

Table 99-17. Activity Concentration of Selected Alpha-emitting Radionuclides in Lake Carlsbad Sediment Samples Collected during 1998

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.

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Collection Date	Water Depth (m)	^a Activity Concentration (mBq g ⁻¹)	^b SD (mBq g ⁻¹)	^c MDC (mBq g ⁻¹)
3/17/98	0.6	1.11E-01	1.96E-02	2.89E-02
3/17/98	0.6	1.11E-01	2.44E-02	6.66E-02
3/19/98	2.4	7.40E-02	2.15E-02	3.22E-02
3/19/98	2.7	2.22E-01	3.44E-02	4.81E-02
8/19/98	1.2	1.91E-01	2.15E-02	2.48E-02
8/19/98	3.0	1.69E-01	1.89E-02	1.59E-02
8/19/98	3.0	1.78E-01	2.11E-02	2.52E-02
8/19/98	3.7	^d NA	NA	NA

Collection Date	Water Depth (m)	²³⁸ U			²³⁵ U			²³⁴ U		
		Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)	Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)	Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)
3/17/98	0.6	2.57E+01	1.11E+00	2.70E-02	1.35E+00	1.22E-01	3.26E-02	3.64E+01	1.55E+00	2.55E-02
3/17/98	0.6	2.83E+01	1.26E+00	2.92E-02	1.45E+00	1.30E-01	3.00E-02	3.96E+01	1.70E+00	2.78E-02
3/19/98	2.4	2.49E+01	1.11E+00	2.81E-02	1.20E+00	1.18E-01	3.33E-02	3.27E+01	1.41E+00	2.66E-02
3/19/98	2.7	3.11E+01	1.41E+00	3.48E-02	1.54E+00	1.48E-01	3.70E-02	4.58E+01	2.04E+00	3.59E-02
8/19/98	1.2	3.36E+01	1.78E+00	3.07E-02	1.68E+00	1.15E-01	3.63E-02	5.00E+01	2.63E+00	4.44E-02
8/19/98	3.0	3.16E+01	1.70E+00	3.22E-02	1.70E+00	1.33E-01	3.52E-02	5.10E+01	2.70E+00	3.70E-02
8/19/98	3.0	2.78E+01	1.48E+00	3.48E-02	1.56E+00	1.22E-01	4.81E-02	4.38E+01	2.33E+00	5.55E-02
8/19/98	3.7	3.29E+01	1.74E+00	4.22E-02	1.58E+00	1.26E-01	5.18E-02	5.00E+01	2.63E+00	6.66E-02

Collection Date	Water Depth (m)	²³² Th			²³⁰ Th			²²⁸ Th		
		Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)	Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)	Activity Concentration (mBq g ⁻¹)	SD (mBq g ⁻¹)	MDC (mBq g ⁻¹)
3/17/98	0.6	1.81E+01	1.04E+00	2.81E-01	1.96E+01	3.10E+01	1.18E+00	1.81E+01	1.07E+00	8.51E-01
3/17/98	0.6	2.43E+01	2.78E+00	1.44E+00	2.67E+01	8.50E+01	3.52E+00	2.74E+01	3.11E+00	2.96E+00
3/19/98	2.4	1.97E+01	1.37E+00	4.07E-01	2.02E+01	4.10E+01	1.59E+00	1.83E+01	1.37E+00	1.22E+00
3/19/98	2.7	2.74E+01	1.81E+00	6.66E-01	2.86E+01	5.30E+01	1.85E+00	2.46E+01	1.81E+00	2.00E+00
8/19/98	1.2	2.06E+01	1.30E+00	4.07E-01	2.12E+01	3.80E+01	1.85E+00	1.42E+01	1.15E+00	1.85E+00
8/19/98	3.0	2.06E+01	1.15E+00	4.44E-01	2.27E+01	3.50E+01	1.48E+00	1.84E+01	1.11E+00	1.37E+00
8/19/98	3.0	9.17E+01	3.63E+00	4.44E-01	3.25E+01	4.30E+01	1.44E+00	3.94E+01	1.85E+00	1.85E+00
8/19/98	3.7	2.71E+01	1.33E+00	4.07E-01	3.06E+01	4.10E+01	1.44E+00	2.63E+01	1.37E+00	1.33E+00

^aActivity concentrations of all radionuclides were measured using alpha spectroscopy

^bSD=count standard deviation

^cMDC = minimum detectable concentration

^dNA = sample was not analyzed for target analyte or analysis failed