

Entergy Arkansas, LLC Independence Steam Electric Station Recycle Ponds

2024 Annual Groundwater Monitoring and Corrective Action Report

Prepared in Compliance with the EPA Final Rule for the Disposal of Coal Combustion Residuals Title 40 CFR Part 257

Prepared for:



Prepared by:



4545 Sherwood Common Blvd.
Building 3, Suite A
Baton Rouge, LA 70816

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EXECUTIVE SUMMARY

Entergy Arkansas, LLC (EAL), operated two recycle ponds as part of its process water system for bottom ash transport at the Independence Steam Electric Station (Plant) located near Newark, Arkansas. The recycle ponds provided intermediate storage of waters used in the transport of coal combustion residuals (CCR) generated from the combustion of coal at the Plant. The West Pond commenced closure as of August 2020 and the East Pond commenced closure as of February 2021. Closure by removal was completed in the second half of 2022. The certified closure of the recycle ponds CCR Unit was completed on October 2, 2023. Management of the CCRs at the recycle ponds is performed pursuant to national criteria established in Title 40 of the Code of Federal Regulations (40 CFR), Part 257 (CCR Rule), effective April 19, 2015 and subsequent revisions to the CCR Rule.

The ponds remained in detection monitoring prior to closure. Because the unit completed closure by removal, further detection monitoring is not required. Two consecutive monitoring events of Appendix IV constituents were conducted in 2024, specifically to confirm that there were no Appendix IV constituents detected at statistically significant levels above the GWPS and demonstrate that the ponds were closed in accordance with 40 CFR 257.102. The plant initially identified the following potential statistically significant increases (SSIs): (*list per comment above*). Alternate source demonstrations ("ASDs") were performed for the potential SSIs and are attached to this report. Each of the ASDs performed were successful, and the Plant updated the closure certification in November 2024 to incorporate the 2024 monitoring results. The recycle ponds CCR Unit remained closed by removal for the duration of 2024.

As indicated above, the potential SSIs identified during the monitoring reports are detailed in the table below.

| Pote | Potential SSIs 3 rd and 4 th Quarters 2024 Monitoring Event | | | | | | | | | | |
|---------|-----------------------------------------------------------------------------------|----------|-------------------------|--|--|--|--|--|--|--|--|
| Well ID | Date | Analyte | Confirmed SSI? (Yes/No) | | | | | | | | |
| RP-4 | 07/2024 | Barium | No | | | | | | | | |
| RP-6 | 07/2024 | Barium | No | | | | | | | | |
| RP-4 | 09/2024 | Barium | No | | | | | | | | |
| RP-5 | 09/2024 | Selenium | No | | | | | | | | |
| RP-6 | 09/2024 | Barium | No | | | | | | | | |



1. INTRODUCTION

Entergy Arkansas, LLC (EAL), operated two recycle ponds as part of its process water system for bottom ash transport at the Plant located near Newark, Arkansas (Lat: 35.67826 / Long: -91.408848). The recycle ponds provided intermediate storage of waters used in the transport of CCR generated from the combustion of coal at the Plant. The West Pond commenced closure as of August 2020 and the East Pond commenced closure in February 2021. Closure by removal was completed in the second half of 2022. The certified closure of the recycle ponds was completed on October 2, 2023. The recycle ponds are managed in accordance with the national criteria established in the CCR Rule. EAL installed a groundwater monitoring system at the recycle ponds CCR Unit that is subject to the groundwater monitoring and corrective action requirements provided under §257.90 through §257.98 of the CCR rule. In accordance with §257.90(e) of the CCR rule, EAL must prepare an annual report that provides information regarding the groundwater monitoring and corrective action program at the recycle ponds CCR Unit.



2. GROUNDWATER MONITORING SYSTEM

The recycle ponds CCR Unit groundwater monitoring system consists of 10 monitoring wells as shown on Figure 1 included in Appendix A. Pursuant to §257.91(f) of the CCR rule, a qualified Arkansas-registered professional engineer has certified the groundwater monitoring system, which was designed and constructed to meet the requirements of §257.91.



3. INSTALLED OR DECOMISSIONED WELLS DURING 2024

EAL did not install any new wells or decommission any existing wells in the certified groundwater monitoring system during 2024.



4. GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all monitoring data obtained under §257.90 through §257.98 during 2024 are provided in Appendix B and C. Monitoring data includes:

- Groundwater level measurements and groundwater flow characteristics;
- Summary of the number of groundwater samples that were collected for analysis for each background and downgradient well;
- Dates the samples were collected;
- Whether the sample was collected as part of detection or assessment monitoring; and
- Summary of CCR Rule constituent results.



5. STATUS SUMMARY OF THE 2024 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring was performed in accordance with the assessment monitoring requirements of §257.95. A summary of activities related to groundwater monitoring performed during 2024 is provided in the list below:

- Two supplemental monitoring events were performed during July and September/October of 2024 for analysis of Appendix IV parameters.
- Statistical evaluation of the monitoring data was performed in accordance with the statistical method certified by a qualified Arkansas-registered professional engineer. The certified statistical method has been posted to EAL's CCR Rule Compliance Data and Information website.
- Statistical evaluation of the monitoring data identified five statistically significant increases (SSIs) during the July and September/October monitoring events.
- EAL completed a successful alternate source demonstration (ASD) per §257.95(g)(3)(ii) in response to potential SSIs identified during the statistical evaluation of the data generated from the July and September/October 2024 supplemental monitoring events. As required by §257.95(g)(3)(ii), a copy of the ASD is included in Appendix D.
- The successful ASD provided in Appendix D demonstrates that none of the potential SSIs exceeded Groundwater Protection Standards (GWPS) at statistically significant level; in fact, the potential SSIs observed during the supplemental monitoring events were below the GWPS concentrations.
- No problems were encountered during 2024 with regard to the supplemental monitoring and corrective action system. Therefore, no actions were required to modify the system.
- The recycle ponds CCR Unit remained in closure with no requirement to initiate assessment of corrective measures for the duration of 2024.



6. PROJECTED ACTIVITIES FOR 2025

The certified closure of the recycle ponds CCR Unit was completed on October 2, 2023. No activities are planned for the program during 2025.



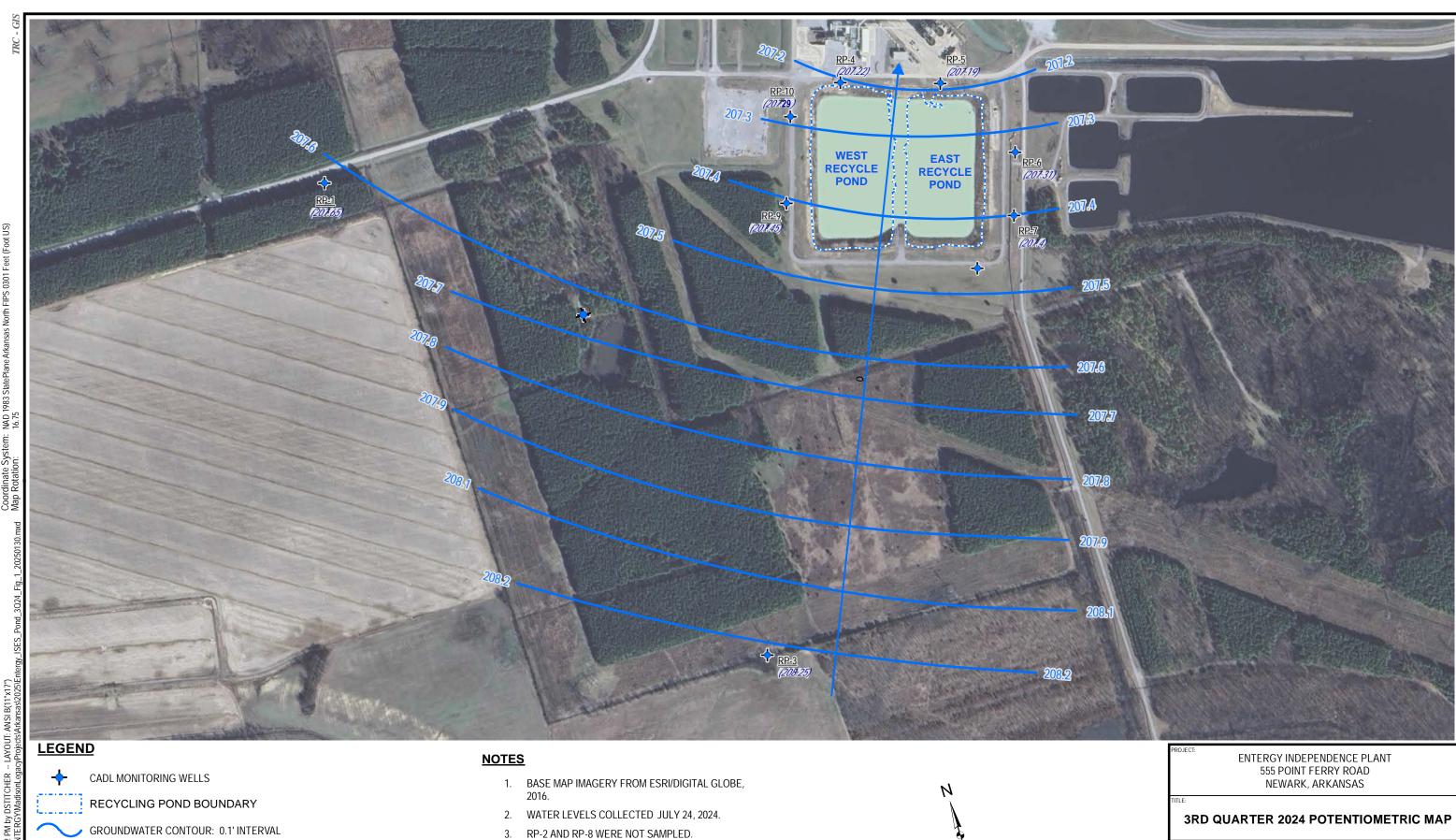
APPENDIX A WELL LOCATIONS



APPENDIX B GROUNDWATER LEVEL DATA



| | Water Level Measurements 2024 | | | | | | | | | | | |
|--------------|---------------------------------|------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------------|--|--|--|--|--|--|--|
| | TOC Elevation (ft NAVD88) | June 2 | 4, 2024 | September 30, 2024 | | | | | | | | |
| Well ID | | Depth to Groundwater (ft below MP) | Groundwater Elevation (ft NAVD88) | Depth to Groundwater (ft below MP) | Groundwater Elevation (ft NAVD88) | | | | | | | |
| RP-1 | P-1 238.95 31.30 | | 207.65 | 30.39 | 208.56 | | | | | | | |
| RP-3 | 234.37 | 26.12 | 208.25 | 26.14 | 208.23 | | | | | | | |
| RP-4 | 240.54 | 33.32 | 207.22 | 32.67 | 207.87 | | | | | | | |
| RP-5 | 241.97 | 34.78 | 207.19 | 34.13 | 207.84 | | | | | | | |
| RP-6 | 241.27 | 33.96 | 207.31 | 33.44 | 207.83 | | | | | | | |
| RP-7 | 241.04 | 33.64 | 207.4 | 33.18 | 207.86 | | | | | | | |
| RP-9 | 238.14 | 30.69 | 207.45 | 30.11 | 208.03 | | | | | | | |
| RP-10 242.99 | | 35.70 | 207.29 | 35.10 | 207.89 | | | | | | | |



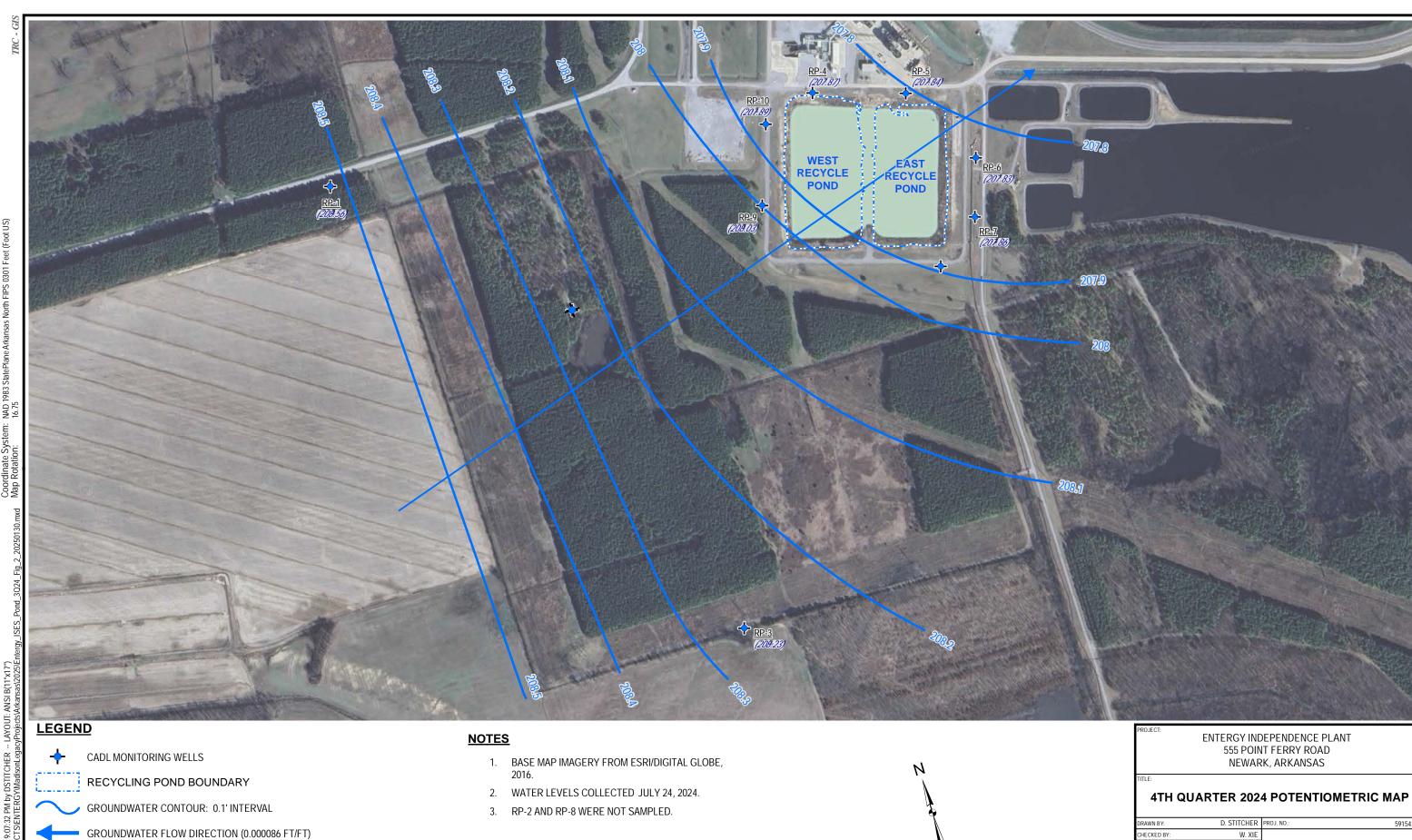
GROUNDWATER FLOW DIRECTION (0.000086 FT/FT)

1:5,200

| DRAWN BY: | D. STITCHER | PROJ. NO.: | 591543 |
|--------------|-------------|------------|--------|
| CHECKED BY: | W. XIE | | |
| APPROVED BY: | J. HOUSE | FIGURE 2.1 | |
| | | 1 | |

4545 SHERWOOD COMMON BLVD.
BUILDING 3, SUITE A
BATON ROUGE, LA 70816
225.216.4783

Entergy_ISES_Pond_3Q24_Fig_1_20250130.mxd



J. HOUSE JANUARY 2025

1:5,400

FIGURE 2.2

4545 SHERWOOD COMMON BLVD.
BUILDING 3, SUITE A
BATON ROUGE, LA 70816
225.216.4783

Entergy_ISES_Pond_3Q24_Fig_2_20250130.mxd



APPENDIX C GROUNDWATER QUALITY DATA



| | Sampling Schedule, Entergy Independence Recycle Ponds Network | | | | | | | | | |
|---------|---------------------------------------------------------------|---------------------------|-----------------------------|--|--|--|--|--|--|--|
| | Suppleme | ental Monitoring Sampling | Dates and Wells Sampled | | | | | | | |
| Well ID | 7/24/2024 | 9/30-10/1/2024 | Number of Samples Collected | | | | | | | |
| RP-1 | Х | Х | 2 | | | | | | | |
| RP-2 | 1 | 1 | 0 | | | | | | | |
| | | | · | | | | | | | |
| RP-3 | X | X | 2 | | | | | | | |
| RP-4 | X | X | 2 | | | | | | | |
| RP-5 | X | X | 2 | | | | | | | |
| RP-6 | X | Χ | 2 | | | | | | | |
| RP-7 | Χ | Χ | 2 | | | | | | | |
| RP-8 | 1 | 1 | 0 | | | | | | | |
| RP-9 | Χ | Χ | 2 | | | | | | | |
| RP-10 | Χ | Χ | 2 | | | | | | | |

Notes:

¹ RP-2 and RP-8 were not sampled during this monitoring period. Wells were inaccessible during this period and samples could not be collected.





| | Summary of Analytical Results – Third Quarter 2024 | | | | | | | | | | | | | | | |
|---------|----------------------------------------------------|-----------------|-------------------|------------------|---------------------|-------------------|--------------------|------------------|--------------------|----------------|-------------------|-------------------|----------------------|--------------------|--------------------|--------------|
| Well ID | Date | Antimony (mg/L) | Arsenic (mg/L) | Barium (mg/L) | Beryllium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Cobalt (mg/L) | Fluoride (mg/L) | Lead (mg/L) | Lithium (mg/L) | Mercury (mg/L) | Molybdenum (mg/L) | Selenium (mg/L) | Thallium (mg/L) | pH (s.u.) |
| RP-1 | 07/24/2024 | <0.005 | <0.0005 | 0.0499 | <0.0005 | <0.001 | <0.003 | <0.0005 | <0.150 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | 0.000757 | 6.05 |
| RP-3 | 07/24/2024 | <0.005 | <0.0005 | 0.032 | <0.0005 | <0.001 | <0.003 | <0.0005 | <0.150 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.26 |
| RP-4 | 07/24/2024 | <0.005 | <0.0005 | 0.0678 | <0.0005 | <0.001 | <0.003 | <0.0005 | 0.313 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.43 |
| RP-5 | 07/24/2024 | <0.005 | 0.000671 | 0.037 | <0.0005 | <0.001 | <0.003 | <0.0005 | <1.50 | <0.0005 | <0.0150 | <0.0002 | 0.00479 | <0.005 | <0.0005 | 6.58 |
| RP-6 | 07/24/2024 | <0.005 | <0.0005 | 0.0403 | <0.0005 | <0.001 | <0.003 | <0.0005 | 0.241 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.66 |
| RP-7 | 07/24/2024 | <0.005 | <0.0005 | 0.0291 | <0.0005 | <0.001 | <0.003 | <0.0005 | <1.50 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.64 |
| RP-9 | 07/24/2024 | <0.005 | <0.0005 | 0.0431 | <0.0005 | <0.001 | <0.003 | <0.0005 | <0.150 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.43 |
| RP-10 | 07/24/2024 | <0.005 | <0.0005 | 0.0588 | <0.0005 | <0.001 | <0.003 | <0.0005 | 0.187 | <0.0005 | <0.0150 | <0.0002 | <0.001 | <0.005 | <0.0005 | 6.56 |

| | Summary of Analytical Results – Fourth Quarter 2024 | | | | | | | | | | | | | | | |
|---------|-----------------------------------------------------|-----------------|-------------------|------------------|---------------------|-------------------|--------------------|------------------|--------------------|----------------|-------------------|-------------------|----------------------|--------------------|--------------------|--------------|
| Well ID | Date | Antimony (mg/L) | Arsenic (mg/L) | Barium (mg/L) | Beryllium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Cobalt (mg/L) | Fluoride (mg/L) | Lead (mg/L) | Lithium (mg/L) | Mercury (mg/L) | Molybdenum (mg/L) | Selenium (mg/L) | Thallium (mg/L) | pH (s.u.) |
| RP-1 | 10/01/2024 | <0.004 | <0.002 | 0.0433 | <0.002 | <0.001 | <0.002 | <0.002 | <0.150 | <0.002 | <0.015 | <0.0002 | <0.005 | <0.002 | <0.002 | 6.61 |
| RP-3 | 09/30/2024 | <0.004 | <0.002 | 0.0334 | <0.002 | <0.001 | <0.002 | <0.002 | 0.235 | <0.002 | <0.015 | <0.0002 | <0.005 | <0.002 | <0.002 | 6.74 |
| RP-4 | 09/30/2024 | <0.004 | <0.002 | 0.0704 | <0.002 | <0.001 | <0.002 | <0.002 | 0.19 | <0.002 | <0.015 | <0.0002 | <0.005 | 0.00258 | <0.002 | 6.54 |
| RP-5 | 09/30/2024 | <0.004 | <0.002 | 0.0318 | <0.002 | <0.001 | <0.002 | <0.002 | 0.256 | <0.002 | <0.015 | <0.0002 | <0.005 | 0.00488 | <0.002 | 6.95 |
| RP-6 | 09/30/2024 | <0.004 | <0.002 | 0.0502 | <0.002 | <0.001 | <0.002 | <0.002 | 0.221 | <0.002 | 0.0169 | <0.0002 | <0.005 | 0.0031 | <0.002 | 6.72 |
| RP-7 | 09/30/2024 | <0.004 | <0.002 | 0.0321 | <0.002 | <0.001 | <0.002 | <0.002 | 0.178 | <0.002 | <0.015 | <0.0002 | <0.005 | 0.00336 | <0.002 | 6.92 |
| RP-9 | 09/30/2024 | <0.004 | <0.002 | 0.0409 | <0.002 | <0.001 | <0.002 | <0.002 | <0.150 | <0.002 | <0.015 | <0.0002 | <0.005 | <0.002 | <0.002 | 6.56 |
| RP-10 | 09/30/2024 | <0.004 | <0.002 | 0.0621 | <0.002 | <0.001 | <0.002 | <0.002 | <0.150 | <0.002 | <0.015 | <0.0002 | <0.005 | <0.002 | <0.002 | 6.84 |



Pace Analytical® ANALYTICAL REPORT

August 07, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group: L1761233

Samples Received: 07/27/2024

Project Number: 1145-21-081

Description: Entergy - Independence

RECYCLE PONDS Site:

Report To: Jonathan Brown

219 Brown Lane

Bryant, AR 72022

















Entire Report Reviewed By: Mysalngsam

Katie Ingram

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received. Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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25

SAMPLE SUMMARY

| | | | Calla stad by | Callanta data kina | De estre de de | 4 - /ki |
|----------------------------------|-----------|----------|--------------------------|------------------------------------|----------------|----------------|
| DD 1 11761232 01 CW | | | Collected by JLC/BLS | Collected date/time 07/24/24 18:00 | 07/27/24 09 | |
| RP-1 L1761233-01 GW | | | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 14:24 | 07/30/24 14:24 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 14:58 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 21:53 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 21:56 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 14:54 | NA | Allen, TX |
| wettals (ici wis) by wethou 0020 | W02332330 | ' | 00/01/24 15:10 | 00/03/24 14.34 | IVA | Alleli, IX |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-3 L1761233-02 GW | | | JLC/BLS | 07/24/24 13:10 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 15:02 | 07/30/24 15:02 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:01 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 21:54 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:02 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:00 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-4 L1761233-03 GW | | | JLC/BLS | 07/24/24 16:00 | 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 15:15 | 07/30/24 15:15 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:08 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 21:56 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:08 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:07 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-5 L1761233-04 GW | | | JLC/BLS | 07/24/24 15:25 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Net Chemistry by Method 9056A | WG2332148 | 10 | 07/30/24 15:28 | 07/30/24 15:28 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:10 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 21:58 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:15 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:13 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | ite/time |
| RP-6 L1761233-05 GW | | | JLC/BLS | 07/24/24 14:50 | 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 15:41 | 07/30/24 15:41 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:12 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 22:03 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:33 | EJS | Allen, TX |
| Motals (ICDMS) by Mothed 6020 | WCCCCC | 1 | 00/01/24 12:10 | 00/05/24 15:10 | NIA | Allon TV |





















Metals (ICPMS) by Method 6020

WG2332538

08/01/24 13:10

08/05/24 15:19

NA

Allen, TX

SAMPLE SUMMARY

| | _ | | | | | |
|---------------------------------|-----------|----------|-----------------------|---------------------------------------|--------------------------|----------------|
| | | | Collected by | Collected date/time | | |
| RP-7 L1761233-06 GW | | | JLC/BLS | 07/24/24 14:05 | 07/27/24 09: | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Vet Chemistry by Method 9056A | WG2332148 | 10 | 07/30/24 15:54 | 07/30/24 15:54 | DLH | Mt. Juliet, Ti |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:15 | LAS | Mt. Juliet, T |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 22:05 | MAP | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:40 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:38 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-9 L1761233-07 GW | | | JLC/BLS | 07/24/24 17:10 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Vet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 16:07 | 07/30/24 16:07 | DLH | Mt. Juliet, TI |
| Mercury by Method 7470A | WG2331681 | 1 | 07/31/24 12:51 | 08/01/24 15:17 | LAS | Mt. Juliet, Ti |
| Metals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 22:06 | MAP | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:46 | EJS | Allen, TX |
| letals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:44 | NA | Allen, TX |
| RP-10 L1761233-08 GW | | | Collected by JLC/BLS | Collected date/time 07/24/24 16:40 | Received da 07/27/24 09: | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | . , | |
| Vet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 16:45 | 07/30/24 16:45 | DLH | Mt. Juliet, T |
| lercury by Method 7470A | WG2331682 | 1 | 07/31/24 12:45 | 08/01/24 11:48 | LAS | Mt. Juliet, T |
| letals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 22:08 | MAP | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:52 | EJS | Allen, TX |
| letals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:50 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | te/time |
| FIELD BLANK L1761233-09 GW | | | JLC/BLS | 07/26/24 09:55 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Vet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 16:58 | 07/30/24 16:58 | DLH | Mt. Juliet, TI |
| lercury by Method 7470A | WG2331682 | 1 | 07/31/24 12:45 | 08/01/24 11:50 | LAS | Mt. Juliet, Ti |
| letals (ICP) by Method 6010B | WG2333416 | 1 | 08/03/24 14:56 | 08/04/24 22:10 | MAP | Mt. Juliet, Ti |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 22:58 | EJS | Allen, TX |
| letals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 15:57 | NA | Allen, TX |
| | | | Collected by | Collected date/time | Received da | ite/time |
| DUPLICATE (RP-9) L1761233-10 GW | | | JLC/BLS | 07/24/24 17:10 | 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Vet Chemistry by Method 9056A | WG2332148 | 1 | 07/30/24 17:11 | 07/30/24 17:11 | DLH | Mt. Juliet, T |
| lercury by Method 7470A | WG2331682 | 1 | 07/31/24 12:45 | 08/01/24 11:53 | LAS | Mt. Juliet, T |
| Metals (ICP) by Method 6010B | WG2333673 | 1 | 08/01/24 08:34 | 08/01/24 16:37 | ZSA | Mt. Juliet, T |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/02/24 23:04 | EJS | Allen, TX |
| Metals (ICPMS) by Method 6020 | WG2332538 | 1 | 08/01/24 13:10 | 08/05/24 16:03 | NA | Allen, TX |
| | | | | | | |



















CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

















Katie Ingram Project Manager

Myra Ingram

PAGE: 5 of 28

Collected date/time: 07/24/24 18:00

| Wet Chemistry | by | Method | 9056A |
|---------------|----|--------|-------|
|---------------|----|--------|-------|

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|-----------|-------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 07/30/2024 14:24 | WG2332148 |



Ss

Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 14:58 | WG2331681 |





| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 21:53 | WG2333416 |





Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|----------|-----------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 14:54 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 14:54 | WG2332538 |
| Barium | 0.0499 | | 0.00300 | 1 | 08/05/2024 14:54 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 21:56 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 14:54 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 14:54 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 14:54 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 14:54 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 14:54 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 21:56 | WG2332538 |
| Thallium | 0.000757 | | 0.000500 | 1 | 08/05/2024 14:54 | WG2332538 |





Collected date/time: 07/24/24 13:10

L1761233

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 07/30/2024 15:02 | WG2332148 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:01 | WG2331681 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 21:54 | WG2333416 |



[°]Qc

Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|--------|-----------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:00 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:00 | WG2332538 |
| Barium | 0.0320 | | 0.00300 | 1 | 08/05/2024 15:00 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:02 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:00 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:00 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:00 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:00 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:00 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:02 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:00 | WG2332538 |







Collected date/time: 07/24/24 16:00

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.313 | | 0.150 | 1 | 07/30/2024 15:15 | WG2332148 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:08 | WG2331681 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 21:56 | WG2333416 |



Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|----------|----------|------------------|-------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:07 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:07 | WG2332538 |
| Barium | 0.0678 | | 0.00300 | 1 | 08/05/2024 15:07 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:08 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:07 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:07 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:07 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:07 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:07 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:08 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:07 | WG2332538 |



[°]Qc







L17

Wet Chemistry by Method 9056A

Collected date/time: 07/24/24 15:25

| | Result | Qualifier RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|---------------|----------|------------------|--------------|
| Analyte | mg/l | mg/l | | date / time | |
| Fluoride | ND | 1.50 | 10 | 07/30/2024 15:28 | WG2332148 |





L1761233-04 WG2332148: dilution due to high SO4



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|---------|--------|-----------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:10 | WG2331681 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|---------|--------|-----------|--------|----------|------------------|-----------|--|
| Analyte | mg/l | | mg/l | | date / time | | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 21:58 | WG2333416 | |



Metals (ICPMS) by Method 6020

| Metals (ICI MS) by Metalou 0020 | | | | | | | | | |
|---------------------------------|----------|-----------|----------|----------|------------------|--------------|--|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> | | | |
| Analyte | mg/l | | mg/l | | date / time | | | | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Arsenic | 0.000671 | В | 0.000500 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Barium | 0.0370 | | 0.00300 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:15 | WG2332538 | | | |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Molybdenum | 0.00479 | | 0.00100 | 1 | 08/05/2024 15:13 | WG2332538 | | | |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:15 | WG2332538 | | | |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:13 | WG2332538 | | | |





Collected date/time: 07/24/24 14:50

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|-----------|-------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.241 | | 0.150 | 1 | 07/30/2024 15:41 | WG2332148 |



| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:12 | WG2331681 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 22:03 | WG2333416 |



Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:19 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:19 | WG2332538 |
| Barium | 0.0403 | | 0.00300 | 1 | 08/05/2024 15:19 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:33 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:19 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:19 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:19 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:19 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:19 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:33 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:19 | WG2332538 |







L176123

Wet Chemistry by Method 9056A

Collected date/time: 07/24/24 14:05

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 1.50 | 10 | 07/30/2024 15:54 | WG2332148 |





L1761233-06 WG2332148: dilution due to high SO4



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|------------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:15 | <u>WG2331681</u> |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|---------|--------|-----------|--------|----------|------------------|-----------|--|
| Analyte | mg/l | | mg/l | | date / time | | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 22:05 | WG2333416 | |



GI

Metals (ICPMS) by Method 6020

| Metals (ICI Ma) by Method 6026 | | | | | | | | | |
|--------------------------------|--------|-----------|----------|----------|------------------|--------------|--|--|--|
| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> | | | |
| Analyte | mg/l | | mg/l | | date / time | | | | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Barium | 0.0291 | | 0.00300 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:40 | WG2332538 | | | |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:38 | WG2332538 | | | |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:40 | WG2332538 | | | |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:38 | WG2332538 | | | |



Collected date/time: 07/24/24 17:10

L1761233

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 07/30/2024 16:07 | WG2332148 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 15:17 | WG2331681 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 22:06 | WG2333416 |



Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|----------|----------|------------------|-------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:44 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:44 | WG2332538 |
| Barium | 0.0431 | | 0.00300 | 1 | 08/05/2024 15:44 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:46 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:44 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:44 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:44 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:44 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:44 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:46 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:44 | WG2332538 |







L176123

Wet Chemistry by Method 9056A

Collected date/time: 07/24/24 16:40

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.187 | | 0.150 | 1 | 07/30/2024 16:45 | WG2332148 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 11:48 | WG2331682 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 22:08 | WG2333416 |



Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|----------|----------|------------------|-----------|
| | | Qualifier | | Dilution | • | batch |
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:50 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:50 | WG2332538 |
| Barium | 0.0588 | | 0.00300 | 1 | 08/05/2024 15:50 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:52 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:50 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:50 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:50 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:50 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:50 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:52 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:50 | WG2332538 |







FIELD BLANK

SAMPLE RESULTS - 09

L1761233

Wet Chemistry by Method 9056A

Collected date/time: 07/26/24 09:55

| - | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> | |
|----------|--------|-----------|-------|----------|------------------|--------------|--|
| Analyte | mg/l | | mg/l | | date / time | | |
| Fluoride | 0.311 | | 0.150 | 1 | 07/30/2024 16:58 | WG2332148 | |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|---------|--------|-----------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 11:50 | WG2331682 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/04/2024 22:10 | WG2333416 |



Cn

Metals (ICPMS) by Method 6020

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|--------|-----------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 15:57 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 15:57 | WG2332538 |
| Barium | ND | | 0.00300 | 1 | 08/05/2024 15:57 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 22:58 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 15:57 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 15:57 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 15:57 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 15:57 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 15:57 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 22:58 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 15:57 | WG2332538 |







DUPLICATE (RP-9)

Collected date/time: 07/24/24 17:10

SAMPLE RESULTS - 10

1761233

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 07/30/2024 17:11 | WG2332148 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 08/01/2024 11:53 | WG2331682 |



³Ss

Cn

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 08/01/2024 16:37 | WG2333673 |



Metals (ICPMS) by Method 6020

| | Result | <u>Qualifier</u> | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|--------|------------------|----------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00500 | 1 | 08/05/2024 16:03 | WG2332538 |
| Arsenic | ND | | 0.000500 | 1 | 08/05/2024 16:03 | WG2332538 |
| Barium | 0.0402 | | 0.00300 | 1 | 08/05/2024 16:03 | WG2332538 |
| Beryllium | ND | | 0.000500 | 1 | 08/02/2024 23:04 | WG2332538 |
| Cadmium | ND | | 0.00100 | 1 | 08/05/2024 16:03 | WG2332538 |
| Chromium | ND | | 0.00300 | 1 | 08/05/2024 16:03 | WG2332538 |
| Cobalt | ND | | 0.000500 | 1 | 08/05/2024 16:03 | WG2332538 |
| Lead | ND | | 0.000500 | 1 | 08/05/2024 16:03 | WG2332538 |
| Molybdenum | ND | | 0.00100 | 1 | 08/05/2024 16:03 | WG2332538 |
| Selenium | ND | | 0.00500 | 1 | 08/02/2024 23:04 | WG2332538 |
| Thallium | ND | | 0.000500 | 1 | 08/05/2024 16:03 | WG2332538 |





Gl



WG2332148

QUALITY CONTROL SUMMARY

L1761233-01,02,03,04,05,06,07,08,09,10

Wet Chemistry by Method 9056A

Method Blank (MB)

(MB) R4101177-1 07/30/24 13:07

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------|-----------|--------------|--------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Fluoride | U | | 0.0640 | 0.150 |









(OS) L1761233-01 07/30/24 14:24 • (DUP) R4101177-6 07/30/24 14:37

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|-------------------|
| Analyte | mg/l | mg/l | | % | | % |
| Fluoride | ND | ND | 1 | 1.26 | | 15 |







(LCS) R4101177-2 07/30/24 13:20

| | Spike Amount L | LCS Result | LCS Rec. | Rec. Limits |
|----------|----------------|------------|----------|-------------|
| Analyte | mg/l n | mg/l | % | % |
| Fluoride | 8.00 7 | 7.98 | 99.7 | 80.0-120 |







L1761068-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761068-01 07/30/24 13:33 • (MS) R4101177-4 07/30/24 13:58 • (MSD) R4101177-5 07/30/24 14:11

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Fluoride | 8.00 | 0.284 | 8.24 | 8.37 | 99.5 | 101 | 1 | 80.0-120 | | | 1.54 | 15 |

L1761233-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1761233-01 07/30/24 14:24 • (MS) R4101177-7 07/30/24 14:50

WG2331681

QUALITY CONTROL SUMMARY

L1761233-01,02,03,04,05,06,07

Mercury by Method 7470A Method Blank (MB)

Method Blank (MB)

| (MB) R4101575-1 08/ | 01/24 12:54 | | | |
|---------------------|-------------|--------------|----------|----------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/l | | mg/l | mg/l |
| Mercury | U | | 0.000100 | 0.000200 |



Laboratory Control Sample (LCS)

(LCS) R4101575-2 08/01/24 12:57

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Mercury | 0.00300 | 0.00342 | 114 | 80.0-120 | |



⁶Qc

L1761227-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761227-12 08/01/24 12:59 • (MS) R4101575-4 08/01/24 13:09 • (MSD) R4101575-5 08/01/24 13:11

| , , | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|--|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % | |
| Mercury | 0.00300 | ND | 0.00312 | 0.00311 | 104 | 104 | 1 | 75 0-125 | | | 0.542 | 20 | |







WG2331682

QUALITY CONTROL SUMMARY

L1761233-08,09,10

Mercury by Method 7470A

Method Blank (MB)

Mercury

| (MB) R4101437-1 | 08/01/24 11:33 |
|-----------------|----------------|
|-----------------|----------------|

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|--------|--------|
| Analyte | mg/l | | mg/l | mg/l |







U

| (LCS) | R4101437-2 | 08/01/24 11:36 |
|-------|-------------|----------------|
| (LCO) | 114101457 2 | 00/01/24 11.50 |

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | |
|---------|--------------|------------|----------|-------------|---------------|--|
| Analyte | mg/l | mg/l | % | % | | |
| Mercury | 0.00300 | 0.00330 | 110 | 80.0-120 | | |



Ss

L1761330-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

0.000100

0.000200

(OS) L1761330-01 08/01/24 11:38 • (MS) R4101437-4 08/01/24 11:43 • (MSD) R4101437-5 08/01/24 11:45

| (, | | Original Result | · | MSD Result | | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|---------|-----------------|---------|------------|------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Mercury | 0.00300 | ND | 0.00272 | 0.00263 | 90.6 | 87.6 | 1 | 75.0-125 | | | 3.35 | 20 |









QUALITY CONTROL SUMMARY

L1761233-01,02,03,04,05,06,07,08,09

Metals (ICP) by Method 6010B

(MB) R4102610-1 08/04/24 21:21

Method Blank (MB)

| , , | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/I | | mg/l | mg/l |
| Lithium | U | | 0.00485 | 0.0150 |









(LCS) R4102610-2 08/04/24 21:23

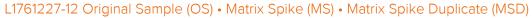
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Lithium | 1.00 | 0.979 | 97.9 | 80.0-120 | |



[†]Cn







(OS) L1761227-12 08/04/24 21:25 • (MS) R4102610-4 08/04/24 21:28 • (MSD) R4102610-5 08/04/24 21:30

| , , | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Lithium | 100 | ND | 0.987 | 102 | 98 7 | 102 | 1 | 75 0-125 | | | 2 92 | 20 |







QUALITY CONTROL SUMMARY

L1761233-10

Metals (ICP) by Method 6010B

(MB) R4101665-1 08/01/24 16:12

Method Blank (MB)

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Lithium | U | | 0.00485 | 0.0150 |









(LCS) R4101665-2 08/01/24 16:14

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Lithium | 1.00 | 0.905 | 90.5 | 80.0-120 | |

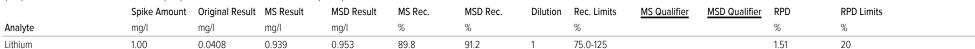








(OS) L1761255-03 08/01/24 16:15 • (MS) R4101665-4 08/01/24 16:19 • (MSD) R4101665-5 08/01/24 16:20











QUALITY CONTROL SUMMARY

L1761233-01,02,03,04,05,06,07,08,09,10

Method Blank (MB)

Metals (ICPMS) by Method 6020

| | · / | | | |
|---------------------|---------------|--------------|----------|----------|
| (MB) R4102226-1 08/ | 3/02/24 21:44 | | | |
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/l | | mg/l | mg/l |
| Beryllium | U | | 0.000130 | 0.000500 |
| Selenium | U | | 0.00152 | 0.00500 |

2_





[†]Cn

Method Blank (MB)

| (MB) R4102810-1 08/0 | 05/24 14:42 | | | |
|----------------------|-------------|--------------|-----------|----------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/l | | mg/l | mg/l |
| Antimony | U | | 0.00154 | 0.00500 |
| Arsenic | 0.000158 | <u>J</u> | 0.000140 | 0.000500 |
| Barium | U | | 0.000340 | 0.00300 |
| Cadmium | U | | 0.000220 | 0.00100 |
| Chromium | U | | 0.000470 | 0.00300 |
| Cobalt | 0.0000798 | <u>J</u> | 0.0000480 | 0.000500 |
| Lead | U | | 0.0000900 | 0.000500 |
| Molybdenum | U | | 0.000270 | 0.00100 |
| Thallium | U | | 0.0000800 | 0.000500 |

⁵Sr









Laboratory Control Sample (LCS)

| (I CS | R4102226-2 | 08/02/24 21:50 |
|-------|------------|----------------|
| | | |

| (/ | | | | | |
|-----------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | mg/l | mg/l | % | % | |
| Beryllium | 0.100 | 0.0960 | 96.0 | 80.0-120 | |
| Selenium | 0.100 | 0.0985 | 98.5 | 80.0-120 | |

Laboratory Control Sample (LCS)

| 1 | 1 CS) | R4102810-2 | 08/05/24 14:48 |
|---|-------|------------|----------------|
| | | | |

| (===)============================== | | | | | |
|-------------------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | mg/l | mg/l | % | % | |
| Antimony | 0.100 | 0.102 | 102 | 80.0-120 | |
| Arsenic | 0.100 | 0.0999 | 99.9 | 80.0-120 | |
| Barium | 0.100 | 0.100 | 100 | 80.0-120 | |
| Cadmium | 0.100 | 0.103 | 103 | 80.0-120 | |
| Chromium | 0.100 | 0.103 | 103 | 80.0-120 | |
| Cobalt | 0.100 | 0.102 | 102 | 80.0-120 | |
| Lead | 0.100 | 0.102 | 102 | 80.0-120 | |
| Molybdenum | 0.100 | 0.105 | 105 | 80.0-120 | |

QUALITY CONTROL SUMMARY

L1761233-01,02,03,04,05,06,07,08,09,10

Laboratory Control Sample (LCS)

(LCS) R4102810-2 08/05/24 14:48

Metals (ICPMS) by Method 6020

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|----------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Thallium | 0.100 | 0.0969 | 96.9 | 80.0-120 | |



















GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

| MDL | Method Detection Limit. |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ND | Not detected at the Reporting Limit (or MDL where applicable). |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| U | Not detected at the Reporting Limit (or MDL where applicable). |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

Qualifier Description

| В | The same analyte is found in the associated blank. |
|---|-------------------------------------------------------------------------------------|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |

¹Cp

















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| Alabama | 40660 | Nebraska | NE-OS-15-05 |
|-------------------------------|-------------|-----------------------------|------------------|
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey-NELAP | TN002 |
| California | 2932 | New Mexico ¹ | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina ¹ | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio-VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| lowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO00356 |
| Kentucky ^{1 6} | KY90010 | South Carolina | 84004002 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | Al30792 | Tennessee 1 4 | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 ⁵ | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA-Crypto | TN00003 | | |
| | | | |

Pace Analytical Services, LLC -Dallas 400 W. Bethany Drive Suite 190 Allen, TX 75013

| Arkansas | 88-0647 | Kansas | E10388 |
|-----------|---------|----------|------------------|
| Florida | E871118 | Texas | T104704232-23-39 |
| Iowa | 408 | Oklahoma | 8727 |
| Louisiana | 30686 | | |

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



















 $^{^{}st}$ Not all certifications held by the laboratory are applicable to the results reported in the attached report.

 $^{^{*}}$ Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

| Name/Address: | | 7.00.7.1 | Billing Info | ormation: | | 100 | | | | Analysis / C | ontainer / Preservative | | Chain of Custody | Page of | | |
|------------------------------------------------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|-------------------------------------------------------|-------------|-------|------------------------|----------------------------|---------------------------|-----------------------------------|-------------------------|----------------------------------|-----------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------|---------------|
| Alliance Technical Gro 219 Brown Lane Bryant, AR 72022 | 219 Brown Lane Bryant, AR 72022 | | | Accounts Payable 219 Brown Ln. Bryant, AR 72022 | | | | N | | | | | PEOPLE | RCE" ADVANCING SCIENCE | | |
| Report to: Jonathan Brown | | | Email To: Jonathan. | brown@alliancetg | .com;dbraun | nd@gb | ı | | HNO3 | HNO | | | 12065 Lebanon Rd Mo | | | |
| Project Description: Entergy - Independence | | | | u, AR | Please C | | | | -Add | -Add | | | Pace Terms and Conditi | ment and acceptance of th | | |
| Phone: 501-847-7077 | Client Proje | -21-0· | Lab Project # GBMCBAR-ENTERGYINE | | | DY | oPres | m | 1L-HDPE-Add HN03 | 1L-HDPE-Add-HN03 | | | SDG# L | 76177 | | |
| Collected by (print): | Site/Facility RECYCLE | | P.O. # | | | 1 | DPE-N | EHNO | | | | | | 0134 | | |
| Collected by (signature): Immediately Packed on Ice N Y | Same | (Lab MUST Be Day Five Day 5 Day Day 10 Day | Day y (Rad Only) | Quote # Date Result | | | # te Results Needed | | FLUORIDE 125mlHDPE-NoPres | s 250mIHDPE-HN03 | RA-226/228 & COMB. | RA-226/228 & COMB. | | | Acctnum: GBN Template: T25 Prelogin: P10: PM: 829 - Britti PB: | 6636 90893 |
| Sample ID | Comp/Gra | Matrix * | Depth | Date | Time | Cntrs | FLUOF | Metals 2 | RA-22 | RA-22 | | | Shipped Via: Fe | Sample # (lab only | | |
| RP-1 | 6 | GW | | 7.24.24 | 1800 | 4 | X | X | X | X | 100 | | 6.61 | 10 | | |
| 10-2- | | GW | | | | 10- | 1270 | - | | 16 | | | 0.01 | | | |
| RP-3 | 6 | GW | | 7.24.24 | 1310 | H | X | X | X | × | E 100 | | 6.74 | 02 | | |
| IP-4 | 6 | GW | | 7.24.24 | | 4 | X | × | × | × | | | 6.54 | 107 | | |
| P-5 | G | GW | | 7.24.24 | | 10.0 | × | x | X | × | | | 6.95 | -34 | | |
| RP-6 | 6 | GW | | 7.24.24 | | - | X | × | X | X | | | | 6.72-0 | | |
| RP-7 | 6 | GW | | 7.24.24 | | | X | X | × | × | | | 6.92 | -08 | | |
| RP-8 | | GW | | | 110- | | | | | | | | 0,10 | 00 | | |
| RP-9 | 6 | GW | | 7.24.24 | 1710 | 4 | X | × | × | × | EX | 100.00 | C.56 | OT | | |
| RP-10 | 6 | GW | | 7.24.24 | | - | × | Х | × | × | 507 BTH | | 6.84 | -38 | | |
| SS - Soil AIR - Air F - Filter SW - Groundwater B - Bioassay WW - WasteWater | Remarks: 5 | | | | | | 76 | all | 1 | pH | Temp | COC Seal COC Signa Bottles | ample Receipt Che Present/Intact: ed/Accurate: arrive intact: bottles used: | ecklist | | |
| OW - Drinking Water OT - Other | Samples returne UPS FedE | A. 70-00-00 | Tracking # | | | | | | | | | Sufficien | nt volume sent: If Applicabl Headspace: | e | | |
| Seeinquished by: (Signature) | Jacob College 7/26/24 1230 | | | | ture) | | | | Trip Blank R | Received: Yes / No HCL / MeoH TBR | Preservat | tion Correct/Cheen <0.5 mR/hr: | cked: Y N | | | |
| Relinquished by : (Signature) | | Date: | Time | Receive | ture) | | | Temp: °C Bottles Received: | | | | PH-10BDH4321 | te/Time | | | |
| | | | | | | | | | Hola. | | Condition: NCF / OK | | | | | |

| Name/Address: | | Billing Information: | | | | | | | Analysis | / Contains | or / Preservative | | Chain of Custody | Page of | | |
|-------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------|-------------------------------------------------------|------------------------|-----------------|-------------|---------------------------|-----------------------|------------------|----------------------------------------------|-------------------|---------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------|--|
| | lliance Technical Group - Bryant, AR 9 Brown Lane | | | | | Pres Chk | | | | | | | | Pa | RCC* ADVANCING SCIENCE | |
| Report to: Jonathan Brown | | | Email To: Jonathan.brown@alliancetg.com;dbraund@gb | | | | | | 1L-HDPE-Add HN03 | HDPE-Add-HNO3 | | | | MT JU 12065 Lebanon Rd Moi Submitting a sample via | | |
| Project Description: Entergy - Independence | | City/State Collected: | New | iru, Ak | Please C | ircle: | | | -Add | Add | | | | | ment and acceptance of the ons found at: | |
| Phone: 501-847-7077 | Client Project | | | Lab Project # GBMCBAR- | ENTERGYIN | DY | Pres | | HDPE | HDPE | | | | SDG# | X61273 | |
| Collected by (print): | Site/Facility I | | | P.O. # | | | FLUORIDE 125mlHDPE-NoPres | Metals 250mlHDPE-HN03 | COMB. 1L- | COMB. 1L- | | | | Table # | //CBAR | |
| Collected by (signature): | Same D | Lab MUST Be | | | | | 125mlF | MIHDP | | oŏ. | | | | Template: T25 | 90893 | |
| Immediately Packed on Ice N Y | Two Da | y 10 D | ay (Rad Only) | Date Resu | its Needed | No. of | RIDE | ls 250 | RA-226/228 & | RA-226/228 | | | | PM: 829 - Britte PB: | | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cntrs | FLUO | Meta | RA-2 | RA-23 | | | | Shipped Via: Fe | Sample # (lab only) | |
| FIELD BLANK | 6 | GW | | 7.26. | 14 0955 | 4 | X | X | X | X | | 18.41 | | - | -01 | |
| DUPLICATE (RP-9) | G | GW | | 7.24.2 | | H | X | X | X | X | | | | 6.56 | -10 | |
| | | GW | | | | | | | | | | | | | | |
| | ~ | | | - | | + | | | | | | | | | | |
| | | | | | | | | | | | | 17-17 | | | | |
| | | | | | | - | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | Carrie | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks: | | | | | | | | | | | Temp | Sample Receipt Checklist COC Seal Present/Intact: NP Y N N N N N N N N N N N N N N N N N | | | |
| DW - Drinking Water OT - Other Samples returned via:UPSFedExCourier | | | | Tracl | king# | | | (C | | | | 1 | Sufficie VOA Zero | ent volume sent: If Applicable Headspace: | e Y N | |
| Relinquished by : (Signature) Date: | | | Time | | ived by: (Signa | ture) | -11 | | | Trip Blan | k Receive | d: Yes / No HCL / MeoH | | ation Correct/Che een <0.5 mR/hr: | cked: Y N | |
| Relinquished by: (Signature) 7/26/24 1230 Time: Received by: (Signature) | | | ture) | | | | Temp: | °C | TBR | If preservation required by Login: Date/Time | | | | | | |
| Relinquished by : (Signature) | D | ate: | Time | e: Rece | | | | Date: | 7.74 | Time: 096 | Hold: | | Condition: NCF / OK | | | |

Appendix IV

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226/228

C1361222

| Temperature | 2.2 to 3 - 25 EDA9 | 2.245224 EP45 | 3.5 to.3-3.8 epta | 3.4 6.3-2.7 EDMS | 1.2 to.3 > 1.8 eths | 1.1 to 3 = 1.4 EDAG | | | | | | | | |
|------------------|--------------------|---------------|-------------------|------------------|---------------------|---------------------|---|---|--|-----|------------------|-----|--|--|
| | | | | | | | | 4 | | | , 2 2 | 3.5 | | |
| Tracking Numbers | 4524 4445-L150h | 40475444 3937 | 362£0£501h04 | 404/0470 7800 | 1525 H5H5-4495 | 95244454494 | , | , | | 100 | | | | |

Dengal

7.27.14 Date



Pace Analytical® ANALYTICAL REPORT

August 07, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group: L1761235

Samples Received: 07/27/2024

Project Number: 1145-21-081

Description: Entergy - Independence

Site: **RECYCLE PONDS**

Report To: Jonathan Brown

219 Brown Lane

Bryant, AR 72022

















Entire Report Reviewed By: Mysalngsam

Katie Ingram

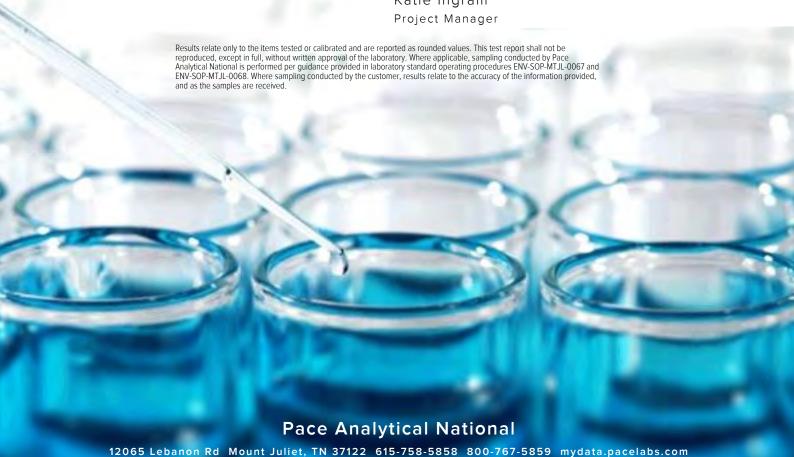


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SAMPLE SUMMARY

| RP-1 L1761235-01 Non-Potable Water | | | Collected by JLC/BLS | Collected date/time 07/24/24 18:00 | Received da 07/27/24 09 | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|----------------------|---------------------------------------|-------------------------|----------------|
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| method | Buten | Dilution | date/time | date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/04/24 16:43 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/04/24 16:43 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 10:58 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | ite/time |
| RP-3 L1761235-02 Non-Potable Water | | | JLC/BLS | 07/24/24 13:10 | 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| wellou | Daten | Dilution | date/time | date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, TN |
| action in the state of the stat | | | 07/00/21 12.02 | 00,01,21.12.10 | 2.1.0 | ma samet, m |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-4 L1761235-03 Non-Potable Water | | | JLC/BLS | 07/24/24 16:00 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, Th |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, Ti |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, Ti |
| | | | | | | |
| | | | Collected by | Collected date/time | | |
| RP-5 L1761235-04 Non-Potable Water | | | JLC/BLS | 07/24/24 15:25 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, TI |
| | | | Collected by | Collected date/time | Peceived da | ta/tima |
| RP-6 L1761235-05 Non-Potable Water | | | JLC/BLS | 07/24/24 14:50 | 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, Ti |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, Ti |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, TN |
| | | | | | | , |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-7 L1761235-06 Non-Potable Water | | | JLC/BLS | 07/24/24 14:05 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| Padiachamistry by Mathad 204/0220 | WC2222400 | 1 | date/time | date/time | עעע | M+ luliat TI |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/04/24 16:43 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/04/24 16:43 | DDD | Mt. Juliet, TN |
| Nodia abamiata, by Mathad CM7EOOD- D M | 14/02/22/24/5 | 4 | 07/00/04/050 | 00/04/24 42:40 | 700 | |





















Radiochemistry by Method SM7500Ra B M

WG2332445

1

07/30/24 12:52

08/01/24 12:16

ZRG

Mt. Juliet, TN

SAMPLE SUMMARY

| | | | Collected by | Collected date/time | Received da | te/time |
|---------------------------------------------|-----------|----------|--------------------------|---------------------------------------|-------------------------|----------------|
| RP-9 L1761235-07 Non-Potable Water | | | JLC/BLS | 07/24/24 17:10 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-10 L1761235-08 Non-Potable Water | | | JLC/BLS | 07/24/24 16:40 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2332445 | 1 | 07/30/24 12:52 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2332445 | 1 | 07/30/24 12:52 | 08/01/24 12:16 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| FIELD BLANK L1761235-09 Non-Potable Water | | | JLC/BLS | 07/26/24 09:55 | 07/27/24 09 | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2333206 | 1 | 07/31/24 08:45 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2333206 | 1 | 07/31/24 08:45 | 08/01/24 19:17 | ZRG | Mt. Juliet, TN |
| DUPLICATE (RP-9) L1761235-10 Non-Potable Wa | tor | | Collected by JLC/BLS | Collected date/time 07/24/24 17:10 | Received da 07/27/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2332189 | 1 | 07/31/24 14:51 | 08/05/24 13:45 | DDD | Mt. Juliet, TN |

1

1

07/31/24 08:45

07/31/24 08:45

08/05/24 13:45

08/01/24 19:17

DDD

ZRG

Mt. Juliet, TN

Mt. Juliet, TN

WG2333206

WG2333206





















Radiochemistry by Method Calculation

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Myralngram

Katie Ingram Project Manager



















PAGE:

5 of 24

Collected date/time: 07/24/24 18:00

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.674 | <u>J</u> | 0.426 | 0.535 | 0.774 | 0.405 | 08/04/2024 16:43 | WG2332189 |
| (T) Barium | 90.1 | | | | | 30.0-143 | 08/04/2024 16:43 | WG2332189 |
| (T) Yttrium | 90.4 | | | | | 30.0-136 | 08/04/2024 16:43 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/I | date / time | |
| Combined Radium | 0.799 | <u>J</u> | 0.454 | 0.801 | 08/04/2024 16:43 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.124 | <u>J</u> | 0.156 | 0.293 | 0.205 | 0.169 | 08/01/2024 10:58 | WG2332445 |
| (T) Barium-133 | 78.4 | | | | | 30.0-143 | 08/01/2024 10:58 | WG2332445 |









Collected date/time: 07/24/24 13:10

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|---------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.0315 | U | 0.244 | 0.343 | 0.464 | 0.242 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 112 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 109 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.777 | | 0.461 | 0.572 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|-------------|
| Analyte | pCi/l | | + / - | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.777 | | 0.391 | 0.514 | 0.335 | 0.232 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 88.8 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |











Collected date/time: 07/24/24 16:00

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/I | pCi/l | date / time | |
| RADIUM-228 | -0.417 | U | 0.238 | 0.338 | 0.467 | 0.244 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 97.8 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 106 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.0302 | U | 0.330 | 0.636 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.0302 | U | 0.229 | 0.385 | 0.432 | 0.292 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 76.1 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









Collected date/time: 07/24/24 15:25

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.531 | | 0.191 | 0.292 | 0.346 | 0.184 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 101 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 96.1 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.531 | <u>J</u> | 0.280 | 0.557 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|---------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | +/- | pCi/I | pCi/l | date / time | |
| RADIUM-226 | -0.0784 | <u>U</u> | 0.205 | 0.340 | 0.436 | 0.284 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 87.9 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









Collected date/time: 07/24/24 14:50

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.788 | | 0.378 | 0.542 | 0.696 | 0.370 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 47.4 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 99.8 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/I | date / time | |
| Combined Radium | 1.63 | | 0.524 | 0.735 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.843 | | 0.363 | 0.489 | 0.236 | 0.175 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 92.0 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









Collected date/time: 07/24/24 14:05

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.282 | <u>J</u> | 0.263 | 0.367 | 0.483 | 0.253 | 08/04/2024 16:43 | WG2332189 |
| (T) Barium | 123 | | | | | 30.0-143 | 08/04/2024 16:43 | WG2332189 |
| (T) Yttrium | 91.5 | | | | | 30.0-136 | 08/04/2024 16:43 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.299 | J | 0.307 | 0.580 | 08/04/2024 16:43 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.0170 | <u>U</u> | 0.158 | 0.294 | 0.322 | 0.225 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 88.1 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









Collected date/time: 07/24/24 17:10

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.495 | <u>J</u> | 0.326 | 0.437 | 0.606 | 0.321 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 115 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 81.2 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.840 | | 0.422 | 0.680 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | +/- | pCi/I | pCi/l | date / time | |
| RADIUM-226 | 0.345 | | 0.268 | 0.395 | 0.309 | 0.209 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 90.5 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









Collected date/time: 07/24/24 16:40

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|-------------|---------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/I | pCi/l | date / time | |
| RADIUM-228 | -0.0221 | U | 0.268 | 0.368 | 0.508 | 0.265 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 116 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 96.4 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.173 | U | 0.336 | 0.580 | 08/05/2024 13:45 | WG2332445 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/I | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.173 | <u>J</u> | 0.203 | 0.338 | 0.279 | 0.192 | 08/01/2024 12:16 | WG2332445 |
| (T) Barium-133 | 85.1 | | | | | 30.0-143 | 08/01/2024 12:16 | WG2332445 |









FIELD BLANK

SAMPLE RESULTS - 09

Collected date/time: 07/26/24 09:55

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.119 | <u>U</u> | 0.220 | 0.321 | 0.425 | 0.223 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 113 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 97.5 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.160 | U | 0.271 | 0.463 | 08/05/2024 13:45 | WG2333206 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.160 | <u>J</u> | 0.158 | 0.279 | 0.184 | 0.144 | 08/01/2024 19:17 | WG2333206 |
| (T) Barium-133 | 95.4 | | | | | 30.0-143 | 08/01/2024 19:17 | WG2333206 |









DUPLICATE (RP-9)

Collected date/time: 07/24/24 17:10

SAMPLE RESULTS - 10

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | + / - | pCi/I | pCi/l | date / time | |
| RADIUM-228 | 0.685 | | 0.237 | 0.336 | 0.428 | 0.224 | 08/05/2024 13:45 | WG2332189 |
| (T) Barium | 107 | | | | | 30.0-143 | 08/05/2024 13:45 | WG2332189 |
| (T) Yttrium | 98.9 | | | | | 30.0-136 | 08/05/2024 13:45 | WG2332189 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/I | date / time | |
| Combined Radium | 3.06 | | 0.618 | 0.480 | 08/05/2024 13:45 | WG2333206 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 2.38 | | 0.571 | 0.693 | 0.217 | 0.161 | 08/01/2024 19:17 | WG2333206 |
| (T) Barium-133 | 95.6 | | | | | 30.0-143 | 08/01/2024 19:17 | WG2333206 |









QUALITY CONTROL SUMMARY

L1761235-01,02,03,04,05,06,07,08,09,10

Method Blank (MB)

(T) Yttrium

(MB) R4103399-1 08/04/24 16:43

Radiochemistry by Method 904/9320

| | MB Result | MB Qualifier | MB 2 sigma CE | MB MDA | MB Lc |
|------------|-----------|--------------|---------------|--------|-------|
| Analyte | pCi/l | | + / - | pCi/l | pCi/l |
| Radium-228 | 0.251 | <u>J</u> | 0.176 | 0.321 | 0.169 |
| (T) Barium | 107 | | 107 | | |

82.3







⁴Cn

L1761235-07 Original Sample (OS) • Duplicate (DUP)

82.3

(OS) L1761235-07 08/05/24 13:45 • (DUP) R4103399-5 08/04/24 16:43

| (00) 21/01200 0/ 00 | (00/2 : .00 (| 20. / | 0 00,0 .,2 | 0.10 | | | | | | | | | |
|---------------------|-----------------|------------------------|--------------|-------------|------------|-------------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| | Original Result | Original 2 sigma CE | Original MDA | Original Lc | DUP Result | DUP 2 sigma CE | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
| Analyte | pCi/l | +/- | pCi/l | pCi/I | pCi/l | +/- | pCi/l | pCi/l | % | | | % | |
| Radium-228 | 0.495 | 0.326 | 0.606 | 0.321 | -0.0140 | 0.336 | 0.626 | 0.327 | 200 | 1.09 | <u>U</u> | 20 | 3 |
| (T) Barium | 115 | | | | 110 | 110 | | | | | | | |
| (T) Yttrium | 81.2 | | | | 97.4 | 97.4 | | | | | | | |









Laboratory Control Sample (LCS)

(LCS) R4103399-2 08/04/24 16:43

| ' | | | | | |
|-------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 4.58 | 91.6 | 80.0-120 | |
| (T) Barium | | | 85.9 | | |
| (T) Yttrium | | | 90.4 | | |



⁹Sc

L1761235-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761235-01 08/04/24 16:43 • (MS) R4103399-3 08/04/24 16:43 • (MSD) R4103399-4 08/04/24 16:43

| (00) [1/01200 01 00/0 | 5-1/2-1 1013 · (IVIS) I | (+1000000000000000000000000000000000000 | 3/04/24 10.43 | · (IVIOD) IX-1000 | 333 + 00/04/ | 2+ 10.+5 | | | | | | | |
|-----------------------|-------------------------|-----------------------------------------|---------------|-------------------|--------------|----------|----------|-------------|--------------|---------------|------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
| Analyte | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-228 | 16.7 | 0.674 | 14.8 | 16.5 | 84.4 | 94.5 | 1 | 70.0-130 | | | 10.8 | | 20 |
| (T) Barium | | 90.1 | | | 88.0 | 108 | | | | | | | |
| (T) Yttrium | | 90.4 | | | 95.7 | 95.7 | | | | | | | |

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1761235-01,02,03,04,05,06,07,08

Method Blank (MB)

| (MB) R4103049-2 | 08/01/24 13:54 | |
|-----------------|----------------|--|
| | | |

| | MB Result | MB Qualifier | MB 2 sigma CE | MB MDA | MB Lc |
|----------------|-----------|--------------|---------------|--------|--------|
| Analyte | pCi/l | | +/- | pCi/l | pCi/l |
| Radium-226 | 0.139 | | 0.0849 | 0.0765 | 0.0557 |
| (T) Barium-133 | 84.3 | | 84.3 | | |







L1761235-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1761235-08 08/01/24 12:16 • (DUP) R4103049-1 08/01/24 10:58

| (00) 2.7 0.200 00 00 | Original Result | • | Original MDA | | DUP Result | DUP 2 sigma | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|----------------------|-----------------|-------|--------------|-------|------------|-------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| Analyte | pCi/l | + / - | pCi/l | pCi/l | pCi/l | + / - | pCi/l | pCi/l | % | | | % | |
| Radium-226 | 0.173 | 0.203 | 0.279 | 0.192 | 0.310 | 0.224 | 0.214 | 0.162 | 57.0 | 0.455 | | 20 | 3 |
| (T) Rarium-133 | 85.1 | | | | 90.5 | 90.5 | | | | | | | |









Laboratory Control Sample (LCS)

(LCS) R4103049-3 08/01/24 13:54

| (200) | 0.72 1 10.0 1 | | | | |
|----------------|---------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-226 | 5.00 | 5.03 | 101 | 75.0-125 | |
| (T) Barium-133 | | | 59.3 | | |





L1758818-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1758818-03 08/05/24 23:32 • (MS) R4103049-4 08/05/24 23:32 • (MSD) R4103049-5 08/05/24 23:32

| , , | Spike Amount | Original Result | | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
|----------------|--------------|-----------------|-------|------------|---------|----------|----------|-------------|--------------|---------------|------|--------|------------|
| Analyte | pCi/l | pCi/l | pCi/l | pCi/I | % | % | | % | | | % | | % |
| Radium-226 | 20.0 | 0.439 | 18.6 | 17.8 | 90.6 | 86.8 | 1 | 75.0-125 | | | 4.18 | | 20 |
| (T) Barium-133 | | 52.8 | | | 97.5 | 74.5 | | | | | | | |

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1761235-09,10

Method Blank (MB)

| (MB) R4102715-1 0 | 8/01/24 19:17 |
|-------------------|---------------|
|-------------------|---------------|

| | MB Result | MB Qualifier | MB 2 sigma CE | MB MDA | MB Lc |
|----------------|-----------|--------------|---------------|--------|--------|
| Analyte | pCi/I | | + / - | pCi/l | pCi/I |
| Radium-226 | 0.0295 | <u>J</u> | 0.0471 | 0.0733 | 0.0525 |
| (T) Barium-133 | 74.6 | | 74.6 | | |







[†]Cn

L1761598-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1761598-12 08/01/24 23:41 • (DUP) R4102715-5 08/01/24 19:17

| (00) 21/01000 12 | Original Result | , | Original MDA | | DUP Result | DUP 2 sigma CE | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|------------------|-----------------|-------|--------------|-------|------------|-------------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| Analyte | pCi/l | + / - | pCi/l | pCi/l | pCi/l | + / - | pCi/l | pCi/l | % | | | % | |
| Radium-226 | 0.379 | 0.256 | 0.198 | 0.164 | 0.237 | 0.221 | 0.228 | 0.188 | 45.9 | 0.418 | | 20 | 3 |
| (T) Barium-133 | 79.2 | | | | 69.2 | 69.2 | | | | | | | |









Laboratory Control Sample (LCS)

(LCS) R4102715-2 08/01/24 19:17

| (200) 111027102 007 | 0.720 | | | | |
|---------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-226 | 5.00 | 4.98 | 99.5 | 75.0-125 | |
| (T) Barium-133 | | | 77.2 | | |





L1761598-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761598-02 08/01/24 19:17 • (MS) R4102715-3 08/01/24 19:17 • (MSD) R4102715-4 08/01/24 19:17

| (, | | Original Result | | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
|----------------|-------|-----------------|-------|------------|---------|----------|----------|-------------|--------------|---------------|-------|--------|------------|
| Analyte | pCi/I | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-226 | 20.0 | 0.487 | 19.9 | 19.8 | 96.9 | 96.4 | 1 | 75.0-125 | | | 0.505 | | 20 |
| (T) Barium-133 | | 80.5 | | | 69.5 | 73.4 | | | | | | | |

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

| MDA | Minimum Detectable Activity. |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rec. | Recovery. |
| RER | Replicate Error Ratio. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (T) | Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation. |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the resul reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |
| | |

Qualifier Description

| | and the second s |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| U | Below Detectable Limits: Indicates that the analyte was not detected. |



















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| Alabama | 40660 | Nebraska | NE-OS-15-05 |
|-------------------------------|-------------|-----------------------------|------------------|
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey-NELAP | TN002 |
| California | 2932 | New Mexico ¹ | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina ¹ | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio-VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| lowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO00356 |
| Kentucky 16 | KY90010 | South Carolina | 84004002 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | Al30792 | Tennessee 1 4 | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 ⁵ | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| | | | |



^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.

TN00003

EPA-Crypto



















^{*} Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

| Name/Address: | Billing Information: | | | | | | Δι | nalusis / Cr | nntainer / | Preserv | ative | Chain of Custody Page of | | | | | |
|-------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------|-------------------------|--------------------------------|--------------------|-------------|---------------------------|-----------------------|------------------|----------------------------|-------|--------------------------|---------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------|-----------------------------------------|--|
| | ryant, AR 72022 | | | | | Pres Chk | | 2 | 8 | 8 | | | | | | CC | |
| Report to: Jonathan Brown | | | Email To: Jonathan.b | prown@alliancetg. | com;dbraunc | l@gb | | | HNO | ONHE | | | | | MT JUL 12065 Lebanon Rd Moun Submitting a sample via th constitutes acknowledgm | Juliet, TN 37122 is chain of custody | |
| Project Description: Entergy - Independence | | City/State Collected: | Vevar | u Ar | Please Ci PT MT | | | | Ade | Ade | | | 9 | | Pace Terms and Condition https://info.pacelabs.com terms.odf | s found at: /hubls/pas-standard- | |
| Phone: 501-847-7077 | Client Project | 1 | | Lab Project # GBMCBAR-EN | NTERGYINI | ΟY | FLUORIDE 125mlHDPE-NoPres | 23 | 1L-HDPE-Add HN03 | 1L-HDPE-Add-HNO3 | | | | | | 134 | |
| Collected by (print): | Site/Facility RECYCLE I | ID# | | P.O.# | | | | E-HN | COMB. 1 | COMB. 1 | | | | NEWS NEWS | Acctnum: GBM | CBAR | |
| Collected by (signature): Immediately Packed on Ice N Y | Same | Day 5 Day | | d Only) Date Results Needed | | | | Metals 250mlHDPE+HN03 | RA-226/228 & CO | RA-226/228 & CC | | | | | Template: T256 Prelogin: P109 PM: 829 - Brittn P8: Shipped Via: Fe | 0893 ie L Boyd | |
| Sample ID | Sample ID Comp/Grab Matrix | | | Date | Time | Cntrs | FLUO | Meta | RA-2 | RA-2 | | | | | P Remarks | Sample # (lab only) | |
| RP-1 | 6 | GW | | 7.24.24 | 1800 | 4 | X | X | X | X | Hall | | | | 6.61 | -0 | |
| nP-2 | | GW | | | | | | | | | | | 5 | | | 1000 | |
| RP-3 | 6 | GW | | 7.24.24 | 1310 | H | X | X | X | × | | | | | 6.74 | -97 | |
| RP-4 | 6 | GW | 1 | 7.24.24 | 1600 | 4 | X | × | × | × | 55] | 1 | | | 6.54 | -03 | |
| RP-5 | G | GW | | 7.24.24 | 1525 | 4 | X | × | X | × | - 4 | | | | 6.95 | ۵4 | |
| RP-6 | 6 | GW | | 7.24.21 | 1 1450 | 4 | X | × | × | X | 410 | 1 | | | Const | -6.72-0 | |
| RP-7 | 6 | GW | | 7.24.24 | 1405 | 4 | X | X | × | × | | 16 | 7 | - 4 | 6.92 | -08 | |
| RP-85- | | GW | | | | | | | | | 3.4 | | | | | The street | |
| RP-9 | 6 | GW | | 7-24-24 | 1710 | 4 | X | × | × | × | 1 | 1 | M | 1710 | C.56 | ーじア | |
| RP-10 | 6 | GW | | 7.24.26 | 1640 | 4 | × | X | × | × | | | 34 | | 6.84 | 104 | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | ee al | ed k | paramet | I x: | V (| 707 | al | 1 | pH _ Flow _ | | Temp | | Sample Receipt Checklist COC Seal Present/Intact: _NP COC Signed/Accurate: Bottles arrive intact: | | | | |
| DW - Drinking Water OT - Other | Samples returns UPS Fedi | ed via: | | Tracki | ng# | - Name | - 1 | | | | Turk. | P | | VOA Ze | ient volume sent: If Applicab ro Headspace: vation Correct/Ch | <u>le</u> Y N | |
| Relinquished by : (Signature) | Relinquished by: (Signature) Date: 7/26 | | | Time: Received | | | Received by: (Signature) | | | | | TBI | L / MeoH | RAD Sc | <u> </u> | | |
| Relinquished by : (Signature) Date: | | | Tim | Fime: Received by: (Signature) | | | | | | Temp: °C Bottles Received: | | | | | TRC-3223A228 | | |
| Relinquished by : (Signature) Date: | | | Tim | ne: Recei | ved for lab b | - 1 | | | | Date: 7-77 | 174 | Time: | 0900 | Hola. | | Condition: NCF / OK | |

| Name/Address: | - 1 | Billing Info | ormation: | 1 | | Analysis / Container / Preservative | | | | | | | Chain of Custody Page of | | | |
|----------------------------------------------------------------------------------------|------------------------------------------|--------------------------|------------------------|---------------------------------|-------------------|-------------------------------------|------------------|--------------------|------------------|-------------------------|----------|----------|--------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Alliance Technical Gro | oup - Bryan | | 219 Bro | s Payable wn Ln. AR 72022 | | Pres Chk | | | | | | | | | Pa PEOPLE A | CC |
| Report to: Jonathan Brown | | | Email To: Jonathan. | .brown@allianc | etg.com;dbraun | | | | 11-HDPE-Add HN03 | 1L-HDPE-Add-HN03 | | | | | 12065 Lebanon Rd Mour Submitting a sample via t constitutes acknowledgm | his chain of custody nent and acceptance of the |
| Project Description: Entergy - Independence | | City/State Collected: | New | aru, Ak | Please C | ircle: | | | -Adc | -Ade | | | | | Pace Terms and Condition https://info.pacelabs.com terms.pdf | ns found at: n/hubfs/pas-standard- |
| Phone: 501-847-7077 | Client Projec | | | Lab Project # | # R-ENTERGYIN | DY | Pres | m | HDPI | HDP | | | | | SDG# | 1761235 |
| | | | | P.O. # | | | Ž | 0 | | Ħ | | 7. | 1-4 | | Table # | |
| Collected by (print): SLC/BLS | Site/Facility RECYCLE F | | | | | норе | PE-HI | COMB. | COMB. | | | | | Acctnum: GBN | | |
| Collected by (signature): Immediately Packed on Ice N Y | | ay 10 Da | | esults Needed | No. | FLUORIDE 125mlHDPE-NoPres | s 250mlHDPE-HN03 | RA-226/228 & COMB. | RA-226/228 & CC | | | | | Prelogin: P109 PM: 829 - Britti PB: | 90893 nie L Boyd | |
| Sample ID | Comp/Grab | 1 | Depth | Date | Time | Cntrs | LUOF | Metals | 3A-22 | RA-22 | | | | | Shipped Via: Fe | Sample # (lab only) |
| FIELD BLANK | 6 | GW | | 771 | 26 000 | - 4 | X | X | X | September 1 | | | | | 10 - | 04 |
| DUPLICATE (RP-9) | G | GW | | 7.24. | 24 1710 | 4 | X | X | X | X | | | 30 | | 6.56 | 10 |
| | | GW | | | | 1 | | | | | | | | \$ | | Visit 5 |
| | - | | - | | | - | - | - | | | | | | | | |
| | | | - | | | - | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | _ | -1- | | | | - | | | | | | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks: | | | | | | 1 | | | pH | w | _ Temp | | COC Si Bottle Correc | Sample Receipt C al Present/Intact gned/Accurate: ss arrive intact: tbottles used: tient volume sent: | : _NP Z _N _H _N _H _N |
| DW - Drinking Water OT - Other | W - Drinking Water Samples returned via: | | | т | racking # | | | | | | | 1 | | VOA Ze | If Applical ero Headspace: evation Correct/Ch | ole YN necked:YN |
| Relinquished by : (Signature) | elinquished by : (Signature) Date: | | | | eceived by: (Sign | nature) | | | | | ank Rece | ived: Ye | es / No HCL / MeoH | RAD So | reen <0.5 mR/hr: | _x _n |
| Relinquished by : (Signature) | | 7/26/2 Date: | 24 / Tin | 230 ne: R | teceived by: (Sig | nature) | | | | Temp: | | °C Bott | TBR les Received: | If prese | ervation required by Lo | ogin: Date/Time |
| Relinquished by : (Signature) | Relinquished by : (Signature) Date: | | Tin | ne: R | Received for lab | oy: (Signa | gnature) | | | Date: Time: 7.27.74 096 | | | | Hold: | | Condition: NCF / OK |

Appendix IV

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226/228

LAPITIS

| Temperature | 2.2 to.3 = 2.5 ED/9 | 2.2403=2.1. EPAS | 3.5 fo.5-2.8 ED49 | 3.4 6.3-2.7 EDMS | 1.2 to.3 = 1.8 ems | 1.1 to 3 = 1.4 ED45 | | | | | | | |
|------------------|---------------------|------------------|-------------------|------------------|--------------------|---------------------|--|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tracking Numbers | 4524 4445+L40h | 40475444 3937 | 362£0£501h05 | 9087 0470 140P | J525 H5H5-L495 | 95744454404 | | | | | | | The state of the s |

Name

7.77.74 Date



Pace Analytical® ANALYTICAL REPORT

October 25, 2024

Alliance Technical Group - Bryant, AR

Sample Delivery Group: L1785828

Samples Received: 10/05/2024

Project Number: 1145-21-081

Description: **Entergy ISES**

ISES Site:

Report To: Jonathan Brown

219 Brown Lane

Little Rock, AR 72022

















Entire Report Reviewed By: Myra Ingram

Katie Ingram

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received. Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

Alliance Technical Group - Bryant, AR

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Sc: Sample Chain of Custody

28

| | | | Collected by | Collected date/time | | |
|-------------------------------------------------------|------------------------|----------|-----------------------|-----------------------|--------------|-----------------|
| RP-1 L1785828-01 GW | | | JLC/KRS | 10/01/24 10:10 | 10/05/24 09: | 00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 21:25 | 10/07/24 21:25 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:26 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:40 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 12:37 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 14:45 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-3 L1785828-02 GW | | | JLC/KRS | 09/30/24 13:10 | 10/05/24 09: | 00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wat Chamistry by Mathad QOEGA | WG2376891 | 1 | 10/07/24 22:18 | 10/07/24 22:18 | DLH | Mt. Juliet, TN |
| Wet Chemistry by Method 9056A Mercury by Method 7470A | WG2376960 | 1 | 10/07/24 22:18 | 10/10/24 12:28 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2376960 WG2379523 | 1 | 10/08/24 14:09 | 10/10/24 12:28 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379523 WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 12:40 | SJM | Mt. Juliet, TN |
| | WG2379593 WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 14:55 | JPD | |
| Metals (ICPMS) by Method 6020B | WGZ3/9393 | ļ | 10/24/24 00.51 | 10/24/24 14.55 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-4 L1785828-03 GW | | | JLC/KRS | 09/30/24 14:25 | 10/05/24 09: | 00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 22:59 | 10/07/24 22:59 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:31 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:43 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 12:44 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 14:58 | JPD | Mt. Juliet, TN |
| | | | Callacted by | Collected data/time | Dosainad da | to/timo |
| | | | Collected by | Collected date/time | Received da | |
| RP-5 L1785828-04 GW | | | JLC/KRS | 09/30/24 13:50 | 10/05/24 09: | .00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 23:12 | 10/07/24 23:12 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:33 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:45 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 12:47 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 15:02 | JPD | Mt. Juliet, TN |
| Metals (ici ms) by Metalod 0020b | WG2373333 | ı | 10/24/24 00:31 | 10/24/24 13:02 | 31 0 | Wit. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | |
| RP-6 L1785828-05 GW | | | JLC/KRS | 09/30/24 15:55 | 10/05/24 09: | 00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 23:26 | 10/07/24 23:26 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:35 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:50 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 13:25 | SJM | Mt. Juliet, TN |
| | | | | | | |



















Metals (ICPMS) by Method 6020B

WG2379593

10/24/24 00:51

10/24/24 15:05

JPD

Mt. Juliet, TN

| | JAIVII LL | O IVIII | /I//I/ I | | | |
|---------------------------------|-----------|----------|-----------------------|---------------------------------------|-----------------------------|----------------|
| RP-7 L1785828-06 GW | | | Collected by JLC/KRS | Collected date/time 09/30/24 16:35 | Received da 10/05/24 09: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 23:39 | 10/07/24 23:39 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:38 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:51 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 13:28 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 15:08 | JPD | Mt. Juliet, TN |
| RP-9 L1785828-07 GW | | | Collected by JLC/KRS | Collected date/time 09/30/24 15:25 | Received da 10/05/24 09: | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/07/24 23:53 | 10/07/24 23:53 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:40 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:53 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 13:31 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 15:11 | JPD | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-10 L1785828-08 GW | | | JLC/KRS | 09/30/24 14:55 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/08/24 00:06 | 10/08/24 00:06 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:43 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:55 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 13:35 | SJM | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379593 | 1 | 10/24/24 00:51 | 10/24/24 15:15 | JPD | Mt. Juliet, TN |
| DUPLICATE (RP-5) L1785828-09 GW | | | Collected by JLC/KRS | Collected date/time 09/30/24 13:50 | Received da 10/05/24 09: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/08/24 00:19 | 10/08/24 00:19 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:50 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379523 | 1 | 10/20/24 22:49 | 10/21/24 21:56 | MAP | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379598 | 1 | 10/20/24 23:44 | 10/21/24 18:23 | LD | Mt. Juliet, TN |
| FIELD BLANK L1785828-10 GW | | | Collected by JLC/KRS | Collected date/time 10/01/24 09:50 | Received da 10/05/24 09: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/08/24 00:33 | 10/08/24 00:33 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:09 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379526 | 1 | 10/20/24 23:45 | 10/23/24 07:33 | DJS | Mt. Juliet, TN |
| Metals (ICPMS) by Method 6020B | WG2379598 | 1 | 10/20/24 23:44 | 10/21/24 18:26 | LD | Mt. Juliet, TN |
| TRIP BLANK L1785828-11 GW | | | Collected by JLC/KRS | Collected date/time 10/01/24 09:50 | Received da 10/05/24 09: | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Wet Chemistry by Method 9056A | WG2376891 | 1 | 10/08/24 01:13 | 10/08/24 01:13 | DLH | Mt. Juliet, TN |
| Mercury by Method 7470A | WG2376960 | 1 | 10/08/24 14:09 | 10/10/24 12:52 | NDL | Mt. Juliet, TN |
| Metals (ICP) by Method 6010B | WG2379526 | 1 | 10/20/24 23:45 | 10/23/24 07:35 | DJS | Mt. Juliet, TN |
| ACCOUNT: | PROJECT: | | SDG: | DAT | E/TIME: | |

¹Cp

















| TRIP BLANK L1785828-11 GW | | | JLC/KRS | 10/01/24 09:50 | 10/05/24 09: | |
|--------------------------------|-----------|----------|----------------|----------------|--------------|----------------|
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Metals (ICPMS) by Method 6020B | WG2379598 | 1 | 10/20/24 23:44 | 10/21/24 18:29 | LD | Mt. Juliet, TN |



















CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

















Katie Ingram Project Manager

Myra Ingram

Collected date/time: 10/01/24 10:10

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | P1 | 0.150 | 1 | 10/07/2024 21:25 | WG2376891 |

²Tc



| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|---------|--------|-----------|----------|----------|------------------|------------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:26 | <u>WG2376960</u> |



Cn

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:40 | WG2379523 |



Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|--------|-----------|---------|----------|------------------|-------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 12:37 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Barium | 0.0433 | | 0.00200 | 1 | 10/24/2024 14:45 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 12:37 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 12:37 | WG2379593 |
| Selenium | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 12:37 | WG2379593 |







Collected date/time: 09/30/24 13:10

L1785828

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.235 | <u>P1</u> | 0.150 | 1 | 10/07/2024 22:18 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:28 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:41 | WG2379523 |



Cn

Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|--------|-----------|---------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 12:40 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Barium | 0.0334 | | 0.00200 | 1 | 10/24/2024 14:55 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 12:40 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 12:40 | WG2379593 |
| Selenium | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 12:40 | WG2379593 |







Collected date/time: 09/30/24 14:25

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|-----------|-------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.190 | | 0.150 | 1 | 10/07/2024 22:59 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:31 | WG2376960 |



Cn

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:43 | WG2379523 |



Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> | | | |
|------------|---------|-----------|---------|----------|------------------|--------------|--|--|--|
| Analyte | mg/l | | mg/l | | date / time | | | | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Barium | 0.0704 | | 0.00200 | 1 | 10/24/2024 14:58 | WG2379593 | | | |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Selenium | 0.00258 | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 12:44 | WG2379593 | | | |







Collected date/time: 09/30/24 13:50

Wet Chemistry by Method 9056A

| | Result | Qualifier RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|---------------|----------|------------------|--------------|
| Analyte | mg/l | mg/l | | date / time | |
| Fluoride | 0.256 | 0.150 | 1 | 10/07/2024 23:12 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:33 | WG2376960 |



Cn

Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:45 | WG2379523 |



Metals (ICPMS) by Method 6020B

| , , , | | | | | | |
|------------|---------|-----------|---------|----------|------------------|------------------|
| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 12:47 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |
| Barium | 0.0318 | | 0.00200 | 1 | 10/24/2024 15:02 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 12:47 | <u>WG2379593</u> |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 12:47 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 12:47 | WG2379593 |
| Selenium | 0.00488 | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 12:47 | WG2379593 |







Collected date/time: 09/30/24 15:55

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.221 | | 0.150 | 1 | 10/07/2024 23:26 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:35 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | 0.0169 | | 0.0150 | 1 | 10/21/2024 21:50 | WG2379523 |



Metals (ICPMS) by Method 6020B

| | Result | <u>Qualifier</u> | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|---------|------------------|---------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 13:25 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Barium | 0.0502 | | 0.00200 | 1 | 10/24/2024 15:05 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 13:25 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 13:25 | WG2379593 |
| Selenium | 0.00310 | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 13:25 | WG2379593 |







Collected date/time: 09/30/24 16:35

L1785828

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.178 | | 0.150 | 1 | 10/07/2024 23:39 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:38 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:51 | WG2379523 |



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Metals (ICPMS) by Method 6020B

| . , , , | | | | | | |
|------------|---------|-----------|---------|----------|------------------|--------------|
| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 13:28 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Barium | 0.0321 | | 0.00200 | 1 | 10/24/2024 15:08 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 13:28 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 13:28 | WG2379593 |
| Selenium | 0.00336 | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 13:28 | WG2379593 |







Collected date/time: 09/30/24 15:25

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 10/07/2024 23:53 | WG2376891 |

Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:40 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:53 | WG2379523 |



Metals (ICPMS) by Method 6020B

| | Decult | Ovalifian | DDI | Dilution | Amalusis | Datah |
|------------|--------|-----------|---------|----------|------------------|--------------|
| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 13:31 | WG2379593 |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Barium | 0.0409 | | 0.00200 | 1 | 10/24/2024 15:11 | WG2379593 |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 13:31 | WG2379593 |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 13:31 | WG2379593 |
| Selenium | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 13:31 | WG2379593 |







Collected date/time: 09/30/24 14:55

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|-----------|-------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 10/08/2024 00:06 | WG2376891 |

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Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:43 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:55 | WG2379523 |



Cn

Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | |
|------------|--------|-----------|---------|----------|------------------|-----------|--|--|--|
| Analyte | mg/l | | mg/l | | date / time | | | | |
| Antimony | ND | | 0.00400 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Arsenic | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Barium | 0.0621 | | 0.00200 | 1 | 10/24/2024 15:15 | WG2379593 | | | |
| Beryllium | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Cadmium | ND | | 0.00100 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Chromium | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Cobalt | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Lead | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Molybdenum | ND | | 0.00500 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Selenium | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |
| Thallium | ND | | 0.00200 | 1 | 10/24/2024 13:35 | WG2379593 | | | |







DUPLICATE (RP-5)

Collected date/time: 09/30/24 13:50

SAMPLE RESULTS - 09

1785828

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|----------|--------|-----------|-------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | 0.295 | | 0.150 | 1 | 10/08/2024 00:19 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:50 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/21/2024 21:56 | WG2379523 |



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Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|------------|---------|-----------|---------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/21/2024 18:23 | WG2379598 |
| Arsenic | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Barium | 0.0304 | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Beryllium | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Cadmium | ND | | 0.00100 | 1 | 10/21/2024 18:23 | WG2379598 |
| Chromium | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Cobalt | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Lead | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Molybdenum | ND | | 0.00500 | 1 | 10/21/2024 18:23 | WG2379598 |
| Selenium | 0.00459 | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |
| Thallium | ND | | 0.00200 | 1 | 10/21/2024 18:23 | WG2379598 |







FIELD BLANK

SAMPLE RESULTS - 10

Wet Chemistry by Method 9056A

Collected date/time: 10/01/24 09:50

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | |
|----------|--------|-----------|-------|----------|------------------|-----------|--|
| Analyte | mg/l | | mg/l | | date / time | | |
| Fluoride | ND | | 0.150 | 1 | 10/08/2024 00:33 | WG2376891 | |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:09 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/23/2024 07:33 | WG2379526 |



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Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|------------|---------|-----------|---------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Antimony | ND | | 0.00400 | 1 | 10/21/2024 18:26 | WG2379598 |
| Arsenic | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Barium | 0.00475 | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Beryllium | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Cadmium | ND | | 0.00100 | 1 | 10/21/2024 18:26 | WG2379598 |
| Chromium | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Cobalt | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Lead | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Molybdenum | ND | | 0.00500 | 1 | 10/21/2024 18:26 | WG2379598 |
| Selenium | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |
| Thallium | ND | | 0.00200 | 1 | 10/21/2024 18:26 | WG2379598 |







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SAMPLE RESULTS - 11

Collected date/time: 10/01/24 09:50

11785828

Wet Chemistry by Method 9056A

| | Result | Qualifier | RDL | Dilution | Analysis | <u>Batch</u> |
|----------|--------|-----------|-------|----------|------------------|--------------|
| Analyte | mg/l | | mg/l | | date / time | |
| Fluoride | ND | | 0.150 | 1 | 10/08/2024 01:13 | WG2376891 |



Mercury by Method 7470A

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|----------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Mercury | ND | | 0.000200 | 1 | 10/10/2024 12:52 | WG2376960 |



Metals (ICP) by Method 6010B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch |
|---------|--------|-----------|--------|----------|------------------|-----------|
| Analyte | mg/l | | mg/l | | date / time | |
| Lithium | ND | | 0.0150 | 1 | 10/23/2024 07:35 | WG2379526 |



Cn

Metals (ICPMS) by Method 6020B

| | Result | Qualifier | RDL | Dilution | Analysis | Batch | | | | |
|------------|---------|-----------|---------|----------|------------------|-----------|--|--|--|--|
| Analyte | mg/l | | mg/l | | date / time | | | | | |
| Antimony | ND | | 0.00400 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Arsenic | 0.00568 | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Barium | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Beryllium | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Cadmium | 0.00105 | | 0.00100 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Chromium | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Cobalt | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Lead | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Molybdenum | ND | | 0.00500 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Selenium | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| Thallium | ND | | 0.00200 | 1 | 10/21/2024 18:29 | WG2379598 | | | | |
| | | | | | | | | | | |







QUALITY CONTROL SUMMARY

L1785828-01,02,03,04,05,06,07,08,09,10,11

Wet Chemistry by Method 9056A

Method Blank (MB)

(MB) R4132364-1 10/07/24 20:58

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|----------|-----------|--------------|--------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Fluoride | U | | 0.0761 | 0.150 |







(OS) L1785828-01 10/07/24 21:25 • (DUP) R4132364-3 10/07/24 21:38

| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
|----------|-----------------|------------|----------|---------|---------------|-------------------|
| Analyte | mg/l | mg/l | | % | | % |
| Fluoride | ND | ND | 1 | 200 | P1 | 15 |









(OS) L1785828-02 10/07/24 22:18 • (DUP) R4132364-6 10/07/24 22:32

| (, | (| | -, - , | | | |
|----------|-----------------|------------|----------|---------|---------------|-------------------|
| | Original Result | DUP Result | Dilution | DUP RPD | DUP Qualifier | DUP RPD Limits |
| Analyte | mg/l | mg/l | | % | | % |
| Fluoride | 0.235 | ND | 1 | 200 | <u>P1</u> | 15 |







(LCS) R4132364-2 10/07/24 21:11

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|----------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Fluoride | 8.00 | 8.68 | 109 | 80.0-120 | |

L1785828-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1785828-01 10/07/24 21:25 • (MS) R4132364-4 10/07/24 21:52 • (MSD) R4132364-5 10/07/24 22:05

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits | |
|----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|--|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % | |
| Fluoride | 8.00 | ND | 8.17 | 8.55 | 100 | 105 | 1 | 80.0-120 | | | 4.48 | 15 | |

L1785828-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1785828-02 10/07/24 22:18 • (MS) R4132364-7 10/07/24 22:45

| | | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
|------|------|--------------|-----------------|-----------|---------|----------|-------------|--------------|
| Anal | lyte | mg/l | mg/l | mg/l | % | | % | |
| Fluo | ride | 8.00 | 0.235 | 8.24 | 100 | 1 | 80.0-120 | |

QUALITY CONTROL SUMMARY

L1785828-01,02,03,04,05,06,07,08,09,10,11

Mercury by Method 7470A

Method Blank (MB)

| (MB) R4130993-1 10/10/24 12:04 | | | | | | | | | | |
|--------------------------------|-----------|--------------|-----------|----------|--|--|--|--|--|--|
| | MB Result | MB Qualifier | MB MDL | MB RDL | | | | | | |
| Analyte | mg/l | | mg/l | mg/l | | | | | | |
| Mercury | U | | 0.0000700 | 0.000200 | | | | | | |

²Tc

³Ss



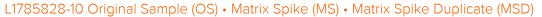
(LCS) R4130993-2 10/10/24 12:06

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Mercury | 0.00300 | 0.00286 | 95.2 | 80.0-120 | |









(OS) L1785828-10 10/10/24 12:09 • (MS) R4130993-4 10/10/24 12:13 • (MSD) R4130993-5 10/10/24 12:21

| , | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Mercury | 0.00300 | ND | 0.00297 | 0.00296 | 99.0 | 98 5 | 1 | 75 0-125 | | | 0.482 | 20 |









QUALITY CONTROL SUMMARY

L1785828-01,02,03,04,05,06,07,08,09

Method Blank (MB)

Metals (ICP) by Method 6010B

(MB) R4135608-1 10/21/24 21:09

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Lithium | U | | 0.00485 | 0.0150 |







[†]Cn



| (LCS) R4135608-2 | 10/21/24 | 21:11 |
|------------------|----------|-------|
|------------------|----------|-------|

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Lithium | 100 | N 997 | 99.7 | 80 0-120 | |









(OS) L1785814-11 10/21/24 21:13 • (MS) R4135608-4 10/21/24 21:16 • (MSD) R4135608-5 10/21/24 21:18

| (, | Spike Amount | Original Result | • | MSD Result | MS Rec. | | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-------|------------|---------|------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Lithium | 1.00 | ND | 0.967 | 0.994 | 96.0 | 98.7 | 1 | 75.0-125 | | | 2.77 | 20 |







QUALITY CONTROL SUMMARY

L1785828-10,11

Method Blank (MB)

Metals (ICP) by Method 6010B

(MB) R4136460-1 10/23/24 07:23

| | MB Result | MB Qualifier | MB MDL | MB RDL |
|---------|-----------|--------------|---------|--------|
| Analyte | mg/l | | mg/l | mg/l |
| Lithium | U | | 0.00485 | 0.0150 |





³Ss

[†]Cn

Laboratory Control Sample (LCS)

(LCS) R4136460-2 10/23/24 07:25

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---------|--------------|------------|----------|-------------|---------------|
| Analyte | mg/l | mg/l | % | % | |
| Lithium | 1.00 | 1.01 | 101 | 80.0-120 | |









(OS) L1785861-02 10/23/24 07:27 • (MS) R4136460-4 10/23/24 07:30 • (MSD) R4136460-5 10/23/24 07:32

| , , | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Lithium | 100 | 0.0297 | 102 | 106 | 99 5 | 103 | 1 | 75 0-125 | | | 3.05 | 20 |









QUALITY CONTROL SUMMARY

L1785828-01,02,03,04,05,06,07,08

Method Blank (MB)

Metals (ICPMS) by Method 6020B

(MB) R4137044-1 10/24/24 10:58 MB Result MB MDL MB RDL MB Qualifier Analyte mg/l mg/l mg/l U Antimony 0.000310 0.00400 Arsenic 0.000120 0.00200 Beryllium U 0.000200 0.00200 Cadmium U 0.000120 0.00100 Chromium U 0.000900 0.00200 U 0.00200 Cobalt 0.000100 Lead U 0.000500 0.00200 Molybdenum U 0.000500 0.00500 Selenium U 0.000250 0.00200 U Thallium 0.000130 0.00200

Method Blank (MB)

| (MB) R4137176-1 10/24/ | /24 14:15 | | | |
|------------------------|-----------|--------------|----------|---------|
| | MB Result | MB Qualifier | MB MDL | MB RDL |
| Analyte | mg/l | | mg/l | mg/l |
| Barium | 0.000526 | J | 0.000500 | 0.00200 |

Laboratory Control Sample (LCS)

| (LCS) R4137044-2 10/24/ | /24 11:01 | | | | |
|-------------------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | mg/l | mg/l | % | % | |
| Antimony | 0.0500 | 0.0501 | 100 | 80.0-120 | |
| Arsenic | 0.0500 | 0.0484 | 96.7 | 80.0-120 | |
| Beryllium | 0.0500 | 0.0456 | 91.2 | 80.0-120 | |
| Cadmium | 0.0500 | 0.0495 | 99.0 | 80.0-120 | |
| Chromium | 0.0500 | 0.0492 | 98.4 | 80.0-120 | |
| Cobalt | 0.0500 | 0.0490 | 98.1 | 80.0-120 | |
| Lead | 0.0500 | 0.0465 | 93.1 | 80.0-120 | |
| Molybdenum | 0.0500 | 0.0477 | 95.3 | 80.0-120 | |
| Selenium | 0.0500 | 0.0485 | 96.9 | 80.0-120 | |
| Thallium | 0.0500 | 0.0469 | 93.8 | 80.0-120 | |

Ss

Cn

Sr

GI

Sc

Analyte Barium

Thallium

QUALITY CONTROL SUMMARY

L1785828-01,02,03,04,05,06,07,08

Metals (ICPMS) by Method 6020B

Laboratory Control Sample (LCS)

(LCS) R4137176-2 10/24/24 14:18

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
|---|--------------|------------|----------|-------------|---------------|
|) | mg/l | mg/l | % | % | |
| | 0.0500 | 0.0474 | 94.8 | 80 0-120 | |







[†]Cn

L1785796-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1785796-01 10/24/24 11:05 • (MS) R4137044-4 10/24/24 11:11 • (MSD) R4137044-5 10/24/24 11:15

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Antimony | 0.0500 | ND | 0.0511 | 0.0519 | 101 | 103 | 1 | 75.0-125 | | | 1.59 | 20 |
| Arsenic | 0.0500 | 0.0142 | 0.0593 | 0.0614 | 90.2 | 94.3 | 1 | 75.0-125 | | | 3.44 | 20 |
| Beryllium | 0.0500 | ND | 0.0447 | 0.0437 | 89.3 | 87.4 | 1 | 75.0-125 | | | 2.21 | 20 |
| Cadmium | 0.0500 | ND | 0.0488 | 0.0497 | 97.7 | 99.3 | 1 | 75.0-125 | | | 1.68 | 20 |
| Chromium | 0.0500 | ND | 0.0478 | 0.0473 | 93.6 | 92.7 | 1 | 75.0-125 | | | 1.02 | 20 |
| Cobalt | 0.0500 | ND | 0.0474 | 0.0480 | 94.6 | 95.7 | 1 | 75.0-125 | | | 1.19 | 20 |
| Lead | 0.0500 | ND | 0.0459 | 0.0464 | 91.9 | 92.9 | 1 | 75.0-125 | | | 1.11 | 20 |
| Molybdenum | 0.0500 | 0.416 | 0.466 | 0.473 | 100 | 113 | 1 | 75.0-125 | | | 1.34 | 20 |
| Selenium | 0.0500 | 0.135 | 0.181 | 0.186 | 91.5 | 101 | 1 | 75.0-125 | | | 2.68 | 20 |

94.4















L1785796-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

0.0465

0.0472

93.0

(OS) L1785796-01 10/24/24 14:22 • (MS) R4137176-4 10/24/24 14:28 • (MSD) R4137176-5 10/24/24 14:31

ND

| (, | | Original Result | , | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|---------|--------|-----------------|--------|------------|---------|----------|----------|-------------|--------------|---------------|------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Barium | 0.0500 | 0.0253 | 0.0733 | 0.0750 | 96.0 | 99 5 | 1 | 75 0-125 | | | 2 37 | 20 |

0.0500

75.0-125

1.50

20

Chromium Cobalt

Molybdenum

Selenium

Thallium

Thallium

Lead

QUALITY CONTROL SUMMARY

L1785828-09,10,11

Metals (ICPMS) by Method 6020B

Method Blank (MB) (MB) R4135564-1 10/21/24 18:04 MB RDL MB Result MB Qualifier MB MDL Analyte mq/l mg/l mg/l Antimony U 0.000310 0.00400 U 0.000120 0.00200 Arsenic Barium U 0.000500 0.00200 U 0.000200 0.00200 Beryllium Cadmium U 0.000120 0.00100













Sc

Laboratory Control Sample (LCS)

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(LCS) R4135564-2 10/21/24 18:07

| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits |
|------------|--------------|------------|----------|-------------|
| Analyte | mg/l | mg/l | % | % |
| Antimony | 0.0500 | 0.0500 | 100 | 80.0-120 |
| Arsenic | 0.0500 | 0.0494 | 98.8 | 80.0-120 |
| Barium | 0.0500 | 0.0477 | 95.3 | 80.0-120 |
| Beryllium | 0.0500 | 0.0485 | 97.0 | 80.0-120 |
| Cadmium | 0.0500 | 0.0510 | 102 | 80.0-120 |
| Chromium | 0.0500 | 0.0506 | 101 | 80.0-120 |
| Cobalt | 0.0500 | 0.0510 | 102 | 80.0-120 |
| Lead | 0.0500 | 0.0475 | 95.0 | 80.0-120 |
| Molybdenum | 0.0500 | 0.0485 | 96.9 | 80.0-120 |
| Selenium | 0.0500 | 0.0478 | 95.6 | 80.0-120 |

0.0482

| | LCS Qualifier |
|--|---------------|
|--|---------------|

0.0500 100 80.0-120 0.0494 98.8 80.0-120 0.0477 95.3 80.0-120 0.0485 97.0 80.0-120 0.0510 102 80.0-120 0.0506 101 80.0-120 0.0510 102 80.0-120 0.0475 95.0 80.0-120 0.0485 96.9 80.0-120

L1785861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

96.5

0.000900

0.000100

0.000500

0.000500

0.000250

0.000130

0.00200

0.00200

0.00200

0.00500

0.00200

0.00200

80.0-120

(OS) L1785861-01 10/21/24 18:10 • (MS) R4135564-4 10/21/24 18:16 • (MSD) R4135564-5 10/21/24 18:20

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|-----------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Antimony | 0.0500 | ND | 0.0522 | 0.0516 | 104 | 103 | 1 | 75.0-125 | | | 1.26 | 20 |
| Arsenic | 0.0500 | 0.00340 | 0.0525 | 0.0520 | 98.2 | 97.3 | 1 | 75.0-125 | | | 0.870 | 20 |
| Barium | 0.0500 | 0.116 | 0.163 | 0.165 | 94.4 | 98.3 | 1 | 75.0-125 | | | 1.20 | 20 |
| Beryllium | 0.0500 | ND | 0.0479 | 0.0475 | 95.1 | 94.3 | 1 | 75.0-125 | | | 0.794 | 20 |
| Cadmium | 0.0500 | ND | 0.0524 | 0.0520 | 103 | 102 | 1 | 75.0-125 | | | 0.836 | 20 |

ACCOUNT:
Alliance Technical Group - Bryant, AR

0.0500

PROJECT: 1145-21-081 SDG: L1785828 DATE/TIME: 10/25/24 17:16

PAGE:

24 of 30

QUALITY CONTROL SUMMARY

L1785828-09,10,11

Metals (ICPMS) by Method 6020B

L1785861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1785861-01 10/21/24 18:10 • (MS) R4135564-4 10/21/24 18:16 • (MSD) R4135564-5 10/21/24 18:20

| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | RPD Limits |
|------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|-------|------------|
| Analyte | mg/l | mg/l | mg/l | mg/l | % | % | | % | | | % | % |
| Chromium | 0.0500 | ND | 0.0519 | 0.0513 | 100 | 99.0 | 1 | 75.0-125 | | | 1.22 | 20 |
| Cobalt | 0.0500 | 0.00756 | 0.0576 | 0.0572 | 100 | 99.4 | 1 | 75.0-125 | | | 0.701 | 20 |
| Lead | 0.0500 | ND | 0.0471 | 0.0473 | 94.1 | 94.6 | 1 | 75.0-125 | | | 0.520 | 20 |
| Molybdenum | 0.0500 | ND | 0.0496 | 0.0494 | 98.1 | 97.8 | 1 | 75.0-125 | | | 0.328 | 20 |
| Selenium | 0.0500 | ND | 0.0506 | 0.0485 | 101 | 97.0 | 1 | 75.0-125 | | | 4.26 | 20 |
| Thallium | 0.0500 | ND | 0.0483 | 0.0490 | 95.5 | 96.9 | 1 | 75.0-125 | | | 1.41 | 20 |





















GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

| Abbic viations and | |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDL | Method Detection Limit. |
| ND | Not detected at the Reporting Limit (or MDL where applicable). |
| RDL | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| U | Not detected at the Reporting Limit (or MDL where applicable). |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

Qualifier Description

| J | The identification of the analyte is acceptable; the reported value is an estimate. |
|----|-------------------------------------------------------------------------------------------|
| P1 | RPD value not applicable for sample concentrations less than 5 times the reporting limit. |



















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| Alabama | 40660 | Nebraska | NE-OS-15-05 |
|-----------------------|-------------|-----------------------------|------------------|
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey-NELAP | TN002 |
| California | 2932 | New Mexico ¹ | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina 1 | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio-VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| lowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO00356 |
| Kentucky 1 6 | KY90010 | South Carolina | 84004002 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | Al30792 | Tennessee 1 4 | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA - ISO 17025 5 | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |



^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.

TN00003

EPA-Crypto



















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

| Company Name/Au | | | Billing Info | ormation: | | | T | | _ | , A | nalvsis / | Contain | er / Pres | ervative | | | Chain of Custody | Page of |
|--------------------------------------|-----------------------------------------------------------------------|-------------------|--------------|-------------------------------------------|---------------|-----------------------------------------|--------------|----------|------------------|------------------|----------------------------|---------|-------------------------------|----------|--------|--------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------|
| Alliance Technical Gro | 219 Brov | | | ounts Payable Brown Ln. ant, AR 72022 | | | | <2 | | <2 | 3 <2 | | | | | | PEOPLE | RCC ADVANCING SCIENCE |
| Report to: | | | Email To: | | | | | | | | 0 | | | | | | MTJU | JLIET, TN |
| Jonathan Brown | | | | Jonathan.Brown@AllianceTG.com;Jhouse@trcc | | | | | | | Ĭ | | | | | | 12065 Lebanon Rd Mo Submitting a sample vi | unt Juliet, TN 37122 |
| Project Description: Entergy ISES | City/State | | | Menory AR Please Circle: PT MT CT E | | | | | | 8 | A33- | | | | | | constitutes acknowledge Pace Terms and Condit | gment and acceptance of the |
| Phone: 501-847-7077 | Client Project 1145-21-0 | | | | Lab Project # | | | 60 | | ONHE | PE-1 | | | | | | SDG # 47 | 85828 |
| Collected by (print): | Site/Facility I | D# | | P.O. # | .O. # | | | E-HNC | res | 1L-HDPE-Add-HN03 | aH- | | | | | | K06 | - 6 |
| Collected by (signature): | | Lab MUST Be | | Quote # | | | 250mlHDPE-HN | NoPr | IL-HDF | 1228 | | | | | | Acctnum: GBN Template:T25 | 9439 | |
| Immediately Packed on Ice N Y | Same DayFive Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day | | | Date | e Results | Needed | No. of | ıls 250n | 125mlHDPE-NoPres | -226/228 1 | -226 | | | | | | Prelogin: P11 PM: 829 - Britt PB: | nie L Boyd |
| Sample ID | Comp/Grab | Matrix * | Depth | Da | te | Time | Cntrs | Metals | | RA-22 | RA | | | | | | Shipped Via: Fo | Sample # (lab only) |
| RP-1 | 6 | GW | | 10-1 | -2H | 1010 | 14 | * | X | X | X | | | | | | G.05 | -01 |
| RP-2 | | GW | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | | | 100 | 100 | | 0.02 | |
| RP-3 | (5 | GW | | 9-3 | 0-24 | 1310 | 4 | K | X | X | X | | | | | | 6.26 | -02 |
| RP-4 | 6 | GW | | 9-30 | 1-24 | 1425 | 4 | L | X | X | X | | | | 1000 | | 6.43 | -03 |
| RP-5 | 13 | GW | | 9-3 | 0-24 | 1350 | 4 | X | X | X | X | | - 1 | | 6.23 | | 6.58 | -04 |
| RP-6 | (- | GW | | 9.3 | 0-24 | 1555 | 14 | X | X | X | X | | | | | | 6.66 | -05 |
| RP-7 | (7 | GW | | - | 0-24 | 1635 | 4 | × | X | X | X | | - 6 | | | | 6.64 | |
| RP-8 | 600 | GW | | | | | 3-1 | | | | | | | | | | 0.01 | -06 |
| P-9 | | GW | | 0.3 | 024 | 1525 | 4 | 1 | X | X | X | 2003 | | | | | 6,43 | |
| P-10 | | GW | | - | 30-2 | 11455 | H | | | X | X | 500 | 100 | | | | G.56 | -07 |
| W - Groundwater B - Bioassay | lemarks:*Metals | The second second | i,BEG,CDG, | | | CP,MOG,PE | BG,SBG | ,SEG,TI | LG | | pH _ Flow | | Temp | | COC S. | eal Pr igned/ es arr | le Receipt Ch esent/Intact; Accurate; ive intact; | ecklist NP Y N N |
| | amples returned v | | | | Tracking | ş # | | | | | riow Other | | | | Suffi | Correct bottles used: Sufficient volume sent: If Applicable | | |
| elinquished by : (Signature) | Dat | e: 0-4-24 | Time: | 55 | Receive | d by: (Signati | ıre) | | | Tr | ip Blank | Receive | eceived: Yes No HCL / MeoH | | Prese | VOA Zero Headspace: Preservation Correct/Checked: RAD Screen <0.5 mR/hr: | | |
| linquished by : (Signature) | Date | e: | Time: | | Received | d by: (Signatu | ire) | 4 % | | Te | Temp: °C Bottles Received: | | | | | If preservation required by Login: Date/Time | | |
| linquished by : (Signature) | Date | e: | Time: | | Received | d for lab by: (| Signatu | 1 | KENY | | o-5 | -2H | Time: | 0900 | Hold: | | | Condition: NCF / OK |

| Company Name/Address: | Billing Information: | | | | Analysis / Container / Preservative | | | | | | | | | Chain of Custody Page of | | | | | |
|-----------------------------------------------------------------------------------|-----------------------------|----------------------------|------------------------------------------------------|------------|-------------------------------------|----------------|-----------|-----------------------|------------------|-----------------------------|------------|-----------|------------|--------------------------|------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------|-----------------------------------|--|
| Alliance Technical G | roup - Brya | nt, AR | 1 | | | Fres | | | | Analysis | Conta | iner / Pr | eservative | | | Chain of Custody | Page of | | |
| 219 Brown Lane Little Rock, AR 72022 | | | | AR 72022 | • | | | | | | HIVO3 | | | | | | PEOPLE | RCC® ADVANCING SCIENCE | |
| Report to: Jonathan Brown | | | Email To: Jonathan.Brown@AllianceTG.com;Jhouse@ti | | | | @trcc | | | | dd. | | | | | | MT JU | JLIET, TN unt Juliet, TN 37122 | |
| Project Description: City/State | | City/State Collected: | Please Circ | | | | ircle: | | | 8 | 一一一 | | | | | | Pace Terms and Conditi | ment and acceptance of the | |
| Phone: 501-847-7077 | Client Project 1145-21-0 | t# | Lab Project # GBMCBAR-ENTERGYISE | | | 1 | 23 | | ONH-P | MPP | | | | | | SDG # LD | F5678 | | |
| Collected by (print): | Site/Facility ISES | ID# | | P.O. # | | | 4 | Metals 250mlHDPE-HN03 | 125mlHDPE-NoPres | RA-226/228 1L-HDPE-Add-HNO3 | 1228 24- | 77. | | | | | Table # Acctnum: GBMCBAR | | |
| Collected by (signature): | Same I | (Lab MUST Be Day Five I | Day | Quote # | | Needed | | | | | | | | | | | Template: T25 Prelogin: P11 | 9439 04841 | |
| Next Day | | Day 10 Da | y (Rad Only) | T | Nesuits | Needed | No. of | tals 25 | SmlHDI | 5mlHDl 226/228 | -226 | OF | | | | | PM: 829 - Britt | | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | e | Time | Cntrs | * We | F 12 | RA-2 | 4 | | - | | | | Remarks | Sample # (lab only) | |
| DUPLICATE -(RP-5) | 1- | GW | | 0-76 | 24 | 1350 | 4 | X | X | X | X | | | | | | 6.58 | -09 | |
| FIELD BLANK | G | GW | | | | 0950 | 4 | 1 | X | × | X | | | | | | 0.50 | -10 | |
| TRIP BLANK | 6 | GW | | | - | 0950 | 4 | X | X | X | X | | | | | | | -11 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | 7 | | | | | | | | | | 1000 | | | | | | |
| | 41 | | | | | | | | | | | | 1 | | | | | | |
| | | | | | | | 1 | | de to | | | | | | | | | | |
| Matrix: S - Soil AIR - Air F - Filter W - Groundwater B - Bioassay W - WasteWater | Remarks:*Meta | ls = ASG,BAG | ,BEG,CDG, | COG,CRG, | HG,LII | CP,MOG,PB | G,SBG | ,SEG,T | LG | | pH Temp _ | | | | COC Sig | | Sample Receipt Checklist 1 Present/Intact: NP Y N ned/Accurate: N | | |
| DW - Drinking Water DT - Other | Samples returned UPS FedEx | | | Tracking # | | | | | | | Flow Other | | | | Bottles arrive intact: Correct bottles used: Sufficient volume sent: If Applicable VOA Zero Headspace: Y N | | | | |
| elinquished by : (Signature) Date: | | te: | Time: 133 | | Received | d by: (Signatu | ire) | | | | Trip Blan | k Receiv | | HCL / MeoH | Preser | cvation | n Correct/Che <0.5 mR/hr: | ecked: N | |
| Relinquished by : (Signature) | | te: | Time: | | Received | d by: (Signatu | re) | ^ | | | Temp: | °(| _ | TBR es Received: | If prese | ervation | required by Log | gin: Date/Time | |
| elinquished by : (Signature) | Da | te: | Time: | R | eceived | for lab by: (5 | 1 | | | | Date: | 0.11 | Time | | Hold: | | | Condition: NCF / OK | |
| | | | | | | | 1 | zm | em | | 10-5 | -24 | | 0900 | | | | | |

| 0.9+0.3=1.6 |
|-------------|



Pace Analytical® ANALYTICAL REPORT

November 01, 2024

Alliance Technical Group - Bryant, AR

L1785830 Sample Delivery Group:

Samples Received: 10/05/2024

Project Number: 1145-21-081

Description: **Entergy ISES**

ISES Site:

Report To: Jonathan Brown

219 Brown Lane

Little Rock, AR 72022



















Drittine Boyd

Brittnie L Boyd

Project Manager Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received. Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

Alliance Technical Group - Bryant, AR

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| | |

Sc: Sample Chain of Custody



















22

| RP-1 L1785830-01 Non-Potable Water | | | Collected by JLC/KRS | Collected date/time 10/01/24 10:10 | Received da 10/05/24 09 | |
|------------------------------------------|-----------|----------|-------------------------|---------------------------------------|----------------------------|----------------|
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | , | |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388528 | 1 | 10/24/24 13:28 | 10/28/24 13:41 | ZRG | Mt. Juliet, TN |
| RP-3 L1785830-02 Non-Potable Water | | | Collected by JLC/KRS | Collected date/time 09/30/24 13:10 | Received da 10/05/24 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388528 | 1 | 10/24/24 13:28 | 10/28/24 13:41 | ZRG | Mt. Juliet, TN |
| RP-4 L1785830-03 Non-Potable Water | | | Collected by JLC/KRS | Collected date/time 09/30/24 14:25 | Received da 10/05/24 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TI |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, Ti |
| Radiochemistry by Method SM7500Ra B M | WG2388528 | 1 | 10/24/24 13:28 | 10/28/24 13:41 | ZRG | Mt. Juliet, TN |
| DD 5 14705000 04 New Datable Water | | | Collected by JLC/KRS | Collected date/time 09/30/24 13:50 | Received da 10/05/24 09 | |
| RP-5 L1785830-04 Non-Potable Water | | | | | | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388528 | 1 | 10/24/24 13:28 | 10/28/24 13:41 | ZRG | Mt. Juliet, TN |
| RP-6 L1785830-05 Non-Potable Water | | | Collected by JLC/KRS | Collected date/time 09/30/24 15:55 | Received da 10/05/24 09 | |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| De die also grieden des Madha d 004/0220 | WC2270000 | 1 | date/time | date/time | DDD | Mar Indian Th |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, Th |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388528 | 1 | 10/24/24 13:28 | 10/28/24 13:41 | ZRG | Mt. Juliet, TN |
| RP-7 L1785830-06 Non-Potable Water | | | Collected by JLC/KRS | Collected date/time 09/30/24 16:35 | Received da 10/05/24 09 | |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388528 | 1 | 10/24/24 13:28 | 10/31/24 15:33 | DDD | Mt. Juliet, Ti |
| Dodie showisty, by Mathad CM7EOOD- DA4 | WC2300520 | | 10/24/24 12:22 | 10/01/21 10:00 | 700 | M4 Julian TA |





















Radiochemistry by Method SM7500Ra B M

WG2388528

1

10/24/24 13:28

10/28/24 13:41

ZRG

Mt. Juliet, TN

| σ, | (1711 , | 0 0 11111 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
|--------------------------------------------|-----------|-----------|-----------------------------------------|-----------------------|--------------|------------------|
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-9 L1785830-07 Non-Potable Water | | | JLC/KRS | 09/30/24 15:25 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | , | |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388900 | 1 | 10/25/24 13:34 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388900 | 1 | 10/25/24 13:34 | 10/30/24 10:41 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| RP-10 L1785830-08 Non-Potable Water | | | JLC/KRS | 09/30/24 14:55 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388900 | 1 | 10/25/24 13:34 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388900 | 1 | 10/25/24 13:34 | 10/30/24 10:41 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| DUPLICATE (RP-5) L1785830-09 Non-Potable W | /ater | | JLC/KRS | 09/30/24 13:50 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation | Analysis | Analyst | Location |
| | | | date/time | date/time | | |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388900 | 1 | 10/25/24 13:34 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388900 | 1 | 10/25/24 13:34 | 10/30/24 10:41 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| FIELD BLANK L1785830-10 Non-Potable Water | | | JLC/KRS | 10/01/24 09:50 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Radiochemistry by Method 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method Calculation | WG2388900 | 1 | 10/25/24 13:34 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method SM7500Ra B M | WG2388900 | 1 | 10/25/24 13:34 | 10/30/24 10:41 | ZRG | Mt. Juliet, TN |
| | | | Collected by | Collected date/time | Received da | te/time |
| TRIP BLANK L1785830-11 Non-Potable Water | | | JLC/KRS | 10/01/24 09:50 | 10/05/24 09: | :00 |
| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
| Padiochomictor by Mothod 904/9320 | WG2376896 | 1 | 10/07/24 14:41 | 10/31/24 15:33 | DDD | Mt. Juliet, TN |
| Radiochemistry by Method 904/9320 | WG23/0890 | I | 10/07/24 14:41 | 10/31/24 15:33 | טטט | ivit. Juliet, TN |





















Radiochemistry by Method Calculation

Radiochemistry by Method SM7500Ra B M

WG2388900

WG2388900

1

10/25/24 13:34

10/25/24 13:34

10/31/24 15:33

10/30/24 10:41

DDD

ZRG

Mt. Juliet, TN

Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Ss

Cn











Brittnie L Boyd Project Manager

rittine Boyd

Collected date/time: 10/01/24 10:10

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.140 | U | 0.251 | 0.449 | 0.464 | 0.243 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 108 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 115 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.114 | U | 0.330 | 0.575 | 10/31/2024 15:33 | WG2388528 |





Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.114 | <u>U</u> | 0.214 | 0.343 | 0.339 | 0.231 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 94.8 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 13:10

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.261 | U | 0.375 | 0.631 | 0.680 | 0.356 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 68.7 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 91.0 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/I | | + / - | pCi/I | date / time | |
| Combined Radium | 0.679 | J | 0.723 | 1.14 | 10/31/2024 15:33 | WG2388528 |





Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.418 | <u>J</u> | 0.618 | 1.11 | 0.918 | 0.625 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 35.1 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 14:25

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/I | pCi/l | date / time | |
| RADIUM-228 | 0.427 | <u>J</u> | 0.244 | 0.445 | 0.434 | 0.228 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 127 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 96.6 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/I | date / time | |
| Combined Radium | 0.973 | | 0.414 | 0.556 | 10/31/2024 15:33 | WG2388528 |





Radiochemistry by Method SM7500Ra B M

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | + / - | + / - | pCi/I | pCi/l | date / time | |
| RADIUM-226 | 0.546 | | 0.335 | 0.620 | 0.347 | 0.232 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 105 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 13:50

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | +/- | pCi/I | pCi/l | date / time | |
| RADIUM-228 | 0.580 | | 0.182 | 0.380 | 0.314 | 0.168 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 126 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 106 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.723 | | 0.290 | 0.464 | 10/31/2024 15:33 | WG2388528 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | +/- | pCi/I | pCi/l | date / time | |
| RADIUM-226 | 0.143 | <u>J</u> | 0.226 | 0.349 | 0.341 | 0.231 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 97.1 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 15:55

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|---------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.0334 | U | 0.187 | 0.386 | 0.349 | 0.185 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 123 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 102 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.199 | <u>J</u> | 0.319 | 0.506 | 10/31/2024 15:33 | WG2388528 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/I | date / time | |
| RADIUM-226 | 0.199 | <u>J</u> | 0.258 | 0.422 | 0.367 | 0.244 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 97.2 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 16:35

L1785830

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.0686 | U | 0.195 | 0.395 | 0.359 | 0.190 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 118 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 97.9 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/I | | + / - | pCi/l | date / time | |
| Combined Radium | 0.212 | U | 0.331 | 0.547 | 10/31/2024 15:33 | WG2388528 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/I | date / time | |
| RADIUM-226 | 0.143 | <u>U</u> | 0.268 | 0.383 | 0.413 | 0.270 | 10/28/2024 13:41 | WG2388528 |
| (T) Barium-133 | 90.3 | | | | | 30.0-143 | 10/28/2024 13:41 | WG2388528 |









Collected date/time: 09/30/24 15:25

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.572 | | 0.290 | 0.498 | 0.513 | 0.268 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 137 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 91.1 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 1.11 | | 0.442 | 0.578 | 10/31/2024 15:33 | WG2388900 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.535 | | 0.334 | 0.739 | 0.267 | 0.209 | 10/30/2024 10:41 | WG2388900 |
| (T) Barium-133 | 67.4 | | | | | 30.0-143 | 10/30/2024 10:41 | WG2388900 |









Collected date/time: 09/30/24 14:55

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.112 | <u>U</u> | 0.216 | 0.414 | 0.401 | 0.211 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 110 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 115 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.168 | U | 0.262 | 0.431 | 10/31/2024 15:33 | WG2388900 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.168 | | 0.148 | 0.286 | 0.158 | 0.124 | 10/30/2024 10:41 | WG2388900 |
| (T) Barium-133 | 95.5 | | | | | 30.0-143 | 10/30/2024 10:41 | WG2388900 |









DUPLICATE (RP-5)

Collected date/time: 09/30/24 13:50

SAMPLE RESULTS - 09

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | 0.324 | J | 0.230 | 0.433 | 0.413 | 0.217 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 114 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 95.4 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/I | date / time | |
| Combined Radium | 0.386 | J | 0.268 | 0.476 | 10/31/2024 15:33 | WG2388900 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | +/- | + / - | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.0615 | <u>U</u> | 0.137 | 0.219 | 0.237 | 0.170 | 10/30/2024 10:41 | WG2388900 |
| (T) Barium-133 | 93.5 | | | | | 30.0-143 | 10/30/2024 10:41 | WG2388900 |









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SAMPLE RESULTS - 10

Collected date/time: 10/01/24 09:50

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | + / - | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.438 | U | 0.229 | 0.427 | 0.434 | 0.227 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 130 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 100 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | + / - | pCi/l | date / time | |
| Combined Radium | 0.0541 | <u>U</u> | 0.268 | 0.499 | 10/31/2024 15:33 | WG2388900 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-226 | 0.0541 | <u>U</u> | 0.139 | 0.229 | 0.246 | 0.174 | 10/30/2024 10:41 | WG2388900 |
| (T) Barium-133 | 104 | | | | | 30.0-143 | 10/30/2024 10:41 | WG2388900 |









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SAMPLE RESULTS - 11

Collected date/time: 10/01/24 09:50

Radiochemistry by Method 904/9320

| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | Batch |
|-------------|---------|-----------|------------|-------|-------|----------|------------------|-----------|
| Analyte | pCi/l | | +/- | +/- | pCi/l | pCi/l | date / time | |
| RADIUM-228 | -0.0673 | U | 0.206 | 0.404 | 0.383 | 0.202 | 10/31/2024 15:33 | WG2376896 |
| (T) Barium | 117 | | | | | 30.0-143 | 10/31/2024 15:33 | WG2376896 |
| (T) Yttrium | 110 | | | | | 30.0-136 | 10/31/2024 15:33 | WG2376896 |







Radiochemistry by Method Calculation

| | Result | Qualifier | Uncertainty | MDA | Analysis Date | Batch |
|-----------------|--------|-----------|-------------|-------|------------------|-----------|
| Analyte | pCi/l | | +/- | pCi/l | date / time | |
| Combined Radium | 0.907 | | 0.467 | 0.544 | 10/31/2024 15:33 | WG2388900 |





| | Result | Qualifier | 2 sigma CE | TPU | MDA | Lc | Analysis Date | <u>Batch</u> |
|----------------|--------|-----------|------------|-------|-------|----------|------------------|--------------|
| Analyte | pCi/l | | + / - | +/- | pCi/l | pCi/I | date / time | |
| RADIUM-226 | 0.907 | | 0.419 | 0.915 | 0.386 | 0.250 | 10/30/2024 10:41 | WG2388900 |
| (T) Barium-133 | 108 | | | | | 30.0-143 | 10/30/2024 10:41 | WG2388900 |









WG2376896

QUALITY CONTROL SUMMARY

L1785830-01,02,03,04,05,06,07,08,09,10,11

Method Blank (MB)

(MB) R4140550-1 10/31/24 15:33

Radiochemistry by Method 904/9320

| , , | | | | | |
|-------------|-----------|--------------|---------------|--------|-------|
| | MB Result | MB Qualifier | MB 2 sigma CE | MB MDA | MB Lc |
| Analyte | pCi/l | | +/- | pCi/l | pCi/l |
| Radium-228 | -0.312 | <u>U</u> | 0.159 | 0.305 | 0.160 |
| (T) Barium | 123 | | 123 | | |
| (T) Yttrium | 87.9 | | 87.9 | | |







L1785836-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1785836-01 10/31/24 15:33 • (DUP) R4140550-5 10/31/24 15:33

| (US) L1/65636-U1 1U/ | 31/24 15.33 • (D | UP) K414U55U- | -5 10/51/24 15. | 33 | | | | | | | | | |
|----------------------|------------------|------------------------|-----------------|-------------|------------|-------------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| | Original Result | Original 2 sigma CE | Original MDA | Original Lc | DUP Result | DUP 2 sigma CE | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
| Analyte | pCi/l | +/- | pCi/l | pCi/l | pCi/I | + / - | pCi/l | pCi/I | % | | | % | |
| Radium-228 | 9.93 | 0.439 | 0.505 | 0.267 | 9.25 | 0.465 | 0.621 | 0.324 | 7.07 | 1.06 | | 20 | 3 |
| (T) Barium | 116 | | | | 122 | 122 | | | | | | | |
| (T) Yttrium | 114 | | | | 110 | 110 | | | | | | | |









Laboratory Control Sample (LCS)

(LCS) R4140550-2 10/31/24 15:33

| (, | | | | | |
|-------------|--------------|------------|----------|-------------|---------------|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier |
| Analyte | pCi/l | pCi/l | % | % | |
| Radium-228 | 5.00 | 4.54 | 90.7 | 80.0-120 | |
| (T) Barium | | | 135 | | |
| (T) Yttrium | | | 107 | | |

9

⁹Sc

L1785635-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1785635-03 10/31/24 15:33 • (MS) R4140550-3 10/31/24 15:33

| (OS) L1/85635-03 10/3 | 1/24 15:33 • (MS) F | (4140550-3 10) | /31/24 15:33 | | | | |
|-----------------------|---------------------|-----------------|--------------|---------|----------|-------------|--------------|
| | Spike Amount | Original Result | MS Result | MS Rec. | Dilution | Rec. Limits | MS Qualifier |
| Analyte | pCi/l | pCi/l | pCi/l | % | | % | |
| Radium-228 | 16.7 | 0.191 | 16.3 | 96.4 | 1 | 70.0-130 | |
| (T) Barium | | 111 | | 123 | | | |
| (T) Yttrium | | 101 | | 105 | | | |

WG2388528

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1785830-01,02,03,04,05,06

Method Blank (MB)

| (MB) R4139580-1 10/2 | MB) R4139580-1 10/28/24 13:41 | | | | | | | | | |
|----------------------|-------------------------------|--------------|------------|-----------|--------|--|--|--|--|--|
| | MB Result | MB Qualifier | MB 2 sigma | CE MB MDA | MB Lc | | | | | |
| Analyte | pCi/l | | +/- | pCi/l | pCi/l | | | | | |
| Radium-226 | 0.0141 | <u>U</u> | 0.0685 | 0.118 | 0.0769 | | | | | |
| (T) Barium-133 | 72.0 | | 72.0 | | | | | | | |





L1785830-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1785830-06 10/28/24 13:41 • (DUP) R4139580-3 10/28/24 13:41

| (03) 21/00000 00 18 | Original Result | • | Original MDA | Original Lc | DUP Result | DUP 2 sigma CE | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|---------------------|-----------------|-------|--------------|-------------|------------|-------------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| Analyte | pCi/l | + / - | pCi/l | pCi/l | pCi/l | +/- | pCi/l | pCi/l | % | | | % | |
| Radium-226 | 0.143 | 0.268 | 0.413 | 0.270 | -0.0661 | 0.173 | 0.368 | 0.240 | 200 | 0.655 | U | 20 | 3 |
| (T) Barium-133 | 90.3 | | | | 92.4 | 92.4 | | | | | | | |

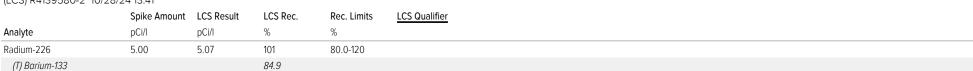






Laboratory Control Sample (LCS)

(LCS) R4139580-2 10/28/24 13:41









WG2388900

QUALITY CONTROL SUMMARY

Radiochemistry by Method SM7500Ra B M

L1785830-07,08,09,10,11

Method Blank (MB)

| (MB) R413 | 39728-1 10/30 |)/24 10:41 | | | | |
|------------|---------------|------------|--------------|---------------|--------|--------|
| | | MB Result | MB Qualifier | MB 2 sigma CE | MB MDA | MB Lc |
| Analyte | | pCi/l | | + / - | pCi/I | pCi/l |
| Radium-22 | 6 | 0.00245 | <u>U</u> | 0.0671 | 0.123 | 0.0799 |
| (T) Bariui | m-133 | 69.3 | | 69.3 | | |







L1785836-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1785836-13 10/30/24 10:41 • (DUP) R4139728-5 10/30/24 10:41

| (, | Original Result | • | Original MDA | | DUP Result | DUP 2 sigma CE | DUP MDA | DUP Lc | DUP RPD | DUP RER | DUP Qualifier | DUP RPD Limits | DUP RER Limit |
|----------------|-----------------|-------|--------------|-------|------------|-------------------|---------|--------|---------|---------|---------------|-------------------|---------------|
| Analyte | pCi/l | + / - | pCi/l | pCi/l | pCi/I | + / - | pCi/l | pCi/l | % | | | % | |
| Radium-226 | 0.193 | 0.251 | 0.357 | 0.237 | -0.129 | 0.198 | 0.462 | 0.301 | 200 | 1.01 | <u>U</u> | 20 | 3 |
| (T) Barium-133 | 110 | | | | 73.6 | 73.6 | | | | | | | |







Laboratory Control Sample (LCS)

(LCS) R4139728-2 10/30/24 10:41

| (200) 11 11007 20 2 1070 | 30, 1110, 20 2 10,00,2 110.11 | | | | | | | | | |
|--------------------------|-------------------------------|------------|----------|-------------|---------------|--|--|--|--|--|
| | Spike Amount | LCS Result | LCS Rec. | Rec. Limits | LCS Qualifier | | | | | |
| Analyte | pCi/l | pCi/l | % | % | | | | | | |
| Radium-226 | 5.00 | 4.70 | 94.0 | 80.0-120 | | | | | | |
| (T) Barium-133 | | | 85.1 | | | | | | | |







L1785836-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1785836-01 10/30/24 10:41 • (MS) R4139728-3 10/30/24 10:41 • (MSD) R4139728-4 10/30/24 10:41

| , , | , , | | , | , | | | | | | | | | |
|----------------|--------------|-----------------|-----------|------------|---------|----------|----------|-------------|--------------|---------------|------|--------|------------|
| | Spike Amount | Original Result | MS Result | MSD Result | MS Rec. | MSD Rec. | Dilution | Rec. Limits | MS Qualifier | MSD Qualifier | RPD | MS RER | RPD Limits |
| Analyte | pCi/l | pCi/l | pCi/l | pCi/l | % | % | | % | | | % | | % |
| Radium-226 | 20.0 | 1.59 | 20.4 | 17.3 | 94.0 | 78.6 | 1 | 75.0-125 | | | 16.3 | | 20 |
| (T) Barium-133 | | 97.9 | | | 96.4 | 92.3 | | | | | | | |

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

| Apple viations and | d Demilions |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MDA | Minimum Detectable Activity. |
| Rec. | Recovery. |
| RER | Replicate Error Ratio. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (T) | Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation. |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |
| | |

Qualifier Description

| J | The identification of the analyte is acceptable; the reported value is an estimate. |
|---|-------------------------------------------------------------------------------------|
| U | Below Detectable Limits: Indicates that the analyte was not detected. |





















ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| Alabama | 40660 | Nebraska | NE-OS-15-05 |
|-------------------------------|-------------|-----------------------------|------------------|
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey-NELAP | TN002 |
| California | 2932 | New Mexico ¹ | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina 1 | DW21704 |
| Georgia | NELAP | North Carolina ³ | 41 |
| Georgia ¹ | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio-VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO00356 |
| Kentucky 16 | KY90010 | South Carolina | 84004002 |
| Kentucky ² | 16 | South Dakota | n/a |
| Louisiana | Al30792 | Tennessee 14 | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas ⁵ | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 ⁵ | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| | | | |



^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.

TN00003

EPA-Crypto



















 $^{^* \, \}text{Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.} \\$

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| Little Rock, AR 72022 | i gra | | bi yaiit, i | AN /ZUZZ | | | | | | m | | | | | | -14 | PEOPL | ADVANCING SCIENCE |
| Report to: Jonathan Brown | | | Email To: Jonathan. | | ceTG.com;Jhous | e@trcc | | | | T P | | | | | | 12065 Leb | oanon Rd Me | JLIET, TN ount Juliet, TN 37122 |
| Project Description: | 7 | City/State | 10. | | Please (| ircle: | 1 | | | - | | | | | | constitute | es acknowled | a this chain of custody gment and acceptance of the tions found at: |
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| Phone: 501-847-7077 | Client Proje 1145-21- | | | GBMCBAI | r-entergyis | ES | 103 | | Add-HINO3 | HOPE- | | | | | | | U7 K06 | 45630 |
| Collected by (print): | Site/Facility ISES | ID# | | P.O.# | | | 250mlHDPE-HN03 | res | 1L-HDPE-A | 8-HC | | | | | | | | MCBAR |
| Collected by (signature): | Rush? | (Lab MUST Be | Notified) | Quote # | | | 모 | NoF | Ŧ | C | | | 355 | | | 100000 | ate:T25 | |
| Immediately Packed on Ice N Y | Same Next Two l | Day10 D | Day y (Rad Only) ay (Rad Only) | Date Re | sults Needed | No. | ls 250m | 125mlHDPE-NoPres | RA-226/228 11 | - 226/2 | | | | | | PM: 82 | 29 - Briti | 04841 tnie L Boyd |
| Sample ID | Comp/Gra | Matrix* | Depth | Date | Time | Cntrs | Metals | | A-22(| RA | | | | | | Shippe pl-\Re | ed Via: F | edEX Priority Sample # (lab only) |
| RP-1 | 6 | GW | | 10-1-2 | 4 1010 | 14 | * × | X | X | X | | | | | | G.C | | -01 |
| RP-2 | 8 | GW | | | | | | | | | | | | | | | | -01 |
| RP-3 | (1 | GW | | 9-30- | ar 1310 | *H | X | X | X | X | | | | | | 6.0 | 26 | -02 |
| RP-4 | (+ | GW | | 9-30- | | 4 | X | X | X | X | | | | | | 6.1 | | -02 |
| RP-5 | 7. | GW | | 9-30 | 14 1350 | 4 | X | X | X | X | | | | | 133 | SERVICE - TOTAL | 58 | -04 |
| RP-6 | 1- | GW | | 9.30 | JU 1553 | 14 | X | × | X | X | 5.0 | | | | | 6.1 | 66 | -05 |
| RP-7 | (7 | GW | d de la | 1-30 | 24 1633 | 14 | × | × | X | X | | | 4 | 4.5 | | 6. | 64 | -06 |
| RP-8 | 9 | GW | | 4 - 2 | is made | | | | | 2 | 37 | | | 1 mm | | 157107 | | |
| RP-9 | 6 | GW | | 9-30 | 24 1525 | 1.4 | X | × | X | X | | 1 | | | | 6,1 | 43 | -07 |
| RP-10 | 6 | GW | | 9-30 | 1-24 145 | 5 4 | X | × | × | X | | | | | | 6. | 36 | -06 |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks:*Me | tals = ASG,BA | G,BEG,CDG | G,COG,CRG,H | G,LIICP,MOG,I | BG,SB | G,SEG,T | rLG | | pH _ | | _ Temp | | . 1 | OC Seal OC Sign Sottles | ample Receil Present/: ned/Accurated | Intact te: tact: | ecklist NP Y N |
| DW - Drinking Water OT - Other | Samples returned UPS Fedi | ed via: Ex Courier | | Tro | acking# | | | | | | | | | 5 | ufficie | bottles usent volume If Approximately Headspace | sent: plicab | le V N |
| Relinquished by : (Signature) | | Date: | Time | : Re | ceived by: (Signa | ture) | | | J | rip Blan | Recei | | HCL / Meol | H H | reserva | ation Correct | ect/Che | ecked: Y _N |
| Relinquished by : (Signature) | | Date: | Time | | ceived by: (Signa | ture) | distriction | 14 | T | Temp: | ٥ | | TBR es Receive | d: | f preserva | ation require | d by Log | gin: Date/Time |
| Relinquished by : (Signature) | | Date: | Time | : Re | ceived for lab by | : (Signat | 1 | MEM | 503 | oate: | -2H | Time | | 1 | lold: | | | Condition: NCF / OK |
| and the second of the second o | and the second second | Arterior controls | | | | | Jam | MUM | | 10-3 | 9.1 | - | 09 | 78 0 18 | | | | |

| Company Name/Address: | | | Billing Info | rmation: | | | 200 | | Α | nalvsis / Co | ntainer / | Preservat | ive | | Chain of Custor | ly Page of |
|-------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|----------------------|--------------|---------------|------------------|------------------|--------------|-----------|----------------------------|----------|-------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Alliance Technical Gro | oup - Bryan | t, AK | | s Payable | | I res Chk | | | | | | | nessets. | | · market processing |) |
| 219 Brown Lane Little Rock, AR 72022 | A second second | | Bryant, | wn Ln. AR 72022 | | | | | | E01/H | | | | | 1 1 | ACE* LE ADVANCING SCIENCE |
| Report to: Ionathan Brown | | 27.7 | Email To: Jonathan. | Brown@AllianceT | G.com;Jhouse | @trcc | | | | Add. | | | | | 12065 Lebanon Rd A Submitting a sample | OULIET, TN fount Juliet, TN 37122 via this chain of custody |
| Project Description: Entergy ISES | | City/State Collected: | Verori | s,AR | Please Ci PT MT (| | | | 93 | 可可 | | | | | Pace Terms and Con- | dgment and acceptance of the ditions found at: .com/hubfs/pas-standard- |
| Phone: 501-847-7077 | Client Projec 1145-21-0 | | | Lab Project # GBMCBAR-E | NTERGYISE | S | 60 | | 11-HDPE-Add-HN03 | ari- | | | | | SDG # | 165830 |
| Collected by (print): | Site/Facility I | D# | | P.O. # | | | 250mHDPE-HN03 | res | PE-Ac | 77 | | | | | Table # | MCBAR |
| Collected by (signature): | Rush? | (Lab MUST Be | Notified) | Quote # | | | 모 | NoF | Ŧ | 228 | | | | 28/88 | Template:T2 | |
| Immediately Packed on Ice N Y \ | Next D | Day Five ay 5 Da ay 10 D Day | y (Rad Only) | Date Resul | ts Needed | No. | ils 250m | 125mlHDPE-NoPres | RA-226/228 11 | 226/2 | | | | | Prelogin: P1 PM: 829 - Bri PB: | |
| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | Cntrs | Metals | | A-22 | A A | | | | | Shipped Via: | FedEX Priority Sample # (lab only) |
| | | GW | | | | 1 | * | L | × | | | | | | I A | |
| DUPLICATE -(RP-5) | 1- | GW | | 9-76-2 | 41350 | 4 | X | X | X | X | | | | | 6.58 | -09 |
| FIELD BLANK | C- | GW | | 10-1-24 | 0150 | 4 | 1 | X | X | X | | | | | | -10 |
| TRIP BLANK | 5 | GW | | 10-1-24 | | H | X | X | X | X | | | 1.7 | | | -11 |
| | | | | | | | | | | | | | | | | |
| a describer of the | g de la faire | | | | | | | | | | | | | | A CONTRACTOR | |
| | | | Total mass | The second | | 1 | | | | | | | | | | |
| | | | | | | - | | | | | | | | 2000 | | |
| | | | | | | | | | | | | | | | | |
| * Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater | Remarks:*Meta | als = ASG,BA | AG,BEG,CD | G,COG,CRG,HG, | LIICP,MOG,P | BG,SB | G,SEG,1 | TLG | | pH | Te | mp | | COC Sea COC Sig Bottles | Sample Receipt (1 Present/Intac ned/Accurate: arrive intact; bottles used: | t: MP Y N |
| DW - Drinking Water OT - Other | Samples returnedUPSFedE | Service Control of the Control of th | | Track | ing# | | | | | | | | | Suffici VOA Zer | ent volume sent If Applica o Headspace: | ble Y N |
| Relinquished by : (Signature) | | la-11-21 | Time | e: Recei | ved by: (Signat | ture) | , pr. 10 | 1.1 | | Trip Blank F | Received: | Yes / No HCL / N TBR | | | ation Correct/C een <0.5 mR/hr: | |
| Relinquished by : (Signature) | 2 | Date: | Time | | ved by: (Signal | ture) | 0 | | | Temp: | °C B | ottles Reco | eived: | If preserv | ation required by L | ogin: Date/Time |
| Relinquished by : (Signature) | | oate: | Time | e: Recei | ved for lab by: | (Signat | tyfe) | | 12.31 | Date: | | ime: | 906 | Hold: | | Condition: NCF / OK |

erature UT8585

| Name | | | | | | | | | | | 4041 0487 2808 J 1.3+0 | | | 4041 0487 2820 /LA9 3.1+0. | |
|------|--|--|--|--|---|-------|-----|-------|------|--|------------------------|----------------|--------------|----------------------------|--|
| | | | | | | 10.00 | | in in | | | 3+0.3=1.6 | 0.9 +0.3 = 1.2 | 4.6+0.3= 4.9 | 3.1+0.3=3.4 | |
| Date | | | | | 4 | 4-2 | - Y | 27 | 10 m | | | | | 1 | |



APPENDIX D FIELD SAMPLING FORMS

| SITE NAME: | ISES |) | | | | SITE LOCATION: | | | | | |
|-------------------|----------------------------------------------|-----------------------------------------|------------------------|-------------------------------------------|---------------------------|-----------------------------|-------------------------------------------------|------------------------------------------------------|---------------------------------------------|------------------------------|----------------------------------------------|
| WELL NO: | | | | SAMPLE | | | | | DATE: 7 | -24-2 | 4 |
| | 150 | | | | PUR | GING DA | TA | | | | |
| WELL DIAMETER | (inches): | TUBING | TER (inches): | TOTAL DEPTH | WATER (feet): | | STATIC TO WA | DEPTH TER (feet): 31. | 30 OR | RGE PUMP T' BAILER: | /PE |
| (only fill out | UME PURGE: if applicable) IT VOLUME PU | | = (| | feet - | | feet) | X WELL CAPA | gallons/fo | | gallons |
| | if applicable) | NGE. TEGO | JIP WIE INT VOL | | allons + (| | ons/foot X | | et) + | gallons | = gallons |
| PUMP OR | TUBING DEPTI | + | WELL SCI | REEN INTERV | | PURGIN | 173 | PURGING | | TOTAL VOL | UME |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1750 | | | | | 6.54 | 12.59 | 314 | 1.62 | 220 | 3.64 | Clar |
| 1755 | | | | | 6.55 | 19.70 | 315 | 1.61 | 224 | 4.16 | 1 |
| 1900 | | | | | 6.61 | 18.57 | 315 | 1.57 | 222 | 1,37 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| TUBING IN | ACITY (Gailon | PACITY (Gal./ | Ft.): 1/8" = 0 | 1" = 0.04; 0006; 3/16' BP = Bladder | | 1/4" = 0.002 | | 0.004; 3/8" = | 5" = 1.02; 0.006; 1/2 Peristaltic Pur | | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| PURGING | EQUIPMENT C | ODES: B | - baller, | BP - bladdel | | PLING DA | | ump _i 11 – | r cristalito i un | ip, <u> </u> | and (Openity) |
| SAMPLED | BY (PRINT) / A | FFILIATION: | | SAMPLER(S | | | NIA . | SAMPLING | | SAMPLIN ENDED A | |
| PUMP OR 1 | TUBING WELL (feet): | | | TUBING MATERIAL C | ODE: | | | D-FILTERED: tion Equipment | Y N | FILTER S | IZE: μm |
| | ONTAMINATIO | DN: PUN | IP Y N | | TUBING | Y N (r | eplaced) | DUPLICATI | | N | |
| SAMP | LE CONTAINE | R SPECIFICA | ATION | SAMPLE | E PRESER | VATION (includ | ling wet ice) | INTEN | | SAMPLING | SAMPLE PUMP |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVAT USED | | TOTAL VOL DED IN FIELD (| mL) Final pF | ANALYSIS METH | | CODE | FLOW RATE (mL per minute) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| REMARKS | | | | | , | | | No. | | | |
| MATERIAL | CODES: | AG = Amber S = Silicone; | | = Clear Glass; O = Other (| | High Density | Polyethylene; | LDPE = Low [| Density Polyeth | nylene; PP | = Polypropylene; |
| SAMPLING | EQUIPMENT | CODES: | APP = After (T | hrough) Perista se Flow Perista | altic Pump; | B = Bailer SM = Straw | | dder Pump; ig Gravity Drain); | ESP = Electric O = Othe | Submersible I r (Specify) | oump; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| NAME: - | 1,101 | | | | | TE CATION: | | | | | |
|---------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------|
| WELL NO: | RP-3 | | | SAMPLE | ID: | | | | DATE: 7 | 1-24-24 | |
| | | | | | PURC | SING DA | TA | | | | |
| | UME PURGE: | TUBING DIAMET 1 WELL VOL | FR (inches): | TOTAL V DEPTH | (feet): | TIC DEPTH T | STATIC D TO WATE O WATER) X | EPTH R (feet): 96. WELL CAPAC | PU OR | RGE PUMP TY BAILER: | PE |
| EQUIPMEN | t if applicable) NT VOLUME PUI t if applicable) | RGE: 1 EQUI | = (IPMENT VOL | | feet - LUME + (TUE allons + (| | feet) X TY X TU ons/foot X | BING LENGTH | | ot = ELL VOLUME gallons = | gallons gallons |
| PUMP OR | TUBING DEPTH | | WELL SCR | EEN INTERV | | BURCIN | | PURGING ENDED AT: | | TOTAL VOL | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 300 | | | | | 6.69 | 14.72 | 273 | 3.35 | 226 | 4.50 | Clear |
| 1305 | | | | | 6.66 | n.59 | 276 | 3.10 | 233 | 3.98 | |
| 1310 | | | | | 6.74 | 19.19 | 269 | 3.14 | 234 | 2.89 | / |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | _ | - | _ | - | | | | | |
| TUBING IN | PACITY (Gallons NSIDE DIA. CAP EQUIPMENT CO | ACITY (Gal./ | -t.): 1/8" = 0. | 1" = 0.04; 0006; 3/16 BP = Bladder | " = 0.0014; Pump; I | 1/4" = 0.002 ESP = Electric | 26; 5/16" = 0. Submersible Pur | 004; 3/8" = (| 5" = 1.02; 0.006; 1/2 eristaltic Pur | 2" = 0.010; | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| PURGING | NSIDE DIA. CAP | ACITY (Gal./F ODES: B | -t.): 1/8" = 0. | 0006; 3/16 | " = 0.0014; Pump; E | 1/4" = 0.000 ESP = Electric PLING DA | 26; 5/16" = 0. Submersible Pur | 004; 3/8" = (| 0.006; 1/2 eristaltic Pur | 2" = 0.010; | 5/8" = 0.016 ther (Specify) |
| PUMP OR | EQUIPMENT CO BY (PRINT) / AR TUBING | ACITY (Gal./F ODES: B | -t.): 1/8" = 0. | 0006; 3/16 BP = Bladder | " = 0.0014; Pump; E SAMF) SIGNATUR | 1/4" = 0.000 ESP = Electric PLING DA | 26; 5/16" = 0.1: Submersible Pur | 3/8" = (mp; PP = P | 0.006; 1/2 reristaltic Pur | 2" = 0.010; mp; O = OI SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) |
| PUMP OR DEPTH IN | NSIDE DIA. CAP EQUIPMENT CO BY (PRINT) / AR | ACITY (Gal./F ODES: B FFILIATION: | = 1,9; 1/8" = 0. | 0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; E SAMF) SIGNATUR | 1/4" = 0.002 ESP = Electric PLING DA | 26; 5/16" = 0.1: Submersible Pur | sampling initiated a | o.006; 1/2 Peristaltic Pur AT: /310 N yype: | 2" = 0.010; mp; O = OI SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) G T: |
| PUMP OR DEPTH IN | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | = Bailer; | 0006; 3/16/ BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; II SAMF) SIGNATUR CODE: TUBING E PRESERV | 1/4" = 0.00: ESP = Electric PLING DA EE(S): Y N (I ATION (includation) | Submersible Pur ATA FIELD Filtration replaced) fing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: Y on Equipment Ty | D.006; 1// Peristaltic Pur AT: 3 © N ype: Y DED AND/OR | 2" = 0.010; mp; O = 0! SAMPLIN: ENDED A | 5/8" = 0.016 ther (Specify) G T: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN FIELD DEC | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA | = Bailer; | 0006; 3/16/ BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; II SAMF) SIGNATUR CODE: TUBING E PRESERV | 1/4" = 0.00: ESP = Electric PLING D EE(S): Y N (i | Submersible Pur ATA FIELD Filtration replaced) fing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: Y DUPLICATE INTENE ANALYSIS | D.006; 1// Peristaltic Pur AT: 3 © N ype: Y DED AND/OR | 2" = 0.010; mp; O = Oi SAMPLINENDED A FILTER SI N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G T: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAMPLED SAMPLE | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | = Bailer; | 0006; 3/16/ BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; II SAMF) SIGNATUR CODE: TUBING E PRESERV | 1/4" = 0.00: ESP = Electric PLING DA EE(S): Y N (I ATION (includation) | Submersible Pur ATA FIELD Filtration replaced) fing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: Y DUPLICATE INTENE ANALYSIS | D.006; 1// Peristaltic Pur AT: 3 © N ype: Y DED AND/OR | 2" = 0.010; mp; O = Oi SAMPLINENDED A FILTER SI N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G T: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO PLE CONTAINE CONTAINERS | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | = Bailer; | 0006; 3/16/ BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; II SAMF) SIGNATUR CODE: TUBING E PRESERV | 1/4" = 0.00: ESP = Electric PLING DA EE(S): Y N (I ATION (includation) | Submersible Pur ATA FIELD Filtration replaced) fing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: Y DUPLICATE INTENE ANALYSIS | D.006; 1// Peristaltic Pur AT: 3 © N ype: Y DED AND/OR | 2" = 0.010; mp; O = Oi SAMPLINENDED A FILTER SI N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G T: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAMPLED SAMPLE | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO PLE CONTAINE # CONTAINERS | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL CODE | EL): 1/8" = 0. = Bailer; EP Y NATION VOLUME | 0006; 3/16/BP = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA USED | Pump; II SAMF SAMF SODE: TUBING E PRESERV TIVE ADD | 1/4" = 0.00: ESP = Electric PLING DA EE(S): Y N (in ATION (includ TOTAL VOL ED IN FIELD | FIELD Filtration replaced) (mL) Final pH/ Temp | METHO | D.006; 1// Peristaltic Pur AT: 3 © N ype: Y DED AND/OR | SAMPLINENDED A FILTER SI N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G T: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLE ID CODE | EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): CONTAMINATIO PLE CONTAINE CONTAINERS | ACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL CODE AG = Amber | EL): 1/8" = 0. = Bailer; IP Y NATION VOLUME | 0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C SAMPL PRESERVA USED | " = 0.0014; Pump; II SAMF SAMF) SIGNATUR CODE: TUBING E PRESERV TIVE ADD | Y N (included to the property of the property | FIELD Filtration replaced) (mL) Final pH/ Temp | SAMPLING INITIATED A FILTERED: Y DUPLICATE INTENE ANALYSIS | D.006; 1// Peristaltic Pur AT: 3 © N YPE: Y DED AND/OR DD | 2" = 0.010; mp; O = Oi SAMPLING EQUIPMENT CODE | 5/8" = 0.016 ther (Specify) G T: IZE: µm |

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE COL

pH: ± 0.1 units Temperature: ± 3% Specific Conductance: ± 3% Dissolved Oxygen: (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) Turbidity: (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) Oxidation/Reduction Potential: ± 10 millivolts

* In-house blodder not functioning. Used remail

| SITE - | ISES | | | | | SITE OCATION: | | | | | | |
|------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------|----------------------------------------------------------|------------------------------------------|--------------------------------------------|----------------------|---------------------------|---------------------------------------------------------------|-------------------------|-------------------------------|--------------------------------------------|
| | RP-W | | | SAMPLE | E ID | | | | | DATE: 7 | -24-24 | |
| | 0 10 11 | | | | PUR | GING DA | ATA | | | | | |
| WELL DIAMETER WELL VOL | (inches): UME PURGE: | TUBING DIAMET | TER (inches): | TOTAL V DEPTH AL WELL DEF | (feet): | ATIC DEPTH | Т | | R (feet): 34. | 9 0 | URGE PUMP TY R BAILER: | PE |
| only fill out | if applicable) T VOLUME PUI if applicable) | | = 1 | = PUMP VOI | feet - | IBING CAPAC | 1 | feet) X X TU | | gallons/f) + FLOW C | | gallons = gallons |
| PUMP OR T | TUBING DEPTH | | WELL SCR | EEN INTERV | | DURCH | | | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP | CO (circle µmh | OND. e units) os/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | (NTU) | COLOR / ODOR (describe) |
| 550 | | | | | 6.52 | 17,70 | 37' | 2 | 0.76 | 278 | 4.86 | Clear |
| 353 | | | | | 6.54 | 18.73 | 360 | 2 | 0.71 | 274 | 4.52 | Clear |
| 600 | | | | | 6.54 | 18.73 | 361 | | 0.68 | 282 | 2.59 | Clear |
| PURGING IN: SAMPLED I | ACITY (Gallons SIDE DIA. CAP. EQUIPMENT CO BY (PRINT) / AF TUBING WELL (feet): | ACITY (Gal./i DDES: B | Ft.): 1/8" = 0. | SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; SAM) SIGNATU | ESP = Electric PLING D RE(S): | 26; 5 c Subme | FIELD Filtration | mp; PP = P SAMPLING INITIATED A -FILTERED: You Equipment T: | Peristaltic Pu | SAMPLIN ENDED A | |
| FIELD DEC | ONTAMINATIO | N: PUM | IP Y N | | TUBING | | replaced | | DUPLICATE | | N | |
| SAMPLE ID CODE | CONTAINERS | MATERIAL CODE | VOLUME | SAMPLI PRESERVAT USED | TIVE | VATION (inclu TOTAL VOL DED IN FIELD | F | ice) Final pH/ Temp | ANALYSIS A | AND/OR | SAMPLING EQUIPMENT CODE | SAMPLE PUMI FLOW RATE (mL per minute |
| | | | | | | | | | | | | |
| REMARKS | | | | | | | | | | | | |
| MATERIAL SAMPLING | | CODES: | Glass; CG = T = Teflon; APP = After (TREPP = Reverse | Clear Glass; O = Other (brough) Peristse Flow Perists | (Specify) | = High Density B = Baile SM = Stra | er: B | P = Blado | LDPE = Low D der Pump; E Gravity Drain); | SP = Electr | ethylene; PP | = Polypropylene Pump; |

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| NAME: WELL NO: | | | | | LC | CATION: | | | | | |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------|
| | RP-5 | | | SAMPLE | E ID: | | | | DATE: 7 | -24-24 | 1 |
| | | | | | PURC | SING DA | | | | | |
| | LUME PURGE: | TUBING DIAME 1 WELL VOI | - TER (inches): | TOTAL DEPTH | (feet): | TIC DEPTH T | | ER (feet): 34,5 WELL CAPACI | | RGE PUMP TY BAILER: | /PE |
| EQUIPME | t if applicable) NT VOLUME PL t if applicable) | JRGE: 1 EQU | = (JIPMENT VO | L. = PUMP VOI | feet - LUME + (TUE | BING CAPACIT | feet) X | JBING LENGTH | gallons/foc) + FLOW CE | | gallons |
| | | | TWELL SO | = g | allons + (| gallo | ns/foot X | feet) |) + | gallons : | |
| IN WELL (f | TUBING DEPTI feet): | | DEPTH: | feet to | feet | INITIATE | DAT: 1500 | ENDED AT: | - | PURGED (g | |
| TIME | VOLUME PURGED (gailons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP (°C) | COND. (circle units) μmhos/cm <u>or</u> μS/cm | DISSOLVED OXYGEN (circle units) mol or % saturation | Redox (mV) | Turbidity (NTU) | (describe) |
| 1515 | | | | | 6.95 | 19.13 | 570 | 1.33 | 250 | 3.15 | Clear |
| 1520 | | | | | 605 | P.03 | 569 | 1.32 | 245 | 4.34 | |
| 1325 | | | | | 6.95 | 19.02 | 568 | 1.25 | 251 | 1.58 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | A |
| TUBING IN | PACITY (Gallon: NSIDE DIA. CAF EQUIPMENT C | PACITY (Gal./ | 0.75" = 0.02; Ft.): 1/8" = 0 | 1" = 0.04; 0.0006; 3/16 BP = Bladder | " = 0.0014; Pump; E | 1/4" = 0.002 SP = Electric | 6: 5/16" = 0. Submersible Pu | 004: 3/8" = 0 | | " = 0.010; | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| PURGING | ISIDE DIA. CAF | PACITY (Gal./ | Ft.): 1/8" = 0 | 0.0006; 3/16 | " = 0.0014; Pump; E SAMP | 1/4" = 0.002 ESP = Electric PLING DA | 6: 5/16" = 0. Submersible Pu | 004: 3/8" = 0 | 0.006; 1/2 eristaltic Pum | " = 0.010; | 5/8" = 0.016 ther (Specify) |
| PUMP OR | EQUIPMENT C BY (PRINT) / A TUBING | PACITY (Gal./ | Ft.): 1/8" = 0 | D.0006; 3/16 BP = Bladder SAMPLER(S | " = 0.0014; Pump; E SAMP) SIGNATUR | 1/4" = 0.002 ESP = Electric PLING DA | Submersible Pu | 004: 3/8" = 0 mp; PP = P | 0.006; 1/2 eristaltic Pum | " = 0.010; p; O = 01 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) |
| PUMP OR DEPTH IN | NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A | PACITY (Gal./ ODES: B | Ft.): 1/8" = (| 0.0006; 3/16 BP = Bladder SAMPLER(S | " = 0.0014; Pump; E SAMP) SIGNATUR | 1/4" = 0.002 ESP = Electric PLING DA E(S): | Submersible Pu | mp: PP = P SAMPLING INITIATED A -FILTERED: Y | eristaltic Pum | " = 0.010; p; O = 01 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) |
| PUMP OR DEPTH IN | NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): | PACITY (Gal./ CODES: B FFILIATION: DN: PUM | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C N SAMPLI | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERVA | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re | Submersible Pu ATA FIELD Filtrati aplaced) ing wet ice) | mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: | 7: \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | "= 0.010; p; O = Of SAMPLIN ENDED A FILTER SI N SAMPLING | 5/8" = 0.016 ther (Specify) G IT: IZE: µm |
| PUMP OR DEPTH IN | EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO | PACITY (Gal./ CODES: B FFILIATION: DN: PUM | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re | FIELD Filtration wet ice) Final pH/ | mp; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: | D.006: 1/2' eristaltic Pum T: \S \sqrt{5} N APPE: Y DED S AND/OR E | SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) G IT: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAM | NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./ ODES: B FFILIATION: DN: PUM ER SPECIFICA MATERIAL | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C N SAMPLI PRESERVAT | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re ATION (includi TOTAL VOL | FIELD Filtration wet ice) Final pH/ | MP; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/2' eristaltic Pum T: \S \sqrt{5} N APPE: Y DED S AND/OR E | " = 0.010; p; O = Of SAMPLIN ENDED A FILTER SI N SAMPLING QUIPMENT | 5/8" = 0.016 ther (Specify) G IT: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAM | NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./ ODES: B FFILIATION: DN: PUM ER SPECIFICA MATERIAL | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C N SAMPLI PRESERVAT | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re ATION (includi TOTAL VOL | FIELD Filtration wet ice) Final pH/ | MP; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/2' eristaltic Pum T: \S \sqrt{5} N APPE: Y DED S AND/OR E | " = 0.010; p; O = Of SAMPLIN ENDED A FILTER SI N SAMPLING QUIPMENT | 5/8" = 0.016 ther (Specify) G IT: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAM SAMPLE | NSIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./ ODES: B FFILIATION: DN: PUM ER SPECIFICA MATERIAL | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C N SAMPLI PRESERVAT | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re ATION (includi TOTAL VOL | FIELD Filtration wet ice) Final pH/ | MP; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/2' eristaltic Pum T: \S \sqrt{5} N APPE: Y DED S AND/OR E | " = 0.010; p; O = Of SAMPLIN ENDED A FILTER SI N SAMPLING QUIPMENT | 5/8" = 0.016 ther (Specify) G IT: IZE: µm SAMPLE PUMP FLOW RATE |
| PUMP OR DEPTH IN SAMPLED SAMPLED SAMPLED SAM | EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINERS | PACITY (Gal./ ODES: B FFILIATION: DN: PUM ER SPECIFICA MATERIAL | Ft.): 1/8" = (= Bailer; MP Y | D.0006; 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C N SAMPLI PRESERVAT | " = 0.0014; Pump; E SAMP) SIGNATUR CODE: TUBING E PRESERV/ | 1/4" = 0.002 ESP = Electric PLING DA E(S): Y N (re ATION (includi TOTAL VOL | FIELD Filtration wet ice) Final pH/ | MP; PP = P SAMPLING INITIATED A -FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/2' eristaltic Pum T: \S \sqrt{5} N APPE: Y DED S AND/OR E | " = 0.010; p; O = Of SAMPLIN ENDED A FILTER SI N SAMPLING QUIPMENT | 5/8" = 0.016 ther (Specify) G IT: IZE: µm |

^{2.} STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| WELL NO: | | | | | | CATION: | | | | | |
|-------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| WELL NO. | RP- | 0 | | SAMPLE | | | | | DATE: 7 | -24-24 | |
| | | | | | PURG | ING DA | | | | | |
| | (inches): UME PURGE: if applicable) | TUBING DIAMET | TER (inches): | TOTAL V DEPTH AL WELL DEF | (feet): | TIC DEPTH T | OWATER) X | WELL CAPAC | NG OR | IRGE PUMP TY R BAILER: | |
| EQUIPMEN | | JRGE: 1 EQU | = (IPMENT VOL. | . = PUMP VOI | feet - UME + (TUB | ING CAPACI | feet) X TY X TU | JBING LENGTH | | ELL VOLUME | gallons |
| PUMP OR | TUBING DEPTI | Н | | EEN INTERV | | DURCIN | IG ED AT: 1427 | PURGING ENDED AT: | | gallons : TOTAL VOL PURGED (g | UME |
| TIME | VOLUME PURGED | CUMUL. VOLUME PURGED | PURGE RATE | DEPTH TO WATER | pH (standard units) | TEMP, (°C) | COND. (circle units) μmhos/cm | DISSOLVED OXYGEN (circle units) mg/L or | Redox (mV) | Turbidity (NTU) | COLOR / |
| 17144 | (gallons) | (gallons) | (gpm) | (feet) | 1 - 0 | 1974 | or µ\$19m | % saturation | 249 | 4.90 | Clear |
| 1440 | | | | | 6.75 | 18.74 | 469 | 1.10 | 253 | 1.73 | 1 |
| 1445 | | | - | | 6.71 | | 467 | 1.06 | 254 | 011 | 1 |
| 1450 | | | | | 6.72 | 18.69 | (0) | 12-1/0 | 234 | 200 | |
| | | | | | | | | | | | |
| - | | | | | | | | | | - | 1 |
| | | | | | | | | | | | |
| TUBING IN | PACITY (Gallon ISIDE DIA. CAR EQUIPMENT C | PACITY (Gal./ | Ft.): 1/8" = 0.1 | 1" = 0.04; 0006; 3/16 BP = Bladder | " = 0.0014; Pump; E | SP = Electric | 26; 5/16" = 0. Submersible Pu | 004: 3/8" = 1 | | 2" = 0.010; | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| TUBING IN PURGING | ISIDE DIA. CAF | ODES: B | Ft.): 1/8" = 0.1 | 0006: 3/16 | " = 0.0014; Pump; E SAMP | 1/4" = 0.002 SP = Electric LING DA | 26; 5/16" = 0. Submersible Pu | 004: 3/8" = 1 mp; PP = F | 0.006; 1/3 Peristaltic Pur | 2" = 0.010; mp; O = 0 | 5/8" = 0.016 ther (Specify) |
| PUMP OR | ISIDE DIA. CAF EQUIPMENT C BY (PRINT) / A | ODES: B | Ft.): 1/8" = 0.1 | 0006; 3/16 BP = Bladder | " = 0.0014; Pump; E SAMP) SIGNATURI | 1/4" = 0.002 SP = Electric LING DA | Submersible Pu | 004: 3/8" = 1 mp; PP = F | O.006: 1/2 Peristaltic Pur AT: 145 0 | 2" = 0.010; mp; O = 0 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) |
| PUMP OR DEPTH IN | ISIDE DIA. CAF EQUIPMENT O BY (PRINT) / A TUBING | PACITY (Gal./I | Ft.): 1/8" = 0.1 | 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; E SAMP) SIGNATURI | 1/4" = 0.002 SP = Electric LING DA | Submersible Pu | mp; PP = F SAMPLING INITIATED A -FILTERED: Y | O.006: 1/2 Peristaltic Pur AT: HS o | 2" = 0.010; mp; O = 0 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) G |
| PUMP OR DEPTH IN FIELD DEC | EQUIPMENT C BY (PRINT) / A TUBING WELL (feet) | PACITY (Gal./I CODES: B FFILIATION: DN: PUM ER SPECIFICA | FL): 1/8" = 0.1 = Bailer; I | 3/16 3/16 BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING | 1/4" = 0.002 SP = Electric LING DA E(S): | Submersible Pu | SAMPLING INITIATED A FILTERED: You Equipment T DUPLICATE ANALYSIS A | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G .T: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN | BY (PRINT) / A TUBING WELL (feet) CONTAMINATIO | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM | Ft.): 1/8" = 0.1 = Bailer; I | 0006: 3/16' BP = Bladder SAMPLER(S TUBING MATERIAL C | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re | Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | SAMPLING INITIATED A -FILTERED: Y on Equipment T DUPLICATE | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; | 5/8" = 0.016 ther (Specify) G XT: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN SAMPLE SAMPLE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO # | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM OR SPECIFICA MATERIAL | FL): 1/8" = 0.1 = Bailer; I | SAMPLER(S TUBING MATERIAL C SAMPLE SAMPLE | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re ATION (includ | Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: You Equipment T DUPLICATE ANALYSIS A | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G .T: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN SAMPLE SAMPLE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO # | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM OR SPECIFICA MATERIAL | FL): 1/8" = 0.1 = Bailer; I | SAMPLER(S TUBING MATERIAL C SAMPLE SAMPLE | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re ATION (includ | Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: You Equipment T DUPLICATE ANALYSIS A | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G T: IZE: μm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN SAMPLE SAMPLE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATION # CONTAINERS | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM OR SPECIFICA MATERIAL | FL): 1/8" = 0.1 = Bailer; I | SAMPLER(S TUBING MATERIAL C SAMPLE SAMPLE | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re ATION (includ | Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: You Equipment T DUPLICATE ANALYSIS A | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G .T: IZE: µm |
| PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATION # CONTAINERS | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM OR SPECIFICA MATERIAL | FL): 1/8" = 0.1 = Bailer; I | SAMPLER(S TUBING MATERIAL C SAMPLE SAMPLE | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re ATION (includ | Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | SAMPLING INITIATED A FILTERED: You Equipment T DUPLICATE ANALYSIS A | AT: HS or Nype: EED AND/OR | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) G .T: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN FIELD DEC SAMPLE ID CODE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATION PLE CONTAINERS | PACITY (Gal./I ODES: B OFFILIATION: ON: PUM OR SPECIFICA MATERIAL | FL): 1/8" = 0.1 = Bailer; IP Y N ATION VOLUME | SAMPLER(S TUBING MATERIAL C SAMPLE SAMPLE | " = 0.0014; Pump; E SAMP) SIGNATURI CODE: TUBING E PRESERVA TIVE ADDE | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re ATION (includ FOTAL VOL. D IN FIELD (| Submersible Pu ATA FIELD Filtrati eplaced) ing wet ice) Final pH/ | DUPLICATE ANALYSIS A METHO LDPE = Low D | Density Polye | 2" = 0.010; mp; O = O SAMPLING FILTER S N SAMPLING EQUIPMENT CODE | 5/8" = 0.016 ther (Specify) G .T: IZE:µm SAMPLE PUMI FLOW RATE (mL per minute) = Polypropylene |

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE NAME: | 555 | | | | | OCATION: | | | | | | |
|-------------------|---------------------------------------------------------------|-----------------------------------------|-------------------------------|----------------------------------------------------------------|---------------------------|-------------------------------------------------|---------------------------------|------------------------|-------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------------------------------------|
| WELL NO: | RP-7 | | | SAMPLE | | | | | | DATE: 7 | -24-2 | 4 |
| | 10 1 | | | | PUR | GING DA | TA | | | | | |
| WELL DIAMETER | (inches): | TUBING DIAMET | ΓER (inches): | TOTAL \ | (feet): | | | | EPTH 33, | | RGE PUMP TY BAILER: | PE . |
| (only fill out | ume PURGE: if applicable) T VOLUME PU if applicable) | | = (| . = PUMP VOL | feet - .UME + (TU | JBING CAPACI | TY 2 | eet) X X TU | WELL CAPAC | gallons/fo) + FLOW C | ELL VOLUME | gallons gallons |
| | TUBING DEPTH | ł | WELL SCF | = g REEN INTERV feet to | AL feet | PURGIN INITIATE | G G D AT: | | PURGING ENDED AT: |) + | gallons TOTAL VOL PURGED (g | .UME |
| IN WELL (fe | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP | COI (circle µmho or (µ | ND. units) os/cm | DISSOLVED OXYGEN (circle units) mg/l/ or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1355 | | | | | 6.94 | 18.65 | 584 | | 1.62 | 259 | 3.44 | Clear |
| 1400 | | | | | 6.99 | 18.74 | 57 | 8 | 1.62 | 268 | 3.34 | - |
| llas | | | | | 6.92 | 18.75 | 574 | 9 | 1,48 | 260 | 4.46 |) |
| | | | | | | | | | | | | |
| TUBING IN | ACITY (Gallons SIDE DIA. CAP EQUIPMENT C | ACITY (Gal./ | F(.): $1/8'' = 0$ | 1" = 0.04; .0006; 3/16' BP = Bladder | | .06; 2" = 0.1 1/4" = 0.002 ESP = Electric | 6, 5, | = 0.37; /16" = 0.t | | 5" = 1.02; 0.006; 1/ eristaltic Pur | | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| SAMPLED | BY (PRINT) / A | FFILIATION: | | SAMPLER(S | | PLING DA | ATA | | SAMPLING INITIATED A | т. Шис | SAMPLIN ENDED A | |
| PUMP OR | TUBING WELL (feet): | | | TUBING MATERIAL C | ODE: | | | 3 4 5 | FILTERED: Y | N | | IZE: μm |
| | ONTAMINATIO | N: PUN | IP Y N | | TUBING | Y N (re | eplaced) | | DUPLICATE | Υ | N | |
| - | LE CONTAINE | | ATION | SAMPLI | | VATION (includ | | ice) inal pH/ | INTEND ANALYSIS A | AND/OR | SAMPLING EQUIPMENT | SAMPLE PUMP FLOW RATE |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | USED | | DED IN FIELD (| | Temp | METHO | OD | CODE | (mL per minute) |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| REMARKS | | | | | | | | | 1 | | | |
| MATERIAL | | | T = Teflon; APP = After (T | = Clear Glass; O = Other (Through) Peristrese Flow Peristrese | Specify) altic Pump; | = High Density B = Bailer SM = Straw | ; В | • = Bladd | LDPE = Low D ler Pump; E Gravity Drain); | SP = Electri | thylene; PP c Submersible er (Specify) | = Polypropylene; Pump; |

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE NAME: | ISES | | | | | SITE LOCATION: | | | | | |
|-------------------|--------------------------------------------------|-----------------------------------------|-----------------------------------------|-------------------------------------------|------------------------------------|-------------------|-------------------------------------------------|-----------------------------------------------------|----------------|---------------------------|----------------------------------------------|
| WELL NO: | | | * | SAMPLE | ID: | | | | DATE: | 1-24-2 | Н |
| | | | | | PUR | GING DA | TA | | | | V |
| WELL DIAMETER | R (inches): | TUBING | TER (inches): | TOTAL V | (feet): | | TO WAT | DEPTH ER (feet): 30 | 69 01 | JRGE PUMP TY R BAILER: | PE |
| (only fill out | UME PURGE: t if applicable) | | = (| | feet - | | O WATER) X | WELL CAPAC | gallons/f | | gallons |
| | t if applicable) | MOL. I Lac | ,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | t) + | gallons | = gallons |
| | | | I WELL SCE | = g REEN INTERV | allons + (| PURGIN | ons/foot X | PURGING | t) + | TOTAL VOL | |
| IN WELL (f | TUBING DEPTH eet): | 1 | DEPTH: | feet to | feet | INITIATE | D AT: 1647 | ENDED AT | | PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP (°C) | COND. (circle units) µmhos/cm or us/cm | OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1700 | | | | | 6.58 | 18.17 | 306 | 0.91 | 288 | 1.79 | Open |
| 1705 | | | | | 6.5 7 | 18.16 | 306 | 0.58 | 287 | 3.43 | |
| 1710 | | | | | 6.56 | 18.03 | 306 | 0.84 | 287 | 0.76 | |
| | | | | | | | | | | | |
| TUBING IN | PACITY (Gailons ISIDE DIA. CAP EQUIPMENT C | PACITY (Gal./ ODES: B | Ft.): 1/8" = 0. | 1" = 0.04; 0006; 3/16' BP = Bladder | * = 0.0014; Pump; SAM | ESP = Electric | 26: 5/16" = 0 Submersible Po | 0.004; 3/8" = ump; PP = I | Peristaltic Pu | mp; 0 = 0 | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| | | | | | | | | INITIATED | AT: 1710 | ENDED A | T: |
| PUMP OR | | | | TUBING MATERIAL C | ODE: | | | D-FILTERED: `tion Equipment T | | FILTER S | IZE: μm |
| | WELL (feet): CONTAMINATION | N: PUN | 1P Y N | | TUBING | Y N (r | eplaced) | DUPLICATE | | N | |
| | PLE CONTAINE | | 1 | | | VATION (includ | | INTEN | | SAMPLING | SAMPLE PUMP |
| | LE CONTAINE | | | PRESERVAT USED | IVE | TOTAL VOL | Final pH | ANIAL VOIC | AND/OR | EQUIPMENT | FLOW RATE (mL per minute) |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | USED | 710 | | | -1 | | | |
| SAMPLE | | | VOLUME | USED | 7101 | | | | | | |
| SAMPLE | | | VOLUME | USED | | | | | | | |
| SAMPLE | | | VOLUME | USED | | | | | | | |
| SAMPLE ID CODE | CONTAINERS | | VOLUME | USED | | | | | | | |
| SAMPLE | CONTAINERS | | VOLUME | USED | | | | | | | |
| SAMPLE ID CODE | CONTAINERS | CODE AG = Amber | | • Clear Glass; • O = Other (| HDPE | = High Density | | LDPE = Low f | Density Polye | othylene; PP | = Polypropylene; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| NAME: , | TSES | | | | | SITE LOCATION: | | | | | | |
|--------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------|----------|----------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------|
| | RP-10 | | | SAMPLE | ID: | | | | | DATE: | 7-24-2 | 4 |
| | KI 10 | | | | PUR | GING DA | TA | | | | | |
| | UME PURGE: | TUBING DIAMET | TER (inches): | TOTAL V DEPTH | (feet): | ATIC DEPTH 1 | TOW | VATE | EPTH R (feet): 35,7 WELL CAPACI | 0 | JRGE PUMP TY R BAILER: | YPE |
| EQUIPMEN | if applicable) IT VOLUME PU if applicable) | RGE: 1 EQU | | | feet - UME + (TU | | feet) ITY X ons/foot X | TU | BING LENGTH) | | | gallons = gallons |
| PUMP OR IN WELL (f | TUBING DEPTH | 1 | | EEN INTERV | | PURGIN | | 8 | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP (°C) | COND. (circle uni µmhos/ci or µ 67 cr | ts) m | DISSOLVED OXYGEN (circle units) rtill or % saturation | Redox (mV) | (NTU) | (describe) |
| 620 | | | | | 6.85 | 18.40 | 569 | | 3.27 | 264 | 5.74 | Clear |
| 625 | | | | | 6.84 | 18.37 | 559 | | 3.18 | 262 | 5.17 | |
| 1630 | | | | | 6.84 | 18.35 | 562 | | 3.15 | 264 | 3.49 | 1 |
| 625 | | | | | 6,86 | 18.32 | 558 | | 3.09 | 266 | 3.13 | 4 |
| 640 | | | | | 6.84 | 18.34 | 552 | | 3.09 | 272 | 1.74 | 1 |
| | | | | | | | | | | | | |
| PUMP OR | PACITY (Gailons ISIDE DIA. CAP EQUIPMENT C BY (PRINT) / AI TUBING WELL (feet): | ACITY (Gal./F | =t.): 1/8" = 0.0 = Baller; E | 1" = 0.04; 1006; 3/16' 3P = Bladder I SAMPLER(S; TUBING MATERIAL C | SAM SIGNATU | 1/4" = 0.002 ESP = Electric PLING DA | 26; 5/16" Submersible | e Pun | 004; 3/8" = 0 | T: 16 M C | /2" = 0.010; imp; O = 0 SAMPLIN ENDED A | |
| PUMP OR DEPTH IN | ISIDE DÌA. CAP EQUIPMENT C BY (PRINT) / AI TUBING | ACITY (Gal./FODES: B | =t.): 1/8" = 0.0 = Baller; E | 3/16' 3P = Bladder I SAMPLER(S | SAM SIGNATU | 1/4" = 0.00; ESP = Electric PLING DA RE(S): | 26; 5/16" Submersible | e Pun | SAMPLING INITIATED A FILTERED: Y | n.006: 1. eristaltic Pu T: [G M C | /2" = 0.010; imp; O = 0 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) |
| PUMP OR DEPTH IN | ISIDE DÌA. CAP EQUIPMENT C BY (PRINT) / AI TUBING WELL (feet): | ACITY (Gal./FODES: B FFILIATION: DN: PUM | =t.): 1/8" = 0.0 = Bailer; E | 3/16' 3P = Bladder I SAMPLER(S) TUBING MATERIAL C | SAM SIGNATU ODE: TUBING | 1/4" = 0.00; ESP = Electric PLING DA RE(S): | Submersible ATA Fireplaced) ding wet ice) | e Pun | SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTEND | T: 16 M C | /2" = 0.010; imp; | 5/8" = 0.016 ther (Specify) IG AT: IZE: µm |
| PUMP OR DEPTH IN | ISIDE DÌA. CAP EQUIPMENT C BY (PRINT) / AI TUBING WELL (feet): CONTAMINATIO | ACITY (Gal./FODES: B FFILIATION: DN: PUM | = t.): 1/8" = 0.0 = Bailer; | 3/16' 3P = Bladder I SAMPLER(S) TUBING MATERIAL C | ODE: TUBING PRESER | 1/4" = 0.002 ESP = Electric PLING DA RE(S): | ATA Freplaced) Final Final | e Pun | SAMPLING INITIATED A FILTERED: Y DUPLICATE: | T: 16 M C | /2" = 0.010; imp; | 5/8" = 0.016 ther (Specify) IG AT: IZE: µm SAMPLE PUMI FLOW RATE |
| PUMP OR DEPTH IN SAMPLE SAMPLE | ISIDE DIA. CAP EQUIPMENT C BY (PRINT) / AI TUBING WELL (feet): CONTAMINATIO PLE CONTAINE # | ACITY (Gal./F ODES: B FFILIATION: ON: PUM R SPECIFICA MATERIAL | = Bailer; E P Y N | 3/16' 3/16' 3P = Bladder I SAMPLER(S) TUBING MATERIAL C SAMPLE | ODE: TUBING PRESER | 1/4" = 0.00; ESP = Electric PLING DA RE(S): Y N (r VATION (included) TOTAL VOL | ATA Freplaced) Final | e Pun | SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTEND ANALYSIS A | T: 16 M C | /2" = 0.010; imp; O = O SAMPLIN FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) IG AT: IZE: µm SAMPLE PUMF FLOW RATE |
| PUMP OR DEPTH IN SAMPLE SAMPLE | BY (PRINT) / AI TUBING WELL (feet): CONTAMINATIO PLE CONTAINERS | ACITY (Gal./F ODES: B FFILIATION: ON: PUM R SPECIFICA MATERIAL | = Bailer; E P Y N | 3/16' 3/16' 3P = Bladder I SAMPLER(S) TUBING MATERIAL C SAMPLE | ODE: TUBING PRESER | 1/4" = 0.00; ESP = Electric PLING DA RE(S): Y N (r VATION (included) TOTAL VOL | ATA Freplaced) Final | e Pun | SAMPLING INITIATED A' FILTERED: Y DUPLICATE: INTEND ANALYSIS A | T: (GMC) T: (GMC) T: V TED NND/OR DD | /2" = 0.010; imp: O = O SAMPLIN FILTER S N SAMPLING EQUIPMENT CODE | 5/8" = 0.016 ther (Specify) IG AT: IZE: µm |

^{2.} STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE NAME | SES | > | | | SI | TE DCATION: | News | V. AR | | | |
|----------------------------|-----------------------------------------------------------------------------------------|------------------------------------------|---------------------------|--------------------------------------------------------------|---------------------------|-----------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------|
| WELL NO: | RR1 | | | SAMPLE | | | | , | DATE:) | 7-1-2 | 4 |
| | | | | | PURC | SING DA | TA | | | | |
| | (inches): UME PURGE: | TUBING DIAMET | ER (inches): | TOTAL V DEPTH | (feet): | TIC DEPTH T | STATIC TO WAT O WATER) X | DEPTH ER (feet): 🥠 WELL CAPAC | .31 OR | RGE PUMP T BAILER: | YPE |
| EQUIPMEN | NT VOLUME PU if applicable) | IRGE: 1 EQU | = (IPMENT VOL. | | | | feet) X TY X T | CUBING LENGTH | | | gallons gallons |
| PUMP OR | TUBING DEPTH | 1 | WELL SCR | EEN INTERV. | AL feet | PURGIN | | PURGING | | TOTAL VO | LUME |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. | COND. (circle units) µmhos/cm or µ g //cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidit (NTU) | (describe) |
| 1000 | | | | | 6,02 | 16.97 | 335 | 199 | 269 | 1.1 | Clear |
| 1005 | | | | | 6.04 | 17.01 | 335 | 1912 | 268 | 1.6 | |
| 1010 | | | | | 6.05 | 17.02 | 336 | 1.89 | 263 | 0.4 | 1 |
| PUMP OR DEPTH IN V | PACITY (Gallons SIDE DIA. CAP EQUIPMENT COMPANY CONTAMINATION CONTAMINATION CONTAMINERS | PACITY (Gal./FODES: B FFILIATION: PUMI | e. Bailer; E P Y N TION | IDO06; 3/16* IP = Bladder F SAMPLER(S) TUBING MATERIAL C | CODE: TUBING E PRESERVA | SP = Electric LING DA E(S): | Submersible Pu | J.004; 3/8" = (Jump; PP = F) SAMPLING INITIATED A D-FILTERED: Y ion Equipment T DUPLICATE ANALYSIS | Peristaltic Pum T: / / / / / / / / / / / / / / / / / / / | SAMPLIN ENDED | 12" = 5.88 5/8" = 0.016 Other (Specify) NG / / / SIZE: µm SAMPLE PUMP FLOW RATE (mL per minute) |
| REMARKS: MATERIAL SAMPLING | CODES: | | | Clear Glass; • O = Other (\$ rough) Perista | Specify) altic Pump; | High Density F | BP = Blad | LDPE = Low D | SP = Electric | | P = Polypropylene; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| WELL NO: RP-3 SAMPLE ID: PURGING DATA | | 4-30-24 | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|---------------------------------------------|
| | _ | 4-70 | |
| | | | |
| WELL TUBING TOTAL WATER STATIC DEPTH DIAMETER (inches): DEPTH (feet): TO WATER (feet): | 26.14 | PURGE PUMP TYPE OR BAILER: | |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL C (only fill out if applicable) = (feet - feet) X | gallo | ons/foot = | gallons |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LE (only fill out if applicable) = gallons + (gallons/foot X | feet) + | W CELL VOLUME gallons = | gallons |
| PUMP OR TUBING DEPTH WELL SCREEN INTERVAL PURGING PURG | GING ED AT: | TOTAL VOLUM PURGED (gall | |
| TIME VOLUME VOLUME VOLUME PURGE TO (circle units) (circle units) (circle units) (circle units) (pm) (feet) (feet) (pm) (feet) (pm) (pm) (pm) (pm) (pm) (pm) (pm) (pm | GEN Re units) (m | dox Turbidity | COLOR / ODOR (describe) |
| 1300 6.26 14.87 276 5.1 | 12 23 | n 3,2 | Cleof |
| 1305 G.26 17.87 275 H.9 | | | |
| 1310 6.26 19.63 276 4.6 | 66 23 | 3 1.1 | 1 |
| | | | |
| | | | |
| | | | |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0. TUBING INSIDE DIA: CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004: 3 | .65; 5" = 1.0 | | 2" = 5.88 3" = 0.016 |
| PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; E | PP = Peristaltion | c Pump; O = Othe | er (Specify) |
| SAMPLING DATA SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S): SAMP INITIA | PLING ATED AT: 13 | SAMPLING ENDED AT: | 1317 |
| PUMP OR TUBING TUBING FIELD-FILTERE DEPTH IN WELL (feet): MATERIAL CODE: Filtration Equipm | | FILTER SIZE | ≛:μm |
| | ICATE: | Y N | |
| SAMPLE # MATERIAL VOLLIME PRESERVATIVE TOTAL VOL. Final pH/ | NTENDED YSIS AND/OR METHOD | REQUIPMENT | SAMPLE PUMP FLOW RATE (mL per minute) |
| ID CODE CONTAINERS CODE VOLUME USED ADDED IN FIELD (mL) Temp | | | |
| | | | |
| REMARKS: Hoc'but HACH recalibrated prior to put | GING | | |
| | Low Density P | Polyethylene; PP = | Polypropylene; |
| SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity D | • | lectric Submersible Pur Other (Specify) | mp; |
| NOTES: 1. The above do not constitute all of the information required by 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS | , | 7-6 2-01 | |

pH: ± 0.1 units Temperature: ± 3% Specific Conductance: ± 3% Dissolved Oxygen: (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) Turbidity: (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) Oxidation/Reduction Potential: ± 10 millivolts

- Built in bludder not functioning. Used outs instead.

| SITE NAME: | SES | | | | | TE OCATION: | rever. | c, AR | | | |
|-------------------------|------------------------------------------------|-----------------------------------------|------------------------|----------------------------------------------------------|--------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------------------------------|----------------|------------------------|----------------------------------------------|
| | RP-H | | | SAMPLE | | | | | DATE: 9 | -30-2 | 4 |
| | | | | | PURC | GING DA | TA | | | | |
| WELL DIAMETER | (inches): | TUBING | TER (inches): | TOTAL \ | WATER (feet): | | STATIC D TO WATE | R (feet): 32 | 67 OR | RGE PUMP TY BAILER: | /PE |
| (only fill out | UME PURGE: if applicable) IT VOLUME PU | | = (| | feet - | | feet) X | | gallons/foo | | gallons |
| | if applicable) | KGE: TEQU | JIPWIENT VOL. | | | | ons/foot X | feet) | | gallons | = gallons |
| | TUBING DEPTH | 1 | WELL SCR | EEN INTERV | AL feet | PURGIN | | PURGING ENDED AT: | | TOTAL VOL | UME |
| IN WELL (fe | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP (°C) | COND. (circle units) µmhos/cm or µS/dm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / |
| 1415 | | | | | 6.43 | 17.58 | 773 | 1,36 | 283 | 1.7 | Llear |
| 1420 | | | | | 6.43 | 1754 | 374 | 1.34 | 223 |),4 | |
| 1425 | | | | | 6.43 | 17.55 | 375 | 1.30 | 224 | 1.2 | |
| | | | | | | | | | | | |
| PURGING I | ACITY (Gallons SIDE DIA. CAP EQUIPMENT C | ODES: B | FL): 1/8" = 0. | 1" = 0.04; 0006; 3/16' BP = Bladder SAMPLER(S | " = 0.0014; Pump; E SAMP | 1/4" = 0.000 SP = Electric PLING DA | 26; 5/16" = 0. Submersible Pur | 004; 3/8" = 0 mp; PP = Pe | eristaltic Pum | p; 0 = 0 | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| | | | | TUDULO | | | LEIELD | INITIATED A | | | IZE:μm |
| PUMP OR T DEPTH IN 1 | TUBING WELL (feet): | | | TUBING MATERIAL C | ODE: | | | on Equipment Ty | | TILILING | μπ |
| FIELD DEC | ONTAMINATIO | N: PUN | IP Y N | | TUBING | Y N (r | eplaced) | DUPLICATE: | Υ | N | |
| SAMF | LE CONTAINE | R SPECIFICA | ATION | SAMPLE | E PRESERV | ATION (includ | ling wet ice) | INTEND | | SAMPLING | SAMPLE PUMP FLOW RATE |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVAT USED | | TOTAL VOL ED IN FIELD | Final pH/ mL) Temp | ANALYSIS A METHO | | QUIPMENT CODE | (mL per minute) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| REMARKS | | | | | | | | | | | |
| MATERIAL | | AG = Amber S = Silicone; | | = Clear Glass; O = Other (| | High Density | Polyethylene; | LDPE = Low De | ensity Polyeth | iylene; PP | = Polypropylene; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE NAME: | 1.SES | | | | SI | TE DCATION: / | Vero | nk | AR | | | |
|-------------------|----------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|--------------------------------------------------|----------------------------|---------------------------------------------|-----------------------------------------|---------------------|----------------------------------------------|---------------|-------------------------------|-------------------------------|
| WELL NO: | RP-S | | | SAMPLE | | | | | 1 | DATE: 4 | 30-2 | 6-1 |
| | | | | | PURC | SING DA | TA | | | | | |
| WELL DIAMETER | (inches): | TUBING DIAMET | FR (inches): | TOTAL V | (feet): | TIC DEDTH T | TO | TIC DE | EPTH R (feet): 74, WELL CAPACE | 13 OR | RGE PUMP TY BAILER: | PΕ |
| (only fill out | if applicable) | | = (| | feet - | | feel | n x | BING LENGTH) | gallons/fo | ot = | gallons |
| | IT VOLUME PUI if applicable) | RGE: 1 EQUI | PMENT VOL | | allons + (| | ns/foot X | 10. | feet) | | gallons | = gallons |
| PUMP OR | TUBING DEPTH | | WELL SCF | EEN INTERV | | PURGIN | G D AT:) . | 327 | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND (circle ur µmhos/ or µ\$/ |). nits) cm | OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1340 | | | | | 6,58 | 17.62 | 542 | | 1,99 | 224 | 1.8 | Clear |
| 1745 | | | | | 6.60 | 17.62 | 53 | 7 | 1,94 | 223 | 1.5 | |
| 1350 | | | | | 6.58 | 17.63 | 5 37 | 3 | 1.92 | 222 |).1 | |
| PUMP OR DEPTH IN | PACITY (Gallons ISIDE DIA. CAP EQUIPMENT CI BY (PRINT) / AI TUBING WELL (feet): CONTAMINATIO | ACITY (Gal./FODES: B | t.): 1/8" = 0. = Bailer; | SAMPLER(S TUBING MATERIAL C | SAMF SIGNATUR CODE: TUBING | 1/4" = 0.002 ESP = Electric PLING DA RE(S): | Submersit ATA eplaced) | FIELD- Filtratio | SAMPLING INITIATED A FILTERED: Y DUPLICATE: | T: 135 | SAMPLIN ENDED A | T: 155 C |
| | PLE CONTAINE | | TION | | | ATION (includ | | e) al pH/ | INTEND ANALYSIS A | ND/OR I | SAMPLING EQUIPMENT | SAMPLE PUMP FLOW RATE |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATUSED | | ED IN FIELD | | emp | METHO | OD O | CODE | (mL per minute) |
| | | | | | | | | | | | | |
| REMARKS | Vupli | | | = Clear Glass; | | High Density | Polyethyle | ne; | LDPE = Low De | ensity Polyet | hylene; PF | = Polypropylene; |
| SAMPLING | G EQUIPMENT | S = Silicone; CODES: # | APP = After (T | O = Other (Through) Perist se Flow Perist | taltic Pump; | B = Baile SM = Strav | | | ler Pump; E Gravity Drain); | | c Submersible er (Specify) | Pump; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE - | TSES | | | | | TE CATION: | Newas | K. AR | | | |
|---------------------|-------------------------------|-----------------------------------------|----------------------------|----------------------------------|---------------------------|--------------------|-----------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------|-------------------------------|----------------------------------------------|
| | RP-6 | | | SAMPLE | ID: | | | | DATE: 9 | -30-2 | H |
| | - | | | | PURG | ING DA | TA | | | | |
| WELL VOL | (inches): | TUBING DIAMET | ER (inches): | TOTAL V DEPTH (| (feet): | TIC DEPTH T | TO WAT | DEPTH ER (feet): 33.4 WELL CAPAC | 44 OR | RGE PUMP TY BAILER: | PE |
| (only fill out | if applicable) IT VOLUME PU | | = 1 | | feet - | | feet) > | | gallons/fo | iot = ELL VOLUME | gallons |
| (only fill out | if applicable) | | | = g | allons + (| gallo | ns/foot X | feet |) + | gallons : | = gallons |
| PUMP OR | TUBING DEPTH | | WELL SCR DEPTH: | EEN INTERV | AL feet | PURGIN INITIATE | G ED AT: IS 🔞 | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) μmhos/cm <u>or</u> μ 9/o m | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 16 HS | | | | | 6.67 | 19.20 | 727 | 0.80 | 217 | 0.4 | Clear |
| ¥356 | | | | | 6.66 | P.25 | 720 | 0.79 | 214 | 0.5 | |
| 1355 | | | | | 666 | 19.46 | 708 | 0.77 | 212 | 0.5 | |
| | | | | | | 16 | | | | | |
| | | | | | 11 | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| TUBING IN | SIDE DIA. CAP | ACITY (Gal./F | -t.): 1/8" = 0. | | | 1/4" = 0.002 | | 0.004; 3/8" = | 5" = 1.02; 0.006; 1/2 Peristaltic Pur | 2" = 0.010: | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| PURGING | EQUIPMENT C | ODES: B | = Bailer; I | DF ~ Diaddei | | LING DA | | ump. | | | |
| SAMPLED | BY (PRINT) / A | FFILIATION: | | SAMPLER(S | | | | SAMPLING INITIATED | AT:)555 | SAMPLIN ENDED A | |
| PUMP OR DEPTH IN | TUBING WELL (feet): | | | TUBING MATERIAL C | ODE: | | | D-FILTERED: \\ ation Equipment T | | FILTER S | IZE: μm |
| | CONTAMINATIO | N: PUM | P Y N | | TUBING | Y N (r | eplaced) | DUPLICATE | : Y | N | |
| | PLE CONTAINE | | TION | | | ATION (includ | ling wet ice) | INTENI ANALYSIS | | SAMPLING EQUIPMENT | SAMPLE PUMP FLOW RATE |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVAT USED | | ED IN FIELD | | " METH | OD | CODE | (mL per minute) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| REMARKS | * | | | | | | | | | | |
| MATERIAL | | AG = Amber S = Silicone; | Glass; CG = T = Teflon; | = Clear Glass; O = Other (| | High Density | Polyethylene; | LDPE = Low [| Density Polye | thylene; PP | = Polypropylene; |
| SAMPLING | G EQUIPMENT | CODES: A | APP = After (T | hrough) Perist se Flow Perist | taltic Pump; | | | dder Pump; I ng Gravity Drain); | | c Submersible er (Specify) | Pump; |

NOTES: 1. The above do not constitute all of the information required by
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE NAME: | ISE | 5 | | | SI | TE CATION: | Neucl | 一人人 | 2 | | |
|-------------------|---------------------------------------------|-----------------------------------------|-----------------------------------------------|-------------------------------------------|-------------------------------|-------------------------------|-------------------------------------------------|------------------------------------------------------------------|---------------------------------------------|---------------------------------------|----------------------------------------------|
| WELL NO: | RP- 7 | | | SAMPLE | ID: | | | | | -30-6 | 24 |
| | , , | | | | PURG | ING DA | TA | | | | |
| WELL DIAMETER | (inches): | TUBING | TER (inches): | TOTAL \ | (feet): | TIC DEBTH T | STATIC I | DEPTH ER (feet): 33 WELL CAPAC | ,18 OR | RGE PUMP T' BAILER: | /PE |
| (only fill out | UME PURGE: if applicable) T VOLUME PU | | = (| | feet - | | feet) X | | gallons/fo | ot = | gallons |
| | if applicable) | NOL. 1 LOO | III III CAT | | allons + (| | ns/foot X | feet | | gallons | = gallons |
| PUMP OR 1 | TUBING DEPTH | | WELL SCF DEPTH: | REEN INTERV | AL feet | PURGIN INITIATE | G D AT: 160 5 | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1620 | | | 1 | | 6.67 | 20,74 | 443 | 3 10 | 211 | 0.7 | Clear |
| 1625 | | | | | 6.66 | 19.65 | 542 | 3,31 | 206 | 1.7 | - (|
| 1630 | | | | | 6.66 | 19.45 | 554 | 3.24 | 205 | 4.4 | 1 |
| 1635 | | | | | 6.64 | 19.31 | 556 | 3.12 | 206 | 1.3 | (|
| | | | | | | | | | | | |
| TUBING IN | ACITY (Gallons SIDE DIA. CAP | ACITY (Gal./F | = t.): $1/8'' = 0.$ | 1" = 0.04; 0006; 3/16' BP = Bladder | " = 0.0014; Pump; E | 1/4" = 0.002 SP = Electric | 6: 5/16" = 0 Submersible Pu | | 5" = 1.02; 0.006: 1/2 eristaltic Purr | 6" = 1.47; " = 0.010; np; O = 0 | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| | | | | CAMPIED/O | | LING DA | TA | | | 1 | |
| SAMPLED | BY (PRINT) / AI | FILIATION: | | SAMPLER(S |) SIGNATURI | =(5) | | SAMPLING INITIATED A | T:16 3 5 | | AT:)640 |
| PUMP OR T | TUBING WELL (feet): | | | TUBING MATERIAL C | ODE: | | | D-FILTERED: Y | | FILTER S | IZE: μm |
| FIELD DEC | ONTAMINATIC | N: PUM | IP Y N | | TUBING | Y N (re | eplaced) | DUPLICATE | Y | N | |
| | LE CONTAINE | | TION | SAMPLE | | ATION (includ | ng wet ice) | INTEND ANALYSIS A | | SAMPLING EQUIPMENT | SAMPLE PUMP FLOW RATE |
| SAMPLE ID CODE | # CONTAINERS | MATERIAL CODE | VOLUME | USED | | D IN FIELD (| TO SECURITY OF | METHO | DD | CODE | (mL per minute) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | _ | + | | | |
| REMARKS | | | | | | | | | | | |
| MATERIAL | | AG = Amber | | = Clear Glass; O = Other (| | High Density F | Polyethylene; | LDPE = Low D | ensity Polyet | hylene; PF | = Polypropylene; |
| SAMPLING | EQUIPMENT | CODES: A | T = Teflon; APP = After (T RFPP = Rever | hrough) Perist | altic Pump; | B = Bailer SM = Straw | | lder Pump; E g Gravity Drain); | | : Submersible er (Specify) | Pump; |

NOTES: 1. The above do not constitute all of the information required by

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| SITE T | SES | | | | SI | TE CATION: | Versack | AR | | | |
|----------------------------|---------------------------------|----------------------------------------|---------------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------------------------|------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------------|
| WELL NO: | Rp-e | 4 | | SAMPLE | ID: | | | | DATE: 9 | -30-2 | 4 |
| | | | | | PURG | SING DA | TA | | | | |
| WELL DIAMETER | (inches): | TUBING | FR (inches): | TOTAL V | (feet): | | STATIC D TO WATE | R (feet): 30 | OR | RGE PUMP TY BAILER: | PE |
| (only fill out | if applicable) | | = 1 | | feet - | | feet) X | WELL CAPACI | gallons/fo | ot = | gallons |
| EQUIPMEN (only fill out | IT VOLUME PU if applicable) | RGE: 1 EQU | IPMENT VOL. | | _UME + (TUE allons + (| | ry X TU | feet) | | gallons | gallons |
| | TUBING DEPTH | | WELL SCR | EEN INTERV | | PURGIN | | PURGING ENDED AT: | | TOTAL VOL PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. | COND. (circle units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (circle units) figh or % saturation | Redox (mV) | Turbidity (NTU) | COLOR / ODOR (describe) |
| 1515 | | | | 1 | 6.46 | 20.60 | 306 | 1.36 | 225 | 0.5 | Clear |
| 1520 | | | | | 6.44 | 20.60 | 306 | 1,32 | 226 | 0.5 | |
| 1525 | | | | | 6.43 | 20.58 | 305 | 1.31 | 226 | 0.6 | |
| WELL CAT | PACITY (Gallons | s Per Foot): (| 0.75" = 0.02; Ft): 1/8" = 0. | 1" = 0.04; 0006: 3/16 | 1.25" = 0.0 " = 0.0014; | 6; 2" = 0.1 1/4" = 0.002 | | | 5" = 1.02; 0.006; 1/2 | 6" = 1.47; 2" = 0.010; | 12" = 5.88 5/8" = 0.016 |
| | EQUIPMENT C | | | BP = Bladder | Pump: | ESP = Electric | Submersible Pu | mp; PP = P | eristaltic Pur | mp; O = O | ther (Specify) |
| | | | | | | PLING DA | ATA | 1 | | | |
| SAMPLED | BY (PRINT) / A | FFILIATION: | | SAMPLER(S | SIGNATUR | (E(S): | | SAMPLING INITIATED A | T: 152 | SAMPLIN ENDED | |
| PUMP OR | | | | TUBING MATERIAL (| CODE: | | |)-FILTERED: Y | N | | IZE: μm |
| | WELL (feet): CONTAMINATION | DN: PUN | IP Y N | | TUBING | Υ Ν (г | eplaced) | DUPLICATE | | N | |
| | | | | | | ATION (includ | | INTEND | DED | SAMPLING | SAMPLE PUMP |
| SAMPLE ID CODE | PLE CONTAINE # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVA USED | TIVE | TOTAL VOL ED IN FIELD (| Final pH/ | ANIAL VOIC | AND/OR | EQUIPMENT CODE | FLOW RATE (mL per minute) |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | 64 | | - |
| REMARKS | S: | | | | | | | | | | |
| MATERIA | L CODES: | AG = Amber | Glass; CG T = Teflon; | = Clear Glass O = Other | | : High Density | Polyethylene; | LDPE = Low D | ensity Polye | thylene; PF | P = Polypropylene; |
| SAMPLIN | G EQUIPMENT | CODES: | APP = After (T | hrough) Peris | taltic Pump; | B = Baile SM = Strav | r; BP = Blac v Method (Tubin | | | c Submersible er (Specify) | Pump; |

NOTES: 1. The above do not constitute all of the information required by
2. Stabilization Criteria FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

| | Kb-10 | ೦ | | SAMPLE | ID: | | | | DATE: 0 | · 30-24 | |
|--------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| | | | | | PURG | ING DA | TA | | | | |
| WELL DIAMETER | (inches): | TUBING DIAMET | ER (inches): | TOTAL V | (feet): | | STATIC D TO WATE | ER (feet): 53 | . 1 OF | IRGE PUMP TY R BAILER: | /PE |
| only fill out | if applicable) | | = (| | feet - | | feet) X | WELL CAPACI | gallons/fe | oot = | gallons |
| | IT VOLUME PU | RGE: 1 EQU | IPMENT VOL. | = PUMP VOL | UME + (TUB | ING CAPACI | TY X T | JBING LENGTH) | + FLOW C | | |
| 5111y 1 5 d. | | | - | | allons + (| _ | ons/foot X | feet) | + | gallons TOTAL VOL | |
| UMP OR WELL (f | TUBING DEPTH eet): | 4 | DEPTH: | feet to | feet | PURGIN | DAT: 1432 | PURGING ENDED AT: DISSOLVED | | PURGED (g | |
| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units) µmhos/cm or µS/cm | OXYGEN (circle units) mgu) or % saturation | Redox (mV) | Turbidity (NTU) | COLOR ODOR (describe |
| ннь | | | | | 6.56 | 17.42 | 477 | 2.52 | 221 | 2.2 | ()eas |
| 436 | | | | | 6.56 | 17.42 | 471 | 2.50 | 221 | 1.3 | |
| 455 | | | | | 6.56 | 17.44 | 47) | 2.51 | 222 | 1.3 | 1 |
| | | | | | | | | | | | |
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| | | | | | | | | | | - 6 | |
| | | | | | | | | | | | |
| UBING IN | PACITY (Gallon: ISIDE DIA. CAF | ACITY (Gal./F | t.): 1/8" = 0.0 | 1" = 0.04; 006; 3/16' IP = Bladder I | ' = 0.0014; Pump; E | 1/4" = 0.002 SP = Electric | Submersible Pu | .004: 3/8" = 0 | 5" = 1.02; 0.006; 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; | 12" = 5.88 5/8" = 0.016 ther (Specify) |
| PURGING IN | ISIDE DIA. CAF | PACITY (Gal./F ODES: B | Et.): 1/8" = 0.0 = Baller; B | 006; 3/16 | ' = 0.0014; Pump; E SAMP | 1/4" = 0.002 SP = Electric LING DA | 6; 5/16" = 0. Submersible Pu | mp; PP = Po | 0.006; 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; mp; O = O | 5/8" = 0.016 ther (Specify) |
| PURGING SAMPLED PUMP OR | ISIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING | PACITY (Gal./F ODES: B | = Baller; B | 006; 3/16' IP = Bladder I SAMPLER(S | ' = 0.0014; Pump; E SAMP) SIGNATURI | 1/4" = 0.002 SP = Electric LING DA | Submersible Pu | mp; PP = Po SAMPLING INITIATED A | 0.006: 1/ eristaltic Pu T: 1455 | 6" = 1.47; 2" = 0.010; mp: O = O | 5/8" = 0.016 ther (Specify) |
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| PUMP OR DEPTH IN | ISIDE DIA. CAF EQUIPMENT C BY (PRINT) / A TUBING | PACITY (Gal./F ODES: B FFILIATION: DN: PUM | Et.): 1/8" = 0.0 = Baller; B | 006; 3/16' P = Bladder I SAMPLER(S TUBING MATERIAL C | Y = 0.0014; Pump; E SAMP SIGNATURE CODE: TUBING E PRESERVA | 1/4" = 0.002 SP = Electric LING DA E(S) Y N (re | Submersible Pu | mp; PP = Po SAMPLING INITIATED A PFILTERED: Y on Equipment Ty DUPLICATE: INTEND | D.006: 1/ eristaltic Pu T: 1455 N | 6" = 1.47; 2" = 0.010; mp; O = O SAMPLIN ENDED A FILTER S N | 5/8" = 0.016 ther (Specify) IG 145 8 IZE: µm SAMPLE PUM |
| EAMPLED PUMP OR DEPTH IN TIELD DEC | EQUIPMENT C BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO | PACITY (Gal./F ODES: B FFILIATION: DN: PUM | Et.): 1/8" = 0.0 = Bailer; B P Y N ATION | 006; 3/16' P = Bladder I SAMPLER(S TUBING MATERIAL C | ' = 0.0014; Pump; E SAMP) SIGNATUR: CODE: TUBING E PRESERV/ | 1/4" = 0.002 SP = Electric LING DA E(S) | Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/ | mp; PP = Po SAMPLING INITIATED A PFILTERED: Y on Equipment Ty DUPLICATE: INTEND | D.006: 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; mp; O = 0 SAMPLIN ENDED A | 5/8" = 0.016 ther (Specify) IG 145 8 IZE: µm SAMPLE PUM FLOW RATI |
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| PUMP OR DEPTH IN SAMPLE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | Et.): 1/8" = 0.0 = Bailer; B | 006; 3/16' P = Bladder I SAMPLER(S TUBING MATERIAL C SAMPLE PRESERVAT | ' = 0.0014; Pump; E SAMP) SIGNATUR: CODE: TUBING E PRESERV/ | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re | Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/ | mp; PP = Po SAMPLING INITIATED A FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; mp: O = O SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) IG 145 (IZE: µm SAMPLE PUM FLOW RATE |
| PUMP OR DEPTH IN | BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | Et.): 1/8" = 0.0 = Bailer; B | 006; 3/16' P = Bladder I SAMPLER(S TUBING MATERIAL C SAMPLE PRESERVAT | ' = 0.0014; Pump; E SAMP) SIGNATUR: CODE: TUBING E PRESERV/ | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re | Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/ | mp; PP = Po SAMPLING INITIATED A FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; mp: O = O SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) IG 145 (IZE: µm SAMPLE PUM FLOW RATE |
| PUMP OR DEPTH IN SAMPLE | BY (PRINT) / A TUBING WELL (feet): CONTAMINATIO PLE CONTAINE | PACITY (Gal./F ODES: B FFILIATION: DN: PUM R SPECIFICA MATERIAL | Et.): 1/8" = 0.0 = Bailer; B | 006; 3/16' P = Bladder I SAMPLER(S TUBING MATERIAL C SAMPLE PRESERVAT | ' = 0.0014; Pump; E SAMP) SIGNATUR: CODE: TUBING E PRESERV/ | 1/4" = 0.002 SP = Electric LING DA E(S): Y N (re | Submersible Pu TA FIELD Filtrati eplaced) ing wet ice) Final pH/ | mp; PP = Po SAMPLING INITIATED A FILTERED: Y on Equipment Ty DUPLICATE: INTEND ANALYSIS A | D.006: 1/ eristaltic Pu | 6" = 1.47; 2" = 0.010; mp: O = O SAMPLIN ENDED A FILTER S N SAMPLING EQUIPMENT | 5/8" = 0.016 ther (Specify) IG 145 (IZE: µm SAMPLE PUM FLOW RATE |
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1. Ine above do not constitute all of the information required by
2. Stabilization Criteria for range of variation of Last three consecutive readings

pH: ± 0.1 units Temperature: ± 3% Specific Conductance: ± 3% Dissolved Oxygen: (10% for values greater than 0.5 mg/L, if three dissolved oxygen values are less than 0.5 mg/L, consider the values as stabilized) Turbidity: (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized) Oxidation/Reduction Potential: ± 10 millivolts



APPENDIX E ALTERNATE SOURCE DEMONSTRATION



Alternate Source Demonstration

Independence Steam Electric Station Water Recycle Ponds – East and West

Newark, Arkansas

January 2025

Prepared For

Entergy Arkansas, LLC Independence Steam Electric Station

Point Ferry Road

Newark, Arkansas 72562

Submitted By

TRC Environmental Corporation

4545 Sherwood Common Blvd. Building 3, Suite A Baton Rouge, LA 70809

Jason S. House Senior Project Manager Nakia W. Addison, P.E. Operations Manager

Executive Summary

Entergy Arkansas, LLC (EAL) owns and operates the Entergy Independence Steam Electric Station (Plant), a coal-fired power plant, to generate electricity. The Plant is located at Point Ferry Road near Newark, Independence County, Arkansas. The Plant has been generating electricity since the early 1980s. As a byproduct of electrical generation, coal combustion residuals (CCRs) historically generated at the Plant have been managed at the:

- On-Site Coal Ash Disposal Landfill (CADL); and
- Water Recycle Ponds East and West (Ponds).

The Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, 40 CFR Part 257 (CCR Rule) became effective on October 19, 2015, and established national criteria for the management of CCR at electrical generating facilities. EAL initially identified the CADL as a CCR Unit when the CCR Rule became effective on October 19, 2015.

The Ponds encompass approximately 13 acres and operated as part of its process water system for bottom ash transport. The Ponds provided intermediate storage of waters used in the transport of CCR generated from the combustion of coal at the Plant. After CCR was identified in the Ponds in 2018, EAL determined the Ponds were also a CCR Unit under the CCR Rule. EAL designed and installed a groundwater monitoring system consisting of 10 wells per 40 CFR Part 257.91. Three of the wells were installed as background wells and the other seven wells were installed around the immediate perimeter of the Ponds. The groundwater monitoring system and statistical methods were certified by a Registered Arkansas Professional Engineer (P.E.). EAL implemented a Detection Monitoring Program per 40 CFR Part 257.94.

After installation of a dry bottom ash handling system at the Plant, EAL commenced closure of the West Pond on August 4, 2020, and the East Pond on February 26, 2021. Closure consisted of removal of CCR and decontamination of affected soils (beyond visible CCR) in accordance with accordance with the following:

■ 40 CFR 257.102(c) of the CCR Rule;

- Amendment No. 1 Closure Plan for Water Recycle Ponds (August 2020) as approved by the Arkansas Energy and Environment Department, Division of Environmental Quality (DEQ) on December 11, 2020; and
- National Pollutant Discharge Elimination System (NPDES) Permit Number AR0037451.

After closure was successfully completed, the notification of closure was prepared per 40 CFR 257.102(h). The notification of closure was certified by a Registered Arkansas P.E. and a Registered Arkansas Professional Geologist (P.G.) on October 2, 2023, per 40 CFR 257.102(f)(3). The certified notification of closure was placed into the Plants's facility operating record (FOR) as required by 40 CFR 257.105(i)(8) and was posted to the Plant's publicly accessible CCR internet site as required by 40 CFR 257.107(i)(8).

A quarterly Detection Monitoring Program for the Appendix III and Appendix IV CCR constituents for the Ponds was implemented in 2018 per 40 CFR Part 257.94. After completion of eight quarterly background monitoring events, a semi-annual Detection Monitoring Program was implemented in 2020. Statistically significant increases (SSIs) of Appendix III detection monitoring constituents were never documented as part of the Detection Monitoring Program; therefore, assessment monitoring was never initiated for the Ponds and groundwater protection standards (GWPS) were not established per 40 CFR 257.95.

The Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments was published by the United States Environmental Protection Agency (USEPA) on May 8, 2024 (Legacy Impoundment/CCRMU Rule). Based on the revised requirements for the closure by removal of CCR provided in the Legacy Impoundment/CCRMU Rule, EAL determined that it would perform additional activities to update the original certification for the closure by removal of CCR for the Ponds before the effective date of the Legacy Impoundment/CCRMU Rule on November 8, 2024. The following activities were performed:

- Perform two additional quarterly groundwater monitoring events at the Ponds during the third and fourth quarters 2024 and analyze the samples for the Appendix IV assessment monitoring constituents;
- Establish GWPS;

- Perform statistical analyses of the Appendix IV assessment monitoring analytical data, identify potential statistically significant levels (SSLs), and prepare an Alternative Source Demonstration (ASD) if appropriate;
- Document that the Appendix IV assessment monitoring groundwater analytical results for the consecutive monitoring events during the third and fourth quarters 2024 are less than GWPS; and
- Prepare an updated certification for the closure by removal of CCR for the Ponds.

EAL performed the two consecutive monitoring events in July 2024 and September/October 2024. Based on statistical analyses of the analytical results, potential SSLs were initially identified for the following three Appendix IV assessment monitoring constituents based on exceedances of intrawell prediction limits:

- Barium (RP-4);
- Selenium (RP-5); and
- Barium (RP-6).

GWPS for the Ponds were established per 40 CFR 257.95(2). In addition, this ASD was prepared per 40 CFR 257.95(g)(3)(ii). Based on the ASD evaluations, none of the potential SSLs were confirmed based on the following lines of reasoning:

- The USEPA primary maximum contaminant levels (MCLs) for barium and selenium under the Clean Water Act are significantly greater than the maximum concentrations for barium and selenium observed at RP-4 through RP-6; and
- The background groundwater quality concentrations for barium and selenium for the Ponds (RP-1 through RP-3) are equivalent to or greater than the highest concentrations detected for RP-4 through RP-6.

The slightly elevated concentrations for barium and selenium observed in the July and September/October 2024 monitoring events are likely related to the following causes:

• Natural variations in groundwater quality, which may be related to fluctuations in seasonal geochemistry conditions in the uppermost aquifer system associated with electrical conductivity (EC), ion strength, oxidation-reduction potential (ORP), pH, and total dissolved solids (TDS).

Based on this ASD successfully documenting that natural variation in groundwater quality is the cause for the exceedances of intrawell prediction limits, the requirements of 40 CFR Part 257.102(c) have been satisfied for closure by removal of CCR for the Ponds.

Based on this successful ASD, the original certification of closure by removal per 40 CFR 257.102(c) was updated and recertified. The updated notification of closure was certified by a Registered Arkansas P.E. and a Registered Arkansas P.G. on November 7, 2024, per 40 CFR 257.102(f)(3). The updated certified notification of closure was placed into the Plant's FOR per 40 CFR 257.105(i)(8) and was posted to the Plants's publicly accessible CCR internet site per 40 CFR 257.107(i)(8).

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TRC Environmental Corporation | Entergy Arkansas, LLC Alternate Source Demonstration – Entergy Independence Plant Recycle Ponds

Section 1 Introduction

1.1 Background

Entergy Arkansas, LLC (EAL) owns and operates the Entergy Independence Steam Electric Plant (Plant), a coal-fired power plant, to generate electricity. The Plant is located at Point Ferry Road near Newark, Independence County, Arkansas (**Figure 1**). The Plant is located at approximate latitude 35°40′39″ N, longitude 91°24′42″ W (front gate).

The Plant has been generating electricity since the early 1980s. As a byproduct of electrical generation, coal combustion residuals (CCRs) historically generated at the Plant have been managed at the Plant at the:

- On-Site Coal Ash Disposal Landfill (CADL); and
- Water Recycle Ponds East and West (Ponds).

The Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, 40 CFR Part 257 (CCR Rule) became effective on October 19, 2015, and established national criteria for the management of CCR at electrical generating facilities. EAL initially identified the CADL as a CCR Unit when the CCR Rule became effective on October 19, 2015.

The Ponds encompass approximately 13 acres and operated as part of the Plant's process water system for bottom ash transport. The Ponds provided intermediate storage of waters used in the transport of CCR generated from the combustion of coal at the Plant. After CCR was identified in the Ponds in 2018, EAL determined the Ponds were also a CCR Unit under the CCR Rule. EAL designed and installed a groundwater monitoring system consisting of 10 wells per 40 CFR Part 257.91. Three of the wells were installed as background wells and the other seven wells were installed around the immediate perimeter of the Ponds. The groundwater monitoring system and statistical methods were certified by a Registered Arkansas Professional Engineer (P.E.). EAL implemented a Detection Monitoring Program per 40 CFR Part 257.94.

A quarterly Detection Monitoring Program for the Appendix III and Appendix IV CCR constituents for the Ponds was implemented in 2018 per 40 CFR Part 257.94. After completion of

eight background monitoring events, a semi-annual Detection Monitoring Program was implemented in 2020. Statistically significant increases (SSIs) of Appendix III detection monitoring constituents were never documented; therefore, assessment monitoring was never initiated for the Ponds and groundwater protection standards (GWPS) were not established pursuant to 40 CFR 257.95.

The East and West Ponds and the locations of the 10 wells making up the certified groundwater monitoring system are shown on (**Figure 2**).

1.1.1 Closure By Removal Certification (October 2, 2023)

After installation of a dry bottom ash handling system at the Plant, EAL commenced closure of the West Pond on August 4, 2020, and the East Pond on February 26, 2021, per 40 CFR Part 257.102(c). Closure consisted of removal of CCR and decontamination of affected soils (beyond visible CCR) in accordance with the following:

- 40 CFR 257.102(c) of the CCR Rule;
- Amendment No. 1 Closure Plan for Water Recycle Ponds (August 2020) as approved by the Arkansas Energy and Environment Department, Division of Environmental Quality (DEQ) on December 11, 2020; and
- National Pollutant Discharge Elimination System (NPDES) Permit Number AR0037451.

All CCR was removed from the Ponds and disposed in the on-site CADL. The on-site CADL is permitted under DEQ Permit No. 0200-S3N-R2. Pursuant to *Amendment No. 1 - Closure Plan for Water Recycle Ponds*, CCR removal was confirmed through visual observations of both Ponds.

Per Amendment No. 1 - Closure Plan for Water Recycle Ponds, both Ponds were decontaminated through excavation of a minimum of 6 inches of the underlying pond liner material (beyond visible CCR) to ensure removal of potential CCR-affected materials. This material was also disposed in the on-Site CADL. Pursuant to *Amendment No. 1 - Closure Plan for Water Recycle Ponds*, CCR decontamination was confirmed through visual observations of both Ponds after excavation.

After closure was successfully completed, the notification of closure was prepared per 40 CFR 257.102(h). The notification of closure was certified by a Registered Arkansas P.E. and a Registered Arkansas Professional Geologist (P.G.) on October 2, 2023 per 40 CFR 257.102(f)(3).

The certified notification of closure was placed into the Plants's facility operating record (FOR) per 40 CFR 257.105(i)(8) and was posted to the Plant's publicly accessible CCR internet site per 40 CFR 257.107(i)(8).

1.1.2 Closure By Removal Recertification (November 7, 2024)

The Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments was published by the USEPA on May 8, 2024 (Legacy Impoundment/CCRMU Rule). Based on the revised requirements for the closure by removal of CCR provided in the Legacy Impoundment/CCRMU Rule, EAL determined it would perform additional activities to update the original certification for the closure by removal of CCR for the Ponds by the effective date of the Legacy Impoundment/CCRMU Rule on November 8, 2024. The following additional activities were performed:

- Perform two additional quarterly groundwater monitoring events at the Ponds during the third and fourth quarters 2024 and analyze the samples for the Appendix IV assessment monitoring constituents;
- Establish GWPS;
- Perform statistical analyses of the Appendix IV assessment monitoring analytical data, identify potential statistically significant levels (SSLs), and prepare an Alternative Source Demonstration (ASD) if appropriate;
- Document that the Appendix IV assessment monitoring groundwater analytical results for the consecutive monitoring events during the third and fourth quarters 2024 are less than GWPS: and
- Prepare an updated certification for the closure by removal of CCR for the Ponds. EAL performed the two consecutive monitoring events in July 2024 and September/October 2024. Based on statistical analyses of the analytical results, potential SSLs were initially identified for the following three Appendix IV assessment monitoring constituents based on exceedances of intrawell prediction limits:
 - Barium (RP-4);
 - Selenium (RP-5); and
 - Barium (RP-6).

GWPS were established per 40 CFR 257.95(2). In addition, this ASD was prepared per 40 CFR 257.95(g)(3)(ii), which demonstrated that natural variation in groundwater quality was the source for the exceedances observed of the intrawell prediction limits. Based on the ASD evaluations, none of the potential SSLs were confirmed based on the following lines of reasoning:

- The USEPA primary maximum contaminant levels (MCLs) for barium and selenium under the Clean Water Act are significantly greater than the maximum concentrations for barium and selenium observed at RP-4 through RP-6; and
- The background groundwater quality concentrations for barium and selenium for the Ponds (RP-1 through RP-3) are equivalent to or greater than the highest concentrations detected for RP-4 through RP-6.

The slightly elevated concentrations for barium and selenium observed in the July and September/October 2024 monitoring events are likely related to the following causes:

Natural variations in groundwater quality, which may be related to fluctuations in seasonal geochemistry conditions in the uppermost aquifer system associated with electrical conductivity (EC), ion strength, oxidation-reduction potential (ORP), pH, and total dissolved solids (TDS).

Based on this ASD successfully documenting that natural variation in groundwater quality is the cause for the exceedances of intrawell prediction limits, the requirements of 40 CFR Part 257.102(c) have been satisfied for closure by removal of CCR for the Ponds.

1.2 Groundwater Monitoring and Statistical Analysis

Based on this successful ASD, the original certification of closure by removal per 40 CFR 257.102(c) was updated and recertified. The updated notification of closure was certified by a Registered Arkansas P.E. and a Registered Arkansas P.G. on November 7, 2024, as required by 40 CFR 257.102(f)(3). The updated certified notification of closure was placed into the Plant's FOR per 40 CFR 257.105(i)(8) and was posted to the Plants's publicly accessible CCR internet site per 40 CFR 257.107(i)(8).

1.2.1 Groundwater Monitoring System

In accordance with the requirements of 40 CFR 257.91, EAL installed a groundwater monitoring system at the Ponds and collected groundwater samples from the CCR groundwater monitoring system wells for laboratory analysis for both Appendix III and Appendix IV CCR constituents and performed statistical analysis of the analytical results. The groundwater monitoring network consists of 10 wells installed into the uppermost aquifer system at the Ponds. Three of the wells are background wells for the Ponds (RP-1 through RP-3), and the remaining seven wells are located around the immediate perimeter of the Ponds (RP-4 through RP-10).

Pursuant to 40 CFR 257.91(f), the groundwater monitoring system was certified by a Registered Arkansas P.E. that stated that the network was designed and constructed to meet the requirements of 40 CFR 257.91 (see Groundwater Monitoring System Certification, (TRC, 2019b)).

A groundwater sampling and analysis program including selection of statistical procedures to evaluate groundwater analytical data was prepared per the CCR Rule (see Groundwater Sampling and Analysis Plan (FTN, 2019)). Eight quarterly background CCR detection monitoring events were initially performed from July 2018 through June 2020 in accordance with 40 CFR 257.93(d) and 257.94(b). The eight quarterly detection monitoring background samples were analyzed for the Appendix III to Part 257 – Constituents for Detection Monitoring and the Appendix IV to Part 257 – Constituents for Assessment Monitoring per 40 CFR 257.94(b). After completion of the initial eight background monitoring events and establishment of background groundwater quality, EAL implemented a semi-annual Detection Monitoring Program with laboratory analysis for the Appendix III to Part 257 – Constituents for Detection Monitoring per the requirements of 40 CFR 257.94.

1.2.2 Statistical Analytical Method

Statistical analysis of the semi-annual detection monitoring analytical data was performed per 40 CFR Part 297.93(f). As described in the Statistical Methods Certification (TRC, October 16, 2017), intrawell statistical evaluation was performed due to the low hydraulic conductivity values and low groundwater velocities for the uppermost aquifer system. As described in the certification:

"Intrawell statistical evaluations are within well comparisons. In the case of intrawell prediction limits, historical data from within a given well for a given parameter will be used to construct a limit. Compliance points will be compared to the limit to determine whether a change is occurring on a per-well/per-parameter basis. If the assumption of normality is not rejected for the background data set, then a parametric prediction limit will be calculated. If the assumption of normality is rejected for the background data set, then a non-parametric prediction limit will be calculated, in which case, the prediction limit will be based on the highest value in the background data set. For pH, both upper and lower prediction limits will be used for intrawell evaluations."

The final detection monitoring event was performed during June 2022 prior to the closure by removal of CCR for the Ponds. The statistical analyses completed for the second semi-annual 2021 and first semi-annual 2022 sampling events analytical data did not identify SSIs, and the Ponds remained in the Detection Monitoring Program. Therefore, ASDs were not prepared for the Ponds.

Section 2 Objectives and Purpose

Pursuant to 40 CFR 257.95(g)(3)(ii), EAL may demonstrate that a source other than the Ponds caused the potential SSLs or that the SSLs resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Therefore, EAL elected to perform an ASD to evaluate the potential SSLs identified for the third and fourth quarters 2024 Appendix IV assessment monitoring constituents. The objectives and purpose of this ASD are:

- Develop GWPS per 40 CFR 257.95(h), based on the Appendix IV assessment monitoring constituents analytical data for the third and fourth quarters 2024;
- Using the certified statistical method, identify potential SSLs for the analytical data per 40 CFR 257.93(f);
- Perform an alternative source demonstration (ASD) per 40 CFR 257.95(g)(3)(ii); and
- Prepare written documentation of the successful ASD for the potential SSLs identified for the third and fourth quarters 2024 groundwater monitoring events, per 40 CFR 257.95(g)(3)(ii).

Section 3 Hydrogeology and Background Groundwater Quality

3.1 Site Hydrogeology

Progressing from the ground surface to the deepest identified stratigraphic unit a description of the units and hydrogeology of the stratigraphic units underlying the Ponds are as follows:

- **Upper Confining Unit**. An upper confining unit consisting of clays and silts is present at the ground surface down to 23 to 28 feet below ground surface (bgs). Vertical hydraulic conductivity of the upper confining unit is estimated to range from 4.0 x 10⁻⁹ to 7.8 x 10⁻⁷ centimeters per second (cm/s) based on flexible wall permeability tests (FTN Associates, Ltd. (FTN) 2001, FTN and Golder Associates Inc. 2017).
- **Alluvial Aquifer**. An alluvial aquifer consisting of fine to medium grained sandy sub rounded to sub angular chert gravel with varying amounts of silt and clay is present beneath the upper confining unit. The alluvial aquifer is the uppermost laterally continuous water bearing zone beneath the Ponds and represents the uppermost aquifer pursuant to the CCR Rule. The alluvial aquifer extends to depths of 85 to 90 feet bgs. Hydraulic conductivity of the alluvial aquifer is estimated to range from 2.1 x 10-2 to 6 x 10-2 cm/s (FTN 2015).
- **Bedrock**. Pennsylvanian aged bedrock consisting of chert, limestone, sandstone, and carbonaceous shale and associated residuum at the bedrock surface are present beneath the alluvial aquifer (Albin, 1965). The top of the bedrock is approximately 85 to 90 feet bgs.

3.2 Background Groundwater Quality

Background groundwater quality for the Ponds for the Appendix IV assessment monitoring constituents is monitored by background wells (RP-1, RP-2 and PR-3). A measure of background groundwater quality for the Ponds is represented by a comparison of the laboratory analytical results for the Appendix IV assessment monitoring constituents that have primary maximum contaminant levels (MCLs) established by the United States Environmental Protection Agency (USEPA) under the Clean Water Act. USEPA has established primary MCLs for 12 of the 15 Appendix IV assessment monitoring constituents.

A comparison of the Appendix IV laboratory analytical results for the 12 Appendix IV constituents that have primary MCLs for the third and fourth quarters of 2024 to the USEPA primary MCLs is provided in the table below.

Background Groundwater Water Quality

| | Concentration Range | | USEPA |
|------------------------|---------------------|---------|-------------|
| Constituent | Low | High | Primary MCL |
| Antimony (mg/L) | | | 0.006 |
| Arsenic (mg/L) | | | 0.010 |
| Barium (mg/L) | 0.0255 | 0.0647 | 2 |
| Beryllium (mg/L) | | | 0.004 |
| Cadmium (mg/L) | | | 0.005 |
| Chromium (mg/L) | | | 0.1 |
| Fluoride (mg/L) | <0.15 | 0.235 | 4 |
| Lead (mg/L) | | | 0.010 |
| Mercury (mg/L) | | | 0.002 |
| Selenium (mg/L) | < 0.002 | 0.00839 | 0.05 |
| Thallium (mg/L) | | | 0.002 |
| Radium 226/228 (pCi/L) | | | 5 |

It should be noted that the USEPA has not established primary drinking water MCLs for cobalt, lithium, and molybdenum; therefore, these Appendix IV CCR constituents were not included in the table above. As shown in the table above, the natural range of groundwater quality within the background wells is consistently less than the USEPA primary drinking water MCLs established by the USEPA under the Clean Water Act.

In addition to the primary MCLs, USEPA has established a secondary MCL under the Clean Water Act for pH of 6.5 to 8.5 standard units (s.u.). pH measurements for the background wells ranged from 5.7 to 6.6 s.u. for the third and fourth quarter 2024 monitoring events, which is slightly less than the secondary MCL range. Finally, it should be noted that USEPA has established both primary and secondary MCLs of 4.0 mg/L for fluoride.

Section 4 Alternate Source Demonstration

EAL performed two groundwater monitoring events in July 2024 and October 2024 (third and fourth quarters 2024) for the Ponds and the samples were analyzed for the Appendix IV assessment monitoring constituents. Based on statistical evaluation of the analytical results, potential SSLs were identified for the following three Appendix IV assessment monitoring constituents based on exceedances of intrawell prediction limits:

- Barium (RP-4);
- Selenium (RP-5); and
- Barium (RP-6).

The laboratory analytical results for both monitoring events and intrawell prediction limits for each of the potential SSLs are summarized in the table below.

Table 1 SSLs – Groundwater Monitoring Event 3Q24 and 4Q24

| Well | Constituent | 3Q24 (7/24/2024) | 4Q24 (10/1/2024) | Intrawell Prediction Limit (µg/L) | Confirmed SSL? (Yes/No) |
|------|-------------|---------------------|---------------------|--------------------------------------|----------------------------|
| RP-4 | Barium | 0.0678 | 0.0704 | 0.05198 | No |
| RP-5 | Selenium | <0.005 | 0.00488 | 0.00278 | No |
| RP-6 | Barium | 0.0403 | 0.0502 | 0.04826 | No |

Likely causes for the potential SSLs and associated lines of reasoning demonstrating that the three SSLs were not caused by a release of CCR constituents from the Ponds to groundwater are provided in the subsections below.

4.1 Barium at RP-4

Barium was detected at a concentration of 0.0678 mg/L in the July 2024 sample and 0.0704 mg/L in the September 2024 sample. Both analytical results exceed the intrawell prediction limit for

barium at RP-4 of 0.05198 mg/L. These slightly elevated concentrations are not SSLs based on the following lines of reasoning:

- The USEPA primary MCL for barium in drinking water is 2 mg/L; therefore, the concentrations for barium at RP-4 were significantly less than USEPA primary MCL; and
- The background concentrations for barium for the Ponds (RP-1 through RP-3) range from 0.0255 to 0.0647 mg/L. The highest background barium concentration of 0.0647 mg/L is comparable to the highest concentration for barium of 0.0704 mg/L for RP-4; therefore, the highest concentrations for RP-4 are consistent with natural variation in seasonal background groundwater quality at the Ponds.

Therefore, based on the lines of reasoning identified above, the potential SSL for barium at RP-4 was not confirmed. The slightly elevated concentrations for barium for RP-4 observed in July and September 2024 are likely related to the following causes:

- Natural variation in groundwater quality.
- Seasonal geochemistry condition changes in groundwater. pH and EC could affect barium concentrations in groundwater. The relatively high EC in groundwater (high chloride concentration and high TDS) could increase the barium concentration. The seasonal increasing of barium could be a result of the natural geochemistry conditions with low pH and high EC.

4.2 Selenium at RP-5

Selenium was detected at a concentration of 0.00488 mg/L in the September 2024 sample, which exceeds the intrawell prediction limit for selenium of 0.00278 mg/L. This slightly elevated concentration is not an SSL based on the following lines of reasoning:

- The USEPA primary MCL for selenium in drinking water is 0.05 mg/L; therefore, the concentrations for selenium at RP-5 were significantly less than USEPA primary MCL;
- The background concentrations for selenium for the Ponds (RP-1 through RP-3) range from <0.0025 to 0.00839 mg/L. The highest background selenium concentration of 0.00839 mg/L is greater than the highest concentration for selenium of 0.00488 mg/L for RP-4; therefore, the highest concentrations for RP-4 are less than the highest background concentrations identified for the Ponds.

Therefore, the potential selenium SSL at RP-5 was not confirmed. The potential SSL was likely related to the following causes:

- Natural variation in groundwater quality.
- Selenium is naturally present in certain rock types, like shale, siltstone, and phosphate rocks. Seasonal geochemistry condition changes in groundwater such as low pH groundwater, can enhance the solubility of selenium-baring minerals in the surrounding rocks and soils. This could lead to increased concentrations of selenium in groundwater.

4.3 Barium at RP-6

Barium was detected at a concentration of 0.0403 mg/L in the July 2024 sample and 0.0502 mg/L in the September 2024 sample. The September 2024analytical result exceeded the intrawell prediction limit for barium at RP-6 of 0.04826 mg/L. This slightly elevated concentration is not a SSL based on the following lines of reasoning:

- The USEPA primary MCL for barium in drinking water is 2 mg/L; therefore, the concentrations for barium at RP-6 were significantly less than USEPA primary MCL;
- The background concentrations for barium for the Ponds (RP-1 through RP-3) range from 0.0255 to 0.0647 mg/L. The highest background barium concentration of 0.0647 mg/L is greater than the highest concentration for barium of 0.0502 mg/L for RP-6; therefore, the highest concentrations for RP-6 are less than the highest background concentrations identified for the Ponds.

Therefore, the potential SSL for barium at RP-6 was not confirmed. The slightly elevated concentration of barium observed in September 2024 could likely be related to the following causes:

- Natural variation in groundwater quality.
- Seasonal geochemistry condition changes in groundwater. pH and EC could affect barium concentrations in groundwater. The relatively high EC in groundwater (high chloride concentration and high TDS) could increase the barium concentration. The seasonal increasing of barium could be a result of the natural geochemistry conditions with low pH and high EC.

Section 5 Conclusions

The information provided in this ASD was prepared in accordance with 40 CFR 257.95(g)(3)(ii) of the CCR Rule. None of the potential SSLs were confirmed for the two consecutive monitoring events (third and fourth quarters 2024), based on the following lines of reasoning:

- The USEPA primary MCLs for barium and selenium under the Clean Water Act are significantly greater than the maximum concentrations for barium and selenium observed at RP-4 through RP-6; and
- The background groundwater quality concentrations for barium and selenium for the Ponds (RP-1 through RP-3) are equivalent to or greater than the highest concentrations detected for RP-4 through RP-6.

The slightly elevated concentrations for barium and selenium observed in July and September/October 2024 are likely related to the following causes:

 Natural variations in groundwater quality, which may be related to fluctuations in seasonal geochemistry conditions in the uppermost aquifer system associated with EC, ion strength, ORP, pH, and TDS.

Based on this ASD successfully documenting that natural variation in groundwater quality is the cause for the exceedances of intrawell prediction limits, the requirements of 40 CFR Part 257.102(c) have been satisfied for closure by removal of CCR for the Ponds.

Based on this successful ASD, the original certification of closure by removal per 40 CFR 257.102(c) was updated and recertified. The updated notification of closure was certified by a Registered Arkansas P.E. and a Registered Arkansas P.G. on November 7, 2024, per 40 CFR 257.102(f)(3). The updated certified notification of closure was placed into the Plant's FOR per 40 CFR 257.105(i)(8) and was posted to the Plants's publicly accessible CCR internet site per 40 CFR 257.107(i)(8).

Section 6 Certification

I hereby certify that the alternative source demonstration presented within this document for the Entergy Independence Steam Electric Station Water Recycle Ponds CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e) 2 of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e) 2.

| Name: | Nakia W. Addison P.E. | Expiration Date: 12/31/2025 |
|-------|-----------------------|-----------------------------|
| | | · • |

Company: TRC Environmental Corporation Date: 1/31/2025

Section 7 References

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