

**Table 1.** Results from bulk density and radionuclide measurements in the sediment core from the Sancho Reservoir

<i>z</i>	$\rho$	<i>m</i>	<sup>210</sup> Pb	<sup>226</sup> Ra	<sup>228</sup> Ra	<sup>234</sup> Th	<sup>40</sup> K	<sup>137</sup> Cs	( <sup>239+240</sup> )Pu	<sup>240</sup> Pu/ <sup>239</sup> Pu
(cm)	(g cm <sup>-3</sup> )	(g cm <sup>-2</sup> )	----- (Bq kg <sup>-1</sup> ) -----						----- -- atom ratio -- -----	
0.75	0.044	0.03								
3	0.047	0.14	119 ± 7	17.1 ± 1.1	26.7 ± 1.8	62 ± 5	406 ± 9	3.4 ± 0.5	0.143 ± 0.003	0.196 ± 0.033
5.5	0.082	0.29							0.137 ± 0.003	0.153 ± 0.017
7.5	0.077	0.45	106 ± 14	19.1 ± 2.9	31.6 ± 4.4	60 ± 13	427 ± 20	6.1 ± 1.7	0.133 ± 0.003	0.188 ± 0.015
9.5	0.114	0.64							0.156 ± 0.003	0.198 ± 0.015
11.5	0.180	0.93	78 ± 12	28.8 ± 2.4	39.1 ± 3.5	28 ± 4	716 ± 19	5.8 ± 1.1	0.161 ± 0.003	0.188 ± 0.022
13.5	0.185	1.30							0.180 ± 0.004	0.180 ± 0.037
15.5	0.249	1.73	72 ± 5	32.1 ± 0.9	47.0 ± 1.8	48 ± 4	733 ± 11	7.1 ± 0.5	0.173 ± 0.003	0.190 ± 0.010
17.5	0.343	2.32							0.161 ± 0.003	0.167 ± 0.019
19.5	0.468	3.13							0.185 ± 0.004	0.150 ± 0.016
21.5	0.490	4.09							0.189 ± 0.004	0.183 ± 0.036
23.5	0.483	5.06	50 ± 5	37.1 ± 1.2	52.0 ± 2.2	48 ± 9	907 ± 14	8.4 ± 0.5	0.194 ± 0.004	0.173 ± 0.025
25.5	0.554	6.10	43 ± 3	39.2 ± 0.5	56.6 ± 0.8	29 ± 2	870 ± 4	10.0 ± 0.2		
27.5	0.669	7.32							0.204 ± 0.004	0.177 ± 0.024
29.5	0.729	8.72	38 ± 7	39.7 ± 1.3	57.8 ± 2.4	46 ± 9	904 ± 15	10.6 ± 0.6	0.247 ± 0.005	0.173 ± 0.053
31.5	0.602	10.05							0.236 ± 0.005	0.169 ± 0.043
33.5	0.582	11.24	62 ± 6	41.8 ± 1.6	57.5 ± 2.9	37 ± 9	924 ± 17	10.7 ± 0.7	0.229 ± 0.005	0.175 ± 0.034
35.5	0.545	12.36	53 ± 2	41.6 ± 0.7	48.2 ± 0.9	41 ± 3	793 ± 7	10.9 ± 0.2	0.302 ± 0.006	0.192 ± 0.056
37.5	0.561	13.47	47 ± 4	34.8 ± 0.9	47.0 ± 1.5	54 ± 5	778 ± 9	11.5 ± 0.3	0.244 ± 0.005	0.160 ± 0.022
39.5	0.593	14.62							0.237 ± 0.005	0.155 ± 0.024
41.5	0.531	15.75	55 ± 1	38.0 ± 0.7	52.4 ± 1.2	48 ± 3	928 ± 7	13.4 ± 0.2	0.255 ± 0.005	0.171 ± 0.025
43.5	0.543	16.82							0.301 ± 0.006	0.183 ± 0.018
45.5	0.578	17.94	53 ± 4	40.6 ± 0.6	54.5 ± 1.3	51 ± 2	919 ± 7	17.1 ± 0.3	0.329 ± 0.007	0.156 ± 0.028
47.5	0.698	19.22							0.427 ± 0.009	0.176 ± 0.072
49.5	0.787	20.70	39 ± 3	37.1 ± 0.7	54.1 ± 1.4	54 ± 2	849 ± 8	19.6 ± 0.3	0.450 ± 0.009	0.163 ± 0.079

**Table 1.** Continuation

$z$	$\rho$	$m$	$^{210}\text{Pb}$	$^{226}\text{Ra}$	$^{228}\text{Ra}$	$^{234}\text{Th}$	$^{40}\text{K}$	$^{137}\text{Cs}$	$(^{239+240})\text{Pu}$	$^{240}\text{Pu}/^{239}\text{Pu}$	
(cm)	(g cm <sup>-3</sup> )	(g cm <sup>-2</sup> )	----- (Bq kg <sup>-1</sup> ) -----					-----			
51.5	0.762	22.25							0.526 ± 0.011	0.187 ± 0.013	
53.5	0.573	23.59	49 ± 4	33.9 ± 1.0	53.6 ± 1.4	48 ± 4	800 ± 10	19.3 ± 0.5	0.584 ± 0.012	0.179 ± 0.012	
55.5	0.571	24.73							0.563 ± 0.011	0.176 ± 0.013	
57.5	0.545	25.85	47 ± 3	40.9 ± 0.7	54.2 ± 1.3	34 ± 3	922 ± 8	32.0 ± 0.4	0.778 ± 0.016	0.171 ± 0.013	
59.5	0.654	27.05	40 ± 1	39.3 ± 0.7	56.6 ± 1.3	49 ± 1	902 ± 8	32.1 ± 0.4	0.839 ± 0.017	0.164 ± 0.012	
61.5	0.758	28.46	41 ± 2	44.4 ± 1.0	55.7 ± 1.7	41 ± 4	934 ± 11	36.3 ± 0.5	0.924 ± 0.019	0.161 ± 0.006	
63.5	0.821	30.04	30 ± 4	38.0 ± 1.0	50.4 ± 1.6	31 ± 4	829 ± 10	38.5 ± 0.5	1.440 ± 0.030	0.149 ± 0.011	
65.5	0.791	31.65	43 ± 2	42.1 ± 0.7	52.4 ± 1.1	55 ± 1	867 ± 7	57.1 ± 0.4	2.369 ± 0.048	0.167 ± 0.009	
67.5	0.812	33.25	41 ± 3	39.9 ± 0.9	49.3 ± 1.3	38 ± 2	865 ± 10	46.0 ± 0.7	1.954 ± 0.040	0.156 ± 0.011	
69.5	0.889	34.95	36 ± 4	35.5 ± 0.9	51.8 ± 1.2	34 ± 3	803 ± 9	32.7 ± 0.5	1.309 ± 0.027	0.139 ± 0.011	
72	0.809	37.06	51 ± 5	37.6 ± 0.9	52.2 ± 1.7	41 ± 4	868 ± 10	31.8 ± 0.6	1.045 ± 0.022	0.136 ± 0.018	
75	0.426	38.91	48 ± 6	39.6 ± 1.6	61.9 ± 2.6	42 ± 9	907 ± 16	14.6 ± 0.5	0.360 ± 0.007	0.136 ± 0.040	

Actual depth,  $z$ , and mass depth,  $m$ , are referred to the central point of each sediment slice;  $\rho$  is the bulk density. Errors are reported as  $1\sigma$