Table 6. Distribution and relative abundances of diatoms, Hole 1014A.

Geologic age	North Pacific diatom zone	Core, section	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	*Actinocyclus ingens*	*Actinocyclus ingens f. nodus*	*Actinocyclus oculatus*	*Actinocyclus tenellus*	*Actinocyclus tsugaruensis*	*Actinoptychus senarius*	*Actinoptychus splendens*	*Aulacoseira granulata*	*Auliscus sp.*	*Azpeitia nodulifera*	*Cavitatus jouseanus*	*Cocconeis decipiens*	*Cocconeis scutellum*	*Coscinodiscus asteromphalus*	*Coscinodiscus lewisianus*	*Coscinodiscus marginatus*	*Coscinodiscus marginatus f. fossilis*	*Coscinodiscus sp.*	*Craspedodiscus coscinodiscus*	*Crucidenticula nicobarica*	*Crucidentucla cf. punctata*	*Denticulopsis dimorpha*	*Denticulopsis hyalina*	*Denticulopsis katayamae*	*Denticulopsis lauta*	*Denticulopsis lauta s.l.*	*Denticulopsis praedimorpha*	*Denticulopsos praelauta*	*Denticulopsis simonsenii*	*Diploneis smithii*
		167-1014A-																																				
Quaternary		1H-CC	3.10	0.00	3.10	T	P		T		T													F										T				
		2H-CC	12.60	0.65	13.25	T	P		T										T					T													T	
	NPD 12	3H-CC	22.10	1.16	23.26	T	P		T	T									T					T													T	
		4H-CC	31.60	1.31	32.91	T	P		T													T		T														
		5H-CC	41.40	1.60	43.00	T	P																															
	to	6H-CC	50.60	2.97	53.57	R	P		T					T				T	T					T	T										T	T		
		7X-CC	54.30	3.00	57.30	T	P		T	T				T																									
Quaternary	NPD 11	8X-CC	64.00	2.67	66.67	T	P		T																	T												T
		9X-CC	73.80	2.03	75.83	T	P		T																									T				
		10X-CC	83.50	2.31	85.81	T	P		T					T										T						T		T						
		11X-CC	93.10	1.91	95.01	T	P		T	T														T														
		12X-CC	102.80	2.21	105.01	T	P		T	T			T				T						T	T													T
		13X-CC	112.40	1.96	114.36	T	P		T					T										T														
		14X-CC	122.00	0.12	122.12	T	P		T					T	T				T					T	T				T			T						T
		15X-CC	131.60	-3.64	127.96	T	P		T						T				T					T	T							T						
		16X-CC	141.20	-7.00	134.20	R	P		T					T			T						T								T						
	NPD 10	17X-CC	150.80	-4.74	146.06	T	P		T					T				T					T							T	T						
		18X-CC	160.40	-3.87	156.53	T	P		T						T								T							T			T				
		19X-CC	170.00	-3.87	166.13	T	P		T							T							T								T						
		20X-CC	179.60	-4.56	175.04	R	P	Coastal	T	T	T	T		T	T	T			T		T			A	T			T	T			T		T			
	to	21X-CC	189.20	-4.56	184.64	T	P	Coastal	T	T														A					T		T						
		22X-CC	198.80	-4.49	194.31	A	M	Coastal	R					R							R			A		R						R					
late Pliocene		23X-CC	208.40	-4.49	203.91	R	P		T	T				T										T			T					T	T					T
		24X-CC	218.00	-6.60	211.40	C	P		R	R				R					T	T				R								R				R	R	
	NPD 9	25X-CC	223.50	-6.60	216.90	R	P		T										T		T			C							T	T		T			T	
		26X-CC	227.70	-6.60	221.10	R	P		T		T							T						T							T		T				T
		27X-CC	237.30	-6.60	230.70	T	P		T		T			T										T								T			T			
		28X-CC	246.90	-6.60	240.30	T	P		T	T				T				T						T							T	T		T			
		29X-CC	250.10	-6.60	243.50	T	P		T						T									T		T						T					T	
	to	30X-CC	256.60	-6.60	250.00	R	P		T				T					T						C							T			T	T			
		31X-CC	266.20	-6.60	259.60	T	P		T		T													T					T									
		32X-CC	275.80	-6.60	269.20	F	P		R	R								R						R		R	R				R					R	
		33X-CC	285.50	-6.60	278.90	R	P		T					T				T		T				T		T					T				T	T	T
		34X-CC	295.10	-6.60	288.50	R	P		T	T					T				T					T								T	T	T	T		
		35X-CC	304.80	-6.60	298.20	T	P		T					T	T						T	T	T		T						T	T				T	
	NPD 8	36X-CC	314.40	-6.60	307.80	T	P		T		T	T		T																	T	T					T
		37X-CC	324.10	-6.60	317.50	R	P		T		T	T		T									T								T	T					
		38X-CC	333.70	-6.60	327.10	T	P		T		T			T			T						T			T		T		T	T					T
		39X-CC	343.40	-6.60	336.80	R	P		T	T			T										T	F						T				T	T	
		40X-CC	353.00	-6.60	346.40	T	P		T	T													T			T										T
	to	41X-CC	362.60	-6.60	356.00	T	P		T									T						T								T					T
		42X-CC	372.20	-6.60	365.60	T	P		T															T	T				T							T
early Pliocene		43X-CC	381.80	-6.60	375.20	†																																
		44X-CC	391.00	-6.60	384.40	R	P		T	T				T				T													T	T		T			T
		45X-CC	401.00	-6.60	394.40	R	P		T				T	T				T						T							T	T			T		T
		46X-CC	410.50	-6.60	403.90	R	P		T	T			T					T						T							T						
	NPD 7?	47X-CC	420.50	-6.60	413.90	R	P		T	T				T				T						T	T											T	
		48X-CC	429.80	-6.60	423.20	R	P		T	T		T						T						T			T				T	T					T
		49X-CC	439.40	-6.60	432.80	R	P		T	T				T				T						T	T						T					T	
		50X-CC	449.00	-6.60	442.40	R	P		T	T		T		T			T							T							T					T	

Notes: Abundance: A = abundant, C = common, F = few, R = rare, and T = trace. Preservation: M = moderate, and P = poor. For complete definition of terms, see "Techniques" section of this chapter. † = no sample.

Table 6 (continued).

Geologic age	North Pacific diatom zone	Core, section	Sample depth (mbsf)	Offset (m)	Composite depth (mcd)	Group abundance	Preservation	Environment, type of upwelling	Grammatophora sp.	Hemiaulus polymorphus	Hemidiscus cuneiformis	Navicula sp.	Neodenticula kamtschatica	Neodenticula koizumii	Neodenticula cf. seminae	Nitzschia reinholdii	Nitzschia sp.	Opephora sp.	Paralia sulcata	Plagiogramma staurophorum	Proboscia barboi	Raphidodiscus marylandicus	Rossiella paleacea	Stephanopyxis schenkii	Stephanopyxis turris	Synedra sp.	Thalassionema hirosakiensis	Thalassionema nitzschioides	Thalassionema nitzschioides v. parva	Thalassionema schraderi	Thalassiosira antiqua	Thalassiosira convexa	Thalassiosira eccentrica	Thalassiosira cf. leptopus	Thalassiosira spp. (T. nativa type)	Thalassiosira yabei	Thalassiothrix longissima	Thalassiothrix spp.	Sponge spicules
		167-1014A-																																					
		1H-CC	3.10	0.00	3.10	T	P																					T							R				C
	NPD 12	2H-CC	12.60	0.65	13.25	T	P																					T	T			T							C
		3H-CC	22.10	1.16	23.26	T	P												T									T	T										C
		4H-CC	31.60	1.31	32.91	T	P																																C
		5H-CC	41.40	1.60	43.00	T	P																									T							C
	to	6H-CC	50.60	2.97	53.57	R	P		T																T				T	T					T			T	T	R
		7X-CC	54.30	3.00	57.30	T	P						T						T									T	T					T			F
Quaternary	NPD 11	8X-CC	64.00	2.67	66.67	T	P								T													T									F
		9X-CC	73.80	2.03	75.83	T	P												T				T				T									F
		10X-CC	83.50	2.31	85.81	T	P												T				T	T												T
		11X-CC	93.10	1.91	95.01	T	P																					T					T				F
		12X-CC	102.80	2.21	105.01	T	P									T												T					T				F
		13X-CC	112.40	1.96	114.36	T	P																									T					F
		14X-CC	122.00	0.12	122.12	T	P									T						T														T
		15X-CC	131.60	−3.64	127.96	T	P							T					T				T													R
	NPD 10	16X-CC	141.20	−7.00	134.20	R	P												T	R			T					T				T	T				C
		17X-CC	150.80	−4.74	146.06	T	P						T						T		R			T													A
		18X-CC	160.40	−3.87	156.53	T	P																					T					T				R
		19X-CC	170.00	−3.87	166.13	T	P						T								T	A	T													T
	to	20X-CC	179.60	−4.56	175.04	R	P	Coastal							T							T	T											T				R
		21X-CC	189.20	−4.56	184.64	T	P												T																		R
		22X-CC	198.80	−4.49	194.31	A	M	Coastal											R	R			T				T					T				R
		23X-CC	208.40	−4.49	203.91	R	P													T		T	T			T										C
		24X-CC	218.00	−6.60	211.40	C	P		R					T					R				T														C
late Pliocene	NPD 9	25X-CC	223.50	−6.60	216.90	R	P				F			T		T			T	T				T				T					T	T				C
		26X-CC	227.70	−6.60	221.10	R	P												T				T				T			T							T
		27X-CC	237.30	−6.60	230.70	R	P												T	T			T	T			T					T				C
		28X-CC	246.90	−6.60	240.30	T	P						T										T								T						C
		29X-CC	250.10	−6.60	243.50	T	P						T										T											T	T		C
	to	30X-CC	256.60	−6.60	250.00	R	P					T														T			T			R		T		C
		31X-CC	266.20	−6.60	259.60	T	P											T		T			T				T									R
		32X-CC	275.80	−6.60	269.20	F	P						T							R			R		R	R						R				R
		33X-CC	285.50	−6.60	278.90	R	P							T						T			T				T					T		T		R
		34X-CC	295.10	−6.60	288.50	R	P											T					T				T			T	T	T	T			R
		35X-CC	304.80	−6.60	298.20	T	P						T							T																C
	NPD 8	36X-CC	314.40	−6.60	307.80	T	P						T	T								T				T									C
		37X-CC	324.10	−6.60	317.50	R	P					T						T					T				T									R
		38X-CC	333.70	−6.60	327.10	T	P							T																						R
		39X-CC	343.40	−6.60	336.80	R	P				T	T	T					T									T					T	T	T	T		R
	to	40X-CC	353.00	−6.60	346.40	T	P							T													T									R
		41X-CC	362.60	−6.60	356.00	T	P							T													T									R
early Pliocene		42X-CC	372.20	−6.60	365.60	T	P						T							T								T				T		T		R
		43X-CC	381.80	−6.60	375.20	†																														
		44X-CC	391.00	−6.60	384.40	R	P											T					T			T					T				C
		45X-CC	401.00	−6.60	394.40	R	P											T					T			T					T	T		T		C
		46X-CC	410.50	−6.60	403.90	R	P											T					T			T									C
	NPD 7?	47X-CC	420.50	−6.60	413.90	R	P											T																	F
		48X-CC	429.80	−6.60	423.20	R	P											T					T											T		T
		49X-CC	439.40	−6.60	432.80	R	P											T					T													C
		50X-CC	449.00	−6.60	442.40	R	P											T		T																F