

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SEC. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	D/ATOMS										
PLEISTOCENE														
A/G	N22 - N23													
A/G	CN15													
					N	● 65.9% ● 1.67	● 63.2%	1	0.5					
					N	● 68.3% ● 1.63	● 61.6%	2	1.0					
					N	● 69.7% ● 1.54	● 33.0%	3						
					N	● 62.6% ● 1.72	● 61.8%	4						
					N	● 56.6% ● 1.86	● 75.3% ● 31.8%	5						
					N	● 59.1% ● 1.76	● 67.3%	6						
					CC									

CLAYEY OOZE, CLAYEY NANNOFOSSIL OOZE to CLAYEY PTEROPOD NANNOFOSSIL OOZE with FORAMINIFERS

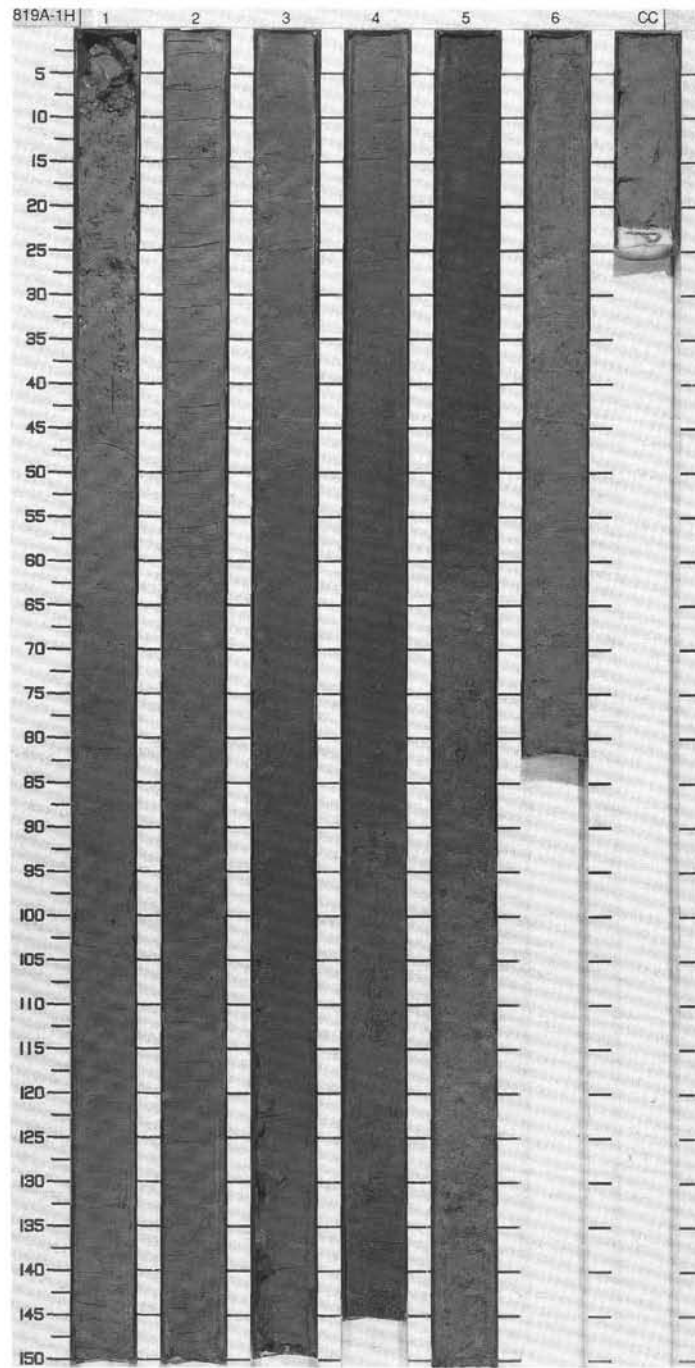
Major lithology: Section 1 contains a CLAYEY PTEROPOD NANNOFOSSIL OOZE with FORAMINIFERS. The color change is gradational from olive gray (5GY 5/2) to dark gray (5Y 4/1), whereas the burrow infillings are olive (5Y 5/3) colored. A CLAYEY OOZE occurs in Section 2, slightly mottled. Pteropod shells are less abundant. CLAYEY NANNOFOSSIL OOZE occurs in Section 3. Section 4, 0-90 cm, and in Section 5. More than 10% Pteropods in this sediment was noted in Section 5, 20-60 cm, in Section 6 and in the core catcher. In Section 4, 90-144 cm an olive (5Y 4/3) CLAYEY PTEROPOD NANNOFOSSIL OOZE occurs.

SMEAR SLIDE SUMMARY (%)

	1, 100	3, 110
	D	D

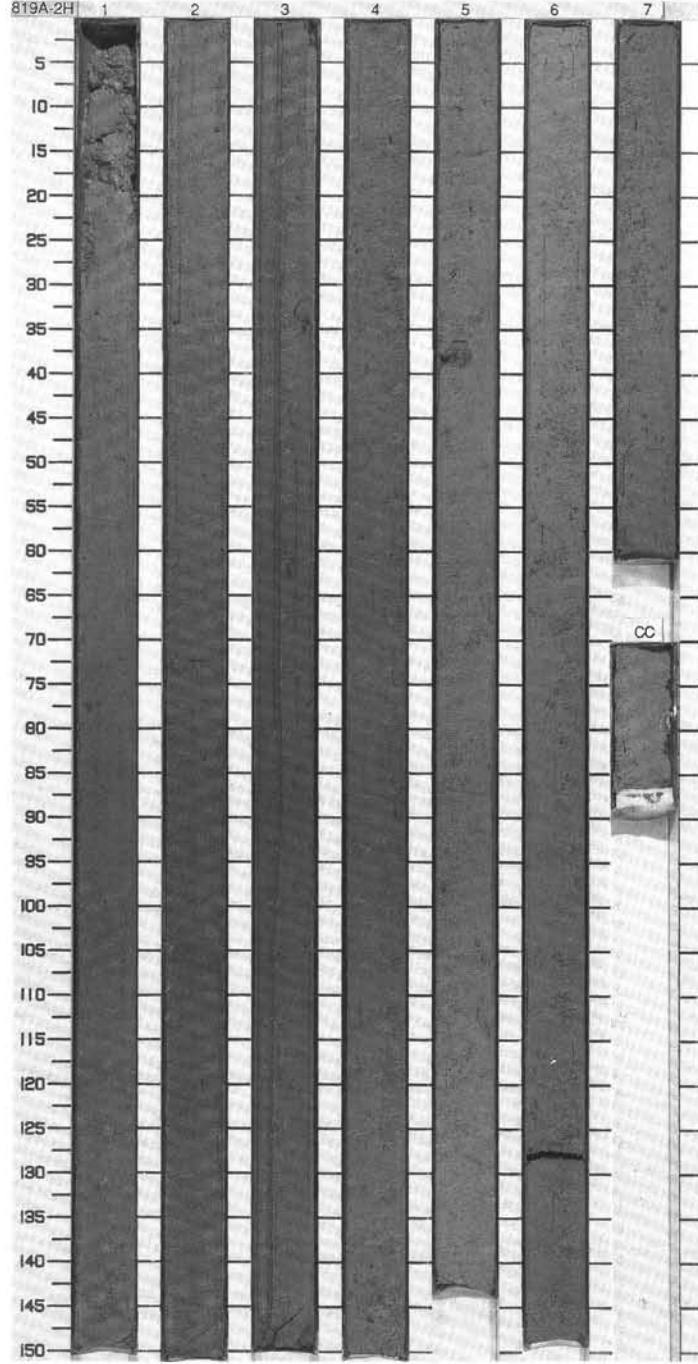
COMPOSITION:

Clay	30	30
Feldspar	---	2
Foraminifers	---	6
Inorganic calcite	15	5
Nannofossils	40	40
Pteropod	10	---
Quartz	5	8
Tunicate	---	4

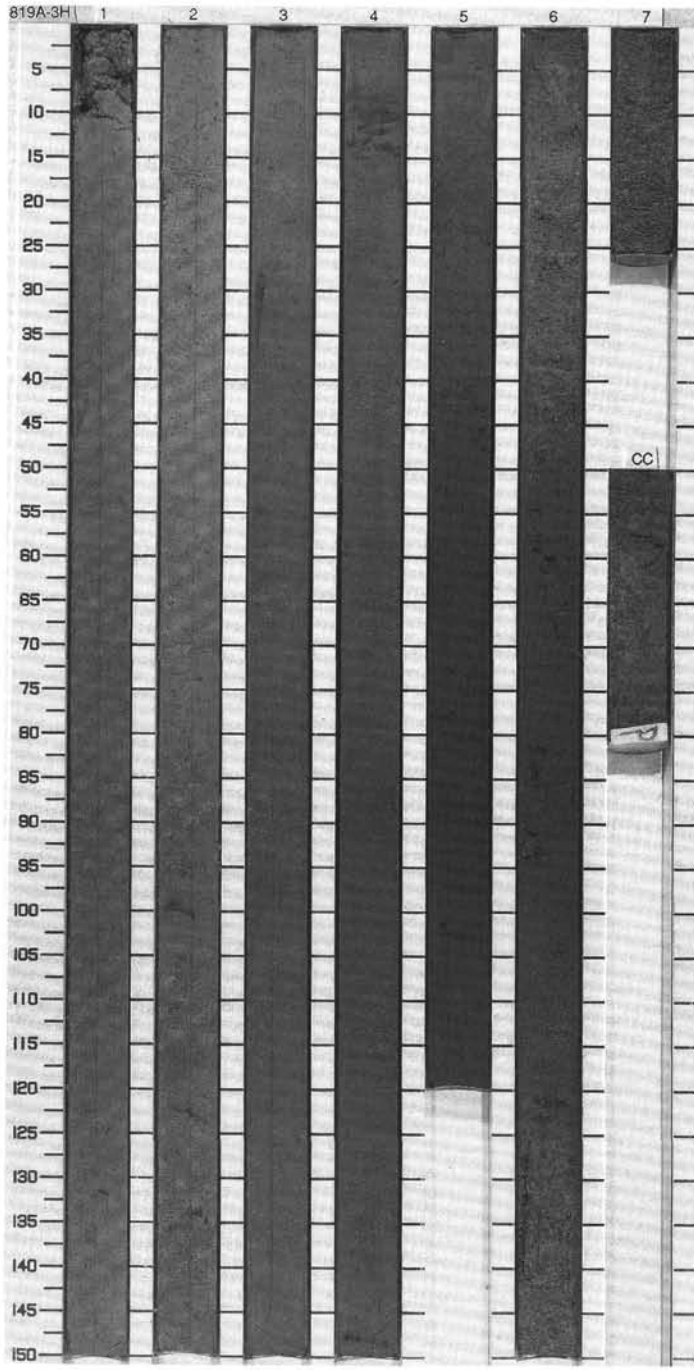


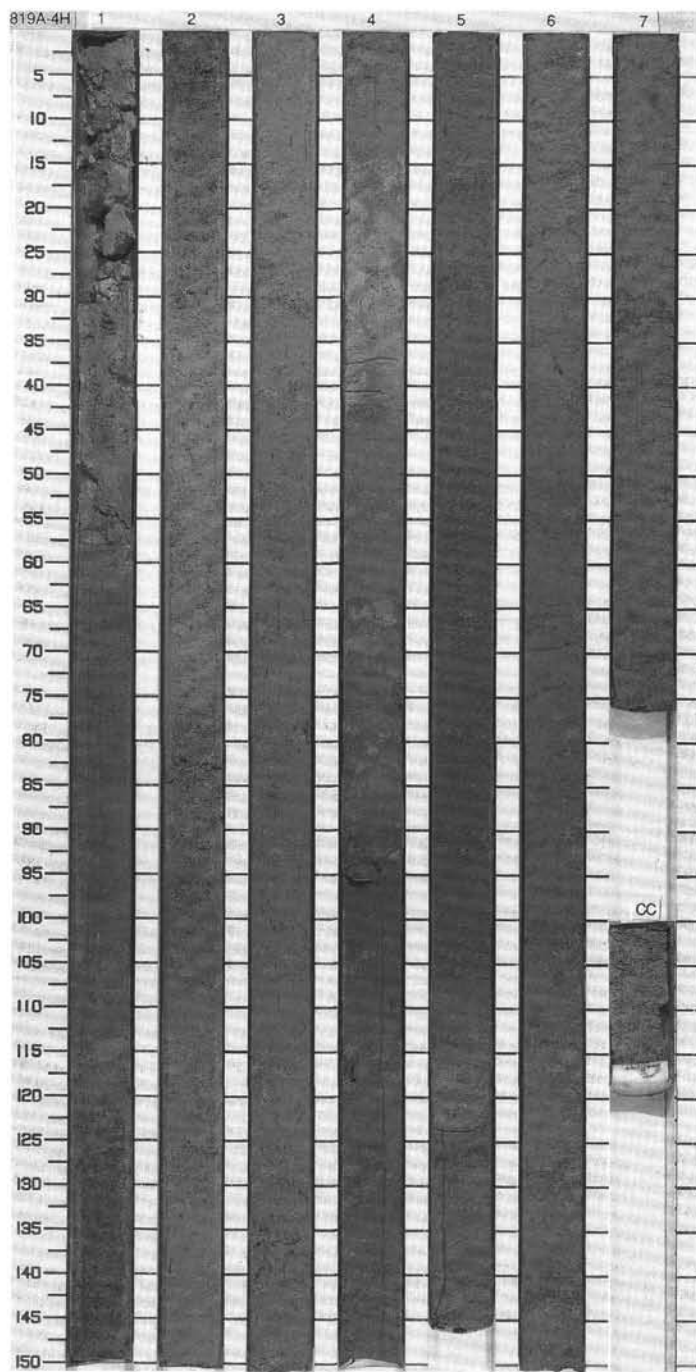
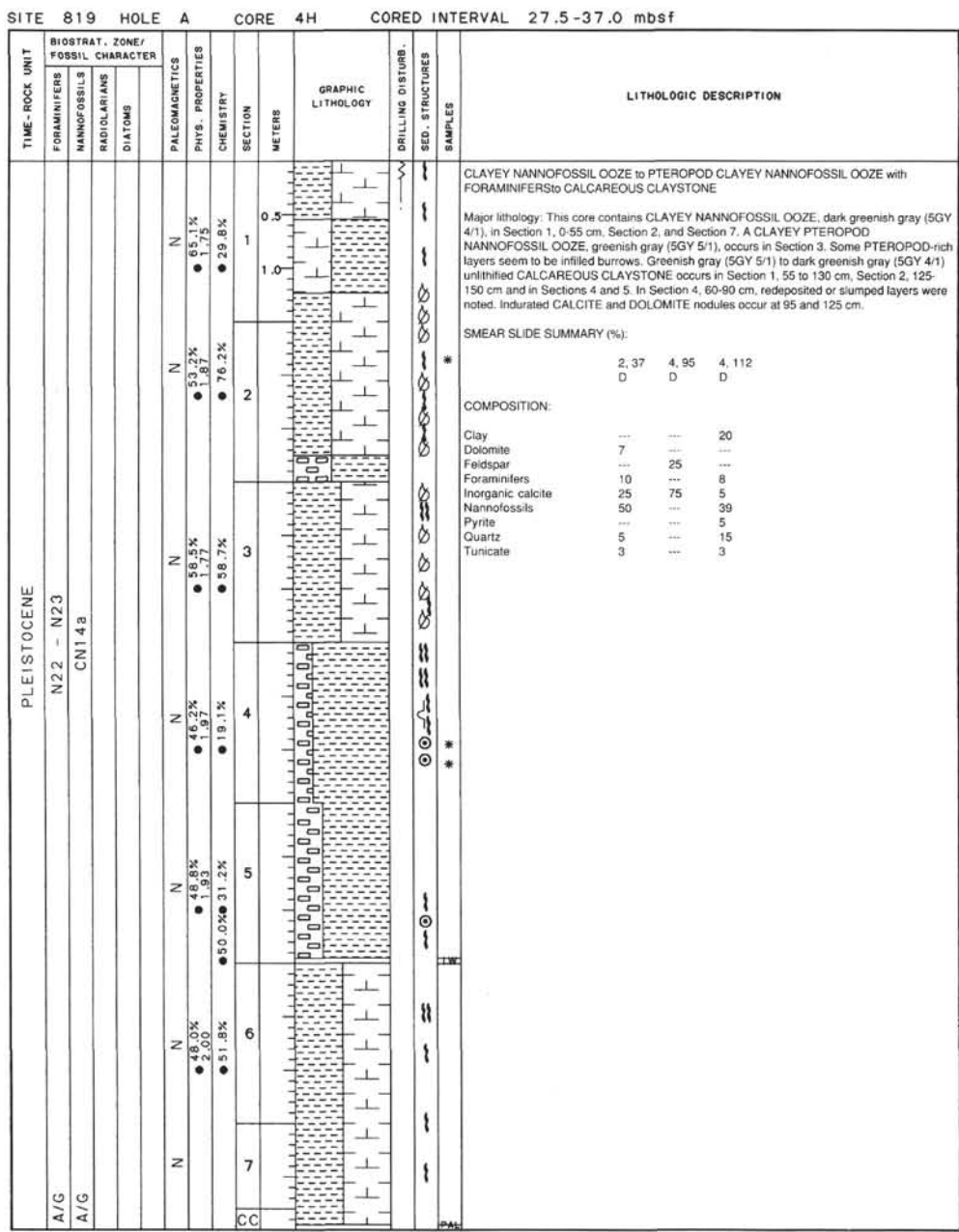
SITE 819 HOLE A CORE 2H CORED INTERVAL 8.5 - 18.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
PLEISTOCENE														<p>CLAYEY NANNOFOSSIL MIXED SEDIMENT to un lithified NANNOFOSSIL CLAYSTONE to CLAYEY NANNOFOSSIL OOZE with PTEROPODS</p> <p>Major lithology: This core contains a gray (5GY 5/1) CLAYEY NANNOFOSSIL MIXED SEDIMENT in Sections 1 and 4, grading into an unlithified NANNOFOSSIL CLAYSTONE, dark gray (5GY 4/1) in Section 2, to dark green gray (5GY 4/1) in Section 3. The remainder of the core is a relatively homogenous greenish gray (5GY 5/1, 5GY 6/1) CLAYEY NANNOFOSSIL OOZE to olive gray (5GY 4/2) CLAYEY NANNOFOSSIL OOZE with PTEROPODS in Section 7. Color changes are gradational throughout the core. In Section 5, at 65 cm, a coarse layer was noted, with 65% PTEROPODS in the coarse fraction, PLANKTONIC and BENTHIC FORAMINIFERS, small BIVALVES and GASTROPODS, as well as a PHOSPHATE fragment.</p>
A/G	N22 - N23													
A/G	CN15													
					N	59.5% ● 1.70	54.8% ●	1	0.5					
					N	65.4% ● 1.69	38.3% ●	2	1.0					
					N	64.9% ● 1.67	41.0% ●	3						
					N	64.4% ● 1.68	50.3% ●	4						
					N	58.1% ● 1.79	73.9% ●	5						
					N	58.0% ● 1.83	72.8% ●	6						
					N	72.7% ●		7						
								CC						

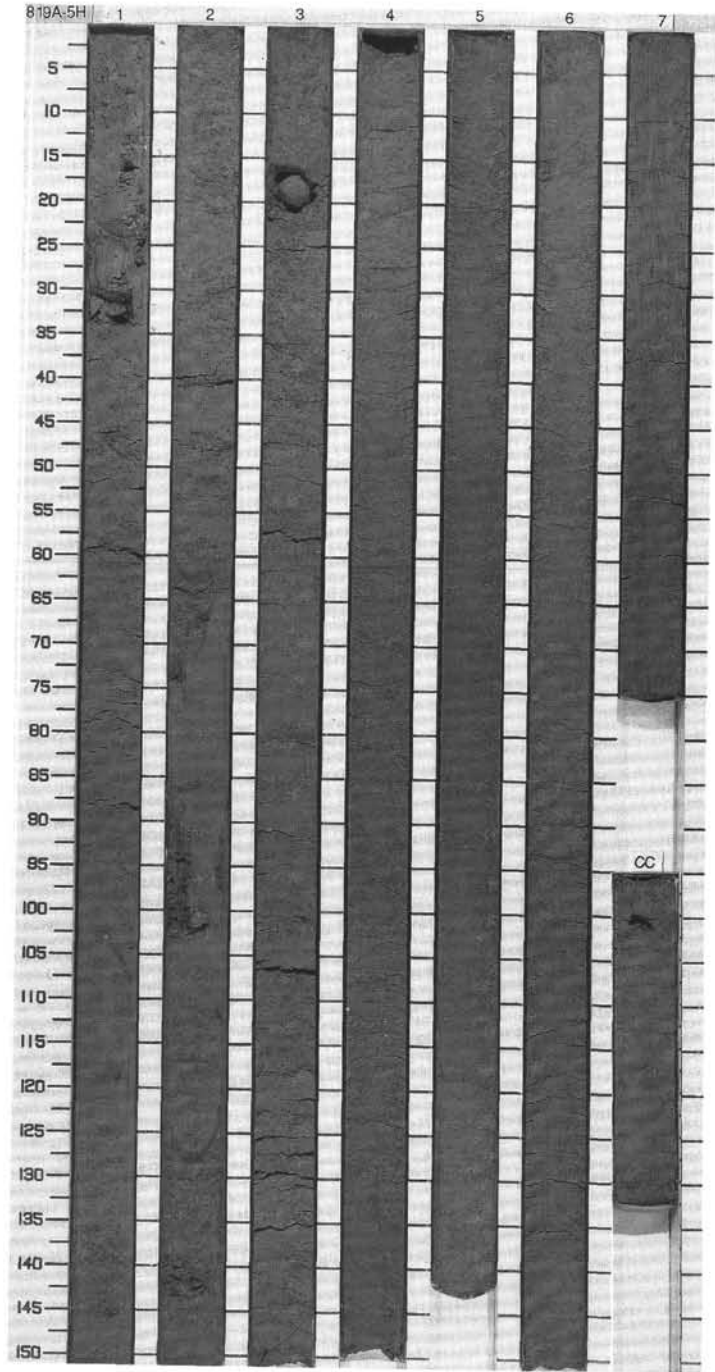


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	BED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS										
PLEISTOCENE													
A/G	N22 - N23			N	58.2% ● 1.79	68.8% ●	1	0.5 - 1.0					<p>CLAYEY NANNOFOSSIL OOZE to CALCAREOUS CLAYEY MIXED SEDIMENT to CALCAREOUS CLAYSTONE</p> <p>Major lithology: This core contains greenish gray (5GY 5/1, 5GY 6/1) CLAYEY NANNOFOSSIL OOZE with scattered PTEROPODS in Sections 1 and 2, 0-40 cm. Sections 2, 40-150, and 3, 0-120 cm contain a greenish gray (5GY 7/1 to 5GY 6/1) CALCAREOUS CLAYEY MIXED SEDIMENT. An un lithified CALCAREOUS CLAYSTONE, dark greenish gray (5GY 4/1), occurs in Sections 3, 120-150 cm, 4 and 5. The colors change from Section 1 to 5 gradationally, and become generally darker.</p> <p>Minor lithology: Greenish gray (5GY 5/1) unlithified PTEROPOD and FORAMINIFER rich CALCAREOUS CLAYSTONE with minor GASTROPODS and BIVALVES occurs in Section 6, 0.55 and 105-150 cm. A dark greenish gray (5GY 4/1) CALCAREOUS CLAYSTONE with minor GASTROPODS and BIVALVES occurs between 55 and 105 cm; a solitary CORAL (caryophyllia type) at 92 cm.</p> <p>SMEAR SLIDE SUMMARY (%): 5.70 D</p> <p>COMPOSITION: Bioclast 20 Clay 25 Nannofossils 10 Opaques 10 Quartz 20 Rock fragment 15</p>
A/G	CN15		N	56.1% ● 1.82	61.8% ●	2							
			N	61.4% ● 1.70	40.2% ●	3							
			N	55.3% ● 1.78	24.9% ● 7%	4							
			N	54.9% ● 1.82	44.6% ● 7%	5							
			N			6							
			N			7							
						CC							



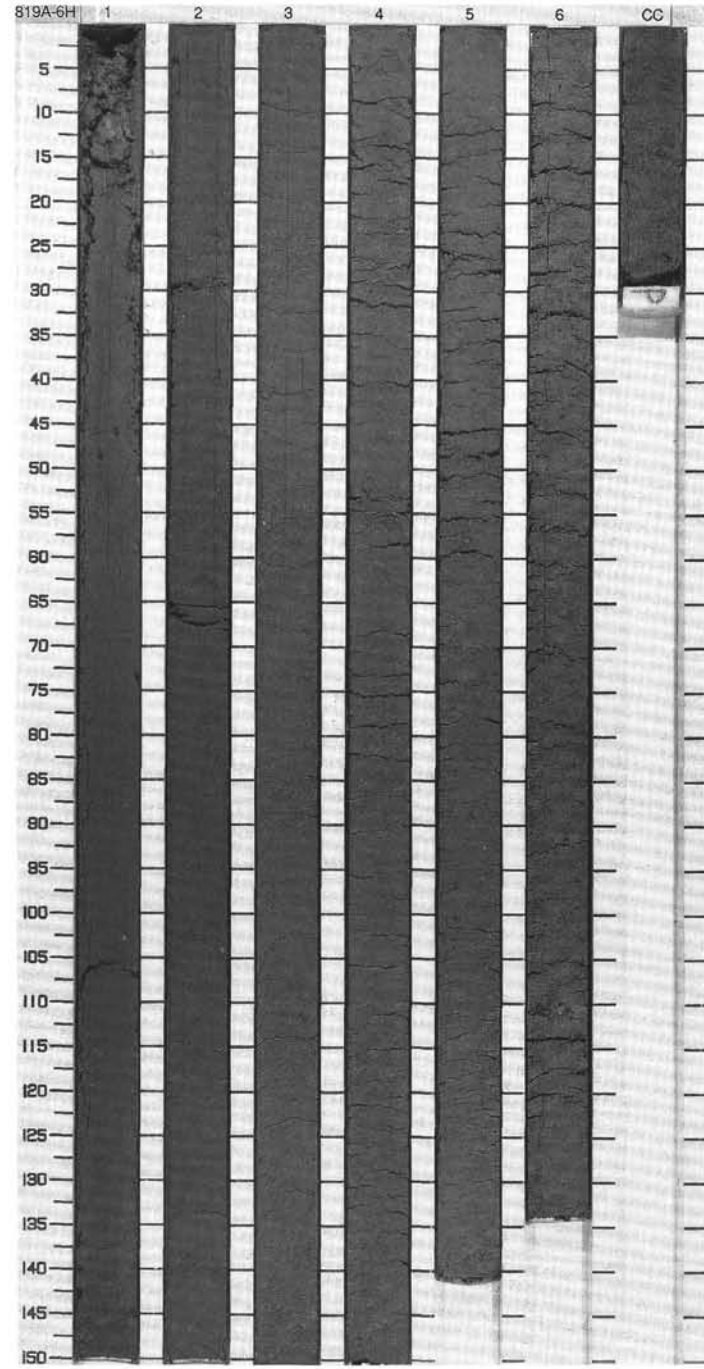


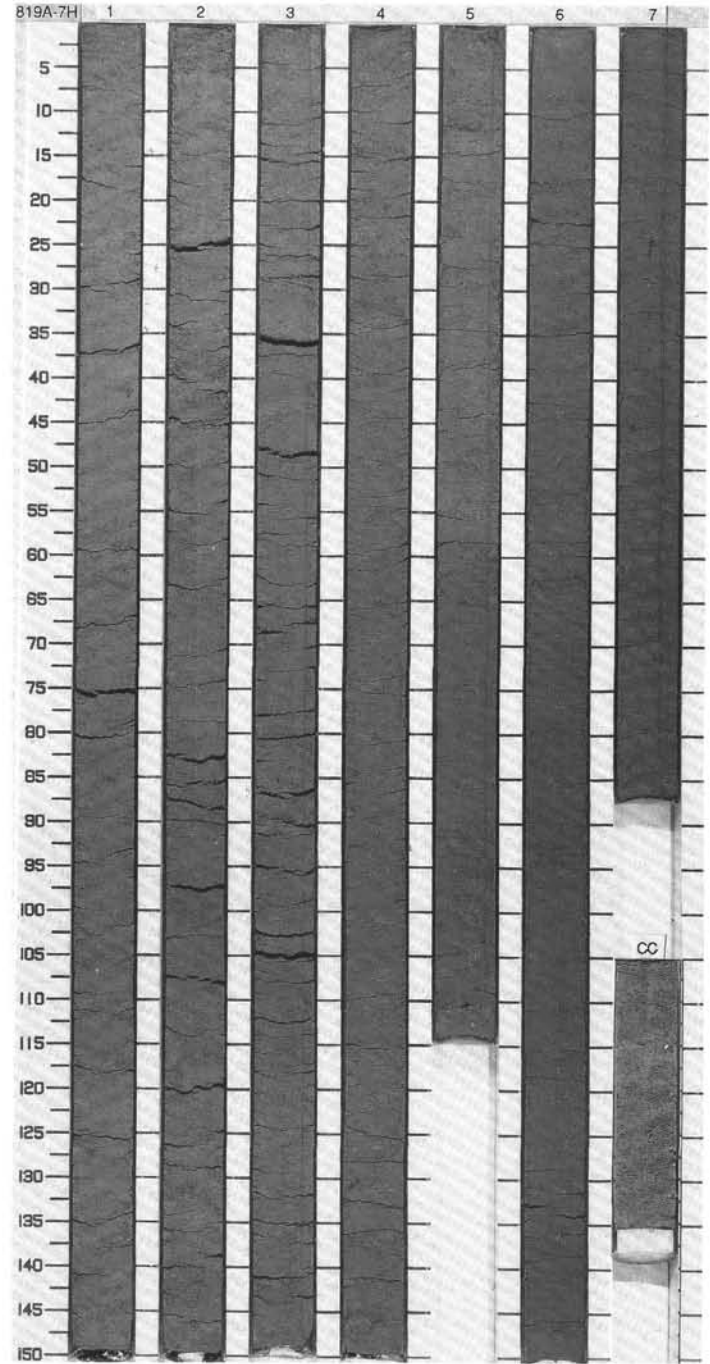
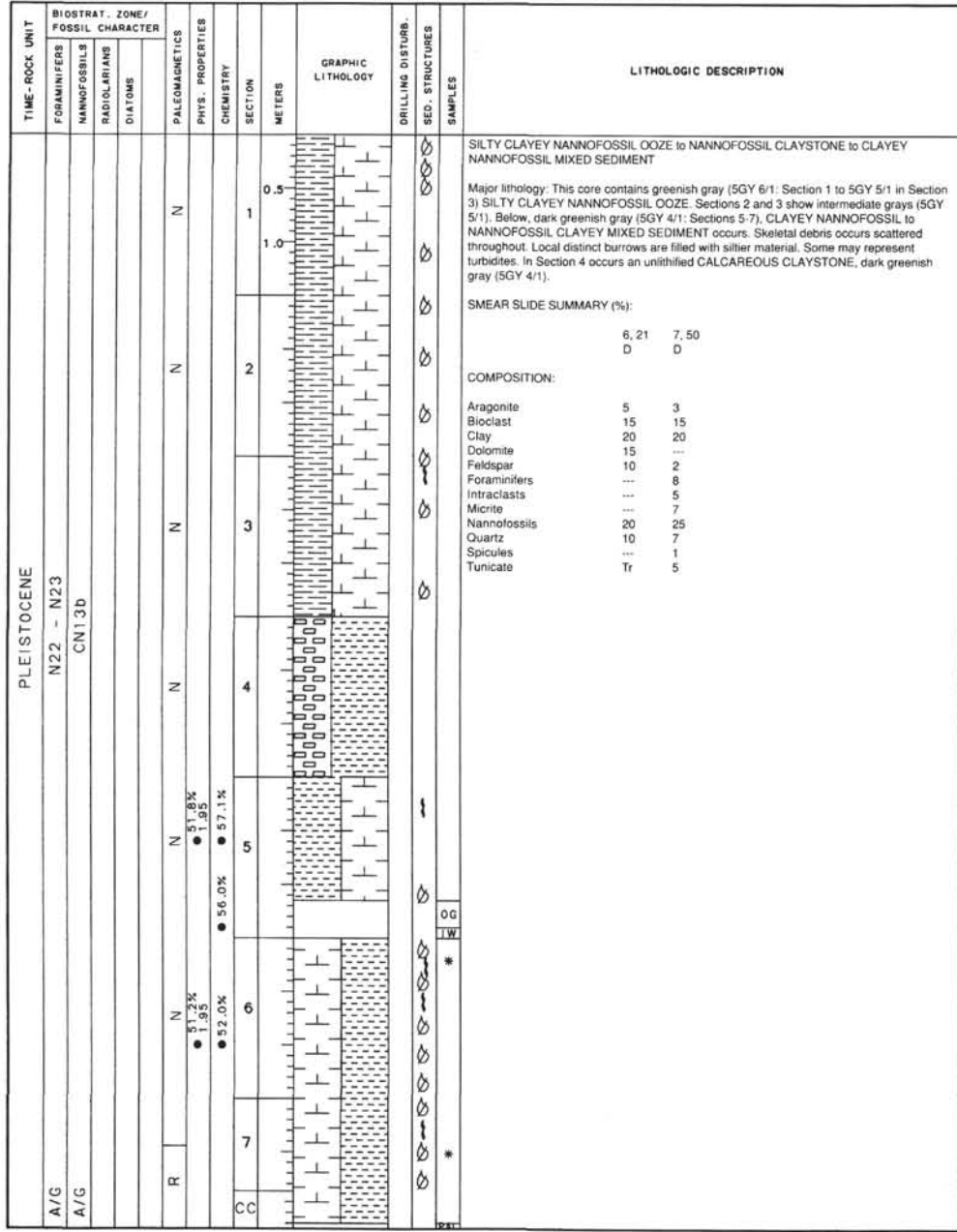
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																	
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONIS																																											
PLEISTOCENE N22 - N23 CN14b					N	1.0%	50.9%	1	0.5					<p>CLAYEY NANNOFOSSIL MIXED SEDIMENT</p> <p>Major lithology: This core contains greenish gray (5GY 5/1), homogeneous CLAYEY NANNOFOSSIL MIXED SEDIMENT with minor amounts of QUARTZ. Bioturbation is of minor importance throughout the core. In Section 1 light burrow mottling with silt in-fillings occurs.</p> <p>Minor Lithology: "Chaiky" patches and layers, rich in DOLOMITE occur in the lower half of Section 2 and the upper part of Section 3.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>3.17</td> <td>5.70</td> </tr> <tr> <td></td> <td>M</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Apatite</td> <td>---</td> <td>1</td> </tr> <tr> <td>Clay</td> <td>---</td> <td>25</td> </tr> <tr> <td>Dolomite</td> <td>80</td> <td>---</td> </tr> <tr> <td>Foraminifers</td> <td>---</td> <td>6</td> </tr> <tr> <td>Inorganic calcite</td> <td>20</td> <td>5</td> </tr> <tr> <td>Intraclasts</td> <td>---</td> <td>9</td> </tr> <tr> <td>Nannofossils</td> <td>---</td> <td>45</td> </tr> <tr> <td>Quartz</td> <td>---</td> <td>6</td> </tr> <tr> <td>Tunicate</td> <td>---</td> <td>3</td> </tr> </table>		3.17	5.70		M	D	Apatite	---	1	Clay	---	25	Dolomite	80	---	Foraminifers	---	6	Inorganic calcite	20	5	Intraclasts	---	9	Nannofossils	---	45	Quartz	---	6	Tunicate	---	3
		3.17	5.70																																												
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Tunicate	---	3																																													
				N	2.0%	53.7%	2	1.0																																							
				R	1.8%	49.0%	3																																								
				R	1.9%	53.7%	4																																								
				R	1.9%	58.9%	5																																								
				R	1.8%	52.9%	6																																								
C/G A/G				N			7																																								



SITE 819 HOLE A CORE 6H CORED INTERVAL 46.5-56.0 mbsf

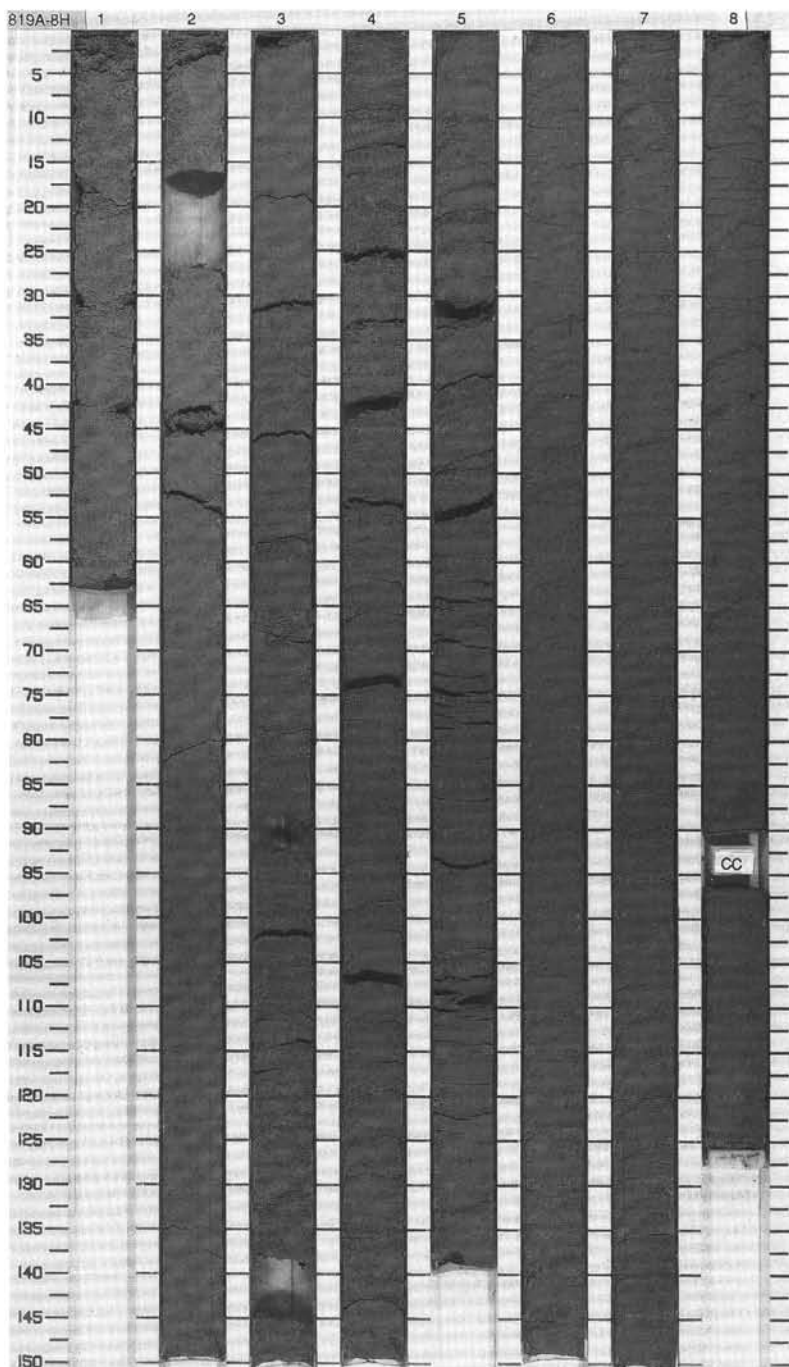
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION														
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS											DIATOMS													
PLEISTOCENE																											
C/G	N22 - N23																										
A/G	CN143																										
				N			1	0.5 1.0					<p>CLAYEY NANNOFOSSIL MIXED SEDIMENT to CLAYEY NANNOFOSSIL OOZE to CLAYEY DOLOMITIC NANNOFOSSIL OOZE with MICRITE INTRACLASTS</p> <p>Major lithology: This core contains dark greenish gray (5GY 6/1), homogeneous CLAYEY NANNOFOSSIL MIXED SEDIMENT to CLAYEY NANNOFOSSIL OOZE, becoming gradationally greenish gray (5GY 5/1) and siltier downcore. Skeletal debris is very rare in Sections 1-3. In Sections 4 to 6 INTRACLASTS and BIOCLASTS (BIVALVES, BENTHIC and PLANKTONIC FORAMINIFERS and GASTROPODS) occur.</p> <p>Minor lithology: Greenish gray (5GY 5/1), CLAYEY DOLOMITIC NANNOFOSSIL OOZE with INTRACLASTS occurs in Section 6. BIOCLASTS were also found.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="margin-left: 40px;">6.70 M</p> <p>COMPOSITION:</p> <table style="margin-left: 40px;"> <tr><td>Bioclast</td><td>15</td></tr> <tr><td>Clay</td><td>20</td></tr> <tr><td>Dolomite</td><td>22</td></tr> <tr><td>Intraclasts</td><td>3</td></tr> <tr><td>Nannofossils</td><td>30</td></tr> <tr><td>Quartz</td><td>5</td></tr> <tr><td>Tunicate</td><td>5</td></tr> </table>	Bioclast	15	Clay	20	Dolomite	22	Intraclasts	3	Nannofossils	30	Quartz	5	Tunicate	5
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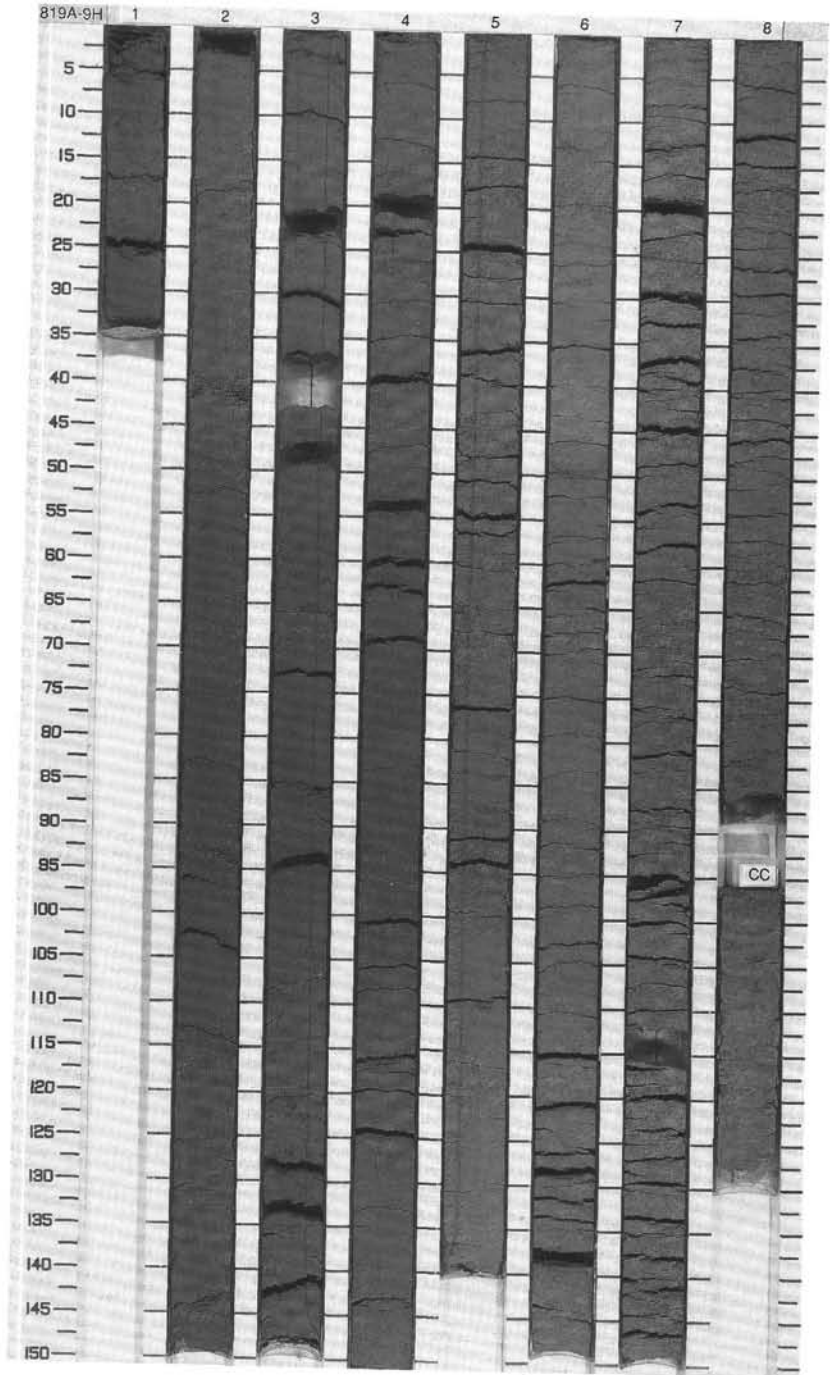
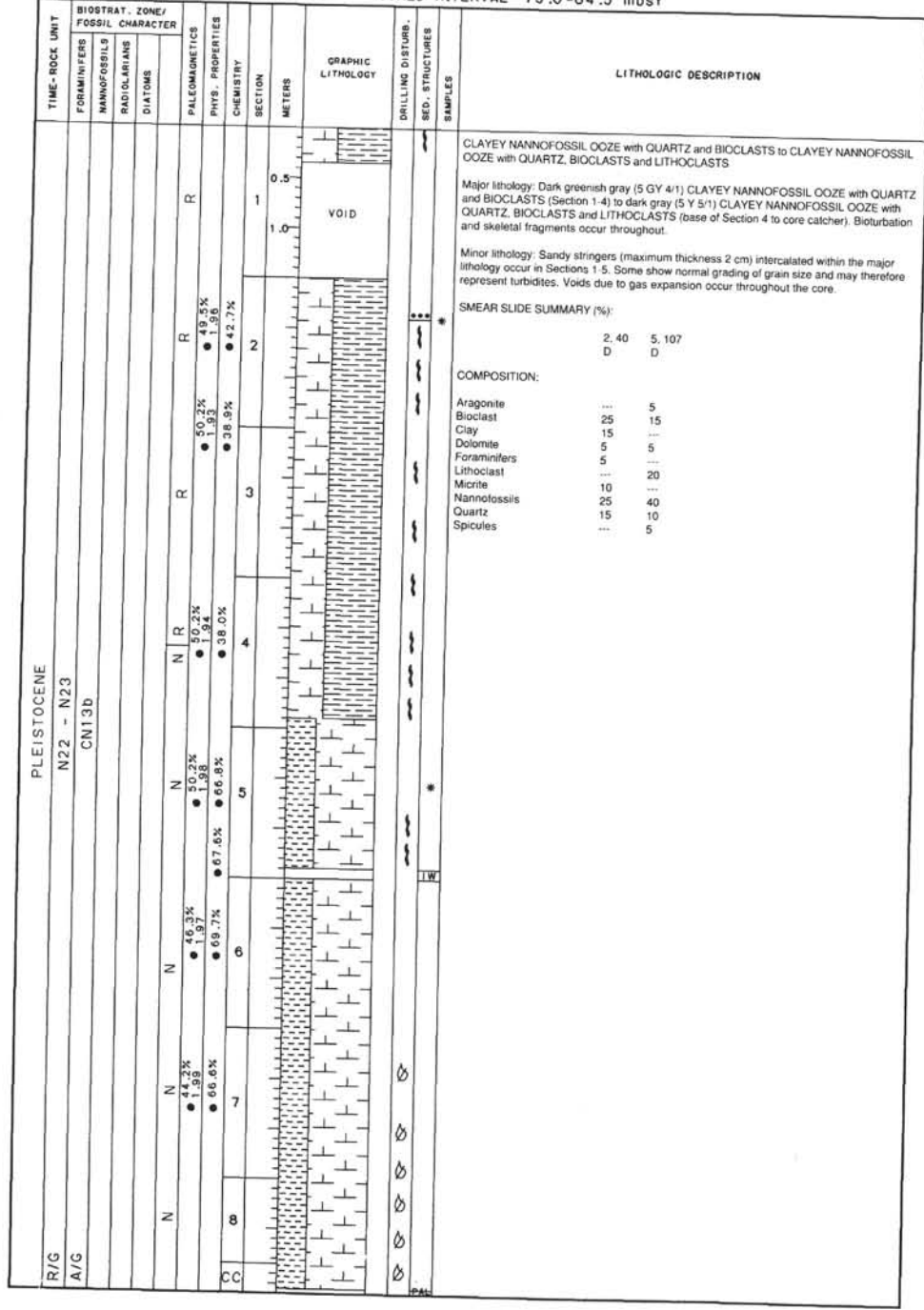


SITE 819 HOLE A CORE 8H CORED INTERVAL 65.5 - 75.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																	
PLEISTOCENE	N22 - N23 CN13b									1				*	SILTY CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS  Major lithology: Gray (5Y 5/1: Section 1) to dark gray (5Y 4/1: Section 2-CC). SILTY CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS. BIOCLASTS are PTEROPODS, BIVALVES and FORAMINIFERS. Bioturbation is of minor importance and occurs in Sections 2-4. Section 8 is slumped.																																																																	
									N	2				*	Minor Lithology: Dark gray (5Y 4/1) layers enriched in SILT or FINE SAND and ROCK FRAGMENTS. The layers are up to several centimeters thick and comprise 30% of Section 4, 20% of Section 5, 10% of Section 6 and 5% of Section 7. In Sections 3 and 8 they form only few intercalations, possibly representing TURBIDITES. Voids due to gas expansion occur throughout the core.																																																																	
									N	3					SMEAR SLIDE SUMMARY (%):  COMPOSITION:																																																																	
									N	4					<table border="0"> <tr> <td></td> <td>1, 20</td> <td>2, 97</td> <td>6, 52</td> <td>7, 104</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table>		1, 20	2, 97	6, 52	7, 104		D	D	D	D																																																							
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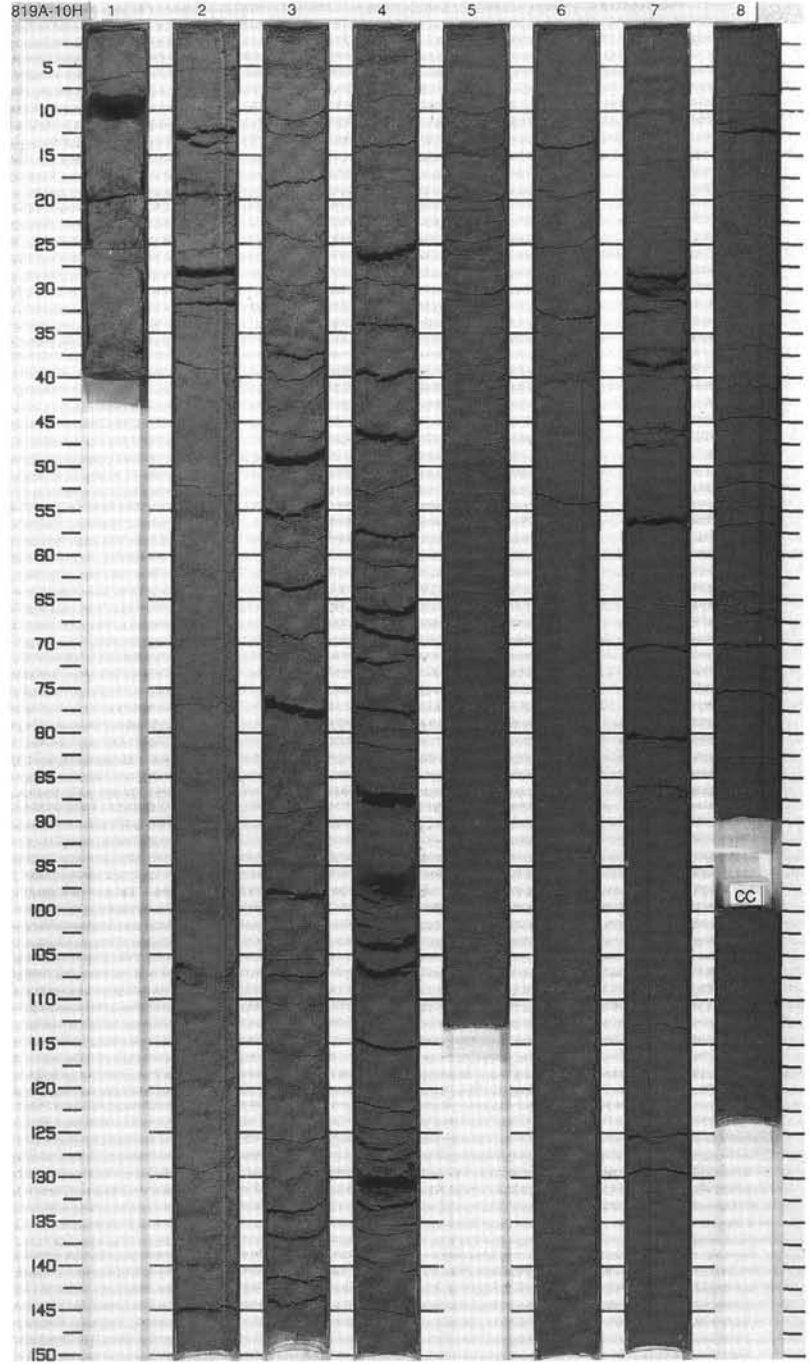




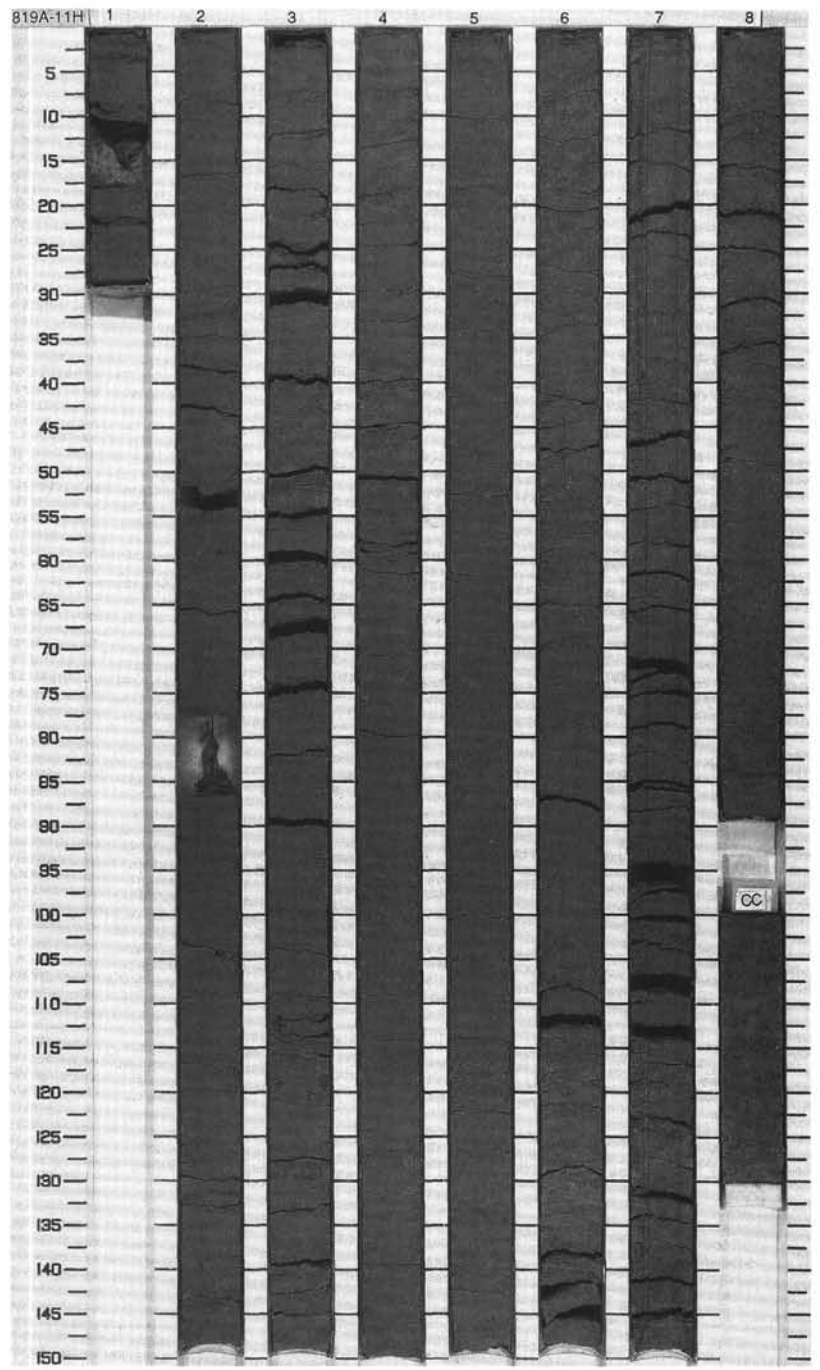


SITE 819 HOLE A CORE 10H CORED INTERVAL 84.5-94.0 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																				
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PLEISTOCENE																																																																			
N22 - N23																																																																			
CNI 3b																																																																			
						N			1	0.5	VOID				<p>CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS to NANNOFOSSIL CLAYSTONE</p> <p>Major lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS to un lithified NANNOFOSSIL CLAYSTONE. The color of the core fluctuates from gray (5Y 5/1) in Sections 1-3 and 6 to dark gray (5Y 4/1) in Sections 4-5 and 7-CC.</p> <p>Minor Lithology: Layers of several mm to 2 cm thickness, enriched in skeletal and siliciclastic silt and sand. In Section 4 silty layers are most abundant (20%) in this core. Voids due to gas expansion occur.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 120</td> <td>4, 7</td> <td>7, 103</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Bioclast</td> <td>15</td> <td>10</td> <td>17</td> </tr> <tr> <td>Clay</td> <td>15</td> <td>10</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>---</td> <td>10</td> <td>---</td> </tr> <tr> <td>Lithoclast</td> <td>---</td> <td>12</td> <td>---</td> </tr> <tr> <td>Nannofossils</td> <td>55</td> <td>30</td> <td>45</td> </tr> <tr> <td>Opalines</td> <td>---</td> <td>---</td> <td>3</td> </tr> <tr> <td>Phosphate</td> <td>---</td> <td>---</td> <td>5</td> </tr> <tr> <td>Quartz</td> <td>5</td> <td>10</td> <td>20</td> </tr> <tr> <td>Rock fragment</td> <td>9</td> <td>10</td> <td>---</td> </tr> <tr> <td>Spicules</td> <td>---</td> <td>5</td> <td>---</td> </tr> <tr> <td>Tunicate</td> <td>1</td> <td>3</td> <td>---</td> </tr> </table>		2, 120	4, 7	7, 103		D	M	D	Bioclast	15	10	17	Clay	15	10	10	Foraminifers	---	10	---	Lithoclast	---	12	---	Nannofossils	55	30	45	Opalines	---	---	3	Phosphate	---	---	5	Quartz	5	10	20	Rock fragment	9	10	---	Spicules	---	5	---	Tunicate	1	3	---
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						N	1.95%	50.4%	2	1.0																																																									
						N	1.95%	50.4%	3																																																										
						N	1.95%	50.4%	4																																																										
						N	1.95%	50.4%	5																																																										
						N	1.95%	50.4%	6																																																										
						N	1.95%	50.4%	7																																																										
						N	1.95%	50.4%	8																																																										
						N	1.95%	50.4%	CC																																																										

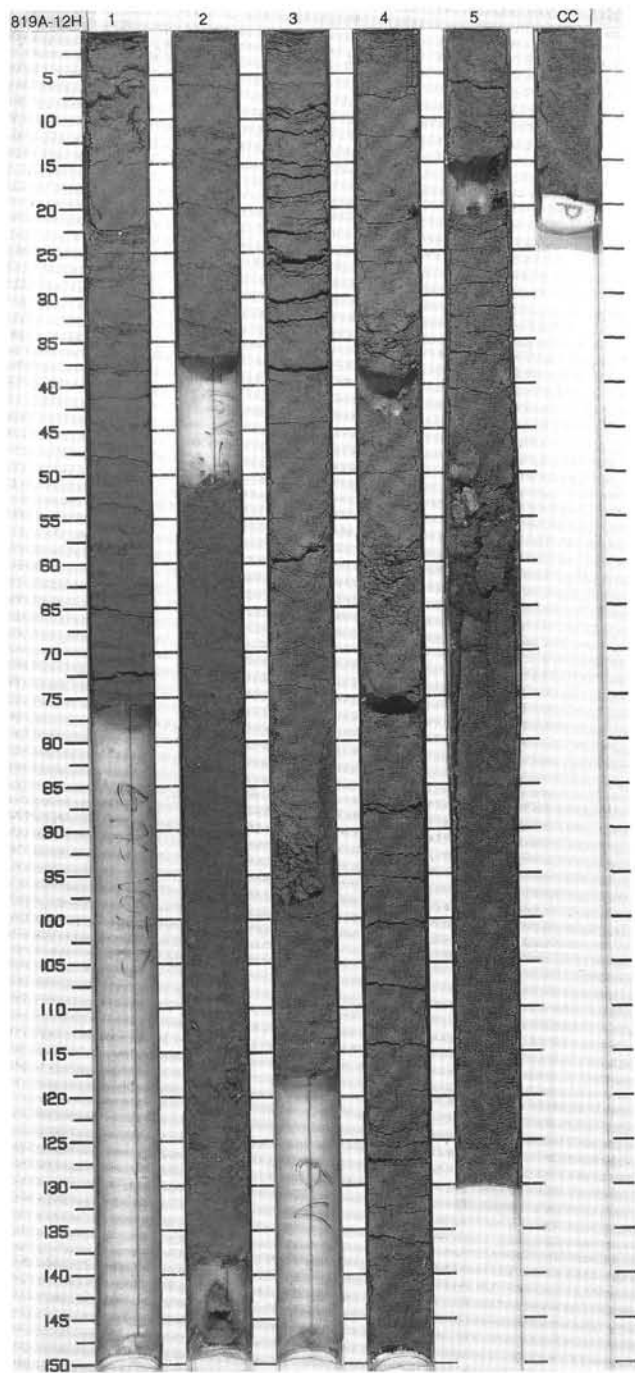


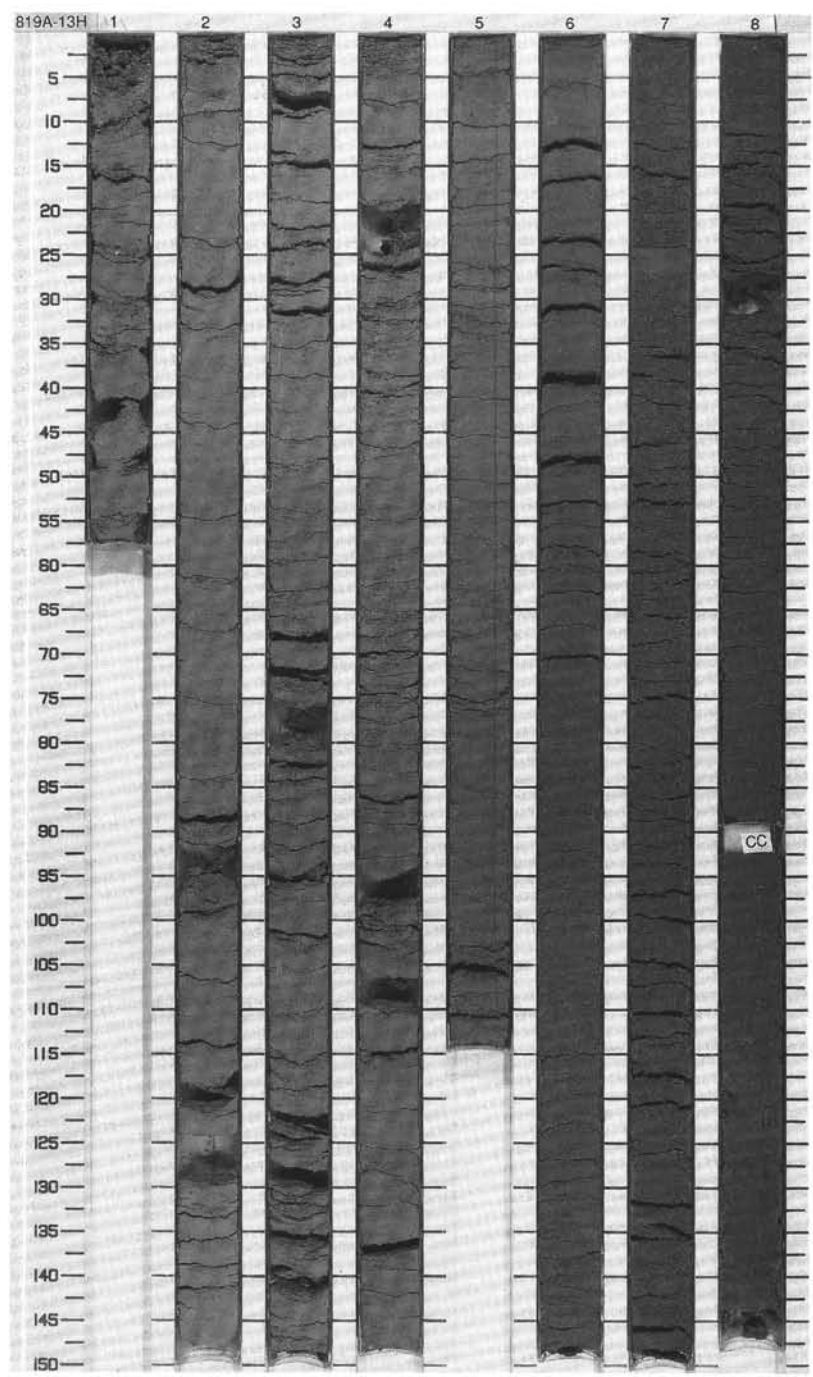
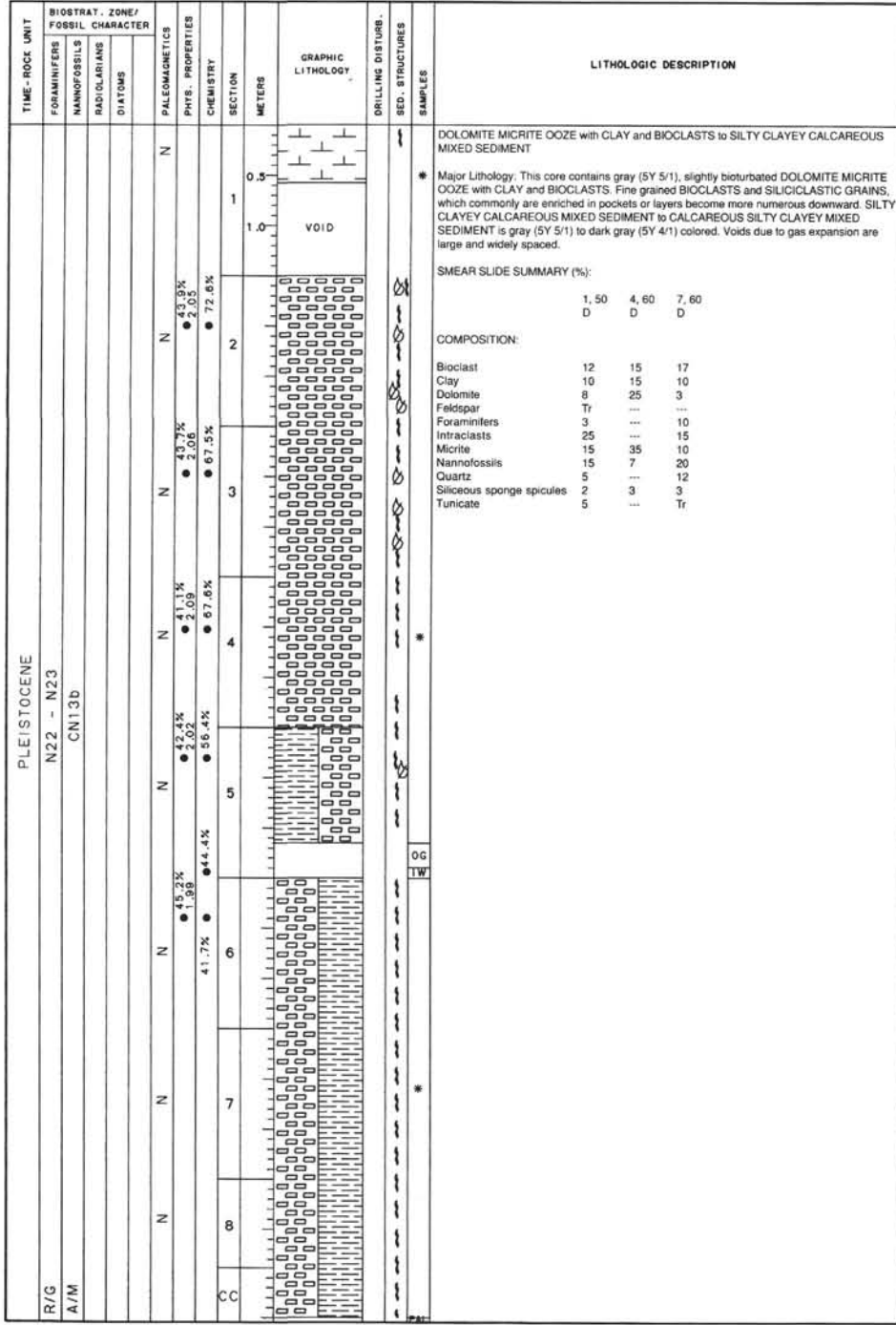
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	BED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS DIATOMS																																										
PLEISTOCENE													NANNOFOSSIL BIOCLAST OOZE to BIOCLAST NANNOFOSSIL OOZE Major Lithology: BIOCLAST NANNOFOSSIL OOZE, dark gray (5Y 4/1) in Sections 1-2 and light olive gray (5Y 6/2) in Sections 3-CC. The latter are richer in silt. BIOCLASTS are scattered throughout. Bioturbation is minor. Minor Lithology: SILTY to SANDY layers of 1-2 cm thickness occur in Section 1-5. Voids due to gas expansion occur. SMEAR SLIDE SUMMARY (%): <table border="1"> <tr> <td></td> <td>2.89</td> <td>6.51</td> <td>8.10</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> COMPOSITION: <table border="1"> <tr> <td>Bioclast</td> <td>35</td> <td>30</td> <td>15</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>10</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>3</td> <td>5</td> <td>-</td> </tr> <tr> <td>Nannofossils</td> <td>32</td> <td>50</td> <td>45</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>5</td> <td>25</td> </tr> <tr> <td>Spicules</td> <td>-</td> <td>-</td> <td>5</td> </tr> </table>		2.89	6.51	8.10	D	D	D	D	Bioclast	35	30	15	Clay	10	10	10	Foraminifers	3	5	-	Nannofossils	32	50	45	Quartz	15	5	25	Spicules	-	-	5
	2.89	6.51	8.10																																										
D	D	D	D																																										
Bioclast	35	30	15																																										
Clay	10	10	10																																										
Foraminifers	3	5	-																																										
Nannofossils	32	50	45																																										
Quartz	15	5	25																																										
Spicules	-	-	5																																										
N22 - N23				N	52.6%	1.88	1	0.5	VOID																																				
CN13b				N	51.6%	1.95	2	1.0																																					
				N	57.6%	1.92	3																																						
				N	50.6%	1.92	4																																						
				N	50.9%	1.92	5																																						
				N	51.2%	1.87	6																																						
				N	58.7%	1.87	7																																						
				N	65.4%	1.88	8																																						
				N	64.6%	1.88	9																																						
				N	48.4%	2.00	10																																						
				N	66.0%	1.88	11																																						
				N			12																																						
C/G							13																																						
A/G							14																																						



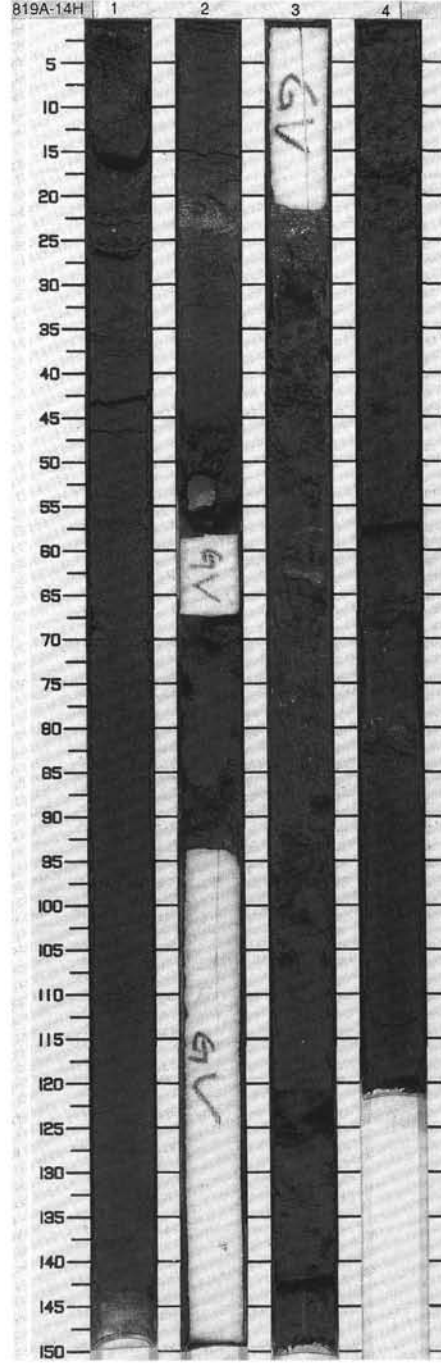
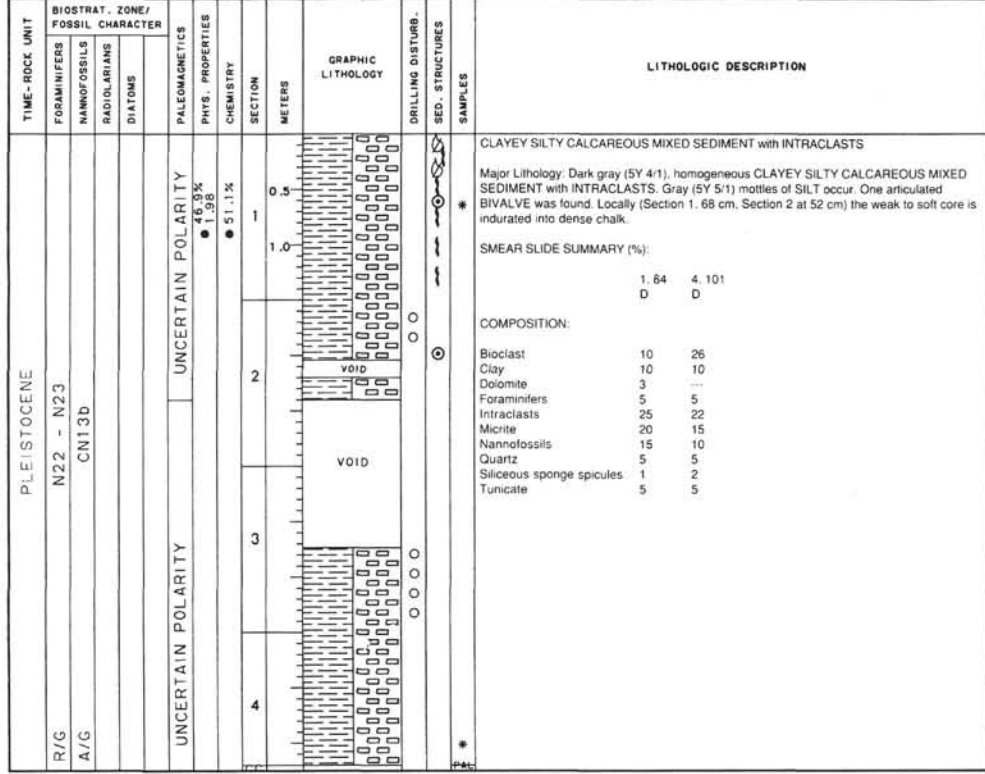
SITE 819 HOLE A CORE 12H CORED INTERVAL 103.5-111.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	BED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
PLEISTOCENE														
C/G	N22 - N23													
A/M	CN13b													
					N	46.9% 2.00	57.1%		0.5					
					N	44.3% 1.88	54.5%		1.0	VOID				
					N	46.3% 2.06	68.1%		2.0	VOID				
					N	48.4% 1.88	85.3%		3.0	VOID				
					N	51.4% 2.00	85.0%		4.0					
					N				5.0					
									CC					





SITE 819 HOLE A CORE 14H CORED INTERVAL 120.5-123.0 mbsf



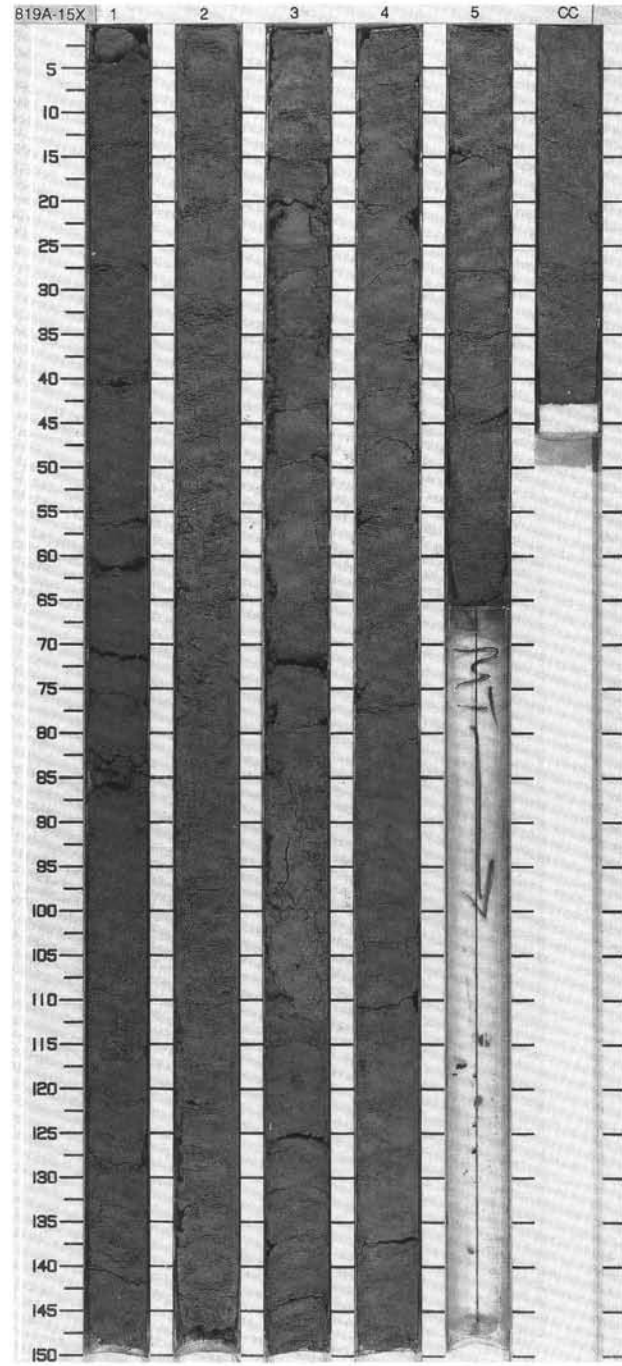
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SEP. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS								
PLEISTOCENE	N22 - N23				N	48.8% 1.9%	58.8%	0.5	[Lithology symbols]	[Disturbance symbols]	*	CLAYEY NANNOFOSSILS OOZE to CLAYEY CALCAREOUS OOZE with NANNOFOSSILS, BIOCLASTS and LITHOCLASTS
	CNI3b							R				
					N	47.9% 1.9%	72.4%		2.0			
								R	47.3% 1.9%	52.0%	3.0	
					N	44.5% 2.0%	67.4%				4.0	
				N				44.5% 2.0%	67.4%	5.0		
R/P										CC		
A/M												

SMEAR SLIDE SUMMARY (%):

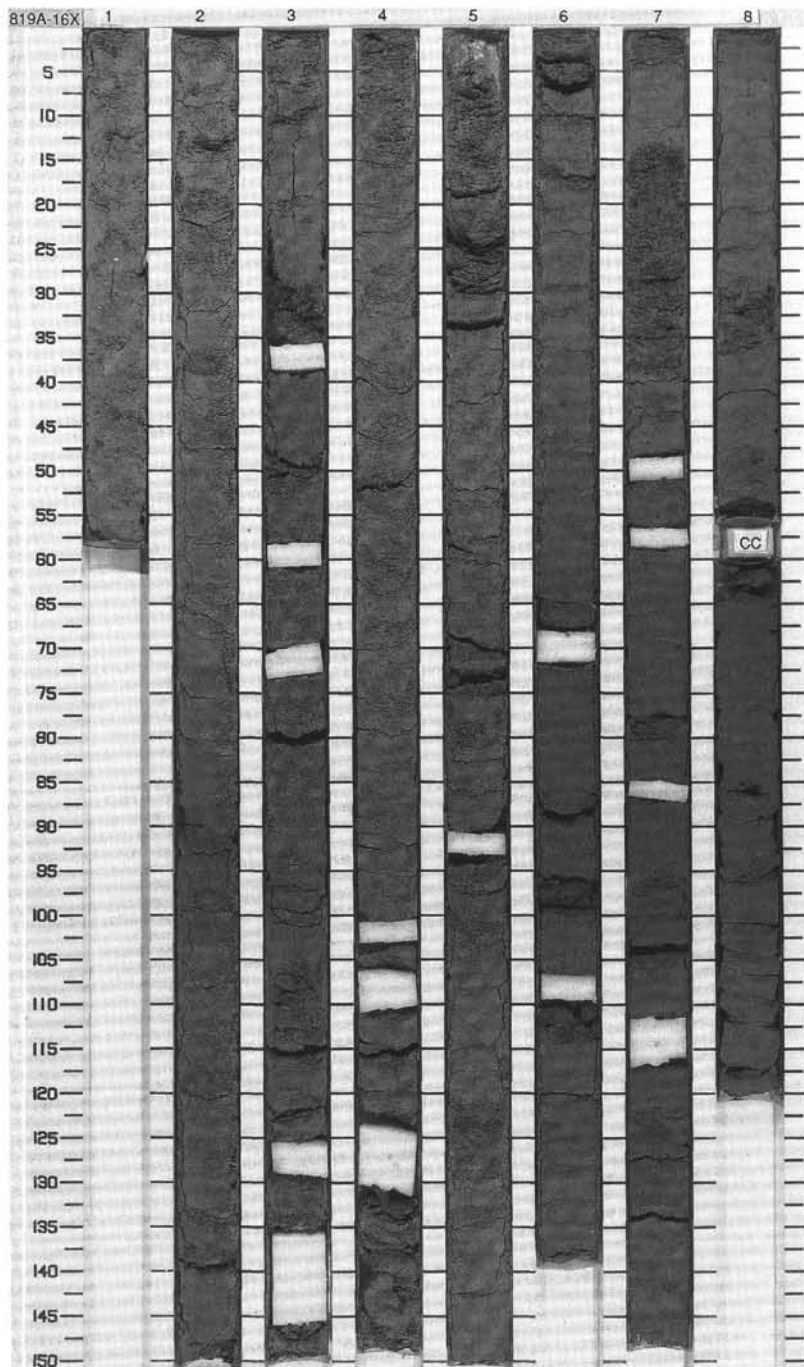
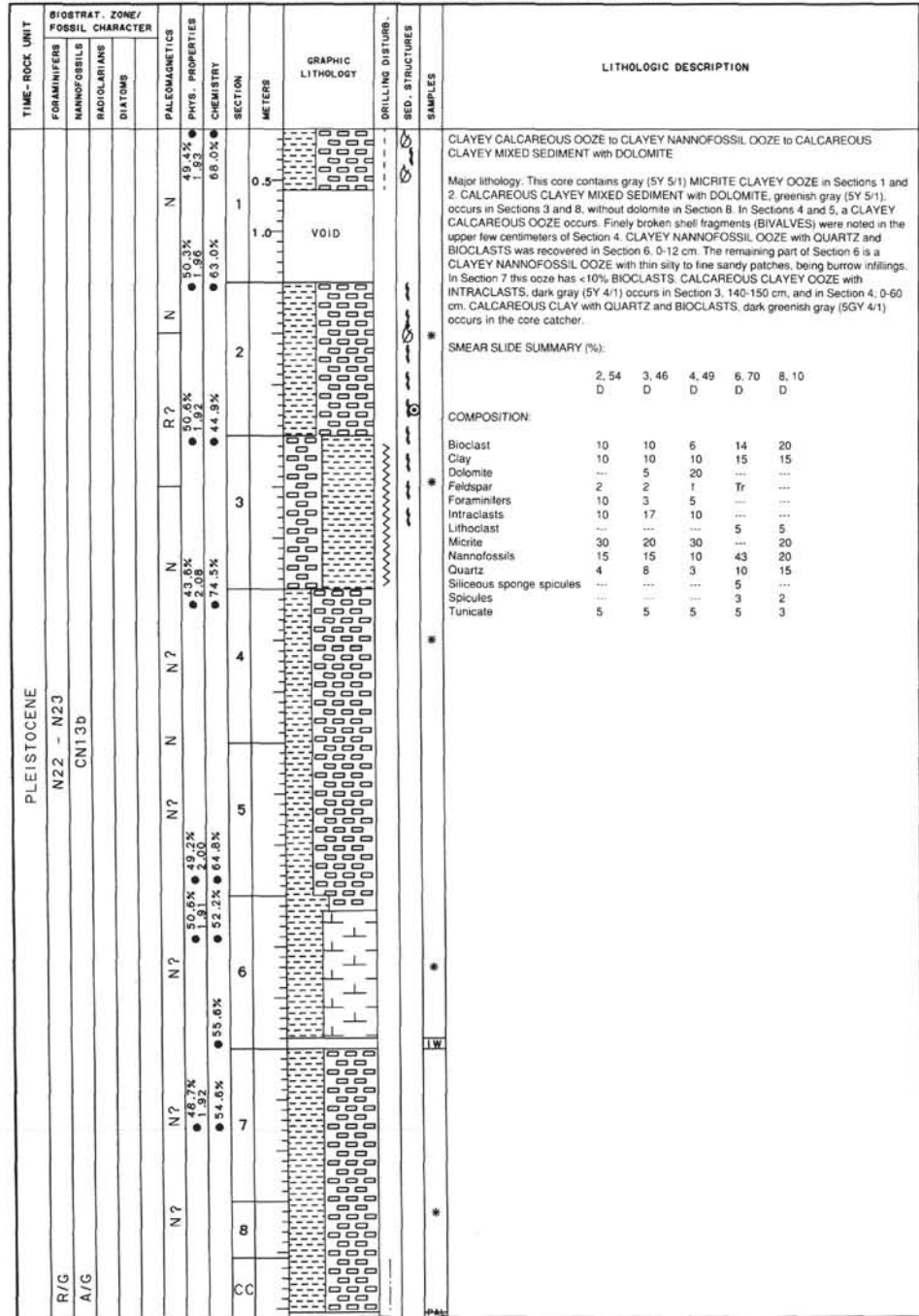
	1.23	1.117	4.90
D	D	D	D

COMPOSITION:

Bioclast	20	10	15
Clay	10	10	10
Dolomite	5	---	5
Feldspar	---	3	2
Foraminifers	10	5	10
Intraclasts	15	10	14
Micrite	15	13	10
Nannofossils	10	30	20
Quartz	5	7	5
Rock fragment	2	---	---
Siliceous sponge spicules	3	5	2
Tunicate	5	7	5

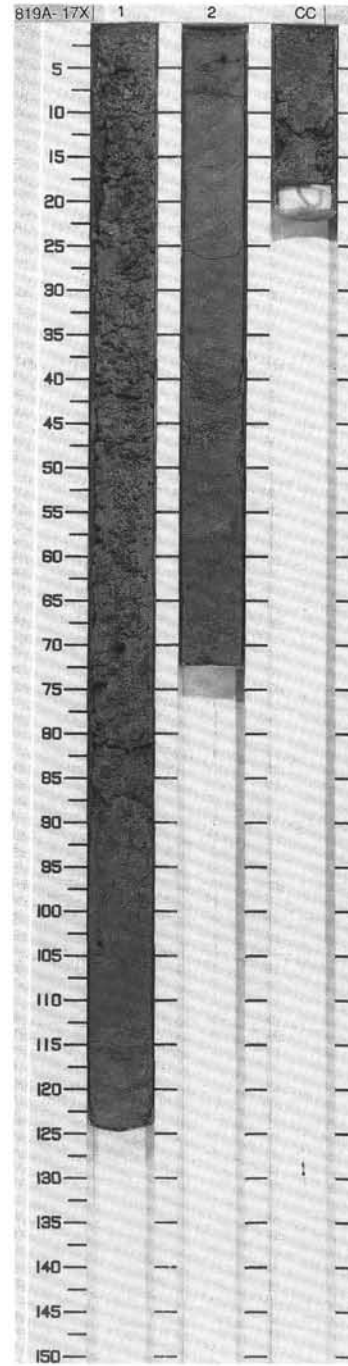


SITE 819 HOLE A CORE 16X CORED INTERVAL 130.4-140.1 mbsf



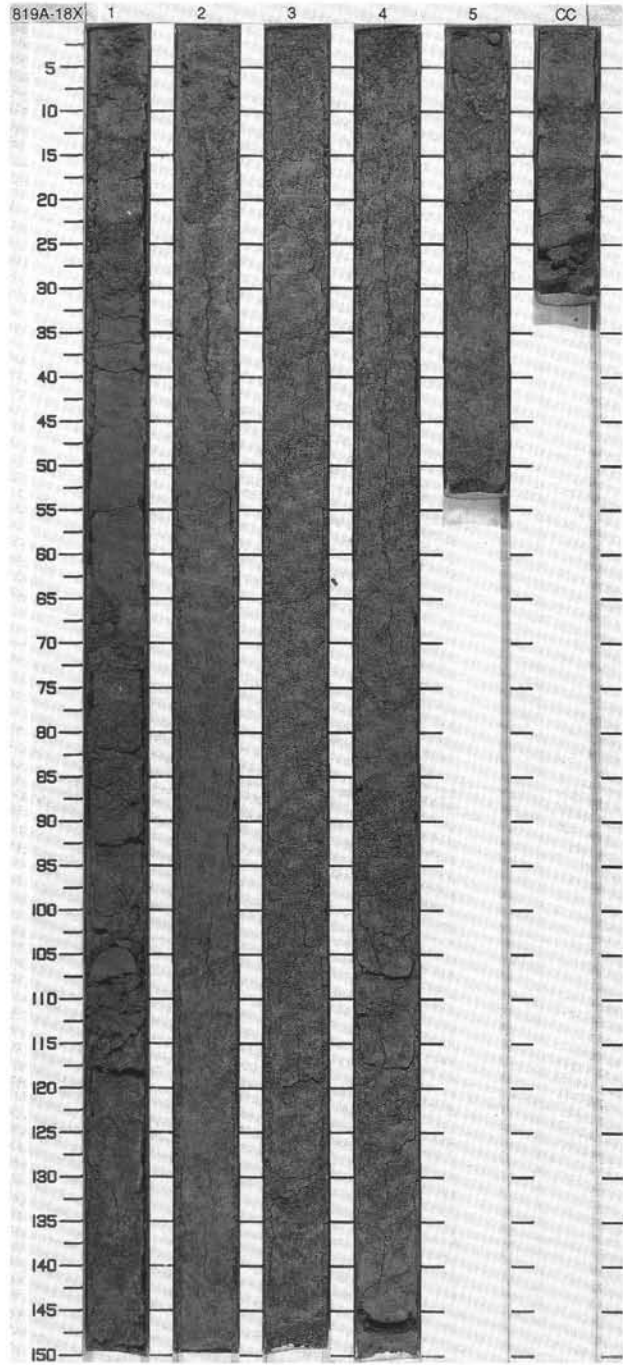


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																				
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS										DIATOMS																																																			
PLEISTOCENE	R/G	N22 - N23										<p>CLAYEY MICRITE MIXED SEDIMENT to MICRITE CLAYEY MIXED SEDIMENT</p> <p>Major Lithology: Greenish gray (5GY 5/1) MICRITE CLAYEY MIXED SEDIMENT or CLAYEY MICRITE MIXED SEDIMENT with rhythmical bedding (2 cm cycles) in Section 2, 0-40 cm. Detrital DOLOMITE occurs.</p> <p>Minor Lithology: Dark greenish gray (5GY 4/1) MICRITE CLAYEY OOZE with NANNOFOSSILS occurs in Section 2, 45-62 cm. Siltier beds with lighter color and normal grading occur.</p> <p>* SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 122</td> <td>2, 56</td> <td>2, 60</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>* COMPOSITION:</p> <table border="1"> <tr> <td>Bioclast</td> <td>10</td> <td>5</td> <td>8</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>10</td> <td>---</td> </tr> <tr> <td>Dolomite</td> <td>15</td> <td>10</td> <td>---</td> </tr> <tr> <td>Feldspar</td> <td>Tr</td> <td>---</td> <td>---</td> </tr> <tr> <td>Foraminifers</td> <td>5</td> <td>5</td> <td>10</td> </tr> <tr> <td>Intraclasts</td> <td>15</td> <td>10</td> <td>9</td> </tr> <tr> <td>Micrite</td> <td>21</td> <td>30</td> <td>30</td> </tr> <tr> <td>Nannofossils</td> <td>15</td> <td>20</td> <td>20</td> </tr> <tr> <td>Quartz</td> <td>6</td> <td>10</td> <td>10</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>---</td> <td>---</td> <td>3</td> </tr> <tr> <td>Tunicate</td> <td>3</td> <td>---</td> <td>5</td> </tr> </table>		1, 122	2, 56	2, 60		D	D	D	Bioclast	10	5	8	Clay	10	10	---	Dolomite	15	10	---	Feldspar	Tr	---	---	Foraminifers	5	5	10	Intraclasts	15	10	9	Micrite	21	30	30	Nannofossils	15	20	20	Quartz	6	10	10	Siliceous sponge spicules	---	---	3	Tunicate	3	---	5
	1, 122	2, 56	2, 60																																																													
	D	D	D																																																													
Bioclast	10	5	8																																																													
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Dolomite	15	10	---																																																													
Feldspar	Tr	---	---																																																													
Foraminifers	5	5	10																																																													
Intraclasts	15	10	9																																																													
Micrite	21	30	30																																																													
Nannofossils	15	20	20																																																													
Quartz	6	10	10																																																													
Siliceous sponge spicules	---	---	3																																																													
Tunicate	3	---	5																																																													
	A/G	CN13b																																																														
				UNCERTAIN POLARITY	43.0% ● 2, 14																																																											
					62.4% ●	54.7% ●																																																										

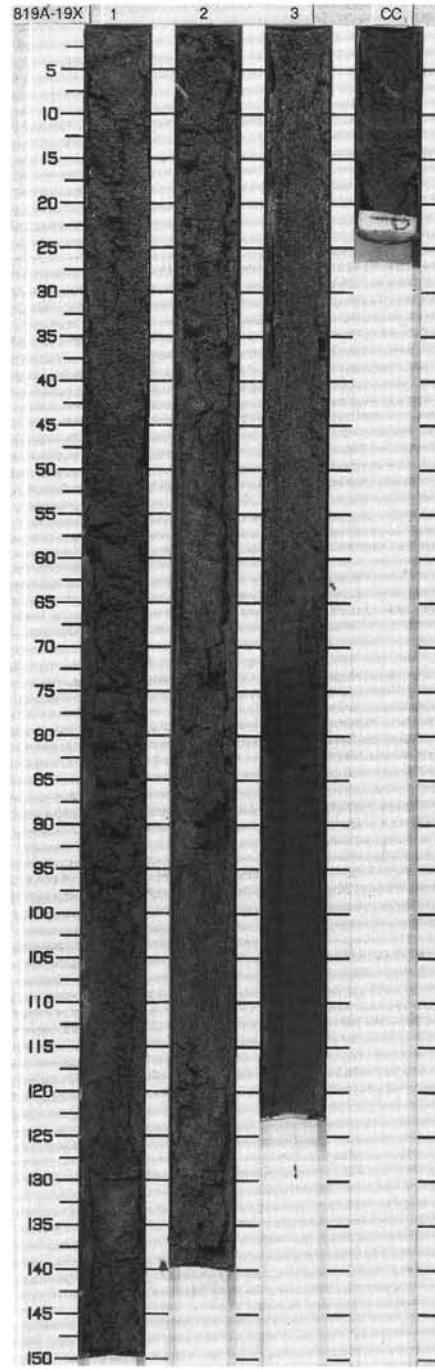


SITE 819 HOLE A CORE 18X CORED INTERVAL 149.7-159.4 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS		PHYS. PROPERTIES		CHEMISTRY		SECTION		METERS		GRAPHIC LITHOLOGY		DRILLING DISTURB.		SED. STRUCTURES		SAMPLES		LITHOLOGIC DESCRIPTION	
TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADICULARIANS	DIAATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION									
PLEISTOCENE	N22 - N23	CN13b			UNCERTAIN POLARITY	47.6% 1.96	59.1%	1	0.5	[Symbol]				CALCAREOUS CHALK with SILICICLASTIC GRAINS									
R/P					45.3% 2.13	73.6%	2	1.0	[Symbol]					* Major Lithology: Gray (5GY 5/1), moderately lithified CALCAREOUS CHALK with SILICICLASTIC GRAINS.									
A/P					46.6% 2.04	73.85%	3		[Symbol]					Minor Lithology (Section 1: 0-60 cm): Dark greenish gray (5GY 4/1), firm to partially lithified CLAYEY CALCAREOUS OOZE.									
					43.6% 2.08	73.85%	4		[Symbol]					SMEAR SLIDE SUMMARY (%):									
					75.1%	72.2%	5		[Symbol]					1.40 3.75									
							CC		[Symbol]					D D									
									[Symbol]					COMPOSITION:									
									[Symbol]					Bioclast 12 12									
									[Symbol]					Clay 15 -									
									[Symbol]					Dolomite 5 5									
									[Symbol]					Foraminifers 3 3									
									[Symbol]					Inorganic calcite - 35									
									[Symbol]					Lithoclast 2 -									
									[Symbol]					Micrite 10 -									
									[Symbol]					Nannofossils 35 30									
									[Symbol]					Quartz 18 15									

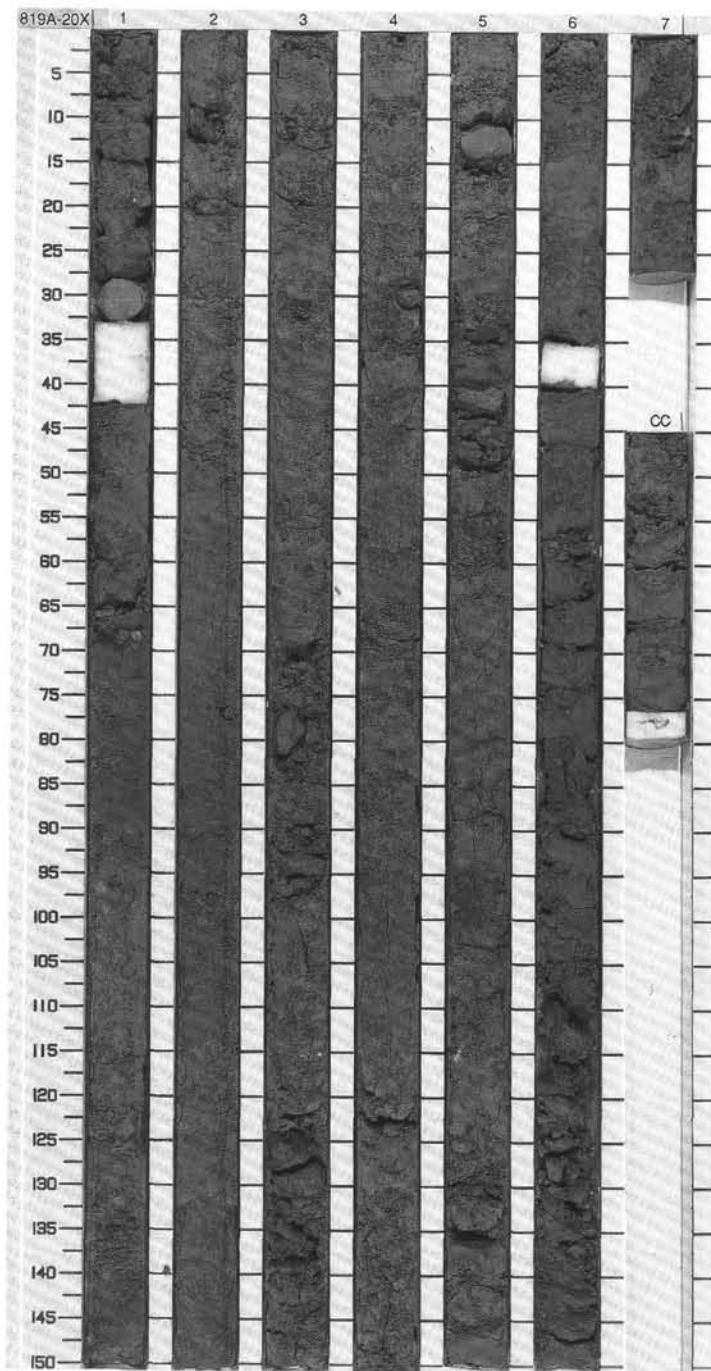


TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																								
R/P	A/P	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONS																																																		
PLEISTOCENE		N22 - N23 CN13b				R?	58.8% ● 1.78	72.1% ●	1	0.5 1.0					CLAYEY MICRITE NANNOFOSSIL OOZE to MICRITE CLAYEY NANNOFOSSIL OOZE  Major lithology: This core contains a highly disturbed (by drilling), greenish gray 5GY 5/1 CLAYEY MICRITE NANNOFOSSIL OOZE. The sediment is firm. The silt and sand size fraction are dominantly carbonate grains. A dark greenish gray (5GY 4/1) MICRITE CLAYEY NANNOFOSSIL OOZE occurs in Section 3. 70-122 cm, already firm.  SMEAR SLIDE SUMMARY (%): <table style="margin-left: 20px;"> <tr> <td></td> <td>1.65</td> <td>2.130</td> <td>3.99</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> COMPOSITION: <table style="margin-left: 20px;"> <tr> <td>Bioclast</td> <td>26</td> <td>12</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>12</td> <td>15</td> <td>20</td> </tr> <tr> <td>Foraminifers</td> <td>10</td> <td>6</td> <td>3</td> </tr> <tr> <td>Inorganic calcite</td> <td>---</td> <td>10</td> <td>20</td> </tr> <tr> <td>Lithoclast</td> <td>10</td> <td>5</td> <td>---</td> </tr> <tr> <td>Nannofossils</td> <td>30</td> <td>40</td> <td>32</td> </tr> <tr> <td>* Siliceous fragments</td> <td>10</td> <td>10</td> <td>15</td> </tr> <tr> <td>* Siliceous sponge spicules</td> <td>2</td> <td>2</td> <td>3</td> </tr> </table>		1.65	2.130	3.99	D	D	D	D	Bioclast	26	12	7	Clay	12	15	20	Foraminifers	10	6	3	Inorganic calcite	---	10	20	Lithoclast	10	5	---	Nannofossils	30	40	32	* Siliceous fragments	10	10	15	* Siliceous sponge spicules	2	2	3
	1.65	2.130	3.99																																																				
D	D	D	D																																																				
Bioclast	26	12	7																																																				
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* Siliceous sponge spicules	2	2	3																																																				
R/P	A/P					53.4% ● 1.90	72.2% ●	2																																															
								3																																															



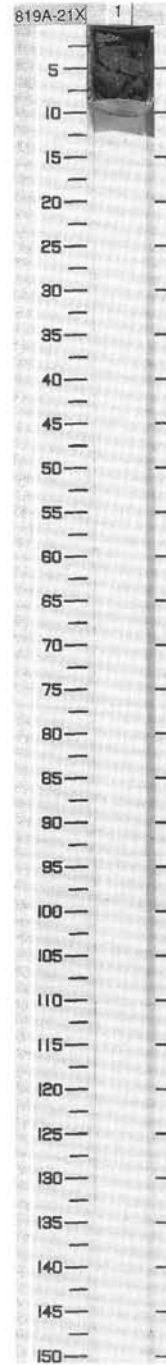
SITE 819 HOLE A CORE 20X CORED INTERVAL 169.1-178.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONES										
PLEISTOCENE														
R/P	N22 - N23													
C/P	CN13b													
	UNCERTAIN POLARITY													
					50.0% ● 1.92	76.1% ●			0.5					
					40.0% ● 2.15	78.5% ●			1.0					
					84.1% ● 1.86	69.1% ●			2					
					70.0% ●				3					
					49.8% ● 1.98	67.2% ●			4					
					32.2% ● 2.22	77.9% ●			5					
					44.8% ● 2.05	67.3% ●			6					
									7					
									CC					

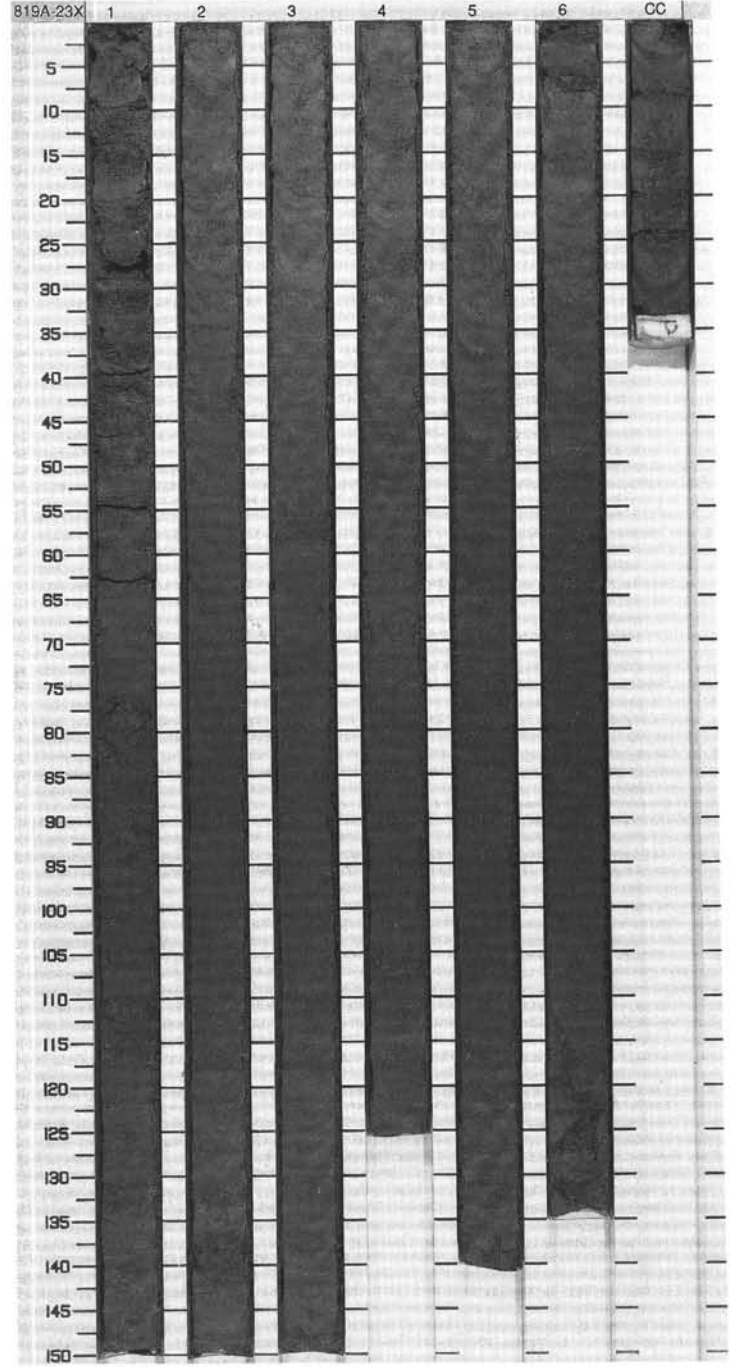
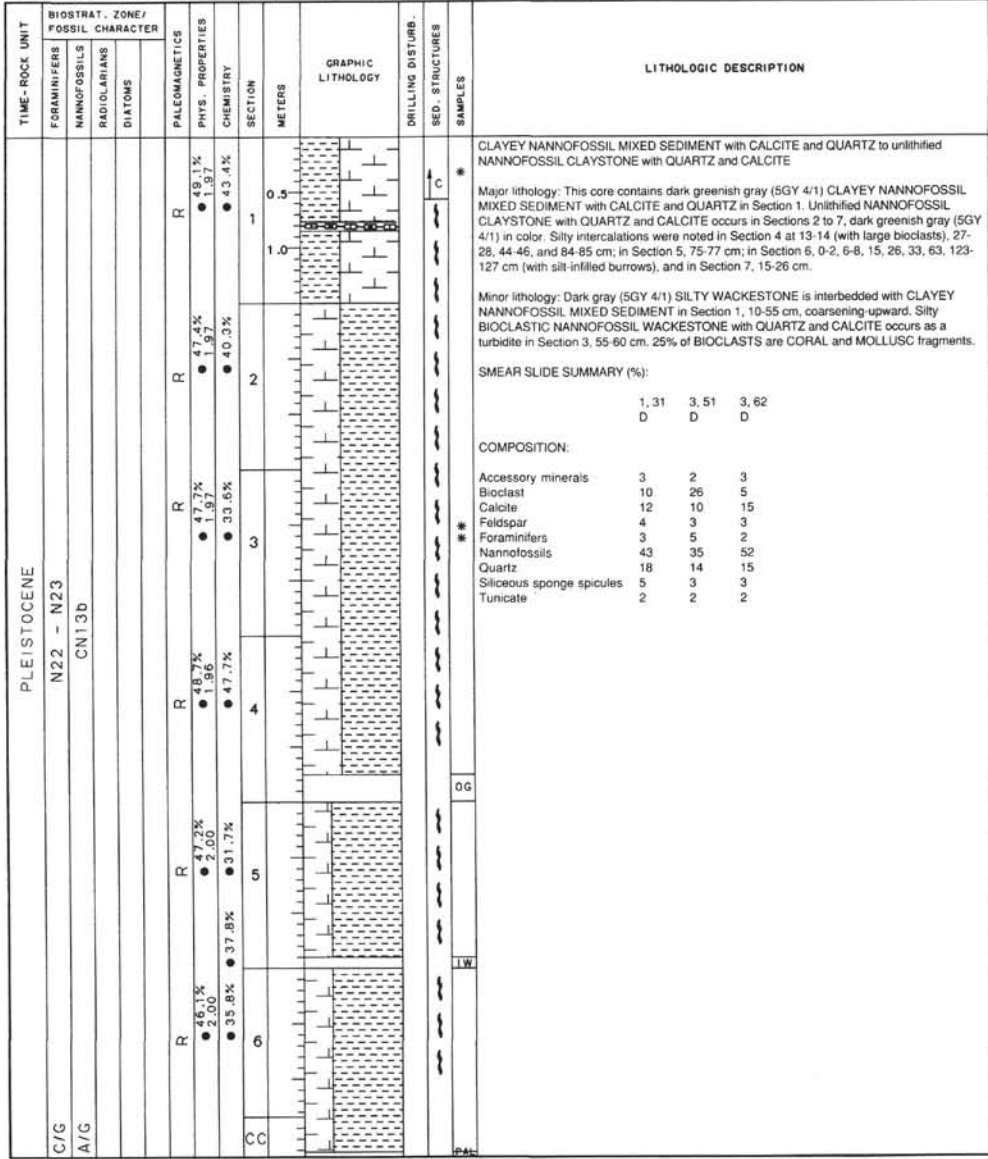


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
PLEISTOCENE N22 - N23 R/P CN13b A/M					NOT MEASURED		81.9%						CALCITE NANNOFOSSIL CHALK  Major lithology: This core contains a dark greenish gray (5GY 4:1) CALCITE NANNOFOSSIL CHALK. The sediment is well lithified (dolomite?) and contains several GASTROPODS

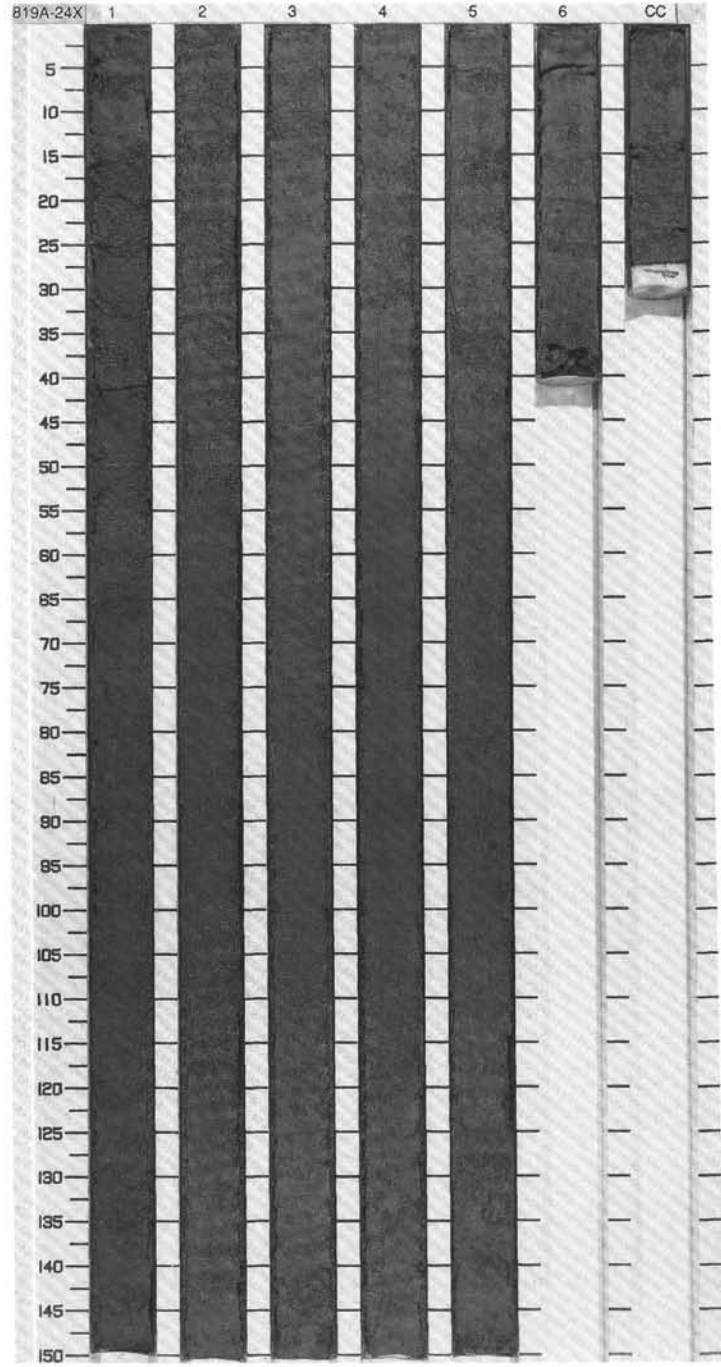
819A 22X NO RECOVERY



SITE 819 HOLE A CORE 23X CORED INTERVAL 198.1-207.4 mbsf



TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS																																																										
PLEISTOCENE																																																													
C/G	N22 - N23				48.3% ● 1.98	51.4% ● 1.98		0.5					CLAYEY NANNOFOSSIL CHALKY MIXED SEDIMENT with BIOCLASTS to CALCITE NANNOFOSSIL. CLAYEY CHALKY MIXED SEDIMENT  Major lithology: Dark greenish gray (SGY 4/1) CLAYEY NANNOFOSSIL CHALKY MIXED SEDIMENT with BIOCLASTS occurs in Section 1, with some silt intercalations (FORAMINIFERS, MICRITIZED BIOCLASTS, minor QUARTZ) to greenish gray (SGY 5/1) CALCITE NANNOFOSSIL CLAYEY CHALKY MIXED SEDIMENT with SILT. The silt is mainly calcareous, including micritized bioclasts. Calcareous silt fills burrows in Section 2 50 cm, Section 4, 86-90 cm, and Section 5, 30-40 cm. In Section 5 silty layers occur at 78-80, and 124-128 cm, as well as in Section 6, 15-25 cm. In Section 3, 8-11 cm a sand-sized CALCITE WACKESTONE/PACKSTONE occurs.  SMEAR SLIDE SUMMARY:  <table style="margin-left: 20px;"> <tr> <td></td> <td>1.75</td> <td>3.11</td> <td>5.32</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> COMPOSITION:  <table style="margin-left: 20px;"> <tr> <td>Accessory minerals</td> <td>2</td> <td>1</td> <td>3</td> </tr> <tr> <td>Bioclast</td> <td>15</td> <td>28</td> <td>15</td> </tr> <tr> <td>Calcite</td> <td>10</td> <td>12</td> <td>12</td> </tr> <tr> <td>Clay</td> <td>254</td> <td>25</td> <td>12</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Foraminifers</td> <td>5</td> <td>6</td> <td>4</td> </tr> <tr> <td>Nannofossils</td> <td>25</td> <td>30</td> <td>25</td> </tr> <tr> <td>Quartz</td> <td>10</td> <td>10</td> <td>9</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>4</td> <td>4</td> <td>3</td> </tr> <tr> <td>Tunicate</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table>		1.75	3.11	5.32	D	D	D	D	Accessory minerals	2	1	3	Bioclast	15	28	15	Calcite	10	12	12	Clay	254	25	12	Feldspar	2	2	2	Foraminifers	5	6	4	Nannofossils	25	30	25	Quartz	10	10	9	Siliceous sponge spicules	4	4	3	Tunicate	2	2	2
	1.75	3.11	5.32																																																										
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A/G	CN13b				46.3% ● 1.98	51.4% ● 1.98	1.0																																																						
					47.4% ● 1.98	47.7% ● 1.98	2																																																						
					46.0% ● 1.93	50.6% ● 1.93	3																																																						
					49.9% ● 1.97	56.5% ● 1.97	4																																																						
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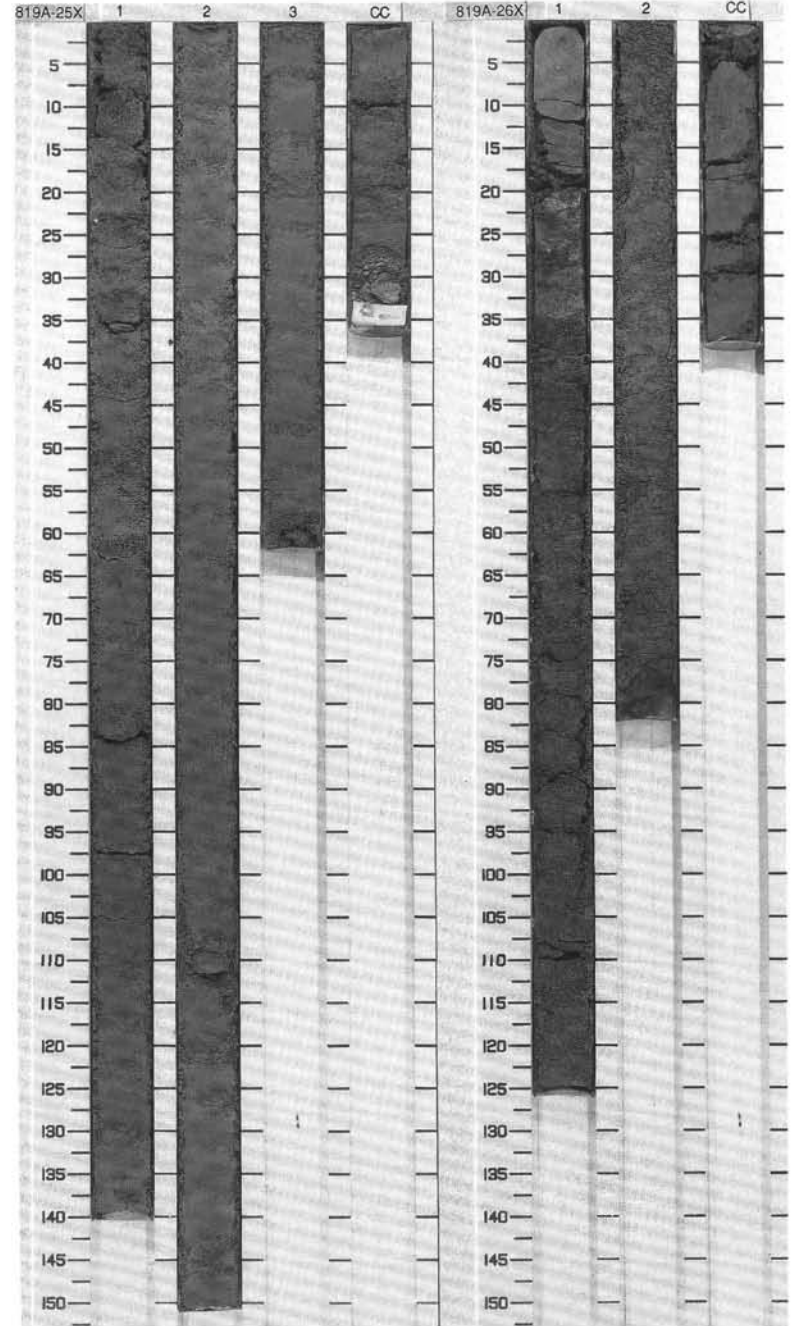


SITE 819 HOLE A CORE 25X CORED INTERVAL 217.0-221.7 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS		PHYS. PROPERTIES		SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
R/G	C/P	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	N	PHYS. PROPERTIES	CHEMISTRY								
		N22 - N23	CN13b				44.8% 2.03	61.9%	1	0.5					CLAYEY NANNOFOSSIL WACKESTONE with BIOCLASTS to CLAYEY NANNOFOSSIL MIXED SEDIMENT	
							44.7% 2.09	60.5%	2	1.0					Major lithology: This core contains CLAYEY NANNOFOSSIL WACKESTONE with BIOCLASTS, greenish gray (5GY 5/1) in color. The BIOCLASTS are reef-derived CORALS (alcyonarian), MOLLUSCS, BENTHIC FORAMINIFERS, and subordinate TUNICATE and CALCAREOUS SPICULES. The CLAYEY NANNOFOSSIL MIXED SEDIMENT is greenish gray (5GY 5/1).  Minor lithology: DOLOMITE nodule in Section 2, 110 cm. In the core catcher, 27-33 cm, a DOLOMITIC NANNOFOSSIL CHALK with CLAY occurs.	
							53.1%	53.1%	3						SMEAR SLIDE SUMMARY (%): 1, 73 CC, 27 D	
									CC						COMPOSITION: Accessory minerals 2 2 Bioclast 20 5 Calcite 11 --- Clay 20 20 Dolomite --- 15 Feldspar 3 1 Foraminifers 5 2 Inorganic calcite --- 13 Nannofossils 23 35 Quartz 10 6 Siliceous sponge spicules 3 --- Spicules --- 1 Tunicate 2 ---	

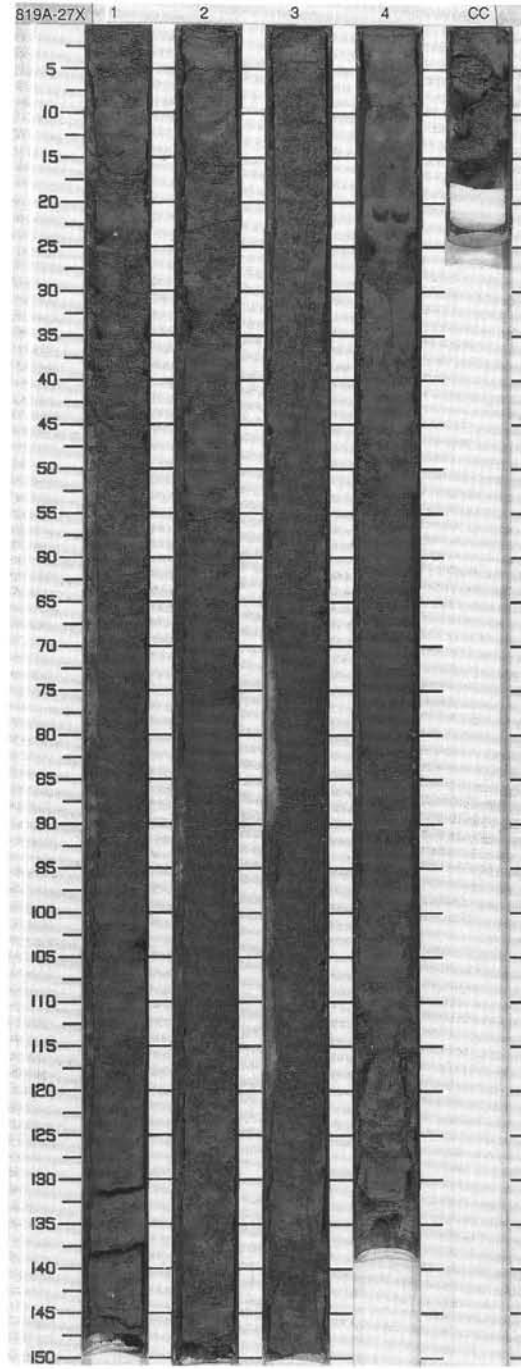
SITE 819 HOLE A CORE 26X CORED INTERVAL 221.7-226.3 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS		PHYS. PROPERTIES		SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
R/G	A/G	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	R	PHYS. PROPERTIES	CHEMISTRY								
		N22 - N23	CN13b				45.3% 4.03	63.1%	1	0.5					* CALCITE CLAYEY NANNOFOSSIL CHALK with BIOCLASTS to CLAYEY BIOCLASTIC NANNOFOSSIL WACKESTONE	
							48.2% 3.35	64.4%	2	1.0					Major lithology: This core contains CALCITE CLAYEY NANNOFOSSIL CHALK with BIOCLASTS, greenish gray (5GY 5/1) colored, to greenish gray (5GY 5/1) CLAYEY BIOCLASTIC NANNOFOSSIL WACKESTONE.	
							64.7%	64.4%	CC						SMEAR SLIDE SUMMARY (%): 1, 9 OG, 2, 44 D	
															COMPOSITION: Accessory minerals 2 1 Bioclast 12 25 Clay 15 18 Dolomite 12 --- Feldspar 2 2 Foraminifers 4 6 Inorganic calcite 20 8 Nannofossils 22 27 Quartz 6 7 Spicules 4 3 Tunicate 1 2	



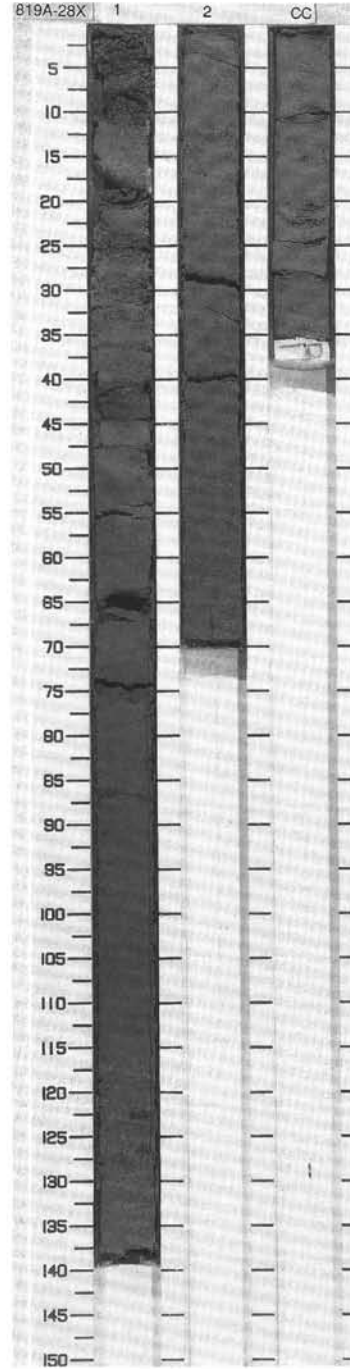


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
R/G	N22 - N23	R	44.2% 2.04	54.8%	1	0.5	[Lithology symbols]				BIOCLASTIC NANNOFOSSIL WACKESTONE with CLAY * Major lithology. This core contains BIOCLASTIC NANNOFOSSIL WACKESTONE with CLAY, greenish gray (5GY 5/1). The bioclasts are silt-sized. SMEAR SLIDE SUMMARY (%): 1.30 3.41 D D COMPOSITION: Bioclast 24 26 Clay 15 10 Feldspar 3 2 Foraminifers 7 5 Igneous rock fragments 1 1 Inorganic calcite 14 12 Micrite --- 6 Nannofossils 23 24 Quartz 7 7 Spicules 5 5 Tunicate 1 2
A/G	CN13b		45.3% 2.03	53.8%	2	1.0	[Lithology symbols]				
			44.8% 2.04	57.8%	3	1.0	[Lithology symbols]				
			54.8% 2.04	57.0%	4	1.0	[Lithology symbols]				
					CC		[Lithology symbols]				



SITE 819 HOLE A CORE 28X CORED INTERVAL 236.0-245.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																								
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																		
R/G	N22 - N23				R	● 47.3% ● 1.98	● 42.5% ● 2.02	1	0.5 1.0					<p>BIOCLASTIC WACKESTONE/CLAYSTONE to NANNOFOSSIL CLAYEY MIXED SEDIMENT with WACKESTONE intercalations</p> <p>Major lithology: This core contains NANNOFOSSIL CLAYEY MIXED SEDIMENT with thin, partially lithified WACKESTONE intercalations in Section 1 at 87-88 cm, and in Section 2 at 13, 17, 38, 47, 54, 57 cm. The color of the ooze is dark greenish gray (5GY 4/1).</p> <p>Minor lithology: Greenish gray (5GY 5/1) silty BIOCLASTIC NANNOFOSSIL WACKESTONE/CLAYSTONE in Section 1, 0-77 cm. The contact to the underlying lithology is gradational.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1.75</td> <td>2.41</td> <td>CC. 25</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Bioclast</td> <td>20</td> <td>15</td> <td>20</td> </tr> <tr> <td>Clay</td> <td>18</td> <td>20</td> <td>25</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Foraminifers</td> <td>8</td> <td>5</td> <td>7</td> </tr> <tr> <td>Igneous rock fragments</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Inorganic calcite</td> <td>2</td> <td>12</td> <td>Tr</td> </tr> <tr> <td>Micrite</td> <td>6</td> <td>6</td> <td>---</td> </tr> <tr> <td>Nannofossils</td> <td>28</td> <td>25</td> <td>27</td> </tr> <tr> <td>Quartz</td> <td>8</td> <td>8</td> <td>7</td> </tr> <tr> <td>Spicules</td> <td>5</td> <td>4</td> <td>5</td> </tr> <tr> <td>Tunicate</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Volcanic ash</td> <td>---</td> <td>---</td> <td>4</td> </tr> </table>		1.75	2.41	CC. 25		D	D	D	Bioclast	20	15	20	Clay	18	20	25	Feldspar	2	2	2	Foraminifers	8	5	7	Igneous rock fragments	1	1	1	Inorganic calcite	2	12	Tr	Micrite	6	6	---	Nannofossils	28	25	27	Quartz	8	8	7	Spicules	5	4	5	Tunicate	2	2	2	Volcanic ash	---	---	4
	1.75	2.41	CC. 25																																																																			
	D	D	D																																																																			
Bioclast	20	15	20																																																																			
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Spicules	5	4	5																																																																			
Tunicate	2	2	2																																																																			
Volcanic ash	---	---	4																																																																			
A/G	CN13b					● 44.5% ● 37.0%	● 51.85	2																																																														
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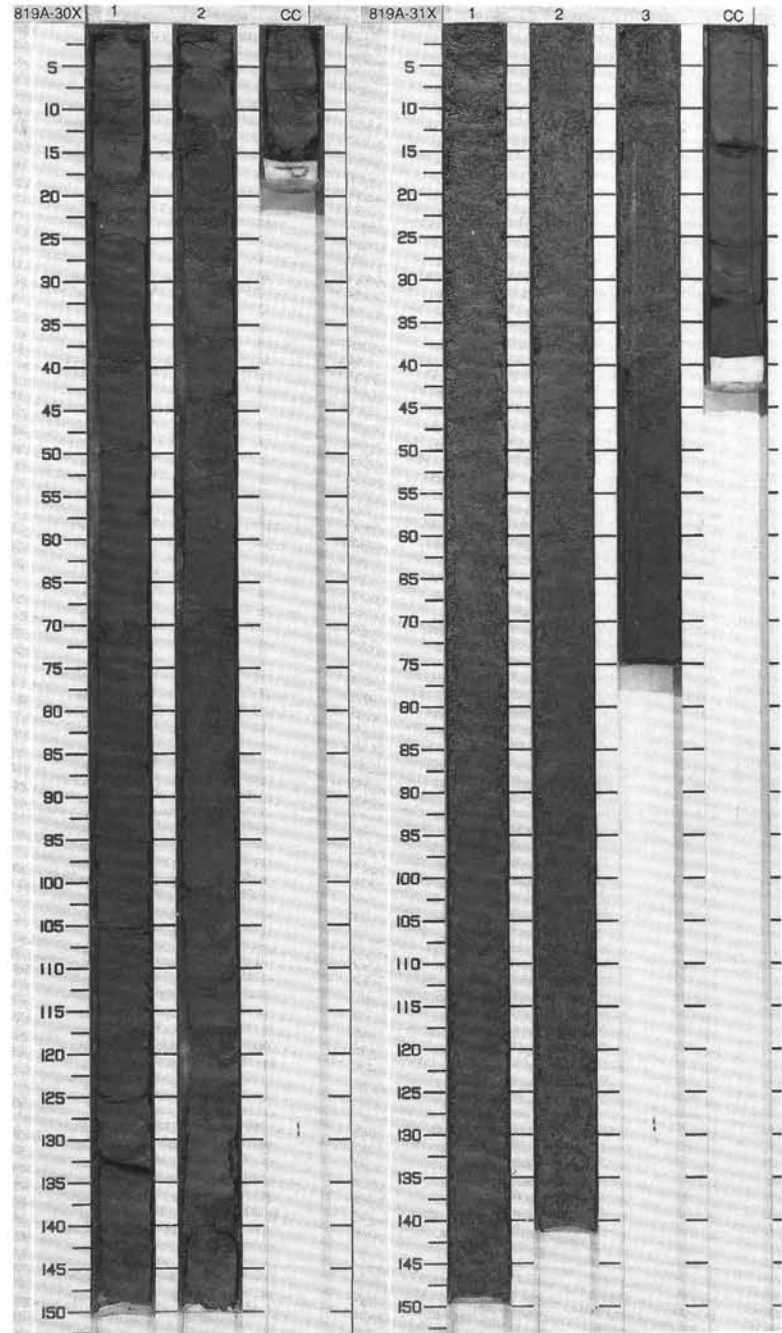


SITE 819 HOLE A CORE 30X CORED INTERVAL 255.3-264.9 mbsf

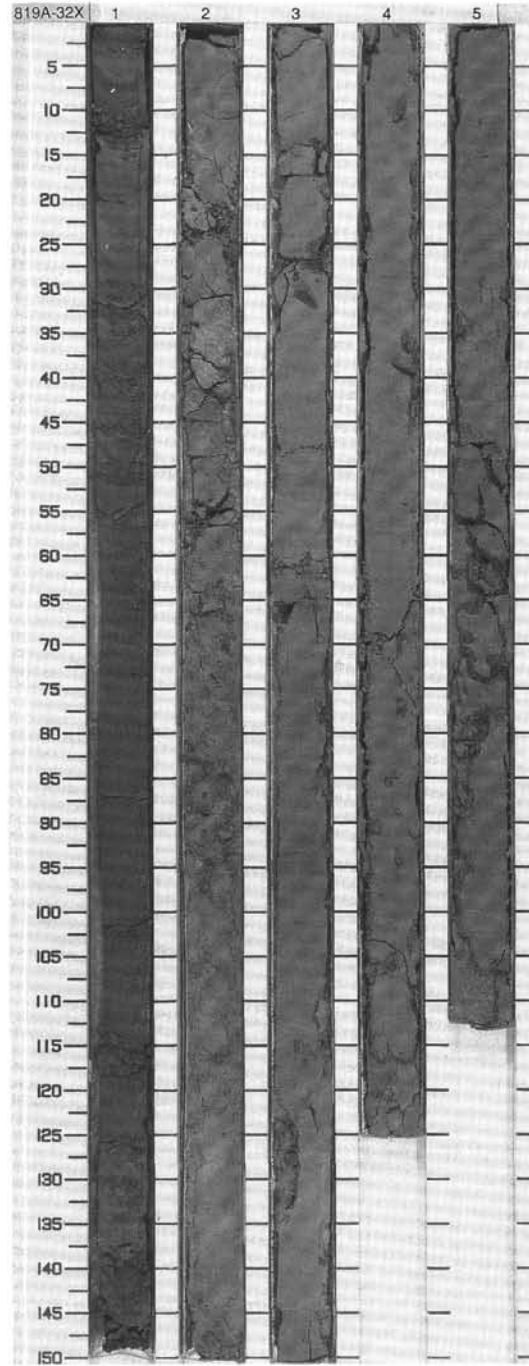
TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	FORAMINIFERS	NANNOFOSSILS										
R/G	N22 - N23	CN13b				R	45.8% 2.02	50.1%	1	0.5	[Lithology Diagram]				<p>BIOCLASTIC CHALK with NANNOFOSSILS and CALCAREOUS CLAYSTONE to NANNOFOSSIL BIOCLASTIC WACKESTONE with CLAY</p> <p>Major lithology: BIOCLASTIC CHALK with NANNOFOSSILS and CALCAREOUS CLAYSTONE, dark greenish gray (5GY 4/1), NANNOFOSSIL BIOCLASTIC WACKESTONE with CLAY is greenish gray (5GY 5/1). The calcareous silt to very fine sand consists of BIOCLASTS (CORALS, MOLLUSCS, BENTHIC FORAMINIFERS) and occurs as thin interlayered beds or as fillings of burrows.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p>1. 67 D</p> <p>COMPOSITION:</p> <p>Bioclast 25 Clay 26 Feldspar 2 Foraminifers 5 Igneous rock fragments 1 Inorganic calcite 11 Nannofossils 22 Quartz 2 Spicules 4 Tunicate 2</p>
A/G							44.1% 2.00	53.1% 44.2%	2	1.0	[Lithology Diagram]				
									CC						

SITE 819 HOLE A CORE 31X CORED INTERVAL 264.9-274.5 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	FORAMINIFERS	NANNOFOSSILS										
R/G	N22 - N23	CN13b				R	47.0% 1.98	63.3%	1	0.5	[Lithology Diagram]				<p>BIOCLASTIC NANNOFOSSIL CLAYEY WACKESTONE with CALCITE CRYSTALS</p> <p>Major lithology: This core contains a greenish gray (5GY 5/1) BIOCLASTIC NANNOFOSSIL CLAYEY WACKESTONE with CALCITE CRYSTALS.</p> <p>Minor lithology: Dark greenish gray (5GY 4/1) NANNOFOSSIL CLAYSTONE occurs in Section 3, 46-75 cm, and in the core catcher.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p>1. 85 CC. 21 D D</p> <p>TEXTURE:</p> <p>Sand 45 33 Silt 43 40 Clay 12 27</p> <p>COMPOSITION:</p> <p>Bioclast 25 15 Clay 18 25 Feldspar 1 1 Foraminifer 7 5 Igneous rock fragments 1 1 Inorganic calcite 10 10 Nannofossils 25 30 Quartz 7 6 Spicules 4 5 Tunicate 2 2</p>
A/G							46.5% 2.03	59.1%	2	1.0	[Lithology Diagram]				
							46.0% 2.03	35.2% 60.1%	3	0.5	[Lithology Diagram]				
									CC						

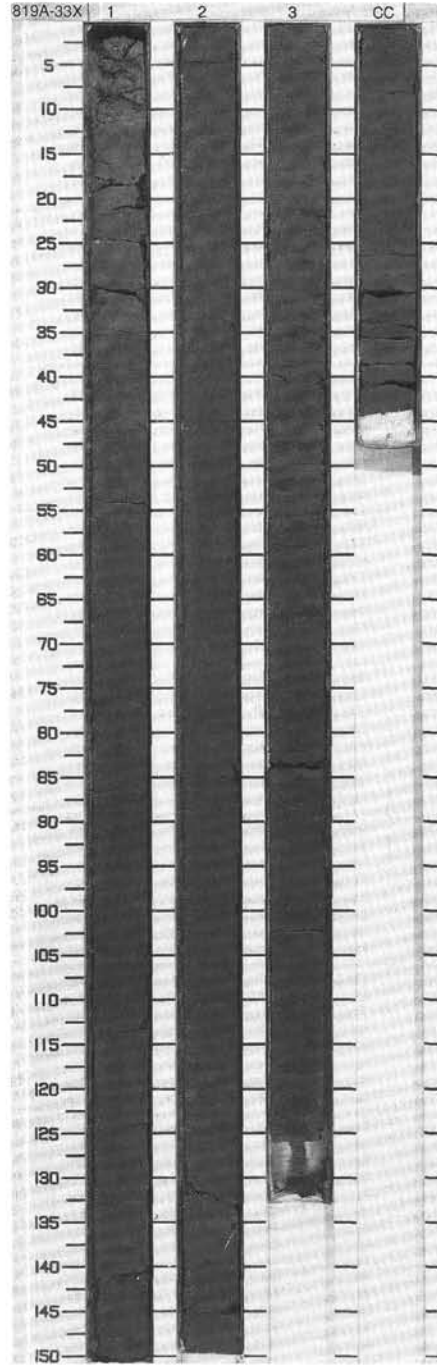


TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																										
R/G	N22 - N23			R	44.7% ● 2.01		1	0.5 1.0					CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS to partially lithified WACKESTONE/CLAYSTONE  Major Lithology: Dark greenish gray (5GY 4/1) CLAYEY NANNOFOSSIL MIXED SEDIMENT with small BIOCLAST FRAGMENTS in the top 100 cm, grading down to lighter-colored greenish gray (5GY 5/1), partially lithified WACKESTONE/CLAYSTONE with NANNOFOSSILS, MICRITE and BIOCLASTS. Wackestones are relatively coarser-grained than overlying ooze and display subhorizontal to wavy laminations, wispy laminae and moderate bioturbation.  SMEAR SLIDE SUMMARY (%): <table border="1"> <tr> <td></td> <td>1.95</td> <td>2.65</td> <td>5.52</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> TEXTURE: <table border="1"> <tr> <td>Sand</td> <td>34</td> <td>43</td> <td>50</td> </tr> <tr> <td>Silt</td> <td>41</td> <td>28</td> <td>30</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>29</td> <td>20</td> </tr> </table> COMPOSITION: <table border="1"> <tr> <td>Bioclast</td> <td>15</td> <td>15</td> <td>20</td> </tr> <tr> <td>Chert</td> <td>---</td> <td>2</td> <td>---</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>10</td> <td>---</td> </tr> <tr> <td>Dolomite</td> <td>---</td> <td>---</td> <td>5</td> </tr> <tr> <td>Feldspar</td> <td>1</td> <td>1</td> <td>5</td> </tr> <tr> <td>Foraminifers</td> <td>6</td> <td>10</td> <td>5</td> </tr> <tr> <td>Igneous rock fragments</td> <td>1</td> <td>---</td> <td>---</td> </tr> <tr> <td>Inorganic calcite</td> <td>10</td> <td>---</td> <td>---</td> </tr> <tr> <td>Intraclasts</td> <td>---</td> <td>10</td> <td>10</td> </tr> <tr> <td>Micrite</td> <td>---</td> <td>18</td> <td>---</td> </tr> <tr> <td>Nannofossils</td> <td>29</td> <td>20</td> <td>20</td> </tr> <tr> <td>Quartz</td> <td>6</td> <td>6</td> <td>8</td> </tr> <tr> <td>Radiolarians</td> <td>---</td> <td>3</td> <td>---</td> </tr> <tr> <td>Spicules</td> <td>5</td> <td>---</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>2</td> <td>5</td> <td>5</td> </tr> </table>		1.95	2.65	5.52	D	D	D	D	Sand	34	43	50	Silt	41	28	30	Clay	25	29	20	Bioclast	15	15	20	Chert	---	2	---	Clay	25	10	---	Dolomite	---	---	5	Feldspar	1	1	5	Foraminifers	6	10	5	Igneous rock fragments	1	---	---	Inorganic calcite	10	---	---	Intraclasts	---	10	10	Micrite	---	18	---	Nannofossils	29	20	20	Quartz	6	6	8	Radiolarians	---	3	---	Spicules	5	---	2	Tunicate	2	5	5
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Spicules	5	---	2																																																																																										
Tunicate	2	5	5																																																																																										
A/G	CN13b			N	45.5% ● 2.04		2																																																																																						
				R	51.2% ● 1.86		3																																																																																						
				R	48.7% ● 1.95		4																																																																																						
				R	50.4% ● 1.94		5																																																																																						

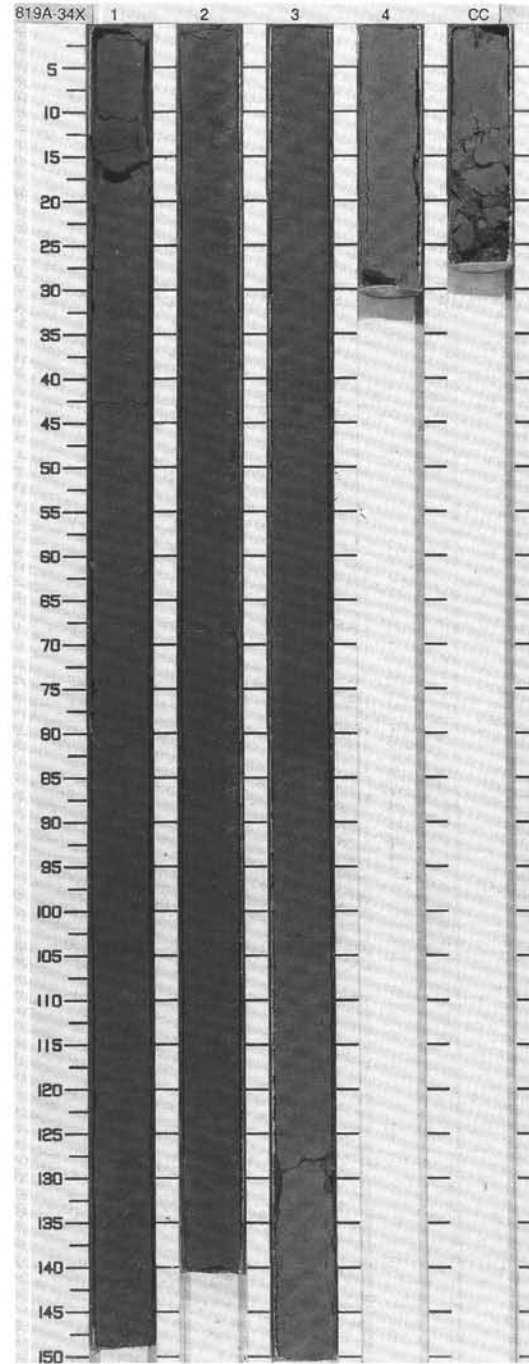


SITE 819 HOLE A CORE 33X CORED INTERVAL 284.2-293.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS		PHYS. PROPERTIES		CHEMISTRY		SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																													
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																										
R/G	N22 - N23				R		49.5%	46.1%	53.8%	31.6%	1	0.5					<p>SILTY CALCAREOUS CLAYSTONE</p> <p>Major Lithology: Dark greenish gray (5GY 4/1) SILTY CALCAREOUS CLAYSTONE. In Section 2, 0-90 cm, the sediment contains a mixture of QUARTZ and FELDSPAR, NANNOFOSSILS, BIVALVES and LITHOCLASTS. Section 2 shows 1 to 2 cm interbedding of WACKESTONE and CLAYEY CALCAREOUS SILTSTONE. Very small burrows show pyritized pelletal fabric.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1.72</td> <td>3.71</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>38</td> <td>36</td> </tr> <tr> <td>Silt</td> <td>48</td> <td>40</td> </tr> <tr> <td>Clay</td> <td>14</td> <td>24</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Bioclast</td> <td>17</td> <td>10</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>20</td> </tr> <tr> <td>Dolomite</td> <td>3</td> <td>1</td> </tr> <tr> <td>Feldspar</td> <td>3</td> <td>4</td> </tr> <tr> <td>Foraminifers</td> <td>5</td> <td>5</td> </tr> <tr> <td>Intraclasts</td> <td>15</td> <td>15</td> </tr> <tr> <td>Nannofossils</td> <td>15</td> <td>15</td> </tr> <tr> <td>Quartz</td> <td>25</td> <td>25</td> </tr> <tr> <td>Spicules</td> <td>2</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>5</td> <td>3</td> </tr> </table>		1.72	3.71	D	D	D	Sand	38	36	Silt	48	40	Clay	14	24	Bioclast	17	10	Clay	10	20	Dolomite	3	1	Feldspar	3	4	Foraminifers	5	5	Intraclasts	15	15	Nannofossils	15	15	Quartz	25	25	Spicules	2	2	Tunicate	5	3
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A/G	CN13b						1.99	1.99	1.86	33.2%	2	1.0																																																		
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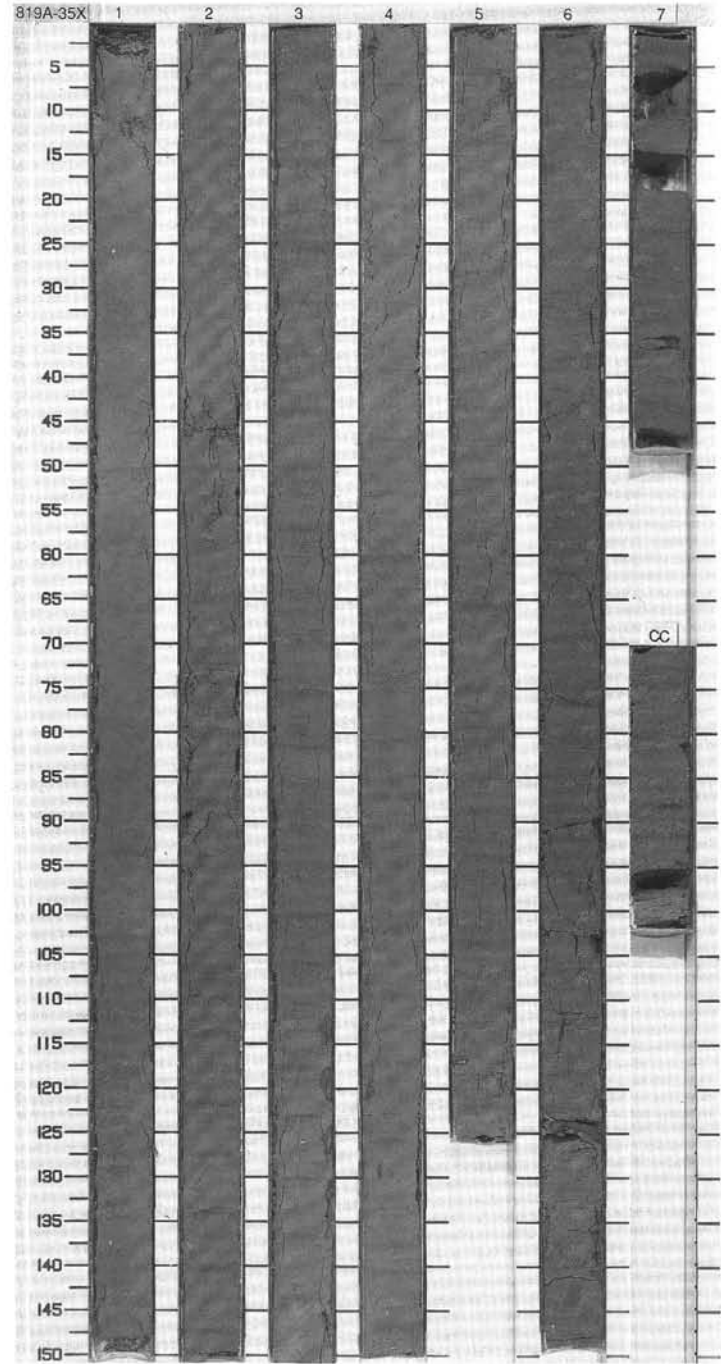


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																								
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																		
R/G	N22 - N23					● 44.7% ● 2.09	● 30.4%		0.5 1.0					SILTY CALCAREOUS CLAYSTONE to CLAYEY CALCAREOUS SILTSTONE  Major Lithology: Dark greenish gray (5GY 4/1) SILTY CALCAREOUS CLAYSTONE grades into a CLAYEY CALCAREOUS SILTSTONE. Both lithologies contain BIOCLASTS. Fine lamination was noted in Section 3, at 80-85 cm.  * SMEAR SLIDE SUMMARY (%): <table style="margin-left: 20px;"> <tr><td>1.94</td><td>3.96</td></tr> <tr><td>D</td><td>D</td></tr> </table> TEXTURE: Sand 59 70 Silt 20 20 Clay 21 10  COMPOSITION: <table style="margin-left: 20px;"> <tr><td>Bioclast</td><td>7</td><td>23</td></tr> <tr><td>Clay</td><td>10</td><td>---</td></tr> <tr><td>Dolomite</td><td>---</td><td>7</td></tr> <tr><td>Feldspar</td><td>4</td><td>1</td></tr> <tr><td>Foraminifers</td><td>5</td><td>10</td></tr> <tr><td>Intraclasts</td><td>10</td><td>13</td></tr> <tr><td>Micrite</td><td>11</td><td>10</td></tr> <tr><td>Nannofossils</td><td>20</td><td>20</td></tr> <tr><td>Opaques</td><td>1</td><td>1</td></tr> <tr><td>Quartz</td><td>25</td><td>10</td></tr> <tr><td>Spicules</td><td>3</td><td>---</td></tr> <tr><td>Tunicate</td><td>4</td><td>5</td></tr> </table>	1.94	3.96	D	D	Bioclast	7	23	Clay	10	---	Dolomite	---	7	Feldspar	4	1	Foraminifers	5	10	Intraclasts	10	13	Micrite	11	10	Nannofossils	20	20	Opaques	1	1	Quartz	25	10	Spicules	3	---	Tunicate	4	5
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A/G	CN13b					● 42.9% ● 2.10	● 53.2%	2																																														
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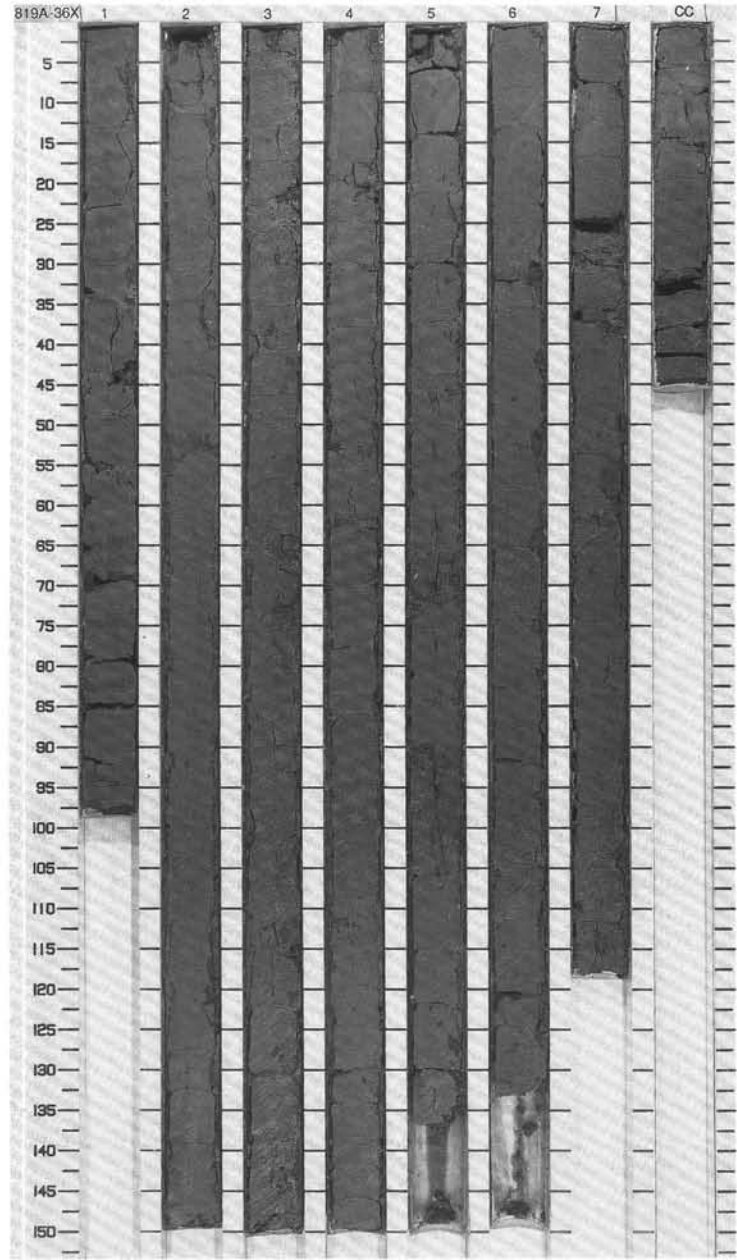
SITE 819 HOLE A CORE 35X CORED INTERVAL 303.5-313.2 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																													
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONS										PHYS. PROPERTIES																																												
R/G	N22 - N23			R	40.9% ● 2.1.4		0.5					<p>CLAYEY WACKESTONE with SILT</p> <p>Major Lithology: Bioturbated greenish gray (5GY 5/1), partially lithified, CLAYEY WACKESTONE containing NANNOFOSSILS, BIVALVES, LITHOCLASTS and SILICICLASTIC GRAINS. Wispy CLAY laminae are present.</p> <p>Minor Lithology: Sporadic interbed and burrow fill BIOCLASTIC PACKSTONES with silt- to sand-sized grains with a mixed NANNOFOSSIL and CLAY matrix. Sediments in Section 7 are finely laminated to wispy laminated.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table style="margin-left: 40px;"> <tr> <td></td> <td>3, 65</td> <td>6, 71</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table style="margin-left: 40px;"> <tr> <td>Bioclast</td> <td>10</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>10</td> </tr> <tr> <td>Collophane</td> <td>---</td> <td>2</td> </tr> <tr> <td>Dolomite</td> <td>7</td> <td>7</td> </tr> <tr> <td>Feldspar</td> <td>3</td> <td>2</td> </tr> <tr> <td>Foraminifers</td> <td>3</td> <td>7</td> </tr> <tr> <td>Glauconite</td> <td>---</td> <td>Tr</td> </tr> <tr> <td>Intraclasts</td> <td>30</td> <td>14</td> </tr> <tr> <td>Micrite</td> <td>10</td> <td>15</td> </tr> <tr> <td>* Nannofossils</td> <td>10</td> <td>20</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>10</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>2</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>5</td> <td>4</td> </tr> </table>		3, 65	6, 71	D	D	D	Bioclast	10	7	Clay	10	10	Collophane	---	2	Dolomite	7	7	Feldspar	3	2	Foraminifers	3	7	Glauconite	---	Tr	Intraclasts	30	14	Micrite	10	15	* Nannofossils	10	20	Quartz	2	10	Siliceous sponge spicules	2	2	Tunicate	5	4
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A/G	CN13b			N	39.5% ● 3.1.5		1.0																																																		
				R	48.8% ● 2.1.3		2.0																																																		
				R	65.4% ● 6.5.4		3.0																																																		
				R	15.1% ● 2.0.6		4.0																																																		
				R	64.9% ● 6.4.9		5.0																																																		
				R	40.3% ● 2.1.4		6.0																																																		
				R	61.7% ● 6.1.7		7.0																																																		
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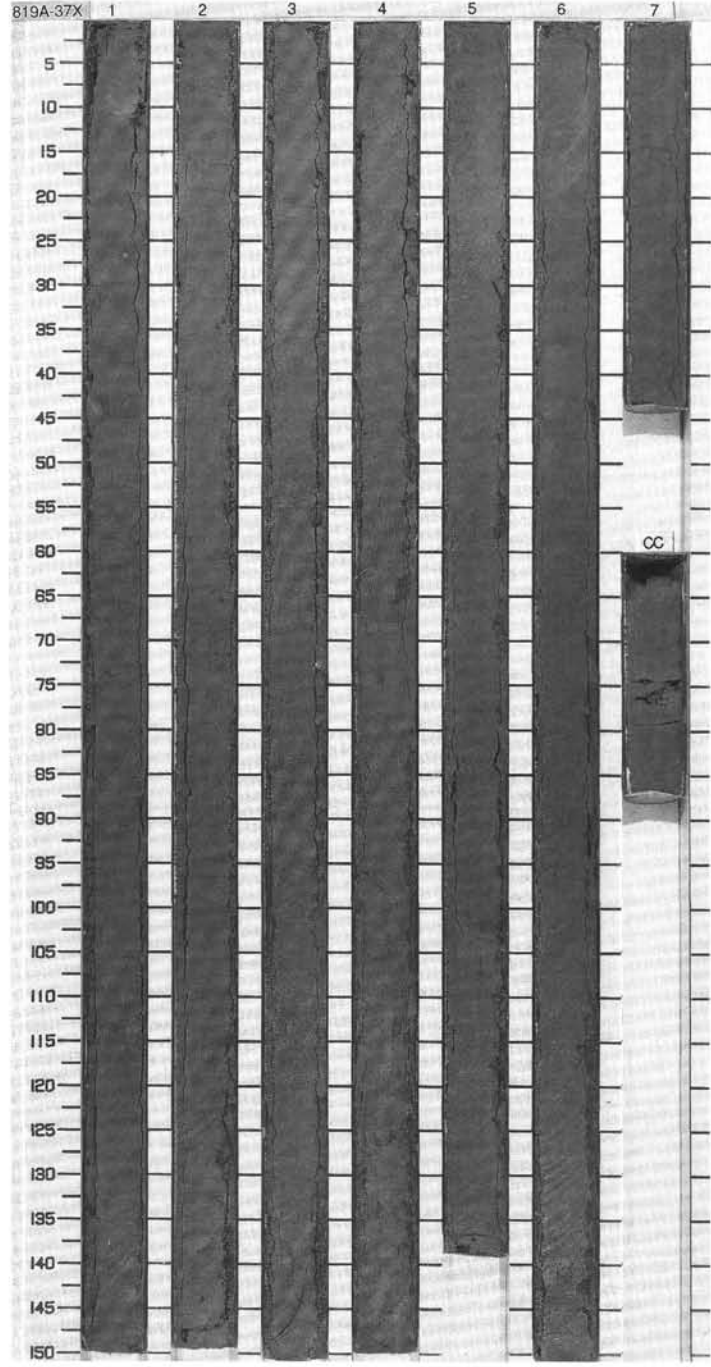




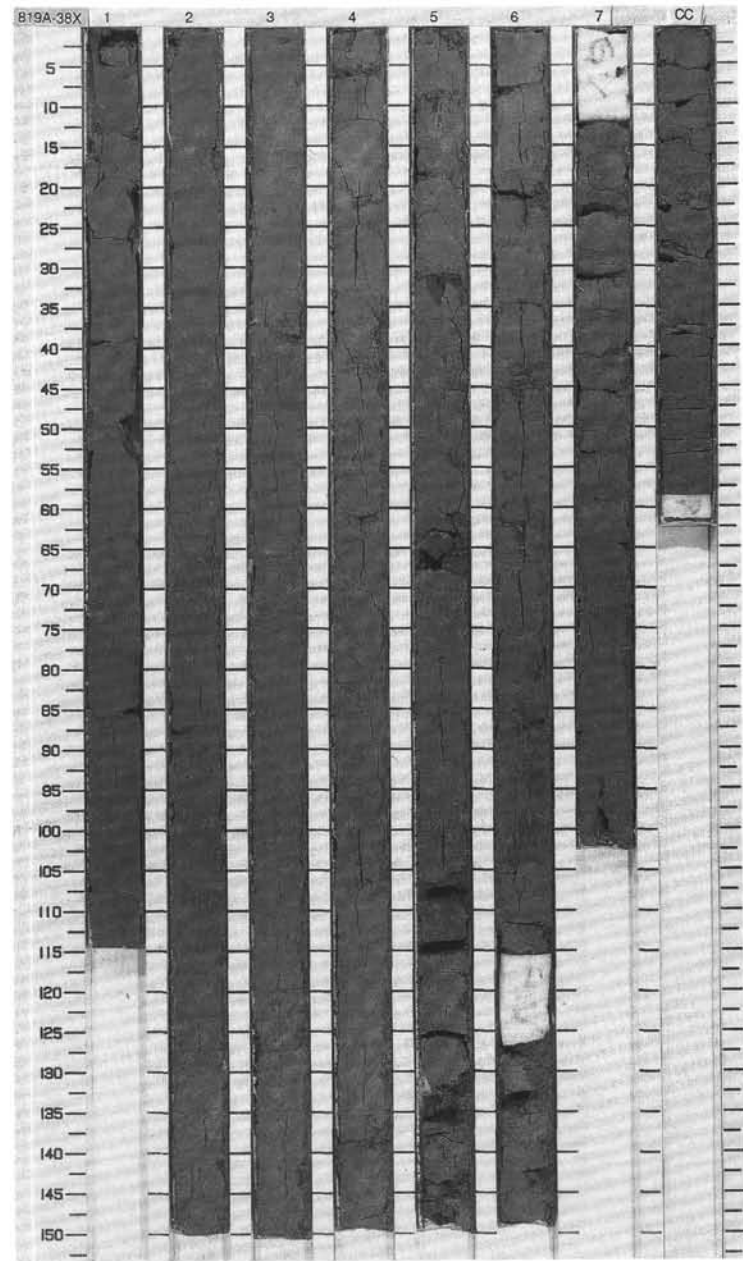
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R/G	N22 - N23			?	43.7% 2.04			0.5				CHALKY CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS and QUARTZ SILT  * Major Lithology: Finely bioturbated greenish gray (5GY 5/1), partially lithified CHALKY CLAYEY NANNOFOSSIL MIXED SEDIMENT with BIOCLASTS and QUARTZ SILT. Wispy CLAY laminae present. Minor BIOCLASTIC PACKSTONE interbeds and burrow-fills.  SMEAR SLIDE SUMMARY (%): <table border="1"> <thead> <tr> <th></th> <th>1, 30</th> <th>1, 54</th> <th>3, 96</th> <th>5, 40</th> <th>7, 44</th> </tr> <tr> <th></th> <th>D</th> <th>D</th> <th>D</th> <th>D</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bioclast</td> <td>15</td> <td>25</td> <td>6</td> <td>27</td> <td>13</td> </tr> <tr> <td>Clay</td> <td>15</td> <td>---</td> <td>20</td> <td>10</td> <td>20</td> </tr> <tr> <td>Collophane</td> <td>---</td> <td>---</td> <td>2</td> <td>---</td> <td>5</td> </tr> <tr> <td>Dolomite</td> <td>---</td> <td>10</td> <td>---</td> <td>---</td> <td>Tr</td> </tr> <tr> <td>Feldspar</td> <td>Tr</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> </tr> <tr> <td>Foraminifers</td> <td>3</td> <td>9</td> <td>2</td> <td>5</td> <td>3</td> </tr> <tr> <td>Intraclasts</td> <td>---</td> <td>30</td> <td>10</td> <td>---</td> <td>8</td> </tr> <tr> <td>Micrite</td> <td>7</td> <td>5</td> <td>20</td> <td>---</td> <td>15</td> </tr> <tr> <td>Nannofossils</td> <td>35</td> <td>10</td> <td>25</td> <td>35</td> <td>20</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>8</td> <td>11</td> <td>15</td> <td>10</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>2</td> <td>---</td> <td>---</td> <td>5</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>3</td> <td>---</td> <td>---</td> <td>3</td> <td>2</td> </tr> </tbody> </table>		1, 30	1, 54	3, 96	5, 40	7, 44		D	D	D	D	D	COMPOSITION:						Bioclast	15	25	6	27	13	Clay	15	---	20	10	20	Collophane	---	---	2	---	5	Dolomite	---	10	---	---	Tr	Feldspar	Tr	---	---	---	---	Foraminifers	3	9	2	5	3	Intraclasts	---	30	10	---	8	Micrite	7	5	20	---	15	Nannofossils	35	10	25	35	20	Quartz	15	8	11	15	10	Siliceous sponge spicules	2	---	---	5	2	Tunicate	3	---	---	3	2
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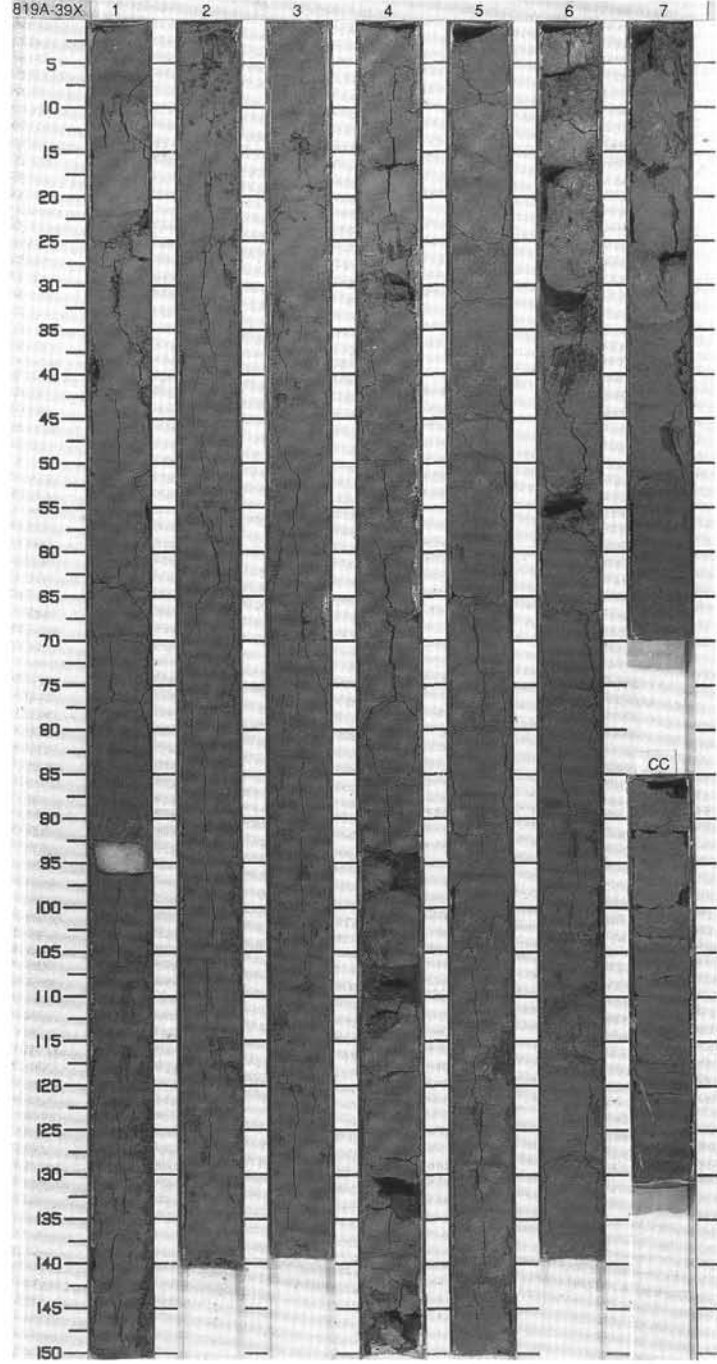
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				R	44.7% ● 2.06	44.7% ● 2.04	1	0.5				BIOCLASTIC CHALK with NANNOFOSSILS to CLAYEY MIXED SEDIMENT  Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) BIOCLASTIC CHALK with NANNOFOSSILS to CLAYEY MIXED SEDIMENT. Thin layers of relatively coarse BIOCLASTIC PACKSTONE to WACKESTONE in Sections 4 and 5.  SMEAR SLIDE SUMMARY (%):  <table style="margin-left: 20px;"> <tr> <td></td> <td>4, 14</td> <td>6, 61</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> </tr> </table> COMPOSITION:  <table style="margin-left: 20px;"> <tr> <td>Bioclast</td> <td>40</td> <td>13</td> </tr> <tr> <td>Clay</td> <td>20</td> <td>5</td> </tr> <tr> <td>Collophane</td> <td>---</td> <td>5</td> </tr> <tr> <td>Dolomite</td> <td>Tr</td> <td>8</td> </tr> <tr> <td>Feldspar</td> <td>---</td> <td>2</td> </tr> <tr> <td>Foraminifers</td> <td>10</td> <td>5</td> </tr> <tr> <td>Intraclasts</td> <td>---</td> <td>20</td> </tr> <tr> <td>Micrite</td> <td>---</td> <td>11</td> </tr> <tr> <td>Nannofossils</td> <td>10</td> <td>15</td> </tr> <tr> <td>Quartz</td> <td>10</td> <td>10</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>3</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>5</td> <td>3</td> </tr> </table>		4, 14	6, 61	D	D	D	Bioclast	40	13	Clay	20	5	Collophane	---	5	Dolomite	Tr	8	Feldspar	---	2	Foraminifers	10	5	Intraclasts	---	20	Micrite	---	11	Nannofossils	10	15	Quartz	10	10	Siliceous sponge spicules	3	2	Tunicate	5	3
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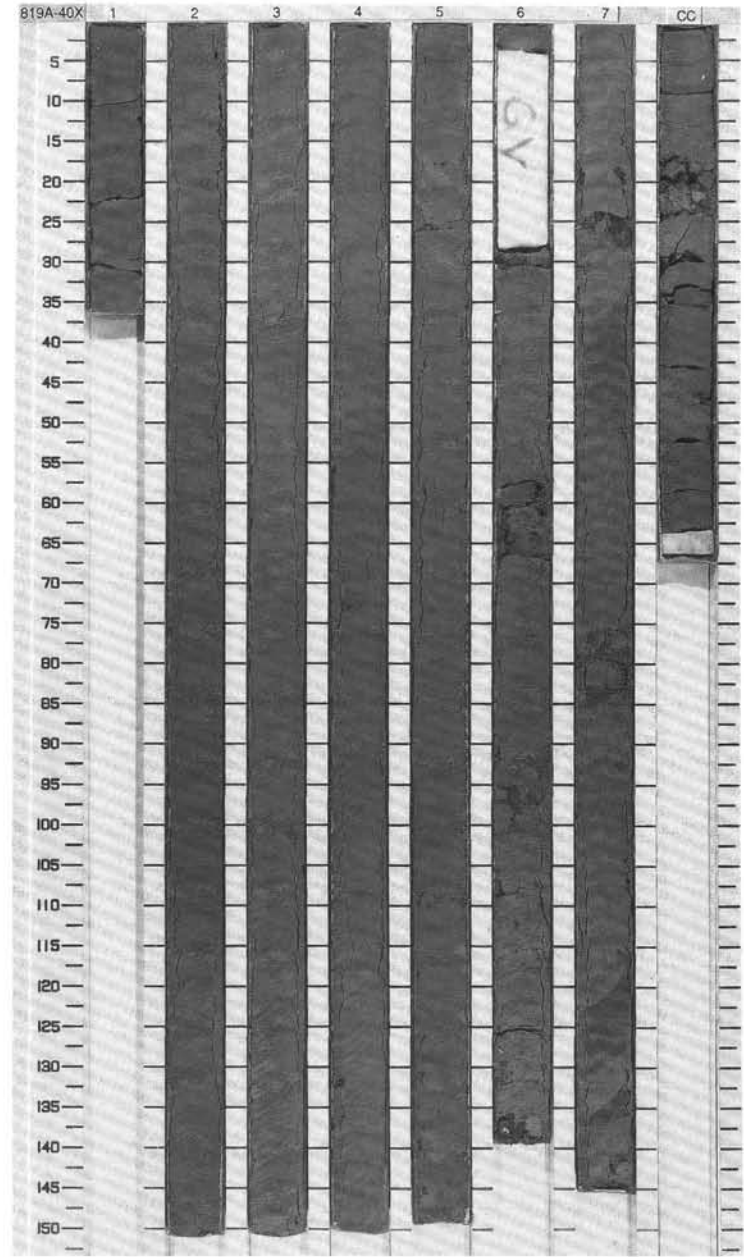
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																											
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R/G	N22 - N23				?	45.6% 2.18	38.2%	1	0.5 1.0	VOID				CLAYEY BIOCLASTIC MIXED SEDIMENT to CALCAREOUS SILTSTONE with BIOCLASTS  Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) firm CLAYEY BIOCLASTIC MIXED SEDIMENT in Sections 1, 5, 6, 7 and CC and CALCAREOUS SILTSTONE with BIOCLASTS in Sections 2, 3 and 4.  SMEAR SLIDE SUMMARY (%):  <table style="margin-left: 20px;"> <tr><td>2.75</td><td>5.77</td></tr> <tr><td>D</td><td>D</td></tr> </table> COMPOSITION  <table style="margin-left: 20px;"> <tr><td>Bioclast</td><td>15</td><td>15</td></tr> <tr><td>Clay</td><td>15</td><td>10</td></tr> <tr><td>Collophane</td><td>2</td><td>3</td></tr> <tr><td>Dolomite</td><td>---</td><td>5</td></tr> <tr><td>Feldspar</td><td>8</td><td>3</td></tr> <tr><td>Foraminifers</td><td>3</td><td>8</td></tr> <tr><td>Glauconite</td><td>Tr</td><td>---</td></tr> <tr><td>Intraclasts</td><td>10</td><td>10</td></tr> <tr><td>Micrite</td><td>10</td><td>10</td></tr> <tr><td>Nannofossils</td><td>10</td><td>15</td></tr> <tr><td>Quartz</td><td>20</td><td>15</td></tr> <tr><td>Siliceous sponge spicules</td><td>4</td><td>3</td></tr> <tr><td>Tunicate</td><td>3</td><td>3</td></tr> </table>	2.75	5.77	D	D	Bioclast	15	15	Clay	15	10	Collophane	2	3	Dolomite	---	5	Feldspar	8	3	Foraminifers	3	8	Glauconite	Tr	---	Intraclasts	10	10	Micrite	10	10	Nannofossils	10	15	Quartz	20	15	Siliceous sponge spicules	4	3	Tunicate	3	3
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A/G	CNI 3D				R	45.6% 2.18	48.2%	1																																																	
					R	43.5% 2.13	47.0%	2																																																	
					R	47.8% 2.10	48.3%	3																																																	
					R	42.7% 2.08	49.6%	4																																																	
					R	49.4% 1.89	49.3%	5																																																	
					R	44.0% 2.03	50.2%	6																																																	
					R	57.6%		7																																																	
					CC																																																				



TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS		PHYS. PROPERTIES		CHEMISTRY		SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																										
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONES																																																							
PLEISTOCENE																																																										
N22 - N23																																																										
CNT3b																																																										
R/G					R	45.6%	2.06	54.5%		1	0.5					<p>CLAYEY CHALK with NANNOFOSSILS BIOCLASTS, LITHOCLASTS, MICRITE and SILICICLASTIC GRAINS</p> <p>Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) CLAYEY CHALK with NANNOFOSSILS BIOCLASTS, LITHOCLASTS, MICRITE, and SILICICLASTIC GRAINS. Unit becomes more clayey in Section 3 and micritic below Section 2.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="0"> <tr> <td></td> <td>2.83</td> <td>4.89</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="0"> <tr> <td>Bioclast</td> <td>15</td> <td>15</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>10</td> </tr> <tr> <td>Collophane</td> <td>---</td> <td>3</td> </tr> <tr> <td>Dolomite</td> <td>8</td> <td>---</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>3</td> </tr> <tr> <td>Foraminifers</td> <td>8</td> <td>5</td> </tr> <tr> <td>Intraclasts</td> <td>10</td> <td>10</td> </tr> <tr> <td>Micrite</td> <td>12</td> <td>27</td> </tr> <tr> <td>Nannofossils</td> <td>20</td> <td>10</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>10</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>2</td> <td>3</td> </tr> <tr> <td>Tunicate</td> <td>3</td> <td>4</td> </tr> </table>		2.83	4.89	D	D	D	Bioclast	15	15	Clay	5	10	Collophane	---	3	Dolomite	8	---	Feldspar	2	3	Foraminifers	8	5	Intraclasts	10	10	Micrite	12	27	Nannofossils	20	10	Quartz	15	10	Siliceous sponge spicules	2	3	Tunicate	3	4
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A/G				R	43.0%	1.97	50.6%		2	1.0																																																
				R	48.6%	2.04	52.1%		3																																																	
				R	47.5%	2.04	46.9%		4																																																	
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TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	BED-STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																													
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS																																																							
PLEISTOCENE N22 - N23 CNI 3b				R	38.3% 2.0.3%	35.6%		0.5	VOID				MICRITIC CLAYEY CHALK with NANNOFOSSILS, BIOCLASTS, LITHOCLASTS, MICRITE and SILICICLASTIC GRAINS  Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) MICRITIC CLAYEY CHALK with NANNOFOSSILS, BIOCLASTS, LITHOCLASTS, MICRITE, and SILICICLASTIC GRAINS. Clay content appears to increase down core.  SMEAR SLIDE SUMMARY (%):  <table style="margin-left: 40px;"> <tr> <td></td> <td>2.80</td> <td>5.77</td> </tr> <tr> <td>D</td> <td></td> <td>D</td> </tr> </table> COMPOSITION:  <table style="margin-left: 40px;"> <tr> <td>Bioclast</td> <td>15</td> <td>10</td> </tr> <tr> <td>Clay</td> <td>15</td> <td>20</td> </tr> <tr> <td>Collophane</td> <td>---</td> <td>3</td> </tr> <tr> <td>Dolomite</td> <td>5</td> <td>---</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>1</td> </tr> <tr> <td>Foraminifers</td> <td>5</td> <td>3</td> </tr> <tr> <td>Glauconite</td> <td>---</td> <td>Tr</td> </tr> <tr> <td>Intraclast</td> <td>10</td> <td>17</td> </tr> <tr> <td>Micrite</td> <td>20</td> <td>25</td> </tr> <tr> <td>Nannofossils</td> <td>10</td> <td>10</td> </tr> <tr> <td>Quartz</td> <td>8</td> <td>5</td> </tr> <tr> <td>Siliceous sponge spicules</td> <td>5</td> <td>2</td> </tr> <tr> <td>Tunicate</td> <td>5</td> <td>3</td> </tr> </table>		2.80	5.77	D		D	Bioclast	15	10	Clay	15	20	Collophane	---	3	Dolomite	5	---	Feldspar	2	1	Foraminifers	5	3	Glauconite	---	Tr	Intraclast	10	17	Micrite	20	25	Nannofossils	10	10	Quartz	8	5	Siliceous sponge spicules	5	2	Tunicate	5	3
		2.80	5.77																																																							
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				R	45.7% 2.1.1%	36.6%		1																																																		
				R	40.9% 2.1.1%	49.45		2																																																		
				R	41.6% 2.0.7%	45.9%		3																																																		
				R	41.6% 2.0.7%	51.0%		4																																																		
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				R	41.8% 2.0.8%	49.0%		6																																																		
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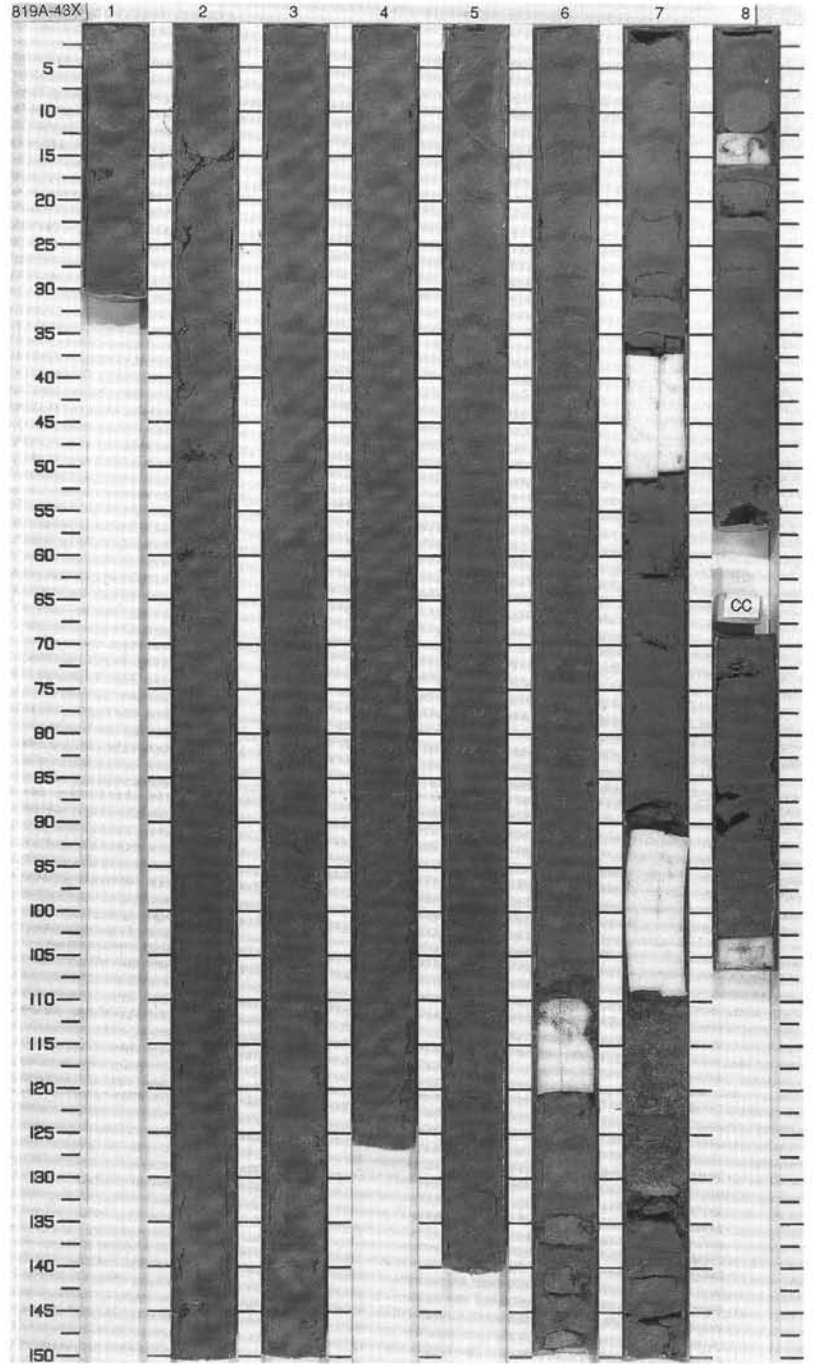






SITE 819 HOLE A CORE 43X CORED INTERVAL 380.4-390.0 mbsf

TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	BED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																				
FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									PHYS. PROPERTIES	CHEMISTRY																		
PLEISTOCENE				N		0.5					BIOCLASTIC CLAYEY CHALK with NANNOFOSSILS  Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) BIOCLASTIC CLAYEY CHALK with NANNOFOSSILS.  SMEAR SLIDE SUMMARY (%):  COMPOSITION:  <table border="0"> <tr><td>Bioclast</td><td>30</td></tr> <tr><td>Clay</td><td>15</td></tr> <tr><td>Feldspar</td><td>2</td></tr> <tr><td>Foraminifers</td><td>4</td></tr> <tr><td>Intraclasts</td><td>10</td></tr> <tr><td>Lithoclast</td><td>5</td></tr> <tr><td>Micrite</td><td>5</td></tr> <tr><td>Nannofossils</td><td>20</td></tr> <tr><td>Quartz</td><td>7</td></tr> <tr><td>Tunicate</td><td>1</td></tr> </table>	Bioclast	30	Clay	15	Feldspar	2	Foraminifers	4	Intraclasts	10	Lithoclast	5	Micrite	5	Nannofossils	20	Quartz	7	Tunicate	1
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Nannofossils	20																														
Quartz	7																														
Tunicate	1																														
R/G				42.3%	2.14	0.5																									
A/G	N22 - N23			44.2%	2.12	1.0	VOID																								
	CN13b			43.2%	2.21	2.0																									
				37.6%	1.85	3.0																									
				39.35%		4.0																									
				43.8%	2.15	5.0																									
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SITE 819 HOLE A CORE 44X CORED INTERVAL 390.0-400.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS										
PLEISTOCENE													
R/G	N22 - N23			R	43.4%			0.5	VOID				BIOCLASTIC CLAYEY CHALK with NANNOFOSSILS Major Lithology: Slightly bioturbated, dark greenish gray (5GY 4/1) BIOCLASTIC CLAYEY CHALK with NANNOFOSSILS.
A/G	CM13b			R	45.6%		1						
				R	51.7%		2						
				R	41.3%		3						
				R	53.0%		4						
				R	51.4%		5		VOID				
				R	43.5%		6						
				R	47.4%		7						
				R	49.2%		8						
					1.95								
					39.2%								

