

Table 99-12. Activity Concentration of Selected Radionuclides Measured by Gamma Spectroscopy in Red Bluff Reservoir Surface Water Samples Collected during 1999

See CEMRC 1999 Report “Radiological and non-radiological constituents in surface water and sediments at selected reservoirs” for descriptions of locations and methods of data collection.

Nuclide	Collection Date and Sampling Depth					
	July 27, 1999 (0.3 m depth)			July 27, 1999 (13.2 m depth)		
	^a Activity Concentration (Bq L ⁻¹)	^b SD (Bq L ⁻¹)	^c MDC (Bq L ⁻¹)	Activity Concentration (Bq L ⁻¹)	SD (Bq L ⁻¹)	MDC (Bq L ⁻¹)
²²⁸ Ac	<MDC		1.74E-01	<MDC		2.08E-01
⁷ Be	<MDC		7.24E-01	<MDC		8.01E-01
²¹² Bi	<MDC		8.33E-01	<MDC		7.35E-01
²¹³ Bi	<MDC		1.39E-01	<MDC		1.63E-01
²¹⁴ Bi	<MDC		1.27E-01	<MDC		1.36E-01
¹⁴⁴ Ce	<MDC		3.35E-01	<MDC		3.63E-01
²⁴⁹ Cf	<MDC		5.91E-02	<MDC		6.52E-02
⁶⁰ Co	<MDC		5.33E-02	<MDC		5.79E-02
¹³⁴ Cs	<MDC		4.64E-02	<MDC		5.15E-02
¹³⁷ Cs	<MDC		5.11E-02	<MDC		5.59E-02
¹⁵² Eu	<MDC		1.14E-01	<MDC		1.59E-01
¹⁵⁴ Eu	<MDC		1.46E-01	<MDC		1.61E-01
¹⁵⁵ Eu	<MDC		1.90E-01	<MDC		2.09E-01
⁴⁰ K	<MDC		7.66E-01	<MDC		8.34E-01
²³³ Pa	<MDC		9.52E-02	<MDC		1.07E-01
^{234m} Pa	<MDC		8.43E+00	<MDC		6.04E+00
²¹⁰ Pb	<MDC		1.49E+01	<MDC		1.21E+01
²¹² Pb	<MDC		9.77E-02	<MDC		1.14E-01
²¹⁴ Pb	<MDC		9.74E-02	<MDC		1.05E-01
¹⁰⁶ Rh	<MDC		4.81E-01	<MDC		5.33E-01

¹²⁵ Sb	<MDC		1.39E-01	<MDC		1.50E-01
²³⁴ Th	<MDC		8.21E-01	<MDC		8.81E-01
²⁰⁸ Tl	<MDC		6.15E-02	<MDC		6.64E-02
²³⁵ U	<MDC		1.86E-01	<MDC		1.99E-01

^aActivity concentrations of all radionuclides were measured using gamma spectroscopy

^bSD=count standard deviation

^cMDC = minimum detectable concentration