

SITE 759 HOLE B CORE 3R CORED INTERVAL 12.5-22.0 mbsf

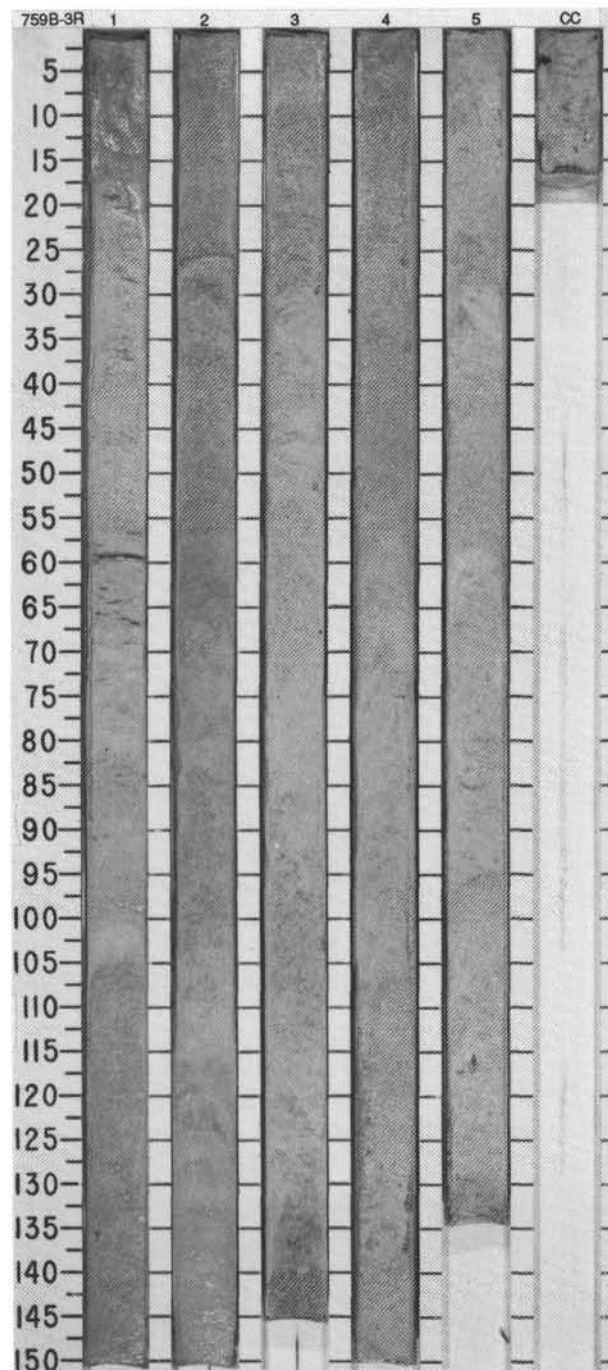
TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																																
FORAMINIFERS	NANNOFOSSILS											RADIOLARIANS	DIATOMS	PALYNOMORPHS																																																																																																																													
QUATERNARY											<p>FORAMINIFER NANNOFOSSIL AND NANNOFOSSIL OOZE WITH FORAMINIFERS</p> <p>Major lithologies: FORAMINIFER NANNOFOSSIL OOZE, alternating pinkish gray (7.5YR 7/2) and pink (5YR 7/2). Percentages of nannofossils and foraminifers revariable and difficult to determine with more than 10% accuracy. NANNOFOSSIL OOZE with FORAMINIFERS, Section 5, light gray (10YR 7/1 and 10YR 7/2).</p> <p>Minor lithologies: a. Sandy mud, Section 1, 0 to 20 cm, drilling induced. b. Nannofossil ooze with clay and foraminifers, Section 2, 25 cm, is 2 mm thick and dark greenish gray (10Y 5/2), with approximately two percent glass (rhyolitic). Clear evidence of bioturbation is not apparent. The core is remarkably undisturbed for rotary drilling. The color variations do not have an obvious frequency or periodicity. In the lower core Section 5 and CC), black specks of pyrite-rich foraminifer nannofossil ooze are observed.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 84</td> <td>2, 25</td> <td>3, 68</td> <td>4, 76</td> <td>5, 116</td> <td>5, 121</td> <td>CC, 10</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>D</td> <td>D</td> <td>M</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Bioclast</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>20</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Echinoid spine</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>2</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Fish</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Foraminifers</td> <td>30</td> <td>20</td> <td>50</td> <td>40</td> <td>70</td> <td>20</td> <td>40</td> </tr> <tr> <td>Glass</td> <td>2</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>2</td> </tr> <tr> <td>Inorganic calcite</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Nannofossils</td> <td>68</td> <td>60</td> <td>50</td> <td>58</td> <td>28</td> <td>80</td> <td>55</td> </tr> <tr> <td>Pteropod</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyroxene</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>3</td> </tr> <tr> <td>Spicules</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> </table>		1, 84	2, 25	3, 68	4, 76	5, 116	5, 121	CC, 10		D	M	D	D	M	D	D	Accessory minerals	Tr	—	—	—	—	—	—	Bioclast	—	—	—	1	—	—	—	Clay	—	20	—	—	—	—	—	Echinoid spine	—	—	—	—	Tr	—	—	Feldspar	—	—	—	—	2	Tr	—	Fish	—	—	—	—	—	Tr	—	Foraminifers	30	20	50	40	70	20	40	Glass	2	Tr	—	—	—	Tr	2	Inorganic calcite	Tr	—	—	—	—	—	—	Nannofossils	68	60	50	58	28	80	55	Pteropod	—	—	—	—	Tr	—	—	Pyroxene	—	—	—	1	—	—	—	Quartz	—	—	—	—	—	—	3	Spicules	—	—	—	—	—	Tr	—
	1, 84	2, 25	3, 68	4, 76	5, 116	5, 121	CC, 10																																																																																																																																				
	D	M	D	D	M	D	D																																																																																																																																				
Accessory minerals	Tr	—	—	—	—	—	—																																																																																																																																				
Bioclast	—	—	—	1	—	—	—																																																																																																																																				
Clay	—	20	—	—	—	—	—																																																																																																																																				
Echinoid spine	—	—	—	—	Tr	—	—																																																																																																																																				
Feldspar	—	—	—	—	2	Tr	—																																																																																																																																				
Fish	—	—	—	—	—	Tr	—																																																																																																																																				
Foraminifers	30	20	50	40	70	20	40																																																																																																																																				
Glass	2	Tr	—	—	—	Tr	2																																																																																																																																				
Inorganic calcite	Tr	—	—	—	—	—	—																																																																																																																																				
Nannofossils	68	60	50	58	28	80	55																																																																																																																																				
Pteropod	—	—	—	—	Tr	—	—																																																																																																																																				
Pyroxene	—	—	—	1	—	—	—																																																																																																																																				
Quartz	—	—	—	—	—	—	3																																																																																																																																				
Spicules	—	—	—	—	—	Tr	—																																																																																																																																				
A/G	N22			Q=72.3 V=1.511 P=1.57	1	0.5				*																																																																																																																																	
A/G	NN19 - NN21			Q=66.5 V=1.525 P=1.57	2	1.0				*																																																																																																																																	
P/R	QUATERNARY			CaCO ₃ =84.08% TOC=0.01%	3					*																																																																																																																																	
Barren				CaCO ₃ =85.5% TOC=0.01%	4					*																																																																																																																																	
					5					*																																																																																																																																	
					CC					*																																																																																																																																	

CORE 759A-1W NO RECOVERY

CORE 759B-1R NO RECOVERY

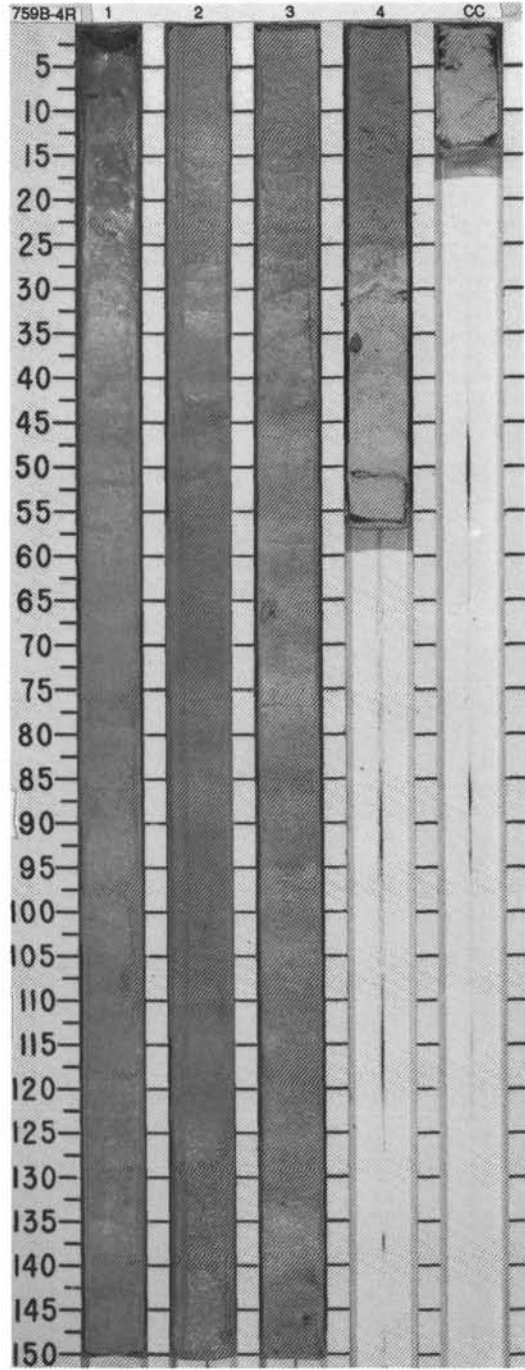
CORE 759B-2R NO RECOVERY

Information on Core Description Forms, for ALL sites, represents field notes taken aboard ship. Some of this information has been refined in accord with post-cruise findings, but production schedules prohibit definitive correlation of these forms with subsequent findings. Thus, the reader should be alerted to the occasional ambiguity or discrepancy.

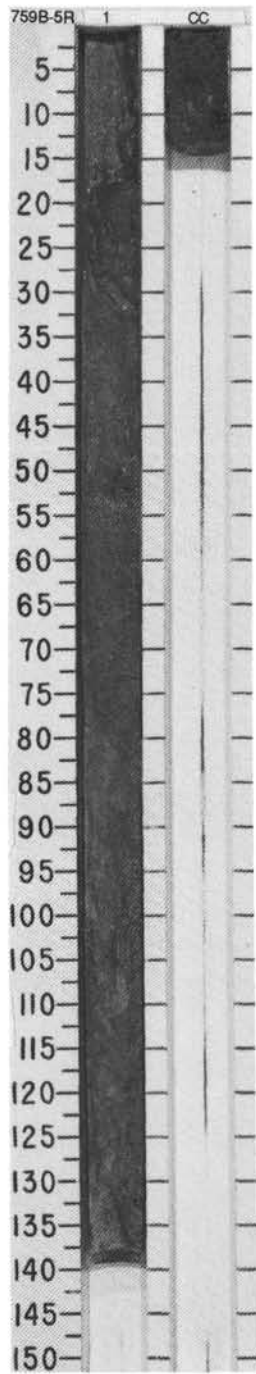


SITE 759 HOLE B CORE 4R CORED INTERVAL 22.0-31.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER					SECTIONS	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALYMNORPHS																																																																																																																																							
(LOWER MIOCENE)	QUATERNARY											<p>FORAMINIFER NANNOFOSSIL OOZE</p> <p>Major lithology: FORAMINIFER NANNOFOSSIL OOZE, dominantly light reddish brown (5YR 6/3) and pink (5YR 7/3). Color variations are gradual and occur on the order of 2-30 cm.</p> <p>Minor lithology: Nannofossil ooze with foraminifers, Section 4, 20 cm through CC, light bluish gray (5B 7/1) and light greenish gray (5G 7/1). The lithologic boundary at Section 4, 20 cm, occurs approximately 5 cm below a distinct color change from slight reddish brown (5YR 6/3) to light bluish gray (5B 7/1). At Section 4, 35 cm, a well-rounded, 1.4 cm rhyolitic pumice fragment is observed.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 48</td> <td>1, 116</td> <td>2, 10</td> <td>3, 100</td> <td>4, 20</td> <td>4, 26</td> <td>4, 36</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>3</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Biotite</td> <td>—</td> <td>3</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>—</td> <td>2</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Fish</td> <td>—</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>—</td> <td>—</td> </tr> <tr> <td>Foraminifers</td> <td>25</td> <td>25</td> <td>40</td> <td>45</td> <td>20</td> <td>10</td> <td>20</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>2</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Nannofossils</td> <td>70</td> <td>70</td> <td>55</td> <td>50</td> <td>75</td> <td>90</td> <td>80</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>—</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyroxene</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silicoflagellates</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> <td>1</td> <td>—</td> <td>—</td> </tr> <tr> <td>Spicules</td> <td>1</td> <td>—</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> </table>		1, 48	1, 116	2, 10	3, 100	4, 20	4, 26	4, 36		D	D	D	D	D	D	D	Accessory minerals	—	—	—	—	3	Tr	—	Biotite	—	3	—	—	—	Tr	—	Clay	—	—	2	—	—	Tr	—	Feldspar	—	—	—	1	—	Tr	—	Fish	—	1	1	1	1	—	—	Foraminifers	25	25	40	45	20	10	20	Glass	—	Tr	—	—	—	—	—	Mica	2	1	—	—	—	—	—	Nannofossils	70	70	55	50	75	90	80	Pyrite	—	—	—	2	—	—	—	Pyroxene	—	Tr	—	—	—	Tr	—	Quartz	2	—	—	—	—	—	—	Silicoflagellates	—	—	—	1	1	—	—	Spicules	1	—	1	—	—	—	—
	1, 48	1, 116	2, 10	3, 100	4, 20	4, 26	4, 36																																																																																																																																					
	D	D	D	D	D	D	D																																																																																																																																					
Accessory minerals	—	—	—	—	3	Tr	—																																																																																																																																					
Biotite	—	3	—	—	—	Tr	—																																																																																																																																					
Clay	—	—	2	—	—	Tr	—																																																																																																																																					
Feldspar	—	—	—	1	—	Tr	—																																																																																																																																					
Fish	—	1	1	1	1	—	—																																																																																																																																					
Foraminifers	25	25	40	45	20	10	20																																																																																																																																					
Glass	—	Tr	—	—	—	—	—																																																																																																																																					
Mica	2	1	—	—	—	—	—																																																																																																																																					
Nannofossils	70	70	55	50	75	90	80																																																																																																																																					
Pyrite	—	—	—	2	—	—	—																																																																																																																																					
Pyroxene	—	Tr	—	—	—	Tr	—																																																																																																																																					
Quartz	2	—	—	—	—	—	—																																																																																																																																					
Silicoflagellates	—	—	—	1	1	—	—																																																																																																																																					
Spicules	1	—	1	—	—	—	—																																																																																																																																					
N7	A/M-G	N22	NN19 - NN21			1						<p>Section 1: 0.5 to 1.0 m</p> <p>Section 2: 1.0 to 2.0 m</p> <p>Section 3: 2.0 to 3.0 m</p> <p>Section 4: 3.0 to 4.0 m</p> <p>CC: Core Catcher</p>																																																																																																																																
	A/G					2																																																																																																																																						
	(A/G					3																																																																																																																																						
	NN3 - NN5)					4																																																																																																																																						
	(Barren)																																																																																																																																											

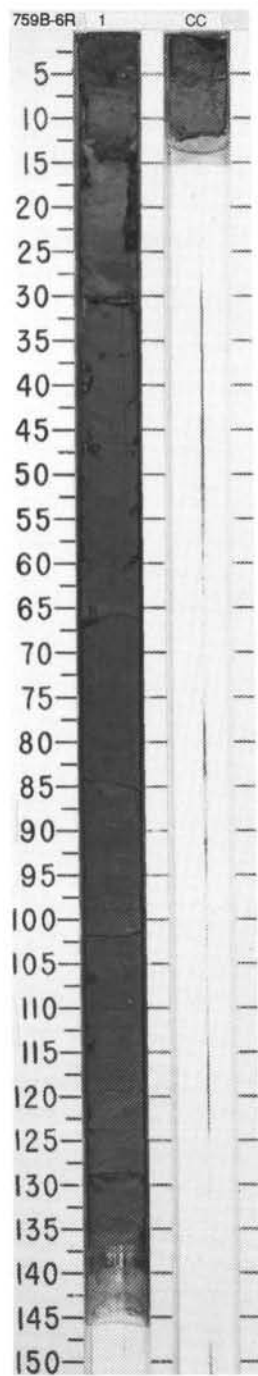


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIAZOOMS									
LOWER MIOCENE	N7(?)	A/G	N7				1	0.5 1.0		O	*		<p>FORAMINIFER QUARTZ SAND</p> <p>Major lithology: FORAMINIFER QUARTZ SAND, yellowish-brown (10YR 5/6), un lithified and structureless. Quartz grains are sub-angular to angular, foraminifers are unbroken and largely planktonic. Some opaque grains appear to be manganese oxide.</p> <p>Interpretation: The association of unbroken planktonic foraminifers with sub-angular to angular grains of quartz, resting on an unconformity, indicates this sediment to be an older lag sand with an admixture of planktonic material.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">1, 70</p> <p>TEXTURE:</p> <p>Sand 90 Silt 7 Clay 3</p> <p>COMPOSITION:</p> <p>Feldspar 10 Foraminifers 40 Mica 5 Quartz 40 Rock fragment 5</p>
	LOWER MIOCENE						CC						
	QUATERNARY - LOWER MIOCENE	A/M											
	QUATERNARY REWORKED	P/R											
			(QUATERNARY REWORKED)										
	Barrren		(LOWER MIOCENE - QUATERNARY)										

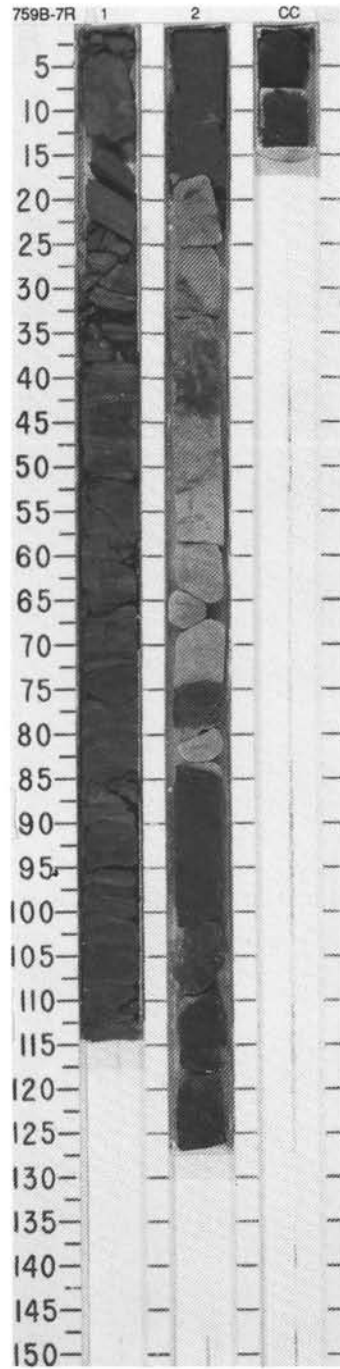


SITE 759 HOLE B CORE 6R CORED INTERVAL 40.5-50.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																								
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									PALYNOFORMS	PALEOMAGNETICS																																																						
NORIAN	Barren	Barren	Barren	Barren	$\phi = 48.4$ $\psi = 1.96$ $\bullet V = 1.678$ $\bullet TOC = 1.53$ CC	1 0.5 1.0						<p>BLACK QUARTZ SILTY CLAY</p> <p>Major lithology: BLACK QUARTZ SILTY CLAY, black (2.5Y 2/0), structureless except for three clayey silt layers. Pyrite nodules occur commonly, with large nodules at 47 cm (6 mm) and at 85 cm (8 mm).</p> <p>Minor lithology: Clayey silt, dark gray (5Y 3/1), in thin (1-1.5 cm) layers in Section 1, 13, 29, and 65 cm, and in CC, 6-12 cm. The layer at Section 1, 65 cm, is normally graded. Sediment includes 5-10% opaque material of possible carbonaceous organic composition.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 41</td> <td>1, 68</td> <td>CC, 9</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>5</td> <td>8</td> <td>5</td> </tr> <tr> <td>Silt</td> <td>45</td> <td>50</td> <td>45</td> </tr> <tr> <td>Clay</td> <td>50</td> <td>42</td> <td>50</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>20</td> <td>—</td> <td>—</td> </tr> <tr> <td>Chert</td> <td>—</td> <td>—</td> <td>5</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>40</td> <td>40</td> </tr> <tr> <td>Hornblende</td> <td>—</td> <td>—</td> <td>2</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Opales (Organics)</td> <td>10</td> <td>5</td> <td>—</td> </tr> <tr> <td>Other</td> <td>—</td> <td>—</td> <td>1</td> </tr> <tr> <td>Quartz</td> <td>30</td> <td>50</td> <td>50</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>—</td> <td>2</td> </tr> </table>		1, 41	1, 68	CC, 9	D	D	D	D	Sand	5	8	5	Silt	45	50	45	Clay	50	42	50	Accessory minerals	20	—	—	Chert	—	—	5	Clay	40	40	40	Hornblende	—	—	2	Mica	—	5	—	Opales (Organics)	10	5	—	Other	—	—	1	Quartz	30	50	50	Rock fragment	—	—	2
	1, 41	1, 68	CC, 9																																																																	
D	D	D	D																																																																	
Sand	5	8	5																																																																	
Silt	45	50	45																																																																	
Clay	50	42	50																																																																	
Accessory minerals	20	—	—																																																																	
Chert	—	—	5																																																																	
Clay	40	40	40																																																																	
Hornblende	—	—	2																																																																	
Mica	—	5	—																																																																	
Opales (Organics)	10	5	—																																																																	
Other	—	—	1																																																																	
Quartz	30	50	50																																																																	
Rock fragment	—	—	2																																																																	

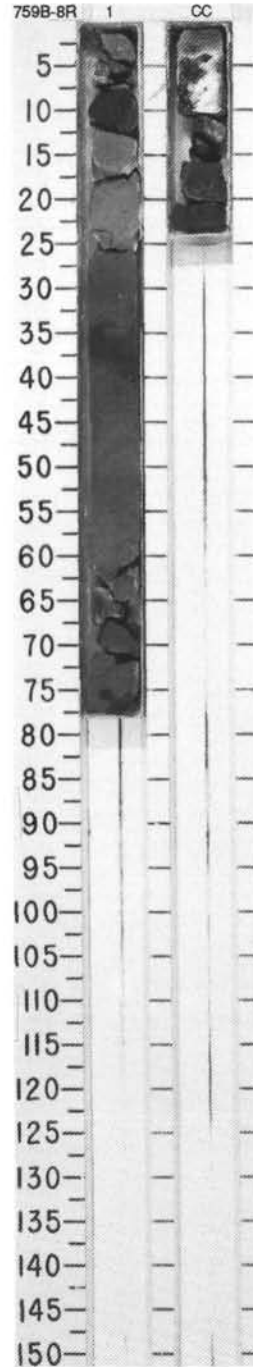


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER					PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																						
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALYNOMORPHS																																																																																																																																
NORIAN	Barren	Barren	Barren	R/M	<i>M. crenulatus</i>		$V_{4.376} = 1.92$ $V_{2.74} = 1.92$ $V_{1.667} = 1.92$	$CaCO_3 = 92.3\%$ $TOC = 0.02\%$	1 2	0.5 1.0				<p>CLAYEY SILTSTONE INTERBEDDED WITH SILTY SANDSTONE AND INTERBEDDED GRAINSTONE AND WACKESTONE</p> <p>Major lithologies: CLAYEY SILTSTONE (very dark greenish gray, 10Y 3/1) and SILTY SANDSTONE (very dark greenish gray, 10Y 3/1), including parallel laminae, coal fragments and coal seams, in Section 1, 0-35 cm and Section 2, 0-27 cm. Normally graded GRAINSTONE (light gray, 5Y 7/1) and overlying WACKESTONE (very dark gray, 5Y 3/1 or light olive gray, 5Y 6/2) in Section 2, 27-128 cm. The clayey siltstone, wackestone and grainstone have been affected by pyritization. Wackestone and grainstone include some shell fragments. A quartz vein is observed in wackestone.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 23 M</th> <th>1, 64 D</th> <th>2, 44 D</th> <th>2, 106 D</th> <th>2, 110 D</th> <th>CC, 8 D</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>70</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Sil</td> <td>25</td> <td>70</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>28</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 23 M</th> <th>1, 64 D</th> <th>2, 44 D</th> <th>2, 106 D</th> <th>2, 110 D</th> <th>CC, 8 D</th> </tr> </thead> <tbody> <tr> <td>Bioclast</td> <td>—</td> <td>—</td> <td>25</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Cement</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>70</td> </tr> <tr> <td>Feldspar</td> <td>44</td> <td>20</td> <td>—</td> <td>—</td> <td>—</td> <td>2</td> </tr> <tr> <td>Mica</td> <td>2</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opales</td> <td>15</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Other</td> <td>—</td> <td>—</td> <td>25</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pellets</td> <td>—</td> <td>—</td> <td>50</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>27</td> <td>50</td> <td>—</td> <td>—</td> <td>—</td> <td>26</td> </tr> <tr> <td>Rock fragment</td> <td>12</td> <td>20</td> <td>—</td> <td>—</td> <td>—</td> <td>2</td> </tr> </tbody> </table>		1, 23 M	1, 64 D	2, 44 D	2, 106 D	2, 110 D	CC, 8 D	TEXTURE:							Sand	70	2	—	—	—	—	Sil	25	70	—	—	—	—	Clay	5	28	—	—	—	—		1, 23 M	1, 64 D	2, 44 D	2, 106 D	2, 110 D	CC, 8 D	Bioclast	—	—	25	—	—	—	Cement	—	—	—	—	—	70	Feldspar	44	20	—	—	—	2	Mica	2	5	—	—	—	—	Opales	15	—	—	—	—	—	Other	—	—	25	—	—	—	Pellets	—	—	50	—	—	—	Phosphate	—	—	Tr	—	—	—	Pyrite	—	5	—	—	—	—	Quartz	27	50	—	—	—	26	Rock fragment	12	20	—	—	—	2
	1, 23 M	1, 64 D	2, 44 D	2, 106 D	2, 110 D	CC, 8 D																																																																																																																															
TEXTURE:																																																																																																																																					
Sand	70	2	—	—	—	—																																																																																																																															
Sil	25	70	—	—	—	—																																																																																																																															
Clay	5	28	—	—	—	—																																																																																																																															
	1, 23 M	1, 64 D	2, 44 D	2, 106 D	2, 110 D	CC, 8 D																																																																																																																															
Bioclast	—	—	25	—	—	—																																																																																																																															
Cement	—	—	—	—	—	70																																																																																																																															
Feldspar	44	20	—	—	—	2																																																																																																																															
Mica	2	5	—	—	—	—																																																																																																																															
Opales	15	—	—	—	—	—																																																																																																																															
Other	—	—	25	—	—	—																																																																																																																															
Pellets	—	—	50	—	—	—																																																																																																																															
Phosphate	—	—	Tr	—	—	—																																																																																																																															
Pyrite	—	5	—	—	—	—																																																																																																																															
Quartz	27	50	—	—	—	26																																																																																																																															
Rock fragment	12	20	—	—	—	2																																																																																																																															



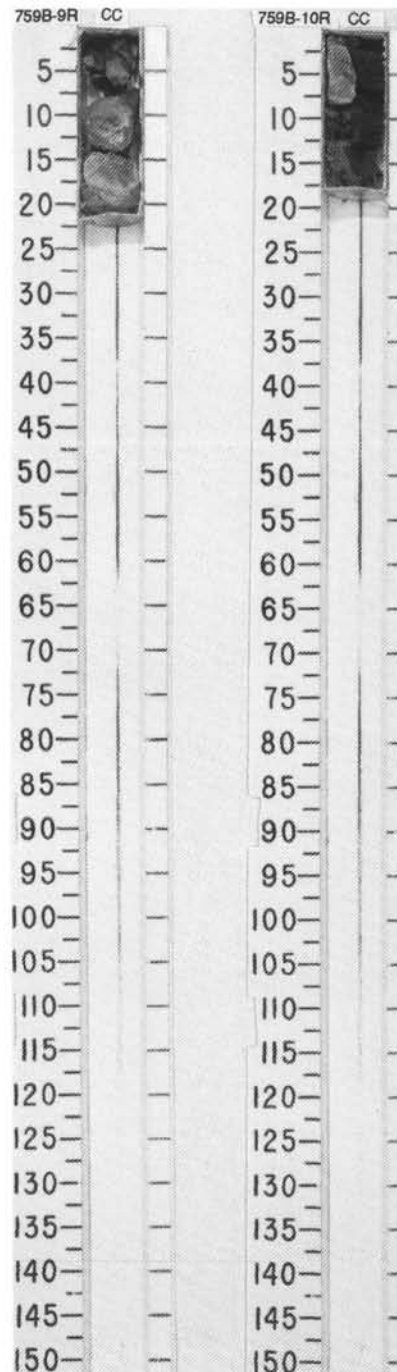
SITE 759 HOLE B CORE 8R CORED INTERVAL 59.5-69.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																																																																																																															
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										PALYNOMORPHS	PALEOMAGNETICS																																																																																																																																																																																																													
NORIAN													<p>BIOCLASTIC CARBONATE WACKESTONE, CARBONATE MUDSTONE AND BIOCLASTIC PACKSTONE/WACKESTONE.</p> <p>Major lithologies: BIOCLASTIC CARBONATE WACKESTONE, very dark gray (2.5Y 3/0) to dark gray (2.5Y 4/0), at Section 1, 25-68 cm and Section CC, 0-24 cm. Bioclasts are generally recrystallized, and include benthonic foraminifers, and fragments of echinoderms and gastropods. Bioturbation occurs at Section 1, 33-40 cm. Pyrite and burrows occur in Sections 1 and CC. Section CC is mottled with pyritized burrows. CARBONATE MUDSTONE, gray (5Y 5/1), at Section 1, 11-25 cm, generally massive, with a 1 cm-thick laminated layer at 15 cm. Birdseye texture, pyrite, and burrows also occur intermittently. BIOCLASTIC PACKSTONE/WACKESTONE, black (10YR 2/1) to dark gray (2.5Y 4/0), at Section 1, 6-11 cm and 68-76 cm, bioclasts include benthic foraminifers, and fragments of echinoderms and gastropods, in a mud matrix.</p> <p>Minor lithologies: a. Fine-grained sandstone, black (10YR 2/1), with calcite cement, at Section 1, 0-6 cm. b. Dolomitic carbonate mudstone, black (2.5Y 2/0), (reacts with 1N HCl) at Section 1, 76-79 cm.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 0</th> <th>1, 0</th> <th>1, 14</th> <th>1, 16</th> <th>1, 34</th> <th>1, 77</th> <th>CC, 2</th> </tr> <tr> <th></th> <th>M</th> <th>D</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Bioclast</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Cement</td> <td>—</td> <td>41</td> <td>—</td> <td>—</td> <td>60</td> <td>—</td> <td>—</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>95</td> <td>100</td> </tr> <tr> <td>Feldspar</td> <td>10</td> <td>27</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Microsparite</td> <td>45</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>40</td> <td>23</td> <td>—</td> <td>—</td> <td>25</td> <td>—</td> <td>—</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>9</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> </tbody> </table> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>CC, 14</th> <th>CC, 18</th> </tr> <tr> <th></th> <th>D</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Accessory minerals</td> <td>—</td> <td>3</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>77</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>20</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 0</th> <th>1, 0</th> <th>1, 14</th> <th>1, 16</th> <th>1, 34</th> <th>1, 77</th> <th>CC, 2</th> </tr> <tr> <th></th> <th>M</th> <th>D</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Bioclast</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Cement</td> <td>—</td> <td>41</td> <td>—</td> <td>—</td> <td>60</td> <td>—</td> <td>—</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>95</td> <td>100</td> </tr> <tr> <td>Feldspar</td> <td>10</td> <td>27</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Microsparite</td> <td>45</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>40</td> <td>23</td> <td>—</td> <td>—</td> <td>25</td> <td>—</td> <td>—</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>9</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> <td>—</td> </tr> </tbody> </table>		1, 0	1, 0	1, 14	1, 16	1, 34	1, 77	CC, 2		M	D	D	D	D	M	D	Bioclast	—	—	—	—	5	—	—	Cement	—	41	—	—	60	—	—	Dolomite	—	—	—	—	—	95	100	Feldspar	10	27	—	—	5	—	—	Mica	Tr	—	—	—	—	—	—	Microsparite	45	—	—	—	—	—	—	Opauques	5	—	—	—	—	—	—	Pyrite	—	—	—	—	—	5	—	Quartz	40	23	—	—	25	—	—	Rock fragment	—	9	—	—	5	—	—		CC, 14	CC, 18		D	D	Accessory minerals	—	3	Dolomite	—	77	Micrite	—	20		1, 0	1, 0	1, 14	1, 16	1, 34	1, 77	CC, 2		M	D	D	D	D	M	D	Bioclast	—	—	—	—	5	—	—	Cement	—	41	—	—	60	—	—	Dolomite	—	—	—	—	—	95	100	Feldspar	10	27	—	—	5	—	—	Mica	Tr	—	—	—	—	—	—	Microsparite	45	—	—	—	—	—	—	Opauques	5	—	—	—	—	—	—	Pyrite	—	—	—	—	—	5	—	Quartz	40	23	—	—	25	—	—	Rock fragment	—	9	—	—	5	—	—
	1, 0	1, 0	1, 14	1, 16	1, 34	1, 77	CC, 2																																																																																																																																																																																																																					
	M	D	D	D	D	M	D																																																																																																																																																																																																																					
Bioclast	—	—	—	—	5	—	—																																																																																																																																																																																																																					
Cement	—	41	—	—	60	—	—																																																																																																																																																																																																																					
Dolomite	—	—	—	—	—	95	100																																																																																																																																																																																																																					
Feldspar	10	27	—	—	5	—	—																																																																																																																																																																																																																					
Mica	Tr	—	—	—	—	—	—																																																																																																																																																																																																																					
Microsparite	45	—	—	—	—	—	—																																																																																																																																																																																																																					
Opauques	5	—	—	—	—	—	—																																																																																																																																																																																																																					
Pyrite	—	—	—	—	—	5	—																																																																																																																																																																																																																					
Quartz	40	23	—	—	25	—	—																																																																																																																																																																																																																					
Rock fragment	—	9	—	—	5	—	—																																																																																																																																																																																																																					
	CC, 14	CC, 18																																																																																																																																																																																																																										
	D	D																																																																																																																																																																																																																										
Accessory minerals	—	3																																																																																																																																																																																																																										
Dolomite	—	77																																																																																																																																																																																																																										
Micrite	—	20																																																																																																																																																																																																																										
	1, 0	1, 0	1, 14	1, 16	1, 34	1, 77	CC, 2																																																																																																																																																																																																																					
	M	D	D	D	D	M	D																																																																																																																																																																																																																					
Bioclast	—	—	—	—	5	—	—																																																																																																																																																																																																																					
Cement	—	41	—	—	60	—	—																																																																																																																																																																																																																					
Dolomite	—	—	—	—	—	95	100																																																																																																																																																																																																																					
Feldspar	10	27	—	—	5	—	—																																																																																																																																																																																																																					
Mica	Tr	—	—	—	—	—	—																																																																																																																																																																																																																					
Microsparite	45	—	—	—	—	—	—																																																																																																																																																																																																																					
Opauques	5	—	—	—	—	—	—																																																																																																																																																																																																																					
Pyrite	—	—	—	—	—	5	—																																																																																																																																																																																																																					
Quartz	40	23	—	—	25	—	—																																																																																																																																																																																																																					
Rock fragment	—	9	—	—	5	—	—																																																																																																																																																																																																																					



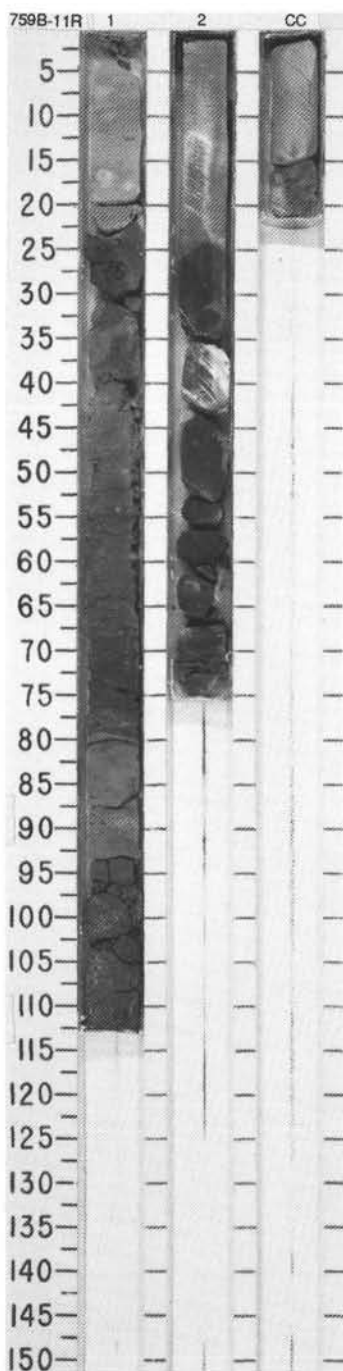
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																							
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																															
NORIAN	Barren	Barren	Barren	(Ostracod fragments)		TOC-1.50%	CC					<p>CARBONATE MUDSTONE AND WACKESTONE</p> <p>Major lithologies: CARBONATE MUDSTONE and WACKESTONE, gray (5Y 6/1) to dark greenish-gray (10Y 5/2) to dark grayish-brown (2.5Y 4/2), mottled, with observed intraclasts and bioclasts. Some recrystallization in veins is observed. The mottles and recrystallization is suggestive of a birdseye texture. The core contains six pieces of recovered sedimentary rocks at Section CC, 0-20 cm.</p> <p>Minor lithology: Quartz sandstone with iron-oxide cement, finely-laminated, manganese-coated, quartz, feldspar, and minor rock fragments are observed.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>CC, 0 M</th> <th>CC, 1 M</th> <th>CC, 14 M</th> <th>CC, 14 D</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Silt</td> <td>—</td> <td>10</td> <td>3</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>90</td> <td>70</td> <td>—</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cement</td> <td>65</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>60</td> <td>50</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>5</td> <td>5</td> <td>10</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>—</td> <td>5</td> <td>15</td> <td>—</td> </tr> <tr> <td>Other</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>30</td> <td>30</td> <td>25</td> <td>—</td> </tr> </tbody> </table>		CC, 0 M	CC, 1 M	CC, 14 M	CC, 14 D	TEXTURE:					Silt	—	10	3	—	Clay	—	90	70	—	COMPOSITION:					Cement	65	—	—	—	Clay	—	60	50	—	Feldspar	5	5	10	—	Opauques	—	5	15	—	Other	Tr	—	—	—	Quartz	30	30	25	—
	CC, 0 M	CC, 1 M	CC, 14 M	CC, 14 D																																																															
TEXTURE:																																																																			
Silt	—	10	3	—																																																															
Clay	—	90	70	—																																																															
COMPOSITION:																																																																			
Cement	65	—	—	—																																																															
Clay	—	60	50	—																																																															
Feldspar	5	5	10	—																																																															
Opauques	—	5	15	—																																																															
Other	Tr	—	—	—																																																															
Quartz	30	30	25	—																																																															

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																								
NORIAN	Indeterminate	Barren	Barren	<i>M. crenulatus</i>		TOC-0.2%	CC					<p>CARBONATE MUDSTONE/WACKESTONE AND BLACK SHALE/CLAYSTONE.</p> <p>Major lithologies: CARBONATE MUDSTONE to WACKESTONE, grey (5Y 6/1), highly mottled as a result of bioturbation, with bioclasts present. Some of the bioclasts appear to be recrystallized. Matrix is lime mud (micrite). BLACK SHALE to CLAYSTONE, black (2.5Y 2/0), laminated, occurs as a single fragment in the core catcher, possibly drilling mud. A pyrite (marcasite?) nodule is found in the lower portion of the core catcher, with smaller pyrite grains scattered throughout the mudstone.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>CC, 3 D</th> <th>CC, 3 D</th> <th>CC, 10 M</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Silt</td> <td>90</td> <td>—</td> <td>80</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>—</td> <td>20</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Accessory minerals</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>—</td> <td>10</td> </tr> <tr> <td>Fe oxide</td> <td>10</td> <td>—</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>—</td> <td>3</td> </tr> <tr> <td>Foraminifers</td> <td>—</td> <td>2</td> <td>—</td> </tr> <tr> <td>Glass</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>78</td> <td>—</td> </tr> <tr> <td>Mollusk</td> <td>—</td> <td>20</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>6</td> <td>—</td> <td>2</td> </tr> <tr> <td>Quartz</td> <td>35</td> <td>—</td> <td>80</td> </tr> <tr> <td>Rock fragment</td> <td>40</td> <td>—</td> <td>5</td> </tr> </tbody> </table>		CC, 3 D	CC, 3 D	CC, 10 M	TEXTURE:				Silt	90	—	80	Clay	10	—	20	COMPOSITION:				Accessory minerals	Tr	—	—	Clay	5	—	10	Fe oxide	10	—	—	Feldspar	2	—	3	Foraminifers	—	2	—	Glass	2	—	—	Micrite	—	78	—	Mollusk	—	20	—	Opauques	6	—	2	Quartz	35	—	80	Rock fragment	40	—	5
	CC, 3 D	CC, 3 D	CC, 10 M																																																																									
TEXTURE:																																																																												
Silt	90	—	80																																																																									
Clay	10	—	20																																																																									
COMPOSITION:																																																																												
Accessory minerals	Tr	—	—																																																																									
Clay	5	—	10																																																																									
Fe oxide	10	—	—																																																																									
Feldspar	2	—	3																																																																									
Foraminifers	—	2	—																																																																									
Glass	2	—	—																																																																									
Micrite	—	78	—																																																																									
Mollusk	—	20	—																																																																									
Opauques	6	—	2																																																																									
Quartz	35	—	80																																																																									
Rock fragment	40	—	5																																																																									

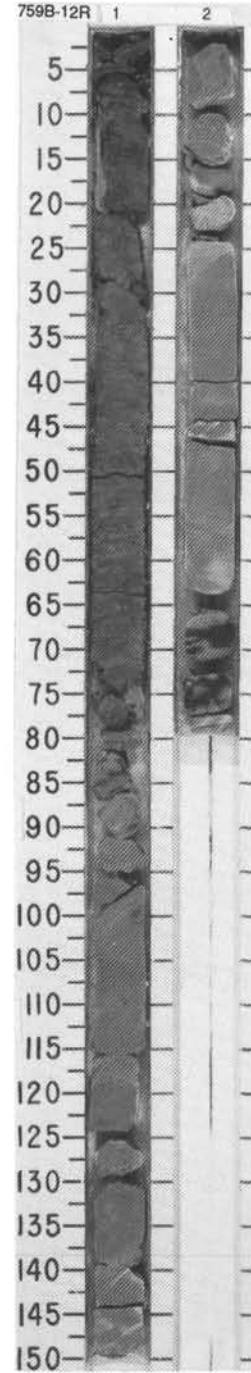


SITE 759 HOLE B CORE 11R CORED INTERVAL 88.0-97.5 mdsf

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																																																																																																																						
NORIAN	Barren	Barren	Barren	Barren				1	0.5					<p>DARK GREENISH-GRAY AND BLACK SILTY CLAYSTONE, BIOCLASTIC SANDSTONE, DOLOMITIC CARBONATE MUDSTONE, AND WACKESTONE.</p> <p>Major lithologies: BIOCLASTIC SANDSTONE, at Section 1, 0-21 cm, light olive-grey (5Y 6/2), with oolites at 0-5 cm and molluscan fragments at 5-21 cm; at Section 2, 0-47 cm, with carbonate cement and molluscan fragments, quartz, and some glauconite. SILTY CLAYSTONE, interlayered black (5Y 2.5/1), dark greenish-grey (5G 4/1), and grayish-green (5G 5/2). Molluscan shell fragments and pyrite nodules, are present at Section 1, 21-79 cm. DOLOMITIC CARBONATE MUDSTONE and MUDSTONE/WACKESTONE, olive grey (5Y 4/2) to dark olive grey (5Y 3/2) at Section 2, 36-76 cm, bioclastic, and burrowed, with some recrystallization. Pyrite is scattered throughout and occurs in veins. At Section 2, 64-66 cm, there is a large pyritized burrow (2 cm x 1 cm).</p> <p>Minor lithologies: a. Fine medium, parallel-laminated sandstone at Section 1, 93-104 cm, grading up through olive grey (5G 5/2) silty claystone at 93-85 cm, to clay and a coal seam at 85-80 cm. b. Fine sandstone, greenish-grey (5BG 6/1), calcareous, with parallel laminae, occurs at Section CC, 0-21 cm, containing glauconite, pyrite, and thin coal seams. c. Coal seams, black (5Y 2.5/1) at Section 1, 80 cm, Section 2, 73-76 cm, and Section CC, 18-21 cm. Pyrite is scattered throughout, occurs in veins, and at Section 2, 47 cm, there is a large pyritized burrow. A pecten cast (1.5 cm square) occurs at Section 2, 47 cm.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 55</th> <th>1, 78</th> <th>1, 110</th> <th>2, 36</th> <th>2, 73</th> </tr> <tr> <th></th> <th>D</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>35</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>35</td> <td>10</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>65</td> <td>65</td> <td>90</td> <td>—</td> <td>—</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Calcite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>95</td> </tr> <tr> <td>Carbonate grains</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>65</td> <td>65</td> <td>74</td> <td>—</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>20</td> <td>15</td> <td>10</td> <td>5</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Peloids</td> <td>—</td> <td>—</td> <td>—</td> <td>70</td> <td>—</td> </tr> <tr> <td>Plant</td> <td>—</td> <td>—</td> <td>3</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>3</td> <td>7</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>10</td> <td>10</td> <td>3</td> <td>20</td> <td>5</td> </tr> <tr> <td>Rock fragment</td> <td>5</td> <td>5</td> <td>3</td> <td>—</td> <td>—</td> </tr> </tbody> </table>		1, 55	1, 78	1, 110	2, 36	2, 73		D	D	D	D	M	TEXTURE:						Sand	35	—	—	—	—	Silt	—	35	10	—	—	Clay	65	65	90	—	—	COMPOSITION:						Calcite	—	—	—	—	95	Carbonate grains	—	Tr	—	—	—	Clay	65	65	74	—	—	Feldspar	20	15	10	5	—	Mica	—	—	—	—	—	Opauques	—	—	—	5	—	Peloids	—	—	—	70	—	Plant	—	—	3	—	—	Pyrite	—	3	7	—	—	Quartz	10	10	3	20	5	Rock fragment	5	5	3	—	—
	1, 55	1, 78	1, 110	2, 36	2, 73																																																																																																																					
	D	D	D	D	M																																																																																																																					
TEXTURE:																																																																																																																										
Sand	35	—	—	—	—																																																																																																																					
Silt	—	35	10	—	—																																																																																																																					
Clay	65	65	90	—	—																																																																																																																					
COMPOSITION:																																																																																																																										
Calcite	—	—	—	—	95																																																																																																																					
Carbonate grains	—	Tr	—	—	—																																																																																																																					
Clay	65	65	74	—	—																																																																																																																					
Feldspar	20	15	10	5	—																																																																																																																					
Mica	—	—	—	—	—																																																																																																																					
Opauques	—	—	—	5	—																																																																																																																					
Peloids	—	—	—	70	—																																																																																																																					
Plant	—	—	3	—	—																																																																																																																					
Pyrite	—	3	7	—	—																																																																																																																					
Quartz	10	10	3	20	5																																																																																																																					
Rock fragment	5	5	3	—	—																																																																																																																					
							2	1.0																																																																																																																		
							CC																																																																																																																			

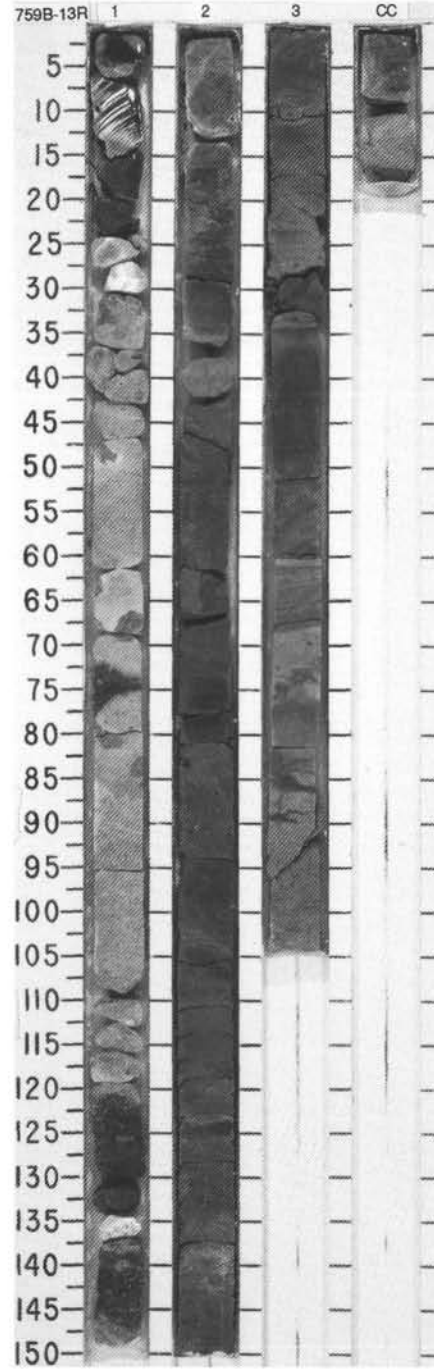


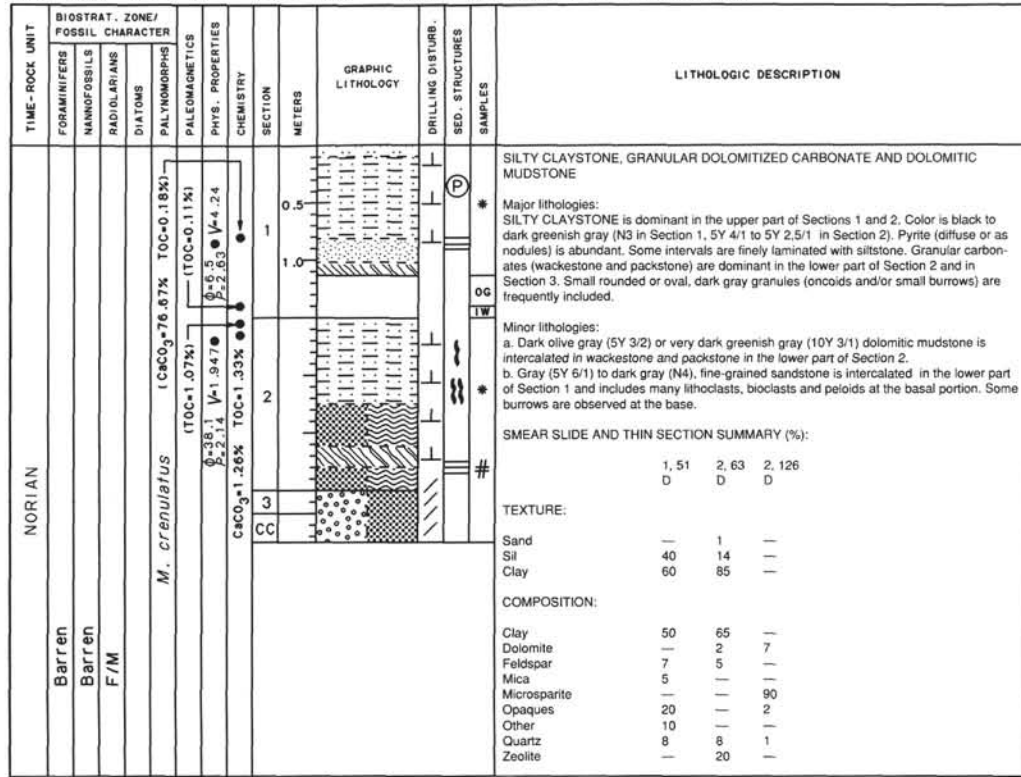
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																											
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																				
	PALYNOFORMS																																																																																							
NORIAN	Indeterminate				ϕ = 2.69 P = 0.60 CaCO ₃ = 97.8% TOC = 0.01%	1	0.5 1.0					CLAYEY SILTSTONE AND BIOCLASTIC PELOIDAL GRAINSTONE/PACKSTONE Major lithologies: CLAYEY SILTSTONE, grayish-green (5G, 4/2), containing rootlet structure and/or impressions, and drill biscuits. BIOCLASTIC PELOIDAL GRAINSTONE to PACKSTONE, dark greenish gray (10Y 5/1), upward-coarsening sequence in Section 1, 72-150 cm, with components including peloids (oolites and coated grains), and bioclasts (coralline red algae, molluscs, echinoderms, benthonic foraminifera, etc.). Section 2, 25-65 cm, is finely laminated. The color varies among light brownish-gray 2.5Y, 5/2, grayish-brown (2.5Y, 5/2), and olive gray (5Y, 4/2). Dolomitized lithologies are black (5Y, 2.5/1). No CC. SMEAR SLIDE AND THIN SECTION SUMMARY (%):																																																																												
	Barren												2							<table border="1"> <thead> <tr> <th></th> <th>1, 22 D</th> <th>1, 95 D</th> <th>2, 24 D</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>10</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>55</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>35</td> <td>—</td> <td>—</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Accessory minerals</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Aggregates</td> <td>—</td> <td>10</td> <td>—</td> </tr> <tr> <td>Algae</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Bioclast</td> <td>—</td> <td>10</td> <td>5</td> </tr> <tr> <td>Clay</td> <td>45</td> <td>—</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>30</td> <td>—</td> <td>—</td> </tr> <tr> <td>Foraminifers</td> <td>—</td> <td>—</td> <td>3</td> </tr> <tr> <td>Mica</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Ooids</td> <td>—</td> <td>50</td> <td>—</td> </tr> <tr> <td>Opales</td> <td>8</td> <td>—</td> <td>—</td> </tr> <tr> <td>Peloids</td> <td>—</td> <td>—</td> <td>65</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>—</td> <td>—</td> </tr> <tr> <td>Spar cement</td> <td>—</td> <td>30</td> <td>27</td> </tr> </tbody> </table>		1, 22 D	1, 95 D	2, 24 D	TEXTURE:				Sand	10	—	—	Silt	55	—	—	Clay	35	—	—	COMPOSITION:				Accessory minerals	Tr	—	—	Aggregates	—	10	—	Algae	Tr	—	—	Bioclast	—	10	5	Clay	45	—	—	Feldspar	30	—	—	Foraminifers	—	—	3	Mica	2	—	—	Ooids	—	50	—	Opales	8	—	—	Peloids	—	—	65
	1, 22 D	1, 95 D	2, 24 D																																																																																					
TEXTURE:																																																																																								
Sand	10	—	—																																																																																					
Silt	55	—	—																																																																																					
Clay	35	—	—																																																																																					
COMPOSITION:																																																																																								
Accessory minerals	Tr	—	—																																																																																					
Aggregates	—	10	—																																																																																					
Algae	Tr	—	—																																																																																					
Bioclast	—	10	5																																																																																					
Clay	45	—	—																																																																																					
Feldspar	30	—	—																																																																																					
Foraminifers	—	—	3																																																																																					
Mica	2	—	—																																																																																					
Ooids	—	50	—																																																																																					
Opales	8	—	—																																																																																					
Peloids	—	—	65																																																																																					
Quartz	15	—	—																																																																																					
Spar cement	—	30	27																																																																																					



SITE 759 HOLE B CORE 13R CORED INTERVAL 107.0-116.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER					PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																														
	FORAMINIFERS	MAMMOFOSBILS	RADIOLARIANS	DIATOMS	PALYNOMORPHS																																																																																																																																							
NORIAN	Barren	Barren	Barren											<p>PACKSTONE, WACKSTONE AND CLAYSTONE</p> <p>Major lithologies: Alternating PACKSTONES (light gray, 2.5Y 7/2 or greenish gray, 5GY 6/1) and WACK-ESTONES (black, 7.5YR 2/0) are dominant and include many shell, coral, and coral fragments, algae, oncolite and oolite. Some packstones and wackstones have been affected by dolomitization. Packstones and wackstones are generally structureless and some are distinctly bioturbated. Black (7.5YR 2/0), dark gray (7.5YR 4/0), and dark olive gray (5Y 3/2) CLAYSTONE in Section 2, 66-150 cm and Section 3, 0-34 cm are parallel laminated and include silty claystone layers (1-10 mm thick).</p> <p>Minor lithologies: a. Greenish gray (10Y 5/1) grainstone in Section 3, 34-68 cm shows parallel lamination and include micritic layers. b. Fine-grained sandstone in Section 2, 42-67 cm is characterized by convolution and include some pyrite nodules and coal fragments. c. Silty claystone, dark gray (7.5YR 4/0) in Section 3, 0-34 cm, as parallel laminae with claystone.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 11</th> <th>1, 72</th> <th>1, 146</th> <th>2, 70</th> <th>2, 119</th> <th>3, 83</th> </tr> <tr> <th></th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> <th>D</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>TEXTURE:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>—</td> <td>20</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>—</td> <td>—</td> <td>60</td> <td>30</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>—</td> <td>—</td> <td>20</td> <td>70</td> <td>—</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bioclast</td> <td>—</td> <td>20</td> <td>—</td> <td>—</td> <td>—</td> <td>4</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>—</td> <td>—</td> <td>20</td> <td>65</td> <td>—</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>40</td> <td>—</td> <td>—</td> <td>—</td> <td>20</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>—</td> <td>—</td> <td>32</td> <td>5</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>—</td> <td>—</td> <td>3</td> <td>5</td> <td>—</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>30</td> <td>10</td> <td>—</td> <td>—</td> <td>70</td> </tr> <tr> <td>Opaques</td> <td>3</td> <td>—</td> <td>—</td> <td>15</td> <td>5</td> <td>5</td> </tr> <tr> <td>Other</td> <td>—</td> <td>—</td> <td>30</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Peloids</td> <td>95</td> <td>10</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>—</td> <td>10</td> <td>30</td> <td>20</td> <td>1</td> </tr> <tr> <td>Spar cement</td> <td>—</td> <td>—</td> <td>50</td> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table>		1, 11	1, 72	1, 146	2, 70	2, 119	3, 83		D	D	D	M	D	D	TEXTURE:							Sand	—	—	—	20	—	—	Silt	—	—	—	60	30	—	Clay	—	—	—	20	70	—	COMPOSITION:							Bioclast	—	20	—	—	—	4	Clay	—	—	—	20	65	—	Dolomite	—	40	—	—	—	20	Feldspar	—	—	—	32	5	—	Mica	—	—	—	3	5	—	Micrite	—	30	10	—	—	70	Opaques	3	—	—	15	5	5	Other	—	—	30	—	—	—	Peloids	95	10	—	—	—	—	Quartz	2	—	10	30	20	1	Spar cement	—	—	50	—	—	—
	1, 11	1, 72	1, 146	2, 70	2, 119	3, 83																																																																																																																																						
	D	D	D	M	D	D																																																																																																																																						
TEXTURE:																																																																																																																																												
Sand	—	—	—	20	—	—																																																																																																																																						
Silt	—	—	—	60	30	—																																																																																																																																						
Clay	—	—	—	20	70	—																																																																																																																																						
COMPOSITION:																																																																																																																																												
Bioclast	—	20	—	—	—	4																																																																																																																																						
Clay	—	—	—	20	65	—																																																																																																																																						
Dolomite	—	40	—	—	—	20																																																																																																																																						
Feldspar	—	—	—	32	5	—																																																																																																																																						
Mica	—	—	—	3	5	—																																																																																																																																						
Micrite	—	30	10	—	—	70																																																																																																																																						
Opaques	3	—	—	15	5	5																																																																																																																																						
Other	—	—	30	—	—	—																																																																																																																																						
Peloids	95	10	—	—	—	—																																																																																																																																						
Quartz	2	—	10	30	20	1																																																																																																																																						
Spar cement	—	—	50	—	—	—																																																																																																																																						



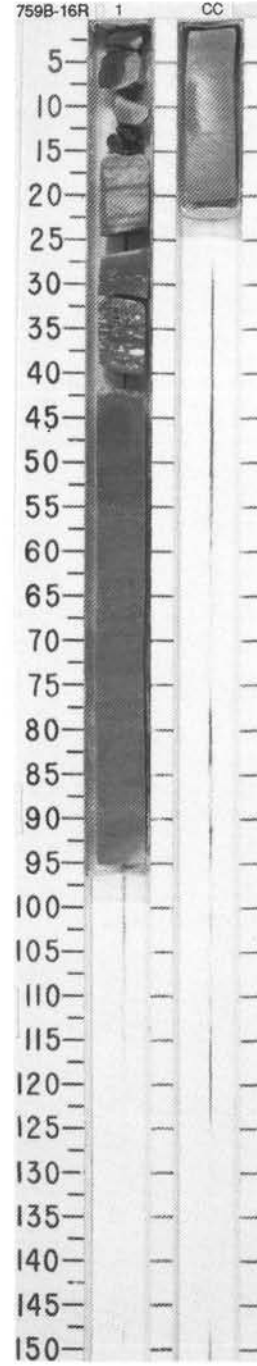


CORE 761B-15R NO RECOVERY

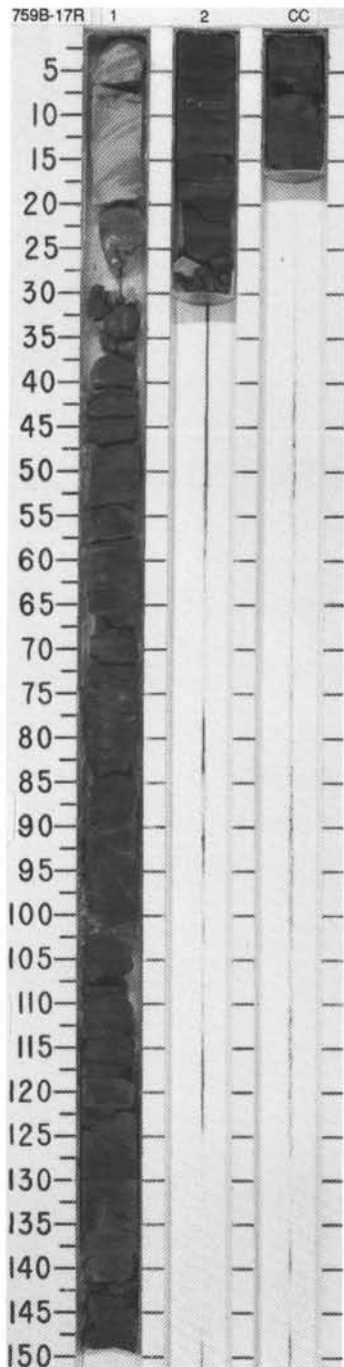


SITE 759 HOLE B CORE 16R CORED INTERVAL 135.5-145.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																											
	FORAMINIFERS	NAKNOFOSSILS	RADIOLARIANS	DIATOMS											PALYNOMORPHS																										
NORIAN														<p>PACKSTONE AND CALCAREOUS SANDSTONE</p> <p>Major lithologies: PACKSTONE (Section 1, 0-40 cm) shows normal grading overlain by parallel lamination, and includes many shell fragments, coal fragments and pellets. Dark greenish gray (5G 4/ 1) CALCAREOUS SANDSTONE (Section 1, 40-150 cm and Section 2, 0-23 cm) is mainly composed of quartz, biotite and glauconite grains and has been affected by calcite cementation. Ripple-cross lamination is dominant in the calcareous sandstone.</p> <p>Interpretation: The change from carbonates to sandstone at Section 1, 10 cm, is used to define the boundary between Lithologic Unit 3 (shallow water) and Lithologic Unit 4 (deeper water).</p> <p>THIN SECTION SUMMARY (%):</p> <table border="0"> <tr> <td></td> <td>1, 40</td> <td>CC</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>10</td> <td>25</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>25</td> </tr> <tr> <td>Feldspar</td> <td>3</td> <td>—</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>50</td> </tr> <tr> <td>Pyroxene</td> <td>2</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>45</td> <td>—</td> </tr> <tr> <td>Spar cement</td> <td>40</td> <td>—</td> </tr> </table>		1, 40	CC	D	D	D	Bioclast	10	25	Dolomite	—	25	Feldspar	3	—	Micrite	—	50	Pyroxene	2	—	Quartz	45	—	Spar cement	40	—
	1, 40	CC																																							
D	D	D																																							
Bioclast	10	25																																							
Dolomite	—	25																																							
Feldspar	3	—																																							
Micrite	—	50																																							
Pyroxene	2	—																																							
Quartz	45	—																																							
Spar cement	40	—																																							
Barren	Barren	Barren	Barren	<i>M. crenulatus</i> F/M ●	ITDC=0.06% V=3.5 V=4.396 ● P=2.65	CaCO ₃ =33.50% TOC=0.09% ●		0.5 1.0																																	
								CC																																	



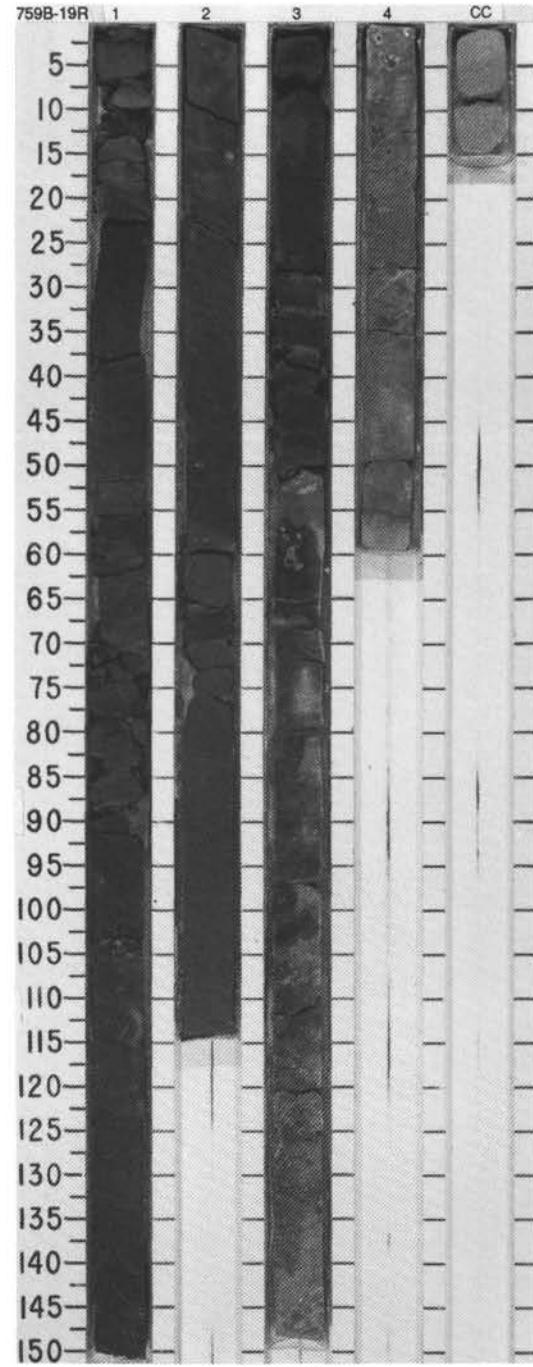
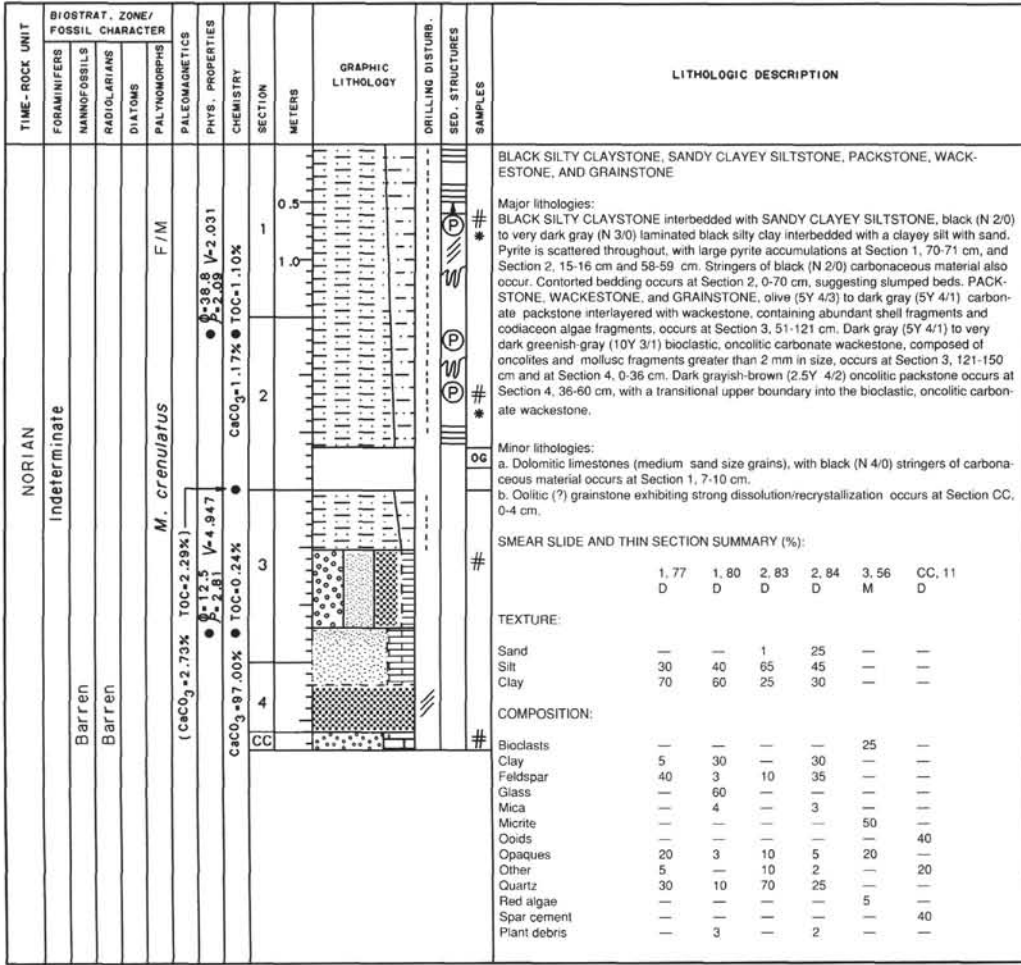
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																								
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIAZONS																																																		
NORIAN	Barren	Barren	Barren	M/F				1	0.5					<p>CLAYSTONE WITH SILT AND SILTY CLAYSTONE</p> <p>Major lithologies: Black (5Y 2.5/1) or dark olive (5Y 3/2) CLAYSTONE with SILT AND SILTY CLAYSTONE are generally structureless or finely laminated, and show distinct bioturbation. Many pyrite nodules (3-10 mm in diameter) are scattered through the silty claystones. Some burrows are infilled with pyrite.</p> <p>Minor lithologies: a. Sandstones show distinct normal grading overlain by parallel lamination, and include some granule- to pebble-sized (<5 mm) fragments at the bases. Quartz, feldspar, and rock fragments are the major constituent grains and are subrounded or rounded. b. Some coal seams are intercalated in the parallel laminated portion of the sandstone. c. Lithified siliceous mudstone are recognized in Section 2, 27-30 cm.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 10</td> <td>1, 87</td> <td>2, 9</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Silt</td> <td>—</td> <td>20</td> <td>35</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>80</td> <td>65</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>—</td> <td>71</td> <td>60</td> </tr> <tr> <td>Feldspar</td> <td>5</td> <td>5</td> <td>10</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>2</td> <td>—</td> </tr> <tr> <td>Opales</td> <td>—</td> <td>10</td> <td>10</td> </tr> <tr> <td>Quartz</td> <td>55</td> <td>12</td> <td>20</td> </tr> <tr> <td>Spar cement</td> <td>40</td> <td>—</td> <td>—</td> </tr> </table>		1, 10	1, 87	2, 9		D	D	D	Silt	—	20	35	Clay	—	80	65	Clay	—	71	60	Feldspar	5	5	10	Mica	—	2	—	Opales	—	10	10	Quartz	55	12	20	Spar cement	40	—	—
	1, 10	1, 87	2, 9																																																			
	D	D	D																																																			
Silt	—	20	35																																																			
Clay	—	80	65																																																			
Clay	—	71	60																																																			
Feldspar	5	5	10																																																			
Mica	—	2	—																																																			
Opales	—	10	10																																																			
Quartz	55	12	20																																																			
Spar cement	40	—	—																																																			
							2	1.0																																														
							CC																																															



SITE 759 HOLE B CORE 18R CORED INTERVAL 154.5-164.0 mbsf

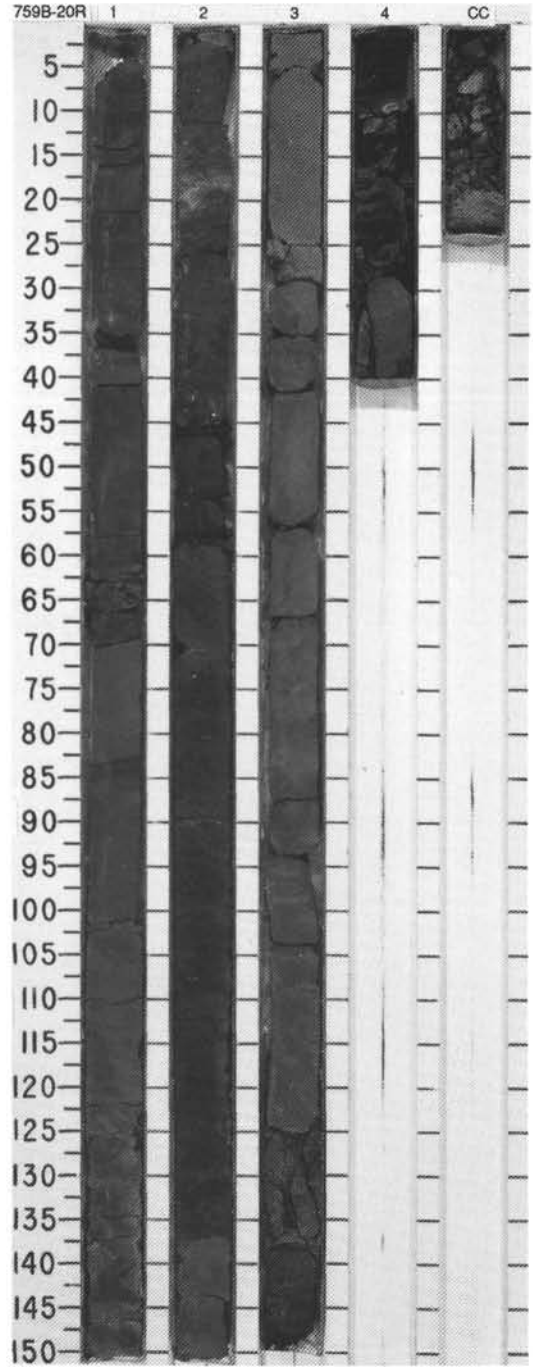
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																				
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIAZONIS																																																														
NORIAN	Barren	Barren	Barren	R/P		(CaCO ₃ =0.75% TOC=3.46%) V=1.945 TOC=1.42%								<p>BLACK SILTY CLAYSTONE, QUARTZ SILTSTONE AND QUARTZ CLAYEY SILTSTONE</p> <p>Major lithologies: BLACK SILTY CLAYSTONE, black (7.5Y 2/0), and generally structureless with pyrite disseminated throughout. QUARTZ SILTSTONE and QUARTZ CLAYEY SILTSTONE, black (7.5YR 2/0), occurring in 1-3 cm-thick layers. Some layers fine upwards. Bioturbation preferentially occurs in the siltstone layers, developed as pockets of claystone with fecal pellets that cross-cut individual siltstone laminae. These siltstone layers are often associated with an underlying horizon of pyrite nodules (1-4 mm) along the contact between the underlying silty claystone and the overlying laminated siltstone.</p> <p>Minor lithologies: a. Quartz sandstone with calcite cement occurs as two pieces (2 X 2 cm and 3 X 3 cm) at Section 1, 0-11 cm. The larger piece contains two layers, a 1 cm-thick, light gray (2.5Y 7/2) layer that is graded from medium to fine quartz sandstone, with angular to sub-rounded grains; and a 3 cm-thick, gray (2.5Y 5/0) layer that is crudely graded, with a few (5%) granules at the base, and grading from medium to fine sandstone. These sandstones are similar to the ones recovered at the top of Core 122-759B-17R. b. Lithic, quartz sandy siltstone occurs at Section CC, 0-5 cm, is graded at the base, and passes upwards into parallel-laminated sandy siltstone.</p> <p>SMEAR SLIDE SUMMARY (%)</p> <table border="1"> <tr> <td></td> <td>1, 65</td> <td>1, 99</td> <td>2, 64</td> </tr> <tr> <td>D</td> <td></td> <td>M</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>5</td> <td>2</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>30</td> <td>65</td> <td>15</td> </tr> <tr> <td>Clay</td> <td>65</td> <td>10</td> <td>85</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcite</td> <td>—</td> <td>—</td> <td>11</td> </tr> <tr> <td>Clay</td> <td>54</td> <td>10</td> <td>80</td> </tr> <tr> <td>Feldspar</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Glauconite</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>1</td> <td>—</td> </tr> <tr> <td>Opales</td> <td>9</td> <td>3</td> <td>3</td> </tr> <tr> <td>Quartz</td> <td>24</td> <td>43</td> <td>2</td> </tr> <tr> <td>Rock fragment</td> <td>9</td> <td>40</td> <td>—</td> </tr> </table>		1, 65	1, 99	2, 64	D		M	M	Sand	5	2	—	Silt	30	65	15	Clay	65	10	85	Calcite	—	—	11	Clay	54	10	80	Feldspar	3	3	3	Glauconite	—	Tr	—	Mica	—	1	—	Opales	9	3	3	Quartz	24	43	2	Rock fragment	9	40	—
	1, 65	1, 99	2, 64																																																															
D		M	M																																																															
Sand	5	2	—																																																															
Silt	30	65	15																																																															
Clay	65	10	85																																																															
Calcite	—	—	11																																																															
Clay	54	10	80																																																															
Feldspar	3	3	3																																																															
Glauconite	—	Tr	—																																																															
Mica	—	1	—																																																															
Opales	9	3	3																																																															
Quartz	24	43	2																																																															
Rock fragment	9	40	—																																																															

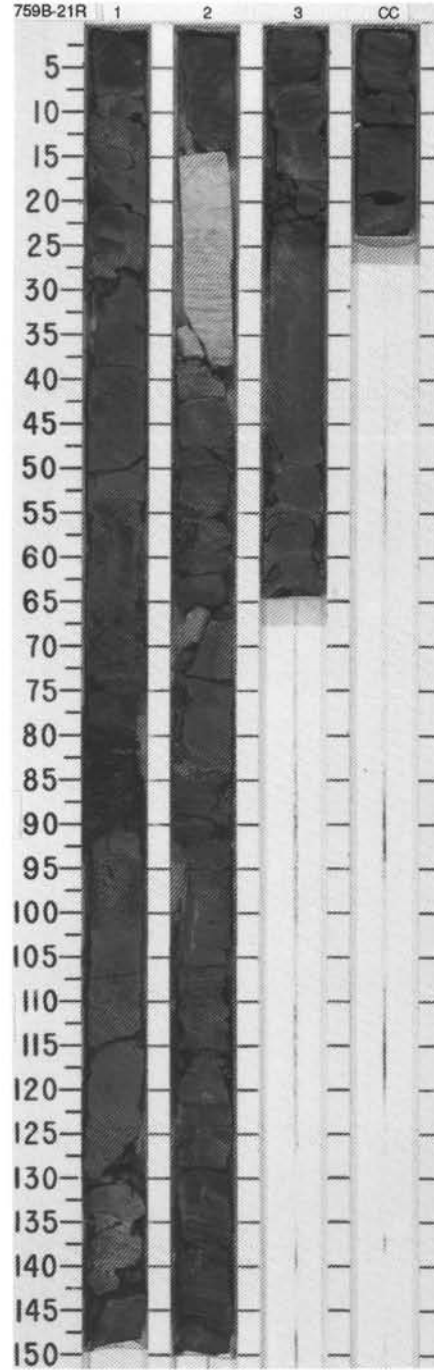
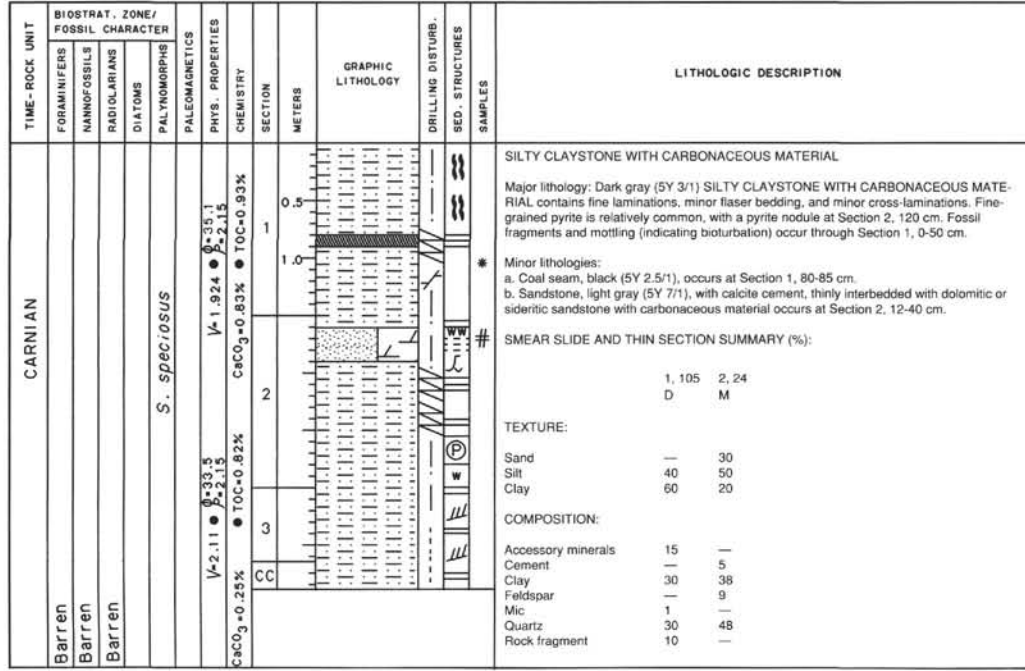




SITE 759 HOLE B CORE 20R CORED INTERVAL 173.5-183.0 mbsf

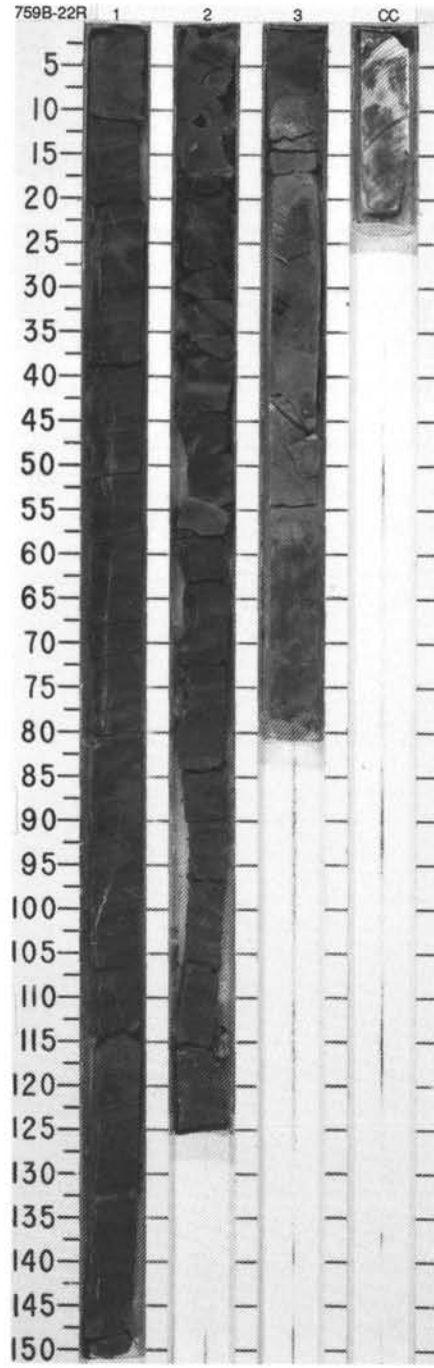
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																	
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																											
CARNIAN	Barren													<p>CLAYSTONE, SILTY CLAYSTONE AND SANDY SILTSTONE WITH CLAY</p> <p>Major lithologies: Interbedded CLAYSTONE, SILTY CLAYSTONE with SANDY SILTSTONE with CLAY, very dark gray 7.5R 3/0, 7.5YR 3/0), massive to parallel laminated silty claystone containing carbonaceous material occurs in Section 1. It is interbedded with dark greenish-gray (5G 4/1) sandy siltstone with clay that is parallel laminated to weakly laminated, occasionally graded, and associated with thin (< 1 cm) coal seams and with pyrite grains. The sandy siltstone with sand layers occur at Section 1, 15-20 cm, 35-40 cm, 65-68 cm, 70-85 cm, and 140-149 cm. Very dark gray (7.5R 3/0) claystone, containing disseminated pyrite, carbonaceous/coal fragments, and occasional shell fragments is also interbedded with silty claystone in Section 1. Silty claystone, dark gray (2.5Y 4/1), massive to parallel-laminated, containing carbonaceous material and dispersed, intact fossils, occurs at Section 2, 0-12 cm and 46-137 cm. Silty claystone, dark greenish-gray (5GY 4/1, 5BG 5/1, and 5BG 4/1), generally structureless, with disseminated carbonaceous material occurs at Section 2, 137-150 cm and at Section 3, 0-140 cm.</p> <p>Minor lithologies: a. Coal seams, black (5Y 2.5/1) coal seams, generally < 2 cm thick, are associated with parallel-laminated siltstone layers at Section 1, 16-17 cm, 36-37 cm, 65-66 cm, 82-84 cm, and in interval between 140 and 150 cm; coal seams also occur at Section 2, 47-49 cm. b. Fossiliferous siliceous siltstone, dark gray (5Y 4/1), poorly consolidated, Section 2, 35-47 cm. c. Fossiliferous wackestone, light gray (5Y 6/1) Section 2, 20-35 cm, gradationally overlying the fossiliferous siliceous siltstone.</p> <p>* SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 22</td> <td>1, 81</td> <td>2, 80</td> <td>3, 49</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>3</td> <td>30</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>37</td> <td>50</td> <td>45</td> <td>45</td> </tr> <tr> <td>Clay</td> <td>60</td> <td>20</td> <td>55</td> <td>55</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>53</td> <td>5</td> <td>25</td> <td>45</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>—</td> <td>15</td> <td>10</td> </tr> <tr> <td>Opacues</td> <td>10</td> <td>9</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyroxene</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>29</td> <td>30</td> <td>30</td> </tr> <tr> <td>Rock fragment</td> <td>10</td> <td>52</td> <td>10</td> <td>5</td> </tr> </table>		1, 22	1, 81	2, 80	3, 49	D	D	D	D	D	Sand	3	30	—	—	Silt	37	50	45	45	Clay	60	20	55	55	Accessory minerals	Tr	—	—	—	Clay	53	5	25	45	Feldspar	2	5	—	—	Mica	—	—	15	10	Opacues	10	9	—	—	Pyroxene	—	Tr	—	—	Quartz	2	29	30	30	Rock fragment	10	52	10	5
		1, 22	1, 81	2, 80	3, 49																																																																										
D	D	D	D	D																																																																											
Sand	3	30	—	—																																																																											
Silt	37	50	45	45																																																																											
Clay	60	20	55	55																																																																											
Accessory minerals	Tr	—	—	—																																																																											
Clay	53	5	25	45																																																																											
Feldspar	2	5	—	—																																																																											
Mica	—	—	15	10																																																																											
Opacues	10	9	—	—																																																																											
Pyroxene	—	Tr	—	—																																																																											
Quartz	2	29	30	30																																																																											
Rock fragment	10	52	10	5																																																																											
NORIAN																																																																															





SITE 759 HOLE B CORE 22R CORED INTERVAL 192.5-202.0 mbsf

TIME - ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																												
	FORAMINIFERS	NAKNOFOSSILS	RADIOLARIANS	DITOMS																																																																						
CARNIAN	Indeterminate					V=1.992 ● $\delta^{13}C_{org}$ = -2.12		I	0.5 1.0																																																																	
	Barren					V=6.504 ● $\delta^{13}C_{org}$ = -2.82		N																																																																		
	Barren					CeCO ₃ = 95.67% ● TOC = 0.04%		G																																																																		
								CC																																																																		
														<p>CLAYSTONE WITH SILT</p> <p>Major lithology: CLAYSTONE with SILT, very dark gray (3.5Y 3/0) to black (2.5Y 2/0), from top of core to Section 3, 17 cm. Sediment is finely laminated and contains pale brown (10YR 6/3) poorly silicified claystone. Load casts are present at Section 2, 90 and 110 cm. A shell concentration occurs at Section 2, 80 cm.</p> <p>Minor lithologies: a. Sand to granule size, skeletal oncoloidal packstone, dark gray (5Y 4/1) with mottles, in Section 3, 17-54 cm. b. Floatstone, from Section 3, 54 cm through CC. Transition from packstone is gradual. Floatstone consists of large intraclasts in packstone and is partially dolomitized. c. Peloidal wackestone from Section 2, 56-58 cm.</p> <p>SMEAR SLIDE AND THIN SECTION SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 85</th> <th>2, 41</th> <th>2, 56</th> </tr> <tr> <th>TEXTURE:</th> <th>D</th> <th>M</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Silt</td> <td>15</td> <td>10</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>85</td> <td>90</td> <td>—</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>Accessory minerals</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Cement</td> <td>—</td> <td>10</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>98</td> <td>80</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>3</td> <td>—</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>—</td> <td>15</td> </tr> <tr> <td>Opalines</td> <td>—</td> <td>3</td> <td>5</td> </tr> <tr> <td>Peloids</td> <td>—</td> <td>—</td> <td>75</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>3</td> <td>5</td> </tr> </tbody> </table>		1, 85	2, 41	2, 56	TEXTURE:	D	M	D	Silt	15	10	—	Clay	85	90	—		1	2	3	Accessory minerals	2	—	—	Cement	—	10	—	Clay	98	80	—	Feldspar	—	3	—	Glass	—	—	—	Mica	—	—	—	Micrite	—	—	15	Opalines	—	3	5	Peloids	—	—	75	Quartz	—	3	5
	1, 85	2, 41	2, 56																																																																							
TEXTURE:	D	M	D																																																																							
Silt	15	10	—																																																																							
Clay	85	90	—																																																																							
	1	2	3																																																																							
Accessory minerals	2	—	—																																																																							
Cement	—	10	—																																																																							
Clay	98	80	—																																																																							
Feldspar	—	3	—																																																																							
Glass	—	—	—																																																																							
Mica	—	—	—																																																																							
Micrite	—	—	15																																																																							
Opalines	—	3	5																																																																							
Peloids	—	—	75																																																																							
Quartz	—	3	5																																																																							



SITE 759 HOLE B CORE 23R CORED INTERVAL 202.0-211.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAINFOSSILS	RADIOLARIANS	DIATOMS									
CARNIAN													
	Barren					$V = 4.78 \bullet \frac{9.5.0}{2.2.73}$							
	Barren					$V = 5.042 \bullet \frac{3.1.7}{2.1.86}$	$CaCO_3 = 80.17\%$ $TOC = 0.28\%$						
	Barren						$CaCO_3 = 88.82\%$						

CARBONATE MUDSTONE, WACKESTONE, AND PACKSTONE

Major lithologies:
CARBONATE MUDSTONE, dark olive gray (5Y 3/2), generally massive but locally laminated as at Section 1, 32-35 cm. Carbonate mudstone occurs at Section 1, 15-120 cm, and grades from clayey carbonate mudstone to a black (2.5Y 2/0) limestone with intralaminational breccias at the base, Section 1, 110-120 cm. WACKESTONE, olive (5Y 5/3), light gray (5Y 7/2) and very dark greenish-gray (10Y 3/1), massive, with small benthic foraminifers. PACKSTONE, dark gray (5Y 4/1) to gray (5Y 6/1), poorly bedded skeletal oncoidal packstone at Section 2, 0-68 cm, and peloidal skeletal packstone at Section 2, 119-141 cm, with quartz and other terrigenous debris.

Minor lithologies:
a. Claystone, black (2.5Y 2/0), at Section 1, 0-10 cm.
b. grainstone, light gray (5Y 7/1) to gray (5Y 5/1), fine to coarse grained, mostly oncoid, ooid, mollusc coquina with large intraclasts of calcareous mudstone and wackestone.
c. Sandstone, siltstone, and claystone. Quartz sandstone with calcite cement, bluish-gray (5B 5/1), and yellowish-brown (2.5Y 6/4). Sandy siltstone with quartz and microfossil debris, and very dark gray (5Y 3/1) bioturbated silty claystone, and siltstone with microfossil debris, at Section 3, 0-23 cm and at Section CC, 0-16 cm.

SMEAR SLIDE SUMMARY (%):

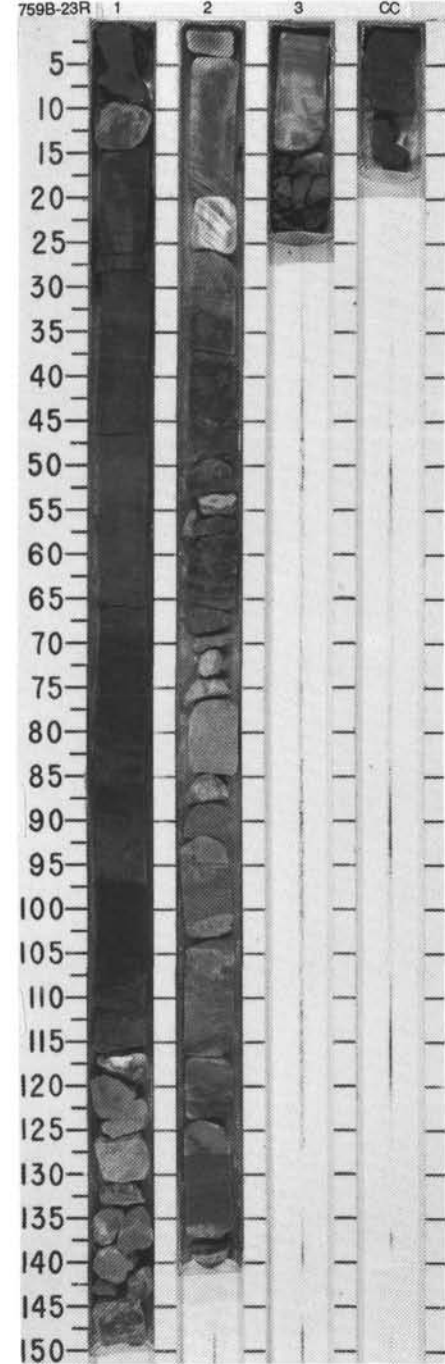
	2, 32	CC, 5
	D	D

TEXTURE:

Sand	—	10
Silt	—	35
Clay	—	55

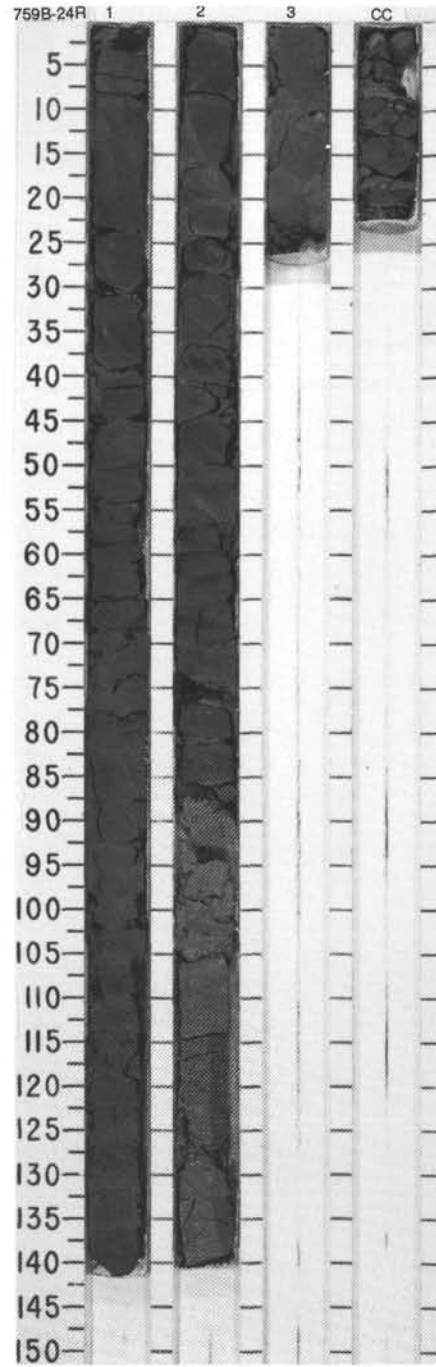
COMPOSITION:

Accessory minerals	—	3
Clay	—	55
Feldspar	—	10
Mica	—	2
Opaques	—	7
Other	60	—
Quartz	2	20
Rock fragment	—	3
Spar cement	38	—

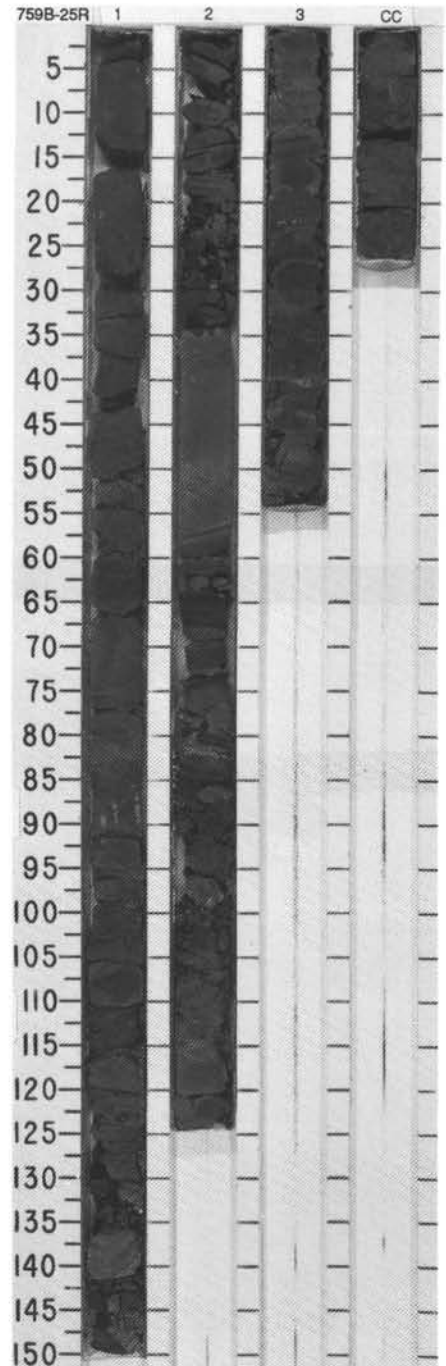


SITE 759 HOLE B CORE 24R CORED INTERVAL 211.5-221.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																																										
	FORAMINIFERS	NAUFOSSILS	RADIOLARIANS	DIATOMS																																																																																																																																																			
CARNIAN	Barren							1	0.5				<p>BLACK CLAYEY SILTSTONE, BLACK SILTY CLAYSTONE, SILTY CLAYEY SANDSTONE AND SANDSTONE WITH CLAY</p> <p>Major lithologies: BLACK CLAYEY SILTSTONE, black (5Y 2.5/1) both structureless and laminated and bioturbated. Dolomitized carbonate grains of unspecified origin commonly occur, wood fragments and carbonaceous matter occur locally. BLACK SILTY CLAYSTONE, black 5Y 2.5/1, 2.5Y 2/0 claystone occurs at Section 2, 0-96 cm. It is finely parallel-laminated in places, with laminations locally disturbed by burrowing, including Chondrites burrows. Thin (1 mm) siltstone laminae occur locally. SILTY CLAYEY SANDSTONE interbedded with SANDSTONE WITH CLAY, gray (5Y 6/1, 5Y 5/1). Section 2, 86 cm through Section 3, 27 cm.</p> <p>Minor lithologies: a. Dolomitic sandy siltstone, dark olive gray (5Y 3/2) to very dark grayish brown (2.5Y 3/2), occurs interbedded with, CC, 7-11 b. Dolomitized carbonate grains of medium sand-size are present.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 15</th> <th>2, 51</th> <th>2, 91</th> <th>2, 120</th> <th>CC, 9</th> </tr> <tr> <th></th> <th>M</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>30</td> <td>80</td> <td>40</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>25</td> <td>30</td> <td>—</td> <td>25</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>75</td> <td>40</td> <td>20</td> <td>35</td> </tr> </tbody> </table> <p>TEXTURE:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 15</th> <th>2, 51</th> <th>2, 91</th> <th>2, 120</th> <th>CC, 9</th> </tr> <tr> <th></th> <th>M</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>30</td> <td>80</td> <td>40</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>25</td> <td>30</td> <td>—</td> <td>25</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>75</td> <td>40</td> <td>20</td> <td>35</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 15</th> <th>2, 51</th> <th>2, 91</th> <th>2, 120</th> <th>CC, 9</th> </tr> <tr> <th></th> <th>M</th> <th>D</th> <th>D</th> <th>D</th> <th>M</th> </tr> </thead> <tbody> <tr> <td>Accessory minerals</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Carbonate</td> <td>—</td> <td>—</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>35</td> <td>75</td> <td>40</td> <td>20</td> <td>35</td> </tr> <tr> <td>Dolomite</td> <td>40</td> <td>—</td> <td>—</td> <td>—</td> <td>10</td> </tr> <tr> <td>Feldspar</td> <td>15</td> <td>15</td> <td>20</td> <td>10</td> <td>20</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>7</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opâques</td> <td>—</td> <td>7</td> <td>10</td> <td>5</td> <td>20</td> </tr> <tr> <td>Plant</td> <td>—</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>10</td> <td>1</td> <td>20</td> <td>60</td> <td>15</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>—</td> <td>10</td> <td>—</td> <td>—</td> </tr> </tbody> </table>		1, 15	2, 51	2, 91	2, 120	CC, 9		M	D	D	D	M	Sand	—	—	30	80	40	Silt	60	25	30	—	25	Clay	40	75	40	20	35		1, 15	2, 51	2, 91	2, 120	CC, 9		M	D	D	D	M	Sand	—	—	30	80	40	Silt	60	25	30	—	25	Clay	40	75	40	20	35		1, 15	2, 51	2, 91	2, 120	CC, 9		M	D	D	D	M	Accessory minerals	—	—	—	Tr	Tr	Carbonate	—	—	—	5	—	Clay	35	75	40	20	35	Dolomite	40	—	—	—	10	Feldspar	15	15	20	10	20	Glass	—	—	—	Tr	—	Mica	7	Tr	—	—	—	Opâques	—	7	10	5	20	Plant	—	2	—	—	—	Quartz	10	1	20	60	15	Rock fragment	—	—	10	—	—
		1, 15	2, 51	2, 91	2, 120	CC, 9																																																																																																																																																	
		M	D	D	D	M																																																																																																																																																	
	Sand	—	—	30	80	40																																																																																																																																																	
Silt	60	25	30	—	25																																																																																																																																																		
Clay	40	75	40	20	35																																																																																																																																																		
	1, 15	2, 51	2, 91	2, 120	CC, 9																																																																																																																																																		
	M	D	D	D	M																																																																																																																																																		
Sand	—	—	30	80	40																																																																																																																																																		
Silt	60	25	30	—	25																																																																																																																																																		
Clay	40	75	40	20	35																																																																																																																																																		
	1, 15	2, 51	2, 91	2, 120	CC, 9																																																																																																																																																		
	M	D	D	D	M																																																																																																																																																		
Accessory minerals	—	—	—	Tr	Tr																																																																																																																																																		
Carbonate	—	—	—	5	—																																																																																																																																																		
Clay	35	75	40	20	35																																																																																																																																																		
Dolomite	40	—	—	—	10																																																																																																																																																		
Feldspar	15	15	20	10	20																																																																																																																																																		
Glass	—	—	—	Tr	—																																																																																																																																																		
Mica	7	Tr	—	—	—																																																																																																																																																		
Opâques	—	7	10	5	20																																																																																																																																																		
Plant	—	2	—	—	—																																																																																																																																																		
Quartz	10	1	20	60	15																																																																																																																																																		
Rock fragment	—	—	10	—	—																																																																																																																																																		
							2	1.0																																																																																																																																															
							3																																																																																																																																																
							CC																																																																																																																																																



TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAUFOSSILS	RADIOLARIANS	DIATOMS									
CARNIAN	Barren	Triassic species					1						<p>SILTY CLAYSTONE AND CLAYEY SILTSTONE</p> <p>Major lithologies: SILTY CLAYSTONE and CLAYEY SILTSTONE, very dark gray (2.5Y 3/0) to black (N3 to N4), with feldspar, rock fragments, and pyrite, and lesser quartz, biotite, and plant debris. This material is laminated to massive. Burrows are filled with light gray silt or pyrite. Some color bands of pale olive (5Y 6/3) may be dolomitized or sideritized.</p> <p>Interpretation: These claystones and siltstones were deposited in an oxygen-depleted environment, with no calcareous fauna. The pyrite and siderite are diagenetic, as pale olive (5Y 6/3) material fills burrows, indicating the presence of burrowing epifauna or infauna.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="margin-left: 40px;">1, 45 D</p> <p>TEXTURE:</p> <p style="margin-left: 40px;">Sand 2 Silt 35 Clay 63</p> <p>COMPOSITION:</p> <p style="margin-left: 40px;">Clay 60 Feldspar 15 Glauconite Tr Mica 2 Opalues 5 Plant 1 Quartz 2 Rock fragment 15</p>
						2							
						3							
						CC							



SITE 759 HOLE B CORE 26R CORED INTERVAL 230.5-235.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																										
	FORAMINIFERS	NAKNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																																			
CARNIAN	Barren	Barren	Barren	F/M				1	0.5				<p>SILTY CLAYSTONE WITH SAND, CLAYSTONE WITH SILT, AND CLAYEY SILTSTONE WITH SAND</p> <p>Major lithologies: CLAYEY SANDY SILTSTONE, dark gray (5Y 4/1), and bioturbated, Section 1, 0-46 cm. SILTY CLAYSTONE with SAND and CLAYEY SILTSTONE with SAND dark gray (5Y 4/1, N4), light brownish-gray (2.5Y 6/2), and very dark gray (2.5Y 3/0, 5Y 3/1, N3).</p> <p>Minor lithology: Claystone with silt, dark gray (5Y 4/1), interbedded with silty claystone with sand, Section 1, 46-100 cm. Sediments are layered and laminated. The coarser grained intervals range from a few to about 40 cm in thickness and are interbedded with laminated, finer-grained sediments. The coarser grained sediments are slightly lighter in color. Bioturbation is common. A pyritized burrow in Section 1 extends from 0-17 cm. In other parts of the core, large burrows are light yellowish brown (2.5Y 6/4). Pyrite nodules occur in Section 1, 57 cm (4x5 mm), and 128 cm (2x6 mm).</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 34</th> <th>1, 46</th> <th>2, 67</th> <th>2, 91</th> <th>3, 20</th> </tr> </thead> <tbody> <tr> <td>M</td> <td></td> <td>M</td> <td>D</td> <td>D</td> <td>D</td> </tr> </tbody> </table> <p>TEXTURE:</p> <table border="1"> <thead> <tr> <th></th> <th>30</th> <th>Tr</th> <th>10</th> <th>10</th> <th>15</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Silt</td> <td>45</td> <td>20</td> <td>60</td> <td>25</td> <td>60</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>80</td> <td>30</td> <td>65</td> <td>25</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>—</th> <th>5</th> <th>—</th> <th>—</th> <th>—</th> </tr> </thead> <tbody> <tr> <td>Accessory minerals</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Clay</td> <td>25</td> <td>7</td> <td>—</td> <td>30</td> <td>70</td> </tr> <tr> <td>Dolomite</td> <td>—</td> <td>—</td> <td>5</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>40</td> <td>5</td> <td>35</td> <td>20</td> <td>50</td> </tr> <tr> <td>Mica</td> <td>5</td> <td>3</td> <td>—</td> <td>2</td> <td>—</td> </tr> <tr> <td>Opales</td> <td>—</td> <td>3</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>20</td> <td>10</td> <td>15</td> <td>5</td> <td>20</td> </tr> <tr> <td>Rock fragment</td> <td>10</td> <td>—</td> <td>15</td> <td>3</td> <td>5</td> </tr> </tbody> </table>		1, 34	1, 46	2, 67	2, 91	3, 20	M		M	D	D	D		30	Tr	10	10	15	Sand						Silt	45	20	60	25	60	Clay	25	80	30	65	25		—	5	—	—	—	Accessory minerals						Clay	25	7	—	30	70	Dolomite	—	—	5	Tr	—	Feldspar	40	5	35	20	50	Mica	5	3	—	2	—	Opales	—	3	—	—	—	Quartz	20	10	15	5	20	Rock fragment	10	—	15	3	5
	1, 34	1, 46	2, 67	2, 91	3, 20																																																																																																		
M		M	D	D	D																																																																																																		
	30	Tr	10	10	15																																																																																																		
Sand																																																																																																							
Silt	45	20	60	25	60																																																																																																		
Clay	25	80	30	65	25																																																																																																		
	—	5	—	—	—																																																																																																		
Accessory minerals																																																																																																							
Clay	25	7	—	30	70																																																																																																		
Dolomite	—	—	5	Tr	—																																																																																																		
Feldspar	40	5	35	20	50																																																																																																		
Mica	5	3	—	2	—																																																																																																		
Opales	—	3	—	—	—																																																																																																		
Quartz	20	10	15	5	20																																																																																																		
Rock fragment	10	—	15	3	5																																																																																																		
							2	1.0																																																																																															
							3																																																																																																

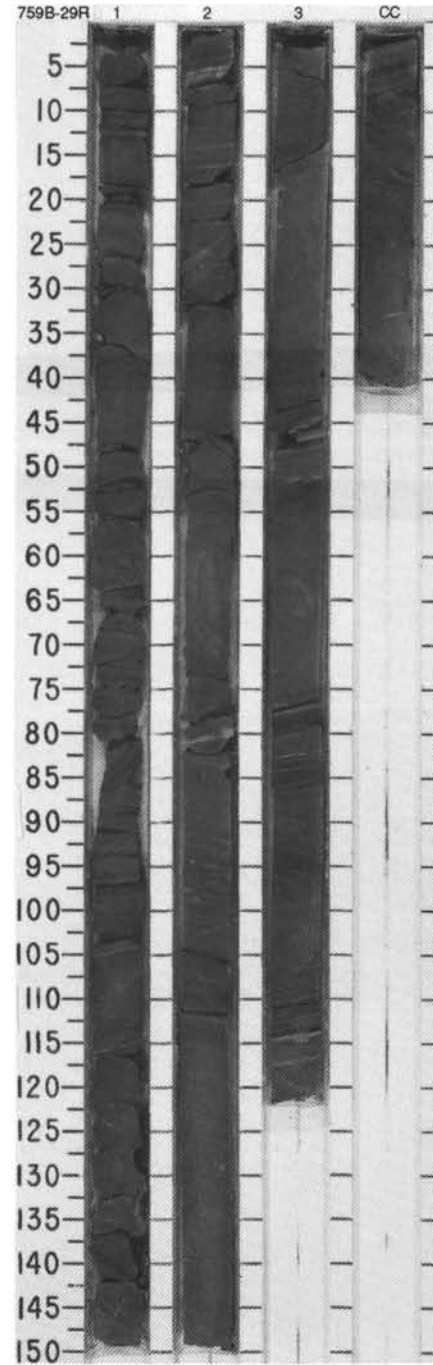


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																												
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAATOMS																																																																						
CARNIAN	Barren	Triassic species	Barren	Barren				1	0.5					<p>CLAYSTONE WITH SILT AND SILTY SANDSTONE</p> <p>Major lithologies: CLAYSTONE WITH SILT and CLAYSTONE, black (N2) to very dark gray (N3), laminated at Section 1, 0-40 cm, at Section 2, 55-150 cm, and less commonly at Section 3, 50-115 cm. The core is bioturbated at Section 1, 40-150 cm, Section 2, 0-55 cm, and at Section 3. Drilling disturbance obscures many of the sedimentary structures in Section 3.</p> <p>Minor lithologies: Pyrite nodules associated with coarse sand grains and with burrows, are present throughout.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 44</td> <td>2, 70</td> <td>3, 23</td> <td>3, 71</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>D</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Silt</td> <td>10</td> <td>5</td> <td>20</td> <td>5</td> </tr> <tr> <td>Clay</td> <td>90</td> <td>95</td> <td>80</td> <td>95</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Carbonate</td> <td>5</td> <td>1</td> <td>1</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>90</td> <td>95</td> <td>80</td> <td>95</td> </tr> <tr> <td>Feldspar</td> <td>2</td> <td>2</td> <td>3</td> <td>—</td> </tr> <tr> <td>Fish</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>T</td> <td>—</td> <td>—</td> <td>1</td> </tr> <tr> <td>Opauques</td> <td>—</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>2</td> <td>15</td> <td>5</td> </tr> </table>		1, 44	2, 70	3, 23	3, 71		D	M	D	M	Silt	10	5	20	5	Clay	90	95	80	95	Accessory minerals	—	—	—	Tr	Carbonate	5	1	1	—	Clay	90	95	80	95	Feldspar	2	2	3	—	Fish	—	Tr	—	—	Mica	T	—	—	1	Opauques	—	Tr	—	—	Quartz	2	2	15	5
	1, 44	2, 70	3, 23	3, 71																																																																						
	D	M	D	M																																																																						
Silt	10	5	20	5																																																																						
Clay	90	95	80	95																																																																						
Accessory minerals	—	—	—	Tr																																																																						
Carbonate	5	1	1	—																																																																						
Clay	90	95	80	95																																																																						
Feldspar	2	2	3	—																																																																						
Fish	—	Tr	—	—																																																																						
Mica	T	—	—	1																																																																						
Opauques	—	Tr	—	—																																																																						
Quartz	2	2	15	5																																																																						
							2	1.0																																																																		
							3																																																																			



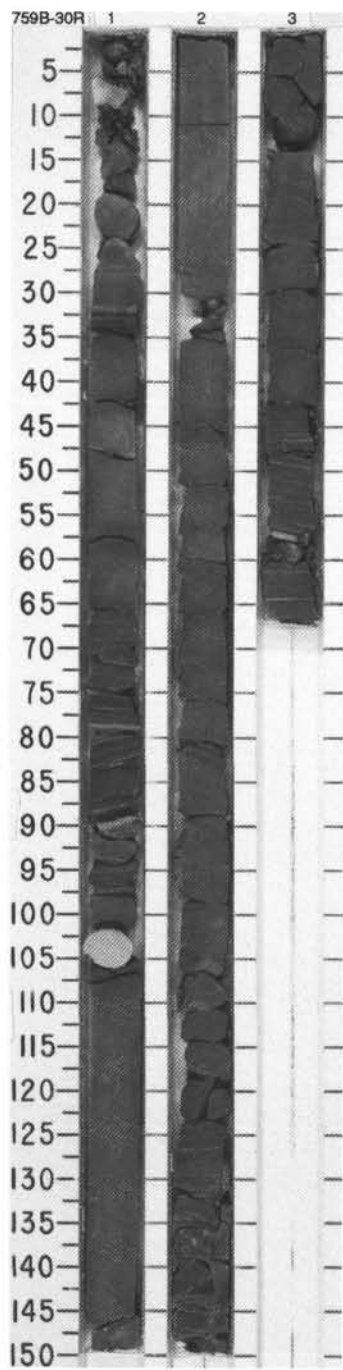
SITE 759 HOLE B CORE 29R CORED INTERVAL 245.5-250.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																											
	FORAMINIFERS	NAUFOSSILS	RADIOLARIANS	DIATOMS																																				
CARNIAN	Barren	F/M	Barren	Barren									<p>SILTY CLAYSTONE AND SANDY CLAYSTONE WITH SILT</p> <p>Major lithologies: Finely laminated SILTY CLAYSTONE, dark gray (5GY 4/1, N4), very dark greenish gray (10Y 3/1), dark greenish gray (10Y 4/2), with laminae. Two different types of laminated silty claystone are present. One type is greener in color and contains dark (carbonaceous ?) layers and pyrite. The other type is black and has siderite (?) layers. The laminated units in which the siderite (?) is present is as follows: Section 1, 8-20, 103-118; Section 2, 0-26, 80-83, 94-102, 109-114; Section 3, 44-55, 76-88, and 106-119 cm. The laminated silty claystone is interbedded with SANDY CLAYSTONE WITH SILT, very dark greenish gray (10Y 4/2) and dark gray (5Y 4/1). The sandy claystone layers range between about 20 and 60 cm in thickness. Dispersed carbonaceous material is present throughout.</p> <p>Minor lithologies: a. Siderite (?) or dolomite laminae, brownish yellow (10YR 6/6), interbedded in the silty claystone. b. Pyrite nodules are present in Section 1, 36 cm (20x10 mm), 90-93 (many 1-4 mm size), and Section 2, 79 cm, (5x8 mm). Sedimentary structures are abundant and well preserved.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 55</td> <td>3, 90</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>25</td> <td>5</td> </tr> <tr> <td>Silt</td> <td>20</td> <td>20</td> </tr> <tr> <td>Clay</td> <td>55</td> <td>75</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>55</td> <td>75</td> </tr> <tr> <td>Feldspar</td> <td>30</td> <td>20</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>5</td> </tr> </table>		2, 55	3, 90	D	D	D	Sand	25	5	Silt	20	20	Clay	55	75	Clay	55	75	Feldspar	30	20	Mica	—	Tr	Quartz	15	5
	2, 55	3, 90																																						
D	D	D																																						
Sand	25	5																																						
Silt	20	20																																						
Clay	55	75																																						
Clay	55	75																																						
Feldspar	30	20																																						
Mica	—	Tr																																						
Quartz	15	5																																						
							1																																	
							2																																	
							3																																	
							CC																																	

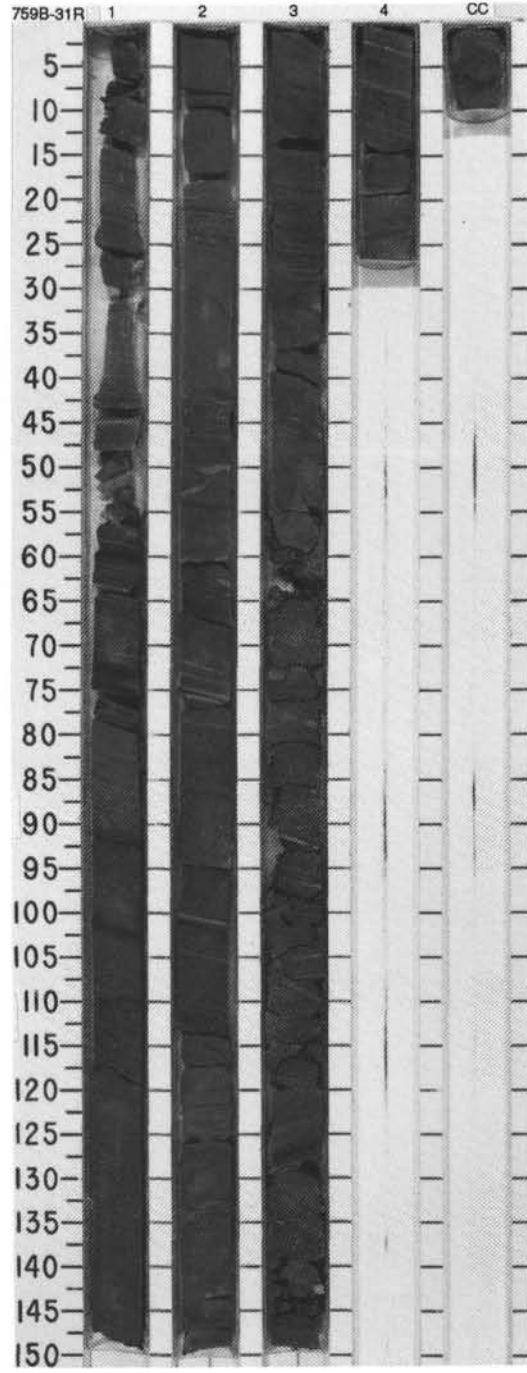


SITE 759 HOLE B CORE 30R CORED INTERVAL 250.5-255.0 mbsf

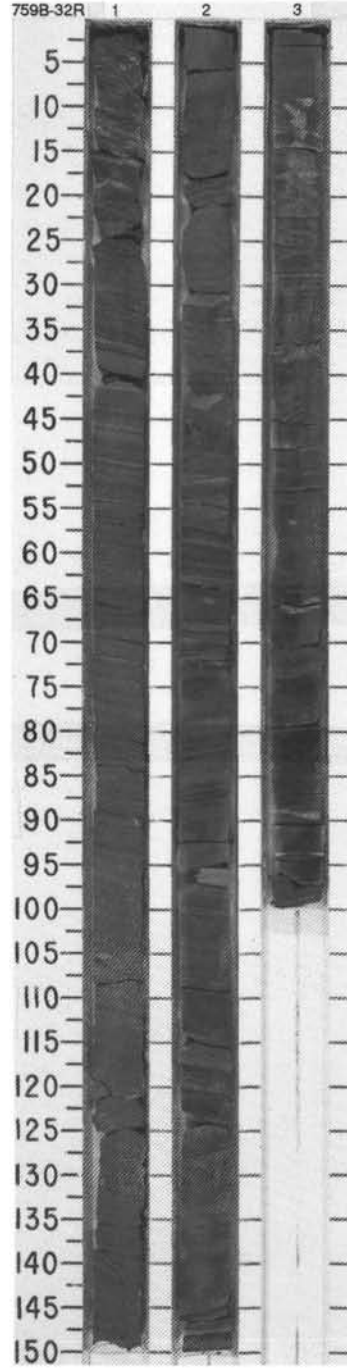
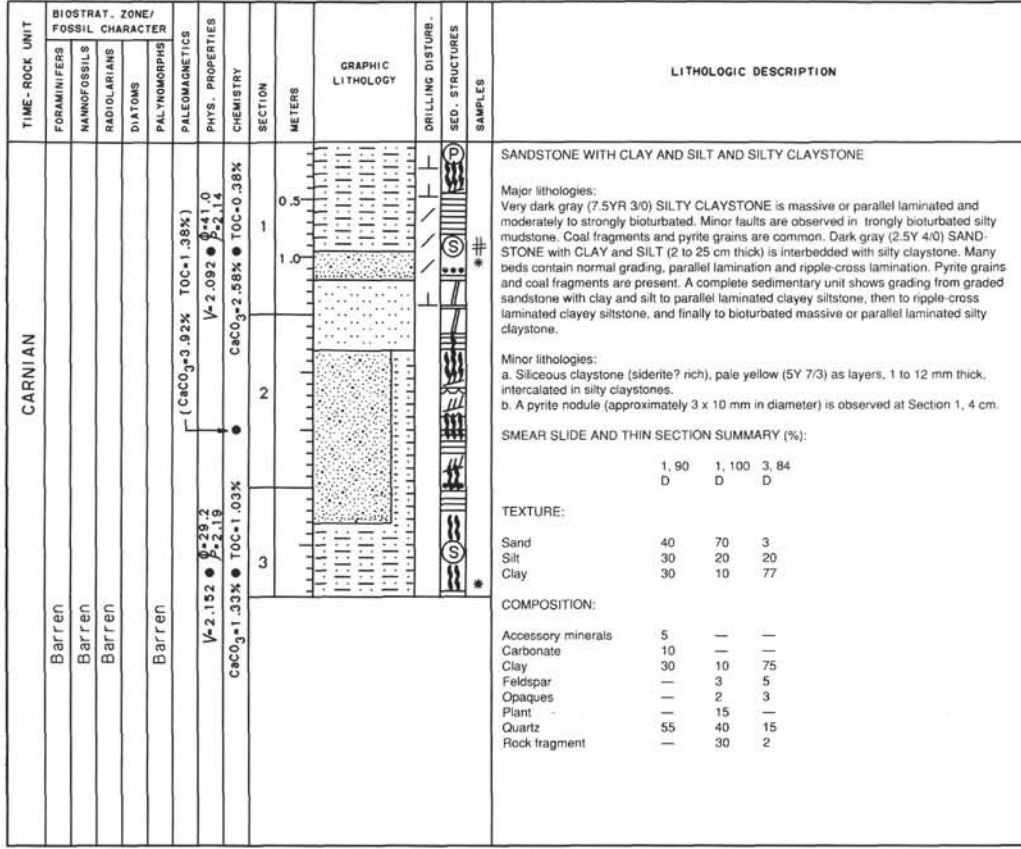
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
CARNIAN		Barren	Triassic species	Late Triassic	<i>S. speciosus</i>		V-2.178 ● P-2.219 T-2.219	CaCO ₃ -1.82% ● TOC=1.06%	1	0.5 1.0		X		SILTY CLAYSTONE AND CLAYSTONE WITH SILT
							V-2.170 ● P-2.219 T-2.219	CaCO ₃ -3.33% ● TOC=1.30%	2			X	*	Major lithology: CLAYEY SILTSTONE, gray (2.5Y 6/0), is dominantly structureless with some parallel-laminations with sharp basal contacts with local bioturbation. Pyrite grains and coal fragments occur within the clayey siltstone. CLAYSTONE with SILT, well laminated with minor slump folds occur at Section 2, 140-150 cm. Section 3, 46-62 cm, very dark gray (5Y 3/1), parallel-laminated and containing claystone streaks 1-7 mm thick. Pellets and chondrites-type burrows occur at Section 3, 42-44 cm.
									3			X	*	Minor lithologies: a. Sandy claystone, very dark gray (2.5Y 3/0) and massive, containing quartz, mica, feldspar, and abundant plant remains, Section 1, 35-65 cm. b. Claystone, very dark gray (5Y 3/1), parallel-laminated Section 3, 55-60 cm. c. Siliceous claystone, pale yellow (5Y 7/3), occurs as 1-7 mm-thick layers and as nodules up to 5 cm in diameter (nodule at Section 1, 102-106 cm), intercalated with clayey siltstone and silty claystone.
														SMEAR SLIDE SUMMARY (%):
														1, 120 3, 58
														D M
														TEXTURE:
														Silt 30 15
														Clay 70 85
														COMPOSITION:
														Clay 50 50
														Mica 5 —
														Quartz 30 30
														Radiolarians — Tr
														Rock fragment 5 10
														Siderite 10 10



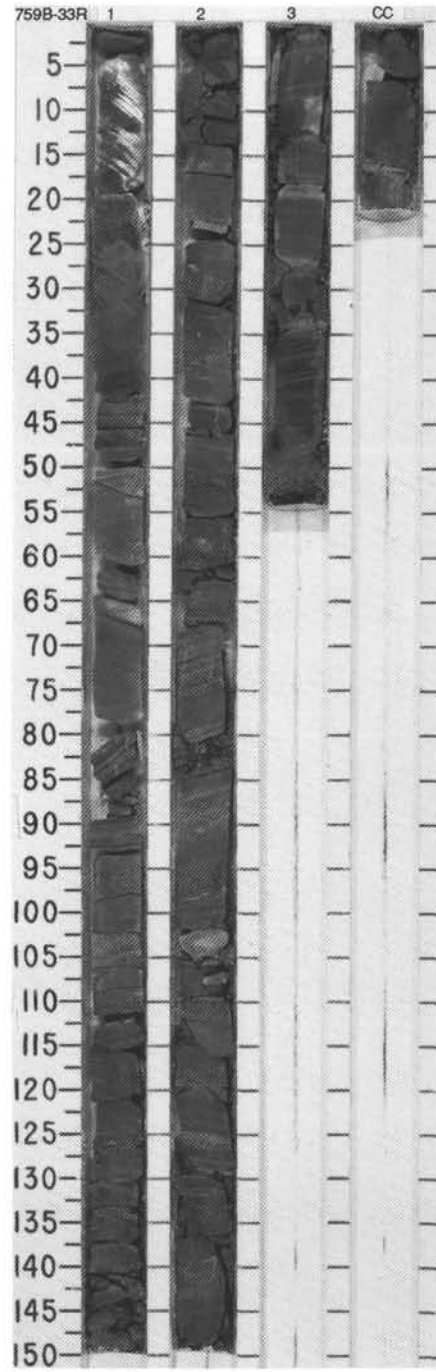
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																												
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIATOMS																																																																																					
CARNIAN																																																																																									
Barren	Triassic species							1	0.5			*	<p>SILTY CLAYSTONE AND CLAYEY SILTSTONE</p> <p>Major lithologies: Black (5Y 5/2) to olive gray (5Y 3/2) laminated carbonaceous SILTY CLAYSTONE and gray (5Y 5/2) to dark gray (5Y 4/1) CLAYEY SILTSTONE. Based on smear slides, quartz is the dominant recognizable mineral. Fine-grained rock fragments and clay size minerals are also present, but are difficult to identify (less than 4 microns). Both lithologies are finely laminated in undisturbed fragments. Some bioturbation is present as well as small cross laminations. Convolute laminations indicate the presence of minor slumps and/or soft sediment deformation by loading. A small syndimentary fault is observed in Section 1, 90 cm.</p> <p>Minor lithologies: a. Siltstone with clay, dark gray (5Y 4/1), structureless, commonly with black organic debris and pyrite, Section 2, 0-20 and 25-40, and Section 3, 130-145. b. Interbedded with the carbonaceous silty claystones is light gray (2.5Y 7/2) siliceous claystone. These claystones do not react to HCL and can scratched easily with a knife. Smear slide examination shows quartz and possibly siderite as the major components. Minor fossil fragments (radiolarian debris ?) were observed.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 70 D</th> <th>2, 30 D</th> <th>3, 125 D</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>25</td> </tr> <tr> <td>Silt</td> <td>25</td> <td>75</td> <td>55</td> </tr> <tr> <td>Clay</td> <td>75</td> <td>25</td> <td>20</td> </tr> </tbody> </table> <p>TEXTURE:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 70 D</th> <th>2, 30 D</th> <th>3, 125 D</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>25</td> </tr> <tr> <td>Silt</td> <td>25</td> <td>75</td> <td>55</td> </tr> <tr> <td>Clay</td> <td>75</td> <td>25</td> <td>20</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 70 D</th> <th>2, 30 D</th> <th>3, 125 D</th> </tr> </thead> <tbody> <tr> <td>Clay</td> <td>50</td> <td>25</td> <td>18</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>Tr</td> <td>2</td> </tr> <tr> <td>Glass</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Opagues</td> <td>10</td> <td>5</td> <td>30</td> </tr> <tr> <td>Other</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Plant</td> <td>—</td> <td>—</td> <td>30</td> </tr> <tr> <td>Pyroxene</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Quart</td> <td>30</td> <td>60</td> <td>15</td> </tr> <tr> <td>Rock fragment</td> <td>10</td> <td>10</td> <td>5</td> </tr> </tbody> </table>		1, 70 D	2, 30 D	3, 125 D	Sand	—	—	25	Silt	25	75	55	Clay	75	25	20		1, 70 D	2, 30 D	3, 125 D	Sand	—	—	25	Silt	25	75	55	Clay	75	25	20		1, 70 D	2, 30 D	3, 125 D	Clay	50	25	18	Feldspar	—	Tr	2	Glass	Tr	—	—	Mica	—	—	Tr	Opagues	10	5	30	Other	Tr	—	—	Plant	—	—	30	Pyroxene	—	—	Tr	Quart	30	60	15	Rock fragment	10	10	5
	1, 70 D	2, 30 D	3, 125 D																																																																																						
Sand	—	—	25																																																																																						
Silt	25	75	55																																																																																						
Clay	75	25	20																																																																																						
	1, 70 D	2, 30 D	3, 125 D																																																																																						
Sand	—	—	25																																																																																						
Silt	25	75	55																																																																																						
Clay	75	25	20																																																																																						
	1, 70 D	2, 30 D	3, 125 D																																																																																						
Clay	50	25	18																																																																																						
Feldspar	—	Tr	2																																																																																						
Glass	Tr	—	—																																																																																						
Mica	—	—	Tr																																																																																						
Opagues	10	5	30																																																																																						
Other	Tr	—	—																																																																																						
Plant	—	—	30																																																																																						
Pyroxene	—	—	Tr																																																																																						
Quart	30	60	15																																																																																						
Rock fragment	10	10	5																																																																																						
R/P							2	1.0																																																																																	
Barren							3																																																																																		
Barren							4																																																																																		
							CC																																																																																		



SITE 759 HOLE B CORE 32R CORED INTERVAL 260.0-265.0 mbsf

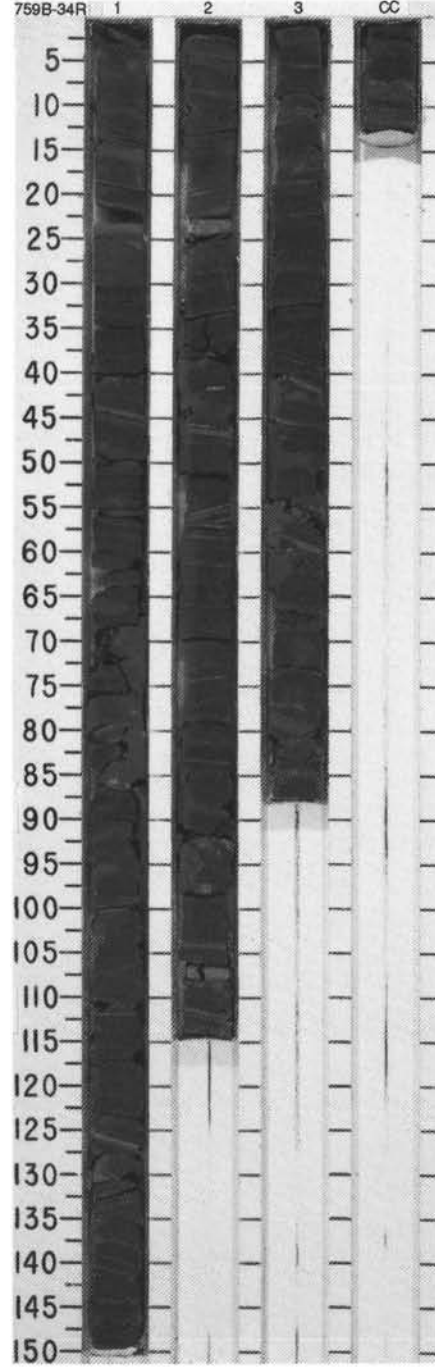


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION												
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																					
CARNIAN																									
Barren	Triassic species							1	0.5				<p>CARBONACEOUS SILTY CLAYSTONE</p> <p>Major lithology: Dark greenish gray (10Y 3/1), olive gray (5Y 4/2), to black (5Y 2.5/1) parallel laminated and slightly bioturbated CARBONACEOUS SILTY CLAYSTONE. Small cross laminations are observed in Sections 1 and C, and CC.</p> <p>Minor lithologies: a. Fossiliferous algal (?) limestone, alternating olive (5Y 4/3) and very dark gray (5Y 3/1), Section 1, 0-40 cm. The limestone is finely laminated with some of the laminations having an undulatory surface. Fine grained quartz sand appears to be interlaminated, possibly trapped by the algal filaments. b. Section 1 at 65-80 cm contains an olive gray (5Y 4/2) sandy siltstone with quartz. The sandstone appears to be cemented with calcite. c. Interbedded with the silty claystone are light gray (2.5Y 7/2) siltstone? claystone layers and laminations, probably diagenetic.</p> <p>THIN SECTION SUMMARY (%): 1.9 M</p> <p>COMPOSITION:</p> <table border="0"> <tr><td>Bioclast</td><td>5</td></tr> <tr><td>Feldspar</td><td>Tr</td></tr> <tr><td>Intraclasts</td><td>10</td></tr> <tr><td>Micrite</td><td>5</td></tr> <tr><td>Quartz</td><td>15</td></tr> <tr><td>Spar cement</td><td>65</td></tr> </table>	Bioclast	5	Feldspar	Tr	Intraclasts	10	Micrite	5	Quartz	15	Spar cement	65
Bioclast	5																								
Feldspar	Tr																								
Intraclasts	10																								
Micrite	5																								
Quartz	15																								
Spar cement	65																								
F/P					V-2.148 ● 9-30.3 P-2.220		2	1.0																	
Barren						CeCO ₃ -4.75% ● TOC-1.06%	3																		
Barren						CeCO ₃ -7.67% ● TOC-0.81%	CC																		

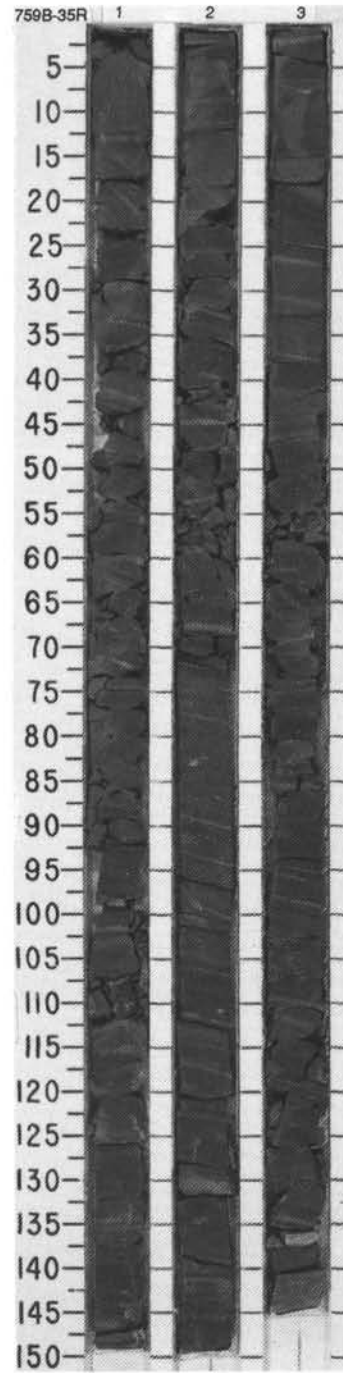


SITE 759 HOLE B CORE 34R CORED INTERVAL 270.0-274.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER					PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAUPOFOSSILS	RADIOLARIANS	DIATOMS	PALYNOMORPHS										
CARNIAN	Barren	F/P	Triassic species	Barren	Barren										<p>CARBONACEOUS SILTY CLAYSTONE AND CLAYEY SILTSTONE</p> <p>Major lithologies: Black (5Y 2.5/1) CARBONACEOUS SILTY CLAYSTONE. The claystone is laminated and bioturbated, (chondrites, Halo burrows). The carbonaceous silty claystone is interbedded and interlaminated with gray (5Y 5/2) to light olive gray (5Y 3/2) CLAYEY SILTSTONE. The clayey siltstone are finely laminated. Quartz is the most abundant mineral component. Small clay minerals and rock fragments are minor constituents.</p> <p>Minor lithologies: a. Interlayered with the carbonaceous silty claystone is a light gray (2.5Y 7/2) siliceous claystone. b. Diagenetic siderite, light gray (2.5Y 7/2) is tentatively identified as a major clay to silt size mineral primarily in layers, Section 1, 21-22 cm, Section 2, 20-22, 45, 54-55, and 107 cm, and Section 3, 54-55 cm. The carbonaceous material is absent from the siderite layers.</p>
						<p>[CaCO₃]=6.08% TOC=0.97%</p> <p>V=2.00 P=2.18 ●</p> <p>CaCO₃=5.00% TOC=1.13% ●</p> <p>V=2.12 P=2.27 ●</p> <p>CaCO₃=1.07% TOC=1.37% ●</p>									

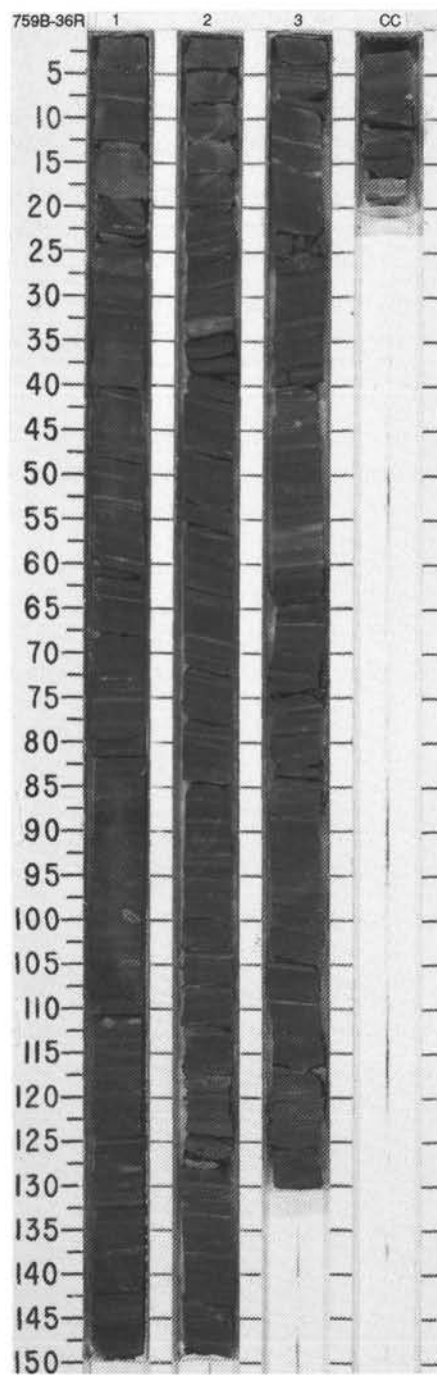


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PHYS. PROPERTIES	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																														
CARNIAN									<p>QUARTZ SILTY CLAYSTONE AND QUARTZ CLAYEY SILTSTONE</p> <p>Major lithologies: QUARTZ SILTY CLAYSTONE, very dark gray (5Y 3/1) to dark gray (5Y 4/1), occurs as structureless, bioturbated, or parallel-laminated intervals. Bioturbation includes chondrites-type burrows or pellets, and very pale brown (10YR 7/4) color mottling infilling burrows. Color banding occurs intermittently as 2 mm- to 1 cm-thick, bedding-parallel bands, light brownish-gray (2.5Y 6/2), with diffuse or sharp boundaries. Dark gray (5Y 4/1) coal fragments occur at Section 1, 32 cm and 112-115 cm. Quartz clayey siltstone, parallel-laminated with dark gray (5Y 4/1) to very dark gray (5Y 3/1) layers alternating with black (5Y 2.5/1) layers. Laminations are 1-2 mm thick, and comprise intervals 2-10 cm thick, with carbonaceous matter and coal fragments concentrated along black layers. Pyrite grains are present.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1.95</td> <td>2.100</td> </tr> <tr> <td>D</td> <td></td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Silt</td> <td>30</td> <td>60</td> </tr> <tr> <td>Clay</td> <td>70</td> <td>40</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>2</td> <td>5</td> </tr> <tr> <td>Clay</td> <td>50</td> <td>40</td> </tr> <tr> <td>Collophane</td> <td>2</td> <td>5</td> </tr> <tr> <td>Opauques</td> <td>10</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>30</td> <td>50</td> </tr> <tr> <td>Rock fragment</td> <td>5</td> <td>—</td> </tr> </table>		1.95	2.100	D		M	Silt	30	60	Clay	70	40	Accessory minerals	2	5	Clay	50	40	Collophane	2	5	Opauques	10	—	Quartz	30	50	Rock fragment	5	—
	1.95	2.100																																					
D		M																																					
Silt	30	60																																					
Clay	70	40																																					
Accessory minerals	2	5																																					
Clay	50	40																																					
Collophane	2	5																																					
Opauques	10	—																																					
Quartz	30	50																																					
Rock fragment	5	—																																					
Barren	Triassic species		1	0.5																																			
F/M			2	1.0																																			
Barren			3																																				
R/P	<i>S. speciosus</i>																																						
		$\phi = 30.7$ $V = 2.136$ $\rho = 2.28$ \bullet $\text{CaCO}_3 = 1.58$ $\text{TOC} = 0.75\%$																																					

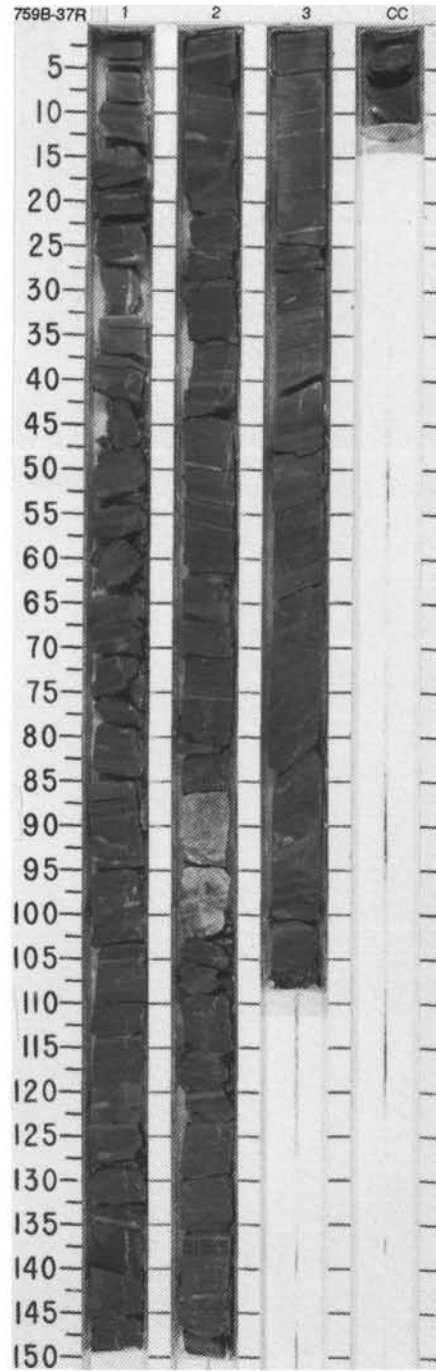


SITE 759 HOLE B CORE 36R CORED INTERVAL 279.5-284.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSBILLS	RADIOLARIANS	DIAZONES									
	CARNIAN												
Barren	Triassic species				V-2.154 ● 0.29.4 / 2.22								
Barren													
G/M	<i>S. speciosus</i>				V-2.12 ● 0.26.9 / 2.22								
						CaCO ₃ +4.17% ● TOC=1.17%	● TOC=1.17%	CaCO ₃ -2.83% ● TOC-2.00%					

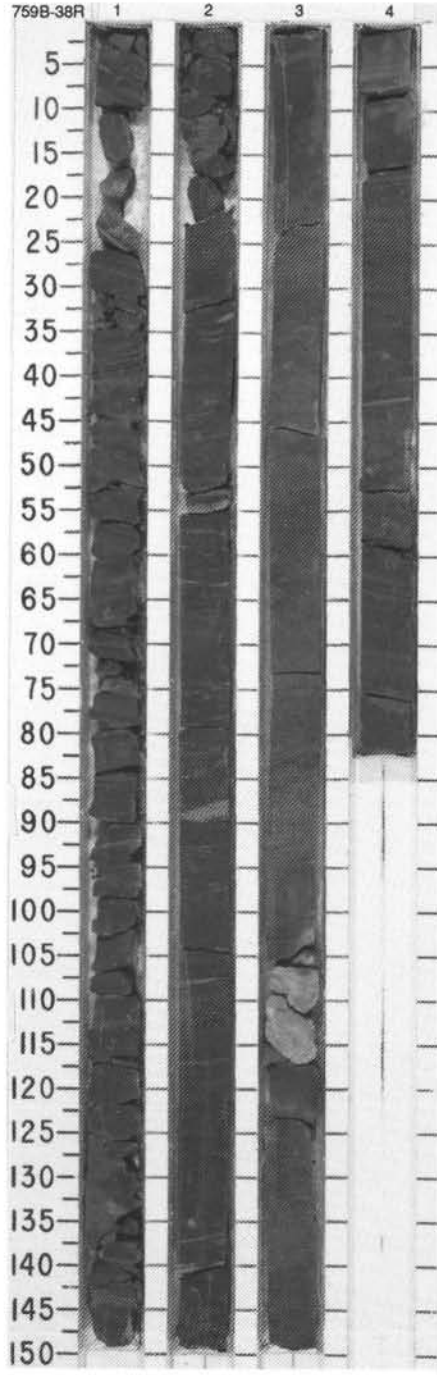


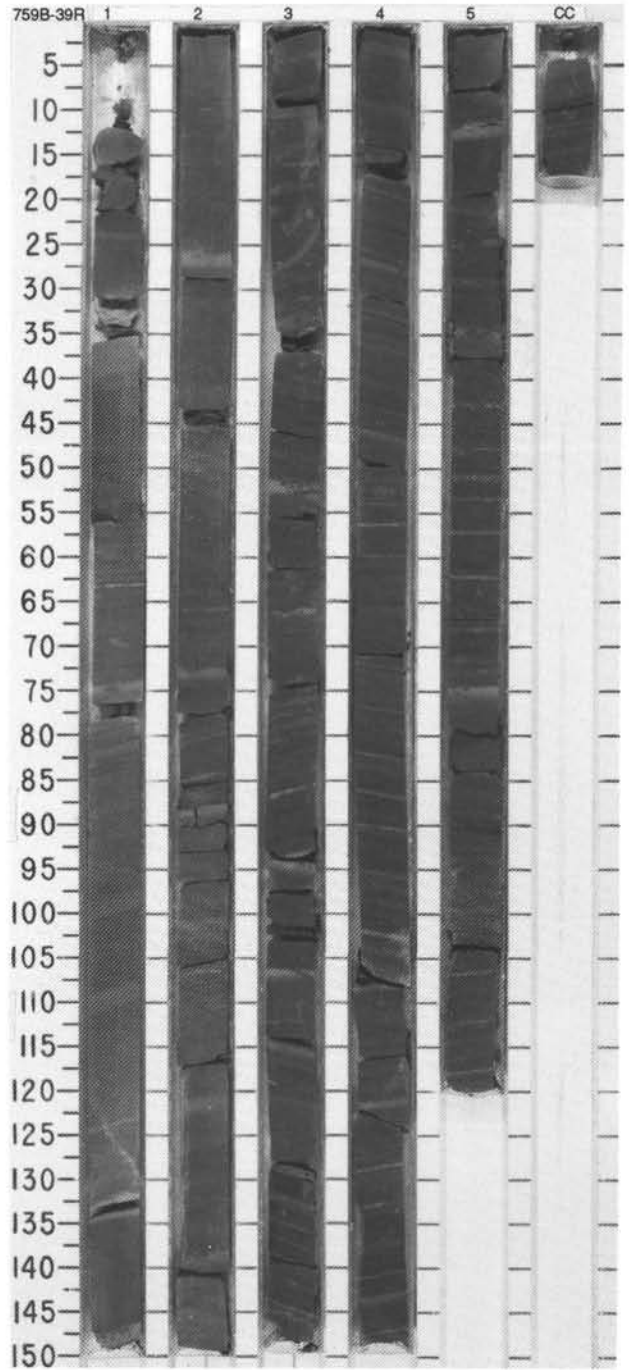
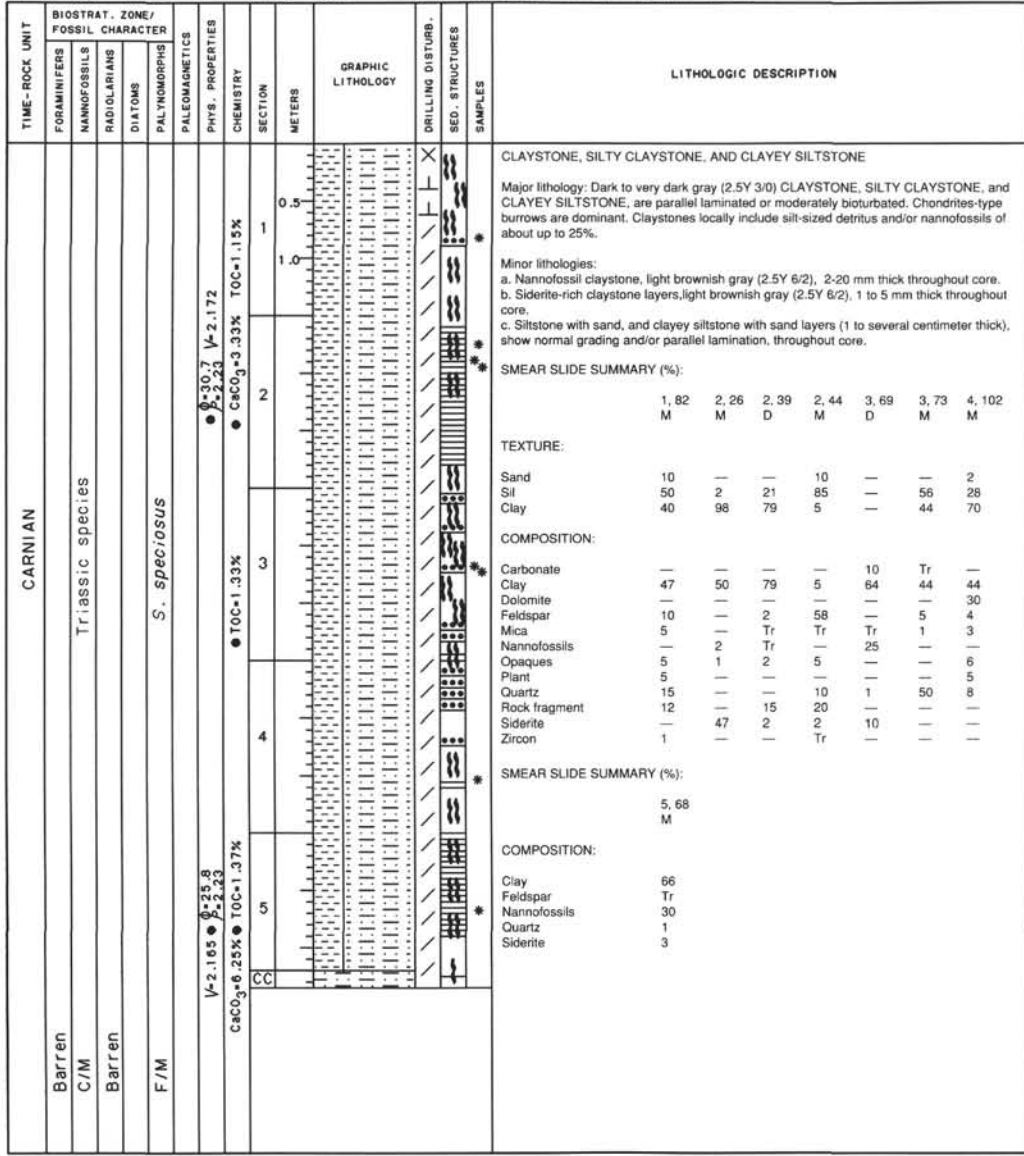
TIME-ROCK UNIT	CARNIAN																																																					
BIOSTRAT. ZONE/ FOSSIL CHARACTER	Triassic species																																																					
FORAMINIFERS	Barren																																																					
NANOFOSSILS	C/M																																																					
RADIOLARIANS	Barren																																																					
DIATOMS	R/M																																																					
PALYNOMORPHS	<i>S. speciosus</i>																																																					
PALEOMAGNETICS	(C ₆₀) ₃ 76.17% TOC=0.24%																																																					
PHYS. PROPERTIES	V=2.105 ρ=2.73 5.43 ρ=1.3 2.33																																																					
CHEMISTRY	TOC=1.36% C ₆₀ =10.33% TOC=0.72%																																																					
SECTION	1 2 3 CC																																																					
METERS	0.5 1.0																																																					
GRAPHIC LITHOLOGY																																																						
DRILLING DISTURB.	X																																																					
SED. STRUCTURES	X																																																					
SAMPLES	*																																																					
LITHOLOGIC DESCRIPTION	<p>SILTY CLAYSTONE, CLAYSTONE WITH SILT, AND CLAYEY SILTSTONE</p> <p>Major lithologies: SILTY CLAYSTONE, CLAYSTONE with SILT, and CLAYEY SILTSTONE, interlayered, dominantly dark gray (5Y 4/1) to very dark gray (5Y 3/1), color banded, less commonly with olive gray (5Y 4/2) to light yellow-brown (2.5Y 6/4) to pale yellow (2.5Y 7/4) layers, 2 mm to 1 cm in thickness. Color mottling also associated with bedding-parallel burrows up to 0.5 cm x 1.5 cm. Clayey siltstone occurs as 1 cm to 9 cm thick layers, is generally parallel-laminated or bioturbated (chondrites? burrows), and contains carbonaceous grains. At Section 3, 47-63 cm, parallel laminations and color bands are inclined at 20 degrees to the core liner. This interval overlies a disturbed interval at Section 3, 63-107 cm, which includes clay intraclasts up to 1 X 3 cm, inclined (20-45 degrees) wavy, onvoluted, above yellow-brown layers micro-faulted laminae with micro-flame structures are observed.</p> <p>Minor lithology: a. Carbonate (dolomite or siderite) mudstone, light brown-gray (2.5Y 6/2), and carbonate (limestone) mudstone, gray (2.5Y 5/0) to olive gray (5Y 5/2), Section 2, 86-103 cm. Dolomite mudstone layers are massive with sugary texture. Limestone mudstone intervals contain wavy to crenulated laminae (algal?), and subtle color banding of gray and olive-gray. The gray layers react more strongly to HCL. b. Clayey Siltstone with sand, dark gray (2.5Y 3/0) to very dark gray (2.5Y 4/0), Section 2, 105-140 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 35</td> <td>2, 107</td> <td>2, 133</td> </tr> <tr> <td>D</td> <td></td> <td>M</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>—</td> <td>12</td> <td>16</td> </tr> <tr> <td>Silt</td> <td>15</td> <td>60</td> <td>45</td> </tr> <tr> <td>Clay</td> <td>85</td> <td>28</td> <td>39</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>79</td> <td>10</td> <td>35</td> </tr> <tr> <td>Feldspar</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>2</td> <td>—</td> </tr> <tr> <td>Mica</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>5</td> <td>3</td> <td>7</td> </tr> <tr> <td>Plant</td> <td>2</td> <td>5</td> <td>5</td> </tr> <tr> <td>Quartz</td> <td>1</td> <td>33</td> <td>20</td> </tr> <tr> <td>Rock fragment</td> <td>3</td> <td>45</td> <td>30</td> </tr> </table>			1, 35	2, 107	2, 133	D		M	M	Sand	—	12	16	Silt	15	60	45	Clay	85	28	39	Clay	79	10	35	Feldspar	1	2	3	Glass	—	2	—	Mica	Tr	—	—	Opauques	5	3	7	Plant	2	5	5	Quartz	1	33	20	Rock fragment	3	45	30
	1, 35	2, 107	2, 133																																																			
D		M	M																																																			
Sand	—	12	16																																																			
Silt	15	60	45																																																			
Clay	85	28	39																																																			
Clay	79	10	35																																																			
Feldspar	1	2	3																																																			
Glass	—	2	—																																																			
Mica	Tr	—	—																																																			
Opauques	5	3	7																																																			
Plant	2	5	5																																																			
Quartz	1	33	20																																																			
Rock fragment	3	45	30																																																			



SITE 759 HOLE B CORE 38R CORED INTERVAL 289.0-298.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PHYS. PROPERTIES CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																		
CARNIAN	Barren F/M Barren R/P	Triassic species <i>S. spectrosus</i>	0.5 1 2 3 4			* * * * *	<p>CLAYSTONE AND CLAYSTONE WITH SILT</p> <p>Major lithologies: CLAYSTONE and CLAYSTONE with SILT, dark gray (N4, 5Y 4/1), dominantly claystone which includes silt-sized detritus of about 10 to 20% in total volume, represented by parallel lamination and syndimentary deformation structures. Moderate bioturbation are observed.</p> <p>Minor lithologies: a. Parallel laminated, pale yellow (5Y 7/3) siliceous claystone layers (siderite? layers), 1 to 5 mm thick are commonly included in the claystones. b. Graded and/or parallel laminated clayey siltstone layers, 4 to 5 mm thick are included in Section 2, 54-56 cm and Section 4, 18, and 58 cm. c. Siliceous claystone nodule (?) or layer (?), 10 cm in diameter is included in Section 3, 108-118 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 63</td> <td>2, 44</td> <td>2, 132</td> <td>4, 37</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Silt</td> <td>6</td> <td>12</td> <td>10</td> <td>23</td> </tr> <tr> <td>Clay</td> <td>94</td> <td>88</td> <td>90</td> <td>77</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Carbonate</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Clay</td> <td>94</td> <td>88</td> <td>90</td> <td>77</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>—</td> <td>—</td> <td>2</td> </tr> <tr> <td>Mica</td> <td>1</td> <td>2</td> <td>Tr</td> <td>1</td> </tr> <tr> <td>Opauques</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>5</td> <td>10</td> <td>10</td> <td>20</td> </tr> </table>		1, 63	2, 44	2, 132	4, 37		D	D	D	D	Silt	6	12	10	23	Clay	94	88	90	77	Carbonate	Tr	Tr	Tr	Tr	Clay	94	88	90	77	Feldspar	—	—	—	2	Mica	1	2	Tr	1	Opauques	Tr	—	—	—	Quartz	5	10	10	20
	1, 63	2, 44	2, 132	4, 37																																																					
	D	D	D	D																																																					
Silt	6	12	10	23																																																					
Clay	94	88	90	77																																																					
Carbonate	Tr	Tr	Tr	Tr																																																					
Clay	94	88	90	77																																																					
Feldspar	—	—	—	2																																																					
Mica	1	2	Tr	1																																																					
Opauques	Tr	—	—	—																																																					
Quartz	5	10	10	20																																																					
		$\phi = 27.5$ $V = 2.112$ $\rho = 2.22$ $\phi = 28.5$ $V = 2.127$ $\rho = 2.22$ CaCO ₃ = 2.42% TOC = 1.20% TOC = 1.03%																																																							





Summary Log for Site 759B

