

Table T13. Correlations of seismic sequence boundaries to core surfaces, Hole M0029A. (See table notes.)

Predicted age BKSA95 (Ma)	Seismic sequence boundaries	Seismic picks (ms)	Predicted depth (mbsf)		Predicted core	Actual depth (mbsf)	Actual core, section, interval (cm)	Notes	Age (Ma)	Age error (Ma)
			Monteverde	Seismic and velocity function core						
—	Base Pleistocene	—	—	40–48	313-M0029A- —	49.68	313-M0029A- 15R-1, 8		?	—
11.5	m1	192	154	152–153	26R	—	—		?	—
12.8	m2	—	—	NR	—	—	—		?	—
13.6	m3	236	192	190–195	32R–34R	2193.17	Base of ?31R-1		?	—
?14.1	m4	280	230	225–235	37R–40R	2231.70	?40R-1, 39	SB; clay over silty fine sand	<13.2	—
—	m4.1	387	326	325–330	65R–66R	325.13–325.23	65R-2, 80–90	FS silty glauconite fine sand over silty clay	—	—
—	m4.2	403	341	345–350	72R–73R	341.11	Top of 71R-1	FS burrowed surface; clay with sands into clay	—	—
—	—	—	—	—	—	343.24–343.89	71R-2, 64R–72R-1, 57	SB indurate contact; clays over claystones over muddy fine sand	?13.4	12.6–13.7
—	m4.3	423	360	350–360	73R–77R	350.40	74R-1, ~14	FS burrowed surface; sands over silty clay; coarsen up above	—	—
—	m4.4	460	395	390–400	87R–90R	~393.00–394.00	89R-1	FS clayey interval with nodules	—	—
—	m4.5	517	449	445–455	106R–109R	449.10	108R-1, 124–128	SB irregular contact; glauconitic silty sand over siliceous silt	?14.6?	13.5–14.6
14.8–15.8	m5	547	479	475–482	117R–118R	478.61	118R-1, 25	SB very fine sand/sandy silt, 57 cm thick burrowed zone; indurated siltstone to top of 20-1, medium-fine sand	15.0–15.4	14.6–15.4
16–16.5	m5.2	664	597	590–600	155R–160R	602.25	161R-2, 37	SB clayey silt over glauconite sand	16.1–16.2	15.6–16.3
—	m5.2	—	—	—	—	—	—		—	—
—	m5.2	—	—	—	—	—	—		—	—
17.2	m5.3	708	642	638–642	173R–174R	634.43	171R-2, 57	Large density peak; glauconitic quartz sand over glauconite sand	16.2–16.9	16.2–16.9
—	m5.3	—	—	—	—	640.51–641.20	175R-1, 50–120 (slurry between)	Silty glauconite sand over siltstone	—	—
—	m5.3	—	—	—	—	643.19	176R-1, 13	SB glauconite sand over silt; density max; sharp decrease density at base	16.9–18.3	16.9–18.3
17.8–18.2	m5.4	723	658	660–670	182R–186R	649.68	179R-1, 23	SB? top indurated zone, clay with burrowed glauconite above; glauconite sand to 23 cm; clay below; density peak; this is the likely core sequence boundary	—	—
—	m5.7	—	—	—	—	662.37	183R-1, 102	SB? slightly glauconitic clay over glauconite sand; density peak; $V_p$ increase 662, $V_p$ maximum 667.5; this is the seismic sequence boundary	—	—
19.5	m5.45	739	676	670–680	186R–190R	673.71	189R-1, 15	SB glauconite bed on clay	16.9–18.3	16.9–18.3
19.7	m5.47	752	690	685–690	193R–194R	683.66	192R-1, 46	Top of glauconite; density increase	—	—
—	m5.47	—	—	—	—	684.33	192R-2, 11	Clay on glauconite; density increase	—	—
—	m5.47	—	—	—	—	687.87	193R-2, 60	SB glauconite on clay; base of density high	16.9–18.3	16.9–18.3
20.1	m5.5	—	—	NR	—	—	—		—	—
20.2	m5.6	777	716	700–710	197R–200R	707.56/710.16	Base of 200R-1/top of 201R-1	SB in coring gap; glauconite sand above; clay below	?18.5	18.3–19.0
20.4	m5.7	802	743	735–742	210R–212R	728.56	208R-1, 9–11	SB dramatic burrowed contact glauconite sands over tan clays; large decrease in density across boundary	19.6–20.2	19.6–20.2
21.5–22.0	m5.8	—	—	750–755	215R/TD	7746.00	213R-1/214R-1–215R-1 top	?SB base of TGR peak; glauconitic clay over coring gap over clay	?21.3	20.4–21.6
—	—	—	—	—	—	750.00–752.86	Base of 215R–top of 217R	Clay over coring gap over glauconitic clay	—	—
—	—	—	—	—	—	753.80 mcd/753.22 mbsf	217R-1, 36	Core gamma peak, top glauconite	<21.5?	—

Notes: BKSA95 from Cande and Kent (1995). Seismic picks from Seisworks. Predicted depth and ages for seismic sequence boundaries m1 to m5.8 from Monteverde et al. (2008). Two predicted depths in two way travel time (TWT) and depth (mbsf) are given, the first from Monteverde et al. (2008) and the second from Mountain et al. (prospectus). Actual depth and actual core are the best fit to surfaces or other contacts noted in the cores. \* = where multiple surfaces potentially fit predicted sequence boundaries, preferred placement is in bold. Preliminary age and age error are derived from "Chronology." NR = none recovered. SB = sequence boundary, FS = flooding surface, TGR = total gamma ray.