

Ms 189SR-111, Table T4. Age-depth data, Site 1172.

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsd)		
					Top	Bottom	Top	Bottom	Mean
					189-1172A-	189-1172A-			
BOI	1172A		0.0021					0.030	0.000
BOI			0.0039					0.080	0.000
BOI			0.0097					0.130	0.000
BOI			0.0135					0.180	0.000
BOI			0.0173					0.230	0.000
BOI			0.0211					0.280	0.000
BOI			0.0249					0.330	0.000
BOI			0.0300					0.380	0.000
BOI			0.0359					0.430	0.000
BOI			0.0419					0.480	0.000
BOI			0.0479					0.530	0.000
BOI			0.0538					0.580	0.000
BOI			0.0598					0.630	0.000
N		FO <i>Emiliania huylei</i> acme	0.09		1H-1, 15-16	1H-1, 117-118	0.155	1.175	0.665
BOI			0.0958					0.680	0.000
BOI			0.0704					0.730	0.000
BOI			0.0740					0.780	0.000
BOI			0.0777					0.830	0.000
BOI			0.0814					0.880	0.000
BOI			0.0849					0.930	0.000
BOI			0.0884					0.980	0.000
BOI			0.0919					1.030	0.000
BOI			0.0954					1.080	0.000
BOI			0.0989					1.130	0.000
BOI			0.1024					1.180	0.000
BOI			0.1059					1.230	0.000
BOI			0.1094					1.280	0.000
BOI			0.1132					1.330	0.000
BOI			0.1174					1.380	0.000
BOI			0.1218					1.430	0.000
BOI			0.1306					1.530	0.000
BOI			0.1345					1.580	0.000
BOI			0.1378					1.630	0.000
BOI			0.1411					1.680	0.000
BOI			0.1442					1.730	0.000
BOI			0.1471					1.780	0.000
BOI			0.1500					1.830	0.000
BOI			0.1529					1.880	0.000
BOI			0.1559					1.930	0.000
BOI			0.1588					1.980	0.000
BOI			0.1622					2.030	0.000
BOI			0.1660					2.080	0.000
BOI			0.1697					2.130	0.000
N		FO <i>Emiliania huylei</i>	0.24		1H-2, 15-16	1H-2, 117-118	1.655	2.675	2.165
BOI			0.1730					2.180	0.000
BOI			0.1763					2.230	0.000
BOI			0.1795					2.280	0.000
BOI			0.1828					2.330	0.000
BOI			0.1861					2.380	0.000
BOI			0.1896					2.430	0.000
BOI			0.1943					2.480	0.000
BOI			0.1990					2.530	0.000
BOI			0.2036					2.580	0.000
BOI			0.2083					2.630	0.000
BOI			0.2130					2.680	0.000
BOI			0.2176					2.730	0.000
BOI			0.2222					2.780	0.000
BOI			0.2267					2.830	0.000
BOI			0.2313					2.880	0.000
BOI			0.2352					2.930	0.000
BOI			0.2409					2.980	0.000
BOI			0.2457					3.030	0.000
BOI			0.2505					3.080	0.000
BOI			0.2553					3.130	0.000
BOI			0.2601					3.180	0.000
BOI			0.2649					3.230	0.000
BOI			0.2707					3.280	0.000
BOI			0.2772					3.330	0.000
BOI			0.2837					3.380	0.000
BOI			0.2902					3.430	0.000
BOI			0.2968					3.480	0.000
BOI			0.3033					3.530	0.000
BOI			0.3098					3.580	0.000
BOI			0.3163					3.630	0.000
BOI			0.3228					3.680	0.000
BOI			0.3261					3.730	0.000
BOI			0.3292					3.780	0.000
BOI			0.3335					3.830	0.000
BOI			0.3367					3.880	0.000
BOI			0.3400					3.930	0.000
BOI			0.3416					3.980	0.000
BOI			0.3429					4.030	0.000
BOI			0.3442					4.080	0.000
BOI			0.3455					4.130	0.000
BOI			0.3467					4.180	0.000
BOI			0.3480					4.230	0.000
BOI			0.3493					4.280	0.000
BOI			0.3506					4.330	0.000
BOI			0.3519					4.380	0.000
BOI			0.3531					4.430	0.000
BOI			0.3557					4.480	0.000
BOI			0.3570					4.530	0.000
BOI			0.3583					4.580	0.000
BOI			0.3596					4.630	0.000
BOI			0.3609					4.680	0.000
BOI			0.3623					4.730	0.000
BOI			0.3636					4.780	0.000
BOI			0.3649					4.830	0.000
BOI			0.3663					4.880	0.000
BOI			0.3676					4.930	0.000
BOI			0.3690					4.980	0.000
BOI			0.3703					5.030	0.000
BOI			0.3716					5.080	0.000
BOI			0.3730					5.130	0.000
BOI			0.3743					5.180	0.000
BOI			0.3757					5.230	0.000
BOI			0.3770					5.280	0.000
BOI			0.3783					5.330	0.000
BOI			0.3801					5.380	0.000
BOI			0.3816					5.430	0.000
BOI			0.3838					5.480	0.000
BOI			0.3876					5.530	0.000
BOI			0.3913					5.580	0.000
BOI			0.3950					5.630	0.000
BOI			0.3987					5.680	0.000
BOI			0.4020					5.730	0.000
BOI			0.4036					5.780	0.000
BOI			0.4052					5.830	0.000
BOI			0.4068					5.880	0.000
BOI			0.4084					5.930	0.000
BOI			0.4100					5.980	0.000
BOI			0.4119					6.030	0.000
BOI			0.4148					6.080	0.000
BOI			0.4172					6.120	0.000
BOI			0.4176					6.170	0.000
BOI			0.4179					6.220	0.000
BOI			0.4187					6.230	0.000
BOI			0.4208					6.280	0.000
BOI			0.4233					6.430	0.000
BOI			0.4259					6.480	0.000
BOI			0.4271					6.530	0.000
BOI			0.4283					6.580	0.000
BOI			0.4295					6.630	0.000
BOI			0.4307					6.680	0.000
BOI			0.4319					6.730	0.000
BOI			0.4331					6.780	0.000
BOI			0.4342					6.830	0.000
BOI			0.4353					6.880	0.000
BOI			0.4365					6.930	0.000
N		LO <i>Pseudemiliania lacunosa</i>	0.42		2H-1, 15-16	2H-1, 117-119	6.455	7.485	6.970
BOI			0.4376					7.080	0.000
BOI			0.4387					7.130	0.000
BOI			0.4398					7.180	0.000
BOI			0.4409					7.230	0.000
BOI			0.4420					7.280	0.000
BOI			0.4432					7.330	0.000
BOI			0.4443					7.380	0.000
BOI			0.4462					7.430	0.000
BOI			0.4486					7.480	0.000
BOI			0.4520					7.530	0.000
BOI			0.4587					7.580	0.000
BOI			0.4653					7.630	0.000
BOI			0.4718					7.680	0.000
BOI			0.4781					7.730	0.000
BOI			0.4843					7.780	0.000
BOI			0.4895					7.830	0.000
BOI			0.4921					7.880	0.000
BOI			0.4933					7.930	0.000
BOI			0.4946					7.980	0.000
BOI			0.4959					8.030	0.000
BOI			0.4972					8.080	0.000
BOI			0.4985					8.130	0.000
BOI			0.4997					8.180	0.000
BOI			0.5010					8.230	0.000
BOI			0.5023					8.280	0.000
BOI			0.5036					8.330	0.000
BOI			0.5048					8.380	0.000
BOI			0.5061					8.430	0.000
BOI			0.5074					8.480	0.000
BOI			0.5087					8.530	0.000
BOI			0.5100					8.580	0.000
BOI			0.5112					8.630	0.000
BOI			0.5125					8.680	0.000
BOI			0.5138					8.730	0.000
BOI			0.5151					8.780	0.000
BOI			0.5163					8.830	0.000
BOI			0.5176					8.880	0.000
BOI			0.5188					8.930	0.000
BOI			0.5200					8.	

Table T4. Age-depth data, Site 1172. (See table notes. Continued on next eleven pages)

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
BOI	1172A		0.0021						0.030	0.000
BOI			0.0059						0.080	0.000
BOI		Base Holocene plateau	0.0097						0.130	0.000
BOI			0.0135						0.180	0.000
BOI			0.0173						0.230	0.000
BOI			0.0211						0.280	0.000
BOI			0.0249						0.330	0.000
BOI			0.0300						0.380	0.000
BOI			0.0359						0.430	0.000
BOI			0.0419						0.480	0.000
BOI			0.0479						0.530	0.000
BOI			0.0538						0.580	0.000
BOI			0.0598						0.630	0.000
N		FO <i>Emiliana huxleyi</i> acme	0.09		1H-1, 15-16	1H-1, 117-118	0.155	1.175	0.665	0.510
BOI			0.0658						0.680	0.000
BOI			0.0704						0.730	0.000
BOI			0.0740						0.780	0.000
BOI			0.0777						0.830	0.000
BOI			0.0814						0.880	0.000
BOI			0.0849						0.930	0.000
BOI			0.0884						0.980	0.000
BOI			0.0919						1.030	0.000
BOI			0.0954						1.080	0.000
BOI			0.0989						1.130	0.000
BOI			0.1024						1.180	0.000
BOI			0.1059						1.230	0.000
BOI			0.1094						1.280	0.000
BOI			0.1132						1.330	0.000
BOI			0.1174						1.380	0.000
BOI			0.1218						1.430	0.000
BOI			0.1306						1.530	0.000
BOI			0.1345						1.580	0.000
BOI			0.1378						1.630	0.000
BOI			0.1411						1.680	0.000
BOI			0.1442						1.730	0.000
BOI			0.1471						1.780	0.000
BOI			0.1500						1.830	0.000
BOI			0.1529						1.880	0.000
BOI			0.1559						1.930	0.000
BOI			0.1588						1.980	0.000
BOI			0.1622						2.030	0.000
BOI			0.1660						2.080	0.000
BOI			0.1697						2.130	0.000
N		FO <i>Emiliana huxleyi</i>	0.24		1H-2, 15-16	1H-2, 117-118	1.655	2.675	2.165	0.510
BOI			0.1730						2.180	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
BOI			0.1763						2.230	0.000
BOI			0.1795						2.280	0.000
BOI			0.1828						2.330	0.000
BOI			0.1861						2.380	0.000
BOI			0.1896						2.430	0.000
BOI			0.1943						2.480	0.000
BOI			0.1990						2.530	0.000
BOI			0.2036						2.580	0.000
BOI			0.2083						2.630	0.000
BOI			0.2130						2.680	0.000
BOI			0.2176						2.730	0.000
BOI			0.2222						2.780	0.000
BOI			0.2267						2.830	0.000
BOI			0.2313						2.880	0.000
BOI			0.2361						2.930	0.000
BOI			0.2409						2.980	0.000
BOI			0.2457						3.030	0.000
BOI			0.2505						3.080	0.000
BOI			0.2553						3.130	0.000
BOI			0.2601						3.180	0.000
BOI			0.2649						3.230	0.000
BOI			0.2707						3.280	0.000
BOI			0.2772						3.330	0.000
BOI			0.2837						3.380	0.000
BOI			0.2902						3.430	0.000
BOI			0.2968						3.480	0.000
BOI			0.3033						3.530	0.000
BOI			0.3098						3.580	0.000
BOI			0.3163						3.630	0.000
BOI			0.3228						3.680	0.000
BOI			0.3261						3.730	0.000
BOI			0.3292						3.780	0.000
BOI			0.3335						3.830	0.000
BOI			0.3367						3.880	0.000
BOI			0.3400						3.930	0.000
BOI			0.3416						3.980	0.000
BOI			0.3429						4.030	0.000
BOI			0.3442						4.080	0.000
BOI			0.3455						4.130	0.000
BOI			0.3467						4.180	0.000
BOI			0.3480						4.230	0.000
BOI			0.3493						4.280	0.000
BOI			0.3506						4.330	0.000
BOI			0.3519						4.380	0.000
BOI			0.3531						4.430	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
BOI			0.3557						4.530	0.000
BOI			0.3570						4.580	0.000
BOI			0.3583						4.630	0.000
BOI			0.3596						4.680	0.000
BOI			0.3609						4.730	0.000
BOI			0.3623						4.780	0.000
BOI			0.3636						4.830	0.000
BOI			0.3649						4.880	0.000
BOI			0.3663						4.930	0.000
BOI			0.3676						4.980	0.000
BOI			0.3690						5.030	0.000
BOI			0.3703						5.080	0.000
BOI			0.3716						5.130	0.000
BOI			0.3730						5.180	0.000
BOI			0.3743						5.230	0.000
BOI			0.3757						5.280	0.000
BOI			0.3770						5.330	0.000
BOI			0.3783						5.380	0.000
BOI			0.3801						5.430	0.000
BOI			0.3838						5.480	0.000
BOI			0.3876						5.530	0.000
BOI			0.3913						5.580	0.000
BOI			0.3950						5.630	0.000
BOI			0.3987						5.680	0.000
BOI			0.4020						5.730	0.000
BOI			0.4036						5.780	0.000
BOI			0.4052						5.830	0.000
BOI			0.4068						5.880	0.000
BOI			0.4084						5.930	0.000
BOI			0.4100						5.980	0.000
BOI			0.4119						6.030	0.000
BOI			0.4148						6.080	0.000
BOI			0.4172						6.120	0.000
BOI			0.4176						6.170	0.000
BOI			0.4179						6.220	0.000
BOI			0.4187						6.330	0.000
BOI			0.4208						6.380	0.000
BOI			0.4233						6.430	0.000
BOI			0.4259						6.480	0.000
BOI			0.4271						6.530	0.000
BOI			0.4283						6.580	0.000
BOI			0.4295						6.630	0.000
BOI			0.4307						6.680	0.000
BOI			0.4319						6.730	0.000
BOI			0.4331						6.780	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
BOI			0.4342						6.830	0.000
BOI			0.4353						6.880	0.000
BOI			0.4365						6.930	0.000
N	LO <i>Pseudoemiliana lacunosa</i>		0.42		2H-1, 15-16	2H-1, 118-119	6.455	7.485	6.970	0.515
BOI			0.4376						6.980	0.000
BOI			0.4387						7.030	0.000
BOI			0.4398						7.080	0.000
BOI			0.4409						7.130	0.000
BOI			0.4420						7.180	0.000
BOI			0.4432						7.230	0.000
BOI			0.4443						7.280	0.000
BOI			0.4462						7.330	0.000
BOI			0.4486						7.380	0.000
BOI			0.4520						7.430	0.000
BOI			0.4587						7.480	0.000
BOI			0.4653						7.530	0.000
BOI			0.4718						7.580	0.000
BOI			0.4781						7.630	0.000
BOI			0.4843						7.680	0.000
BOI			0.4895						7.730	0.000
BOI			0.4921						7.830	0.000
BOI			0.4933						7.880	0.000
BOI			0.4946						7.930	0.000
BOI			0.4959						7.980	0.000
BOI			0.4972						8.030	0.000
BOI			0.4985						8.080	0.000
BOI			0.4997						8.130	0.000
BOI			0.5010						8.180	0.000
BOI			0.5023						8.230	0.000
BOI			0.5036						8.280	0.000
BOI			0.5048						8.330	0.000
BOI			0.5061						8.380	0.000
BOI			0.5074						8.430	0.000
BOI			0.5087						8.480	0.000
BOI			0.5100						8.530	0.000
BOI			0.5112						8.580	0.000
BOI			0.5125						8.630	0.000
BOI			0.5138						8.680	0.000
BOI			0.5151						8.730	0.000
BOI			0.5163						8.780	0.000
BOI			0.5176						8.830	0.000
BOI			0.5188						8.880	0.000
BOI			0.5200						8.930	0.000
BOI			0.5213						8.980	0.000
BOI			0.5225						9.030	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
BOI			0.5244						9.080	0.000
BOI			0.5264						9.130	0.000
BOI			0.5285						9.180	0.000
BOI			0.5305						9.230	0.000
BOI			0.5326						9.280	0.000
BOI			0.5346						9.330	0.000
BOI			0.5360						9.380	0.000
BOI			0.5366						9.430	0.000
BOI			0.5371						9.480	0.000
BOI			0.5377						9.530	0.000
BOI			0.5382						9.580	0.000
BOI			0.5387						9.630	0.000
BOI			0.5393						9.680	0.000
BOI			0.5398						9.730	0.000
BOI			0.5404						9.780	0.000
BOI			0.5409						9.830	0.000
BOI			0.5415						9.880	0.000
BOI			0.5420						9.930	0.000
N	LO <i>Reticulofenestra asanoi</i>		0.86	???	2H-3, 15-16	2H-3, 117-118	9.455	10.475	9.965	0.510
BOI			0.5425						9.980	0.000
BOI			0.5447						10.030	0.000
BOI			0.5472						10.080	0.000
BOI			0.5492						10.130	0.000
BOI			0.5511						10.180	0.000
BOI			0.5533						10.230	0.000
BOI			0.5564						10.280	0.000
BOI			0.5596						10.330	0.000
BOI			0.5628						10.380	0.000
BOI			0.5665						10.430	0.000
BOI			0.5734						10.480	0.000
BOI			0.5810						10.530	0.000
BOI			0.5886						10.580	0.000
BOI			0.5960						10.630	0.000
BOI			0.6024						10.680	0.000
BOI			0.6057						10.730	0.000
R	LO <i>Stylatractus universus</i>		XXX	0.45	1H-CC	2H-CC	6.215	16.130	11.173	4.958
F	FO <i>Globorotalia truncatulinoides</i>		XXX	2.0	1H-CC	2H-CC	6.215	16.130	11.173	4.958
M	Onset C1n		XXX	0.78					12.500	0.000
Alternative Pliocene/Pleistocene boundary 1.77 Ma on magnetostratigraphy										
M	1172A	Termination C2n	XXX	1.77					17.100	0.000
N		FO <i>Reticulofenestra asanoi</i>	1.16		3H-2, 15-16	3H-2, 117-118	17.455	18.475	17.965	0.510
N		LO <i>Helicosphaera sellii</i>	1.26		3H-3, 15-16	3H-3, 117-118	18.955	19.975	19.465	0.510
N		LO <i>Calcidiscus macintyreii</i>	1.59		3H-3, 15-16	3H-3, 117-118	18.955	19.975	19.465	0.510

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
Pliocene/Pleistocene boundary 1.77 Ma on nannofossil datums										
M	1172A	Onset C2n	XXX	1.95					19.550	0.000
N		FO <i>Gephyrocapsa oceanica</i>	1.65		3H-4, 117-118	3H-5, 15-16	21.470	21.950	21.710	0.240
N		FO <i>Gephyrocapsa caribbeanica</i>	1.72		3H-4, 117-118	3H-5, 15-16	21.470	21.950	21.710	0.240
M		Termination C2r.1n	XXX	2.14					23.200	0.000
M		Onset C2r.1n	XXX	2.15					23.700	0.000
N		LO <i>Discoaster brouweri</i>	1.95		3H-7, 15-16	3H-CC	24.950	25.540	25.245	0.295
M		Termination C2An.1n	2.58						30.900	0.000
M		Onset C2An.1n	3.04						36.900	0.000
M		Termination C2An.2n	3.11						38.600	0.000
M		Onset C2An.2n	3.22						40.200	0.000
M		Termination C2An.3n	3.33						41.700	0.000
M		Onset C2An.3n	3.58						46.250	0.000
lower/upper Pliocene boundary 3.58 Ma										
F	1172A	FO <i>Globorotalia inflata</i>	XXX	3.2	5H-CC	6H-CC	44.525	53.940	49.233	4.708
N		LO <i>Reticulofenestra pseudumbilica</i>	3.65		6H-6, 15-16	6H-6, 117-118	51.955	52.975	52.465	0.510
M		Termination C3n.1n	4.18						57.800	0.000
M		Onset C3n.1n	4.29						60.000	0.000
M		Termination C3n.2n	4.46						63.400	0.000
M		Onset C3n.2n	4.48						66.600	0.000
F		FO <i>Globorotalia crassula</i>	XXX	3.3	7H-CC	8H-CC	63.680	73.170	68.425	4.745
F		LO <i>Globorotalia pliozea</i>	4.6		7H-CC	8H-CC	63.680	73.170	68.425	4.745
M		Termination C3n.3n	4.8						69.000	0.000
M		Onset C3n.3n	4.89						71.400	0.000
M		Termination C3n.4n	4.98						73.500	0.000
M		Onset C3n.4n	5.23						78.900	0.000
N		LO <i>Trifarina angulosa</i>	5.23		8H-CC	10H-3, 15-16	73.170	85.455	79.313	6.143
Miocene/Pliocene boundary 5.3 Ma										
N	1172A	LO <i>Discoaster quinqueramus</i>	5.53		8H-CC	10H-3, 15-16	73.170	85.455	79.313	6.143
F		LO <i>Globorotalia conomiozea</i>	XXX	3.2	9H-CC	10H-CC	82.555	92.050	87.303	4.748
F		FO <i>Globorotalia punctulata</i>	XXX	4.8	9H-CC	10H-CC	82.555	92.050	87.303	4.748
M		Termination C3An.1n	5.89						94.100	0.000
F		FO <i>Globorotalia crassaformis</i>	XXX	4.7	10H-CC	11H-CC	92.050	101.330	96.690	4.640
F		FO <i>Globorotalia pliozea</i>	5.6		10H-CC	11H-CC	92.050	101.330	96.690	4.640
M		Onset C3An.1n	6.14						100.700	0.000
M		Termination C3An.2n	6.27						105.400	0.000
M		Onset C3An.2n	6.57						107.400	0.000
N		<i>Reticulofenestra pseudumbilica</i> paracme top	7.1		13H-7, 15	14H-1, 15	119.95	121.47	120.710	0.760
N		FO <i>Amaurolithus delicatus</i>	7.3		13H-7, 16	14H-1, 16	119.95	121.47	120.710	0.760
N		FO <i>Amaurolithus primus</i>	7.4		13H-7, 17	14H-1, 17	119.95	121.47	120.710	0.760
M		Termination C3Bn	XXX	6.94					121.500	0.000
M		Onset C3Bn	XXX	7.09					124.200	0.000
F		FO <i>Globorotalia sphericomiozea</i>	XXX	5.6	13H-CC	14H-CC	120.665	129.220	124.943	4.278

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
F		FO <i>Globorotalia conomiozea</i>	7.12		189-1172A-13H-CC	189-1172A-14H-CC	120.665	129.220	124.943	4.278
M		Termination C3Br.1n	XXX	7.14					125.400	0.000
M		Onset C3Br.1n	XXX	7.17					126.800	0.000
F		LO <i>Paragloborotalia continuosa</i>	8.0		15H-CC	16H-CC	139.705	149.135	144.420	4.715
M		Onset C4n.2n	8.07						146.900	0.000
M		Termination C4r.1n	8.23						149.200	0.000
M		Onset C4r.1n	8.26						150.300	0.000
F		FO <i>Neogloboquadrina pachyderma</i>	XXX	9.2	16H-CC	17H-CC	149.135	158.200	153.668	4.533
M		Termination C4An	8.7	???					156.200	0.000
F		LO <i>Globoquadrina dehiscens</i>	XXX	5.8	17H-CC	18H-CC	158.200	167.880	163.040	4.840
F		LO <i>Paragloborotalia nympa</i>	XXX	10.1	17H-CC	18H-CC	158.200	167.880	163.040	4.840
F		LO <i>Globorotalia panda</i>	XXX	11.8	17H-CC	18H-CC	158.200	167.880	163.040	4.840
N		<i>Reticulofenestra pseudumbilica</i> paracme bottom	8.78		18H-4, 15-16	18H-5, 15-16	162.955	164.455	163.705	0.750
M		Onset C4An	9.03						167.000	0.000
M		Termination C4Ar.1n	9.23						169.800	0.000
M		Onset C4Ar.1n	9.31						169.900	0.000
M		Termination C4Ar.2n	9.58						174.000	0.000
M		Onset C4Ar.2n	9.64						175.000	0.000
M		Termination C5n.1n	9.74						176.700	0.000
F		LO <i>Paragloborotalia mayeri</i>	XXX	11.4	19H-CC	20H-CC	177.650	186.445	182.048	4.398
F		LO <i>Globorotalia miozea</i>	XXX	15.9	21H-CC	22H-CC	196.670	206.100	201.385	4.715
M		Onset C5n.2n	10.95						216.000	0.000
Dm		LO <i>Denticulopsis dimorpha</i>	10.7		23H-CC	24H-CC	215.235	225.100	220.168	4.932
M		Termination C5r.1n	11.05						224.300	0.000
M		Onset C5r.1n	11.1						226.900	0.000
Alternative middle/upper Miocene boundary 11.2 Ma on magnetostratigraphy										
M	1172A	Termination C5r.2n	11.48						232.100	0.000
M		Onset C5r.2n	11.53						234.300	0.000
R		LAO <i>Cyrtocapsella tetrapera</i>	12.50		26X-CC	27X-CC	235.720	246.760	241.240	5.520
F		LO <i>Globorotalia peripheroronda</i>	12.50	14.0	26X-CC	27X-CC	235.720	246.760	241.240	5.520
middle/upper Miocene boundary 11.2 Ma on nannofossil data										
N	1172A	LO <i>Cyclicargolithus floridanus</i>	11.9		27X-3, 15-16	27X-4, 15-16	242.855	244.355	243.605	0.750
M		Termination C5An.1n	11.94						243.800	0.000
M		Onset C5An.1n	12.08						246.300	0.000
M		Termination C5An.2n	12.18						250.000	0.000
F		FO <i>Paragloborotalia mayeri</i>	12.1		27X-CC	28X-CC	246.760	255.595	251.178	4.417
F		LO <i>Globorotalia zealandica</i>	XXX	16.7	27X-CC	28X-CC	246.760	255.595	251.178	4.417
F		LO <i>Globorotalia praescitula</i>	XXX	16.9	27X-CC	28X-CC	246.760	255.595	251.178	4.417
M		Onset C5An.2n	12.4						253.200	0.000
M		Termination C5Ar.1n	12.68						260.400	0.000
F		FO <i>Orbulina suturalis</i>	XXX	15.1	28X-CC	29X-CC	255.595	266.185	260.890	5.295
M		Onset C5Ar.1n	12.71	???					260.900	0.000
M		Termination C5Ar.2n	12.78	???					262.000	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
M		Onset C5Ar.2n	12.82	???					263.200	0.000
M		Termination C5Aan	12.99	???					265.300	0.000
N		LO <i>Calcidiscus premacintyre</i>	12.7		30X-4, 15-16	30X-5, 15-16	272.655	274.155	273.405	0.750
M		Termination C5ABn	13.3						273.600	0.000
N		LCO <i>Cyclargolithus floridanus</i>	13.2		30X-5, 15	30X-6, 15	274.15	275.65	274.900	0.750
M		Onset C5ABn	13.51						275.700	0.000
N		LO <i>Sphenothilus heteromorphus</i>	13.52		31X-3, 15-16	31X-4, 15-16	280.755	282.255	281.505	0.750
M		Termination C5ACn	13.7						282.200	0.000
M		Onset C5ACn	14.08						285.200	0.000
M		Termination C5ADn	14.18						287.300	0.000
M		Onset C5ADn	14.61						291.900	0.000
M		Termination C5Bn.1n	14.8						293.300	0.000
M		Onset C5Bn.1n	14.89						293.900	0.000
M		Termination C5Bn.2n	15.03						296.300	0.000
M		Onset C5Bn.2n	15.16						298.800	0.000
F		FO <i>Paragloborotalia nympa</i>	XXX	13.4	32X-CC	33X-CC	295.660	306.300	300.980	5.320
M		Termination C5Cn.1n	16.01						302.300	0.000
N		FO <i>Calcidiscus premacintyre</i>	17.4		34X-2, 15-16	34X-3, 15-16	308.15	309.85	309.000	0.850
lower/middle Miocene boundary 16.4 Ma (in hiatus)										
F	1172A	FO <i>Praeorbulina curva</i>	16.3		33X-CC	34X-CC	306.300	316.250	311.275	4.975
F		FO <i>Globorotalia miozea</i>	16.7		33X-CC	34X-CC	306.300	316.250	311.275	4.975
F		LO <i>Catapsydrax dissimilis</i>	17.3		33X-CC	34X-CC	306.300	316.250	311.275	4.975
N		FO <i>Sphenothilus heteromorphus</i>	18.2		34X-4, 15-16	34X-5, 15-16	311.155	312.655	311.905	0.750
M		Onset C5Cn.3n	16.73						314.100	0.000
M		Termination C5Dn	17.28						316.900	0.000
M		Termination C5En	18.28						320.200	0.000
F		FO <i>Globorotalia zealandica</i>	17.3		34X-CC	35X-CC	316.250	324.825	320.538	4.287
F		FO <i>Globorotalia praescitula</i>	18.5		34X-CC	35X-CC	316.250	324.825	320.538	4.287
M		Onset C5En	18.78						324.000	0.000
M		Termination C6n	19.05						325.800	0.000
F		FO <i>Globoturborotalita connecta</i>	20.9		35X-CC	36X-CC	324.825	335.000	329.913	5.088
F		FO <i>Globoturborotalita woodi</i>	22.6	21.80	35X-CC	36X-CC	324.825	335.000	329.913	5.088
F		LO <i>Turborotalia euapertura</i>	23.8??	22.50	35X-CC	36X-CC	324.825	335.000	329.913	5.088
F		LO <i>Tenuitella gemma</i>	24.3		35X-CC	36X-CC	324.825	335.000	329.913	5.088
M		Onset C6n	20.13						333.100	0.000
Oligocene/Miocene boundary 23.8 Ma										
N	1172A	LO <i>Reticulofenestra bisecta</i> s. str.	23.9		37X-4, 15-16	37X-4, 117-118	339.955	340.975	340.465	0.510
M		Termination C6Bn.1n	XXX	22.59					346.700	0.000
M		Onset C6Bn.1n	XXX	22.75					348.400	0.000
M		Termination C6Bn.2n	XXX	22.8					349.100	0.000
N		LO <i>Chiasmolithus altus</i>	26.1		38X-3, 62-63	38X-4, 54-55	348.525	349.945	349.235	0.710
F		FO <i>Globoquadrina dehiscent</i>	XXX	23.2	37X-CC	38X-CC	344.935	353.665	349.300	4.365
D		FO <i>Rocella vigilans</i> var. B	28.0		38X-4, 9-12	38X-5, 10-12	349.510	351.010	350.260	0.750
M		Onset C6Bn.2n	XXX	23.069					350.900	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
lower/upper Oligocene boundary 28.5 Ma										
Dm	1172A	LO <i>Rocella vigilans</i> var. A	29.0		38X-6, 11–13	39X-1, 10–12	352.520	354.710	353.615	1.095
F		LO <i>Subbotina angiporoides</i>	30.0		38X-CC	39X-2, 5–7	353.665	356.160	354.913	1.248
M		Termination C11n.1n	29.401						355.400	0.000
M		Onset C11n.1n	29.662						355.800	0.000
M		Termination C11n.2n	29.765						356.500	0.000
N		FO <i>Cyclicargolithus abisectus</i>	31.1		39X-2, 18–19	39X-2, 135–136	356.285	357.455	356.870	0.585
Dm		FO <i>Rocella vigilans</i> var. A	30.24		39X-2, 110–112	39X-3, 10–12	357.211	357.710	357.461	0.250
Dm		FO <i>Cavitatus jouseanus</i>	30.62		39X-2, 110–112	39X-3, 10–12	357.211	357.710	357.461	0.250
M		Onset C11n.2n	30.098						357.300	0.000
M		Termination C13n	33.058						358.800	0.000
Dm		LO <i>Hemiaulus characteristicus</i>	33.5		39X-3, 110–112	39X-3, 145–147	358.711	359.060	358.886	0.174
Dm		LO <i>Distephanosira architecturalis</i>	33.5		39X-3, 110–112	39X-3, 145–147	358.711	359.060	358.886	0.174
M		Onset C13n	33.545						358.900	0.000
D		LO <i>Enneadocysta</i> sp. A (?)	33.55		39X-3, 122–124	39X-3, 145–147	358.830	359.060	358.945	0.115
R		LO <i>Lophocyrtis</i> (<i>Cyclamp.</i> ?) <i>longiventer</i>	33.55		38X-CC	39X-CC	353.665	364.235	358.950	5.285
D		FO <i>Reticulatosphaera actinocoronata</i>	33.55		39X-4, 10–12	39X-4, 25–27	359.210	359.360	359.285	0.075
Eocene/Oligocene boundary 33.7 Ma										
N	1172A	LO <i>Reticulofenestra umbilicus</i>	31.3		39X-2, 143–144	39X-5, 63–64	357.535	361.235	359.385	1.850
N		FO <i>Isthmolithus recurvus</i>	XXX	36.0	39X-2, 143–144	39X-5, 63–64	357.535	361.235	359.385	1.850
D		FO <i>Stoveracysta kakanuiensis</i>	34.5		39X-4, 40–42	39X-4, 45–47	359.510	359.560	359.535	0.025
M		Termination C15n	34.66						359.700	0.000
M		Onset C15n	34.94						359.800	0.000
M		Termination C16n.1n	35.34						360.100	0.000
D		FO <i>Deflandrea</i> sp. A	35.2		39X-4, 85–87	39X-4, 130–132	359.960	360.410	360.185	0.225
D		FAO <i>Brigantedinium?</i> sp	35.2		39X-4, 85–87	39X-4, 130–132	359.960	360.410	360.185	0.225
D		LO <i>Schematophora speciosa</i>	35.4		39X-4, 130–132	39X-4, 147–149	360.410	360.580	360.495	0.085
D		LO <i>Spinidinium luciae</i>	35.4		39X-5, 10–12	39X-5, 17–19	360.710	360.780	360.745	0.035
D		LO <i>Aireiana verrucosa</i>	35.4		39X-5, 17–19	39X-5, 22–24	360.780	360.830	360.805	0.025
D		LO <i>Hemiplacophora semilunifera</i>	35.4		39X-5, 17–19	39X-5, 22–24	360.780	360.830	360.805	0.025
D		FO <i>Globorotalia inflata</i>	35.4		39X-5, 22–24	39X-5, 55–57	360.830	361.160	360.995	0.165
M		Onset C16n.1n	35.53						361.300	0.000
D		FO <i>Aireiana verrucosa</i>	35.4		39X-5, 55–57	39X-5, 85–87	361.160	361.460	361.310	0.150
M		Termination C16n.2n	35.69						361.500	0.000
D		FO <i>Schematophora speciosa</i>	36.0		39X-5, 85–87	39X-5, 100–102	361.460	361.610	361.535	0.075
D		FO <i>Achomosphaera alaicornu</i>	36.0		39X-6, 5–7	39X-6, 10–12	362.160	362.210	362.185	0.025
D		LAO <i>Enneadocysta</i> spp.	36.0		39X-7, 31–33	39X-7, 40–42	363.920	364.010	363.965	0.045
D		FCO <i>Alterbidinium distinctum</i>	36.0		39X-CC	40X-1, 85–87	364.235	365.060	364.648	0.412
D		LO <i>Pyxidinopsis waipawaensis</i> group	36.0		39X-CC	40X-1, 85–87	364.235	365.060	364.648	0.412
M		Onset C16n.2n	36.34						365.000	0.000
M		Termination C17n.1n	36.62						367.100	0.000
D		FAO <i>Spinidinium macmurdoense</i>	36.9		40X-2, 85–87	40X-3, 85–87	366.560	368.060	367.310	0.750
D		FO <i>Stoveracysta ornata</i>	36.95		40X-3, 85–87	40X-4, 85–87	368.060	369.560	368.810	0.750
M		Onset C17n.3n	38.11						373.900	0.000

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
D		LO <i>Wilsonidinium ornatum</i>	38.3		189-1172A-40X-CC	189-1172A-41X-1, 85-87	373.895	374.660	374.278	0.383
R		FO <i>Eucyrtidium ventricosum</i>	38.3		40X-CC	41X-1, 100-102	373.895	374.810	374.353	0.458
R		LO <i>Lychnocanoma amphitrite</i>	38.3		41X-1, 100-102	41X-2, 97-99	374.810	376.280	375.545	0.735
R		LO <i>Eucyrtidium antiquum</i>	38.3		40X-CC	41X-CC	373.895	383.320	378.608	4.713
M		Termination C18n.1n	38.43						382.100	0.000
D		LO <i>Arachnodinium antarcticum</i>	38.5		41X-5, 86-88	42X-3, 85-87	380.520	387.260	383.890	3.370
D		LO <i>Hystriospheraidium truswelliae</i>	38.5		41X-5, 86-88	42X-3, 85-87	380.520	387.260	383.890	3.370
F		LO <i>Globigerapsis index</i>	XXX	34.3	41X-CC	42X-CC	383.320	392.950	388.135	4.815
R		FO <i>Eucyrtidium spinosum</i>	38.6		41X-CC	42X-CC	383.320	392.950	388.135	4.815
R		LO <i>Calocyclus nakasekoi</i>	38.6		42X-3, 100-102	42X-4, 100-102	387.410	388.910	388.160	0.750
N		LO <i>Chiasmolithus solitus</i>	XXX	38.2	42X-5, 59-60	42X-6, 59-60	389.995	391.495	390.745	0.750
D		LO <i>Hystriocholpoma spinosum</i>	39.0		42X-6, 85-87	43X-2, 85-87	391.760	395.360	393.560	1.800
M		Termination C18n.2n	39.63						413.600	0.000
M		Onset C18n.2n	40.13						415.000	0.000
R		LCO <i>Lophocyrtis biaurita</i>	40.2		45X-2, 100-102	45X-3, 100-102	414.710	416.210	415.460	0.750
N		FO <i>Reticulofenestra reticulata</i>	41.2		45X-2, 59-60	45X-CC	414.295	421.930	418.113	3.818
M		Termination C19n	41.26						430.000	0.000
R		FO <i>Eucyrtidium nishimurae</i>	41.3		46X-6, 100-102	46X-CC	430.310	431.505	430.908	0.597
D		FO <i>Hemiplacophora semilunifera</i>	41.4		46X-6, 85-87	47X-2, 85-87	430.160	433.760	431.960	1.800
M		Onset C19n	41.52						432.000	0.000
D		LO <i>Spiniferites</i> sp. B	41.52		47X-2, 85-87	47X-4, 85-87	433.760	436.760	435.260	1.500
D		LO <i>Wilsonidium echinosuturatum</i>	41.52		47X-2, 85-87	47X-4, 85-87	433.760	436.760	435.260	1.500
R		FO <i>Calocyclus nakasekoi</i>	42.4		47X-6, 100-102	47X-CC	439.910	441.135	440.523	0.613
M		Termination C20n	42.54						441.000	0.000
R		FO <i>Lychnocanoma amphitrite</i>	43.0		48X-3, 100-102	48X-CC	445.010	450.695	447.853	2.843
R		LO <i>Spongatractus pachystylus</i>	43.5		48X-CC	49X-CC	450.695	460.260	455.478	4.783
N		FO <i>Reticulofenestra umbilicus</i>	42.0		46X-3, 59-60	53X-CC	425.395	498.655	462.025	36.630
D		FO <i>Batiacasphaera compta</i>	44.0		50X-CC	51X-2, 85-87	460.240	472.160	466.200	5.960
R		LCO <i>Dictyomitra amygdala</i>	45.4		52X-3, 100-102	52X-CC	483.410	488.480	485.945	2.535
M		Termination C21n	46.26						500.000	0.000
D		LCO <i>Deflandrea convexa</i> group	46.3		53X-CC	54X-3, 85-87	498.655	502.460	500.558	1.903
R		FO <i>Lophocyrtis</i> (Cyclamp.?) <i>longiventer</i>	46.3		53X-CC	54X-3, 100-102	498.655	502.610	500.633	1.978
					189-1172D-5R-1, 40-42	189-1172D-5R-2, 38-40	507.410	508.890	508.150	0.740
D	1172D	FO <i>Wilsonidium echinosuturatum</i>	47.0		5R-1, 40-42	5R-2, 38-40	507.410	508.890	508.150	0.740
D		FCO <i>Enneadocysta</i> sp. A	47.5		5R-2, 38-40	6R-2, 38-40	508.890	518.490	513.690	4.800
M		Onset C21n	47.91						519.000	0.000
D		FCO <i>Enneadocysta partridgei</i>	49.0		6R-4, 38-40	7R-3, 40-42	521.490	529.610	525.550	4.060
D		LO <i>Membranophoridium perforatum</i>	49.0		6R-4, 38-40	7R-3, 40-42	521.490	529.610	525.550	4.060
		lower/middle Eocene boundary 49 Ma								
M	1172D	Termination C22n	49.04						526.400	0.000
M		Onset C22n	49.71						540.000	0.000
D		LO <i>Charlesdowniea edwardsii/columna</i>	49.8		8R-6, 40-42	9R-2, 40-42	543.710	547.310	545.510	1.800
N		LO <i>Discoaster kupperi</i>	XXX	48.4	8R-CC	9R-CC	543.980	555.220	549.600	5.620
D		LO <i>Cribroperidinium</i> sp. A	50.0		9R-2, 40-42	9R-7, 40-42	547.310	554.810	551.060	3.750

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
D		FAO <i>Vozzhennikovia</i> spp.	50.0		189-1172A-9R-7, 40-42	189-1172A-9R-CC	554.810	555.220	555.015	0.205
M		Termination C23n.1n	50.78						555.900	0.000
D		LO <i>Batiacasphaera cassiculum</i>	51.0		10R-1, 40-42	10R-3, 40-42	555.510	558.510	557.010	1.500
D		FO <i>Arachnodinium antarcticum</i>	51.5		10R-3, 40-42	11R-5, 40-42	558.510	571.110	564.810	6.300
D		LO <i>Melitasphaeridium pseudorecurvatum</i>	51.5		10R-3, 40-42	11R-5, 40-42	558.510	571.110	564.810	6.300
D		FAO <i>Phthanoperidinium echinatum</i> group	51.5		10R-3, 40-42	11R-5, 40-42	558.510	571.110	564.810	6.300
M		Onset C23n.2n	51.74						569.300	0.000
D		FO <i>Charlesdowniea edwardsii/columna</i>	51.8		11R-5, 40-42	11R-6, 40-42	571.110	572.610	571.860	0.750
D		LO <i>Thalassiphora delicata</i>	51.8		11R-5, 40-42	11R-6, 40-42	571.110	572.610	571.860	0.750
D		LO <i>Dracodinium waipawaense</i>	52.0		12R-4, 40-42	12R-5, 40-42	579.210	580.710	579.960	0.750
D		LO <i>Impagidinium cassiculum</i>	52.0		12R-4, 40-42	12R-5, 40-42	579.210	580.710	579.960	0.750
M		Termination C24n.1n	52.36						581.000	0.000
D		FO <i>Hystrichokolpoma rigaudiae</i>	52.4		12R-CC	13R-1, 40-42	584.180	584.310	584.245	0.065
D		FO <i>Hystrichokolpoma spinosum</i>	52.4		12R-CC	13R-1, 40-42	584.180	584.310	584.245	0.065
D		FO <i>Hystrichokolpoma truncatum</i>	52.4		12R-CC	13R-1, 40-42	584.180	584.310	584.245	0.065
M		Onset 24n.1n	52.66						585.000	0.000
D		LO <i>Cerodinium medcalfii</i>	52.7		13R-1, 40-42	13R-2, 40-42	584.310	585.810	585.060	0.750
D		FO <i>Membranophoridium perforatum</i>	52.7		13R-1, 40-42	13R-2, 40-42	584.310	585.810	585.060	0.750
D		LAO <i>Palaeocystodinium</i> spp.	52.7		13R-2, 40-42	13R-3, 40-42	585.810	587.310	586.560	0.750
M		Termination C24n.2n	52.76						586.800	0.000
D		FO <i>Cribroperidinium</i> sp. A	52.9		13R-5, 40-42	13R-6, 40-42	590.310	591.810	591.060	0.750
D		FO <i>Dracodinium waipawaense</i>	52.9		13R-5, 40-42	13R-6, 40-42	590.310	591.810	591.060	0.750
D		FO <i>Batiacasphaera cassiculum</i>	53.0		13R-6, 40-42	13R-7, 40-42	591.810	593.310	592.560	0.750
M		Onset C24n.3n	53.35						594.200	0.000
D		FO <i>Octodinium askinae</i>	53.5		15R-3, 40-42	15R-4, 40-42	606.510	608.010	607.260	0.750
D		FO <i>Melitasphaeridium pseudorecurvatum</i>	53.5		15R-3, 40-42	15R-4, 40-42	606.510	608.010	607.260	0.750
D		FO <i>Thalassiphora pelagica</i>	53.5		15R-3, 40-42	15R-4, 40-42	606.510	608.010	607.260	0.750
D		FO <i>Deflandrea convexa</i> group	53.6		15R-4, 40-42	15R-5, 40-42	608.010	609.510	608.760	0.750
D		LO <i>Aiora fenestrata</i>	54.0		15R-5, 40-42	15R-6, 40-42	609.510	611.010	610.260	0.750
D		LCO <i>Alisocysta margarita</i>	54.0		15R-7, 40-42	16R-1, 40-42	612.510	613.110	612.810	0.300
D		FCO <i>Deflandrea phosphoritica</i> group	54.0		16R-1, 40-42	16R-2, 40-42	613.110	614.610	613.860	0.750
D		FO <i>Pentadinium laticinctum</i>	54.0		16R-1, 40-42	16R-2, 40-42	613.110	614.610	613.860	0.750
D		LCO <i>Alisocysta reticulata</i> group	54.0		16R-3, 40-42	16R-4, 40-42	616.110	617.610	616.860	0.750
Paleocene/Eocene boundary 55 Ma										
D	1172D	FO <i>Apectodinium homomorphum</i>	55.5		17R-1, 40-42	17R-2, 40-42	622.710	624.210	623.460	0.750
D		FCO <i>Deflandrea antarctica</i> group	55.5		17R-4, 40-42	17R-5, 40-42	627.210	628.710	627.960	0.750
D		LO <i>Tanyosphaeridium</i> spp.	55.5		17R-4, 40-42	17R-5, 40-42	627.210	628.710	627.960	0.750
D		LO <i>Cerodinium</i> spp.	55.5		17R-5, 40-42	17R-6, 40-42	628.710	630.210	629.460	0.750
M		Onset C25n	56.39						634.800	0.000
D		FO <i>Spinidinium macmurdoensis</i>	56.4		18R-2, 40-42	18R-4, 40-42	633.810	636.810	635.310	1.500
D		LCO <i>Alisocysta circumtabulata</i>	57.0		19R-3, 40-42	20R-1, 40-42	644.910	651.510	648.210	3.300
D		LO <i>Oligosphaeridium</i> spp.	57.0		19R-3, 40-42	20R-1, 40-42	644.910	651.510	648.210	3.300
D		FO <i>Diphyes colligerum</i>	57.0		20R-4, 40-42	20R-5, 40-42	656.010	657.510	656.760	0.750
D		LAO <i>Glaphyrocysta/Areoligera</i> spp.	57.5		20R-7, 40-42	20R-CC	660.510	660.840	660.675	0.165

Table T4 (continued).

Source	Hole	Event	Age (Ma)	Alternate age (Ma)	Core, section, interval (cm)		Depth (mbsf)			Depth error (m)
					Top	Bottom	Top	Bottom	Mean	
					189-1172A-	189-1172A-				
D	LO	<i>Senegalinium dilwynense</i>	57.5		21R-4, 40–42	21R-5, 40–42	665.610	667.110	666.360	0.750
D	FO	<i>Impagidinium victorianum</i>	57.5		21R-5, 40–42	21R-CC	667.110	667.205	667.158	0.047
D	FO	<i>Pyxidinospis waipawaensis</i> group	57.5		21R-5, 40–42	21R-CC	667.110	667.205	667.158	0.047
D	FO	<i>Spiniferites</i> sp. B	57.5		21R-5, 40–42	21R-CC	667.110	667.205	667.158	0.047
D	FO	<i>Hystriospheraeidium truswelliae</i>	57.8		23R-1, 41–43	23R-CC	680.420	681.945	681.183	0.762
D	FO	<i>Impagidinium cassiculum</i>	57.8		23R-1, 41–43	23R-CC	680.420	681.945	681.183	0.762
D	FO	<i>Thalassiphora delicata</i>	57.8		23R-1, 41–43	23R-CC	680.420	681.945	681.183	0.762
D	LO	<i>Trithyrodinium evittii</i>	57.8		23R-2, 4–8	23R-CC	681.560	681.945	681.753	0.192
D	LOA	<i>Palaeoperidinium pyrophorum</i>	58.0		23R-CC	24R-1, 60–64	681.945	690.320	686.133	4.188
D	LO	<i>Alterbidinium acutulum</i>	64.0		23R-CC	24R-5, 12–14	681.945	695.830	688.888	6.943
D	FO	<i>Cerodinium medcalfii</i>	64.0		23R-CC	24R-5, 12–14	681.945	695.830	688.888	6.943
D	FAO	<i>Glaphyrocysta/Areoligera</i> spp.	58.0		23R-CC	24R-5, 12–14	681.945	695.830	688.888	6.943
D	LO	<i>Operculodinium?</i> sp. A	64.0		23R-CC	24R-5, 12–14	681.945	695.830	688.888	6.943
D	LO	<i>Senoniasphaera inornata</i>	63.0		24R-1, 60–64	24R-2, 60–64	690.320	691.820	691.070	0.750
M		Termination C29n	63.98						692.600	0.000
M		Onset C29n	64.75						695.990	0.000
Cretaceous/Tertiary boundary 65 Ma									695.990	
M		Termination C30n	65.5						695.990	0.000
D	LAO	<i>Manumiella</i> spp.	65.0		24R-5, 36–38	24R-5, 40–42	696.070	696.110	696.090	0.020
D	LO	<i>Spiniferites</i> sp. A	65.0		24R-5, 36–38	24R-5, 40–42	696.070	696.110	696.090	0.020
D	FOA	<i>Palaeoperidinium pyrophorum</i>	65.0		24R-5, 40–42	24R-5, 44–46	696.110	696.150	696.130	0.020
D	FO	<i>Senoniasphaera inornata</i>	64.9		24R-5, 40–42	24R-5, 44–46	696.110	696.150	696.130	0.020
D	FO	<i>Trithyrodinium evittii</i>	64.9		24R-5, 40–42	24R-5, 47–48	696.110	696.175	696.143	0.033
D	LO	<i>Dinopterygium</i> sp. A	65.0		24R-5, 44–46	24R-5, 47–48	696.150	696.175	696.163	0.012
N	LO	<i>Arkhangelskiella cymbiformis</i>	65.0		24R-5, 41–42	25R-5, 40–41	696.115	705.705	700.910	4.795
N	LO	<i>Eiffelithus turrisseiffelii</i>	65.0		24R-5, 41–42	25R-5, 40–41	696.115	705.705	700.910	4.795
D	FO	<i>Cerodinium speciosum/striatum</i>	67.0		24R-CC	25R-CC	699.050	709.130	704.090	5.040
M		Onset C30n	67.61						709.100	0.000
M		Termination C31n	67.74						713.300	0.000
D	LO	<i>Odontochitina operculata</i>	68.0		27R-7, 40–42	28R-6, 40–42	727.410	735.780	731.595	4.185
D	FO	<i>Alisocysta reticulata</i> group	68.0		28R-6, 40–42	28R-7, 40–42	735.780	737.020	736.400	0.620
D	FO	<i>Alisocysta circumtabulata</i>	68.0		28R-6, 40–42	28R-7, 40–42	735.780	737.020	736.400	0.620
M		Onset C31n	68.74						736.600	0.000
D	FO	<i>Dinopterygium</i> sp. A	70.0		30R-CC	31R-CC	747.355	766.080	756.718	9.363
D	FAO	<i>Manumiella</i> spp.	70.0		Top 31R-CC	1172D–TD (base 31R)	766.080	766.500	766.290	0.210

Notes: BOI = benthic oxygen isotope data, D = dinocyst, Dm = diatom, F = planktonic foraminifer, M = magnetostratigraphic event, N = nannofossil, R = radiolarian. TD = total depth. FO = first occurrence, FAO = first abundant occurrence, FCO = first common occurrence, LO = last occurrence, LAO = last abundant occurrence, LCO = last common occurrence. Top sample = last downhole occurrence of marker (FO); next sample up in case of LO. Bottom sample = first downhole occurrence of marker (LO); next sample down in case of FO. Error = half depth of top–bottom sample range. Tables are arranged by depth (mbsf). The primary age model comprises the most robust data available. XXX = alternate data provided. Alternative datums remain less robust until further work can resolve them. We include these data in the tables to highlight problem areas. See text for datum references.