13:51 | R338505 |
| **STANDARD METHODS 2540 C (TOTAL) 1997, 2011** | | | | | | | | |
| Total Dissolved Solids | NELAP | 20 | | **1440** | mg/L | 1 | 10/31/2023 12:12 | R338603 |
| **SW-846 9036 (TOTAL)** | | | | | | | | |
| Sulfate | NELAP | 200 | | **806** | mg/L | 20 | 10/30/2023 16:13 | R338498 |
| **SW-846 9214 (TOTAL)** | | | | | | | | |
| Fluoride | NELAP | 0.10 | | **0.29** | mg/L | 1 | 11/02/2023 15:22 | R338693 |
| **SW-846 9251 (TOTAL)** | | | | | | | | |
| Chloride | NELAP | 20 | | **89** | mg/L | 5 | 10/30/2023 16:08 | R338509 |
| **SW-846 3005A, 6010B, METALS BY ICP (TOTAL)** | | | | | | | | |
| Barium | NELAP | 0.0025 | | **0.0636** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Beryllium | NELAP | 0.0005 | | **< 0.0005** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Boron | NELAP | 0.200 | | **22.1** | mg/L | 10 | 11/01/2023 13:04 | 213879 |
| Cadmium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Calcium | NELAP | 0.100 | | **278** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Chromium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Cobalt | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Lead | NELAP | 0.0150 | | **< 0.0150** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Lithium | NELAP | 0.0050 | | **< 0.0050** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| Molybdenum | NELAP | 0.0100 | | **< 0.0100** | mg/L | 1 | 10/31/2023 19:11 | 213879 |
| **SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)** | | | | | | | | |
| Antimony | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:51 | 213879 |
| Arsenic | NELAP | 0.0010 | | **0.0036** | mg/L | 5 | 11/01/2023 12:51 | 213879 |
| Selenium | NELAP | 0.0010 | | **< 0.0010** | mg/L | 5 | 11/01/2023 12:51 | 213879 |
| Thallium | NELAP | 0.0020 | | **< 0.0020** | mg/L | 5 | 11/01/2023 12:51 | 213879 |
| **SW-846 7470A (TOTAL)** | | | | | | | | |
| Mercury | NELAP | 0.00020 | | **< 0.00020** | mg/L | 1 | 11/01/2023 10:28 | 214005 |
| **EPA 903.0/904.0, RADIUM 226/228** | | | | | | | | |
| Radium-226 | * | 0 | | **See Attached** | pci/L | 1 | 11/14/2023 0:00 | R339727 |
| Radium-228 | * | 0 | | **See Attached** | pci/L | 1 | 11/14/2023 0:00 | R339727 |

# Receiving Check List

http://www.teklabinc.com/

**Client:** City Water, Light & Power
**Work Order:** 23101164
**Client Project:** Ash Pond Monitoring Wells
**Report Date:** 27-Nov-23

**Carrier:** Justin Colp
**Received By:** HAW

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

**Reviewed by:** Ellie Hopkins
**On:** 27-Oct-23

**Pages to follow:** Chain of custody 3 Extra pages included 57

| | | | | |
|---|---|---|---|---|
| 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 CET. - TMathis - 10/26/2023 12:47:39 PM

pH strip #90719. - amberdilallo - 10/27/2023 9:49:59 AM

Samples collected on 10/26/23 were delivered to the laboratory on 10/26/23 at 1707 (on ice - 2.6C - LTG1). - HW/ERH 10/27/23

Print PDF

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23101164

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

SC_335

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 4.8 °C cTL
Preserved in: ☐ LAB ☒ FIELD FOR LAB USE ONLY
LAB NOTES: pH 9.07 9.45 10-26-23
KTE SM 11/6/23

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

**PROJECT NAME/NUMBER**
Ash Pond 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 F SO4 TDS (T) | Metals (T)** | Radium-226 | Radium-228 | Field Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23101164-001 | RW-3 | 10-25-23 / ~~1235~~ 1234* | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 002 | AP-1 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 003 | AP-2 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 004 | AP-3 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 005 | AP-4 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 006 | AP-5 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 007 | AP-6 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 008 | AP-7 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 009 | AP-8 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 010 | AP-9 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 011 | AP-10 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| J. Colp | 10-25-23 1715 | | 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

Cbo 10-21-23

Print PDF

# CHAIN OF CUSTODY

Pg 1 of 2 Workorder # 23101164

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

SC_336

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 °C
Preserved in: ☐ LAB ☒ FIELD FOR LAB USE ONLY
LAB NOTES: 9019 10/27/23
~~KTE~~ 11/6/23

**Client Comments:**
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

**PROJECT NAME/NUMBER**
Ash Pond Monitoring Wells

**SAMPLE COLLECTOR'S NAME**
Justin Gb

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23101164-001 | RW-3 | | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 002 | AP-1 | 10-26-23/ 1222 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 003 | AP-2 | 1305 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 004 | AP-3 | * 13525 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 005 | AP-4 | 1406 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 006 | AP-5 | 1444 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 007 | AP-6 | 0909 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 008 | AP-7 | 10-26-23/ 1358 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 009 | AP-8 | 10-26-23/ 0930 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 010 | AP-9 | 10-26-23/ 1446 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 011 | AP-10 | 10-26-23/ 1243 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | 10-26-23 17:07 | | 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

# CHAIN OF CUSTODY

Pg 2 of 2 Workorder # 23101164

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

SC_337

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:**
*elevations, pH, conductivity, temperature
**Sb As Se Tl (ICPMS) Ba Be B Cd Ca Cr Co Pb Li Hg Mo
Quarterly monitoring

PROJECT NAME/NUMBER: Ash Pond Monitoring Wells
SAMPLE COLLECTOR'S NAME: Justin Gp

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23101164-012 | AP-11 | 10-26-23 / 1152 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 013 | AP-12 | 1120 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 014 | AP-13 | 1033 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| 015 | AP-14 | 1351 | Groundwater | 1 | 2 | | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |
| | | | Groundwater | | | | | | | | | | | | | | | |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| [signature] | 10.26.23 17:05 | [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 Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

**Groundwater Sampling Summary**
**CWLP- 4Q 2023**

SC_338

| | | | 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 | RW-3 | Groundwater Sample | 70.0 | None | S | Clear | Good | Good | Good | No | No |
| 002 | AP-1 | Groundwater Sample | 72.0 | Light | S | Cloudy | Good | Good | Good | No | No |
| 003 | AP-2 | Groundwater Sample | 72.0 | Light | S | Partly cloudy | Good | Good | Good | No | No |
| 004 | AP-3 | Groundwater Sample | 71.0 | Light | S | Partly cloudy | Good | Good | Good | No | No |
| 005 | AP-4 | Groundwater Sample | 71.0 | None | S | Partly cloudy | Good | Good | Good | Yes | No |
| 006 | AP-5 | Groundwater Sample | 71.0 | Light | S | Partly cloudy | Good | Good | Good | Yes | No |
| 007 | AP-6 | Groundwater Sample | 66.0 | None | S | Partly cloudy | Good | Good | Good | No | No |
| 008 | AP-7 | Groundwater Sample | 71.0 | Light | S | Cloudy | Good | Good | Good | Yes | No |
| 009 | AP-8 | Groundwater Sample | 66.0 | None | S | Partly cloudy | Good | Good | Good | Yes | No |
| 010 | AP-9 | Groundwater Sample | 71.0 | Light | S | Cloudy | Good | Good | Good | Yes | No |
| 011 | AP-10 | Groundwater Sample | 72.0 | Light | S | Partly cloudy | Good | Good | Good | No | No |
| 012 | AP-11 | Groundwater Sample | 71.0 | None | S | Cloudy | Good | Good | Good | No | No |
| 013 | AP-12 | Groundwater Sample | 70.0 | None | S | Partly cloudy | Good | Good | Good | No | No |
| 014 | AP-13 | Groundwater Sample | 67.0 | None | S | Partly cloudy | Good | Good | Good | Yes | No |
| 015 | AP-14 | Groundwater Sample | 71.0 | None | S | Partly cloudy | Good | Good | Good | No | No |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

**Groundwater Sampling Summary**
**CWLP- 4Q 2023**

SC_339

| | | GW Level Measurement | | | | Purge Activities | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WO Sample** | **Well ID** | **Sampler Initials** | **Date/Time** | **DTW (ft)** | **DTB (ft)** | **Sampler Initials** | **Purge Date** | | | **Sampling Device** | **Well Diameter (in)** | **Actual Volume Purged (L)** | **Purge Rate (mL/min)** |
| 001 | RW-3 | BG | 10/26/23 12:26 | 11.79 | 44.01 | BG | 10/25/2023 | 12:24 | 12:35 | Bladder Pump | 2" | 2.0 | 181.8 |
| 002 | AP-1 | BG | 10/26/23 12:12 | 11.42 | 31.08 | BG | 10/26/2023 | 12:12 | 12:22 | Bladder Pump | 2" | 3.0 | 300.0 |
| 003 | AP-2 | BG | 10/26/23 12:52 | 8.70 | 21.33 | BG | 10/26/2023 | 12:52 | 13:05 | Bladder Pump | 2" | 2.5 | 192.3 |
| 004 | AP-3 | BG | 10/26/23 13:12 | 10.09 | | BG | 10/26/2023 | 13:12 | 13:35 | Bladder Pump | 2" | 2.0 | 87.0 |
| 005 | AP-4 | BG | 10/26/23 13:57 | 10.79 | 60.41 | BG | 10/26/2023 | 13:57 | 14:06 | Bladder Pump | 2" | 2.0 | 222.2 |
| 006 | AP-5 | BG | 10/26/23 14:33 | 18.17 | 31.27 | BG | 10/26/2023 | 13:32 | 14:44 | Bladder Pump | 2" | 4.0 | 55.6 |
| 007 | AP-6 | BG | 10/26/23 8:57 | 10.06 | 39.62 | BG | 10/26/2023 | 08:58 | 09:09 | Submersible Pump | 2" | 1.7 | 154.5 |
| 008 | AP-7 | TAC | 10/26/23 13:35 | 12.45 | 42.52 | TAC | 10/26/2023 | 13:12 | 13:58 | Bladder Pump | 2" | 3.5 | 76.1 |
| 009 | AP-8 | BG | 10/26/23 9:18 | 8.07 | 39.60 | BG | 10/26/2023 | 09:20 | 09:30 | Submersible Pump | 2" | 2.0 | 200.0 |
| 010 | AP-9 | TAC | 10/26/23 14:26 | 13.87 | 39.60 | TAC | 10/26/2023 | 14:30 | 14:46 | Submersible Pump | 2" | 2.5 | 156.2 |
| 011 | AP-10 | BG | 10/26/23 12:30 | 6.57 | 38.07 | BG | 10/26/2023 | 12:30 | 12:43 | Submersible Pump | 2" | 4.0 | 307.7 |
| 012 | AP-11 | BG | 10/26/23 11:30 | 15.96 | 22.95 | BG | 10/26/2023 | 11:30 | 11:52 | Submersible Pump | 2" | 6.0 | 272.7 |
| 013 | AP-12 | BG | 10/26/23 10:43 | 18.44 | 30.40 | BG | 10/26/2023 | 10:43 | 11:20 | Submersible Pump | 2" | 8.5 | 229.7 |
| 014 | AP-13 | BG | 10/26/23 9:58 | 19.88 | 31.00 | BG | 10/26/2023 | 09:59 | 10:33 | Submersible Pump | 2" | 9.5 | 279.4 |
| 015 | AP-14 | BG | 10/26/23 13:37 | 3.72 | 31.20 | BG | 10/26/2023 | 13:38 | 13:51 | Submersible Pump | 2" | 5.0 | 384.6 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

**Groundwater Sampling Summary**
**CWLP- 4Q 2023**

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| | | Sampling Activities and Observations | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WO Sample** | **Well ID** | **Sampler Initials** | **Date** | **Sample Time** | **Sampling Method** | **Field Filtered** | **Appearance** | **Odor** | **Color** | **Post-Sample DTW (ft)** | **Drawdown (ft)** |
| 001 | RW-3 | bg | 10/25/23 | 12:34 | Low Flow | Yes | Clear | Slight | CLEAR | 14.45 | **2.66** |
| 002 | AP-1 | BG | 10/26/23 | 12:22 | Low Flow | No | Clear | None | CLEAR | 11.69 | 0.27 |
| 003 | AP-2 | BG | 10/26/23 | 13:05 | Low Flow | No | Clear | None | clear | 8.82 | 0.12 |
| 004 | AP-3 | BG | 10/26/23 | 13:25 | Low Flow | No | Clear | Slight | Clear | 10.43 | 0.34 |
| 005 | AP-4 | BG | 10/26/23 | 14:06 | Low Flow | No | Clear | Slight | Clear | 11.11 | 0.32 |
| 006 | AP-5 | BG | 10/26/23 | 14:44 | Low Flow | No | Clear | None | Clear | 20.72 | **2.55** |
| 007 | AP-6 | BG | 10/26/23 | 09:09 | Low Flow | No | Clear | Slight | clear | 12.07 | **2.01** |
| 008 | AP-7 | TAC | 10/26/23 | 13:58 | Low Flow | No | Clear | None | None | 14.42 | **1.97** |
| 009 | AP-8 | BG | 10/26/23 | 09:30 | Low Flow | No | Clear | None | CLEAR | 8.54 | 0.47 |
| 010 | AP-9 | TAC | 10/26/23 | 14:46 | Low Flow | No | Clear | None | None | 13.87 | 0.00 |
| 011 | AP-10 | BG | 10/26/23 | 12:43 | Low Flow | No | Clear | Slight | clear | 6.23 | -0.34 |
| 012 | AP-11 | BG | 10/26/23 | 11:52 | Low Flow | No | Clear | Slight | clear | 16.46 | 0.50 |
| 013 | AP-12 | BG | 10/26/23 | 11:20 | Low Flow | No | Cloudy | Slight | Gray | 19.44 | **1.00** |
| 014 | AP-13 | BG | 10/26/23 | 10:33 | Low Flow | No | Cloudy | Moderate | Gray | 21.27 | **1.39** |
| 015 | AP-14 | BG | 10/26/23 | 13:51 | Low Flow | No | Clear | None | Clear | 3.60 | -0.12 |

**Site Samping Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

**Groundwater Sampling Summary**
**CWLP- 4Q 2023**

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| WO Sample | Well ID | COMMENTS |
|---|---|---|
| 001 | RW-3 | GW Level measurement time should be 1226 not 1504. logged this in the worng column |
| 002 | AP-1 | |
| 003 | AP-2 | |
| 004 | AP-3 | |
| 005 | AP-4 | |
| 006 | AP-5 | |
| 007 | AP-6 | |
| 008 | AP-7 | |
| 009 | AP-8 | |
| 010 | AP-9 | |
| 011 | AP-10 | |
| 012 | AP-11 | |
| 013 | AP-12 | |
| 014 | AP-13 | |
| 015 | AP-14 | |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

**Stabilized Field Parameters Summary**
**CWLP- 4Q 2023**

SC_342

| Well ID | Date | Time | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) | DTB (ft) | DTW (ft) | LIMS ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-3 | 10/25/2023 | 12:34 | 15.7 | 60.3 | 7.31 | 632.4 | 1.39 | 8.6 | -125.8 | 44.01 | 11.79 | 23101164-001A |
| AP-1 | 10/26/2023 | 12:22 | 15.4 | 59.7 | 6.71 | 1,710.9 | 1.31 | 11.94 | -103.3 | 31.08 | 11.42 | 23101164-002A |
| AP-2 | 10/26/2023 | 13:05 | 16.6 | 61.9 | 6.57 | 1,375.8 | 1.04 | 15.13 | -16.1 | 21.33 | 8.70 | 23101164-003A |
| AP-3 | 10/26/2023 | 13:25 | 18.2 | 64.8 | 6.69 | 1,293.6 | 1.28 | 10.54 | -79.9 | | 10.09 | 23101164-004A |
| AP-4 | 10/26/2023 | 14:06 | 19.1 | 66.4 | 6.99 | 865.9 | 1.78 | 8.84 | -91.3 | 60.41 | 10.79 | 23101164-005A |
| AP-5 | 10/26/2023 | 14:44 | 14.4 | 57.9 | 7.17 | 652.7 | 2.61 | 2.05 | -2.3 | 31.27 | 18.17 | 23101164-006A |
| AP-6 | 10/26/2023 | 9:09 | 15.2 | 59.4 | 7.17 | 609.4 | 1.75 | 9.52 | -101.5 | 39.62 | 10.06 | 23101164-007A |
| AP-7 | 10/26/2023 | 13:58 | 14.5 | 58.1 | 7.15 | 478.1 | 0.67 | 7.82 | -155.7 | 42.52 | 12.45 | 23101164-008A |
| AP-8 | 10/26/2023 | 9:30 | 15.2 | 59.4 | 7.01 | 926.5 | 1.41 | 9.1 | -111.3 | 39.60 | 8.07 | 23101164-009A |
| AP-9 | 10/26/2023 | 14:46 | 17.1 | 62.8 | 6.81 | 743.3 | 1.14 | 10.37 | -111.2 | 39.60 | 13.87 | 23101164-010A |
| AP-10 | 10/26/2023 | 12:43 | 14.9 | 58.8 | 6.82 | 1,182.1 | 0.94 | 12.43 | -111.3 | 38.07 | 6.57 | 23101164-011A |
| AP-11 | 10/26/2023 | 11:52 | 16.7 | 62.1 | 6.60 | 1,038.9 | 0.91 | 11.89 | -84.2 | 22.95 | 15.96 | 23101164-012A |
| AP-12 | 10/26/2023 | 11:20 | 15.7 | 60.3 | 6.62 | 1,816.3 | 0.66 | 63.28 | -144.5 | 30.40 | 18.44 | 23101164-013A |
| AP-13 | 10/26/2023 | 10:33 | 15.5 | 59.9 | 6.74 | 820.7 | 1.03 | 159.47 | -94.3 | 31.00 | 19.88 | 23101164-014A |
| AP-14 | 10/26/2023 | 13:51 | 14.3 | 57.7 | 7.06 | 1,735.5 | 0.97 | 6.91 | -50.6 | 31.20 | 3.72 | 23101164-015A |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_343

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-3 | 10/25/2023 | 12:28 | 11.79 | 15.0 | 59.0 | 7.31 | 613.2 | 613.2 | 3.08 | 3.23 | -61 |
| RW-3 | 10/25/2023 | 12:31 | 11.79 | 16.0 | 60.8 | 7.25 | 633.4 | 633.4 | 1.93 | 8.1 | -95.4 |
| RW-3 | 10/25/2023 | 12:34 | 11.79 | 15.7 | 60.3 | 7.31 | 632.4 | 632.4 | 1.39 | 8.6 | -125.8 |

**Site Samping Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_344

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-1 | 10/26/2023 | 12:16 | 11.42 | 15.8 | 60.4 | 6.76 | 1,608.0 | 1,608.0 | 2.81 | 14.64 | -74.6 |
| AP-1 | 10/26/2023 | 12:19 | 11.42 | 15.6 | 60.1 | 6.72 | 1,676.8 | 1,676.8 | 1.73 | 9.9 | -93.3 |
| AP-1 | 10/26/2023 | 12:22 | 11.42 | 15.4 | 59.7 | 6.71 | 1,710.9 | 1,710.9 | 1.31 | 11.94 | -103.3 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_345

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-2 | 10/26/2023 | 12:56 | 8.7 | 16.8 | 62.2 | 6.60 | 1,378.7 | 1,378.7 | 2.31 | 21.59 | -20.8 |
| AP-2 | 10/26/2023 | 12:59 | 8.7 | 16.7 | 62.1 | 6.58 | 1,375.7 | 1,375.7 | 1.54 | 19.53 | -18 |
| AP-2 | 10/26/2023 | 13:02 | 8.7 | 16.7 | 62.1 | 6.57 | 1,375.2 | 1,375.2 | 1.21 | 13.35 | -16.9 |
| AP-2 | 10/26/2023 | 13:05 | 8.7 | 16.6 | 61.88 | 6.57 | 1,375.8 | 1,375.8 | 1.04 | 15.13 | -16.1 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_346

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-3 | 10/26/2023 | 13:16 | 10.09 | 18.3 | 64.9 | 6.82 | 1,258.1 | 1,258.1 | 4.12 | 12.63 | -50.7 |
| AP-3 | 10/26/2023 | 13:19 | 10.09 | 18.0 | 64.4 | 6.72 | 1,280.4 | 1,280.4 | 2.34 | 16.99 | -64.5 |
| AP-3 | 10/26/2023 | 13:22 | 10.09 | 18.2 | 64.8 | 6.70 | 1,289.4 | 1,289.4 | 1.58 | 11.27 | -74.9 |
| AP-3 | 10/26/2023 | 13:25 | 10.09 | 18.2 | 64.76 | 6.69 | 1,293.6 | 1,293.6 | 1.28 | 10.54 | -79.9 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_347

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-4 | 10/26/2023 | 14:00 | 10.79 | 19.3 | 66.7 | 7.51 | 826.2 | 826.2 | 3.93 | 21.58 | -44.8 |
| AP-4 | 10/26/2023 | 14:03 | 10.79 | 19.0 | 66.2 | 7.06 | 856.2 | 856.2 | 2.63 | 14.79 | -68.6 |
| AP-4 | 10/26/2023 | 14:06 | 10.79 | 19.1 | 66.4 | 6.99 | 865.9 | 865.9 | 1.78 | 8.84 | -91.3 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_348

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-5 | 10/26/2023 | 14:38 | 18.17 | 14.5 | 58.1 | 7.25 | 649.9 | 649.9 | 3.96 | 2.79 | -2.9 |
| AP-5 | 10/26/2023 | 14:41 | 18.17 | 14.4 | 57.9 | 7.20 | 649.3 | 649.3 | 3 | 2.62 | -2.6 |
| AP-5 | 10/26/2023 | 14:44 | 18.17 | 14.4 | 57.9 | 7.17 | 652.7 | 652.7 | 2.61 | 2.05 | -2.3 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_349

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-6 | 10/26/2023 | 9:03 | 10.06 | 14.9 | 58.8 | 7.24 | 581.3 | 581.3 | 3.13 | 2.84 | -46.4 |
| AP-6 | 10/26/2023 | 9:06 | 10.06 | 14.8 | 58.6 | 7.19 | 599.7 | 599.7 | 2.14 | 6.25 | -89.1 |
| AP-6 | 10/26/2023 | 9:09 | 10.06 | 15.2 | 59.4 | 7.17 | 609.4 | 609.4 | 1.75 | 9.52 | -101.5 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_350

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-7 | 10/26/2023 | 13:49 | 12.45 | 14.3 | 57.7 | 7.17 | 455.0 | 455.0 | 0.78 | 25.78 | -151 |
| AP-7 | 10/26/2023 | 13:52 | 12.45 | 14.5 | 58.1 | 7.16 | 456.5 | 456.5 | 0.74 | 21.99 | -153.2 |
| AP-7 | 10/26/2023 | 13:55 | 12.45 | 14.6 | 58.3 | 7.15 | 472.5 | 472.5 | 0.7 | 3.96 | -154.3 |
| AP-7 | 10/26/2023 | 13:58 | 12.45 | 14.5 | 58.1 | 7.15 | 478.1 | 478.1 | 0.67 | 7.82 | -155.7 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_351

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-8 | 10/26/2023 | 9:24 | 8.07 | 15.0 | 59.0 | 7.03 | 927.0 | 927.0 | 2.61 | 17.19 | -96.7 |
| AP-8 | 10/26/2023 | 9:27 | 8.07 | 15.1 | 59.2 | 7.02 | 926.5 | 926.5 | 1.77 | 11.27 | -105.8 |
| AP-8 | 10/26/2023 | 9:30 | 8.07 | 15.2 | 59.4 | 7.01 | 926.5 | 926.5 | 1.41 | 9.1 | -111.3 |

**Site Samping Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_352

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-9 | 10/26/2023 | 14:37 | 13.87 | 16.2 | 61.2 | 6.81 | 733.8 | 733.8 | 1.31 | 6.73 | -103.4 |
| AP-9 | 10/26/2023 | 14:40 | 13.87 | 16.7 | 62.1 | 6.80 | 733.3 | 733.3 | 1.18 | 7.62 | -107.4 |
| AP-9 | 10/26/2023 | 14:43 | 13.87 | 16.9 | 62.4 | 6.80 | 738.0 | 738.0 | 1.14 | 8.59 | -109.5 |
| AP-9 | 10/26/2023 | 14:46 | 13.87 | 17.1 | 62.78 | 6.81 | 743.3 | 743.3 | 1.14 | 10.37 | -111.2 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_353

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-10 | 10/26/2023 | 12:34 | 6.57 | 15.1 | 59.2 | 6.86 | 1,183.1 | 1,183.1 | 2.33 | 26.24 | -92.3 |
| AP-10 | 10/26/2023 | 12:37 | 6.57 | 14.9 | 58.8 | 6.84 | 1,181.5 | 1,181.5 | 1.47 | 15.58 | -102 |
| AP-10 | 10/26/2023 | 12:40 | 6.57 | 14.9 | 58.8 | 6.83 | 1,182.5 | 1,182.5 | 1.12 | 12.12 | -107.5 |
| AP-10 | 10/26/2023 | 12:43 | 6.57 | 14.9 | 58.82 | 6.82 | 1,182.1 | 1,182.1 | 0.94 | 12.43 | -111.3 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_354

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-11 | 10/26/2023 | 11:37 | 15.96 | 15.9 | 60.6 | 6.64 | 1,049.4 | 1,049.4 | 1.47 | 59.67 | -113.1 |
| AP-11 | 10/26/2023 | 11:40 | 15.96 | 16.2 | 61.2 | 6.63 | 1,043.7 | 1,043.7 | 1.23 | 31.24 | -104.9 |
| AP-11 | 10/26/2023 | 11:43 | 15.96 | 16.3 | 61.3 | 6.61 | 1,041.7 | 1,041.7 | 1.09 | 22.75 | -98.3 |
| AP-11 | 10/26/2023 | 11:46 | 15.96 | 16.4 | 61.52 | 6.61 | 1,040.2 | 1,040.2 | 1.01 | 16.87 | -92.7 |
| AP-11 | 10/26/2023 | 11:49 | 15.96 | 16.6 | 61.88 | 6.60 | 1,039.5 | 1,039.5 | 0.96 | 13.31 | -88.2 |
| AP-11 | 10/26/2023 | 11:52 | 15.96 | 16.7 | 62.06 | 6.6 | 1,038.9 | 1,038.9 | 0.91 | 11.89 | -84.2 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_355

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-12 | 10/26/2023 | 11:02 | 18.44 | 15.6 | 60.1 | 6.65 | 1,773.3 | 1,773.3 | 0.98 | 201.64 | -151.9 |
| AP-12 | 10/26/2023 | 11:05 | 18.44 | 15.7 | 60.3 | 6.65 | 1,776.9 | 1,776.9 | 0.87 | 178.2 | -151.4 |
| AP-12 | 10/26/2023 | 11:08 | 18.44 | 15.7 | 60.3 | 6.64 | 1,781.7 | 1,781.7 | 0.8 | 114.04 | -150.5 |
| AP-12 | 10/26/2023 | 11:11 | 18.44 | 15.8 | 60.44 | 6.64 | 1,785.5 | 1,785.5 | 0.76 | 100.71 | -148.9 |
| AP-12 | 10/26/2023 | 11:14 | 18.44 | 15.5 | 59.9 | 6.63 | 1,793.5 | 1,793.5 | 0.71 | 84.74 | -147.2 |
| AP-12 | 10/26/2023 | 11:17 | 18.44 | 15.6 | 60.08 | 6.63 | 1,797.4 | 1,797.4 | 0.68 | 71.82 | -145.9 |
| AP-12 | 10/26/2023 | 11:20 | 18.44 | 15.7 | 60.26 | 6.62 | 1,816.3 | 1,816.3 | 0.66 | 63.28 | -144.5 |

**Site Samping Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_356

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-13 | 10/26/2023 | 10:27 | 19.88 | 15.6 | 60.1 | 6.75 | 819.6 | 819.6 | 1.17 | 152.79 | -99.4 |
| AP-13 | 10/26/2023 | 10:30 | 19.88 | 15.9 | 60.6 | 6.74 | 818.1 | 818.1 | 1.09 | 169.74 | -97.2 |
| AP-13 | 10/26/2023 | 10:33 | 19.88 | 15.5 | 59.9 | 6.74 | 820.7 | 820.7 | 1.03 | 159.47 | -94.3 |

**Site Sampling Event:** CWLP- 4Q 2023
**LIMS Workorder:** 23101164
**Technician(s):** JC, BG

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

SC_357

| Well ID | Date | Time | DTW | Temp (deg C) | Temp (deg F) | pH (SU) | Sp Cond (µS/cm) | Sp Cond (µmhos/cm @25C) | ODO (mg/L) | Turbidity (NTU) | ORP (mV) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AP-14 | 10/26/2023 | 13:45 | 3.72 | 14.4 | 57.9 | 7.07 | 1,732.9 | 1,732.9 | 1.45 | 29.77 | -49.2 |
| AP-14 | 10/26/2023 | 13:48 | 3.72 | 14.4 | 57.9 | 7.06 | 1,734.3 | 1,734.3 | 1.15 | 18.15 | -49.8 |
| AP-14 | 10/26/2023 | 13:51 | 3.72 | 14.3 | 57.7 | 7.06 | 1,735.5 | 1,735.5 | 0.97 | 6.91 | -50.6 |

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
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*Website: http://www.settek.com*

November 22, 2023

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

RE: 23101164

Dear Shelly Hennessy:

Order No.: 23110120

Summit Environmental Technologies, Inc. received 15 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

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# Case Narrative

WO#: **23110120**
Date: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Project:** 23101164

WorkOrder Narrative:
23110120: 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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*Website: http://www.settek.co*

# Qualifiers and Acronyms

WO#: **23110120**
Date: **11/22/2023**

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.**

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# Workorder Sample Summary

WO#: **23110120**

***22-Nov-23***

**CLIENT:** TEKLAB Inc,
**Project:** 23101164

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 23110120-001 | 23101164-001 | | 10/25/2023 12:35:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-002 | 23101164-002 | | 10/26/2023 12:22:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-003 | 23101164-003 | | 10/26/2023 1:05:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-004 | 23101164-004 | | 10/26/2023 1:35:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-005 | 23101164-005 | | 10/26/2023 2:06:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-006 | 23101164-006 | | 10/26/2023 2:44:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-007 | 23101164-007 | | 10/26/2023 9:09:00 AM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-008 | 23101164-008 | | 10/26/2023 1:58:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-009 | 23101164-009 | | 10/26/2023 9:30:00 AM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-010 | 23101164-010 | | 10/26/2023 2:46:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-011 | 23101164-011 | | 10/26/2023 12:43:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-012 | 23101164-012 | | 10/26/2023 11:52:00 AM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-013 | 23101164-013 | | 10/26/2023 11:20:00 AM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-014 | 23101164-014 | | 10/26/2023 10:33:00 AM | 11/1/2023 11:45:00 AM | Non-Potable Water |
| 23110120-015 | 23101164-015 | | 10/26/2023 1:51:00 PM | 11/1/2023 11:45:00 AM | Non-Potable Water |

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*Website: http://www.settek.com*

# DATES REPORT

WO#: **23110120**

***22-Nov-23***

SC_362

**Client:** TEKLAB Inc,
**Project:** 23101164

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23110120-001A | 23101164-001 | 10/25/2023 12:35:00 PM | Non-Potable Water | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-002A | 23101164-002 | 10/26/2023 12:22:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-003A | 23101164-003 | 10/26/2023 1:05:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-004A | 23101164-004 | 10/26/2023 1:35:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-005A | 23101164-005 | 10/26/2023 2:06:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-006A | 23101164-006 | 10/26/2023 2:44:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-007A | 23101164-007 | 10/26/2023 9:09:00 AM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-008A | 23101164-008 | 10/26/2023 1:58:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |

Original

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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*Website: http://www.settek.com*

# DATES REPORT

WO#: **23110120**

***22-Nov-23***

SC_363

**Client:** TEKLAB Inc,
**Project:** 23101164

| Sample ID | Client Sample ID | Collection Date | Matrix | Test Name | Leachate Date | Prep Date | Analysis Date |
|---|---|---|---|---|---|---|---|
| 23110120-008A | 23101164-008 | 10/26/2023 1:58:00 PM | Non-Potable Water | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-009A | 23101164-009 | 10/26/2023 9:30:00 AM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-010A | 23101164-010 | 10/26/2023 2:46:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-011A | 23101164-011 | 10/26/2023 12:43:00 PM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-012A | 23101164-012 | 10/26/2023 11:52:00 AM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-013A | 23101164-013 | 10/26/2023 11:20:00 AM | | Combined Radium (EPA903+904) | | | 11/15/2023 7:54:51 AM |
| | | | | Radium-226 (EPA 903.0) | | 11/7/2023 1:38:00 PM | 11/13/2023 10:53:00 AM |
| | | | | Radium-228 (EPA 904.0) | | 11/7/2023 1:38:00 PM | 11/10/2023 3:00:00 PM |
| 23110120-014A | 23101164-014 | 10/26/2023 10:33:00 AM | | Combined Radium (EPA903+904) | | | 11/17/2023 7:27:41 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 |
| 23110120-015A | 23101164-015 | 10/26/2023 1:51:00 PM | | Combined Radium (EPA903+904) | | | 11/17/2023 7:27:41 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 |

Original

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 10/25/2023 12:35:00 PM

**Project:** 23101164

**Lab ID:** 23110120-001

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-001

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.09 | 2.00 | U | pCi/L | ± 0.750 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.19 | 1.00 | U | pCi/L | ± 0.0700 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.9 | 1.00 | J | pCi/L | ± 0.680 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 PM |

**Qualifiers:**

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

Original



SC_364

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 12:22:00 PM

**Project:** 23101164

**Lab ID:** 23110120-002
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-002

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.85 | 2.00 | U | pCi/L | ± 0.630 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.5 | 1.00 | U | pCi/L | ± 0.120 | 1 | 11/13/2023 10:53:00 A |
| Yield | 0.93 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.35 | 1.00 | U | pCi/L | ± 0.510 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 0.96 | | | | | 1 | 11/10/2023 3:00:00 PM |

**Qualifiers:**

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

Original



SC_365

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 10/26/2023 1:05:00 PM

**Project:** 23101164

**Lab ID:** 23110120-003

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-003

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.42 | 2.00 | U | pCi/L | ± 0.610 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.17 | 1.00 | U | pCi/L | ± 0.0700 | 1 | 11/13/2023 10:53:00 A |
| Yield | 0.99 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.25 | 1.00 | U | pCi/L | ± 0.540 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_366

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#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 1:35:00 PM

**Project:** 23101164

**Lab ID:** 23110120-004
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-004

| 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 | ± 0.670 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.17 | 1.00 | U | pCi/L | ± 0.0700 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.48 | 1.00 | U | pCi/L | ± 0.600 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_367

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#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 2:06:00 PM

**Project:** 23101164

**Lab ID:** 23110120-005
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-005

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.58 | 2.00 | U | pCi/L | ± 0.800 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.49 | 1.00 | U | pCi/L | ± 0.110 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 1.09 | 1.00 | | pCi/L | ± 0.690 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_368

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#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 2:44:00 PM

**Project:** 23101164

**Lab ID:** 23110120-006
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-006

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.26 | 2.00 | U | pCi/L | ± 0.760 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.15 | 1.00 | U | pCi/L | ± 0.0600 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 1.11 | 1.00 | | pCi/L | ± 0.700 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_369

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 9:09:00 AM

**Project:** 23101164

**Lab ID:** 23110120-007
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-007

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.52 | 2.00 | U | pCi/L | ± 0.570 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.15 | 1.00 | U | pCi/L | ± 0.0600 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.37 | 1.00 | U | pCi/L | ± 0.510 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_370

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 1:58:00 PM

**Project:** 23101164

**Lab ID:** 23110120-008
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-008

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.8 | 2.00 | U | pCi/L | ± 0.770 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.33 | 1.00 | U | pCi/L | ± 0.100 | 1 | 11/13/2023 10:53:00 A |
| Yield | 0.98 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.47 | 1.00 | U | pCi/L | ± 0.670 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_371

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 9:30:00 AM

**Project:** 23101164

**Lab ID:** 23110120-009
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-009

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 1.55 | 2.00 | U | pCi/L | ± 0.970 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.05 | 1.00 | U | pCi/L | ± 0.160 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 1.5 | 1.00 | | pCi/L | ± 0.810 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 0.99 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_372

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 2:46:00 PM

**Project:** 23101164

**Lab ID:** 23110120-010
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-010

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.64 | 2.00 | U | pCi/L | ± 0.740 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.64 | 1.00 | U | pCi/L | ± 0.130 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | -0.19 | 1.00 | U | pCi/L | ± 0.610 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 PM |

**Qualifiers:**

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

Original



SC_373

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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*Summit Environmental Technologies, Inc.*
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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 10/26/2023 12:43:00 PM

**Project:** 23101164

**Lab ID:** 23110120-011

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-011

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 3.14 | 2.00 | | pCi/L | ± 1.06 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.75 | 1.00 | J | pCi/L | ± 0.140 | 1 | 11/13/2023 10:53:00 A |
| Yield | 1 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 2.39 | 1.00 | | pCi/L | ± 0.920 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 1 | | | | | 1 | 11/10/2023 3:00:00 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 test code |

Original



SC_374

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 10/26/2023 11:52:00 AM

**Project:** 23101164

**Lab ID:** 23110120-012

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-012

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.52 | 2.00 | U | pCi/L | ± 0.720 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.1 | 1.00 | U | pCi/L | ± 0.0600 | 1 | 11/13/2023 10:53:00 A |
| Yield | 0.97 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.42 | 1.00 | U | pCi/L | ± 0.660 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 0.93 | | | | | 1 | 11/10/2023 3:00:00 PM |

**Qualifiers:**

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

Original



SC_375

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,

**Collection Date:** 10/26/2023 11:20:00 AM

**Project:** 23101164

**Lab ID:** 23110120-013

**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-013

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.91 | 2.00 | U | pCi/L | ± 0.780 | 1 | 11/15/2023 7:54:51 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.54 | 1.00 | U | pCi/L | ± 0.120 | 1 | 11/13/2023 10:53:00 A |
| Yield | 0.98 | | | | | 1 | 11/13/2023 10:53:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.37 | 1.00 | U | pCi/L | ± 0.660 | 1 | 11/10/2023 3:00:00 PM |
| Yield | 0.96 | | | | | 1 | 11/10/2023 3:00:00 PM |

**Qualifiers:**

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

Original



SC_376

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

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*Website: http://www.settek.com*

# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 10:33:00 AM

**Project:** 23101164

**Lab ID:** 23110120-014
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-014

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.69 | 2.00 | U | pCi/L | ± 0.510 | 1 | 11/17/2023 7:27:41 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.3 | 1.00 | U | pCi/L | ± 0.100 | 1 | 11/15/2023 10:35:00 A |
| Yield | 0.97 | | | | | 1 | 11/15/2023 10:35:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.39 | 1.00 | U | pCi/L | ± 0.410 | 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 test code |

Original



SC_377

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# Analytical Report

(consolidated)

WO#: **23110120**

Date Reported: **11/22/2023**

**CLIENT:** TEKLAB Inc,
**Collection Date:** 10/26/2023 1:51:00 PM

**Project:** 23101164

**Lab ID:** 23110120-015
**Matrix:** NON-POTABLE WATER

**Client Sample ID:** 23101164-015

| Analyses | Result | RL | Qual | Units | Uncertainty | DF | Date Analyzed |
|---|---|---|---|---|---|---|---|
| **RAD226/228** | | | | | **CALCULATION** | | Analyst: **CXS** |
| **COMBINED RADIUM (EPA903+904)** | | | | | | | |
| Radium-226/Radium-228 | 0.86 | 2.00 | U | pCi/L | ± 0.530 | 1 | 11/17/2023 7:27:41 AM |
| **RAD226/228** | | | | | **E903.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-226 (EPA 903.0)** | | | | | | | |
| Radium-226 | 0.29 | 1.00 | U | pCi/L | ± 0.0900 | 1 | 11/15/2023 10:35:00 A |
| Yield | 0.96 | | | | | 1 | 11/15/2023 10:35:00 A |
| **RAD226/228** | | | | | **E904.0** | **E903-904** | Analyst: **HDJ** |
| **RADIUM-228 (EPA 904.0)** | | | | | | | |
| Radium-228 | 0.57 | 1.00 | U | pCi/L | ± 0.440 | 1 | 11/14/2023 2:13:00 PM |
| Yield | 0.8 | | | | | 1 | 11/14/2023 2:13:00 PM |

**Qualifiers:**

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

Original



SC_378

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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_379

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

Sample ID: **23110093-002AMS** SampType: **MS** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/7/2023** RunNo: **174559**
Client ID: **BatchQC** Batch ID: **70288** TestNo: **E904.0** **E903-904** Analysis Date: **11/10/2023** SeqNo: **4721762**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 5.85 | 1.00 | 5.000 | 1.460 | 87.8 | 70 | 130 | | | | |
| Yield | 1.00 | | | 1.000 | 0 | | | | | | |

**Qualifiers:**

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

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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_380

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

| Sample ID: **MB-70288** | SampType: **MBLK** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174559** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **70288** | TestNo: **E904.0** | **E903-904** | Analysis Date: **11/10/2023** | SeqNo: **4721756** |

| 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-70288** | SampType: **LCS** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174559** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **70288** | TestNo: **E904.0** | **E903-904** | Analysis Date: **11/10/2023** | SeqNo: **4721757** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 4.82 | 1.00 | 5.000 | 0 | 96.4 | 70 | 130 | | | | QLR |
| Yield | 1.00 | | | 0 | 0 | | | | | | |

| Sample ID: **LCSD-70288** | SampType: **LCSD** | TestCode: **Radium-228_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174559** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **70288** | TestNo: **E904.0** | **E903-904** | Analysis Date: **11/10/2023** | SeqNo: **4721758** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 3.74 | 1.00 | 5.000 | 0 | 74.8 | 70 | 130 | 4.820 | 25.2 | 20 | R |
| Yield | 1.00 | | | 0 | 0 | | | 1.000 | 0 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | M | Manual Integration used to determine area 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_381

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

Sample ID: **RLCD-70288** SampType: **RLC** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/7/2023** RunNo: **174559**
Client ID: **BatchQC** Batch ID: **70288** TestNo: **E904.0** **E903-904** Analysis Date: **11/10/2023** SeqNo: **4721761**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | 1.10 | 1.00 | 1.000 | 0 | 110 | 50 | 150 | | | | |
| Yield | 0.970 | | | 0 | 0 | | | | | | |

Sample ID: **23110191-001ADUP** SampType: **DUP** TestCode: **Radium-228_** Units: **pCi/L** Prep Date: **11/7/2023** RunNo: **174559**
Client ID: **BatchQC** Batch ID: **70288** TestNo: **E904.0** **E903-904** Analysis Date: **11/10/2023** SeqNo: **4721783**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-228 | ND | 1.00 | | 0 | 0 | | | 0.7400 | 200 | 20 | RU |
| Yield | 1.00 | | | 0 | 0 | | | 1.000 | 0 | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | M | Manual Integration used to determine area 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_382

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

| Sample ID: **23110093-002AMS** | SampType: **MS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721797** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 5.76 | 1.00 | 5.000 | 0 | 115 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_383

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

| Sample ID: **MB-70288** | SampType: **MBLK** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721791** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | ND | 1.00 | | | | | | | | | U |
| Yield | 0.990 | | | | | | | | | | |

| Sample ID: **LCS-70288** | SampType: **LCS** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **LCSW** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721792** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.76 | 1.00 | 5.000 | 0 | 95.2 | 70 | 130 | | | | |

| Sample ID: **LCSD-70288** | SampType: **LCSD** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **LCSS02** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721793** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 4.50 | 1.00 | 5.000 | 0 | 90.0 | 70 | 130 | 4.760 | 5.62 | 20 | |

| Sample ID: **RLC-70288** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721795** |

| 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 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_384

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

| Sample ID: **RLC-70288** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721795** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.29 | 1.00 | 1.000 | 0 | 129 | 50 | 150 | | | | |

| Sample ID: **RLCD-70288** | SampType: **RLC** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721796** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Radium-226 | 1.18 | 1.00 | 1.000 | 0 | 118 | 50 | 150 | | | | |

| Sample ID: **23110190-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721816** |

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

| Sample ID: **23110191-001ADUP** | SampType: **DUP** | TestCode: **Radium-226_** | Units: **pCi/L** | Prep Date: **11/7/2023** | RunNo: **174560** |
|---|---|---|---|---|---|
| Client ID: **BatchQC** | Batch ID: **70288** | TestNo: **E903.0** | **E903-904** | Analysis Date: **11/13/2023** | SeqNo: **4721818** |

| 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 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**
***22-Nov-23***

SC_385

**Client:** TEKLAB Inc,
**Project:** 23101164 **BatchID:** **70288**

Sample ID: **23110191-001ADUP** SampType: **DUP** TestCode: **Radium-226_** Units: **pCi/L** Prep Date: **11/7/2023** RunNo: **174560**
Client ID: **BatchQC** Batch ID: **70288** TestNo: **E903.0** **E903-904** Analysis Date: **11/13/2023** SeqNo: **4721818**

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

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | M | Manual Integration used to determine area 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 spec |

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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_386

**Client:** TEKLAB Inc,
**Project:** 23101164 **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 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_387

**Client:** TEKLAB Inc,
**Project:** 23101164 **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 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 spec |



Original

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

# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_388

**Client:** TEKLAB Inc,
**Project:** 23101164 **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 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_389

**Client:** TEKLAB Inc,
**Project:** 23101164 **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 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 spec |



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# QC SUMMARY REPORT

WO#: **23110120**

***22-Nov-23***

SC_390

**Client:** TEKLAB Inc,
**Project:** 23101164 **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 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 spec |



Original

SC_391

Pg 1 of 2 23110120

# 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: 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# 23101164

Contact: Shelly Hennessy Email: shennessy
Requested Due Date: 20 business days or less Billing/PO: 35260
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 | cpm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23101164-001 | 10/25/23 1235 | HNO3 | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 25 |
| | 23101164-002 | 10/26/23 1222 | HNO3 | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 21 |
| | 23101164-003 | 10/26/23 1305 | ~~Unpres~~ HNO3 | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 31 |
| | 23101164-004 | 10/26/23 1335 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 31 |
| | 23101164-005 | 10/26/23 1406 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 18 |
| | 23101164-006 | 10/26/23 1444 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 31 |
| | 23101164-007 | 10/26/23 0909 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 18 |
| | 23101164-008 | 10/26/23 1358 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 18 |
| | 23101164-009 | 10/26/23 0930 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 31 |
| | 23101164-010 | 10/26/23 1446 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 27 |
| | 23101164-011 | 10/26/23 1243 | ~~Unpres~~ | Groundwater | ✔ | ✔ | ✔ | | | | | | | | | 1 | 15 |

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | Jackie Neisler | 11-1-23 / 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 / doors / Red Ey

17.6, 13.4, 13.5

Pg 2 of 2

# TEKLAB, INC. Chain of Custody

23110120

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

Project# 23101164

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.

Contact: Shelly Hennessy | Email: shennessy
Requested Due Date: 20 business days or less | Billing/PO: 35260 | Phone: 618 344 1004

State of Origin:

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 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23101164-012 10/26/23 | ~~10/25/23~~ 1152 | HNO3 | Groundwater | ✓ | ✓ | ✓ | | | | | | | | 11 | | |
| | 23101164-013 | 10/26/23 1120 | HNO3 | Groundwater | ✓ | ✓ | ✓ | | | | | | | | 15 | | |
| | 23101164-014 | 10/26/23 1033 | ~~Unpres~~ HNO3 | Groundwater | ✓ | ✓ | ✓ | | | | | | | | 18 | | |
| | 23101164-015 | 10/26/23 1351 | ~~Unpres~~ ↓ | Groundwater | ✓ | ✓ | ✓ | | | | | | | | 5 | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |
| | | | Unpres | Groundwater | | | | | | | | | | | | | |

CPM

| *Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | 11-1-23/1145 |

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SubCocRevA
3/2/2016

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# Sample Log-In Check List

Client Name: TEK-IL-62234-A Work Order Number: 23110120 RcptNo: 1

| | | | |
|---|---|---|---|
| Logged by: | Jacqueline Rasile | 11/1/2023 11:45:00 AM | Jackie Rasile |
| Completed By: | Jacqueline Rasile | 11/2/2023 11:10:56 AM | Jackie Rasile |
| Reviewed By: | Jennifer Woolf | 11/2/2023 1:45:17 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:

Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|---|---|---|---|---|---|---|
| 1 | 13.5 | 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: 23110120 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 | | | |