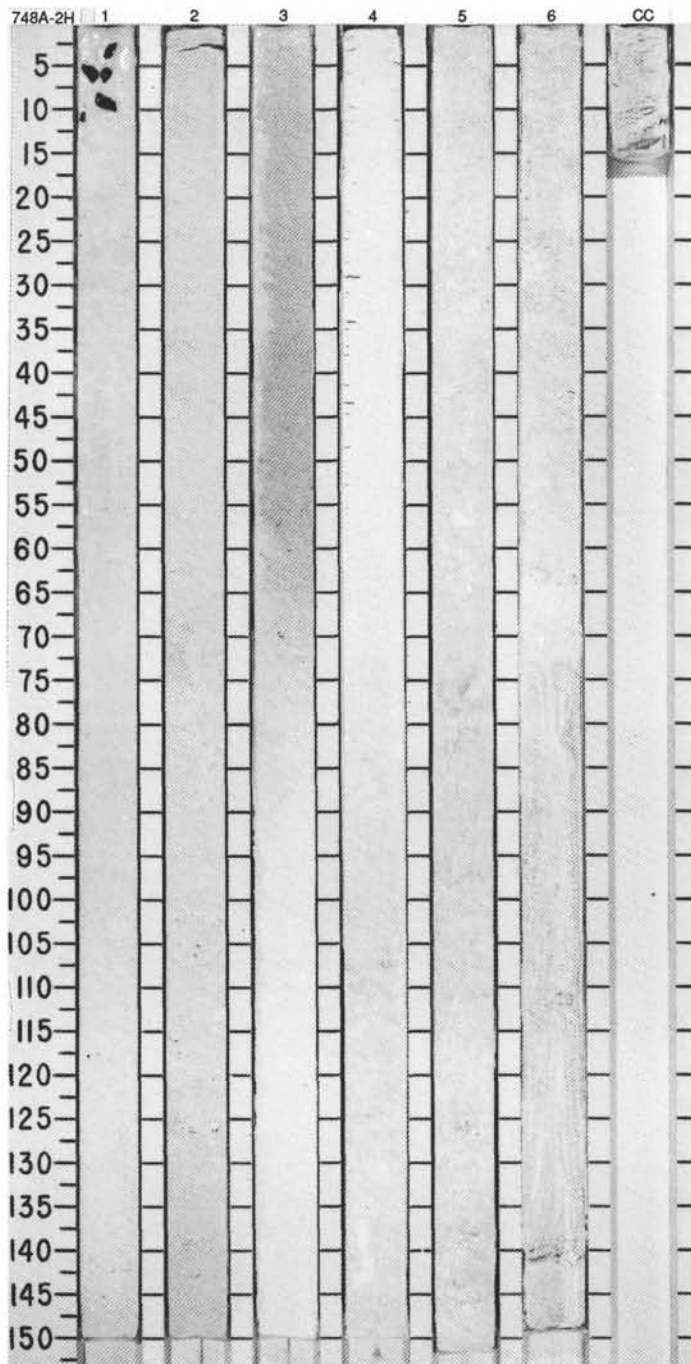
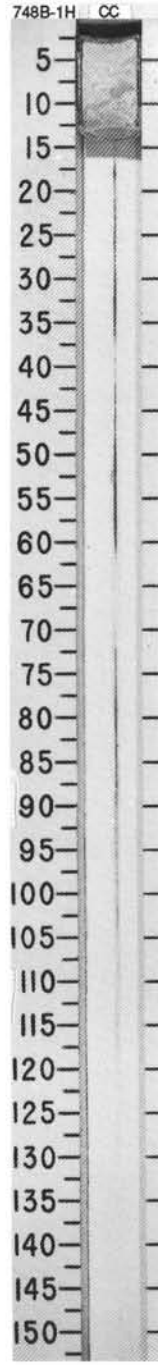


SITE 748 HOLE A CORE 2H CORED INTERVAL 9.5-19.0 mbsf

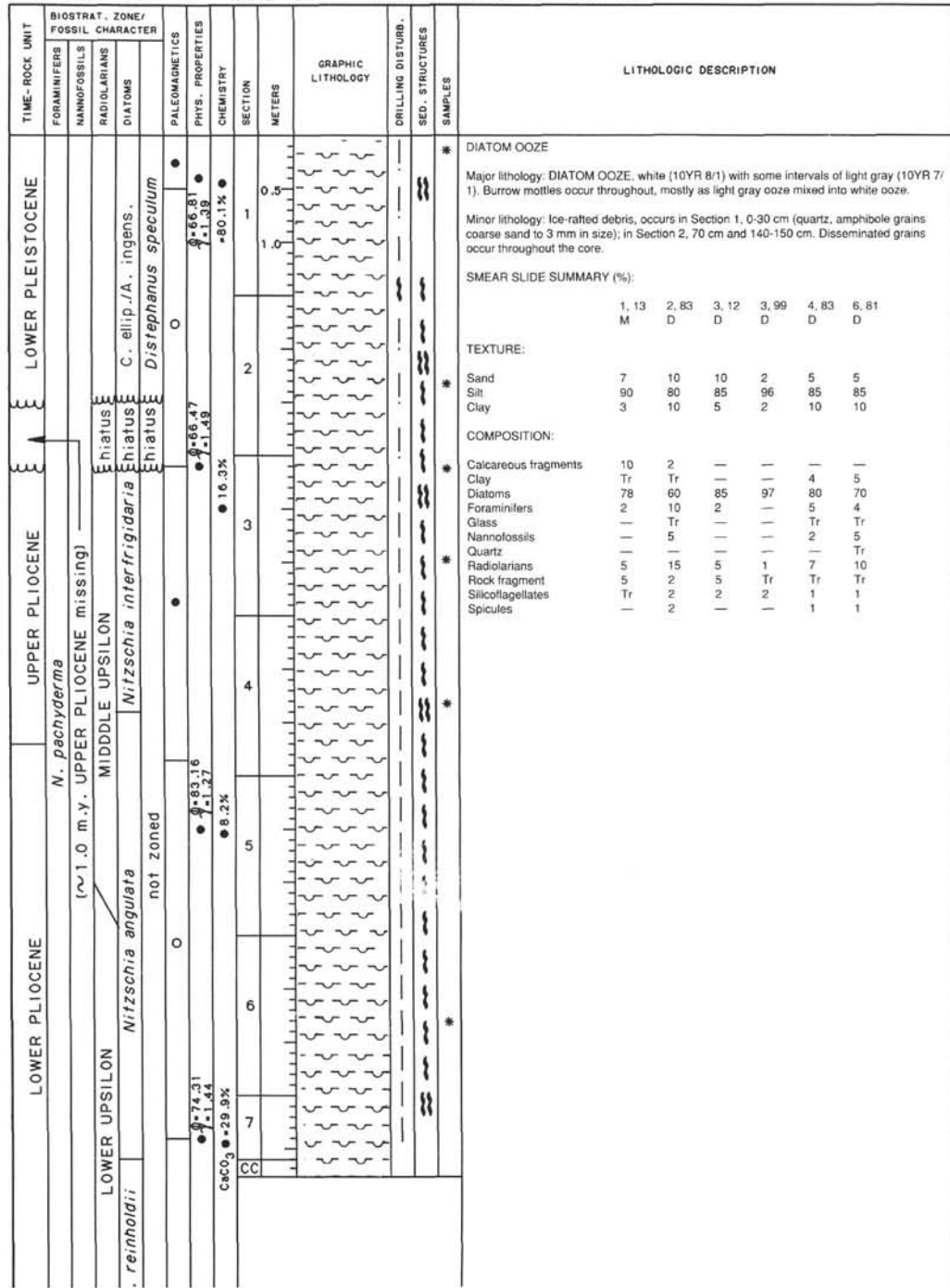
TIME - ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																				
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																												
UPPER PLIOCENE	A/M	?	<i>N. angulata</i> <i>(N. interfrigidaria)</i>		● 78.66 ● 71.23	OC=0.02%	1					DIATOM OOZE AND NANNOFOSSIL OOZE WITH FORAMINIFERS Major lithologies: a. DIATOM OOZE, white (10YR 8/1), from top of core to middle of Section 2; diatom ooze with radiolarians occurs in the lower half of Section 2, and foraminifer radiolarian diatom ooze occurs in the top half of Section 3. Slight bioturbation on a 10-cm scale in Section 1, and a mottled interval of gray (10YR 7/1) mixed into pale brown (10YR 8/2) in Section 2, 56-85 cm. b. NANNOFOSSIL OOZE WITH FORAMINIFERS, white (10YR 8/1), occurs from the top of Section 5 to the base of the core; grades up into nannofossil ooze with diatoms and radiolarians; moderately bioturbated from middle of Section 4 to middle of Section 6. Minor lithology: Ice-rattled debris occurs as sand-sized grains disseminated throughout, and as dropstones in Section 1, 0-28 cm, 43-57 cm, and 117-120 cm (gneiss and granite pebbles); and in Section 3, 50-70 cm (0.5-1.0 cm, gneiss pebbles and biotite grains) Drilling disturbance: Flow-in occurs in Section 6, 75-150 cm. SMEAR SLIDE SUMMARY (%): <table border="1" style="margin-left: 40px; margin-top: 10px;"> <tr><td></td><td>1, 90</td><td>2, 90</td><td>3, 40</td><td>3, 140</td><td>5, 74</td></tr> <tr><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td><td>D</td></tr> </table> TEXTURE: <table border="1" style="margin-left: 40px; margin-top: 10px;"> <tr><td>Sand</td><td>5</td><td>8</td><td>20</td><td>15</td><td>10</td></tr> <tr><td>Silt</td><td>90</td><td>88</td><td>70</td><td>80</td><td>80</td></tr> <tr><td>Clay</td><td>5</td><td>4</td><td>10</td><td>5</td><td>10</td></tr> </table> COMPOSITION: <table border="1" style="margin-left: 40px; margin-top: 10px;"> <tr><td>Carbonate</td><td>7</td><td>5</td><td>5</td><td>—</td><td>—</td></tr> <tr><td>Clay</td><td>Tr</td><td>Tr</td><td>5</td><td>5</td><td>5</td></tr> <tr><td>Diatoms</td><td>85</td><td>75</td><td>40</td><td>20</td><td>8</td></tr> <tr><td>Foraminifers</td><td>2</td><td>5</td><td>15</td><td>5</td><td>15</td></tr> <tr><td>Nannofossils</td><td>—</td><td>—</td><td>5</td><td>60</td><td>65</td></tr> <tr><td>Radiolarians</td><td>4</td><td>12</td><td>20</td><td>8</td><td>6</td></tr> <tr><td>Rock fragment</td><td>—</td><td>—</td><td>5</td><td>—</td><td>—</td></tr> <tr><td>Silicoflagellates</td><td>Tr</td><td>1</td><td>2</td><td>1</td><td>Tr</td></tr> <tr><td>Spicules</td><td>2</td><td>2</td><td>Tr</td><td>Tr</td><td>1</td></tr> </table>		1, 90	2, 90	3, 40	3, 140	5, 74	D	D	D	D	D	D	Sand	5	8	20	15	10	Silt	90	88	70	80	80	Clay	5	4	10	5	10	Carbonate	7	5	5	—	—	Clay	Tr	Tr	5	5	5	Diatoms	85	75	40	20	8	Foraminifers	2	5	15	5	15	Nannofossils	—	—	5	60	65	Radiolarians	4	12	20	8	6	Rock fragment	—	—	5	—	—	Silicoflagellates	Tr	1	2	1	Tr	Spicules	2	2	Tr	Tr	1
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LOWER PLIOCENE							2																																																																																									
UPPER MIOCENE	A/M	?	<i>Giaborotalia scitula</i> <i>upper C. spongothorax</i> <i>Denticulopsis hustedtii</i> <i>(D. hustedtii / D. dimorpha)</i>		● 64.72 ● 71.00	CaCO ₃ ● 72.8%	3					DRILLING DISTURB. SED. STRUCTURES	LITHOLOGIC DESCRIPTION																																																																																			
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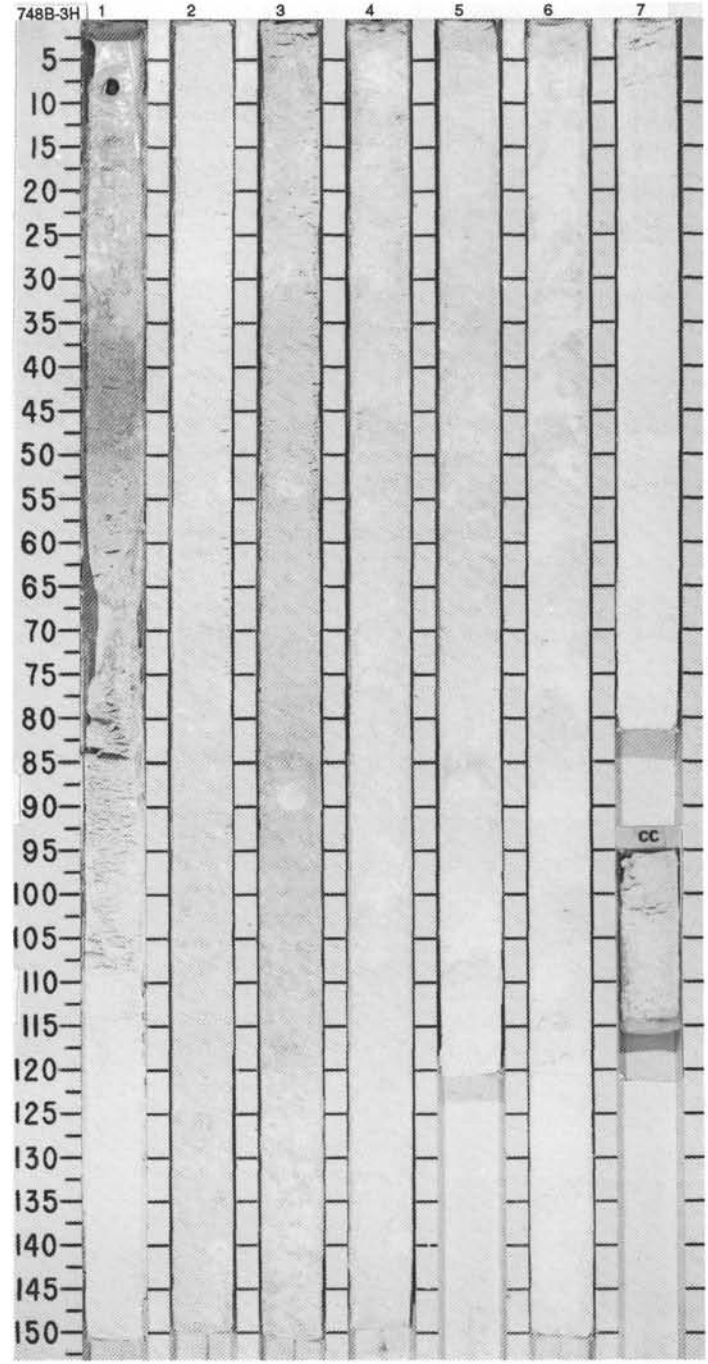
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																							
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																													
PLIOCENE - PLEISTOCENE										FORAMINIFER OOZE AND DIATOM OOZE Major lithologies: a. FORAMINIFER OOZE, white (10YR 8/1), occurs in the CC, 0-6 cm. b. DIATOM OOZE, light gray (10YR 7/1), occurs in the CC, 6-10 cm. The contact between the two is gradual and appears to represent bioturbation, which has mixed the diatom ooze upward into the foraminifer ooze. A few scattered specks of ice-rattled debris occur throughout. SMEAR SLIDE SUMMARY (%): <table style="margin-left: 40px;"> <tr> <td></td> <td>CC, 2</td> <td>CC, 9</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> </tr> </table> TEXTURE: <table style="margin-left: 40px;"> <tr> <td>Sand</td> <td>10</td> <td>3</td> </tr> <tr> <td>Silt</td> <td>85</td> <td>95</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>2</td> </tr> </table> COMPOSITION: <table style="margin-left: 40px;"> <tr> <td>Calcareous fragments</td> <td>55</td> <td>13</td> </tr> <tr> <td>Clay</td> <td>Tr</td> <td>2</td> </tr> <tr> <td>Diatoms</td> <td>25</td> <td>70</td> </tr> <tr> <td>Foraminifers</td> <td>15</td> <td>10</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Radiolarians</td> <td>5</td> <td>5</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Spicules</td> <td>Tr</td> <td>—</td> </tr> </table>		CC, 2	CC, 9		D	D	Sand	10	3	Silt	85	95	Clay	5	2	Calcareous fragments	55	13	Clay	Tr	2	Diatoms	25	70	Foraminifers	15	10	Glass	—	Tr	Radiolarians	5	5	Rock fragment	—	Tr	Spicules	Tr	—
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	MID CHI or YOUNGER																																																
	<i>A. ingens</i>																																																
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SITE 748 HOLE B CORE 2H CORED INTERVAL 0.1-9.6 mbsf



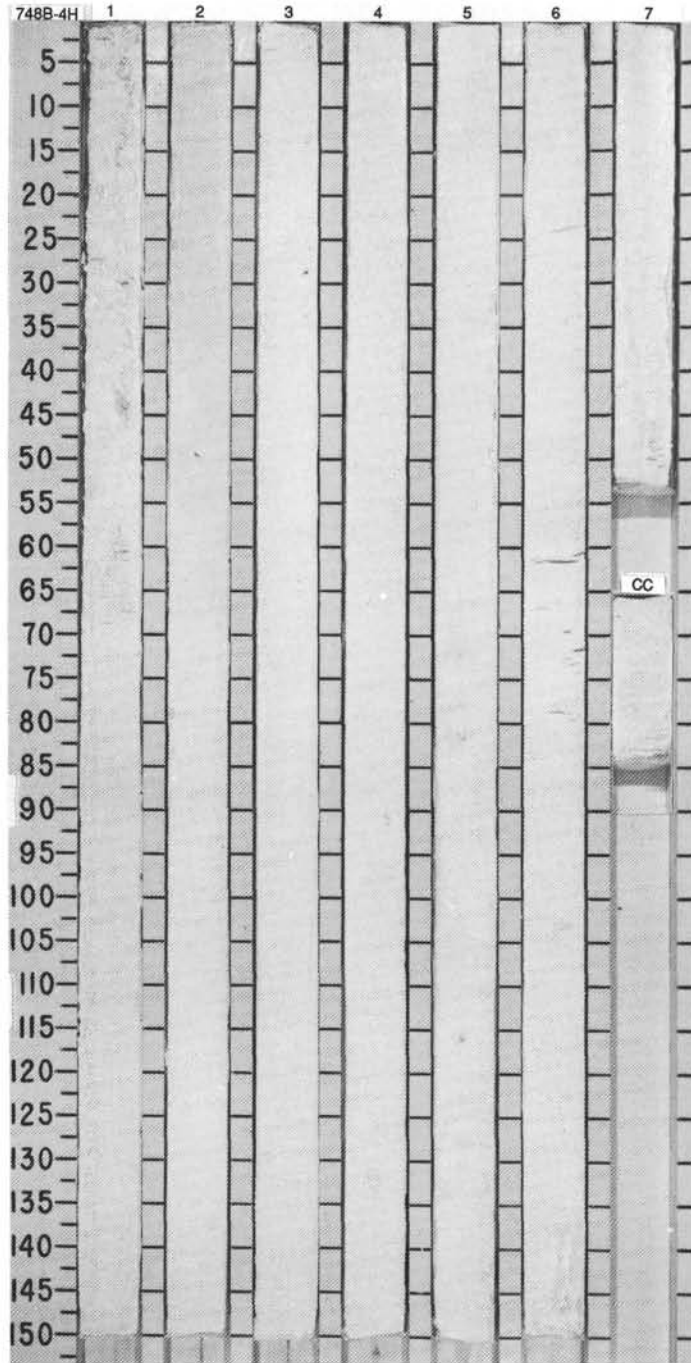
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																								
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UPPER MIOCENE														<p>NANNOFOSSIL OOZE AND NANNOFOSSIL OOZE WITH DIATOMS</p> <p>Major lithologies: a. NANNOFOSSIL OOZE, white (10YR 8/1), occurs from top of Section 4 to the base of the core. Possible Zoophycos noted in Section 5, 64 cm. b. NANNOFOSSIL OOZE with DIATOMS, white (10YR 8/1), occurs from Section 1, 60 cm, to bottom of Section 3. Ooze is moderately bioturbated, containing several stages of burrowing in Section 3, 110-150 cm. Chondrites or Planolites are cut by Skolithos and again by Chondrites.</p> <p>Minor lithologies: a. Nannofossil ooze with diatoms and foraminifers, white (10 YR B/1) and light gray (10YR 7/1), occurs from Section 1, 60 cm to approximately the middle of Section 2. b. Calcareous diatom ooze with radiolarians and foraminifers, light brownish gray (10YR B/3), in Section 1, 33 to 60 cm. c. Ice-rafted debris, pebble 0.5 cm across occurs in Section 1, 45 cm; also sand-sized grains.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1.40</td> <td>1.129</td> <td>3.44</td> </tr> <tr> <td>D</td> <td></td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>35</td> <td>15</td> <td>1</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>80</td> <td>98</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>5</td> <td>1</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcareous fragments</td> <td>28</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Diatoms</td> <td>40</td> <td>10</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>10</td> <td>10</td> <td>Tr</td> </tr> <tr> <td>Nannofossils</td> <td>3</td> <td>80</td> <td>89</td> </tr> <tr> <td>Quartz</td> <td>4</td> <td>—</td> <td>—</td> </tr> <tr> <td>Radiolarians</td> <td>10</td> <td>Tr</td> <td>1</td> </tr> <tr> <td>Spicules</td> <td>5</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Unspecified minerals</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> </table>		1.40	1.129	3.44	D		D	D	Sand	35	15	1	Silt	60	80	98	Clay	5	5	1	Calcareous fragments	28	—	—	Clay	—	—	Tr	Diatoms	40	10	10	Foraminifers	10	10	Tr	Nannofossils	3	80	89	Quartz	4	—	—	Radiolarians	10	Tr	1	Spicules	5	Tr	Tr	Unspecified minerals	Tr	—	—
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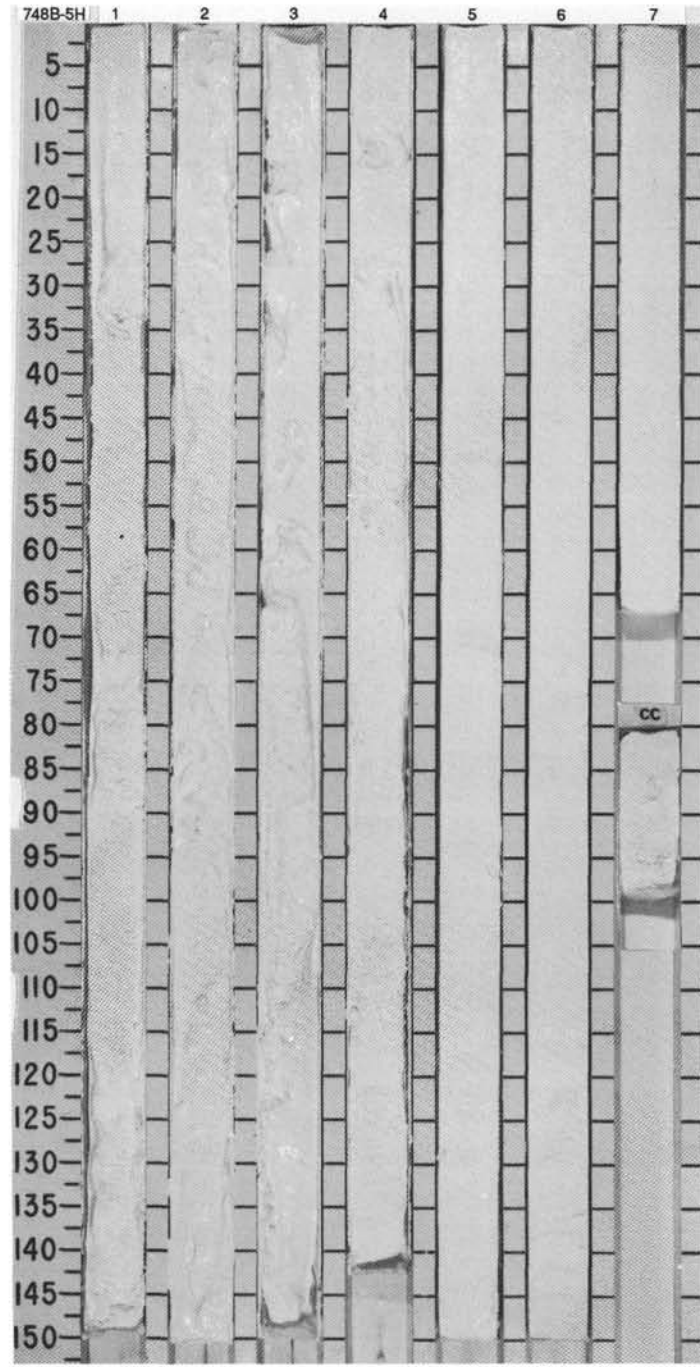
SITE 748

SITE 748 HOLE B CORE 4H CORED INTERVAL 19.1-28.6 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								SILICO- FLAGELLATES	PALEOMAGNETICS																												
UPPER MIOCENE																																									
	<i>N. nympha</i> (sn15 - N16)					0.5 1					NANNOFOSSIL OOZE WITH DIATOMS																														
	?		upper <i>C. spongothorax</i>			1 2					Major lithology: NANNOFOSSIL OOZE with DIATOMS, white (whiter than 10YR 8/1). Lithology is mostly homogeneous, with few signs of disturbance. Mottling evident in Section 1, 42-46 cm; Section 2, 30-70 cm; Section 4, 97-104 cm and 134-138 cm; Section 5, 31-35 cm, 67-76 cm, and 79-87 cm. Pyrite occurs in Section 4, 119-120 cm. Suggestion of horizontal lamination in Section 5, 110-136. Bioturbation is slight throughout core except as noted.																														
			lower <i>C. spongothorax</i>			2 3					Drilling disturbance: Slight except in the CC, which has flow-in.																														
			<i>D. hustedii</i> - <i>D. dimorpha</i>			3 4					SMEAR SLIDE SUMMARY (%):																														
			not zoned			4 5					<table border="1"> <tr> <td></td> <td>1, 43</td> <td>1, 77</td> <td>5, 84</td> <td>5, 119</td> </tr> <tr> <td></td> <td>M</td> <td>D</td> <td>D</td> <td>M</td> </tr> </table>		1, 43	1, 77	5, 84	5, 119		M	D	D	M																				
	1, 43	1, 77	5, 84	5, 119																																					
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						6 7					<table border="1"> <tr> <td>Sand</td> <td>6</td> <td>—</td> <td>—</td> <td>1</td> </tr> <tr> <td>Silt</td> <td>91</td> <td>100</td> <td>100</td> <td>97</td> </tr> <tr> <td>Clay</td> <td>3</td> <td>—</td> <td>—</td> <td>2</td> </tr> </table>	Sand	6	—	—	1	Silt	91	100	100	97	Clay	3	—	—	2															
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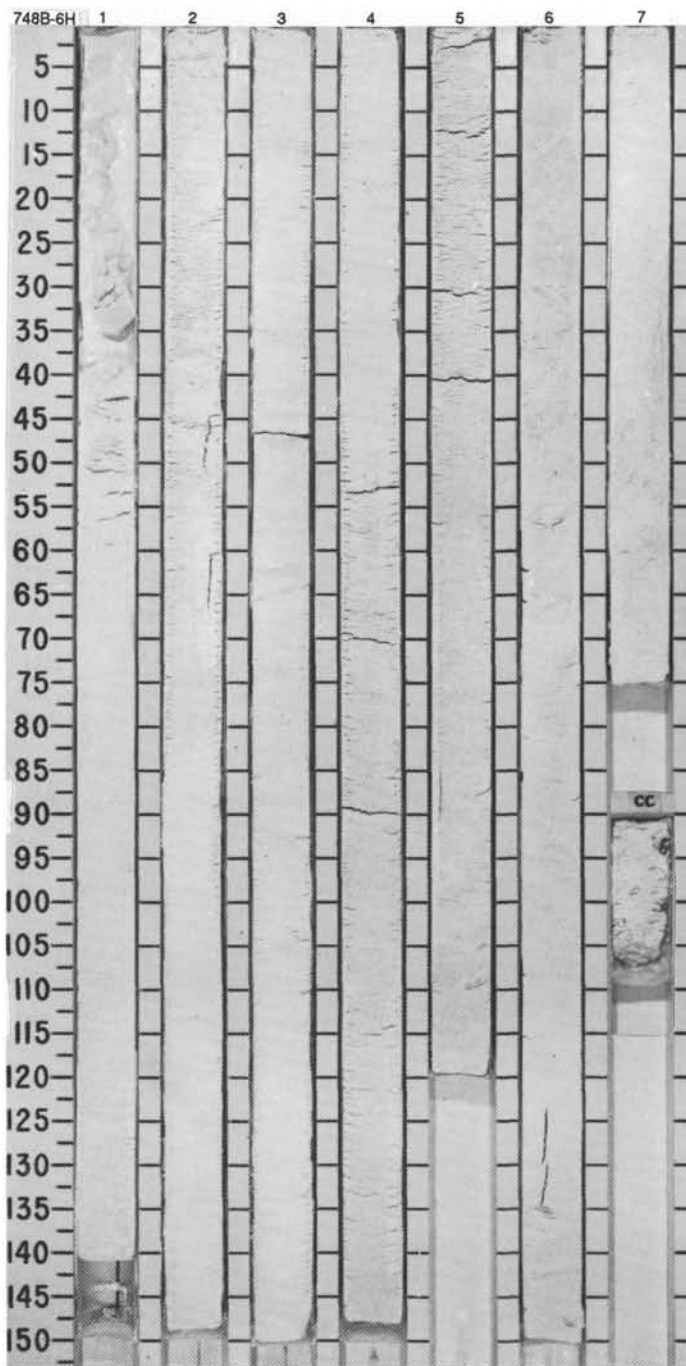


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																							
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UPPER MIOCENE				<i>D. hustedtii</i> - <i>D. dimorpha</i>			0.5 1.0					<p>NANNOFOSSIL OOZE</p> <p>Major lithology: NANNOFOSSIL OOZE, white (much whiter than 10YR 8/1); completely soupy and disturbed in Sections 1, 2, 3, and the top 55 cm of Section 4. Other sections are firm and homogeneous, showing slight to moderate drilling disturbance. No burrow structures evident. Two bands (laminations) of darker white (10YR 8/1), ~2 cm thick occur in Section 5, 50 and 72 cm. Two pebbles ~1 mm in Section 1, 59 and 65 cm, probably cave-in.</p> <p>Minor lithology: Nannofossil ooze with diatoms (whiter than 10YR 8/1), Section 6 and 7.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>4, 71</td> <td>5, 119</td> <td>6, 100</td> <td>7, 28</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>1</td> <td>1</td> <td>3</td> <td>3</td> </tr> <tr> <td>Silt</td> <td>97</td> <td>95</td> <td>94</td> <td>94</td> </tr> <tr> <td>Clay</td> <td>2</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Diatoms</td> <td>4</td> <td>3</td> <td>10</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>1</td> <td>Tr</td> <td>1</td> <td>1</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Nannofossils</td> <td>95</td> <td>97</td> <td>88</td> <td>89</td> </tr> <tr> <td>Radiolarians</td> <td>Tr</td> <td>Tr</td> <td>1</td> <td>Tr</td> </tr> <tr> <td>Silicoflagellates</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> </table>		4, 71	5, 119	6, 100	7, 28	D	D	D	D	D	Sand	1	1	3	3	Silt	97	95	94	94	Clay	2	4	3	3	Diatoms	4	3	10	10	Foraminifers	1	Tr	1	1	Glass	—	—	Tr	—	Nannofossils	95	97	88	89	Radiolarians	Tr	Tr	1	Tr	Silicoflagellates	Tr	Tr	Tr	Tr
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Silicoflagellates	Tr	Tr	Tr	Tr																																																															
MIDDLE MIOCENE	<i>N. nympha</i> (=N15)						2					<p>PP</p> <p>*</p> <p>*</p> <p>*</p>																																																							
	lower <i>C. spongathorax</i>						3																																																												
	<i>D. dimorpha</i> - <i>N. denticuloides</i>						4																																																												
	<i>Mesocena circulis</i>						5																																																												
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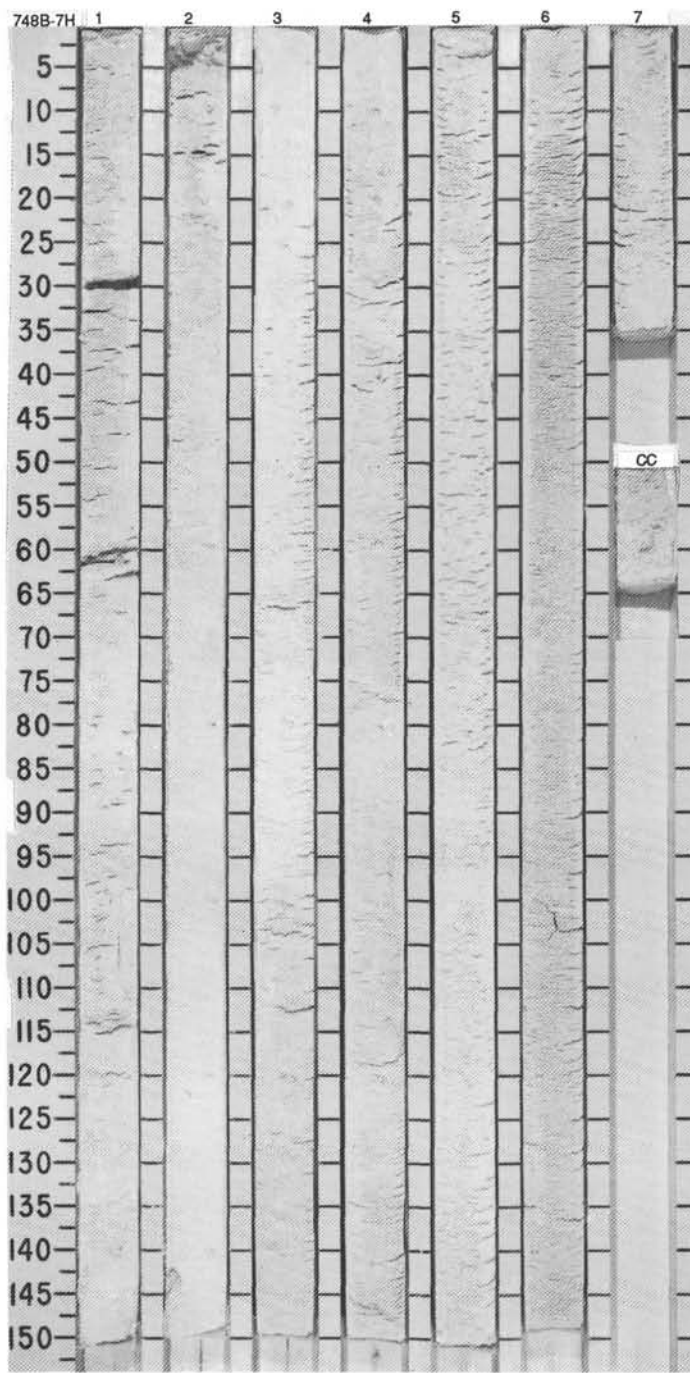


SITE 748 HOLE B CORE 6H CORED INTERVAL 38.1-47.6 mbsf

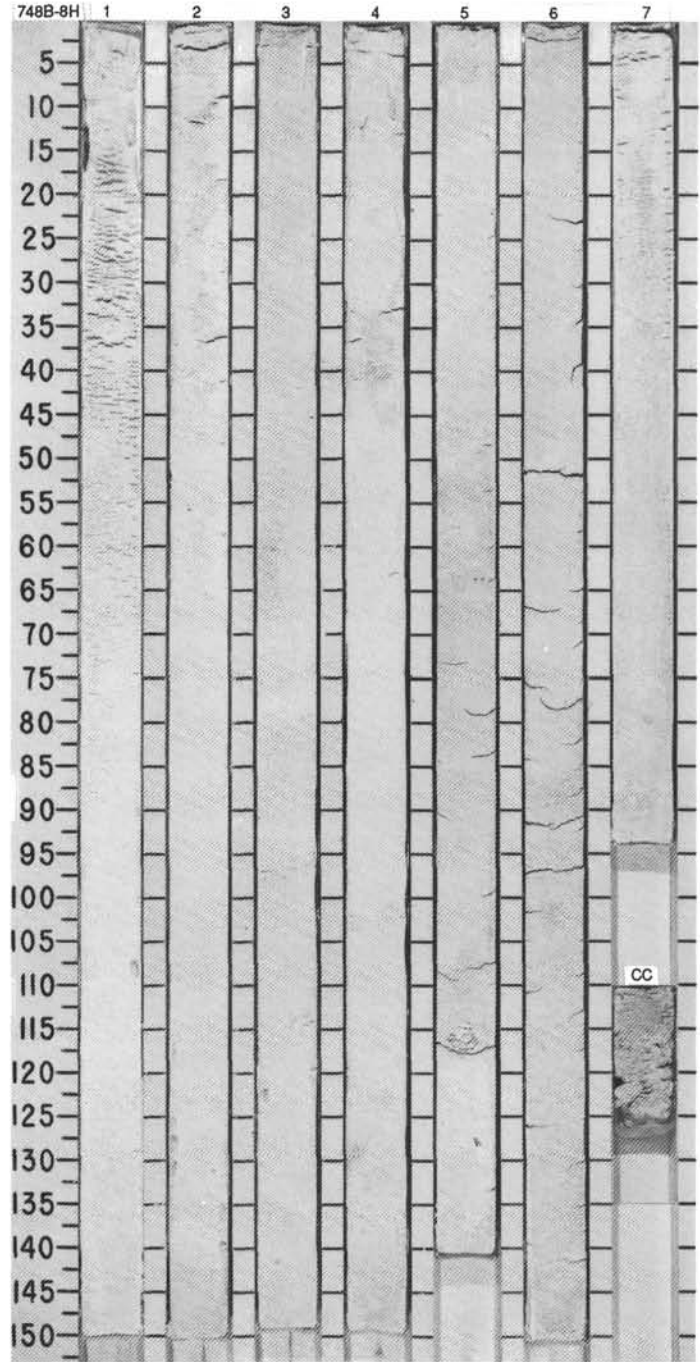
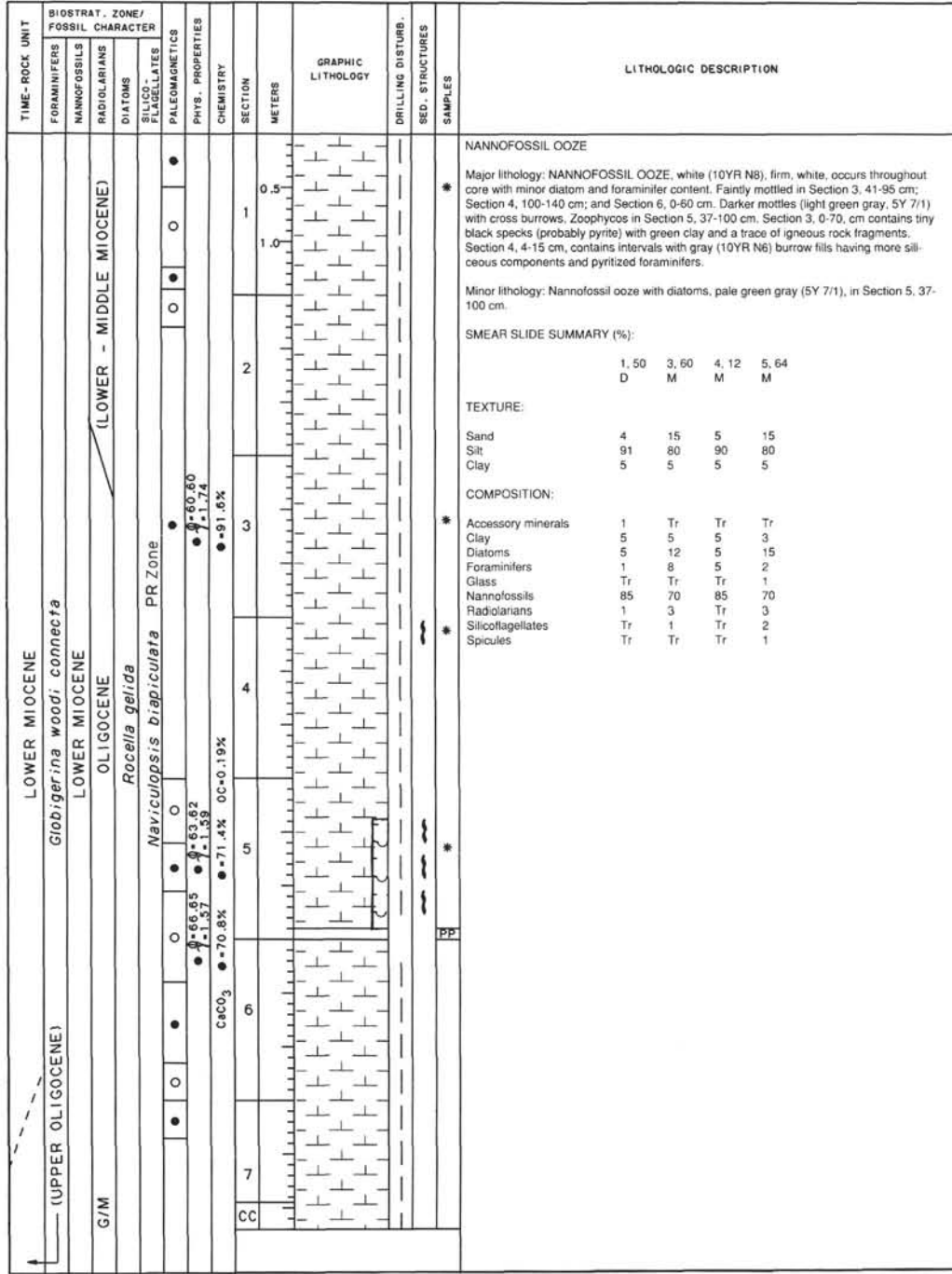
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																						
	FORAMINIFERS	NANNOFOSSILS	RADIOLIARIANS	DIAATOMS																																																																															
MIDDLE MIOCENE	<i>N. nympha</i>							0.5 1.0					NANNOFOSSIL OOZE Major lithology: NANNOFOSSIL OOZE, brilliant white (N8), with evidence of pale light green gray banding in Section 2, 39-42 cm and 99-100 cm, and a hint of banding in Section 4. Siliceous components occur throughout, although at very low percentages. Pale bands seem slightly coarser and may contain more foraminifers. A few foraminifers have pyritized chambers. SMEAR SLIDE SUMMARY (%): <table style="margin-left: 20px;"> <tr> <td></td> <td>2.40</td> <td>2.50</td> <td>2.112</td> <td>4.50</td> </tr> <tr> <td>M</td> <td>D</td> <td>M</td> <td>D</td> <td></td> </tr> </table> TEXTURE: <table style="margin-left: 20px;"> <tr> <td>Sand</td> <td>15</td> <td>8</td> <td>15</td> <td>15</td> </tr> <tr> <td>Silt</td> <td>80</td> <td>84</td> <td>78</td> <td>80</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>8</td> <td>7</td> <td>5</td> </tr> </table> COMPOSITION: <table style="margin-left: 20px;"> <tr> <td>Accessory minerals</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Diatoms</td> <td>5</td> <td>5</td> <td>7</td> <td>3</td> </tr> <tr> <td>Foraminifers</td> <td>7</td> <td>2</td> <td>7</td> <td>8</td> </tr> <tr> <td>Glass</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Nannofossils</td> <td>80</td> <td>85</td> <td>80</td> <td>85</td> </tr> <tr> <td>Radiolarians</td> <td>1</td> <td>2</td> <td>1</td> <td>1</td> </tr> <tr> <td>Silicoflagellates</td> <td>1</td> <td>1</td> <td>1</td> <td>—</td> </tr> <tr> <td>Spicules</td> <td>Tr</td> <td>1</td> <td>Tr</td> <td>—</td> </tr> </table>		2.40	2.50	2.112	4.50	M	D	M	D		Sand	15	8	15	15	Silt	80	84	78	80	Clay	5	8	7	5	Accessory minerals	—	—	Tr	—	Clay	3	3	3	3	Diatoms	5	5	7	3	Foraminifers	7	2	7	8	Glass	Tr	Tr	Tr	—	Nannofossils	80	85	80	85	Radiolarians	1	2	1	1	Silicoflagellates	1	1	1	—	Spicules	Tr	1	Tr	—
	2.40	2.50	2.112	4.50																																																																															
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Silt	80	84	78	80																																																																															
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Accessory minerals	—	—	Tr	—																																																																															
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Diatoms	5	5	7	3																																																																															
Foraminifers	7	2	7	8																																																																															
Glass	Tr	Tr	Tr	—																																																																															
Nannofossils	80	85	80	85																																																																															
Radiolarians	1	2	1	1																																																																															
Silicoflagellates	1	1	1	—																																																																															
Spicules	Tr	1	Tr	—																																																																															
LOWER MIOCENE	<i>M3 (G. zealandica)</i>							2																																																																											
LOWER MIOCENE ?	not zoned							3																																																																											
LOWER MIDDLE or LOWER MIOCENE	<i>Nitzschia maleinterpretaria</i>							4																																																																											
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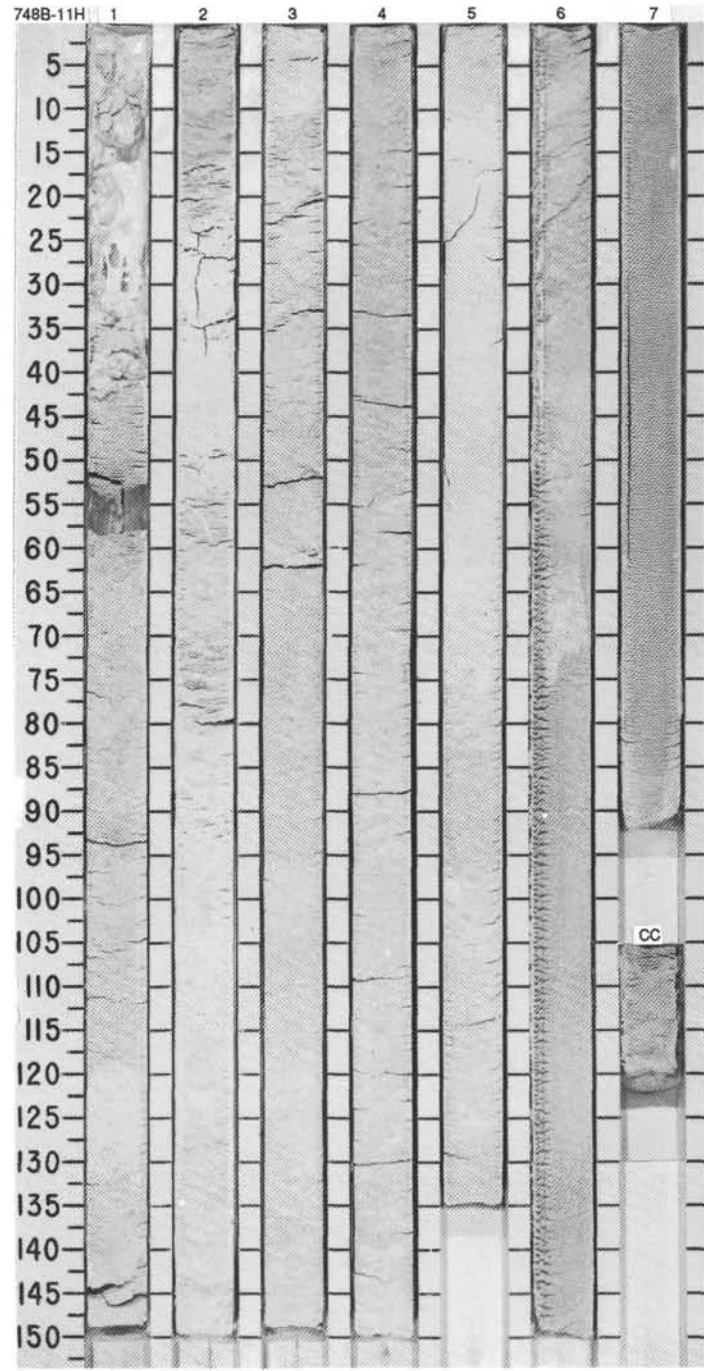
TIME-ROCK UNIT		BIOSTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																								
FORAMINIFERS	NANNOFOSSILS																																																																			
LOWER MIOCENE		<i>Globigerina woodi connecta</i>				1	0.5					<p>SILICEOUS NANNOFOSSIL OOZE AND FORAMINIFER SILICEOUS OOZE WITH GLASS</p> <p>Major lithologies:</p> <p>a. SILICEOUS NANNOFOSSIL OOZE, white (whiter than 10YR N8), occurs from Section 3 to the base of the core. Uniformly bedded, with no structures or bioturbation evident.</p> <p>b. FORAMINIFER SILICEOUS OOZE with GLASS, white (whiter than 10YR N8), occurs from the top of the core to the top of Section 3; contact is gradational.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 130</td> <td>3, 50</td> <td>4, 50</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>100</td> <td>12</td> <td>12</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>78</td> <td>78</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>10</td> </tr> </table> <p>* COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>—</td> <td>5</td> <td>5</td> </tr> <tr> <td>Diatoms</td> <td>20</td> <td>3</td> <td>3</td> </tr> <tr> <td>Foraminifers</td> <td>25</td> <td>4</td> <td>4</td> </tr> <tr> <td>Glass</td> <td>10</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Nannofossils</td> <td>—</td> <td>75</td> <td>75</td> </tr> <tr> <td>Radiolarians</td> <td>20</td> <td>5</td> <td>5</td> </tr> <tr> <td>Silicoflagellates</td> <td>10</td> <td>5</td> <td>5</td> </tr> <tr> <td>Spicules</td> <td>5</td> <td>2</td> <td>2</td> </tr> <tr> <td>Unknown</td> <td>5</td> <td>—</td> <td>—</td> </tr> </table>		2, 130	3, 50	4, 50		D	D	D	Sand	100	12	12	Silt	—	78	78	Clay	—	10	10	Clay	—	5	5	Diatoms	20	3	3	Foraminifers	25	4	4	Glass	10	Tr	Tr	Nannofossils	—	75	75	Radiolarians	20	5	5	Silicoflagellates	10	5	5	Spicules	5	2	2	Unknown	5	—	—
	2, 130	3, 50	4, 50																																																																	
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Sand	100	12	12																																																																	
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Silicoflagellates	10	5	5																																																																	
Spicules	5	2	2																																																																	
Unknown	5	—	—																																																																	
LOWER MIOCENE		<i>Rocella gelida</i>				2	1.0																																																													
LOWER - MIDDLE MIOCENE		<i>N. lata</i> range				3																																																														
			● 62.57 ● 61.04			4																																																														
			● 59.93 ● 58.71			5																																																														
			● 60.66 ● 58.72			6																																																														
			● 86.7%			7																																																														
			CaCO ₃ ● 91.1% OC=0.00%																																																																	



SITE 748 HOLE B CORE 8H CORED INTERVAL 57.1-66.6 mbsf

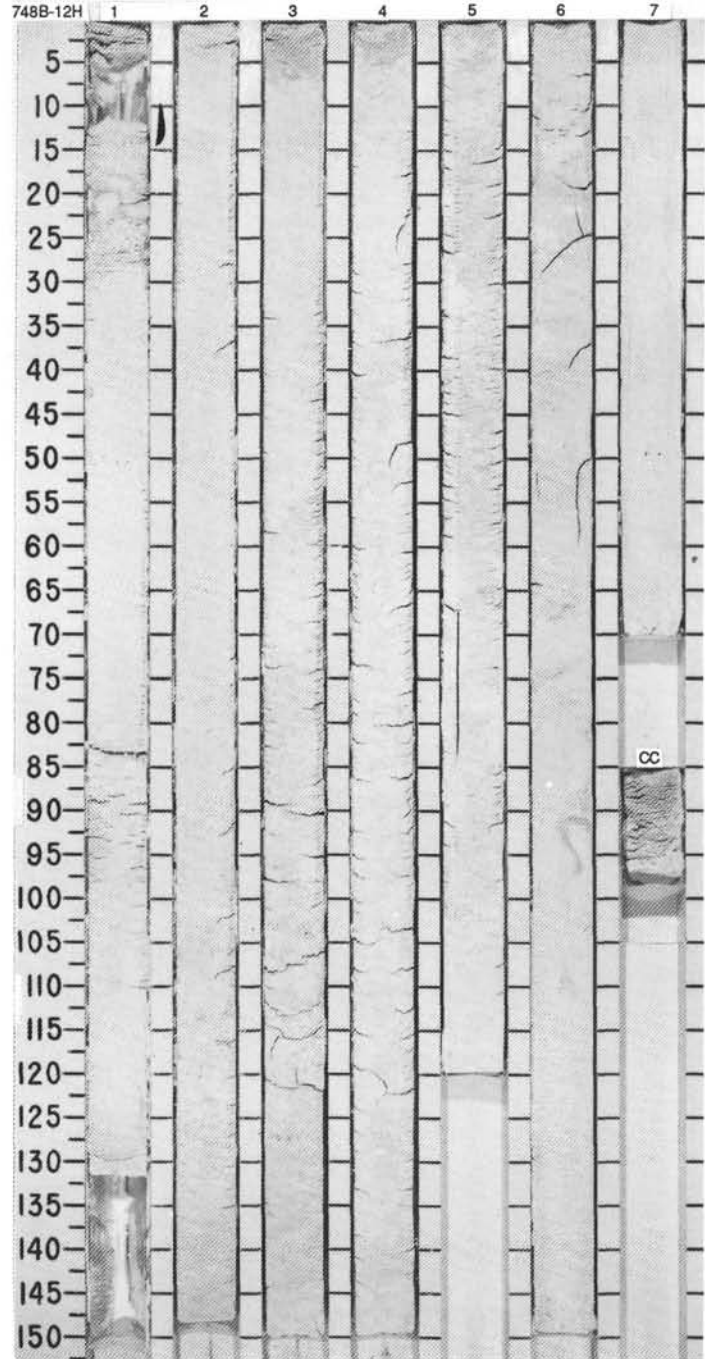


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURED SAMPLES	LITHOLOGIC DESCRIPTION																																	
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																									
LOWER OLIGOCENE	S. evasperia				● 58.42		1	0.5				<p>NANNOFOSSIL OOZE</p> <p>Major lithology: NANNOFOSSIL OOZE, white (10YR 8/1), faintly mottled with white (5Y 8/2) in Sections 1-5. Pyrite specks are rare, scattered throughout Sections 4 and 5.</p> <p>Drilling disturbance: Severely disturbed by drilling in Section 1, 0-55 cm, and from Section 6, 60 cm, to the base of the core.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="0"> <tr> <td></td> <td>1, 70</td> <td>1, 70</td> </tr> <tr> <td>D</td> <td></td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="0"> <tr> <td>Sand</td> <td>5</td> <td>5</td> </tr> <tr> <td>Silt</td> <td>90</td> <td>85</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>10</td> </tr> </table> <p>COMPOSITION:</p> <table border="0"> <tr> <td>Clay</td> <td>2</td> <td>5</td> </tr> <tr> <td>Diatoms</td> <td>10</td> <td>4</td> </tr> <tr> <td>Foraminifers</td> <td>5</td> <td>10</td> </tr> <tr> <td>Nannofossils</td> <td>80</td> <td>75</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Radiolarians</td> <td>—</td> <td>4</td> </tr> </table>		1, 70	1, 70	D		M	Sand	5	5	Silt	90	85	Clay	5	10	Clay	2	5	Diatoms	10	4	Foraminifers	5	10	Nannofossils	80	75	Pyrite	—	Tr	Radiolarians	—	4
	1, 70	1, 70																																											
D		M																																											
Sand	5	5																																											
Silt	90	85																																											
Clay	5	10																																											
Clay	2	5																																											
Diatoms	10	4																																											
Foraminifers	5	10																																											
Nannofossils	80	75																																											
Pyrite	—	Tr																																											
Radiolarians	—	4																																											
UPPER LOWER or UPPER OLIGOCENE	Rocella vigilans ?				● 60.96		2	1.0																																					
	Corbisema archangeliskiana RZ				● 61.72		3																																						
A/M-G	O				● 58.08		4																																						
					● 57.74		5																																						
					● 57.70		6																																						
					● 87.9	OC=0.00%	7																																						

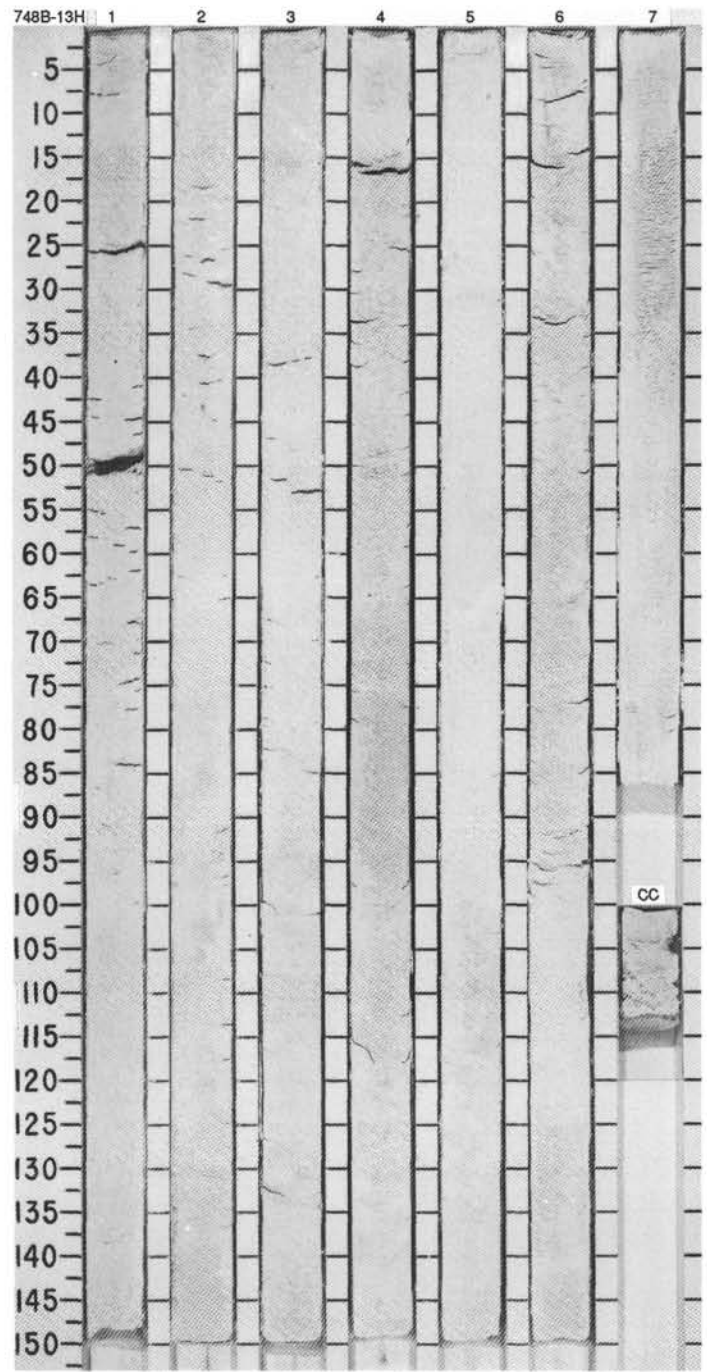


SITE 748 HOLE B CORE 12H CORED INTERVAL 95.1-104.6 mbsf

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	FLUCCILLATES																																																																																													
LOWER OLILOCENE	Subbotina angiporooides								0.5					<p>NANNOFOSSIL OOZE AND NANNOFOSSIL OOZE WITH FORAMINIFERS</p> <p>Major lithologies: a. NANNOFOSSIL OOZE, greenish gray white (5Y 8/1) and white (N8), faintly mottled with scattered black specks in burrows, gradually becoming whiter down core from the top of Section 3 to the bottom of Section 5. b. NANNOFOSSIL OOZE with FORAMINIFERS, white (N8) and greenish gray white (5Y 8/1), faintly mottled with the darker color; becomes whiter in Section 1, 70-150 cm, and in Section 2. Sections 6 through CC are greenish white (5Y 7/1).</p> <p>Minor lithology: Nannofossil ooze with foraminifers and siliceous debris, white (N8), in Section 7 and CC; homogeneous. A pyrite-lined vertical burrow, 1-cm wide and sinusoidal, occurs in Section 6, 89-99 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 50</td> <td>3, 104</td> <td>3, 130</td> <td>6, 20</td> <td>7, 50</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>10</td> <td>20</td> <td>5</td> <td>15</td> <td>10</td> </tr> <tr> <td>Silt</td> <td>80</td> <td>70</td> <td>90</td> <td>80</td> <td>80</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>10</td> <td>5</td> <td>5</td> <td>10</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcareous fragments</td> <td>—</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>2</td> <td>5</td> <td>2</td> <td>3</td> <td>5</td> </tr> <tr> <td>Diatoms</td> <td>8</td> <td>5</td> <td>5</td> <td>8</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>15</td> <td>15</td> <td>5</td> <td>15</td> <td>12</td> </tr> <tr> <td>Nannofossils</td> <td>70</td> <td>65</td> <td>80</td> <td>65</td> <td>65</td> </tr> <tr> <td>Pyrite</td> <td>2</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Radiolarians</td> <td>1</td> <td>5</td> <td>5</td> <td>4</td> <td>5</td> </tr> <tr> <td>Silicoflagellates</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Spicules</td> <td>—</td> <td>2</td> <td>1</td> <td>1</td> <td>2</td> </tr> </table>		1, 50	3, 104	3, 130	6, 20	7, 50		D	M	D	D	D	Sand	10	20	5	15	10	Silt	80	70	90	80	80	Clay	10	10	5	5	10	Calcareous fragments	—	2	—	—	—	Clay	2	5	2	3	5	Diatoms	8	5	5	8	10	Foraminifers	15	15	5	15	12	Nannofossils	70	65	80	65	65	Pyrite	2	1	—	—	—	Radiolarians	1	5	5	4	5	Silicoflagellates	—	—	—	Tr	—	Spicules	—	2	1	1	2
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	D	M	D	D	D																																																																																													
Sand	10	20	5	15	10																																																																																													
Silt	80	70	90	80	80																																																																																													
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Nannofossils	70	65	80	65	65																																																																																													
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Silicoflagellates	—	—	—	Tr	—																																																																																													
Spicules	—	2	1	1	2																																																																																													
A/M-G	UPPER LOWER OR UPPER OLILOCENE								1.0																																																																																									
	OLIGOCENE									VOID																																																																																								
	Pyxilla reticulata and Coscinodiscus superbus																																																																																																	
	Corbisema archangeliskiana - Naviculopsis constricta 1Z																																																																																																	
	O																																																																																																	
	CaCO ₃																																																																																																	
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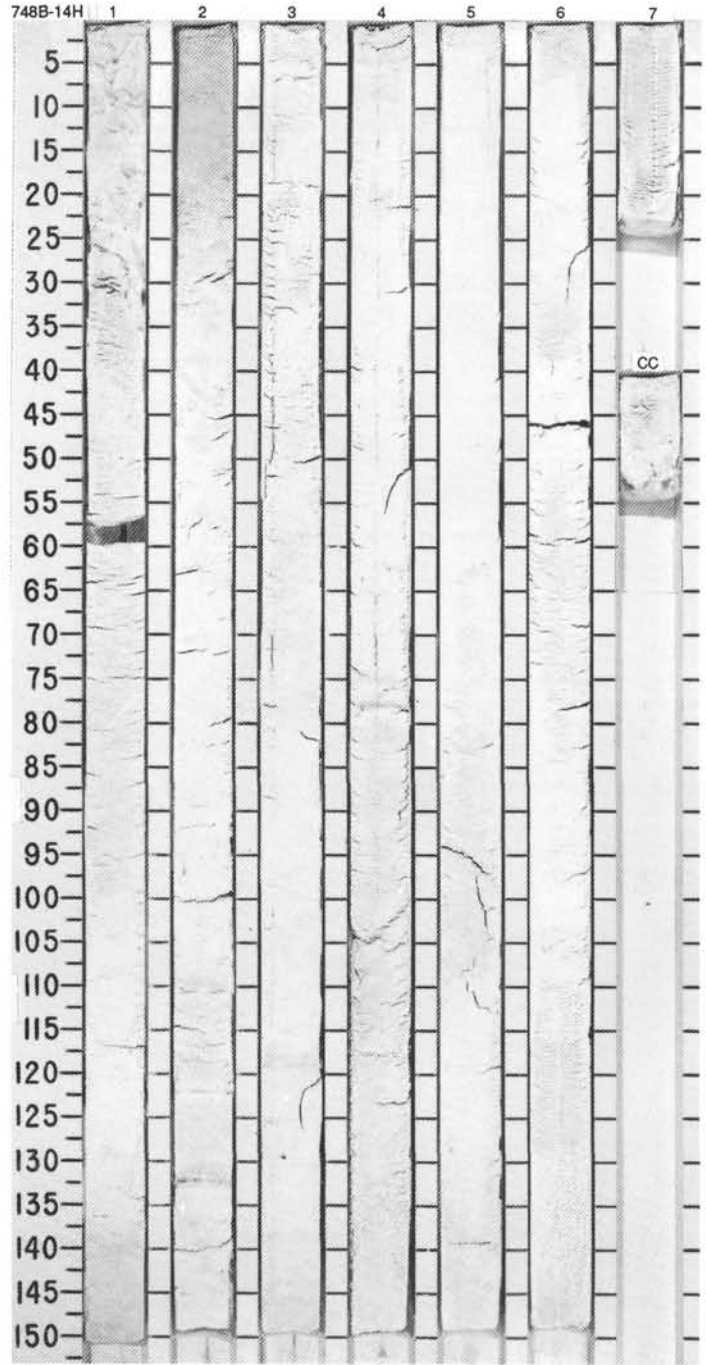


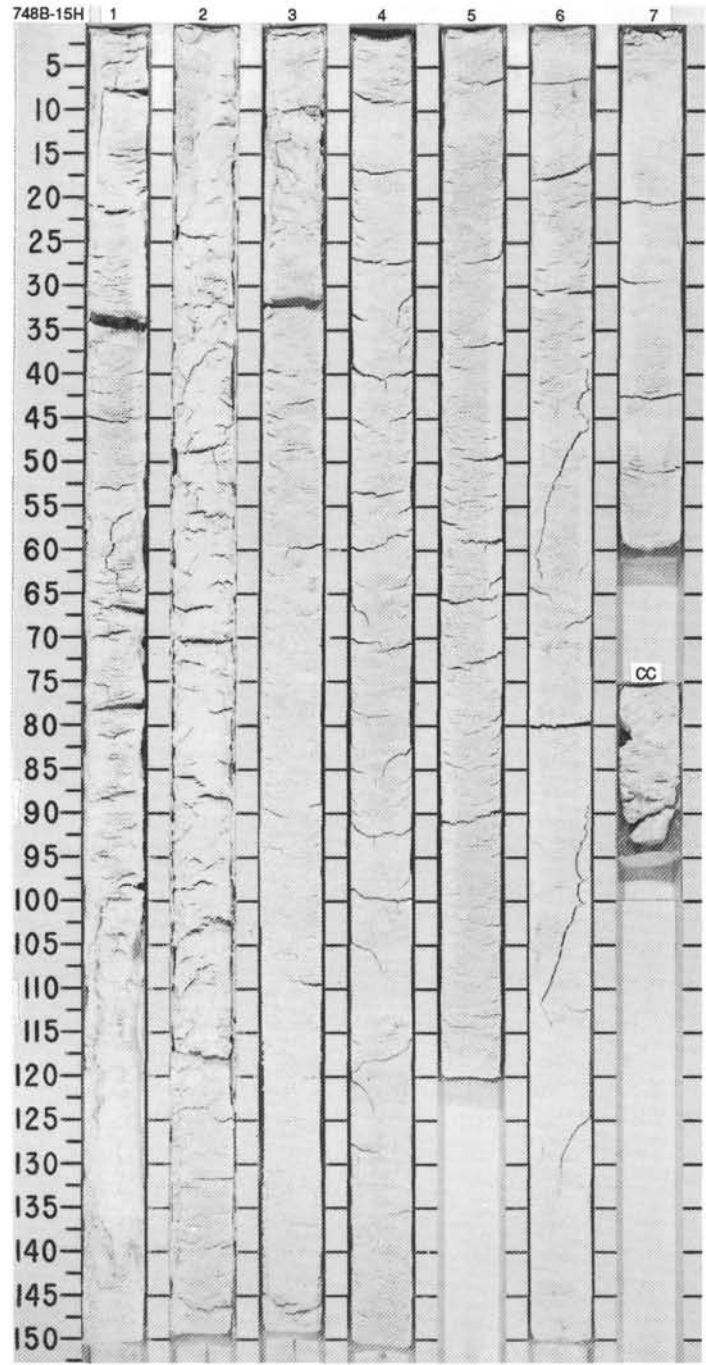
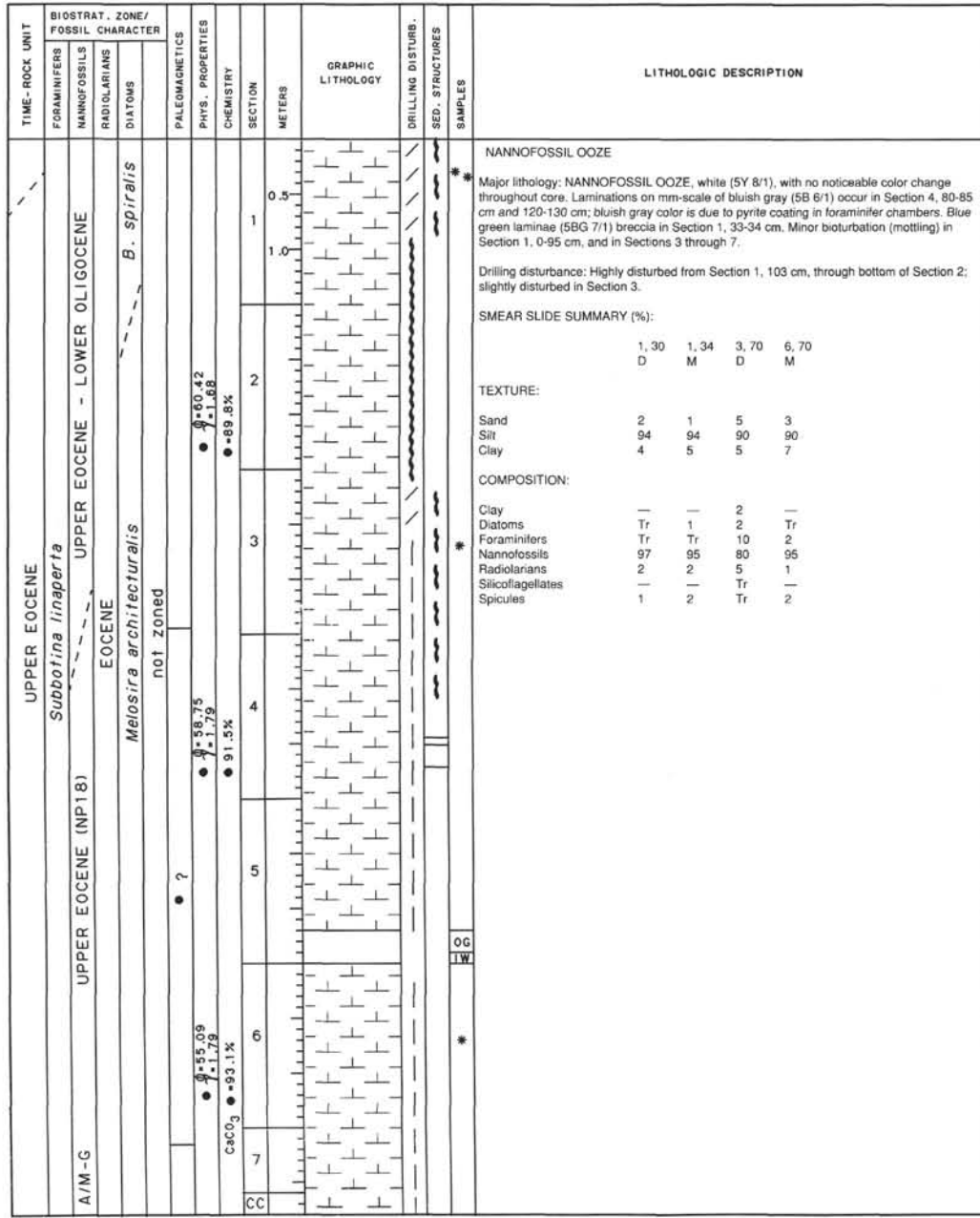
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																												
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																					
LOWER OLIGOCENE	<i>Subbotina angiporoides</i>												<p>NANNOFOSSIL OOZE AND NANNOFOSSIL OOZE WITH SILICEOUS DEBRIS</p> <p>Major lithologies: NANNOFOSSIL OOZE, white (5Y 8/1), and NANNOFOSSIL OOZE with SILICEOUS DEBRIS, light greenish gray (5Y 7/1); burrowed. Changes between these lithologies are gradational and mixed where burrowed. The darker color corresponds to higher siliceous content. Pyrite smudges and specks occur in Section 2, 43 cm, and are scattered in Section 4. A few cream-colored burrows occur in Section 4, filled with siliceous nannofossil ooze; nannofossils are slightly corroded.</p> <p>Drilling disturbance: The lower half of Section 6 and all of Section 7 are completely disturbed by drilling.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>4, 50</td> <td>4, 65</td> <td>4, 68</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>10</td> <td>20</td> <td>2</td> </tr> <tr> <td>Silt</td> <td>85</td> <td>75</td> <td>89</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>5</td> <td>9</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>4</td> <td>2</td> <td>3</td> </tr> <tr> <td>Diatoms</td> <td>13</td> <td>15</td> <td>15</td> </tr> <tr> <td>Foraminifers</td> <td>3</td> <td>4</td> <td>3</td> </tr> <tr> <td>Nannofossils</td> <td>70</td> <td>70</td> <td>70</td> </tr> <tr> <td>Radiolarians</td> <td>7</td> <td>5</td> <td>5</td> </tr> <tr> <td>Silicoflagellates</td> <td>2</td> <td>1</td> <td>1</td> </tr> </table>		4, 50	4, 65	4, 68		D	M	D	Sand	10	20	2	Silt	85	75	89	Clay	5	5	9	Clay	4	2	3	Diatoms	13	15	15	Foraminifers	3	4	3	Nannofossils	70	70	70	Radiolarians	7	5	5	Silicoflagellates	2	1	1
	4, 50	4, 65	4, 68																																																						
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Silicoflagellates	2	1	1																																																						
UPPER LOWER or UPPER OLIGOCENE	<i>Rhizosolenia gravida</i>																																																								
OLIGOCENE	<i>P. reticulata</i> and <i>C. superbus</i> PR																																																								
	<i>N. constricta</i> - <i>D. deflandrei</i> PR																																																								
	<i>Naviculopsis trispinosa</i> PR																																																								
	<i>Brightwellia spiralis</i>																																																								
A/M-G	<i>Naviculopsis trispinosa</i> PR																																																								
	<p>● 65.31 ● 66.11 ● 66.59 (●?)</p> <p>● 75.7 0C=0.07%</p> <p>● 72.5%</p> <p>CaCO₃</p>																																																								



SITE 748 HOLE B CORE 14H CORED INTERVAL 114.1-123.6 mbsf

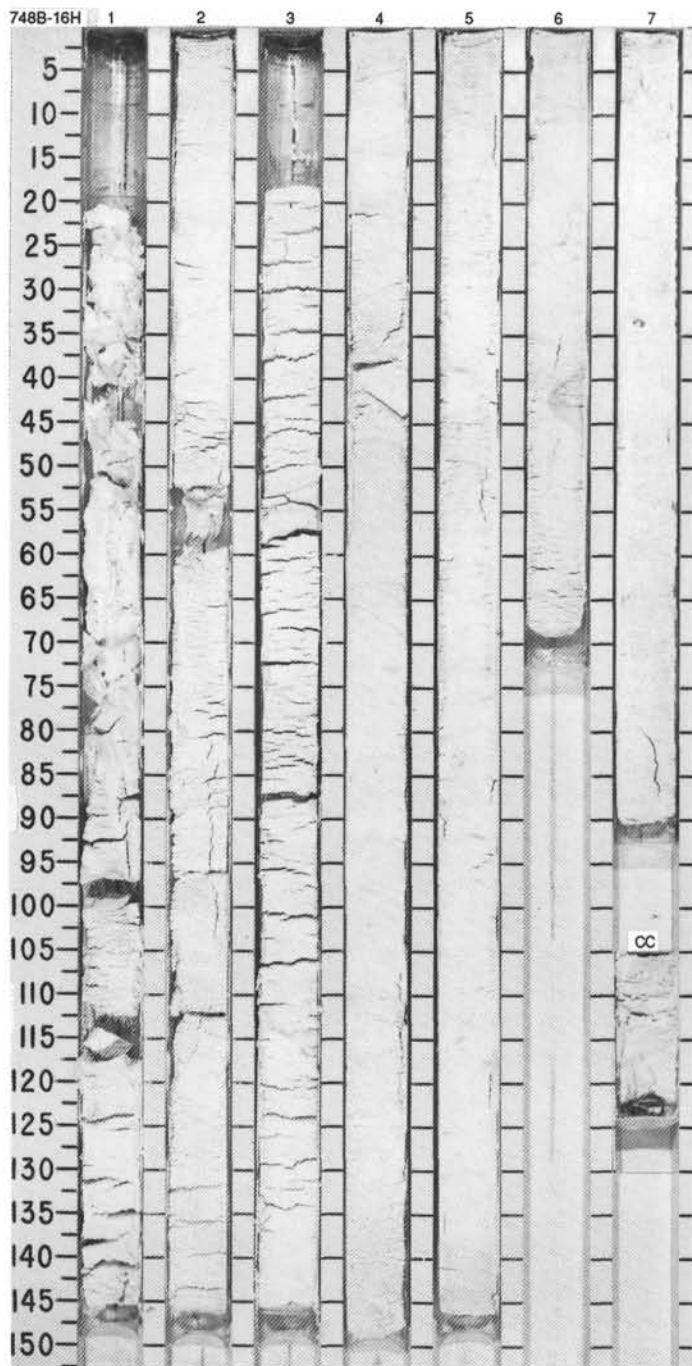
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	FORAMINIFERS	NANNOFOSSILS	RADIOLIARIANS	DIATOMS	SILICOFLAGELLATES	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																				
LOWER OLIGOCENE	<i>Subbotina angiporoides</i> UPPER EOCENE or LOWER OLIGOCENE (NP19 - NP22)									0.5				<p>NANNOFOSSIL OOZE WITH SILICEOUS DEBRIS AND NANNOFOSSIL OOZE WITH FORAMINIFERS</p> <p>* Major lithologies: a. NANNOFOSSIL OOZE with SILICEOUS DEBRIS, white (5Y 8/1) with light gray (5Y 7/1) and bluish gray (5B 6/1) laminations, 1-mm to 10-cm beds. Greener laminae have more diatoms; black to gray laminae are pyritic. The siliceous component is richer in radiolarians than diatoms. b. NANNOFOSSIL OOZE with FORAMINIFERS, white (5Y 8/1), with laminations as above.</p> <p>Minor lithology: Siliceous nannofossil ooze, light greenish gray (5G 7/1), occurs in Section 1, 136-150 cm, and in Section 2, 0-20 cm. Contains glauconite and ice-rafted debris (angular quartz grains and volcanic clasts).</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 50</td> <td>2, 14</td> <td>5, 50</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>10</td> <td>20</td> <td>15</td> </tr> <tr> <td>Silt</td> <td>80</td> <td>75</td> <td>70</td> </tr> <tr> <td>Clay</td> <td>10</td> <td>5</td> <td>10</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcareous fragments</td> <td>4</td> <td>5</td> <td>10</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>4</td> <td>5</td> </tr> <tr> <td>Diatoms</td> <td>8</td> <td>15</td> <td>3</td> </tr> <tr> <td>Foraminifers</td> <td>10</td> <td>5</td> <td>16</td> </tr> <tr> <td>Nannofossils</td> <td>60</td> <td>55</td> <td>64</td> </tr> <tr> <td>Radiolarians</td> <td>5</td> <td>10</td> <td>2</td> </tr> <tr> <td>Silicoflagellates</td> <td>4</td> <td>2</td> <td>—</td> </tr> <tr> <td>Spicules</td> <td>—</td> <td>Tr</td> <td>—</td> </tr> </table>		1, 50	2, 14	5, 50		D	M	M	Sand	10	20	15	Silt	80	75	70	Clay	10	5	10	Calcareous fragments	4	5	10	Clay	5	4	5	Diatoms	8	15	3	Foraminifers	10	5	16	Nannofossils	60	55	64	Radiolarians	5	10	2	Silicoflagellates	4	2	—	Spicules	—	Tr	—
			1, 50	2, 14	5, 50																																																													
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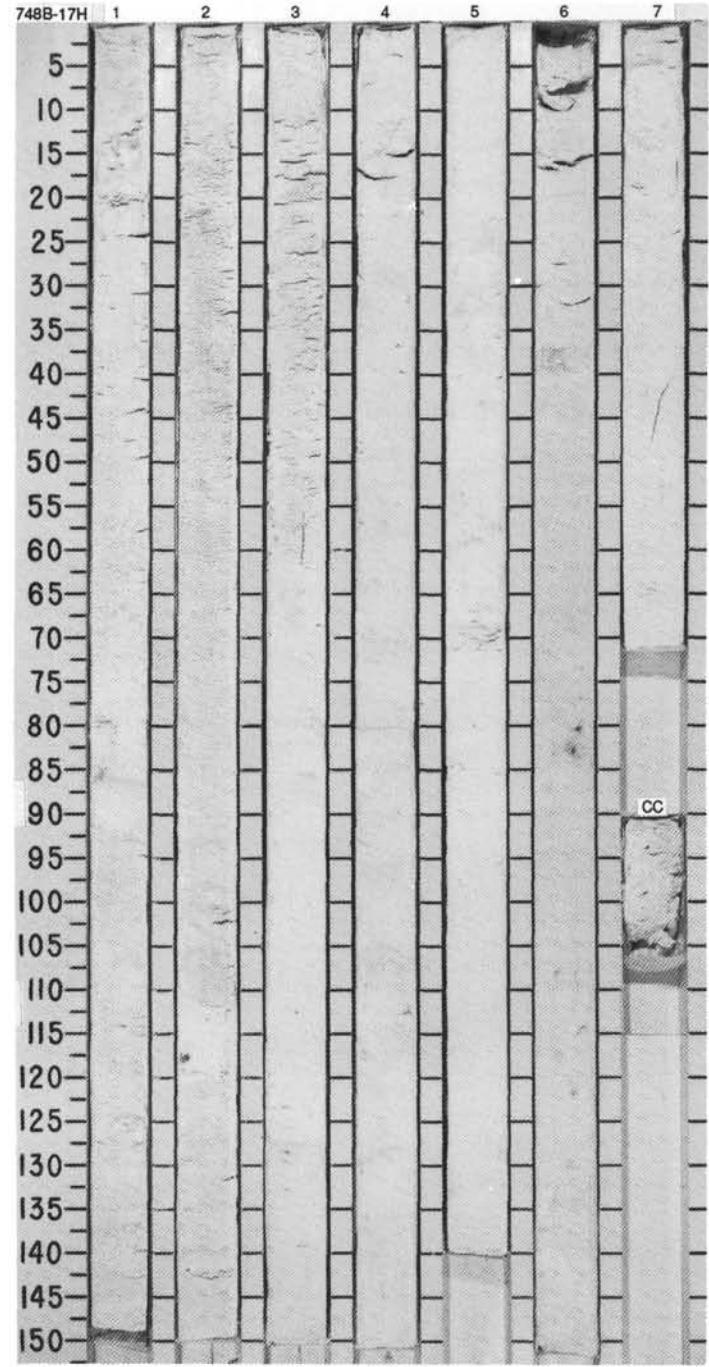
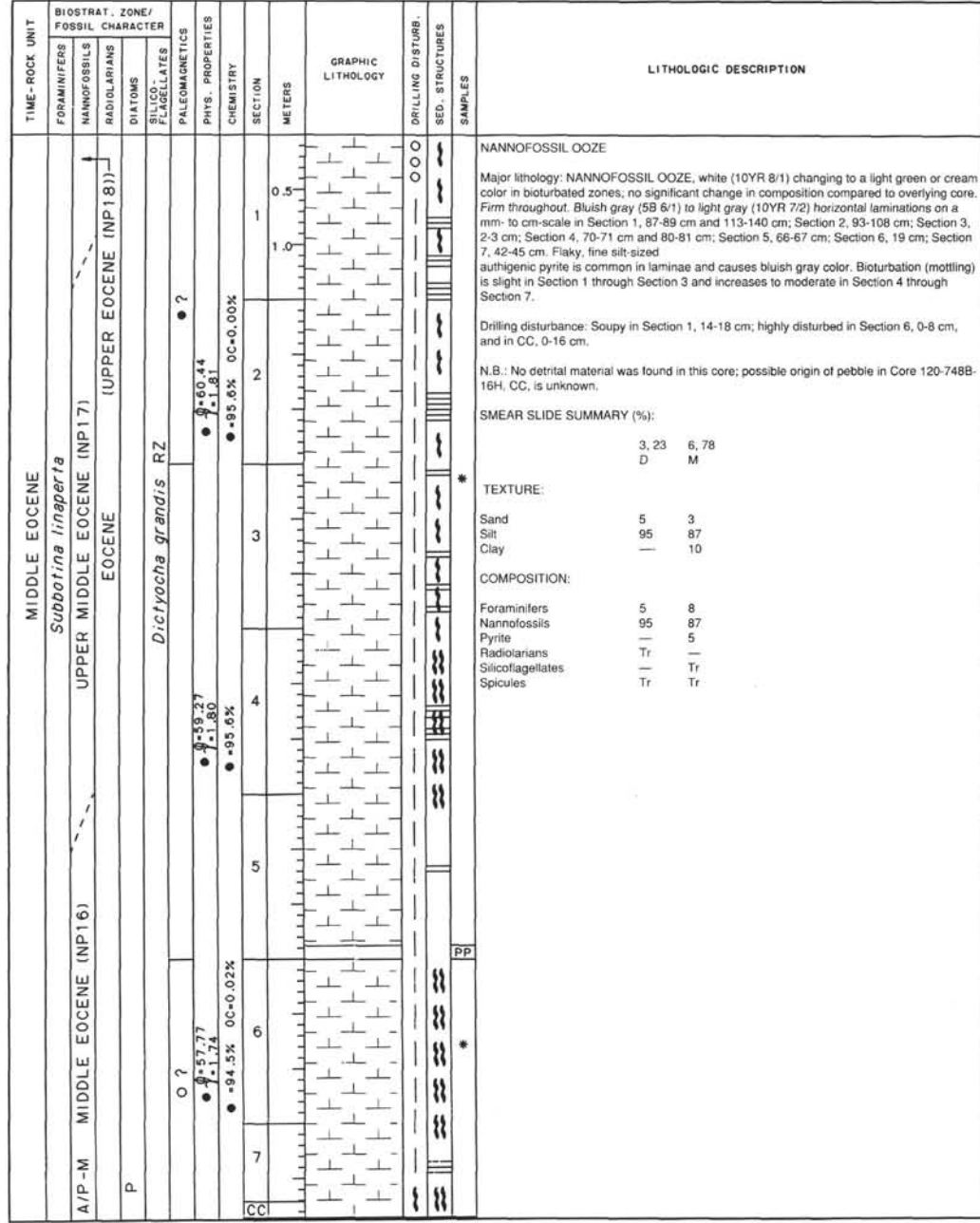




SITE 748 HOLE B CORE 16H CORED INTERVAL 133.1-142.6 mbsf

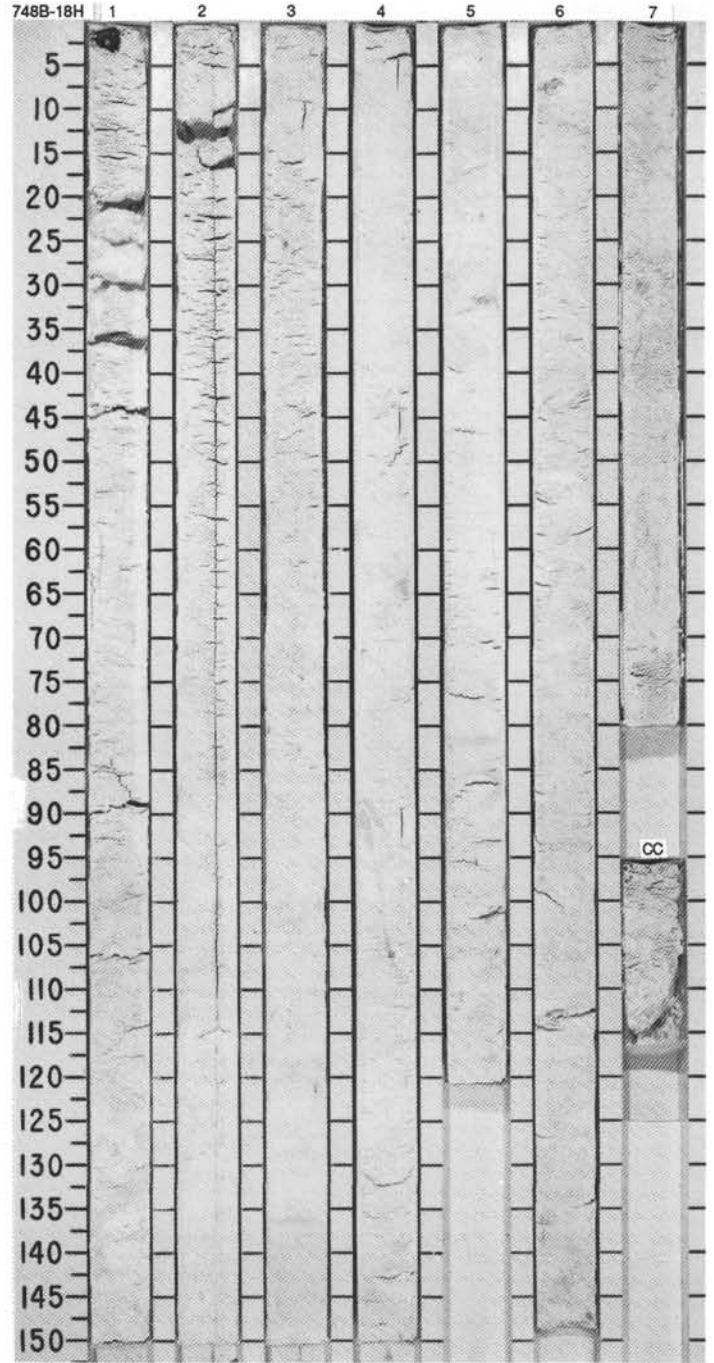
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																							
									FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICO-FLABELLATES	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY																																															
UPPER EOCENE				VOID				<p>NANNOFOSSIL OOZE</p> <p>Major lithology: NANNOFOSSIL OOZE, white (10YR 8/1), changing to a cream white in bioturbated zones; firm. Horizontal laminations on a cm-scale, bluish gray (5B 6/1) in Section 2, 8-12 cm, 22-40 cm, and 100-112 cm; in Section 4, 46-47 cm, 63-64 cm, and 109-110 cm; in Section 5, 18-19 cm, 22-28 cm, and 72-78 cm; and in Section 7, 65 cm and 69 cm. Flaky fine silt-size pyrite common, up to 2% in laminae, causing the bluish gray hues. Bioturbation (mottling) is slight at Section 4, 46 cm, and increases downcore to moderate in Section 6. A large half circle burrow (10 cm) occurs in Section 6, 35-45 cm, with flaky, fine silt-sized authigenic pyrite present in the outer edge giving it a bluish gray outline.</p> <p>Drilling disturbance: Soupy in Section 1, 20-65 cm. Highly disturbed in Section 1, 65-140 cm; in Section 2, 35-50 cm, 58-65 cm, and 140-144 cm; moderately disturbed in Section 2, 0-35 cm, and 65-140 cm; in Section 3, 18-147 cm; in Section 4, 9-45 cm, and 130-150 cm; and in Section 7, 0-90 cm. Slightly disturbed in Section 6, 0-66 cm.</p> <p>N.B.: A 3.5 cm subangular granitic pebble was found in the bottom of the core catcher. No other pebble or sand/silt-sized detrital material was found in the CC or the overlying sections. Possible interpretations: downhole contamination(?) or ice-raftered debris(?).</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 128</th> <th>3, 40</th> <th>4, 9</th> <th>4, 55</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </tbody> </table> <p>TEXTURE:</p> <table border="1"> <thead> <tr> <th></th> <th>5</th> <th>7</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>5</td> <td>7</td> <td>5</td> <td>6</td> </tr> <tr> <td>Silt</td> <td>95</td> <td>93</td> <td>95</td> <td>94</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>Tr</th> <th>7</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>Diatoms</td> <td>Tr</td> <td>7</td> <td>5</td> <td>6</td> </tr> <tr> <td>Foraminifera</td> <td>5</td> <td>93</td> <td>94</td> <td>94</td> </tr> <tr> <td>Nannofossils</td> <td>Tr</td> <td>Tr</td> <td>1</td> <td>—</td> </tr> <tr> <td>Radiolarians</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Spiroles</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> </tbody> </table>		1, 128	3, 40	4, 9	4, 55	D	D	D	D	D		5	7	5	6	Sand	5	7	5	6	Silt	95	93	95	94		Tr	7	5	6	Diatoms	Tr	7	5	6	Foraminifera	5	93	94	94	Nannofossils	Tr	Tr	1	—	Radiolarians	Tr	Tr	Tr	Tr	Spiroles	Tr	Tr	Tr	Tr
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D	D	D	D	D																																																											
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Radiolarians	Tr	Tr	Tr	Tr																																																											
Spiroles	Tr	Tr	Tr	Tr																																																											
UPPER EOCENE	<i>Subbotina linaperta</i>			VOID																																																											
UPPER EOCENE (NP18)				VOID																																																											
EOCENE				VOID																																																											
MIDDLE EOCENE - <i>Triceratium kanaye</i>				VOID																																																											
<i>Hannites quadrum</i> range				VOID																																																											
A/M-G				VOID																																																											
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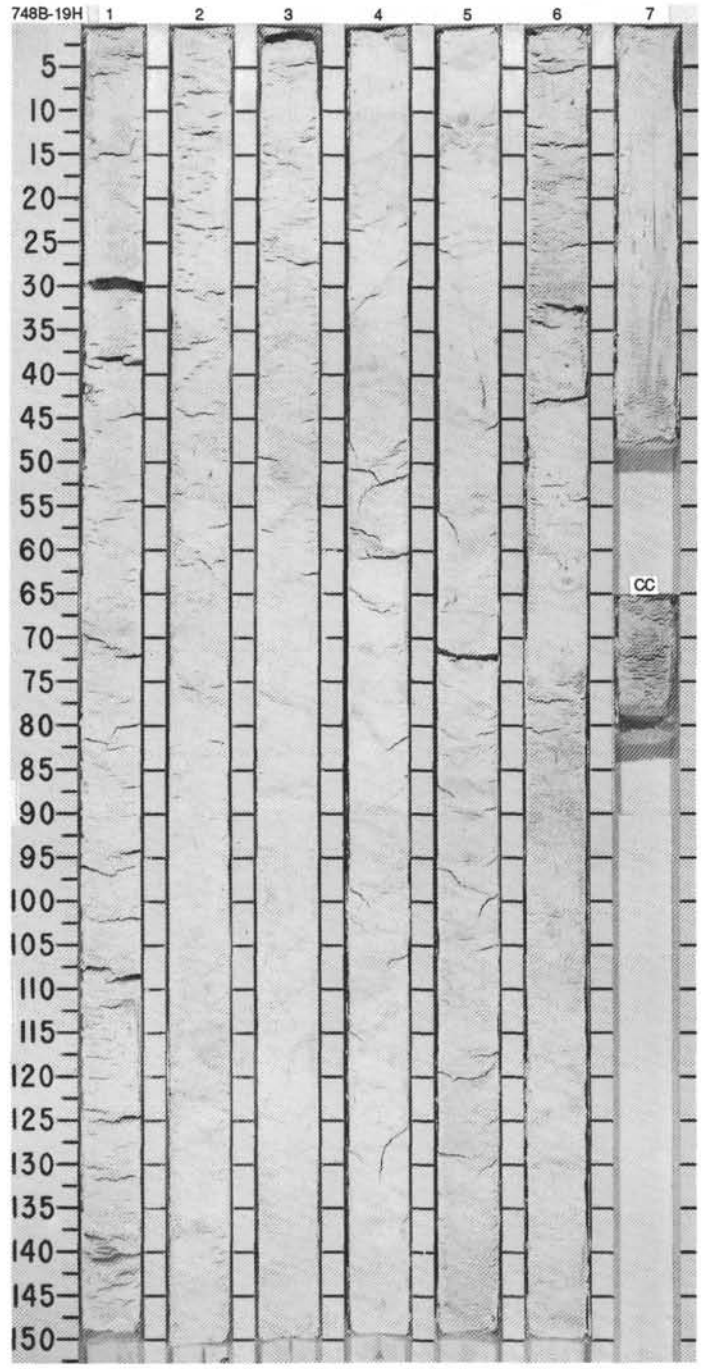


SITE 748 HOLE B CORE 18H CORED INTERVAL 152.1-161.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																		
MIDDLE EOCENE									<p>NANNOFOSSIL OOZE</p> <p>Major lithology: NANNOFOSSIL OOZE, white (10YR 8/1), biogenic silica components greater than in overlying core. Firm throughout; laminae on a cm-scale, light gray (10YR 7/2) in Section 1, 50-51 cm, 75-76 cm, and 125-126 cm; in Section 2, 23-24 cm, and 114-116 cm; in Section 3, 53 cm, 72 cm, 121 cm, and 138 cm. Bluish gray (5B 6/1) specks and blotches on a mm-scale are scattered throughout the core. Smear slide analysis of the blotch in Section 4, 104-105 cm, contains 6% flaky, fine silt-size pyrite. Bioturbation (mottling) is slight in Sections 1-5; moderate bioturbation in Section 1, 50-65 cm and 125-130 cm; and in Section 4, 87-110 cm. Pyrite is present in laminae, blotches, and specks.</p> <p>Drilling disturbance: Fractured in Section 1, 25-40 cm; and in Section 2, 5-10 cm; slightly disturbed throughout the entire core.</p> <p>Downhole contamination: Biotite gneiss pebble, 3 cm, in Section 1, 0-3 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 54</td> <td>4, 21</td> <td>4, 104</td> <td>7, 20</td> </tr> <tr> <td>D</td> <td></td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>1</td> <td>2</td> <td>7</td> <td>1</td> </tr> <tr> <td>Silt</td> <td>94</td> <td>91</td> <td>83</td> <td>90</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>7</td> <td>10</td> <td>9</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Foraminifers</td> <td>2</td> <td>1</td> <td>8</td> <td>2</td> </tr> <tr> <td>Nannofossils</td> <td>97</td> <td>98</td> <td>83</td> <td>95</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>6</td> <td>1</td> </tr> <tr> <td>Radiolarians</td> <td>1</td> <td>1</td> <td>2</td> <td>1</td> </tr> <tr> <td>Spicules</td> <td>Tr</td> <td>Tr</td> <td>1</td> <td>1</td> </tr> </table>		1, 54	4, 21	4, 104	7, 20	D		D	M	D	Sand	1	2	7	1	Silt	94	91	83	90	Clay	5	7	10	9	Foraminifers	2	1	8	2	Nannofossils	97	98	83	95	Pyrite	—	—	6	1	Radiolarians	1	1	2	1	Spicules	Tr	Tr	1	1
	1, 54	4, 21	4, 104	7, 20																																																							
D		D	M	D																																																							
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Foraminifers	2	1	8	2																																																							
Nannofossils	97	98	83	95																																																							
Pyrite	—	—	6	1																																																							
Radiolarians	1	1	2	1																																																							
Spicules	Tr	Tr	1	1																																																							
		• β -58.55 • β -1.84	• β -56.44 • β -1.86		0.5																																																						
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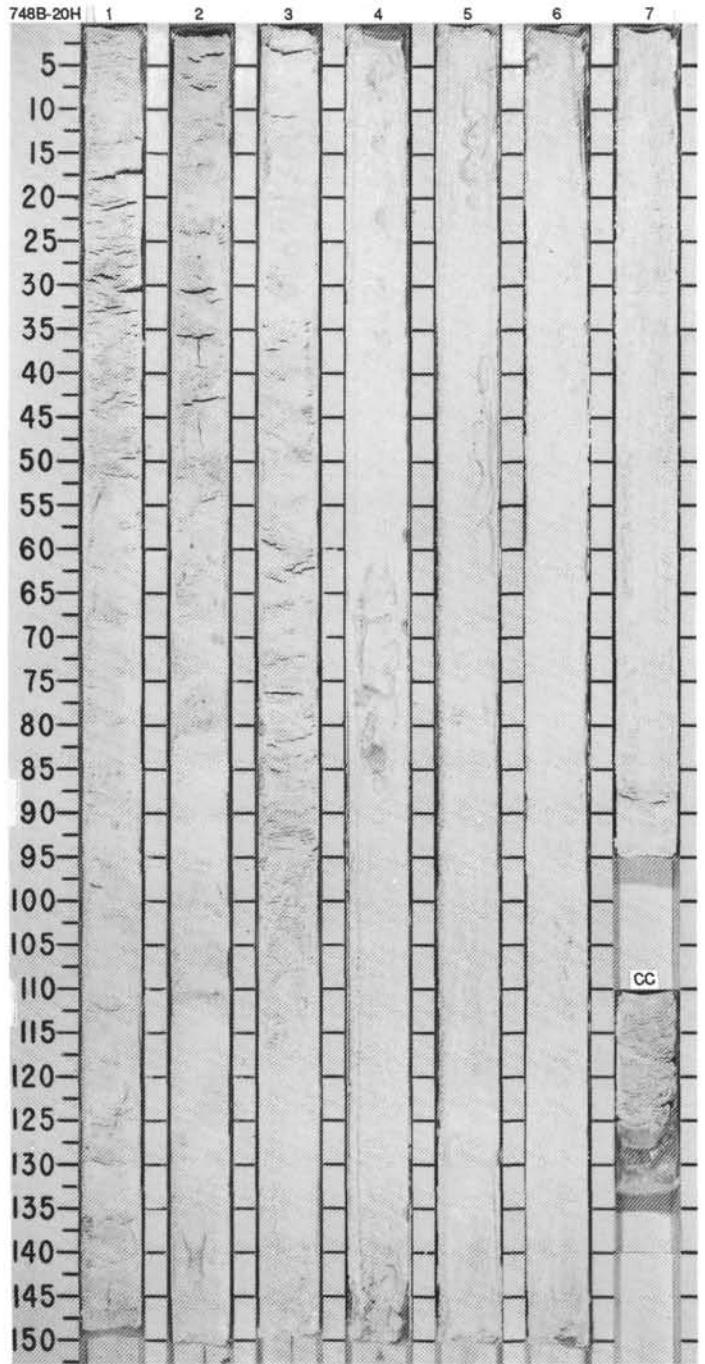


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLIARIANS	DIATOMS									
MIDDLE EOCENE													
	<i>Globigeropsis index</i>												
A/M-G	MIDDLE EOCENE (NP15 - NP16) EOCENE												
P	<i>Dictyochoa grandis</i> RZ												
					● 61.17 ● 71.73	OC=0.00%		1	0.5 1.0				
					● 60.71 ● 71.79			2					
					● 55.84 ● 61.80			3					
					● 96.9%			4					
								5					
								6					
								7					
								CC					



SITE 748 HOLE B CORE 20H CORED INTERVAL 171.1-180.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS										
MIDDLE EOCENE	MIDDLE EOCENE (NP15 to NP16)											
	<i>Globigeropsis index</i>											
A/M-G	Barren											
	MIDDLE EOCENE - <i>Paralia sulcata</i> var. <i>crenulata</i> range											
	<i>Dictyocna grandis</i> RZ											
				● 56.38								
				● 47.72								
				● 1.86								
				● 95.4%								
				● 95.5%	CaCO ₃	0C=0.07%						

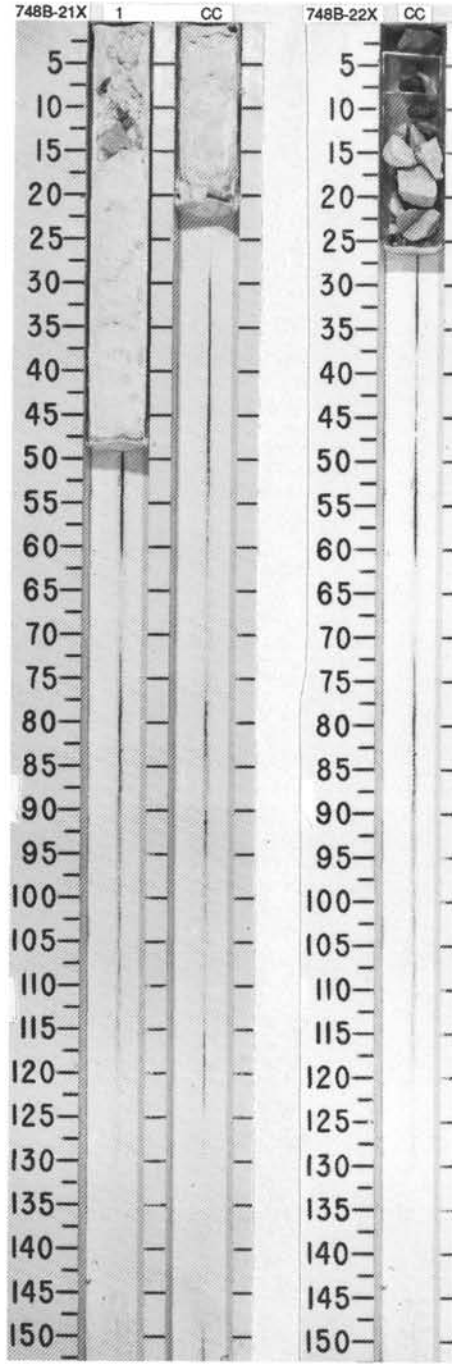


SITE 748 HOLE B CORE 21X CORED INTERVAL 180.6-187.1 mbsf

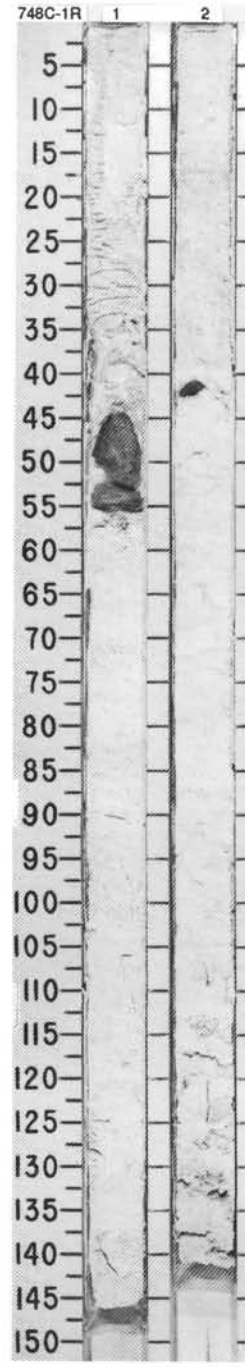
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
MIDDLE EOCENE	<i>Globigeropsis index</i>	A/M-G						1					<p>NANNOFOSSIL OOZE</p> <p>Major lithology: NANNOFOSSIL OOZE, white (5Y 8/1), with faint purple and tan sub-horizontal burrows. Chert and porcellanite fragments were recovered from the disturbed part of Section 1. Chert is brown, vitreous; porcellanite is similar in appearance to the ooze, including purple mottles, foraminifer relicts, and black pyrite specks.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">1, 3 D</p> <p>COMPOSITION:</p> <p>Bivalves 5 Calcareous fragments Tr Chalcedony 5 Foraminifers 40 Glauconite Tr Micrite 30 Silica 15 Spicules Tr</p>
MIDDLE EOCENE (NP16 - NP15)	Barten							CC					

SITE 748 HOLE B CORE 22X CORED INTERVAL 187.1-196.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
MIDDLE EOCENE		A/M						CC					<p>DRILLING BRECCIA</p> <p>Major lithology: DRILLING BRECCIA comprised mostly of white (10YR 8/1) porcellanite with purple-lined burrows, radiolarians, foraminifers, and a fish tooth or scale.</p>
MIDDLE EOCENE (NP15)	no sample				9-11.26 7-2.35 5-4.06 3-2.33 2-2.88								

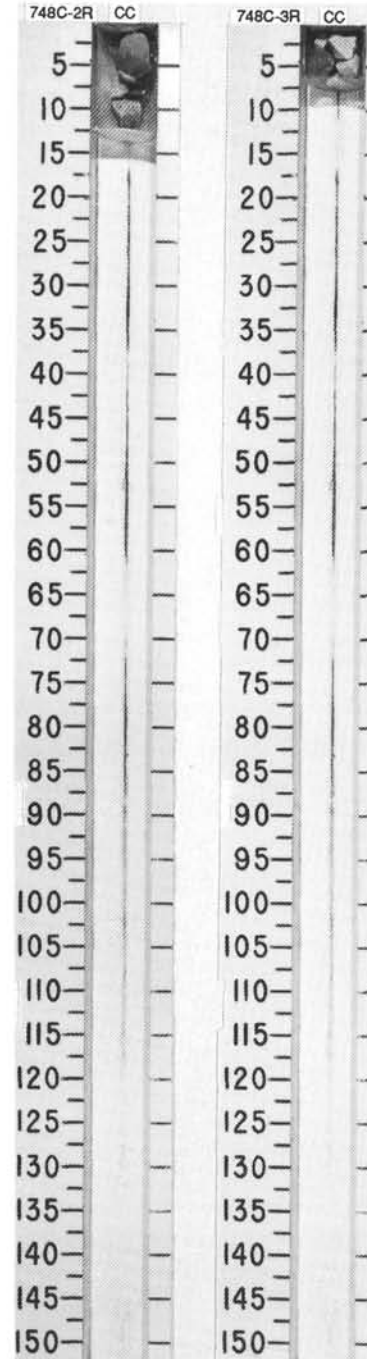


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																														
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS																																							
MIDDLE EOCENE	<i>Globigerina index</i>						1					<p>NANNOFOSSIL CHALK</p> <p>Major lithology: NANNOFOSSIL CHALK, white (10Y N8) with purple sub-horizontal to diagonal burrows up to 7 mm in diameter; purple color appears to be from pyrite.</p> <p>Minor lithology: Porcellanite fragments, olive (5Y 5/4), probably drilling breccia and out of place, with white, dark olive, and reddish streaks inside; in Section 1, 44-57 cm, and Section 2, 41-43 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 70</td> <td>2, 114</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>5</td> <td>5</td> </tr> <tr> <td>Silt</td> <td>90</td> <td>90</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>5</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Diatoms</td> <td>1</td> <td>-</td> </tr> <tr> <td>Foraminifers</td> <td>3</td> <td>5</td> </tr> <tr> <td>Micrite</td> <td>5</td> <td>5</td> </tr> <tr> <td>Nannofossils</td> <td>90</td> <td>90</td> </tr> <tr> <td>Spicules</td> <td>Tr</td> <td>Tr</td> </tr> </table>		1, 70	2, 114	D	D	D	Sand	5	5	Silt	90	90	Clay	5	5	Diatoms	1	-	Foraminifers	3	5	Micrite	5	5	Nannofossils	90	90	Spicules	Tr	Tr
	1, 70	2, 114																																								
D	D	D																																								
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Foraminifers	3	5																																								
Micrite	5	5																																								
Nannofossils	90	90																																								
Spicules	Tr	Tr																																								
A/M	MIDDLE EOCENE (NP14 - NP15)					OC=0.13% ● =95.8%	2	VOID																																		
	Barren					CaCO ₃ ● =95.4%																																				
	Barren																																									



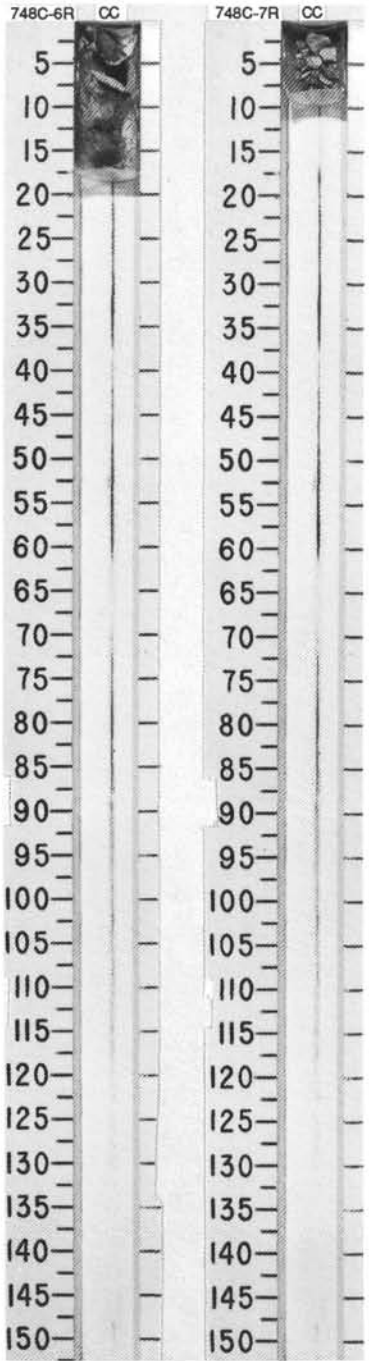
SITE 748 HOLE C CORE 2R CORED INTERVAL 182.5-192.0 mbsf		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
TIME-ROCK UNIT		FORAMINIFERS	NANNOFOSSILS										
no sample							CC	-▲▲▲▲▲					CHERT Major lithology: CHERT, olive (5Y 5/2), vitreous, occurs as several fragments in the CC. Contains white specks, possibly representing relict radiolarians; also some preserved burrow structures with some adhering porcellanite and chalk with dark gray to purple burrows. Laminae pass through the siliceous front.

SITE 748 HOLE C CORE 3R CORED INTERVAL 192.0-201.5 mbsf		BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
TIME-ROCK UNIT		FORAMINIFERS	NANNOFOSSILS										
no sample							LL	▲▲▲▲▲▲▲▲					CHERT Major lithology: CHERT, occurs as fragments in the CC; two are light gray (5Y7/1), hard porcellanite with burrow streaks; four are olive brown (5Y 5/6), dark vitreous, with white porcellanite rind showing preserved foraminifers, silicified chalk, and nannofossils in contact. A cobble of felsic biotite gneiss also occurs in the CC (downhole contamination).



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										
MIDDLE EOCENE														CHERT
	<i>Acarinina primitiva</i>										X			Major lithology: CHERT, olive (5Y 5/4), with porcellanite rim (pale olive, 5Y 6/3) showing grainy texture including preserved burrows and bits foraminifer, clastic, and organic(?) matter. Chalk veneer is attached in stratigraphic contact.
	A/M-G LOWER MIDDLE EOCENE													SMEAR SLIDE SUMMARY (%): CC, 10 D
	Barren													TEXTURE: Silt 70 Clay 30
	Barren													COMPOSITION: Micrite 60 Nannofossils 20 Silica 20

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										
MIDDLE EOCENE														CHERT
	A/M-G LOWER MIDDLE EOCENE													Major lithology: drilling breccia of CHERT, olive (5Y 5/4), vitreous, with minor porcellanite; some fragments have a nannofossil chalk patina.
	no sample													
	no sample													

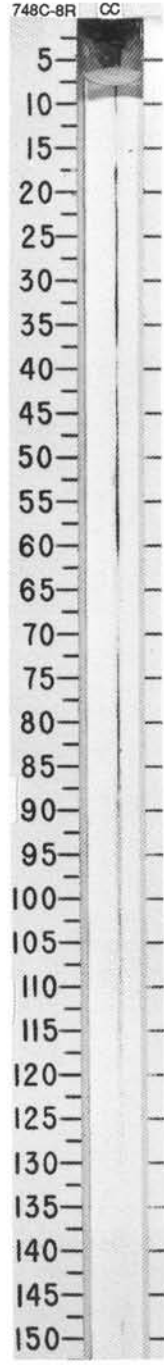


CORE 120-748C-4R NO RECOVERY

CORE 120-748C-5R NO RECOVERY

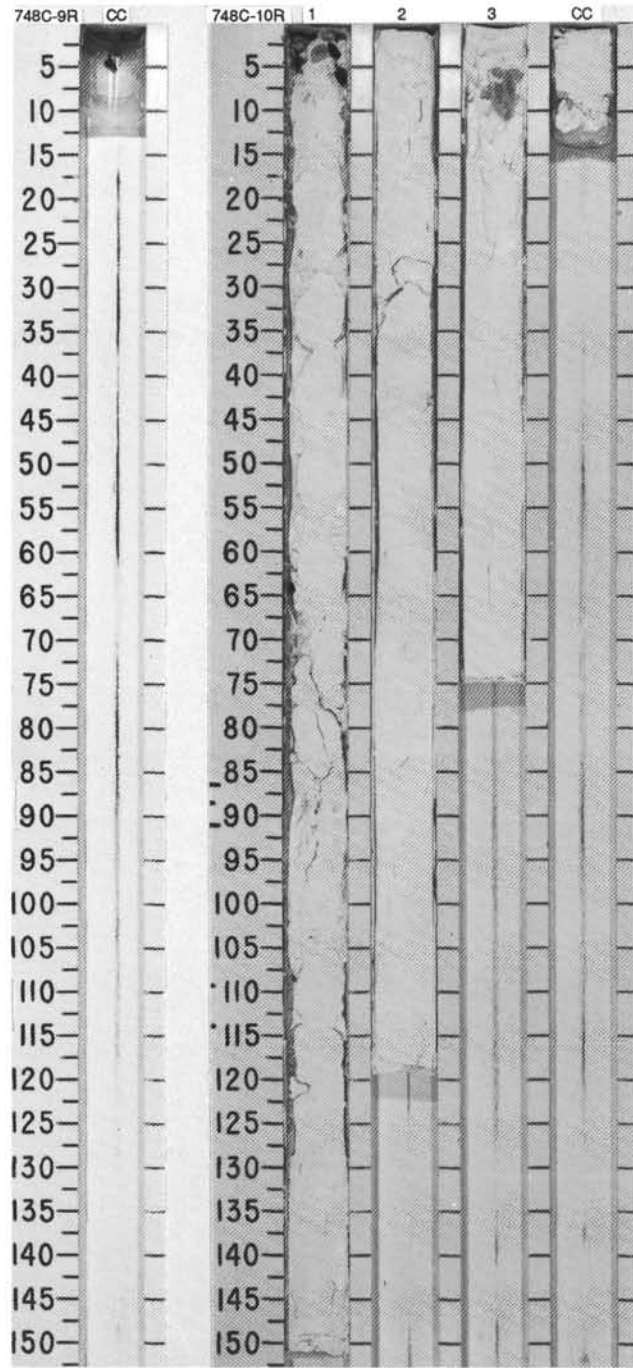
SITE 748 HOLE C CORE 8R CORED INTERVAL 239.5-249.0 mbsf

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	D.IATOMS										
LOWER MIDDLE EOCENE or UPPER LOWER EOCENE														
A/M	no sample													
	LOWER MIDDLE EOCENE or UPPER LOWER EOCENE (NP13 or NP14)													
	no sample													
	no sample													
														CHERT Major lithology: drilling breccia of CHERT, olive (5Y 5/4), no sediment attached.



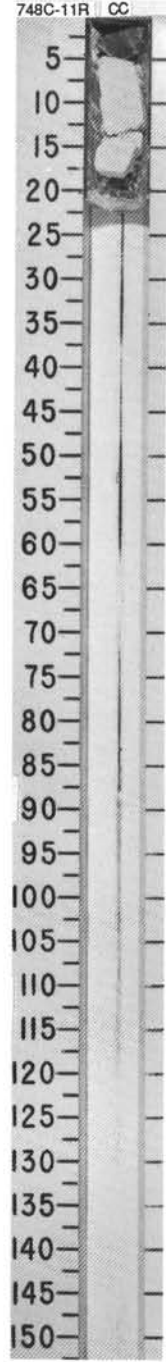
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
	no sample													
														CHERT Major lithology: CHERT, olive (5Y 4/3), an angular fragment 1.5 cm across.

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																				
	UPPER LOWER EOCENE																							
P8 <i>A. pentacamerata</i> A/M	P9 <i>A. densa</i> UPPER LOWER EOCENE (NP13)	Barren	Barren						0.5 1.0					NANNOFOSSIL CHALK * Major lithology: NANNOFOSSIL CHALK, white (10YR 8/1), slightly burrowed throughout, some faint cm-scale cream-colored laminae in Section 1, 48-49 cm and 53-54 cm and in Section 2, 42-45 cm and 112-113 cm. Some chert fragments occur; these often have ghosts of microfossils. Drilling disturbance: The core consists of drilling biscuits with foster material in between. SMEAR SLIDE SUMMARY (%): <table border="1"> <tr> <td></td> <td>1, 39</td> <td>2, 54</td> <td>2, 54</td> <td>3, 50</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> TEXTURE: Sand 1 3 1 1 Silt 93 90 93 92 Clay 6 7 6 7 COMPOSITION: Foraminifers 1 2 1 1 Micrite 6 5 6 7 Nannofossils 93 93 93 92 Pyrite Tr Tr Tr Tr		1, 39	2, 54	2, 54	3, 50		D	D	M	D
	1, 39	2, 54	2, 54	3, 50																				
	D	D	M	D																				
						● -94.3% ● -44.88 ● -1.06 CaCO ₃ ● -95.3%																		

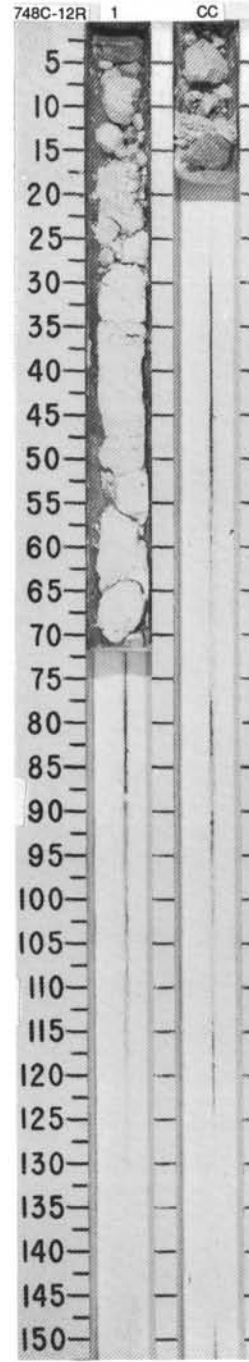


SITE 752 HOLE C CORE 11R CORED INTERVAL 268.0-277.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS										
LOWER EOCENE													
	<i>Subbotina patagonica</i>												
	LOWER EOCENE (NP12)												
	Barten												
	Barten												
					9-20.65 7-1.83								
						CACO ₃ 99.0%							
							CC						
										X		*	
													<p>NANNOFOSSIL CHALK</p> <p>Major lithology: NANNOFOSSIL CHALK, white (10Y N8), uniform, with foraminifers, etched nannofossils (including discoasters), and micrite.</p> <p>Minor lithology: Chert, bluish gray (10Y N6), vitreous, in CC, 0-4 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">CC, 10 D</p> <p>TEXTURE:</p> <p>Silt 80 Clay 20</p> <p>COMPOSITION:</p> <p>Foraminifers 10 Micrite 65 Nannofossils 20 Silica 1</p>

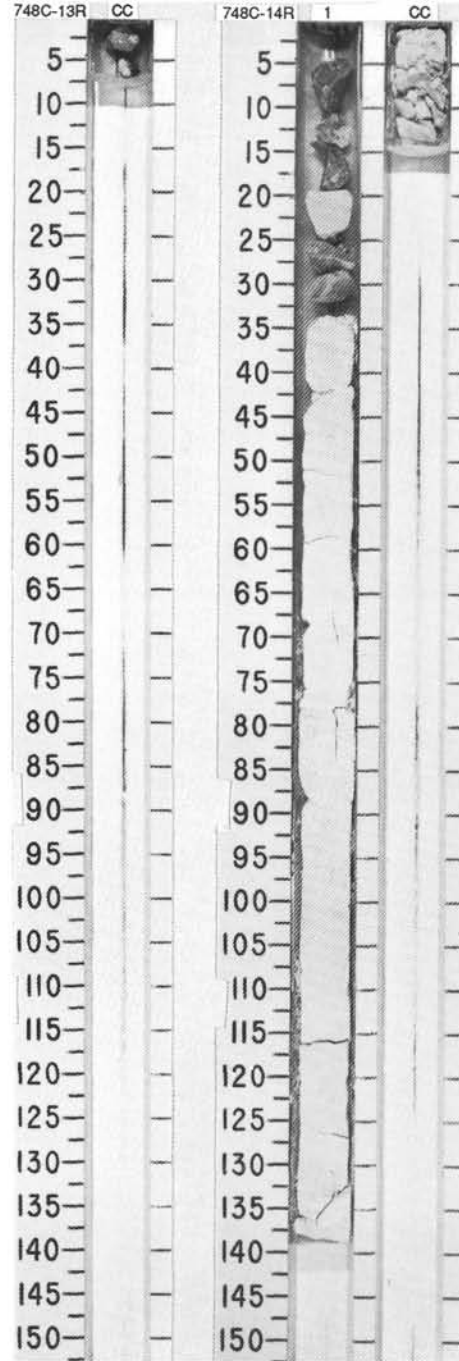


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION														
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																								
LOWER EOCENE	<i>Subbotina patagonica</i> - <i>Pseudonastrigerina wilcoxensis</i>					0.54, 0.84 1.92	CaCO ₃ 95.6%	1	0.5				*	<p>NANNOFOSSIL CHALK WITH MICRITE</p> <p>Major lithology: NANNOFOSSIL CHALK with micrite, white (10YR 8/1), fewer foraminifers than in overlying core. Nannofossils are etched. Laminations occur on a mm-scale and are light gray (10YR 8/1) to bluish gray (5B 6/1). A few crinoid and bryozoan fragments are scattered in Section 1, 35-71 cm; chert fragments (light gray, 10YR 7/1) occur in Section 1, 0-4 cm, which have chalk rinds and contain ghosts of foraminifers. Chert fragments up to 5 cm across also occur in the CC.</p> <p>Drilling disturbance: Moderately fractured (drilling biscuits) through Section 1; CC is highly fractured.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table style="margin-left: 20px;"> <tr><td>1.40</td></tr> <tr><td>D</td></tr> </table> <p>TEXTURE:</p> <table style="margin-left: 20px;"> <tr><td>Sand</td><td>5</td></tr> <tr><td>Silt</td><td>89</td></tr> <tr><td>Clay</td><td>6</td></tr> </table> <p>COMPOSITION:</p> <table style="margin-left: 20px;"> <tr><td>Foraminifers</td><td>5</td></tr> <tr><td>Micrite</td><td>10</td></tr> <tr><td>Nannofossils</td><td>85</td></tr> </table>	1.40	D	Sand	5	Silt	89	Clay	6	Foraminifers	5	Micrite	10	Nannofossils	85
1.40																												
D																												
Sand	5																											
Silt	89																											
Clay	6																											
Foraminifers	5																											
Micrite	10																											
Nannofossils	85																											
	A/M-G																											
	LOWER EOCENE (NP11)																											
	Barren																											
	Barren																											



SITE 748 HOLE C CORE 13R CORED INTERVAL 287.0-296.5 mbsf													
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
LOWER EOCENE	<i>Pseudonastigerina wilcoxensis</i>	A/P											CHERT Major lithology: CHERT, grayish brown (10YR 4/2), occurs as 3-cm angular fragments in the CC. Chert contains relict foraminifers and possibly radiolarians.
	LOWER EOCENE (NP11)												
	no sample												
	no sample												

SITE 748 HOLE C CORE 14R CORED INTERVAL 296.5-306.0 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									
LOWER EOCENE	<i>M. formosa gracilis</i>	A/M-G					0.5 1.0						NANNOFOSSIL CHALK Major lithology: NANNOFOSSIL CHALK, white (10YR 8/1), with numerous black specks; purple bands occur in Section 1, 100-138 cm, and horizontal laminations in Section 1, 131-133 cm. A very hard chalk fragment, possible silicified, occurs in Section 1, 19-24 cm; chalk in Cc is firm and slightly brittle. Minor lithology: Chert, grayish brown (10YR 5/2), occurs in Section 1, 0-19 cm; milky appearance, contains relict microfossils and/or inclusions of chalk.
	Barren												SMEAR SLIDE SUMMARY
	Barren												1, 60 D
													TEXTURE:
													Sand 3
													Silt 97
													COMPOSITION:
													Foraminifers 3
													Micrite 40
													Nannofossils 57
													Pyrite Tr

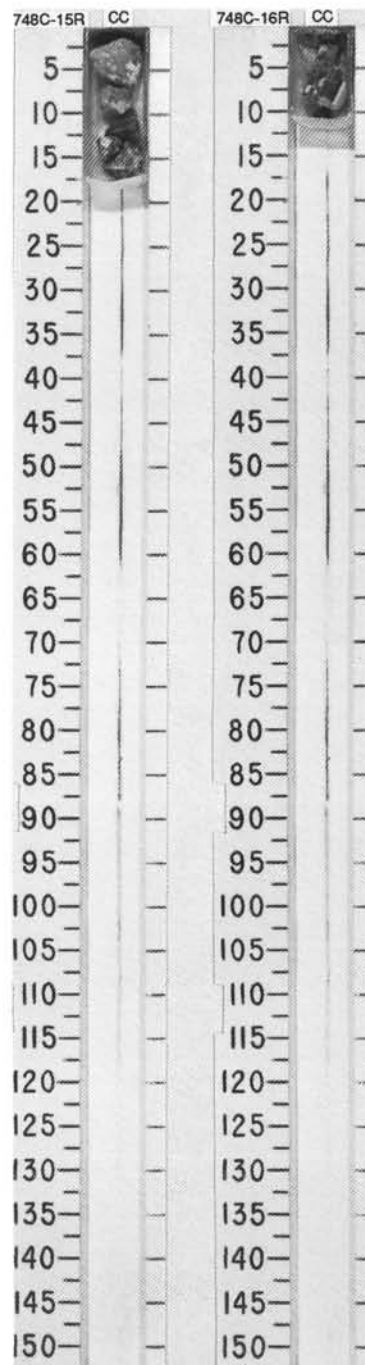


SITE 748 HOLE C CORE 15R CORED INTERVAL 306.0-315.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAKNOFOSSILLS	RADIOLARIANS	DIATOMS									
LOWER EOCENE	<i>A. solidadoensis</i>							CC	-▲▲▲▲▲		X		CHERT Major lithology: CHERT, light brownish gray (10YR 6/2), in the CC, 0-6 cm, and very dark gray (10YR 3/1) in the CC, 6-17 cm. Chert contains numerous inclusions of chalk and/or relict microfossils (white specks).
	LOWER EOCENE (NP11) A/M-P												
	no sample												
	no sample												

SITE 748 HOLE C CORE 16R CORED INTERVAL 315.5-320.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAKNOFOSSILLS	RADIOLARIANS	DIATOMS									
LOWER EOCENE	<i>A. solidadoensis</i>							CC	-▲▲▲▲▲		X		CHERT Major lithology: Drilling breccia of CHERT, very dark gray (10YR 3/1) with rind of hard, light gray (10YR 7/1) chalk occurs in the CC. A fragment of igneous rock (biotite-rich granite) also occurs in the CC; probably downhole contamination.
	LOWER EOCENE (NP10) A/M												
	no sample												
	no sample												



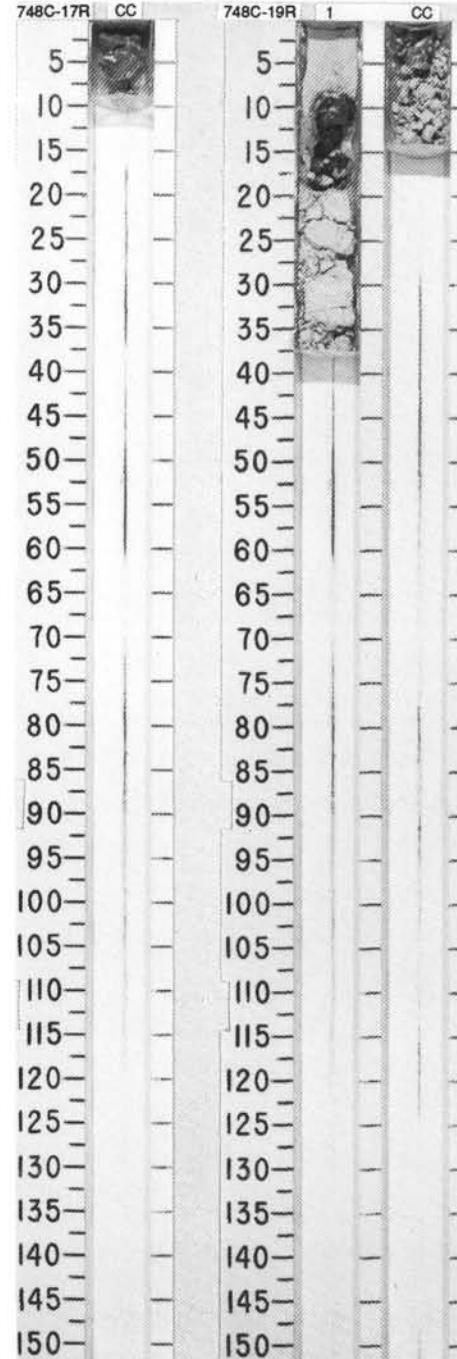
SITE 748 HOLE C CORE 17R CORED INTERVAL 320.5-330.0 mbsf

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										
UPPER PALEOCENE								CC						CHERT Major lithology: Three fragments of CHERT, very dark gray (10YR 3/1); chert contains a few inclusions of chalk.

CORE 120-748C-18R NO RECOVERY

SITE 748 HOLE C CORE 19R CORED INTERVAL 331.0-340.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
UPPER PALEOCENE								1						NANNOFOSSIL CHALK WITH MICRITE Major lithology: NANNOFOSSIL CHALK with MICRITE, white (5Y 8/1); nannofossil preservation is poor to moderate. Minor lithology: Chert, black (2.5Y 2/0), with chalk rinds, occurs as fragments in Section 1, 8-19 cm; relict foraminifers disseminated throughout. Drilling disturbance: Soupy in Section 1, 0-10 cm; moderately fractured in Section 1, 10-37 cm, and in the CC. SMEAR SLIDE SUMMARY (%): 1, 30 D TEXTURE: Sand 2 Silt 91 Clay 7 COMPOSITION: Foraminifers 3 Micrite 10 Nannofossils 87
								CC						

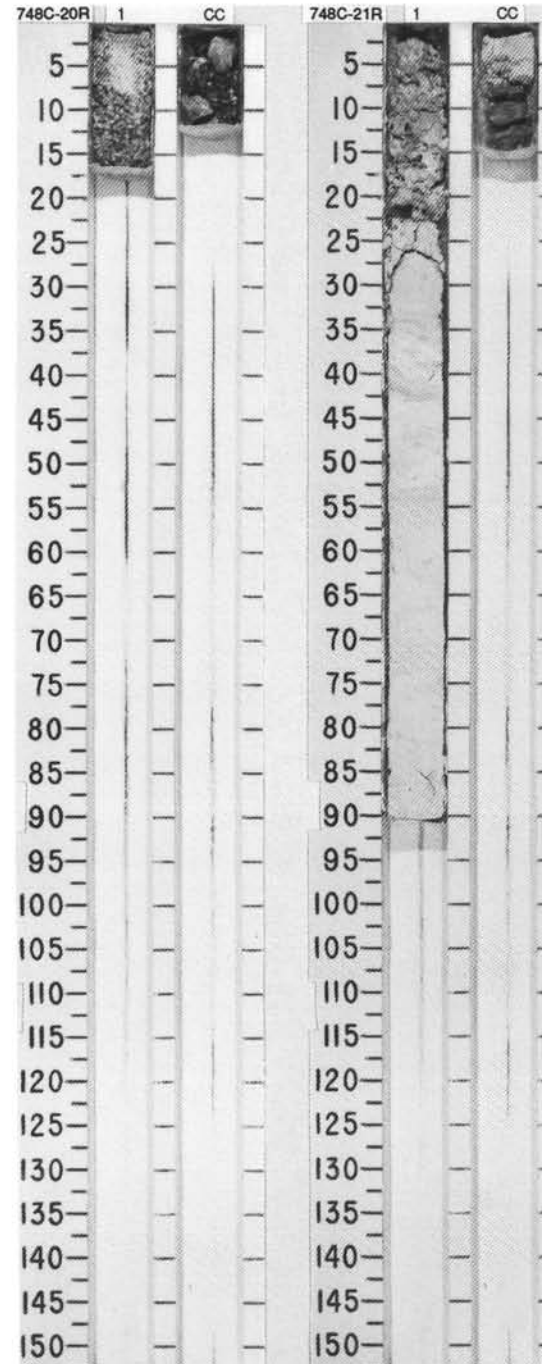


SITE 748 HOLE C CORE 20R CORED INTERVAL 340.5-350.0 mbsf

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										
UPPER PALEOCENE	<i>Igorina laevigata (albeari)</i>							1						<p>CHERT</p> <p>Major lithology: Drilling breccia of angular CHERT fragments (0.5 cm) with some soft ooze (slurry). The chert is light brownish gray (10YR 6/2) and vitreous. Some larger pieces of chert (10-15 cm) occur in the core catcher, along with a fragment of basalt and of red siltstone (downhole contamination).</p>
UPPER PALEOCENE	A/M -P no sample no sample													

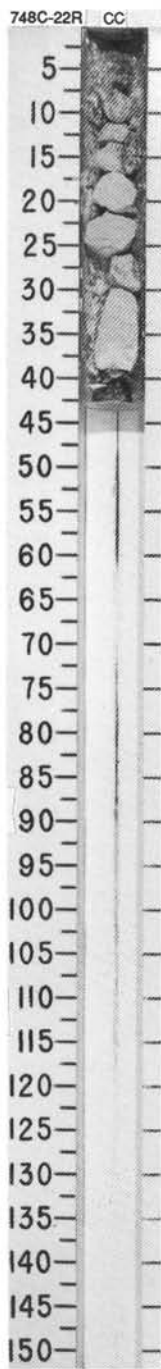
SITE 748 HOLE C CORE 21R CORED INTERVAL 350.0-359.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
UPPER PALEOCENE	UPPER PALEOCENE (NP9)							1	0.5					<p>NANNOFOSSIL CHALK WITH FORAMINIFERS AND MICRITE</p> <p>Major lithology: NANNOFOSSIL CHALK with FORAMINIFERS and MICRITE, light gray (10YR 7/2); laminated in Section 1, 53-55 cm, and burrowed throughout on a 5-cm scale. The top 25 cm is completely brecciated and contains chert fragments and chalk. Chert fragments also occur in the CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="margin-left: 40px;">1. 52 D</p> <p>TEXTURE:</p> <p>Sand 10 Silt 85 Clay 5</p> <p>COMPOSITION:</p> <p>Foraminifers 10 Micrite 30 Nannofossils 60</p>
UPPER PALEOCENE	A/G no sample Barren													

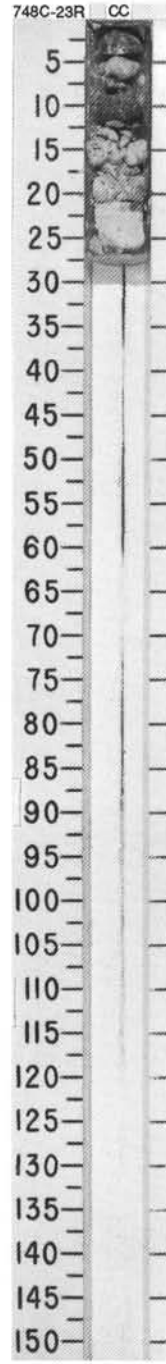


SITE 748 HOLE C CORE 22R CORED INTERVAL 359.5 - 369.0 mbsf

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										
UPPER PALEOCENE													
	<i>Igorina pusilla</i>				9.52.44		1			X	X	*	NANNOFOSSIL CHALK WITH FORAMINIFERS AND MICRITE Major lithology: NANNOFOSSIL CHALK with FORAMINIFERS and MICRITE, light gray (10YR 7/2); completely fractured; one burrow occurs in Section 1, 35 cm. Minor lithology: Chert, black (10YR 2/1), occurs as fragments. N.B.: no CC. SMEAR SLIDE SUMMARY (%): 1, 28 D TEXTURE: Sand 15 Silt 80 Clay 5 COMPOSITION: Foraminifers 15 Micrite 25 Nannofossils 60
A/G	UPPER PALEOCENE (NP9)				1.62	CaCO ₃ = 96.4%							
	no sample												
	no sample												

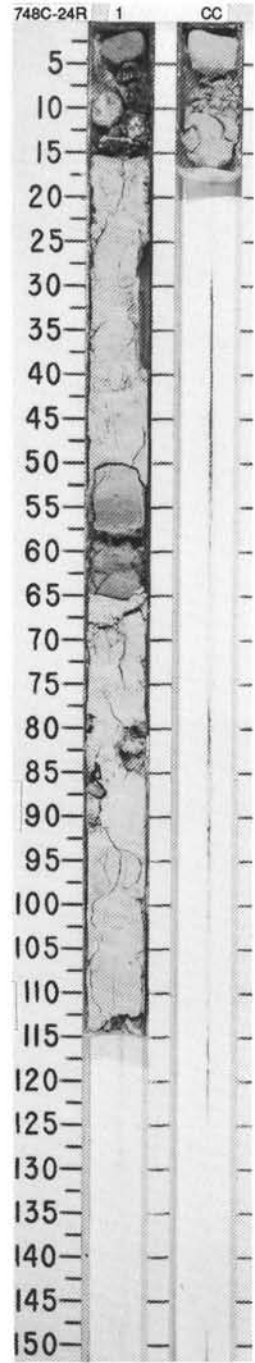


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAUFOSSILS	RADIOLARIANS										
UPPER PALEOCENE	<i>Acarinina mekannai</i>	A/G			0.51, 25 1.1, 80	CaCO ₃ 95.8%	CC						CHALK AND CHERT Major lithologies: a. CHALK, white (10YR 8/1), occurs as a small piece in the CC, 3-5 cm, and a larger piece in the CC, 20-26 cm; a disturbed interval of chalk occurs 11-20 cm. The larger piece is burrow mottled with light gray (5Y 8/1) and contains dark speck throughout (glauconite). b. CHERT, very dark gray (10YR 3/1), contains light inclusions which may be relict microfossils; occurs in the CC, 0-3 cm and 8-11 cm.

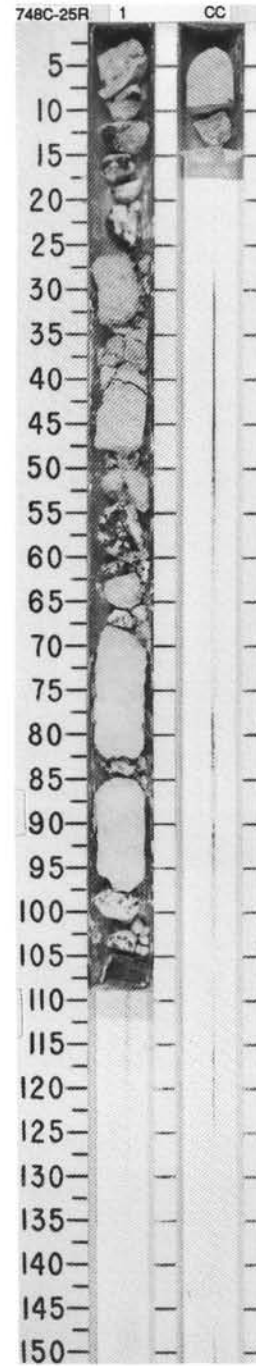


SITE 748 HOLE C CORE 24R CORED INTERVAL 378.5-388.0 mbsf

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																																																																												
UPPER PALEOCENE	UPPER PALEOCENE (NP8 or base NP 9) A/M-G				0.45-4	0.1-0.2	CaCO ₃ 56.3%	1	0.5		X	*		<p>NANNOFOSSIL CHALK WITH MICRITE AND FORAMINIFERS</p> <p>Major lithology: NANNOFOSSIL CHALK with MICRITE and FORAMINIFERS, light gray (10YR 7/2), bioturbated on a 5-10 cm scale; contains about 1% glauconite throughout.</p> <p>Drilling disturbance: Chalk is fragmented, and sharp contacts between pieces are the result of disturbance. Some chert pieces appear in Section 1, 0-18 cm; probable downhole contamination.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 0</td> <td>1, 55</td> <td>1, 62</td> <td>1, 90</td> <td>1, 101</td> </tr> <tr> <td></td> <td>M</td> <td>M</td> <td>M</td> <td>D</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>10</td> <td>1</td> <td>4</td> <td>2</td> <td>15</td> </tr> <tr> <td>Silt</td> <td>85</td> <td>94</td> <td>88</td> <td>91</td> <td>80</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>5</td> <td>8</td> <td>7</td> <td>5</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Foraminifers</td> <td>1</td> <td>1</td> <td>10</td> <td>6</td> <td>15</td> </tr> <tr> <td>Glauconite</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> </tr> <tr> <td>Micrite</td> <td>88</td> <td>54</td> <td>13</td> <td>13</td> <td>23</td> </tr> <tr> <td>Nannofossils</td> <td>10</td> <td>44</td> <td>75</td> <td>81</td> <td>60</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>—</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Pyrite</td> <td>1</td> <td>1</td> <td>2</td> <td>—</td> <td>1</td> </tr> </table>		1, 0	1, 55	1, 62	1, 90	1, 101		M	M	M	D	M	Sand	10	1	4	2	15	Silt	85	94	88	91	80	Clay	5	5	8	7	5	Foraminifers	1	1	10	6	15	Glauconite	—	—	—	—	1	Micrite	88	54	13	13	23	Nannofossils	10	44	75	81	60	Phosphate	—	—	Tr	Tr	Tr	Pyrite	1	1	2	—	1
	1, 0	1, 55	1, 62	1, 90	1, 101																																																																											
	M	M	M	D	M																																																																											
Sand	10	1	4	2	15																																																																											
Silt	85	94	88	91	80																																																																											
Clay	5	5	8	7	5																																																																											
Foraminifers	1	1	10	6	15																																																																											
Glauconite	—	—	—	—	1																																																																											
Micrite	88	54	13	13	23																																																																											
Nannofossils	10	44	75	81	60																																																																											
Phosphate	—	—	Tr	Tr	Tr																																																																											
Pyrite	1	1	2	—	1																																																																											
	UPPER PALEOCENE (NP8 or base NP 9) A/M-G				0.2-0.3	0.1-1	CaCO ₃ 56.3%	1	1.0		X	*																																																																				

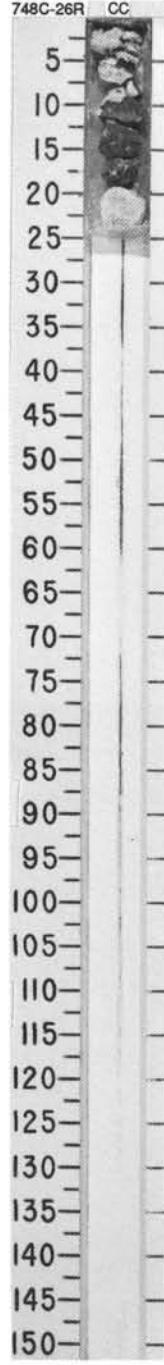


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																										
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONIS																																																																																																				
UPPER PALEOCENE	A/M													<p>NANNOFOSSIL CHALK WITH FORAMINIFERS</p> <p>Major lithology: NANNOFOSSIL CHALK with FORAMINIFERS, light gray (10YR 7/1), similar to the overlying core. Horizontal laminae on a mm-scale occur in Section 1, 87-88 cm.</p> <p>Minor lithologies: a. Lithified wackestone, occurs in CC, 0-5 cm; contains glauconite. b. Chert, dark olive gray (5Y 3/2), occurs as fragments in Section 1, 0-25 cm and 55-68 cm.</p> <p>Drilling disturbance: Breccia occurs in Section 1, 0-26 cm, 48-67 cm, and 97-108 cm, and in the CC; highly fractured in Section 1, 26-48 cm and 67-97 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 1</th> <th>1, 42</th> <th>1, 95</th> <th>CC, 1</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>D</td> <td>D</td> <td>D</td> <td>D</td> </tr> </tbody> </table> <p>TEXTURE:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 1</th> <th>1, 42</th> <th>1, 95</th> <th>CC, 1</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>—</td> <td>10</td> <td>100</td> <td>—</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>80</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>—</td> <td>—</td> </tr> </tbody> </table> <p>COMPOSITION:</p> <table border="1"> <thead> <tr> <th></th> <th>1, 1</th> <th>1, 42</th> <th>1, 95</th> <th>CC, 1</th> </tr> </thead> <tbody> <tr> <td>Bivalves</td> <td>5</td> <td>—</td> <td>—</td> <td>5</td> </tr> <tr> <td>Calcareous fragments</td> <td>Tr</td> <td>—</td> <td>20</td> <td>Tr</td> </tr> <tr> <td>Chalcedony</td> <td>5</td> <td>—</td> <td>—</td> <td>10</td> </tr> <tr> <td>Tr</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Foraminifers</td> <td>35</td> <td>10</td> <td>80</td> <td>30</td> </tr> <tr> <td>Glauconite</td> <td>Tr</td> <td>1</td> <td>—</td> <td>5</td> </tr> <tr> <td>Micrite</td> <td>35</td> <td>9</td> <td>—</td> <td>40</td> </tr> <tr> <td>Nannofossils</td> <td>—</td> <td>80</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Silica</td> <td>15</td> <td>—</td> <td>—</td> <td>10</td> </tr> <tr> <td>Spicules</td> <td>Tr</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> </tbody> </table>		1, 1	1, 42	1, 95	CC, 1	D	D	D	D	D		1, 1	1, 42	1, 95	CC, 1	Sand	—	10	100	—	Silt	—	80	—	—	Clay	—	10	—	—		1, 1	1, 42	1, 95	CC, 1	Bivalves	5	—	—	5	Calcareous fragments	Tr	—	20	Tr	Chalcedony	5	—	—	10	Tr	Tr	—	—	—	Foraminifers	35	10	80	30	Glauconite	Tr	1	—	5	Micrite	35	9	—	40	Nannofossils	—	80	—	—	Pyrite	—	—	—	Tr	Silica	15	—	—	10	Spicules	Tr	—	—	Tr
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SITE 748 HOLE C CORE 26R CORED INTERVAL 397.5-407.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER		PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	MAMMOFOSSILS									
	RADIOLARIANS	DIATOMS									
UPPER PALEOCENE						CC					CHERT Major lithology: CHERT, very dark gray (2.5Y N3/0), occurs as fragments in the CC, 2-5 cm. A fragment in the CC, 5-7 cm, is composed of chalk, porcellanite, and chert. A porcellanite fragment occurs in the CC, 19-24 cm: chert fragments, 10-19 cm.
LOWER UPPER PALEOCENE (NP6)	A/M-G										



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	DICTYONS																																																																																										
UPPER MAESTRICHTIAN	MIDDLE - UPPER MAESTRICHTIAN	F/M	Cretaceous	no sample				1	0.5				#	<p>INTERMITTENTLY SILICIFIED GLAUCONITIC BIOCLASTIC GRAINSTONE</p> <p>Major lithology: partly SILICIFIED GLAUCONITIC BIOCLASTIC GRAINSTONE, light gray (5Y 7/1 and 5Y 6/1) to gray (5Y 5/1) and yellowish olive (5& 6/2). Moderately to highly bioturbated, mostly massive with rare, cm-scale graded bedding. Very fine sand-size grains, including rare quartz. Bioclastic debris includes (in order of decreasing abundance) echinoid debris, mollusc debris (including inoceramids), benthic foraminifers, sponge spicules, brachiopods, and bryozoa. The entire core is speckled with black pyrite and dark green glauconite. Burrows include horizontal Chondrites and Planolites and subvertical Thalassinoides.</p> <p>Cementation is sporadic, but complete where present, and is not confirmed to textural or bioturbated zones. Friable intervals, partly cemented by calcite occur in Section 1, 46-105 cm, and in Section 2, 0-21 cm. Glauconite replaces some fossils such as foraminifers, echinoid spines, and spicules; many of these are coated with pyrite.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 12</th> <th>1, 27</th> <th>1, 117</th> </tr> <tr> <th></th> <th>D</th> <th>D</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Texture:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>—</td> <td>—</td> <td>100</td> </tr> <tr> <td>COMPOSITION:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Altered grains</td> <td>3</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Apatite</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Bivalves</td> <td>5</td> <td>10</td> <td>—</td> </tr> <tr> <td>Bryozoa</td> <td>Tr</td> <td>—</td> <td>—</td> </tr> <tr> <td>Calcareous fragments</td> <td>10</td> <td>10</td> <td>25</td> </tr> <tr> <td>Chalcedony</td> <td>5</td> <td>10</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>—</td> <td>10</td> </tr> <tr> <td>Foraminifers</td> <td>Tr</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Glauconite</td> <td>40</td> <td>30</td> <td>3</td> </tr> <tr> <td>Micrite</td> <td>10</td> <td>5</td> <td>55</td> </tr> <tr> <td>Pyrite</td> <td>10</td> <td>20</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>Tr</td> <td>Tr</td> <td>5</td> </tr> <tr> <td>Silica</td> <td>—</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Spicules</td> <td>10</td> <td>5</td> <td>—</td> </tr> <tr> <td></td> <td>5</td> <td>5</td> <td>—</td> </tr> </tbody> </table>		1, 12	1, 27	1, 117		D	D	D	Texture:				Sand	—	—	100	COMPOSITION:				Altered grains	3	Tr	—	Apatite	—	—	Tr	Bivalves	5	10	—	Bryozoa	Tr	—	—	Calcareous fragments	10	10	25	Chalcedony	5	10	—	Clay	—	—	10	Foraminifers	Tr	Tr	—	Glauconite	40	30	3	Micrite	10	5	55	Pyrite	10	20	—	Quartz	Tr	Tr	5	Silica	—	—	Tr	Spicules	10	5	—		5	5	—
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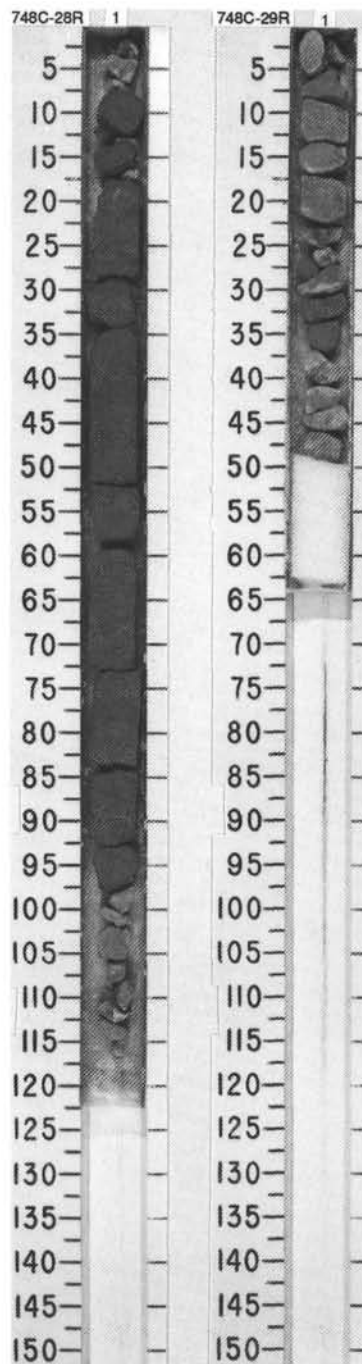


SITE 748 HOLE C CORE 28R CORED INTERVAL 416.5-426.0 mbsf

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										
LOWER MAESTRICHTIAN	MAESTRICHTIAN	<i>Tranolithus phaeolus</i>		no sample										<p>GLAUCONITE BIOCLASTIC GRAINSTONE WITH GLAUCONITE</p> <p>Major lithology: BIOCLASTIC GRAINSTONE with GLAUCONITE, olive (10Y 4/2), speckled with black pyrite grains. Massive, medium-grained sand. Bioclasts include echinoids, molluscs (including inoceramid debris), sponge spicules, and foraminifers.</p> <p>A few drilling biscuits at the top and base of the core are cemented by silica.</p> <p>N.B.: no CC.</p>
F/M														

SITE 748 HOLE C CORE 29R CORED INTERVAL 426.0-435.0 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										
no sample														<p>LITHIFIED GLAUCONITE BIOCLASTIC GRAINSTONE</p> <p>Major lithology: LITHIFIED GLAUCONITIC BIOCLASTIC GRAINSTONE, olive (10Y 6/3 to 10Y 6/2), massive. Burrowed in Section 1, 35-40 cm; inoceramid debris occurs in Section 1, 8 cm, 28 cm, and 48 cm.</p> <p>N.B.: No CC.</p>

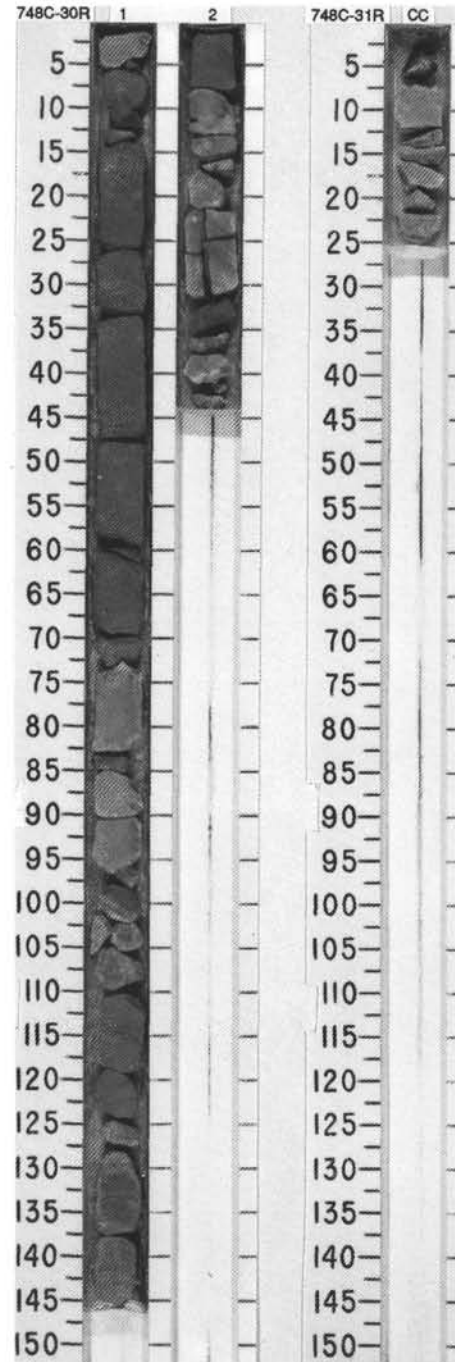


SITE 748 HOLE C CORE 30R CORED INTERVAL 435.0-445.0 mbsf

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										
MIDDLE - UPPER MAESTRICHTIAN													<p>MEDIUM-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE</p> <p>Major lithology: MEDIUM-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE, olive (10Y 6/2), silicified in Section 1, 0-2 cm and 70-109 cm, and in Section 2, 0-30 cm and 35-44 cm. Unsilicified intervals are bioturbated. Inoceramid fragments occur in Section 1, 50 cm, 78 cm, 92 cm, 117 cm, and 132 cm.</p> <p>N.B.: no CC.</p>
MIDDLE - UPPER MAESTRICHTIAN	no sample	no sample	no sample			OC=0.25	1						
							2						

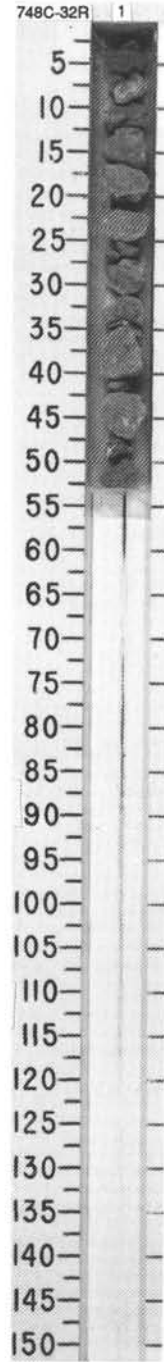
SITE 748 HOLE C CORE 31R CORED INTERVAL 445.0-454.5 mbsf

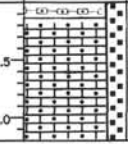
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS										
MIDDLE - UPPER MAESTRICHTIAN													<p>SILICIFIED, VERY COARSE TO COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE</p> <p>Major lithology: SILICIFIED, VERY COARSE TO COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE, pale olive (10Y 6/2), moderately well-sorted. Clasts are angular to subrounded, and include bryozoan and mollusc (and brachiopod?) debris, sponge spicules, basalt clasts, echinoid spines, inoceramid prisms, and pyrite.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p>CC, 6 D</p> <p>COMPOSITION:</p> <p>Algae 8 Altered grains Tr Bivalves 5 Bryozoa 5 Calcareous fragments 10 Chalcedony 10 Foraminifers 15 Glauconite 2 Micrite 30 Pyrite Tr Silica Tr Spicules Tr</p>
MIDDLE - UPPER MAESTRICHTIAN	Barren	no sample	no sample				CC						

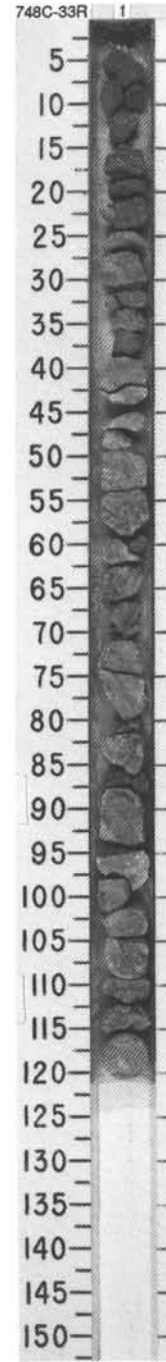


SITE 748 HOLE C CORE 32R CORED INTERVAL 454.5-464.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																								
	FORAMINIFERS	MAMMOFOSILS	RADIOLARIANS																																																																		
no sample	R/P					9-36.42 -2.22	1				##		<p>INTERMITTENTLY SILICIFIED, VERY COARSE TO COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE</p> <p>Major lithology: INTERMITTENTLY SILICIFIED, VERY COARSE TO COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE, pale olive (10Y 6/2), well to moderately well sorted. Faint grading in some pieces. Clay-filled burrows. Silicified intervals: Section 1, 0-2 cm and 70-109 cm; Section 2, 0-30 cm and 95-44 cm. Unsilicified intervals are bioturbated. Inoceramid fragments occur in Section 1, 50 cm, 78 cm, 92 cm, 117 cm, and 132 cm.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table> <tr> <td></td> <td>1, 15</td> <td>1, 36</td> <td>1, 49</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table> <tr> <td>Algae</td> <td>6</td> <td>5</td> <td>5</td> </tr> <tr> <td>Altered grains</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Bivalves</td> <td>5</td> <td>10</td> <td>30</td> </tr> <tr> <td>Eryozoa</td> <td>30</td> <td>20</td> <td>15</td> </tr> <tr> <td>Calcareous fragments</td> <td>20</td> <td>5</td> <td>10</td> </tr> <tr> <td>Chalcedony</td> <td>5</td> <td>10</td> <td>5</td> </tr> <tr> <td></td> <td>5</td> <td>15</td> <td>5</td> </tr> <tr> <td>Foraminifers</td> <td>1</td> <td>5</td> <td>5</td> </tr> <tr> <td>Glaucinite</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Micrite</td> <td>15</td> <td>10</td> <td>10</td> </tr> <tr> <td>Silica</td> <td>4</td> <td>10</td> <td>6</td> </tr> <tr> <td>Spicules</td> <td>5</td> <td>5</td> <td>5</td> </tr> </table>		1, 15	1, 36	1, 49		D	D	D	Algae	6	5	5	Altered grains	Tr	Tr	Tr	Bivalves	5	10	30	Eryozoa	30	20	15	Calcareous fragments	20	5	10	Chalcedony	5	10	5		5	15	5	Foraminifers	1	5	5	Glaucinite	3	2	2	Micrite	15	10	10	Silica	4	10	6	Spicules	5	5	5
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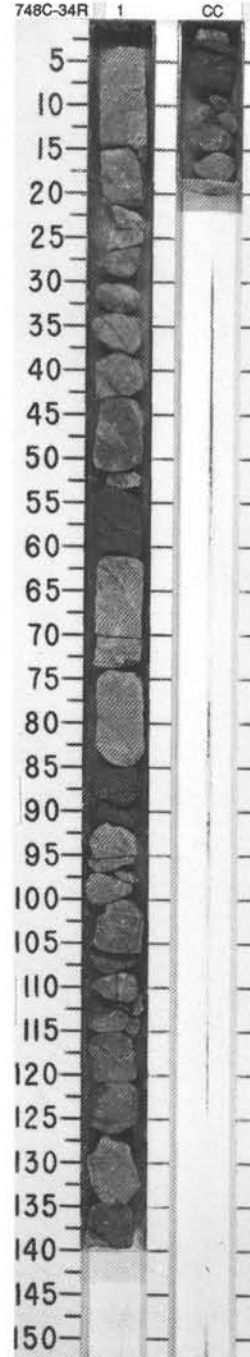


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																										
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																				
	no sample	Barren	no sample	no sample			CaCO ₃ = 70.4%	0.5 1.0	0.5 1.0				#	<p>VERY COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE</p> <p>Major lithology: VERY COARSE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE, olive (10Y 5/2 when wet, 10Y 6/2 when dry), coarsening toward base to a rudstone in 5-cm-sized drilling biscuits. Well-sorted and porous with no matrix. Angular clasts include abundant bryozoa, common glauconite, sponge spicules, echinoid spines, rare quartz, pyrite, and a reddish, translucent mineral (phosphate?); fossils are fragmented and bed-parallel.</p> <p>N.B.: no CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="margin-left: 40px;">1, 55 D</p> <p>COMPOSITION:</p> <table style="margin-left: 40px;"> <tr><td>Algae</td><td>3</td></tr> <tr><td>Altered grains</td><td>Tr</td></tr> <tr><td>Bivalves</td><td>5</td></tr> <tr><td>Bryozoa</td><td>30</td></tr> <tr><td>Calcareous fragments</td><td>10</td></tr> <tr><td>Chalcedony</td><td>5</td></tr> <tr><td></td><td>10</td></tr> <tr><td>Fish</td><td>2</td></tr> <tr><td>Foraminifers</td><td>5</td></tr> <tr><td>Glauconite</td><td>5</td></tr> <tr><td>Micrite</td><td>15</td></tr> <tr><td>Silica</td><td>5</td></tr> <tr><td>Spicules</td><td>5</td></tr> </table>	Algae	3	Altered grains	Tr	Bivalves	5	Bryozoa	30	Calcareous fragments	10	Chalcedony	5		10	Fish	2	Foraminifers	5	Glauconite	5	Micrite	15	Silica	5	Spicules	5
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Spicules	5																																							

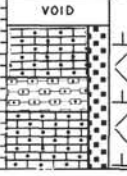


SITE 748 HOLE C CORE 34R CORED INTERVAL 473.5 - 483.0 mbsf

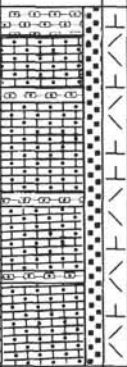
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																										
MIDDLE CAMPANIAN or above														<p>SILICIFIED, COARSE-GRAINED BIOCLASTIC RUDSTONE TO GRAINSTONE WITH GLAUCONITE</p> <p>Major lithology: SILICIFIED, COARSE-GRAINED BIOCLASTIC RUDSTONE to GRAINSTONE with GLAUCONITE, pale olive (10Y 6/2). Bedding is outlined by flat-lying clasts. Very thin flasers occur. Angular clasts include abundant bryozoa and molluscs (including inoceramid) debris, 2-6 mm; common sponge spicules, echinoid spines, glauconite, rare benthic foraminifers, and quartz.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 59</td> <td>1, 116</td> </tr> <tr> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Algae</td> <td>5</td> <td>5</td> </tr> <tr> <td>Altered grains</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Bivalves</td> <td>15</td> <td>15</td> </tr> <tr> <td>Bryozoa</td> <td>25</td> <td>10</td> </tr> <tr> <td>Calcareous fragments</td> <td>5</td> <td>20</td> </tr> <tr> <td>Chalcedony</td> <td>5</td> <td>3</td> </tr> <tr> <td></td> <td>5</td> <td>10</td> </tr> <tr> <td>Fish</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Foraminifers</td> <td>10</td> <td>5</td> </tr> <tr> <td>Glauconite</td> <td>5</td> <td>5</td> </tr> <tr> <td>Micrite</td> <td>10</td> <td>10</td> </tr> <tr> <td>Opaques</td> <td>—</td> <td>5</td> </tr> <tr> <td>Silica</td> <td>5</td> <td>5</td> </tr> <tr> <td>Spicules</td> <td>10</td> <td>2</td> </tr> </table>		1, 59	1, 116	D	D	D	Algae	5	5	Altered grains	Tr	Tr	Bivalves	15	15	Bryozoa	25	10	Calcareous fragments	5	20	Chalcedony	5	3		5	10	Fish	Tr	Tr	Foraminifers	10	5	Glauconite	5	5	Micrite	10	10	Opaques	—	5	Silica	5	5	Spicules	10	2
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non-diagnostic UPPER Cretaceous	R/P				9-10.83 1-2.39	80.2% 0.6-0.18%	CC																																																							
no sample																																																														
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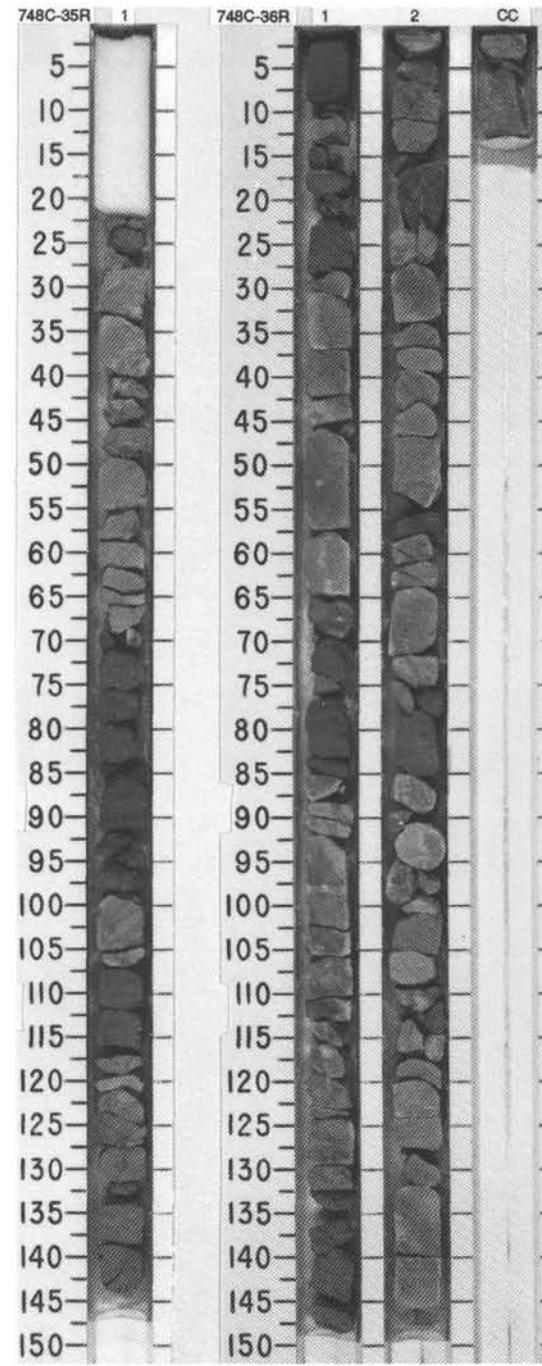


SITE 748 HOLE C CORE 35R CORED INTERVAL 483.0-492.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER MAESTRICHTIAN	MIDDLE CAMPANIAN or above <i>Tranolithus phaceliosus</i> barren no sample		• 44.93 • 2.01	CaCO ₃ = 74.9% OC=0.14%		0.5 1.0					MEDIUM TO FINE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE Major lithology: MEDIUM TO FINE-GRAINED GLAUCONITIC BIOCLASTIC GRAINSTONE, olive (10Y 5/2), silicified in Section 1, 26-39 cm, 48-73 cm, and 100-150 cm. Bioclasts are angular and dominated by bryozoa. Black pyrite and green glauconite are speckled throughout. A brachiopod fragment occurs in Section 1, 42 cm. N.B.: No CC.

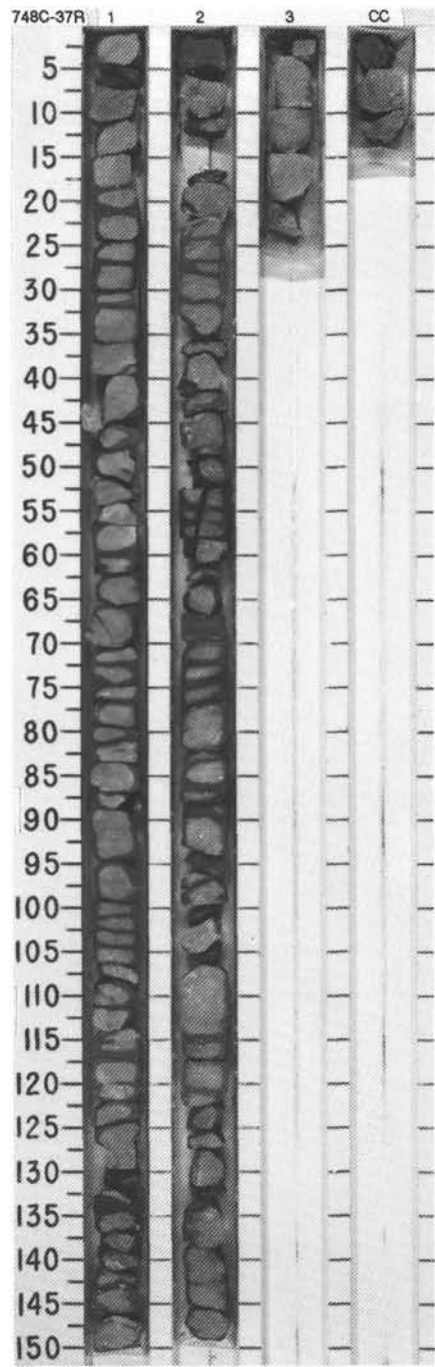
SITE 748 HOLE C CORE 36R CORED INTERVAL 492.5-502.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER MAESTRICHTIAN	MIDDLE CAMPANIAN - MAESTRICHTIAN UPPER <i>Tranolithus phaceliosus</i> no sample no sample		• 22.33 • 16.58 • 2.47	CaCO ₃ = 48.4% OC=0.19%		0.5 1.0					FINE-GRAINED, GLAUCONITIC BIOCLASTIC GRAINSTONE Major lithology: FINE-GRAINED, GLAUCONITIC BIOCLASTIC GRAINSTONE, olive (10Y 5/2), glauconitic pellets fine sand size (finer than in overlying cores). Massively bedded, with small wispy flasers; a few cross-cutting burrows filled in brown also occur. Macroscopic clasts include crinoid and mollusc (inoceramic?) debris; a shell occurs in Section 2, 93 cm. A small wood fragment, 6 mm long, occurs in: Section 2, 55 cm. Cementation varies, with silicified intervals dominant; friable intervals are: Section 1, 0-29 cm and 70-86 cm; Section 2, 15-25 cm and 80-90 cm.



SITE 748 HOLE C CORE 37R CORED INTERVAL 502.0-511.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS									
LOWER MAESTRICHTIAN UPPER CRETACEOUS F/M					$\beta = 12.78$ $\alpha = 22.39$							
UPPER <i>Tranolithus phacelosus</i>					$\beta = 29.42$ $\alpha = 22.39$	CaCO ₃ = 82.4 OC=0.37%	1 2					
	no sample											
	no sample											



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	DIALOMS																																										
UPPER CRETACEOUS														FINE-GRAINED, GLAUCONITIC SILICIFIED BIOCLASTIC GRAINSTONE Major lithology: FINE-GRAINED, GLAUCONITIC SILICIFIED BIOCLASTIC GRAINSTONE, light olive gray (5Y 6/2); black wisps (<< 1 mm) throughout. Some less silicified intervals occur in Section 1, 44-52 cm, 106-11 cm, and 126-127 cm; and in Section 2, 8-16 cm, 21-27 cm, 62-63 cm, and 113-116 cm. Bryozoans abundant in Section 1, 41-66 cm. Large inoceramid fragments occur in Section 1, 87-88 cm; in Section 2, 8 cm, 21 cm, 64-65 cm, and 84-85 cm; and in the CC, 5 cm and 15-16 cm. Pyrite occurs disseminated throughout Section 2, 67-69 cm. Bedding is massive with wispy beds throughout; flaser bedding occurs in Section 2, 55-58 cm and 112-116 cm. SMEAR SLIDE SUMMARY (%): <table style="margin-left: 20px;"> <tr><td></td><td>CC</td></tr> <tr><td></td><td>D</td></tr> </table> COMPOSITION: <table style="margin-left: 20px;"> <tr><td>Algae</td><td>1</td></tr> <tr><td>Altered grains</td><td>Tr</td></tr> <tr><td>Bivalves</td><td>40</td></tr> <tr><td>Bryozoa</td><td>Tr</td></tr> <tr><td>Calcareous fragments</td><td>5</td></tr> <tr><td>Chalcedony</td><td>5</td></tr> <tr><td></td><td>5</td></tr> <tr><td>Fish</td><td>Tr</td></tr> <tr><td>Foraminifers</td><td>10</td></tr> <tr><td>Glaucinite</td><td>Tr</td></tr> <tr><td>Micrite</td><td>25</td></tr> <tr><td>Opaques</td><td>Tr</td></tr> <tr><td>Silica</td><td>3</td></tr> <tr><td>Spicules</td><td>5</td></tr> </table>		CC		D	Algae	1	Altered grains	Tr	Bivalves	40	Bryozoa	Tr	Calcareous fragments	5	Chalcedony	5		5	Fish	Tr	Foraminifers	10	Glaucinite	Tr	Micrite	25	Opaques	Tr	Silica	3	Spicules	5
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Spicules	5																																													
UPPER CRETACEOUS	Barren				•	0-18.27 1-2.34 2-2.35 3-2.35 CC 0-28%	1	0.5 1.0																																						
	no sample				•	0-28.20 1-2.35 CC = 85.8% OC = 0-32%	2																																							
	no sample				•		CC																																							



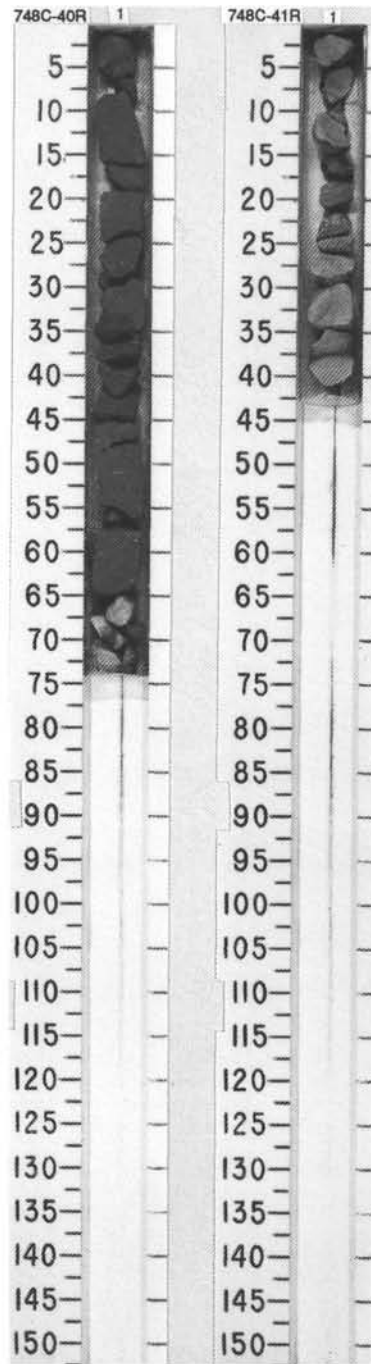
SITE 748 HOLE C CORE 39R CORED INTERVAL 521.0-530.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																									
	FORAMINIFERS	MAMMOFOSILS	RADIOLARIANS	DIATOMS																																		
UPPERMOST CAMPANIAN	UPPER CRETACEOUS	middle <i>Tranolithus</i>		no sample	no sample	$\phi = 14.13$ $\phi = 2.49$ $\phi = 16.30$ $\phi = 2.54$ $\phi = 0.85\%$ $\phi = 8.31\%$	$\text{CaCO}_3 = 83.1\%$	1 2 CC	0.5 1.0	[Lithology symbols]	#	<p>FINE-GRAINED, GLAUCONITE SILICIFIED BIOCLASTIC GRAINSTONE</p> <p>Major lithology: FINE-GRAINED, GLAUCONITIC SILICIFIED BIOCLASTIC GRAINSTONE, gray (5Y 5/1) to olive (5Y 4/4), slightly darker when wet. Less silicified intervals occur in Section 1, 8-15 cm, 32-44 cm, 55-72 cm, 74-77 cm, 94-113 cm, and 130-146 cm; and in Section 2, 42-59 cm, 68-85 cm, 105-109 cm; and 120-144 cm. Large inoceramid fragments occur in Section 1, 4-5 cm, 27-28 cm, 39-40 cm, 58-59 cm, 102-104 cm, 115-116 cm, 130-131 cm, 133-134 cm; and 138-145; and in Section 2, 2-3 cm, 27-28 cm, 43-44 cm, 53-55 cm, 61-63 cm, 84 cm, 117-118 cm, and 136-137 cm. Flaser bedding occurs throughout and is especially prominent in the unsilicified intervals.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p># 2.49 D</p> <p>COMPOSITION:</p> <table border="0"> <tr><td>Algae</td><td>Tr</td></tr> <tr><td>Altered grains</td><td>Tr</td></tr> <tr><td>Bivalves</td><td>50</td></tr> <tr><td>Bryozoa</td><td>Tr</td></tr> <tr><td>Calcareous fragments</td><td>2</td></tr> <tr><td>Chalcedony</td><td>10</td></tr> <tr><td></td><td>5</td></tr> <tr><td>Foraminifers</td><td>Tr</td></tr> <tr><td>Glauconite</td><td>5</td></tr> <tr><td>Micrite</td><td>20</td></tr> <tr><td>Opauques</td><td>Tr</td></tr> <tr><td>Silica</td><td>5</td></tr> <tr><td>Spicules</td><td>Tr</td></tr> </table>	Algae	Tr	Altered grains	Tr	Bivalves	50	Bryozoa	Tr	Calcareous fragments	2	Chalcedony	10		5	Foraminifers	Tr	Glauconite	5	Micrite	20	Opauques	Tr	Silica	5	Spicules	Tr
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TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONIS										
UPPER CRETACEOUS														FINE-GRAINED, INTERMITTENTLY SILICIFIED BIOCLASTIC GRAINSTONE WITH GLAUCONITE Major lithology: FINE-GRAINED, INTERMITTENTLY SILICIFIED BIOCLASTIC GRAINSTONE with GLAUCONITE, olive when wet (5Y 4/2) to gray when dry (5Y 6/1); fine-scale flaser bedding on a 5-cm scale. Partially silicified except for 4 highly silicified fragments in Section 1, 65-75 cm. Bioclasts include bryozoans, echinoid fragments and spines, and inoceramid fragments (<1 cm; compose up to 80% of the sand), benthic foraminifers, fish debris, and rare radiolarians. Glauconite (<3%), occur. Moderately to well sorted; fragmented by drilling. Inclined bedding (45°) in Section 1, 0-10 cm, outlined by burrows. N.B.: No CC.
UPPER CRETACEOUS	Barren					CaCO ₃ = 86.5% OC=0.54%	9-33.70 7-2.23	1	0.5					

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										
UPPER CRETACEOUS														SILICIFIED BIOCLASTIC PACKSTONE WITH GLAUCONITE Major lithology: SILICIFIED BIOCLASTIC PACKSTONE with GLAUCONITE, gray when dry (5Y 5/1), olive gray when wet (5Y 4/2); silicified throughout; massive. Fine grained and well sorted in Section 1, 0-25 and 30-42 cm; medium to coarse and poorly sorted in Section 1, 25-30 cm. Bioclasts are angular, dominated by bryozoans in the coarser intervals; glauconite is present throughout. Drilling disturbance: Highly fragmented throughout. N.B.: no CC. SMEAR SLIDE SUMMARY (%): 1, 10 M TEXTURE: Silt 60 Clay 40 COMPOSITION: Apatite 1 Calcareous fragments 20 Clay 40 Glauconite 2 Micrite 10 Pyrite 1 Silica 24
UPPER CRETACEOUS	Barren					CaCO ₃ = 26.5% OC=0.1%	9-16.64 7-2.86	1						

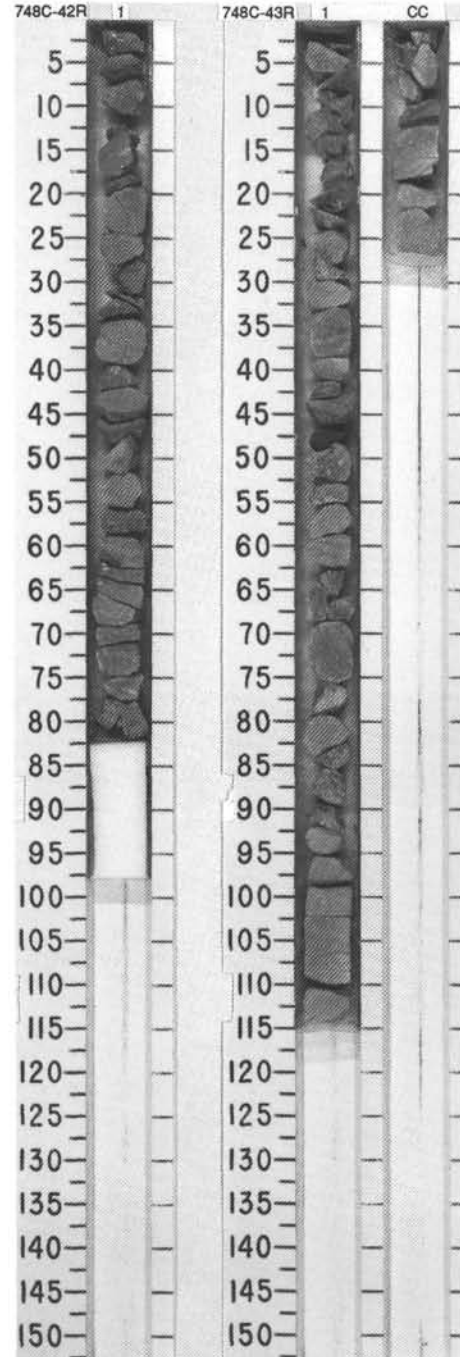


SITE 748 HOLE C CORE 42R CORED INTERVAL 549.5-559.0 mbsf

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									
no sample	Barren	no sample	Barren			CaCO ₃ = 35.5% OC=0.40%	1	0.5					<p>SILICIFIED BIOCLASTIC PACKSTONE WITH GLAUCONITE</p> <p>Major lithology: SILICIFIED BIOCLASTIC PACKSTONE with GLAUCONITE, olive when wet (5Y 5/4 to 5Y 4/3), dark greenish gray when dry (5BG 5/1). Very coarse to medium sand-sized clasts; moderately well to poorly sorted. Matrix contains 10%-15% clay and micrite. Clasts include abundant bryozoans and inoceramid prisms, common glauconite-coated and filled fossils, rare pyrite, crinoid fragments, radiolarians, and benthic foraminifers. A few clay-filled burrows occur.</p> <p>N.B.: no CC.</p>

SITE 748 HOLE C CORE 43R CORED INTERVAL 559.0-568.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																									
no sample	Barren	no sample	Barren			CaCO ₃ = 38.2% OC=0.30%	1 CC	0.5 1.0					<p>SILICIFIED BIOCLASTIC PACKSTONE</p> <p>Major lithology: SILICIFIED BIOCLASTIC PACKSTONE, olive when wet (5Y 5/4 to 5Y 4/3) to dark greenish gray (5BG 5/1) when dry. Coarse-to-medium sand-sized clasts in Section 1, 95-115 cm, and the CC. Clasts include abundant bryozoan debris, common glauconite, inoceramid prisms, rare pyrite, foraminifers, and crinoid columnals. Moderately well to poorly sorted; sorting declines with grain size. Rare clay-filled burrows.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table style="margin-left: 20px;"> <tr><td>1, 120</td></tr> <tr><td>D</td></tr> </table> <p>COMPOSITION:</p> <table style="margin-left: 20px;"> <tr><td>Micrite</td><td>2</td></tr> <tr><td>Pyrite</td><td>1</td></tr> <tr><td>Glauconite</td><td>3</td></tr> <tr><td>Calcareous fragments</td><td>60</td></tr> <tr><td>Clay</td><td>10</td></tr> <tr><td>Apatite</td><td>1</td></tr> <tr><td>Silica</td><td>2</td></tr> </table>	1, 120	D	Micrite	2	Pyrite	1	Glauconite	3	Calcareous fragments	60	Clay	10	Apatite	1	Silica	2
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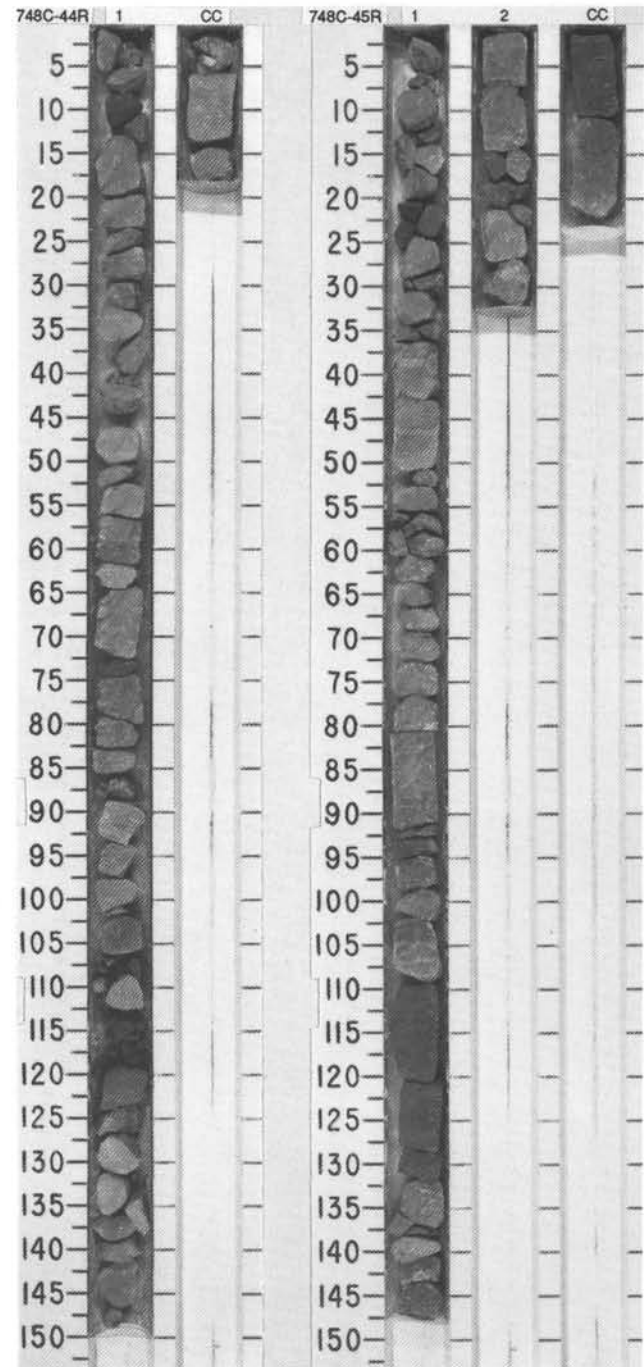


SITE 748 HOLE C CORE 44R CORED INTERVAL 568.5-578.0 mbsf

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										
	no sample	Barren	no sample	Barren				1	0.5 1.0					<p>FINE-GRAINED, INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE</p> <p>Major lithology: FINE-GRAINED, INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE, olive to pale olive (5Y 5/4 to 5Y 6/4), contains floating clasts of coarse sand-sized inoceramid debris, bryozans, and many foraminifers silicified brown cement with some mud; 5% glauconite; poorly sorted. Bedding is indistinct with some burrows; clast concentrations are graded along some intervals; beds are flat-lying along a cm-scale.</p> <p>Minor lithology: Less silicified grainstone, dusky olive (5Y 5/2), occurs in Section 1, 6-8 cm, 37-38 cm, and 114-125 cm. Minor friable zones contains some quartz(?) and apatite grains.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p>1, 120 M</p> <p>TEXTURE:</p> <p>Sand 30 Silt 30 Clay 40</p> <p>COMPOSITION:</p> <p>Apatite 1 Calcareous fragments 60 Clay 10 Glauconite 3 Micrite 20 Pyrite 1 Silica 2</p>

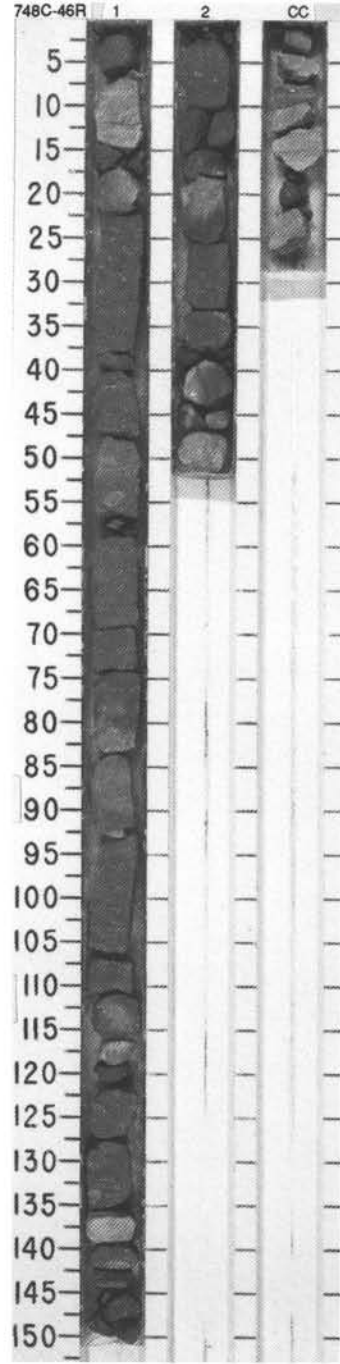
SITE 748 HOLE C CORE 45R CORED INTERVAL 578.0-587.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS										
	no sample	Barren	Barren	Barren				1 2 CC	0.5 1.0					<p>INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE WITH GLAUCONITE</p> <p>Major lithology: INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE with GLAUCONITE olive (5Y 5/4 to 5Y 6/4), moderately well sorted. Coarse-sized clasts occur in Section 1, 0-30 cm, 60-110 cm, and 130-150 cm; Section 2, 0-32 cm, and CC, 0-22 cm moderately well-sorted. Fine to medium, poorly sorted sand, Section 1, 30-60 cm, and 110-130 cm. Clasts include abundant bryozoan debris, common glauconite, pyrite, matrix of clay and micrite, rare crinoid columnals, inoceramid debris, and foraminifers.</p>

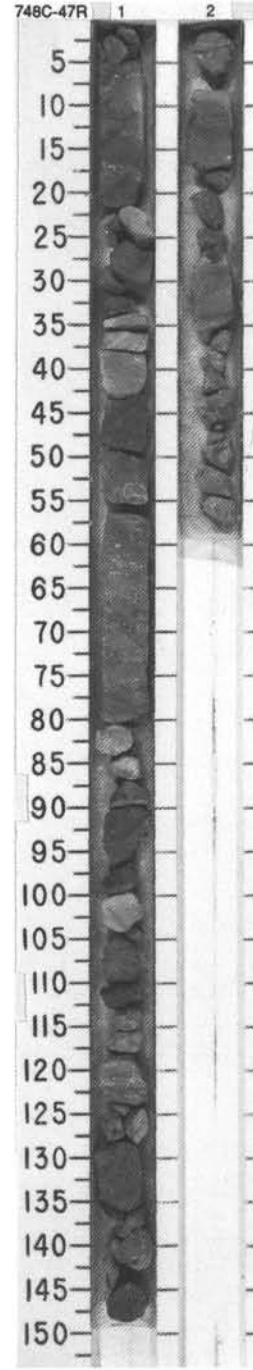


SITE 748 HOLE C CORE 46R CORED INTERVAL 587.5-597.0 mbsf

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																																			
UPPER CAMPANIAN	MIDDLE SANTONIAN or above	UPPER <i>Quadrum tridum</i>	no sample	Barren		CaCO ₃ = 35.0% OC=0.22%	1 2 CC	0.5 1.0				<p>INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE WITH GLAUCONITE</p> <p>Major lithology: INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE with GLAUCONITE, olive (5Y 5/4 to 5Y 5/3), poorly sorted. Matrix is very fine sand with muddy intervals (in Section 2) and clay-filled burrows (Section 1, 48-53 cm and 84-91 cm). Clasts include mollusc debris and whole shells filled with mud, crinoid columnals, abundant bryozoans and inoceramid debris, glauconite, and pyrite. Many fossils are filled with or replaced by glauconite. Larger bryozoan and inoceramid debris is bed-parallel.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">2, 48 D</p> <p>COMPOSITION:</p> <table style="width: 100%;"> <tr><td>Algae</td><td>Tr</td></tr> <tr><td>Altered grains</td><td>Tr</td></tr> <tr><td>Bivalves</td><td>20</td></tr> <tr><td>Bryozoa</td><td>5</td></tr> <tr><td>Calcareous fragments</td><td>5</td></tr> <tr><td>Chalcedony</td><td>10</td></tr> <tr><td></td><td>10</td></tr> <tr><td>Foraminifers</td><td>10</td></tr> <tr><td>Glauconite</td><td>5</td></tr> <tr><td>Micrite</td><td>20</td></tr> <tr><td>Opauques</td><td>Tr</td></tr> <tr><td>Silica</td><td>5</td></tr> <tr><td>Spicules</td><td>5</td></tr> </table>	Algae	Tr	Altered grains	Tr	Bivalves	20	Bryozoa	5	Calcareous fragments	5	Chalcedony	10		10	Foraminifers	10	Glauconite	5	Micrite	20	Opauques	Tr	Silica	5	Spicules	5
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TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																													
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																							
UPPER CAMPANIAN	Barren							1	0.5					<p>INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE WITH GLAUCONITE</p> <p>Major lithology: INTERMITTENTLY SILICIFIED BIOCLASTIC PACKSTONE with GLAUCONITE, olive (SY 5/4 to SY 5/3), moderately well sorted, coarse to medium sized grains. Clasts include abundant bryozoan and mollusc debris, common glauconite, rare crinoid columnals and pyrite; inoceramids very rare. Mollusc and bryozoan debris lie along bedding planes. Burrowed, with burrows cross-cutting in some planes. Mud-rich intervals are in Section 1, 90-99 cm, 104-112 cm, and 128-136 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 72</td> <td>2, 55</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>30</td> <td>10</td> </tr> <tr> <td>Silt</td> <td>55</td> <td>80</td> </tr> <tr> <td>Clay</td> <td>15</td> <td>10</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Apatite</td> <td>1</td> <td>—</td> </tr> <tr> <td>Calcareous fragments</td> <td>65</td> <td>85</td> </tr> <tr> <td>Clay</td> <td>15</td> <td>2</td> </tr> <tr> <td>Foraminifers</td> <td>—</td> <td>2</td> </tr> <tr> <td>Glauconite</td> <td>5</td> <td>10</td> </tr> <tr> <td>Micrite</td> <td>5</td> <td>Tr</td> </tr> <tr> <td>Phosphate</td> <td>1</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Quartz</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Silica</td> <td>3</td> <td>—</td> </tr> </table>		1, 72	2, 55	D	D	D	Sand	30	10	Silt	55	80	Clay	15	10	Apatite	1	—	Calcareous fragments	65	85	Clay	15	2	Foraminifers	—	2	Glauconite	5	10	Micrite	5	Tr	Phosphate	1	—	Pyrite	Tr	Tr	Quartz	Tr	—	Silica	3	—
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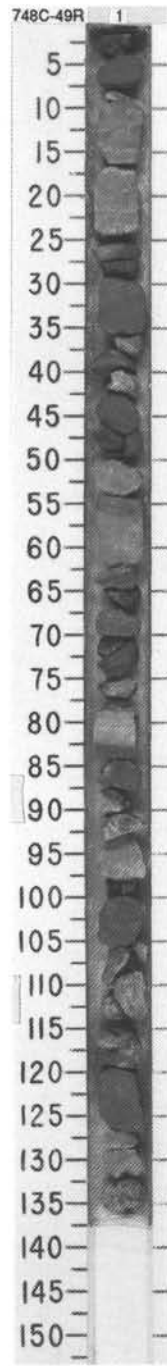


SITE 748 HOLE C CORE 48R CORED INTERVAL 606.5-616.0 mbsf

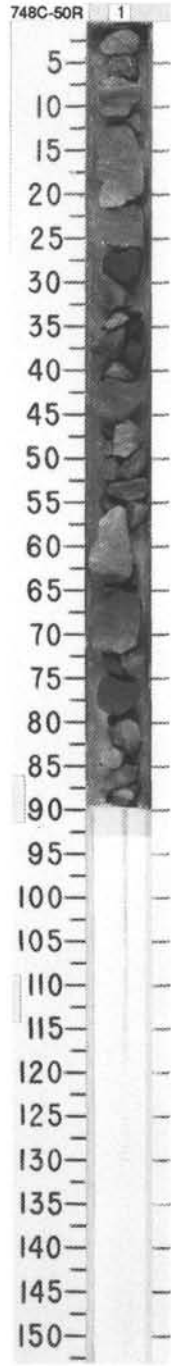
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																				
	FORAMINIFERS	NAUPOSSILLS	RADIOLARIANS	DIATOMS																																																																																																													
UPPER CAMPANIAN	CAMPANIAN				●	CaCO ₃ = 91.1%	16.60 2.37		0.5 1.0				<p>INTERMITTENTLY SILICIFIED GLAUCONITIC BIOCLASTIC PACKSTONE</p> <p>Major lithology: INTERMITTENTLY SILICIFIED GLAUCONITIC BIOCLASTIC PACKSTONE, olive (5Y 4/3 to 5Y 4/4), moderately to poorly sorted, fine sand and mud size grains. Clasts include abundant foraminifers, glauconite and clay, rare quartz, pyrite, sponge spicules, and phosphate (teeth or bone) fragments. Porous, with mud-sand laminations.</p> <p>N.B.: no CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <thead> <tr> <th></th> <th>1, 1 D</th> <th>1, 90 D</th> <th>1, 91 D</th> <th>1, 110 D</th> </tr> </thead> <tbody> <tr> <td>Sand</td> <td>100</td> <td>20</td> <td>100</td> <td>25</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>60</td> <td>—</td> <td>60</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>20</td> <td>—</td> <td>15</td> </tr> </tbody> </table> <p>TEXTURE:</p> <p>COMPOSITION:</p> <table border="1"> <tbody> <tr><td>Accessory minerals</td><td>3</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Altered grains</td><td>5</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Apatite</td><td>—</td><td>Tr</td><td>20</td><td>1</td></tr> <tr><td>Calcareous fragments</td><td>—</td><td>60</td><td>—</td><td>70</td></tr> <tr><td>Clay</td><td>—</td><td>5</td><td>—</td><td>10</td></tr> <tr><td>Feldspar</td><td>5</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Foraminifers</td><td>—</td><td>10</td><td>—</td><td>—</td></tr> <tr><td>Glauconite</td><td>60</td><td>10</td><td>65</td><td>2</td></tr> <tr><td>Micrite</td><td>—</td><td>10</td><td>—</td><td>10</td></tr> <tr><td>Opauques</td><td>10</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Phosphate</td><td>—</td><td>Tr</td><td>1</td><td>1</td></tr> <tr><td>Plagioclase</td><td>5</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Pyrite</td><td>—</td><td>Tr</td><td>10</td><td>1</td></tr> <tr><td>Quartz</td><td>5</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Rock Fragment</td><td>1</td><td>—</td><td>—</td><td>—</td></tr> <tr><td>Spicules</td><td>3</td><td>—</td><td>—</td><td>—</td></tr> </tbody> </table>		1, 1 D	1, 90 D	1, 91 D	1, 110 D	Sand	100	20	100	25	Silt	—	60	—	60	Clay	—	20	—	15	Accessory minerals	3	—	—	—	Altered grains	5	—	—	—	Apatite	—	Tr	20	1	Calcareous fragments	—	60	—	70	Clay	—	5	—	10	Feldspar	5	—	—	—	Foraminifers	—	10	—	—	Glauconite	60	10	65	2	Micrite	—	10	—	10	Opauques	10	—	—	—	Phosphate	—	Tr	1	1	Plagioclase	5	—	—	—	Pyrite	—	Tr	10	1	Quartz	5	—	—	—	Rock Fragment	1	—	—	—	Spicules	3	—	—	—
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TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																		
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS																											
UPPER CAMPANIAN				●			1	0.5 1.0			#	<p>LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE</p> <p>Major lithology: LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE, olive (5Y 4/3 to 5Y 4/4), medium to fine grained, poorly sorted; highly bioturbated intervals, light gray (5Y 7/1 to 5Y 7/2) in Section 1, 8-22 cm, 46-62 cm, and 78-82 cm with clay rip-up clasts. Clasts include abundant glauconite, pyrite, bryozoan and mollusc debris, foraminifers, rare quartz, and up to 15% clay scattered in stringers and burrows.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">1, 53 D</p> <p>COMPOSITION:</p> <table border="0"> <tr><td>Altered grains</td><td>Tr</td></tr> <tr><td>Calcareous fragments</td><td>5</td></tr> <tr><td>Chalcedony</td><td>5</td></tr> <tr><td>Foraminifers</td><td>10</td></tr> <tr><td>Glauconite</td><td>10</td></tr> <tr><td>Micrite</td><td>60</td></tr> <tr><td>Opagues</td><td>Tr</td></tr> <tr><td>Silica</td><td>Tr</td></tr> <tr><td>Spicules</td><td>10</td></tr> </table>	Altered grains	Tr	Calcareous fragments	5	Chalcedony	5	Foraminifers	10	Glauconite	10	Micrite	60	Opagues	Tr	Silica	Tr	Spicules	10
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MIDDLE - UPPER CAMPANIAN			F/M	●		CaCO ₃ = 30.8% 0C=0.42%																								
			upper <i>Quadrum trifidum</i>																											
			CRETACEOUS																											
			no sample																											



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																																			
UPPER CAMPANIAN		no result	F/M		● 9.37.51 ● 2.04	CaCO ₃ = 46.2% OC=0.85%	1	0.5			*	<p>LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE TO WACKESTONE</p> <p>Major lithology: LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE to WACKESTONE, olive gray (5Y 4/2), poorly sorted, very fine sand with mud. Clasts consist of common foraminifers and pyrite, rare mollusc debris, sponge spicules, and pyrite, with very rare glass and quartz. Up to half of the mud-sized component is micrite. Highly bioturbated intervals have clay rip-up clasts, light gray (5Y 7/1), burrowed.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="0"> <tr><td>1,</td><td>45</td></tr> <tr><td>D</td><td></td></tr> </table> <p>TEXTURE:</p> <table border="0"> <tr><td>Sand</td><td>20</td></tr> <tr><td>Silt</td><td>60</td></tr> <tr><td>Clay</td><td>20</td></tr> </table> <p>COMPOSITION:</p> <table border="0"> <tr><td>Apatite</td><td>Tr</td></tr> <tr><td>Calcareous fragments</td><td>35</td></tr> <tr><td>Clay</td><td>10</td></tr> <tr><td>Foraminifers</td><td>Tr</td></tr> <tr><td>Glaucinite</td><td>10</td></tr> <tr><td>Micrite</td><td>40</td></tr> <tr><td>Phosphate</td><td>Tr</td></tr> <tr><td>Pyrite</td><td>3</td></tr> </table>	1,	45	D		Sand	20	Silt	60	Clay	20	Apatite	Tr	Calcareous fragments	35	Clay	10	Foraminifers	Tr	Glaucinite	10	Micrite	40	Phosphate	Tr	Pyrite	3
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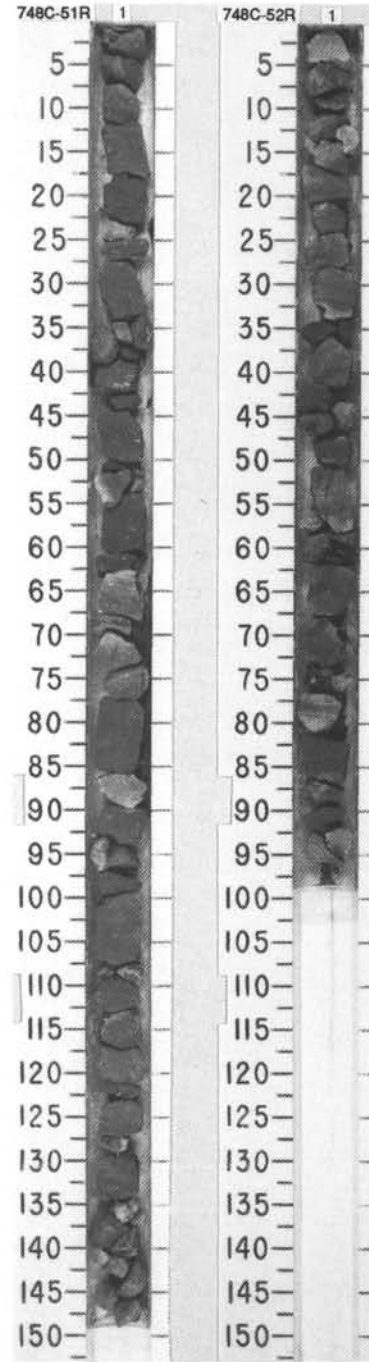


SITE 748 HOLE C CORE 51R CORED INTERVAL 635.0-644.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
UPPER CRETACEOUS	no result							1	0.5 1.0				<p>LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE</p> <p>Major lithology: LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE, olive (5Y 4/2), poorly sorted, very fine sand with mud. Clasts include mollusc debris, glauconite, pyrite, foraminifers, rare bryozoan debris, sponge spicules, and phosphatic debris. A nearly entire irregular echinoid occurs in Section 1, 0-3 cm.</p> <p>N.B.: No CC.</p>

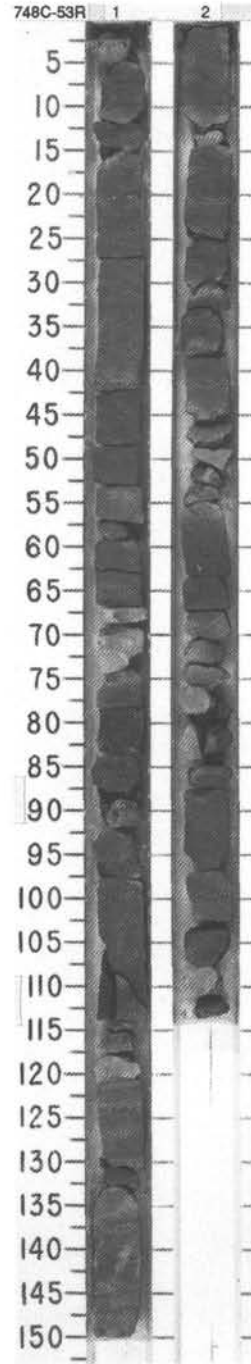
SITE 748 HOLE C CORE 52R CORED INTERVAL 644.5-654.0 mbsf

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									
UPPER CAMPANIAN CAMPANIAN	R/M							1					<p>LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE</p> <p>Major lithology: LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE, olive (5Y 4/2), poorly sorted, very fine sand and mud. Clasts include abundant mollusc debris, common glauconite, pyrite, foraminifers, rare bryozoan debris, sponge spicules, and phosphatic debris.</p> <p>N.B.: No CC.</p>

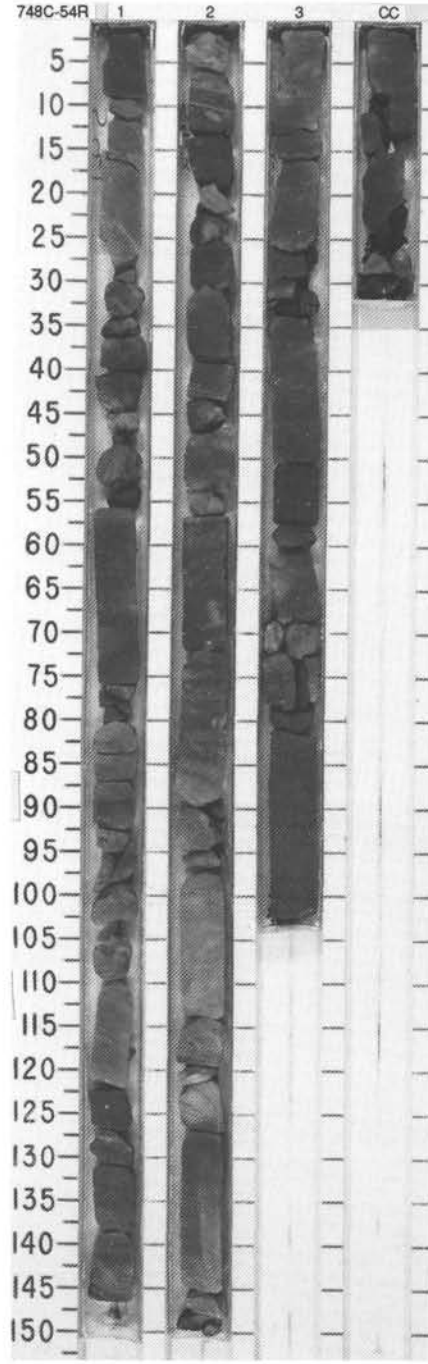


SITE 748 HOLE C CORE 53R CORED INTERVAL 654.0-663.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIATOMS									
UUPER CAMPANIAN													<p>PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE</p> <p>Major lithology: PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE, dark olive gray (5Y 3/1), finely bedded, fine grained, moderately to poorly sorted, moderately indurated. Partly silicified in Section 1, 70-73 cm, and 118-120 cm; and in Section 2, 46-49 cm, 73-77 cm, and 105-108 cm; lenticular bedding on a mm-scale in Section 1, 5-13 cm, 58-77 cm, 119-150 cm, with color in varying shades of olive (5Y 5/3, 5Y 4/3). Glauconite is 25%-30% throughout; phosphatic particles rare; biogenic components are foraminifers, sponge spicules, and shell fragments. An olive (5Y 4/3), clay-rich clast occurs in Section 1, 96-97 cm. Slightly bioturbated throughout.</p> <p>Drilling disturbance: highly fragmented throughout.</p> <p>N.B.: No CC.</p>
Barren	R/M				<p>• 46.29</p> <p>• 27.53</p> <p>• 2.30</p> <p>• 3.65</p>	<p>CaCO₃ = 1.7%</p> <p>OC = 0.43%</p> <p>OC = 0.69%</p> <p>OC = 36.4%</p>	<p>1</p> <p>2</p>	<p>0.5</p> <p>1.0</p>					

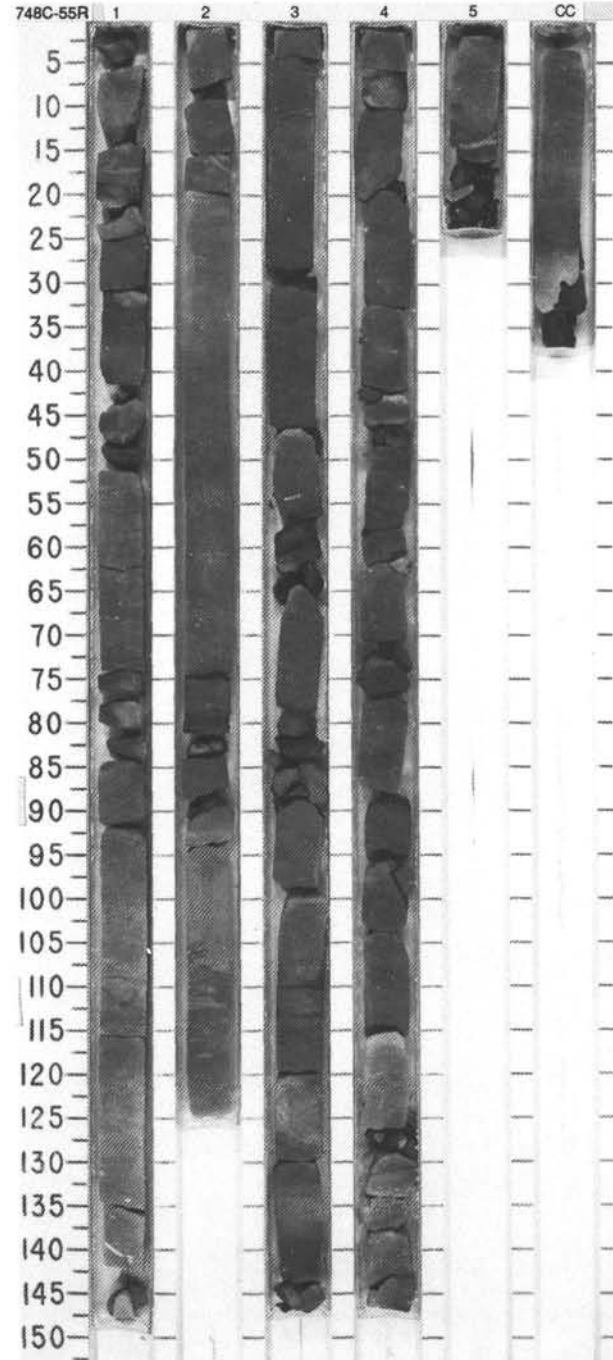


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAANOFOSFILLS	RADIOLARIANS	DIAZONS										
UPPER CAMPANIAN					•			1	0.5					PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE TO WACKESTONE Major lithology: PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE to WACKESTONE, gray when dry (5Y 5/1) to olive gray when wet (5Y 4/2). Partly mud-supported fabric; fine grained, well sorted, partly silicified; fine-scale bedding (flaser?) on a <1 cm scale, with bioturbation on a 1-2 cm scale. In Section 2, 0-17, clay is burrowed into grainstone. Carbonate cements occur in Section 2, 98-113 cm. Bioclasts consist of b. yozonans, and sponge spicules, echinoid spines, echinoderm fragments, foraminifers, and mollusc fragments. Drilling disturbance: sediments fragmented into 2-15 cm-long pieces.
no result					•		2	1.0						
middle <i>Quadrum trifidum</i>					•									
Barren					•									
					•			3						
					•			CC						

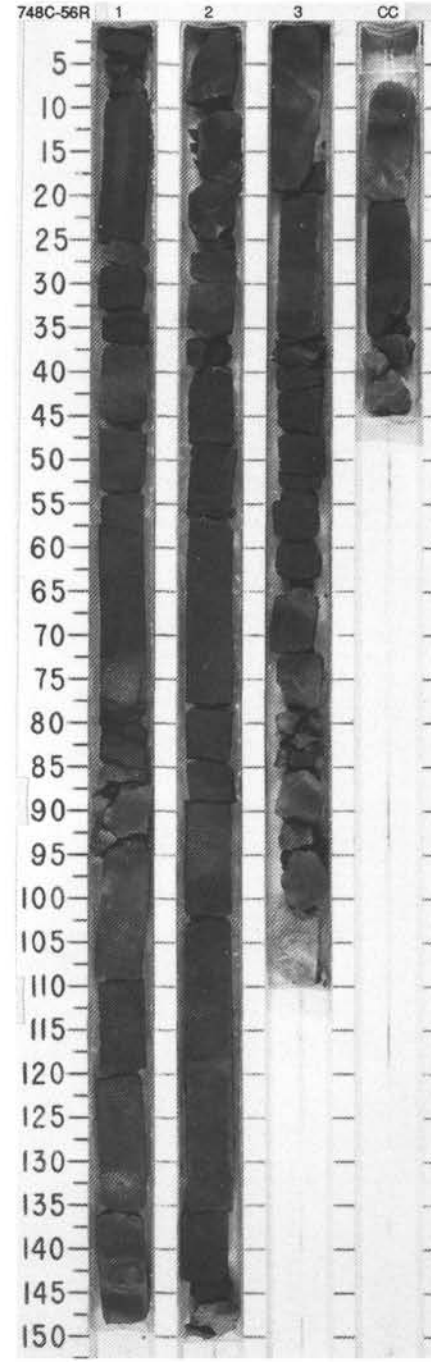


SITE 748 HOLE C CORE 55R CORED INTERVAL 673.0-682.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																										
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIATOMS																																			
UPPER CAMPANIAN	MIDDLE - UPPER CAMPANIAN				•	$\delta = -3.21$ $\sigma = 2.08$		1	0.5				<p>PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE TO WACKESTONE</p> <p>Major lithology: PARTIALLY LITHIFIED GLAUCONITIC BIOCLASTIC PACKSTONE to WACKESTONE dark olive gray (5Y 3/1), grading to black (5Y 2.5/1) in CC. Finely bedded, fine grained, moderately to poorly sorted, moderately indurated. Partly siltified in Section 1, 20-23 cm, and 76-80 cm; in Section 3, 123-128 cm; and in Section 4, 116-120 cm. Lenticular bedding on a mm-scale in Section 1, 0-8 cm, and 15-18 cm; in Section 2, 40-81 cm, and 110-125 cm; in Section 3, 48-52 cm, and 89-99 cm; in Section 4, 49-68 cm, 80-85 cm, and 115-147 cm, and in CC, 8-11 cm. Glauconite 30%-40% throughout, biogenic components are foraminifers, sponge spicules, and shell fragments, few to rare; trace of pyrite disseminated throughout Sections 1 and 2. Phosphatic particles are rare. Inoceramid fragments (cm-sized) occur in Section 1, 135-144 cm. Bioturbation is moderate throughout Sections 1, 2, 4, and CC; slight in Section 3.</p> <p>Minor lithology: Glauconitic bioclastic wackestone, dark olive gray (5Y 3/1), in Section 3; biogenic components are the same as the major lithology.</p> <p>Drilling disturbance: Highly fragmented in Section 4; moderately fragmented in Sections 1, 2, and CC; slightly fragmented in Section 2.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="0"> <tr><td></td><td>2, 100</td></tr> <tr><td>D</td><td></td></tr> </table> <p>TEXTURE:</p> <table border="0"> <tr><td>Sand</td><td>10</td></tr> <tr><td>Silt</td><td>80</td></tr> <tr><td>Clay</td><td>10</td></tr> </table> <p>COMPOSITION:</p> <table border="0"> <tr><td>Altered grains</td><td>5</td></tr> <tr><td>Calcareous fragments</td><td>65</td></tr> <tr><td>Feldspar</td><td>Tr</td></tr> <tr><td>Foraminifers</td><td>10</td></tr> <tr><td>Glauconite</td><td>15</td></tr> <tr><td>Opaques</td><td>3</td></tr> <tr><td>Plagioclase</td><td>Tr</td></tr> <tr><td>Quartz</td><td>1</td></tr> </table>		2, 100	D		Sand	10	Silt	80	Clay	10	Altered grains	5	Calcareous fragments	65	Feldspar	Tr	Foraminifers	10	Glauconite	15	Opaques	3	Plagioclase	Tr	Quartz	1
	2, 100																																						
D																																							
Sand	10																																						
Silt	80																																						
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Opaques	3																																						
Plagioclase	Tr																																						
Quartz	1																																						
MIDDLE - UPPER CAMPANIAN	MIDDLE <i>Quadrum tritidum</i>				•		-30.2% OC-0.36% ●	2	1.0																														
	Barren				•			3	VOID																														
	Barren				•			4	VOID																														
					•	$\delta = -42.63$ $\sigma = 2.04$	CaCO ₃ ● = 22.6%	5	VOID																														
					•			CC	VOID																														



TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																								
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIAZONES																																																																																																		
	FOSSIL CHARACTER																																																																																																					
	FOSSIL CHARACTER																																																																																																					
UPPER CAMPANIAN	no result													<p>BIOLAISTIC GLAUCONITE PACKSTONE</p> <p>Major lithology: BIOLAISTIC GLAUCONITE PACKSTONE, color varies from very dark gray (5Y 3/1) to black (5Y 2.5/1); fine-grained, massive, grain-supported fabric, poorly to moderately sorted; moderately indurated (partially lithified). Glauconite varies from 50 to 70 %; components are common foraminifers and unspecified carbonate debris, mm-scale clay-rich, glauconite-poor blotches, dark olive gray (5Y 3/2) are common throughout.</p> <p>Drilling disturbance: Highly fractured throughout Section 3; moderately fractured throughout Sections 1, 2, and CC.</p> <p>* SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 27</td> <td>3, 95</td> <td>3, 101</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>—</td> <td>10</td> <td>10</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>75</td> <td>40</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>15</td> <td>50</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>—</td> <td>5</td> <td>5</td> </tr> <tr> <td>Altered grains</td> <td>20</td> <td>15</td> <td>5</td> </tr> <tr> <td>Calcareous fragments</td> <td>2</td> <td>2</td> <td>—</td> </tr> <tr> <td>Chalcedony</td> <td>1</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>25</td> <td>25</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>1</td> <td>2</td> </tr> <tr> <td>Fish</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Foraminifers</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Glauconite</td> <td>20</td> <td>30</td> <td>30</td> </tr> <tr> <td>Micrite</td> <td>30</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opauques</td> <td>2</td> <td>10</td> <td>5</td> </tr> <tr> <td>Plagioclase</td> <td>—</td> <td>2</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>3</td> <td>—</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>5</td> <td>3</td> </tr> <tr> <td>Rock fragment</td> <td>—</td> <td>1</td> <td>—</td> </tr> <tr> <td>Silica</td> <td>6</td> <td>—</td> <td>25</td> </tr> <tr> <td>Spicules</td> <td>10</td> <td>—</td> <td>—</td> </tr> </table>		2, 27	3, 95	3, 101		D	D	D	Sand	—	10	10	Silt	—	75	40	Clay	—	15	50	Accessory minerals	—	5	5	Altered grains	20	15	5	Calcareous fragments	2	2	—	Chalcedony	1	—	—	Clay	—	25	25	Feldspar	—	1	2	Fish	2	—	—	Foraminifers	2	—	—	Glauconite	20	30	30	Micrite	30	—	—	Opauques	2	10	5	Plagioclase	—	2	—	Pyrite	3	—	—	Quartz	—	5	3	Rock fragment	—	1	—	Silica	6	—	25	Spicules	10	—	—
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Chalcedony	1	—	—																																																																																																			
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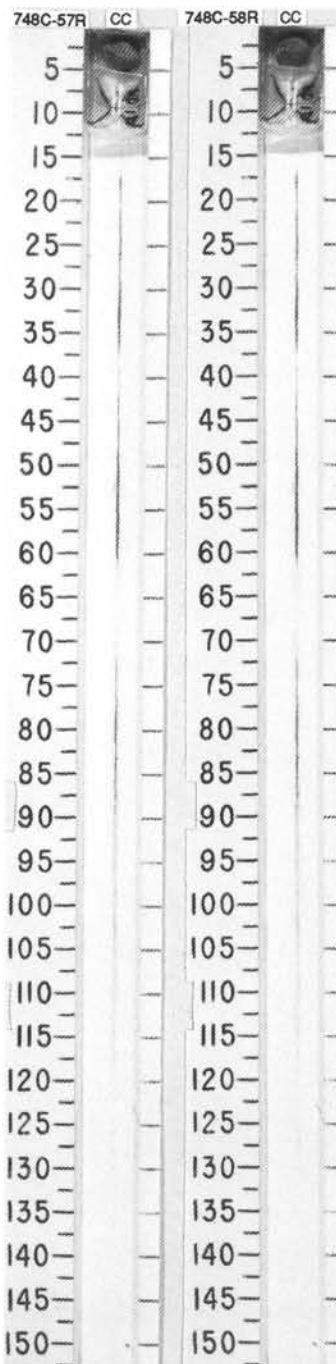


SITE 748 HOLE C CORE 57R CORED INTERVAL 692.0-701.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
no sample													SILICIFIED CLAYEY GLAUCONITIC SANDSTONE Major lithology: SILICIFIED CLAYEY GLAUCONITIC SANDSTONE, gray (5G 4/2), occurs as a fragment in the CC.

SITE 748 HOLE C CORE 58R CORED INTERVAL 701.5-711.0 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									
UPPER CAMPANIAN SANTONIAN - CAMPANIAN lower <i>Quadrum frigidum</i> Barren Barren													SILICIFIED CLAYEY GLAUCONITIC SANDSTONE Major lithology: SILICIFIED CLAYEY GLAUCONITIC SANDSTONE, grayish green (5G 4/2), occurs as a single hard, rounded, cemented piece in the CC. Two kinds of glauconite, black and light green occur, as do flakes of apatite (fish debris?), chalcodony spheres, silica cement replacing fossil molds, feldspar, possible zeolite, and rare siderite. SMEAR SLIDE SUMMARY (%): CC, 1 D TEXTURE: Sand --- 5 Silt --- 60 Clay --- 35 COMPOSITION: Altered grains 10 10 Chalcodony 10 --- Clay --- 35 Feldspar --- 5 Fish Tr --- Glauconite 40 10 Opasques Tr 3 Pyrite Tr --- Quartz --- 3 Silica 25 30 Spicules 10 ---

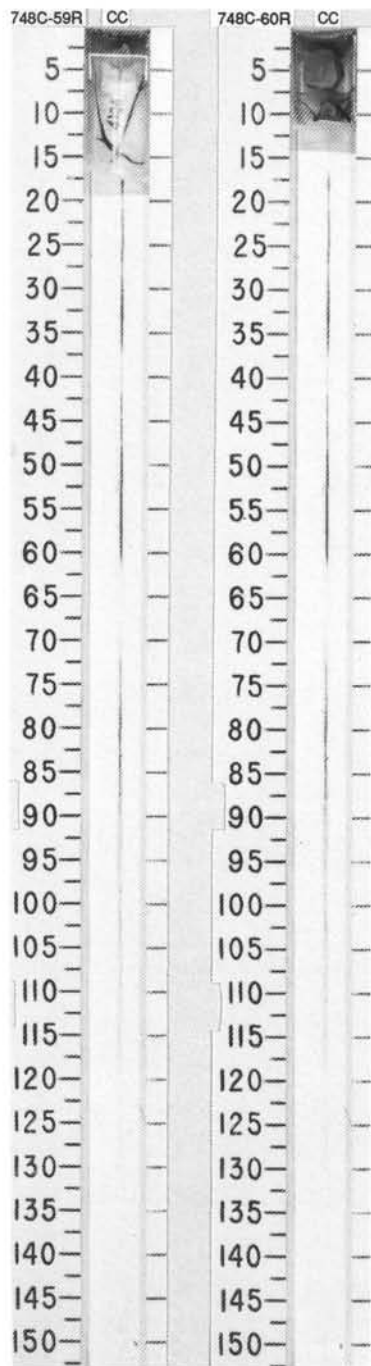


SITE 748 HOLE C CORE 59R CORED INTERVAL 711.0-722.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS									
	Barren	no sample	no sample									<p>SILICIFIED CLAYEY GLAUCONITIC SANDSTONE</p> <p>Major lithology: SILICIFIED CLAYEY GLAUCONITIC SANDSTONE, gray (5G 4/2), occurs as one 5-cc diameter piece in the CC. Fine sand sized, poorly sorted, composed mostly of glauconite; cemented by light olive silica. Rare foraminifer tests, common pyrite, ferruginous red specks.</p>

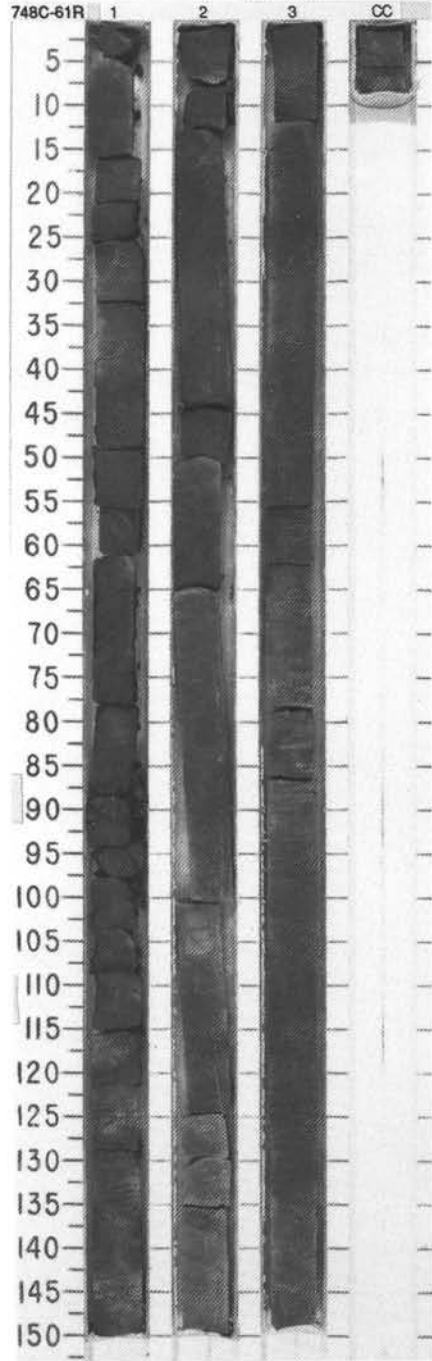
SITE 748 HOLE C CORE 60R CORED INTERVAL 722.5-727.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS									
	no sample	Barren	Barren									<p>SILICIFIED CLAYEY GLAUCONITIC SANDSTONE</p> <p>Major lithology: SILICIFIED CLAYEY GLAUCONITIC SANDSTONE, dark gray green (5G 4/2); occurs as fragments in the CC. Well-sorted fine sand, faint parallel bedding. Clasts are dominated by glauconite and siliceous grains (isotropic), with rare pyrite and red ferruginous specks.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">CC, 1 M</p> <p>TEXTURE:</p> <p>Silt 40 Clay 60</p> <p>COMPOSITION:</p> <p>Accessory minerals 5 Altered grains 10 Clay 40 Feldspar 5 Glauconite 10 Opalines 15 Quartz 5 Rock fragment 5 Silica 5</p>

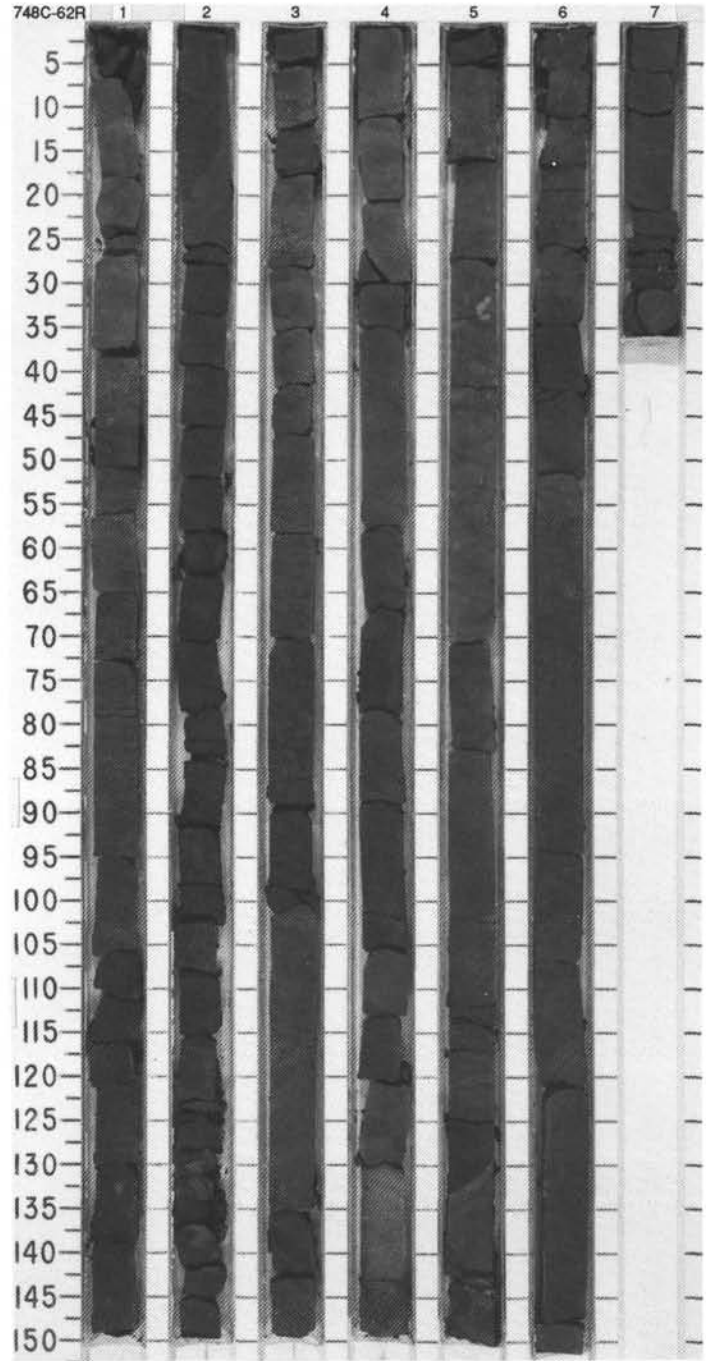


SITE 748 HOLE C CORE 61R CORED INTERVAL 727.5-732.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																										
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																			
Barren	Barren	no result	no sample		●	●	●	1	0.5				<p>CLAYEY GLAUCONITIC SANDSTONE</p> <p>Major lithology: CLAYEY GLAUCONITIC SANDSTONE, dark olive (5Y 2.5/3) with lighter olive (5Y 4/3) mottles; heavily burrowed, with cm-scale cross-cutting Planolites-type burrows. Clasts in the coarse fraction include abundant glauconitic silica-replaced fossils, rare vertebrate debris, pyrite, and ferruginous red specks. A heavily burrowed zone occurs in Section 1, 90-150 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 110</td> <td>2, 135</td> </tr> <tr> <td>D</td> <td></td> <td>0</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>15</td> <td>10</td> </tr> <tr> <td>Silt</td> <td>25</td> <td>75</td> </tr> <tr> <td>Clay</td> <td>60</td> <td>15</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>10</td> <td>5</td> </tr> <tr> <td>Altered grains</td> <td>—</td> <td>15</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>15</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>5</td> </tr> <tr> <td>Glauconite</td> <td>25</td> <td>25</td> </tr> <tr> <td>Opauques</td> <td>20</td> <td>5</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>3</td> </tr> <tr> <td>Rock fragment</td> <td>1</td> <td>—</td> </tr> <tr> <td>Silica</td> <td>—</td> <td>25</td> </tr> </table>		2, 110	2, 135	D		0	Sand	15	10	Silt	25	75	Clay	60	15	Accessory minerals	10	5	Altered grains	—	15	Clay	40	15	Feldspar	—	5	Glauconite	25	25	Opauques	20	5	Quartz	—	3	Rock fragment	1	—	Silica	—	25
	2, 110	2, 135																																																					
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Accessory minerals	10	5																																																					
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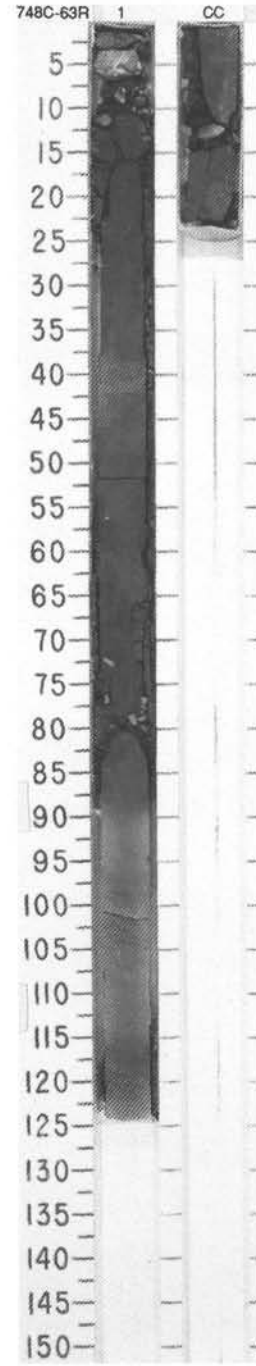


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER					SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALYNOLOGY						
CONIACIAN to UPPER TURONIAN	Barren					0.5	[Lithology pattern: fine dotted]	[Disturbance pattern: wavy]	*	GLAUCONITIC CLAYSTONE Major lithology: GLAUCONITIC CLAYSTONE, dark olive (SY 2.5/4), uniform, brittle, partly silicified including microfossils as molds. Burrowed throughout with mainly Planolites-type burrows and some Teichinus. No calcareous components but rare scattered, angular phosphatic fossil fragments including large shark teeth (in Section 1, 145 cm, and CC), faint bedding with wispy clay-filled burrow tracks, and light mottling. Small pyrite burrow-fill concretions in Section 4, 125 cm, and Section 5, 30-33 cm. Contains clay, isotropic siliceous fragments with some molds of foraminifers and radiolarians, clear altered grains, and occluded opaques. Glauconite occurs as light green fecal pellets, light green chips, and bulbous dark grains; pyrite is common as silt-size shiny black, blocky chips.	
	Barren					1.0					
	Barren					2.0					
	Barren					3.0					
	Striatoconus Zone					4.0					
						5.0					
						6.0					
					7.0						
								#		N.B.: No CC. SMEAR SLIDE SUMMARY (%): 1, 38 M TEXTURE: Silt 60 Clay 40 COMPOSITION: Accessory minerals 10 Clay 60 Opaques 20 Rock fragment 5	

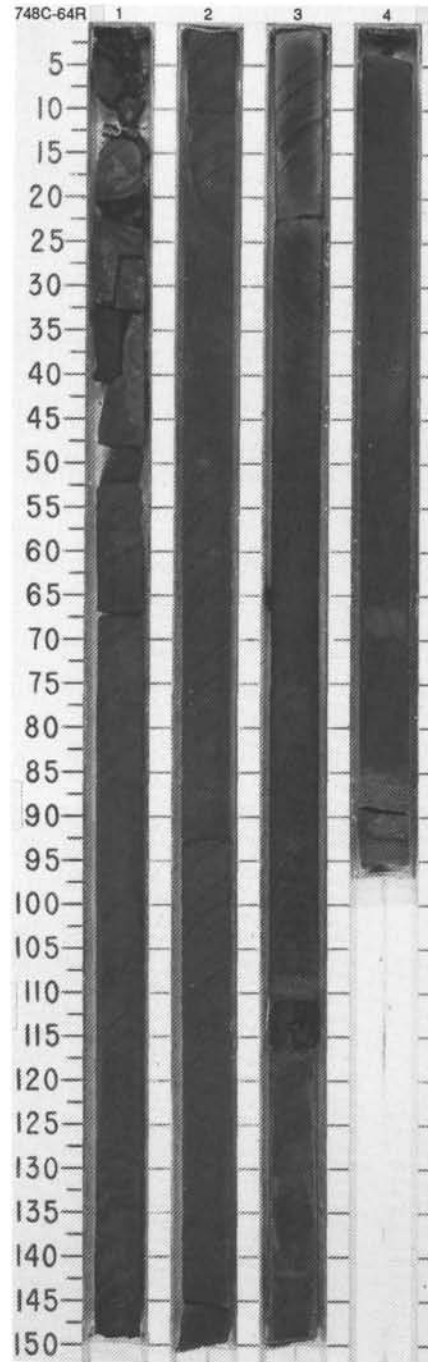


SITE 748 HOLE C CORE 63R CORED INTERVAL 742.0-751.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NAKKOFOSSILS	RADIOLARIANS	DIATOMS										
	Barren	Barren	no result	Barren		OC-0.22%								
	Barren		F/P	Barren		OC-0.31%								
						CC								
				common bone fragments										
						CaCO ₃ - 2.9%								
						OC-52.44%								
						OC-1.89%								



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																																																																																																																												
	Barren	Barren	Barren	Barren	•	•	•	1	0.5				*	<p>ZEOLITIC GLAUCONITE CLAYEY SILTSTONE</p> <p>Major lithology: ZEOLITIC GLAUCONITE CLAYEY SILTSTONE, black (5Y 2.5/2); moderately indurated. Finely laminated in Section 1, 125-150 cm; Section 2, 0-22 cm, and 88-108 cm; Section 3, 96-110 cm; and Section 4, 86-97 cm. Biogenic components apparently absent. Small mm-scale burrows (Chondrites) in Section 1, 65-150 cm; in Section 2, 25-35 cm, 55-65 cm, 70-88 cm, and 133-150 cm; and in Section 3, 133-136 cm. Altered grains comprise 6%-38% of the sediment.</p> <p>Drilling disturbance: highly fractured in Section 1, 0-14 cm; moderately fractured in Section 1, 14-55 cm; slightly fractured in Section 1, 55 cm, through Section 4.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 55</td> <td>1, 70</td> <td>3, 59</td> <td>3, 108</td> <td>4, 70</td> </tr> <tr> <td></td> <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>—</td> <td>10</td> <td>35</td> <td>15</td> <td>20</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>50</td> <td>55</td> <td>50</td> <td>50</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>40</td> <td>10</td> <td>35</td> <td>30</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>5</td> <td>5</td> <td>6</td> <td>—</td> <td>6</td> </tr> <tr> <td>Altered grains</td> <td>10</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>30</td> <td>25</td> <td>14</td> <td>35</td> <td>30</td> </tr> <tr> <td>Feldspar</td> <td>5</td> <td>2</td> <td>2</td> <td>—</td> <td>3</td> </tr> <tr> <td>Glass</td> <td>—</td> <td>—</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Glaucinite</td> <td>15</td> <td>25</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Heavy minerals</td> <td>—</td> <td>—</td> <td>3</td> <td>3</td> <td>2</td> </tr> <tr> <td>Opagues</td> <td>10</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>—</td> <td>4</td> <td>—</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>3</td> <td>15</td> <td>19</td> <td>14</td> </tr> <tr> <td>Rock fragment</td> <td>1</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Silica</td> <td>5</td> <td>10</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Unknown</td> <td>—</td> <td>—</td> <td>38</td> <td>6</td> <td>15</td> </tr> <tr> <td>Zeolite</td> <td>15</td> <td>20</td> <td>20</td> <td>30</td> <td>30</td> </tr> </table>		1, 55	1, 70	3, 59	3, 108	4, 70		D	D	D	D	D	Sand	—	10	35	15	20	Silt	60	50	55	50	50	Clay	40	40	10	35	30	Accessory minerals	5	5	6	—	6	Altered grains	10	5	—	—	—	Clay	30	25	14	35	30	Feldspar	5	2	2	—	3	Glass	—	—	2	—	—	Glaucinite	15	25	—	—	—	Heavy minerals	—	—	3	3	2	Opagues	10	5	—	—	—	Pyrite	—	—	—	4	—	Quartz	2	3	15	19	14	Rock fragment	1	—	—	—	—	Silica	5	10	—	—	—	Unknown	—	—	38	6	15	Zeolite	15	20	20	30	30
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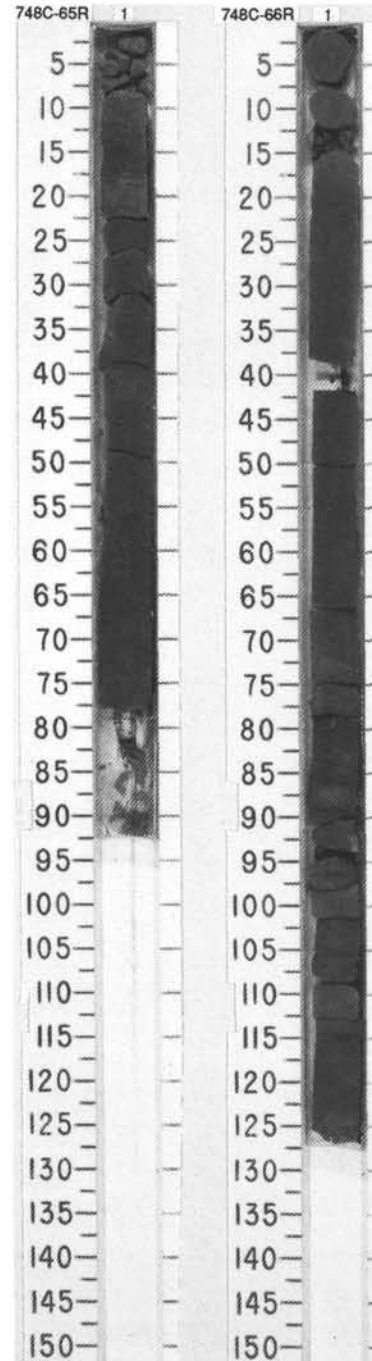


SITE 748 HOLE C CORE 65R CORED INTERVAL 761.0-770.5 mbsf

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																															
	Barren	Barren	Barren	Barren	•	$\phi = 50.84$ $\sigma = 0.0235$ $\sigma = 0.9\%$	$CaCO_3 = 1.8\%$	1	0.5			*	<p>CLAYEY SILTSTONE WITH GLAUCONITE</p> <p>Major lithology: CLAYEY SILTSTONE with GLAUCONITE, black (5Y 2.5/2); moderately indurated. Finely laminated in Section 1, 16-27 cm; small mm-scale burrows (Chondrites) in Section 1, 43-57 cm. "Altered" grains comprise 25% of the sediment. No biogenic components identified.</p> <p>Drilling disturbance: Highly fractured, Section 1, 0-6 cm; moderately fractured, Section 1, 6-79 cm.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table> <tr><td>1,40</td></tr> <tr><td>D</td></tr> </table> <p>TEXTURE:</p> <table> <tr><td>Sand</td><td>25</td></tr> <tr><td>Silt</td><td>45</td></tr> <tr><td>Clay</td><td>30</td></tr> </table> <p>COMPOSITION:</p> <table> <tr><td>Clay</td><td>30</td></tr> <tr><td>Glauconite</td><td>19</td></tr> <tr><td>Heavy minerals</td><td>1</td></tr> <tr><td>Opalines</td><td>5</td></tr> <tr><td>Quartz</td><td>15</td></tr> <tr><td>Unknown</td><td>25</td></tr> <tr><td>Zeolite</td><td>5</td></tr> </table>	1,40	D	Sand	25	Silt	45	Clay	30	Clay	30	Glauconite	19	Heavy minerals	1	Opalines	5	Quartz	15	Unknown	25	Zeolite	5
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SITE 748 HOLE C CORE 66R CORED INTERVAL 770.5-780.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																			
	FORAMINIFERS	NAUPOFOSSILS	RADIOLARIANS	DIATOMS																													
	Barren	Barren	Barren	Barren	•	$\phi = 47.49$ $\sigma = 2.11$ $\sigma = 0.41\%$	$CaCO_3 = 0.8\%$	1	0.5			*	<p>GLAUCONITIC CLAYEY SILTSTONE</p> <p>Major lithology: GLAUCONITIC CLAYEY SILTSTONE, black (5Y 2.5/2); burrowed with Chondrites, especially in Section 1, 17-25 cm, and 114-128 cm; finely laminated in Section 1, 75-80 cm and 90-110 cm. Slightly fractured by drilling.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table> <tr><td>1,75</td></tr> <tr><td>D</td></tr> </table> <p>TEXTURE:</p> <table> <tr><td>Sand</td><td>15</td></tr> <tr><td>Silt</td><td>50</td></tr> <tr><td>Clay</td><td>35</td></tr> </table> <p>COMPOSITION:</p> <table> <tr><td>Clay</td><td>35</td></tr> <tr><td>Feldspar</td><td>2</td></tr> <tr><td>Glauconite</td><td>40</td></tr> <tr><td>Quartz</td><td>5</td></tr> <tr><td>Unknown</td><td>8</td></tr> <tr><td>Zeolite</td><td>5</td></tr> </table>	1,75	D	Sand	15	Silt	50	Clay	35	Clay	35	Feldspar	2	Glauconite	40	Quartz	5	Unknown	8	Zeolite	5
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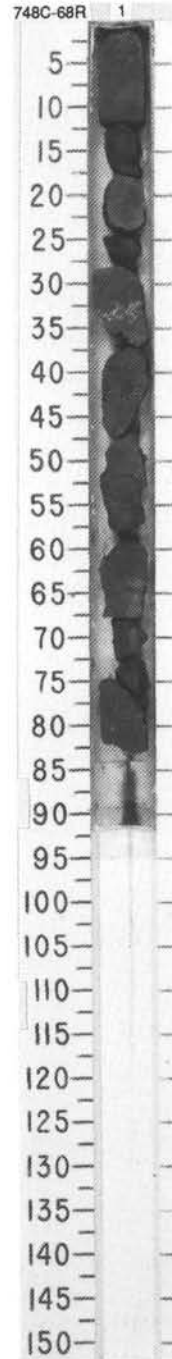


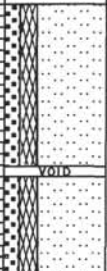
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS									
Barren	Barren	Barren	Barren	Barren	●	●	CaCO ₃ = 4.5%	1	0.5 1.0		*		<p>CLAYEY SILTSTONE WITH GLAUCONITE AND ZEOLITES</p> <p>Major lithology: CLAYEY SILTSTONE with GLAUCONITE and ZEOLITES, dark olive gray (5Y 2.5/2); massively bedded with Chondrites burrowing throughout. Highly fractured in Section 1, 0-55 cm and 120-150 cm; moderately fractured in Section 1, 55-120 cm.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">1, 75 D</p> <p>TEXTURE:</p> <p>Sand 20 Silt 45 Clay 35</p> <p>COMPOSITION:</p> <p>Accessory minerals 10 Clay 30 Feldspar 2 Opagues 6 Quartz 6 Unknown 40 Zeolite 5</p>

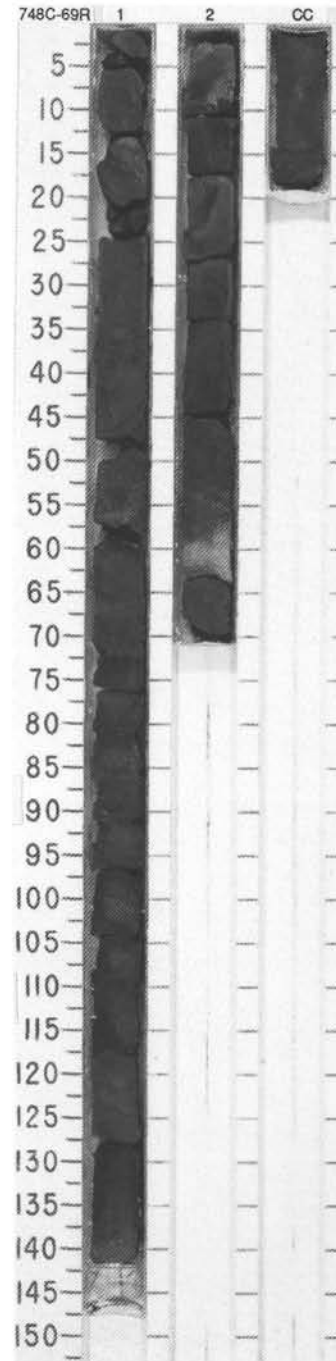


SITE 748 HOLE C CORE 68R CORED INTERVAL 789.5-797.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																										
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIATOMS																																																			
	Barren	Barren	Barren	Barren	●	52.19 2.11	CaCO ₃ = 9.8%	1	0.5				<p>CLAYEY SILTSTONE WITH GLAUCONITE</p> <p>Major lithology: CLAYEY SILTSTONE with GLAUCONITE, black (5Y 2.5/2); burrows on a mm-scale (Chondrites) in Section 1, 32-35 cm; (Ophomorpha) in Section 1, 41-48 cm and 52-58 cm; large vertical burrow in Section 1, 66-70 cm. Finely laminated on a mm-scale in Section 1, 65-68 cm. Altered grains comprise up to 30% of this lithology. Moderately bioturbated throughout.</p> <p>Drilling disturbance: Highly fractured throughout.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 33</td> <td>1, 44</td> </tr> <tr> <td></td> <td>M</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>—</td> <td>15</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>60</td> </tr> <tr> <td>Clay</td> <td>40</td> <td>25</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>1</td> <td>3</td> </tr> <tr> <td>Altered grains</td> <td>5</td> <td>10</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>30</td> </tr> <tr> <td>Feldspar</td> <td>3</td> <td>4</td> </tr> <tr> <td>Glaucconite</td> <td>15</td> <td>30</td> </tr> <tr> <td>Opauques</td> <td>3</td> <td>3</td> </tr> <tr> <td>Quartz</td> <td>1</td> <td>2</td> </tr> <tr> <td>Siderite</td> <td>25</td> <td>3</td> </tr> <tr> <td>Silica</td> <td>20</td> <td>10</td> </tr> </table>		1, 33	1, 44		M	D	Sand	—	15	Silt	60	60	Clay	40	25	Accessory minerals	1	3	Altered grains	5	10	Clay	25	30	Feldspar	3	4	Glaucconite	15	30	Opauques	3	3	Quartz	1	2	Siderite	25	3	Silica	20	10
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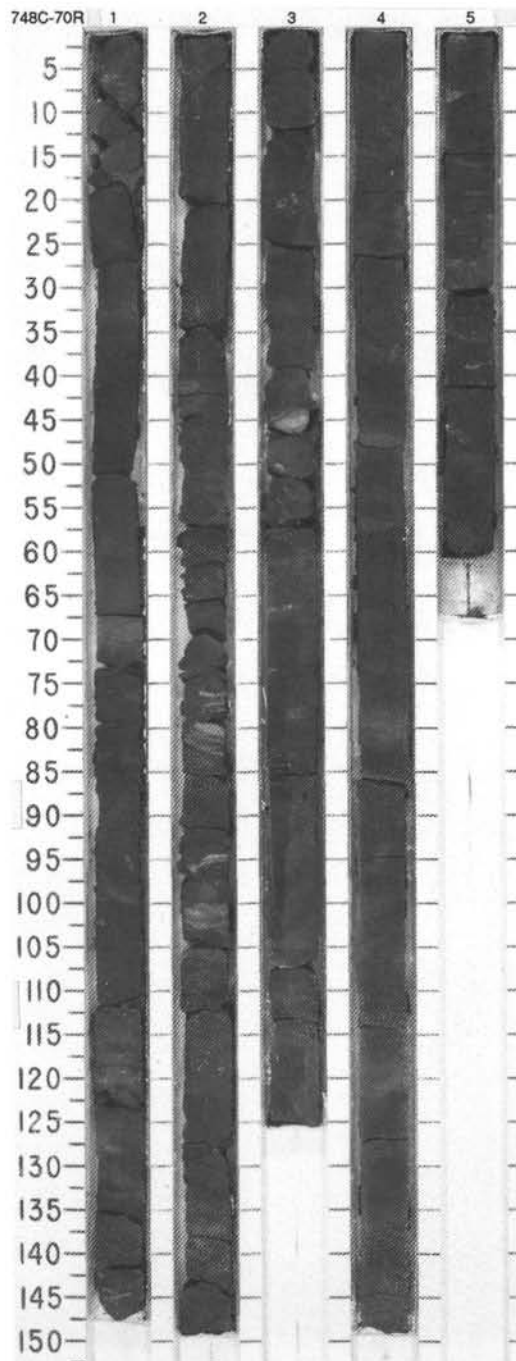


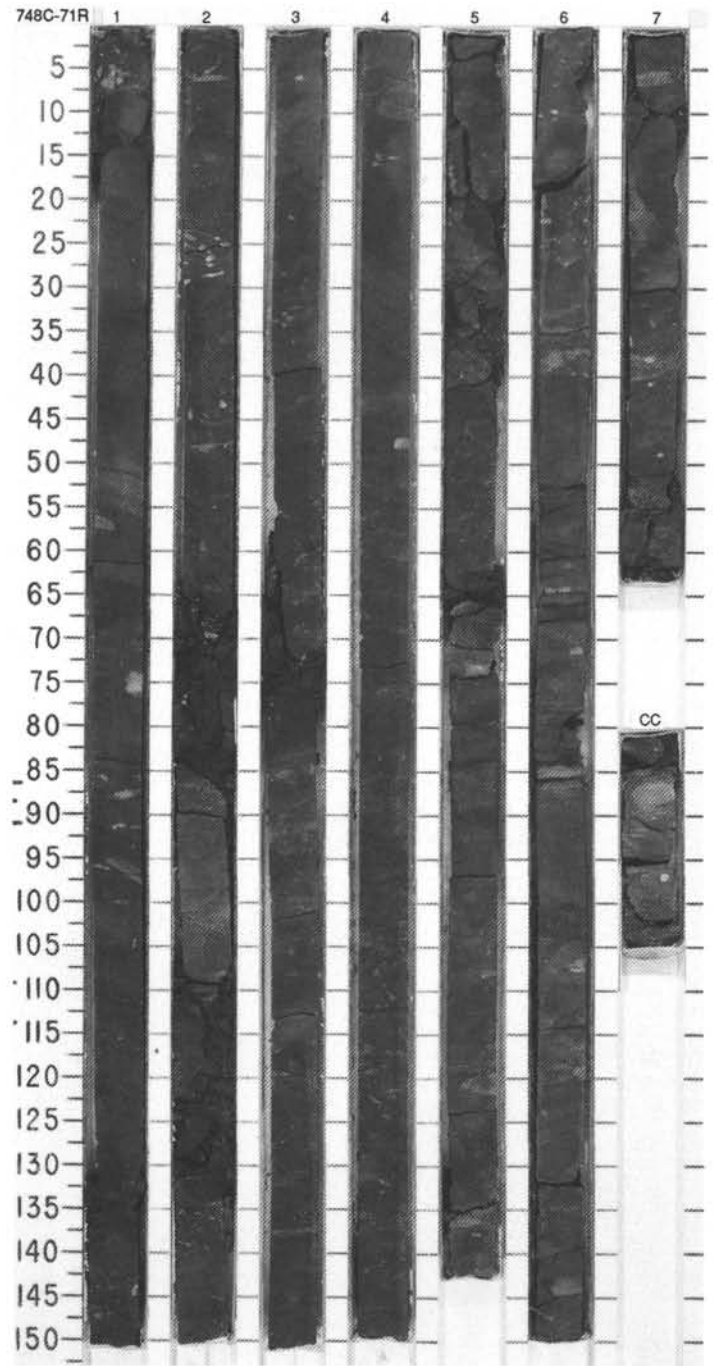
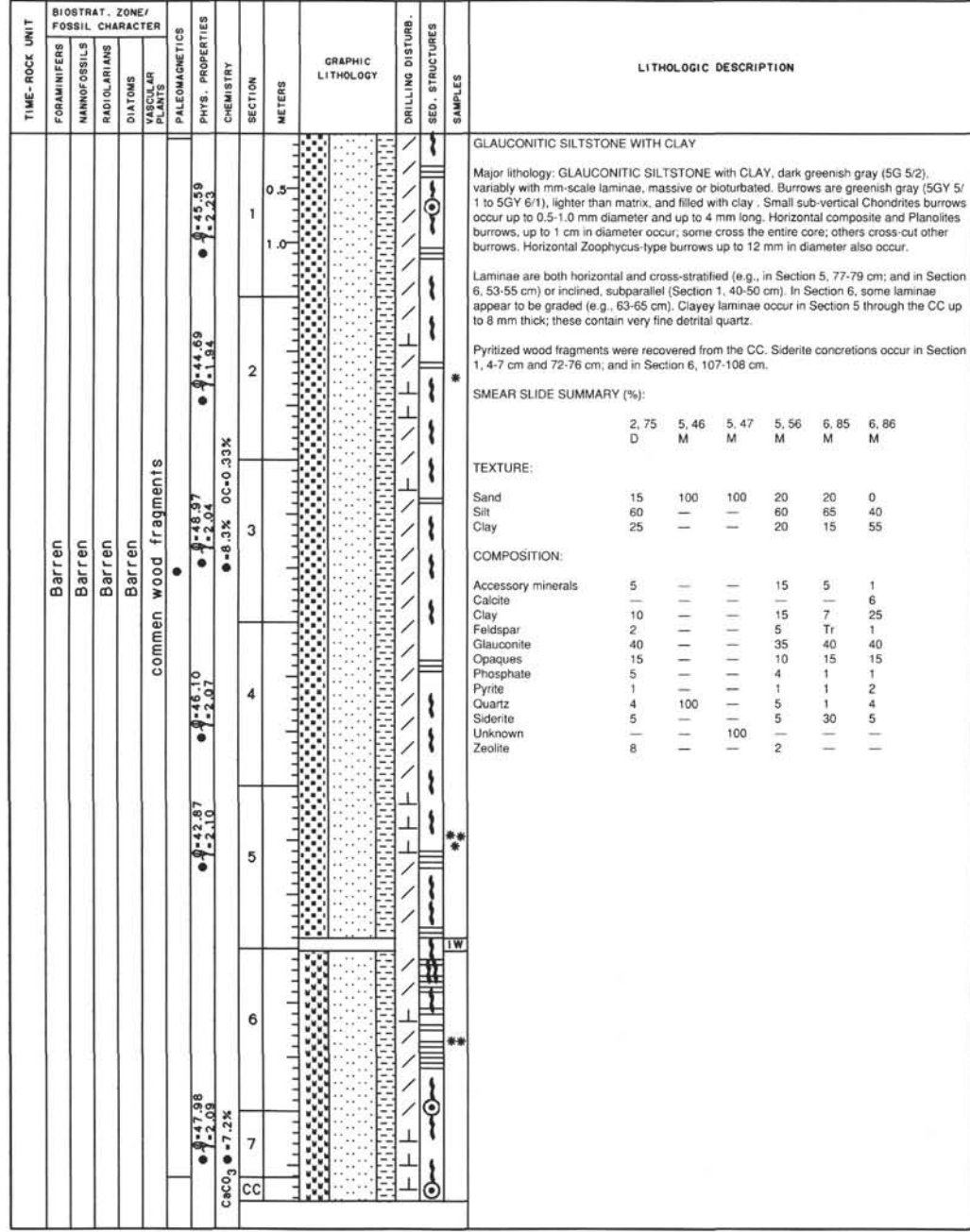
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																						
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS																																																																																
	Barren	Barren	not sampled	Barren	0-48.03 -2.11	OC=0.16% CaCO ₃ = 2.3%	1 2 CC	0.5 1.0					<p>GLAUCONITIC SILTSTONE WITH ZEOLITES</p> <p>Major lithology: GLAUCONITIC SILTSTONE with ZEOLITES, black (5Y 2.5/1), homogeneous and moderately indurated throughout. Moderately burrowed, with Zoophycos in Section 1, 66-67 cm; Planolites in Section 1, 0-91 cm; and Chondrites in Section 1, and 0-91 cm, and in 129-137 cm; and in Section 2, 2-10 cm. Large burrow (Thalassinoides?) in Section 2, 8-16 cm; finely laminated on mm-scale in Section 1, and in 90-95 cm; Section 2, 23-28 cm and 42-58 cm.</p> <p>Minor lithology: Claystone, gray (5Y 5/1), in Section 1, 140-141 cm. Sideritic silty claystone, gray (5Y 5/1), in Section 2, 52-54 cm. Sharp, irregular, somewhat burrowed contacts with siltstone.</p> <p>Drilling disturbance: Moderately fractured throughout.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 93</td> <td>1, 140</td> <td>2, 54</td> <td>2, 60</td> </tr> <tr> <td></td> <td>D</td> <td>M</td> <td>M</td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>30</td> <td>3</td> <td>30</td> <td>2</td> </tr> <tr> <td>Silt</td> <td>45</td> <td>25</td> <td>40</td> <td>43</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>72</td> <td>30</td> <td>55</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Clay</td> <td>Tr</td> <td>Tr</td> <td>Tr</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>25</td> <td>70</td> <td>35</td> <td>50</td> </tr> <tr> <td>Tr</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Glauconite</td> <td>45</td> <td>9</td> <td>50</td> <td>8</td> </tr> <tr> <td>Opauques</td> <td>5</td> <td>9</td> <td>10</td> <td>—</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>—</td> <td>Tr</td> <td>Tr</td> </tr> <tr> <td>Quartz</td> <td>10</td> <td>3</td> <td>5</td> <td>2</td> </tr> <tr> <td>Siderite</td> <td>—</td> <td>4</td> <td>—</td> <td>40</td> </tr> <tr> <td>Zeolite</td> <td>15</td> <td>5</td> <td>—</td> <td>—</td> </tr> </table>		1, 93	1, 140	2, 54	2, 60		D	M	M	M	Sand	30	3	30	2	Silt	45	25	40	43	Clay	25	72	30	55	Clay	Tr	Tr	Tr	—	Feldspar	25	70	35	50	Tr	Tr	—	—	—	Glauconite	45	9	50	8	Opauques	5	9	10	—	Phosphate	—	—	Tr	Tr	Quartz	10	3	5	2	Siderite	—	4	—	40	Zeolite	15	5	—	—
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SITE 748 HOLE C CORE 70R CORED INTERVAL 807.0-816.5 mbsf

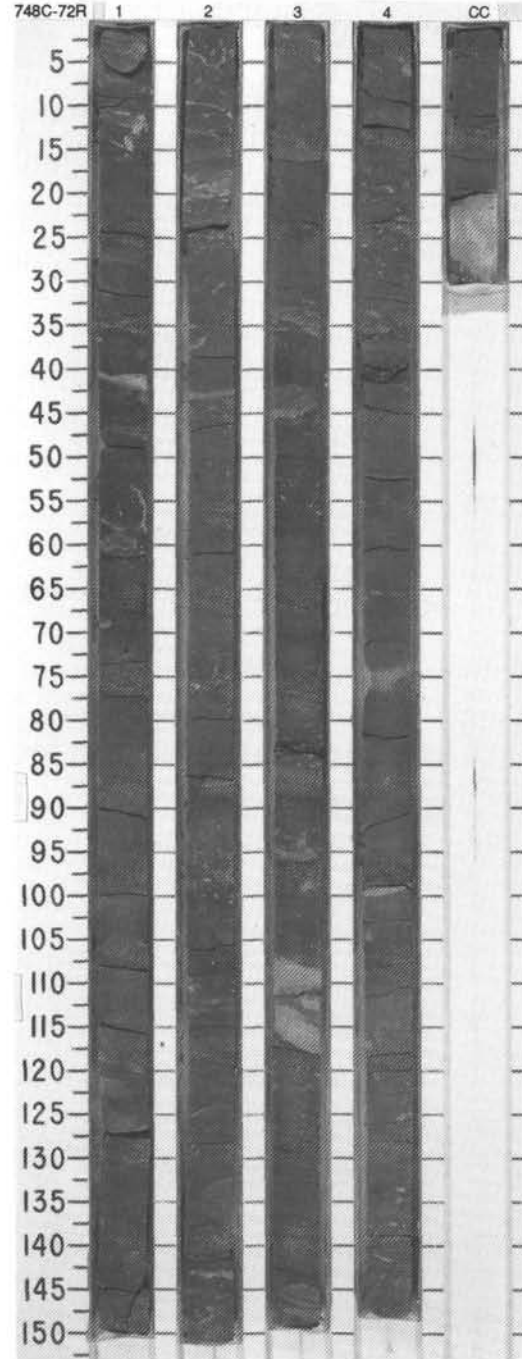
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER			PALEOMAGNETICS	PHYS. PROPERTIES CHEMISTRY	SECTION METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																																																																						
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	Barren	Barren	Barren	Barren	$\phi = 4.6, 1.2$ $\sigma = 2.03$	0.5 1.0		**		<p>CLAYEY GLAUCONITIC SILTSTONE</p> <p>Major lithology: CLAYEY GLAUCONITIC SILTSTONE, black (5Y 2.5/1) to grayish green (5G 5/2), with gray (5Y 6/1) burrows alternating with mm-laminae, composed of glauconite, altered grains, pyrite, clay, and zeolites. Many burrows are composed of siderite, including Planolites, composite burrows, and Chondrites. Large burrows up to 5 cm, concretionary, siderite-filled occur in Section 3, 5 cm; others are filled with gray to light brown clay. Cross-laminae in Section 2, 105-110 cm and 111-120 cm; and in Section 4, 37 cm. Possible 5-mm-scale grading in Section 4, 115 cm.</p> <p>N.B.: No CC.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 50</td> <td>1, 60</td> <td>2, 80</td> <td>2, 83</td> <td>2, 105</td> <td>3, 79</td> <td>4, 53</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>M</td> <td>M</td> <td>D</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>2</td> <td>25</td> <td>10</td> <td>10</td> <td>100</td> <td>30</td> <td>30</td> </tr> <tr> <td>Silt</td> <td>85</td> <td>55</td> <td>50</td> <td>60</td> <td>—</td> <td>50</td> <td>40</td> </tr> <tr> <td>Clay</td> <td>13</td> <td>20</td> <td>40</td> <td>30</td> <td>—</td> <td>20</td> <td>30</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>3</td> <td>5</td> <td>5</td> <td>3</td> <td>5</td> <td>5</td> <td>5</td> </tr> <tr> <td>Altered grains</td> <td>30</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Tr</td> <td>15</td> <td>35</td> <td>20</td> <td>15</td> <td>—</td> <td>26</td> <td>15</td> </tr> <tr> <td>Clay</td> <td>5</td> <td>—</td> <td>—</td> <td>Tr</td> <td>5</td> <td>—</td> <td>—</td> </tr> <tr> <td>Feldspar</td> <td>20</td> <td>25</td> <td>20</td> <td>10</td> <td>45</td> <td>10</td> <td>20</td> </tr> <tr> <td>Glauconite</td> <td>10</td> <td>5</td> <td>15</td> <td>10</td> <td>10</td> <td>5</td> <td>10</td> </tr> <tr> <td>Opauques</td> <td>Tr</td> <td>3</td> <td>8</td> <td>Tr</td> <td>10</td> <td>25</td> <td>30</td> </tr> <tr> <td>Phosphate</td> <td>5</td> <td>—</td> <td>5</td> <td>6</td> <td>5</td> <td>5</td> <td>3</td> </tr> <tr> <td>Pyrite</td> <td>5</td> <td>5</td> <td>10</td> <td>3</td> <td>15</td> <td>8</td> <td>5</td> </tr> <tr> <td>Quartz</td> <td>5</td> <td>4</td> <td>4</td> <td>51</td> <td>Tr</td> <td>1</td> <td>2</td> </tr> <tr> <td>Siderite</td> <td>2</td> <td>15</td> <td>10</td> <td>Tr</td> <td>2</td> <td>15</td> <td>10</td> </tr> <tr> <td>Zeolite</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>4, 67</td> </tr> <tr> <td></td> <td>M</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Silt</td> <td>100</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Glauconite</td> <td>4</td> </tr> <tr> <td>Quartz</td> <td>20</td> </tr> <tr> <td>Siderite</td> <td>70</td> </tr> <tr> <td>Zeolite</td> <td>2</td> </tr> </table>		1, 50	1, 60	2, 80	2, 83	2, 105	3, 79	4, 53		D	D	M	M	D	D	D	Sand	2	25	10	10	100	30	30	Silt	85	55	50	60	—	50	40	Clay	13	20	40	30	—	20	30	Accessory minerals	3	5	5	3	5	5	5	Altered grains	30	—	—	—	—	—	—	Tr	15	35	20	15	—	26	15	Clay	5	—	—	Tr	5	—	—	Feldspar	20	25	20	10	45	10	20	Glauconite	10	5	15	10	10	5	10	Opauques	Tr	3	8	Tr	10	25	30	Phosphate	5	—	5	6	5	5	3	Pyrite	5	5	10	3	15	8	5	Quartz	5	4	4	51	Tr	1	2	Siderite	2	15	10	Tr	2	15	10	Zeolite									4, 67		M	Silt	100	Glauconite	4	Quartz	20	Siderite	70	Zeolite	2
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Zeolite	2																																																																																																																																																															
	Barren	Barren	Barren	Barren	$\phi = 6.7, 1.1$ $\sigma = 2.72$			**																																																																																																																																																								
	Barren	Barren	Barren	Barren	$\phi = 7.2\%$ OC=0.14% $\phi = 4.5, 3.9$ $\sigma = 2.12$			**																																																																																																																																																								
	Barren	Barren	Barren	Barren	$\phi = 1.6\%$ CaCO ₃			**																																																																																																																																																								



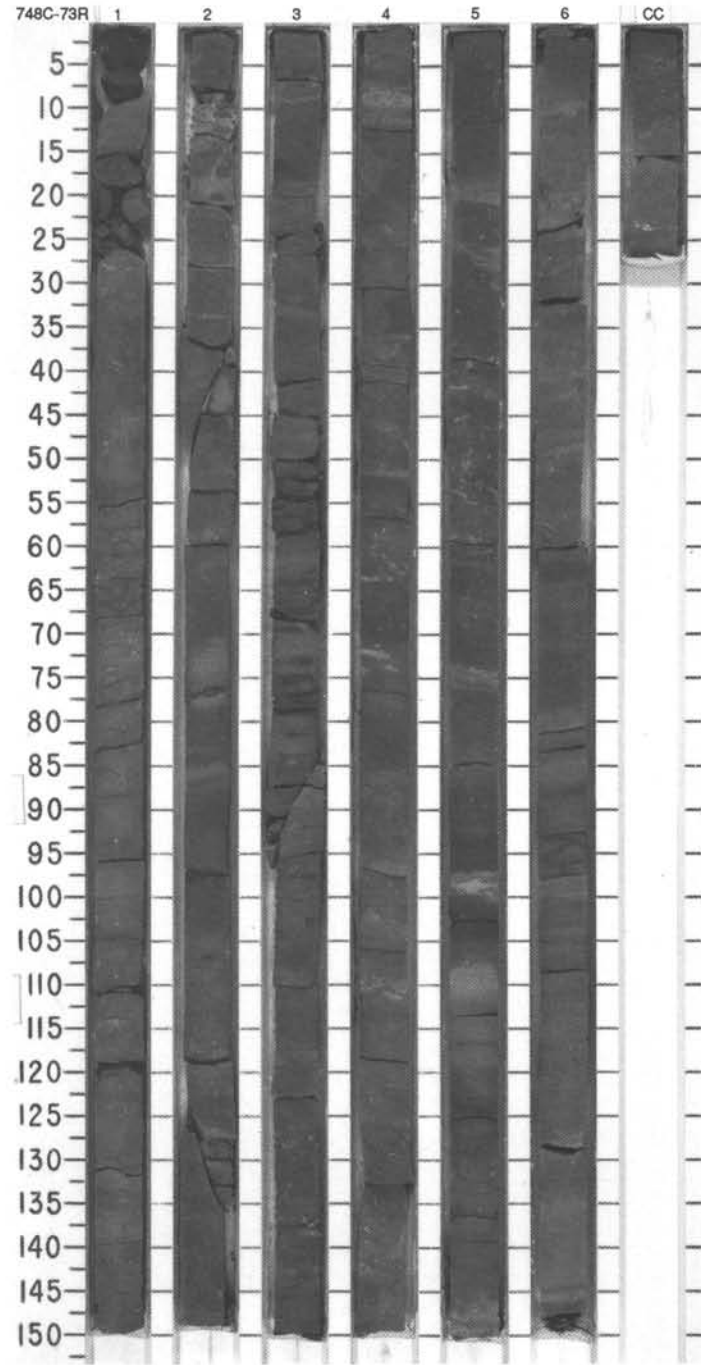


SITE 748 HOLE C CORE 72R CORED INTERVAL 826.5-835.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																																												
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																																																					
	Barrén	Barrén	not sampled	Barrén		3.54 1.67 7.5%		1	0.5				GLAUCONITIC SILTSTONE Major lithology: GLAUCONITIC SILTSTONE, dark greenish gray (5G 5/2) to black (5Y 2.5/1), with mm-scale laminae, some graded, some cross-cut. Also contains bioturbated intervals composed of black to light greenish colors; most horizontal, 2-6 mm wide. Siderite occurs in the coarser fraction, as does pyritized charcoal (wood fragments). Concretions occur in Section 3, 107-109 cm, and the CC, 20-30 cm; contain calcareous clayey silt to silty clay, greenish gray (5Y 7/1). SMEAR SLIDE SUMMARY (%): <table border="1"> <tr> <td></td> <td>1, 72</td> <td>2, 66</td> <td>3, 109</td> <td>3, 110</td> <td>4, 73</td> </tr> <tr> <td></td> <td>M</td> <td>D</td> <td>M</td> <td>M</td> <td>M</td> </tr> </table> TEXTURE: <table border="1"> <tr> <td>Sand</td> <td>45</td> <td>5</td> <td>5</td> <td>—</td> <td>10</td> </tr> <tr> <td>Silt</td> <td>30</td> <td>75</td> <td>70</td> <td>50</td> <td>75</td> </tr> <tr> <td>Clay</td> <td>25</td> <td>20</td> <td>25</td> <td>50</td> <td>15</td> </tr> </table> COMPOSITION: <table border="1"> <tr> <td>Accessory minerals</td> <td>1</td> <td>2</td> <td>—</td> <td>6</td> <td>5</td> </tr> <tr> <td>Calcite</td> <td>—</td> <td>—</td> <td>15</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>9</td> <td>45</td> <td>40</td> <td>35</td> <td>15</td> </tr> <tr> <td>Feldspar</td> <td>1</td> <td>2</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Glauconite</td> <td>35</td> <td>20</td> <td>10</td> <td>20</td> <td>20</td> </tr> <tr> <td>Micrite</td> <td>—</td> <td>—</td> <td>14</td> <td>—</td> <td>—</td> </tr> <tr> <td>Opalines</td> <td>15</td> <td>15</td> <td>2</td> <td>15</td> <td>20</td> </tr> <tr> <td>Organic matter</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>15</td> </tr> <tr> <td>Phosphate</td> <td>25</td> <td>2</td> <td>—</td> <td>5</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>2</td> <td>2</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Quartz</td> <td>2</td> <td>10</td> <td>5</td> <td>6</td> <td>3</td> </tr> <tr> <td>Siderite</td> <td>10</td> <td>1</td> <td>10</td> <td>5</td> <td>15</td> </tr> <tr> <td>Zeolite</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> </table>		1, 72	2, 66	3, 109	3, 110	4, 73		M	D	M	M	M	Sand	45	5	5	—	10	Silt	30	75	70	50	75	Clay	25	20	25	50	15	Accessory minerals	1	2	—	6	5	Calcite	—	—	15	—	—	Clay	9	45	40	35	15	Feldspar	1	2	—	5	—	Glauconite	35	20	10	20	20	Micrite	—	—	14	—	—	Opalines	15	15	2	15	20	Organic matter	—	—	—	—	15	Phosphate	25	2	—	5	—	Pyrite	2	2	1	2	3	Quartz	2	10	5	6	3	Siderite	10	1	10	5	15	Zeolite	Tr	—	—	—	—
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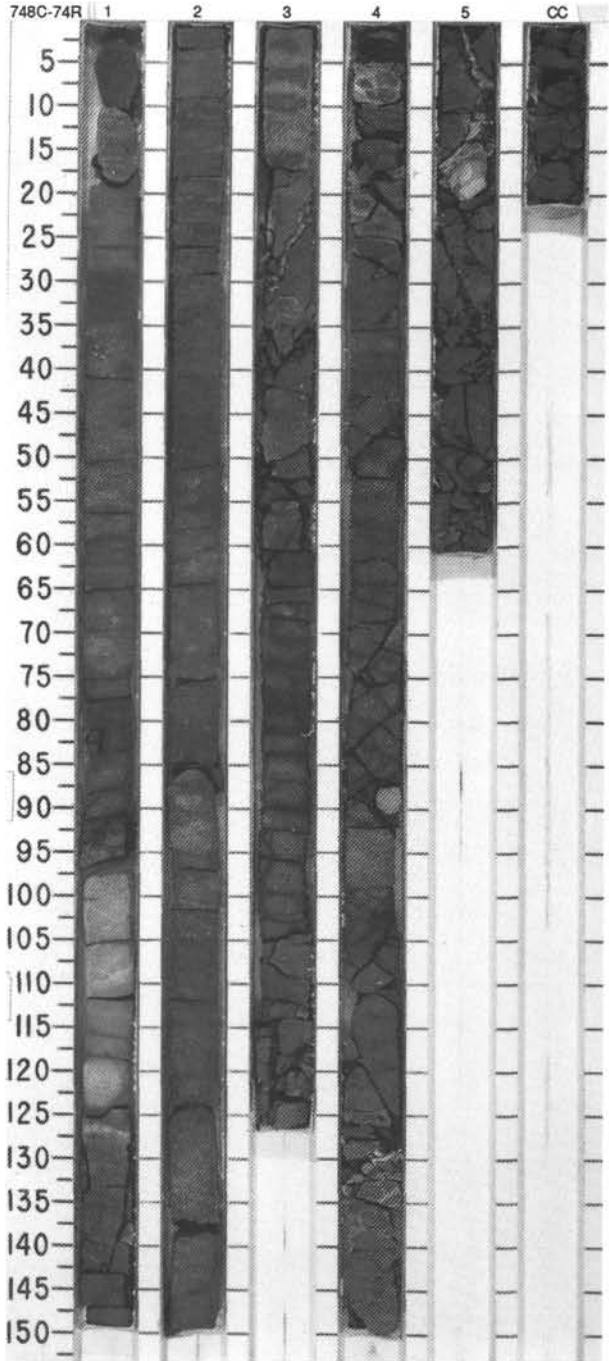


TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																
	FORAMINIFERS	NAUPOSSILS	RADIOLARIANS	DIAATOMS																																																																																									
	Barren	Barren	Barren	Barren	● $\beta = 45.33$ ● $\beta = 47.89$ ● $\beta = 2.14$ ● $\beta = 4.36$ ● $\beta = 2.06$ ● $\beta = 3.5\%$ OC=0.15%			1	0.5				<p>GLAUCONITIC SILTSTONE</p> <p>Major lithology: GLAUCONITIC SILTSTONE, black (5Y 2.5/1), calcite-cemented, laminated in some intervals. Sideritic burrows occur in Section 1, 59-65 cm and 69-77 cm. A large wood chip occurs in Section 1, 142 cm. Slickensided faults with calcite linings occur in Section 2, 37-50 cm and 127-137 cm; and in Section 3, 82-97 cm. Graded beds and cross-laminae occur in Sections 5 and 6. Clay rip-up clasts occur in Section 4, 109 cm and 112 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2, 46</td> <td>2, 76</td> <td>3, 53</td> <td>4, 140</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> <p>* TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>100</td> <td>10</td> <td>—</td> <td>20</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>80</td> <td>60</td> <td>70</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>40</td> <td>10</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>—</td> <td>5</td> <td>10</td> <td>1</td> </tr> <tr> <td>Calcite</td> <td>100</td> <td>15</td> <td>Tr</td> <td>25</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>35</td> <td>1</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>5</td> <td>Tr</td> <td>5</td> </tr> <tr> <td>Glauconite</td> <td>—</td> <td>30</td> <td>20</td> <td>30</td> </tr> <tr> <td>Opaques</td> <td>—</td> <td>5</td> <td>5</td> <td>15</td> </tr> <tr> <td>Organic matter</td> <td>—</td> <td>—</td> <td>7</td> <td>1</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>10</td> <td>1</td> <td>5</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>—</td> <td>2</td> <td>1</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>10</td> <td>5</td> <td>10</td> </tr> <tr> <td>Siderite</td> <td>—</td> <td>10</td> <td>10</td> <td>5</td> </tr> </table>		2, 46	2, 76	3, 53	4, 140		D	D	M	D	Sand	100	10	—	20	Silt	—	80	60	70	Clay	—	10	40	10	Accessory minerals	—	5	10	1	Calcite	100	15	Tr	25	Clay	—	10	35	1	Feldspar	—	5	Tr	5	Glauconite	—	30	20	30	Opaques	—	5	5	15	Organic matter	—	—	7	1	Phosphate	—	10	1	5	Pyrite	—	—	2	1	Quartz	—	10	5	10	Siderite	—	10	10	5
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	Barren	Barren	Barren	Barren				3	1.5																																																																																				
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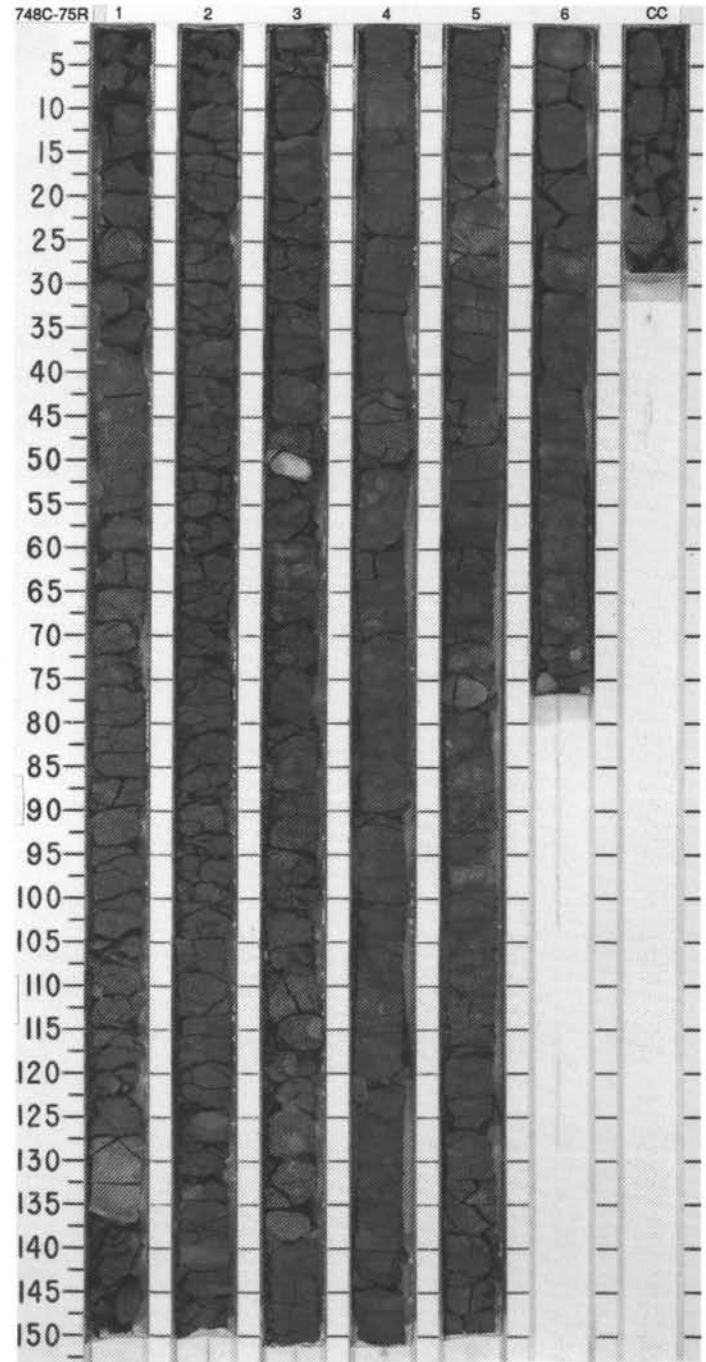


SITE 748 HOLE C CORE 74R CORED INTERVAL 845.0-854.5 mdsf

TIME-ROCK UNIT	BIOTRAT. ZONE/ FOSSIL CHARACTER	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS NANNOFOSSILS RADIOLARIANS DIATOMS									<p>GLAUCONITIC SILTSTONE</p> <p>Major lithology: GLAUCONITIC SILTSTONE, black (5Y 2.5/1), characterized by laminations, clay-filled burrows, graded intervals (i.e., all of Section 2), and faults (some calcite-lined). Laminations predominantly occur in Section 1, 0-30 cm; burrows in Sections 1, 2, and the top half of Section 3. Faults occur in Sections 3, 4, and 5. A concretion surrounding a mollusc shell occurs in Section 4, 87-90 cm. Tiny pyritized or carbonized wood fragments occur throughout and are concentrated in a layer in Section 1, 110-127 cm.</p>
	Barren Barren Barren Barren				1	0.5 1.0	[Pattern: fine dots]	[Symbol: vertical lines]		
					2		[Pattern: coarse dots]	[Symbol: vertical lines]		
					3		[Pattern: fine dots]	[Symbol: vertical lines]		
					4		[Pattern: coarse dots]	[Symbol: vertical lines]		
					5		[Pattern: fine dots]	[Symbol: vertical lines]		
					CC		[Pattern: fine dots]	[Symbol: vertical lines]		

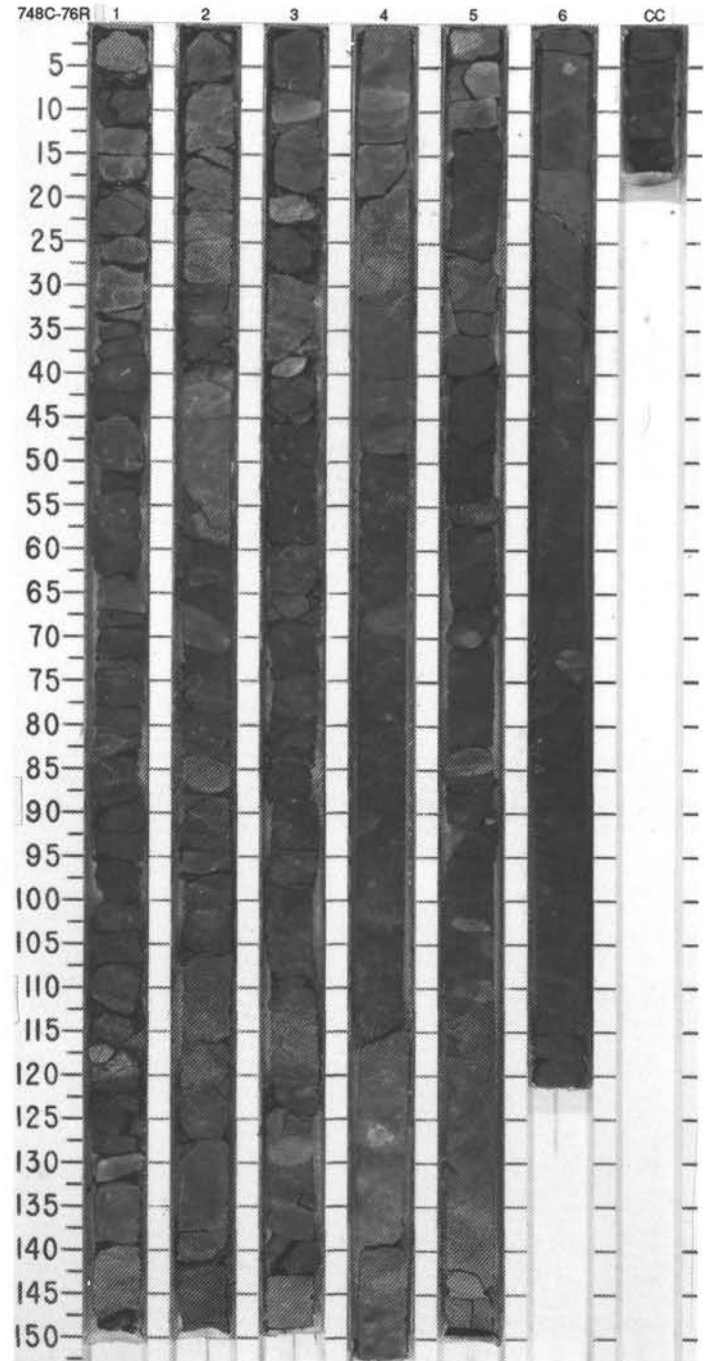


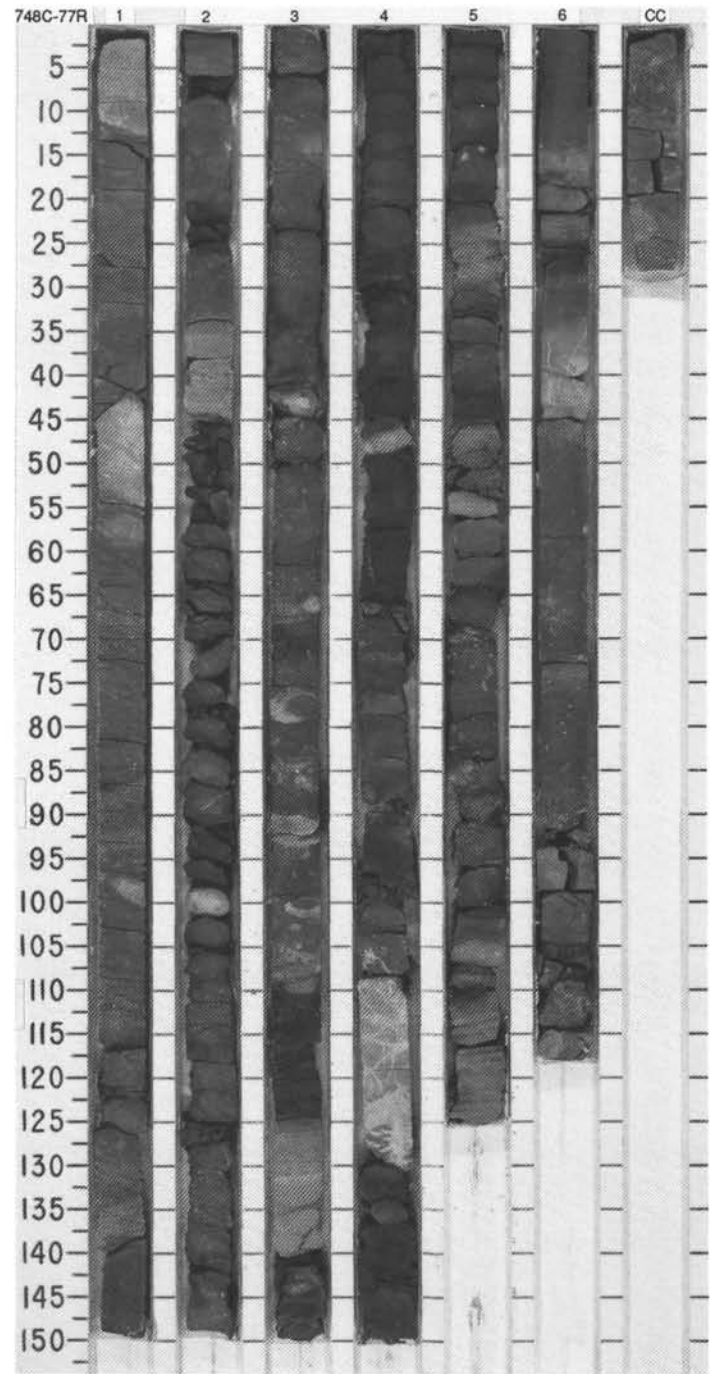
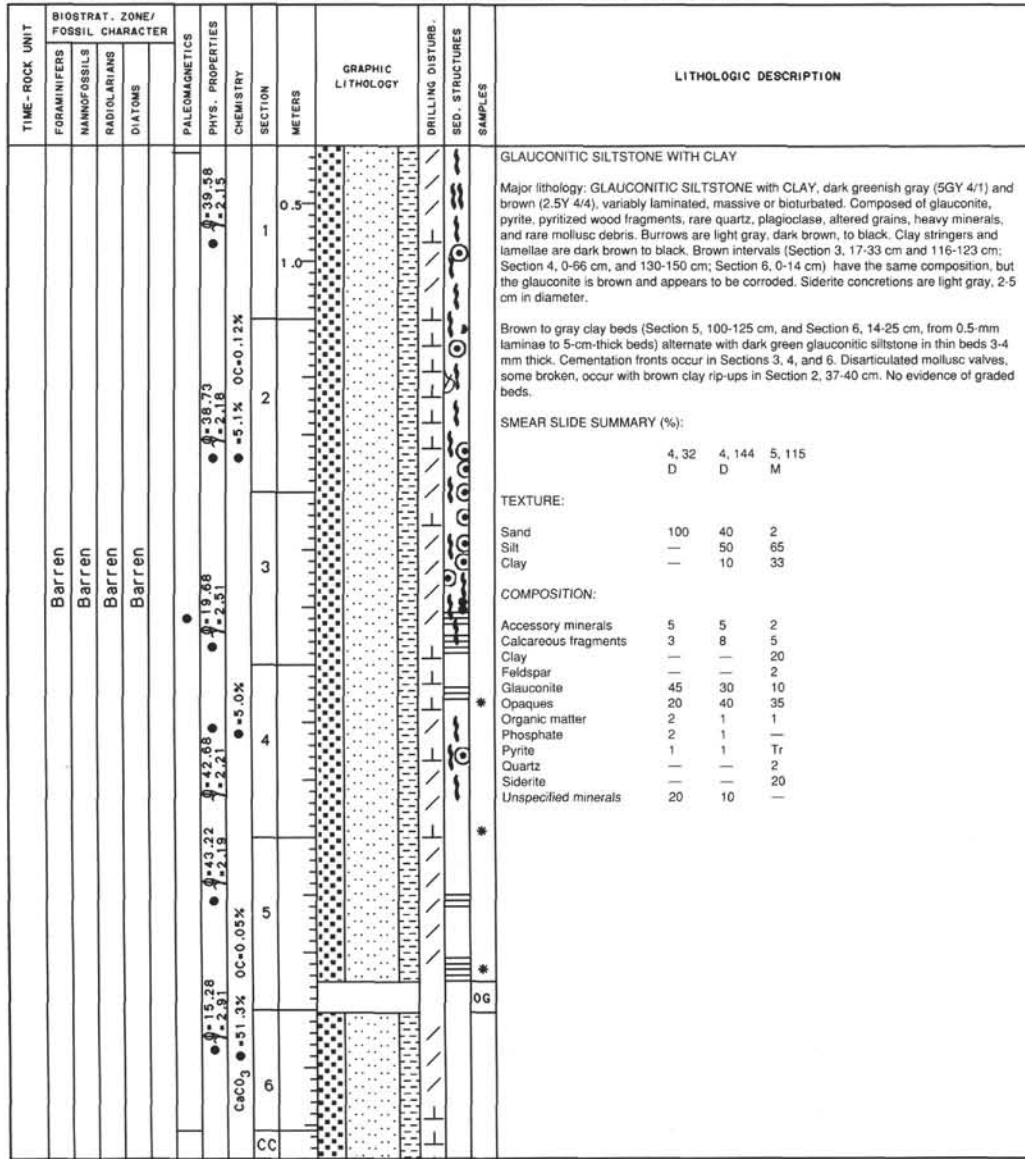
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB. SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																				
	FORAMINIFERS	NANOFOSSILS	RADIOLARIANS	DIATOMS																																																													
	Barren	Barren	Barren	Barren	●	● 54.99 ● 54.39 ● 2.03		1	0.5 1.0				<p>GLAUCONITIC SILTSTONE</p> <p>Major lithology: GLAUCONITIC SILTSTONE, dark greenish gray (5G 4/1) and black (5Y 2.5/1); moderately indurated throughout. Massive, laminated on a cm-scale. Slightly fissile in Section 6. Burrowed throughout with laminae in Section 6, 2-4 cm and 26-29 cm. Variable carbonate content in cements in Section 3, 51-53 cm, and Section 4, 59-60 cm.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>2.77</td> <td>3.50</td> <td>5.65</td> </tr> <tr> <td>D</td> <td>M</td> <td>D</td> <td></td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>15</td> <td>25</td> <td>25</td> </tr> <tr> <td>Silt</td> <td>65</td> <td>70</td> <td>55</td> </tr> <tr> <td>Clay</td> <td>20</td> <td>5</td> <td>20</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcite</td> <td>2</td> <td>—</td> <td>—</td> </tr> <tr> <td>Clay</td> <td>30</td> <td>—</td> <td>30</td> </tr> <tr> <td>Feldspar</td> <td>1</td> <td>—</td> <td>2</td> </tr> <tr> <td>Glauconite</td> <td>40</td> <td>—</td> <td>45</td> </tr> <tr> <td>Opauques</td> <td>4</td> <td>2</td> <td>6</td> </tr> <tr> <td>Quartz</td> <td>4</td> <td>—</td> <td>6</td> </tr> <tr> <td>Siderite</td> <td>8</td> <td>98</td> <td>8</td> </tr> <tr> <td>Zeolite</td> <td>8</td> <td>—</td> <td>1</td> </tr> </table>		2.77	3.50	5.65	D	M	D		Sand	15	25	25	Silt	65	70	55	Clay	20	5	20	Calcite	2	—	—	Clay	30	—	30	Feldspar	1	—	2	Glauconite	40	—	45	Opauques	4	2	6	Quartz	4	—	6	Siderite	8	98	8	Zeolite	8	—	1
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	Barren	Barren	Barren	Barren	●	● 50.32 ● 2.20 ● 5.8% OC=0.21%		2																																																									
	Barren	Barren	Barren	Barren	●	● 41.54 ● 2.21 ● 38.6%		3																																																									
	Barren	Barren	Barren	Barren	●	● 38.6%		4																																																									
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SITE 748 HOLE C CORE 76R CORED INTERVAL 864.0-873.5 mbsf

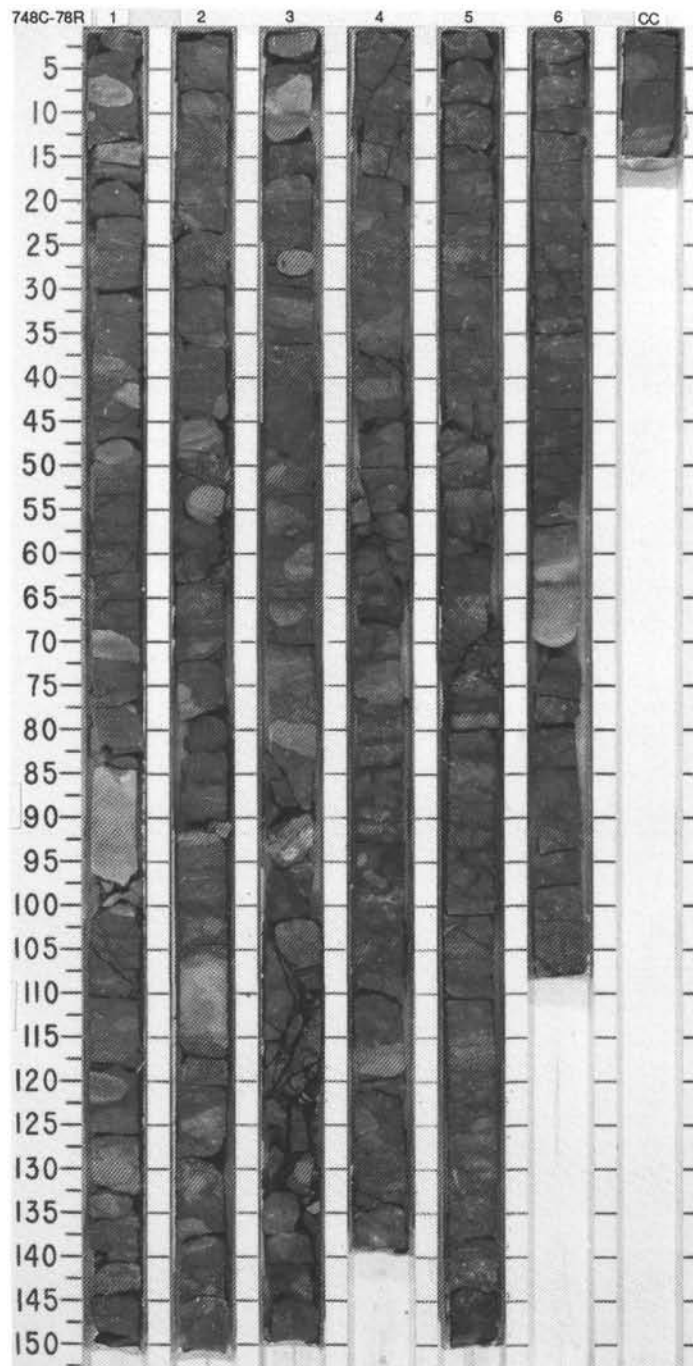
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																											
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS																																																																																					
	Barren	Barren	Barren	Barren	• $\beta = 46.94$ • $\alpha = 2.23$			1	0.5 1.0					<p>GLAUCONITIC SILTSTONE</p> <p>Major lithology: GLAUCONITIC SILTSTONE, dark greenish gray (5G 4/1), moderate to severe bioturbation throughout. Massive bedding with variable carbonate in matrix; siderite concretions occur.</p> <p>Drilling disturbance: Severe drilling fractures from top of core through Section 5, 80 cm, and moderate to slight fracturing below.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 28</td> <td>2, 44</td> <td>3, 38</td> <td>5, 41</td> </tr> <tr> <td></td> <td>D</td> <td>D</td> <td>M</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>20</td> <td>15</td> <td>4</td> <td>20</td> </tr> <tr> <td>Silt</td> <td>60</td> <td>60</td> <td>91</td> <td>55</td> </tr> <tr> <td>Clay</td> <td>20</td> <td>25</td> <td>5</td> <td>25</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Calcite</td> <td>—</td> <td>30</td> <td>—</td> <td>10</td> </tr> <tr> <td>Clay</td> <td>30</td> <td>15</td> <td>2</td> <td>25</td> </tr> <tr> <td>Feldspar</td> <td>1</td> <td>1</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Glaucinite</td> <td>35</td> <td>35</td> <td>2</td> <td>40</td> </tr> <tr> <td>Opaques</td> <td>5</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>2</td> <td>—</td> <td>Tr</td> </tr> <tr> <td>Pyrite</td> <td>—</td> <td>2</td> <td>2</td> <td>3</td> </tr> <tr> <td>Quartz</td> <td>15</td> <td>5</td> <td>—</td> <td>12</td> </tr> <tr> <td>Siderite</td> <td>9</td> <td>12</td> <td>94</td> <td>5</td> </tr> <tr> <td>Zeolite</td> <td>5</td> <td>—</td> <td>—</td> <td>5</td> </tr> </table>		1, 28	2, 44	3, 38	5, 41		D	D	M	D	Sand	20	15	4	20	Silt	60	60	91	55	Clay	20	25	5	25	Calcite	—	30	—	10	Clay	30	15	2	25	Feldspar	1	1	—	Tr	Glaucinite	35	35	2	40	Opaques	5	—	—	—	Phosphate	—	2	—	Tr	Pyrite	—	2	2	3	Quartz	15	5	—	12	Siderite	9	12	94	5	Zeolite	5	—	—	5
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Siderite	9	12	94	5																																																																																					
Zeolite	5	—	—	5																																																																																					
	Barren	Barren	Barren	Barren	• $\beta = 49.75$ • $\alpha = 2.20$ • $\alpha = 4.3\%$ OC=0.52%		2																																																																																		
	Barren	Barren	Barren	Barren	• $\beta = 49.75$ • $\alpha = 2.15$ • $\alpha = 6.3\%$ OC=0.30%		3																																																																																		
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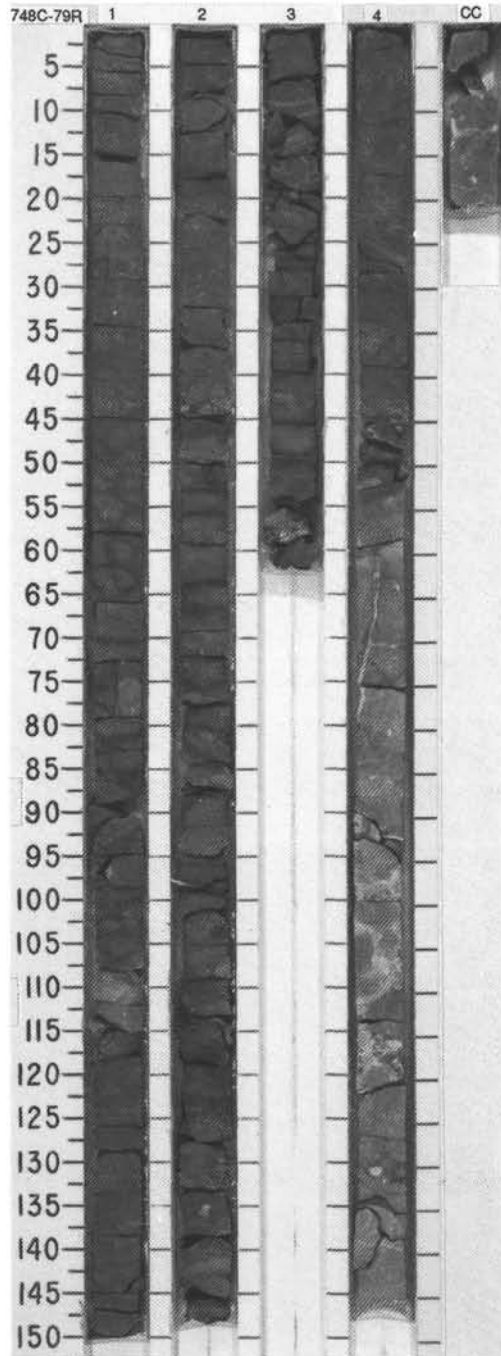
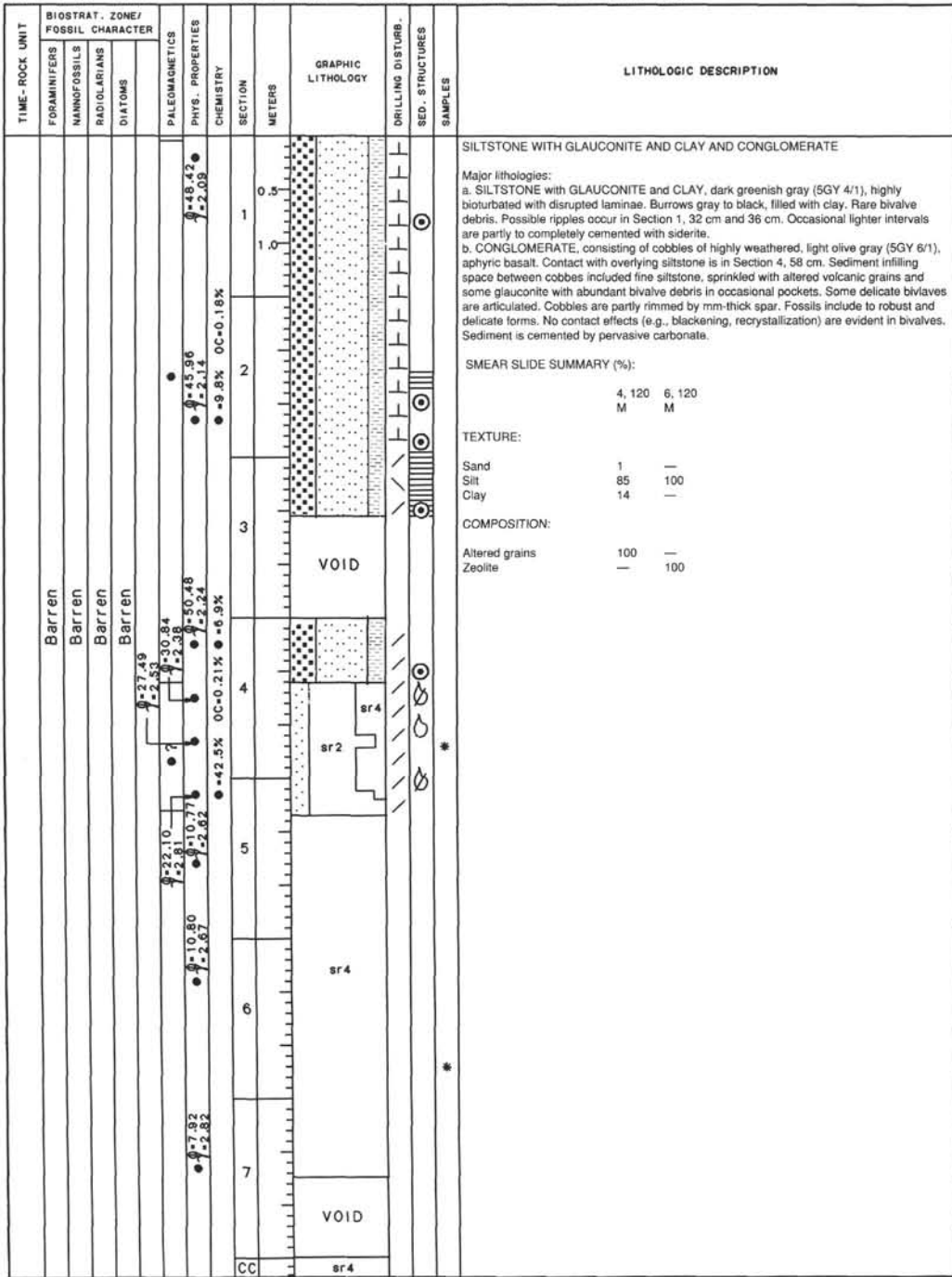




SITE 748 HOLE C CORE 78R CORED INTERVAL 883.0-892.0 mbsf

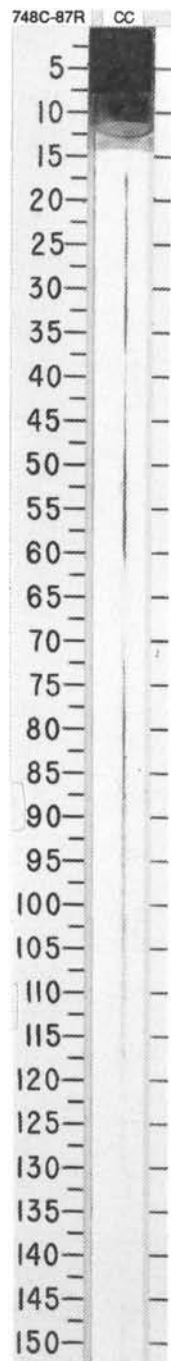
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION																																																																																															
	FORAMINIFERS	NAUPOFOSSILS	RADIOLARIANS	DIAZONS																																																																																																									
TURONIAN	Barren	Barren	Barren	Barren										<p>GLAUCONITIC SILTSTONE WITH CLAY</p> <p>Major lithology: GLAUCONITIC SILTSTONE with CLAY, dark to greenish gray (SG 4/1 to 5G 5/1). Variable contents of clay and sand components. Bedding generally obliterated by moderate burrowing, mainly 0.5-cm-scale cylindrical subparallel burrows. Some levels retain indistinct evidence of mm-scale layering and current laminations. Fissile partings; brittle and hard in places. Generally lacking calcite but some concretions are cemented by siderite or partly cemented by calcite. Burrows leave patchy zones with coarser and finer grain sizes. Components include abraded grains of quartz, feldspar, and other coated grains plus fragments of wood. In Section 3, 90-97 cm, large, coarse, fibrous calcite fracture filling, at approximately 45o (disturbed).</p> <p>Minor lithology: Siderite-cemented concretions, hard green gray (5GY 6/1); occur as zones of host lithology cemented by siderite. Some also have a calcite component (e.g., Section 1, 83-96 cm; Section 2, 59-71 cm and 105-116 cm). Generally located around burrows, although cementation fronts pass through structures in host lithology. Several concretions are clay-rich.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <table border="1"> <tr> <td></td> <td>1, 8</td> <td>1, 14</td> <td>3, 90</td> <td>4, 53</td> </tr> <tr> <td>D</td> <td></td> <td>M</td> <td>D</td> <td>D</td> </tr> </table> <p>TEXTURE:</p> <table border="1"> <tr> <td>Sand</td> <td>—</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Silt</td> <td>—</td> <td>89</td> <td>89</td> <td>87</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>10</td> <td>12</td> </tr> </table> <p>COMPOSITION:</p> <table border="1"> <tr> <td>Accessory minerals</td> <td>—</td> <td>20</td> <td>20</td> <td>25</td> </tr> <tr> <td>Altered grains</td> <td>10</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Calcareous fragments</td> <td>—</td> <td>2</td> <td>4</td> <td>3</td> </tr> <tr> <td>Clay</td> <td>—</td> <td>10</td> <td>12</td> <td>12</td> </tr> <tr> <td>Feldspar</td> <td>—</td> <td>1</td> <td>3</td> <td>2</td> </tr> <tr> <td>Fish</td> <td>Tr</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Glauconite</td> <td>20</td> <td>20</td> <td>30</td> <td>26</td> </tr> <tr> <td>Opauques</td> <td>10</td> <td>—</td> <td>5</td> <td>5</td> </tr> <tr> <td>Organic matter</td> <td>—</td> <td>Tr</td> <td>1</td> <td>1</td> </tr> <tr> <td>Phosphate</td> <td>—</td> <td>—</td> <td>—</td> <td>1</td> </tr> <tr> <td>Plagioclase</td> <td>2</td> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>Pyrite</td> <td>4</td> <td>3</td> <td>6</td> <td>5</td> </tr> <tr> <td>Quartz</td> <td>—</td> <td>—</td> <td>7</td> <td>5</td> </tr> <tr> <td>Siderite</td> <td>50</td> <td>40</td> <td>7</td> <td>10</td> </tr> </table>		1, 8	1, 14	3, 90	4, 53	D		M	D	D	Sand	—	1	1	1	Silt	—	89	89	87	Clay	—	10	10	12	Accessory minerals	—	20	20	25	Altered grains	10	—	—	—	Calcareous fragments	—	2	4	3	Clay	—	10	12	12	Feldspar	—	1	3	2	Fish	Tr	—	—	—	Glauconite	20	20	30	26	Opauques	10	—	5	5	Organic matter	—	Tr	1	1	Phosphate	—	—	—	1	Plagioclase	2	—	—	—	Pyrite	4	3	6	5	Quartz	—	—	7	5	Siderite	50	40	7	10
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	Barren	Barren	Barren	Barren	• 9-45.59 • 7-2.11	• 9-47.25 • 7-2.13		1	0.5																																																																																																				
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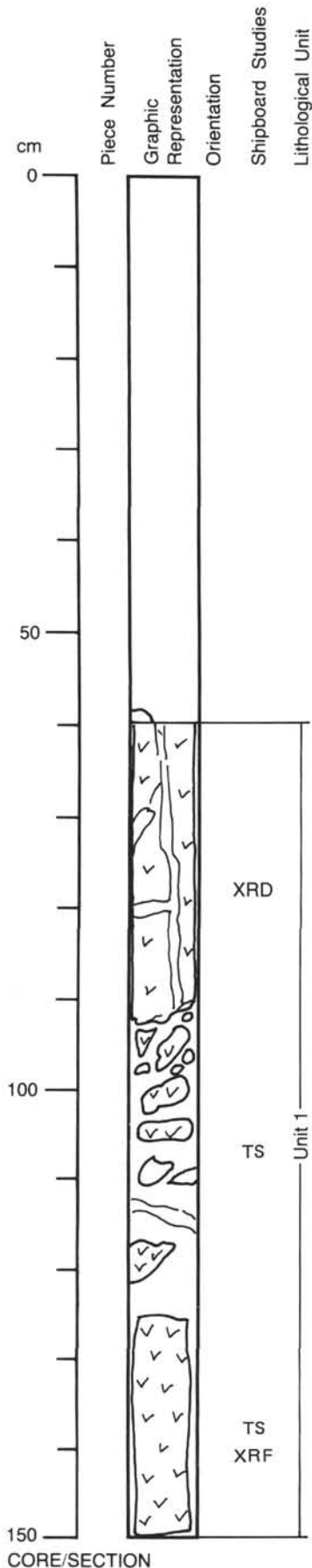


SITE 748 HOLE C CORE 87R CORED INTERVAL 934.0-935.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER				PALEOMAGNETICS	PHYS. PROPERTIES CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	FORAMINIFERS	NANNOFOSSILS	RADIOLARIIANS	DIATOMS									
no sample							CC			X	*		<p>CLAYSTONE (ALTERED BASALT) and ALTERED BASALT CHIPS</p> <p>Major lithology: CLAYSTONE and ALTERED BASALT CHIPS, grayish green (5G 4/2); soapy texture, very small scale (0.5 mm) lenticular bedding of creamy white claystone (5Y 8/2). A 3-cm claystone piece (altered basalt) occurs; also a piece of olive gray (5Y 4/2) claystone, homogeneous in smear slide, contains vertical and horizontal seams with siderite and calcite.</p> <p>Drilling disturbance: Highly brecciated.</p> <p>SMEAR SLIDE SUMMARY (%):</p> <p style="text-align: right;">CC, 10 D</p> <p>TEXTURE:</p> <p>Silt 5 Clay 95</p> <p>COMPOSITION:</p> <p>Clay 100</p>



120-748C-79R-4



UNIT 1: GREEN SILTSTONES

79R-1 0 cm to 79R-4 60 cm

See sedimentary visual core descriptions.

UNIT 1A: APHYRIC BASALT

79R-4 60-90 cm

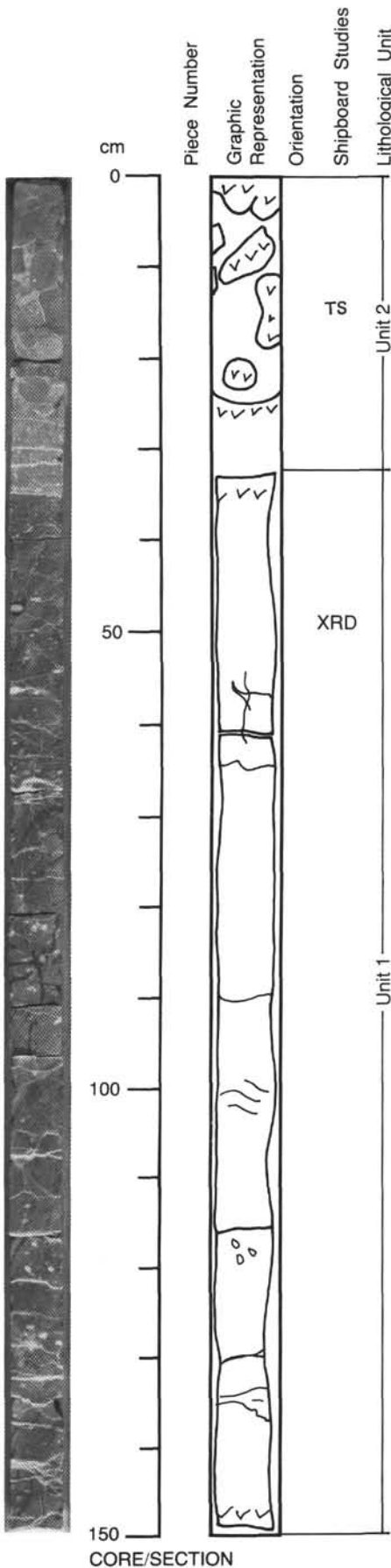
- CONTACTS:** Not determined.
- PHENOCRYSTS:** Aphyric.
- GROUNDMASS:** Microcrystalline.
- VESICLES:** 3%, 1-3 mm, subround, irregularly distributed, filled with calcite.
- COLOR:** Light gray green.
- STRUCTURE:** Not determined.
- ALTERATION:** High, pyrite in groundmass.
- VEINS/FRACTURES:** 1-3 mm thick, infilled with calcite, quartz, clays.

UNIT 1B: CONGLOMERATE WITH VOLCANIC PEBBLES

79R-4 90 cm to 79R-5 25 cm

Rounded volcanic pebbles (3 mm-6 cm) identical to the aphyric basalts from interval 79R-4 60-90 cm above. Pebbles have a 1 mm chilled margin (?) and are rimmed by calcite. Matrix: Calcareous sediment with shell fragments containing reworked pebbles of limestone.

120-748C-79R-5



UNIT 1B: CONTINUED

74R-5 0-25 cm

See Section 120-748C-79R-4

UNIT 1C: SPARSELY PLAGIOCLASE PHYRIC BASALT

79R-5 25-33 cm

CONTACTS: Not determined.
PHENOCRYSTS: Plagioclase - 1%, 3 mm, lath-shaped.
GROUNDMASS: Microcrystalline.
VESICLES: 2%, 1-8 mm, filled with calcite.
COLOR: Light green gray.
STRUCTURE: Not determined.
ALTERATION: High.
VEINS/FRACTURES: (?)%, 0.5-3 mm, horizontal, filled with calcite.

UNIT 1D: APHYRIC BASALT

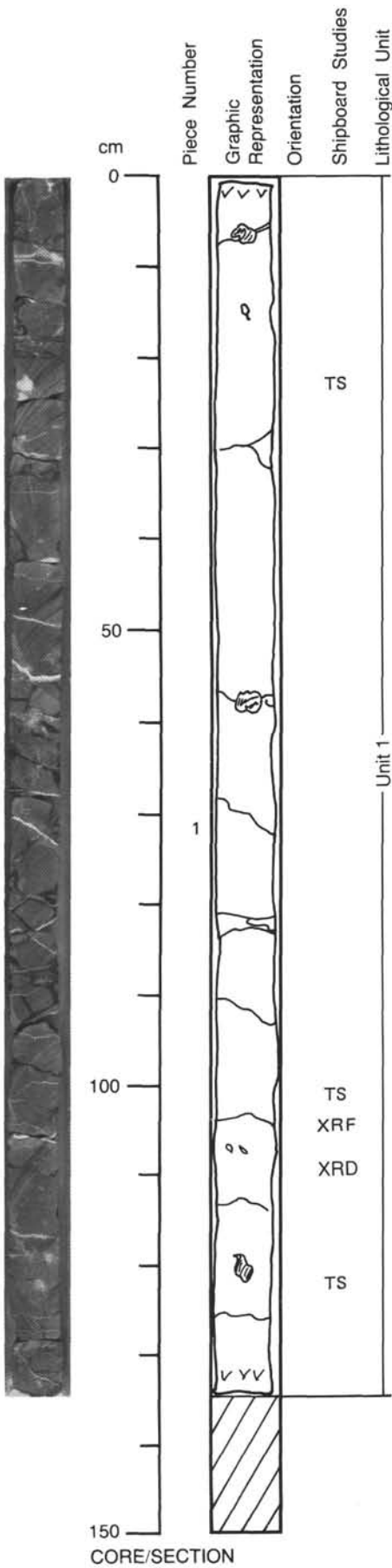
79R-5 33 cm - 79R-7 72 cm

CONTACTS: Not determined.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Microcrystalline.
VESICLES: (?)%, 0.5-5 mm, filled with calcite, zeolites, quartz, and green clays.
COLOR: Medium to dark gray.
STRUCTURE: Not determined.
ALTERATION: Moderate to high.
VEINS/FRACTURES: (?)%, 0.5-5 mm, mostly horizontal filled with calcite. Veins crosscut the vesicles.

120-748C-79R-6

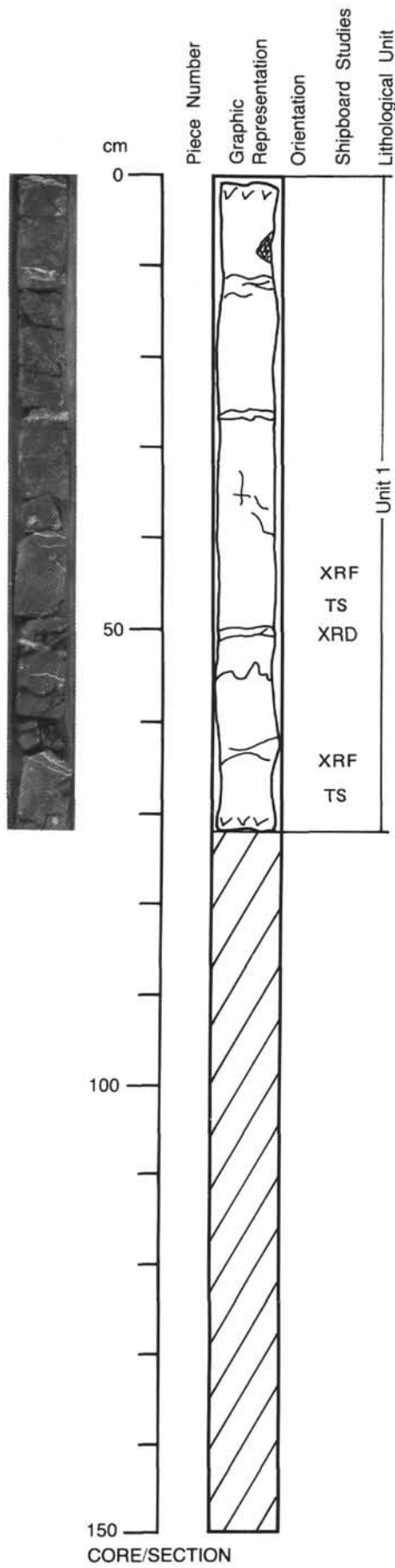
UNIT 1D: CONTINUED

See Section 120-748C-79R-5



UNIT 1D: CONTINUED

See Section 120-748C-79R-5



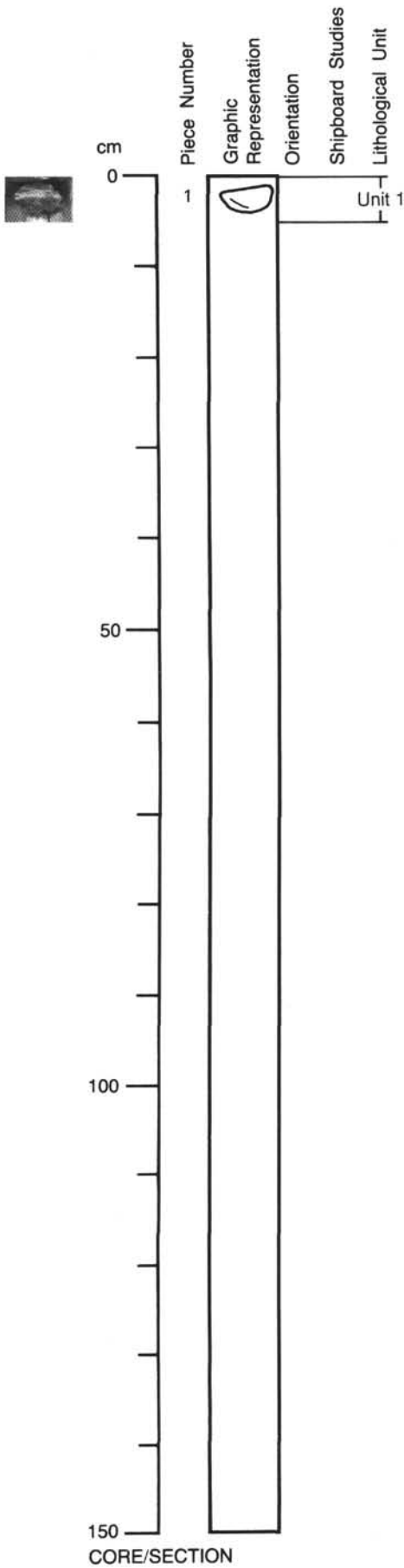
120-748C-80R-CC

UNIT 1D: CONTINUED

Piece 1

CONTACTS: Not determined.
PHENOCRYSTS: Aphyric
GROUNDMASS: Fine-grained.
VESICLES: 2%, 1-10 mm, infilled with calcite.
COLOR: Gray.
STRUCTURE: Not determined.
ALTERATION: High.
VEINS/FRACTURES: (?)%, 1-5 mm, strongly calcite veined.

CORE 120-748C-81R NO RECOVERY

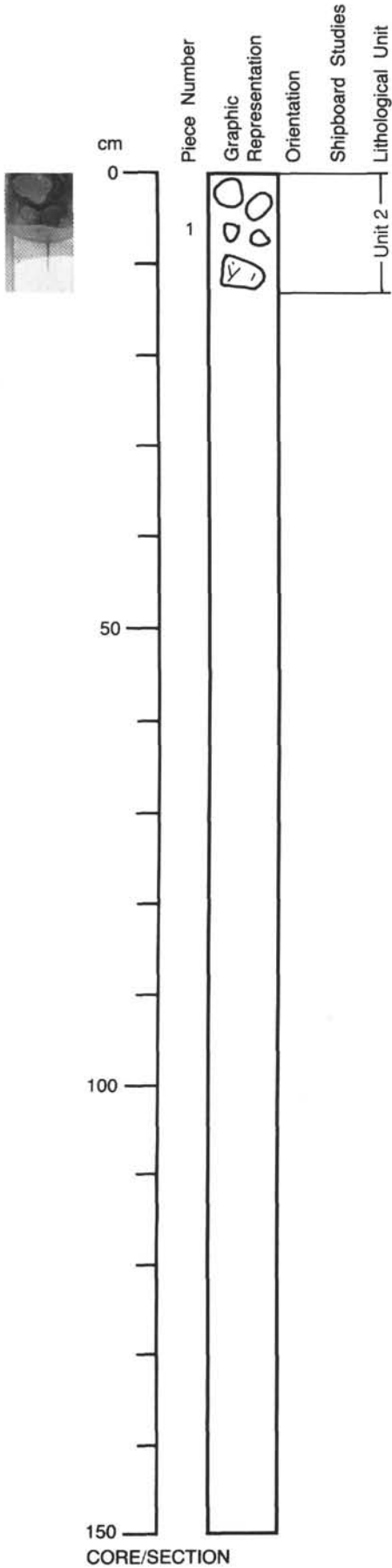


120-748C-82R-CC

UNIT 2: SPARSELY PLAGIOCLASE PHYRIC BASALT

Piece 1

CONTACTS: Not determined.
PHENOCRYSTS: Plagioclase - 1-2%, 1 mm, euhedral laths.
GROUNDMASS: Fine-grained.
VESICLES: 5%, 1-3 mm, infilled with calcite, zeolites and green clay minerals.
COLOR: Gray.
STRUCTURE: Not determined.
ALTERATION: Moderate.
VEINS/FRACTURES: Few 0.5 mm veins of calcite.



CORE 120-748C-83R NO RECOVERY

120-748C-84R-CC

UNIT 3: SPARSELY PHYRIC BASALT

Piece 1

CONTACTS: Not determined.

PHENOCRYSTS: Clinopyroxene - 2-3%, 0.5-3 mm, subhedral to euhedral crystals, sometimes forming glomerocrysts up to 1 cm.

GROUNDMASS: Microcrystalline.

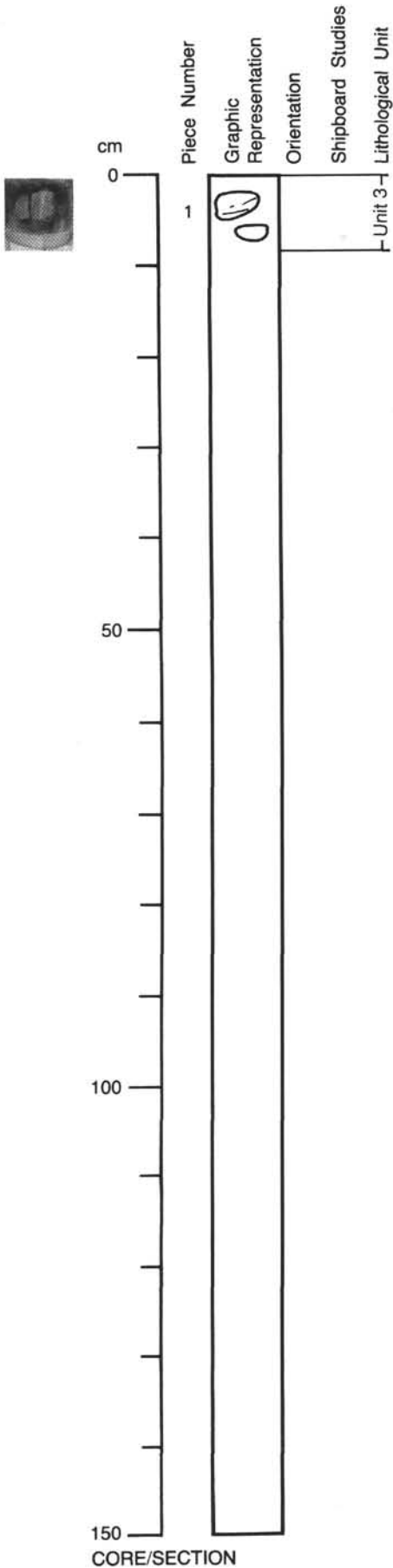
VESICLES: 5%, 1-3 mm, infilled with calcite.

COLOR: Gray.

STRUCTURE: Not determined.

ALTERATION: Moderate.

VEINS/FRACTURES: (?)%, 0.25-1 mm, infilled with calcite.

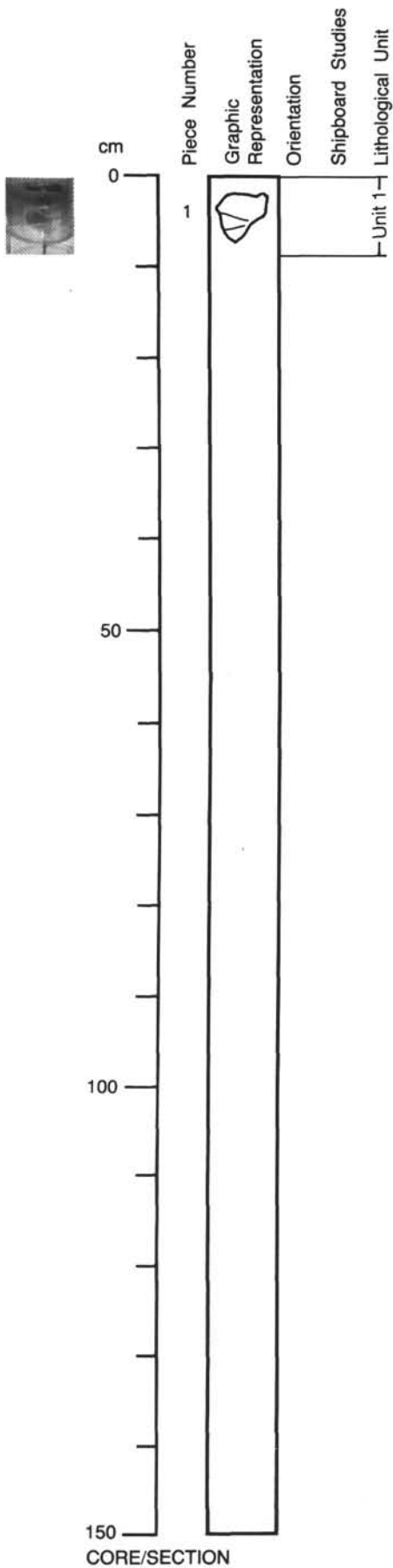


CORE/SECTION

UNIT 1D: CONTINUED

Piece 1

CONTACTS: Not determined.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Microcrystalline.
VESICLES: 1%, 1-3 mm, infilled with zeolites and green clay minerals.
COLOR: Gray.
STRUCTURE: Not determined.
ALTERATION: Moderate.
VEINS/FRACTURES: (?)%, 1 mm, veins of calcite.
ADDITIONAL COMMENTS: Pebble from higher in sequence?



120-748C-86R-CC

UNIT 3: CONTINUED

Piece 1

CONTACTS: Not determined.
PHENOCRYSTS: Clinopyroxene - 2-3%, 0.5-3 mm, subhedral to euhedral crystals, sometimes forming glomerocrysts up to 1 cm.
GROUNDMASS: Microcrystalline.
VESICLES: < 5%, 1-3 mm, infilled with calcite.
COLOR: Gray.
STRUCTURE: Not determined.
ALTERATION: Moderate.
VEINS/FRACTURES: (?)%, 0.25-1 mm, infilled with calcite.

