2024
Annual Environmental Radiological Monitoring Data Summary Report for the Pinyon Plain Mine

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Prepared for:

Energy Fuels Resources (USA), Inc.

225 Union Blvd., Suite 600
Lakewood, CO 80228 USA

and

U.S. Forest Service
Kaibab National Forest

800 South Sixth Street
Williams, AZ 86046

Prepared by:

Environmental Restoration Group, Inc.

8809 Washington St. NE
Suite 150
Albuquerque, NM 87113

Table of Contents

List of Tables

List of Figures

Section 1.0 Introduction

On behalf of Energy Fuels Resources, Inc. (Energy Fuels), Environmental Restoration Group, Inc. (ERG) has prepared this summary report detailing the 2024 annual environmental radiological monitoring near the Pinyon Plain Mine, formerly known as the Canyon Mine, in Coconino County, Arizona. The Pinyon Plain Mine is a fully-permitted operational uranium mine located on lands administered by United States Forest Service (USFS). The mine is located approximately seven miles south of Tusayan, Arizona. The regional setting of the Pinyon Plain Mine is shown in Figure 1.

The operational radiological monitoring reported herein shows radiological conditions for the first operational year of Pinyon Plain Mine. Monitoring was conducted in accordance with requirements set forth in the 1986 Record of Decision (ROD) for the Canyon Mine Proposal, Final Environmental Impact Statement (USFS 1986). Sampling methods and locations for this operational monitoring are consistent with those used in preoperational monitoring collected as part of the Radiological Assessment of the Canyon Mine Project (McKlveen, 1985), Supplemental Preoperational Baseline Radiological Monitoring Data for the Canyon Mine (ERG, 2017) and the Supplemental Preoperational Baseline Radiological Monitoring Data for the Pinyon Plain Mine (ERG, 2025).

The monitoring program consists of direct gamma radiation measurements, radon-222 and its progeny in air, and radionuclides in soil and surface water. The sampling type, parameters, and frequency are shown in Table 1, and are summarized as follows.

- Direct gamma radiation measurements consisted of:
    - Four consecutive quarterly dose rate measurements were conducted at each of 12 locations from the first quarter (Q1) through the fourth quarter (Q4). These measurements were conducted using optically stimulated luminescence (OSL) badge dosimeters.
    - High Pressure Ionization Chamber (HPIC) measurements were conducted at each location and time during the quarterly deployment of OSL badge dosimeters.
    - Exposure rate measurements were conducted using a portable radiation measurement survey meter at each location and time during the quarterly deployment of OSL badge dosimeters.
- Radon and its progeny measurements consisted of:
    - Radon-222 concentrations in air were measured at each of three locations from Q1 through Q4. These concentrations were measured using passive track-etch cup detectors with each quarterly measurement lasting approximately 90 days.
    - Radon progeny concentrations in air were measured following the Modified-Kusnetz method at each location and time during the quarterly deployment of track-etch cups.
- Soil sampling consisted of a one-time sampling event which occurred at each of six locations during the second quarter (Q2) and third quarter (Q3) transition.
- Surface water sampling consisted of a one-time sampling event which occurred only at the Owl Tank stock pond during the Q3 and Q4 transition. There was no surface water present in the South Wash during any visit to the site in 2024.

Section 2.0 Methods

The methods for each type of measurement conducted during 2024 annual environmental radiological monitoring are discussed below.

2.1 Direct Gamma Radiation

Direct gamma radiation measurements consisted of three types of measurements, each made quarterly for a period of four quarters. These measurements are discussed in the following sections. The locations for each type of measurement are shown in Figure 2 and include:

- Grand Canyon National Park Airport (Airport),
- Tusayan Ranger Station,
- Owl Tank,
- a location described as South Wash where an elevated radiological anomaly was identified in the 1985 McKlveen studies, and
- locations of equal distance from the mine shaft in eight compass directions.

In total 12 different locations were monitored for direct gamma radiation during 2024 operations. The following subsection describes in detail the methods used to measure direct gamma radiation at each monitoring location.

2.1.1 Dose Rate Measurements

Radiation dose rate measurements were conducted using InLight OSL badge dosimeters provided by Landauer, a National Voluntary Laboratory Accreditation Program (NVLAP)-approved provider for ionizing radiation dosimetry services. An OSL badge dosimeter was deployed at each of the locations described above and shown in Figure 2 for approximately one calendar quarter, or 90 days. Deployment and retrieval dates for the OSL badge dosimeters are listed in Table 2.

The OSL badge dosimeters were placed on tree branches, wooden posts, t-post, or other available features such as fencing, approximately 1-meter above the ground surface (ags) and away from any obstacle that might influence the measurement by shielding gamma radiation. An additional OSL badge dosimeter was placed at the Northwest (NW) location for each period to serve as a duplicate measurement.

2.1.2 High Pressure Ion Chamber Measurements

The HPIC measures exposure rate from interactions of gamma, x-rays, and cosmic radiation without discrimination. HPIC measurements were made at each location described above at the quarterly deployment of the OSL badge dosimeters. The measurements were collected every six-second interval over a period of greater than ten minutes using a GE Energy Model RSDetection HPIC with the center of the ion chamber approximately 1-meter ags. All readings were logged automatically to the internal HPIC datalogger, downloaded to a laptop computer, and then transferred into a spreadsheet for analysis.

2.1.3 Portable Scintillometer Measurements

Exposure rate measurements using a Ludlum Model 19, a 1-inch by 1-inch sodium iodide (NaI) scintillometer, were made at each location described above at the quarterly deployment of the OSL badge dosimeters. The exposure rate reading for each location was recorded manually in a field logbook or measurement log form.

2.2 Radon-222 and Progeny Measurements

Radon-222 concentration in air and working level (the level of radon-222 decay products) measurements were made at three locations (Airport, Mine Site, and South Wash), shown in Figure 2. Consistent with the direct gamma measurements, the radon-222 and working level measurements were each made quarterly for a period of four quarters. The following subsection describes in detail the methods used to measure radon-222 and its progeny.

2.2.1 Radon-222 Measurements

Radon-222 concentrations in air were measured at each of the three locations described above and shown in Figure 2, using a passive Radonova Rapidos high sensitivity track-etch detector for a period of approximately one calendar quarter each. Deployment and retrieval dates for the three locations coincide with the quarterly OSL badge dosimeter deployment and retrieval dates at each location.

The detectors were placed in a protective housing attached to a wooden post, t-post, or other available feature such as fencing at approximately one-meter ags.

2.2.2 Working Level Measurements

Radon-222 decay products, or progeny, concentrations in air are typically expressed in the unit of working level (WL) or milli-working level. WL measurements were made at each of the three locations described above and shown in Figure 2, using the Modified-Kusnetz method described in "Measuring Airborne Radon Progeny at Uranium Mills" (CNSC, 2003). The dates and times the WL measurements were made coincided with the quarterly Rapidos track-etch detector (and OSL badge dosimeter) deployments.

Air samples were collected for five minutes using an air pump operating at 2.5 liters per minute through a 37-millimeter (mm) glass fiber filter. The filter was counted for alpha radiation emissions using a Ludlum Model 2929 with Ludlum Model 43-10-1 tray counter. The sample and background count times were five minutes each for the data collected in the first two quarters of 2024. Sample and background count times were increased to ten minutes each for the final two quarters of 2024 to further decrease the minimum detectable concentration (MDC).

2.3 Soil Sampling

Surface soil samples were collected on July 10, 2024 at the locations described in Table 1 and shown in Figure 2. A grab sample from 0 to 5 centimeters (cm) was collected from each location using a hand trowel. The sample was placed in a Ziplock plastic bag and labeled with date, time, sample location, and sampler's initials. The samples were sent to Pace Analytical National in Mount Juliet, TN, a National Environmental Laboratory Accreditation Program (NELAP)-approved laboratory with Arizona Dept of Health Service (ADHS), Environmental Laboratory Licensure. The proper chain of custody protocol was used in shipping. The samples were analyzed for the following radiological parameters:

- Gross alpha radioactivity,
- Gross beta radioactivity,
- Radium-226,
- Total Uranium,
- Potassium-40,
- Thorium-232,
- Thallium-208, and
- Cesium-137.

For the total uranium analyses the laboratory results for all samples were identified to be ND, or "not detected at the reporting limit" with a reported detection limit of 15.0 mg/kg. This was considered an unacceptably high detection limit for total uranium analyses and the samples were therefore resubmitted for total uranium analyses to ACZ Laboratories, Inc. in Steamboat Springs, CO, another NELAP-approved laboratory with ADHS licensure.

2.4 Surface Water Sampling

The monitoring plan required a one-time sampling of surface water in both the South Wash and at Owl Tank, if surface water was present in sufficient quantity to sample. During the periods that ERG staff were at the site, surface water was present at Owl Tank but not South Wash; therefore, the only surface water sample collected was at Owl Tank. *Note: there is no perennial flow, and water is only present in the southern wash immediately following storm events*.

Section 3.0 Results

The results for each type of measurement collected pursuant to the scope of work are discussed below.

3.1 Direct Gamma Radiation

The results for direct gamma radiation monitoring are provided in the following subsections.

3.1.1 Dose Rate Measurements

The dose rate measurements for the 2024 monitoring period are shown in Table 3. Across all reported quarterly doses, the quarterly radiation dose rate ranged from 16.7 to 39.4 mrem per quarter. The location with the highest average annual dose rate is South Wash, consistent with previous investigations (McKlveen, 1985, ERG, 2024) that reported higher than background gamma radiation at the South Wash. The location with the lowest average annual dose rate was the South (S) location, shown in Figure 2. The average for all locations is 24.4 millirem per quarter, or 11.5 microrem per hour (µR/hr). All results in Table 3 were corrected by ERG for an average transit control dosimeter response of 0.22 mrem per day while in transit and not deployed at monitoring locations. Some of the dosimeters were either lost or found on the ground at the time of their retrieval, and therefore data for these badges were not included in this report. These badges were as follows: two badges at Owl Tank (Q2 found on ground, Q3 lost), one badge at Northwest (NW) (Q2 found on ground), and one badge at South Wash (Q2 found on ground). The Landauer laboratory data reports are provided in Appendix A.

3.1.2 High Pressure Ion Chamber Measurements

The exposure rate measurements for the HPIC are shown in Table 4. The quarterly exposure rate ranged from 10.8 to 16.6 µR/hr. The South Wash location had the highest annual average exposure rate at 15.5 µR/hr. The location with the lowest annual average exposure rate of 11.9 µR/hr was South (S), shown in Figure 2. The average annual exposure rate over all locations was 13.4 µR/hr.

3.1.3 Portable Scintillometer Measurements

The exposure rate measurements using the Ludlum Model 19 are shown in Table 4. The exposure rates ranged from 6.5 to 15.0 µR/hr. The South Wash location had the highest observed exposure rate. The location with the lowest exposure rate was South (S), shown in Figure 2. The average for all locations was 9.7 µR/hr. HPIC data are considered a truer measure of exposure rate, the Ludlum Model 19 measurements are estimated based on the energy of the cesium-137 calibration source. Unlike the Model 19, the HPIC is energy independent and can provide consistent readings across a wide array of gamma energies and provides more accurate and stable exposure rate readings. Therefore, it is advantageous to convert Ludlum Model 19 measurement to the true exposure rate readings using a site-specific conversion factor. Based on the HPIC and Ludlum Model 19 data, the most appropriate site-specific conversion factor is 1.3, see Figure 3. That is, to convert a Ludlum Model 19 measurement result to a predicted HPIC measurement result, multiply the Ludlum Model 19 measurement by 1.3.

3.2 Radon-222 and Progeny Measurements

The results for the radon-222 and its progeny monitoring are provided in the following subsections.

3.2.1 Radon-222 Measurements

The radon-222 concentrations in air results are provided in Table 5. The radon-222 concentrations range from 0.19 picocuries per Liter (pCi/L) at South Wash in Q1 to 0.95 pCi/L at South Wash in Q3. In two cases the reported radon concentration results were less than the minimum detectable concentration (MDC) of

0.19 pCi/L at the Airport and the Mine Site locations in Q1. The South Wash location had the highest annual average concentration reported, followed by the Mine Site location, and then the Airport. The average concentration for all areas and periods is 0.46 pCi/L. The Radonova laboratory data reports are provided in Appendix B.

3.2.2 Working Level Measurements

The radon-222 decay product concentrations in air results are shown in Table 6. The radon-222 decay product concentrations range from 0.0 to 4.8 milliworkinglevels (mWL). The highest quarterly concentration was observed at Airport in Q1, followed by the Mine Site location. The lowest quarterly concentration of 0.0 was measured at the Mine Site and South Wash locations in multiple quarters. The average concentration for all areas and periods is 1.3 mWL.

3.3 Soil Sampling

The results for the six soil samples analyzed for radiological parameters are shown in Table 7. All analyses were performed by Pace Analytical National unless noted otherwise. A summary of the soil sampling results are as follows:

- Radium-226 concentrations were measured by EPA Method 901.1 (gamma spec) and ranged from 0.794 pCi/g to 1.70 pCi/g with an average concentration of 1.36 pCi/g. Red Horse Wash had the highest radium-226 concentration in soil.

- Gross alpha concentrations were measured by EPA Method 9310 and ranged from 10.6 pCi/g to 4.85 pCi/g with an average concentration of 6.57 pCi/g. The location with the highest gross alpha concentration in soil is Little Red Horse Wash. The current gross alpha method includes contributions from all alpha emitting radionuclides in the uranium decay series, except radon-222.

- Gross beta concentrations were measured by EPA Method 9310 and ranged from 15.2 pCi/g to 24.5 pCi/g with an average concentration of 19.4 pCi/g. The location with the highest gross beta concentration in soil is Little Red Horse Wash.

- Potassium-40 concentrations were measured by EPA Method 901.1 (gamma spec) and ranged from 18.0 pCi/g to 28.9 pCi/g with an average concentration of 20.5 pCi/g. The location with the highest potassium-40 concentration in soil is Red Horse Wash.

- Thorium-232 concentrations were measured by LANL Method ER200M and ranged from 0.91 pCi/g to 1.41 pCi/g with an average concentration of 0.5 pCi/g. The location with the highest concentration of thorium-232 in soil is South Wash.

- Thallium-208 concentrations were measured by EPA Method 901.1 (gamma spec) and ranged from 0.296 pCi/g to 0.464 pCi/g with an average concentration of 0.387 pCi/g. The location with the highest concentration of thallium-208 in soil is Red Horse Wash.

- Cesium-137 concentrations were measured by EPA Method 901.1 (gamma spec) and ranged from below the MDA to 0.501 pCi/g with an average concentration of 0.17 pCi/g. The location with the highest cesium-137 concentration in soil is Little Red Horse Wash.

- Total Uranium concentrations were measured by Method 6020B (ICP-MS) at ACZ Laboratories and ranged from 0.721 mg/kg to 1.26mg/kg with an average concentration of 0.958 mg/Kg. The location with the highest uranium concentration in soil is North-Northwest.

The Pace Analytical and ACZ Laboratories laboratory data reports are provided in Appendix C.

3.4 Water Sampling

During the periods that ERG staff were at the site, surface water was only observed at Owl Tank and therefore no sample was collected in the South Wash. *Note: there is no perennial flow, and water is only present in the southern wash immediately following storm events*.

The results for the Owl Tank sample analyzed for radiological parameters are shown in Table 8. All but the radium-226, gross alpha, and gross beta results were less than minimum detectable concentrations.

The Pace Analytical laboratory data reports are provided in Appendix D.

Section 4.0 Conclusions

The results presented in this operational radiological monitoring report are generally similar to those reported in "Radiological Assessment of the Canyon Mine Project (McKlveen, 1985), Supplemental Preoperational Baseline Radiological Monitoring Data for the Canyon Mine (ERG, 2017) and the Supplemental Preoperational Baseline Radiological Monitoring Data for the Pinyon Plain Mine (ERG, 2025), and represent values that are within the range of typical background conditions within the United States (NCRP, 2009).

Section 5.0 References

Canadian Nuclear Safety Commission (CNSC). Measuring Airborne Radon Progeny at Uranium Mines and Mills. Regulatory Guide G-4. June 2003.

Environmental Restoration Group, Inc. (ERG). “Supplemental Preoperational Baseline Radiological Monitoring Data for the Canyon Mine”. August 2017.

Environmental Restoration Group, Inc. (ERG). “Supplemental Preoperational Baseline Radiological Monitoring Data for the Pinyon Plain Mine”. May 2025.

McKlveen, J.W., “Radiological Assessment of the Canyon Mine Project, Kaibab National Forest, Coconino County Arizona”. July 25, 1985.

National Council on Radiation Protection and Measurements (NCRP). “NCRP Report 160, Ionizing Radiation Exposure of the Population of the United States”. 2009

United States Forest Service (USFS). “Record of Decision, Canyon Mine Proposal - Final Environmental Impact Statement Canyon Uranium Mine “. August 1986.

Tables

Table 1 – Pinyon Plain Mine, USFS Preoperational Radiological Monitoring

Sample Type	Number of Locations	Location	Sample Frequency	Analyses (Method)[1]
Direct Gamma	12	8 × Compass Directions around Mine Site[2] Owl Tank (center wash, north of tank) South Wash[3] Airport Tusayan Ranger Station	Quarterly	Direct Gamma in µR/hr (OSL, HPIC, and Scintillometer Micro-R meter)[4]
Radon	3	Mine Site South Wash Airport	Quarterly	Radon concentration in air (Rapidos HS track-etch detector) and radon "working level" (Modified-Kusnetz).
Soil	6	Owl Tank Downwash of Mine Site (South Wash) Upwash of Mine Site (NNE) Upwash of Mine Site (NNW) Litte Red Horse Wash[5] Red Horse Wash[5]	One-time Sample Event	Gross Alpha/Beta (EPA 9310), Ra-226, K-40, Tl-208, and Cs-137 (E901.1), Th-232 (LANL ER200), and Total Uranium (6020B)
Surface Water[6]	2	Downwash of Mine Site Owl Tank	One-time Sample Event (based on availability)	Gross Alpha/Beta (E900.0), K-40, Tl-208, Cs-137, and Th-232 by Ac-228 (E901.1), Ra-226 (903.0/9315), and Total Uranium (6020B)

Notes:
1. Based on data presented in the FEIS, Appendix E Radiological Assessment, Appendix C, Table C.2 (Soils) analyses for Ra-226, Gross Alpha , Gross Beta, Th-232, Tl-208, K-40, and Cs-137, and Table C.3 (Surface Water) analyses for Ra-226, Gross Alpha , Gross Beta, K-40.
2. Gamma monitoring at 8 compass direction (N, NE, E, SE, S, SW, W, NW) locations approximately 1/4 mile from mine shaft.
3. New radon location added to monitoring program in 2023.
4. Based on data presented in the FEIS, Appendix E Radiological Assessment, Appendix A.
5. Little Red Horse Wash location formerly known as Red Horse Wash at US Highway 180. Big Red Horse Wash location on Arizona State Land Department lands moved “upwash” onto USFS lands and re-named Red Horse Wash.
6. Based on historic monitoring as documented in a Nov 11, 1993 letter report by Errol L. Montgomery & Associates, no monitoring to be conducted at Havasu Springs, Indian Gardens, or Blue Springs.

Table 2 – OSL Badge Deployments

Monitoring Quarter	Location	Deployment	Retrieval
2024 Q1	Airport , Tusayan Ranger Station	January 14, 2024	April 3, 2024
	Owl Tank, South Wash, SE, S, SW, W, W, NW, N, NE, E	January 15, 2024	April 4, 2024
2024 Q2	Airport, Tusayan Ranger Station	April 3, 2024	July 9, 2024
	Owl Tank, South Wash, SE, S, SW, W, W, NW, N, NE, E	April 4, 2024	July 10, 2024
2024 Q3	Airport, Tusayan Ranger Station	July 9, 2024	October 1, 2024
	Owl Tank, South Wash, SE, S, SW, W, W, NW, N, NE, E	July 10, 2024	October 2, 2024
2024 Q4	Airport, Tusayan Ranger Station	October 1, 2024	January 6, 2025
	Owl Tank, South Wash, SE, S, SW, W, W, NW, N, NE, E	October 2, 2024	January 8, 2025

Table 3 – Dose Rate Measurements Using Optically Stimulated Dosimeters (OSLs)

Location	Monitoring Quarter	Days Deployed	Effective Ambient Dose (mrem/quarter)		Average Exposure Rate[3] (µrem/hr)	Comments
			(Gross)	(Net)[1]		
Tusayan Ranger Station	2024 Q1	80	33.9	21.6	11.4	
	2024 Q2	97	36.2	25.5		
	2024 Q3	84	34.6	23.9		
	2024 Q4	97	37.2	27.3		
Airport	2024 Q1	80	34.1	21.8	12.0	
	2024 Q2	97	38.3	27.6		
	2024 Q3	84	36.6	25.9		
	2024 Q4	97	37.4	27.5		
Owl Tank	2024 Q1	80	35.6	23.3	12.5	
	2024 Q2	Found on Ground				Unused
	2024 Q3	Missing				Missing
	2024 Q4	98	39.9	30.0		
South Wash	2024 Q1	80	34.9	22.6	14.5	
	2024 Q2	Found on Ground				Unused
	2024 Q3	84	40.6	29.9		
	2024 Q4	98	49.3	39.4		
N	2024 Q1	80	35.1	22.8	12.5	
	2024 Q2	97	38.6	27.9		
	2024 Q3	84	36.9	26.2		
	2024 Q4	98	40.7	30.8		
NE	2024 Q1	80	33.3	21.0	10.8	
	2024 Q2	97	35.7	25.0		
	2024 Q3	84	33.4	22.7		
	2024 Q4	98	34.5	24.6		
E	2024 Q1	80	31.8	19.5	11.1	
	2024 Q2	97	34.6	23.9		
	2024 Q3	84	35.9	25.2		
	2024 Q4	98	36.7	26.8		
SE	2024 Q1	80	31.0	18.7	11.2	
	2024 Q2	97	35.4	24.7		
	2024 Q3	84	35.3	24.6		
	2024 Q4	98	38.8	28.9		
S	2024 Q1	80	29.0	16.7	9.7	
	2024 Q2	97	30.5	19.8		
	2024 Q3	84	31.5	20.8		
	2024 Q4	98	36.9	27.0		
SW	2024 Q1	80	32.3	20.0	10.8	
	2024 Q2	97	34.9	24.2		
	2024 Q3	84	33.9	23.2		
	2024 Q4	98	35.8	25.9		
W	2024 Q1	80	33.7	21.4	10.8	
	2024 Q2	97	35.0	24.3		
	2024 Q3	84	34.2	23.5		
	2024 Q4	98	33.3	23.4		
NW[3]	2024 Q1	80	30.3	18.0	10.8	
	2024 Q2	97	31.2	20.5		Q2 NW Ground, unused
	2024 Q3	84	35.1	23.6		
	2024 Q4	98	39.5	28.4		
Average				**24.4**	**11.5**	

Notes:
1. Net effective dose is Gross (reported) effective dose less the transit dose. Transit dose calculated by the number of days in transit multiplied by 0.22 mrem/day (average daily transit control dose for project OSL badges).
2. Average net effective dose for quarters in which badge retrieved converted to exposure rate per hour.
3. Results reflect average of NW and NW Duplicate badge analyses.

Table 4 – HPIC and Ludlum Model 19 Measurements

Location	Monitoring Quarter	HPIC Reading (µR/hr)	Model 19 Reading (µR/hr)	Average HPIC Reading (µR/hr)	Average Model 19 Reading (µR/hr)
Tusayan Ranger Station	2024 Q1	12.6	8.0	13.0	8.8
	2024 Q2	12.5	9.0		
	2024 Q3	13.6	9.0		
	2024 Q4	13.2	9.0		
Airport	2024 Q1	13.2	8.5	13.6	8.9
	2024 Q2	13.4	9		
	2024 Q3	14.2	9		
	2024 Q4	13.5	9		
Owl Tank	2024 Q1	14.2	11.5	14.7	11.4
	2024 Q2	14.5	12		
	2024 Q3	15.2	11		
	2024 Q4	14.9	11		
South Wash	2024 Q1	14.2	10.5	15.5	13.0
	2024 Q2	14.7	11.5		
	2024 Q3	16.5	15		
	2024 Q4	16.6	15		
N	2024 Q1	13.5	10.0	14.2	10.8
	2024 Q2	13.7	10.0		
	2024 Q3	15.4	11.5		
	2024 Q4	14.3	11.5		
NE	2024 Q1	12.1	9.0	13.0	9.9
	2024 Q2	12.3	9.5		
	2024 Q3	14.1	10.5		
	2024 Q4	13.3	10.5		
E	2024 Q1	11.7	8.0	12.4	8.8
	2024 Q2	11.9	8.0		
	2024 Q3	13.3	9.5		
	2024 Q4	12.6	9.5		
SE	2024 Q1	12.3	8.5	13.0	10.4
	2024 Q2	12.2	9.0		
	2024 Q3	13.9	12		
	2024 Q4	13.6	12		
S	2024 Q1	10.8	6.5	11.9	8.0
	2024 Q2	11.2	7.5		
	2024 Q3	13.6	9		
	2024 Q4	11.9	9		
SW	2024 Q1	11.8	7.5	13.0	8.8
	2024 Q2	12.3	8.5		
	2024 Q3	14.6	9.5		
	2024 Q4	13.4	9.5		
W	2024 Q1	13.0	10.0	13.9	10.5
	2024 Q2	13.3	10.0		
	2024 Q3	15.5	11		
	2024 Q4	13.8	11		
NW	2024 Q1	11.4	7.5	12.3	8.4
	2024 Q2	11.9	8		
	2024 Q3	13.7	9		
	2024 Q4	12.2	9		
Average				**13.4**	**9.8**

Notes:
1. Measurements taken approximately 1-m above ground surface.
2. µR/hr: microroentgen per hour
3. Measurements made on the day beginning the quarterly period.

Table 5 – Radon -222 Concentration Results

Location	Monitoring Quarter	Days Deployed	Radon-222 Concentration (pCi/L)	Radon-222 Uncertainty (pCi/L)	Average Radon-222 Concentration (pCi/L)	Comments
Airport	2024 Q1	80	< 0.19	*n/a*	0.24	
	2024 Q2	97	0.22	0.11		
	2024 Q3	84	0.22	0.14		
	2024 Q4	98	0.32	*0.19*		
South Wash	2024 Q1	80	0.19	*0.17*	0.61	
	2024 Q2	97	*0.51*	*0.14*		
	2024 Q3	84	0.95	0.19		
	2024 Q4	98	0.78	0.22		
Mine Site	2024 Q1	80	< 0.19	*n/a*	0.52	
	2024 Q2	97	0.49	0.11		
	2024 Q3	84	0.81	0.19		
	2024 Q4	98	0.59	*0.19*		
Average					**0.46**	

Notes:
1. Where radon concentration is less than the detection limit, the detection limit is used in the average.
2. Uncertainty is two standard deviations

Table 6 - Working Level Measurements Using Modified-Kusnetz Method

Location	Monitoring Quarter	Date	Radon-222 Progeny Concentration (mWL)	Average Radon-222 Progeny Concentration (mWL)
Airport	2024 Q1	1/14/2024	4.80	1.7
	2024 Q2	4/3/2024	0.90	
	2024 Q3	7/9/2024	0.80	
	2024 Q4	10/1/2024	0.10	
South Wash	2024 Q1	1/15/2024	0.00	0.5
	2024 Q2	4/4/2024	0.00	
	2024 Q3	7/10/2024	2.00	
	2024 Q4	10/2/2024	0.00	
Mine Site	2024 Q1	1/15/2024	0.00	1.8
	2024 Q2	4/4/2024	0.00	
	2024 Q3	7/10/2024	4.50	
	2024 Q4	10/2/2024	2.50	
Average				**1.3**

Notes:
1. mWL equals milliworking level
2. Measurements made on the day beginning of the quarterly period.

Table 7 - Radiological Constituents Concentrations in Soil

Location	Ra-226 (pCi/g)	Gross Alpha (pCi/g)	Gross Beta (pCi/g)	K-40 (pCi/g)	Tl-208 (pCi/g)	Cs-137 (pCi/g)	Th-232 (pCi/g)	Total U (mg/Kg)
Owl Tank	1.31 ± 0.246	5.19 ± 1.31	16.2 ± 1.98	19.9 ± 2.94	0.353 ± .0111	< MDA	0.91 ± 0.134	0.79
South Wash	0.968 ± 0.242	4.85 ± 1.26	20.2 ± 1.95	19.7 ± 3.04	0.437 ± 0.118	0.212 ± 0.108	1.41 ± 0.277	0.966
NNE	0.794 ± 0.142	5.76 ± 1.33	17.3 ± 1.87	18.0 ± 1.99	0.354 ± 0.0704	0.098 ± 0.054	0.838 ± 0.214	0.721
NNW	1.16 ± 0.199	5.58 ± 1.35	15.2 ± 1.69	18.6 ± 2.42	0.296 ± 0.0798	< MDA	1.08 ± 0.225	1.26
Little Red Horse Wash	1.43 ± 0.212	10.6 ± 1.84	24.5 ± 1.98	27.9 ± 2.90	0.418 ± 0.0195	0.501 ± 0.105	1.33 ± 0.242	1.00
Red Horse Wash	1.70 ± 0.218	7.43 ± 1.49	22.8 ± 1.88	28.9 ± 2.95	0.464 ± 0.0888	< MDA	1.30 ± 0.246	1.01
Average	**1.23**	**6.57**	**19.4**	**22.2**	**0.387**	**0.206**	**1.14**	**.96**

Notes:
Gross Alpha/Beta by EPA Method 9310
Ra-226, K-40, Tl-208, and Cs-137 by Method DOE Ga-01-R/901.1 (Gamma Spec). MDC for Cs-137 Owl Tank = 0.168 pCi/g, NNW = 0.134 pCi/g, and Red Horse Wash = 0.122 pCi/g. Where Cs-137 concentration is less than MDC, the MDC value is used for value in average.
Th-232 by LANL Method ER200M
Total Uranium by Metals (ICP-MS) Method 6020 - performed by ACZ Labs in Steamboat Springs, CO

Table 8 – Radiological Constituents Concentrations in Surface Water

Location	Ra-226 (pCi/L)	Gross Alpha (pCi/L)	Gross Beta (pCi/L)	K-40 (pCi/L)	Tl-208 (pCi/L)	Cs-137 (pCi/L)	Th-232 (pCi/L)	Total U (mg/L)
Owl Tank	0.892	9.24	19.1	0.0685	-1.35	7.62	-3.87	n/d

Notes:
Gross Alpha/Beta by Method E900.0
K-40, Tl-208, Cs-137, Th-232 by Method E901.1 (Gamma Spec). K-40 MDC = 124 pCi/L, Tl-208 MDC = 12.3 pCi/l, Cs-137 MDC = 12.3 pCi/L, and Th-232 MDC = 35.1 pCi/L.
Ra-226 by Method 903.0/9315. MDA - 0.316 pCi/L
Total Uranium by Method 6020B (RDL: 0.0010 mg/L)

Figures

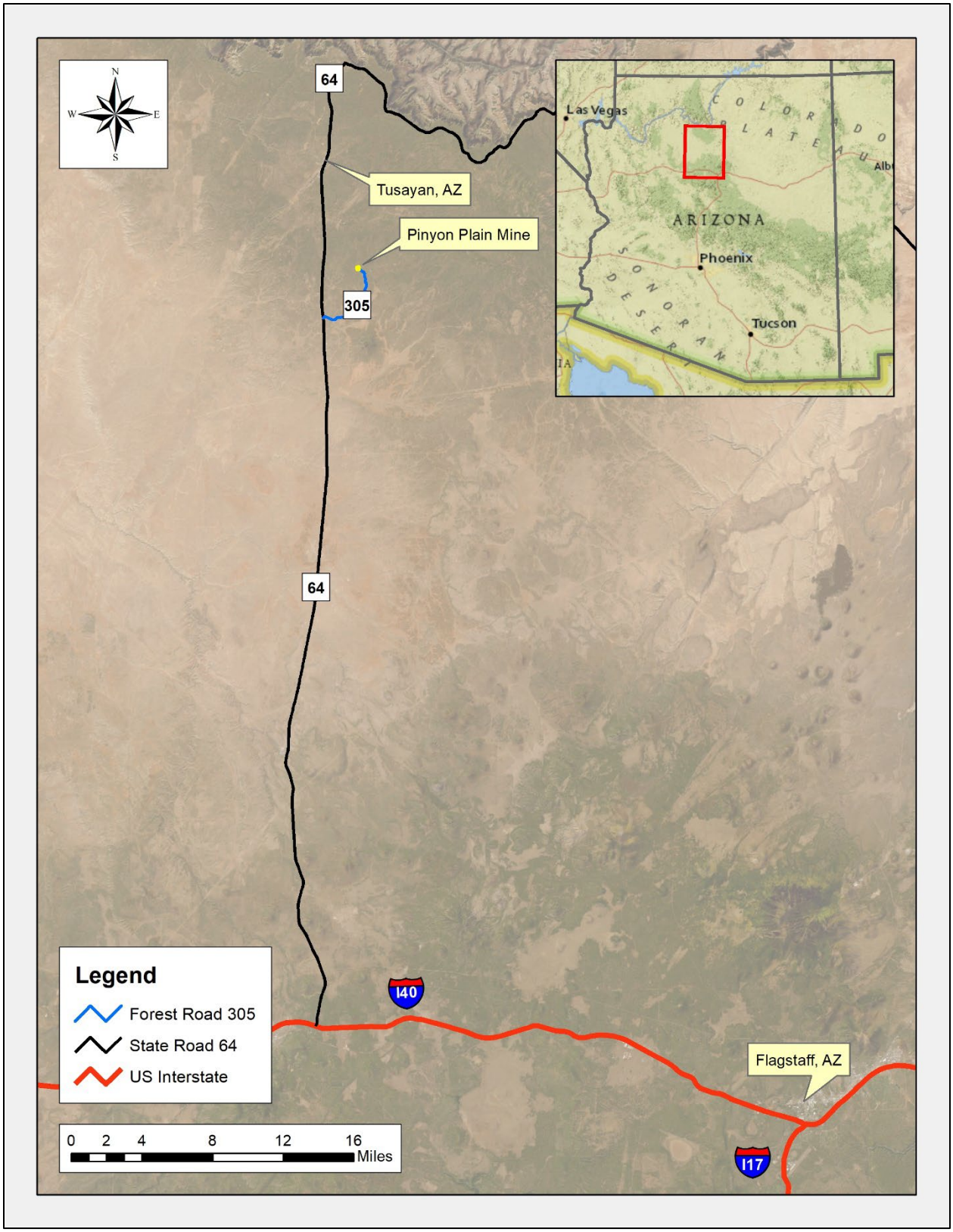

Figure 1 – Pinyon Plain Mine Regional Setting

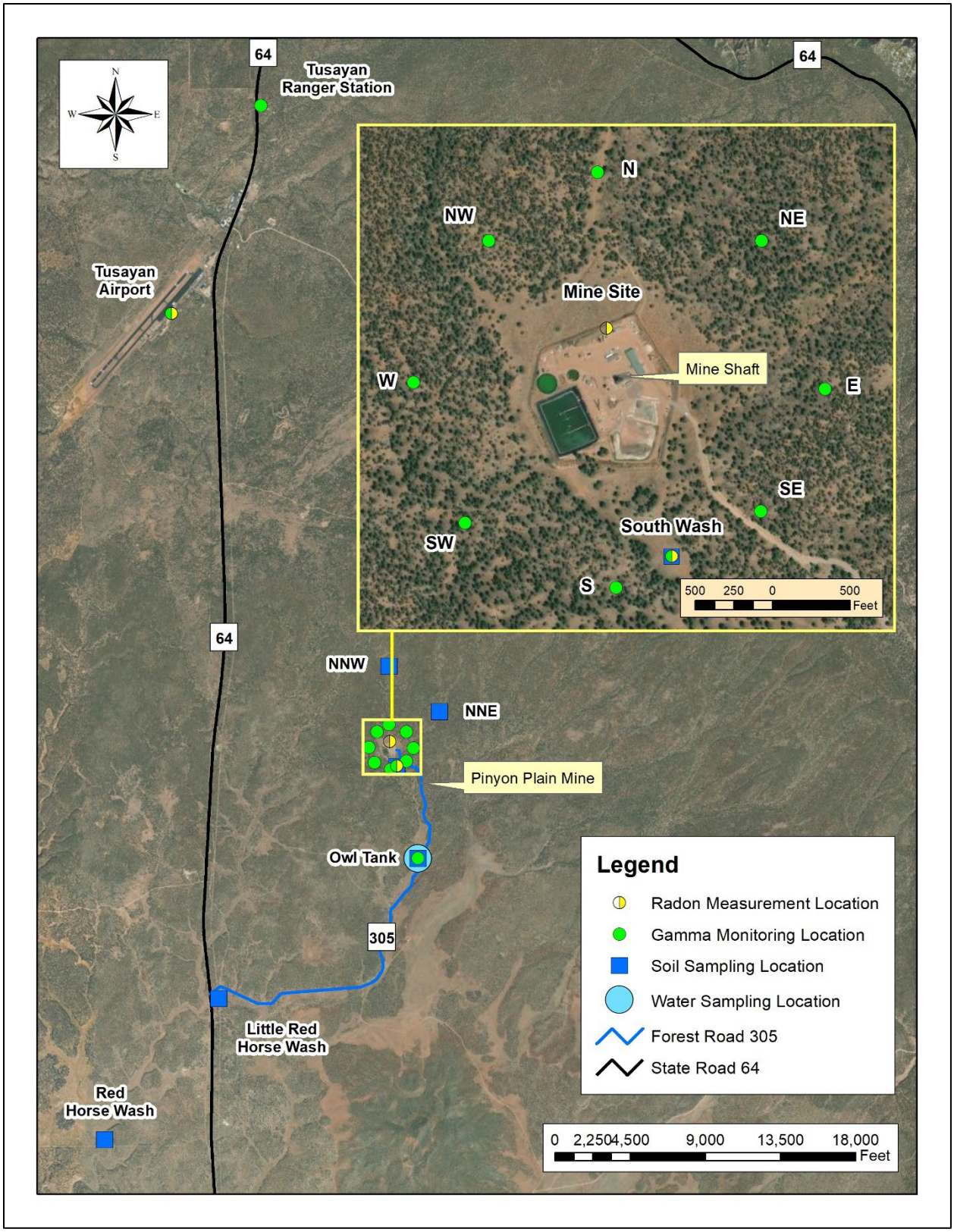

Figure 2 – Radiological Sampling Locations for the Pinyon Plain Mine

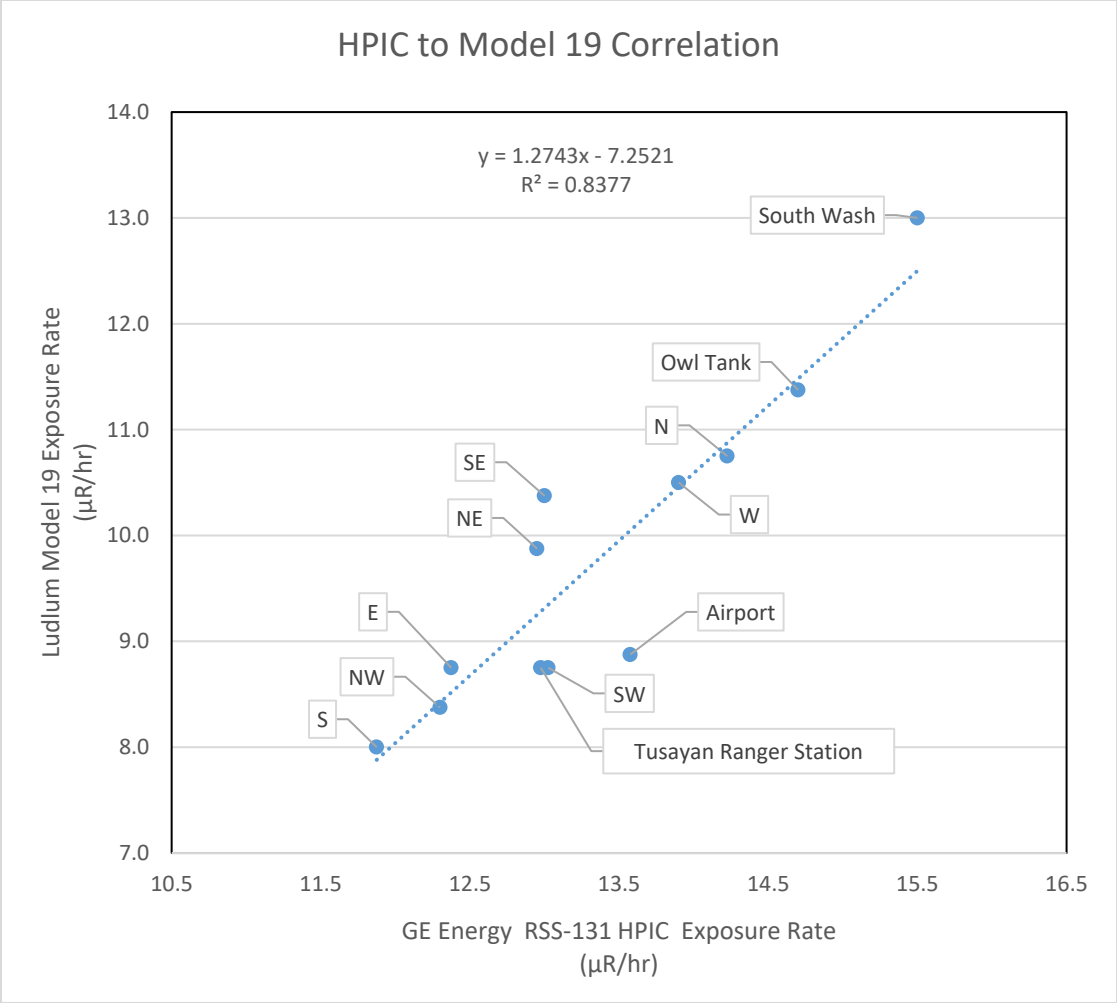

Figure 3 – HPIC to Model 19 Correlation

Appendix A

OSL (Gamma) Laboratory Data

ENVIRO RESTORATION GRP
STE 150 / NORTHEAST
8809 WASHINGTON ST
ALUQUERQUE, NM 87113

Report Date (YYYY-MM-DD)	2024-04-12
Page	1 of 1
Dosimeter Received	2024-04-09
QC Release	LCA
Analytical Work Order	2409901277

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Customer Service: (800) 323-8830
Technical: (800) 438-3241

Environmental Dosimetry Report

Account : 716005 Subaccount : 1448929 Series: X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2023-10-01 to	2023-12-31	Q4	2023			
	V03NH	Historical Customer Avg Control Dose	67.0						
00035	V03NH	AIRPORT	64.0	-3.0		-2.7	-0.4	2016-10	EX00012998G
Monitoring Period:			2024-01-01 to	2024-03-31	Q1	2024			
00000	V03NH	Deploy Control						2016-10	EX001013265
	V03NH	Control Dose Used	35.6						
00025	V03NH	NORTH	35.1	-0.6				2016-10	EX00057639D
00026	V03NH	NORTHEAST	33.3	-2.3				2016-10	EX001005618
00027	V03NH	EAST	31.8	-3.8				2016-10	EX00101412C
00028	V03NH	SOUTHEAST	31.0	-4.7				2016-10	EX00062586J
00029	V03NH	SOUTH	29.0	-6.7				2016-10	EX000996848
00030	V03NH	SOUTHWEST	32.3	-3.3				2016-10	EX00062688D
00031	V03NH	WEST	33.7	-2.0				2016-10	EX00061802U
00032	V03NH	NORTHWEST	30.9	-4.8				2016-10	EX001016714
00033	V03NH	SOUTH WASH	34.9	-0.7	-0.7	-0.7	14.9	2016-10	EX00100051J
00034	V03NH	OWL TANK	35.6	0.0	0.0	0.0	7.8	2016-10	EX00089506G
00035	V03NH	AIRPORT	34.1	-1.6	-1.6	-1.6	-0.4	2016-10	EX000107217
00036	V03NH	TUSAYAN	33.9	-1.7	-1.7	-1.7	-15.5	2016-10	EX00082364P
00037	V03NH	NW Dup	29.6	-6.1	-6.1	-6.1	-27.6	2016-10	EX00082512U

ENVIRO RESTORATION GRP
STE 150 / NORTHEAST
8809 WASHINGTON ST
ALUQUERQUE, NM 87113

Report Date (YYYY-MM-DD)	2024-07-22
Page	1 of 1
Dosimeter Received	2024-07-19
QC Release	LCA
Analytical Work Order	2419700908

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Environmental Dosimetry Report

Account : 716005 Subaccount : 1448929 Series: X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2024-04-01 to	2024-06-30	Q2	2024			
00000	V03NH	Deploy Control						2016-10	EX00088978Y
	V03NH	Control Dose Used	45.2						
00025	V03NH	NORTH	38.6	-6.6				2016-10	EX00099623G
00026	V03NH	NORTHEAST	35.7	-9.5				2016-10	EX00001882Y
00027	V03NH	EAST	34.6	-10.6				2016-10	EX001013083
00028	V03NH	SOUTHEAST	35.4	-9.7				2016-10	EX00064352W
00029	V03NH	SOUTH	30.5	-14.7				2016-10	EX00060678G
00030	V03NH	SOUTHWEST	34.8	-10.4				2016-10	EX00080046V
00031	V03NH	WEST	35.0	-10.2				2016-10	EX00054178O
00032	V03NH	NORTHWEST	34.5	-10.7				2016-10	EX001008307
00033	V03NH	SOUTH WASH	25.7	-19.5	-19.5	-20.2	-4.6	2016-10	EX00062531Y
00034	V03NH	OWL TANK	40.2	-5.0	-5.0	-5.0	2.8	2016-10	EX00058147P
00035	V03NH	AIRPORT	38.3	-6.9	-6.9	-8.5	-7.3	2016-10	EX001040466
00036	V03NH	TUSAYAN	36.2	-9.0	-9.0	-10.7	-24.5	2016-10	EX00074109P
00037	V03NH	NW Dup	31.2	-14.0	-14.0	-20.1	-41.6	2016-10	EX00069436J

ENVIRO RESTORATION GRP
STE 150 / NORTHEAST
8809 WASHINGTON ST
ALUQUERQUE, NM 87113

Report Date (YYYY-MM-DD)	2024-10-11
Page	1 of 1
Dosimeter Received	2024-10-11
QC Release	LCA
Analytical Work Order	2428302012

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Environmental Dosimetry Report

Account : 716005 Subaccount : 1448929 Series: X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2024-07-01 to	2024-09-30	Q3	2024			
00000	V03NH	Deploy Control						2016-10	EX00063701W
	V03NH	Control Dose Used	38.6						
00025	V03NH	NORTH	36.9	-1.7				2016-10	EX00081832N
00026	V03NH	NORTHEAST	33.4	-5.2				2016-10	EX000955985
00027	V03NH	EAST	35.9	-2.7				2016-10	EX00105348V
00028	V03NH	SOUTHEAST	35.3	-3.3				2016-10	EX00104069Y
00029	V03NH	SOUTH	31.5	-7.1				2016-10	EX00097202U
00030	V03NH	SOUTHWEST	33.9	-4.7				2016-10	EX00073994B
00031	V03NH	WEST	34.2	-4.4				2016-10	EX00105366X
00032	V03NH	NORTHWEST	35.0	-3.6				2016-10	EX00070507P
00033	V03NH	SOUTH WASH	40.6	2.0	2.0	-18.2	-2.6	2016-10	EX00094069H
00035	V03NH	AIRPORT	36.6	-2.0	-2.0	-10.5	-9.3	2016-10	EX00091251X
00036	V03NH	TUSAYAN	34.6	-4.0	-4.0	-14.7	-28.5	2016-10	EX00108003C
00037	V03NH	NW Dup	35.2	-3.4	-3.4	-23.5	-45.0	2016-10	EX00108156Z

ENVIRO RESTORATION GRP
STE 150 / NORTHEAST
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Report Date (YYYY-MM-DD)	2025-01-22
Page	1 of 1
Dosimeter Received	2025-01-13
QC Release	LCA
Analytical Work Order	2501300229

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Technical: (800) 438-3241

Environmental Dosimetry Report

Account : 716005 Subaccount : 1448929 Series: X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2024-10-01 to	2024-12-31	Q4	2024			
00000	V03NH	Deploy Control						2016-10	EX00096213S
	V03NH	Control Dose Used	44.3						
00025	V03NH	NORTH	40.7	-3.7				2016-10	EX00046906J
00026	V03NH	NORTHEAST	34.5	-9.9				2016-10	EX00051855L
00027	V03NH	EAST	36.7	-7.6				2016-10	EX000930022
00028	V03NH	SOUTHEAST	38.8	-5.5				2016-10	EX00097030Z
00029	V03NH	SOUTH	36.9	-7.4				2016-10	EX00097186G
00030	V03NH	SOUTHWEST	35.8	-8.5				2016-10	EX00065291V
00031	V03NH	WEST	33.3	-11.0				2016-10	EX00096296E
00032	V03NH	NORTHWEST	40.8	-3.6				2016-10	EX001073318
00033	V03NH	SOUTH WASH	49.3	5.0	5.0	-13.2	2.4	2016-10	EX00069078J
00034	V03NH	OWL TANK	39.9	-4.4	-4.4	-9.4	-1.6	2016-10	EX00093278F
00035	V03NH	AIRPORT	37.4	-6.9	-6.9	-17.4	-16.2	2016-10	EX00097033T
00036	V03NH	TUSAYAN	37.2	-7.2	-7.2	-21.9	-35.7	2016-10	EX00103918O
00037	V03NH	NW Dup	38.1	-6.3	-6.3	-29.7	-51.2	2016-10	EX00093025U

General Information

The Environmental dosimeter is for both indoor and outdoor use, and is designed to withstand extremes of temperature, humidity, precipitation, and other environmental conditions. InLight dosimeters are built on an assembly of a case component with copper and plastic filters along with a four-positioned aluminum oxide detector slide component. Both the case and slide are uniquely bar coded with serial numbers for chain of custody and sensitivity identification. The InLight dosimeter is sealed within a heavy-duty vinyl tamper resistant pouch that has multiple slots to permit several methods of attachment for easy deployment.

Technical Specifications

- Fully meets ANSI N545-1977, NRC Regulatory Guide 4.13, and HPS Draft Standard N13.29 for environmental dosimetry.

- Minimum Detectable Dose - nominally 0.1 mrem (1 μSv), reporting to tenths of a millirem ambient dose equivalent.

- Detection Capabilities:

  Photons (x and gamma rays) with energies above 15 keV nominally: 0.1 mrem to 1000 rem (1 μSv to 10 Sv).

  Beta particles with energies greater than approximately 500 keV average energy: 20 mrem to 1000 rem (200 μSv to 10 Sv).

Control Dosimeter

A minimum of two control dosimeters are provided per shipment. The first is for field deployment/retrieval used to measure exposure during shipment and placement/collection. The second is for transit used to measure exposure during shipment only. Both control dosimeters assigned to a shipment should accompany that shipment both from and to LANDAUER. Do not use the control dosimeters for any other purpose. Store dosimeters away from radiation when not in use along with the control dosimeter(s) of the same use date.

Dosimetry reports show gross and net dosage. Gross dosage includes the dosage to the controls. LANDAUER's background subtraction protocol is:

1. Subtract the deployment/retrieval control; or if not returned to LANDAUER
2. Subtract the transit control.

Environmental Dosimetry Report Information

Location ID Number

Unique number assigned by LANDAUER.

Dosimeter Type

Dosimeter Type	Analytical Sensitivity	Minimum Detectable Dose Level (mrem)
V03NH	High	0.1
V03NN	Standard	5.0
V06NH	High	0.1
V06NN	Standard	5.0

Identifier

Location name supplied by customer.

Exposure Ambient Dose (mrem)

Gross: Gross exposure before control subtraction.
Net: Net exposure after control subtraction.

Net Cumulative Totals (mrem)

Quarter to Date, Year to Date, and Permanent are accumulated net ambient exposure.

Inception Date

The date LANDAUER began keeping dosimeter records for a given dosimeter for a monitoring location on the current account.

Serial Number

Dosimeter serial number.

U.S. Patents

6,316,782; 6,127,685; 5,892,234

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Appendix B

Radon Laboratory Results

radonova
The global leader in radon measurement

REPORT NUMBER
6745389:1

REPORT PAGE
1 of 2

REPORT DATE
04/15/2024

PRINT DATE
04/15/2024

OWN ID
N/A

BY
ERG, Inc

REPORT RECEIVER(S)
chuckfarr@ergoffice.com

RADON MONITORING REPORT

Description of the measurement

The measurement was performed with a closed alpha-track detector (Rapidos®) following the measurement protocols given by AARST/ANSI.

The detector(s) arrived to Radonova Laboratories **04/09/2024**.
They were measured **04/14/2024**.

Test data have been given by Samantha Morley

Property data and address

MEASURE SITE ADDRESS
EFRI Pinyon Plain
Tusayan 86023

BUILDING ID

TRANSIT DETECTOR 1:
*203889 (3 ± 11 pCi*days/l)*

TRANSIT DETECTOR 2:
*466528 (10 ± 11 pCi*days/l)*

TRANSIT DETECTOR 3:
*685200 (14 ± 11 pCi*days/l)*

Test results

DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	LOCATION TYPE	RADON RESULT
246354-5 [Rapidos®]	*01/14/2024 – 04/03/2024*	*Tusayan Airport*	*Out-door*	< 0.19 pCi/L
549641-9 [Rapidos®]	*01/15/2024 – 04/04/2024*	*South Wash*	*Out-door*	0.19 ± 0.17 pCi/L
177497-5 [Rapidos®]	*01/15/2024 – 04/04/2024*	*Mine Site*	*Out-door*	< 0.19 pCi/L

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Radonova Laboratories Laboratory Measurement Specialist

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

DISCLAIMER

Radonova Inc. makes no warranty of any kind, express or implied, as regard to the use, operation or analysis of any Radonova Inc. monitor. Radonova Inc. specifically disclaims implied warranties of merchantability and fitness for a particular purpose. Radonova Inc. is not responsible for any damage, including consequential damages, to persons or property resulting from the use of the monitor or the resulting data.

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

Measurement method: Closed alpha-track detector

The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in the ANSI/AARST protocols. The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.

Transit detectors are used for the return delivery of the high-sensitivity detectors in order to make a more accurate background subtraction.

Radonova Laboratories (P.O. Box 6522, SE-751 38 UPPSALA, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals. NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations

For each detector, the measured value of the radon concentration is provided. For each value an uncertainty associated with the measurement to a 95% confidence level is also provided. For example a measurement result of 4.0 ± 0.5 pCi/L means that the radon concentration is most likely contained in the range 3.5 - 4.5 pCi/L. If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/L will be reported. The reported measured values are related to the detectors as received by Radonova Laboratories. Detector deployment is not performed by Radonova Laboratories. Measurement information such as monitoring period (dates) and placement location is provided to Radonova Laboratories by the end user. The presented results apply only to the samples tested.

The average transit exposure has been subtracted in the reported radon concentrations.

Codes on non-reportable detectors

DNR	Not Reported – Detector Not Returned
VTW	Not Reported – Visibly Tampered With
FBD	Not Reported – Film Broken or Damaged
LIL	Not Reported – Lost in Lab
DTO	Not Reported – Detector Too Old

Measurement method versions used when the report was created

ANSI/AARST MAH-2023, Protocol for Conducting Measurements of Radon and Radon Decay Products in Homes
ANSI/AARST MA-MFLB-2023, Protocol for Measurements of Radon in Multifamily, School, Commercial and Mixed-Use Buildings

Signature on the report

With the signature on the report, the person responsible for the radon analysis at Radonova Laboratories hereby certifies that the measurement procedures follows the guidance in accordance with the ANSI/AARST Measurement Protocols and that the demands from SWEDAC are fulfilled.

Measurement information displayed in italics on report has been provided by the customer.

Certification no:

107831-AL, 107830-RT, NRSB ARL1904, NY ELAP ID: 12042,

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
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LOMBARD, IL 60148
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REPORT NUMBER
6928569:1

REPORT DATE
07/25/2024

REPORT PAGE
1 of 2

PRINT DATE
07/25/2024

OWN ID
N/A

BY
ERG, Inc

RADON MONITORING REPORT

Description of the measurement

The measurement was performed with a closed alpha-track detector (Rapidos®) following the measurement protocols given by AARST/ANSI.

The detector(s) arrived to Radonova Laboratories **07/16/2024**.
They were measured **07/22/2024**.

Test data have been given by Sam Morley

Property data and address

MEASURE SITE ADDRESS
Pinyon Plain Mine
Tusayan AZ 86023

BUILDING ID

TRANSIT DETECTOR 1:
*631154 (10 ± 9 pCi*days/l)*

TRANSIT DETECTOR 2:
*550919 (18 ± 11 pCi*days/l)*

TRANSIT DETECTOR 3:
*815475 (10 ± 9 pCi*days/l)*

Test results

DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	LOCATION TYPE	RADON RESULT
955931-1 [Rapidos®]	*04/03/2024 – 07/09/2024*	*Airport*	*Out-door*	0.22 ± 0.11 pCi/L
931014-5 [Rapidos®]	*04/04/2024 – 07/10/2024*	*South Wash*	*Out-door*	0.51 ± 0.14 pCi/L
821624-4 [Rapidos®]	*04/04/2024 – 07/10/2024*	*Onsite*	*Out-door*	0.49 ± 0.11 pCi/L

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Radonova Laboratories Laboratory Measurement Specialist

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

Measurement method: Closed alpha-track detector

The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in the ANSI/AARST protocols. The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.

Transit detectors are used for the return delivery of the high-sensitivity detectors in order to make a more accurate background subtraction.

Radonova Laboratories (P.O. Box 6522, SE-751 38 UPPSALA, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals. NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations

For each detector, the measured value of the radon concentration is provided. For each value an uncertainty associated with the measurement to a 95% confidence level is also provided. For example a measurement result of 4.0 ± 0.5 pCi/L means that the radon concentration is most likely contained in the range 3.5 - 4.5 pCi/L. If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/L will be reported. The reported measured values are related to the detectors as received by Radonova Laboratories. Detector deployment is not performed by Radonova Laboratories. Measurement information such as monitoring period (dates) and placement location is provided to Radonova Laboratories by the end user. The presented result applies only to the sample tested as received by the laboratory.

The average transit exposure has been subtracted in the reported radon concentrations.

Codes on non-reportable detectors

DNR	Not Reported – Detector Not Returned
VTW	Not Reported – Visibly Tampered With
FBD	Not Reported – Film Broken or Damaged
LIL	Not Reported – Lost in Lab
DTO	Not Reported – Detector Too Old

Measurement method versions used when the report was created

ANSI/AARST MAH-2023, Protocol for Conducting Measurements of Radon and Radon Decay Products in Homes
ANSI/AARST MA-MFLB-2023, Protocol for Measurements of Radon in Multifamily, School, Commercial and Mixed-Use Buildings

Signature on the report

With the signature on the report, the person responsible for the radon analysis at Radonova Laboratories hereby certifies that the measurement procedures follows the guidance in accordance with the ANSI/AARST Measurement Protocols and that the demands from SWEDAC are fulfilled.

Measurement information displayed in italics on report has been provided by the customer.

Certification no:

107831-AL, 107830-RT, NRSB ARL1904, NY ELAP ID: 12042,

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

radonova
The global leader in radon measurement

REPORT NUMBER
6973313:1

REPORT DATE
10/17/2024

REPORT PAGE
1 of 2

PRINT DATE
10/17/2024

OWN ID
N/A

BY
ERG, Inc

RADON MONITORING REPORT

Description of the measurement

The measurement was performed with a closed alpha-track detector (Rapidos®) following the measurement protocols given by AARST/ANSI.

The detector(s) arrived to Radonova Laboratories **10/08/2024**.
They were measured **10/14/2024**.

Test data have been given by SMorley/CFarr

Property data and address

MEASURE SITE ADDRESS
Pinyon Plain Mine, c/o EFR
Coconino County AZ 87113

BUILDING ID

TRANSIT DETECTOR 1:
*503649 (10 ± 11 pCi*days/l)*

TRANSIT DETECTOR 2:
*197916 (11 ± 11 pCi*days/l)*

TRANSIT DETECTOR 3:
*815492 (16 ± 9 pCi*days/l)*

Test results

DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	LOCATION TYPE	RADON RESULT
128379-5 [Rapidos®]	*07/09/2024 – 10/01/2024*	*Airport*	*Out-door*	0.22 ± 0.14 pCi/L
556729-2 [Rapidos®]	*07/10/2024 – 10/02/2024*	*South Wash*	*Out-door*	0.95 ± 0.19 pCi/L
516375-3 [Rapidos®]	*07/10/2024 – 10/02/2024*	*Onsite*	*Out-door*	0.81 ± 0.19 pCi/L

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Radonova Laboratories Laboratory Measurement Specialist

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

Measurement method: Closed alpha-track detector

The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in the ANSI/AARST protocols. The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.

Transit detectors are used for the return delivery of the high-sensitivity detectors in order to make a more accurate background subtraction.

Radonova Laboratories (P.O. Box 6522, SE-751 38 UPPSALA, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals. NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations

For each detector, the measured value of the radon concentration is provided. For each value an uncertainty associated with the measurement to a 95% confidence level is also provided. For example a measurement result of 4.0 ± 0.5 pCi/L means that the radon concentration is most likely contained in the range 3.5 - 4.5 pCi/L. If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/L will be reported. The reported measured values are related to the detectors as received by Radonova Laboratories. Detector deployment is not performed by Radonova Laboratories. Measurement information such as monitoring period (dates) and placement location is provided to Radonova Laboratories by the end user. The presented result applies only to the sample tested as received by the laboratory.

The average transit exposure has been subtracted in the reported radon concentrations.

Codes on non-reportable detectors

DNR	Not Reported – Detector Not Returned
VTW	Not Reported – Visibly Tampered With
FBD	Not Reported – Film Broken or Damaged
LIL	Not Reported – Lost in Lab
DTO	Not Reported – Detector Too Old

Measurement method versions used when the report was created

ANSI/AARST MAH-2023, Protocol for Conducting Measurements of Radon and Radon Decay Products in Homes
ANSI/AARST MA-MFLB-2023, Protocol for Measurements of Radon in Multifamily, School, Commercial and Mixed-Use Buildings

Signature on the report

With the signature on the report, the person responsible for the radon analysis at Radonova Laboratories hereby certifies that the measurement procedures follows the guidance in accordance with the ANSI/AARST Measurement Protocols and that the demands from SWEDAC are fulfilled.

Measurement information displayed in italics on report has been provided by the customer.

Certification no:

107831-AL, 107830-RT, NRSB ARL1904, NY ELAP ID: 12042,

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REPORT NUMBER
6990813:1

REPORT DATE
01/22/2025

REPORT PAGE
1 of 2

PRINT DATE
01/22/2025

OWN ID
N/A

BY
ERG, Inc

RADON MONITORING REPORT

Description of the measurement

The measurement was performed with a closed alpha-track detector (Rapidos®) following the measurement protocols given by AARST/ANSI.

The detector(s) arrived to Radonova Laboratories **01/14/2025**.
They were measured **01/20/2025**.

Test data have been given by Chuck Farr

Property data and address

MEASURE SITE ADDRESS
VWM3+PF
Tusayan 86023

BUILDING ID

TRANSIT DETECTOR 1:
*753050 (2 ± 14 pCi*days/l)*

TRANSIT DETECTOR 2:
*189756 (0 ± 11 pCi*days/l)*

TRANSIT DETECTOR 3:
*185959 (11 ± 14 pCi*days/l)*

Test results

DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	LOCATION TYPE	RADON RESULT
965885-7 [Rapidos®]	*10/01/2024 – 01/07/2025*	*Airport*	*Out-door*	0.32 ± 0.19 pCi/L
729352-5 [Rapidos®]	*10/02/2024 – 01/08/2025*	*South Wash*	*Out-door*	0.78 ± 0.22 pCi/L
190281-6 [Rapidos®]	*10/02/2024 – 01/08/2025*	*Onsite*	*Out-door*	0.59 ± 0.19 pCi/L

Comment to the results

Tryggve Rönnqvist (Electronically signed)

Signature Radonova Laboratories Laboratory Measurement Specialist

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

Measurement method: Closed alpha-track detector

The radon measurement was performed with a closed alpha-track detector following the quality assurance guidance given in the ANSI/AARST protocols. The detector container is manufactured from electrically conducting plastic. Through a small slit (filter), radon gas enters the detector. The track-detecting material (film) inside the detector is hit by alpha particles generated by the radon entering the container and the decay products formed from it. On the film, the alpha particles make small tracks which are enlarged through chemical etching and later counted in a microscope in order to determine the radon exposure.

Transit detectors are used for the return delivery of the high-sensitivity detectors in order to make a more accurate background subtraction.

Radonova Laboratories (P.O. Box 6522, SE-751 38 UPPSALA, Sweden) is accredited (no. 1489) by SWEDAC to conduct radon-gas measurements using the closed alpha-track detector method. The analysis equipment is checked daily and the detectors are calibrated at regular intervals. NRPP Licenses: 107831 AL, 107830 RT

Measured radon concentrations

For each detector, the measured value of the radon concentration is provided. For each value an uncertainty associated with the measurement to a 95% confidence level is also provided. For example a measurement result of 4.0 ± 0.5 pCi/L means that the radon concentration is most likely contained in the range 3.5 - 4.5 pCi/L. If the start or end date of the measurement has not been provided, the radon concentration cannot be calculated. In such cases, the total exposure in pCi*days/L will be reported. The reported measured values are related to the detectors as received by Radonova Laboratories. Detector deployment is not performed by Radonova Laboratories. Measurement information such as monitoring period (dates) and placement location is provided to Radonova Laboratories by the end user. The presented result applies only to the sample tested as received by the laboratory.

The average transit exposure has been subtracted in the reported radon concentrations.

Codes on non-reportable detectors

DNR	Not Reported – Detector Not Returned
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FBD	Not Reported – Film Broken or Damaged
LIL	Not Reported – Lost in Lab
DTO	Not Reported – Detector Too Old

Measurement method versions used when the report was created

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ANSI/AARST MA-MFLB-2023, Protocol for Measurements of Radon in Multifamily, School, Commercial and Mixed-Use Buildings

Signature on the report

With the signature on the report, the person responsible for the radon analysis at Radonova Laboratories hereby certifies that the measurement procedures follows the guidance in accordance with the ANSI/AARST Measurement Protocols and that the demands from SWEDAC are fulfilled.

Measurement information displayed in italics on report has been provided by the customer.

Certification no:

107831-AL, 107830-RMP, NRSB ARL1904, NY ELAP ID: 12042,

SWEDAC ACKREDITERING
Accred. no. 1489
Testing
ISO/IEC 17025

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
LOMBARD, IL 60148
331.814.2200, help@radonova.com

Appendix C

Soil Sample Laboratory Results

ANALYTICAL REPORT

September 03, 2024

Revised Report

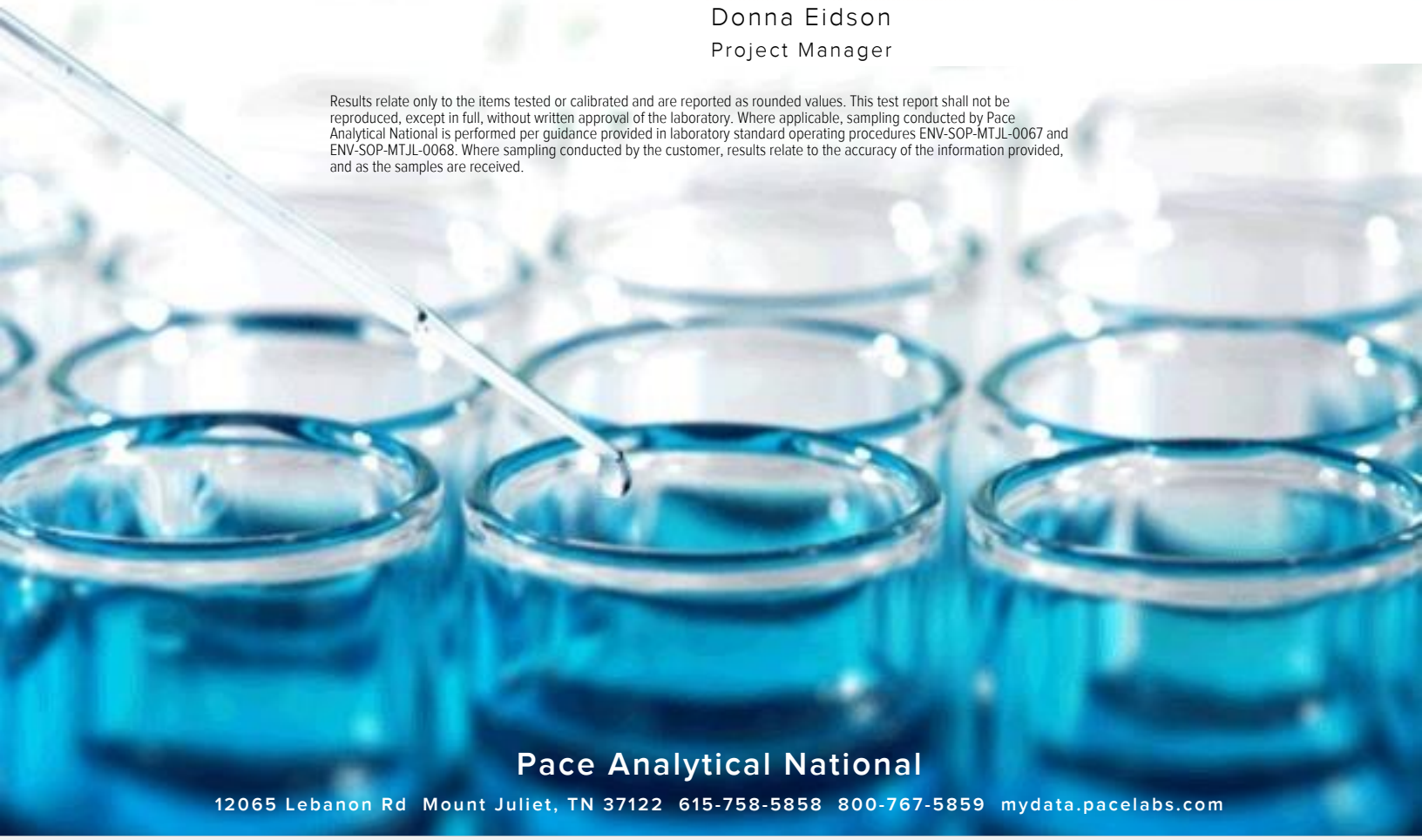
ERG - Albuquerque, NM

Sample Delivery Group:	L1759375
Samples Received:	07/23/2024
Project Number:	ERFI PINYON PLAIN
Description:	

Report To: Chuck Farr
8809 Washington St NE Suite 150
Albuquerque, NM 87113

Entire Report Reviewed By:

Donna Eidson
Project Manager



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

TABLE OF CONTENTS

LITTLE RED HORSE WASH L1759375-01 Solids and Chemical Materials

Collected by | Collected date/time 07/10/24 16:36 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 08:23	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/14/24 20:37	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

LITTLE RED HORSE WASH L1759375-02 Solid

Collected by | Collected date/time 07/10/24 16:36 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331280	5	07/27/24 16:12	07/31/24 16:22	LD	Mt. Juliet, TN

RED HORSE WASH L1759375-03 Solids and Chemical Materials

Collected by | Collected date/time 07/10/24 17:02 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 08:41	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/07/24 23:18	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

RED HORSE WASH L1759375-04 Solid

Collected by | Collected date/time 07/10/24 17:02 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331280	5	07/27/24 16:12	07/31/24 16:25	LD	Mt. Juliet, TN

OWL TANK L1759375-05 Solids and Chemical Materials

Collected by | Collected date/time 07/10/24 07:35 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 08:58	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/07/24 23:18	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

OWL TANK L1759375-06 Solid

Collected by | Collected date/time 07/10/24 07:35 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331280	5	07/27/24 16:12	07/31/24 16:29	LD	Mt. Juliet, TN

NNW L1759375-07 Solids and Chemical Materials

Collected by | Collected date/time 07/10/24 14:15 | Received date/time 07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 09:23	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/07/24 23:18	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

NNW L1759375-08 Solid

Collected by	Collected date/time	Received date/time
	07/10/24 14:15	07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331280	5	07/27/24 16:12	07/31/24 16:40	LD	Mt. Juliet, TN

NNE L1759375-09 Solids and Chemical Materials

Collected by	Collected date/time	Received date/time
	07/10/24 13:36	07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 09:24	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/07/24 23:18	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

NNE L1759375-10 Solid

Collected by	Collected date/time	Received date/time
	07/10/24 13:36	07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331151	5	07/27/24 17:40	08/22/24 00:57	SJM	Mt. Juliet, TN

SOUTH WASH L1759375-11 Solids and Chemical Materials

Collected by	Collected date/time	Received date/time
	07/10/24 08:05	07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method DOE Ga-01-R/901.1	WG2332093	1	07/26/24 14:03	08/16/24 10:03	DME	Mt. Juliet, TN
Radiochemistry by Method EPA 9310	WG2336337	1	08/05/24 15:33	08/07/24 23:18	SNR	Mt. Juliet, TN
Radiochemistry by Method LANL ER200M	WG2344281	1	08/16/24 07:45	08/17/24 22:36	RGT	Mt. Juliet, TN

SOUTH WASH L1759375-12 Solid

Collected by	Collected date/time	Received date/time
	07/10/24 08:05	07/23/24 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG2331151	5	07/27/24 17:40	08/22/24 00:38	SJM	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.

Donna Eidson
Project Manager

Report Revision History

Level II Report - Version 1: 08/23/24 13:23

Project Narrative

Updated GSPEC reporting list

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
Bismuth-214 (Ra-226)	1.43		0.212	0.212	0.212	0.0958	08/16/2024 08:23	WG2332093
Potassium-40	27.9		2.90	2.90	1.12	0.471	08/16/2024 08:23	WG2332093
Thallium-208	0.418		0.0915	0.0915	0.119	0.0543	08/16/2024 08:23	WG2332093
Cesium-137	0.501		0.105	0.105	0.132	0.0602	08/16/2024 08:23	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
GROSS ALPHA	10.6	J6	1.84	1.44	1.14	0.676	08/14/2024 20:37	WG2336337
GROSS BETA	24.5		1.98	2.65	1.46	0.775	08/14/2024 20:37	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
THORIUM-228	1.31		0.241	0.384	0.165	0.0982	08/17/2024 22:36	WG2344281
THORIUM-230	0.849		0.267	0.411	0.275	0.153	08/17/2024 22:36	WG2344281
THORIUM-232	1.33		0.242	0.386	0.164	0.0977	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*76.2*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	07/31/2024 16:22	WG2331280

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
Bismuth-214 (Ra-226)	1.70		0.218	0.218	0.189	0.0853	08/16/2024 08:41	WG2332093
Potassium-40	28.9		2.95	2.95	1.19	0.506	08/16/2024 08:41	WG2332093
Thallium-208	0.464		0.0888	0.0888	0.104	0.0473	08/16/2024 08:41	WG2332093
Cesium-137	-0.00897	U	0.0620	0.0620	0.122	0.0558	08/16/2024 08:41	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
GROSS ALPHA	7.43		1.49	1.09	1.02	0.604	08/07/2024 23:18	WG2336337
GROSS BETA	22.8		1.88	2.48	1.40	0.744	08/07/2024 23:18	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
THORIUM-228	1.41		0.256	0.398	0.173	0.103	08/17/2024 22:36	WG2344281
THORIUM-230	0.730		0.263	0.405	0.280	0.156	08/17/2024 22:36	WG2344281
THORIUM-232	1.30		0.246	0.388	0.172	0.102	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*81.2*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	07/31/2024 16:25	WG2331280

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
Bismuth-214 (Ra-226)	1.31		0.246	0.246	0.254	0.111	08/16/2024 08:58	WG2332093
Potassium-40	19.9		2.94	2.94	1.85	0.768	08/16/2024 08:58	WG2332093
Thallium-208	0.353		0.111	0.111	0.153	0.0682	08/16/2024 08:58	WG2332093
Cesium-137	0.0433	U	0.0912	0.0912	0.168	0.0747	08/16/2024 08:58	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
GROSS ALPHA	5.19		1.31	0.884	1.09	0.640	08/07/2024 23:18	WG2336337
GROSS BETA	16.2		1.98	1.94	1.97	1.03	08/07/2024 23:18	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
THORIUM-228	1.09		0.210	0.347	0.154	0.0908	08/17/2024 22:36	WG2344281
THORIUM-230	0.598		0.233	0.370	0.256	0.142	08/17/2024 22:36	WG2344281
THORIUM-232	0.910		0.194	0.331	0.153	0.0904	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*77.9*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	07/31/2024 16:29	WG2331280

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
Bismuth-214 (Ra-226)	1.16		0.199	0.199	0.212	0.0951	08/16/2024 09:23	WG2332093
Potassium-40	18.6		2.42	2.42	1.54	0.665	08/16/2024 09:23	WG2332093
Thallium-208	0.296		0.0798	0.0798	0.108	0.0484	08/16/2024 09:23	WG2332093
Cesium-137	0.0643	J	0.0709	0.0709	0.134	0.0604	08/16/2024 09:23	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
GROSS ALPHA	5.58		1.35	0.924	1.13	0.656	08/07/2024 23:18	WG2336337
GROSS BETA	15.2		1.69	1.76	1.49	0.787	08/07/2024 23:18	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
THORIUM-228	0.732		0.203	0.347	0.195	0.114	08/17/2024 22:36	WG2344281
THORIUM-230	0.527		0.249	0.392	0.284	0.158	08/17/2024 22:36	WG2344281
THORIUM-232	1.08		0.225	0.368	0.168	0.100	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*77.5*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	07/31/2024 16:40	WG2331280

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
Bismuth-214 (Ra-226)	0.794		0.142	0.142	0.167	0.0758	08/16/2024 09:24	WG2332093
Potassium-40	18.0		1.99	1.99	0.957	0.410	08/16/2024 09:24	WG2332093
Thallium-208	0.354		0.0704	0.0704	0.0854	0.0387	08/16/2024 09:24	WG2332093
Cesium-137	0.0977		0.0539	0.0539	0.0918	0.0414	08/16/2024 09:24	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
GROSS ALPHA	5.76		1.33	0.922	1.05	0.617	08/07/2024 23:18	WG2336337
GROSS BETA	17.3		1.87	2.00	1.74	0.911	08/07/2024 23:18	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result pCi/g	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/g	Lc pCi/g	Analysis Date date / time	Batch
THORIUM-228	0.866		0.218	0.371	0.189	0.112	08/17/2024 22:36	WG2344281
THORIUM-230	0.0231	U	0.216	0.369	0.303	0.169	08/17/2024 22:36	WG2344281
THORIUM-232	0.838		0.214	0.367	0.185	0.110	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*73.1*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	08/22/2024 00:57	WG2331151

Radiochemistry by Method DOE Ga-01-R/901.1

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
Bismuth-214 (Ra-226)	0.968		0.242	0.242	0.308	0.137	08/16/2024 10:03	WG2332093
Potassium-40	19.7		3.04	3.04	2.23	0.950	08/16/2024 10:03	WG2332093
Thallium-208	0.437		0.118	0.118	0.150	0.0662	08/16/2024 10:03	WG2332093
Cesium-137	0.212		0.108	0.108	0.168	0.0740	08/16/2024 10:03	WG2332093

Radiochemistry by Method EPA 9310

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
GROSS ALPHA	4.85		1.26	0.845	1.09	0.635	08/07/2024 23:18	WG2336337
GROSS BETA	20.2		1.95	2.27	1.73	0.906	08/07/2024 23:18	WG2336337

Radiochemistry by Method LANL ER200M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/g		+ / -	+ / -	pCi/g	pCi/g	date / time	
THORIUM-228	0.851		0.227	0.371	0.198	0.118	08/17/2024 22:36	WG2344281
THORIUM-230	0.688		0.286	0.430	0.314	0.177	08/17/2024 22:36	WG2344281
THORIUM-232	1.41		0.277	0.421	0.188	0.113	08/17/2024 22:36	WG2344281
(T) THORIUM-229	*74.3*					*30.0-110*	*08/17/2024 22:36*	WG2344281

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Uranium	ND		15.0	5	08/22/2024 00:38	WG2331151

Method Blank (MB)

(MB) R4107731-4 08/15/24 11:05

Analyte	MB Result pCi/g	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/g	MB Lc pCi/g
Americium-241	0.0604	J	0.0646	0.119	0.0577
Bismuth-214 (Ra-226)	-0.00671	U	0.0560	0.117	0.0545
Cesium-137	0.0159	U	0.0295	0.0575	0.0264
Cobalt-60	-0.00755	U	0.0173	0.0537	0.0234
Potassium-40	0.203	U	0.255	0.490	0.211
Thallium-208	0.0194	U	0.0288	0.0551	0.0255

L1758786-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1758786-01 08/15/24 10:22 • (DUP) R4107731-2 08/15/24 08:58

Analyte	Original Result pCi/g	Original 2 sigma CE + / -	Original MDA pCi/g	Original Lc pCi/g	DUP Result pCi/g	DUP 2 sigma CE + / -	DUP MDA pCi/g	DUP Lc pCi/g	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Bismuth-214 (Ra-226)	1.95	0.234	0.187	0.0842	2.09	0.265	0.243	0.111	7.07	0.404		20	3
Potassium-40	20.0	2.27	1.20	0.513	19.2	2.27	1.20	0.513	4.09	0.250		20	3
Thallium-208	0.462	0.105	0.128	0.0587	0.569	0.105	0.128	0.0587	20.7	0.775		20	3

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4107731-1 08/15/24 08:36 • (LCSD) R4107731-3 08/15/24 08:59

Analyte	Spike Amount pCi/g	LCS Result pCi/g	LCSD Result pCi/g	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Americium-241	36.9	35.7	36.3	96.7	98.5	80.0-120			1.83	20
Cesium-137	53.8	56.9	57.9	106	108	80.0-120			1.76	20
Cobalt-60	62.9	64.6	62.7	103	99.7	80.0-120			3.06	20

Method Blank (MB)

(MB) R4107882-1 08/07/24 23:18

Analyte	MB Result pCi/g	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/g	MB Lc pCi/g
GROSS ALPHA	0.298	J	0.469	0.664	0.394
GROSS BETA	1.16	J	1.26	1.65	0.865

L1762646-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762646-01 08/14/24 20:37 • (DUP) R4107882-5 08/14/24 20:37

Analyte	Original Result pCi/g	Original 2 sigma CE + / -	Original MDA pCi/g	Original Lc pCi/g	DUP Result pCi/g	DUP 2 sigma CE + / -	DUP MDA pCi/g	DUP Lc pCi/g	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
GROSS ALPHA	-0.230	0.418	0.734	0.434	6.39	1.12	0.741	0.434	200	5.53	J3	20	3
GROSS BETA	-0.0586	1.05	1.45	0.765	4.58	1.45	1.65	0.866	200	2.59		20	3

Laboratory Control Sample (LCS)

(LCS) R4107882-2 08/07/24 23:18

Analyte	Spike Amount pCi/g	LCS Result pCi/g	LCS Rec. %	Rec. Limits %	LCS Qualifier
GROSS ALPHA	101	101	99.5	75.0-125	
GROSS BETA	401	412	103	66.0-144	

L1759375-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1759375-01 08/14/24 20:37 • (MS) R4107882-6 08/15/24 14:40

Analyte	Spike Amount pCi/g	Original Result pCi/g	MS Result pCi/g	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
GROSS ALPHA	101	10.6	39.4	28.6	1	29.0-149	J6
GROSS BETA	401	24.5	199	43.5	1	43.0-133	

QUALITY CONTROL SUMMARY

L1759375-01,03,05,07,09,11

Method Blank (MB)

(MB) R4108308-1 08/17/24 22:36

Analyte	MB Result pCi/g	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/g	MB Lc pCi/g
THORIUM-228	-0.0450	U	0.0843	0.186	0.110
THORIUM-230	-0.519	U	0.147	0.298	0.167
THORIUM-232	0.129	J	0.116	0.179	0.107
(T) THORIUM-229	*72.9*		*72.9*		

L1759375-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1759375-01 08/17/24 22:36 • (DUP) R4108308-5 08/17/24 22:36

Analyte	Original Result pCi/g	Original 2 sigma CE + / -	Original MDA pCi/g	Original Lc pCi/g	DUP Result pCi/g	DUP 2 sigma CE + / -	DUP MDA pCi/g	DUP Lc pCi/g	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
THORIUM-228	1.31	0.241	0.165	0.0982	1.06	0.218	0.167	0.0987	21.2	0.772		20	3
THORIUM-230	0.849	0.267	0.275	0.153	0.763	0.258	0.272	0.151	10.6	0.230		20	3
THORIUM-232	1.33	0.242	0.164	0.0977	1.39	0.244	0.163	0.0968	4.55	0.180		20	3
(T) THORIUM-229	*76.2*				*80.6*	*80.6*							

Laboratory Control Sample (LCS)

(LCS) R4108308-2 08/17/24 22:36

Analyte	Spike Amount pCi/g	LCS Result pCi/g	LCS Rec. %	Rec. Limits %	LCS Qualifier
THORIUM-228	4.98	4.23	84.8	75.0-125	
THORIUM-230	4.98	4.39	88.1	75.0-125	
THORIUM-232	4.98	4.51	90.5	75.0-125	
(T) THORIUM-229			*86.5*		

L1759386-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1759386-08 08/17/24 22:36 • (MS) R4108308-3 08/17/24 22:36 • (MSD) R4108308-4 08/17/24 22:36

Analyte	Spike Amount pCi/g	Original Result pCi/g	MS Result pCi/g	MSD Result pCi/g	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
THORIUM-228	4.95	0.257	5.02	4.60	96.2	88.5	1	60.0-140			8.67		20
THORIUM-230	4.95	0.0781	5.75	4.96	115	99.4	1	60.0-140			14.7		20
THORIUM-232	4.95	0.178	5.19	4.68	101	91.7	1	60.0-140			10.4		20
(T) THORIUM-229		*56.8*			*72.8*	*72.4*							

Method Blank (MB)

(MB) R4110209-1 08/22/24 00:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4110209-2 08/22/24 00:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	93.3	93.3	80.0-120	

L1759375-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1759375-12 08/22/24 00:38 • (MS) R4110209-5 08/22/24 00:50 • (MSD) R4110209-6 08/22/24 00:54

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	ND	103	100	102	99.8	5	75.0-125			2.03	20

Method Blank (MB)

(MB) R4101036-1 07/31/24 15:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Uranium	U		0.0478	15.0

Laboratory Control Sample (LCS)

(LCS) R4101036-2 07/31/24 16:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	100	107	107	80.0-120	

L1759814-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1759814-05 07/31/24 16:06 • (MS) R4101036-5 07/31/24 16:15 • (MSD) R4101036-6 07/31/24 16:19

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	100	ND	73.9	92.6	72.1	90.9	5	75.0-125	J6	J3	22.6	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

MDA	Minimum Detectable Activity.
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
(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.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	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		

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

* 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.

L1759375

Pace® Location Requested (City/State): MT. JULIET/TN

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Sample Receipt Checklist — total 6

COC Seal Present/Intact: X Y N
COC Signed/Accurate: X Y N
Bottles arrive intact: X Y N
Correct bottles used: X Y N
Sufficient volume sent: X Y N
RA Screen <0.5 mR/hr: X Y N

If Applicable
VOA Zero Headspace: __Y__N
Pres. Correct/Check: __Y__N

7774 8738 4703

Company Name: Environmental Restoration Group, Inc. (ERG)
Street Address: 8809 Washington St. NE, Suite 150, Albuquerque, NM 87113
Customer Project #: 0229-03
Project Name: EFRI Pinyon Plain
Site Collection Info/Facility ID (as applicable):

Contact/Report To: Chuck Farr
Phone #: (505) 298-4224
E-Mail: chuckfarr@ergoffice.com
Cc E-Mail: sammorley@ergoffice.com
Invoice to: chuckfarr@ergoffice.com
Invoice E-mail: chuckfarr@ergoffice.com
Purchase Order # (if applicable): n/a
Quote #: ØØ166126
County / State origin of sample(s): Coconino, AZ

Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: n/a
Reportable [ ] Yes [X] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other ______
Date Results Requested: n/a

DW PWSID # or WW Permit # as applicable: n/a
Field Filtered (if applicable): [ ] Yes [X] No
Analysis:

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only — Proj. Mgr: / AcctNum / Client ID: A152 / Profile / Template: / Prelog / Bottle Ord. ID:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Analysis Requested: Gross Alpha/Beta (E900.0); Total uranium (6020A); Ra-226 (EPA Method 901.1); K-40 (EPA Method 901.1); Tl-208 (EPA Method 901.1); Cs-137 (EPA Method 901.1); Th-232 (EPA Method 901.1) w/ Ac-228 as confirmation peak

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Gross Alpha/Beta (E900.0)	Total uranium (6020A)	Ra-226 (EPA Method 901.1)	K-40 (EPA Method 901.1)	Tl-208 (EPA Method 901.1)	Cs-137 (EPA Method 901.1)	Th-232 (EPA Method 901.1)	Sample Comment
Little Red Horse Wash	SS	Grab			7/10/24	16:36	1			X	X	X	X	X	X	X	-01,02
Red Horse Wash	SS	Grab			7/10/24	17:02	1			X	X	X	X	X	X	X	-03,04
Owl Tank	SS	Grab			7/10/24	07:35	1			X	X	X	X	X	X	X	-05,06
NNW	SS	Grab			7/10/24	14:15	1			X	X	X	X	X	X	X	-07,08
NNE	SS	Grab			7/10/24	13:36	1			X	X	X	X	X	X	X	-09,10
South Wash	SS	Grab			7/10/24	08:25	1			X	X	X	X	X	X	X	~~-06~~ -11,12 HR 7/23/24

Additional Instructions from Pace®: 1 X GAMMA SPEC. Ac-228 AS CONFIRMATION PEAK ON TH-232

Collected By: Printed Name: SAMANTHA MORLEY; Signature: [signature]

Customer Remarks / Special Conditions / Possible Hazards: BACKGROUND LEVEL SOIL SAMPLES.

Coolers: | Thermometer ID: ED49 | Correction Factor (°C): 0.3 | Obs. Temp. (°C): 22.8 | Corrected Temp. (°C): 23.1 | [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
CHUCK FARR / ERG [signature]	7/18/24 13:20	[signature]	07-23-24 ~~0900~~ 0930

Tracking Number:
Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

ENV-FRM-CORQ-0019_v02_110123 ©

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 07, 2024

Report to:
Chuck Farr
Environmental Restoration Group
8809 Washington St.
Suite 150
Albuquerque, NM 87113

Bill to:
Accounts Payable
Environmental Restoration Group
8809 Washington St. NW
Suite 150
Albuquerque, NM 87113

Project ID:
ACZ Project ID: L90384

Chuck Farr:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 18, 2024. This project has been assigned to ACZ's project number, L90384. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L90384. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 06, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Environmental Restoration Group
Project ID:
Sample ID: LITTLE RED HORSE WASH

ACZ Sample ID: ***L90384-01***
Date Sampled: *07/10/24 16:36*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	510	1.000		*	mg/Kg	0.051	0.255	10/04/24 15:03	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	97.8		*	%	0.1	0.5	09/27/24 3:13	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 9:47	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 13:29	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 7:55	jsa

Arizona license number: AZ0102

Environmental Restoration Group
Project ID:
Sample ID: RED HORSE WASH

ACZ Sample ID: ***L90384-02***
Date Sampled: *07/10/24 17:02*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	510	1.01		*	mg/Kg	0.051	0.255	10/04/24 15:05	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.0		*	%	0.1	0.5	09/27/24 4:22	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 9:50	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 13:47	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 8:08	jsa

Arizona license number: AZ0102

Environmental Restoration Group
Project ID:
Sample ID: OWL TANK

ACZ Sample ID: ***L90384-03***
Date Sampled: *07/10/24 07:35*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	515	0.790		*	mg/Kg	0.0515	0.258	10/04/24 15:06	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	97.9		*	%	0.1	0.5	09/27/24 5:31	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 9:52	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 14:05	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 8:21	jsa

Arizona license number: AZ0102

Environmental Restoration Group
Project ID:
Sample ID: NNW

ACZ Sample ID: ***L90384-04***
Date Sampled: *07/10/24 14:15*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	505	1.26		*	mg/Kg	0.0505	0.253	10/04/24 15:08	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.1		*	%	0.1	0.5	09/27/24 6:41	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 9:55	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 14:23	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 8:34	jsa

Arizona license number: AZ0102

Environmental Restoration Group
Project ID:
Sample ID: NNE

ACZ Sample ID: ***L90384-05***
Date Sampled: *07/10/24 13:36*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	510	0.721		*	mg/Kg	0.051	0.255	10/04/24 15:14	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	97.5		*	%	0.1	0.5	09/27/24 7:50	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 9:57	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 14:42	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 8:47	jsa

Arizona license number: AZ0102

Environmental Restoration Group
Project ID:
Sample ID: SOUTH WASH

ACZ Sample ID: ***L90384-06***
Date Sampled: *07/10/24 08:25*
Date Received: *09/18/24*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	EPA 6020B	510	0.966		*	mg/Kg	0.051	0.255	10/04/24 15:16	aps

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.3		*	%	0.1	0.5	09/27/24 8:59	rsh

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972				*				09/24/24 10:00	jsa
Digestion - Hot Plate	EPA 3050B				*				10/02/24 15:00	rsh
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2				*				09/25/24 8:59	jsa

Arizona license number: AZ0102

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

ERG

ACZ Project ID: ***L90384***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Solids, Percent D2216-80

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG598081													
WG598081PBS	PBS	09/26/24 14:30				U	%		-0.1	0.1			
L90377-01DUP	DUP	09/26/24 16:48			60.5	59.3	%				2	20	

Uranium, total (3050) EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG598677													
WG598677ICV	ICV	10/04/24 13:56	MS240930-3	.05		.05063	mg/L	101	90	110			
WG598677ICB	ICB	10/04/24 13:58				U	mg/L		-0.0003	0.0003			
WG597685PBS	PBS	10/04/24 14:09				U	mg/Kg		-0.15	0.15			
WG598462PBS	PBS	10/04/24 14:10				U	mg/Kg		-0.15	0.15			
WG598462LCSS1	LCSS	10/04/24 14:39	PCN627346	108		111.04476	mg/Kg		80.6	135			
WG598462LCSSD1	LCSSD	10/04/24 14:41	PCN627346	108		109.28874	mg/Kg		80.6	135	2	20	
L90380-01MS	MS	10/04/24 14:57	MS240912-4	12.5	1.4	14.33552	mg/Kg	103	75	125			
L90380-01MSD	MSD	10/04/24 14:59	MS240912-4	12.625	1.4	14.78222	mg/Kg	106	75	125	3	20	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Extended Qualifier Report

Environmental Restoration Group

ACZ Project ID: ***L90384***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION

No extended qualifiers associated with this analysis

Metals Analysis

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Uranium, total (3050)	EPA 6020B

Soil Analysis

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Solids, Percent	D2216-80

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Solids, Percent	D2216-80

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Environmental Restoration Group

ACZ Project ID: L90384
Date Received: 09/18/2024 12:14
Received By:
Date Printed: 9/23/2024

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]			X
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA42948	17.9	NA	15	Yes

Was ice present in the shipment container(s)?

No - Wet or gel ice was not present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Environmental Restoration Group

ACZ Project ID: L90384
Date Received: 09/18/2024 12:14
Received By:
Date Printed: 9/23/2024

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L90384

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Chuck Farr	Address: 8809 Washington St., Suite 150
Company: ERG	Albuquerque, NM 87113
E-mail: chuckfarr@ergoffice.com	Telephone: (505) 298-4224

Copy of Report to:

Name: Chuck Farr	E-mail: chuckfarr@ergoffice.com
Company: ERG	Telephone: (505) 298-4224

Invoice to:

Name: Chuck Farr	Address: 8809 Washington St., Suite 150
Company: ERG	Albuquerque, NM 87113
E-mail: chuckfarr@ergoffice.com	Telephone: (505) 298-4224

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ☐ NO ☒

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ☒

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: CFarr **Sampler's Site Information** **State** AZ **Zip code** 86023 **Time Zone** MST

***Sampler's Signature:** C Farr for Sam Mosley.

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: Total-U-Only (per Jason Lombardi 8/29/24)

PO#: 090924-CF-01

Reporting state for compliance testing: Not at this time.

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Uranium, Total (3050) EPA 6020B							
Little Red Horse Wash	7/10/24 16:36	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
Red Horse Wash	7/10/24 17:02	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
Owl Tank	7/10/24 07:35	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
NNW	7/10/24 14:15	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
NNE	7/10/24 13:36	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
South Wash	7/10/24 08:25	SO	1	☒	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
C Farr	9/16/24 12:00		9/18/24 12:14

BSC 9/20/24

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

Appendix D

Water Sample Laboratory Results

ANALYTICAL REPORT

November 14, 2024

Revised Report

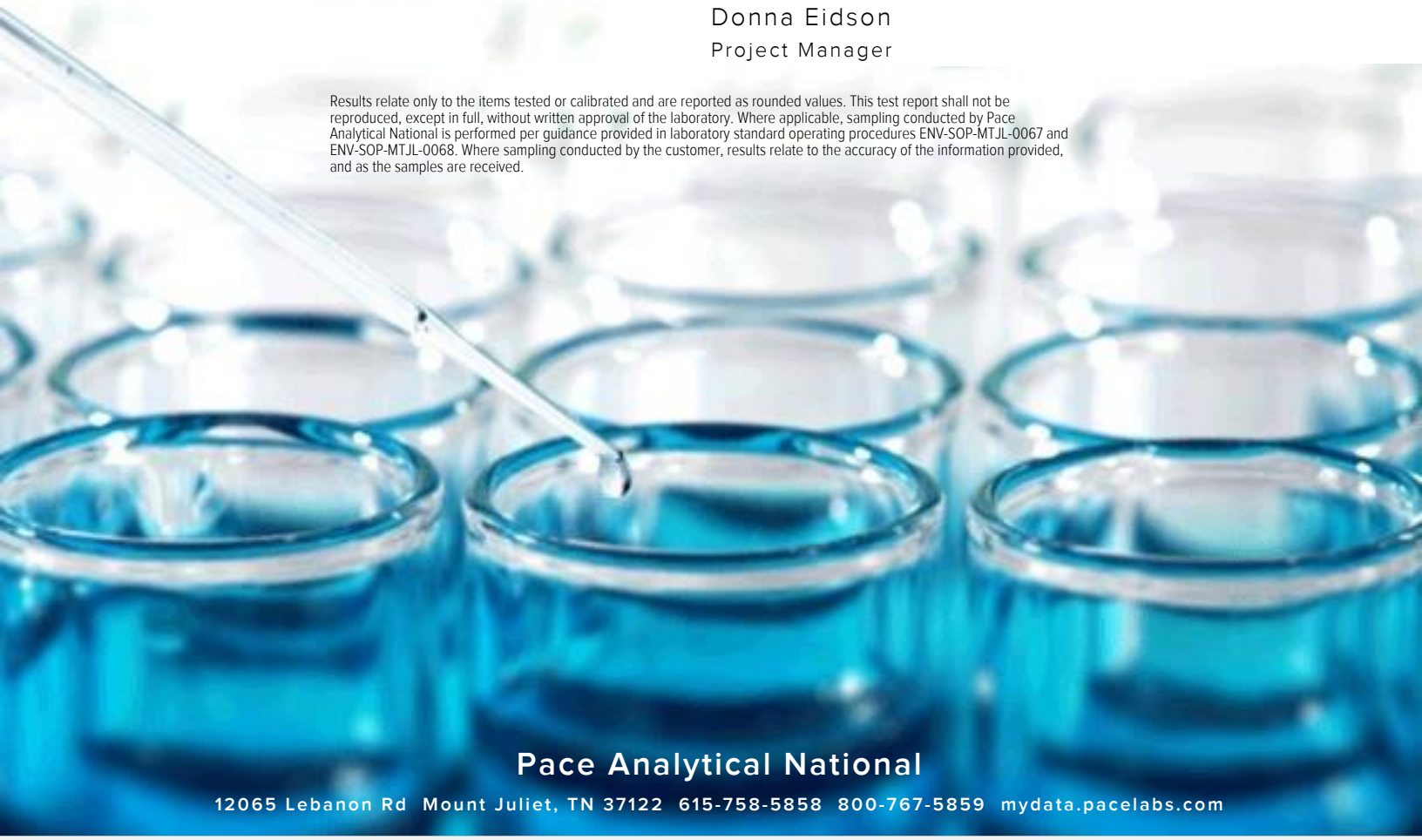
ERG - Albuquerque, NM

Sample Delivery Group:	L1787225
Samples Received:	10/09/2024
Project Number:	0229-03
Description:	EFRI Pinyon Plain

Report To: Chuck Farr
8809 Washington St NE Suite 150
Albuquerque, NM 87113

Entire Report Reviewed By:

Donna Eidson
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

OWL TANK L1787225-01 Non-Potable Water

Collected by: Chuck Farr
Collected date/time: 10/02/24 08:30
Received date/time: 10/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 901.1 (21 day)	WG2382749	1	10/15/24 13:13	10/17/24 22:44	DDD	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2389328	1	10/29/24 14:38	11/04/24 22:41	SNR	Mt. Juliet, TN

OWL TANK L1787225-02 GW

Collected by: Chuck Farr
Collected date/time: 10/02/24 08:30
Received date/time: 10/09/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2395219	1	11/07/24 22:22	11/08/24 02:32	UNP	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.

Donna Eidson
Project Manager

Report Revision History

Level II Report - Version 1: 11/08/24 22:01

Project Narrative

Added Th232 & updated format.

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	9.24		2.46	2.48	2.17	0.915	10/24/2024 23:47	WG2385898
GROSS BETA	19.1		3.15	3.17	3.18	1.51	10/24/2024 23:47	WG2385898

Radiochemistry by Method 901.1 (21 day)

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Actinium-228 (Ra-228)	-6.65	U	26.6	26.6	58.2	27.9	10/17/2024 22:44	WG2382749
Americium-241	60.1	U	131	131	250	121	10/17/2024 22:44	WG2382749
Antimony-124	-6.96	U	5.56	5.56	13.8	6.60	10/17/2024 22:44	WG2382749
Beryllium-7	-4.53	U	53.7	53.7	102	48.7	10/17/2024 22:44	WG2382749
Bismuth-212	72.8	J	84.9	84.9	130	60.9	10/17/2024 22:44	WG2382749
Bismuth-214 (Ra-226)	-6.90	U	11.9	11.9	24.9	11.9	10/17/2024 22:44	WG2382749
Cesium-137	7.62	J	6.64	6.64	12.3	5.86	10/17/2024 22:44	WG2382749
Cobalt-60	1.87	U	3.99	3.99	11.7	5.41	10/17/2024 22:44	WG2382749
Iridium-192	-4.52	U	4.21	4.21	9.79	4.72	10/17/2024 22:44	WG2382749
Lead-212	2.11	U	8.39	8.39	15.9	7.72	10/17/2024 22:44	WG2382749
Lead-214	6.04	U	9.10	9.10	20.2	9.72	10/17/2024 22:44	WG2382749
Potassium-40	0.0685	U	60.5	60.5	124	57.8	10/17/2024 22:44	WG2382749
Scandium-46	-3.15	U	9.22	9.22	15.1	7.14	10/17/2024 22:44	WG2382749
Thallium-208	-1.35	U	6.31	6.31	12.3	5.88	10/17/2024 22:44	WG2382749
Thorium-234 (U-238)	67.6	U	101	101	232	94.6	10/17/2024 22:44	WG2382749
Uranium-235	-2.72	U	6.13	6.13	11.8	5.72	10/17/2024 22:44	WG2382749
Cesium-134	-4.32	U	4.50	4.50	11.8	5.64	10/17/2024 22:44	WG2382749
Thorium-232	-3.87	U	18.0	18.0	35.1	5.88	10/17/2024 22:44	WG2382749

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.892		0.360	0.502	0.316	0.109	11/04/2024 22:41	WG2389328
(T) Barium	*102*					*30.0-143*	*11/04/2024 22:41*	WG2389328

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Uranium	ND		0.00100	1	11/08/2024 02:32	WG2395219

Method Blank (MB)

(MB) R4137414-1 10/24/24 20:09

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
GROSS ALPHA	-0.255	U	0.378	0.671	0.278
GROSS BETA	0.318	U	0.959	1.29	0.613

L1787561-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787561-02 10/24/24 20:09 • (DUP) R4137414-5 10/24/24 20:09

Analyte	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
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	12.2	2.27	1.54	0.635	11.2	2.20	1.52	0.625	8.48	0.313		20	3
GROSS BETA	1.51	1.48	1.82	0.861	2.88	1.75	2.14	1.02	62.2	0.595		20	3

Laboratory Control Sample (LCS)

(LCS) R4137414-2 10/24/24 20:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	17.1	114	80.0-120	
GROSS BETA	39.9	43.1	108	80.0-120	

L1788359-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1788359-05 10/24/24 20:09 • (MS) R4137414-3 10/24/24 20:09 • (MSD) R4137414-4 10/24/24 20:09

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
GROSS ALPHA	17.6	0.227	18.2	19.1	102	107	1	70.0-130			4.93		20
GROSS BETA	46.9	-1.82	50.6	49.8	108	106	1	70.0-130			1.58		20

Method Blank (MB)

(MB) R4135668-3 10/15/24 18:36

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Beryllium-7	16.5	U	30.8	47.4	22.5
Potassium-40	22.8	U	43.0	82.9	38.4
Scandium-46	0.878	U	4.71	7.35	3.43
Cobalt-60	2.43	U	2.76	7.99	3.69
Antimony-124	-2.69	U	3.40	7.69	3.68
Cesium-134	-0.718	U	3.19	6.22	2.94
Cesium-137	2.04	U	4.51	8.76	4.18
Iridium-192	-1.95	U	2.78	6.32	3.04
Thallium-208	-1.40	U	4.25	8.47	4.05
Bismuth-212	-29.7	U	61.1	125	59.7
Lead-212	-1.14	U	6.08	11.6	5.61
Bismuth-214 (Ra-226)	-3.99	U	8.20	17.1	8.20
Lead-214	5.83	U	6.71	14.0	6.74
Actinium-228 (Ra-228)	-0.830	U	13.7	32.4	15.4
Thorium-232	-4.00	U	12.1	24.2	4.05
Thorium-234 (U-238)	38.1	U	43.4	111	45.7
Uranium-235	-1.69	U	4.38	8.34	4.06
Americium-241	7.30	U	9.18	17.1	8.39

L1788418-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1788418-01 10/15/24 19:07 • (DUP) R4135668-4 10/16/24 21:26

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Beryllium-7	-11.8	29.0	58.6	27.8	22.6	35.2	53.5	25.3	200	0.755	J	20	3
Potassium-40	-35.8	46.3	98.9	46.1	20.4	41.5	80.5	37.2	200	0.904	U	20	3
Scandium-46	0.0441	3.47	7.12	3.28	3.24	5.23	7.96	3.72	195	0.510	J	20	3
Cobalt-60	-0.140	2.81	8.62	3.98	0.469	2.70	8.07	3.73	200	0.156	U	20	3
Antimony-124	-2.08	3.23	7.36	3.48	-3.70	3.91	9.09	4.36	0.000	0.319	U	20	3
Cesium-134	-1.97	2.43	6.56	3.11	-4.60	3.21	6.26	2.97	0.000	0.653	U	20	3
Cesium-137	2.07	4.06	7.78	3.68	0.547	4.57	8.99	4.29	116	0.249	U	20	3
Iridium-192	3.11	2.84	4.97	2.36	-1.02	3.17	7.27	3.51	200	0.970	U	20	3
Thallium-208	1.05	3.65	7.02	3.32	0.0531	4.04	7.98	3.81	181	0.182	U	20	3
Bismuth-212	23.9	46.9	71.5	32.8	6.35	63.9	127	60.7	116	0.222	U	20	3
Lead-212	-3.21	6.28	11.8	5.72	1.97	6.24	11.6	5.62	200	0.585	U	20	3
Bismuth-214 (Ra-226)	-11.7	7.04	15.5	7.37	1.05	8.39	17.6	8.42	200	1.17	U	20	3
Lead-214	4.39	6.25	13.3	6.34	-2.07	6.76	14.6	7.01	200	0.701	U	20	3
Actinium-228 (Ra-228)	-4.95	10.0	23.6	11.0	8.40	13.8	32.2	15.3	200	0.784	U	20	3
Thorium-234 (U-238)	-67.8	51.7	115	47.3	-11.4	43.0	114	46.9	0.000	0.838	U	20	3

L1788418-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1788418-01 10/15/24 19:07 • (DUP) R4135668-4 10/16/24 21:26

Analyte	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
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Uranium-235	-14.6	4.44	8.65	4.21	-2.61	4.41	8.44	4.11	0.000	1.92	U	20	3
Americium-241	-3.82	12.6	23.1	11.2	4.31	9.20	17.3	8.46	200	0.521	U	20	3

Laboratory Control Sample (LCS)

(LCS) R4135668-2 10/15/24 18:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Americium-241	25800	26700	103	80.0-120	
Cesium-137	37700	38300	102	80.0-120	
Cobalt-60	44000	44400	101	80.0-120	

Method Blank (MB)

(MB) R4142653-1 11/04/24 21:41

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.114	J	0.0960	0.125	0.0381
(T) Barium	*104*		*104*		

L1788359-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1788359-22 11/04/24 22:41 • (DUP) R4142653-5 11/04/24 22:41

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.0983	0.193	0.363	0.132	0.130	0.255	0.497	0.152	27.7	0.0987	U	20	3
(T) Barium	*101*				*111*	*111*							

Laboratory Control Sample (LCS)

(LCS) R4142653-2 11/04/24 21:41

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.51	110	80.0-120	
(T) Barium			*99.7*		

L1789938-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1789938-01 11/05/24 01:42 • (MS) R4142653-3 11/04/24 21:41 • (MSD) R4142653-4 11/04/24 21:41

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	1.55	20.3	24.2	93.8	113	1	75.0-125			17.6		20
(T) Barium		*101*			*105*	*106*							

Method Blank (MB)

(MB) R4143512-1 11/08/24 00:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Uranium	U		0.000130	0.00100

Laboratory Control Sample (LCS)

(LCS) R4143512-2 11/08/24 01:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Uranium	0.0500	0.0478	95.6	80.0-120	

L1793618-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1793618-01 11/08/24 01:05 • (MS) R4143512-4 11/08/24 01:11 • (MSD) R4143512-5 11/08/24 01:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Uranium	0.0500	ND	0.0449	0.0467	89.4	92.9	1	75.0-125			3.89	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

MDA	Minimum Detectable Activity.
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
(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	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	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		

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

* 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.

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name: Environmental Restoration Group, Inc.	Contact/Report To: Chuck Farr
Street Address: 8809 Washington St. NE, Suite 150 Albuquerque, NM 87113	Phone #: 505-298-4224
	E-Mail: chuckfarr@ergoffice.com
	Cc E-Mail:
Customer Project #: 0229-03	Invoice to: Chuck Farr
Project Name: EFRI Pinyon Plain	Invoice E-mail: chuckfarr@ergoffice.com
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #: 00166126
Time Zone Collected: [ ] AK [X] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s): Coconino, AZ

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other_____

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [X] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other _____

Date Results Requested:

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: see | note | see | note

Identify Container Preservative Type***: see | note | see | note

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Gross Alpha/Beta (E900.0)	E901.1 (K-40, Th-208, Cs-137, Th-232)	Ra-226 (SM7500 RA B M)	Total Uranium (6020A)	Sample Comment
Owl Tank	SW	grab			10/2/2024	08:30	8			X	X	X	X	Sample is within 6 × 1L bottles (2 of the bottles have preservative (HNO3) and within 2 × 250 mL bottles (both have preservative (HNO3) in them.

Lab Use Only: Proj. Mgr: 1787225 B084 | Profile / Template: | Prelog / Bottle Ord. ID:

Preservation non-conformance noted for sample

-01,02

Additional Instructions from Pace® :

Collected By: Printed Name CHUCK FARR Signature

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C): [ ] On Ice

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Chuck Farr	10/8/24 14:30			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) Harley Robertson	Date/Time: 10/9/24 0900	Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)		Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and C

4.3+0.3=4.6 DP A9

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

7791 0184 2310

ENV-FRM-CORQ-0019_v02_110123 ©