

Radionuclide Distribution Coefficients

Deposit	Radionuclide (mL/g)	Distribution Coefficient
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Alluvium	Sr	48-2454
	Cs	121-1165
Tuff	Sr	260-4000
	Cs	1020-17800
Carbonate	Sr	0.19
	Cs	13.5
Dolomite	Sr	5-14
Granolierite	Sr	4-21
	Cs	8-1810
Granite	Sr	1.7
	Cs	34.3
Basalt	Sr	16-1220
	Cs	38-9520
Shaly siltstone	Sr	8.3
	Cs	309
Sandstone	Sr	1.4
	Cs	102
Salt	Sr	0.2
	Cs	0.03
Columbia River Basalt	Ru-106	38.0
	Pu	19.8
	Am-241	231
	Sr-85	120.4
	Pu-237	6.5
	Ra-226	731
	Co-60	315
	I-125	6.2
	Se-75	11.1
	Sr-90	5-38
	Cs-137	12-200
	U	<1
	Tc	<<1
	Ru-89	26-750
	Sr-90	5-25
	Pu-239	>1980
Alluvium	U-238	2.0 100
		4.5 200
		5.75 1000
		7.0 2000

Th-230	2.0	16
	4.5	5000
	5.75	10000
	7.0	15000
Ra-226	2.0	0
	4.5	12
	5.75	60
	7.0	100
Pb-210	2.0	20
	4.5	100
	5.75	1500
	7.0	4000
Po-210	2.0	0
	4.5	0
	5.75	12
	7.0	25

Data compiled by Serrano, Sergio E. 1997. Hydrology for Engineers, Geologists, and Environmental Professionals, HydroScience, Inc. Lexington, KY