



U. S. Department of Energy – Idaho Operations Office

RADIOLOGICAL AND ENVIRONMENTAL SCIENCES LABORATORY

2251 North Boulevard, MS 2112 | Idaho Falls, ID 83415

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CONFIRMATORY MEASUREMENT REPORT

FOR

U.S. NUCLEAR REGULATORY COMMISSION

11545 Rockville Pike, MS T-5 A10

Rockville, Maryland 20852

The results listed in this report are only applicable to the aliquot(s) taken from the sample(s) as received.

The sample information is logged into the sample analysis database as received. RESL is not responsible for the validity of the data provided by the customer.

The sample(s) are analyzed in the same condition as received. RESL assumes no responsibility for the sampling, handling, preservation, or transportation of samples provided for analyses.

All analytical radiochemistry was performed at RESL facilities by qualified personnel using current validated technical procedures that are directly applicable to the specific analyses.

Any additions to, deviations, or exclusions from the procedure or process are noted as such in the report.

Each analytical result is accompanied by its total propagated uncertainty expressed at one standard deviation.

All results that do not pass through zero when their standard deviation is multiplied by two and then added and subtracted to the result are considered statistically positive at the 95% confidence interval.

This report is authorized by the RESL Senior Technical Manager for Chemistry (STM-C). Information regarding the technical aspects of this report may be obtained from Shane Steidley, STM-C at: steidlsd@id.doe.gov or 208-521-2120.



Approved By:

Shane Steidley

Shane Steidley, STM-C
DOE-ID, RESL

Department of Energy

Radiological & Environmental Sciences Laboratory

NUCLEAR REGULATORY COMMISSION

Sample ID: NRC-107 HA2356	Matrix: Soil	Site Name: Southwest Bench Area Contact: Linda Gersey	
		Nuclide	Results
		Cs-137	-7 +/- 5 E-3 pCi/g
		Ra-226	9.5 +/- 0.5 E-1 pCi/g
		Th-228	1.66 +/- 0.08 E0 pCi/g
		Th-230	1.04 +/- 0.05 E0 pCi/g
		Th-232	1.57 +/- 0.08 E0 pCi/g
		U-234	1.15 +/- 0.06 E0 pCi/g
		U-238	1.16 +/- 0.06 E0 pCi/g
Sample ID: NRC-108 HA2357	Matrix: Soil	Site Name: Southwest Bench Area Contact: Linda Gersey	
		Nuclide	Results
		Cs-137	-7 +/- 6 E-3 pCi/g
		Ra-226	1.09 +/- 0.05 E0 pCi/g
		Th-228	1.76 +/- 0.09 E0 pCi/g
		Th-230	1.29 +/- 0.06 E0 pCi/g
		Th-232	1.65 +/- 0.08 E0 pCi/g
		U-234	1.12 +/- 0.06 E0 pCi/g
		U-238	1.28 +/- 0.06 E0 pCi/g
Sample ID: NRC-109 HA2358	Matrix: Soil	Site Name: Southwest Bench Area Contact: Linda Gersey	
		Nuclide	Results
		Cs-137	6 +/- 5 E-3 pCi/g

Samples Approved by: Shane Heidley

ACTIVITIES ARE AS OF: 09/09/2021 UNCERTAINTIES ARE ONE SIGMA



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Sample ID: NRC-109 HA2358		Ra-226	1.05 +/- 0.05 E0 pCi/g
		Th-228	1.51 +/- 0.08 E0 pCi/g
		Th-230	1.73 +/- 0.09 E0 pCi/g
		Th-232	1.66 +/- 0.08 E0 pCi/g
		U-234	1.68 +/- 0.08 E0 pCi/g
		U-238	1.72 +/- 0.09 E0 pCi/g
Sample ID: NRC-110 HA2359	Matrix: Soil		Site Name: Southwest Bench Area
			Contact: Linda Gersey
		Nuclide	Results
		Cs-137	5 +/- 3 E-3 pCi/g
		Ra-226	1.20 +/- 0.06 E0 pCi/g
		Th-228	1.54 +/- 0.08 E0 pCi/g
		Th-230	1.94 +/- 0.10 E0 pCi/g
		Th-232	1.57 +/- 0.08 E0 pCi/g
		U-234	1.45 +/- 0.07 E0 pCi/g
		U-238	1.23 +/- 0.06 E0 pCi/g
Sample ID: NRC-111 HA2360	Matrix: Soil		Site Name: Southwest Bench Area
			Contact: Linda Gersey
		Nuclide	Results
		Cs-137	1.1 +/- 0.6 E-2 pCi/g
		Ra-226	1.58 +/- 0.07 E0 pCi/g
		Th-228	1.40 +/- 0.07 E0 pCi/g
		Th-230	2.05 +/- 0.10 E1 pCi/g
		U-234	1.90 +/- 0.10 E1 pCi/g

Samples Approved by: _____

Shane Heidley

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Date: 9/28/2021

Sample ID: NRC-111 HA2360		U-238	1.88 +/- 0.09 E1 pCi/g
Sample ID: NRC-112 HA2361	Matrix: Soil Site Name: Southwest Bench Area Contact: Linda Gersey		
		Nuclide	Results
		Cs-137	-9 +/- 5 E-3 pCi/g
		Ra-226	1.20 +/- 0.06 E0 pCi/g
		Th-228	1.35 +/- 0.07 E0 pCi/g
		Th-230	1.57 +/- 0.08 E0 pCi/g
		Th-232	1.46 +/- 0.07 E0 pCi/g
		U-234	9.7 +/- 0.5 E-1 pCi/g
		U-238	1.03 +/- 0.05 E0 pCi/g

Samples Approved by: Shane Heidley

ACTIVITIES ARE AS OF: 09/09/2021 UNCERTAINTIES ARE ONE SIGMA

