

TABLE DR1. CALCULATED ASH CONTENT OF LOS ALAMOS RESERVOIR SEDIMENT SAMPLES

Sample number	Sample location*	Estimated deposit age*	Depth (cm) *	Silt + clay fraction in sample (f_i)	^{137}Cs concentration (C) (pCi/g)	Calculated fraction ash in sample (f_a)#
CABG-02-0011	Center of reservoir	8/9/01	3–27	0.942	1.31	0.043
CABG-02-0012	Center of reservoir	8/9/01	27–39	0.678	0.961	0.031
CABG-02-0016	North side of reservoir	8/9/01	36–43	0.186	0.240	0.005
CABG-02-0013	Center of reservoir	8/9/01	39–54	0.168	0.204	0.003
CABG-02-0014	Center of reservoir	7/13/01	76–97	0.969	1.66	0.072
CABG-02-0015	Center of reservoir	7/2/01	97–109	0.439	0.691	0.025
CABG-02-0018	North side of reservoir	Spring 2001	78–137	0.114	0.137	0.002
CABG-02-0017	North side of reservoir	Spring 2001	87–102	0.108	0.223	0.009
CABG-02-0009	Center of reservoir	Spring 2001	109–132	0.913	2.33	0.134
CABG-02-0010	Center of reservoir	Spring 2001	132–142	0.746	1.62	0.084
CABG-02-0008	Center of reservoir	9/8/00	173–193	0.909	2.39	0.139
CABG-02-0007	Center of reservoir	7/18/00	231–289	0.922	3.76	0.256
CABG-02-0006	Center of reservoir	7/18/00	289–329	0.703	2.50	0.161
CABG-02-0004	Center of reservoir	7/18/00	329–354	0.306	1.35	0.090
CABG-02-0005	Center of reservoir	7/18/00	354–370	0.132	0.679	0.045
CABG-02-0003	Center of reservoir	7/16/00	370–388	0.900	5.06	0.366
CABG-02-0002	Center of reservoir	6/28/00	406–432	0.883	4.66	0.333
CABG-02-0001	Center of reservoir	1943–2000	451–470	0.917	0.962	N.A.**

*Stratigraphic section in center of reservoir and estimated ages of sediment layers shown in Figure 4 of Lavine et al. (2006).

#Calculated fraction ash in sample based on Equation 4 and using ^{137}Cs concentration in ash (C_a) = 13.0 pCi/g, $a = 0.02$, and $b = 0.85$.

**N.A. = not applicable.

TABLE DR2. SEDIMENT DEPOSITION IN LOS ALAMOS RESERVOIR

Period of sediment deposition	Total volume (m ³)*	Volume coarse-grained sediment (m ³)*	Volume fine-grained sediment (m ³)*	Mass coarse-grained sediment (Mg)#	Mass all fine-grained sediment (Mg)#	Mass ash (Mg)**	Mass fine-grained sediment excluding ash (Mg)	Total mass sediment (Mg)
1943–5/10/00	8600	N.D.##	N.D.	N.D.	N.D.	N.D.	N.D.	10729***
5/10/00–6/28/01	21800	5300	16500	8639	18480	3567	14913	27119
6/28/01–4/2/02	8000	0	8000	0	8960	323	8637	8960
4/2/02–7/23/03	4000	900	3100	1467	3472	0	3472	4939
7/23/03–6/30/04	4800	3700	1100	6031	1232	0	1232	7263
6/30/04–7/11/05	4500	3500	1000	5705	1120	0	1120	6825

*Sediment volumes from Lavine et al. (2006), Table 2; coarse-grained sediment assumed equal to volume of delta, and fine-grained sediment assumed equal to remainder of volume.

#Conversion from volume to mass uses average density of coarse-grained sediment of 1.63 g/cm³ and fine-grained sediment of 1.12 g/cm³ based on measurements of 23 samples from Los Alamos Reservoir.

**Ash estimated to constitute 19.3% of fine-grained sediment in 2000 and 3.6% in 2001 based on calculations in Table DR1 and thickness of layers in measured stratigraphic section shown in Figure 4 of Lavine et al. (2006). Suspended sediment samples from the burn area (Gallaher and Koch, 2004) indicate that sediment after 2001 had negligible ash content.

N.D. = not determined

***Estimated mass of sediment from 1943 to May 10, 2000 based on assumption of 75% fine-grained sediment and 25% coarse-grained sediment and same densities as for postfire samples.