**Supplemental Table 1.** Sedimentary description of core BDL12 (recovered August 7, 2012 from Baldwin Lake, San Bernardino County, U.S.A., 34°16.56633', -116°48.61182' and 2060 masl)

(cm)Age (ka)*Description of Sediment4 - 1405.4 - 10.9brown to dark gray massive clayey silt, lightening downsection becoming diffusely bedded140 - 15010.9 - 11.3light gray swaley laminated clayey silt with irregular mineralizations/silty deposits150 - 15411.3 - 11.8olive massive clayey silt with organic fragments throughout inclarge (>1 cm) charcoal pieces154 - 18711.8 - 15.9sharp contact at 37 cm; light gray massive clayey silt with irregular gray massive gray gray massive gray gray gray gray gray gray gray gray	
becoming diffusely bedded  140 – 150  10.9 – 11.3  light gray swaley laminated clayey silt with irregular mineralizations/silty deposits  150 – 154  11.3 – 11.8  olive massive clayey silt with organic fragments throughout inclarge (>1 cm) charcoal pieces	
mineralizations/silty deposits  150 – 154  11.3 – 11.8  olive massive clayey silt with organic fragments throughout inclarge (>1 cm) charcoal pieces	and
large (>1 cm) charcoal pieces	
154 – 187 11.8 – 15.9 sharp contact at 37 cm; light gray massive clayey silt with irreg	cluding
mineralizations, silty deposits, and laminations throughout	gular
187 – 270 15.9 – 24.9 dark greenish gray massive clayey silt with sparse silty laminat transitioning to subtle mottling and irregular iron oxidation down	
270 – 276 gap	
276 – 553  25.1 – 32.0  dark gray diffusely bedded (2-3 cm) clayey silt with oxidation, flecks (charcoal?), and visible micaceous below 60 cm. Beddin thickness increases downsection to up to 8 cm, but remains diff	g
554-607 $32.0-34.4$ dark gray massive clayey silt	
607 – 793 34.4 – 43.0 dark gray clayey silt with sparse oxidized horizons, faintly bede (0.5-5 cm), darkening and increasingly micaceous downsection	
793 – 851 43.0 – 45.9 brown-gray massive clayey silt with irregular sandy microlayer organics	rs and
851 – 968 45.9 – 50.3 olive gray faintly-bedded (beds >5cm) clayey silt with some ox beds and mottling increasingly apparent downsection	idations;
968 – 989 50.3 – 51.5 black massive clayey silt	
989 – 1067 gap	
1067 – 1125 54.0 – 56.2 dark brown to black sharply-banded sandy silt, major beds >4cm with minor internal laminations visible; <b>tephra</b> at 1113 cm	m thick,
1125 – 1182 56.2 – 58.3 dark brown to black faintly banded massive silt (bands range 0. thick)	.5 - 2  cm
black to dark gray faintly banded clayey silt, bands start 2-8 cm thin downsection to $\sim 0.5-6$ cm thick	thick,
1495 – 1532 70.0 – 71.3 dark brown organic-rich clayey silt with sporadic shell fragmer and 1510 cm	nts at 1496
1532 – 1556 71.3 – 72.2 gray massive faintly-banded sandy silt, bands 2-3 thick with sh contacts	arp
1556 – 1574 72.2 – 72.9 gray massive gritty sandy silt with visible small shells	
1574 – 1595 gap	
1595 – 1643 73.7 – 76.1 dark green gray to dark gray massive clayey silt, darkens down	section
1643 – 1654 76.1 – 76.7 black, brown-gray, and gray banded clayey silt (bands 1-3 cm t	hick)
1654 – 1668 76.7 – 77.4 very dark gray massive clayey silt with mollusks	

## Sedimentary description, cont.

Core Depth		
(cm)	Age (ka)*	Description of Sediment
1668 – 1746	77.4 – 81.5	black faintly-banded clayey silt, bands increasingly thinner laminations at 48 cm
1746 – 1774	81.5 – 82.9	diffuse contact to marly brown clayey banded silt with shells; bands sharply defined and 3-8 cm, shells throughout
1774 – 1798		gap
1798 – 1830	84.0 – 85.4	dark olive brown massive clayey silt with abundant mollusks that are less frequent downsection
1830 – 1861	85.4 – 86.6	sharp contact; dark brown diffusely-banded clayey silt with sparse mollusks
1861 – 1903	86.6 – 88.3	dark gray massive organic clayey silt that lightens downsection; black flecks increase downsection
1903 – 1950	88.3 – 90.2	gray massive sandy silt with sparse mollusks; gradually lightens and mollusks decrease downsection
1950 - 2005		gap
2005 - 2059	92.4 – 94.6	dark greenish gray massive sandy silt
2059 - 2083		gap – IRSL dating
2083 - 2135	95.5 – 98.4	highly disturbed black sandy silt
2135 - 2163	98.4 - 100.2	black massive sandy silt
2163 – 2190	100.2 - 102.1	gap – IRSL dating
2190 - 2213	102.1 - 103.6	black massive micaeceous sandy silt with sparse mollusks layers
2213 – 2279	103.6 – 107.5	black to dark gray banded (1-4 cm) sandy silt; bands increasingly thin downsection
2279 – 2297	107.5 - 108.3	dark olive gray massive sandy silt with black flecks throughout
2297 – 2347	108.3 - 110.8	brown gray to gray massive sandy silt lightening gradually downsection
2347 – 2556	110.8 - 120.3	gray to greenish-gray massive clayey silt
2556 - 2580		gap – IRSL dating
2580 - 2596	121.0 – 121.4	dark greenish clayey silt
2596 - 2686	121.4 – 124.9	brown-gray massive poorly sorted sand, with some pebbles throughout
2686 - 2706		gap – IRSL dating

<sup>\*</sup>Weighted mean age from Bacon 2.2 age model – see text