

Laboratory Results For MAPEP Series 45

(ELIW01) Energy Laboratories, Inc.

2393 Salt Creek HWY

Casper, Wy 82601

MAPEP-21-GrW45: Gross alpha/beta water

Radiological							Units: (Bq/L)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Gross alpha	0.09	0.232	A		-61.2	0.070 - 0.394	0.035	N
Gross beta	3.0	2.807	A		6.9	1.404 - 4.211	0.15	A

Radiological Reference Date: August 1, 2021
MAPEP-21-MaW45: Radiological and inorganic combined water standard

Radiological							Units: (Bq/L)	
Analyte	Result	Ref Value	Flag	Notes	Bias (%)	Acceptance Range	Unc Value	Unc Flag
Americium-241	NR	0.426				0.298 - 0.554		
Cesium-134	NR	10.4				7.3 - 13.5		
Cesium-137	NR					False Positive Test		
Cobalt-57	NR	13.9				9.7 - 18.1		
Cobalt-60	NR	14.0				9.8 - 18.2		
Hydrogen-3	NR	250				175 - 325		
Iron-55	NR	49.8				34.9 - 64.7		
Manganese-54	NR	9.0				6.3 - 11.7		
Nickel-63	NR	39.5				27.7 - 51.4		
Plutonium-238	NR	0.0096				Sensitivity Evaluation		
Plutonium-239/240	NR	0.528				0.370 - 0.686		
Potassium-40	NR					False Positive Test		
Radium-226	0.1	0.226	N		-55.8	0.158 - 0.294	0.015	A
Strontium-90	NR	3.86				2.70 - 5.02		
Technetium-99	NR	3.71				2.60 - 4.82		
Uranium-234	0.05	0.0215	N	(4)		Sensitivity Evaluation	0.005	
Uranium-238	0.02	0.0123	A	(17)		Sensitivity Evaluation	0.01	
Zinc-65	NR					False Positive Test		

Radiological Reference Date: August 1, 2021
Notes:

(4) = Sensitivity Evaluation

(17) = NOT DETECTED - reported a statistically zero result