



**M. IWAI AND D. WINTER  
NEOGENE DIATOMS**

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**Chapter 35, Table T4. Stratigraphic occurrence of diatom species at Site 1103.**

Seismic Unit	Diatom Zone	Observer	Depth (mbsf)	Core, section, interval (cm)	Sample preparation method	Abundance of fragments	Abundance	Preservation	Planktonic diatoms:	<i>Actinocyclus actinochilus</i>	<i>Actinocyclus ingens</i> s.s.	<i>Actinocyclus ingens</i> var. <i>ovalis</i>	<i>Actinocyclus karstenii</i>	<i>Actinocyclus octonarius</i>	<i>Azpeitia nodulifera</i>	<i>Chaetoceros</i> spp.	<i>Coscinodiscus asteromphalus</i>	<i>Coscinodiscus marginatus</i>	<i>Denticulopsis delicata</i>	
S1	<i>T. lentiginosa</i> Zone   <i>A. ingens</i> Zone	MI	0.2	178-1103A-1R-CC, 20-25	Smear	R	VR	P												
		MI	0.2	1R-CC, 20-25	H <sub>2</sub> O <sub>2</sub>	R	VR	P												
		MI	16.8	3R-CC	Smear	R	VR	P			+									
		MI	36.0	5R-CC	Smear	R	VR	P												
		MI	45.6	6R-CC, 2-3	Smear	R	VR	P												
		MI	45.6	6R-CC, 2-3	H <sub>2</sub> O <sub>2</sub>	R	VR	P										7		
		MI	65.3	8R-1, 50-51	Smear	F	R	P												
		MI	74.7	9R-CC, 34-36	Smear	R	VR	P			+		+							
		MI	74.7	9R-CC, 34-36	H <sub>2</sub> O <sub>2</sub>	R	VR	P					+							
		MI	83.4	10R-1, 38-40	H <sub>2</sub> O <sub>2</sub>	F	R	P										19		
		MI	83.4	10R-1, 38-40	Smear	R	VR	P			+									
	DW	94.3	11R-CC, 59-60	Smear	F	R	P													
	MI	94.3	11R-CC, 59-60	Smear	F	R	P													
	DW	113.2	13R-1, 23-25	Smear	A	R	P													
	MI	113.2	13R-1, 23-25	H <sub>2</sub> O <sub>2</sub>	F-C	R-F	M-P			1	+	9				32			+	
	DW	122.8	14R-1, 24-25	Smear	C	R	P													
	MI	122.8	14R-1, 24-25	Smear	C	R	P													
	MI	122.8	14R-1, 24-25	H <sub>2</sub> O <sub>2</sub>	F	R	P						4			11	+			
	DW	132.3	15R-CC	Smear	C	R	P				+									
	MI	132.3	15R-CC	Smear	C	R	P			+	+									
	MI	132.3	15R-CC	H <sub>2</sub> O <sub>2</sub>	F	R	P				5	1				3			+	
	DW	151.8	17R-CC	Smear	F?	F	P			+	R			R						
	MI	151.8	17R-CC	Smear	F	R	P			+	R									
	MI	151.8	17R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P				1		+							
	DW	161.9	18R-CC	Smear	R?	R	P				+									
	MI	180.8	20R-CC	Smear	F	VR	P				+									
	MI	209.3	23R-CC	Smear	F	R	P			+			+							
	MI	209.3	23R-CC	H <sub>2</sub> O <sub>2</sub>	F	R	P			1	+		2			12			+	
	MI	218.4	24R-CC	Smear	F	R	P			+			+							
	S3	<i>T. vulnifica</i> Zone?	MI	250.6	27R-CC	Smear	R	B	P											
			MI	250.6	27R-CC	H <sub>2</sub> O <sub>2</sub>	VR	B	P											
			MI	263.4	28R-CC	Smear	R	VR	P											
			MI	263.4	28R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P											
MI			269.1	29R-CC	Smear	R	VR	P												
MI			269.1	29R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P												
DW			276.5	30R-CC	Smear	C		P												
MI			276.5	30R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P												
DW			286.0	31R-1, 22	Smear	R		P										2		+
MI			286.2	31R-1, 39-40	H <sub>2</sub> O <sub>2</sub>	R	R	M-P								2	23			+
MI		286.2	31R-1, 40	Smear	R	R	P											+		
DW		286.4	31R-1, 63	Smear	F		P													
MI		286.8	31R-1, 104	Smear	F	R	P													
MI		288.9	31R-3, 45	Smear	R	R	P												+	
DW		289.4	31R-CC	Smear	R		P													
MI		295.6	32R-1, 37-38	H <sub>2</sub> O <sub>2</sub>	B	B	-													
DW		295.6	32R-1, 37-38	Smear	B	B	-													
MI		306.1	33R-1, 134	Smear	R	R	P													
DW		306.5	33R-CC	Smear	R		P													



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**Table T4 (continued).**

<i>Thalassiosira vulnifica</i>	<i>Thalassiosira</i> spp.	<i>Thalassiothrix</i> spp.	<i>Thalassiothrix</i> and <i>Thalassionema</i> fragments	<i>Trinacria</i> spp.	Benthic diatoms:	<i>Achnanthes</i> spp.	<i>Cocconeis californica</i>	<i>Cocconeis costata</i>	<i>Cocconeis</i> spp.	<i>Delphineis</i> spp.	<i>Melosira</i> sp.	<i>Melosira?</i> sp.	Other Pennates	Other Centrales	Total counted	Fields of view observed	At optical magnification of
1	+														0 1 0 0 0	100	×40
	1	+									1				14 0 0	555	×63
+	3	6	+	+					+						1 56.5 0 0 0	100 705	×40 ×63
10	7.5	+						+	1				1	7	118 0 0	600	×63
	5	7.5						1	+	+				3	64 3 0	600	×63
1	2	6						1						1	39.5	651	×63
		1.5	+							+				1	5.5	112	×40
	2	1	0.5				+	+					1	3	42.5	884	×63
			+	+										+	0	52	×40
			+											+	0	55	×40
			+											+	2	53	×40
						+							+	1	5	100	×63
17	1		+	+				1	+		13	1	2	100	623	×63	
			+														
			+	+													

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**Table T4 (continued).**

		DW	319.6	34R-CC	Smear	F		P		+				
		MI	319.6	34R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P		1	1		29	+
		MI	326.5	35R-CC	Smear	F	R	P						+
		MI	338.8	36R-CC	smear	R	B	P						
	<i>A. ingens</i> var. <i>ovalis</i> Zone	MI	338.8	36R-CC	H <sub>2</sub> O <sub>2</sub>	VR	VR	P						
		MI	348.8	37R-CC	smear	F	R	P			+			
		MI	348.8	37R-CC	H <sub>2</sub> O <sub>2</sub>	R	VR	P						
		MI	355.3	38R-CC	smear	R	VR	P						
		MI	355.3	38R-CC	H <sub>2</sub> O <sub>2</sub>	R	R	P		1	2	1		5

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R + R +		1 + + +	3 2 1 + R +	4 4.5		
+ + + + 3 1		R 1 +	4 1 + + + 63 6 1			

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**Table T4 (continued).**

6	0.5	+	+		1			R 6	60	640	×63
			+						0		
									5	103	×63
			+						0		
									1	111	×63
									0		
2	1	+	+		+			15	101	541	×63