Table 4. Distribution and relative abundances of diatoms, Hole 1010C.

Geologic age	North Pacific diatom zone	Numeric age (Ma)*	Core, section, interval (cm)	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	*Actinocyclus ehrenbergii*	*Actinocyclus ellipticus*	*Actinocyclus ingens*	*Actinocyclus ingens* f. *nodus*	*Actinocyclus tenellus*	*Actinocyclus tsugaruensis*	*Actinoptychus senarius*	*Annellus californicus*	*Aulacoseira granulata*	*Azpeitia endoi*	*Azpeitia nodulifera*	*Biddulphia aurita*	*Cavitatus jouseanus*	*Coscinodiscus asteromphalus*	*Coscinodiscus lewisianus*	*Coscinodiscus marginatus*	*Coscinodiscus marginatus* f. *fossilis*	*Coscinodiscus oculus-iridis*	*Craspedodiscus coscinodiscus*	*Crucidenticula nicobarica* s.s.	*Crucidenticula nicobarica* s.l.	*Crucidenticula punctata*	*Denticulopsis dimorpha*	*Denticulopsis hyalina*	*Denticulopsis katayamae*
			167-1010C-																															
			1H-CC	5.50	0.00	5.50	B																											
			2H-CC	15.00	0.86	15.86	B																											
Pleistocene	Barren		3H-CC	24.50	2.30	26.80	B																											
			4H-CC	34.00	3.36	37.36	B																											
			5H-3, 20-21	37.20	4.86	42.06	B																											
to			5H-5, 21-23	40.21	4.86	45.07	T	P							T																			
			5H-CC	43.50	4.86	48.36	B																											
			6H-3, 20-21	46.73	5.78	52.51	T	P														T												
Pliocene			6H-5, 20-21	49.73	5.78	55.51	T	P																	T									
			6H-CC	53.00	5.78	58.78	R	P																					R			T		
			7H-3, 21-22	56.21	6.43	62.64	T	P										T							T									
	Unzoned		7H-5, 21-22	59.21	6.43	65.64	R	P				T													R									
		C3A.n1(t)	7H-CC	62.50	6.43	68.93	R	P				T													T				T			T		
		C3A.n1(o)	8H-3, 20-21	65.70	7.49	73.19	T	P																	T						T			
		C3A.n2(t)	8H-5, 20-21	68.70	7.49	76.19	R	P					T												T									
		C3A.n2(o)	8H-CC	72.00	7.49	79.49	T	P																										T
		C3Bn(t)	9H-3, 20-21	75.20	7.73	82.93	R	P		T															T									
			9H-5, 20-21	78.20	7.73	85.93	R	P				T													T									
			9H-CC	81.50	7.73	89.23	R	P				T													T									
		7.6	10H-3, 20-21	84.70	8.53	93.23	C	P	Coastal							F								A	C									
late Miocene			10H-5, 21-22	87.71	8.53	96.24	F	P																	C									
	NPD 6B		10H-CC	91.00	8.53	99.53	R	P													T				R	T						T		
			11H-3, 20-21	94.20	9.43	103.63	R	P																	C							T		
		8.6	11H-5, 21-22	97.20	9.43	106.63	R	P				C													C									R
	NPD 6A	9.16	11H-CC	100.50	9.43	109.93	A	M/G	Coastal			F				F				R	T				A	C						T		T
	NPD 5D	9.9	12H-3, 20-21	103.70	10.51	114.21	R	P				T													R	T					T			
			12H-5, 21-22	106.70	10.51	117.21	C	P				F				F									C									
			12H-CC	110.00	10.51	120.51	C	M	Coastal			F				F		T			T				C	C								
			13H-3, 21-22	113.21	12.07	125.28	R	P																	C	T								
	NPD 5C		13H-5, 21-22	116.21	12.07	128.28	C	P				C									T				C									
			13H-CC	119.50	12.07	131.57	R	P				C													C									
			14H-3, 20-22	122.70	13.05	135.75	R	P										T																
			14H-5, 20-22	125.70	13.05	138.75	C	M				C	R		F					R					C			R				R		
		11.5	14H-CC	129.00	13.05	142.05	A	M	Coastal			C			F					R					F					R		T		
			15H-3, 21-22	132.21	13.21	145.42	A	G	Oceanic			A			F					C					C									
			15H-5, 21-22	135.21	13.21	148.42	A	G	Oceanic			A			C					F								R						
			15H-CC	138.50	13.21	151.71	C	P	Oceanic			C			C					F					C	C								
	NPD 5B		16H-3, 21-22	141.71	13.64	155.35	D	VG	Oceanic	A		A		T	F															R				
			16H-5, 21-22	144.71	13.64	158.35	D	VG	Oceanic			F				R				A					C									
			16H-CC	148.00	13.64	161.64	D	VG	Oceanic	A		A			C	R				C					C			C		R				
			17H-3, 21-22	151.21	12.76	163.97	D	VG	Oceanic	R	F	C			C	R				F				F	A			R						
middle Miocene			17H-5, 21-22	154.21	12.76	166.97	D	VG	Oceanic		R	C												R	A			R		R				
		12.9	17H-CC	157.50	12.76	170.26	D	VG	Oceanic		R	C	R		C		R			F					C			R	T			T		
			18X-3, 21-22	160.71	13.76	174.47	A	G	Oceanic	R		C			F										A				T					
			18X-5, 21-22	163.71	13.76	177.47	A	G	Oceanic							F				F			T		C				F					
	NPD 5A		18X-CC	165.20	13.76	178.96	D	VG	Oceanic			A	C						R	C			T		R									
			19X-3, 22-23	168.42	15.75	184.17	D	VG	Oceanic			A					R			C					A		R	R						
			19X-5, 26-27	171.46	15.75	187.21	D	VG	Oceanic		R	A					R							A	C				R					
		13.1	19X-CC	174.90	15.75	190.65	D	VG	Oceanic			A				R	R							A	C			R				T		
	NPD 4Bb		20X-3, 75-76	178.65	16.33	194.98	A	G	Coastal/oceanic	T		F	T			R	R							R	C							C		
			20X-CC	184.60	16.33	200.93	B																											
	Barren		21X-CC	194.20			B																											
			23X-CC	209.40			B																											

Notes: * = Cande and Kent (1995). Shaded areas = barren interval. Abundance: D = dominant, A = abundant, C = common, F = few, R = rare, T = trace, and B = barren. Preservation: VG = very good, G = good, M = moderate, and P = poor. For complete definition of terms, see "Techniques" section of this chapter.

Table 4 (continued).

Geologic age	North Pacific diatom zone	Numeric age (Ma)*	Core, section, interval (cm)	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	*Denticulopsis lauta*	*Denticulopsis lauta* s.l.	*Denticulopsis* cf. *miocenica*	*Denticulopsis praedimorpha*	*Denticulopsis simonsenii*	*Hemidiscus cuneiformis*	*Nitzschia fossilis*	*Nitzschia pliocena*	*Nitzschia porteri*	*Paralia sulcata*	*Proboscia barboi*	*Rhizosolenia styliformis*	*Rouxia californica*	*Stephanopyxis turris*	*Synedra* sp.	*Thalassionema hirosakiensis*	*Thalassionema nitzschioides*	*Thalassionema nitzschioides* v. *parva*	*Thalassionema schraderi*	*Thalassionema* cf. *schraderi*	*Thalassiosira antiqua*	*Thalassiosira leptopus*	*Thalassiosira manifesta*	*Thalassiosira praeyabei*	*Thalassiosira yabei*	*Thalassiothrix longissima*
			167-1010C-																																
			1H-CC	5.50	0.00	5.50	B																												
			2H-CC	15.00	0.86	15.86	B																												
Pleistocene	Barren		3H-CC	24.50	2.30	26.80	B																												
			4H-CC	34.00	3.36	37.36	B																												
			5H-3, 20-21	37.20	4.86	42.06	B																												
to			5H-5, 21-23	40.21	4.86	45.07	T	P																											
			5H-CC	43.50	4.86	48.36	B																												
			6H-3, 20-21	46.73	5.78	52.51	T	P																											
Pliocene			6H-5, 20-21	49.73	5.78	55.51	T	P																											
			6H-CC	53.00	5.78	58.78	R	P			T			T												T									
			7H-3, 21-22	56.21	6.43	62.64	T	P																											
	Unzoned		7H-5, 21-22	59.21	6.43	65.64	R	P						T												T									T
		C3A.n1(t)	7H-CC	62.50	6.43	68.93	R	P		T		T								T			T			R				T					
		C3A.n1(o)	8H-3, 20-21	65.70	7.49	73.19	T	P																		T									
		C3A.n2(t)	8H-5, 20-21	68.70	7.49	76.19	R	P																											
		C3A.n2(o)	8H-CC	72.00	7.49	79.49	T	P																				T							
		C3Bn(t)	9H-3, 20-21	75.20	7.73	82.93	R	P																		T									
			9H-5, 20-21	78.20	7.73	85.93	R	P											T							T									
			9H-CC	81.50	7.73	89.23	R	P			T			T					R							R									
		7.6	10H-3, 20-21	84.70	8.53	93.23	C	P	Coastal				T	T													R	C	R						
late Miocene			10H-5, 21-22	87.71	8.53	96.24	F	P						R					F				F					R							F
	NPD 6B		10H-CC	91.00	8.53	99.53	R	P			T			R		T	T	T	T			T	T			R	T								T
			11H-3, 20-21	94.20	9.43	103.63	R	P																		T									T
		8.6	11H-5, 21-22	97.20	9.43	106.63	R	P						F									F				R								T
	NPD 6A	9.16	11H-CC	100.50	9.43	109.93	A	M/G	Coastal						T					A						F			R						F
	NPD 5D	9.9	12H-3, 20-21	103.70	10.51	114.21	R	P						F												T									T
			12H-5, 21-22	106.70	10.51	117.21	C	P			T		T	F						R					F										R
			12H-CC	110.00	10.51	120.51	C	M	Coastal					R									F		T	F									
			13H-3, 21-22	113.21	12.07	125.28	R	P						T																					T
	NPD 5C		13H-5, 21-22	116.21	12.07	128.28	C	P						F	R				R							F									
			13H-CC	119.50	12.07	131.57	R	P					R	F									F		R	F									
			14H-3, 20-22	122.70	13.05	135.75	R	P						T																					T
			14H-5, 20-22	125.70	13.05	138.75	C	M					T	C												F									
		11.5	14H-CC	129.00	13.05	142.05	A	M	Coastal				A	C								T				C									C
			15H-3, 21-22	132.21	13.21	145.42	A	G	Oceanic				C	C						A						C									A
			15H-5, 21-22	135.21	13.21	148.42	A	G	Oceanic				A	A						A	R														A
			15H-CC	138.50	13.21	151.71	C	P	Oceanic				F	A					R				F		R	C									A
	NPD 5B		16H-3, 21-22	141.71	13.64	155.35	D	VG	Oceanic										R				R			C									A
			16H-5, 21-22	144.71	13.64	158.35	D	VG	Oceanic				F	F					R				R												A
			16H-CC	148.00	13.64	161.64	D	VG	Oceanic					A					R				R			A					T			F	A
			17H-3, 21-22	151.21	12.76	163.97	D	VG	Oceanic					A												A								F	A
middle Miocene			17H-5, 21-22	154.21	12.76	166.97	D	VG	Oceanic				F	A						R						C									A
		12.9	17H-CC	157.50	12.76	170.26	D	VG	Oceanic				T	A						C						A							T	T	A
			18X-3, 21-22	160.71	13.76	174.47	A	G	Oceanic					A					R		R		F			C									A
			18X-5, 21-22	163.71	13.76	177.47	A	G	Oceanic					C									F			C									A
	NPD 5A		18X-CC	165.20	13.76	178.96	D	VG	Oceanic					C						A						A									A
			19X-3, 22-23	168.42	15.75	184.17	D	VG	Oceanic					A					R					R		C									A
			19X-5, 26-27	171.46	15.75	187.21	D	VG	Oceanic					C												C									A
		13.1	19X-CC	174.90	15.75	190.65	D	VG	Oceanic	T				C												A									A
	NPD 4Bb		20X-3, 75-76	178.65	16.33	194.98	A	G	Coastal/oceanic																							T			T
			20X-CC	184.60	16.33	200.93	B																												
	Barren		21X-CC	194.20			B																												
			23X-CC	209.40			B																												