

Table 12 (continued).

Geologic age	North Pacific diatom zone	Numeric age (Ma5*)	Core, section, interval (cm)	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling							
middle Miocene	NPD 5B	12.5? 12.8? <12.9	167-1021B- 32X-CC 33X-2, 20-22 33X-5, 15-17 33X-CC	300.50	15.41	315.91	A	M	Oceanic	<i>Denticulopsis</i> cf. <i>dimorpha</i>						
				302.20	15.41	317.61	A	M/G	Oceanic	<i>Denticulopsis</i> <i>hustedtii</i> (elliptical)	R					
				306.65	15.41	322.06	A	M/G	Oceanic	<i>Denticulopsis</i> <i>hyalina</i>						
				310.20	15.41	325.61	A	M/G	Oceanic	<i>Denticulopsis</i> <i>kateyamae</i>						
											<i>Denticulopsis</i> cf. <i>kateyamae</i>					
											<i>Denticulopsis</i> <i>lauta</i> s.l.					
											<i>Denticulopsis</i> <i>praedimorpha</i>		F	C		
											<i>Denticulopsis</i> <i>simonsenii</i>		C	C		
											<i>Grammatophora</i> sp.		C	C		
											<i>Hemiantulus polymorphus</i>		C	C		
											<i>Hemidiscus cuneiformis</i>					
											<i>Neodenticula kamtschatica</i>					
							<i>Neodenticula koizumii</i>									
							<i>Neodenticula</i> cf. <i>koizumii</i>									
							<i>Neodenticula seminata</i>									
							N. sp. A sensu Akiba and Yanagisawa									
							<i>Nitzschia fossilis</i>									
							<i>Nitzschia heteropolica</i>									
							<i>Nitzschia pliocena</i>									
							<i>Nitzschia porteri</i>									
							<i>Nitzschia reinholdii</i>									
							<i>Nitzschia rolandii</i>									
							<i>Nitzschia</i> sp.									
							<i>Paralia sulcata</i>									
							<i>Proboscia barboi</i>				R					
							<i>Proboscia praebarboi</i>				A					
							<i>Proboscia</i> sp.				R					
							<i>Rhaphoneis</i> sp.				R					
							<i>Rhizosolenia hebetata</i> f. <i>hiemalis</i>				R					
							<i>Rhizosolenia miocenica</i>				A					

Table 12 (continued).

Geologic age	North Pacific diatom zone	Numeric age (Ma5*)	Core, section, interval (cm)	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	<i>Rhizosolenia styliformis</i>	<i>Rossetia paleacea</i>	<i>Rouxia californica</i>	<i>Stephanopyxis dimorpha</i>	<i>Stephanopyxis turris</i>	<i>Synedra</i> spp.	<i>Thalassionema hirosakiensis</i>	<i>Thalassionema nitschoides</i>	<i>Thalassionema nitschoides v. parva</i>	<i>Thalassionema robusta</i>	<i>Thalassionema schraderi</i>	<i>Thalassionema</i> spp.	<i>Thalassiosira antiqua</i>	<i>Thalassiosira convexa</i>	<i>Thalassiosira cf. convexa</i>	<i>Thalassiosira eccentrica</i>	<i>Thalassiosira grunowii</i>	<i>Thalassiosira leptopus</i>	<i>Thalassiosira oestrupii</i>	<i>Thalassiosira yabei</i>	<i>Thalassiothrix longissima</i>	<i>Thalassiothrix</i> spp.	<i>Centric</i> sp. 1							
Quaternary	Unzoned	2.0?	167-1021B-1H-CC	8.00	0.00	8.00	B		Clay																														
			2H-CC	17.50	1.18	18.68	T	P	Clay																														
			3H-CC	27.00	1.94	28.94	T	P	Clay																														
			4H-CC	36.50	2.50	39.00	B		Clay																														
			5H-CC	46.00	4.02	50.02	T	P	Clay																														
			6H-CC	55.50	4.76	60.26	C	P	Dissolution																														
			7H-CC	65.00	5.69	70.69	F	P	Clay																														
			8H-CC	74.50	6.55	81.05	C	P/M	Oceanic																														
			9H-CC	84.00	8.71	92.71	R	P	Dissolution																														
			10H-CC	93.50	12.75	106.25	T	P	Clay + nanno																														
late Pliocene	NPD 9 - NPD 8	3.5?	11H-CC	103.00	13.15	116.15	T	P	Clay + nanno																														
			12H-CC	112.50	14.31	126.81	R	P	Clay + dissolution																														
			13H-CC	122.00	14.29	136.29	T	P	Clay + dissolution																														
			14H-CC	131.50	13.43	144.93	T	P	Clay + dissolution																														
			15H-CC	141.00	14.13	155.13	A	P	Clay + oceanic																														
			16H-CC	150.50	14.95	165.45	R	P	Clay + dissolution																														
			17H-CC	160.00	15.53	175.53	R	P																															
			18H-CC	169.50	15.41	184.91	A	P	Clay + upwelling																														
			19X-CC	175.40	15.41	190.81	F	P	Clay + dissolution																														
			20X-CC	185.00	15.41	200.41	A	P	Clay																														
early Pliocene	NPD 7B	<5.49	21X-3, 20-22	188.20	15.41	203.61	R	P																															
			21X-CC	194.70	15.41	210.11	R	P	Clay																														
			22X-2, 20-22	196.40	15.41	211.81	R	P																															
			22X-5, 10-12	200.80	15.41	216.21	R	P																															
			22X-CC	204.30	15.41	219.71	R	P																															
			23X-2, 20-22	206.00	15.41	221.41	F	P																															
			23X-5, 20-22	210.50	15.41	225.91	A	P/M	Oceanic																														
			23X-CC	214.00	15.41	229.41	A	P	Oceanic																														
			24X-2, 20-22	215.70	15.41	231.11	A	P/M	Oceanic																														
			24X-5, 20-22	220.20	15.41	235.61	A	P/M	Oceanic																														
late Miocene	NPD 6B	7.6	24X-CC	223.60	15.41	239.01	A	P/M	Oceanic																														
			25X-2, 18-20	225.28	15.41	240.69	A	P/M	Oceanic																														
			25X-5, 18-20	229.78	15.41	245.19	A	P	Oceanic																														
			25X-CC	233.20	15.41	248.61	A	P	Oceanic																														
			26X-2, 92-94	235.62	15.41	251.03	A	G	Oceanic																														
			26X-5, 93-95	240.13	15.41	255.54	A	G	Oceanic																														
			26X-CC	242.80	15.41	258.21	C	P	Oceanic																														
			27X-2, 12-14	244.42	15.41	259.83	A	G	Oceanic																														
			27X-5, 12-14	248.92	15.41	264.33	C	M/G	Oceanic																														
			27X-CC	252.40	15.41	267.81	C	M	Oceanic																														
NPD 5D	9.9	9.16 9.26	28X-2, 25-27	254.15	15.41	269.56	C	M	Oceanic																														
			28X-5, 12-14	258.52	15.41	273.93	C	M	Oceanic																														
			28X-CC	262.10	15.41	277.51	C	P/M	Oceanic																														
			29X-2, 6-8	263.66	15.41	279.07	A	P/M	Oceanic																														
			29X-5, 20-22	268.30	15.41	283.71	A	P/M	Oceanic																														
			29X-CC	271.70	15.41	287.11	C	P/M	Dissolution																														
			30X-2, 18-20	273.38	15.41	288.79	R	P	Dissolution																														
			30X-5, 20-22	277.90	15.41	293.31	R	P	Dissolution																														
			30X-CC	281.30	15.41	296.71	R	P	Dissolution																														
			31X-2, 15-17	282.95	15.41	298.36	R	P	Dissolution																														
NPD 5C	11.5	9.9	31X-5, 20-22	287.50	15.41	302.91	R	P	Dissolution																														
			31X-CC	290.90	15.41	306.31	R	P	Dissolution																														
			32X-3, 57-59	294.47	15.41	309.88	C	M	Oceanic																														

Table 12 (continued).

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middle Miocene	NPD 5B	12.5? 12.8? <12.9	167-1021B-32X-CC 33X-2, 20-22 33X-5, 15-17 33X-CC	300.50 302.20 306.65 310.20	15.41 15.41 15.41 15.41	315.91 317.61 322.06 325.61	A A A A	M M/G M/G M/G	Oceanic Oceanic Oceanic Oceanic	R R F C C R R R C R R R R F A A A A