SITE 808 HOLE A CORE 1H CORED INTERVAL 4676.0-4682.3 mbsl; 0.0-6.3 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN21; RADIOLARIANS: C/G; DIATOMS: F/M; *Anthocyrtidium angulare* ~ *Buccinosphaera invaginata*

PALEOMAGNETICS: N

PHYS. PROPERTIES: ϕ=.72 ρ=1.54; ϕ=.69 ρ=1.62; ϕ=.71 ρ=1.60; ϕ=.61 ρ=1.78; ϕ=.66 ρ=1.66; ϕ=.66 ρ=1.66

CHEMISTRY: %IC=0.16; %IC=0.03; %IC=0.16; %IC=0.17 %TOC=0.58; %IC=0.15; %IC=0.15

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: KM; DR; LW; TAY; WAR; LW

LITHOLOGIC DESCRIPTION

CLAYEY SILT and FINE SAND, with CLAYEY SILT, SANDY CLAYEY SILT, and ASH

Major lithology: Gray CLAYEY SILT (5Y 4/3, 2.5Y 4/0) inter-layered with thin beds of FINE SAND. Clayey silt displays mottling and minor bioturbation locally, plus trace shell fragments. Sand intervals are darker gray (2.5Y 3/0) and typically display sharp bases and normal size grading; some sands contain parallel laminae. Typical Bouma sequences are T_{abe}. Bases of sand intervals are located at: Section 2, 112 cm, 127 cm, Section 3, 32 cm, 37 cm, 42 cm, 80 cm, 88 cm, 92 cm 115 cm, 120 cm, 135 cm; Section 4, 24 cm, 38 cm, 54 cm, 76 cm, 85 cm, 90 cm, 97 cm, 117 cm, 121 cm, 126 cm, and 137 cm.

Minor lithology: Homogeneous, structureless CLAYEY SILT, gray to dark gray color (2.5Y 3/0, 2.5Y 4/0). Local mottling and minor bioturbation

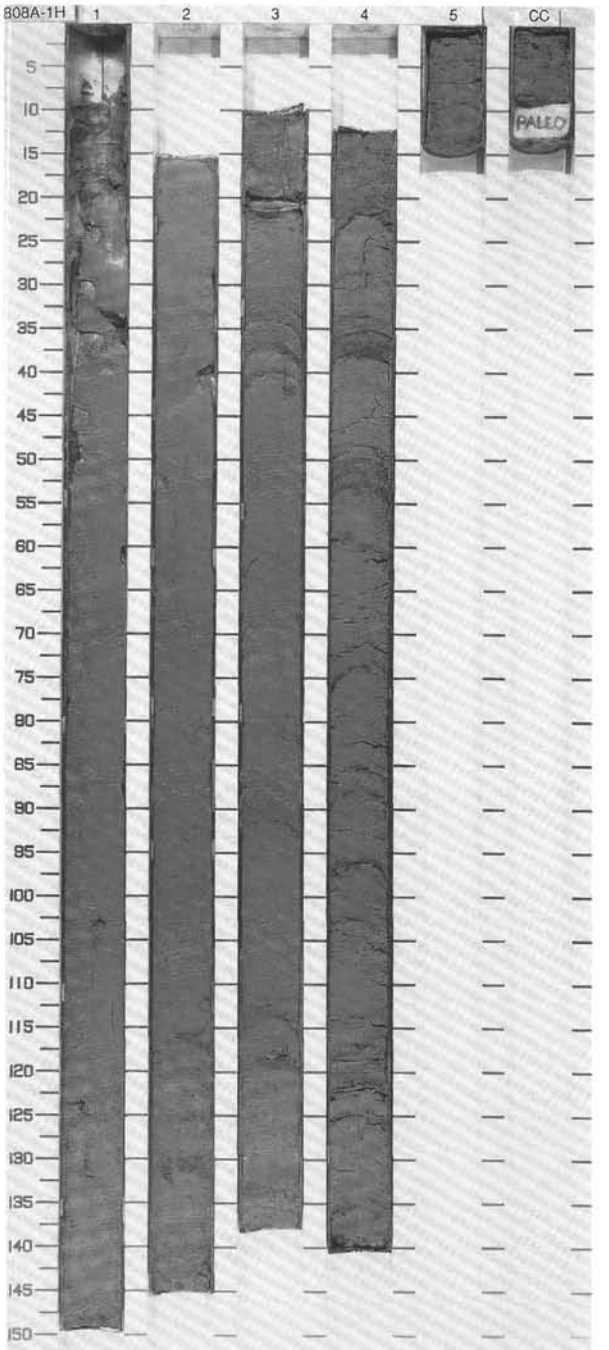
Minor lithology: SANDY CLAYEY SILT, dark gray (2.5Y 4/0), structureless.

Minor lithology: Thin ASH layers (5YR 7/1) interbedded with clayey silt. Ash-bearing intervals are located in Section 3, 72-77 cm.

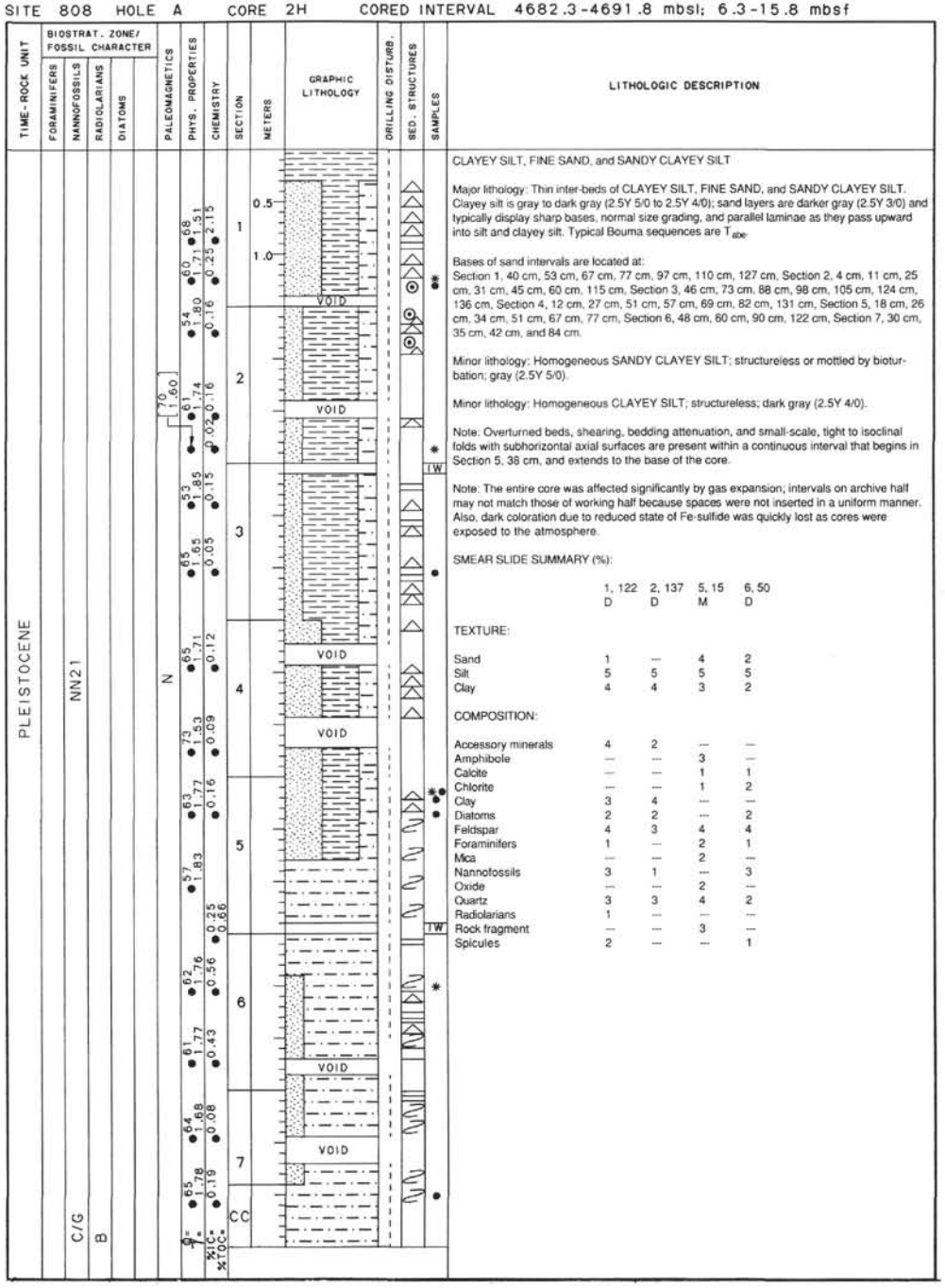
SMEAR SLIDE SUMMARY (%):

	3, 67 D	3, 72 M
TEXTURE:		
Sand	1	1
Silt	4	5
Clay	3	1
COMPOSITION:		
Accessory minerals	---	2
Amphibole	---	1
Clay	4	2
Diatoms	2	1
Feldspar	3	3
Foraminifers	1	1
Glass	2	5
Nannofossils	1	1
Quartz	3	2
Radiolarians	1	1
Spicules	2	1

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



SITE 808 HOLE A CORE 2H CORED INTERVAL 4682.3-4691.8 mbsl; 6.3-15.8 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILT, FINE SAND, and SANDY CLAYEY SILT

Major lithology: Thin inter-beds of CLAYEY SILT, FINE SAND, and SANDY CLAYEY SILT. Clayey silt is gray to dark gray (2.5Y 5/0 to 2.5Y 4/0); sand layers are darker gray (2.5Y 3/0) and typically display sharp bases, normal size grading, and parallel laminae as they pass upward into silt and clayey silt. Typical Bouma sequences are T_{abe}.

Bases of sand intervals are located at:
Section 1, 40 cm, 53 cm, 67 cm, 77 cm, 97 cm, 110 cm, 127 cm, Section 2, 4 cm, 11 cm, 25 cm, 31 cm, 45 cm, 60 cm, 115 cm, Section 3, 46 cm, 73 cm, 88 cm, 98 cm, 105 cm, 124 cm, 136 cm, Section 4, 12 cm, 27 cm, 51 cm, 57 cm, 69 cm, 82 cm, 131 cm, Section 5, 18 cm, 26 cm, 34 cm, 51 cm, 67 cm, 77 cm, Section 6, 48 cm, 60 cm, 90 cm, 122 cm, Section 7, 30 cm, 35 cm, 42 cm, and 84 cm.

Minor lithology: Homogeneous SANDY CLAYEY SILT; structureless or mottled by bioturbation; gray (2.5Y 5/0).

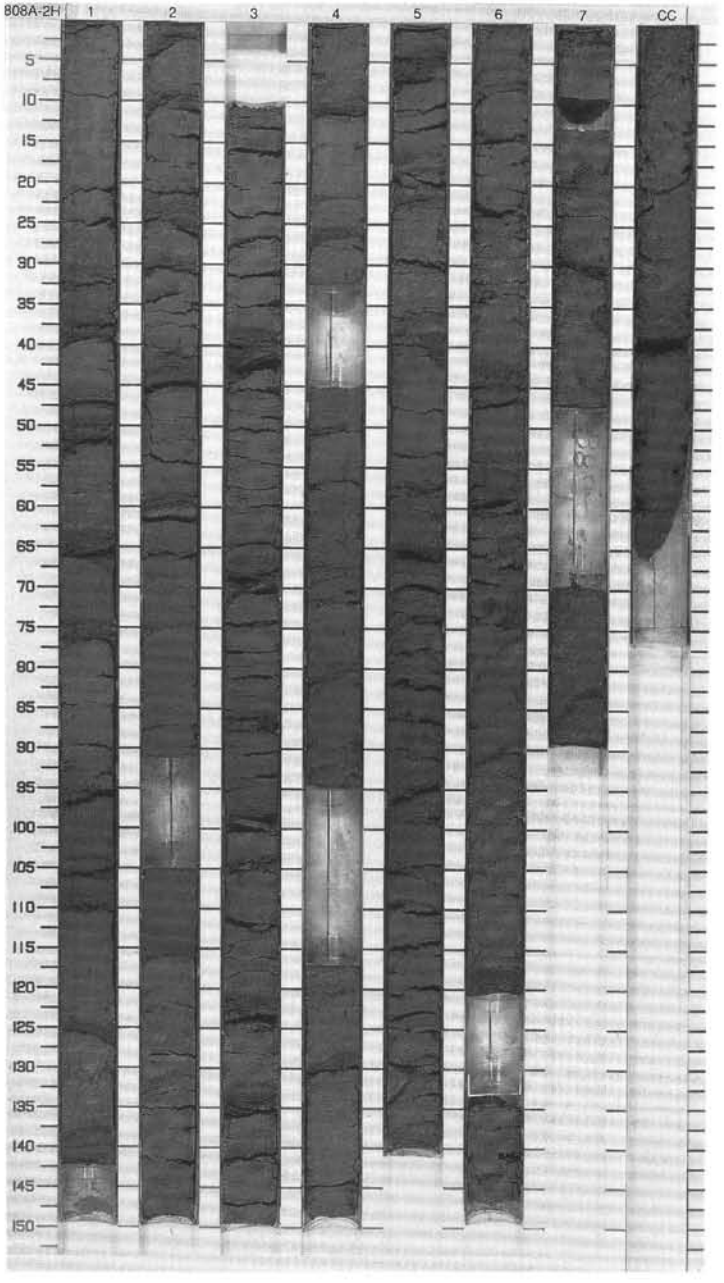
Minor lithology: Homogeneous CLAYEY SILT; structureless; dark gray (2.5Y 4/0).

Note: Overturned beds, shearing, bedding attenuation, and small-scale, tight to isoclinal folds with subhorizontal axial surfaces are present within a continuous interval that begins in Section 5, 38 cm, and extends to the base of the core.

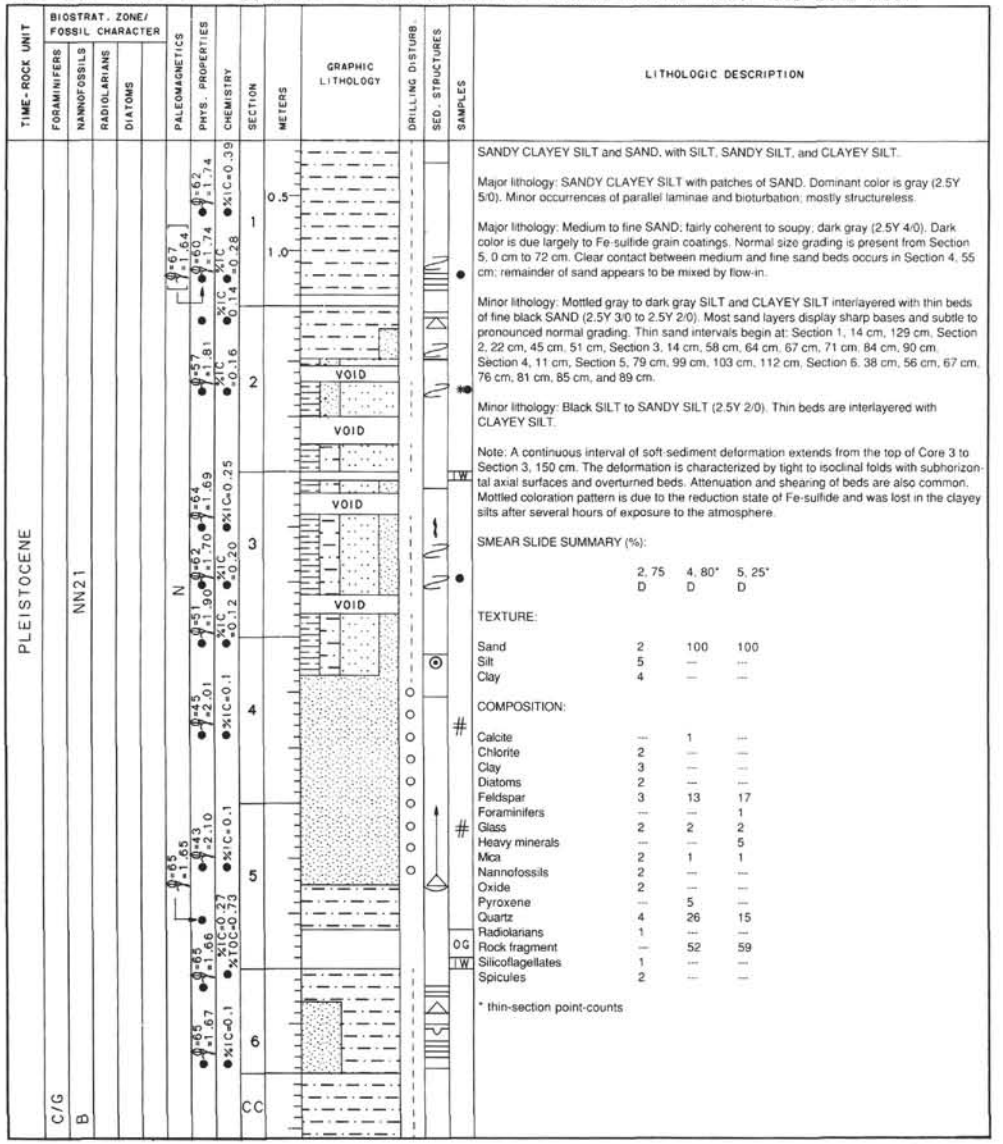
Note: The entire core was affected significantly by gas expansion; intervals on archive half may not match those of working half because spaces were not inserted in a uniform manner. Also, dark coloration due to reduced state of Fe-sulfide was quickly lost as cores were exposed to the atmosphere.

SMEAR SLIDE SUMMARY (%):

	1, 122 D	2, 137 D	5, 15 M	6, 50 D
TEXTURE:				
Sand	1	—	4	2
Silt	5	5	5	5
Clay	4	4	3	2
COMPOSITION:				
Accessory minerals	4	2	—	—
Amphibole	—	—	3	—
Calcite	—	—	1	1
Chlorite	—	—	1	2
Clay	3	4	—	—
Diatoms	2	2	—	2
Feldspar	4	3	4	4
Foraminifers	1	—	2	1
Mica	—	—	2	—
Nannofossils	3	1	—	3
Oxide	—	—	2	—
Quartz	3	3	4	2
Radiolarians	1	—	—	—
Rock fragment	—	—	3	—
Spicules	2	—	—	1



SITE 808 HOLE A CORE 3H CORED INTERVAL 4691.8-4701.3 mbsl; 15.8-25.3 mbsf



LITHOLOGIC DESCRIPTION

SANDY CLAYEY SILT and SAND, with SILT, SANDY SILT, and CLAYEY SILT.

Major lithology: SANDY CLAYEY SILT with patches of SAND. Dominant color is gray (2.5Y 5/0). Minor occurrences of parallel laminae and bioturbation; mostly structureless.

Major lithology: Medium to fine SAND; fairly coherent to soupy; dark gray (2.5Y 4/0). Dark color is due largely to Fe-sulfide grain coatings. Normal size grading is present from Section 5, 0 cm to 72 cm. Clear contact between medium and fine sand beds occurs in Section 4, 55 cm; remainder of sand appears to be mixed by flow-in.

Minor lithology: Mottled gray to dark gray SILT and CLAYEY SILT interlayered with thin beds of fine black SAND (2.5Y 3/0 to 2.5Y 2/0). Most sand layers display sharp bases and subtle to pronounced normal grading. Thin sand intervals begin at: Section 1, 14 cm, 129 cm, Section 2, 22 cm, 45 cm, 51 cm, Section 3, 14 cm, 58 cm, 64 cm, 67 cm, 71 cm, 84 cm, 90 cm, Section 4, 11 cm, Section 5, 79 cm, 99 cm, 103 cm, 112 cm, Section 6, 38 cm, 56 cm, 67 cm, 76 cm, 81 cm, 85 cm, and 89 cm.

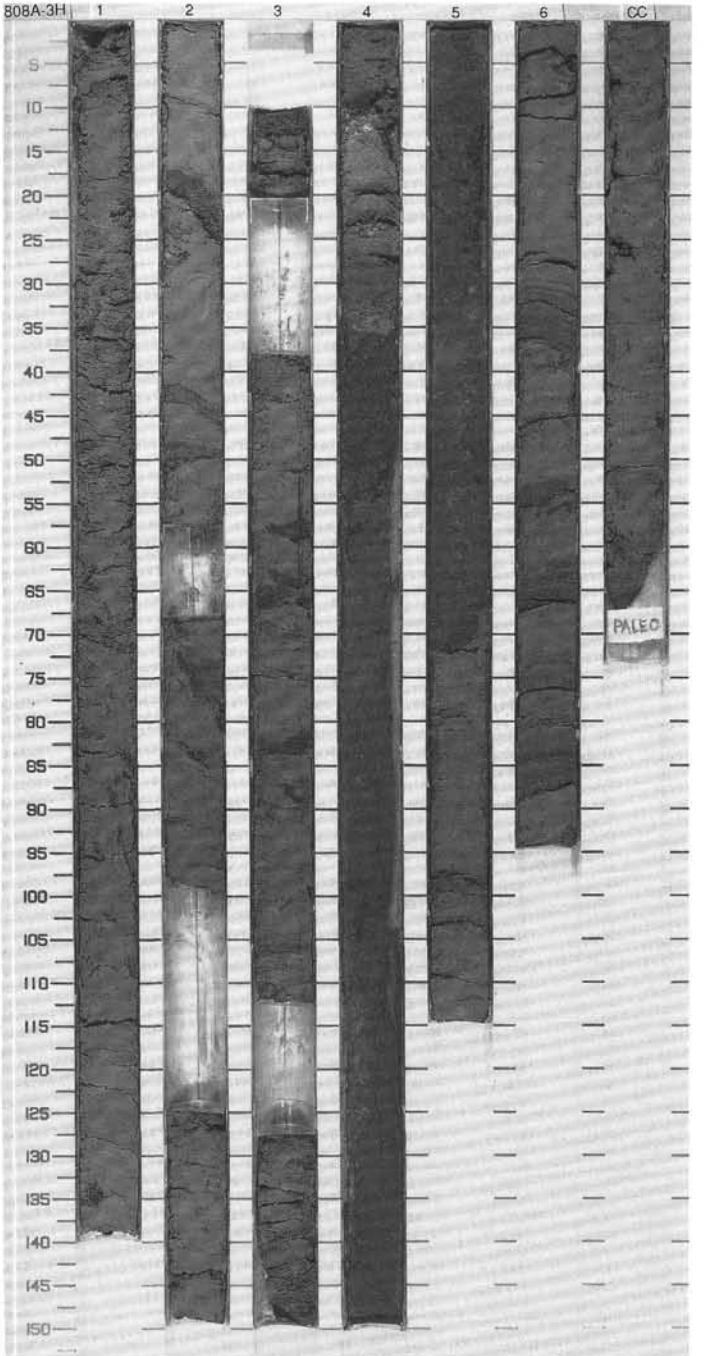
Minor lithology: Black SILT to SANDY SILT (2.5Y 2/0). Thin beds are interlayered with CLAYEY SILT.

Note: A continuous interval of soft-sediment deformation extends from the top of Core 3 to Section 3, 150 cm. The deformation is characterized by tight to isoclinal folds with subhorizontal axial surfaces and overturned beds. Attenuation and shearing of beds are also common. Mottled coloration pattern is due to the reduction state of Fe-sulfide and was lost in the clayey silts after several hours of exposure to the atmosphere.

SMEAR SLIDE SUMMARY (%):

	2, 75 D	4, 80* D	5, 25* D
TEXTURE:			
Sand	2	100	100
Silt	5	—	—
Clay	4	—	—
COMPOSITION:			
Calcite	—	1	—
Chlorite	2	—	—
Clay	3	—	—
Diatoms	2	—	—
Feldspar	3	13	17
Foraminifers	—	—	1
Glass	2	2	2
Heavy minerals	—	—	5
Mica	2	1	1
Nannofossils	2	—	—
Oxide	2	—	—
Pyroxene	—	5	—
Quartz	4	26	15
Radiolarians	1	—	—
Rock fragment	—	52	59
Silicoflagellates	1	—	—
Spicules	2	—	—

* thin-section point-counts



SITE 808 HOLE A CORE 4H CORED INTERVAL 4701.3-4710.8 mbsl; 25.3-34.8 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS F/M; NANNOFOSSILS NN21; RADIOLARIANS F/M; DIATOMS upper *Anthocyrtidium angulare* - *Buccinosphaera invaginata*

PALEOMAGNETICS: N

PHYS. PROPERTIES: ρ=1.64 ±1.70; ρ=1.60 ±1.74; ρ=1.61 ±1.75; ρ=1.62 ±1.71; ρ=1.56 ±1.89; ρ=1.44 ±2.04; ρ=1.45 ±2.04; ρ=1.43 ±2.07

CHEMISTRY: %IC=0.14 ±0.11; %IC ±0.25; %IC=0.06; %IC=0.10; %IC=0.29; %IC=0.19 %TOC=0.63; %IC=0.42

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID; VOID; VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW; UW

LITHOLOGIC DESCRIPTION

COARSE/MEDIUM SAND, FINE SAND/SILTY SAND and CLAYEY SILT

Major lithology: Structureless COARSE/MEDIUM SAND (3Y 3/0, 2.5Y 2/0, 5Y 4/1, 5Y 3/1). Coring-induced fluidization has elutriated fines, probably including thin silt/clay beds, to leave diffuse patches of clayey silt and clayey sand.

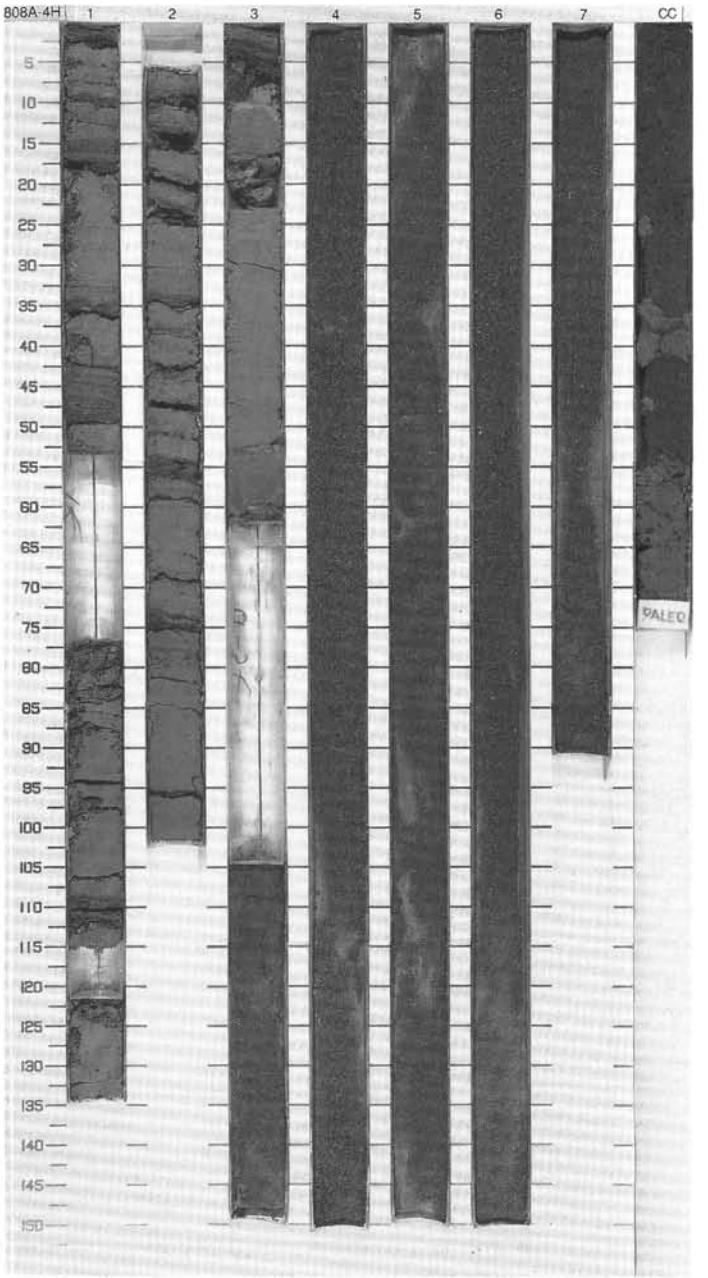
Minor lithology: Thin beds of FINE SAND and SILTY SAND (2.5Y 5/0, 2.5Y 3/0), showing parallel lamination and normal grading above a sharp base. Bases of sand intervals in Section 1, 3 cm, 10 cm, 18 cm, 36 cm, 49 cm, 80 cm, 113 cm, 115 cm, Section 2, 16 cm, 39 cm, 61 cm, 79 cm, 80.5 cm, Section 3, 10 cm, 17.5 cm, CC, 38 cm, 55 cm.

Minor lithology: Mottled CLAYEY SILT (5Y 3/1, 5Y 5/1) with local diffuse laminae of silt and clay. Mottling due to bioturbation. Dark coloration in mottling and laminae due to reduced state of Fe-sulfide lost after several hours of exposure to atmosphere.

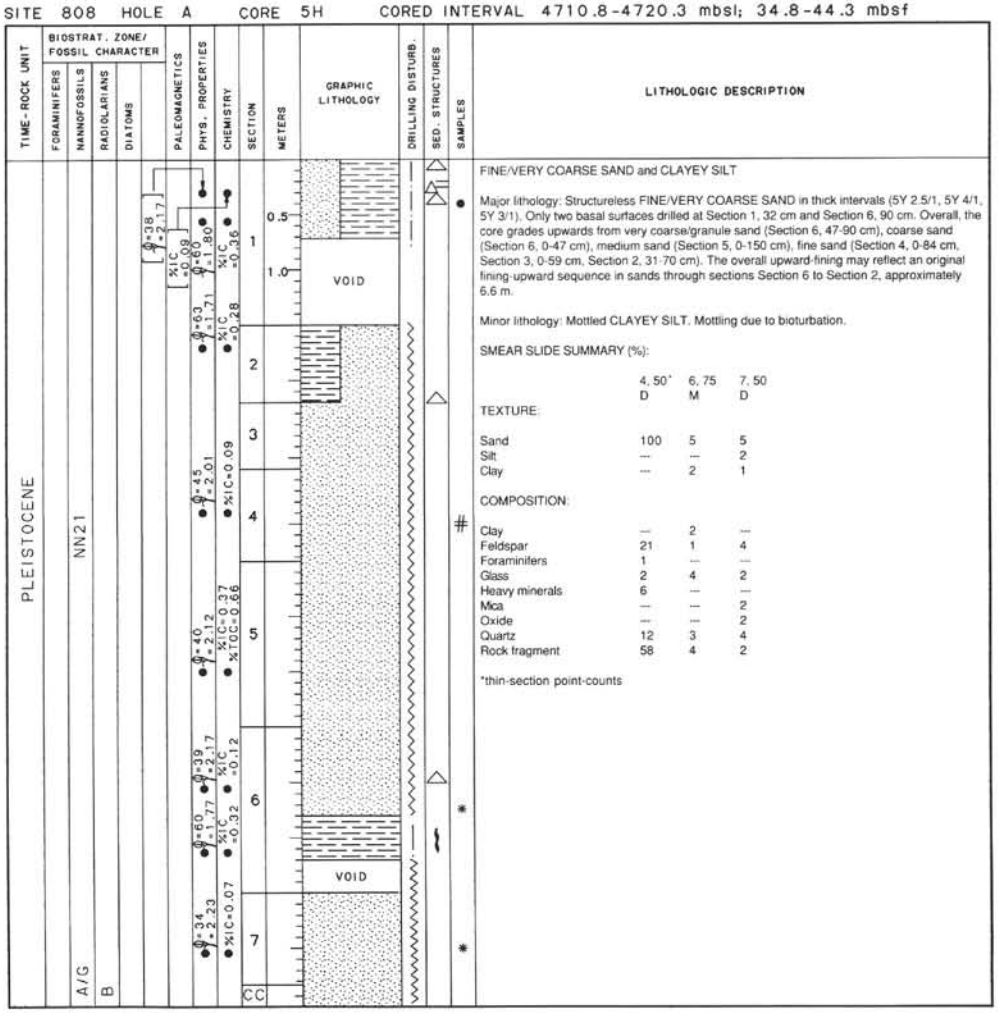
SMEAR SLIDE SUMMARY (%):

	1, 13 D	2, 92 D	4, 37 D	4, 85 D	4, 86* D	6, 100* D
TEXTURE:						
Sand	2	3	5	5	100	100
Silt	5	5	–	–	–	–
Clay	4	5	–	–	–	–
COMPOSITION:						
Amphibole	2	–	–	–	–	–
Calcite	–	–	–	–	1	–
Chlorite	2	–	–	–	–	–
Clay	2	3	–	–	–	–
Diatoms	2	2	–	–	–	–
Feldspar	3	2	2	3	20	21
Foraminifers	1	1	–	–	–	1
Glass	2	1	–	2	1	1
Heavy minerals	–	–	–	–	5	7
Mica	2	1	1	2	–	–
Nannofossils	2	–	–	–	–	–
Oxide	2	–	–	–	–	–
Pyroxene	–	–	3	2	–	–
Quartz	5	3	4	4	13	15
Radiolarians	–	2	–	–	–	–
Rock fragment	–	3	5	3	60	55
Silicoflagellates	1	2	–	–	–	–
Spicules	1	2	–	–	–	–

*thin-section point-counts



SITE 808 HOLE A CORE 5H CORED INTERVAL 4710.8-4720.3 mbsl; 34.8-44.3 mbsf



LITHOLOGIC DESCRIPTION

FINE/VERY COARSE SAND and CLAYEY SILT

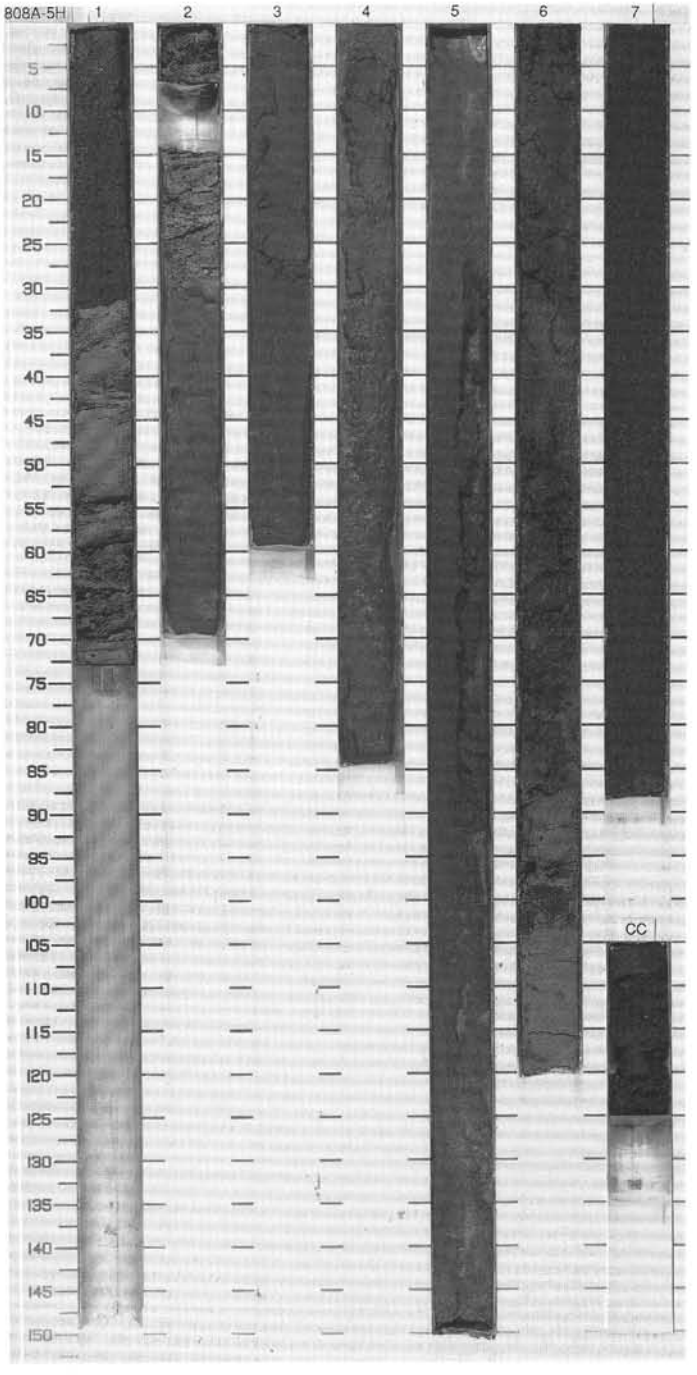
Major lithology: Structureless FINE/VERY COARSE SAND in thick intervals (5Y 2.5/1, 5Y 4/1, 5Y 3/1). Only two basal surfaces drilled at Section 1, 32 cm and Section 6, 90 cm. Overall, the core grades upwards from very coarse/granule sand (Section 6, 47-90 cm), coarse sand (Section 6, 0-47 cm), medium sand (Section 5, 0-150 cm), fine sand (Section 4, 0-84 cm, Section 3, 0-59 cm, Section 2, 31-70 cm). The overall upward-fining may reflect an original fining-upward sequence in sands through sections Section 6 to Section 2, approximately 6.6 m.

Minor lithology: Mottled CLAYEY SILT. Mottling due to bioturbation.

SMEAR SLIDE SUMMARY (%):

	4, 50* D	6, 75 M	7, 50 D
TEXTURE:			
Sand	100	5	5
Silt	–	–	2
Clay	–	2	1
COMPOSITION:			
Clay	–	2	–
Feldspar	21	1	4
Foraminifers	1	–	–
Glass	2	4	2
Heavy minerals	6	–	–
Mica	–	–	2
Oxide	–	–	2
Quartz	12	3	4
Rock fragment	58	4	2

*thin-section point-counts



SITE 808 HOLE A CORE 6H CORED INTERVAL 4720.3-4729.8 mbsl; 44.3-53.8 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN21; RADIOLARIANS: C/G; DIATOMS: B

PALEOMAGNETICS

PHYS. PROPERTIES: ϕ=.41 ρ=2.13; ϕ=.42 ρ=2.09; ϕ=.40 ρ=2.13; ϕ=.39 ρ=2.13; ϕ=.41 ρ=2.08; ϕ=.59 ρ=1.77

CHEMISTRY: %IC=0.15; %IC=0.39; %IC=0.08; %IC=0.11; %Cl=0.15; %IC=0.17; %TOC=0.34

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID; VOID; VOID; VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

FINE SAND and CLAYEY SILT

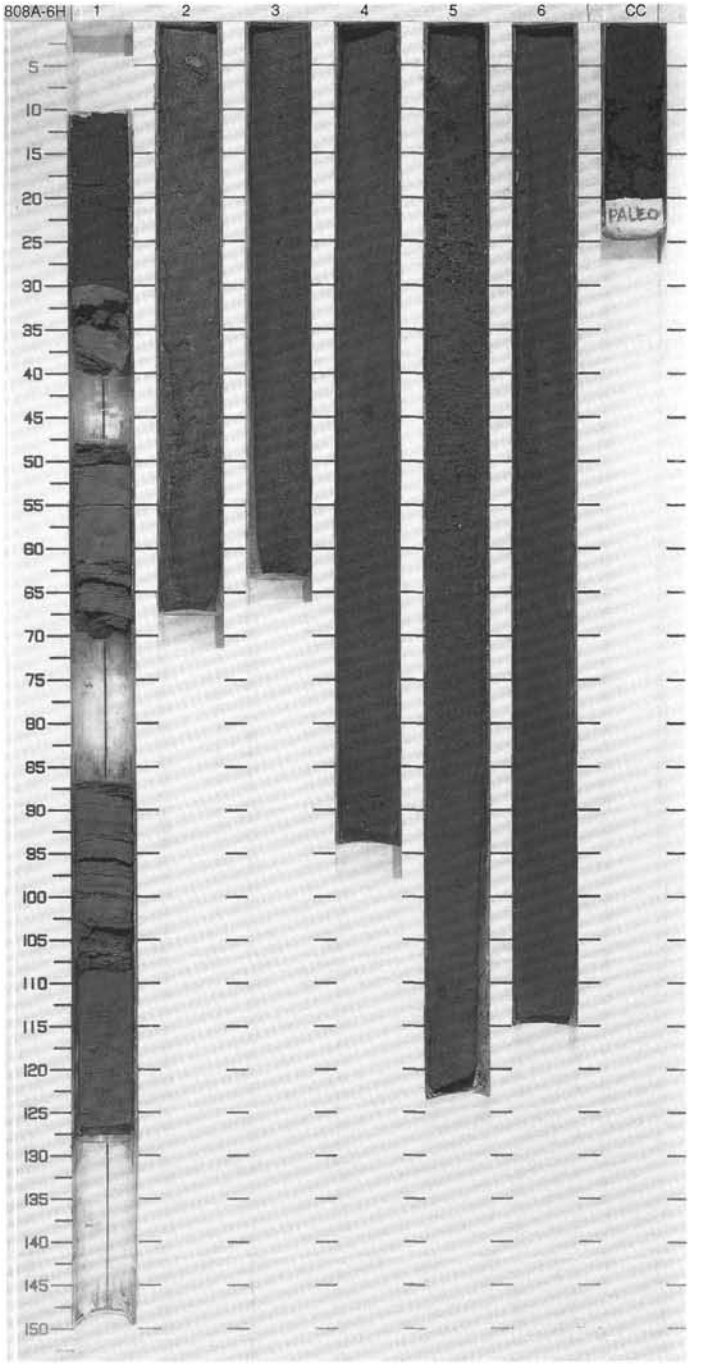
Major lithology: Structureless FINE SAND (range medium to very fine) in medium to very thick beds (5Y 4/1, 5Y, 5/1, 5Y 6/1). Base of medium-bedded sand intervals at Section 1, 30 cm, 128 cm. Very thick sand intervals probably represents several discrete beds with primary *contacts destroyed by fluidization during coring.*

Minor lithology: Mottled CLAYEY SILT (5Y 6/1). Mottling due to bioturbation.

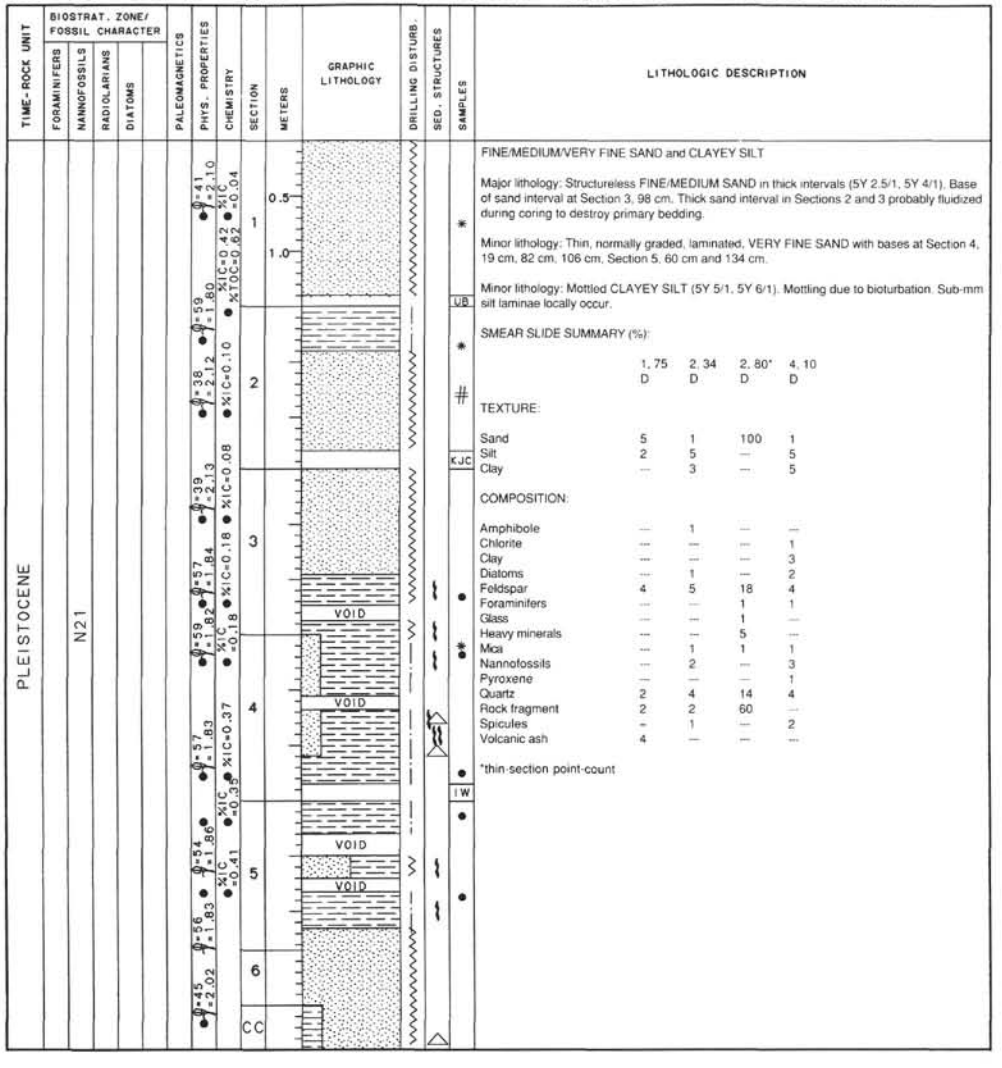
SMEAR SLIDE SUMMARY (%):

	1, 15 D	1, 50 D	3, 25 D	4, 54* D	4, 70 D	4, 70* D
TEXTURE:						
Sand	5	2	5	100	5	100
Silt	2	5	3	—	3	—
Clay	1	5	2	—	1	—
COMPOSITION:						
Calcite	—	—	—	1	—	—
Chlorite	—	—	1	—	—	—
Clay	—	4	2	—	—	—
Diatoms	2	2	—	—	—	—
Feldspar	3	2	2	13	4	21
Foraminifers	1	1	—	—	—	1
Glass	2	—	2	1	2	2
Heavy minerals	—	—	—	4	—	5
Mica	—	—	—	—	1	—
Nannofossils	—	3	—	—	—	—
Oxide	1	2	1	—	2	—
Quartz	2	4	4	18	4	16
Rock fragment	5	—	5	63	3	55
Silicoflagellates	1	—	—	—	—	—
Spicules	2	—	—	—	—	—

*thin-section point-counts



SITE 808 HOLE A CORE 7H CORED INTERVAL 4729.8-4739.3 mbsl; 53.8-63.3 mbsf



LITHOLOGIC DESCRIPTION

FINE/MEDIUM/VERY FINE SAND and CLAYEY SILT

Major lithology: Structureless FINE/MEDIUM SAND in thick intervals (5Y 2.5/1, 5Y 4/1). Base of sand interval at Section 3, 98 cm. Thick sand interval in Sections 2 and 3 probably fluidized during coring to destroy primary bedding.

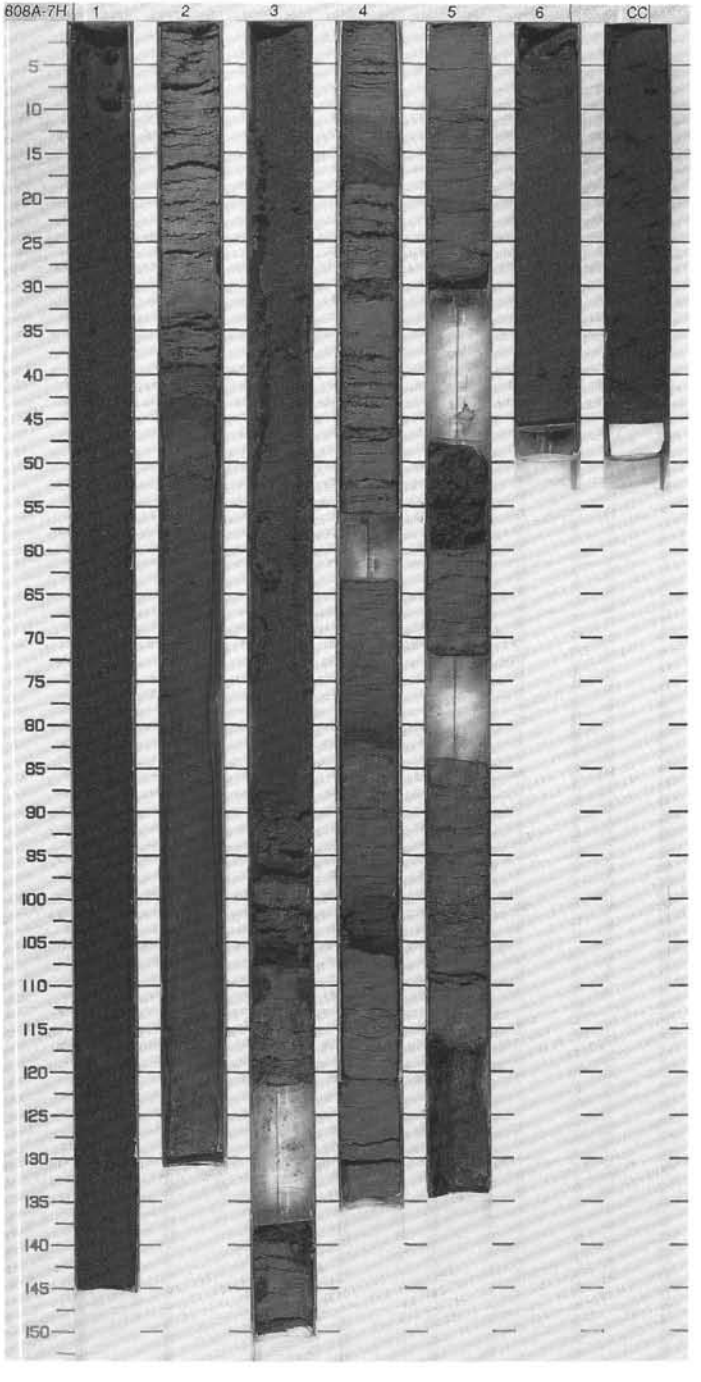
Minor lithology: Thin, normally graded, laminated, VERY FINE SAND with bases at Section 4, 19 cm, 82 cm, 106 cm, Section 5, 60 cm and 134 cm.

Minor lithology: Mottled CLAYEY SILT (5Y 5/1, 5Y 6/1). Mottling due to bioturbation. Sub-mm silt laminae locally occur.

SMEAR SLIDE SUMMARY (%):

	1, 75 D	2, 34 D	2, 80* D	4, 10 D
TEXTURE:				
Sand	5	1	100	1
Silt	2	5	—	5
Clay	—	3	—	5
COMPOSITION:				
Amphibole	—	1	—	—
Chlorite	—	—	—	1
Clay	—	—	—	3
Diatoms	—	1	—	2
Feldspar	4	5	18	4
Foraminifers	—	—	1	1
Glass	—	—	1	—
Heavy minerals	—	—	5	—
Mica	—	1	1	1
Nannofossils	—	2	—	3
Pyroxene	—	—	—	1
Quartz	2	4	14	4
Rock fragment	2	2	60	—
Spicules	+	1	—	2
Volcanic ash	4	—	—	—

*thin-section point-count



SITE 808 HOLE A CORE 8H CORED INTERVAL 4739.3-4744.3 mbsl; 63.3-68.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		NN21				9-38 ● 7=2.15 9-59 ● 7=1.80 9-55 ● 7=1.88 20.30	×TC=0.33 ×TC=0.09 ×TOC=0.52	1 2 CC	0.5 1.0				# * IW ●

LITHOLOGIC DESCRIPTION

FINE/COARSE SAND and CLAYEY SILT

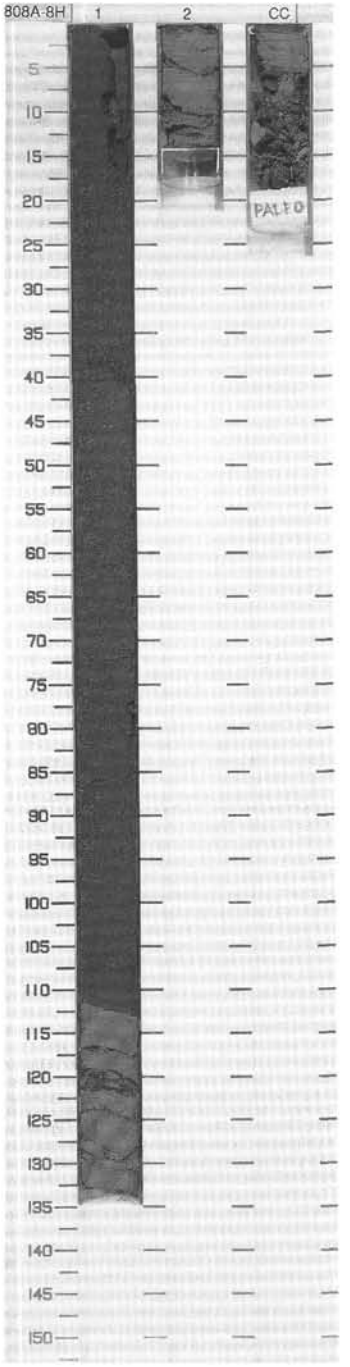
Major lithology: Structureless FINE/COARSE SAND in thick interval (5Y 4/1). Base of sand interval at Section 1, 112 cm. Thick sand interval probably represents at least two discrete beds as seen by abrupt grain-size change from fine to coarse sand upwards at Section 1, 40 cm.

Minor lithology: Mottled CLAYEY SILT (5Y 5/1). Mottling due to bioturbation.

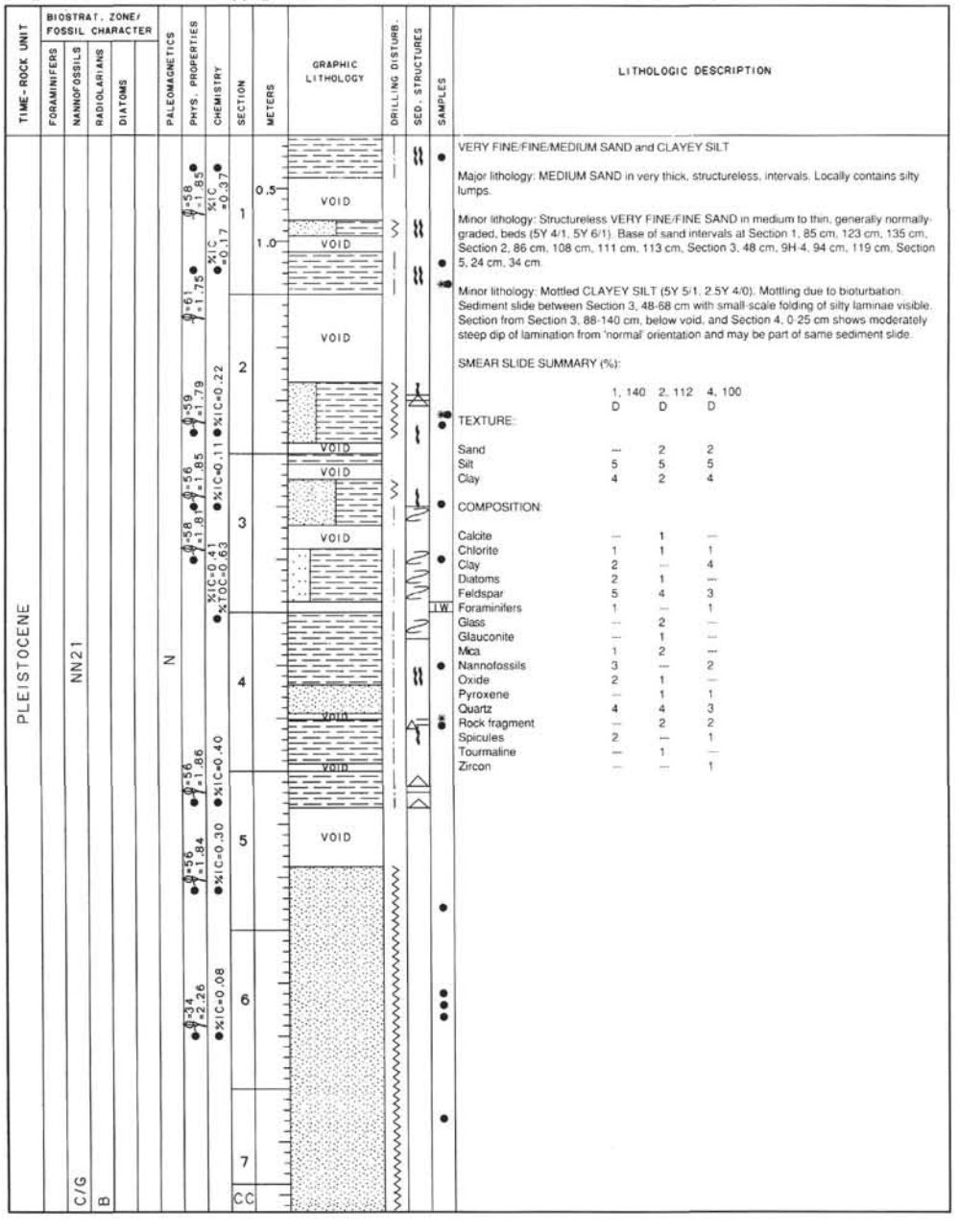
SMEAR SLIDE SUMMARY (%):

	1, 34* D	1, 127 D
TEXTURE:		
Sand	100	1
Silt	—	5
Clay	—	4
COMPOSITION:		
Amphibole	—	1
Chlorite	—	1
Clay		3
Diatoms	—	1
Feldspar	20	4
Foraminifers	1	—
Glass	1	—
Heavy minerals	6	—
Nannofossils	—	2
Quartz	18	3
Radiolarians	—	2
Rock fragment	54	2
Silicoflagellates	—	1

*thin-section point-count



SITE 808 HOLE A CORE 9H CORED INTERVAL 4744.3-4753.8 mbsl; 68.3-77.8 mbsf



LITHOLOGIC DESCRIPTION

VERY FINE/FINE/MEDIUM SAND and CLAYEY SILT

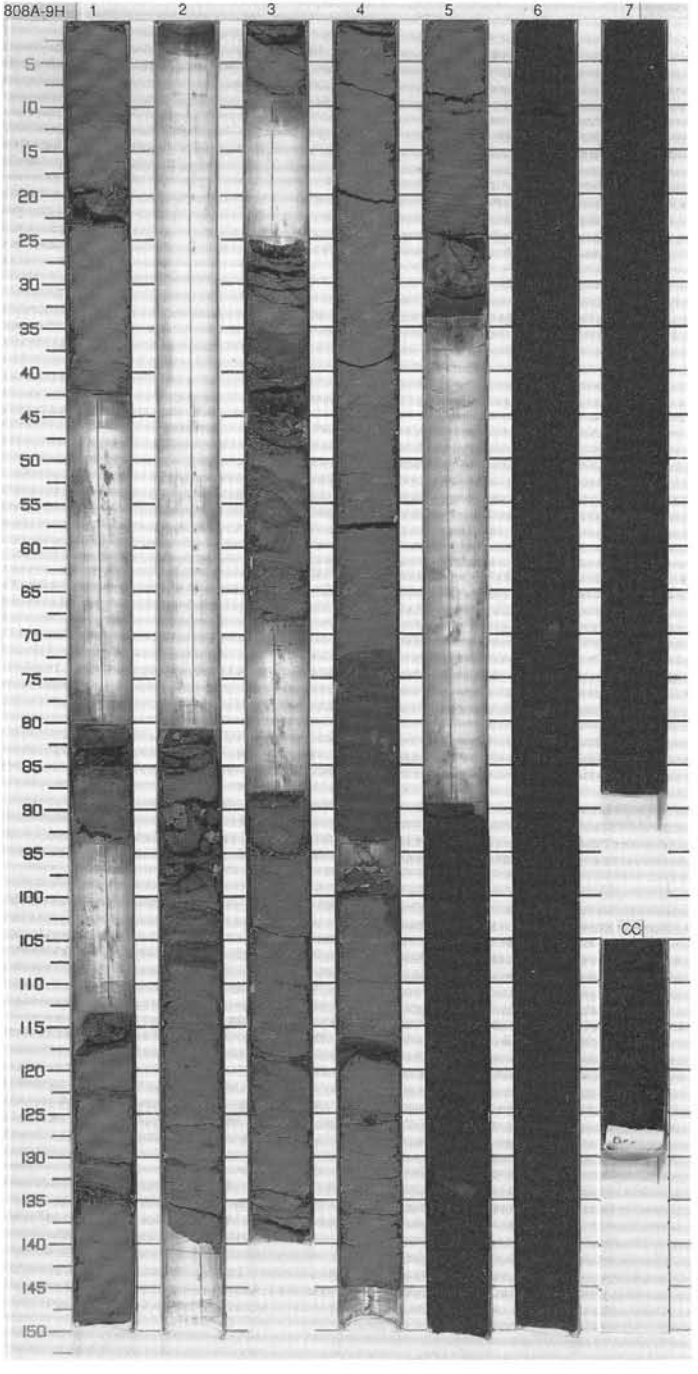
Major lithology: MEDIUM SAND in very thick, structureless, intervals. Locally contains silty lumps.

Minor lithology: Structureless VERY FINE/FINE SAND in medium to thin, generally normally-graded, beds (5Y 4/1, 5Y 6/1). Base of sand intervals at Section 1, 85 cm, 123 cm, 135 cm, Section 2, 86 cm, 108 cm, 111 cm, 113 cm, Section 3, 48 cm, 9H-4, 94 cm, 119 cm, Section 5, 24 cm, 34 cm.

Minor lithology: Mottled CLAYEY SILT (5Y 5/1, 2.5Y 4/0). Mottling due to bioturbation. Sediment slide between Section 3, 48-68 cm with small-scale folding of silty laminae visible. Section from Section 3, 88-140 cm, below void, and Section 4, 0-25 cm shows moderately steep dip of lamination from 'normal' orientation and may be part of same sediment slide.

SMEAR SLIDE SUMMARY (%):

	1, 140 D	2, 112 D	4, 100 D
TEXTURE:			
Sand	–	2	2
Silt	5	5	5
Clay	4	2	4
COMPOSITION:			
Calcite	–	1	–
Chlorite	1	1	1
Clay	2	–	4
Diatoms	2	1	–
Feldspar	5	4	3
Foraminifers	1	–	1
Glass	–	2	–
Glauconite	–	1	–
Mica	1	2	1
Nannofossils	3	–	2
Oxide	2	1	–
Pyroxene	–	1	1
Quartz	4	4	3
Rock fragment	–	2	2
Spicules	2	–	1
Tourmaline	–	1	–
Zircon	–	–	1



SITE 808 HOLE A CORE 10H CORED INTERVAL 4753.8-4763.4 mbsl; 77.8-87.4 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/G; NANNOFOSSILS NN21; RADIOLARIANS B; DIATOMS

PALEOMAGNETICS: φ=55 / =1.88; φ=61 / =1.74; φ=62 / =1.90; φ=53 / =1.91

PHYS. PROPERTIES

CHEMISTRY: %IC =0.36; %IC =0.37; %IC =0.11; %IC=0.15; %IC=0.08 %TOC=0.13

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID; VOID; VOID; VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW; OR

LITHOLOGIC DESCRIPTION

SAND, SILTY SAND, and SANDY CLAYEY SILT with SAND and CLAYEY SILT

Major lithology: Fine to coarse SAND with isolated pebbles; structureless due to high water content and flow in core; color is very dark gray to black (2.5Y 2/0).

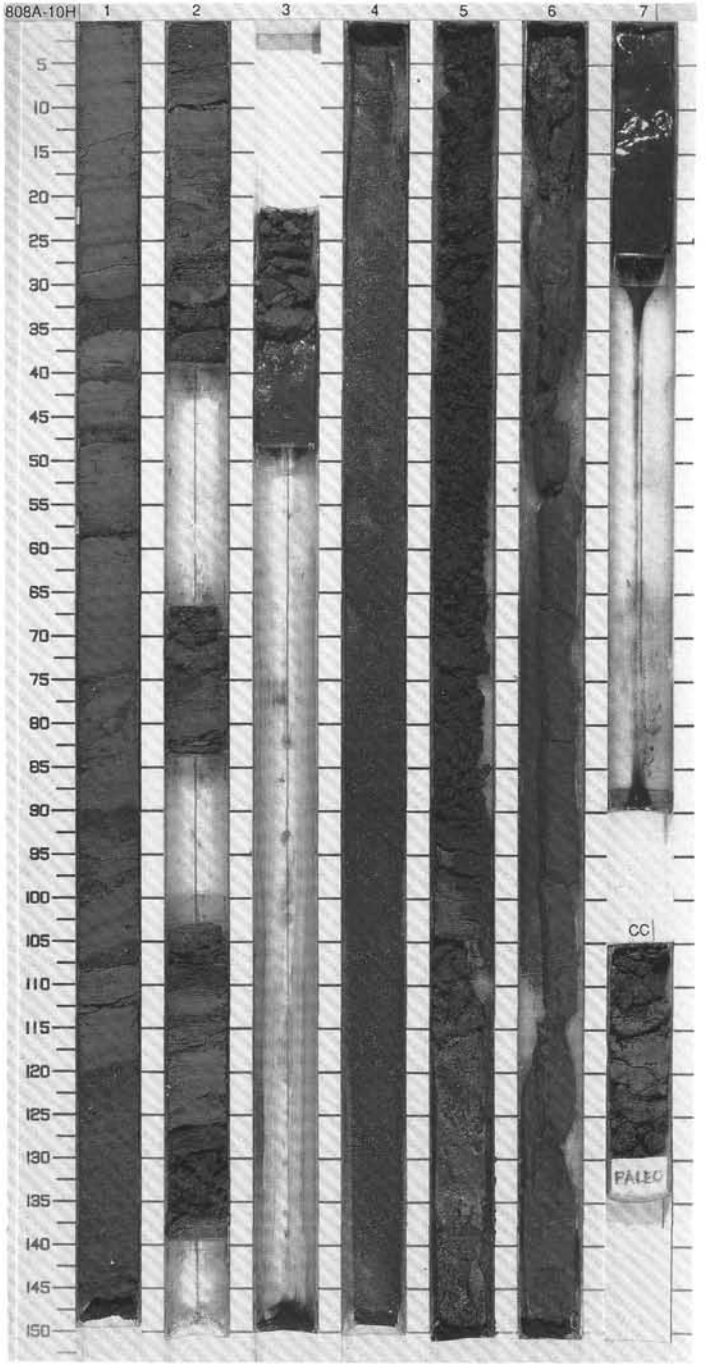
Major lithology: Dark gray (2.5Y 4/0) SILTY SAND with dispersed fragments of coaly material; structureless due to flow in core and high water content.

Minor lithologies: Interbeds of thin fine-grained SAND, CLAYEY SILT, and SANDY CLAYEY SILT; the color of finer-grained material is gray (2.5Y 5/0). Sand layers are darker gray (2.5Y 3/0), with sharp bases, loading, normal size grading, and rare parallel laminae. Some of the sands occur as lenses and inclined stringers. Thin sand intervals begin at: Section 1, 35 cm, 40 cm, 48 cm, 58 cm, 76 cm, 92 cm, 99 cm, 108 cm, and Section 2, 76 cm.

SMEAR SLIDE SUMMARY (%):

	5, 50* D	6, 100* D
TEXTURE:		
Sand	100	100
COMPOSITION:		
Feldspar	17	18
Foraminifers	1	1
Glass	2	3
Heavy minerals	1	5
Mica	1	1
Quartz	13	19
Rock fragment	65	53

*thin-section point-counts



SITE 808 HOLE A CORE 11H CORED INTERVAL 4763.4-4772.9 mbsl: 87.4-96.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20	R/G	B		Φ=46 ● γ=2.00	%IC =0.12 ●	1 2 CC	0.5 1.0				* #	MEDIUM SAND to SILTY SAND

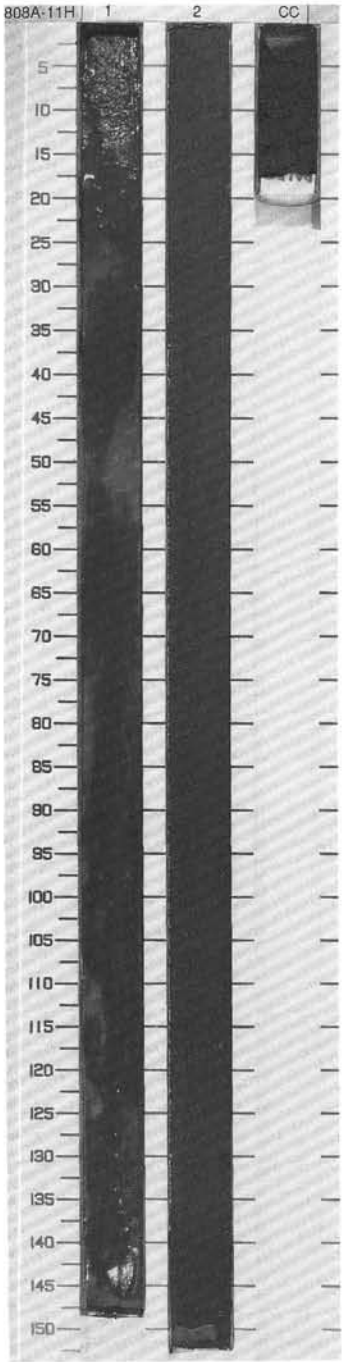
Major lithology: The entire core consists of dark gray (2.5Y 3/0) SAND and SILTY SAND. The sediment is normally graded from medium to fine sand over the length of the core and, thus, could represent a single thick turbidite deposit. This grading, however, could also be due to handling of the water-saturated sample. No internal structures are preserved. Mud lumps are present in Section 2, 150 cm, and CC, 3 cm.

SMEAR SLIDE SUMMARY (%):

	1, 25 D	2, 100* D
TEXTURE:		
Sand	5	100
Silt	3	—
Clay	1	—
COMPOSITION:		
Amphibole	2	—
Chlorite	2	—
Feldspar	3	21
Foraminifers	—	1
Glass	—	1
Heavy minerals	—	7
Mica	—	1
Oxide	1	—
Pyroxene	2	—
Quartz	3	16
Rock fragment	4	53

*thin-section point-count

808A 12H NO RECOVERY



SITE 808 HOLE A CORE 13H CORED INTERVAL 4782.4-4787.4 mbsl; 106.4-111.4 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN20; RADIOLARIANS: F/M; DIATOMS: B

PALEOMAGNETICS

PHYS. PROPERTIES: Φ=53 ρ=1.88; Φ=57.0 ρ=1.80; Φ=57 ρ=1.82; Φ=30 ρ=2.30

CHEMISTRY: %IC=0.09; %IC=0.28 %TOC=0.60; %IC=0.25; %IC=0.06

SECTION: 1, 2, 3, 4, CC

METERS: 0.5

GRAPHIC LITHOLOGY: VOID; VOID; VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW; IR

LITHOLOGIC DESCRIPTION

MEDIUM to FINE SAND and CLAYEY SILT with SILT

Major lithology: Medium to fine-grained, dark gray (2.5Y 3/0) SAND. Normal size grading occurs from Section 3, 78 cm down to Section 4, 65 cm; this part of the core is probably a single turbidite. Sand is structureless internally except for features caused by fluid movement in the core liner.

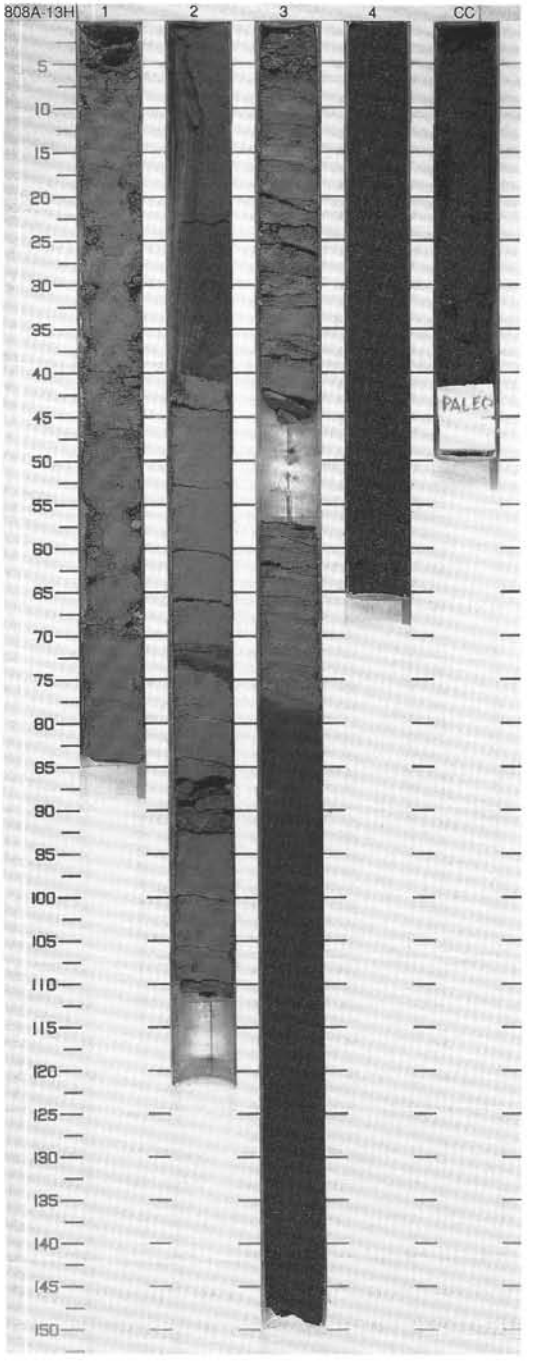
Major lithology: Gray CLAYEY SILT, structureless to slightly mottled. Slight color variations (2.5Y 4/0 to 5Y 4/1) are due to increased contents of lighter volcanic ash; these color changes are particularly obvious in Section 1.

Minor lithology: Thin beds of black (2.5Y 2/0 to 2.5Y 3/0) SILT. These silts display sharp bases, parallel laminae, and grade upward into clayey silt, as described above. Silty intervals begin as follows: Section 2, 40 cm, 74 cm, Section 3, 28 cm, and 78 cm.

SMEAR SLIDE SUMMARY (%):

	1, 48 D	2, 22 D	3, 80 D	3, 90* D	4, 31 D
TEXTURE:					
Sand	1	5	5	100	5
Silt	4	1	1	—	—
Clay	3	—	—	—	—
COMPOSITION:					
Accessory minerals	1	2	—	—	—
Amphibole	—	1	—	—	—
Calcite	—	—	—	1	—
Chlorite	—	1	—	—	—
Clay	2	—	—	—	—
Diatoms	2	—	—	—	—
Feldspar	3	3	2	17	2
Foraminifers	—	1	—	—	—
Glass	4	3	4	2	5
Mica	—	2	2	—	—
Nannofossils	2	—	—	—	—
Olivine	—	—	—	—	1
Pyroxene	—	1	3	3	1
Quartz	3	3	3	16	3
Radiolarians	1	—	—	—	—
Rock fragment	4	4	3	61	3
Spicules	1	—	—	—	—

*thin-section point-count



808B 1X NO RECOVERY

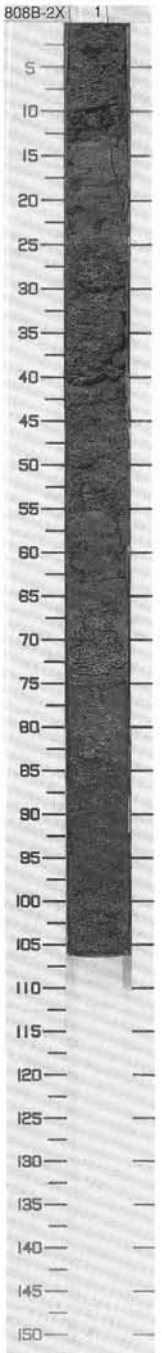
SITE 808 HOLE B CORE 2X CORED INTERVAL 4794.8-4804.5 mbsl; 120.6-130.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20	C/G R/P *Diartus pettersoni* ~ *Buccinosphaera invaginata*			ϕ=58 ϕ=1.81 ϕ=62 ϕ=1.62	%IC=0.11 %IC=0.22	1	0.5 1.0				* * * *	CLAYEY SILT, CLAY and ASH Major lithology: CLAYEY SILT (2.5Y 3/0) in structureless intervals with rare, diffuse, dark (2.5Y 2/0) sub-mm laminae. Minor lithology: Volcanic ASH in Section 1, 79-83 cm.

SMEAR SLIDE SUMMARY (%):

	1, 15 D	1, 55 D	1, 57 D	1, 70 M	1, 80 M
TEXTURE:					
Sand	—	1	4	1	—
Silt	5	5	5	4	5
Clay	2	3	2	5	2
COMPOSITION:					
Amphibole	1	2	2	—	—
Calcite	1	—	2	—	—
Chlorite	1	—	—	1	1
Diatoms	2	2	2	2	2
Feldspar	3	3	3	2	2
Glass	—	—	3	5	5
Mica	2	2	2	1	1
Nannofossils	—	—	2	3	3
Oxide	1	1	2	1	1
Quartz	3	3	2	2	2
Radiolarians	1	1	1	—	—
Rock fragment	2	2	2	—	1
Silicoflagellates	1	1	2	—	—
Spicules	1	1	2	2	—

808B 3X NO RECOVERY



SITE 808 HOLE B CORE 4X CORED INTERVAL 4814.1-4823.7 mbsl; 139.9-149.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		C/G NN20	B		%IC=0.29 %TOC=0.74	1.79 2.08	%IC=0.14	1 CC	0.5				

LITHOLOGIC DESCRIPTION

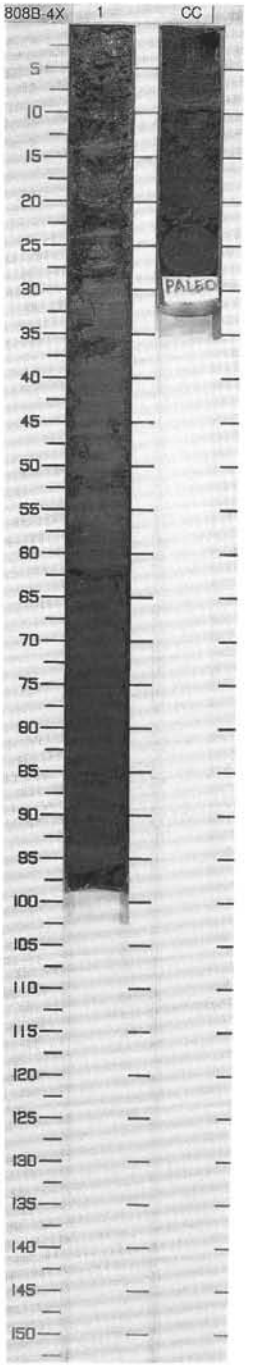
CLAYEY SILT and SILT

Major lithology: CLAYEY SILT (2.5Y 3/0, 2.5Y 2/0) in structureless to mottled intervals. Mottling due to bioturbation.

Minor lithology: SILT with parallel lamination in Section 1, 62-73 cm. Magnetite in sediment.

SMEAR SLIDE SUMMARY (%):

	1, 40 D
TEXTURE:	
Sand	1
Silt	4
Clay	2
COMPOSITION:	
Amphibole	1
Chlorite	1
Clay	2
Diatoms	2
Feldspar	3
Mica	2
Nannofossils	2
Quartz	3
Silicoflagellates	1
Spicules	2



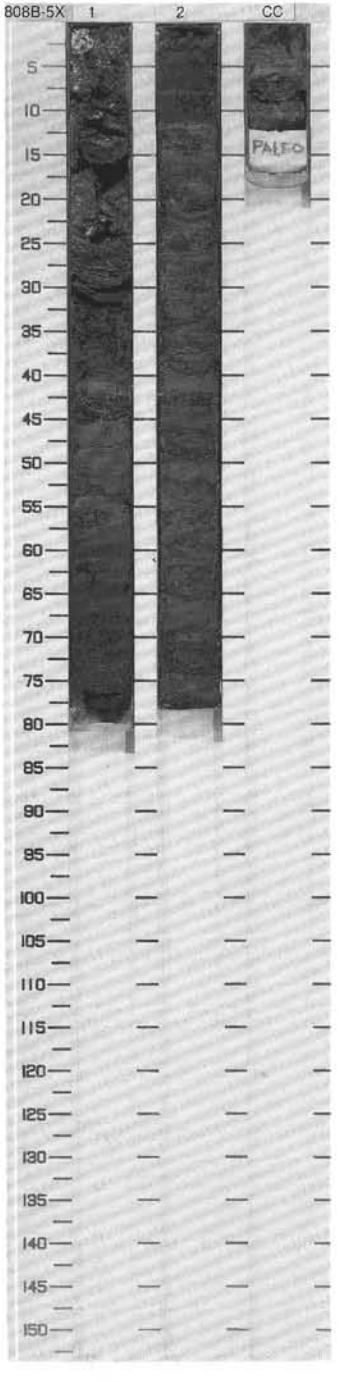
SITE 808 HOLE B CORE 5X CORED INTERVAL 4823.7-4833.3 mbsl: 149.5-159.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	F/M	NN20	B					1, 2, CC	0.5				IW	CLAYEY SILT, VERY FINE SAND and SILT Major lithology: CLAYEY SILT (2.5Y 3/0, 2.5Y 2/0) in structureless to mottled intervals. Mottling due to bioturbation. Minor lithology: Structureless VERY FINE SAND, with common plant material. Bases of sands in Section 1, 60 cm, 65 cm, Section 2, 7.5 cm, 11 cm. Minor lithology: Structureless SILT in Section 1, 25-40 cm.

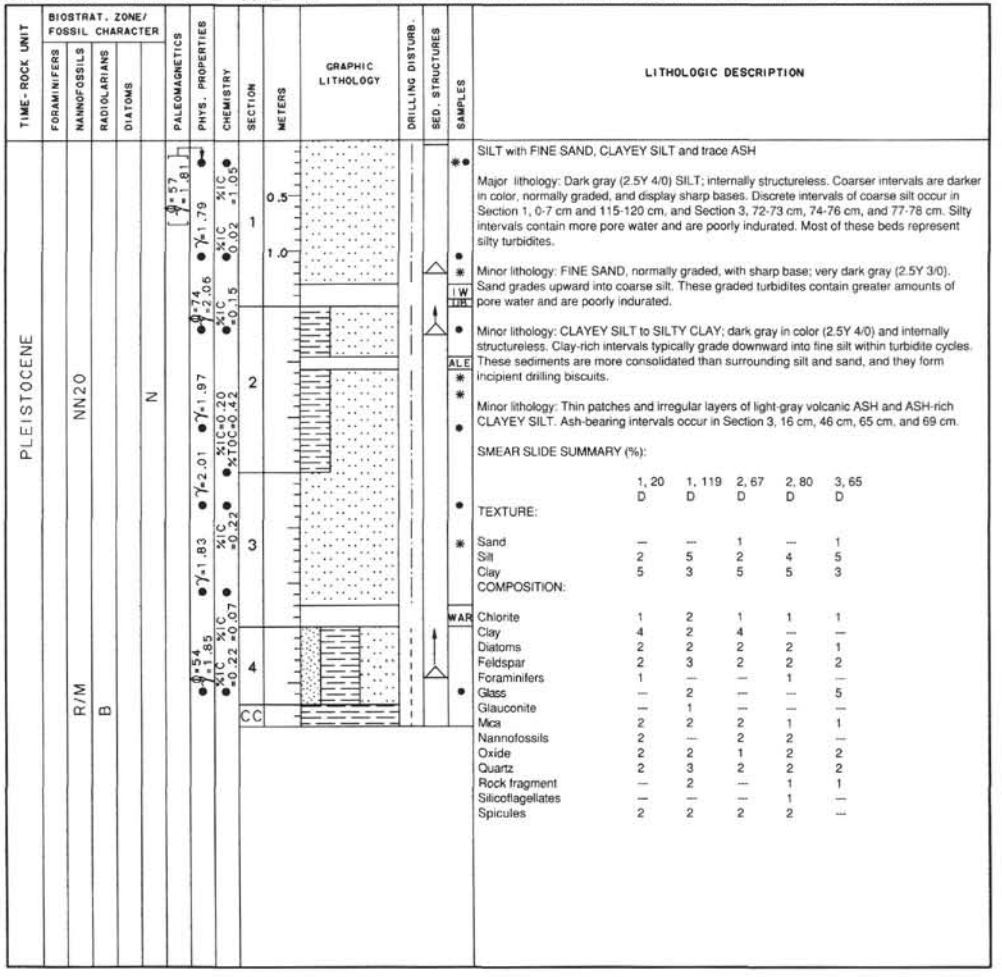
SMEAR SLIDE SUMMARY (%):

	1, 54 D	2, 13 D
TEXTURE:		
Sand	2	2
Silt	5	5
Clay	4	4
COMPOSITION:		
Chlorite	—	1
Clay	3	2
Diatoms	2	3
Feldspar	3	3
Glass	1	1
Mica	2	2
Nannofossils	1	—
Oxide	2	2
Quartz	3	3
Radiolarians	—	2
Rock fragment	3	2
Silicoflagellates	1	—
Spicules	2	2

808B 6X NO RECOVERY



SITE 808 HOLE B CORE 7X CORED INTERVAL 4843.0-4852.7 mbsl; 168.8-178.5 mbsf



SILT with FINE SAND, CLAYEY SILT and trace ASH

Major lithology: Dark gray (2.5Y 4/0) SILT; internally structureless. Coarser intervals are darker in color, normally graded, and display sharp bases. Discrete intervals of coarse silt occur in Section 1, 0-7 cm and 115-120 cm, and Section 3, 72-73 cm, 74-76 cm, and 77-78 cm. Silty intervals contain more pore water and are poorly indurated. Most of these beds represent silty turbidites.

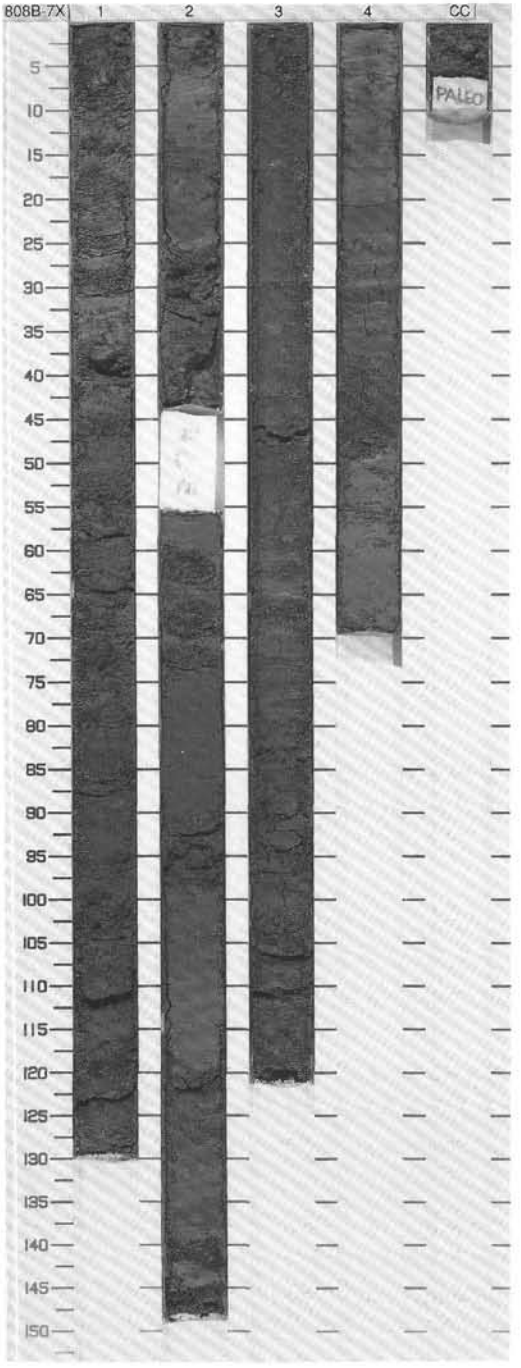
Minor lithology: FINE SAND, normally graded, with sharp base; very dark gray (2.5Y 3/0). Sand grades upward into coarse silt. These graded turbidites contain greater amounts of pore water and are poorly indurated.

Minor lithology: CLAYEY SILT to SILTY CLAY; dark gray in color (2.5Y 4/0) and internally structureless. Clay-rich intervals typically grade downward into fine silt within turbidite cycles. These sediments are more consolidated than surrounding silt and sand, and they form incipient drilling biscuits.

Minor lithology: Thin patches and irregular layers of light-gray volcanic ASH and ASH-rich CLAYEY SILT. Ash-bearing intervals occur in Section 3, 16 cm, 46 cm, 65 cm, and 69 cm.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 119 D	2, 67 D	2, 80 D	3, 65 D
TEXTURE:					
Sand	—	—	1	—	1
Silt	2	5	2	4	5
Clay	5	3	5	5	3
COMPOSITION:					
Chlorite	1	2	1	1	1
Clay	4	2	4	—	—
Diatoms	2	2	2	2	1
Feldspar	2	3	2	2	2
Foraminifers	1	—	—	1	—
Glass	—	2	—	—	5
Glauconite	—	1	—	—	—
Mica	2	2	2	1	1
Nannofossils	2	—	2	2	—
Oxide	2	2	1	2	2
Quartz	2	3	2	2	2
Rock fragment	—	2	—	1	1
Silicoflagellates	—	—	—	1	—
Spicules	2	2	2	2	—



SITE 808 HOLE B CORE 8X CORED INTERVAL 4852.7-4862.4 mbsl; 178.5-188.2 mbsf

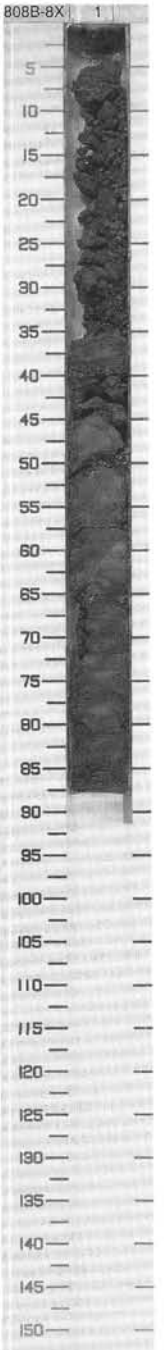
TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		B NN20	B			● 0-29 ● 2.10	● %IC=0.11	1	0.5					SANDY CLAYEY SILT and CLAYEY SILT with minor CLAY

Major lithology: Dark gray (2.5Y 4/0) SANDY CLAYEY SILT and CLAYEY SILT. Faint laminae and sharp contacts between textural intervals define possible folds between 45 and 55 cm with subhorizontal axial surfaces. Strong drilling disturbance is evident in the upper 45 cm, where sediment is broken into small fragments.

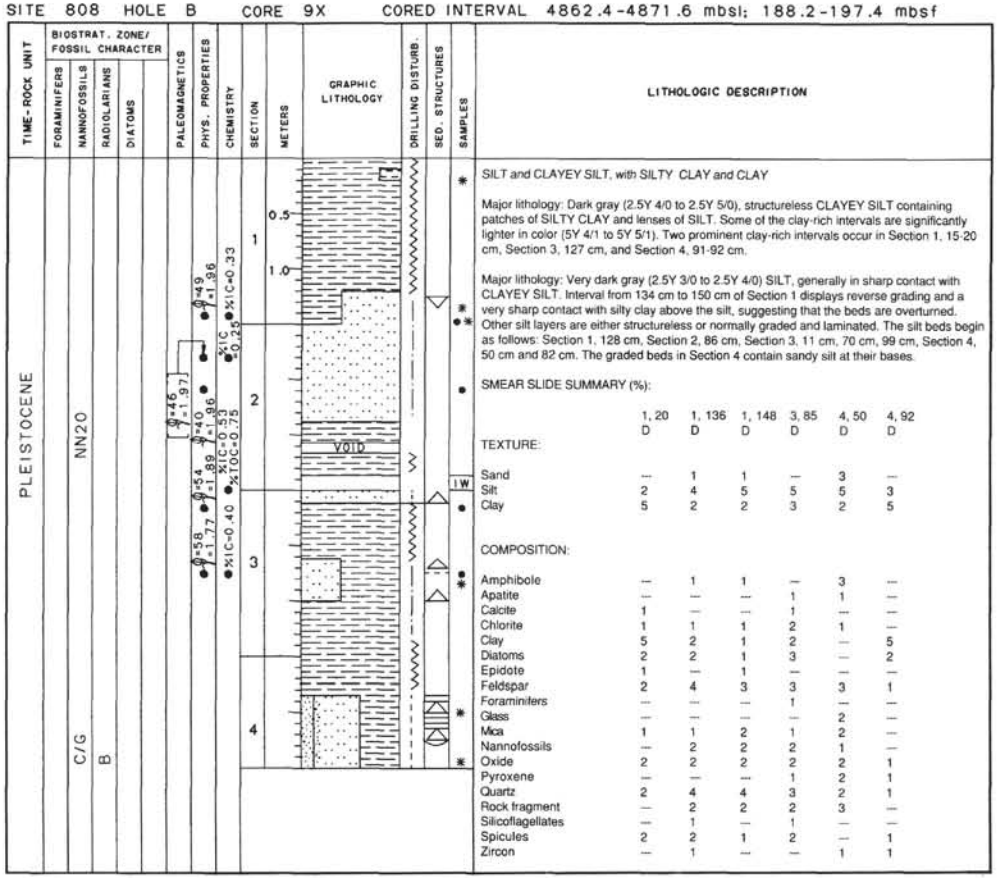
Minor lithology: Deformed layer of very fine CLAY at 59-63 cm. This layer is lighter in color (5Y 5/2) than surrounding sediment. The material appears to be composed of extremely fine grained carbonate, but this cannot be confirmed petrographically.

SMEAR SLIDE SUMMARY (%):

	1, 60 M	1, 75 D
TEXTURE:		
Sand	—	4
Silt	2	5
Clay	5	3
COMPOSITION:		
Amphibole	1	—
Chlorite	1	1
Clay	5	2
Diatoms	—	1
Feldspar	2	3
Mica	—	2
Nannofossils	—	2
Oxide	2	2
Quartz	2	3
Rock fragment	1	2
Spicules	—	1



SITE 808 HOLE B CORE 9X CORED INTERVAL 4862.4-4871.6 mbsl; 188.2-197.4 mbsf



LITHOLOGIC DESCRIPTION

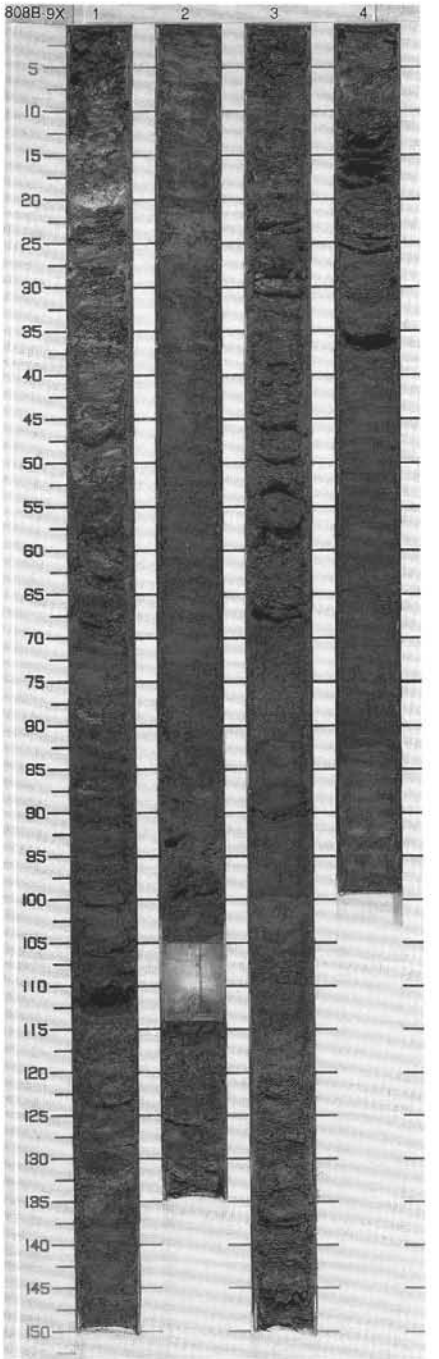
SILT and CLAYEY SILT, with SILTY CLAY and CLAY

Major lithology: Dark gray (2.5Y 4/0 to 2.5Y 5/0), structureless CLAYEY SILT containing patches of SILTY CLAY and lenses of SILT. Some of the clay-rich intervals are significantly lighter in color (5Y 4/1 to 5Y 5/1). Two prominent clay-rich intervals occur in Section 1, 15-20 cm, Section 3, 127 cm, and Section 4, 91-92 cm.

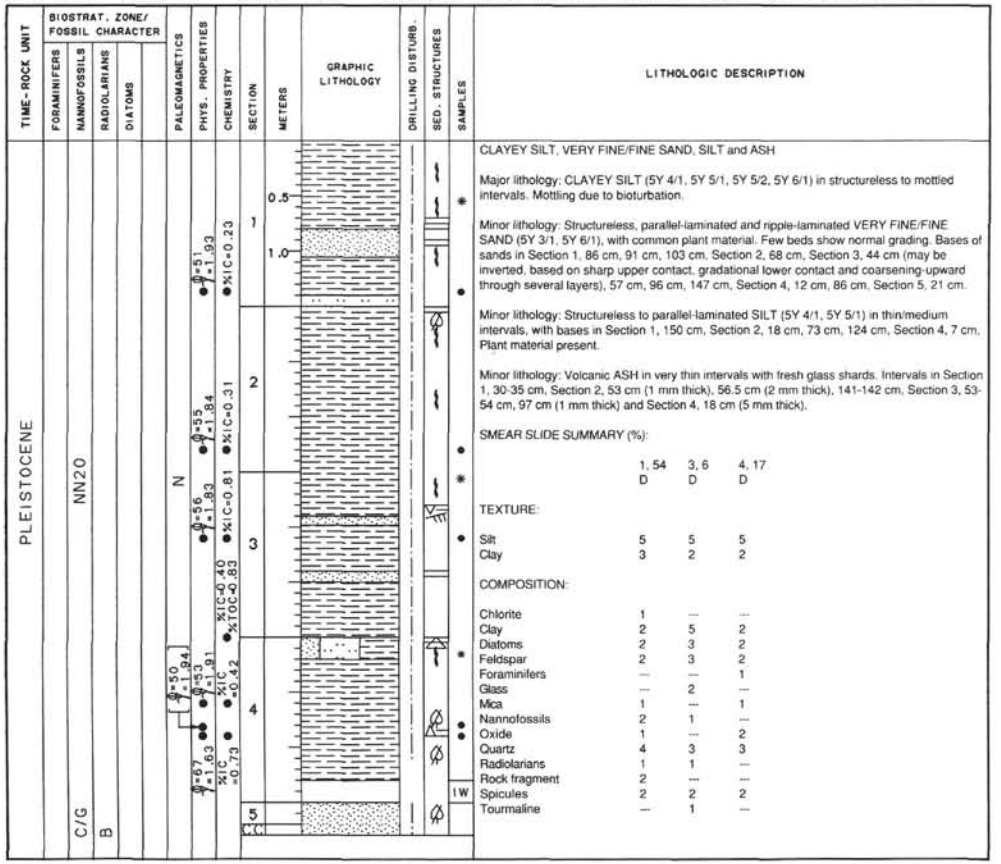
Major lithology: Very dark gray (2.5Y 3/0 to 2.5Y 4/0) SILT, generally in sharp contact with CLAYEY SILT. Interval from 134 cm to 150 cm of Section 1 displays reverse grading and a very sharp contact with silty clay above the silt, suggesting that the beds are overturned. Other silt layers are either structureless or normally graded and laminated. The silt beds begin as follows: Section 1, 128 cm, Section 2, 86 cm, Section 3, 11 cm, 70 cm, 99 cm, Section 4, 50 cm and 82 cm. The graded beds in Section 4 contain sandy silt at their bases.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 136 D	1, 148 D	3, 85 D	4, 50 D	4, 92 D
TEXTURE:						
Sand	—	1	1	—	3	—
Silt	2	4	5	5	5	3
Clay	5	2	2	3	2	5
COMPOSITION:						
Amphibole	—	1	1	—	3	—
Apatite	—	—	—	1	1	—
Calcite	1	—	—	1	—	—
Chlorite	1	1	1	2	1	—
Clay	5	2	1	2	—	5
Diatoms	2	2	1	3	—	2
Epidote	1	—	1	—	—	—
Feldspar	2	4	3	3	3	1
Foraminifers	—	—	—	1	—	—
Glass	—	—	—	—	2	—
Mica	1	1	2	1	2	—
Nannofossils	—	2	2	2	1	—
Oxide	2	2	2	2	2	1
Pyroxene	—	—	—	1	2	1
Quartz	2	4	4	3	2	1
Rock fragment	—	2	2	2	3	—
Silicoflagellates	—	1	—	1	—	—
Spicules	2	2	1	2	—	1
Zircon	—	1	—	—	1	1



SITE 808 HOLE B CORE 10X CORED INTERVAL 4871.6-4881.0 mbsl; 197.4-206.8 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILT, VERY FINE/FINE SAND, SILT and ASH

Major lithology: CLAYEY SILT (5Y 4/1, 5Y 5/1, 5Y 5/2, 5Y 6/1) in structureless to mottled intervals. Mottling due to bioturbation.

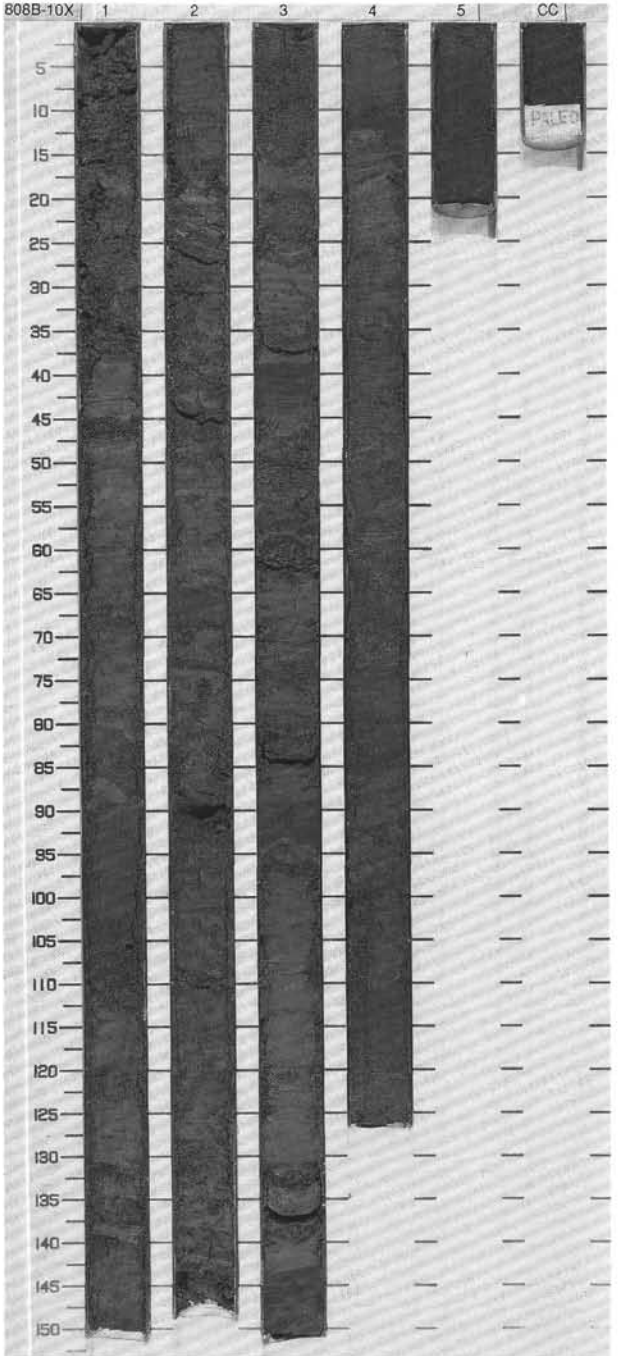
Minor lithology: Structureless, parallel-laminated and ripple-laminated VERY FINE/FINE SAND (5Y 3/1, 5Y 6/1), with common plant material. Few beds show normal grading. Bases of sands in Section 1, 86 cm, 91 cm, 103 cm, Section 2, 68 cm, Section 3, 44 cm (may be inverted, based on sharp upper contact, gradational lower contact and coarsening-upward through several layers), 57 cm, 96 cm, 147 cm, Section 4, 12 cm, 86 cm, Section 5, 21 cm.

Minor lithology: Structureless to parallel-laminated SILT (5Y 4/1, 5Y 5/1) in thin/medium intervals, with bases in Section 1, 150 cm, Section 2, 18 cm, 73 cm, 124 cm, Section 4, 7 cm. Plant material present.

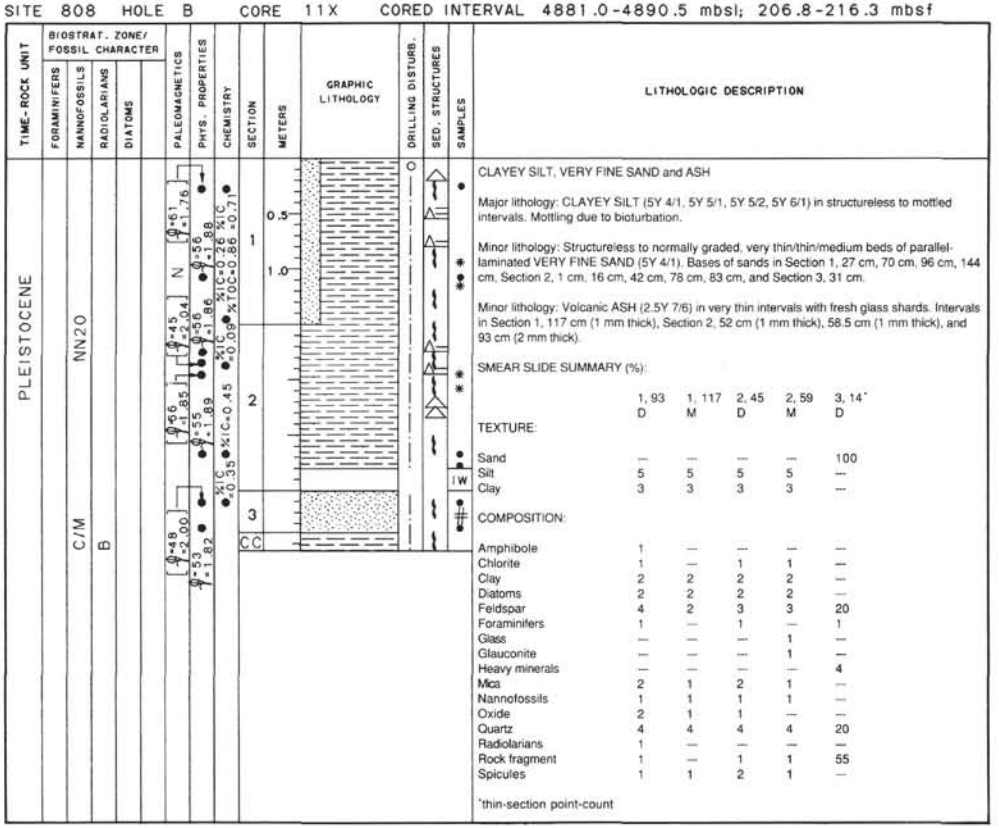
Minor lithology: Volcanic ASH in very thin intervals with fresh glass shards. Intervals in Section 1, 30-35 cm, Section 2, 53 cm (1 mm thick), 56.5 cm (2 mm thick), 141-142 cm, Section 3, 53-54 cm, 97 cm (1 mm thick) and Section 4, 18 cm (5 mm thick).

SMEAR SLIDE SUMMARY (%):

	1, 54 D	3, 6 D	4, 17 D
TEXTURE:			
Silt	5	5	5
Clay	3	2	2
COMPOSITION:			
Chlorite	1	—	—
Clay	2	5	2
Diatoms	2	3	2
Feldspar	2	3	2
Foraminifers	—	—	1
Glass	—	2	—
Mica	1	—	1
Nannofossils	2	1	—
Oxide	1	—	2
Quartz	4	3	3
Radiolarians	1	1	—
Rock fragment	2	—	—
Spicules	2	2	2
Tourmaline	—	1	—



SITE 808 HOLE B CORE 11X CORED INTERVAL 4881.0-4890.5 mbsl; 206.8-216.3 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILT, VERY FINE SAND and ASH

Major lithology: CLAYEY SILT (5Y 4/1, 5Y 5/1, 5Y 5/2, 5Y 6/1) in structureless to mottled intervals. Mottling due to bioturbation.

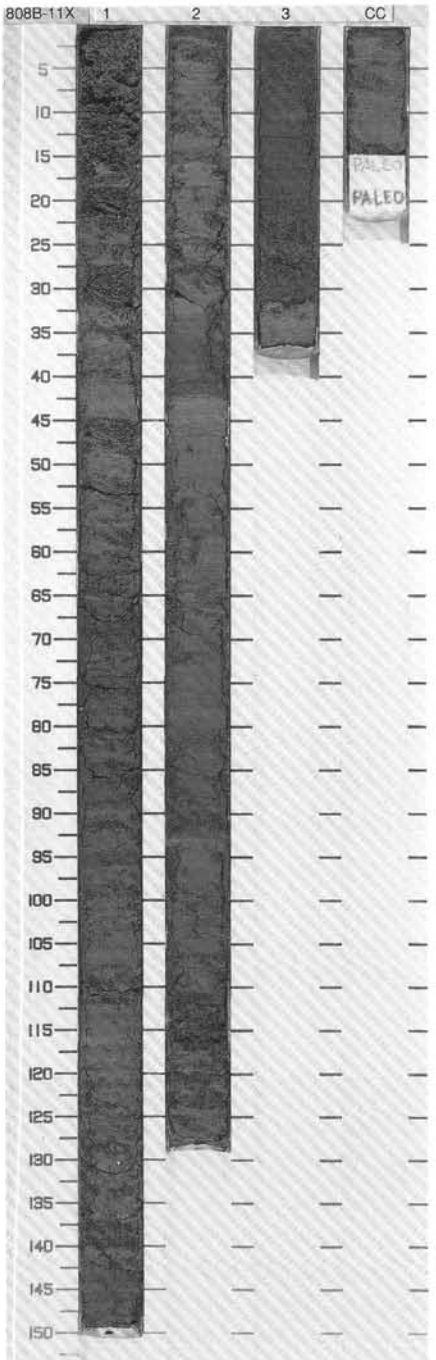
Minor lithology: Structureless to normally graded, very thin/thin/medium beds of parallel-laminated VERY FINE SAND (5Y 4/1). Bases of sands in Section 1, 27 cm, 70 cm, 96 cm, 144 cm, Section 2, 1 cm, 16 cm, 42 cm, 78 cm, 83 cm, and Section 3, 31 cm.

Minor lithology: Volcanic ASH (2.5Y 7/6) in very thin intervals with fresh glass shards. Intervals in Section 1, 117 cm (1 mm thick), Section 2, 52 cm (1 mm thick), 58.5 cm (1 mm thick), and 93 cm (2 mm thick).

SMEAR SLIDE SUMMARY (%):

	1, 93 D	1, 117 M	2, 45 D	2, 59 M	3, 14* D
TEXTURE:					
Sand	—	—	—	—	100
Silt	5	5	5	5	—
Clay	3	3	3	3	—
COMPOSITION:					
Amphibole	1	—	—	—	—
Chlorite	1	—	1	1	—
Clay	2	2	2	2	—
Diatoms	2	2	2	2	—
Feldspar	4	2	3	3	20
Foraminifers	1	—	1	—	1
Glass	—	—	—	1	—
Glauconite	—	—	—	1	—
Heavy minerals	—	—	—	—	4
Mica	2	1	2	1	—
Nannofossils	1	1	1	1	—
Oxide	2	1	1	—	—
Quartz	4	4	4	4	20
Radiolarians	1	—	—	—	—
Rock fragment	1	—	1	1	55
Spicules	1	1	2	1	—

*thin-section point-count



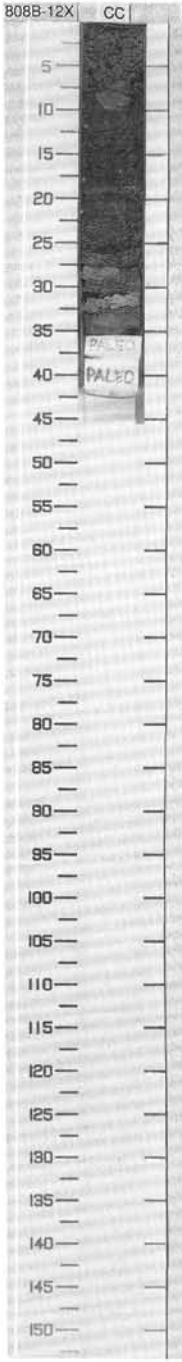
SITE 808 HOLE B CORE 12X CORED INTERVAL 4890.5-4900.0 mbsl; 216.3-225.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20 C/G	B					CC						FINE SAND and CLAYEY SILT Major lithology: Structureless FINE SAND (5Y 2.5/1) with disseminated medium/coarse grade particles of diagenetic white crystalline mineral (zeolite philipsite). Minor lithology: Mottled CLAYEY SILT (5Y 6/1). Mottling due to bioturbation.

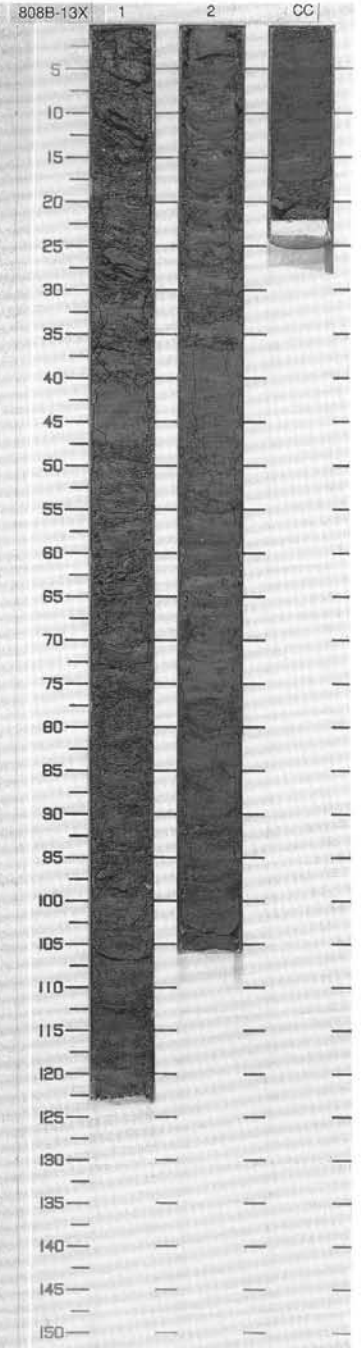
SITE 808 HOLE B CORE 13X CORED INTERVAL 4900.0-4909.3 mbsl; 225.8-235.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20 C/G	B		N			1 2 CC	0.5 1.0				IW UB	CLAYEY SILT, VERY FINE SAND and SILT Major lithology: CLAYEY SILT (5Y 5/1, 5Y 6/1, 5Y 3/1) in structureless to mottled intervals. Mottling due to bioturbation. Minor lithology: Structureless to normally graded, thin/medium beds of parallel-laminated VERY FINE SAND (5Y 3/1, 5Y 6/1). Bases of sands in Section 1, 47 cm, 116 cm, 124 cm, Section 2, 62 cm and CC, 22 cm. Minor lithology: Laminated SILT in Section 2, 36-46 cm.

808B-12X CC



808B-13X 1 2 CC



SITE 808 HOLE B CORE 14X CORED INTERVAL 4909.3-4918.7 mbsl: 235.1-244.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		NN20	B	B		ρ=1.42 ρ=2.06 ρ=1.49 ρ=2.06	%IC=0.42 %TOC=0.84	1	0.5				* *
								CC					

LITHOLOGIC DESCRIPTION

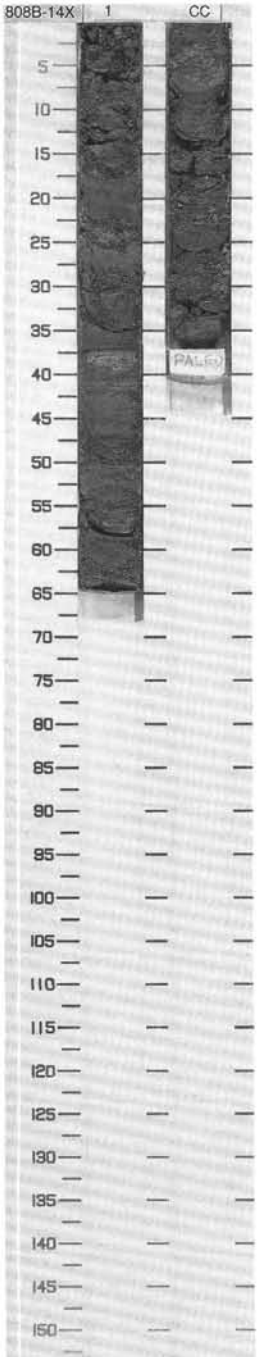
SILT and CLAYEY SILT

Major lithology: Dark gray (2.5Y 4/0) SILT interbedded with clayey silt. Silt beds are normally graded and may contain sandy silt at their bases. Lower boundaries are sharp. Coarsest intervals begin in Section 1, 21-22 cm, 27 cm, 37-38 cm, and 45 cm, and CC, 36 cm.

Major lithology: Gray (2.5Y 5/0) CLAYEY SILT; structureless, firm to hard, and forms drilling biscuits, whereas silty layers are less deformed.

SMEAR SLIDE SUMMARY (%):

	1, 18 D	1, 54 D
TEXTURE:		
Sand	2	1
Silt	5	5
Clay	3	3
COMPOSITION:		
Amphibole	1	—
Chlorite	1	—
Clay	4	2
Diatoms	—	1
Feldspar	3	3
Foraminifers	1	2
Mica	2	1
Nannofossils	2	2
Oxide	1	—
Quartz	4	4
Rock fragment	2	1
Spicules	—	1

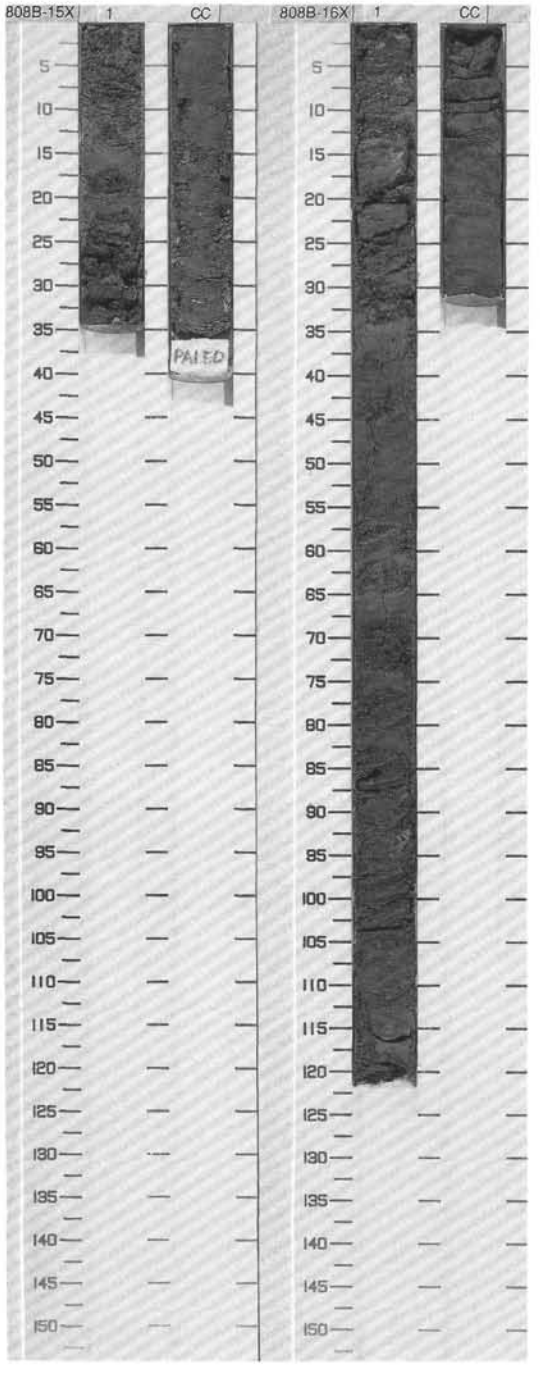


SITE 808 HOLE B CORE 15X CORED INTERVAL 4918.7-4928.4 mbsl; 244.5-254.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20	R/M	B			%IC=0.49	1						SANDY SILT, SILT, and CLAYEY SILT Major lithology: Dark gray (2.5Y 4/0) SILT to SANDY SILT, grading upward into clayey silt. Internal structure destroyed by drilling disturbance. Minor lithology: Gray (2.5Y 5/0) CLAYEY SILT. Structureless. Overlies silty layers. SMEAR SLIDE SUMMARY (%): CC, 20 D TEXTURE: Sand 2 Silt 4 Clay 1 COMPOSITION: Chlorite 2 Clay 1 Diatoms 1 Epidote 1 Feldspar 3 Foraminifers 2 Mica 1 Nannofossils 2 Oxide 2 Quartz 3 Rock fragment 3 Spicules 2
					Ø=1.83	Ø=1.98	%IC=0.19 %TOC=0.26	CC						

SITE 808 HOLE B CORE 16X CORED INTERVAL 4928.4-4937.6 mbsl; 254.2-263.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20	R/P	B	N	Ø=1.92 Ø=2.01 Ø=1.48	%IC=0.46 %TOC=0.65 %IC=0.30	1	0.5 1.0					SILT and CLAYEY SILT Major lithology: Dark gray (2.5Y 4/0) SILT, with sharp lower contacts, normal size grading from coarse to fine silt, and faint parallel laminae. A graded bed, beginning Section 1, 56 cm, contains sandy silt at the base. Silt intervals display a lower degree of consolidation and less deformation than interbeds of clayey silt; these coarser layers probably acted as dewatering conduits during compaction. Major lithology: Gray (2.5Y 5/0) CLAYEY SILT. Structureless; indurated and intensely disturbed by drilling, forming discrete biscuits.
								CC				FAY LW		

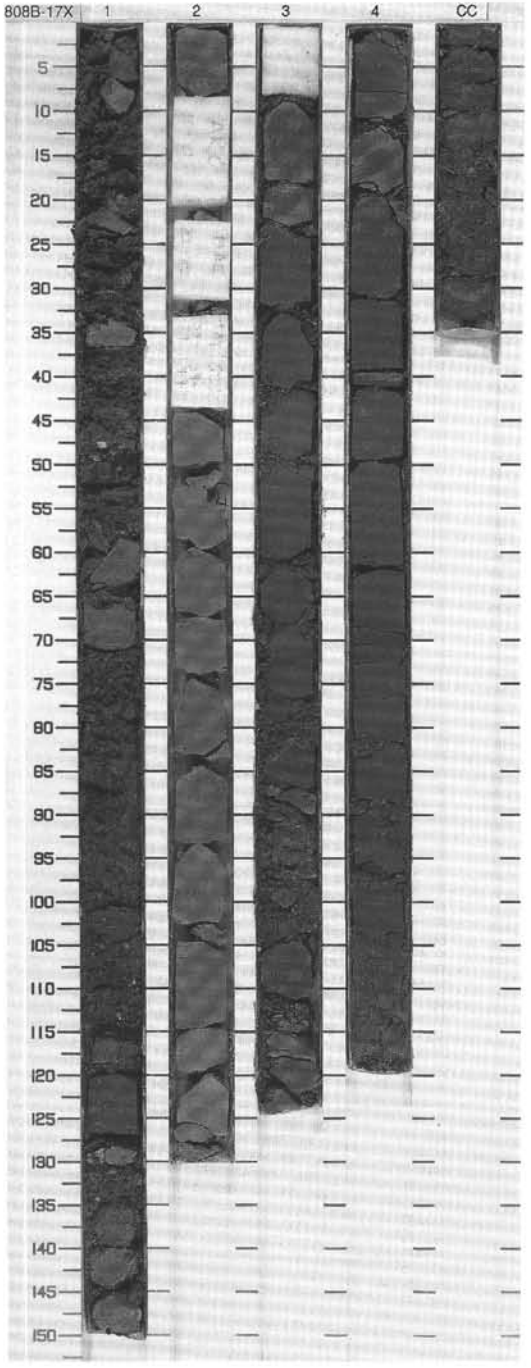


SITE 808 HOLE B CORE 17X CORED INTERVAL 4937.6-4947.2 mbsl; 263.4-273.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20	C/M	B	N	ρ=1.53 ρ=2.93 ρ=1.82 %IC=0.48 %TOC=0.81 %IC=0.57 ρ=1.51 ρ=1.87 %IC=0.42 ρ=1.43 ρ=2.02 %IC=0.34		1 2 3 4 CC	0.5 1.0				AKO ALE LAY IW DB OG	SILTSTONE, SILTY CLAYSTONE and CONGLOMERATE Major lithology: SILTY CLAYSTONE (5Y 5/1) with some sub-mm, dark, shear bands. Disseminated pyrite and pyrite framboids common. Major lithology: Structureless SILTSTONE (2.5Y 3/0). In Section 1, 71-101 cm and 126-150 cm, there are dispersed small, well rounded, quartz pebbles and granules (up to 6 mm diameter). Major lithology: Pebble CONGLOMERATE (2.5Y 3/0) in Section 1, 101-126 cm. Matrix-supported with well rounded clayey siltstone (Pleistocene) clasts up to >2.7 cm in maximum measured dimension, and sub-rounded to well-rounded small pebbles and granules (mm-scale) of other lithologies. Matrix (estimated 60-70%) of clayey fine sand. Disseminated plant material abundant in matrix. SMEAR SLIDE SUMMARY (%):

	1, 103 M	1, 137 D	2, 46 D	3, 45 D	4, 56 D
TEXTURE:					
Sand	—	5	1	1	—
Silt	2	2	2	5	5
Clay	5	2	5	4	4
COMPOSITION:					
Calcite	—	1	1	—	—
Chlorite	1	—	—	1	—
Clay	5	2	5	3	3
Diatoms	2	—	2	—	—
Epidote	—	1	—	—	—
Feldspar	2	3	3	3	3
Foraminifers	—	—	—	1	—
Mica	1	2	2	1	1
Nannofossils	3	3	2	2	—
Oxide	1	2	1	1	1
Quartz	3	4	3	3	4
Rock fragment	1	2	1	1	2
Spicules	2	2	2	—	—

808B 18X NO RECOVERY



SITE 808 HOLE B CORE 19X CORED INTERVAL 4956.7-4962.1 mbsl; 282.5-287.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	R/M	NN20	B		N	0.44, 1.98; 0.46, 1.95; 0.63, 1.86; 0.43, 1.86	%IC=0.53; %IC=0.48; %IC=0.47, %TOC=0.62; %IC=0.34	1, 2, 3, CC	0.5, 1.0				SP, IW

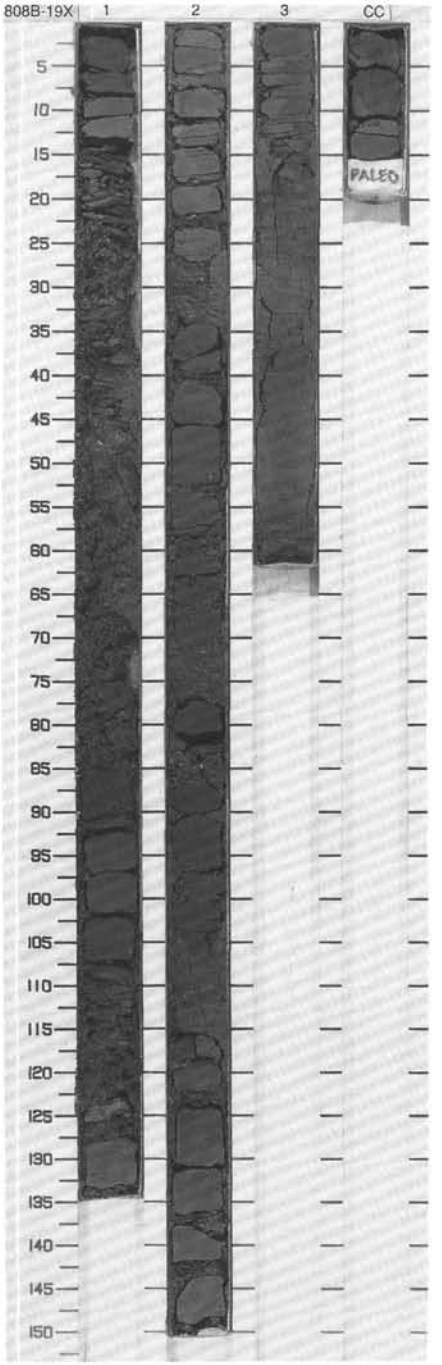
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Lithology: SILTY CLAYSTONE (5Y 4/0). Intensely bioturbated. Local dark, sub-mm, shear bands.

SMEAR SLIDE SUMMARY (%):

	1, 127 D	3, 26 D
TEXTURE:		
Silt	4	4
Clay	5	5
COMPOSITION:		
Chlorite	1	—
Clay	5	4
Feldspar	3	2
Foraminifers	2	—
Glass	1	2
Mica	1	2
Nannofossils	5	2
Oxide	—	2
Quartz	4	3
Rock fragment	1	2
Spicules	2	2
Tourmaline	—	1



SITE 808 HOLE B CORE 20X CORED INTERVAL 4962.1-4971.7 mbsl; 287.9-297.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	F/M	NN20	B			●γ=1.82 ●γ=2.00 ●γ=2.42	%IC=0.44 %TOC=0.66 ●%IC=0.45 ●%C =0.42	1 2 CC	0.5 1.0				* * LW UW *

LITHOLOGIC DESCRIPTION

CLAYSTONE, VERY FINE SAND and ASH

Major lithology: Structureless to mottled CLAYSTONE (5Y 4/1, 5Y 3/1). Mottling due to bioturbation.

Minor lithology: VERY FINE SAND with parallel lamination in thin interval in CC, 0-4.5 cm.

Minor lithology: Volcanic ASH (5Y 6/4) in 4 mm-thick interval in Section 2, 30 cm.

SMEAR SLIDE SUMMARY (%):

	1, 56 D	1, 60 D	2, 30 M
TEXTURE:			
Silt	2	2	2
Clay	5	5	5
COMPOSITION:			
Amphibole	1	–	–
Apatite	1	–	–
Calcite	–	–	2
Chlorite	1	–	–
Clay	5	5	5
Epidote	1	–	–
Feldspar	3	3	2
Foraminifers	1	–	2
Mica	2	2	1
Micrite	–	2	–
Nannofossils	2	2	–
Oxide	1	–	2
Quartz	3	3	3
Rock fragment	2	2	1
Spicules	1	–	1

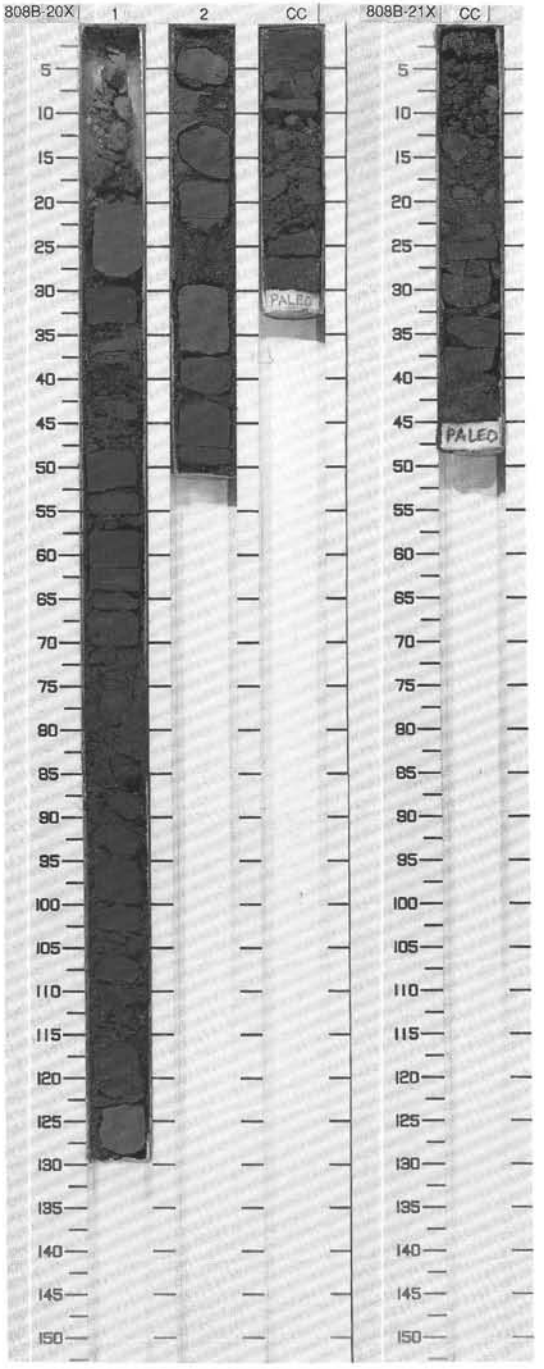
SITE 808 HOLE B CORE 21X CORED INTERVAL 4971.7-4981.3 mbsl; 297.5-307.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	R/P	NN20	B			●γ=1.46 ●γ=2.06	●%IC=0.69	CC					

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Lithology: Structureless to mottled SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation.

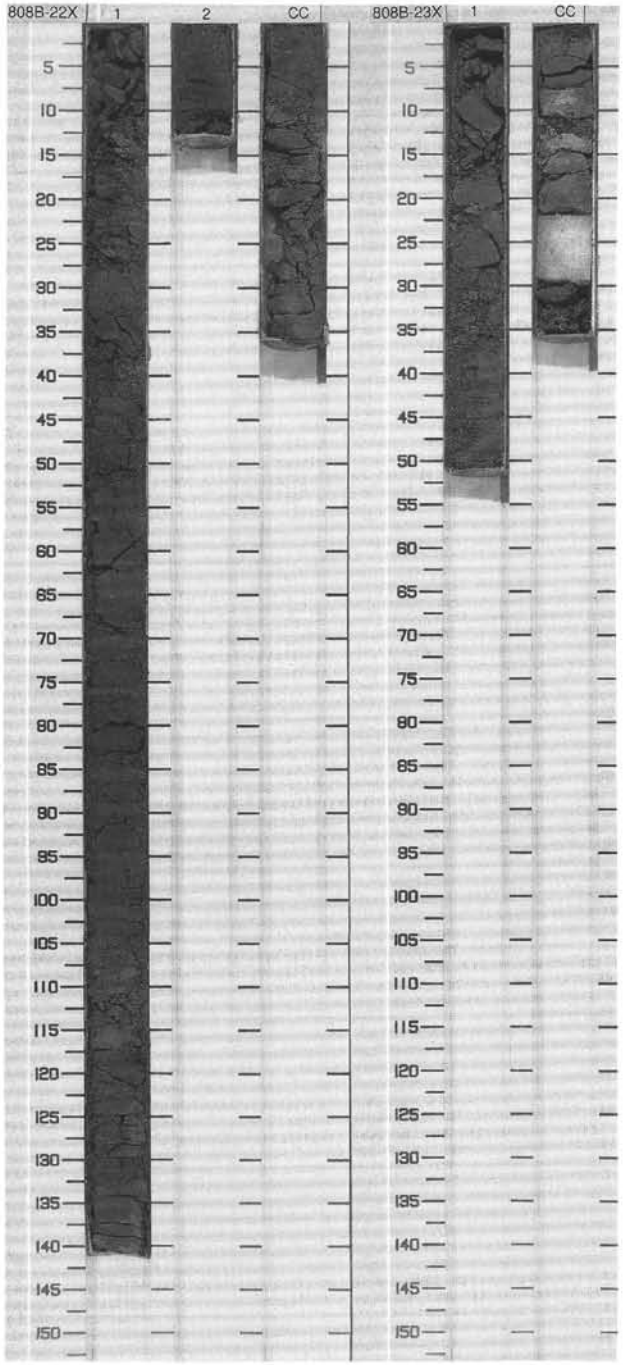


SITE 808 HOLE B CORE 22X CORED INTERVAL 4981.3-4991.0 mbsl; 307.1-316.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	C/G	NN20	B		N	Ø=45 ●=2.03	%IC=0.29 %TOC=0.59 %IC =0.38	1	0.5 1.0					SILTY CLAYSTONE Lithology: Structureless to mottled SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation.
								2						
								CC					IW	

SITE 808 HOLE B CORE 23X CORED INTERVAL 4991.0-5000.6 mbsl; 316.8-326.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	C/M	NN20	B		N	Ø=49 ●=2.00	%IC=0.39 %TOC=0.61	1						SILTSTONE and CLAYEY SILTSTONE Major lithologies: Gray (2.5Y 4/0) SILTSTONE and CLAYEY SILTSTONE broken into small fragments and larger drilling biscuits. Local preservation of laminae within some of the biscuits, which are engulfed in drilling slurry. Material in the core catcher is similar in texture, but less indurated and slightly less deformed. SMEAR SLIDE SUMMARY (%): CC, 20 D TEXTURE: Silt 5 Clay 4 COMPOSITION: Clay 3 Feldspar 3 Mica 2 Nannofossils 2 Oxide 1 Quartz 4 Rock fragment 3 Spicules 2
								CC					SW	



SITE 808 HOLE B CORE 24X CORED INTERVAL 5000.6-5010.2 mbsl; 326.4-336.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		C/M NN20	B		N	ϕ=49 ϕ=1.99 ϕ=47 ϕ=2.07 ϕ=43 ϕ=2.07	%IC=0.42 %IC=0.20 %TOC=0.5 %IC=0.62	1 2 3 CC	0.5 1.0				UB W KJC

LITHOLOGIC DESCRIPTION

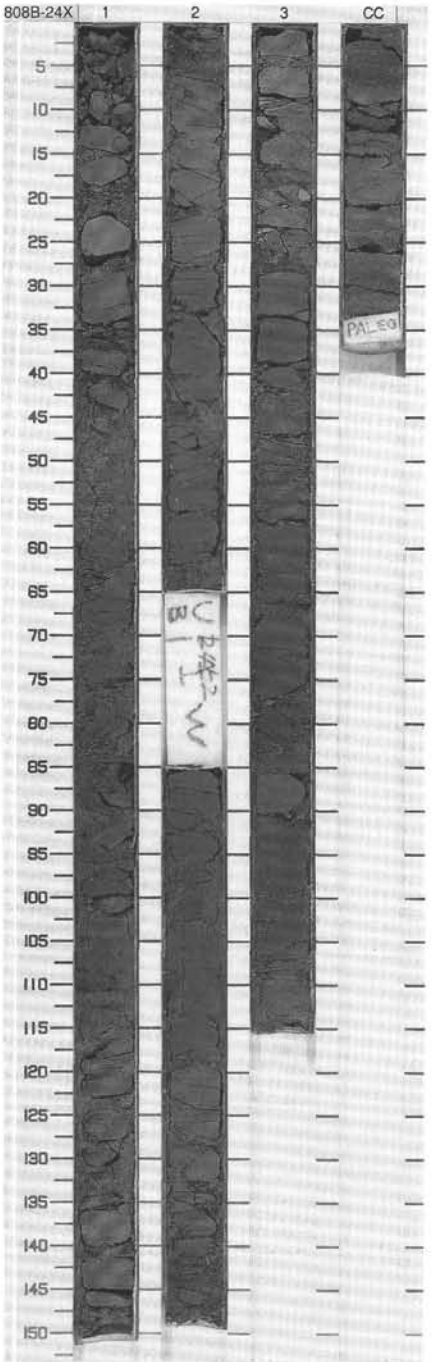
CLAYEY SILTSTONE, with SILT and SILTY drilling slurry

Major lithology: Gray (2.5Y 4/0) CLAYEY SILTSTONE, broken into drilling biscuits and interveining slurry. Slurried intervals appear to be coarser in grain size. Only a few intact pieces are large enough to obtain clearly-defined internal structure; most of these fragments appear structureless or bioturbated, and a few display faint laminae. Incipient fissility is aligned parallel to compositional layering, but the fabric has been rotated in an irregular way (see section on structural geology).

Minor lithology: SILT; relatively undeformed within core catcher. Much of the overlying drilling slurry also contains high percentages of silt, but the slurry is not in the correct stratigraphic position.

SMEAR SLIDE SUMMARY (%):

	1, 45 D	1, 115 D	CC, 5 D	CC, 7 M
TEXTURE:				
Sand	1	1	2	5
Silt	5	5	5	3
Clay	4	3	4	1
COMPOSITION:				
Calcite	1	—	—	—
Chlorite	1	1	1	—
Clay	2	3	2	2
Diatoms	—	—	2	—
Epidote	—	1	—	—
Feldspar	3	3	3	5
Foraminifers	1	—	—	—
Glass	—	—	1	—
Mica	2	2	2	2
Nannofossils	1	1	2	—
Oxide	—	1	2	—
Quartz	4	4	3	4
Rock fragment	3	3	3	3
Spicules	—	—	2	—



SITE 808 HOLE B CORE 25X CORED INTERVAL 5010.2-5014.8 mbsl; 336.0-340.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	R/P	NN20	B		N	ρ=1.44 ρ=2.02 %IC=0.52	ρ=1.46 ρ=2.00 %IC=0.40 ρ=1.44 ρ=2.04 %IC=0.51 ρ=1.43 ρ=2.01 %IC=0.48 %IC=0.58 %TOC=0.69	1 2 3 4 CC	0.5 1.0				* * * OG * IW *

LITHOLOGIC DESCRIPTION

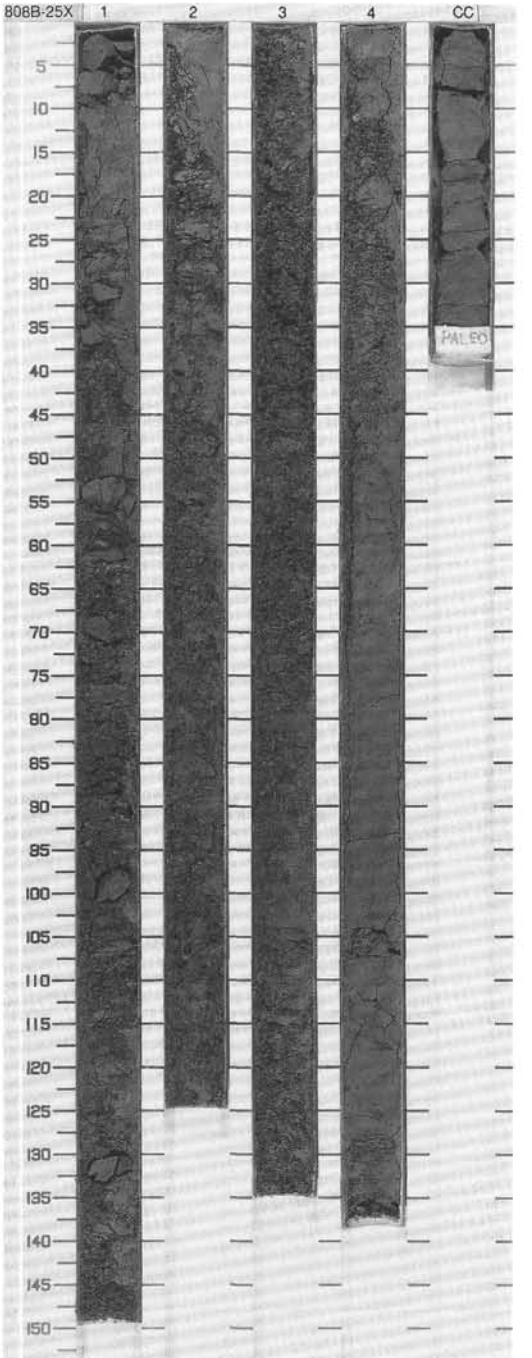
CLAYEY SILT and CLAYEY SILTSTONE

Major lithology: CLAYEY SILT grading into CLAYEY SILTSTONE. Gray in color (2.5Y 4/0). Firm, but not as hard as material in Core 24X. Intensely fractured into small bits together with a few drilling biscuits. Laminae in some of the biscuits display steep dips (see description of structural geology). Intervals between Section 2, 40 cm, and Section 3, 72 cm also display an unusual flaky or scaly fabric which appears to be sub-horizontal in orientation. Similar fabrics occur in Section 4, 0-45 cm. Remaining intervals contain larger biscuits, but there is relatively little drilling slurry between the biscuits. There is local preservation of bioturbation and faint laminae, but overall, there are few primary sedimentary structures remaining.

SMEAR SLIDE SUMMARY (%):

	1, 28 D	1, 50 M	2, 6 D	3, 58 D	4, 22 D
TEXTURE:					
Sand	—	—	—	—	1
Silt	5	4	5	5	5
Clay	4	5	4	4	3
COMPOSITION:					
Chlorite	1	—	2	2	1
Clay	4	3	4	4	3
Diatoms	—	—	—	1	—
Feldspar	3	4	3	3	4
Foraminifers	—	—	—	—	1
Glass	1	2	2	1	2
Mica	1	1	1	2	2
Micrite	—	—	—	1	—
Nannofossils	2	2	2	2	2
Oxide	2	—	1	2	1
Quartz	4	4	4	4	4
Rock fragment	2	1	3	2	3
Spicules	2	1	2	2	2

808B 26X NO RECOVERY

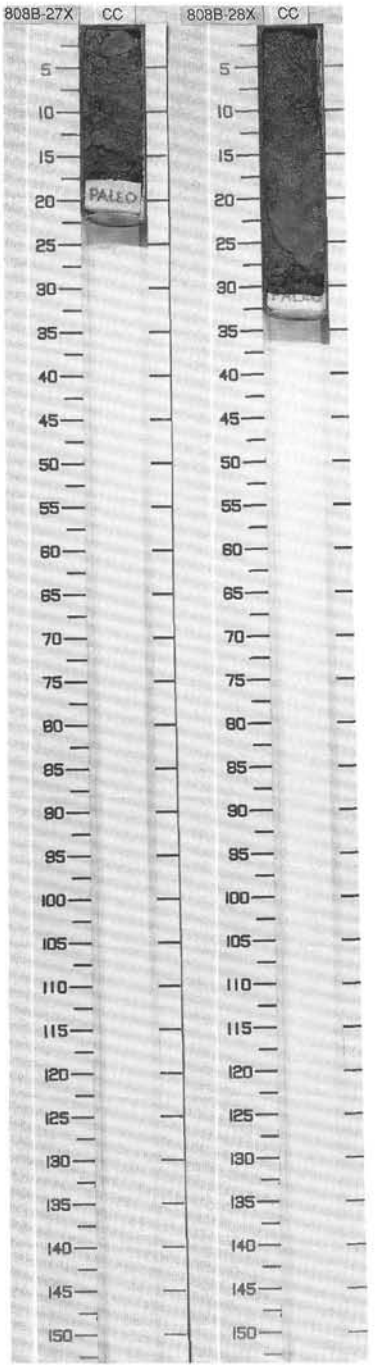


SITE 808 HOLE B CORE 27X CORED INTERVAL 5019.8-5029.4 mbsl; 345.6-355.2 mbsf

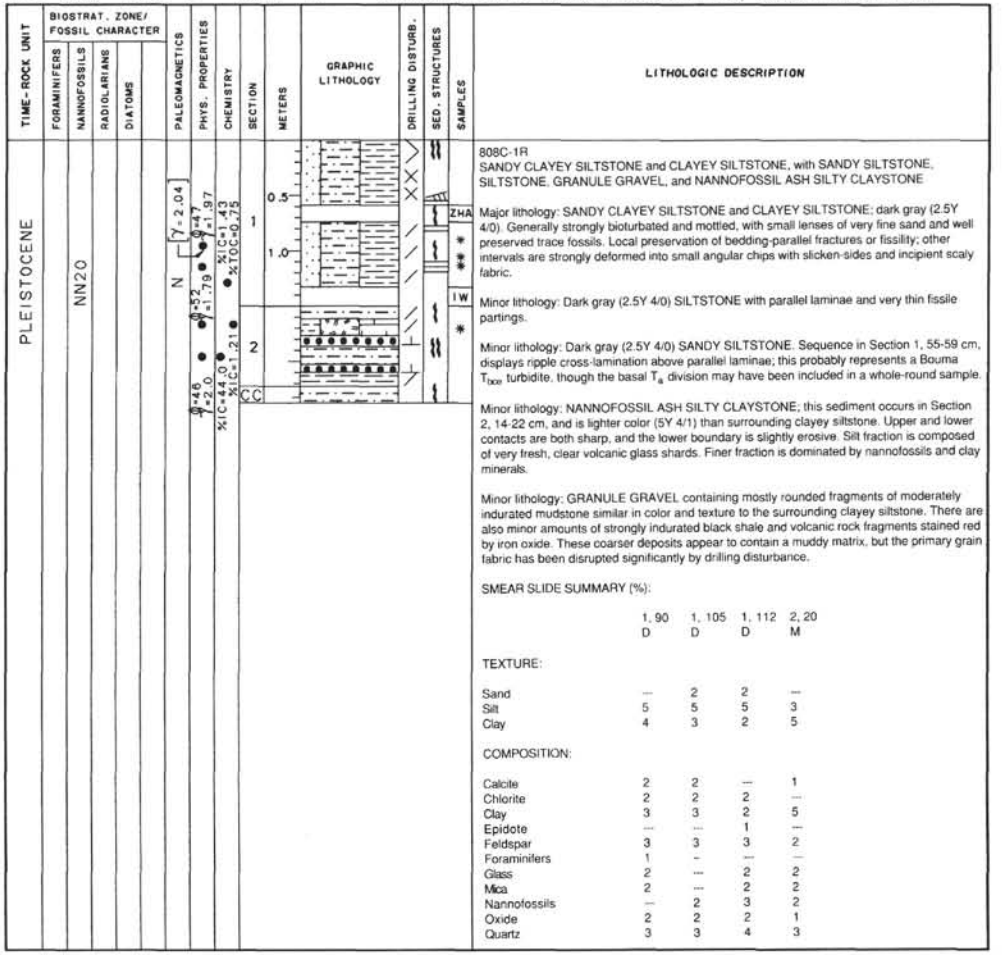
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20 F/M	B			ρ=1.48 ρ=1.98 MAD=12 ϕ=0.42		CC						CLAYEY SILT Major lithology: Structureless CLAYEY SILT, dark gray in color (2.5Y 4/0). Deformed by drilling into biscuits.

SITE 808 HOLE B CORE 28X CORED INTERVAL 5029.4-5033.0 mbsl; 355.2-358.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		NN20 C/G	B					CC					*	VERY FINE SAND with SILTY CLAY Major lithology: VERY FINE SAND interlayered with SILTY CLAY. Dark gray in color (2.5Y 4/0). Structureless in upper 20 cm. Laminae are evident from CC, 20 cm to 30 cm; this layering dips approximately 30°. Organic matter also occurs as small disseminated particles. SMEAR SLIDE SUMMARY (%): CC, 22 D TEXTURE: Silt 4 Clay 5 COMPOSITION: Clay 4 Epidote 1 Feldspar 3 Mica 2 Nannofossils 2 Oxide 1 Quartz 3 Rock fragment 2



SITE 808 HOLE C CORE 1R CORED INTERVAL 4973.1-4982.6 mbsl; 298.5-308.0 mbsf



LITHOLOGIC DESCRIPTION

808C-1R
SANDY CLAYEY SILTSTONE and CLAYEY SILTSTONE, with SANDY SILTSTONE, SILTSTONE, GRANULE GRAVEL, and NANNOFOSSIL ASH SILTY CLAYSTONE

Major lithology: SANDY CLAYEY SILTSTONE and CLAYEY SILTSTONE; dark gray (2.5Y 4/0). Generally strongly bioturbated and mottled, with small lenses of very fine sand and well preserved trace fossils. Local preservation of bedding-parallel fractures or fissility; other intervals are strongly deformed into small angular chips with slicken-sides and incipient scaly fabric.

Minor lithology: Dark gray (2.5Y 4/0) SILTSTONE with parallel laminae and very thin fissile partings.

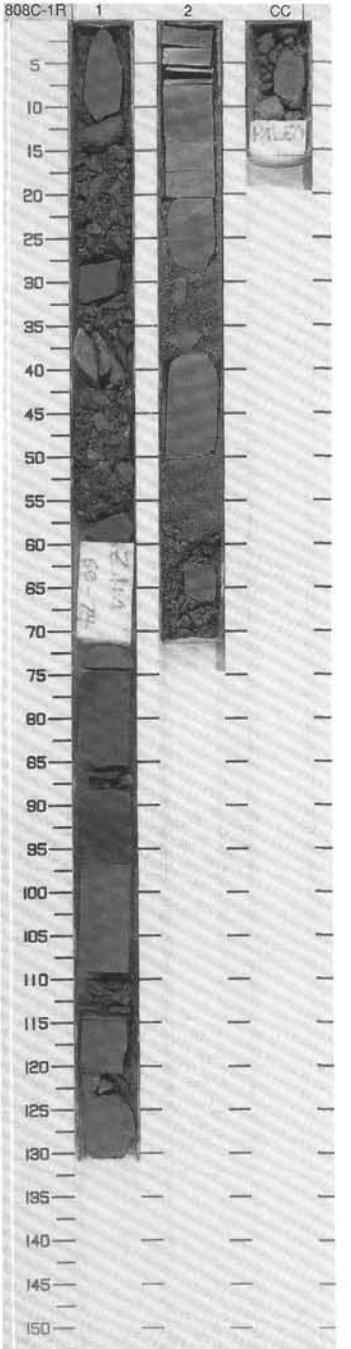
Minor lithology: Dark gray (2.5Y 4/0) SANDY SILTSTONE. Sequence in Section 1, 55-59 cm, displays ripple cross-lamination above parallel laminae; this probably represents a Bouma T_{bce} turbidite, though the basal T_a division may have been included in a whole-round sample.

Minor lithology: NANNOFOSSIL ASH SILTY CLAYSTONE; this sediment occurs in Section 2, 14-22 cm, and is lighter color (5Y 4/1) than surrounding clayey siltstone. Upper and lower contacts are both sharp, and the lower boundary is slightly erosive. Silt fraction is composed of very fresh, clear volcanic glass shards. Finer fraction is dominated by nannofossils and clay minerals.

Minor lithology: GRANULE GRAVEL containing mostly rounded fragments of moderately indurated mudstone similar in color and texture to the surrounding clayey siltstone. There are also minor amounts of strongly indurated black shale and volcanic rock fragments stained red by iron oxide. These coarser deposits appear to contain a muddy matrix, but the primary grain fabric has been disrupted significantly by drilling disturbance.

SMEAR SLIDE SUMMARY (%):

	1, 90 D	1, 105 D	1, 112 D	2, 20 M
TEXTURE:				
Sand	–	2	2	–
Silt	5	5	5	3
Clay	4	3	2	5
COMPOSITION:				
Calcite	2	2	–	1
Chlorite	2	2	2	–
Clay	3	3	2	5
Epidote	–	–	1	–
Feldspar	3	3	3	2
Foraminifers	1	–	–	–
Glass	2	–	2	2
Mica	2	–	2	2
Nannofossils	–	2	3	2
Oxide	2	2	2	1
Quartz	3	3	4	3



SITE 808 HOLE C CORE 2R CORED INTERVAL 4982.6-4992.2 mbsl; 308.0-317.6 mbsf

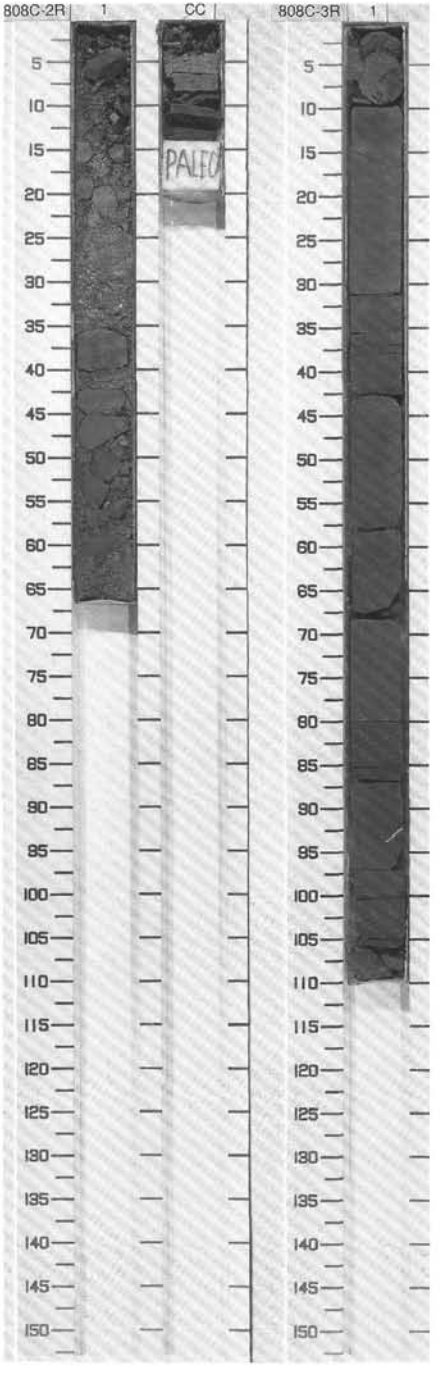
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		A/G NN20	B			Φ=4.7 ● Φ=2.1	%IC=0.52 ● %TOC=0.66	1 CC	0.5				TW	CLAYEY SILTSTONE Lithology: Mottled CLAYEY SILTSTONE (5Y 4/0), with diffuse parallel lamination in CC, 4-15 cm. Mottling due to bioturbation.

SITE 808 HOLE C CORE 3R CORED INTERVAL 4992.2-5001.8 mbsl; 317.6-327.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE		C/M NN20	B		N	Φ=50 ● Φ=2.04 Φ=43 ● Φ=2.06 Φ=48 ● Φ=2.15	%IC=1.05 %TOC=0.66 %IC ● =0.44	1	0.5 1.0				TW	CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/0). Mottling due to bioturbation. Flattened siliceous worm tubes at Section 1, 72 cm. Major lithology: Normally-graded, laminated, SILTSTONE turbidites (5Y 4/0) in thin to medium beds. T_{bcd} SILTSTONE turbidite with incipient ripple-lamination at Section 1, 29-42.5 cm. Bases of SILT turbidites at Section 1, 42.5 cm, 58 cm, 78.5 cm and 105 cm.

SMEAR SLIDE SUMMARY (%):

	1, 14 M	1, 25 D	1, 33 D	1, 41 D
TEXTURE:				
Silt	3	5	5	5
Clay	5	4	3	4
COMPOSITION:				
Calcite	1	–	2	–
Chlorite	–	1	2	2
Clay	5	3	3	3
Feldspar	2	3	4	3
Glass	2	1	2	–
Mica	–	2	3	2
Nannofossils	2	3	2	2
Oxide	–	1	2	2
Quartz	3	4	4	3
Rock fragment	–	2	3	3
Spicules	2	–	2	2

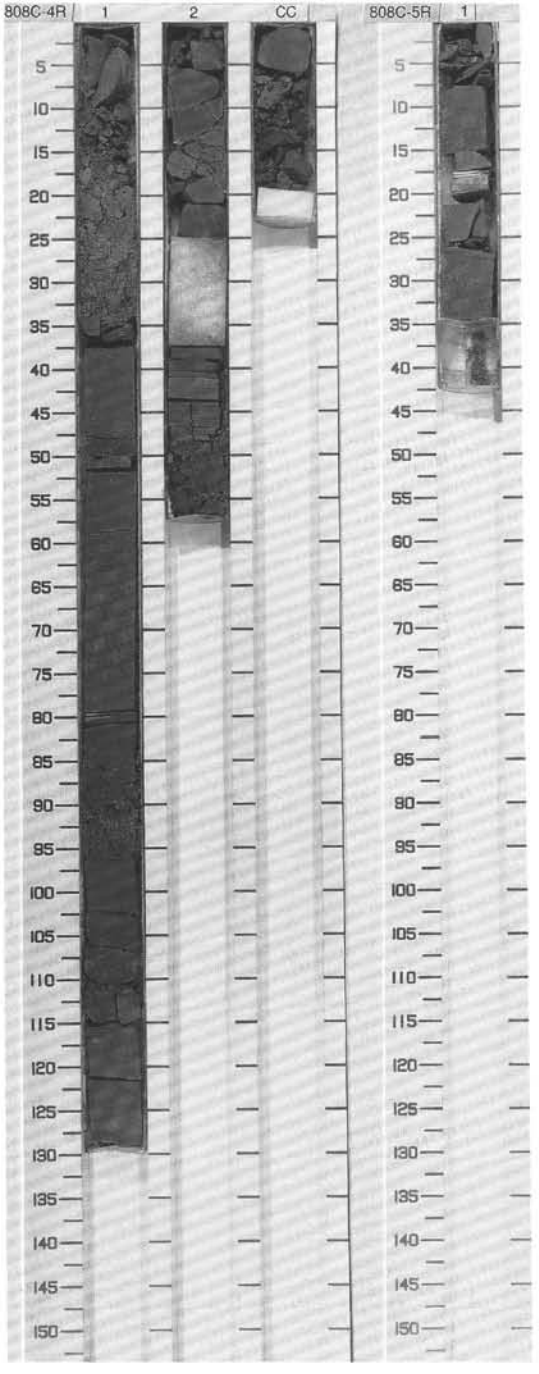


SITE 808 HOLE C CORE 4R CORED INTERVAL 5001.8-5011.5 mbsl; 327.2-336.9 mbsf

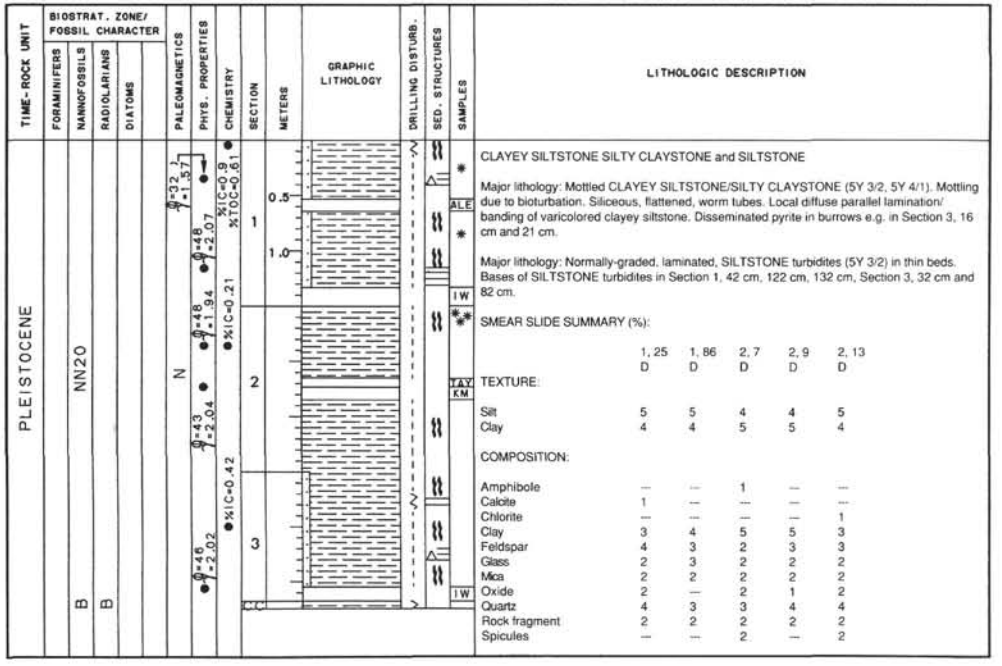
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	C/G	NN20	B			ϕ=48 ρ=2.04 ϕ=44 ρ=2.02 ϕ=41 ρ=2.07	%IC=0.88 %TOC=0.81 %IC =0.46	1 2 CC	0.5 1.0				IW DR ALE	CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/0, 5Y 3/1). Mottling due to bioturbation. Prominent 'shear zones' in Section 1, 68-79 cm. Major lithology: Normally-graded, laminated, SILTSTONE turbidites (5Y 3/0, 5Y 3/1) in thin to medium beds. Bases of SILTSTONE turbidites at Section 1, 50 cm, 58 cm, 91 cm, 107 cm, 112 cm, 121.5 cm, 130 cm and Section 2, 50 cm. Slight disturbance to laminae and steeper bedding dip in Section 2, 82-91 cm.

SITE 808 HOLE C CORE 5R CORED INTERVAL 5011.5-5021.2 mbsl; 336.9-346.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	(NN20)	B	B			ϕ=47 ρ=1.95		1						CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1). Mottling due to bioturbation. Major lithology: Normally-graded, laminated, SILTSTONE turbidites (5Y 3/1) in thin beds. Bases of SILTSTONE turbidites at Section 1, 21 cm, 34 cm and 37 cm.



SITE 808 HOLE C CORE 6R CORED INTERVAL 5021.2-5030.8 mbsl; 346.6-356.2 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE SILTY CLAYSTONE and SILTSTONE

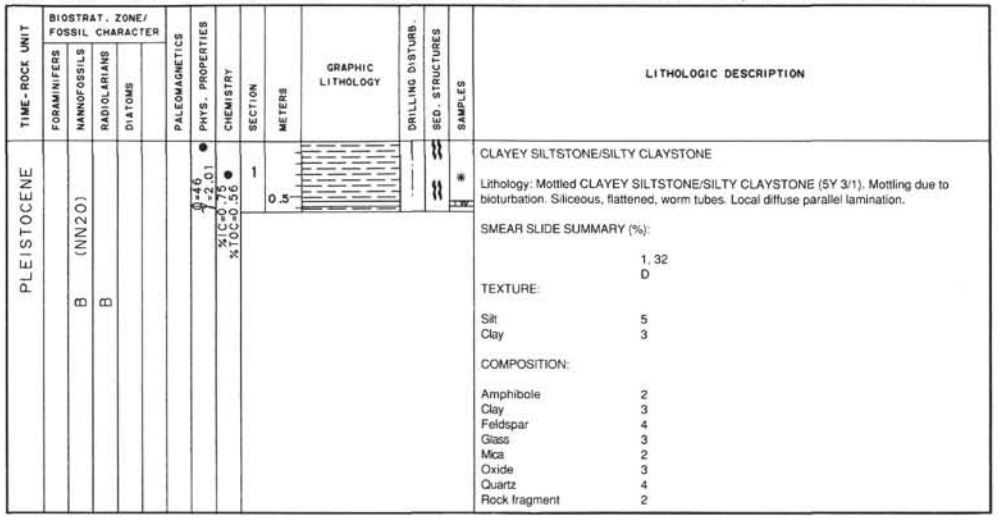
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/2, 5Y 4/1). Mottling due to bioturbation. Siliceous, flattened, worm tubes. Local diffuse parallel lamination/ banding of varicolored clayey siltstone. Disseminated pyrite in burrows e.g. in Section 3, 16 cm and 21 cm.

Major lithology: Normally-graded, laminated, SILTSTONE turbidites (5Y 3/2) in thin beds. Bases of SILTSTONE turbidites in Section 1, 42 cm, 122 cm, 132 cm, Section 3, 32 cm and 82 cm.

SMEAR SLIDE SUMMARY (%):

	1, 25 D	1, 86 D	2, 7 D	2, 9 D	2, 13 D
TEXTURE:					
Silt	5	5	4	4	5
Clay	4	4	5	5	4
COMPOSITION:					
Amphibole	—	—	1	—	—
Calcite	1	—	—	—	—
Chlorite	—	—	—	—	1
Clay	3	4	5	5	3
Feldspar	4	3	2	3	3
Glass	2	3	2	2	2
Mica	2	2	2	2	2
Oxide	2	—	2	1	2
Quartz	4	3	3	4	4
Rock fragment	2	2	2	2	2
Spicules	—	—	2	—	2

SITE 808 HOLE C CORE 7R CORED INTERVAL 5030.8-5040.5 mbsl; 356.2-365.9 mbsf



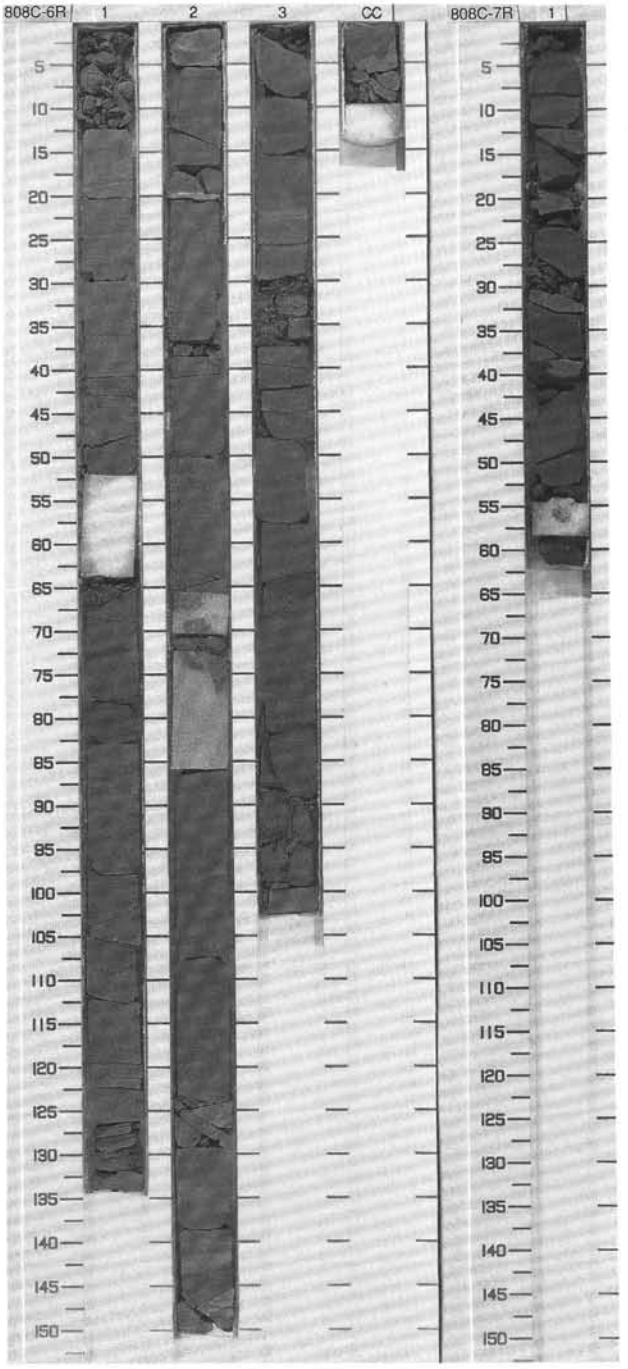
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1). Mottling due to bioturbation. Siliceous, flattened, worm tubes. Local diffuse parallel lamination.

SMEAR SLIDE SUMMARY (%):

	1, 32 D
TEXTURE:	
Silt	5
Clay	3
COMPOSITION:	
Amphibole	2
Clay	3
Feldspar	4
Glass	3
Mica	2
Oxide	3
Quartz	4
Rock fragment	2



SITE 808 HOLE C CORE 8R CORED INTERVAL 5040.5-5050.2 mbsl; 365.9-375.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		C/M NN20	B		N	ϕ=2.1 ϕ=2.29 ϕ=2.27 ϕ=2.11 ϕ=2.05 ϕ=2.20 ϕ=2.44 ϕ=2.41 ϕ=2.35	%TC=0.97 %TOC=0.65 %TC=0.26	1 2	0.5 1.0				* * * VB IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE with SHALE and SILTY SAND

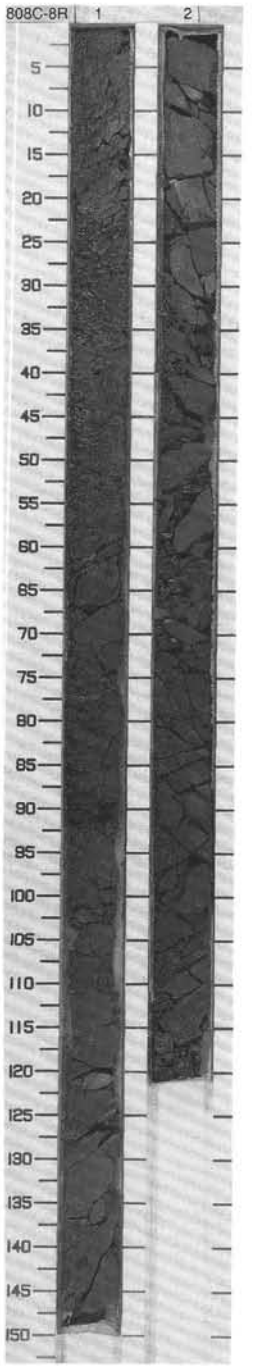
Major lithology: Dark gray (2.5Y 4/0) CLAYEY SILTSTONE. Thin to very thin interbeds in the upper part of Section 1, 10-23 cm, are lighter in color (5Y 5/1) and contain more clay; these strata collectively display an apparent dip of approximately 40°. Most of the remaining intervals are well indurated, internally structureless, and highly deformed by spaced fractures and darker colored, anastomosing shear bands. Interval in Section 2, 91-98 cm, contains a very thin bed of fine sand to coarse silt that is inclined at an apparent dip of approximately 55°.

Minor lithology: Very dark gray (2.5Y 3/0) fissile SHALE; moderately indurated. The fissility is inclined into the core liner, but at a relatively low dip angle.

Minor lithology: Structureless and moderately indurated SILTY SAND. Dark gray color (2.5Y 4/0). Contains grains as large as coarse sand (2 mm). Sharp base appears to be subhorizontal.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 35 D	1, 110 D
TEXTURE:			
Sand	—	—	5
Silt	5	5	4
Clay	4	4	2
COMPOSITION:			
Amphibole	—	—	1
Chlorite	—	2	2
Clay	3	3	2
Epidote	—	—	1
Feldspar	2	3	4
Glass	4	3	2
Mica	—	2	2
Nannofossils	3	—	2
Oxide	1	2	2
Quartz	3	4	4
Rock fragment	—	2	3
Spicules	2	—	—



SITE 808 HOLE C CORE 9R CORED INTERVAL 5050.2-5059.8 mbsl; 375.6-385.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		F/M NN20	B				%IC=1.07 %TOC=0.65 %IC =0.38	1	0.5 1.0				* * TW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and CLAYEY SILTY SANDSTONE

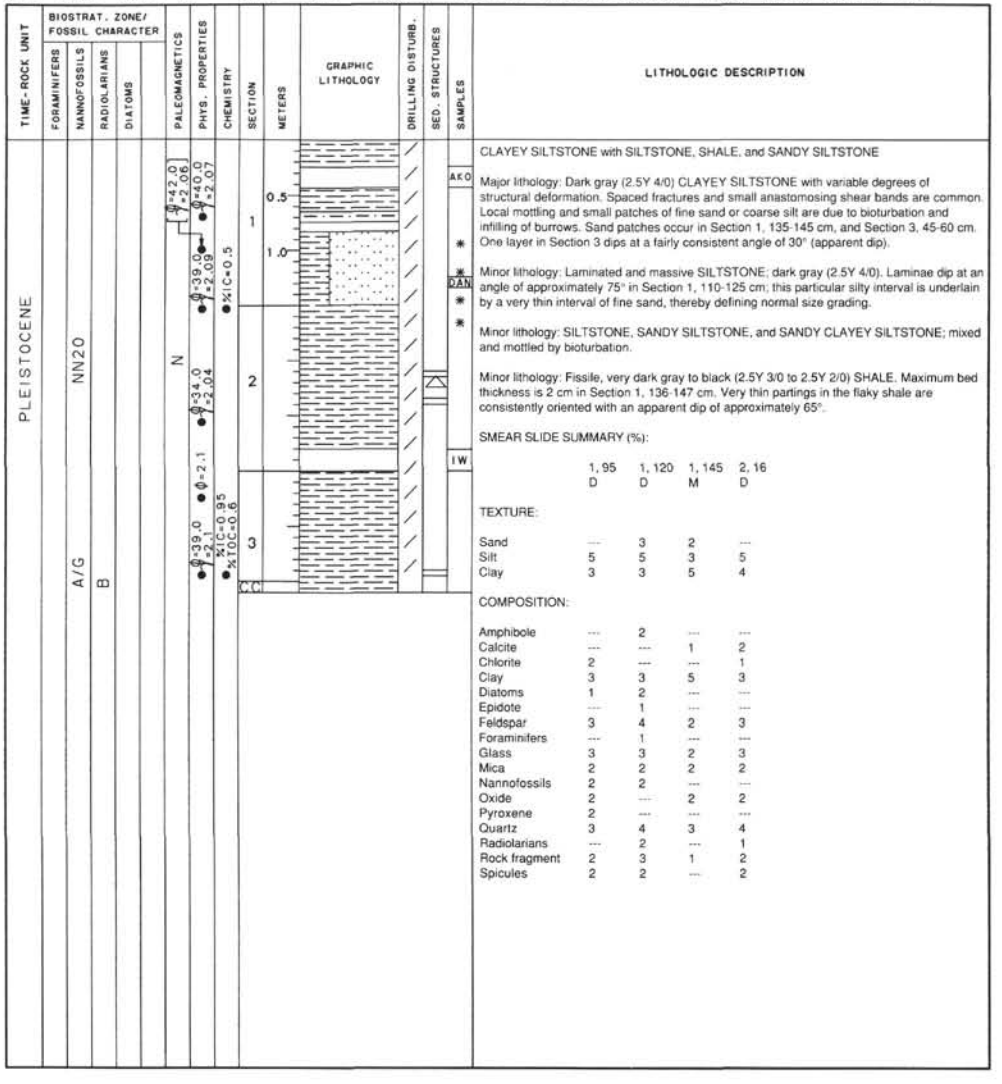
Major lithology: CLAYEY SILTY SANDSTONE with faint laminae and deformation (shear) bands. Dark gray color (2.5Y 4/0). No reliable or consistent indicators of bedding orientation.

Major lithology: Dark gray (2.5Y 4/0) CLAYEY SILTSTONE to SILTY CLAYSTONE. Deformed by widely spaced, inclined fractures and riddled by anastomosing shear bands. No reliable indicators of bedding orientation.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 100 D
TEXTURE:		
Sand	5	–
Silt	4	4
Clay	3	5
COMPOSITION:		
Calcite	2	–
Chlorite	2	–
Clay	3	4
Feldspar	3	3
Glass	3	2
Mica	2	2
Nannofossils	2	–
Oxide	1	2
Quartz	3	4
Rock fragment	3	–
Spicules	2	2

SITE 808 HOLE C CORE 10R CORED INTERVAL 5059.8-5069.4 mbsl; 385.2-394.8 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE with SILTSTONE, SHALE, and SANDY SILTSTONE

Major lithology: Dark gray (2.5Y 4/0) CLAYEY SILTSTONE with variable degrees of structural deformation. Spaced fractures and small anastomosing shear bands are common. Local mottling and small patches of fine sand or coarse silt are due to bioturbation and infilling of burrows. Sand patches occur in Section 1, 135-145 cm, and Section 3, 45-60 cm. One layer in Section 3 dips at a fairly consistent angle of 30° (apparent dip).

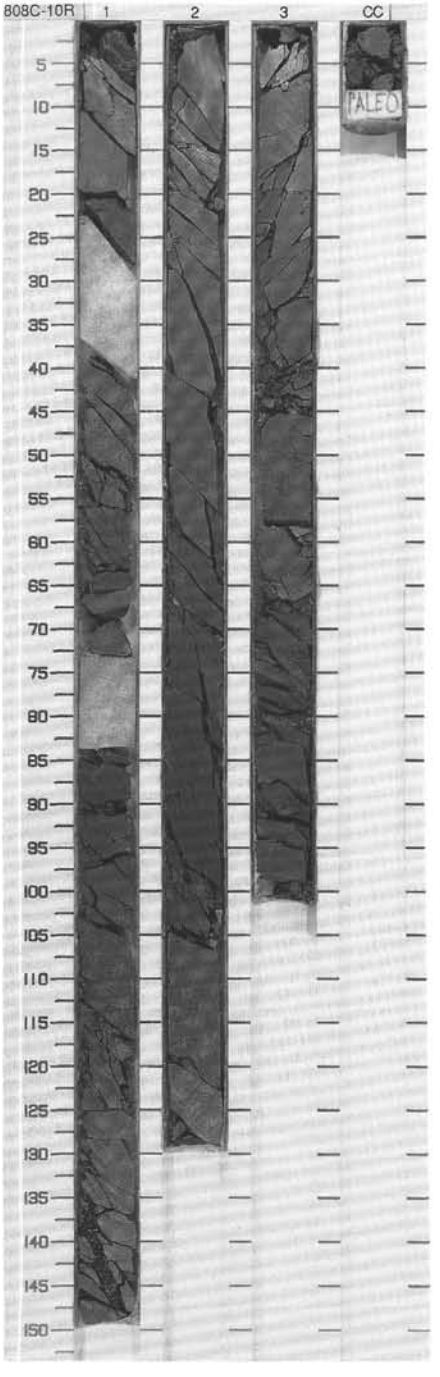
Minor lithology: Laminated and massive SILTSTONE; dark gray (2.5Y 4/0). Laminae dip at an angle of approximately 75° in Section 1, 110-125 cm; this particular silty interval is underlain by a very thin interval of fine sand, thereby defining normal size grading.

Minor lithology: SILTSTONE, SANDY SILTSTONE, and SANDY CLAYEY SILTSTONE; mixed and mottled by bioturbation.

Minor lithology: Fissile, very dark gray to black (2.5Y 3/0 to 2.5Y 2/0) SHALE. Maximum bed thickness is 2 cm in Section 1, 136-147 cm. Very thin partings in the flaky shale are consistently oriented with an apparent dip of approximately 65°.

SMEAR SLIDE SUMMARY (%):

	1, 95 D	1, 120 D	1, 145 M	2, 16 D
TEXTURE:				
Sand	---	3	2	---
Silt	5	5	3	5
Clay	3	3	5	4
COMPOSITION:				
Amphibole	---	2	---	---
Calcite	---	---	1	2
Chlorite	2	---	---	1
Clay	3	3	5	3
Diatoms	1	2	---	---
Epidote	---	1	---	---
Feldspar	3	4	2	3
Foraminifers	---	1	---	---
Glass	3	3	2	3
Mica	2	2	2	2
Nannofossils	2	2	---	---
Oxide	2	---	2	2
Pyroxene	2	---	---	---
Quartz	3	4	3	4
Radiolarians	---	2	---	1
Rock fragment	2	3	1	2
Spicules	2	2	---	2



SITE 808 HOLE C CORE 11R CORED INTERVAL 5069.4-5079.2 mbsl; 394.8-404.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISOCENE		C/G NN20	B		N	ϕ=2.04 ϕ=1.40 ϕ=2.08	%IC=1.16 %TOC=0.74	1	0.5 1.0				
								2					UB IW

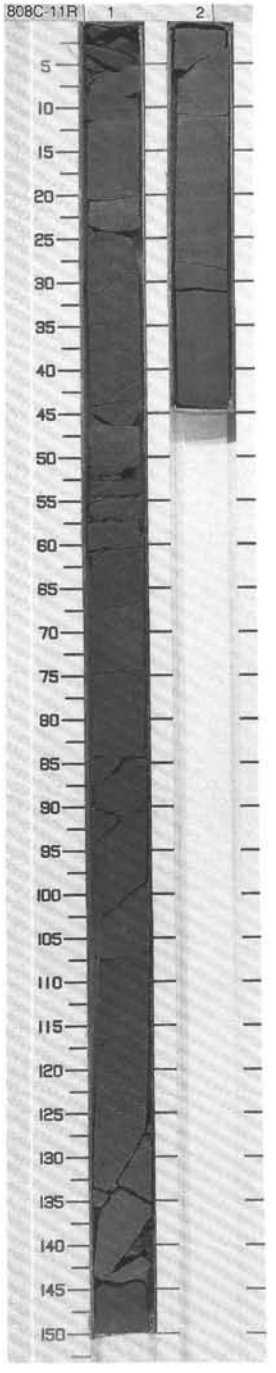
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE with SILTSTONE

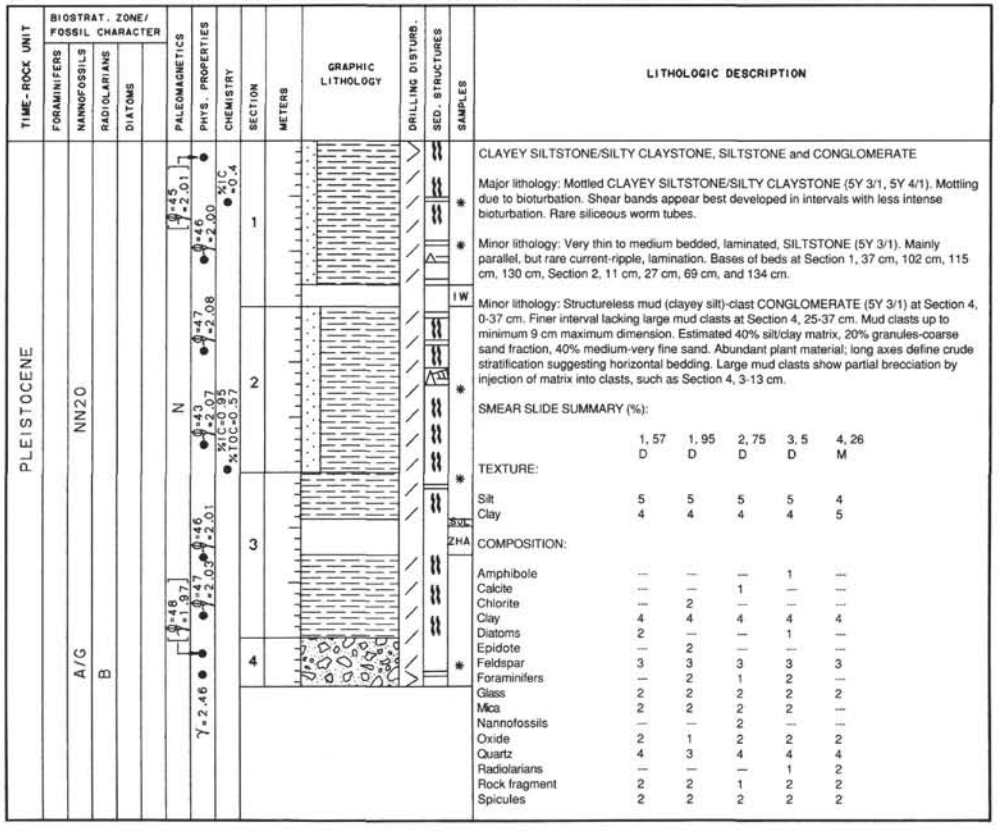
Major lithology: Dark gray (2.5Y 4/0) CLAYEY SILTSTONE grading upward to SILTY CLAYSTONE. Local deformation bands and spaced subhorizontal fractures, but otherwise mildly deformed. Parallel laminae are subhorizontal. Moderate amounts of bioturbation, mottling, and isolated patches of fine sand to coarse silt.

SMEAR SLIDE SUMMARY (%):

	1, 45 M	1, 90 M
TEXTURE:		
Silt	5	4
Clay	3	5
COMPOSITION:		
Amphibole	1	–
Calcite	–	1
Clay	3	5
Diatoms	2	–
Feldspar	3	3
Foraminifers	2	2
Glass	3	–
Mica	2	2
Nannofossils	2	2
Oxide	2	1
Quartz	3	3
Radiolarians	2	–
Rock fragment	2	–
Spicules	2	2



SITE 808 HOLE C CORE 12R CORED INTERVAL 5079.2-5088.9 mbsl; 404.6-414.3 mbsf



CLAYEY SILTSTONE/SILTY CLAYSTONE, SILTSTONE and CONGLOMERATE

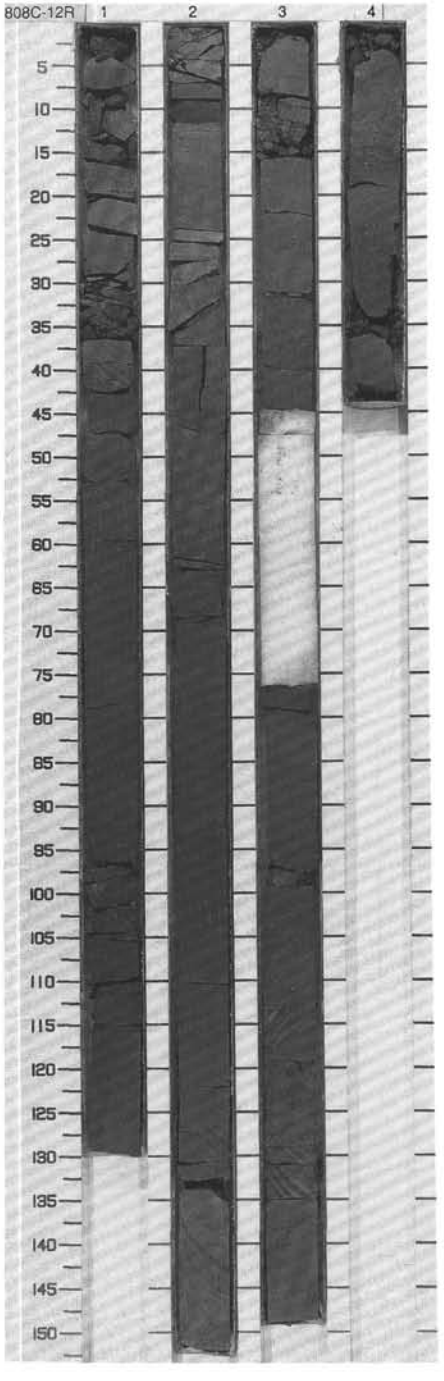
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation. Shear bands appear best developed in intervals with less intense bioturbation. Rare siliceous worm tubes.

Minor lithology: Very thin to medium bedded, laminated, SILTSTONE (5Y 3/1). Mainly parallel, but rare current-ripple, lamination. Bases of beds at Section 1, 37 cm, 102 cm, 115 cm, 130 cm, Section 2, 11 cm, 27 cm, 69 cm, and 134 cm.

Minor lithology: Structureless mud (clayey silt)-clast CONGLOMERATE (5Y 3/1) at Section 4, 0-37 cm. Finer interval lacking large mud clasts at Section 4, 25-37 cm. Mud clasts up to minimum 9 cm maximum dimension. Estimated 40% silt/clay matrix, 20% granules-coarse sand fraction, 40% medium-very fine sand. Abundant plant material; long axes define crude stratification suggesting horizontal bedding. Large mud clasts show partial brecciation by injection of matrix into clasts, such as Section 4, 3-13 cm.

SMEAR SLIDE SUMMARY (%):

	1, 57 D	1, 95 D	2, 75 D	3, 5 D	4, 26 M
TEXTURE:					
Silt	5	5	5	5	4
Clay	4	4	4	4	5
COMPOSITION:					
Amphibole	–	–	–	1	–
Calcite	–	–	1	–	–
Chlorite	–	2	–	–	–
Clay	4	4	4	4	4
Diatoms	2	–	–	1	–
Epidote	–	2	–	–	–
Feldspar	3	3	3	3	3
Foraminifers	–	2	1	2	–
Glass	2	2	2	2	2
Mica	2	2	2	2	–
Nannofossils	–	–	2	–	–
Oxide	2	1	2	2	2
Quartz	4	3	4	4	4
Radiolarians	–	–	–	1	2
Rock fragment	2	2	1	2	2
Spicules	2	2	2	2	2



SITE 808 HOLE C CORE 13R CORED INTERVAL 5088.9-5098.6 mbsl; 414.3-424.0 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: F/M; NANNOFOSSILS: NN20; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: N

PHYS. PROPERTIES: φ=45 ρ=2.06; φ=42 ρ=2.04; φ=44 ρ=2.01; φ=45 ρ=2.03; φ=43.0 ρ=2.02; φ=43 ρ=2.02; φ=50 ρ=1.91

CHEMISTRY: %IC=0.97 %TOC=0.43; %IC=0.43

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

LITHOLOGIC DESCRIPTION

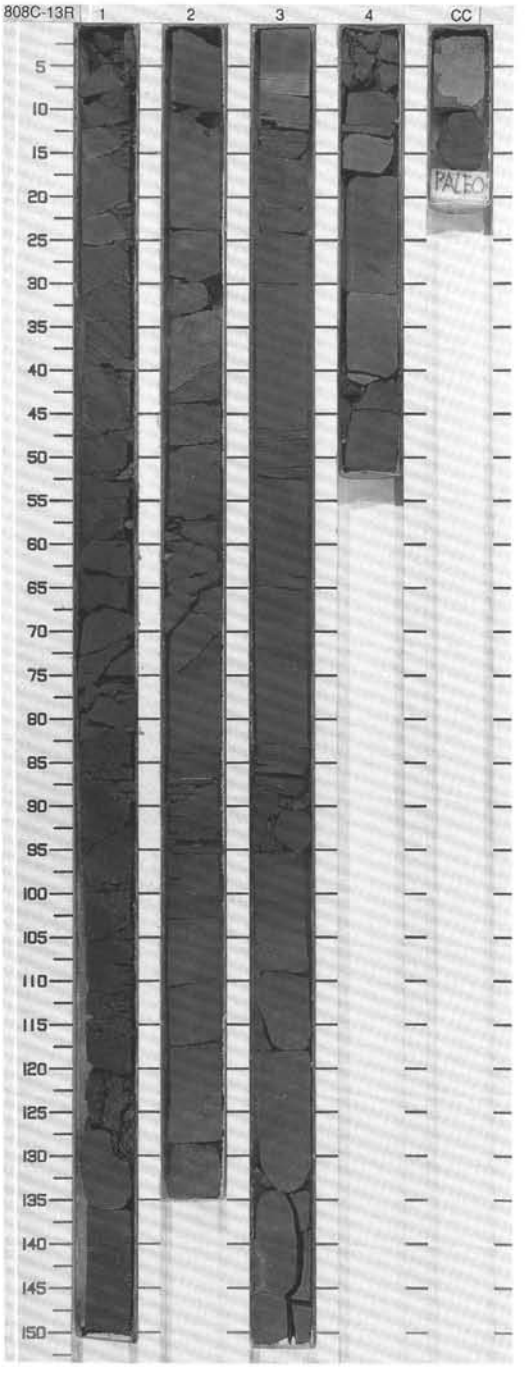
CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation. Local diffuse, mm/cm-scale lamination. Shear bands locally well-developed in this lithology. Contains rare siliceous, flattened, worm tubes. Current-aligned siliceous worm tubes in Section 2, 41 cm. Section 1, 55-83 cm, shows patches of medium/ coarse sand within CLAYEY SILTSTONE/SILTY CLAYSTONE, either due to sediment sliding or tectonic shearing of wet sediments.

Minor lithology: Thin/medium-bedded, normally-graded, laminated SILTSTONE (5Y 3/1) turbidites. Mainly parallel-lamination with rare small-scale current-ripple lamination. Bases of beds in Section 1, 120 cm, 128 cm, Section 2, 10 cm, 98 cm, 110 cm, 117.5 cm, Section 3, 15 cm, 52 cm, and 89 cm.

SMEAR SLIDE SUMMARY (%):

	1, 9 D	1, 66 D
TEXTURE:		
Sand	–	1
Silt	5	5
Clay	4	4
COMPOSITION:		
Amphibole	2	–
Calcite	2	2
Clay	3	4
Epidote	1	–
Feldspar	4	3
Foraminifers	–	2
Glass	2	2
Mica	2	2
Nannofossils	2	–
Oxide	2	2
Quartz	3	4
Rock fragment	2	2
Spicules	2	2



SITE 808 HOLE C CORE 14R CORED INTERVAL 5098.6-5108.3 mbsl; 424.0-433.7 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS F/M; NANNOFOSSILS NN20; RADIOLARIANS R/P; DIATOMS —

PALEOMAGNETICS: N

PHYS. PROPERTIES: ρ=1.41 ●, ρ=2.04; ρ=1.46 ●, ρ=2.0; ρ=1.44 ●, ρ=2.0; ρ=1.41 ●, ρ=2.08; ρ=1.42 ●, ρ=2.06; ρ=1.48 ●, ρ=2.01

CHEMISTRY: %IC=0.40; %IC=0.99; %TOC=0.6

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: UB, LW

LITHOLOGIC DESCRIPTION

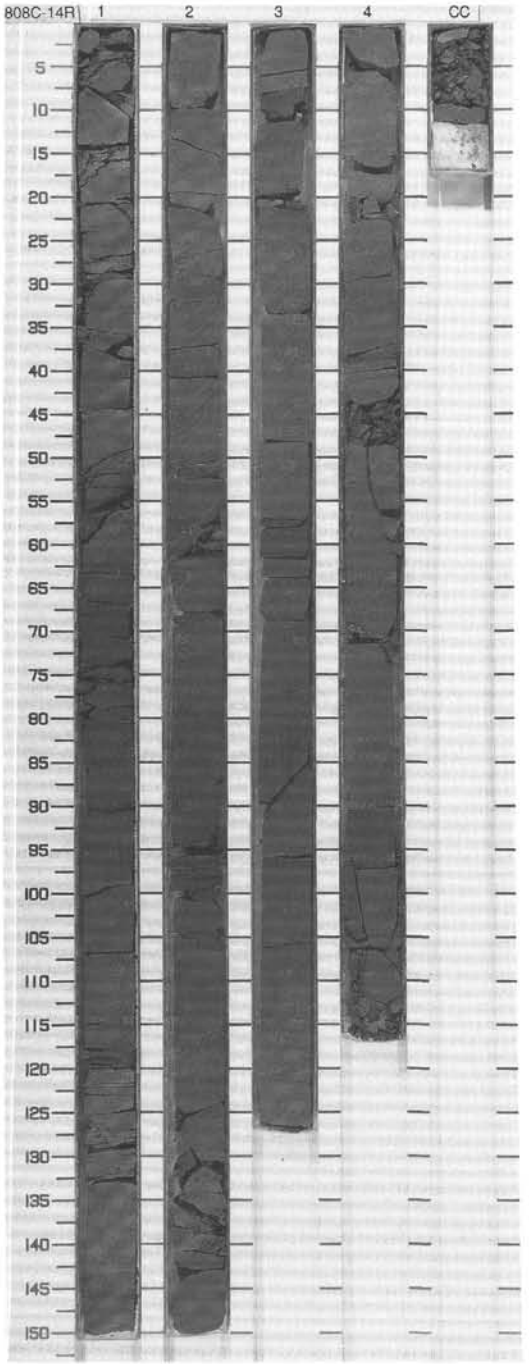
CLAYEY SILTSTONE/SILTY CLAYSTONE, SILTSTONE and ASH

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation. Local diffuse, mm/cm-scale lamination. Shear bands locally well-developed in this lithology. Contains rare siliceous, flattened, worm tubes. Bioturbated yellowish (2.5Y 6/4) carbonate SILTY CLAYSTONE in Section 4, 72 cm.

Minor lithology: Thin/medium-bedded, normally-graded, laminated SILTSTONE (5Y 3/1) turbidites. Mainly parallel-lamination with rare small-scale current-ripple lamination. Bases of beds in Section 1, 75 cm, 80 cm, 134 cm, Section 2, 62 cm, 101 cm, Section 3, 11 cm, 69 cm, and Section 4, 43 cm.

SMEAR SLIDE SUMMARY (%):

	1, 59 D	4, 8 D	4, 72 M
TEXTURE:			
Sand	1	—	—
Silt	5	5	2
Clay	4	4	5
COMPOSITION:			
Chlorite	2	—	—
Clay	4	3	3
Epidote	—	2	—
Feldspar	3	3	2
Foraminifers	2	—	—
Glass	2	2	—
Mica	2	2	—
Micrite	—	—	5
Oxide	2	2	1
Quartz	4	4	2
Radiolarians	—	2	—
Rock fragment	2	2	—
Spicules	2	2	2



SITE 808 HOLE C CORE 15R CORED INTERVAL 5108.3-5117.6 mbsl; 433.7-443.0 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN20; RADIOLARIANS: B; DIATOMS

PALEOMAGNETICS: N

PHYS. PROPERTIES

CHEMISTRY: %IC=0.5; %IC=0.88; %TOC=0.61

SECTION: 1, 2, 3, 4, 5

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW, OG, KJC

LITHOLOGIC DESCRIPTION

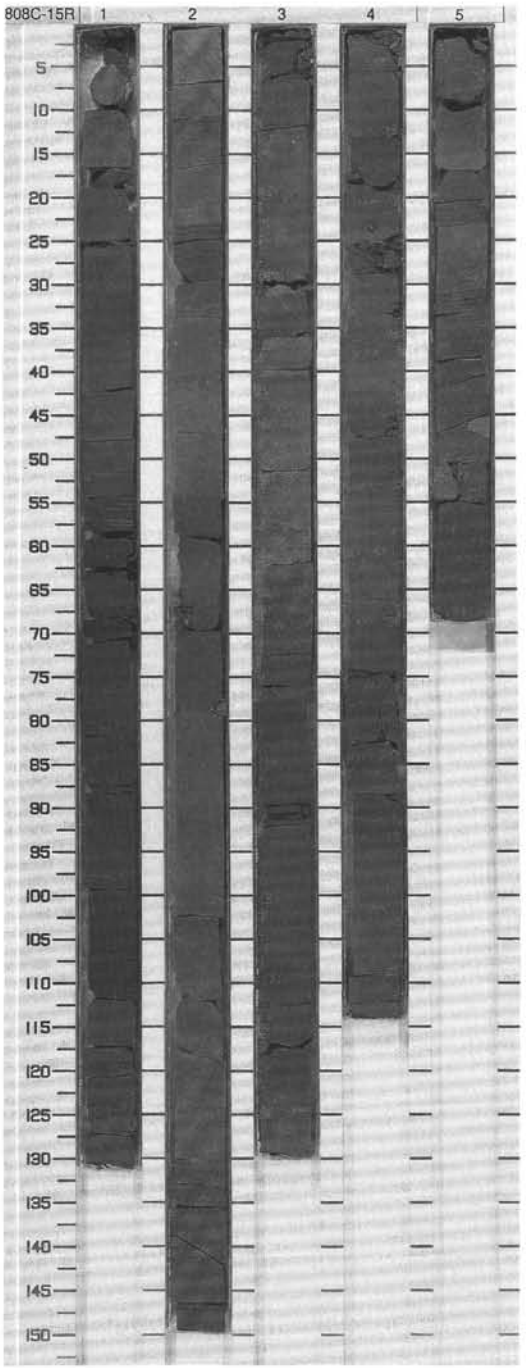
CLAYEY SILTSTONE/SILTY CLAYSTONE, SILTSTONE and ASH

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 3/1, 5Y 4/1). Mottling due to bioturbation. Local diffuse, mm/cm-scale lamination. Shear bands locally well-developed in this lithology. Contains rare siliceous, flattened, worm tubes. Bioturbated yellowish (5Y 7/6) carbonate SILTY CLAYSTONE in Section 3, 62-63 cm, and Section 4, 34 cm.

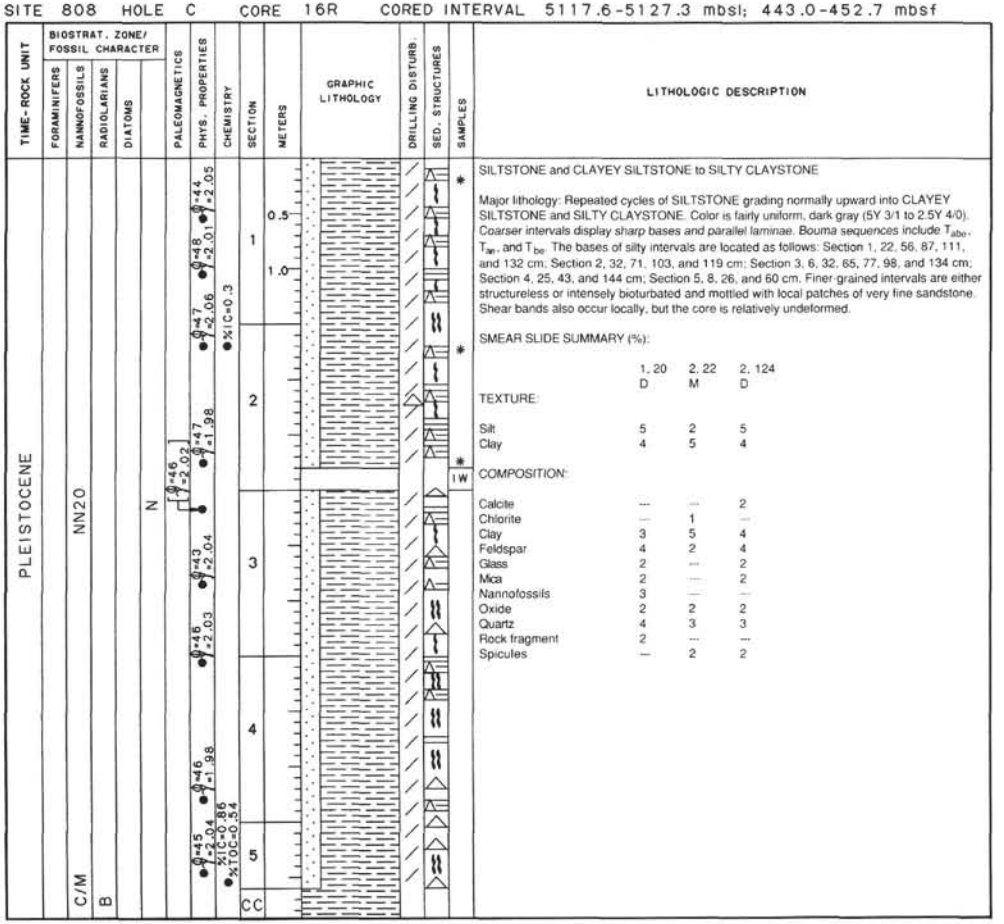
Minor lithology: Thin/medium-bedded, normally-graded, laminated SILTSTONE (5Y 3/1) turbidites. Mainly parallel-lamination with rare small-scale current-ripple lamination. Bases of beds in Section 1, 62 cm, 71 cm, 89 cm, 112 cm, 121 cm, Section 2, 29 cm, 58 cm, 102 cm, Section 3, 6 cm, 40 cm, 92 cm, Section 4, 18 cm, 28 cm, 75 cm, 115 cm, Section 5, 23 cm, 33 cm, and 38 cm.

SMEAR SLIDE SUMMARY (%):

	2, 35 D	3, 62 M
TEXTURE:		
Silt	4	2
Clay	5	5
COMPOSITION:		
Calcite	2	–
Clay	4	3
Diatoms	2	–
Feldspar	3	2
Glass	2	2
Micrite	–	5
Nannofossils	2	–
Oxide	2	–
Quartz	3	3
Radiolarians	2	–
Spicules	2	2



SITE 808 HOLE C CORE 16R CORED INTERVAL 5117.6-5127.3 mbsl; 443.0-452.7 mbsf

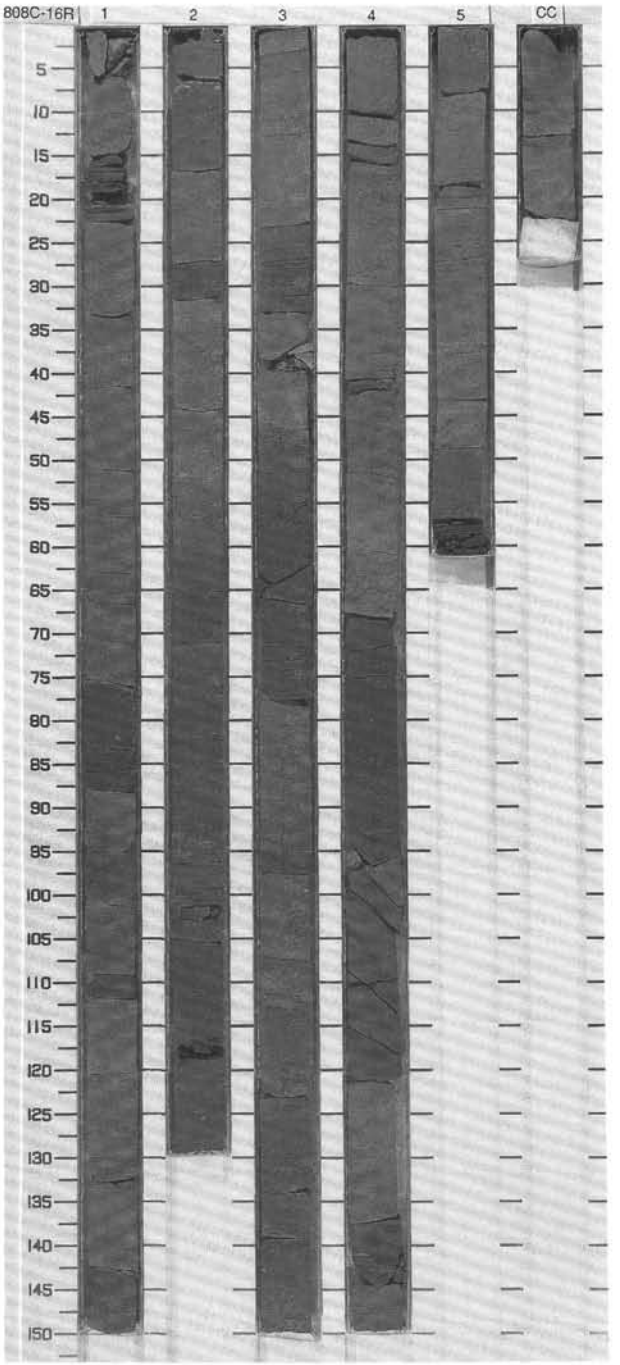


SILTSTONE and CLAYEY SILTSTONE to SILTY CLAYSTONE

Major lithology: Repeated cycles of SILTSTONE grading normally upward into CLAYEY SILTSTONE and SILTY CLAYSTONE. Color is fairly uniform, dark gray (5Y 3/1 to 2.5Y 4/0). *Coarser intervals display sharp bases and parallel laminae. Bouma sequences include* T_{abe}, T_{ae}, and T_{be}. The bases of silty intervals are located as follows: Section 1, 22, 56, 87, 111, and 132 cm; Section 2, 32, 71, 103, and 119 cm; Section 3, 6, 32, 65, 77, 98, and 134 cm; Section 4, 25, 43, and 144 cm; Section 5, 8, 26, and 60 cm. Finer-grained intervals are either structureless or intensely bioturbated and mottled with local patches of very fine sandstone. Shear bands also occur locally, but the core is relatively undeformed.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	2, 22 M	2, 124 D
TEXTURE:			
Silt	5	2	5
Clay	4	5	4
COMPOSITION:			
Calcite	--	--	2
Chlorite	--	1	--
Clay	3	5	4
Feldspar	4	2	4
Glass	2	--	2
Mica	2	--	2
Nannofossils	3	--	--
Oxide	2	2	2
Quartz	4	3	3
Rock fragment	2	--	--
Spicules	--	2	2



SITE 808 HOLE C CORE 17R CORED INTERVAL 5127.3-5137.0 mbsl; 452.7-462.4 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN20; RADIOLARIANS: C/M; DIATOMS: B

PALEOMAGNETICS: N

PHYS. PROPERTIES; CHEMISTRY: %IC=0.43; %IC=1.09; %TOC=0.61

SECTION: 1, 2, 3, 4, 5, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID; VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: LIH; OG; IW; WAR

LITHOLOGIC DESCRIPTION

SILTSTONE, CLAYEY SILTSTONE, and SILTY CLAYSTONE with ASH NANNOFOSSIL SILTY CLAYSTONE

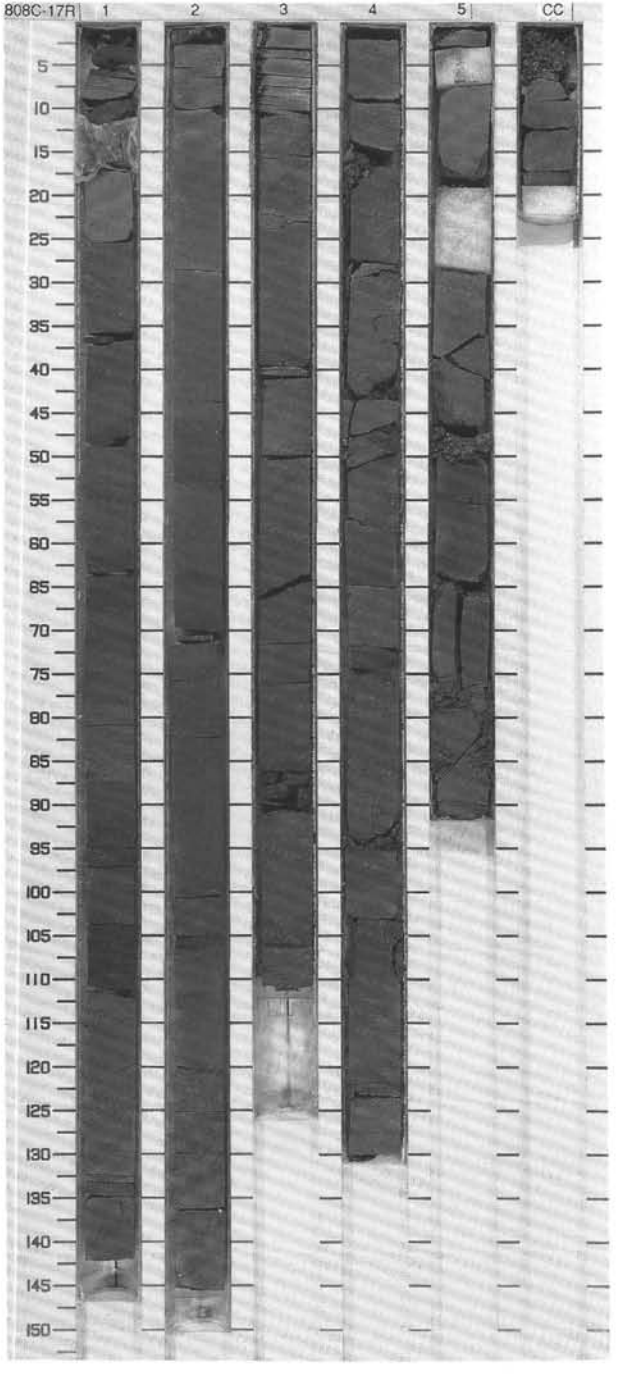
Major lithology: Repeated cycles of SILTSTONE grading normally upward into CLAYEY SILTSTONE and SILTY CLAYSTONE. Mostly dark gray in color (2.5Y 4/0), with some of the silty intervals very dark gray (2.5Y 3/0). Coarser intervals display sharp to erosive bases and parallel laminae. Typical Bouma sequences are T_{abe} and T_{de}. Silty intervals begin as follows: Section 1, 37 cm and 112 cm; Section 2, 10 cm, 52 cm, 117 cm, and 132 cm. Finer-grained intervals typically show intense bioturbation and mottling, with local patches of fine sand and coarse silt.

Major lithology: Bioturbated, dark gray (2.5Y 4/0) CLAYEY SILTSTONE and SILTY CLAYSTONE. Non-cyclic.

Minor lithology: Gray (2.5Y 5/0) SILTY CLAYSTONE with abundant volcanic ASH and NANNOFOSSILS. The ash is fresh and clear. The upper and lower contacts are fairly sharp with surrounding, darker gray, clayey siltstone. Section 1, 79-88 cm.

SMEAR SLIDE SUMMARY (%):

	1, 85 M	1, 100 D
TEXTURE:		
Silt	4	5
Clay	5	4
COMPOSITION:		
Amphibole	tr	2
Calcite	tr	2
Clay	5	4
Diatoms	tr	1
Feldspar	2	4
Glass	4	2
Mica	tr	1
Nannofossils	2	3
Quartz	3	4
Spicules	tr	2



SITE 808 HOLE C CORE 18R CORED INTERVAL 5137.0-5146.6 mbsl; 462.4-472.0 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/G; NANNOFOSSILS: NN20; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: N

PHYS. PROPERTIES: Φ=48 ρ=1.94; Φ=47 ρ=1.99; Φ=47 ρ=1.95; Φ=47 ρ=1.98; Φ=46 ρ=1.99; Φ=47 ρ=1.95; Φ=45 ρ=2.03; Φ=46 ρ=1.99; Φ=45 ρ=1.98

CHEMISTRY: %IC=0.22; %IC=0.5; Φ=44 ρ=2.03; %IC=1.21 %TOC=0.67

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE and CLAYEY SILTSTONE, with SILTSTONE and NANNOFOSSIL CLAYSTONE

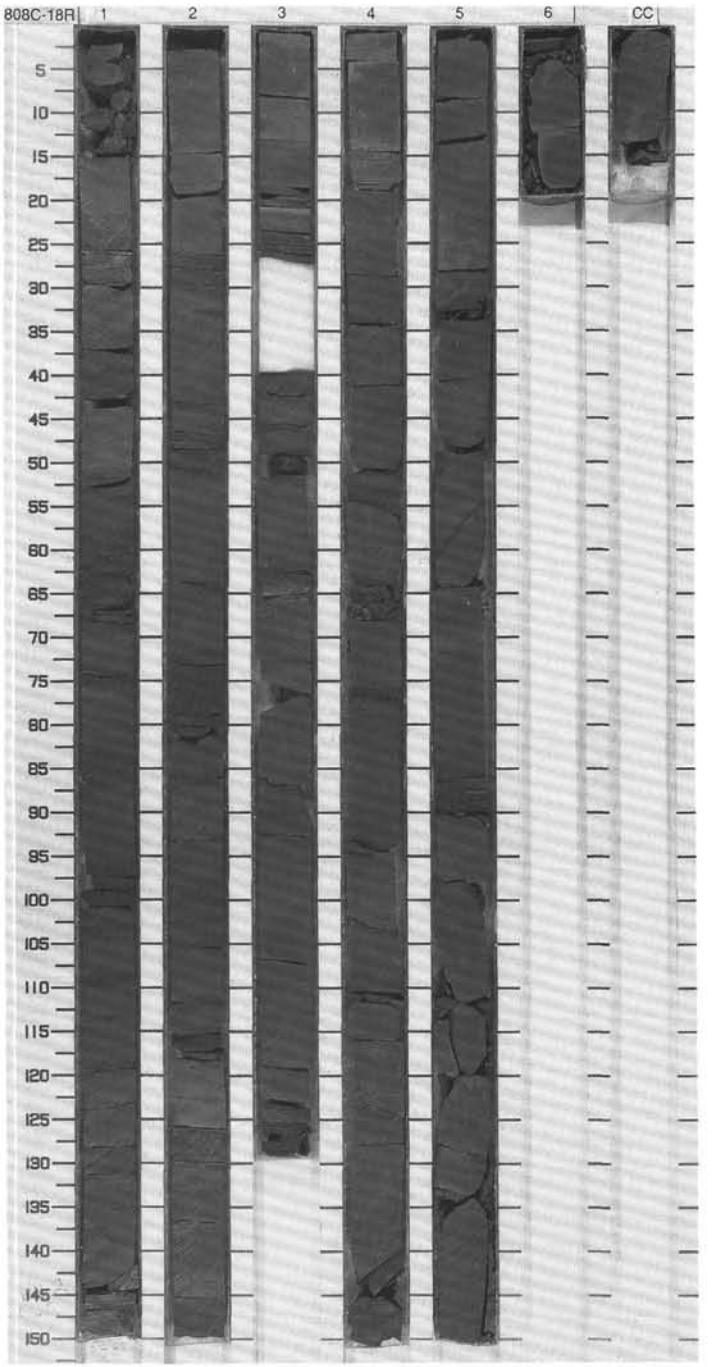
Major lithology: Dark gray (2.5Y 4/0) CLAYEY SILTSTONE, typically grading upward into SILTY CLAYSTONE. Most intervals are mottled and intensely bioturbated. Very little deformation; sparse shear bands.

Minor lithology: Dark gray (2.5Y 4/0) SILTSTONE, grading upward into clayey siltstone. *These coarser intervals typically display sharp bases, rare erosive bases and load casts,* normal size grading, parallel laminae, and rare convolute laminae. Bouma sequences include T_{cde} and T_{de}. Coarser silt intervals begin as follows: Section 1, 31 cm; Section 3, 42 cm and 130 cm; and Section 4, 70 cm.

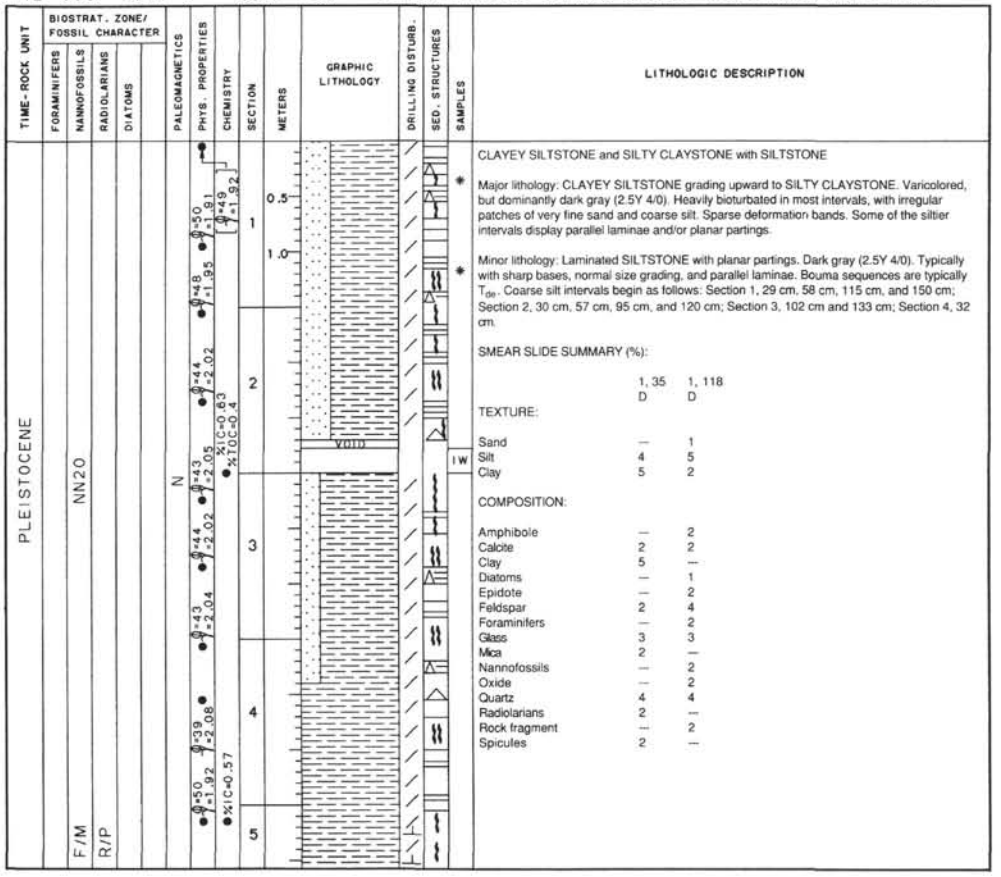
Minor lithology: Gray (2.5Y 5/0) NANNOFOSSIL CLAYSTONE. This lighter-colored and finer-grained sediment occurs in Section 5, 69-72 cm, with somewhat gradational upper and lower contacts with the surrounding clayey siltstone.

SMEAR SLIDE SUMMARY (%):

	1, 90 D	3, 63 D
TEXTURE:		
Sand	—	3
Silt	5	5
Clay	4	3
COMPOSITION:		
Chlorite	1	—
Clay	3	3
Feldspar	4	3
Glass	—	5
Mica	2	—
Oxide	2	1
Quartz	4	3
Rock fragment	2	2



SITE 808 HOLE C CORE 19R CORED INTERVAL 5146.6-5156.3 mbsl; 472.0-481.7 mbsf



LITHOLOGIC DESCRIPTION

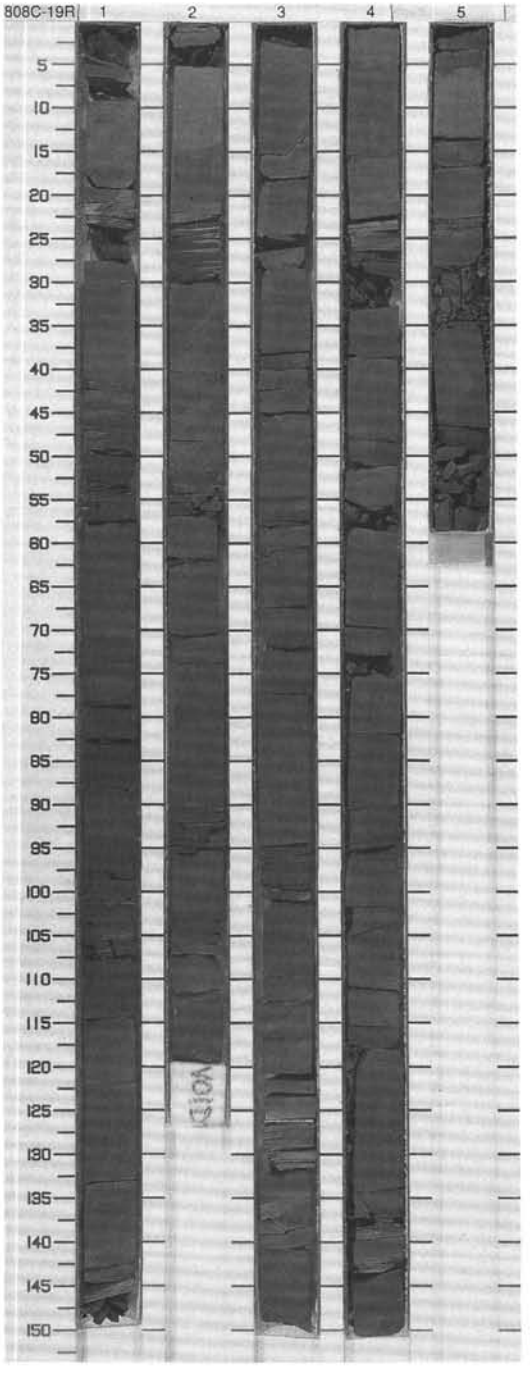
CLAYEY SILTSTONE and SILTY CLAYSTONE with SILTSTONE

Major lithology: CLAYEY SILTSTONE grading upward to SILTY CLAYSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Heavily bioturbated in most intervals, with irregular patches of very fine sand and coarse silt. Sparse deformation bands. Some of the siltier intervals display parallel laminae and/or planar partings.

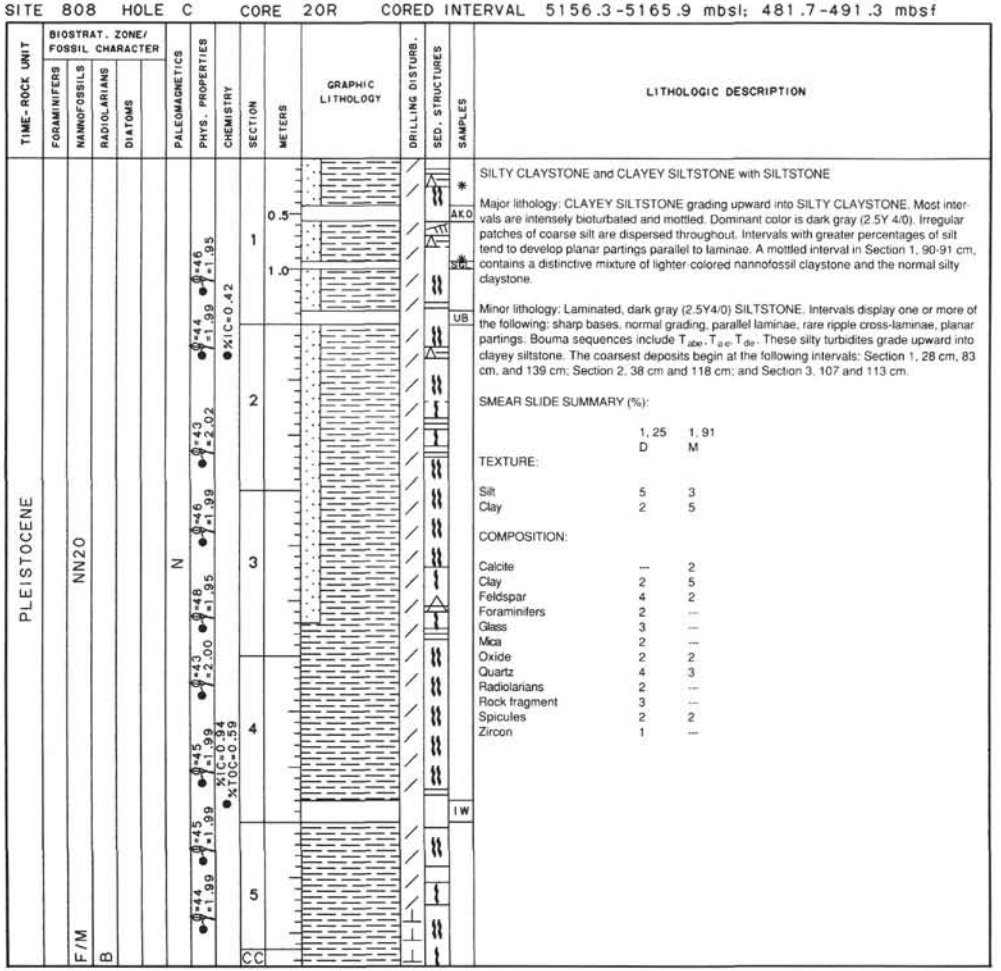
Minor lithology: Laminated SILTSTONE with planar partings. Dark gray (2.5Y 4/0). Typically with sharp bases, normal size grading, and parallel laminae. Bouma sequences are typically T_{de}. Coarse silt intervals begin as follows: Section 1, 29 cm, 58 cm, 115 cm, and 150 cm; Section 2, 30 cm, 57 cm, 95 cm, and 120 cm; Section 3, 102 cm and 133 cm; Section 4, 32 cm.

SMEAR SLIDE SUMMARY (%):

	1, 35 D	1, 118 D
TEXTURE:		
Sand	–	1
Silt	4	5
Clay	5	2
COMPOSITION:		
Amphibole	–	2
Calcite	2	2
Clay	5	–
Diatoms	–	1
Epidote	–	2
Feldspar	2	4
Foraminifers	–	2
Glass	3	3
Mica	2	–
Nannofossils	–	2
Oxide	–	2
Quartz	4	4
Radiolarians	2	–
Rock fragment	–	2
Spicules	2	–



SITE 808 HOLE C CORE 20R CORED INTERVAL 5156.3-5165.9 mbsl; 481.7-491.3 mbsf



LITHOLOGIC DESCRIPTION

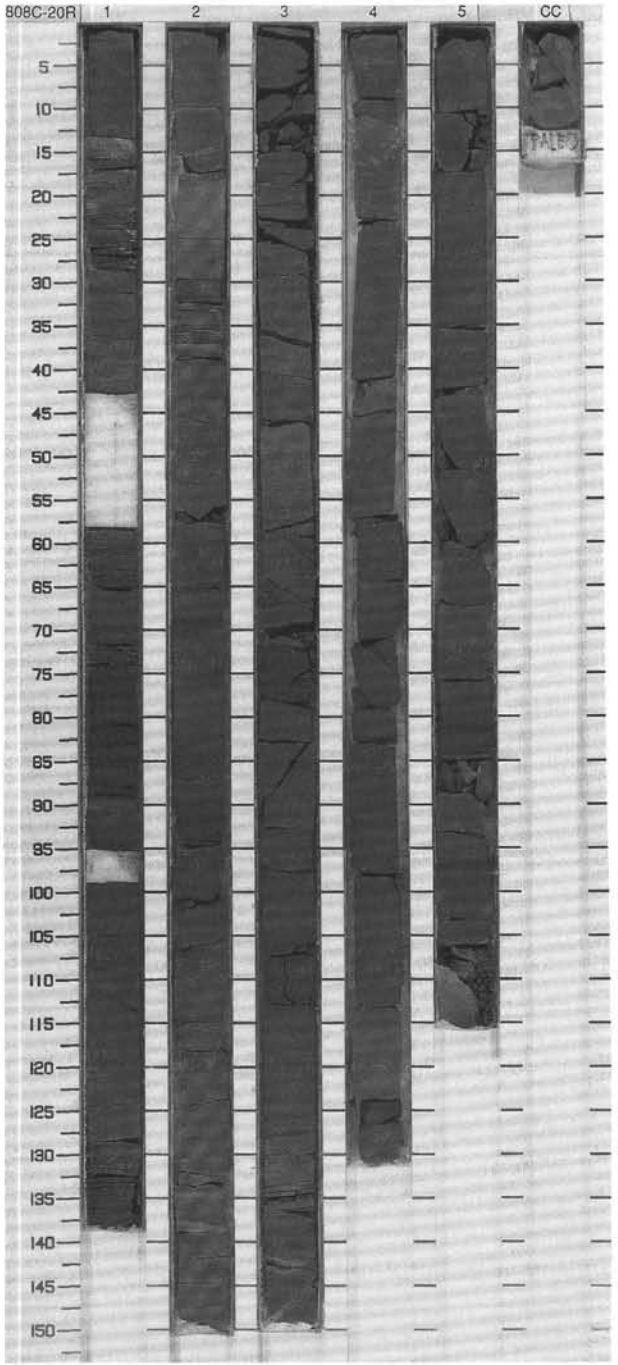
SILTY CLAYSTONE and CLAYEY SILTSTONE with SILTSTONE

Major lithology: CLAYEY SILTSTONE grading upward into SILTY CLAYSTONE. Most intervals are intensely bioturbated and mottled. Dominant color is dark gray (2.5Y 4/0). Irregular patches of coarse silt are dispersed throughout. Intervals with greater percentages of silt tend to develop planar partings parallel to laminae. A mottled interval in Section 1, 90-91 cm, contains a distinctive mixture of lighter-colored nannofossil claystone and the normal silty claystone.

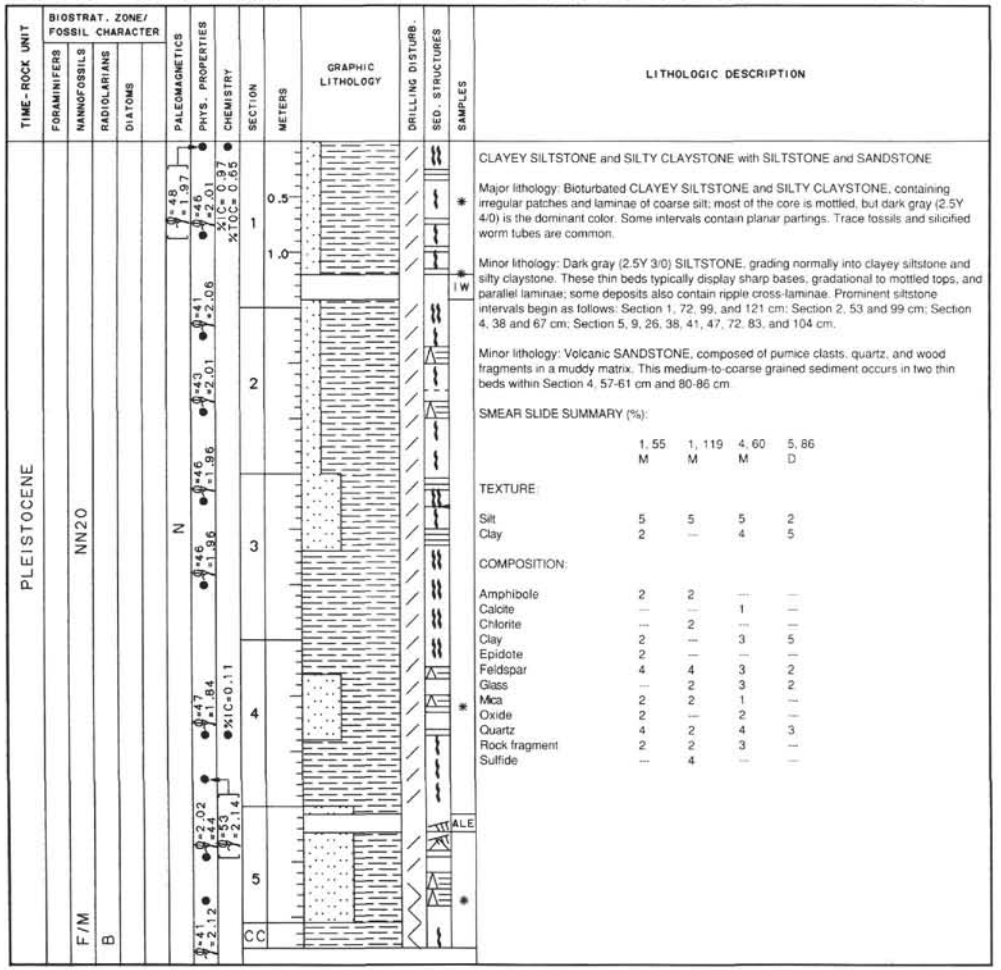
Minor lithology: Laminated, dark gray (2.5Y4/0) SILTSTONE. Intervals display one or more of the following: sharp bases, normal grading, parallel laminae, rare ripple cross-laminae, planar partings. Bouma sequences include T_{abe}, T_{ade}, T_{de}. These silty turbidites grade upward into clayey siltstone. The coarsest deposits begin at the following intervals: Section 1, 28 cm, 83 cm, and 139 cm; Section 2, 38 cm and 118 cm; and Section 3, 107 and 113 cm.

SMEAR SLIDE SUMMARY (%):

	1, 25 D	1, 91 M
TEXTURE:		
Silt	5	3
Clay	2	5
COMPOSITION:		
Calcite	--	2
Clay	2	5
Feldspar	4	2
Foraminifers	2	--
Glass	3	--
Mica	2	--
Oxide	2	2
Quartz	4	3
Radiolarians	2	--
Rock fragment	3	--
Spicules	2	2
Zircon	1	--



SITE 808 HOLE C CORE 21R CORED INTERVAL 5165.9-5175.6 mbsl; 491.3-501.0 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE with SILTSTONE and SANDSTONE

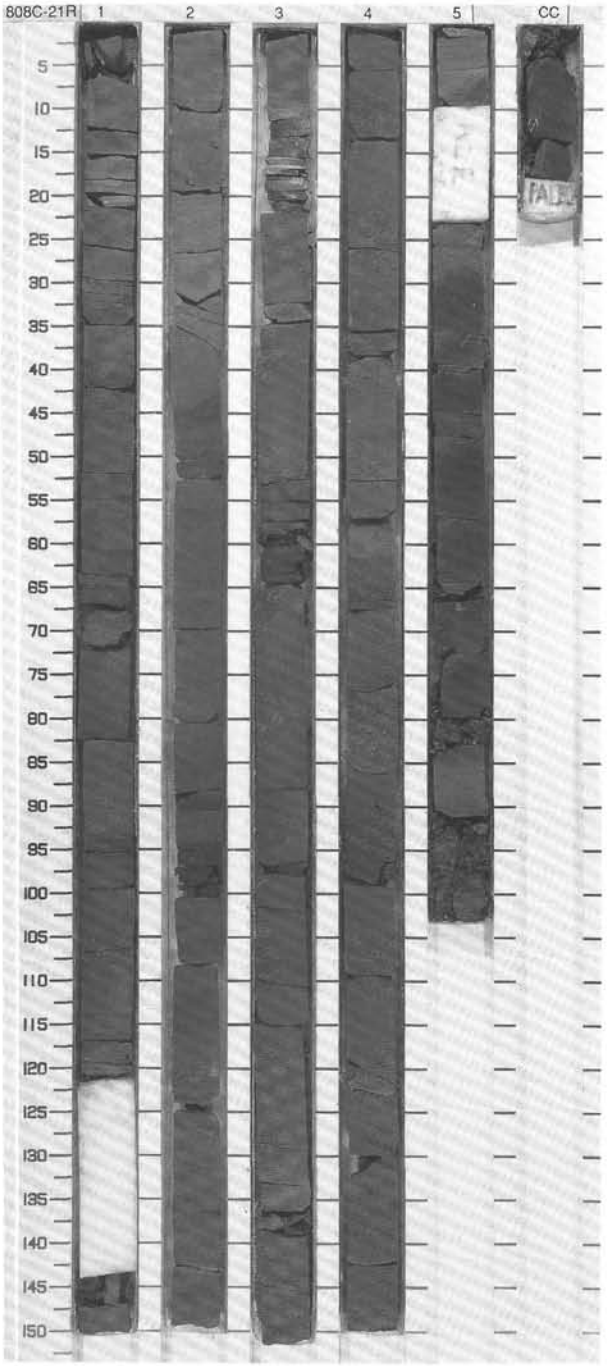
Major lithology: Bioturbated CLAYEY SILTSTONE and SILTY CLAYSTONE, containing irregular patches and laminae of coarse silt; most of the core is mottled, but dark gray (2.5Y 4/0) is the dominant color. Some intervals contain planar partings. Trace fossils and silicified worm tubes are common.

Minor lithology: Dark gray (2.5Y 3/0) SILTSTONE, grading normally into clayey siltstone and silty claystone. These thin beds typically display sharp bases, gradational to mottled tops, and parallel laminae; some deposits also contain ripple cross-laminae. Prominent siltstone intervals begin as follows: Section 1, 72, 99, and 121 cm; Section 2, 53 and 99 cm; Section 4, 38 and 67 cm; Section 5, 9, 26, 38, 41, 47, 72, 83, and 104 cm.

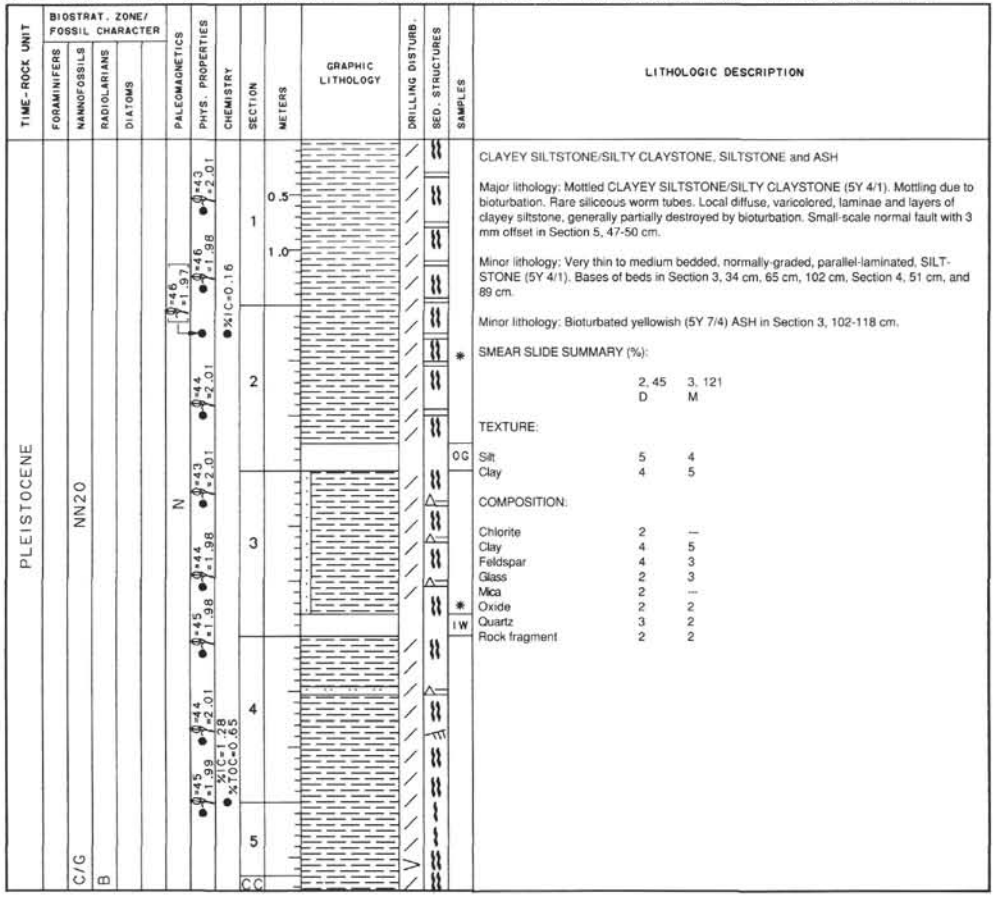
Minor lithology: Volcanic SANDSTONE, composed of pumice clasts, quartz, and wood fragments in a muddy matrix. This medium-to-coarse grained sediment occurs in two thin beds within Section 4, 57-61 cm and 80-86 cm.

SMEAR SLIDE SUMMARY (%):

	1, 55 M	1, 119 M	4, 60 M	5, 86 D
TEXTURE:				
Silt	5	5	5	2
Clay	2	—	4	5
COMPOSITION:				
Amphibole	2	2	—	—
Calcite	—	—	1	—
Chlorite	—	2	—	—
Clay	2	—	3	5
Epidote	2	—	—	—
Feldspar	4	4	3	2
Glass	—	2	3	2
Mica	2	2	1	—
Oxide	2	—	2	—
Quartz	4	2	4	3
Rock fragment	2	2	3	—
Sulfide	—	4	—	—



SITE 808 HOLE C CORE 22R CORED INTERVAL 5175.6-5185.3 mbsl; 501.0-510.7 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, SILTSTONE and ASH

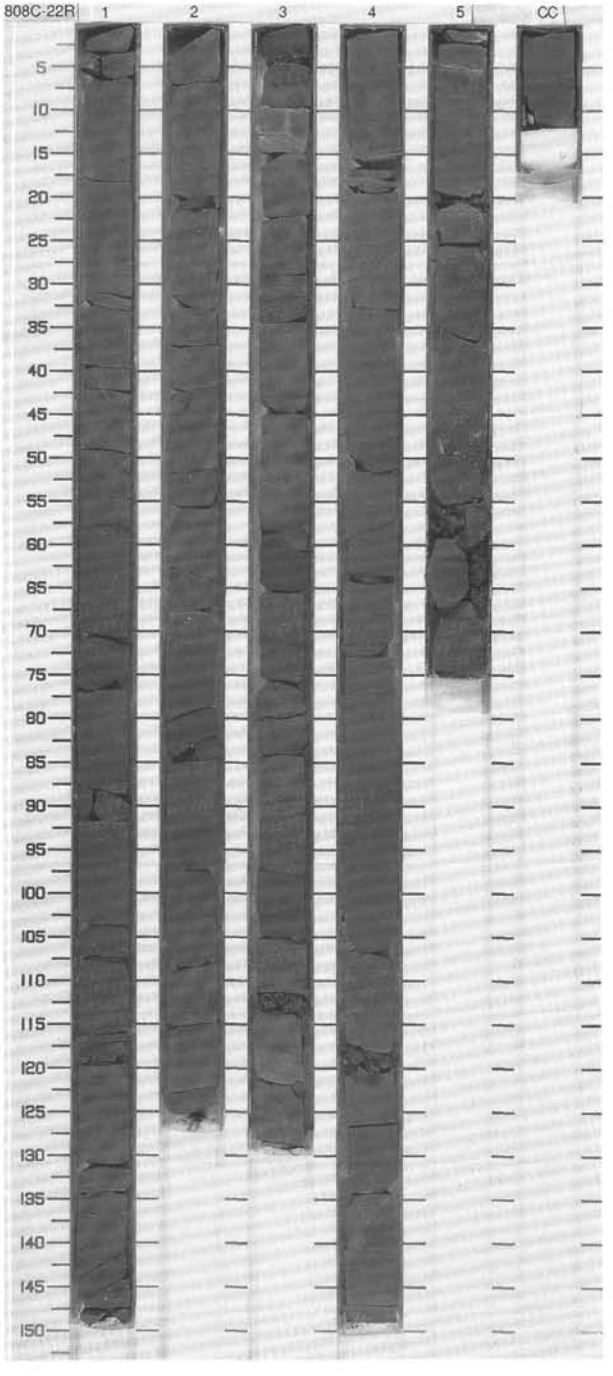
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Rare siliceous worm tubes. Local diffuse, varicolored, laminae and layers of clayey siltstone, generally partially destroyed by bioturbation. Small-scale normal fault with 3 mm offset in Section 5, 47-50 cm.

Minor lithology: Very thin to medium bedded, normally-graded, parallel-laminated, SILTSTONE (5Y 4/1). Bases of beds in Section 3, 34 cm, 65 cm, 102 cm, Section 4, 51 cm, and 89 cm.

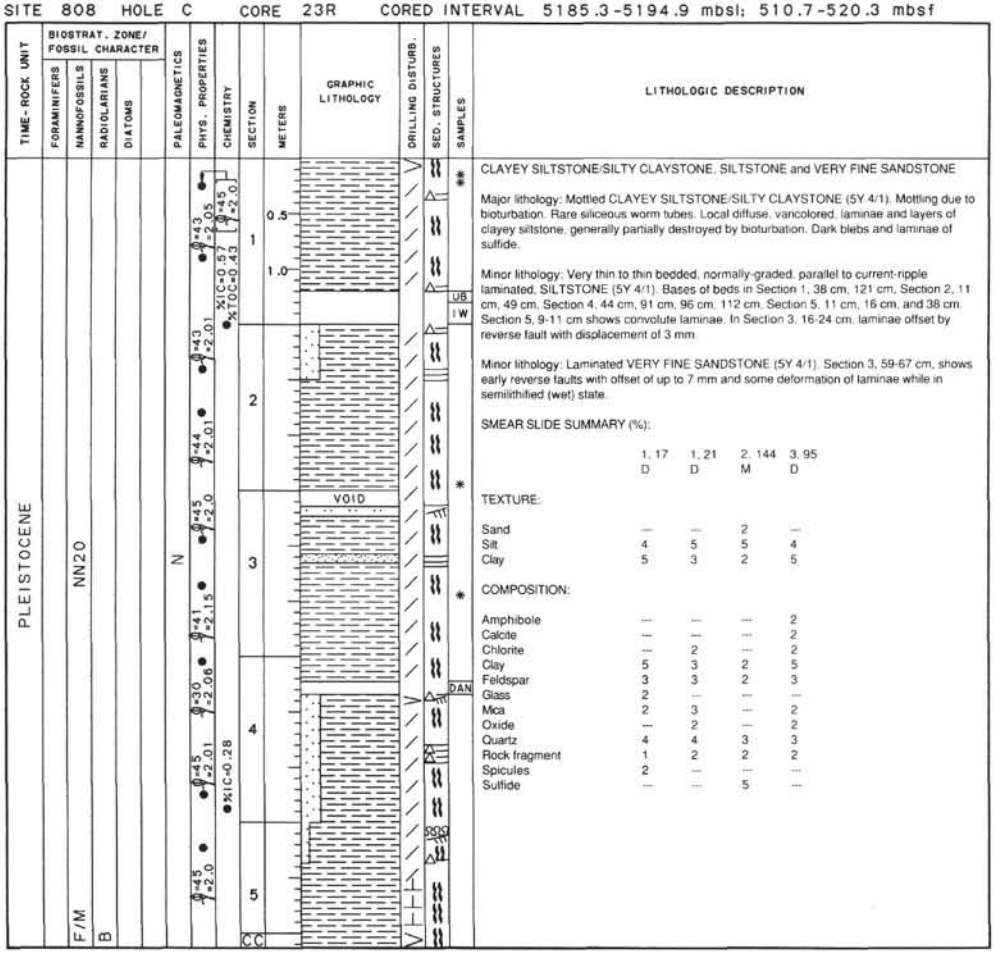
Minor lithology: Bioturbated yellowish (5Y 7/4) ASH in Section 3, 102-118 cm.

SMEAR SLIDE SUMMARY (%):

	2, 45 D	3, 121 M
TEXTURE:		
Silt	5	4
Clay	4	5
COMPOSITION:		
Chlorite	2	–
Clay	4	5
Feldspar	4	3
Glass	2	3
Mica	2	–
Oxide	2	2
Quartz	3	2
Rock fragment	2	2



SITE 808 HOLE C CORE 23R CORED INTERVAL 5185.3-5194.9 mbsl; 510.7-520.3 mbsf



LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, SILTSTONE and VERY FINE SANDSTONE

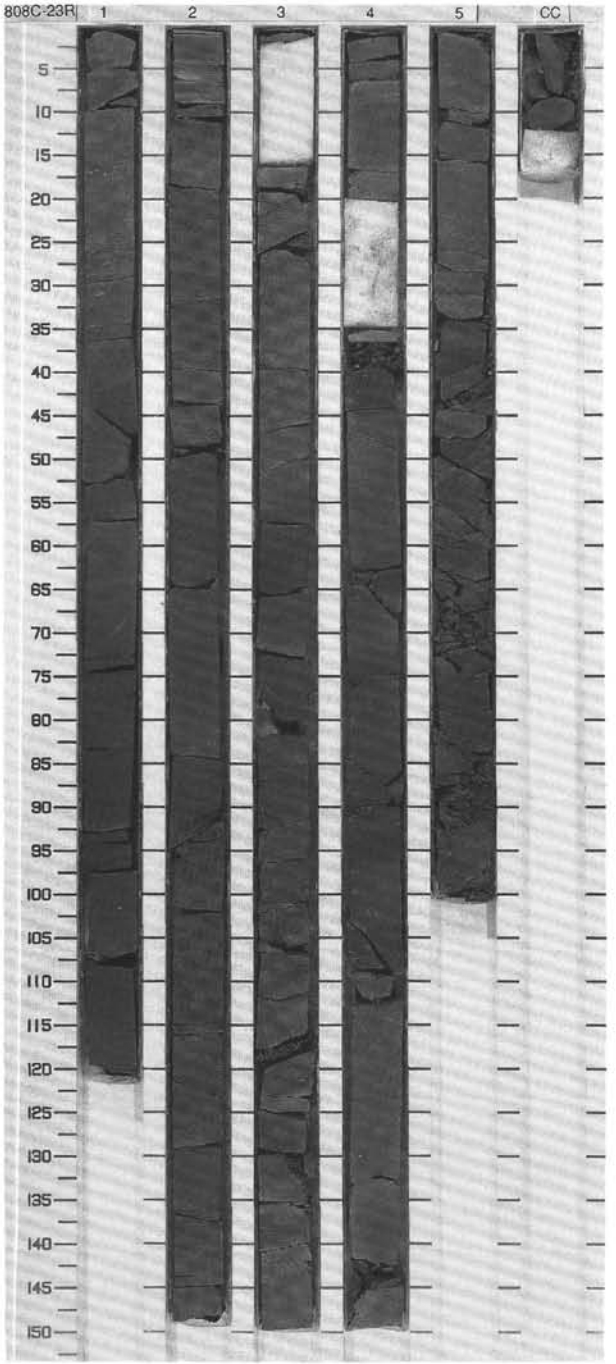
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Rare siliceous worm tubes. Local diffuse, varicolored, laminae and layers of clayey siltstone, generally partially destroyed by bioturbation. Dark blebs and laminae of sulfide.

Minor lithology: Very thin to thin bedded, normally-graded, parallel to current-ripple laminated, SILTSTONE (5Y 4/1). Bases of beds in Section 1, 38 cm, 121 cm, Section 2, 11 cm, 49 cm, Section 4, 44 cm, 91 cm, 96 cm, 112 cm, Section 5, 11 cm, 16 cm, and 38 cm. Section 5, 9-11 cm shows convolute laminae. In Section 3, 16-24 cm, laminae offset by reverse fault with displacement of 3 mm.

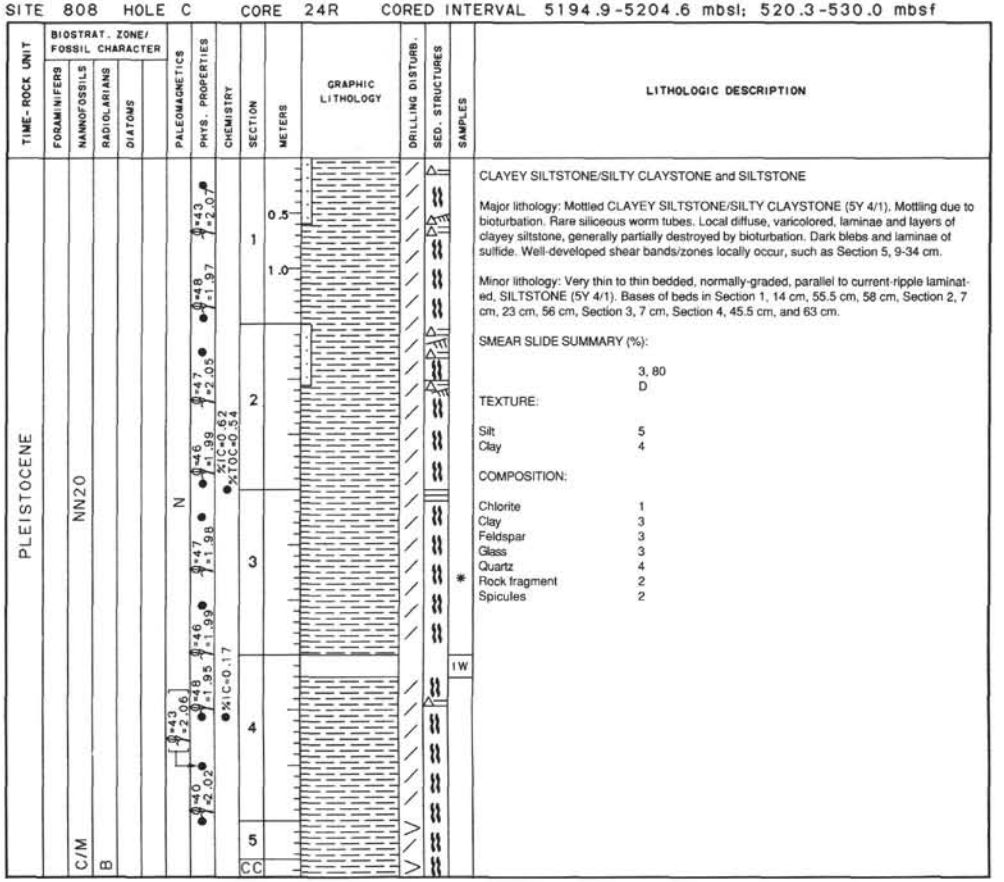
Minor lithology: Laminated VERY FINE SANDSTONE (5Y 4/1). Section 3, 59-67 cm, shows early reverse faults with offset of up to 7 mm and some deformation of laminae while in semilithified (wet) state.

SMEAR SLIDE SUMMARY (%):

	1, 17 D	1, 21 D	2, 144 M	3, 95 D
TEXTURE:				
Sand	—	—	2	—
Silt	4	5	5	4
Clay	5	3	2	5
COMPOSITION:				
Amphibole	—	—	—	2
Calcite	—	—	—	2
Chlorite	—	2	—	2
Clay	5	3	2	5
Feldspar	3	3	2	3
Glass	2	—	—	—
Mica	2	3	—	2
Oxide	1	2	—	2
Quartz	4	4	3	3
Rock fragment	1	2	2	2
Spicules	2	—	—	—
Sulfide	—	—	5	—



SITE 808 HOLE C CORE 24R CORED INTERVAL 5194.9-5204.6 mbsl; 520.3-530.0 mbsf



LITHOLOGIC DESCRIPTION

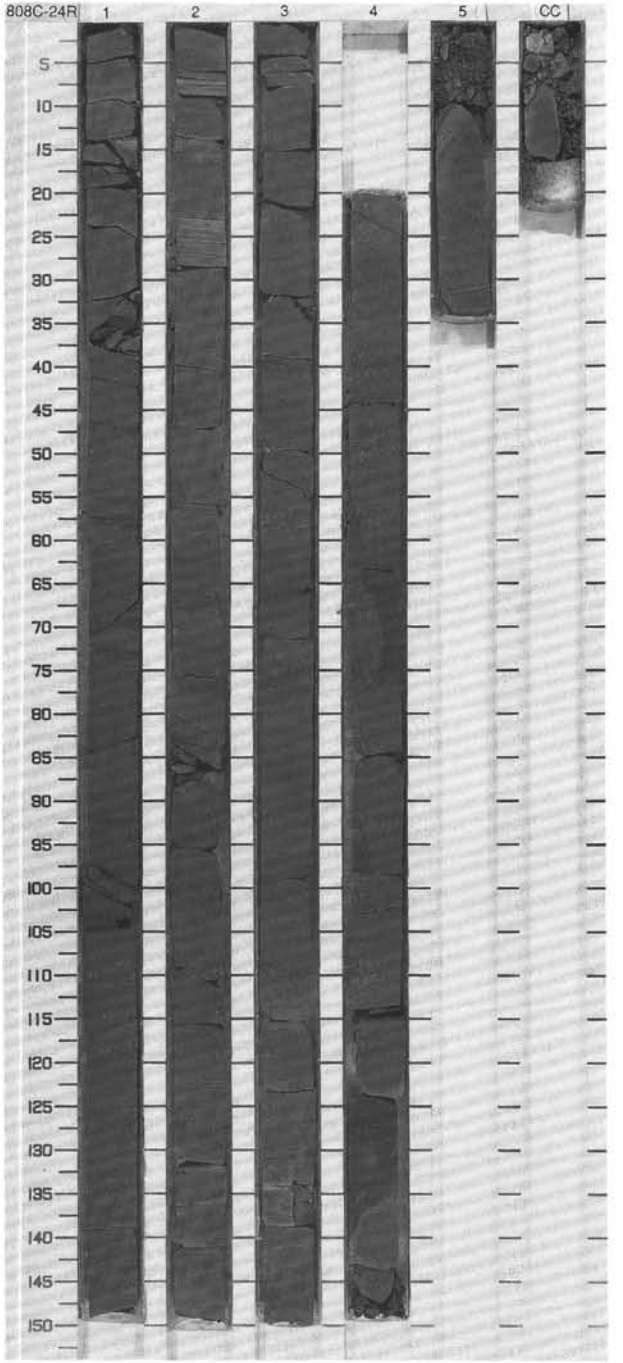
CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Rare siliceous worm tubes. Local diffuse, varicolored, laminae and layers of clayey siltstone, generally partially destroyed by bioturbation. Dark blebs and laminae of sulfide. Well-developed shear bands/zones locally occur, such as Section 5, 9-34 cm.

Minor lithology: Very thin to thin bedded, normally-graded, parallel to current-ripple laminated, SILTSTONE (5Y 4/1). Bases of beds in Section 1, 14 cm, 55.5 cm, 58 cm, Section 2, 7 cm, 23 cm, 56 cm, Section 3, 7 cm, Section 4, 45.5 cm, and 63 cm.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Silt	5
Clay	4
COMPOSITION:	
Chlorite	1
Clay	3
Feldspar	3
Glass	3
Quartz	4
Rock fragment	2
Spicules	2



SITE 808 HOLE C CORE 25R CORED INTERVAL 5204.6-5214.3 mbsl; 530.0-539.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	C/G	NN20	B		N	ϕ=44 ρ=2.03 ϕ=45 ρ=1.98 ϕ=44 ρ=2.01 ϕ=45 ρ=1.97 ϕ=45 ρ=2.0	%IC=0.46 %IC=2.0 %TOC=0.73	1 2 3	0.5 1.0				IW

LITHOLOGIC DESCRIPTION

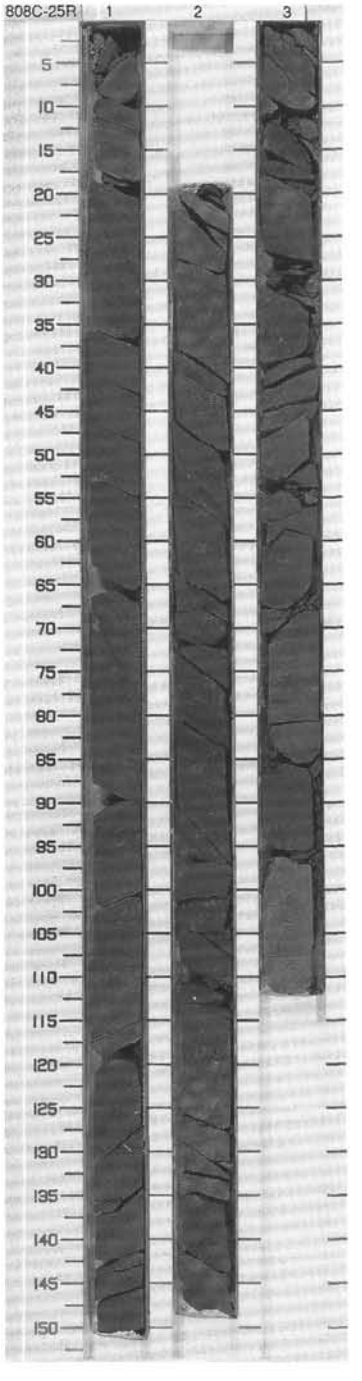
CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Rare siliceous worm tubes. Local diffuse, varicolored, laminae and layers of clayey siltstone, generally partially destroyed by bioturbation. Rare siliceous worm tubes occur throughout lithology. Dark blebs and laminae of sulfide. Section 3, 18-40 cm, shows complex deformation patterns due to two superimposed shear directions and contains highly fractured parts.

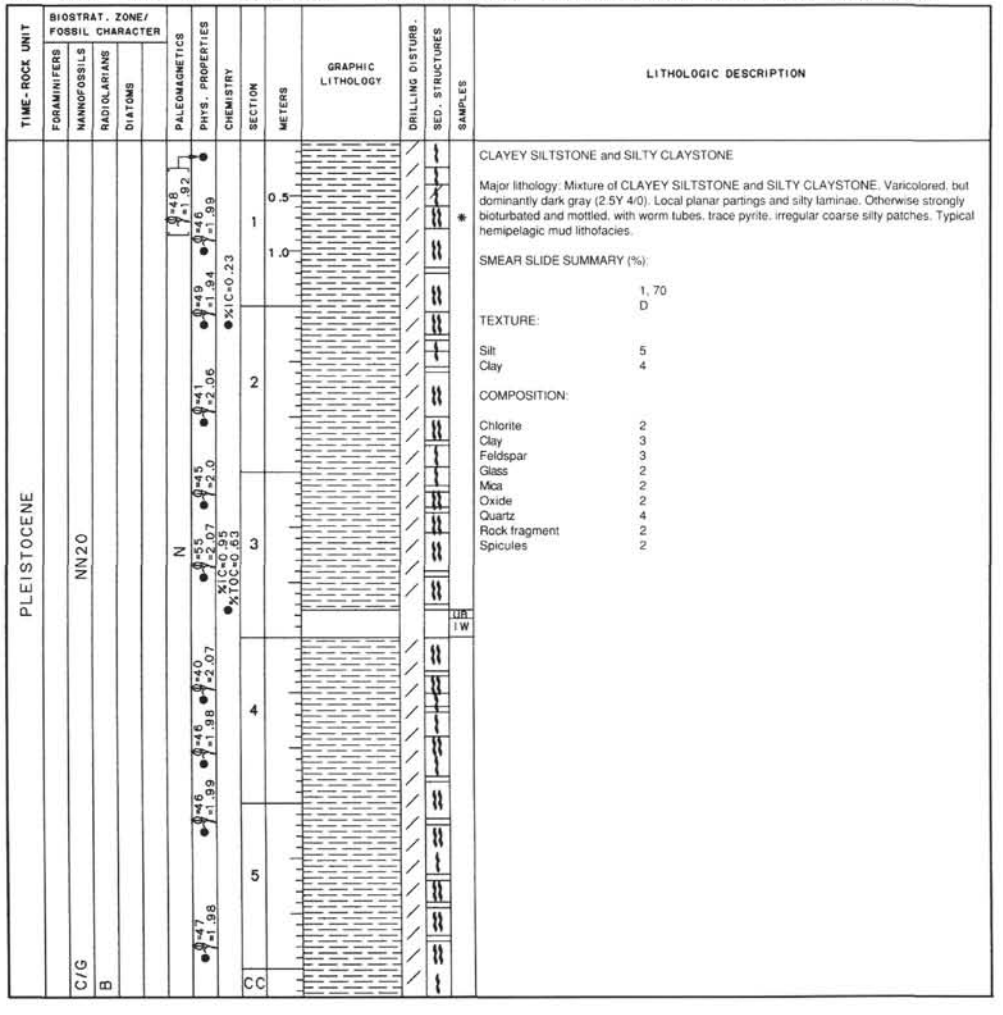
Minor lithology: Very thin to thin bedded, normally-graded, parallel to current-ripple laminated, SILTSTONE (5Y 4/1). Bases of beds in Section 1, 48 cm, Section 2, 107 cm, 127 cm, and Section 3, 86 cm.

SMEAR SLIDE SUMMARY (%):

	2, 95 D
TEXTURE:	
Silt	5
Clay	4
COMPOSITION:	
Chlorite	2
Clay	3
Diatoms	2
Feldspar	3
Mica	2
Oxide	2
Quartz	4
Radiolarians	2
Rock fragment	2
Spicules	2



SITE 808 HOLE C CORE 26R CORED INTERVAL 5214.3-5223.9 mbsl; 539.7-549.3 mbsf



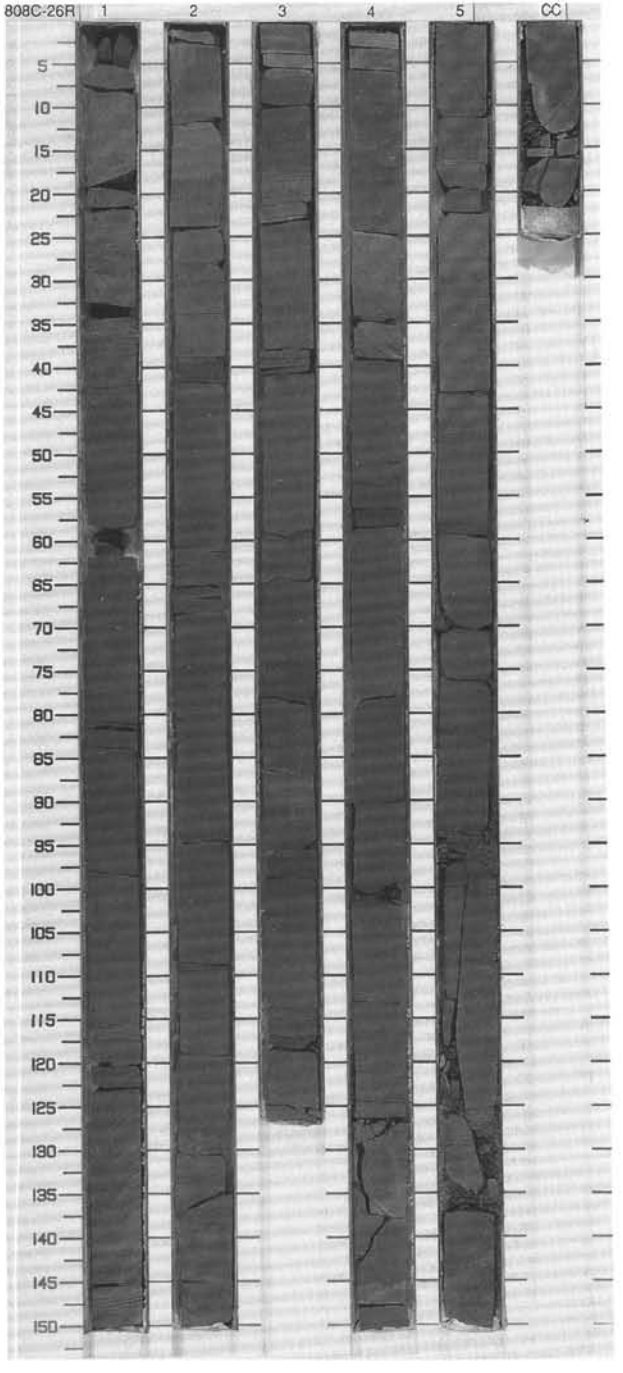
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE

Major lithology: Mixture of CLAYEY SILTSTONE and SILTY CLAYSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Local planar partings and silty laminae. Otherwise strongly bioturbated and mottled, with worm tubes, trace pyrite, irregular coarse silty patches. Typical hemipelagic mud lithofacies.

SMEAR SLIDE SUMMARY (%):

	1, 70 D
TEXTURE:	
Silt	5
Clay	4
COMPOSITION:	
Chlorite	2
Clay	3
Feldspar	3
Glass	2
Mica	2
Oxide	2
Quartz	4
Rock fragment	2
Spicules	2



SITE 808 HOLE C CORE 27R CORED INTERVAL 5223.9-5233.5 mbsl; 549.3-558.9 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN20; RADIOLARIANS: A/G; DIATOMS: B

PALEOMAGNETICS: N

PHYS. PROPERTIES: Φ=47 ρ=1.98; Φ=45 ρ=2.02; Φ=48 ρ=1.98; Φ=44 ρ=2.04; Φ=43 ρ=2.1; Φ=42 ρ=2.07; Φ=44 ρ=1.99; Φ=44 ρ=2.04; Φ=44 ρ=2.08; Φ=44 ρ=2.04; Φ=52 ρ=1.76; Φ=40 ρ=2.08

CHEMISTRY: %IC=0.34; %IC=1.1; %IC=0.3 %TOC=0.19

SECTION: 1 2 3 4 5 6 7

METERS: 0.5; 1.0

GRAPHIC LITHOLOGY: VOID

DRILLING DISTURB.

SED. STRUCTURES: *; *

SAMPLES: IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE, with SILTSTONE and TUFF

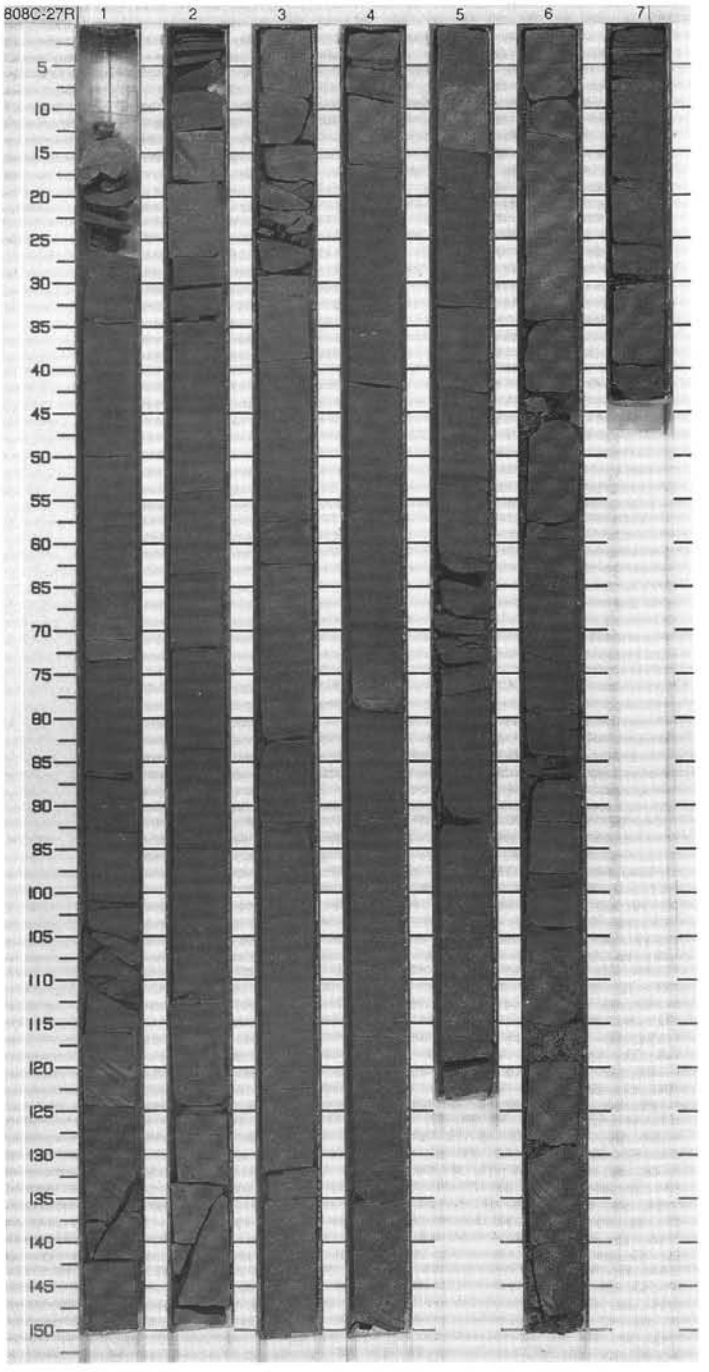
Major lithology: Bioturbated mixtures of CLAYEY SILTSTONE and SILTY CLAYSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Mottled with irregular silty patches. Local occurrences of parallel laminae and planar partings. Lighter (2.5Y5/0) interval of nannofossil-rich claystone in Section 1, 68-74 cm.

Minor lithology: SILTSTONE, with sharp bases occurring in Section 3, 24-29 cm and 132-135 cm; Section 4, 0-10 cm, 51-57 cm, and 122-136 cm; Section 5, 117-123 cm. Silty intervals typically display parallel laminae.

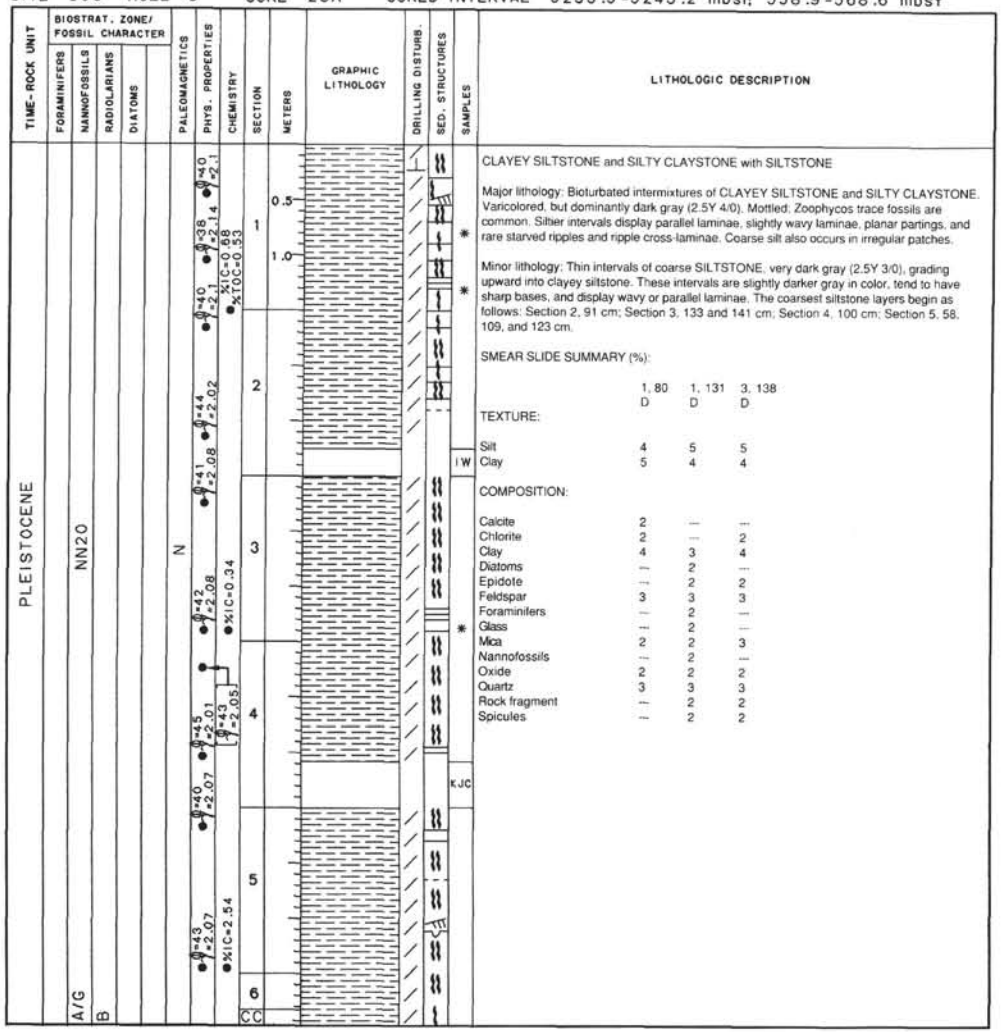
Minor lithology: Gray (10YR 4/0) TUFF, composed of sand-sized to silt-sized shards of clear, fresh volcanic glass. Convoluted to wispy, with a sharp base and irregular vertical size distribution. Tuff intervals occur in Section 6, 0-2 cm and 8-34 cm.

SMEAR SLIDE SUMMARY (%):

	1, 74 D	1, 123 D
TEXTURE:		
Silt	5	4
Clay	4	5
COMPOSITION:		
Calcite	–	2
Clay	3	4
Feldspar	2	2
Foraminifers	2	2
Glass	5	3
Nannofossils	3	–
Oxide	3	2
Quartz	3	4
Radiolarians	–	2
Spicules	2	2



SITE 808 HOLE C CORE 28R CORED INTERVAL 5233.5-5243.2 mbsl; 558.9-568.6 mbsf



LITHOLOGIC DESCRIPTION

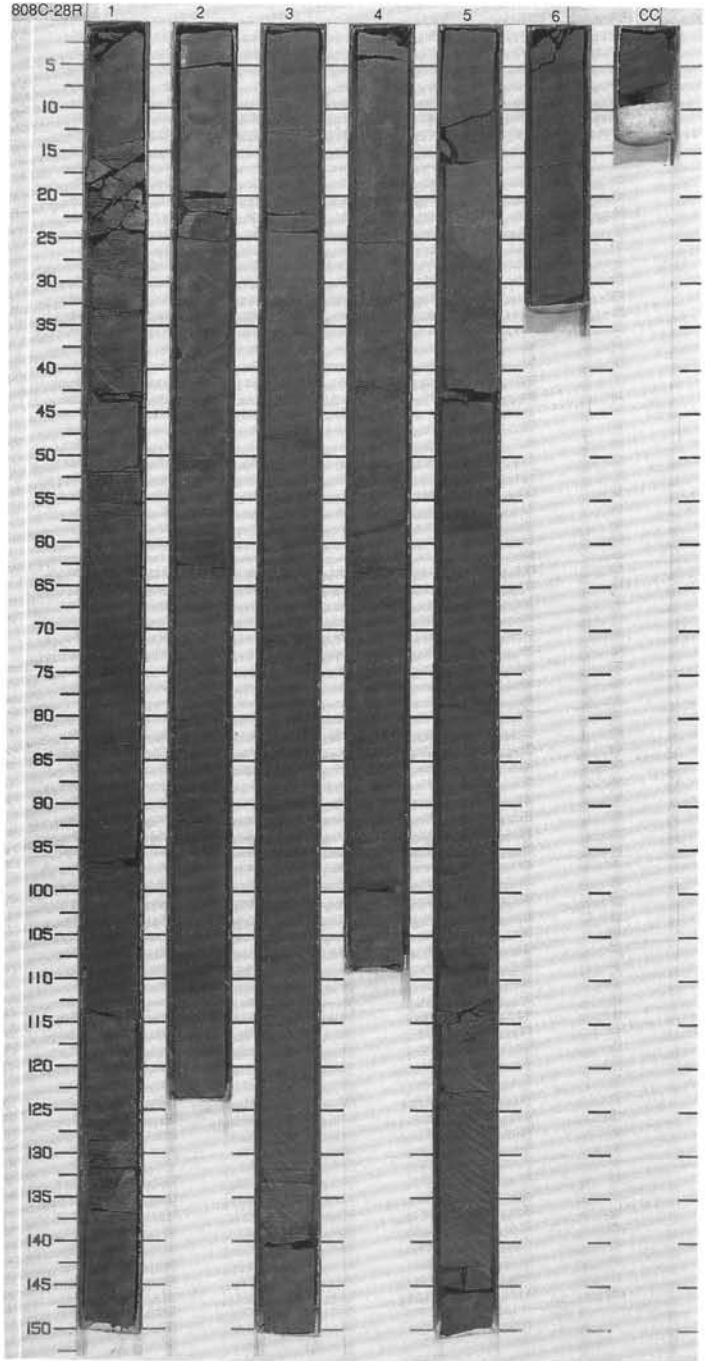
CLAYEY SILTSTONE and SILTY CLAYSTONE with SILTSTONE

Major lithology: Bioturbated intermixtures of CLAYEY SILTSTONE and SILTY CLAYSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Mottled; Zoophycos trace fossils are common. Silber intervals display parallel laminae, slightly wavy laminae, planar partings, and rare starved ripples and ripple cross-laminae. Coarse silt also occurs in irregular patches.

Minor lithology: Thin intervals of coarse SILTSTONE, very dark gray (2.5Y 3/0), grading upward into clayey siltstone. These intervals are slightly darker gray in color, tend to have sharp bases, and display wavy or parallel laminae. The coarsest siltstone layers begin as follows: Section 2, 91 cm; Section 3, 133 and 141 cm; Section 4, 100 cm; Section 5, 58, 109, and 123 cm.

SMEAR SLIDE SUMMARY (%):

	1, 80 D	1, 131 D	3, 138 D
TEXTURE:			
Silt	4	5	5
Clay	5	4	4
COMPOSITION:			
Calcite	2	—	—
Chlorite	2	—	2
Clay	4	3	4
Diatoms	—	2	—
Epidote	—	2	2
Feldspar	3	3	3
Foraminifers	—	2	—
Glass	—	2	—
Mica	2	2	3
Nannofossils	—	2	—
Oxide	2	2	2
Quartz	3	3	3
Rock fragment	—	2	2
Spicules	—	2	2



SITE 808 HOLE C CORE 29R CORED INTERVAL 5243.2-5252.9 mbsl; 568.6-578.3 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS R/M; NANNOFOSSILS NN20; RADIOLARIANS B; DIATOMS

PALEOMAGNETICS: N

PHYS. PROPERTIES

CHEMISTRY: %IC=0.44; %IC=0.6; %TOC=0.46; %IC=0.55

SECTION: 1, 2, 3, 4, 5, 6, 7, 8

METERS: 0.5

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: CC; IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE with traces of SILTSTONE and TUFF

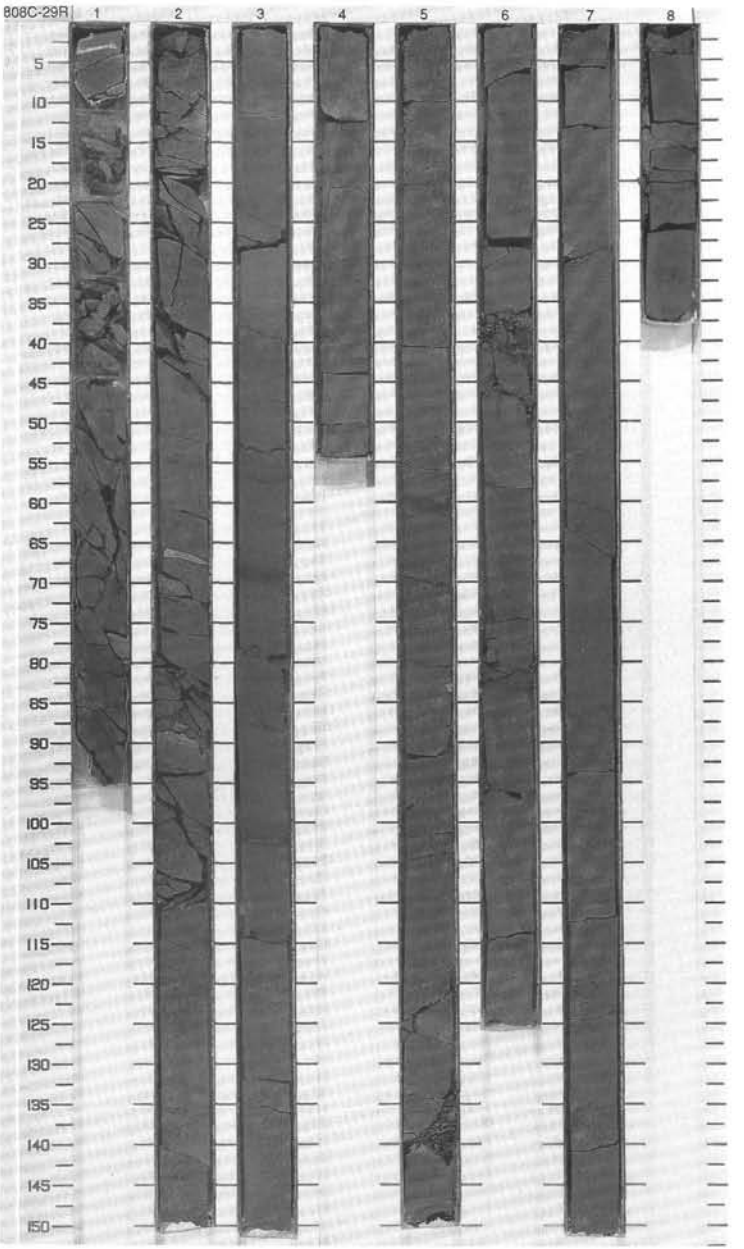
Major lithology: Monotonous bioturbated mixtures of CLAYEY SILTSTONE and SILTY CLAYSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Mottled; Zoophycos trace fossils are common. Rare laminae and irregular silty patches.

Minor lithology: SILTSTONE. This coarser sediment occurs in very thin beds beginning in Section 3, 102 and 115 cm.

Minor lithology: TUFF: composed of clear, fresh shards of volcanic glass. Grain size of the glass shards ranges from coarse silt to fine sand. Clay is also included in this interval, giving the tuff a dirty appearance. Restricted to Section 6, 36-38 cm.

SMEAR SLIDE SUMMARY (%):

	3, 53 D	3, 115 M	6, 35 M
TEXTURE:			
Sand	—	2	1
Silt	4	5	5
Clay	5	3	—
COMPOSITION:			
Amphibole	—	—	2
Calcite	2	—	—
Chlorite	2	2	—
Clay	4	3	—
Feldspar	3	4	2
Glass	—	2	5
Mica	2	2	—
Olivine	—	—	1
Oxide	2	2	—
Pyroxene	—	—	2
Quartz	3	3	—
Rock fragment	—	2	2
Sulfide	—	2	—



SITE 808 HOLE C CORE 30R CORED INTERVAL 5252.9-5262.2 mbsl; 578.3-587.6 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/G; NANNOFOSSILS NN20; RADIOLARIANS B; DIATOMS; PALEOMAGNETICS N

PHYS. PROPERTIES: 0-45 2.02; 0-47 1.97; 0-52 1.90; 0-49 1.89; 0-47 1.99; 0-45 2.01; 0-41 2.04; 0-46 1.83; 0-37 2.12; 0-39 2.12; 0-40 2.09; 0-42 2.07

CHEMISTRY: %IC=0.09; %IC=0.35; %TOC=0.31; %IC=0.18

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: 1W, OG

LITHOLOGIC DESCRIPTION

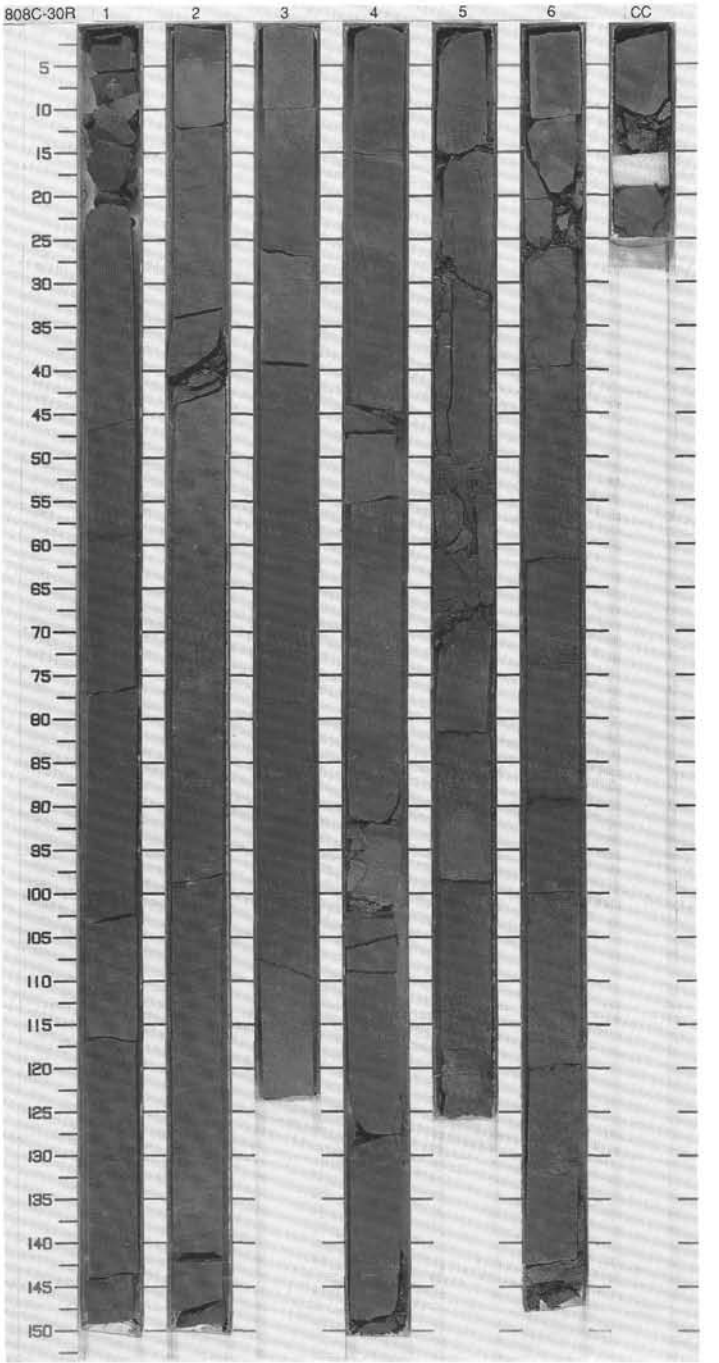
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated mixtures of SILTY CLAYSTONE and CLAYEY SILTSTONE. Varicolored, but dominantly dark gray (2.5Y 4/0). Minor irregular silty patches. Large burrows over 1 cm in diameter; mostly horizontal in orientation. Minor zones of parallel laminae. Black patches and small nodules are probably iron sulfide; pyrite also occurs in Section 6, 83 cm.

Minor lithology: Gray TUFF and ash-rich SAND; sharp bases and normal size grading. Mottled in upper part. Ash-rich intervals occur in Section 4, 88-112 cm; Section 5, 120-123 cm; Section 6, 88-91 cm. The lowermost interval is dark-colored and contains devitrified glass and clay alteration.

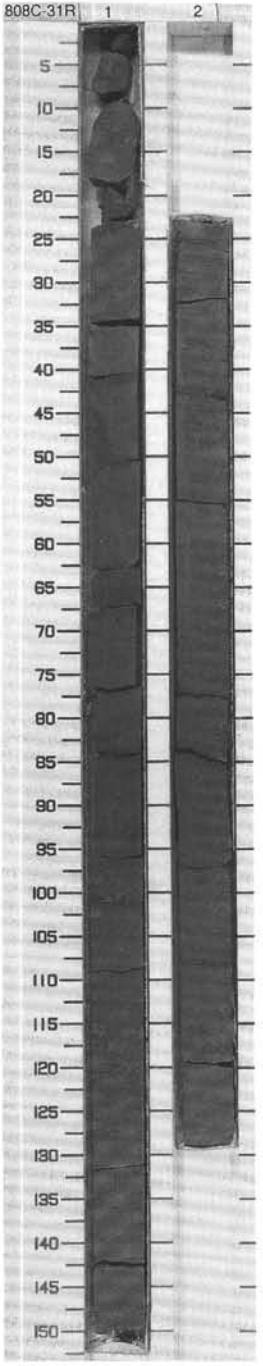
SMEAR SLIDE SUMMARY (%):

	4, 65 M	4, 100 M	5, 123 D	6, 90 D
TEXTURE:				
Sand	—	—	2	—
Silt	4	5	5	5
Clay	5	4	—	3
COMPOSITION:				
Chlorite	2	—	2	—
Clay	4	4	—	3
Feldspar	3	2	2	2
Glass	3	5	5	5
Mica	2	—	—	—
Oxide	2	2	2	—
Quartz	3	2	—	2
Rock fragment	—	—	2	2

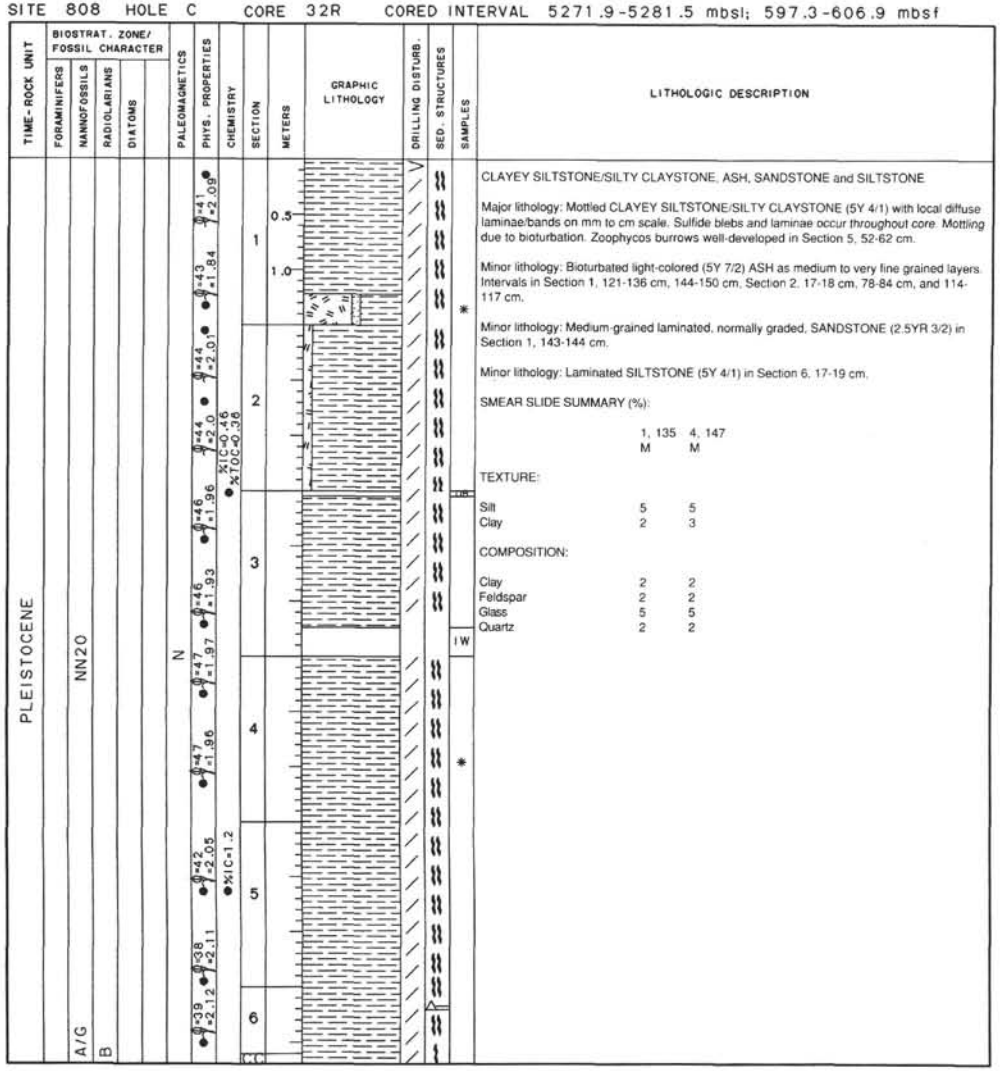


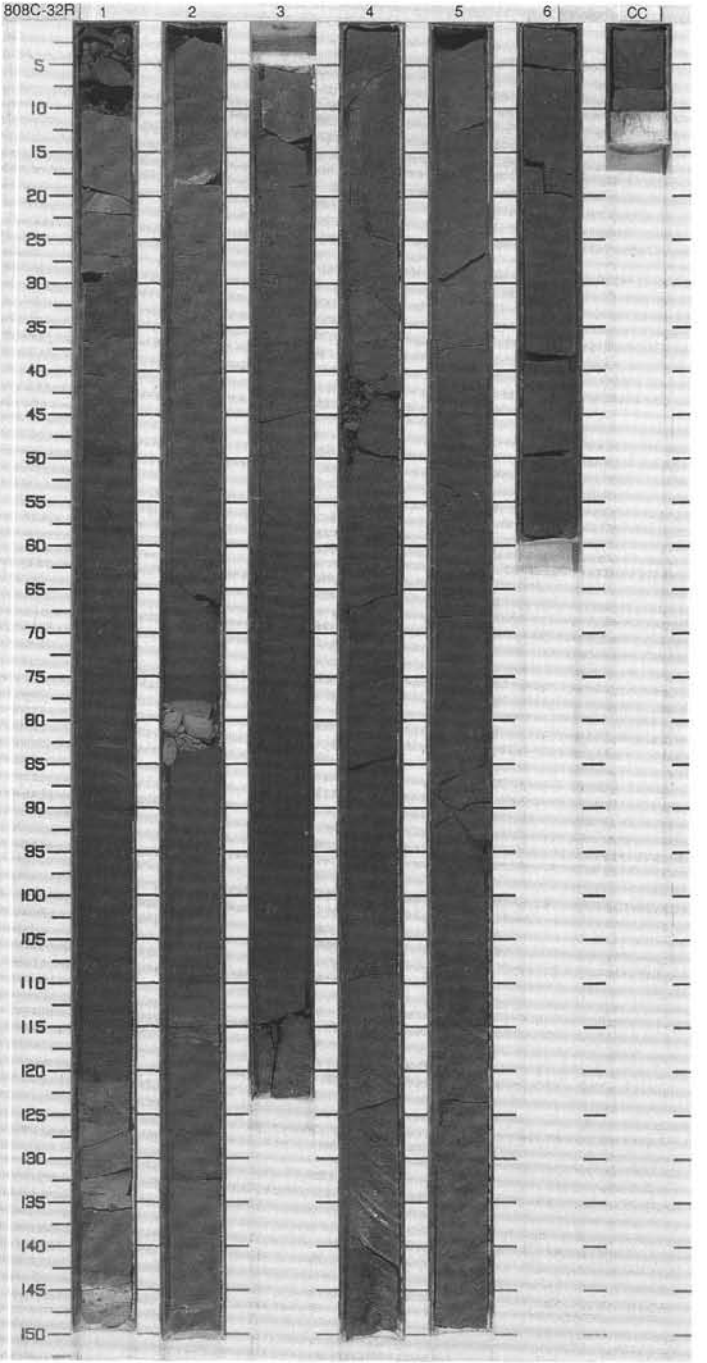
SITE 808 HOLE C CORE 31R CORED INTERVAL 5262.2-5271.9 mbsl; 587.6-597.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	A/G	NN20	B		N	0.43 / 2.04; 0.39 / 2.1; 0.40 / 2.09; 0.40 / 2.1	%IC=0.89 %100=0.54; %IC=0.41	1; 2	0.5; 1.0				IW	CLAYEY SILTSTONE and SILTY CLAYSTONE Major lithology: Bioturbated mixtures of CLAYEY SILTSTONE and SILTY CLAYSTONE. Mottled, with irregular silty patches. Dark gray color (2.5Y 4/0). Black sulfide(?) mineralization occurs in small irregular patches and thin lenses parallel to bedding. Local parallel laminae.



SITE 808 HOLE C CORE 32R CORED INTERVAL 5271.9-5281.5 mbsl; 597.3-606.9 mbsf





SITE 808 HOLE C CORE 33R CORED INTERVAL 5281.5-5291.1 mbsl; 606.9-616.5 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN20; RADIOLARIANS: F/M; DIATOMS: B

PALEOMAGNETICS: N

PHYS. PROPERTIES

CHEMISTRY: %IC=0.33; %IC=0.44; %IC=1.0; %TOC=0.6

SECTION: 1, 2, 3, 4, 5, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH, and SILTSTONE

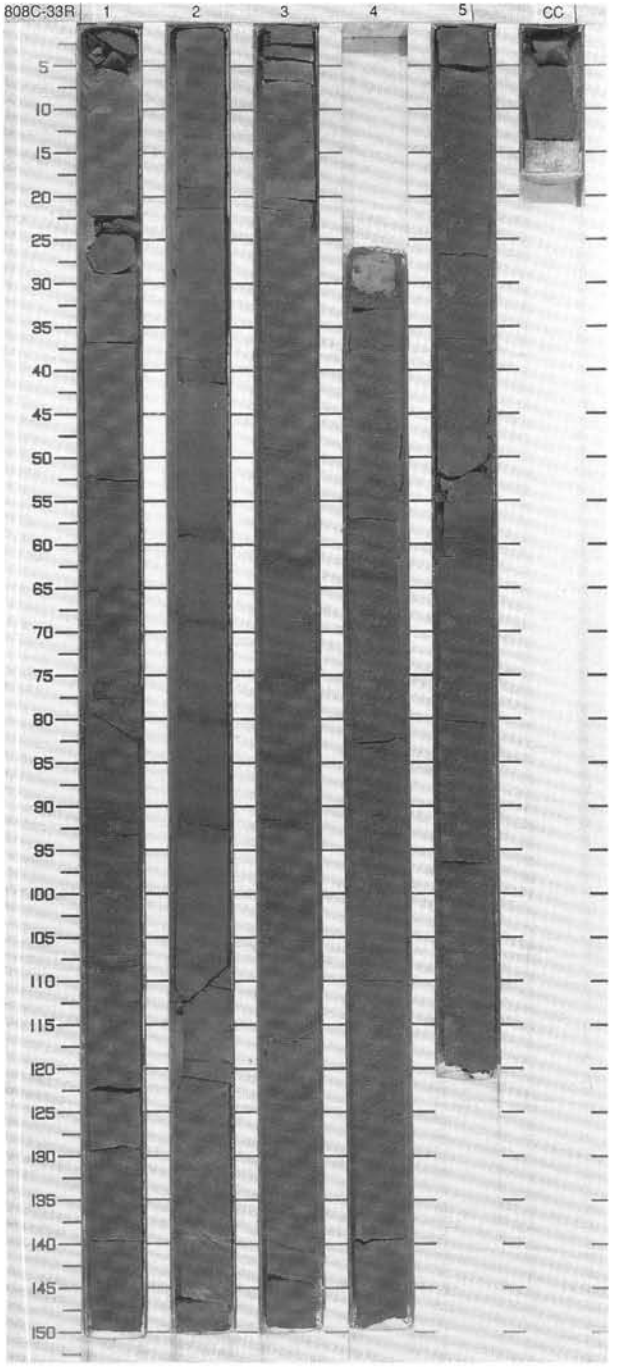
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse laminae/bands on mm to cm scale. Sulfide blebs and laminae occur throughout core. Mottling due to bioturbation.

Minor lithology: Bioturbated light-colored (7.5YR 7/2) ASH as fine to very fine grained layers. Interval in Section 4, 26-31 cm.

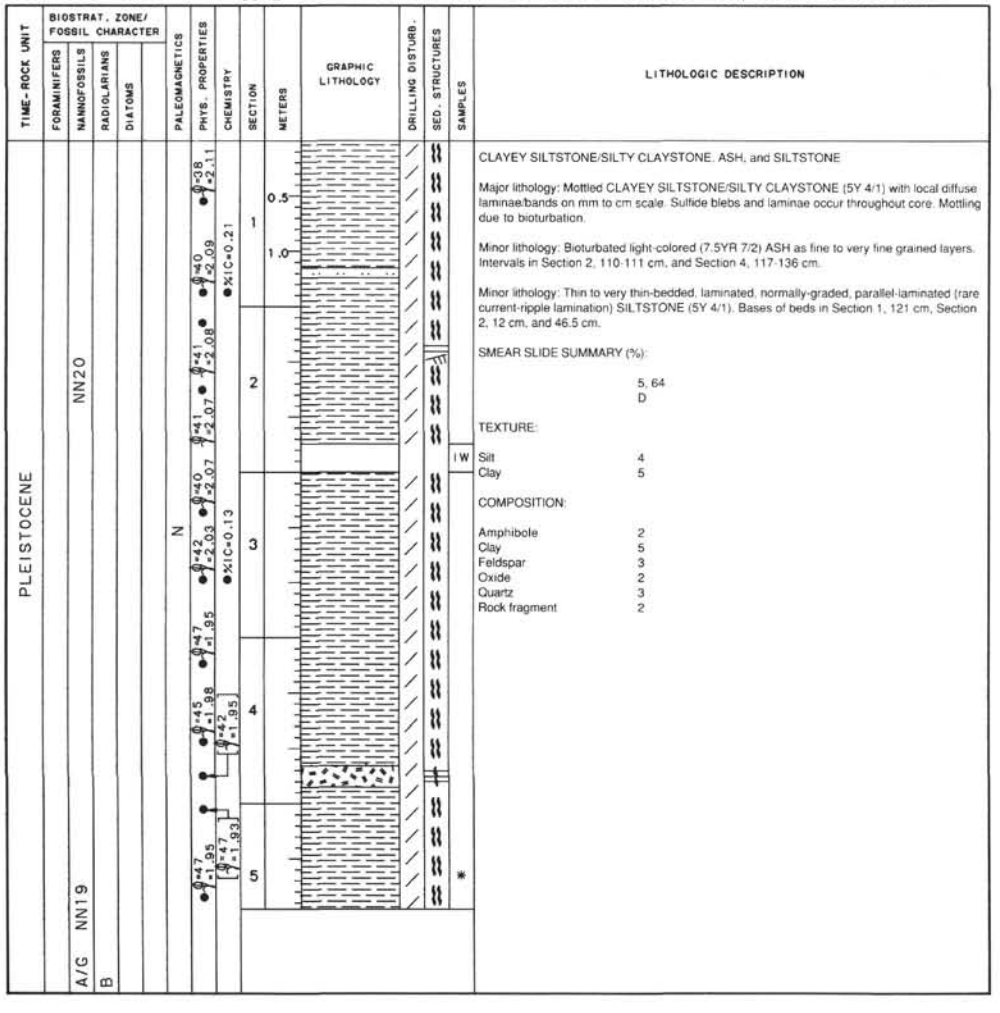
Minor lithology: Thin to very thin-bedded, laminated, normally-graded, parallel-and current-ripple laminated, SILTSTONE (5Y 4/1). Bases of intervals in Section 1, 52 cm, 70 cm, 77 cm, 94 cm, 129 cm, Section 2, 21 cm, 41 cm, 93 cm, 119 cm, 122 cm, 139.5 cm, 148 cm, Section 3, 4 cm, 23 cm, 49 cm, 85 cm, 91 cm, 101.5 cm, 142 cm, Section 5, 5.5 cm, and 59.5 cm. Convolute laminae in Section 2, 18-21 cm.

SMEAR SLIDE SUMMARY (%):

	1, 45 D	3, 47 D	4, 36 M
TEXTURE:			
Silt	4	5	5
Clay	5	4	2
COMPOSITION:			
Clay	5	3	2
Feldspar	3	3	3
Glass	2	2	5
Mica	–	2	–
Oxide	–	2	2
Pyroxene	–	–	2
Quartz	4	4	–
Rock fragment	–	3	2



SITE 808 HOLE C CORE 34R CORED INTERVAL 5291.1-5300.8 mbsl; 616.5-626.2 mbsf



CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH, and SILTSTONE

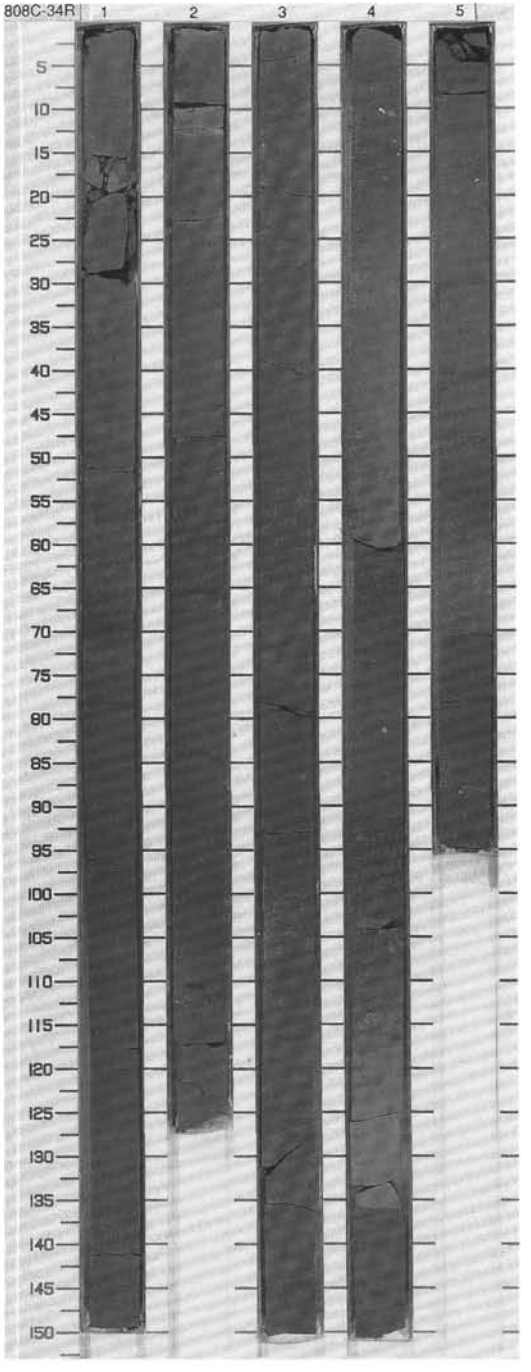
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse laminae/bands on mm to cm scale. Sulfide blebs and laminae occur throughout core. Mottling due to bioturbation.

Minor lithology: Bioturbated light-colored (7.5YR 7/2) ASH as fine to very fine grained layers. Intervals in Section 2, 110-111 cm, and Section 4, 117-136 cm.

Minor lithology: Thin to very thin-bedded, laminated, normally-graded, parallel-laminated (rare current-ripple lamination) SILTSTONE (5Y 4/1). Bases of beds in Section 1, 121 cm, Section 2, 12 cm, and 46.5 cm.

SMEAR SLIDE SUMMARY (%):

	5, 64 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Amphibole	2
Clay	5
Feldspar	3
Oxide	2
Quartz	3
Rock fragment	2



SITE 808 HOLE C CORE 35R CORED INTERVAL 5300.8-5310.5 mbsl; 626.2-635.9 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN19; RADIOLARIANS: B; DIATOMS: —

PALEOMAGNETICS: N

PHYS. PROPERTIES: 0-43 ρ=2.03; 0-41 ρ=2.08; 0-43 ρ=2.04; 0-43 ρ=2.01; 0-48 ρ=1.88; 0-53 ρ=1.98; 0-44 ρ=2.02; 0-57 ρ=2.01; 0-48 ρ=1.93; 0-51 ρ=1.85; 0-49 ρ=1.93

CHEMISTRY: %IC=0.49; %IC=0.45; %TOC=0.34

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: CC; HR; IW; *

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH and SANDSTONE

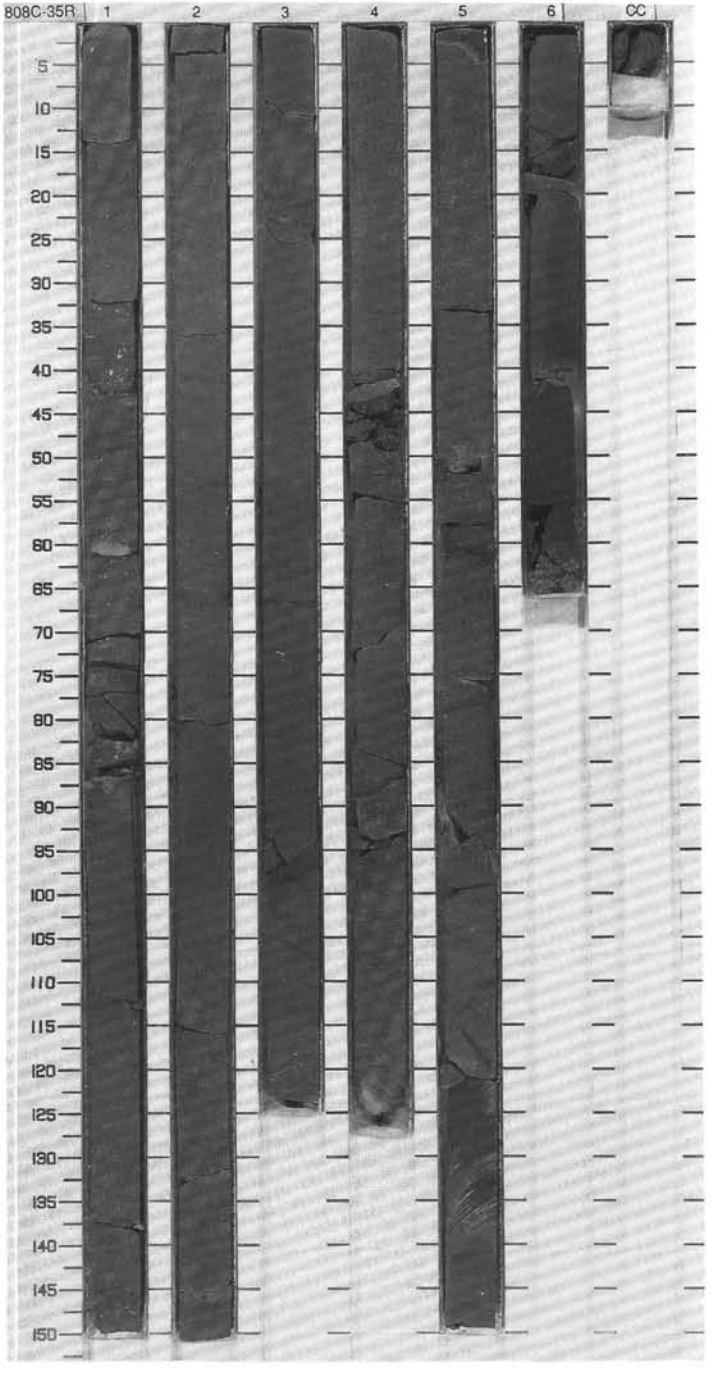
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Sulfide blebs and laminae occur throughout core. Mottling due to bioturbation. Zoophycos burrows well-developed in Section 2, 65-67 cm. Prominent 2 mm-thick, deformed, red (5R 3/2) silty claystone at Section 5, 120 cm.

Minor lithology: Bioturbated light-colored (7.5YR 7/2) ASH as medium to very fine grained layers. Intervals in Section 1, 61-63 cm, 87-88 cm, Section 2, 62-67 cm, Section 4, 124-127 cm, Section 5, 49-51 cm, 75-76 cm, 118-121 cm, Section 6, 39-41 cm, and 59-65 cm.

Minor lithology: Coarse SANDSTONE (5Y 4/1), bioturbated, in Section 5, 61-63 cm.

SMEAR SLIDE SUMMARY (%):

	5, 49 D
TEXTURE:	
Silt	5
Clay	3
COMPOSITION:	
Clay	3
Feldspar	4
Glass	5
Quartz	2



SITE 808 HOLE C CORE 36R CORED INTERVAL 5310.5-5320.1 mbsl; 635.9-645.5 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN19; RADIOLARIANS: R/M; DIATOMS: B; PALEOMAGNETICS: N

PHYS. PROPERTIES: Φ-40.0 ρ-2.11; Φ-43.0 ρ-2.03; Φ-49.0 ρ-1.92; Φ-49.0 ρ-1.91; Φ-39.0 ρ-2.09; Φ-57.0 ρ-1.79; Φ-39.0 ρ-2.13; Φ-38.0 ρ-2.13; Φ-39.0 ρ-2.09

CHEMISTRY: %IC=0.67, %TOC=0.5; %IC=0.32

SECTION: 1, 2, 3, 4, 5

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH and SANDSTONE

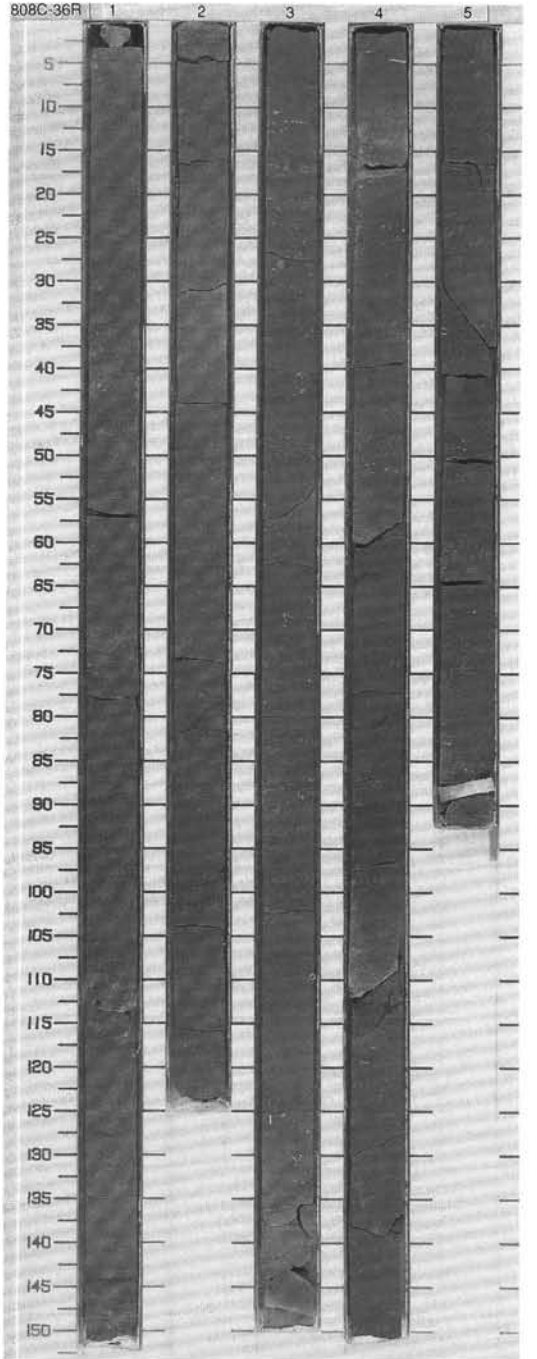
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Sulfide blebs and laminae occur throughout core. Mottling due to bioturbation.

Minor lithology: Bioturbated light-colored (7.5YR 7/2) ASH as very fine to silty layers. Intervals in Section 1, 110-117 cm, Section 4, 14-17 cm, 105-112 cm, and 137-138 cm.

Minor lithology: Volcanic very coarse/fine-grained SANDSTONE, in Section 3, 137-147 cm. Lower interval, 146-147 cm, shows normal grading from coarse to fine; 137-146 cm shows normal grading from very coarse to fine/very fine, with 0.5 cm basal zone of inverse grading. Small-scale normal faults offset top part of bed.

SMEAR SLIDE SUMMARY (%):

	3, 144 M
TEXTURE:	
Sand	97
Clay	3
COMPOSITION:	
Clay	3
Feldspar	10
Glass	60
Heavy minerals	2
Quartz	2
Rock fragment	8



SITE 808 HOLE C CORE 37R CORED INTERVAL 5320.1-5329.5 mbsl; 645.5-654.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	A/G	NN19	B		N	ϕ=37 ρ=2.13 ϕ=41 ρ=2.06 ϕ=39 ρ=2.10	%IC=0.44 %TOC=0.3 %IC=0.54	1 2	0.5 1.0				IW

LITHOLOGIC DESCRIPTION

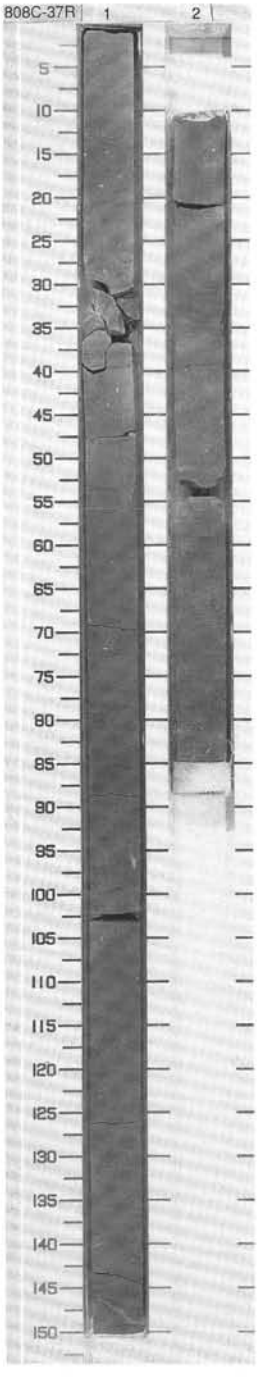
CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH and SANDSTONE

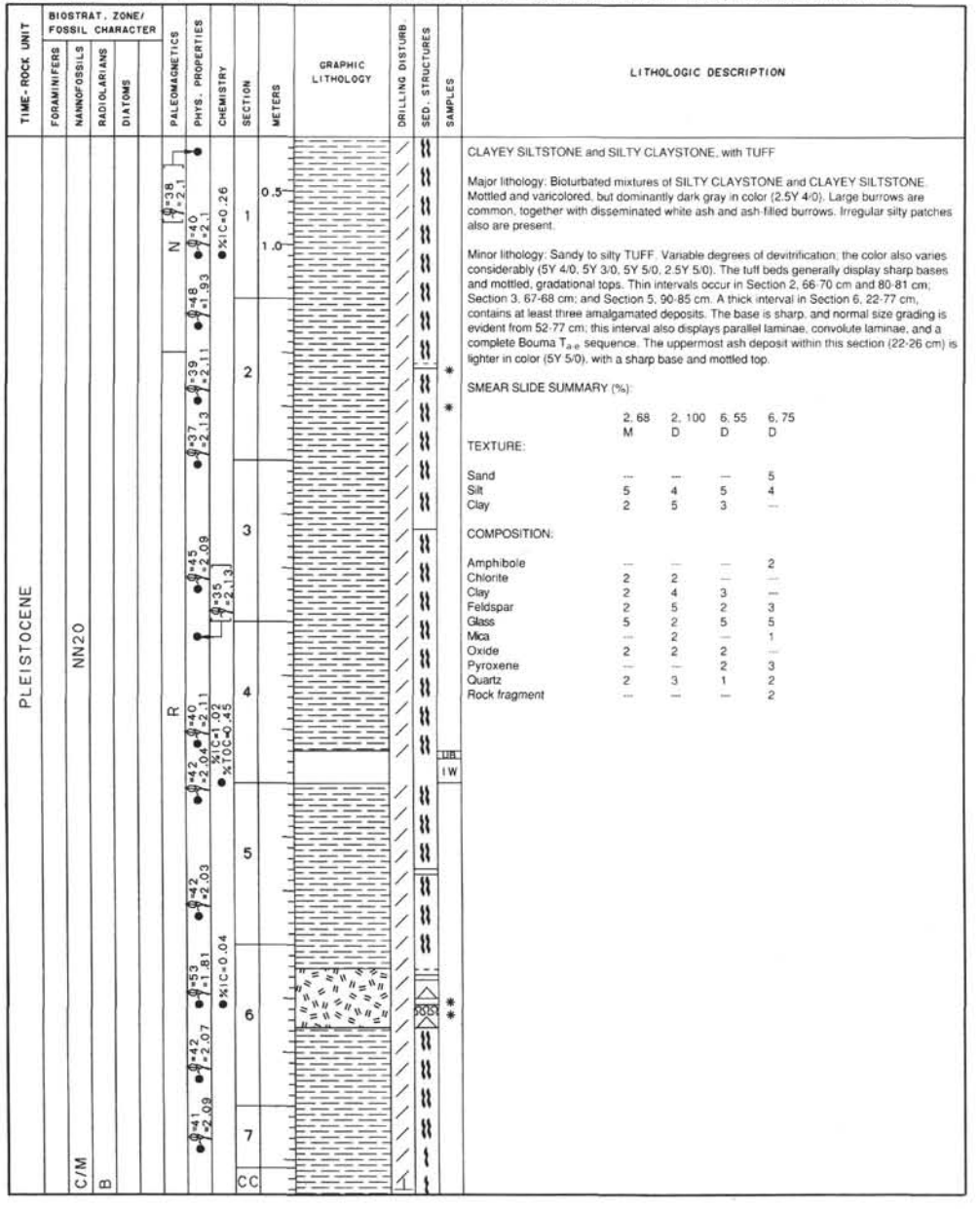
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Sulfide blebs and laminae occur throughout core. Mottling due to bioturbation.

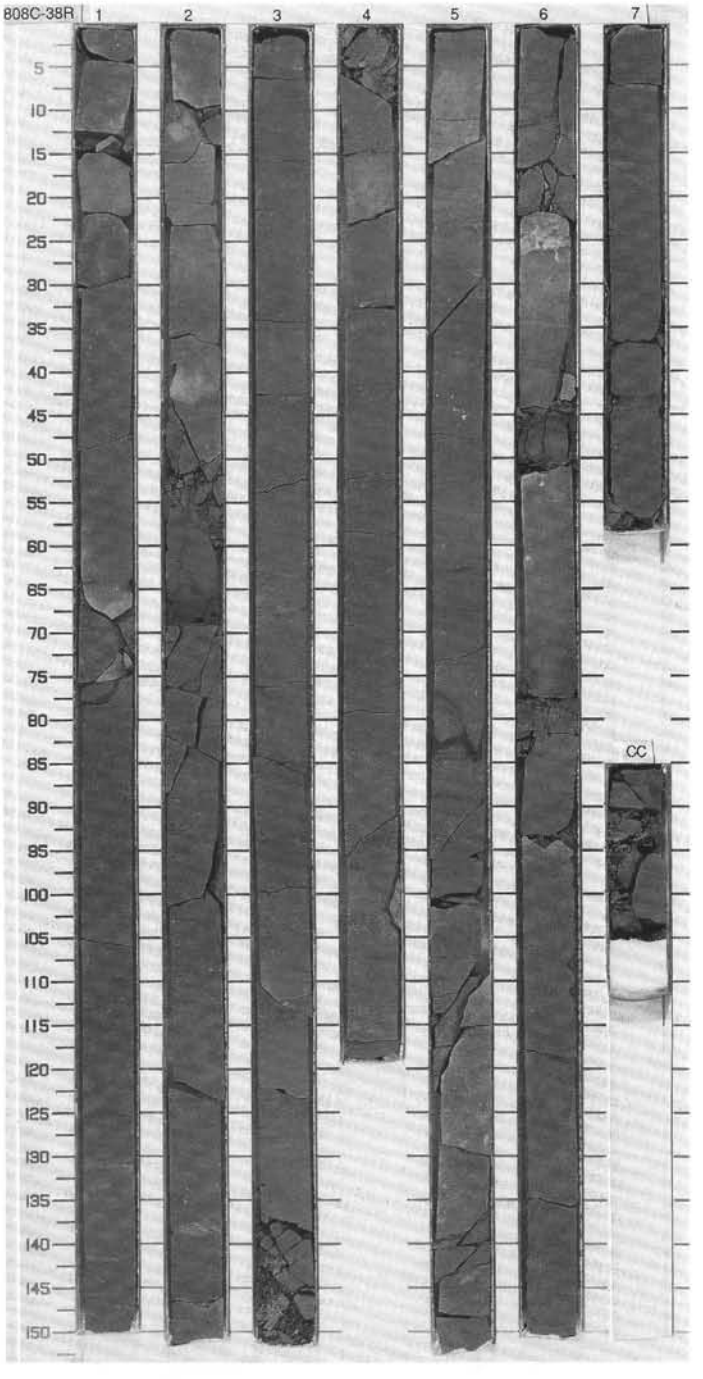
Minor lithology: Bioturbated light-colored ASH as fine to silty layer in Section 1, 28-40 cm. Upper 28-36 cm is highly bioturbated, and lower 36-40 cm part shows parallel lamination and sharp base.

SMEAR SLIDE SUMMARY (%):

	1, 38 M
TEXTURE:	
Silt	5
Clay	3
COMPOSITION:	
Clay	3
Feldspar	3
Glass	5
Oxide	2




TIME-ROCK UNIT
PLEISTOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER
FORAMINIFERS
NANNOFOSSILS
RADIOLARIANS
DIATOMS
NN20
C/M
B
PALEOMAGNETICS
PHYS. PROPERTIES
CHEMISTRY
SECTION
METERS
GRAPHIC LITHOLOGY
DRILLING DISTURB
SED. STRUCTURES
SAMPLES
R
N
%IC=0.26
%IC=1.02
%IC=0.45
%IC=0.04
%TOC=0.45
CC
LITHOLOGIC DESCRIPTION
CLAYEY SILTSTONE and SILTY CLAYSTONE, with TUFF
Major lithology: Bioturbated mixtures of SILTY CLAYSTONE and CLAYEY SILTSTONE. Mottled and varicolored, but dominantly dark gray in color (2.5Y 4/0). Large burrows are common, together with disseminated white ash and ash-filled burrows. Irregular silty patches also are present.
Minor lithology: Sandy to silty TUFF. Variable degrees of devitrification; the color also varies considerably (5Y 4/0, 5Y 3/0, 5Y 5/0, 2.5Y 5/0). The tuff beds generally display sharp bases and mottled, gradational tops. Thin intervals occur in Section 2, 66-70 cm and 80-81 cm; Section 3, 67-68 cm; and Section 5, 90-85 cm. A thick interval in Section 6, 22-77 cm, contains at least three amalgamated deposits. The base is sharp, and normal size grading is evident from 52-77 cm; this interval also displays parallel laminae, convolute laminae, and a complete Bouma T_{a-e} sequence. The uppermost ash deposit within this section (22-26 cm) is lighter in color (5Y 5/0), with a sharp base and mottled top.
SMEAR SLIDE SUMMARY (%):
2, 68 M
2, 100 D
6, 55 D
6, 75 D
TEXTURE:
Sand — — — 5
Silt 5 4 5 4
Clay 2 5 3 —
COMPOSITION:
Amphibole — — — 2
Chlorite 2 2 — —
Clay 2 4 3 —
Feldspar 2 5 2 3
Glass 5 2 5 5
Mica — 2 — 1
Oxide 2 2 2 —
Pyroxene — — 2 3
Quartz 2 3 1 2
Rock fragment — — — 2


808C-38R
1
2
3
4
5
6
7
CC

SITE 808 HOLE C CORE 39R CORED INTERVAL 5339.1-5348.8 mbsl; 664.5-674.2 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/M; NANNOFOSSILS NN19; RADIOLARIANS B; DIATOMS

PALEOMAGNETICS: R R R R

PHYS. PROPERTIES: ? ? ? ?

CHEMISTRY: %IC=0.27; %IC=2.99, %TOC=0.78

SECTION: 1 2 3 4 5

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: ZHA, IW, KM, WAR

LITHOLOGIC DESCRIPTION

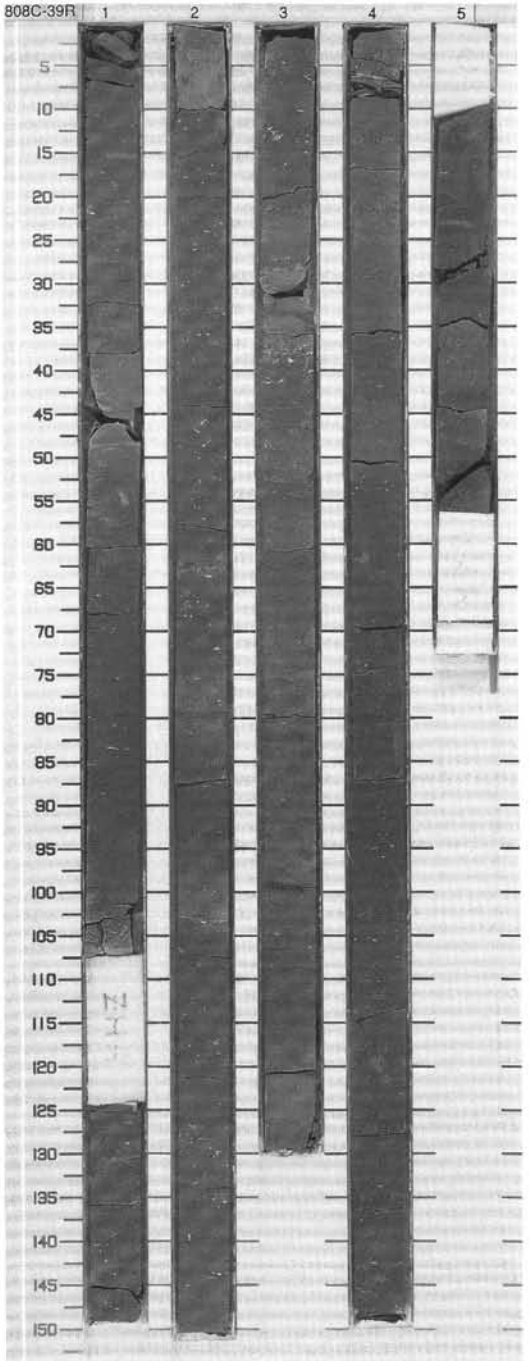
CLAYEY SILTSTONE and SILTY CLAYSTONE with TUFF

Major lithology: Bioturbated mixtures of SILTY CLAYSTONE and CLAYEY SILTSTONE. Mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Contains disseminated white ash and ashy burrow-fill; forams are also common, giving much of the core a speckled appearance.

Minor lithology: Sand- to silt-sized TUFF; lighter gray color (2.5Y 5/0). Variable degrees of devitrification and replacement by smectite. Ash deposits typically display normal size grading, sharp bases and gradational, mottled tops. Some contacts are convoluted. Tuff intervals occur as follows: Section 1, 45-49 cm and 105-124 cm (nearly all of the lower interval was sampled for ZHA whole-round); Section 3, 29-39, 51-53, and 99-100 cm.

SMEAR SLIDE SUMMARY (%):

	1, 47 M	1, 95 D
TEXTURE:		
Silt	5	5
Clay	3	4
COMPOSITION:		
Clay	3	—
Feldspar	2	3
Glass	5	3
Oxide	2	2
Pyroxene	—	2
Quartz	—	3
Rock fragment	—	2

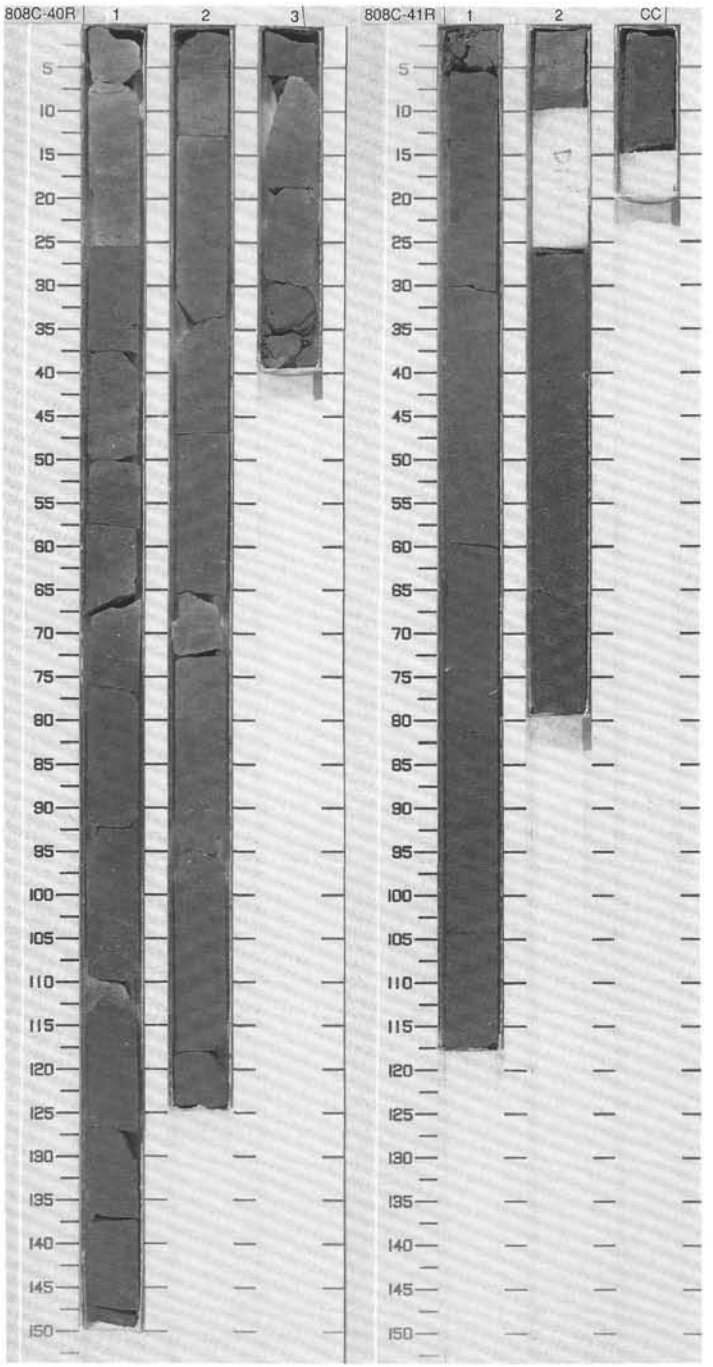


SITE 808 HOLE C CORE 40R CORED INTERVAL 5348.8-5358.4 mbsl; 674.2-683.8 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	A/M	NN19	B		R?	ϕ=38 *2.09; ϕ=38 *2.12; ϕ=43 *2.07; ϕ=41 *2.1; ϕ=41 *2.08; %IC=2.25 %TOC=0.83; %IC=0.16; %IC=0.19		1; 2; 3	0.5; 1.0				* IW	CLAYEY SILTSTONE AND SILTY CLAYSTONE Major lithology: SILTY CLAYSTONE intermixed with lesser amounts of CLAYEY SILTSTONE. Mottled by bioturbation: varicolored but dominantly dark gray (2.5Y 4/0). Numerous large horizontal burrows, together with disseminated ash, forams, and irregular patches of coarser silt. SMEAR SLIDE SUMMARY (%): 2, 95 D TEXTURE: Silt 5 Clay 4 COMPOSITION: Clay 5 Feldspar 3 Nannofossils 2 Quartz 3 Rock fragment 2

SITE 808 HOLE C CORE 41R CORED INTERVAL 5358.4-5368.1 mbsl; 683.8-693.5 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	F/M	NN19	B		N	ϕ=54 *2.01; ϕ=41 *2.08; ϕ=42 *2.08; ϕ=36 *2.18	%IC=2.38 %TOC=0.70 %IC=0.38	1; 2; CC	0.5; 1.0				IW TIB DAN *	SILTY CLAYSTONE and CLAYEY SILTSTONE Major lithology: Bioturbated mixtures of SILTY CLAYSTONE and CLAYEY SILTSTONE. Irregular patches of coarser silt. Mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Numerous large horizontal burrows. SMEAR SLIDE SUMMARY (%): 2, 50 D TEXTURE: Silt 4 Clay 5 COMPOSITION: Clay 4 Feldspar 3 Glass 3 Oxide 2 Quartz 3 Rock fragment 2



SITE 808 HOLE C CORE 42R CORED INTERVAL 5368.1-5377.8 mbsl; 693.5-703.2 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS ?; NANNOFOSSILS NN9; RADIOLARIANS A/M; DIATOMS B

PALEOMAGNETICS: ? R I N

PHYS. PROPERTIES: ? R I N

CHEMISTRY: %IC=0.86; %IC=0.49; %IC=0.67; %TOC=0.42

SECTION: 1 2 3 4 5 6

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: OG IW KJC

LITHOLOGIC DESCRIPTION

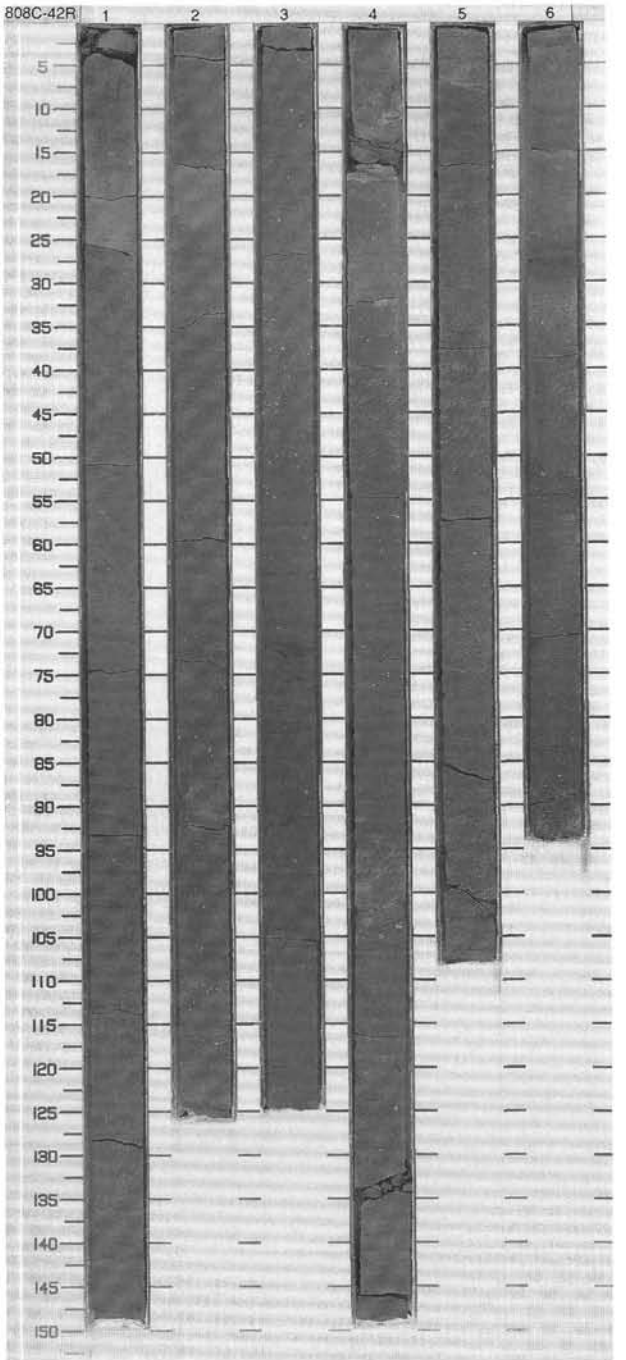
CLAYEY SILTSTONE and SILTY CLAYSTONE with TUFF

Major lithology: Bioturbated mixtures of SILTY CLAYSTONE and CLAYEY SILTSTONE, with irregular silty patches. Mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Abundant horizontal burrows, forams, and disseminated ash. Also contains pyrite nodules.

Minor lithology: Altered TUFF, composed of partially devitrified volcanic glass. Grain size ranges from sand-sized to fine silt. Beds typically are normally graded, with either sharp or irregular bases and irregular, mottled upper boundaries. Ash deposits occur in Section 2, 88-91 and 124-126 cm; Section 4, 10-18 and 101-105 cm.

SMEAR SLIDE SUMMARY (%):

	2, 40 D	2, 91 M
TEXTURE:		
Silt	5	5
Clay	4	3
COMPOSITION:		
Amphibole	–	2
Chlorite	2	–
Clay	3	2
Epidote	2	–
Feldspar	3	3
Glass	–	4
Mica	2	–
Oxide	2	2
Quartz	4	2
Rock fragment	2	2



SITE 808 HOLE C CORE 43R CORED INTERVAL 5377.8-5387.0 mbsl; 703.2-712.4 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS ?; NANNOFOSSILS R/M NN19; RADIOLARIANS B; DIATOMS ?

PALEOMAGNETICS: R ?

PHYS. PROPERTIES: Φ-38 ρ-2.12; Φ-38 ρ-2.13; Φ-39 ρ-2.11; Φ-39 ρ-2.14; Φ-40 ρ-2.07; Φ-37 ρ-2.14; Φ-38 ρ-2.14; Φ-38 ρ-2.13; Φ-37 ρ-2.14; Φ-36 ρ-2.14

CHEMISTRY: %IC=0.48; %IC=0.96; %IC=0.26; %IC=2.13; %IC=4.02; %TOC=0.43

SECTION: 1 2 3 4 5 6 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: WAR KM AKO TAY; IW

LITHOLOGIC DESCRIPTION

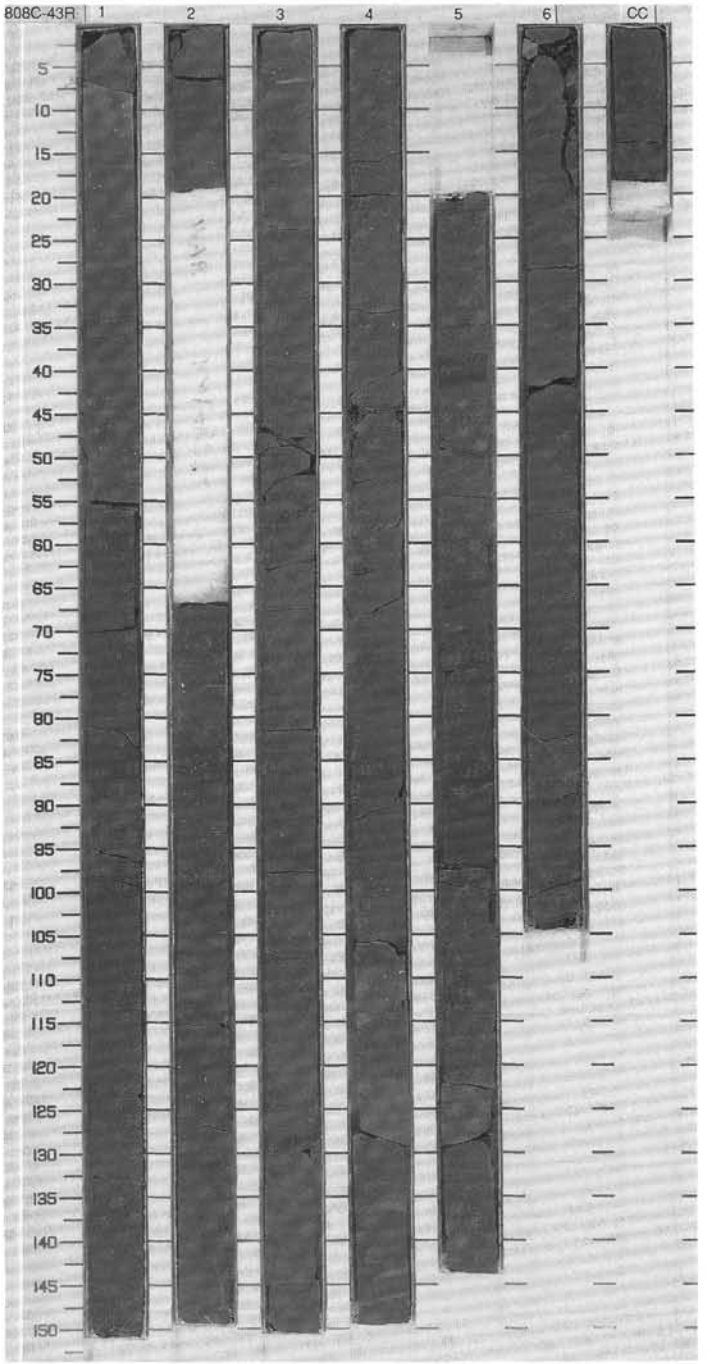
SILTY CLAYSTONE with CLAYEY SILTSTONE and TUFF

Major lithology: Bioturbated SILTY CLAYSTONE mixed with irregular patches of CLAYEY SILTSTONE. Mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Traces of pyrite; disseminated forams, burrows, and small worm tubes are common.

Minor Lithology: Altered TUFF, containing sand-sized and silt-sized devitrified glass shards. Ash is largely replaced by smectite. Thin tuff bed occurs in Section 2, 114-117 cm.

SMEAR SLIDE SUMMARY (%):

	2, 80 D	2, 114 M
TEXTURE:		
Silt	4	5
Clay	5	2
COMPOSITION:		
Amphibole	–	2
Clay	4	3
Feldspar	2	3
Glass	3	5
Oxide	2	–
Pyroxene	–	2
Quartz	4	–
Rock fragment	2	–



SITE 808 HOLE C CORE 44R CORED INTERVAL 5387.0-5396.6 mbsl; 712.4-722.0 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/P; NANNOFOSSILS: NN19; RADIOLARIANS: B; DIATOMS: R; PALEOMAGNETICS: N?

PHYS. PROPERTIES: ? ? ? ? ? ? ? ?

CHEMISTRY: %IC=1.41; %IC=0.62; %TOC=0.43; %IC=0.1; %IC=1.15

SECTION: 1 2 3 4 5 6 7

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

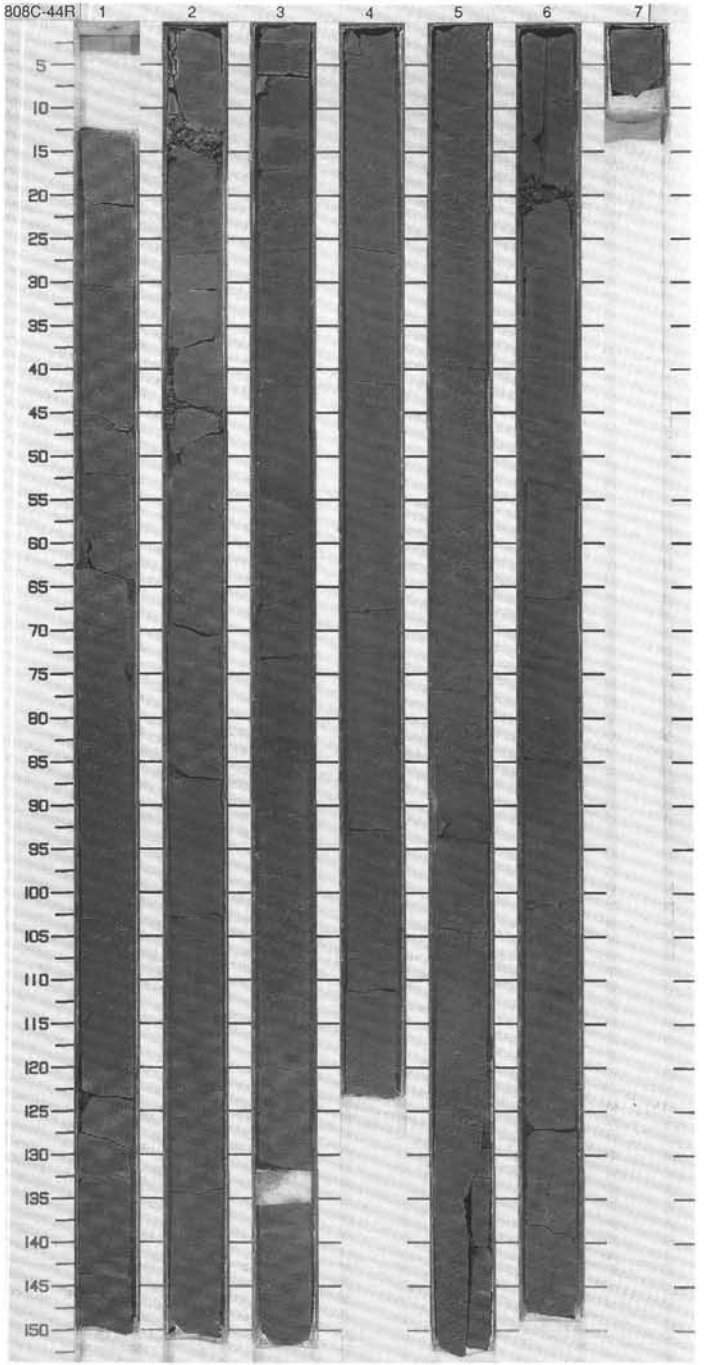
SED. STRUCTURES

SAMPLES: UB STL IW

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE with irregular patches of coarser sediment. Mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Pyrite nodules are fairly common, as are disseminated forams and horizontal burrows



SITE 808 HOLE C CORE 45R CORED INTERVAL 5396.6-5406.3 mbsl; 722.0-731.7 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN19; RADIOLARIANS: R/M; DIATOMS: B

PALEOMAGNETICS: N N N N R N ?

PHYS. PROPERTIES

CHEMISTRY: %IC=0.45; %IC=0.22; %IC=1.57; %TOC=0.62

SECTION: 1 2 3 4 5 6

METERS: 0.5; 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: 1W; PAL

LITHOLOGIC DESCRIPTION

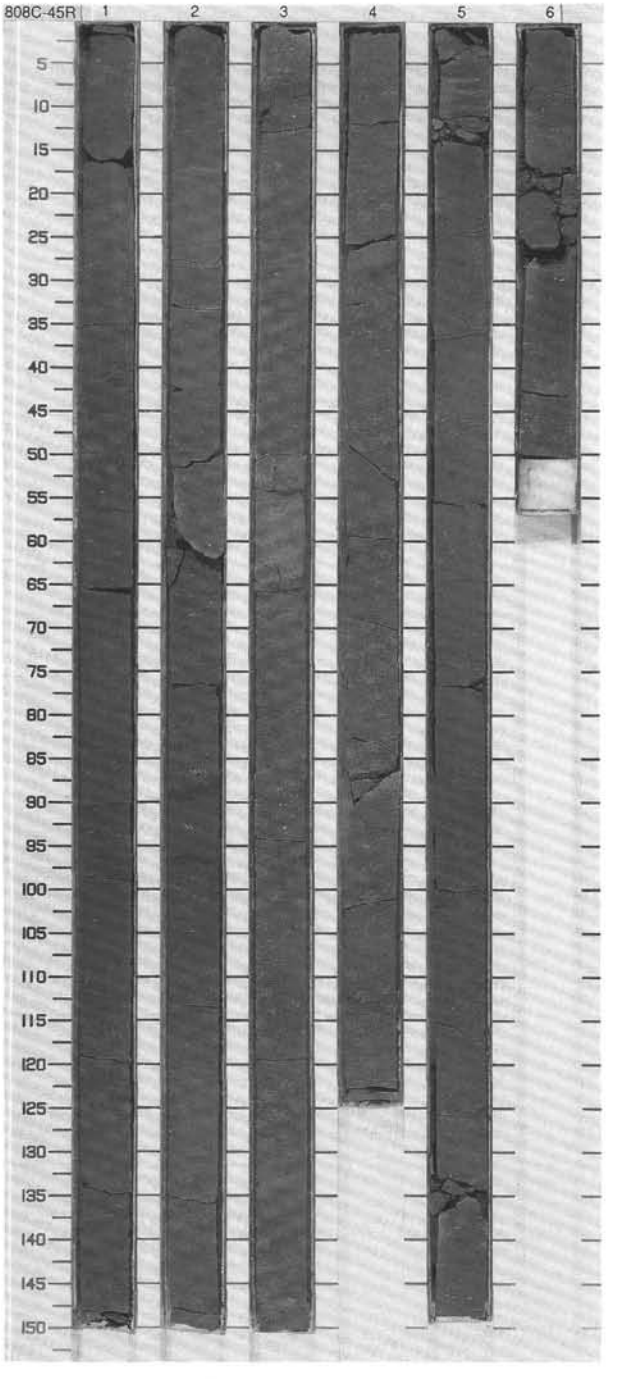
CLAYEY SILTSTONE/SILTY CLAYSTONE, and SANDSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Volcanic coarse/fine-grained SANDSTONE (5Y 4/1), in Section 2, 48 cm (1 mm thick), Section 3, 5-11 cm, 12-13 cm, 50-64 cm, 66-67.5 cm, and Section 6, 27-28 cm. Moderate bioturbation common. Section 5, 50-64 cm SANDSTONE shows: 50-54 cm bioturbated ash, 54-63 cm normally-graded coarse to very fine, diffusely laminated, interval, and 63-64 cm inversely-graded very fine to coarse interval; base bioturbated.

SMEAR SLIDE SUMMARY (%):

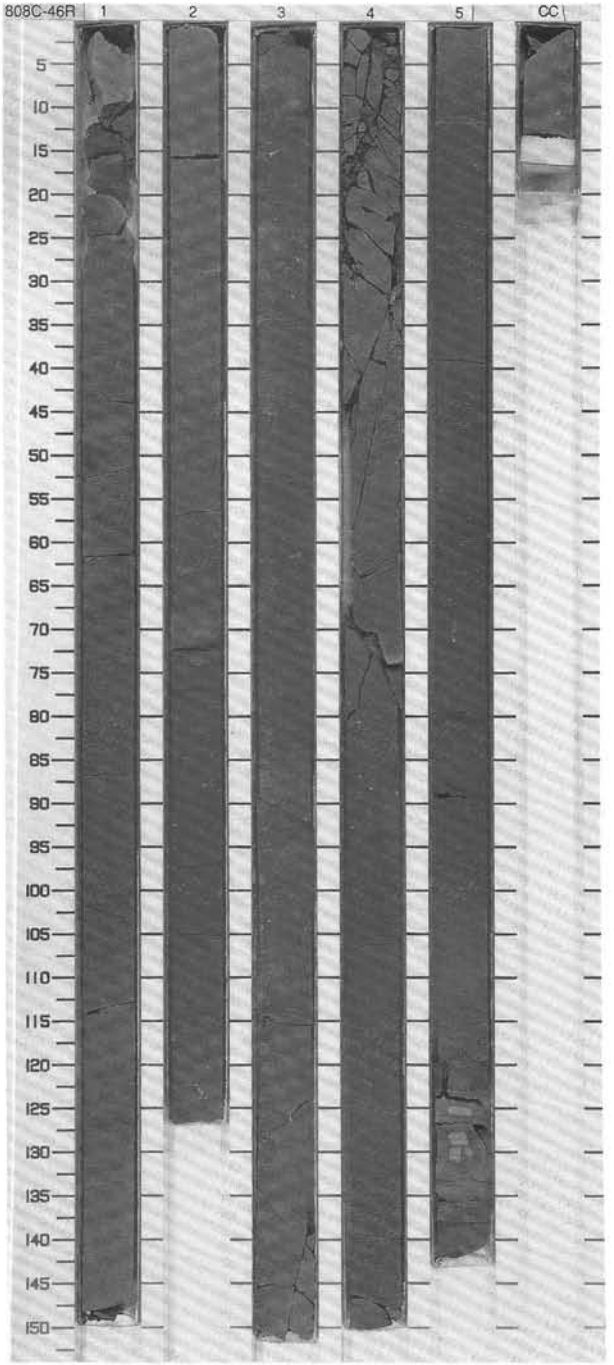
	3, 52 M	3, 70 D
TEXTURE:		
Silt	5	5
Clay	2	3
COMPOSITION:		
Amphibole	2	2
Clay	2	3
Feldspar	2	3
Glass	5	5
Mica	—	2
Quartz	—	2



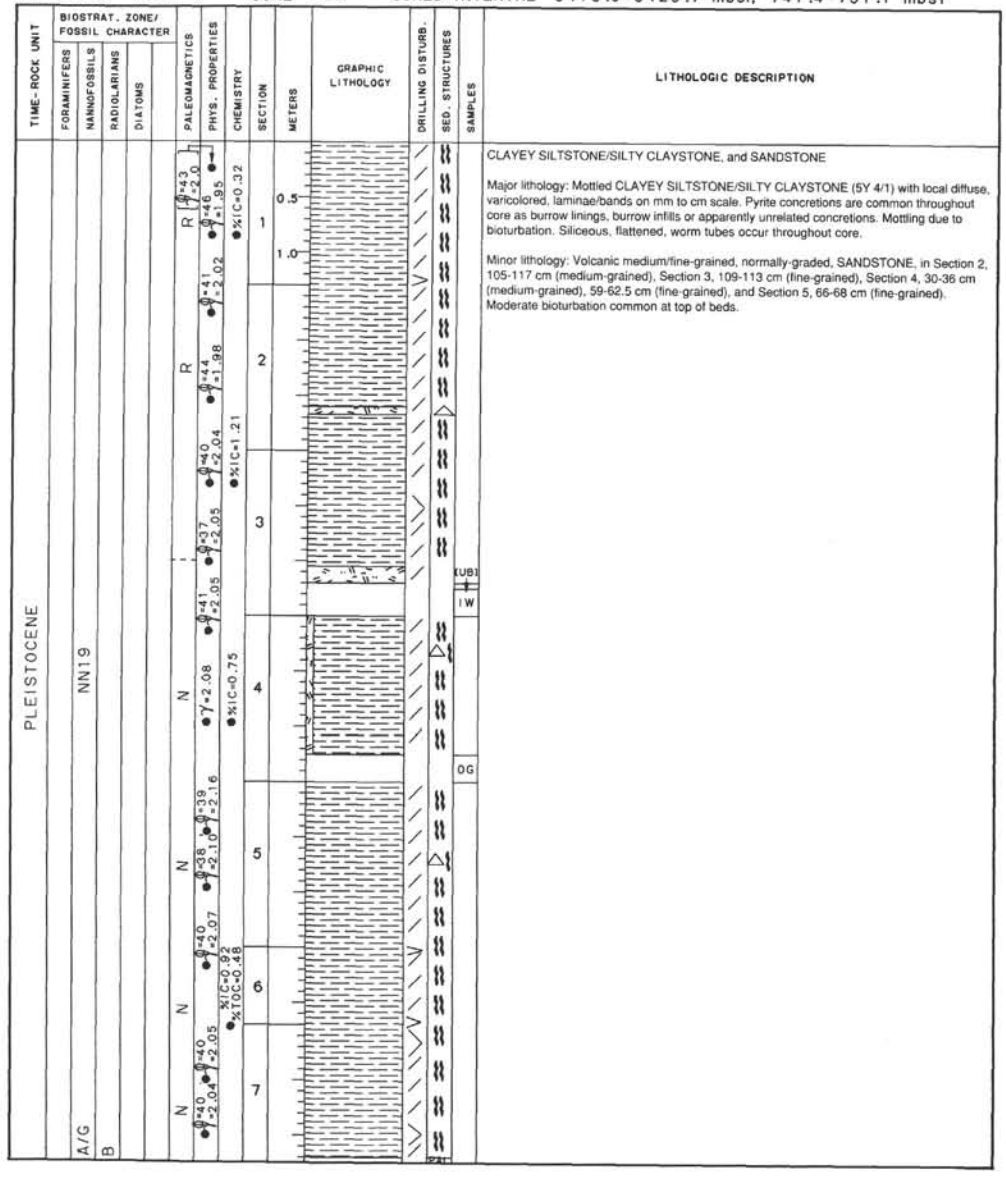
SITE 808 HOLE C CORE 46R CORED INTERVAL 5406.3-5416.0 MBSL: 731.7-741.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	A/G	NN19	B		R N		%IC=1.57 %TOC=0.5	1	0.5 1.0					CLAYEY SILTSTONE/SILTY CLAYSTONE, and SANDSTONE Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Minor lithology: Volcanic medium/fine-grained SANDSTONE, in Section 5, 123-135.7 cm. This interval contains multiple events in normally-graded intervals: 123-125.8 cm, 125.8-126.2 cm, 126.2-127.4 cm, 127.4-129.7 cm, 129.7-130.2, 130.2-135.4 cm, and 135.4-135.7 cm. Maximum grain size is 0.4 mm. Layering defined by concentrations of volcanic glass, feldspars and pyroxenes. Moderate bioturbation common. SMEAR SLIDE SUMMARY (%):

	1, 84 D	3, 25 M
TEXTURE:		
Sand	1	–
Silt	4	5
Clay	5	4
COMPOSITION:		
Calcite	2	3
Chlorite	2	–
Clay	4	2
Epidote	2	–
Feldspar	2	3
Glass	4	1
Mica	–	2
Nannofossils	2	4
Oxide	2	2
Quartz	3	3
Rock fragment	–	1
Sulfide	2	–



SITE 808 HOLE C CORE 47R CORED INTERVAL 5416.0-5425.7 mbsl; 741.4-751.1 mbsf

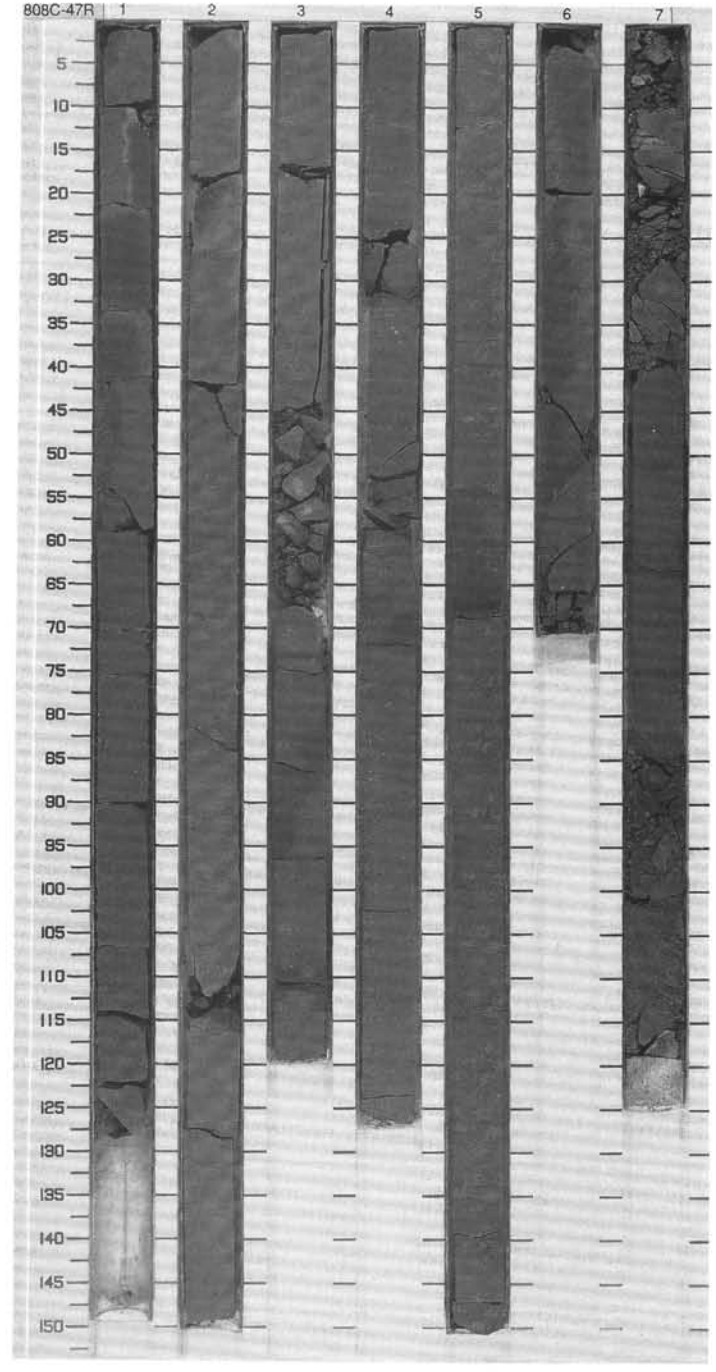


LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, and SANDSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Volcanic medium/fine-grained, normally-graded, SANDSTONE, in Section 2, 105-117 cm (medium-grained), Section 3, 109-113 cm (fine-grained), Section 4, 30-36 cm (medium-grained), 59-62.5 cm (fine-grained), and Section 5, 66-68 cm (fine-grained). Moderate bioturbation common at top of beds.



SITE 808 HOLE C CORE 48R CORED INTERVAL 5425.7-5435.3 mbsl; 751.1-760.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE		NN19	A/M	B	N R N N N N N N	ϕ=2.07 ϕ=1.99 ϕ=2.06 ϕ=2.02 ϕ=2.06 ϕ=2.06 ϕ=2.07 ϕ=1.95 ϕ=2.08 ϕ=2.02 ϕ=2.06 ϕ=2.07	%IC=0.2 %IC=0.58 %TOC=0.43 %IC=1.07 %IC=1.33	1 2 3 4 5 6 7 CC	0.5 1.0				IW

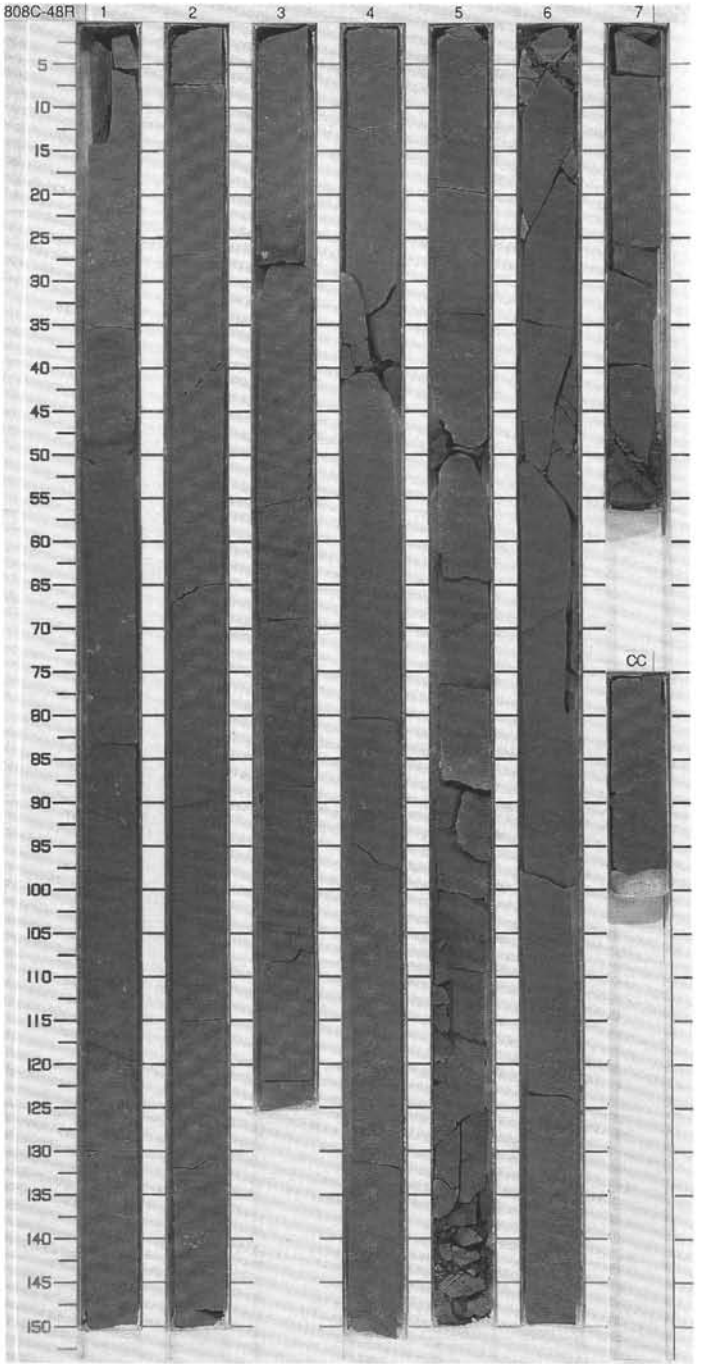
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, SANDSTONE, and ASH.

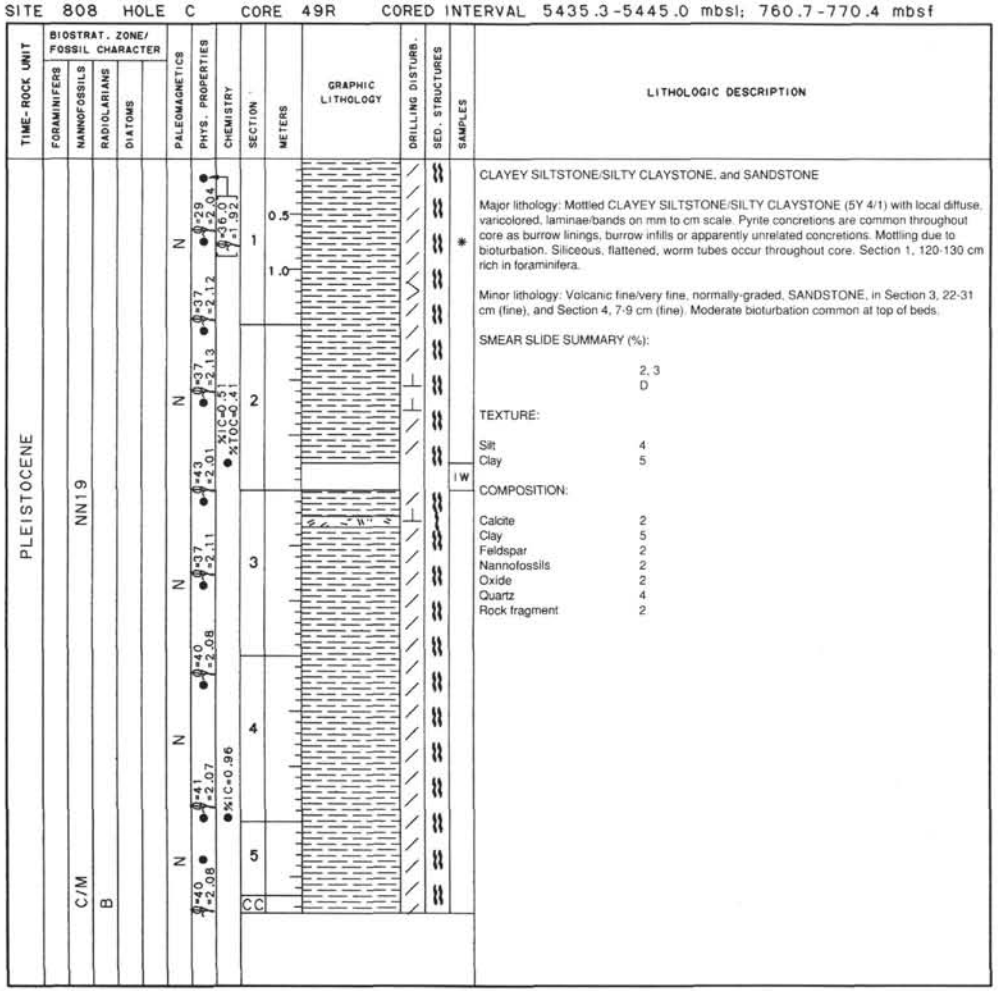
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Section 6, 75-100 cm rich in foraminifera.

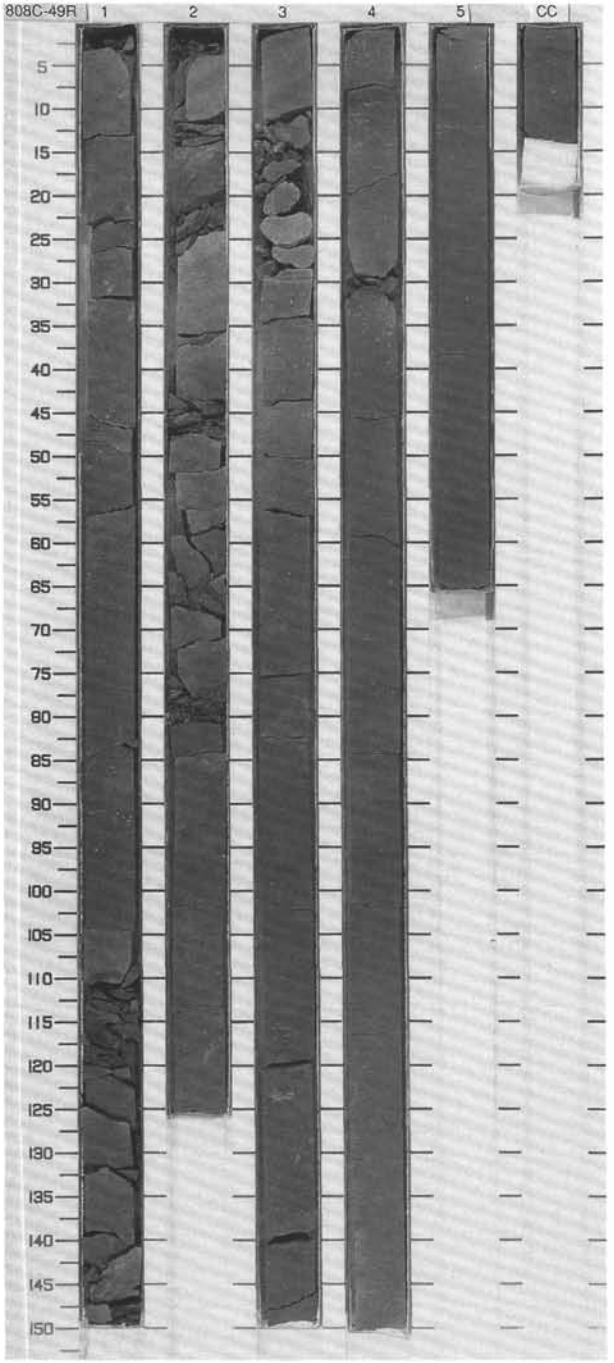
Minor lithology: Volcanic fine/very fine, normally-graded, SANDSTONE, in Section 1, 48-49 cm (fine), Section 3, 25-28 cm (very fine), and Section 5, 136-142 cm (fine). Moderate bioturbation common at top of beds.

Minor lithology: Bioturbated ASH (siltstone) in Section 5, 50-53 cm.



SITE 808 HOLE C CORE 49R CORED INTERVAL 5435.3-5445.0 mbsl; 760.7-770.4 mbsf





SITE 808 HOLE C CORE 50R CORED INTERVAL 5445.0-5454.7 mbsl; 770.4-780.1 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS R/P; NANNOFOSSILS NN19; RADIOLARIANS B; DIATOMS N

PALEOMAGNETICS

PHYS. PROPERTIES

CHEMISTRY: %IC=0.44; %IC=0.92; %IC=0.83; %TOC=0.46; %IC=2.5

SECTION: 1, 2, 3, 4, 5, 6, 7

METERS: 0.5

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: (UB), IW

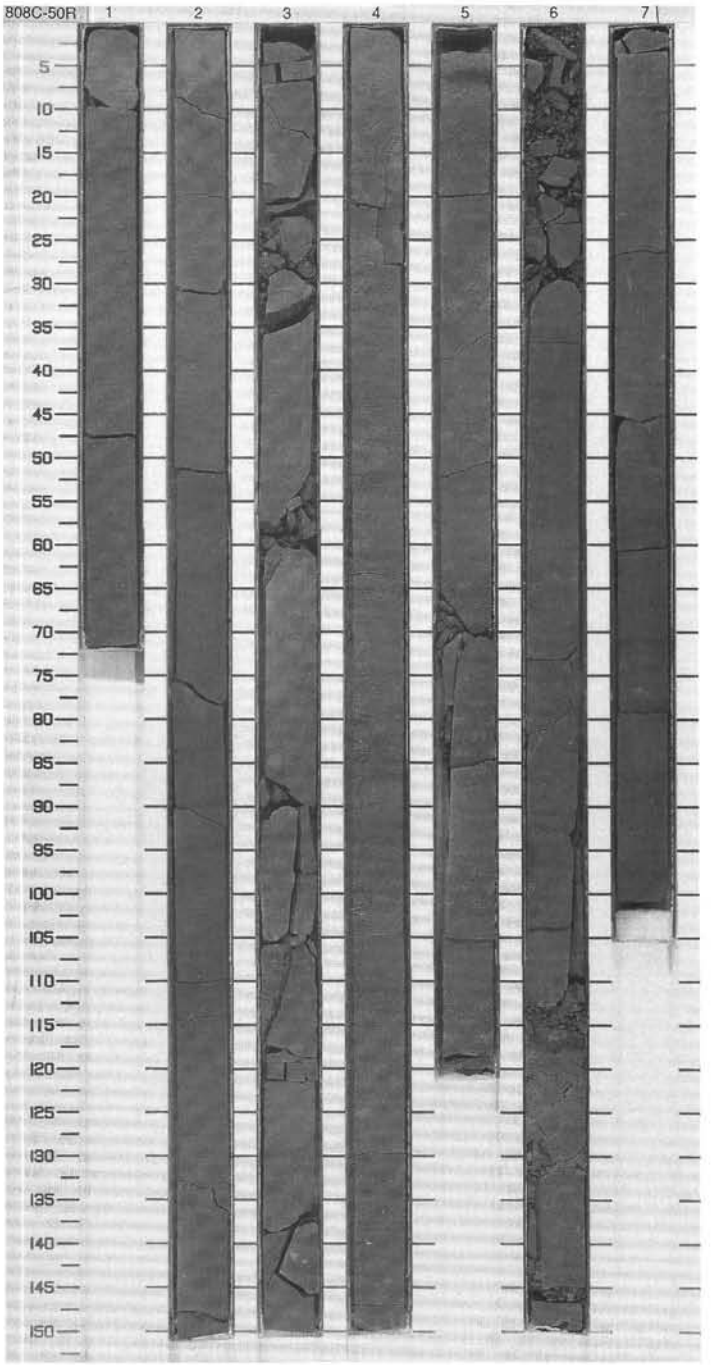
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE and SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE; mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Disseminated forams and horizontal burrows are abundant; there are also traces of pyrite and silicified worm tubes. A very thin bed of altered TUFF occurs in Section 5, 5-7 cm.

SMEAR SLIDE SUMMARY (%):

	5, 6 M
TEXTURE:	
Silt	5
Clay	2
COMPOSITION:	
Clay	2
Feldspar	2
Glass	5
Mica	1
Oxide	1
Quartz	2
Rock fragment	2



SITE 808 HOLE C CORE 51R CORED INTERVAL 5454.7-5464.4 mbsl; 780.1-789.8 mbsf

TIME-ROCK UNIT: PLIOCENE / PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN19, C/M; RADIOLARIANS: B; DIATOMS

PALEOMAGNETICS; PHYS. PROPERTIES; CHEMISTRY; SECTION; METERS; GRAPHIC LITHOLOGY; DRILLING DISTURB.; SED. STRUCTURES; SAMPLES

LITHOLOGIC DESCRIPTION

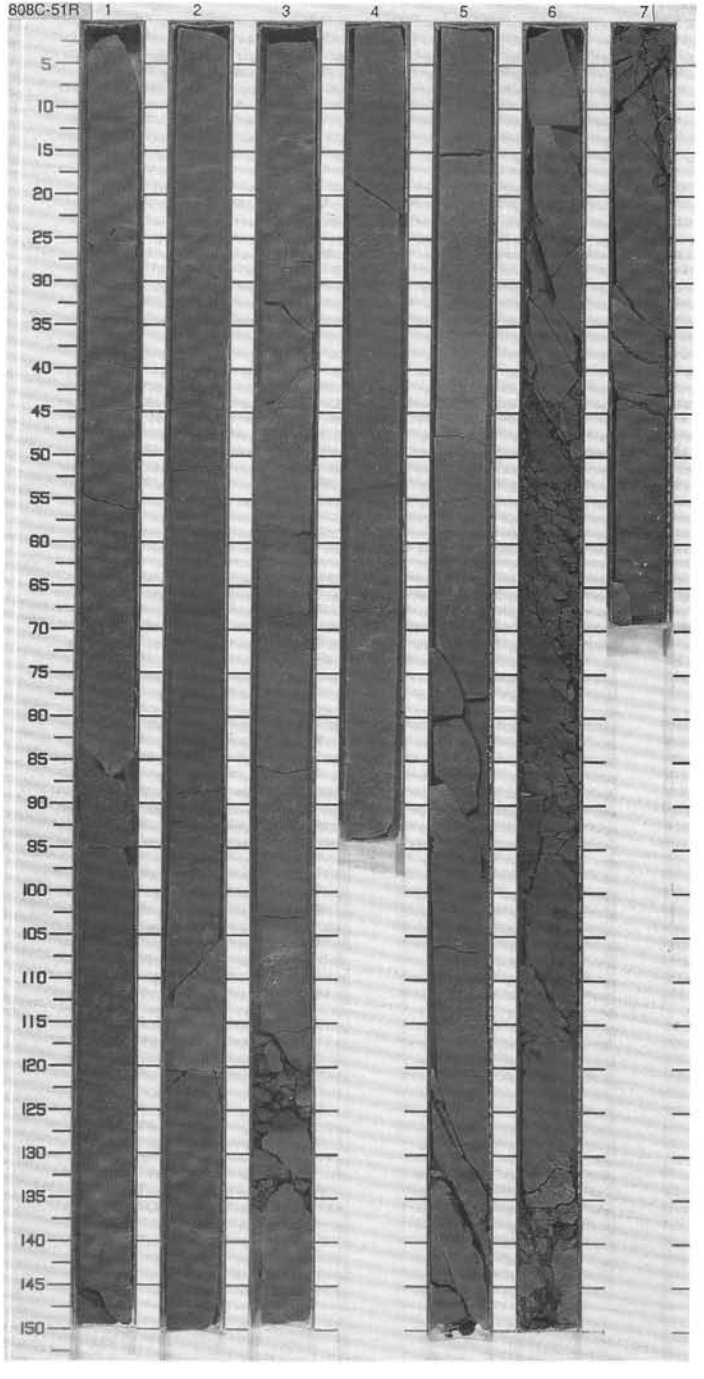
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated CLAYEY SILTSTONE and SILTY CLAYSTONE; mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Disseminated forams are common; there are also large burrows and traces of pyrite.

Minor lithology: Thin beds of very dark gray (2.5Y 3/0), altered TUFF. The tuff beds display sharp bases, mottled tops, and a considerable amount of devitrification. Volcaniclastic deposits occur in Section 5, 105-107 cm and 118-127 cm.

SMEAR SLIDE SUMMARY (%):

	3, 31 D	3, 126 M
TEXTURE:		
Silt	5	5
Clay	4	2
COMPOSITION:		
Calcite	2	–
Chlorite	2	–
Clay	3	2
Feldspar	2	2
Glass	4	5
Oxide	2	2
Pyroxene	2	–
Quartz	3	2
Rock fragment	2	–



SITE 808 HOLE C CORE 52R CORED INTERVAL 5464.4-5474.0 mbsl; 789.8-799.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PLICENE - PLEISTOCENE	(NN16 - NN18)	(NN19a)	B	B	N ? N N N N N		%IC=0.07 %IC=0.29 %IC=1.31 %TOC=0.43	1 2 3 4 5 6 CC	0.5 1.0				IW

LITHOLOGIC DESCRIPTION

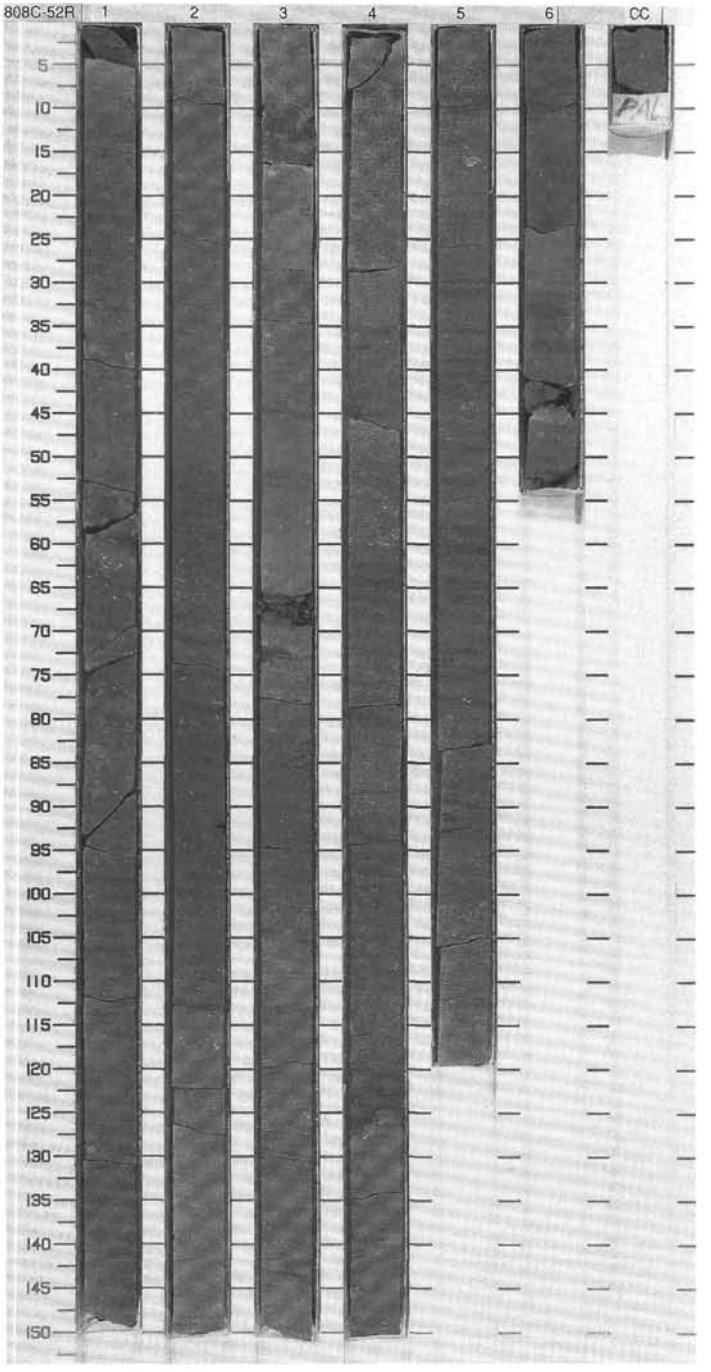
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated CLAYEY SILTSTONE and SILTY CLAYSTONE, with color bands defined by thin concentrations of devitrified volcanic ash. The dominant color is dark gray (2.5Y 4/0), with green ash-rich bands. Most of the sediment is mottled because of horizontal burrows. Disseminated forams are common, and there are traces of silicified worm tubes and pyrite.

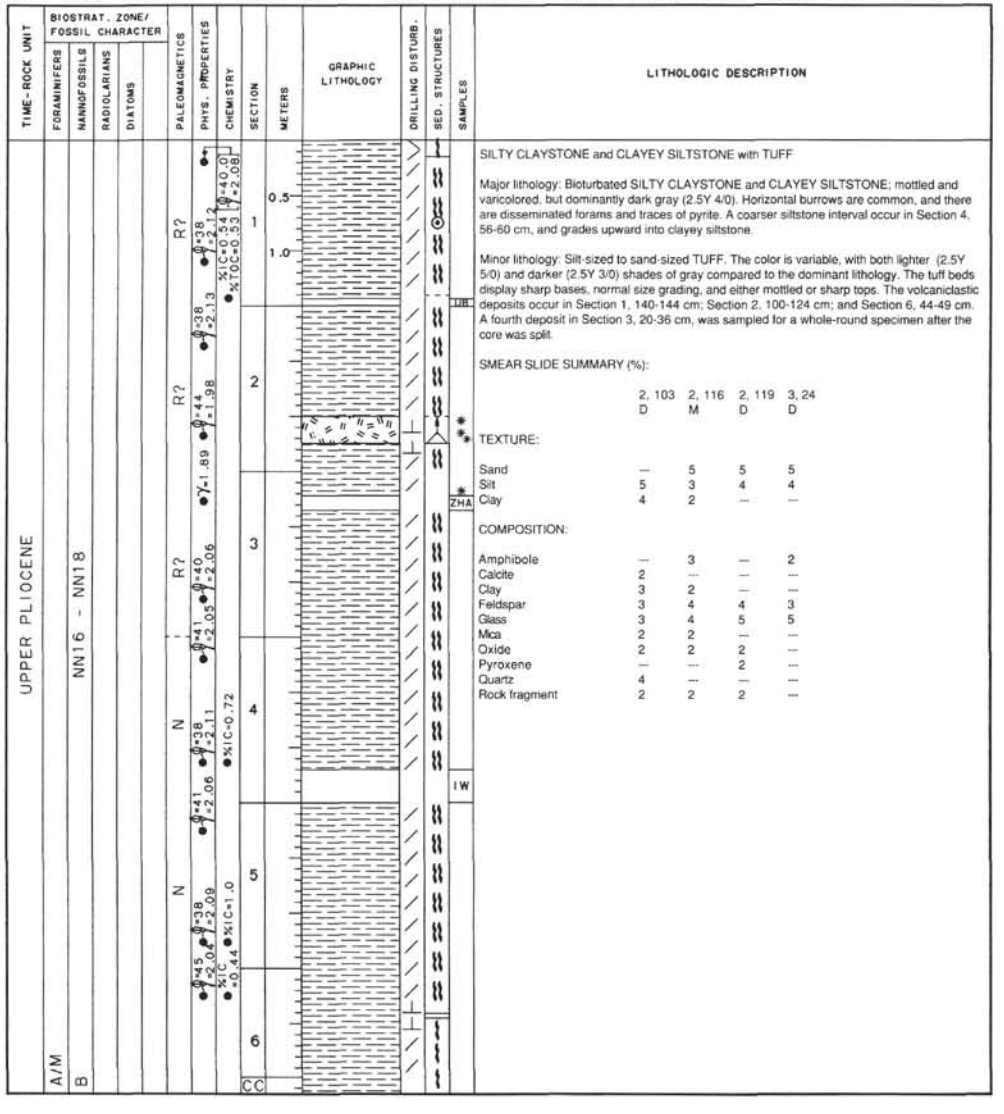
Minor lithology: Altered TUFF containing silt-sized to sand-sized glass shards. The volcanic glass is partially devitrified, and the color is variable. The tuff beds occur in Section 3, 9-16 and 65-68 cm; Section 4, 118-127 cm; and Section 6, 41-47 cm.

SMEAR SLIDE SUMMARY (%):

	4, 77 D	4, 124 M
TEXTURE:		
Silt	4	5
Clay	5	2
COMPOSITION:		
Calcite	2	–
Clay	5	–
Feldspar	2	2
Glass	2	5
Nannofossils	2	–
Oxide	–	2
Quartz	3	–
Rock fragment	–	2



SITE 808 HOLE C CORE 53R CORED INTERVAL 5474.0-5483.7 mbsl; 799.4-809.1 mbsf



LITHOLOGIC DESCRIPTION

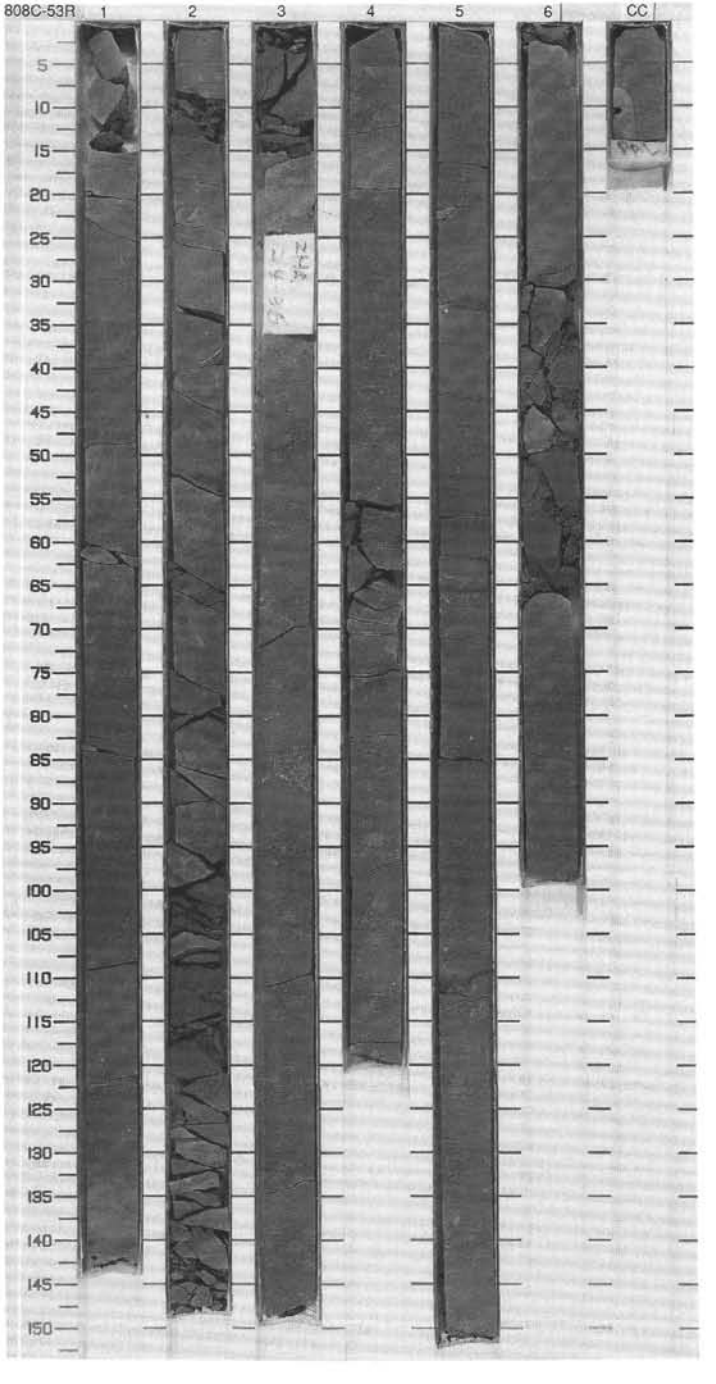
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE; mottled and varicolored, but dominantly dark gray (2.5Y 4/0). Horizontal burrows are common, and there are disseminated forams and traces of pyrite. A coarser siltstone interval occur in Section 4, 56-60 cm, and grades upward into clayey siltstone.

Minor lithology: Silt-sized to sand-sized TUFF. The color is variable, with both lighter (2.5Y 5/0) and darker (2.5Y 3/0) shades of gray compared to the dominant lithology. The tuff beds display sharp bases, normal size grading, and either mottled or sharp tops. The volcaniclastic deposits occur in Section 1, 140-144 cm; Section 2, 100-124 cm; and Section 6, 44-49 cm. A fourth deposit in Section 3, 20-36 cm, was sampled for a whole-round specimen after the core was split.

SMEAR SLIDE SUMMARY (%):

	2, 103 D	2, 116 M	2, 119 D	3, 24 D
TEXTURE:				
Sand	–	5	5	5
Silt	5	3	4	4
Clay	4	2	–	–
COMPOSITION:				
Amphibole	–	3	–	2
Calcite	2	–	–	–
Clay	3	2	–	–
Feldspar	3	4	4	3
Glass	3	4	5	5
Mica	2	2	–	–
Oxide	2	2	2	–
Pyroxene	–	–	2	–
Quartz	4	–	–	–
Rock fragment	2	2	2	–



SITE 808 HOLE C CORE 54R CORED INTERVAL 5483.7-5493.3 mbsl; 809.1-818.7 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/M; NANNOFOSSILS NN16 - NN18; RADIOLARIANS B; DIATOMS

PALEOMAGNETICS: N

PHYS. PROPERTIES: ●1.85 ●2.19 ●2.0 ●2.1 ●2.11

CHEMISTRY: %IC=0.18; %IC=2.95 %TOC=0.34; %IC=0.76

SECTION: 1 2 3 4 5 6 7

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW KJC

LITHOLOGIC DESCRIPTION

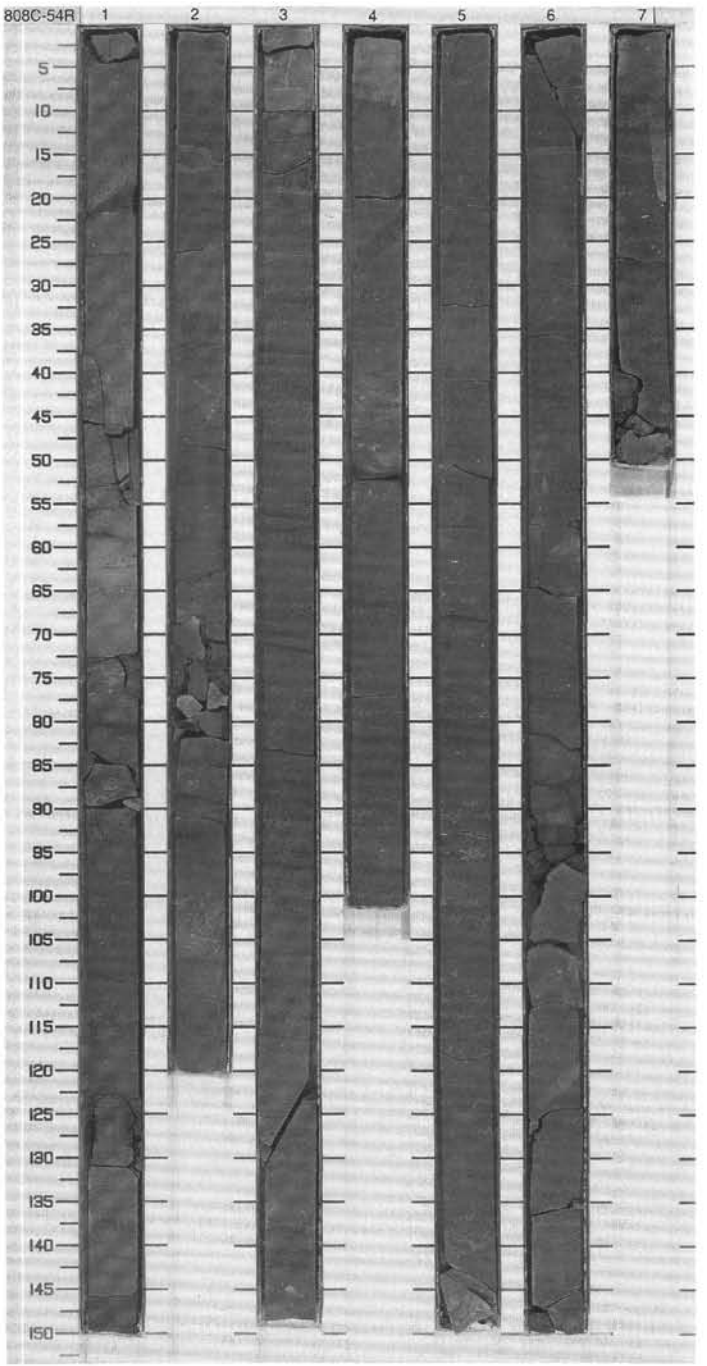
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE, with horizontal burrows, disseminated forams, and local color bands. The dominant color is dark gray (2.5Y 4/0), and thin intervals enriched in volcanic ash are greenish gray. This hemipelagic sediment is intruded by a SANDSTONE DIKE in Section 4, 18-29 cm. The clastic intrusion is approximately 2 cm thick, inclined at an angle of approximately 45° (apparent dip). The sand is poorly sorted and polymictic in composition.

Minor lithology: Color-banded TUFF. Color varies from gray (2.5Y 5/0) to very dark gray (2.5Y 3/0). The tuff beds display sharp bases and mottled tops, and the grain size ranges from fine silt to sand-sized glass shards. Most of the ash is partially devitrified. The most prominent tuff bed occurs in Section 1, 50-73 cm; this deposit contains parallel laminae, convolute laminae, and fluid-escape features similar to dish structures. Additional tuff beds occur in Section 1, 18-22 cm, 86-90 cm, and 123-130 cm; Section 2, 72-82 cm; Section 3, 0-19 cm; and Section 6, 91-98 cm.

SMEAR SLIDE SUMMARY (%):

	1, 69 M	1, 73 D	2, 25 M	2, 78 M	4, 18 M
TEXTURE:					
Sand	2	5	85	—	4
Silt	5	4	15	5	5
Clay	2	2	0	2	2
COMPOSITION:					
Amphibole	—	—	—	—	2
Calcite	—	—	1	—	—
Chlorite	—	—	—	—	2
Clay	2	2	—	2	2
Feldspar	3	3	15	3	4
Glass	5	5	—	5	4
Heavy minerals	—	—	2	—	—
Mica	—	—	2	1	—	2
Oxide	—	—	3	—	—	—
Pyroxene	—	—	2	—	—	—
Quartz	2	2	10	2	3
Rock fragment	—	2	70	—	2



SITE 808 HOLE C CORE 55R CORED INTERVAL 5493.3-5503.0 mbsl; 818.7-828.4 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/M
- NANNOFOSSILS: NN16 - NN18
- RADIOLARIANS: B
- DIATOMS

PALEOMAGNETICS: R R R N N

PHYS. PROPERTIES

CHEMISTRY: %IC=0.22; %IC=0.07; %IC=0.31; %TOC=0.62; %IC=1.76; %TOC=2.10

SECTION: 1 2 3 4 5 6 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW OG

LITHOLOGIC DESCRIPTION

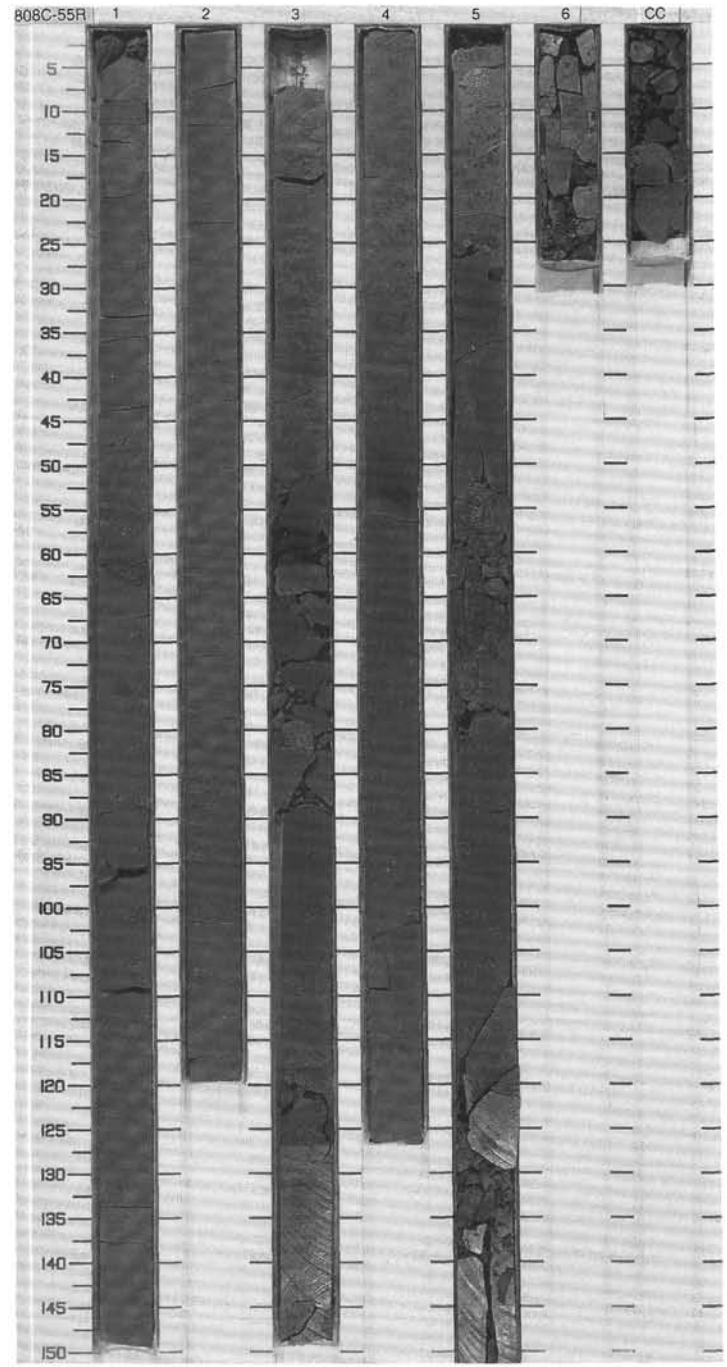
SILTY CLAYSTONE and CLAYEY SILTSTONE with TUFF

Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE; mottled and varicolored, with dark gray (2.5Y 4/0) as the dominant color. There are numerous horizontal burrows, traces of pyrite, and disseminated forams.

Minor lithology: Thin to very thin beds of sand-sized to silt-sized TUFF, dark gray in color (2.5Y 4/0 to 2.5Y 3/0). The tuff beds display sharp bases, normal size grading or massive bedding, and mottled tops. The volcaniclastic deposits occur in Section 3, 51-57 cm and 122-127 cm; and Section 4, 52-54 cm.

SMEAR SLIDE SUMMARY (%):

	3, 125 M
TEXTURE:	
Sand	4
Silt	5
COMPOSITION:	
Feldspar	3
Glass	5
Mica	2
Quartz	2
Rock fragment	2



SITE 808 HOLE C CORE 56R CORED INTERVAL 5503.0-5512.7 mbsl; 828.4-838.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PLIOCENE		NN16 - NN18	C/M	B	? N N N N	1.70 2.21 1.24 2.23 2.16 2.16 2.21 2.23 2.23	%IC=0.61 %TOC=0.38 %IC=0.13	1 2 3 4 5 CC	0.5 1.0	VOID		*	UB IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE, ASH and SILTSTONE

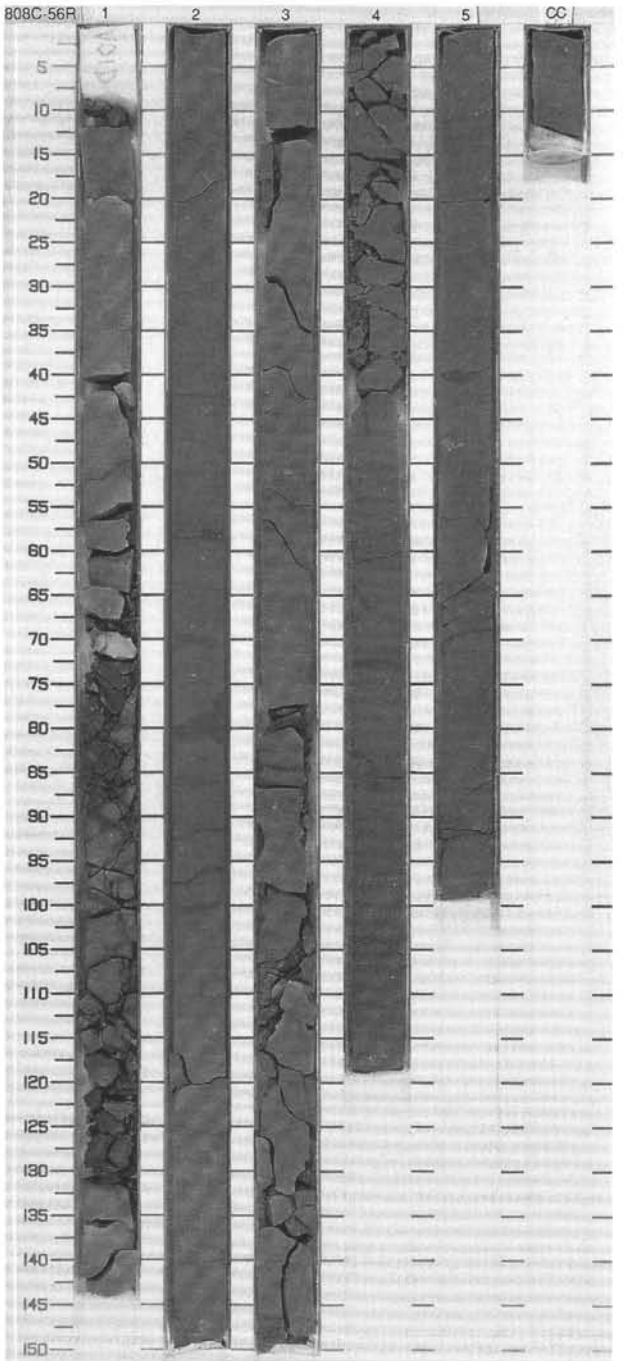
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Bioturbated, silicified silty ASH in Section 1, 69-72 cm.

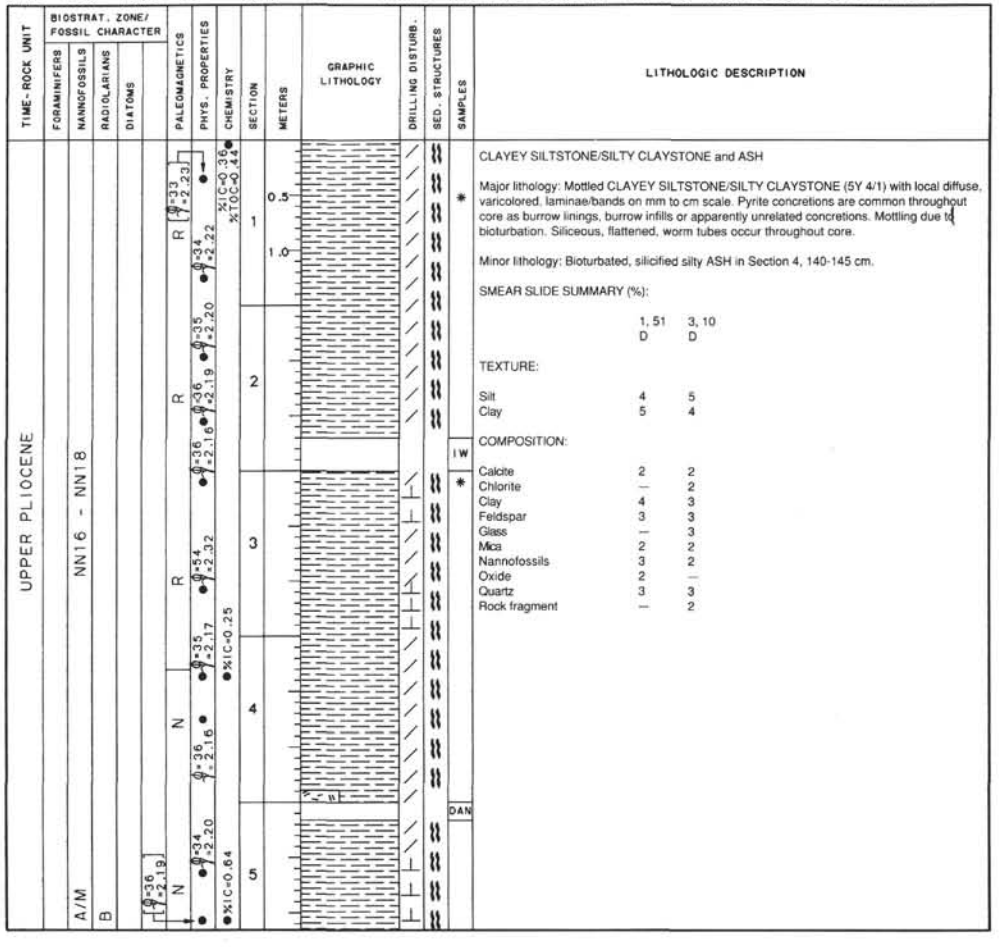
Minor lithology: Laminated SILTSTONE in Section 1, 129-132 cm.

SMEAR SLIDE SUMMARY (%):

	1, 70 D
TEXTURE:	
Silt	5
Clay	3
COMPOSITION:	
Chlorite	2
Clay	3
Feldspar	2
Glass	5
Oxide	2
Quartz	2



SITE 808 HOLE C CORE 57R CORED INTERVAL 5512.7-5522.0 mbsl; 838.1-847.4 mbsf



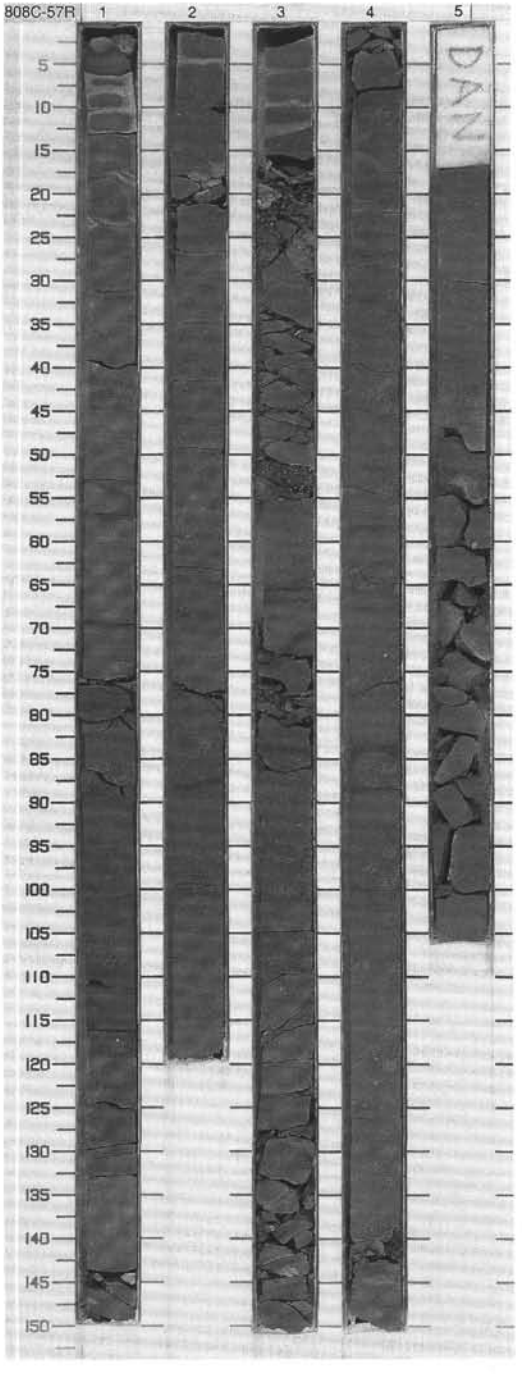
CLAYEY SILTSTONE/SILTY CLAYSTONE and ASH

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Bioturbated, silicified silty ASH in Section 4, 140-145 cm.

SMEAR SLIDE SUMMARY (%):

	1, 51 D	3, 10 D
TEXTURE:		
Silt	4	5
Clay	5	4
COMPOSITION:		
Calcite	2	2
Chlorite	–	2
Clay	4	3
Feldspar	3	3
Glass	–	3
Mica	2	2
Nannofossils	3	2
Oxide	2	–
Quartz	3	3
Rock fragment	–	2



SITE 808 HOLE C CORE 58R CORED INTERVAL 5522.0-5531.7 mbsl; 847.4-857.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PLIOCENE		NN16 - NN18	C/M	B	N	N	%IC=0.39 %TOC=0.36 %IC=0.33	1 2 3 4 5	0.5 1.0			*	IW

LITHOLOGIC DESCRIPTION

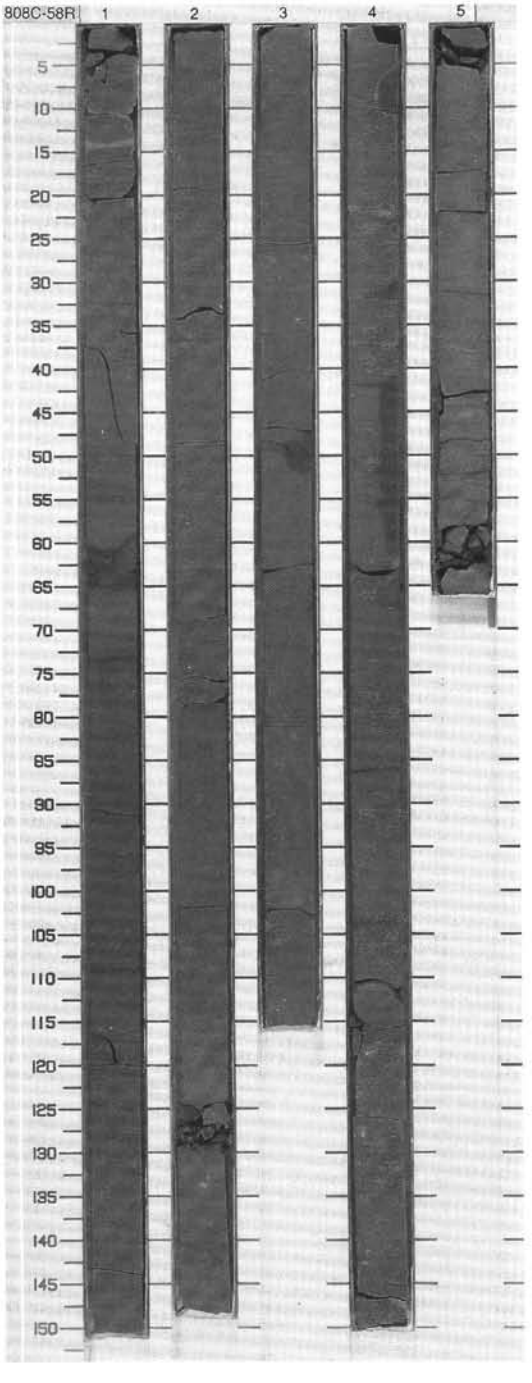
CLAYEY SILTSTONE/SILTY CLAYSTONE and ASH

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Bioturbated, silicified silty ASH in Section 2, 127-130 cm.

SMEAR SLIDE SUMMARY (%):

	2, 116 D	5, 40 D
TEXTURE:		
Silt	5	5
Clay	4	4
COMPOSITION:		
Chlorite	2	—
Clay	3	5
Feldspar	2	2
Glass	5	3
Mica	2	2
Oxide	2	2
Quartz	3	4



SITE 808 HOLE C CORE 59R CORED INTERVAL 5531.7-5541.4 mbsl; 857.1-866.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PLIOCENE	C/M	NN16 - NN18	B		N	N	%IC=1.72 %IC=0.81 %TOC=0.47 %IC=0.12 %IC=0.39	1 2 3 4 5 CC	0.5 1.0			DB IW OG	*

LITHOLOGIC DESCRIPTION

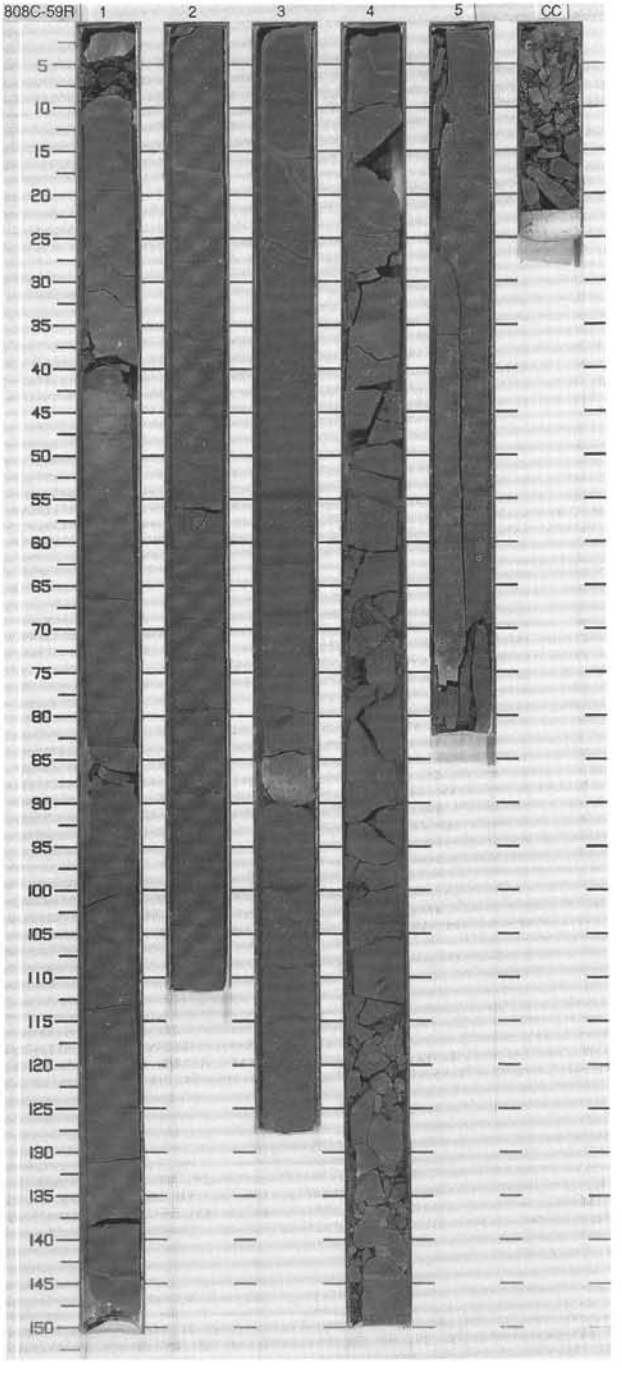
CLAYEY SILTSTONE/SILTY CLAYSTONE and SILTSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

Minor lithology: Normally-graded SILTSTONE in Section 4, 34.5-35.5 cm.

SMEAR SLIDE SUMMARY (%):

	4, 30 D
TEXTURE:	
Silt	5
Clay	2
COMPOSITION:	
Bioclast	1
Calcite	2
Chlorite	2
Clay	2
Epidote	2
Feldspar	2
Glass	5
Mica	2
Nannofossils	2
Oxide	2
Quartz	3
Sphene	1



SITE 808 HOLE C CORE 60R CORED INTERVAL 5541.4-5551.1 mbsl; 868.8-876.5 mbsf

TIME-ROCK UNIT: LOWER PLIOCENE - UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/M
- NANNOFOSSILS: NN15 - NN16
- RADIOLARIANS: B
- DIATOMS

PALEOMAGNETICS: R R ? R ?

PHYS. PROPERTIES: ● 0.37 / 2.17 ● 0.36 / 2.19 ● 0.35 / 2.21 ● 0.34 / 2.21 ● 0.36 / 2.20 ● 0.35 / 2.20 ● 0.33 / 2.22 ● 0.35 / 2.21 ● 0.36 / 2.17 ● 0.38 / 2.09

CHEMISTRY: %IC=0.42 %IC=0.4 %IC=0.8 %TOC=0.36 %IC=0.11 %IC=0.29

SECTION: 1 2 3 4 5 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: *

SAMPLES: IW

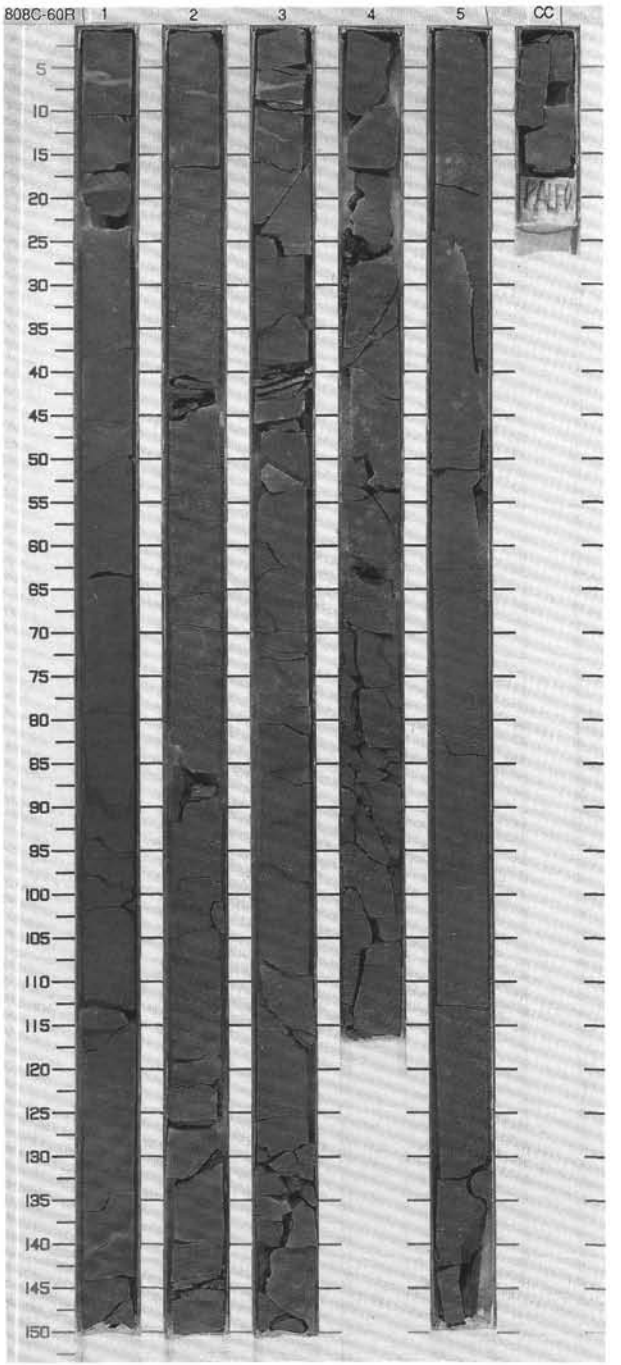
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

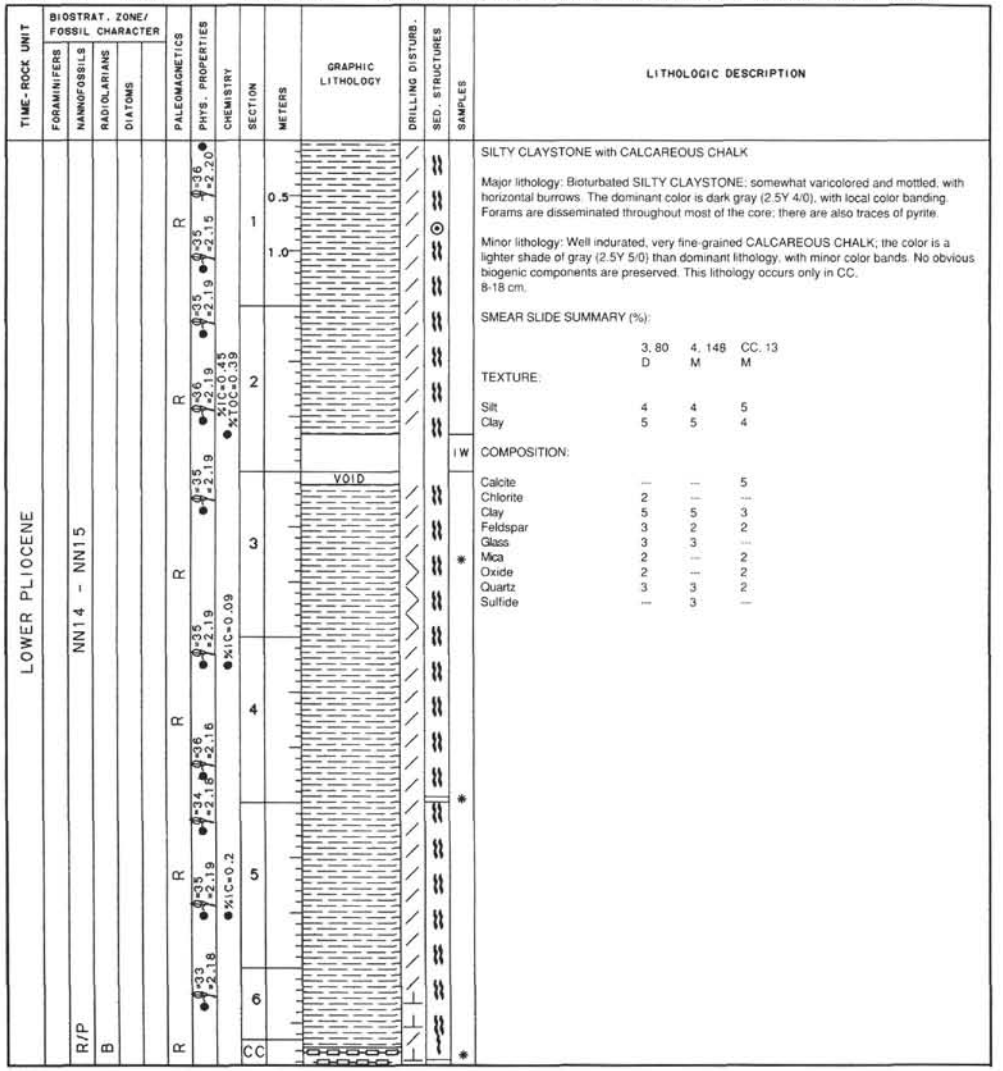
Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Pyrite concretions are common throughout core as burrow linings, burrow infills or apparently unrelated concretions. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core.

SMEAR SLIDE SUMMARY (%):

	3, 69 D
TEXTURE:	
Silt	5
Clay	4
COMPOSITION:	
Calcite	2
Clay	3
Feldspar	3
Glass	2
Nannofossils	3
Oxide	2
Quartz	3



SITE 808 HOLE C CORE 61R CORED INTERVAL 5551.1-5560.7 mbsl; 876.5-886.1 mbsf



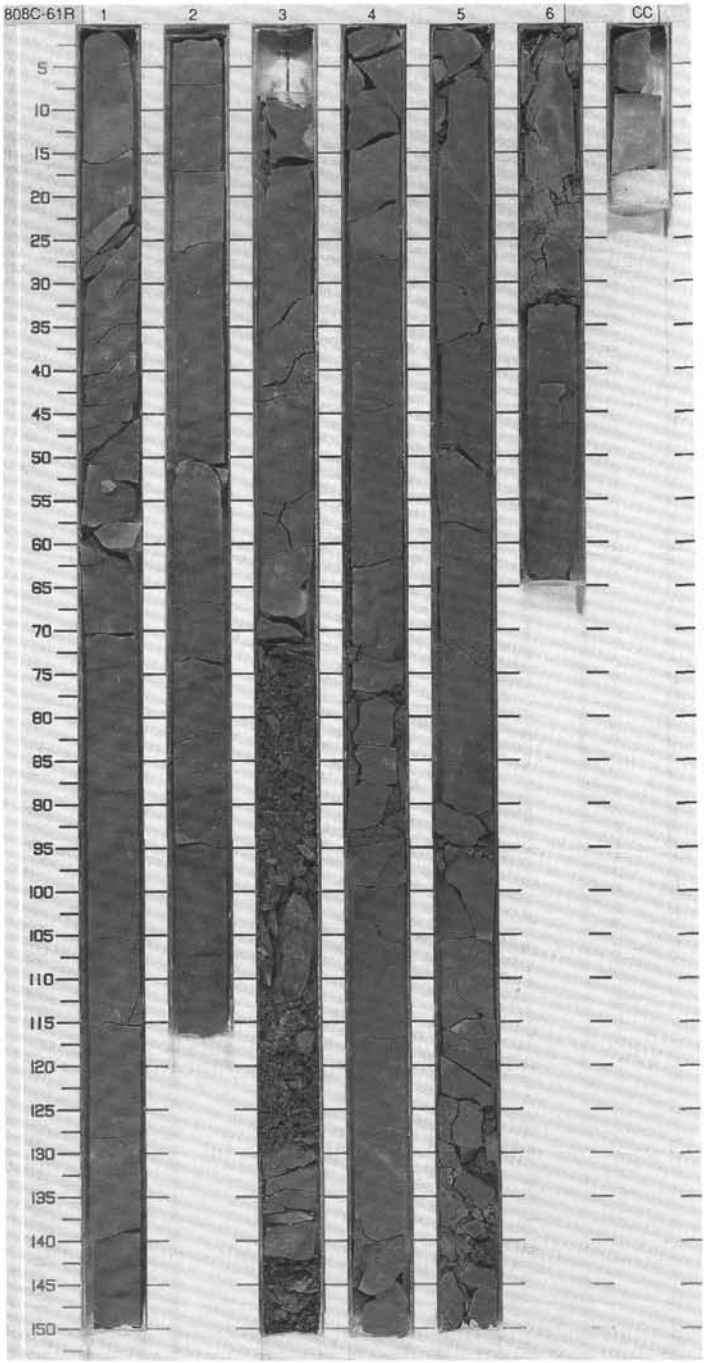
SILTY CLAYSTONE with CALCAREOUS CHALK

Major lithology: Bioturbated SILTY CLAYSTONE; somewhat varicolored and mottled, with horizontal burrows. The dominant color is dark gray (2.5Y 4/0), with local color banding. Forams are disseminated throughout most of the core; there are also traces of pyrite.

Minor lithology: Well indurated, very fine-grained CALCAREOUS CHALK; the color is a lighter shade of gray (2.5Y 5/0) than dominant lithology, with minor color bands. No obvious biogenic components are preserved. This lithology occurs only in CC, 8-18 cm.

SMEAR SLIDE SUMMARY (%):

	3, 80 D	4, 148 M	CC, 13 M
TEXTURE:			
Silt	4	4	5
Clay	5	5	4
COMPOSITION:			
Calcite	–	–	5
Chlorite	2	–	–
Clay	5	5	3
Feldspar	3	2	2
Glass	3	3	–
Mica	2	–	2
Oxide	2	–	2
Quartz	3	3	2
Sulfide	–	3	–



SITE 808 HOLE C CORE 62R CORED INTERVAL 5560.7-5570.4 mbsl; 886.1-895.8 mbsf

TIME-ROCK UNIT: LOWER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN13; RADIOLARIANS: B; DIATOMS

PALEOMAGNETICS: N R R R

PHYS. PROPERTIES: Φ=34 ρ=2.19; Φ=34 ρ=2.21; Φ=35 ρ=2.19; Φ=33 ρ=2.21; Φ=34 ρ=2.18; Φ=22 ρ=2.50

CHEMISTRY: %IC=0.41; %IC=0.11; %IC=0.46 %TOC=0.38; Φ=34 ρ=2.21; %IC =6.93

SECTION: 1 2 3 4 5 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

LITHOLOGIC DESCRIPTION

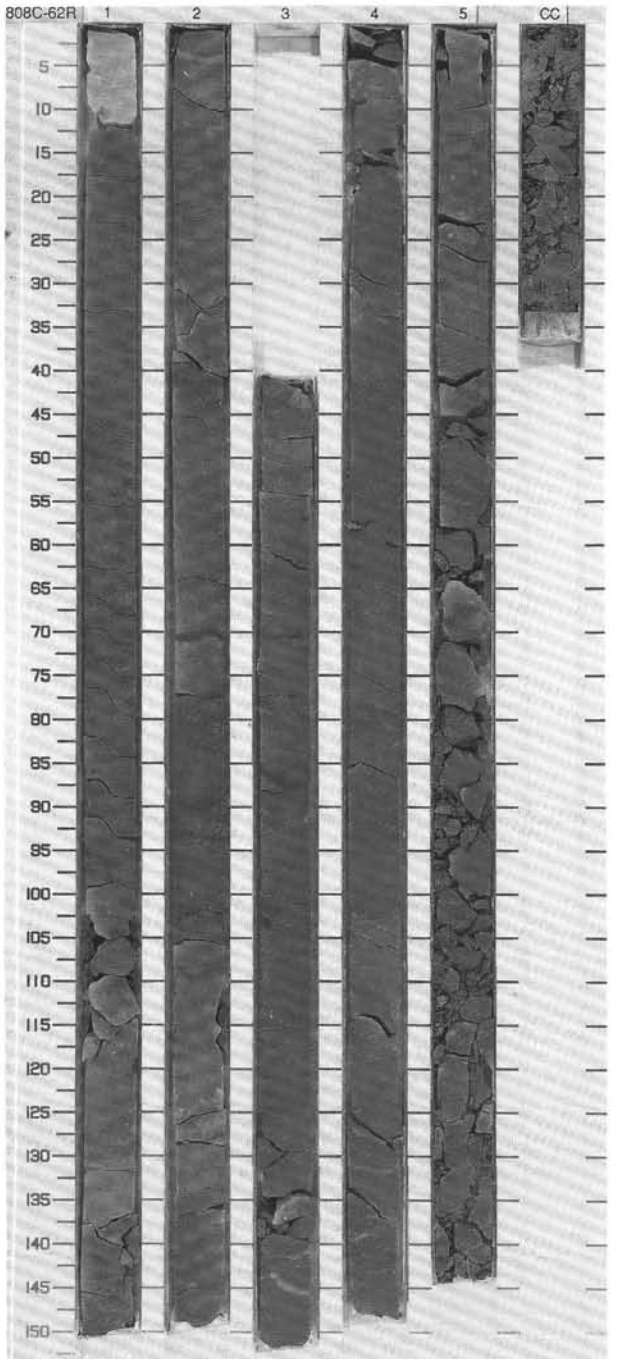
SILTY CLAYSTONE with CALCAREOUS CHALK

Major lithology: Bioturbated SILTY CLAYSTONE; varicolored, locally banded, mottled, with horizontal burrows, disseminated forams, and traces of pyrite. The dominant color is dark gray (2.5Y 4/0).

Minor lithology: Very fine-grained, well indurated CALCAREOUS CHALK; lighter gray color (2.5Y 5/0) than dominant lithology. No biogenic constituents are evident in smear slide. Sediment is bioturbated and mottled, with traces of forams in hand sample; the lower boundary is sharp. This pelagic lithology is restricted to Section 1, 0-12 cm.

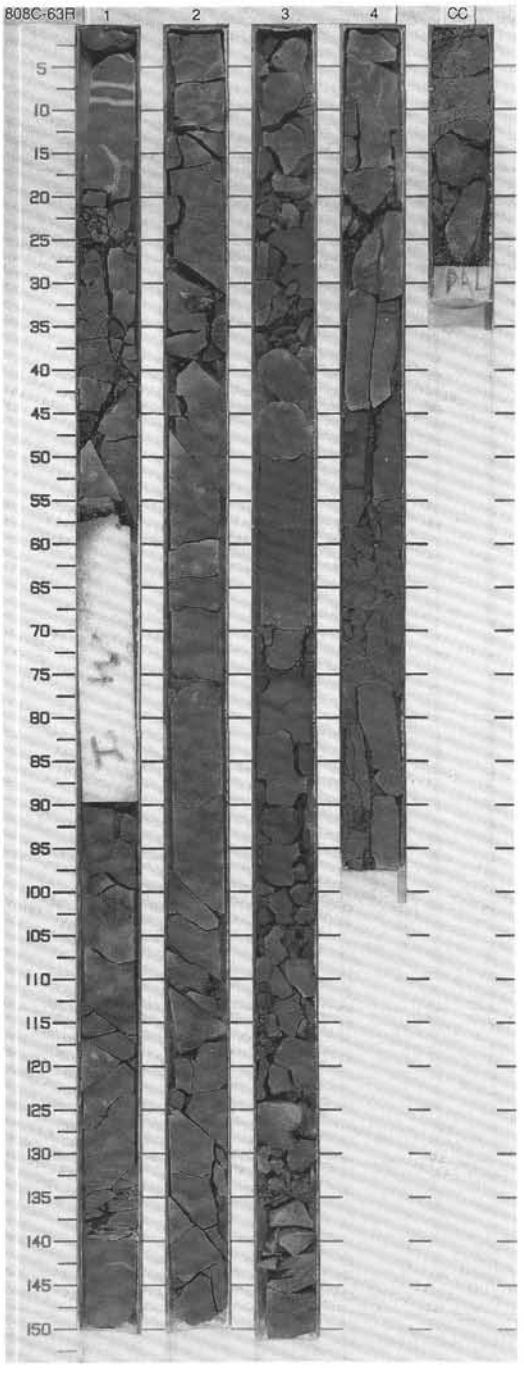
SMEAR SLIDE SUMMARY (%):

	1, 6 M	1, 60 D
TEXTURE:		
Silt	4	4
Clay	5	5
COMPOSITION:		
Calcite	5	2
Chlorite	–	2
Clay	3	4
Feldspar	2	2
Glass	–	3
Mica	2	–
Oxide	2	2
Quartz	2	3



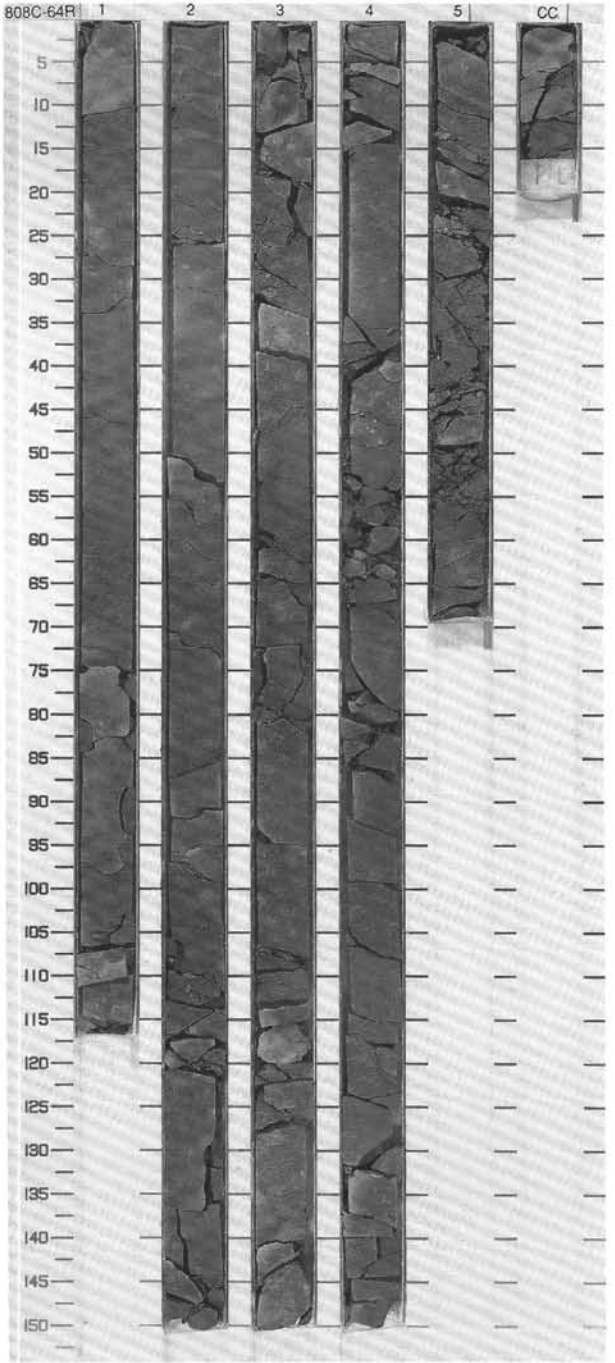
SITE 808 HOLE C CORE 63R CORED INTERVAL 5570.4-5580.1 mbsl; 895.8-905.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER PLIOCENE	R/M	NN13	B		R N		%IC=0.17 %IC=0.18 %IC=0.42 %TOC=0.33	1 2 3 4 CC	0.5 1.0				IW *	SILTY CLAYSTONE Major lithology: Bioturbated SILTY CLAYSTONE. Varicolored and mottled, but dominantly dark gray in color (2.5Y 4/0). Features include horizontal burrows, traces of pyrite, worm tubes, and disseminated forams. SMEAR SLIDE SUMMARY (%): 4, 29 D TEXTURE: Silt 4 Clay 5 COMPOSITION: Calcite 2 Chlorite 2 Clay 3 Feldspar 2 Glass 3 Mica 2 Oxide 2 Quartz 3



SITE 808 HOLE C CORE 64R CORED INTERVAL 5580.1-5589.7 mbsl; 905.5-915.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER PLIOCENE		NN13			N R		%IC=0.59 %TOC=0.37	1	0.5 1.0				IW	SILTY CLAYSTONE Major lithology: Bioturbated SILTY CLAYSTONE; somewhat varicolored and mottled, but dominantly dark gray (2.5Y 4/0). There are numerous horizontal burrows and variable amounts of disseminated forams; traces of pyrite. The degree of disturbance varies considerably. SMEAR SLIDE SUMMARY (%): 4, 100 D TEXTURE: Silt 4 Clay 5 COMPOSITION: Calcite 2 Chlo^Rite 2 Clay 3 Feldspar 2 Glass 3 Mica 2 Oxide 2 Quartz 3
		C/M		B	N R		%IC=0.63 %IC=0.15	2 3 4 5					*	
					N			CC						



SITE 808 HOLE C CORE 65R CORED INTERVAL 5589.7-5599.4 mbsl; 915.1-924.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER PLIOCENE		C/M	NN12 - NN13	B	R	R		1 2 CC	0.5 1.0				SW IW

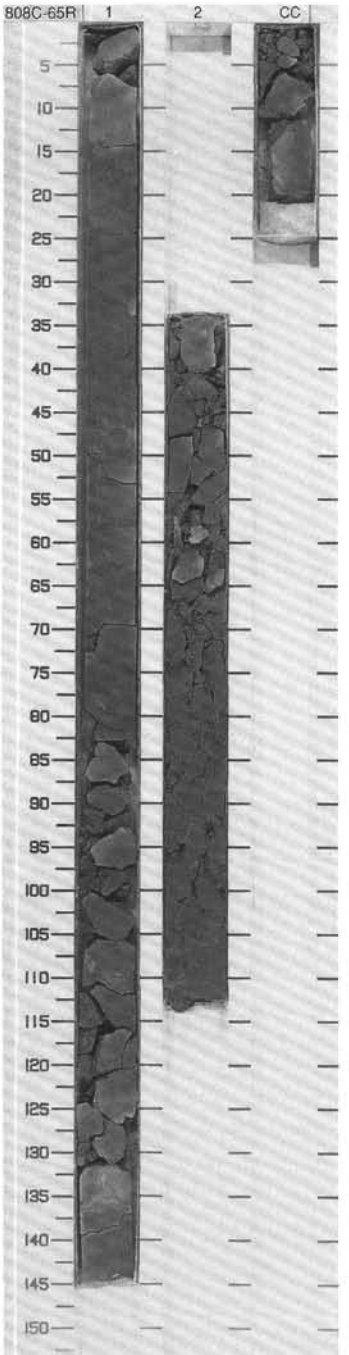
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE, with variable degrees of disturbance; some intervals are highly fractured and surrounded by drilling slurry. Core appears mottled and burrowed where less deformed, and the dominant color is dark gray (2.5Y 4/0). There are trace amounts of disseminated forams.

SMEAR SLIDE SUMMARY (%):

	1, 50 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	2
Chlorite	2
Clay	3
Feldspar	2
Glass	3
Mica	2
Oxide	2
Quartz	2
Rock fragment	1



SITE 808 HOLE C CORE 66R CORED INTERVAL 5599.4-5609.1 mbsl; 924.8-934.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER PLIOCENE	R/P	NN12	B		R N N N		%IC=0.21 %IC=0.12 %IC=1.07 %TOC=0.5	1 2 3 4 CC	0.5 1.0				IW OG AKG PLE TAN KM SCL

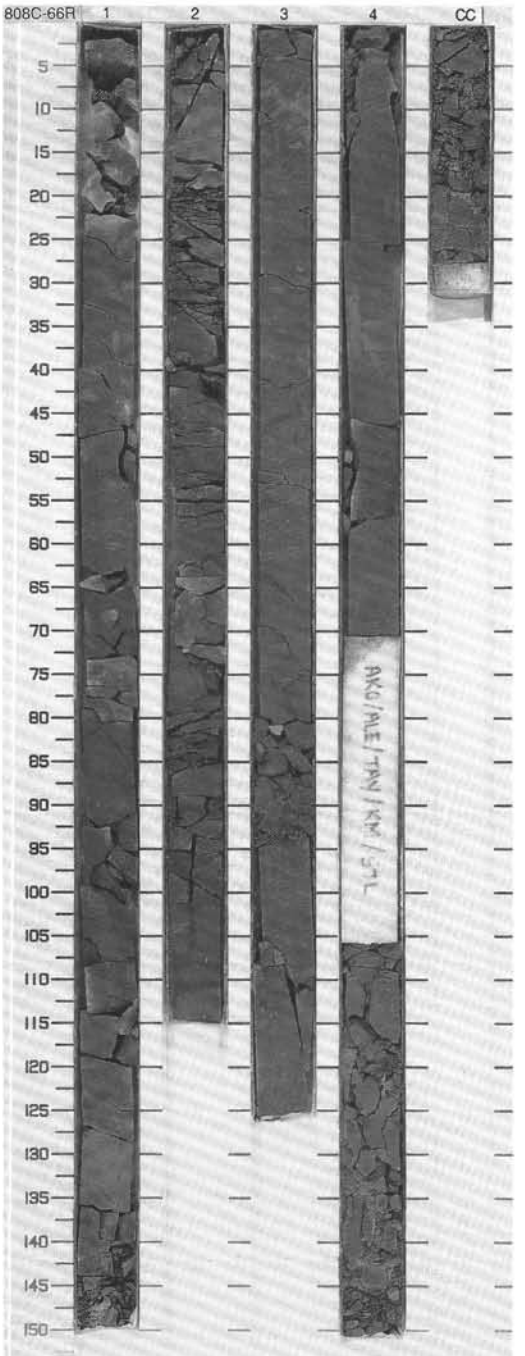
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated and mottled SILTY CLAYSTONE. The dominant color is dark gray (2.5Y 4/0). The degree of disturbance is variable and mixed with features caused by tectonic deformation. Some intervals display polished and slickensided fracture surfaces that are subhorizontal in orientation. Other intervals contain drill breccia engulfed in drilling slurry. Minor sedimentary features include traces of pyrite, disseminated forams, horizontal burrows.

SMEAR SLIDE SUMMARY (%):

	3, 30 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Chlorite	2
Clay	5
Epidote	2
Feldspar	2
Glass	2
Mica	2
Nannofossils	2
Oxide	1
Quartz	3



SITE 808 HOLE C CORE 67R CORED INTERVAL 5609.1-5618.8 mbsl; 934.5-944.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER PLIOCENE		C/M	B		R	ϕ=34 ●=2.20 ●=2.22 ϕ=34 ●%IC=0.14	%IC=0.48 %TOC=0.34	1 2 CC	0.5 1.0				*	

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE deformed into a breccia. The dominant color is dark gray (2.5Y 4/0). Fragments in Section 2 and the core catcher are surrounded by drilling slurry. Large fragments display the typical effects of bioturbation, such as mottled color and small burrows. There are also traces of pyrite and disseminated forams.

SMEAR SLIDE SUMMARY (%):

	1, 70 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	2
Chlorite	1
Clay	5
Feldspar	2
Glass	2
Mica	2
Oxide	2
Quartz	3
Rock fragment	1

SITE 808 HOLE C CORE 68R CORED INTERVAL 5618.8-5628.4 mbsl; 944.2-953.8 mbsf

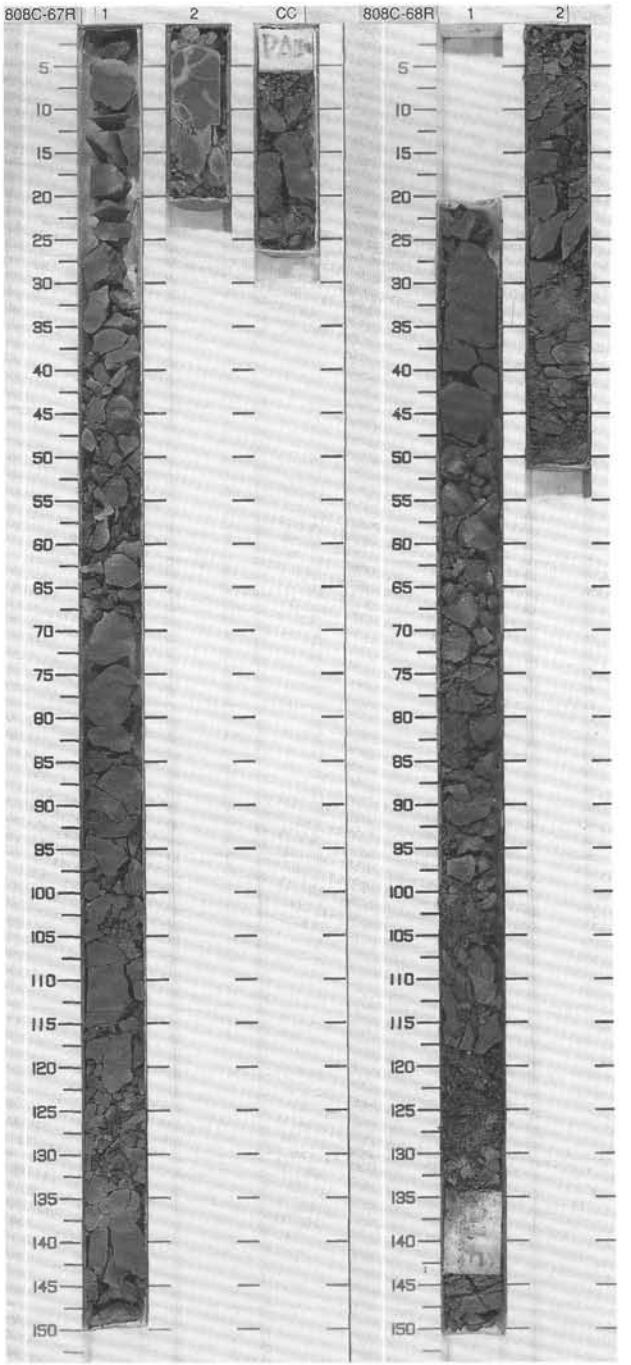
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
UPPER MIOCENE - LOWER PLIOCENE		C/M	B		R?	ϕ=32 ●=2.25 ϕ=32 ●=2.26 ϕ=32 ●=2.32	%IC=0.83 %TOC=0.32 ●%IC=0.18	1 2	0.5 1.0				IW UB ALE *	

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Intensely brecciated and fractured throughout core.

SMEAR SLIDE SUMMARY (%):

	2, 15 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Chlorite	2
Clay	5
Epidote	2
Feldspar	2
Mica	2
Nannofossils	2
Oxide	2
Quartz	3
Rock fragment	2



SITE 808 HOLE C CORE 69R CORED INTERVAL 5628.4-5638.0 mbsl; 953.8-963.4 mbsf

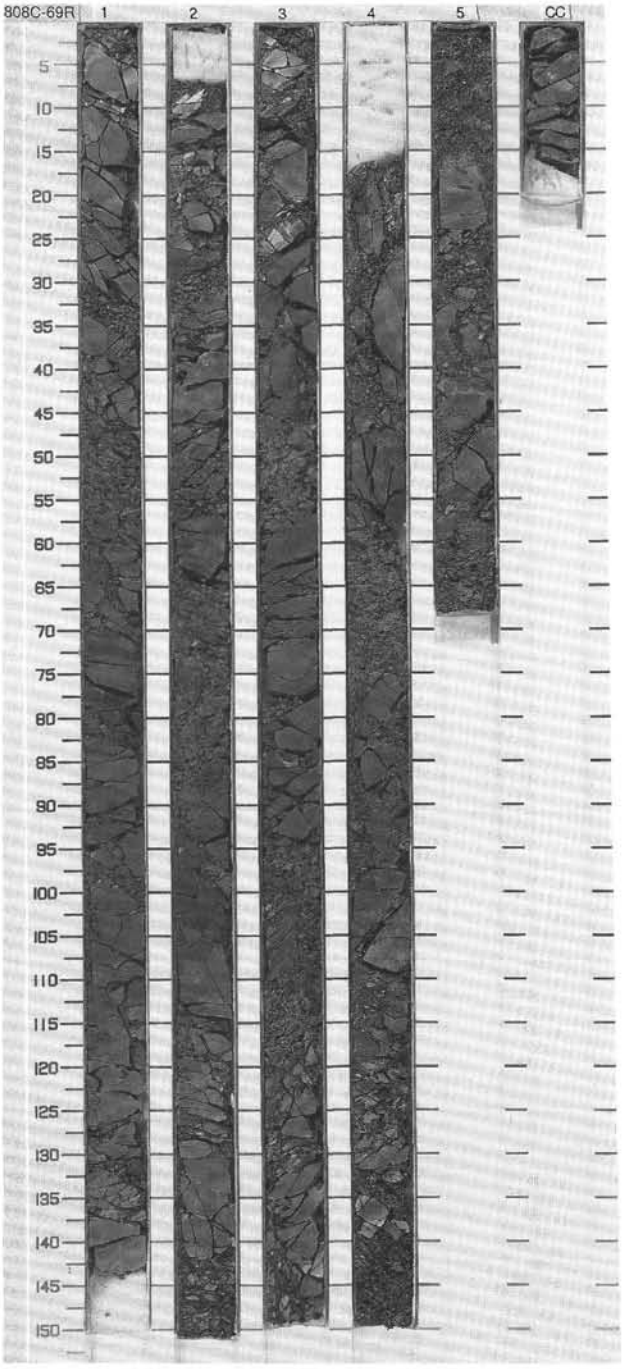
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE		(NN11 - NN12)	B	B	R	R	%IC=0.08 %IC=1.02 %IC=0.28 %IC=0.38 %TOC=0.29	1 2 3 4 5 CC	0.5 1.0			* * *	IW IW

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Intensely brecciated and fractured throughout core.

SMEAR SLIDE SUMMARY (%):

	2, 61 D	5, 10 D
TEXTURE:		
Silt	4	4
Clay	5	5
COMPOSITION:		
Calcite	2	2
Clay	5	5
Feldspar	2	2
Mica	2	2
Nannofossils	2	3
Oxide	2	2
Quartz	3	3



SITE 808 HOLE C CORE 70R CORED INTERVAL 5638.0-5647.7 mbsl; 963.4-973.1 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: F/M
- NANNOFOSSILS: NN11 - NN12
- RADIOLARIANS: B
- DIATOMS

PALEOMAGNETICS: R; N; N

PHYS. PROPERTIES: 0-38 / 2.16; 0-36 / 2.15; 0-39 / 2.13; 0-38 / 2.15; 0-39 / 2.14; 0-38 / 2.14

CHEMISTRY: %IC=0.33; %IC=0.36, %TOC=0.26; %IC=0.42

SECTION: 1, 2, 3, 4, 5

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

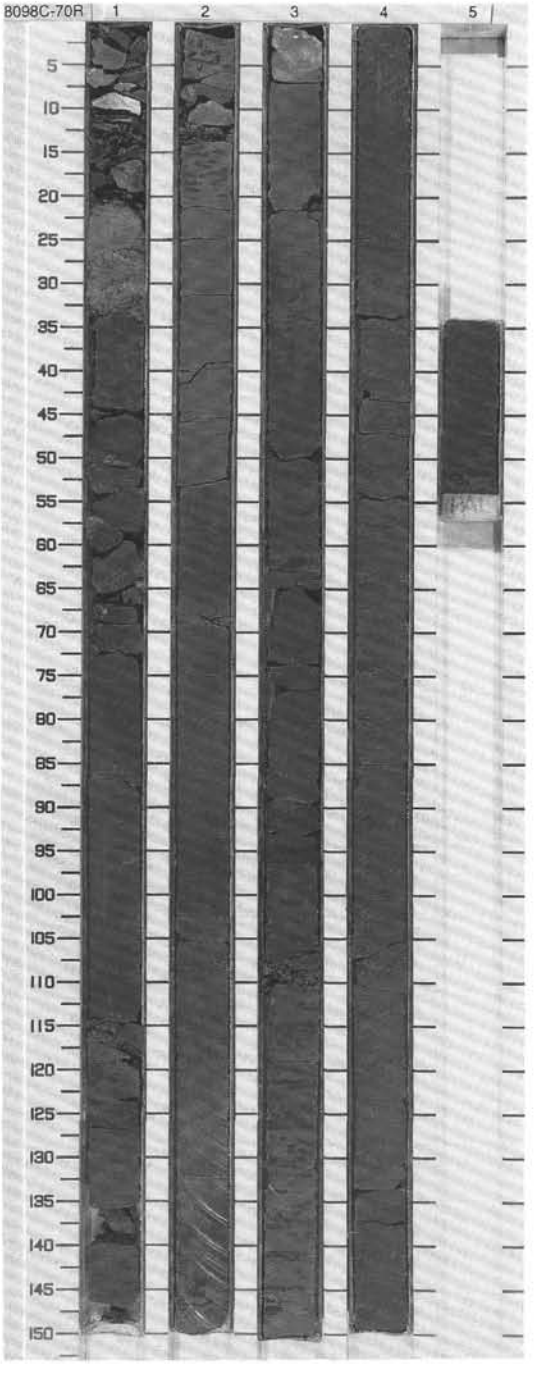
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Intensely brecciated and fractured in Section 1, 0-23 cm; 23-37 cm comprises soft rock flour of CLAYEY SILTSTONE/SILTY CLAYSTONE with partially brecciated sub-rounded clasts of relatively intact similar lithology up to 5 cm maximum dimension. Below Section 1, 37 cm, core is not fractured/brecciated.

SMEAR SLIDE SUMMARY (%):

	1, 27 D	5, 44 D
TEXTURE:		
Silt	5	4
Clay	4	5
COMPOSITION:		
Calcite	1	1
Chlorite	—	2
Clay	3	5
Feldspar	2	2
Glass	5	—
Mica	1	2
Nannofossils	2	3
Oxide	2	2
Quartz	3	3



SITE 808 HOLE C CORE 71R CORED INTERVAL 5647.7-5657.4 mbsl; 973.1-982.8 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: NN11; RADIOLARIANS: A/M, B; DIATOMS

PALEOMAGNETICS: R

PHYS. PROPERTIES

CHEMISTRY: %IC=1.0, %TOC=0.35; %IC=0.85

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: TIB, IW, SJC, OG

LITHOLOGIC DESCRIPTION

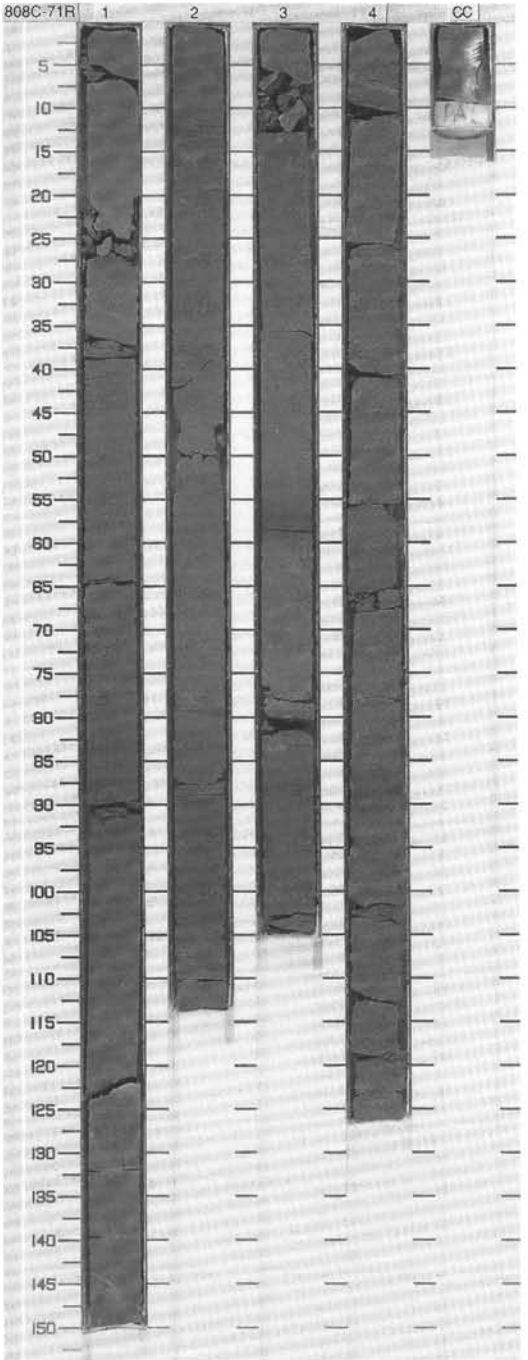
CLAYEY SILTSTONE/SILTY CLAYSTONE and SANDSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Disseminated pyrite common.

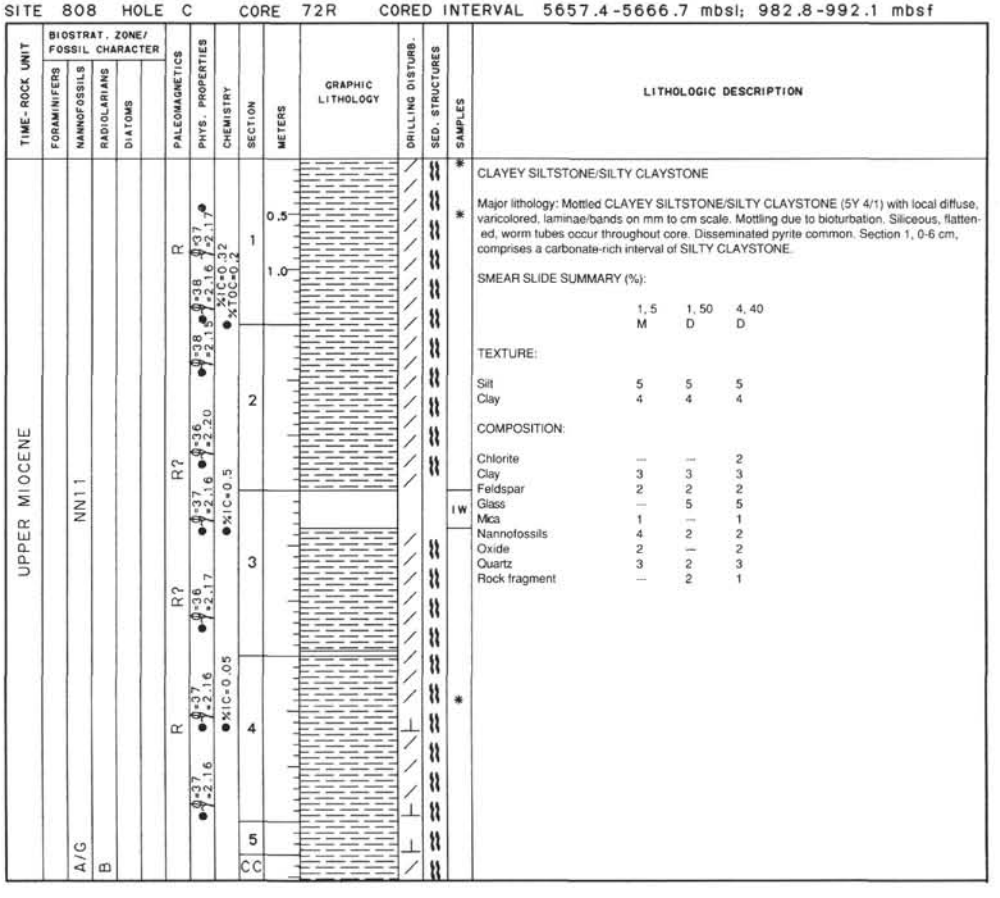
Minor lithology: Altered, silicified, fine volcanic SILTSTONE in Section 3, 79-81 cm.

SMEAR SLIDE SUMMARY (%):

	3, 40 D	3, 81 M
TEXTURE:		
Sand	–	2
Silt	5	5
Clay	4	2
COMPOSITION:		
Calcite	2	–
Chlorite	2	2
Clay	3	2
Feldspar	3	2
Glass	–	5
Mica	2	2
Nannofossils	4	–
Oxide	2	–
Quartz	3	3
Rock fragment	–	2
Sulfide	–	2



SITE 808 HOLE C CORE 72R CORED INTERVAL 5657.4-5666.7 mbsl; 982.8-992.1 mbsf



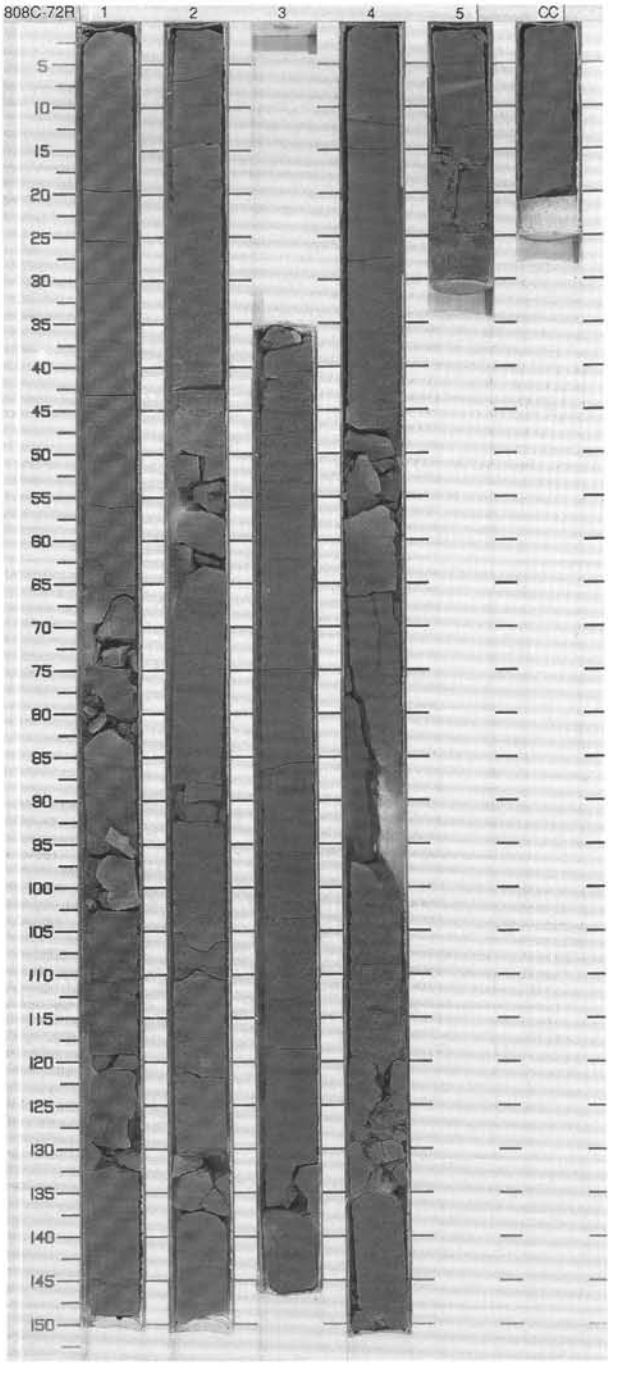
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Disseminated pyrite common. Section 1, 0-6 cm, comprises a carbonate-rich interval of SILTY CLAYSTONE.

SMEAR SLIDE SUMMARY (%):

	1, 5 M	1, 50 D	4, 40 D
TEXTURE:			
Silt	5	5	5
Clay	4	4	4
COMPOSITION:			
Chlorite	—	—	2
Clay	3	3	3
Feldspar	2	2	2
Glass	—	5	5
Mica	1	—	1
Nannofossils	4	2	2
Oxide	2	—	2
Quartz	3	2	3
Rock fragment	—	2	1



SITE 808 HOLE C CORE 73R CORED INTERVAL 5666.7-5676.4 mbsl; 992.1-1001.8 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS (NN11); NANNOFOSSILS B; RADIOLARIANS B; DIATOMS

PALEOMAGNETICS: R R R N N N

PHYS. PROPERTIES

CHEMISTRY: %IC=0.09; %IC=2.55; %IC=0.06; %IC=0.31; %IC=0.28

SECTION: 1 2 3 4 5 6

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

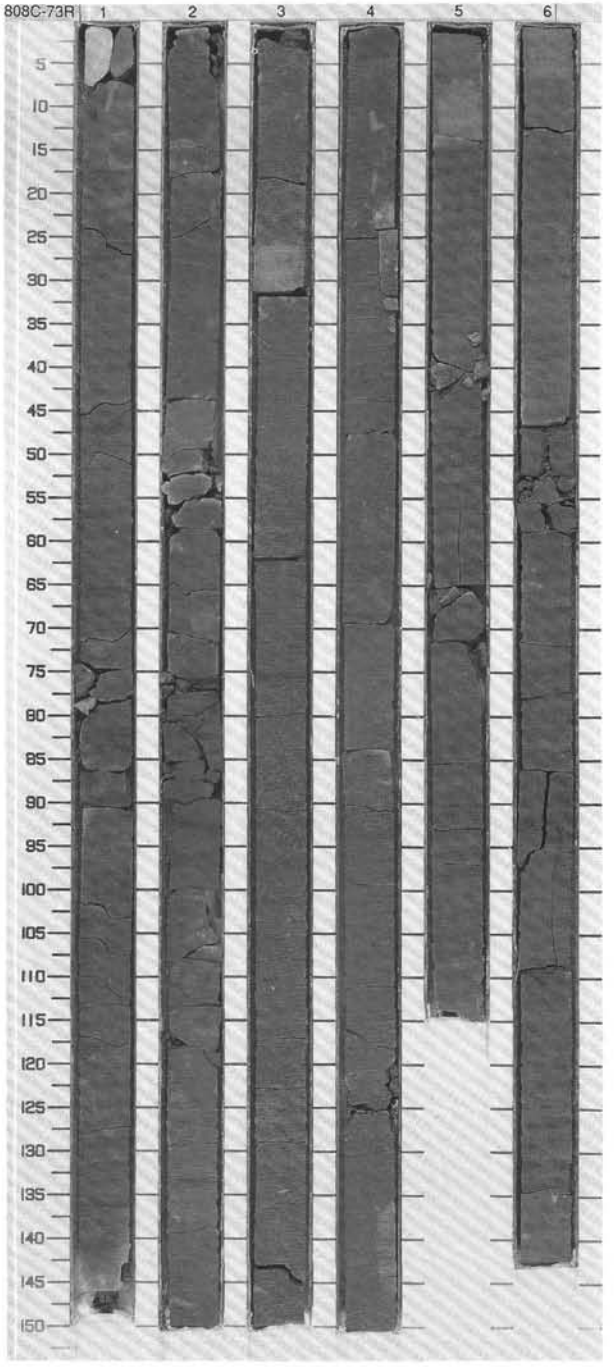
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE and CLAYEY SILTSTONE

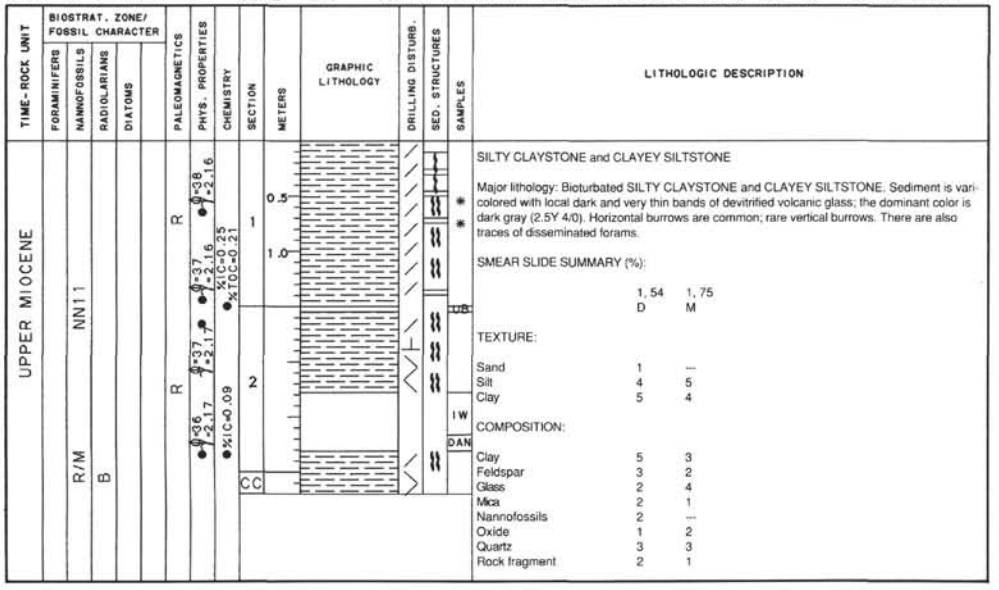
Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE. The sediment is varicolored, with local banding due to greenish-gray concentrations of devitrified glass; otherwise mottled. The dominant color is dark gray (2.5Y 4/0). Horizontal burrows are common, and forams are disseminated throughout the core.

SMEAR SLIDE SUMMARY (%):

	4, 69 D	5, 48 M
TEXTURE:		
Silt	4	5
Clay	5	2
COMPOSITION:		
Calcite	2	—
Clay	5	2
Feldspar	2	2
Glass	—	5
Mica	2	2
Nannofossils	2	2
Oxide	2	3
Quartz	3	2



SITE 808 HOLE C CORE 74R CORED INTERVAL 5676.4-5685.9 mbsl; 1001.8-1011.3 mbsf



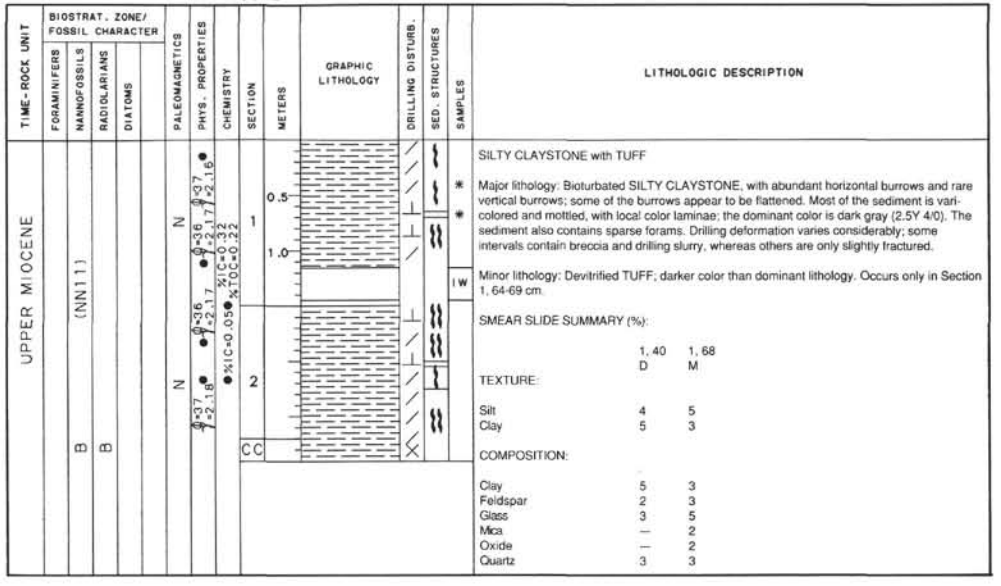
SILTY CLAYSTONE and CLAYEY SILTSTONE

Major lithology: Bioturbated SILTY CLAYSTONE and CLAYEY SILTSTONE. Sediment is varicolored with local dark and very thin bands of devitrified volcanic glass; the dominant color is dark gray (2.5Y 4/0). Horizontal burrows are common; rare vertical burrows. There are also traces of disseminated forams.

SMEAR SLIDE SUMMARY (%):

	1, 54 D	1, 75 M
TEXTURE:		
Sand	1	--
Silt	4	5
Clay	5	4
COMPOSITION:		
Clay	5	3
Feldspar	3	2
Glass	2	4
Mica	2	1
Nannofossils	2	--
Oxide	1	2
Quartz	3	3
Rock fragment	2	1

SITE 808 HOLE C CORE 75R CORED INTERVAL 5685.9-5695.1 mbsl; 1011.3-1020.5 mbsf



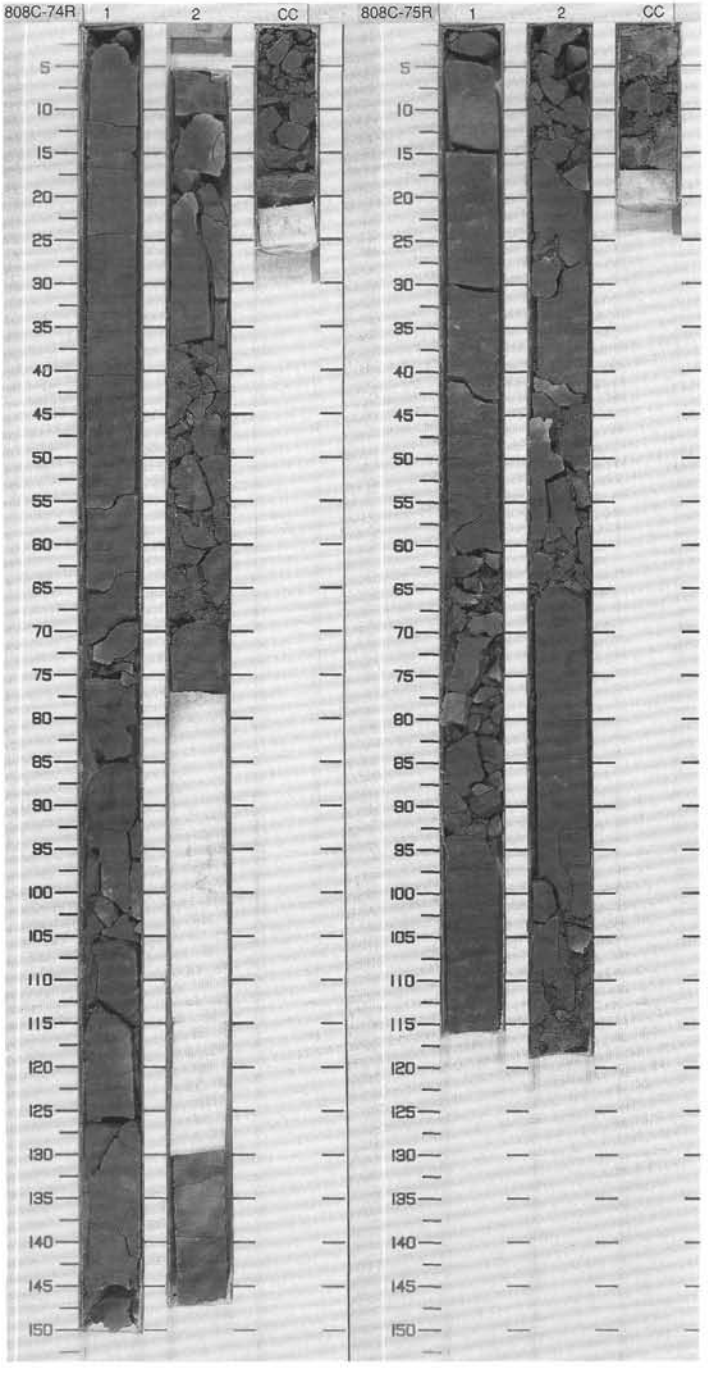
SILTY CLAYSTONE with TUFF

Major lithology: Bioturbated SILTY CLAYSTONE, with abundant horizontal burrows and rare vertical burrows; some of the burrows appear to be flattened. Most of the sediment is varicolored and mottled, with local color laminae; the dominant color is dark gray (2.5Y 4/0). The sediment also contains sparse forams. Drilling deformation varies considerably; some intervals contain breccia and drilling slurry, whereas others are only slightly fractured.

Minor lithology: Devitrified TUFF; darker color than dominant lithology. Occurs only in Section 1, 64-69 cm.

SMEAR SLIDE SUMMARY (%):

	1, 40 D	1, 68 M
TEXTURE:		
Silt	4	5
Clay	5	3
COMPOSITION:		
Clay	5	3
Feldspar	2	3
Glass	3	5
Mica	--	2
Oxide	--	2
Quartz	3	3



SITE 808 HOLE C CORE 76R CORED INTERVAL 5695.1-5704.5 mbsl; 1020.5-1029.9 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS (NN11); RADIOLARIANS; DIATOMS

PALEOMAGNETICS: R R R R R N N N

PHYS. PROPERTIES: ϕ=2.16 ϕ=2.18 ϕ=2.25 ϕ=2.25 ϕ=2.18 ϕ=2.20 ϕ=2.21 ϕ=2.17 ϕ=2.17 ϕ=2.20

CHEMISTRY: %IC=0.07 %IC=0.18 %IC<0.41 %TOC<0.26

SECTION: 1 2 3 4 5 6 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: W OG

LITHOLOGIC DESCRIPTION

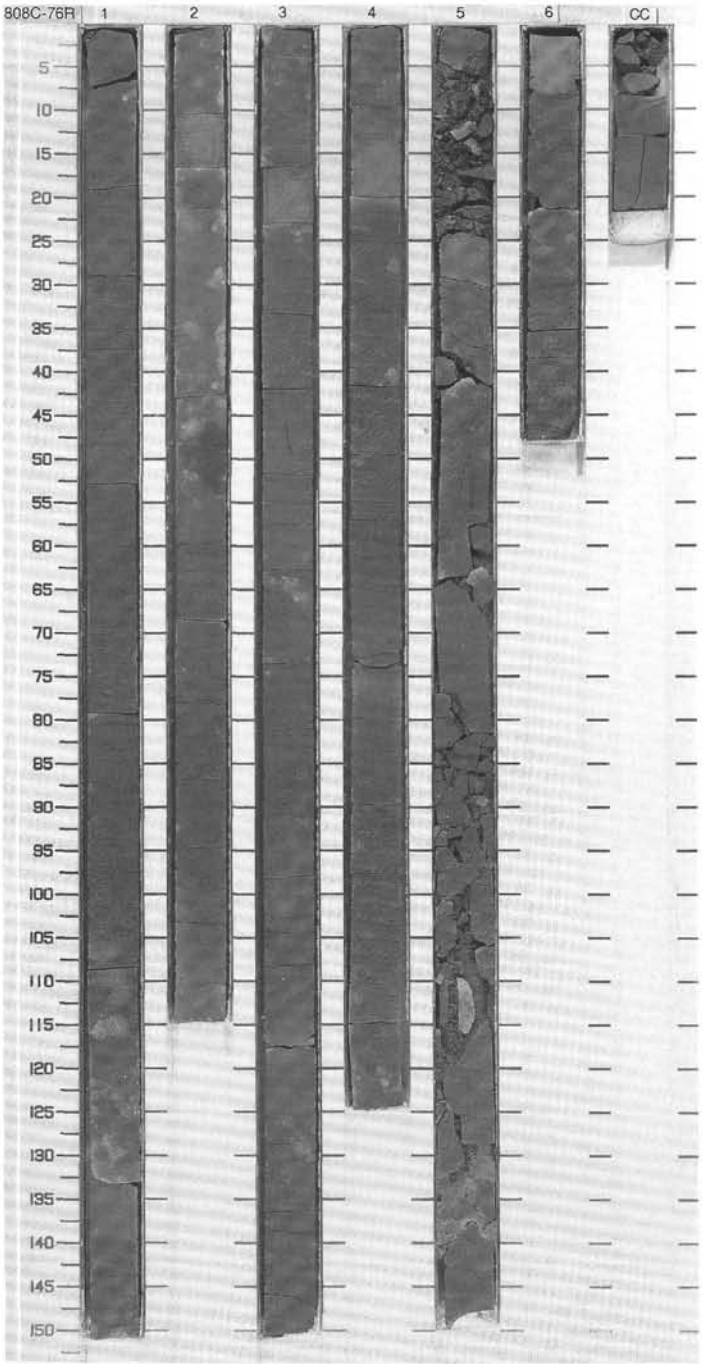
SILTY CLAYSTONE with CALCAREOUS CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE with abundant horizontal burrows and rare vertical burrows; mottled and slightly varicolored. The dominant color is dark gray (2.5Y 4/0). There are also traces of disseminated forams. The degree of disturbance varies from mildly fractured to drill breccia and drilling slurry. Section 5, 0-24 cm, displays polished fracture surfaces.

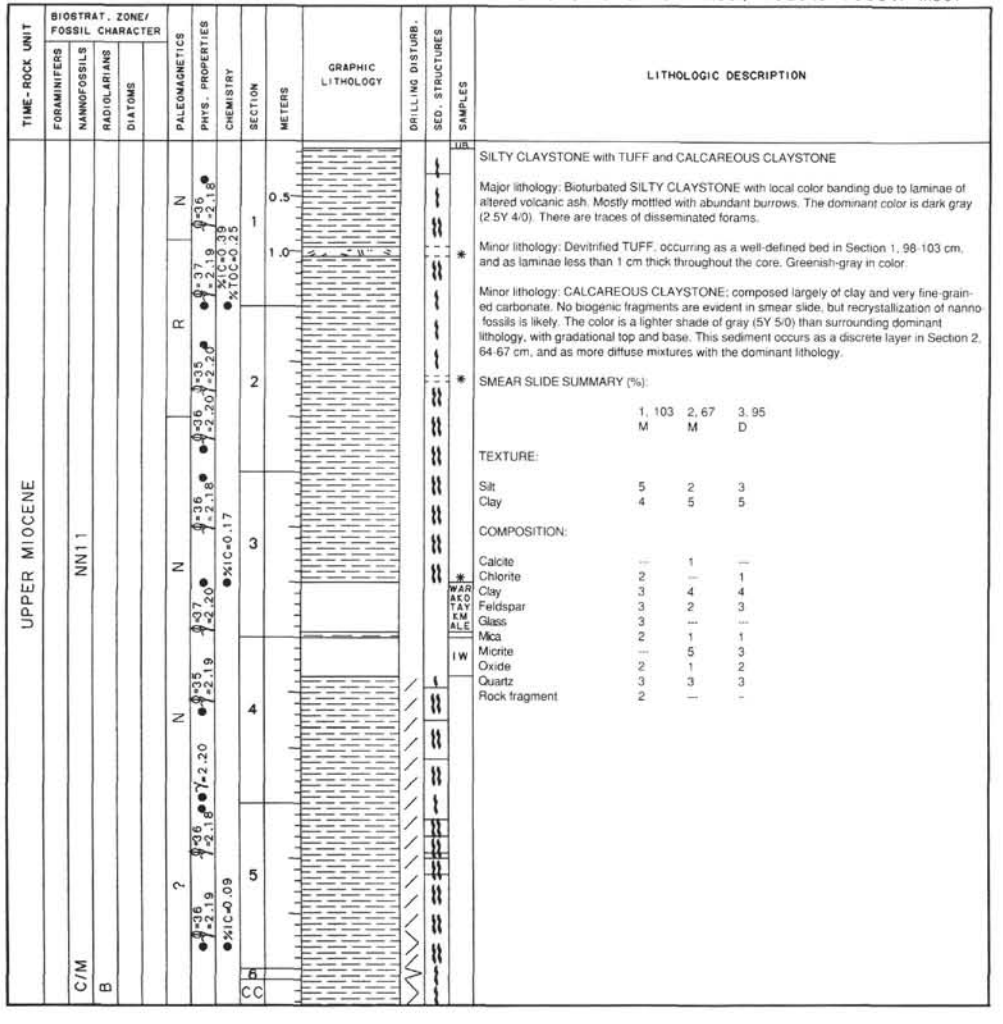
Minor lithology: CALCAREOUS CLAYSTONE, composed largely of recrystallized nannofossils; the color is a lighter shade of gray (2.5Y 5/0) compared to dominant lithology. This fine-grained sediment occurs in Section 4, 10-14 cm. Both upper and lower boundaries are gradational, and bioturbation is moderate.

SMEAR SLIDE SUMMARY (%):

	3, 117 D	4, 13 M
TEXTURE:		
Silt	4	3
Clay	5	5
COMPOSITION:		
Calcite	1	--
Chlorite	--	2
Clay	5	3
Feldspar	3	1
Mica	2	1
Micrite	--	5
Oxide	2	2
Quartz	3	2
Rock fragment	2	1



SITE 808 HOLE C CORE 77R CORED INTERVAL 5704.5-5713.7 mbsl; 1029.9-1039.1 mbsf



SILTY CLAYSTONE with TUFF and CALCAREOUS CLAYSTONE

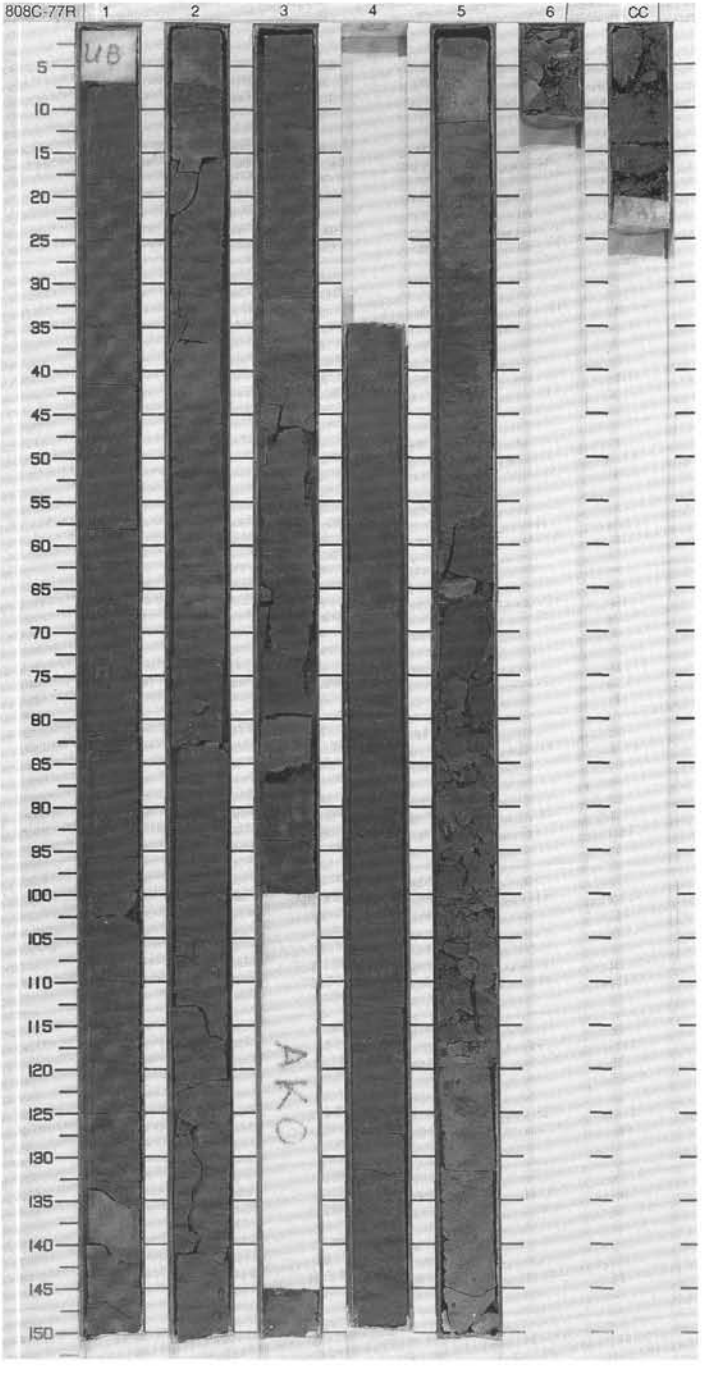
Major lithology: Bioturbated SILTY CLAYSTONE with local color banding due to laminae of altered volcanic ash. Mostly mottled with abundant burrows. The dominant color is dark gray (2.5Y 4/0). There are traces of disseminated forams.

Minor lithology: Devitrified TUFF, occurring as a well-defined bed in Section 1, 98-103 cm, and as laminae less than 1 cm thick throughout the core. Greenish-gray in color.

Minor lithology: CALCAREOUS CLAYSTONE; composed largely of clay and very fine-grained carbonate. No biogenic fragments are evident in smear slide, but recrystallization of nannofossils is likely. The color is a lighter shade of gray (5Y 5/0) than surrounding dominant lithology, with gradational top and base. This sediment occurs as a discrete layer in Section 2, 64-67 cm, and as more diffuse mixtures with the dominant lithology.

SMEAR SLIDE SUMMARY (%):

	1, 103 M	2, 67 M	3, 95 D
TEXTURE:			
Silt	5	2	3
Clay	4	5	5
COMPOSITION:			
Calcite	—	1	—
Chlorite	2	—	1
Clay	3	4	4
Feldspar	3	2	3
Glass	3	—	—
Mica	2	1	1
Micrite	—	5	3
Oxide	2	1	2
Quartz	3	3	3
Rock fragment	2	—	-



SITE 808 HOLE C CORE 78R CORED INTERVAL 5713.7-5722.9 mbsl; 1039.1-1048.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE	R/P	NN10 - NN11	B		N	N	%IC-0.44	1 2 3 4 5 6 CC	0.5 1.0				IW *

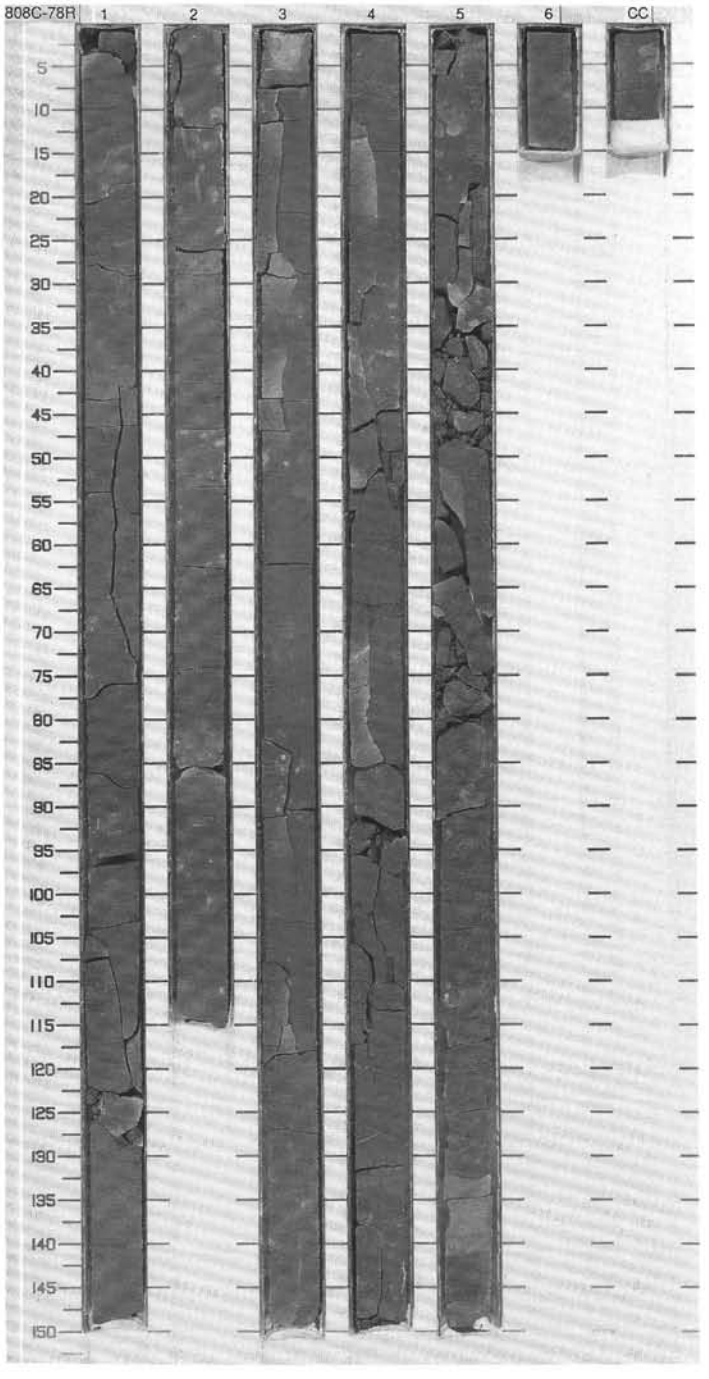
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE; mostly mottled by burrowing, with local color banding due to laminae of devitrified volcanic ash. The dominant color is dark gray (2.5Y 4/0). Minor features include traces of pyrite in burrows and replacing worm tubes; there are also minor amounts of disseminated forams.

SMEAR SLIDE SUMMARY (%):

	3, 92 D
TEXTURE:	
Sand	1
Silt	4
Clay	5
COMPOSITION:	
Calcite	2
Chlorite	2
Clay	5
Feldspar	2
Mica	2
Nannofossils	3
Oxide	2
Quartz	3



SITE 808 HOLE C CORE 79R CORED INTERVAL 5722.9-5732.4 mbsl: 1048.3-1057.8 mbsf

TIME-ROCK UNIT: MIDDLE - UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN8 - NN10; RADIOLARIANS: B; DIATOMS: —

PALEOMAGNETICS: N N N N N

PHYS. PROPERTIES: ϕ=2.19 ϕ=2.23 ϕ=2.19 ϕ=2.24 ϕ=2.19 ϕ=2.32 ϕ=2.57 ϕ=2.21 ϕ=2.53

CHEMISTRY: %IC=1.81 %IC=0.14 %IC=2.64 %TOC= 0.27 %TOC= 0.21

SECTION: 1 2 3 4 5 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: * OG IW *

LITHOLOGIC DESCRIPTION

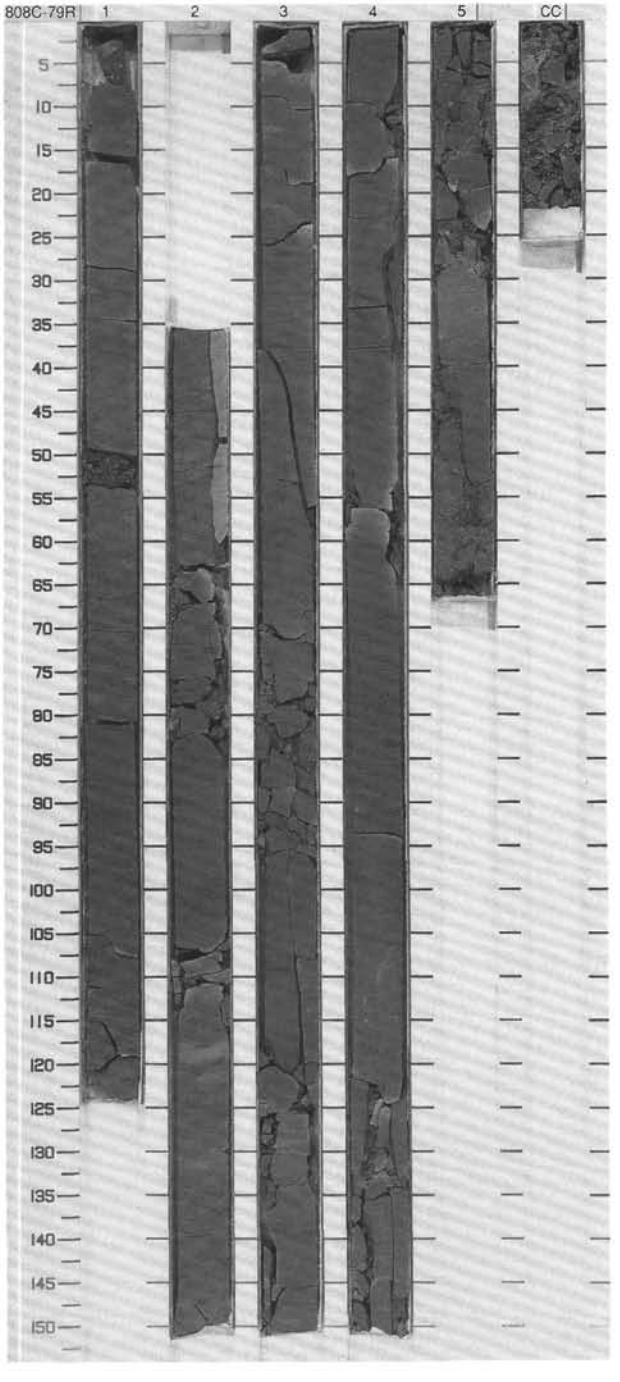
CLAYEY SILTSTONE/SILTY CLAYSTONE and CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Disseminated pyrite common.

Minor lithology: Yellowish (2.5Y 7/2) bioturbated carbonate CLAYSTONE in Section 2, 118-120 cm, and Section 3, 128-129 cm.

SMEAR SLIDE SUMMARY (%):

	1, 35 D	2, 119 M
TEXTURE:		
Silt	4	3
Clay	5	5
COMPOSITION:		
Calcite	1	—
Chlorite	—	1
Clay	5	3
Feldspar	3	2
Mica	2	1
Micrite	—	5
Oxide	2	2
Quartz	3	2
Rock fragment	2	—



SITE 808 HOLE C CORE 80R CORED INTERVAL 5732.4-5741.7 mbsl; 1057.8-1067.1 mbsf

TIME-ROCK UNIT: MIDDLE-UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: R/M; NANNOFOSSILS: NN8 - NN10; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: N

PHYS. PROPERTIES: φ-34 2.20; φ-33 2.20; φ-34 2.21; φ-31 2.34; φ-34 2.21; φ-35 2.26; φ-35 2.18; %IC=3.35; %IC=0.31; %TOC=0.22; %IC=0.07

CHEMISTRY

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: UB; IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE and CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siliceous, flattened, worm tubes occur throughout core. Yellowish crystalline calcite in CC, 18-19 cm, up to 2 cm dimension.

Minor lithology: Bioturbated yellowish (2.5Y 7/2) carbonate CLAYSTONE in Section 1, 75-76 cm, Section 2, 76-79.5 cm, and Section 4, 26-28 cm. Bioturbation predates diagenetic carbonate formation.

SMEAR SLIDE SUMMARY (%):

	1, 50 D	1, 76 M	2, 79 M
TEXTURE:			
Silt	5	3	3
Clay	4	5	5
COMPOSITION:			
Calcite	2	—	—
Chlorite	—	1	2
Clay	4	3	3
Epidote	—	1	—
Feldspar	3	2	2
Mica	2	1	1
Micrite	—	5	5
Oxide	2	1	1
Quartz	4	2	2

SITE 808 HOLE C CORE 81R CORED INTERVAL 5741.7-5751.1 mbsl; 1067.1-1076.5 mbsf

TIME-ROCK UNIT: MIDDLE-UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: R/P; NANNOFOSSILS: NN8 - NN10; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: R

PHYS. PROPERTIES: φ-35 2.17; φ-34 2.17; φ-34 2.13; φ-35 2.21; %IC=0.68; %TOC=0.27; %IC=0.35

CHEMISTRY

SECTION: 1, 2

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

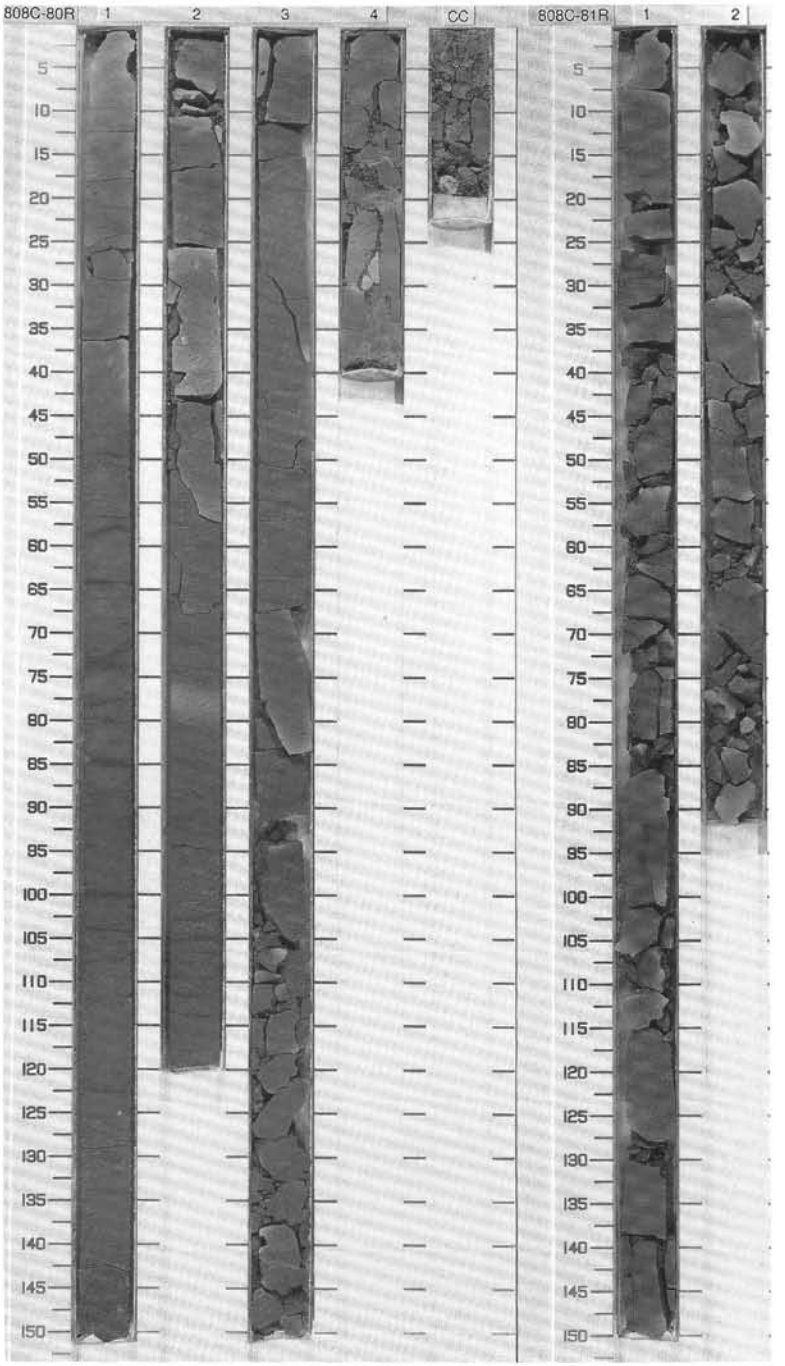
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Fracturing throughout Section 2, with partially disaggregated, brecciated, blocks and interstitial clay-rich material.

SMEAR SLIDE SUMMARY (%):

	1, 50 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Chlorite	2
Clay	5
Epidote	1
Feldspar	2
Mica	2
Nannofossils	2
Oxide	2
Quartz	3



SITE 808 HOLE C CORE 82R CORED INTERVAL 5751.1-5760.4 mbsl; 1076.5-1085.8 mbsf

TIME-ROCK UNIT: MIDDLE - UPPER MIOCENE

BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: R/P NN8 - NN10; RADIOLARIANS: B; DIATOMS

PALEOMAGNETICS: R; N

PHYS. PROPERTIES: ●1.33 ●2.22 ●0.33 ●2.21; ●1.33 ●2.25

CHEMISTRY: %IC=0.3 %TOC=0.27; %IC=0.27

SECTION: 1, 2, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: *, IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Fracturing throughout Section 2, with partially disaggregated, brecciated, blocks and interstitial clay-rich material.

SMEAR SLIDE SUMMARY (%):

	1, 50 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	1
Clay	5
Epidote	2
Feldspar	3
Mica	2
Oxide	2
Quartz	2

SITE 808 HOLE C CORE 83R CORED INTERVAL 5760.4-5766.6 mbsl; 1085.8-1092.0 mbsf

TIME-ROCK UNIT: MIDDLE - UPPER MIOCENE

BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: C/M NN8 - NN10; RADIOLARIANS: B; DIATOMS

PALEOMAGNETICS: R

PHYS. PROPERTIES: ●1.34 ●2.21 ●0.33 ●2.22 ●0.33 ●2.22; ●0.37 ●2.18

CHEMISTRY: %IC=0.12

SECTION: 1, 2, 3, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: *, *

LITHOLOGIC DESCRIPTION

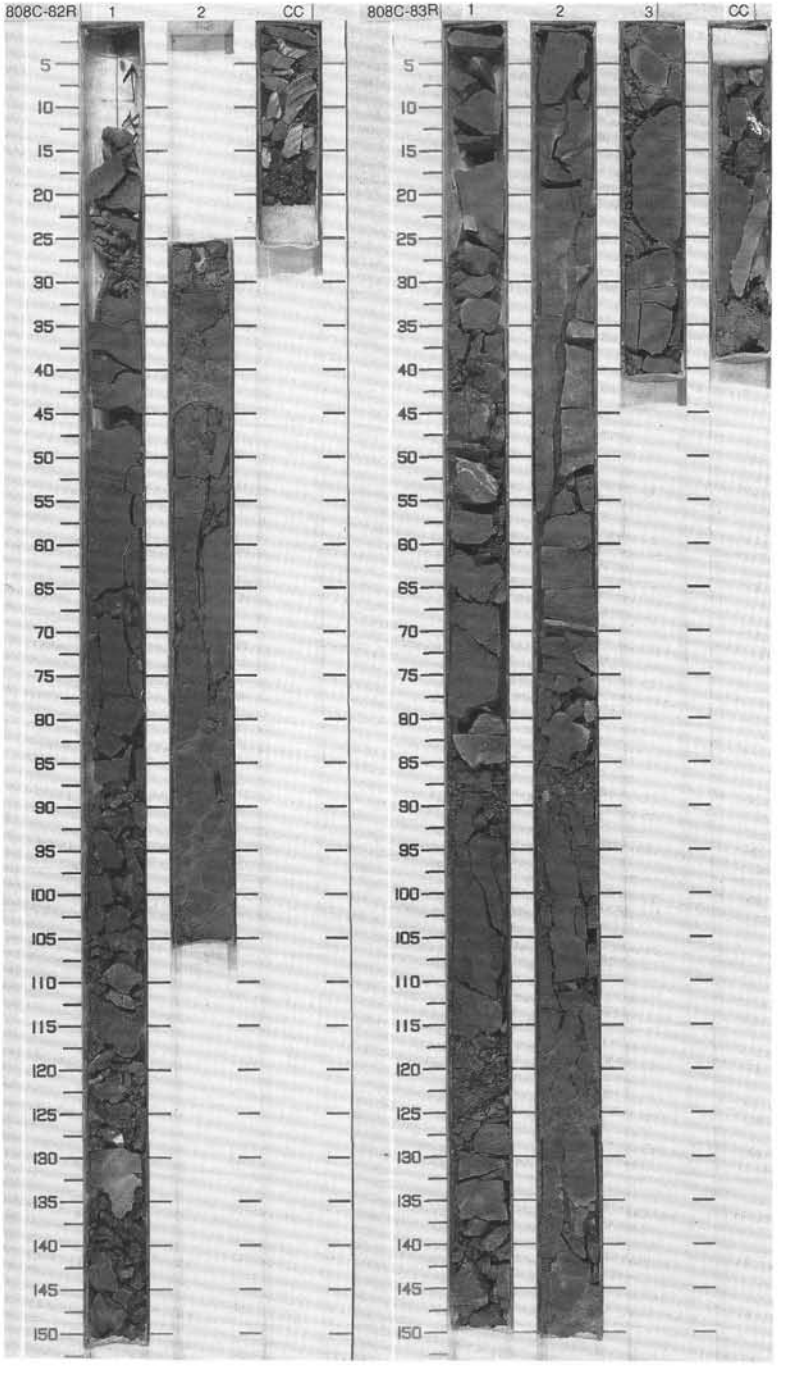
SILTY CLAYSTONE with CALCAREOUS CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE; mottled, with dark gray (2.5Y 4/0) as the dominant color. There are sparse quantities of disseminated forams; small burrows are common. The degree of core disturbance is variable; some intervals display polished fracture surfaces and others contain drilling breccia and slurry.

Minor lithology: Dark brown (10YR 3/3) CALCAREOUS CLAYSTONE. This very fine-grained, dirty micrite occurs in Section 2, 56-59 cm. Upper and lower boundaries are both gradational.

SMEAR SLIDE SUMMARY (%):

	1, 70 D	2, 58 M
TEXTURE:		
Silt	4	3
Clay	5	5
COMPOSITION:		
Chlorite	2	–
Clay	5	3
Feldspar	3	2
Mica	2	–
Micrite	–	5
Oxide	2	–
Quartz	3	1



SITE 808 HOLE C CORE 84R CORED INTERVAL 5766.6-5772.9 mbsl; 1092.0-1098.3 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: B; NANNOFOSSILS: (NN7 - NN8); RADIOLARIANS: ?; DIATOMS: R

PALEOMAGNETICS: R

PHYS. PROPERTIES: Φ=.33 ρ=2.26; Φ=.34 ρ=2.26; Φ=.33 ρ=2.25; Φ=.32 ρ=2.27; Φ=.33 ρ=2.23

CHEMISTRY: %IC=0.06; %IC=0.33; %TOC=0.29

SECTION: 1, 2, 3, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: SB, IW

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Diagenetic carbonate in Section 1, 66-67 cm.

SMEAR SLIDE SUMMARY (%):

	1, 50 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	1
Clay	5
Feldspar	2
Mica	2
Oxide	2
Quartz	3

SITE 808 HOLE C CORE 85R CORED INTERVAL 5772.9-5782.6 mbsl; 1098.3-1108.0 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN6 - NN7; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: R

PHYS. PROPERTIES: Φ=.34 ρ=2.22; Φ=.33 ρ=2.22; Φ=.38 ρ=2.21; Φ=.33 ρ=2.22; Φ=.34 ρ=2.22

CHEMISTRY: %IC=0.28; %TOC=0.28; %IC=0.38

SECTION: 1, 2, 3, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: DAN, IW

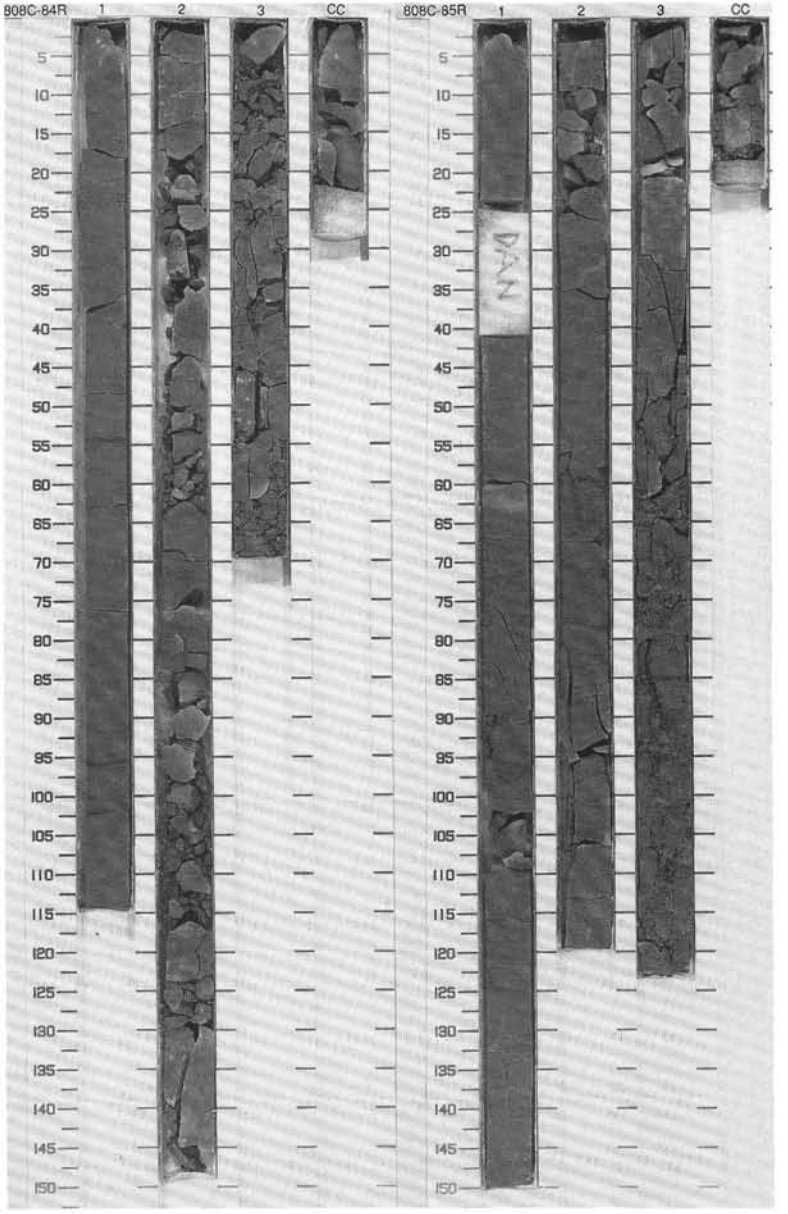
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Diagenetic carbonate in Section 1, 59-62 cm.

SMEAR SLIDE SUMMARY (%):

	1, 61 M	3, 51 D
TEXTURE:		
Silt	5	4
Clay	3	5
COMPOSITION:		
Calcite	5	2
Clay	3	5
Feldspar	–	3
Mica	–	2
Oxide	2	2
Quartz	2	3
Rock fragment	–	1



SITE 808 HOLE C CORE 86R CORED INTERVAL 5782.6-5792.2 mbsl; 1108.0-1117.6 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN6 - NN7; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: R

PHYS. PROPERTIES: Ø=2.22 Ø=2.23 Ø=2.32 Ø=2.23 Ø=2.33 Ø=2.23 Ø=2.43 Ø=2.23 Ø=2.33

CHEMISTRY: %IC=0.36 %TOC=0.29 %IC=1.09 %IC=6.88 %IC=0.11

SECTION: 1 2 3 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: CM

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Diagenetic carbonate in Section 2, 108-115 cm. Elliptical siderite concretion in Section 2, 63-65 cm.

SMEAR SLIDE SUMMARY (%):

	1, 50 D	2, 64 M
TEXTURE:		
Silt	4	5
Clay	5	2
COMPOSITION:		
Calcite	3	5
Clay	5	2
Feldspar	3	2
Mica	1	—
Nannofossils	2	—
Oxide	2	—
Quartz	3	3
Radiolarians	2	—

SITE 808 HOLE C CORE 87R CORED INTERVAL 5792.2-5801.5 mbsl; 1117.6-1126.9 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: (NN6-NN7); NANNOFOSSILS: B; RADIOLARIANS: B; DIATOMS:

PALEOMAGNETICS: N? Ø=2.23

PHYS. PROPERTIES: Ø=2.24 Ø=2.25

CHEMISTRY: %IC=0.24 %TOC=0.23 %IC=0.04

SECTION: 1 2 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: TIR

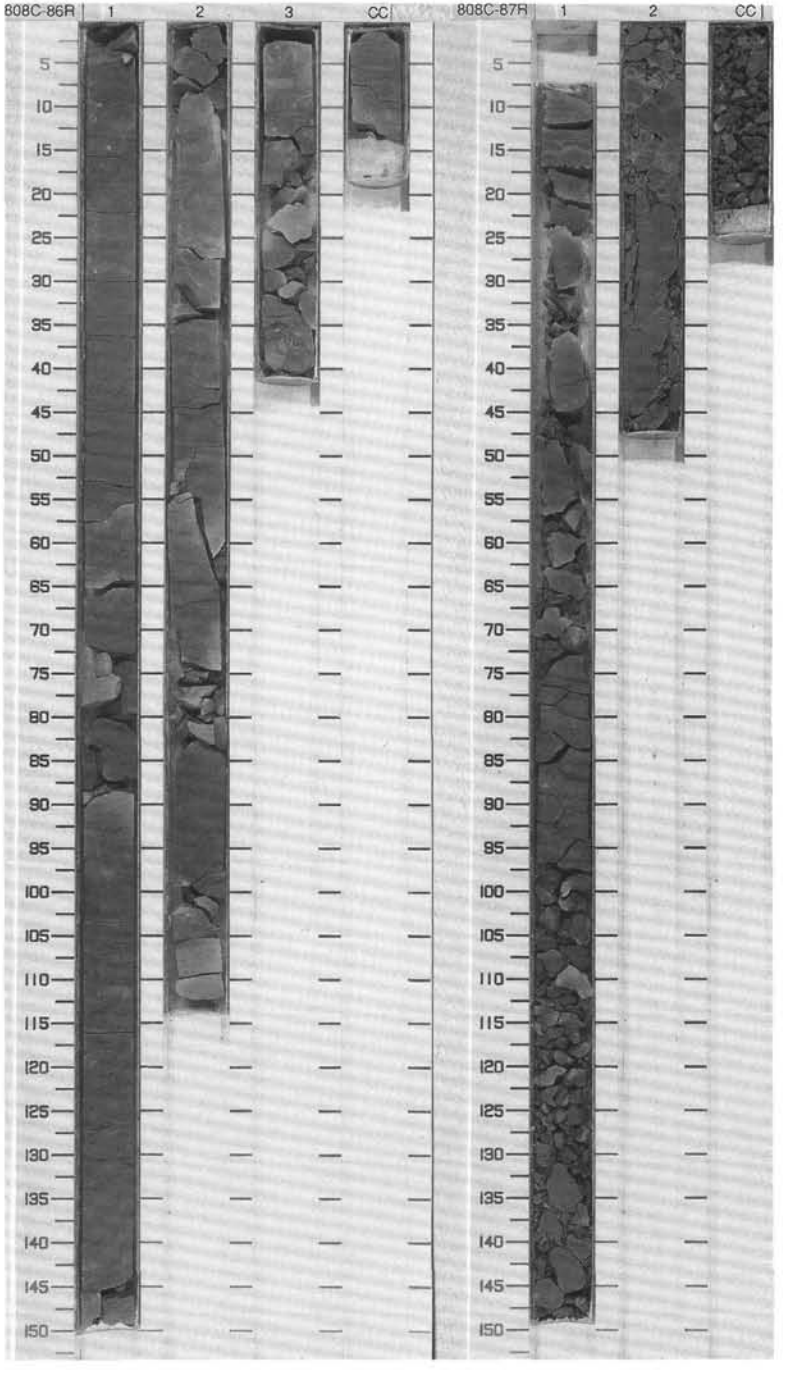
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation.

SMEAR SLIDE SUMMARY (%):

	1, 80 M
TEXTURE:	
Silt	3
Clay	5
COMPOSITION:	
Clay	5
Feldspar	2
Oxide	2
Quartz	3
Radiolarians	2



SITE 808 HOLE C CORE 88R CORED INTERVAL 5801.5-5811.2 mbsl; 1126.9-1136.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		C/M NN6 - NN7	B		R	ϕ=2.27 ϕ=2.24 ϕ=2.38	%IC=4.67 %IC=0.32 %TOC=0.27	1 2 CC	0.5 1.0				IW *

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Siderite concretion in Section 2, 11 cm.

SMEAR SLIDE SUMMARY (%):

	2, 15 M
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	3
Clay	3
Feldspar	2
Micrite	5
Oxide	2
Quartz	3

SITE 808 HOLE C CORE 89R CORED INTERVAL 5811.2-5820.9 mbsl; 1136.6-1146.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		C/M NN6 - NN7	B		R N?	ϕ=2.24 ϕ=2.26 ϕ=2.26	%IC=0.45 %TOC=0.23 %IC=0.73	1 2 CC	0.5 1.0				* * *

LITHOLOGIC DESCRIPTION

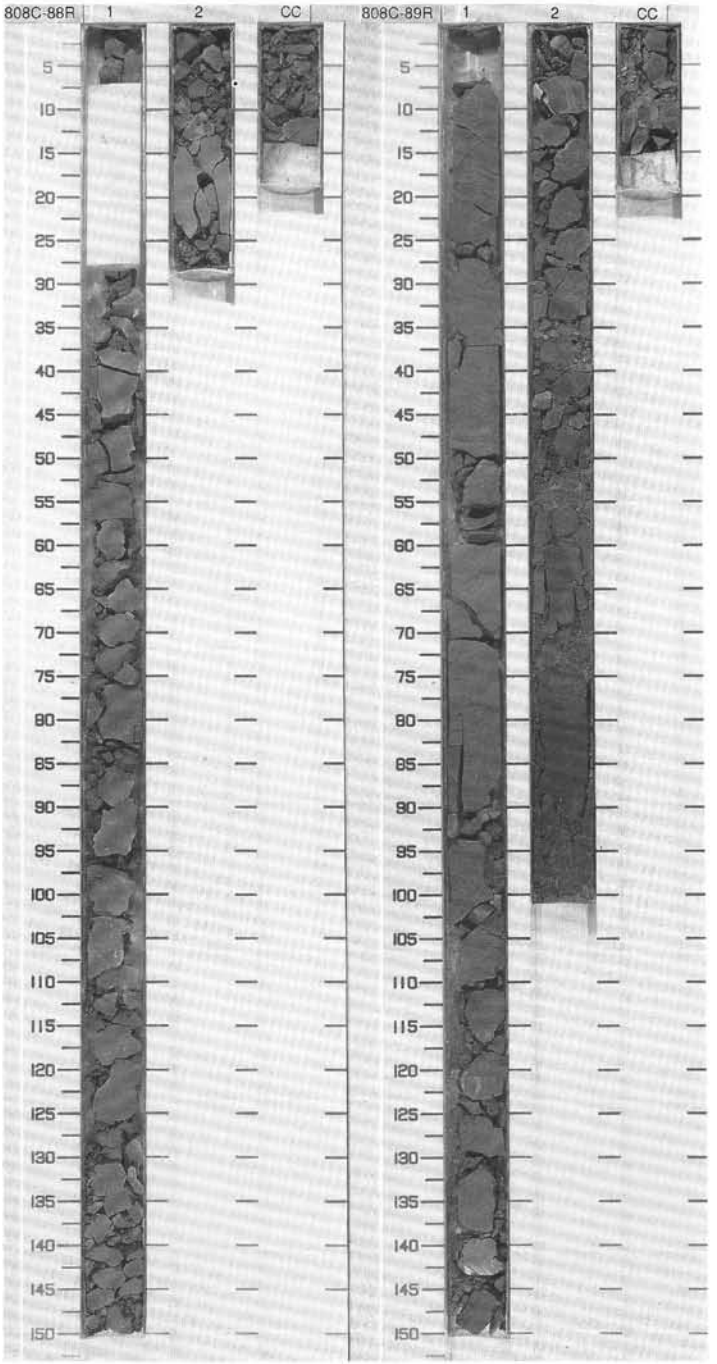
SILTY CLAYSTONE with MIXED SEDIMENT

Major lithology: Bioturbated SILTY CLAYSTONE; mottled by burrows, but the color is dominantly dark gray (2.5Y 4/0). There are traces of pyrite and color bands, together with patches of carbonate claystone.

Minor lithology: MIXED SEDIMENT containing carbonate, pyrite, biotite, clay, and nannofossils. This material is poorly sorted, with grains as large as fine sand. The interval of occurrence is Section 1, 52-58 cm.

SMEAR SLIDE SUMMARY (%):

	1, 57 D	2, 43 M	2, 92 D
TEXTURE:			
Sand	2	—	—
Silt	5	2	4
Clay	3	5	5
COMPOSITION:			
Calcite	3	1	2
Chlorite	3	1	—
Clay	2	2	5
Epidote	3	—	1
Feldspar	3	2	3
Mica	2	—	—
Micrite	3	5	—
Nannofossils	2	—	3
Oxide	2	2	2
Quartz	2	2	3
Rock fragment	2	—	—



SITE 808 HOLE C CORE 90R CORED INTERVAL 5820.9-5830.5 mbsl; 1146.3-1155.9 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: B; NANNOFOSSILS: (NN6 - NN7); RADIOLARIANS: B; DIATOMS: B

PALEOMAGNETICS: N

PHYS. PROPERTIES: 0.31 / 2.27; 0.57 / 2.26; 0.32 / 2.26

CHEMISTRY: %IC=0.47; %C=1.43; %TOC=0.25

SECTION: 1, 2, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW, UB

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE; mottled by burrows, but the color is dominantly dark gray (2.5Y 4/0). Pyrite occurs as burrow-fill, and there is a very thin interval of flaky, light-gray claystone in Section 1, 133 cm. Irregular patches of claystone also occur within drilling breccia in Section 2, 69-73 cm. Much of the core is highly fractured, and some intervals contain breccia fragments surrounded by drilling slurry.

SMEAR SLIDE SUMMARY (%):

	1, 100 D	1, 133 M
TEXTURE:		
Silt	4	2
Clay	5	5
COMPOSITION:		
Calcite	2	—
Chlorite	2	—
Clay	5	5
Feldspar	2	1
Mica	2	—
Nannofossils	2	—
Oxide	2	2
Quartz	3	2
Rock fragment	—	1

SITE 808 HOLE C CORE 91R CORED INTERVAL 5830.5-5840.2 mbsl; 1155.9-1165.6 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: C/M; NANNOFOSSILS: NN6 - NN7; RADIOLARIANS: B; DIATOMS: B

PALEOMAGNETICS: R?

PHYS. PROPERTIES: 0.29 / 2.23; 0.30 / 2.22; 0.32 / 2.24

CHEMISTRY: %IC=1.3; %C=0.59; %TOC=0.28

SECTION: 1, 2, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW, OG

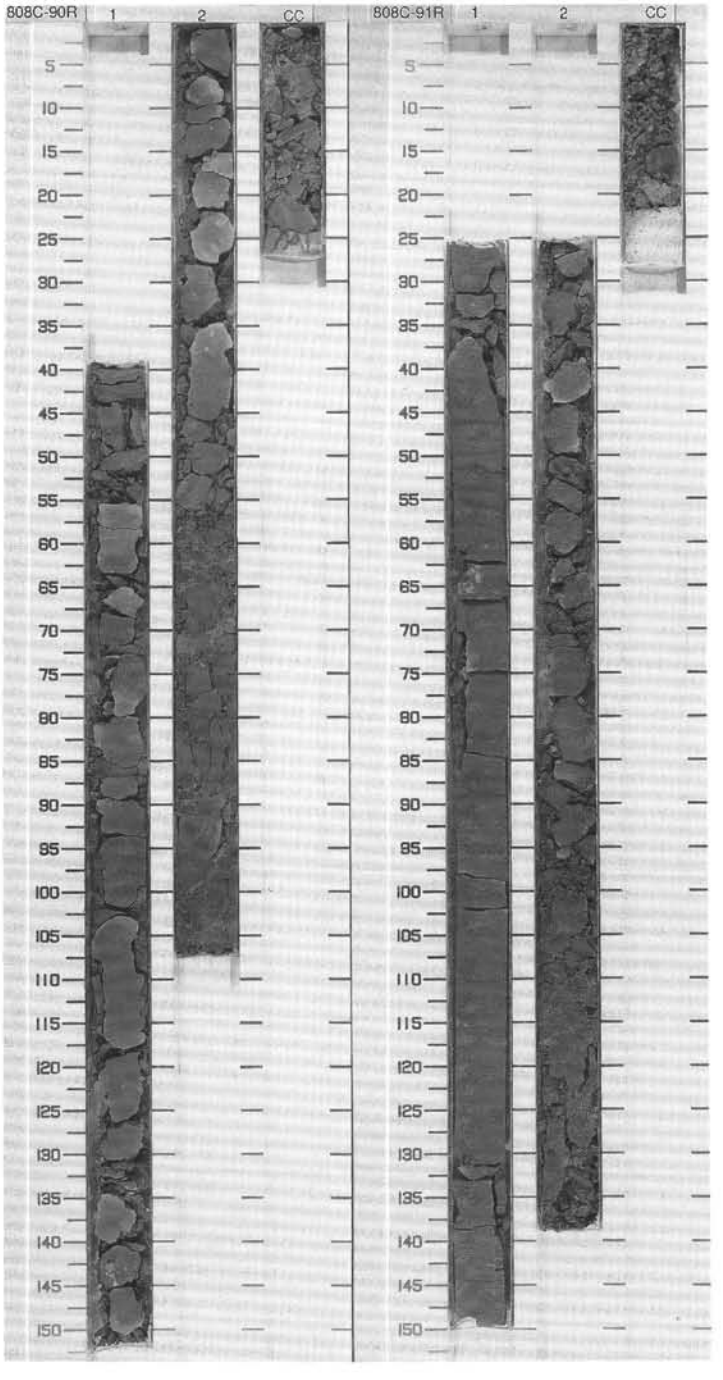
LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE, with numerous burrows and traces of disseminated forams. The sediment is mottled, and the principal color is dark gray (2.5Y 4/0). A coarser-grained interval rich in detrital biotite occurs in Section 1, 64-68 cm, and there are small, irregular lenses of micritic claystone in Section 1, 120-121 cm and in Section 2, 103-105 cm. Much of the core has been deformed to the state of drill breccia and drilling slurry.

SMEAR SLIDE SUMMARY (%):

	1, 65 M	1, 110 D
TEXTURE:		
Silt	5	4
Clay	4	5
COMPOSITION:		
Calcite	2	2
Clay	4	5
Feldspar	3	3
Mica	2	—
Oxide	2	2
Quartz	4	



SITE 808 HOLE C CORE 92R CORED INTERVAL 5840.2-5849.9 mbsl; 1165.6-1175.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		F/M NN6 - NN7	B		R	0-27 ● 1-2.32 ● 0-32 ● 1-2.21 ● 0-31 ● 1-2.27 ● %C=0.35 ● %TOC=0.3 ●	%C=0.46 ●	1 2 CC	0.5 1.0		X X X X X X /	≈ ≈ ≈ ≈ ≈ ≈ ~	* * *

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE. The sediment is mottled and dominantly dark gray in color (2.5Y 4/0), with burrows and sparse disseminated forams. Most of the core has been intensely fragmented into a drilling breccia. Small pods of micritic claystone occur in Section 1, 72-74 and 95-96 cm; this fine-grained sediment is light brownish gray (2.5Y 6/2).

SMEAR SLIDE SUMMARY (%):

	1, 50 D	CC, 15 M
TEXTURE:		
Silt	4	3
Clay	5	5
COMPOSITION:		
Calcite	2	—
Clay	5	4
Feldspar	3	2
Mica	2	1
Micrite	—	5
Nannofossils	2	—
Oxide	2	2
Quartz	3	2
Rock fragment	1	—

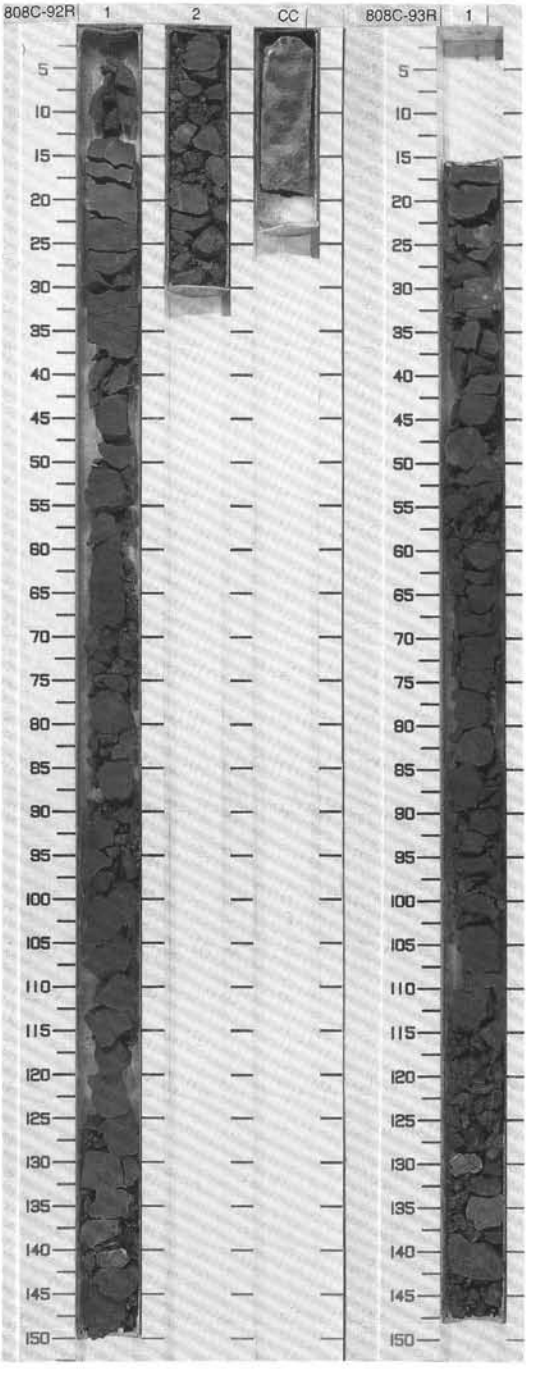
SITE 808 HOLE C CORE 93R CORED INTERVAL 5849.9-5859.5 mbsl; 1175.3-1184.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		B (NN6 - NN7)	B		0-31 ● 1-2.24 ●	0-33 ● 1-2.33 ●	%C=0.64 ● %TOC=0.27 ●	1	0.5 1.0		X X X X		IW

LITHOLOGIC DESCRIPTION

SILTY CLAYSTONE

Major lithology: Bioturbated SILTY CLAYSTONE; the entire core is intensely fragmented into a drilling breccia. There are small, irregular patches of micritic claystone, grayish brown in color (2.5Y 5/2). Otherwise, the sediment is mottled and the principal color is dark gray (2.5Y 4/0). Pyrite is present as a burrow fill.



SITE 808 HOLE C CORE 94R CORED INTERVAL 5859.5-5869.2 mbsl; 1184.9-1194.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		B (NN6 - NN7)	B		? R	●0.31 ●2.3 ●0.32 ●2.28 ●0.39 ●2.28	%IC=0.77 %IC=0.36 %TOC=0.26	1 2 CC	0.5 1.0				1W, CC, *

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation

SMEAR SLIDE SUMMARY (%):

	1, 90 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	1
Chlorite	1
Clay	5
Feldspar	3
Mica	2
Oxide	1
Quartz	3
Rock fragment	1

SITE 808 HOLE C CORE 95R CORED INTERVAL 5869.2-5878.9 mbsl; 1194.6-1204.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		F/M NN6 - NN7	B		N	●0.26 ●2.38 ●0.30 ●2.28	%IC=0.51 %IC=4.3 %TOC=0.21	1 CC	0.5 1.0				* *

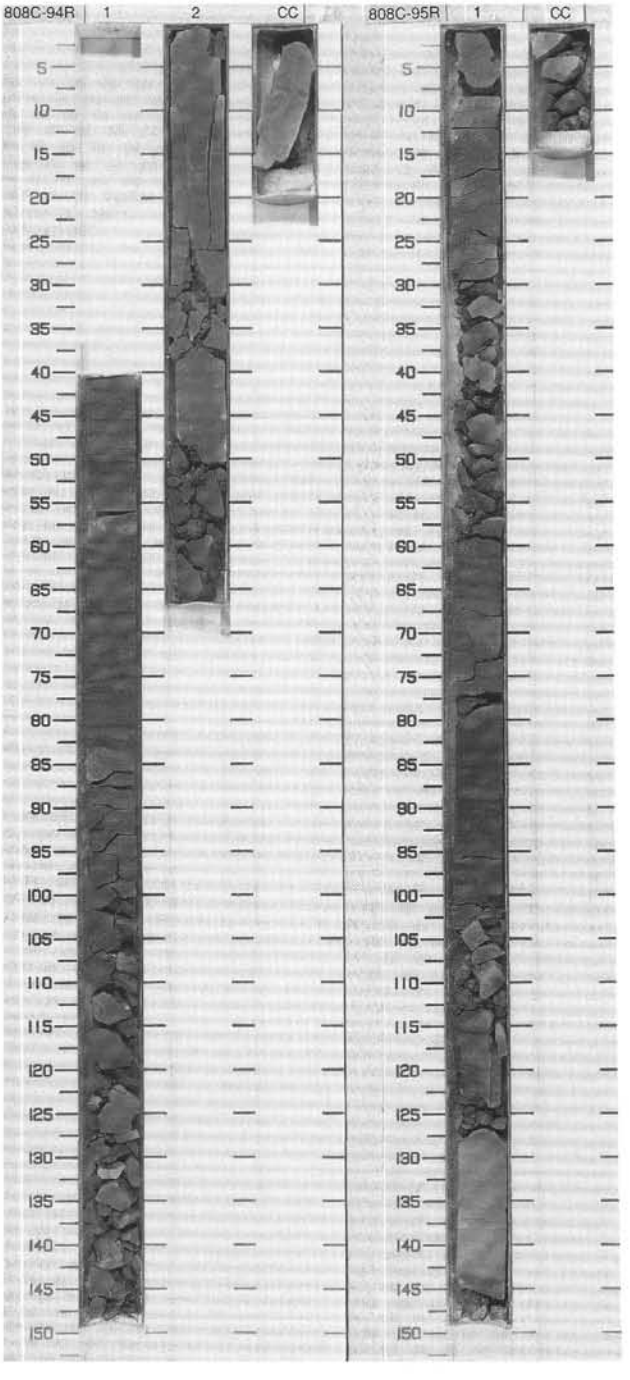
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation. Section 1, 127-150 cm, shows extensive diagenetic micritization of lithology.

SMEAR SLIDE SUMMARY (%):

	1, 23 D	1, 133 M
TEXTURE:		
Silt	4	4
Clay	5	5
COMPOSITION:		
Calcite	2	–
Clay	5	3
Feldspar	3	2
Mica	1	2
Micrite	–	5
Nannofossils	–	3
Oxide	2	2
Quartz	3	2



SITE 808 HOLE C CORE 96R CORED INTERVAL 5878.9-5888.6 mbsl; 1204.3-1214.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		B (NN5 - NN6)	B		R N	0-31 2.28 / 0-30 2.31	%IC=0.35 %TOC=0.05	1 2	0.5 1.0				1W * 1W

LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1) with local diffuse, varicolored, laminae/bands on mm to cm scale. Mottling due to bioturbation.

SMEAR SLIDE SUMMARY (%):

	1, 42 D
TEXTURE:	
Silt	4
Clay	5
COMPOSITION:	
Calcite	2
Chlorite	2
Clay	5
Feldspar	3
Oxide	2
Quartz	3

SITE 808 HOLE C CORE 97R CORED INTERVAL 5888.6-5898.3 mbsl; 1214.0-1223.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MIOCENE		F/M NN5 - NN6	B		N?	0-31 2.32 / 0-30 2.29	%IC=0.35 %TOC=0.05	1	0.5 1.0				UB *

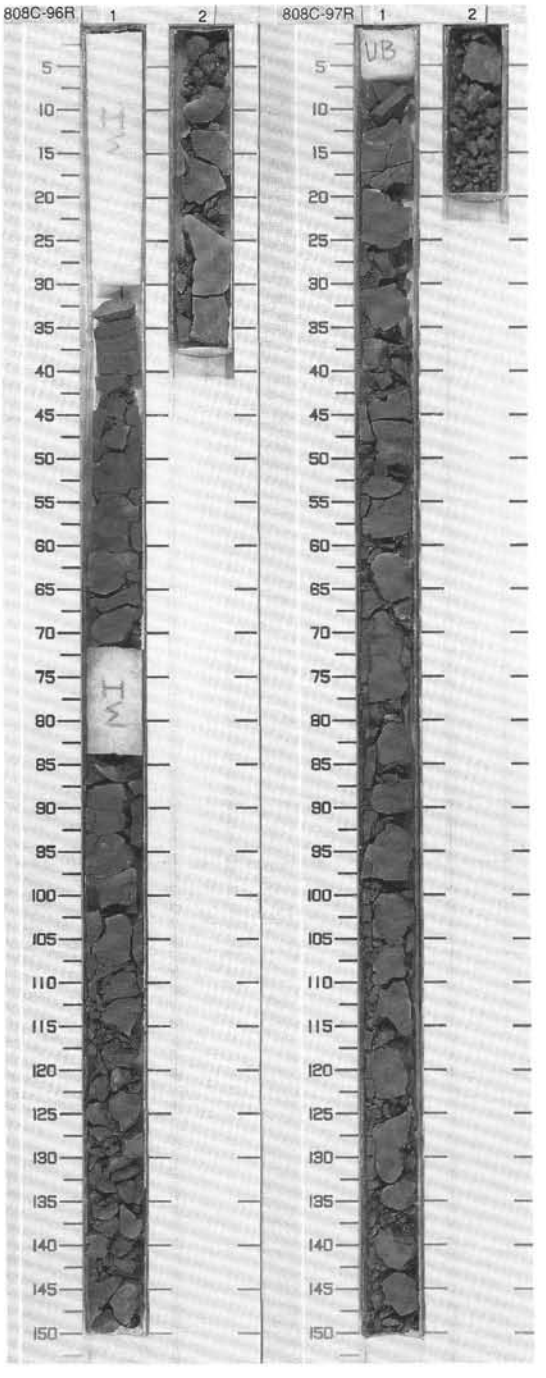
LITHOLOGIC DESCRIPTION

CLAYEY SILTSTONE/SILTY CLAYSTONE

Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Burrows appear very flattened and sheared relative to overlying sections.

SMEAR SLIDE SUMMARY (%):

	1, 50 D
TEXTURE:	
Silt	5
Clay	4
COMPOSITION:	
Calcite	2
Chlorite	2
Clay	4
Feldspar	3
Mica	2
Nannofossils	2
Oxide	2
Quartz	4
Rock fragment	2

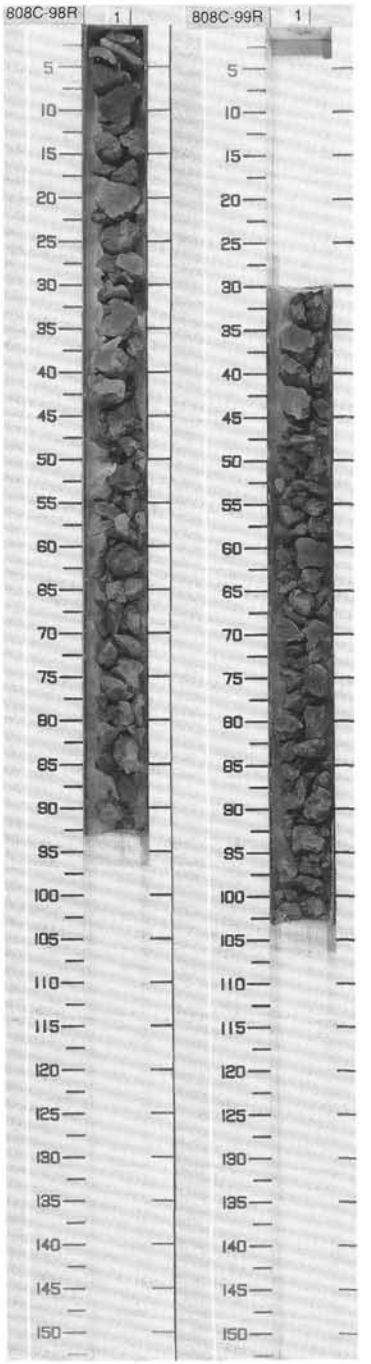


SITE 808 HOLE C CORE 98R CORED INTERVAL 5898.3-5908.0 mbsl; 1223.7-1233.4 mbsf

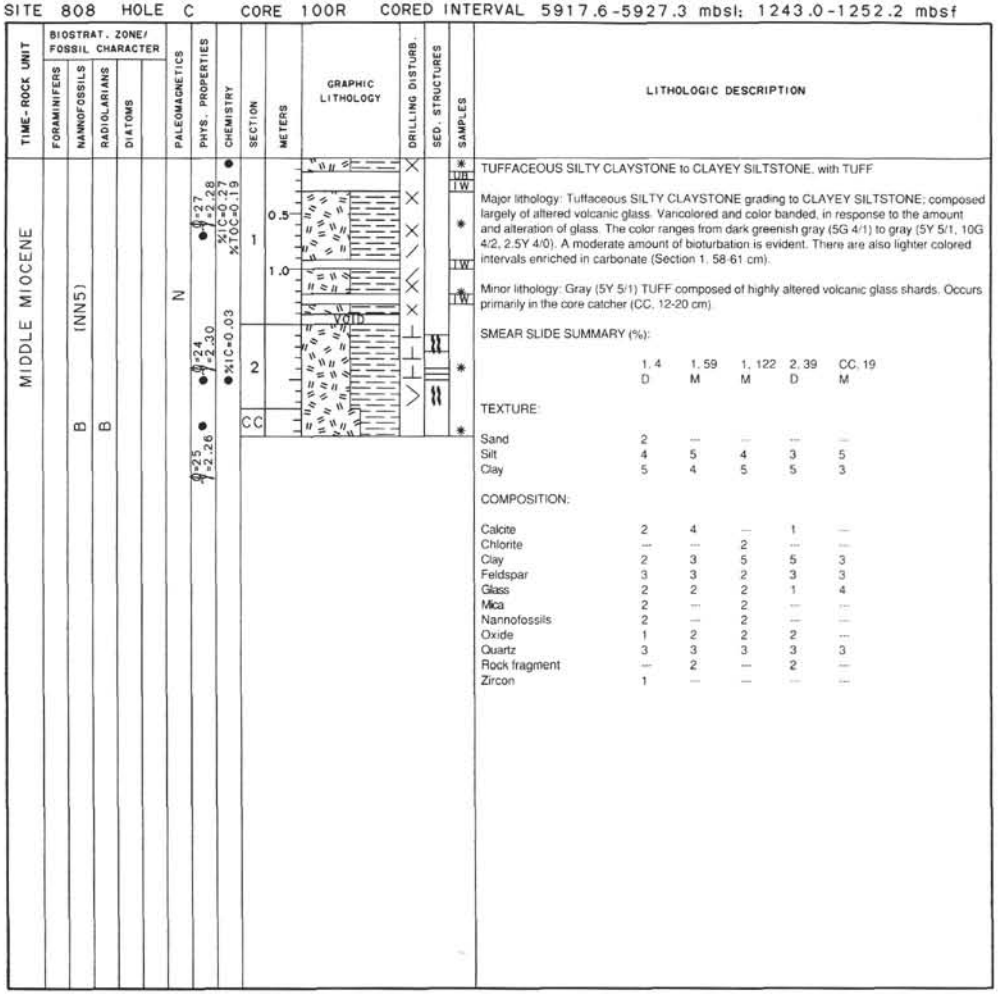
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
MIDDLE MIOCENE		B (NN5)	B			ϕ=31 ● ρ=2.31	%IC=0.34 ● %TOC=0.12	1	0.5					CLAYEY SILTSTONE/SILTY CLAYSTONE Major lithology: Mottled CLAYEY SILTSTONE/SILTY CLAYSTONE (5Y 4/1). Mottling due to bioturbation. Burrows appear very flattened and sheared relative to overlying sections. Section 1, 90-93 cm, contains hard brown mineral, probably siderite.

SITE 808 HOLE C CORE 99R CORED INTERVAL 5908.0-5917.6 mbsl; 1233.4-1243.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
MIDDLE MIOCENE		B (NN5)	B			ϕ=30 ● ρ=2.29	%IC=0.25 ● %TOC=0.04	1	0.5		X X X		IW	SILTY CLAYSTONE Major lithology: Drilling breccia composed of bioturbated SILTY CLAYSTONE. Fragments are rounded by drilling abrasion. The dominant color is dark gray (2.5Y 4/0).



SITE 808 HOLE C CORE 100R CORED INTERVAL 5917.6-5927.3 mbsl; 1243.0-1252.2 mbsf



LITHOLOGIC DESCRIPTION

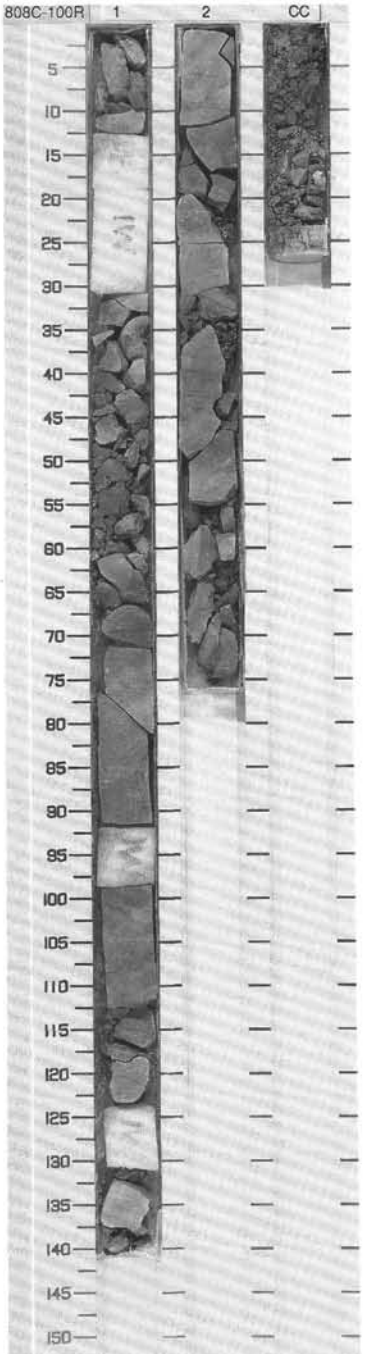
TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE, with TUFF

Major lithology: Tuffaceous SILTY CLAYSTONE grading to CLAYEY SILTSTONE; composed largely of altered volcanic glass. Varicolored and color banded, in response to the amount and alteration of glass. The color ranges from dark greenish gray (5G 4/1) to gray (5Y 5/1, 10G 4/2, 2.5Y 4/0). A moderate amount of bioturbation is evident. There are also lighter colored intervals enriched in carbonate (Section 1, 58-61 cm).

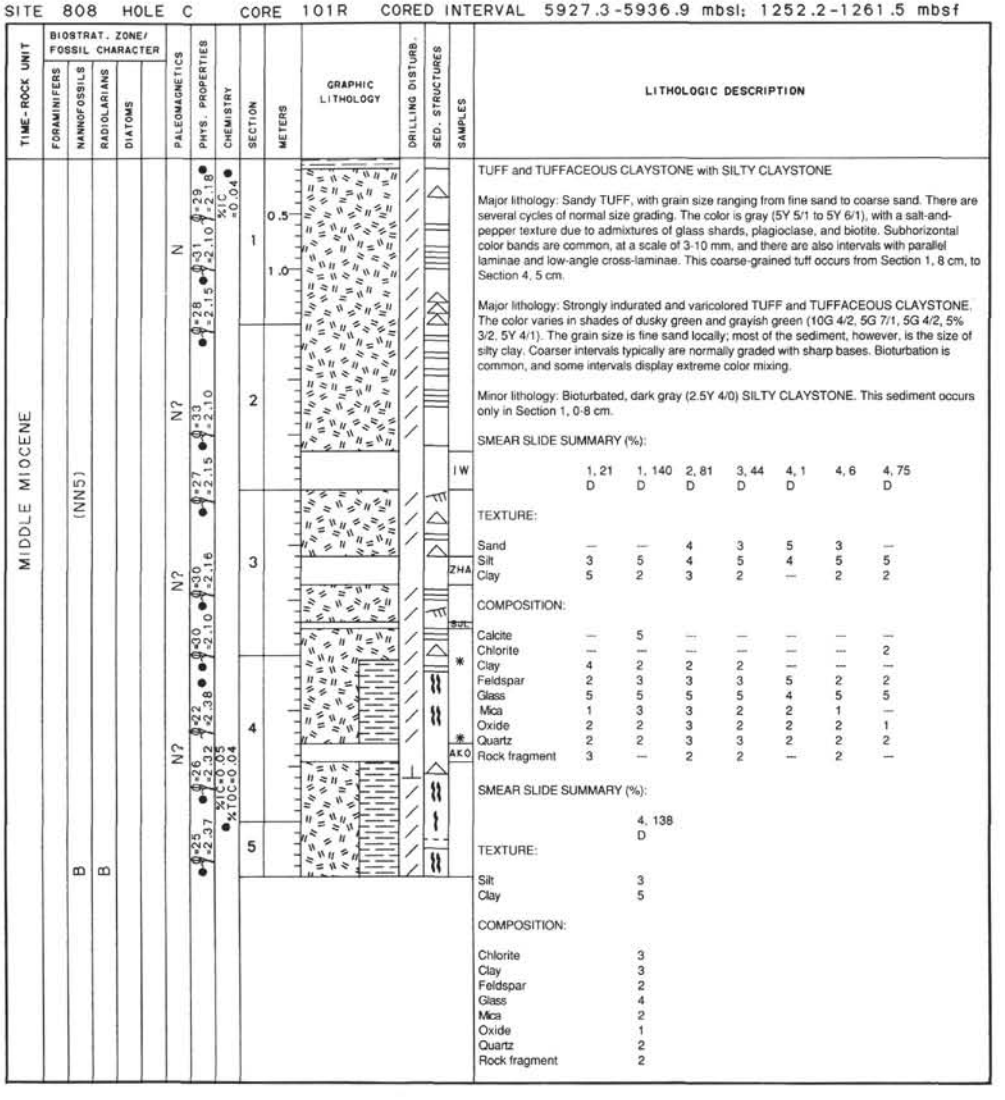
Minor lithology: Gray (5Y 5/1) TUFF composed of highly altered volcanic glass shards. Occurs primarily in the core catcher (CC, 12-20 cm).

SMEAR SLIDE SUMMARY (%):

	1, 4 D	1, 59 M	1, 122 M	2, 39 D	CC, 19 M
TEXTURE:					
Sand	2	—	—	—	—
Silt	4	5	4	3	5
Clay	5	4	5	5	3
COMPOSITION:					
Calcite	2	4	—	1	—
Chlorite	—	—	2	—	—
Clay	2	3	5	5	3
Feldspar	3	3	2	3	3
Glass	2	2	2	1	4
Mica	2	—	2	—	—
Nannofossils	2	—	2	—	—
Oxide	1	2	2	2	—
Quartz	3	3	3	3	3
Rock fragment	—	2	—	2	—
Zircon	1	—	—	—	—



SITE 808 HOLE C CORE 101R CORED INTERVAL 5927.3-5936.9 mbsl; 1252.2-1261.5 mbsf



LITHOLOGIC DESCRIPTION

TUFF and TUFFACEOUS CLAYSTONE with SILTY CLAYSTONE

Major lithology: Sandy TUFF, with grain size ranging from fine sand to coarse sand. There are several cycles of normal size grading. The color is gray (5Y 5/1 to 5Y 6/1), with a salt-and-pepper texture due to admixtures of glass shards, plagioclase, and biotite. Subhorizontal color bands are common, at a scale of 3-10 mm, and there are also intervals with parallel laminae and low-angle cross-laminae. This coarse-grained tuff occurs from Section 1, 8 cm, to Section 4, 5 cm.

Major lithology: Strongly indurated and varicolored TUFF and TUFFACEOUS CLAYSTONE. The color varies in shades of dusky green and grayish green (10G 4/2, 5G 7/1, 5G 4/2, 5% 3/2, 5Y 4/1). The grain size is fine sand locally; most of the sediment, however, is the size of silty clay. Coarser intervals typically are normally graded with sharp bases. Bioturbation is common, and some intervals display extreme color mixing.

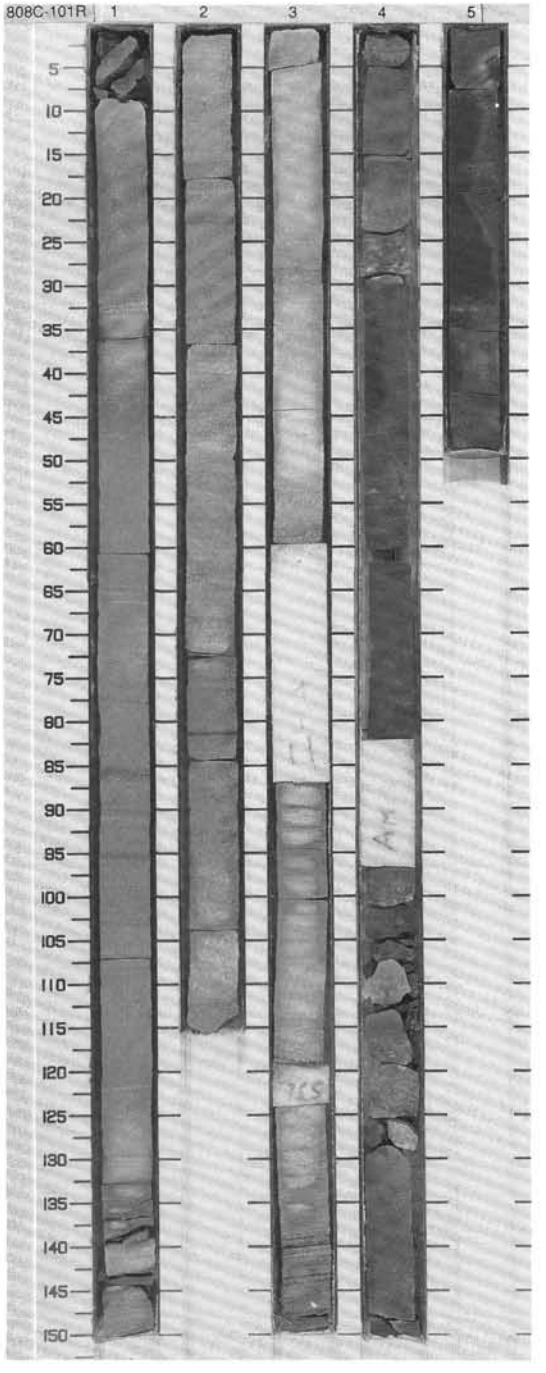
Minor lithology: Bioturbated, dark gray (2.5Y 4/0) SILTY CLAYSTONE. This sediment occurs only in Section 1, 0-8 cm.

SMEAR SLIDE SUMMARY (%):

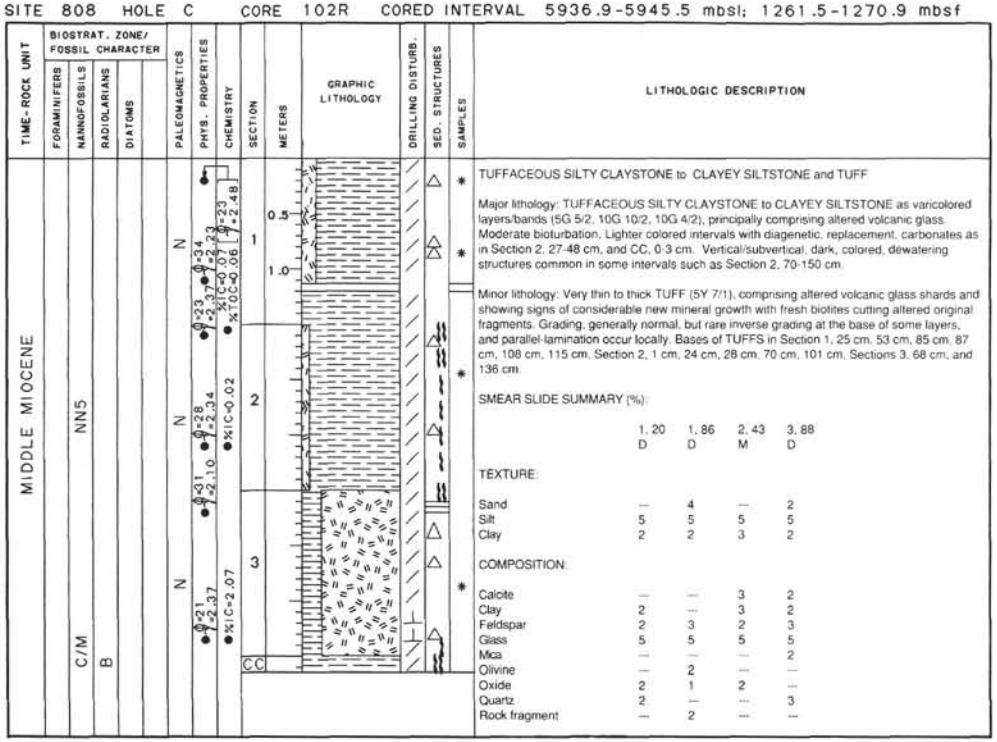
	1, 21 D	1, 140 D	2, 81 D	3, 44 D	4, 1 D	4, 6	4, 75 D
TEXTURE:							
Sand	—	—	4	3	5	3	—
Silt	3	5	4	5	4	5	5
Clay	5	2	3	2	—	2	2
COMPOSITION:							
Calcite	—	5	—	—	—	—	—
Chlorite	—	—	—	—	—	—	2
Clay	4	2	2	2	—	—	—
Feldspar	2	3	3	3	5	2	2
Glass	5	5	5	5	4	5	5
Mica	1	3	3	2	2	1	—
Oxide	2	2	3	2	2	2	1
Quartz	2	2	3	3	2	2	2
Rock fragment	3	—	2	2	—	2	—

SMEAR SLIDE SUMMARY (%):

	4, 138 D
TEXTURE:	
Silt	3
Clay	5
COMPOSITION:	
Chlorite	3
Clay	3
Feldspar	2
Glass	4
Mica	2
Oxide	1
Quartz	2
Rock fragment	2



SITE 808 HOLE C CORE 102R CORED INTERVAL 5936.9-5945.5 mbsl; 1261.5-1270.9 mbsf



LITHOLOGIC DESCRIPTION

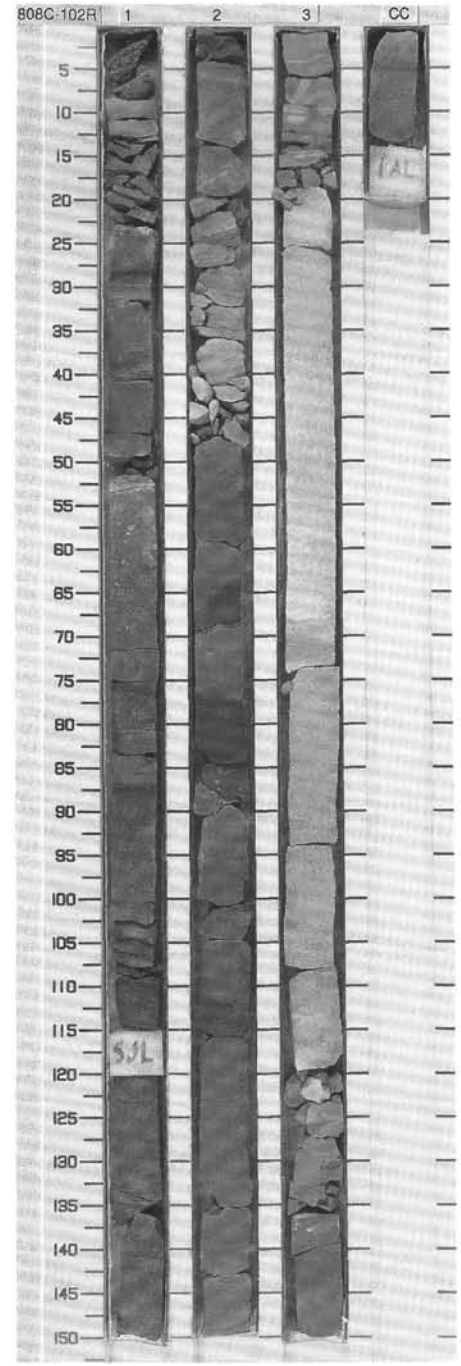
TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE and TUFF

Major lithology: TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE as varicolored layers/bands (5G 5/2, 10G 10/2, 10G 4/2), principally comprising altered volcanic glass. Moderate bioturbation. Lighter colored intervals with diagenetic, replacement, carbonates as in Section 2, 27-48 cm, and CC, 0-3 cm. Vertical/subvertical, dark, colored, dewatering structures common in some intervals such as Section 2, 70-150 cm.

Minor lithology: Very thin to thick TUFF (5Y 7/1), comprising altered volcanic glass shards and showing signs of considerable new mineral growth with fresh biotites cutting altered original fragments. Grading, generally normal, but rare inverse grading at the base of some layers, and parallel-lamination occur locally. Bases of TUFFS in Section 1, 25 cm, 53 cm, 85 cm, 87 cm, 108 cm, 115 cm, Section 2, 1 cm, 24 cm, 28 cm, 70 cm, 101 cm, Sections 3, 68 cm, and 136 cm.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 86 D	2, 43 M	3, 88 D
TEXTURE:				
Sand	–	4	–	2
Silt	5	5	5	5
Clay	2	2	3	2
COMPOSITION:				
Calcite	–	–	3	2
Clay	2	–	3	2
Feldspar	2	3	2	3
Glass	5	5	5	5
Mica	–	–	–	2
Olivine	–	2	–	–
Oxide	2	1	2	–
Quartz	2	–	–	3
Rock fragment	–	2	–	–



SITE 808 HOLE C CORE 103R CORED INTERVAL 5945.5-5955.0 mbsl; 1270.9-1280.4 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE
BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS C/M; NANNOFOSSILS NN5; RADIOLARIANS B; DIATOMS
PALEOMAGNETICS: N
PHYS. PROPERTIES: 2.21 2.49; 2.24 2.39; 2.19 2.44; 2.22 2.38; 2.24 2.08; 2.22 2.41
CHEMISTRY: %IC=1.03 %TOC=0.12; %IC=0.02; %IC=0.81
SECTION: 1, 2, 3, CC
METERS: 0.5, 1.0
GRAPHIC LITHOLOGY
DRILLING DISTURB.
SED. STRUCTURES
SAMPLES: IW

LITHOLOGIC DESCRIPTION

TUFFACEOUS SILTY CLAYSTONE to CLAYEY CLAYSTONE and TUFF

Major lithology: TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE as varicolored layers/bands, mainly in hues of red and green (10G 4/2, 10G 5/2, 5R 3/2), principally comprising altered volcanic glass. Moderate bioturbation.

Minor lithology: Very thin to thick TUFF layers (2.5Y 8/0), comprising altered volcanic glass shards and showing signs of considerable new mineral growth with fresh biotites cutting altered original fragments. Grading, general normal, but rare inverse grading at the base of some layers, and parallel-lamination occur locally. Bases of TUFFS in Section 1, 45 cm, Section 2, 60 cm, Section 3, 18 cm, and 108 cm (amalgamated events).

SMEAR SLIDE SUMMARY (%):

	1, 35 M	2, 53 D	3, 93 D
TEXTURE:			
Silt	4	2	5
Clay	5	5	3
COMPOSITION:			
Chlorite	2	1	—
Clay	5	5	3
Feldspar	3	2	2
Glass	3	1	5
Mica	2	2	—
Quartz	3	3	3
Rock fragment	—	—	1

SITE 808 HOLE C CORE 104R CORED INTERVAL 5955.0-5964.5 mbsl; 1280.4-1289.9 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE
BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/M; NANNOFOSSILS NN5; RADIOLARIANS B; DIATOMS
PALEOMAGNETICS: N
PHYS. PROPERTIES: 2.19 2.49; 2.20 2.43; 2.24 2.39; 2.21 2.45
CHEMISTRY: %IC=0.81 %TOC=0.18; %IC =1.94; %IC=1.65
SECTION: 1, 2
METERS: 0.5, 1.0
GRAPHIC LITHOLOGY
DRILLING DISTURB.
SED. STRUCTURES
SAMPLES

LITHOLOGIC DESCRIPTION

TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE and TUFF

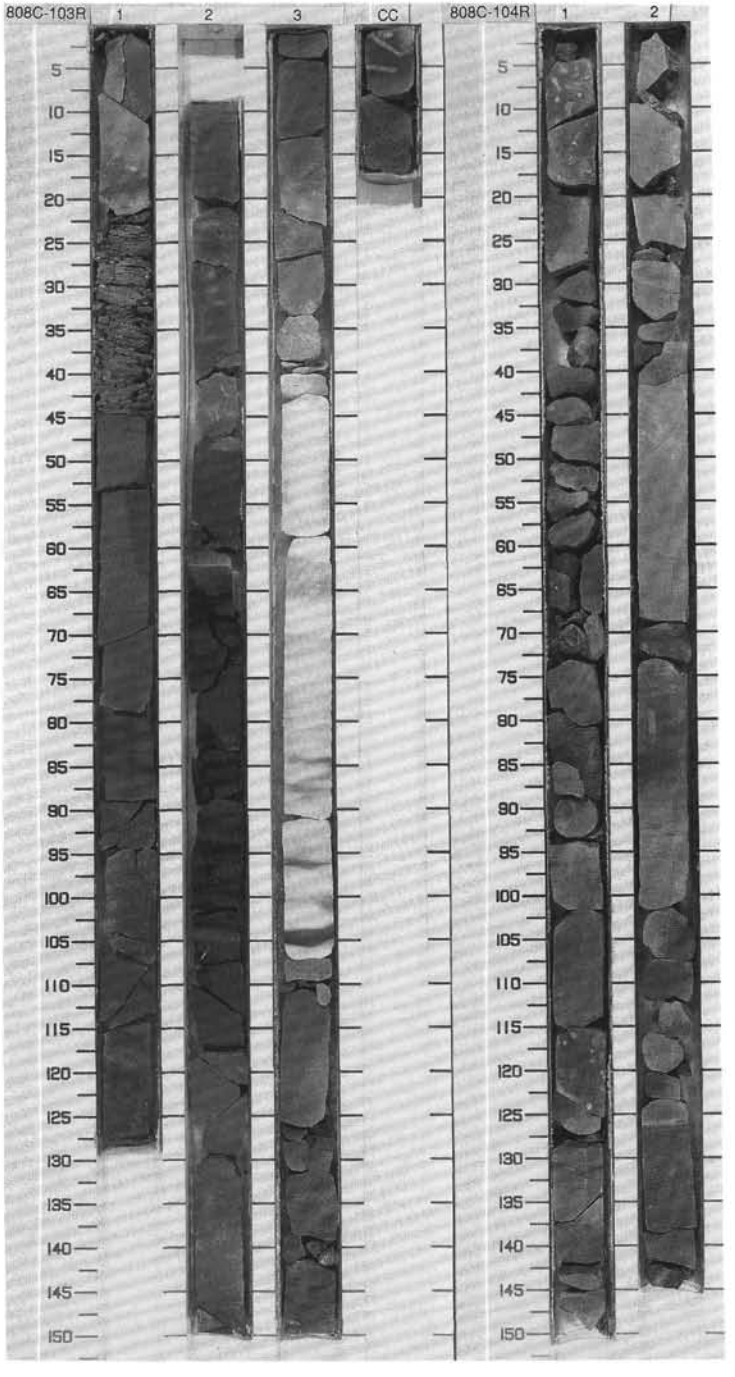
Major lithology: TUFFACEOUS SILTY CLAYSTONE to CLAYEY SILTSTONE as varicolored layers/bands, mainly in hues of red and green (10G 4/2), principally comprising altered volcanic glass. Moderate bioturbation. Stylolites above early normal fault in Section 1, 105-110 cm.

Minor lithology: Very thin TUFF layers (2.5Y 8/0), comprising altered volcanic glass shards. Bases of TUFFS in Section 1, 127 cm, Section 2, 42 cm, 52 cm and 95-98 cm (disseminated due to bioturbation).

808F 1M through 3M NO RECOVERY

808F 4M WASH CORE

808G 1W WASH CORE

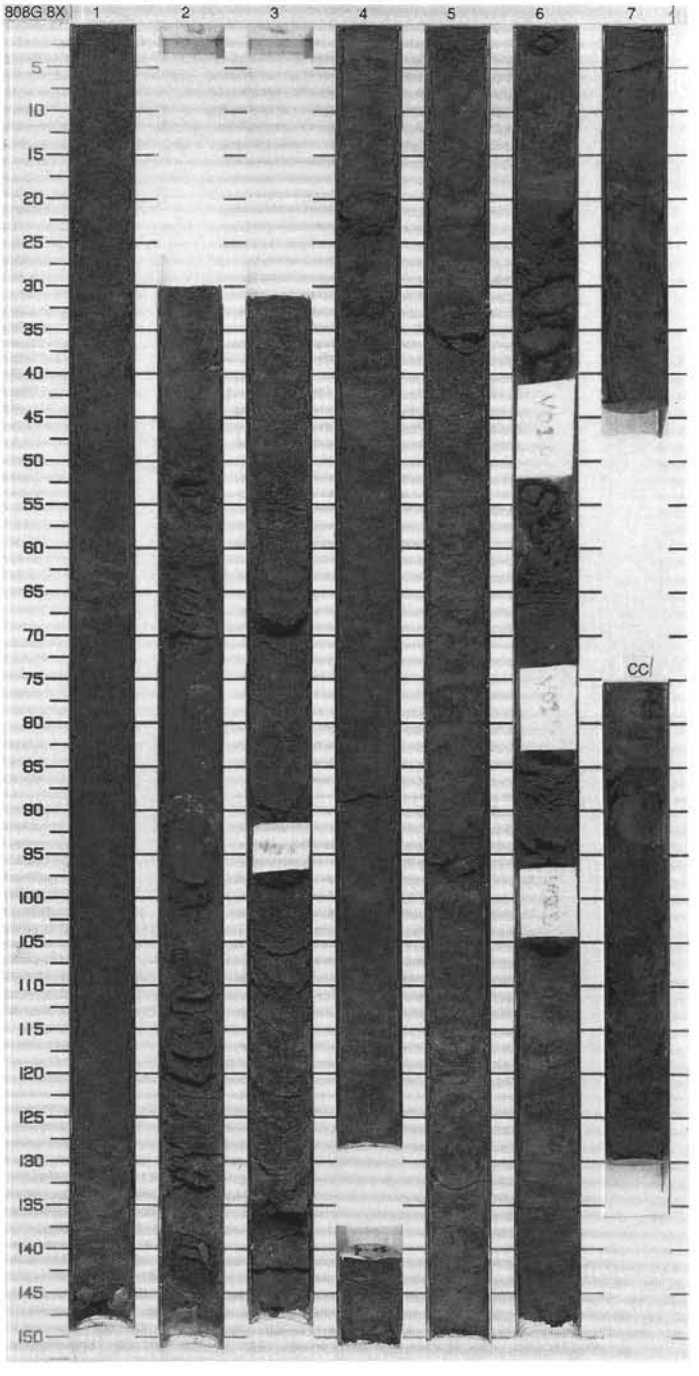


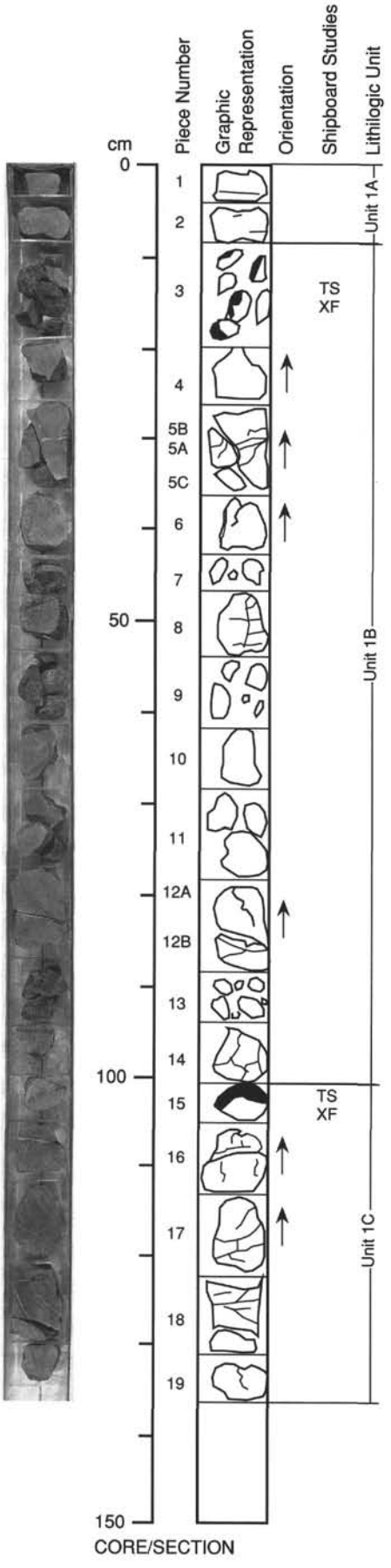
808G2X through 7M NO RECOVERY

SITE 808 HOLE G CORE 8X CORED INTERVAL 4877.3-4887.3 mbsl; 193.0-203.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	A/G	NN21						1	0.5					CLAYEY SILT AND SILT with FINE SAND AND VOLCANIC ASH Dominant lithology: CLAYEY SILT. Dark gray color (2.5Y 4/0 to 5Y 3/1). Most structureless. Deformed by expansion of core. Irregular traces of nannofossil-rich clay. Local laminae of silt. Dominant lithology: SILT. Dark gray color (2.5Y 4/0 to 5Y 3/1). Typically with sharp bases and normal size grading. Minor lithology: Fine to very fine SAND. Similar in most respects to silt intervals, but slightly coarser grained. Minor lithology: silt and sand-sized volcanic ASH. Composed of clear to dark brown glass shards, opaque grains, mafic minerals, and plagioclase. Occurs in Section 7, 5-17 cm.
									1.0					
								2					KM	
								3					ALE TAY	
								4					WAR	
								5						
								6						
								7						
								CC						

808G 9M through 12M NO RECOVERY





131-808C-105R-1

UNIT 1A: PLAGIOCLASE PHYRIC BASALT

Pieces 1-2

CONTACTS: None.
PHENOCRYSTS: Homogeneous distribution.
Plagioclase - 1-2%; 0.2-0.3 mm; tablets, subhedral.
GROUNDMASS: Fine grained, intersertal to subophitic consisting of altered plagioclase laths, interstitial clinopyroxene and altered brownish glass.
VESICLES: 1-2%; 0.3-0.8 mm; rounded; homogeneous distribution.
COLOR: Light greenish gray.
STRUCTURE: Massive.
ALTERATION: Moderately to highly altered (alteration increasing from Piece 1 to Piece 2).
VEINS/FRACTURES: 0-2%; 0.2-0.5 mm; subhorizontal; filled with calcite and minor pyrite.
ADDITIONAL COMMENTS: Piece 2 shows yellowish to reddish oxidation haloes probably related to fractures (top and bottom of the piece).

UNIT 1B: APHYRIC TO PLAGIOCLASE PHYRIC BASALT

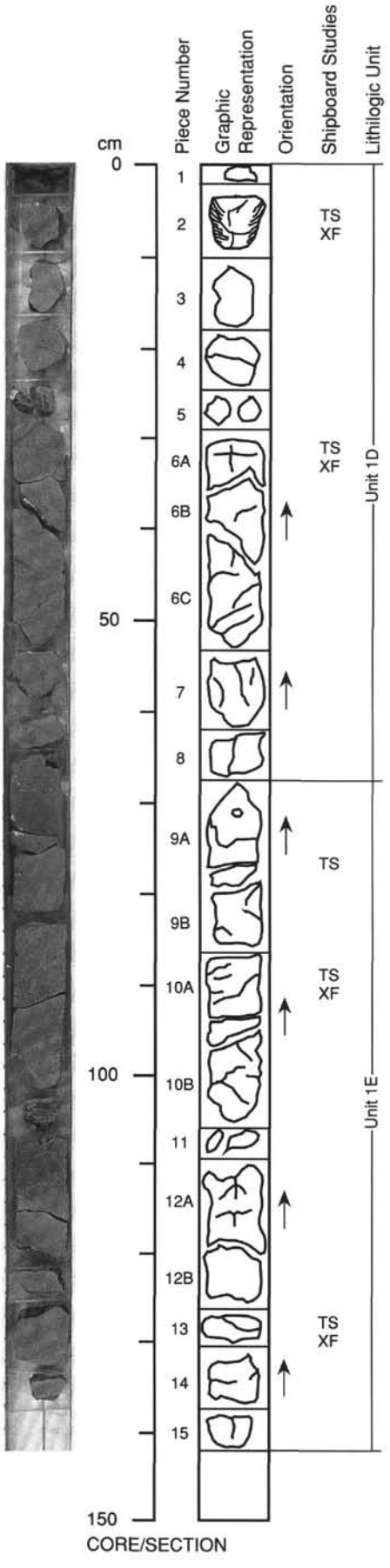
Pieces 3-14

CONTACTS: None, except a narrow (0.5 mm) glassy margin (Piece 3).
PHENOCRYSTS: Totally pseudomorphed by clay minerals.
Plagioclase - <1-2%; 0.2-1.5 mm; tablets, anhedral to subhedral, generally fresh.
GROUNDMASS: Fine to medium grained, coarsening from Piece 3 to 6 and decreasing from Piece 10 to 14. Intersertal texture, often radiating and constituted of 30-40% plagioclase, interstitial clinopyroxene, 15% totally altered olivine, 15% glassy mesostasis, partly devitrified and altered (smectite), and rare magnetite.
VESICLES: 0-5%; 0.2-0.4 mm; rounded or lobate; heterogeneous distribution; vesicles are more frequent in the upper pieces of the subunit and are filled with smectite, calcite, and altered yellowish devitrified glass.
COLOR: Light gray to greenish gray with frequent reddish oxidation haloes.
STRUCTURE: Massive.
ALTERATION: Moderately to highly altered.
VEINS/FRACTURES: 0-6%; 0.5-2.5 mm; non-oriented; filled with calcite (Pieces 3, 4, 8), calcite and zeolite (Pieces 5A, 5B, 5C, and 11) and calcite and chlorite (Piece 14). The widest veins are in Piece 14.

UNIT 1C: APHYRIC BASALT

Pieces 15-19

CONTACTS: None, except a 0.5 mm brownish glassy margin with variolitic texture.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, intersertal to locally intergranular, constituted of 30-40% plagioclase laths (up to 0.5 mm) sometimes radiating, 10-20% clinopyroxene, 15% olivine (0.1-0.2 mm) totally altered, 15% glass, partly altered (reddish smectite) and partly devitrified (spherulitic texture), and rare dispersed magnetite.
VESICLES: 0-3%; 0.2-0.4 mm; generally rounded; they are present only in Piece 15; vesicles are partly filled with smectite with minor microcrystalline calcite.
COLOR: Dark gray to light greenish gray.
STRUCTURE: Massive.
ALTERATION: From slightly to patchy moderately altered; Piece 19 is the most altered.
VEINS/FRACTURES: 0-5%; 0.2-4 mm; crossing each other; a wide (4 mm) subhorizontal fracture in Piece 16 is filled with well crystallized calcite (core) and green material (borders) (chlorite?). Thinner, irregular cross cutting veins are filled with calcite.
ADDITIONAL COMMENTS: Neither top nor bottom of subunit recognizable.



131-808C-106R-1

UNIT 1D: OLIVINE-PLAGIOCLASE PHYRIC TO APHYRIC BASALT

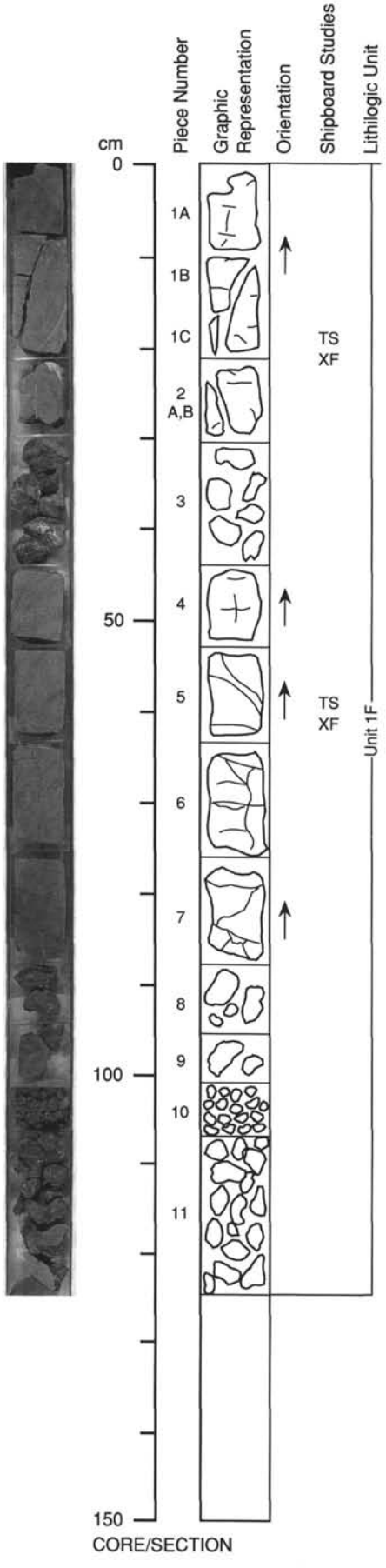
Pieces 1-8

CONTACTS: None: only a variolitic and vesicular 1-2 mm dark green glassy margin in Piece 2.
PHENOCRYSTS: Rare and sparsely distributed.
Plagioclase - 0-3%; 0.5-0.8 mm; tabular euhedral, totally replaced by clay minerals except a narrow fresh clear rim (overgrown?)
Olivine - 0-1%; 0.2-0.3 mm; microphenocrysts, subhedral totally pseudomorphed by greenish-yellowish alteration minerals.
GROUNDMASS: Fine grained intergranular, locally subophitic made of 50% often radiating plagioclase laths(~0.5 mm), 40% anhedral clinopyroxene and interstitial partly altered glass (smectite)
VESICLES: 0-3%; 0.1-0.3 mm; spherical to lobate; heterogeneously distributed; concentrated in the upper part of Piece 2; empty or partly filled with carbonate and/or clay minerals.
COLOR: Medium to dark gray.
STRUCTURE: Massive.
ALTERATION: Slightly altered. Phenocrysts are totally replaced and glassy mesostasis is patchy altered to smectite.
VEINS/FRACTURES: 2-5%; 0.5-1 mm; vein network; Fe-oxidation along some veins and adjacent rock. Thick veins filled with calcite (core) and green chlorite (?)(margin). Thin veins: only calcite.
ADDITIONAL COMMENTS: Grain size coarsening from Piece 1 to 5. All the subunit is generally coarser and better crystallized than the former ones. Piece 1 is a reddish-brown fine grained slate: it may be a baked fragment of altered volcanic ash.

UNIT 1E: PLAGIOCLASE PHYRIC BASALT

Pieces 9-15

CONTACTS: Dark green glassy variolitic 2 mm margin in Piece 9A.
PHENOCRYSTS: Homogeneous distribution.
Plagioclase - 0-2%; 0.5-0.7 mm; tabular subhedral to euhedral, generally fresh.
GROUNDMASS: Fine-medium grained, intergranular to doleritic consisting of 30% plagioclase laths (up to 1 mm), 30% clinopyroxene,10% altered olivine, magnetite, and interstitial devitrified altered glass. From Piece 15 downward, texture tends to be intersertal with more glass.
VESICLES: 0-2%; ~1 mm; spherical; dishomogeneous distribution; vesicles are mainly concentrated in upper part of Piece 9 and are filled with smectite and calcite.
COLOR: Dark gray to dark greenish-gray; yellowish to reddish irregular zones and haloes.
STRUCTURE: Massive.
ALTERATION: Slightly to moderately altered; alteration increases near veins.
VEINS/FRACTURES: 3-10%; 0.2-2 mm; non-oriented; occurring throughout and cross cutting each other. Normally filled with calcite, chlorite, and minor pyrite(?). The thicker veins are zonally filled with chlorite and smectite at the borders and large calcite crystals in the center.The thinner ones are filled with microcrystalline calcite. Reddish oxidation haloes are common at their sides. In Piece 9 one large (2mm) vein is filled with calcite and variolitic green glass.
ADDITIONAL COMMENTS: This subunit is coarser grained than 1D. From Piece 13 grain size slightly decreases and rocks become aphyric.

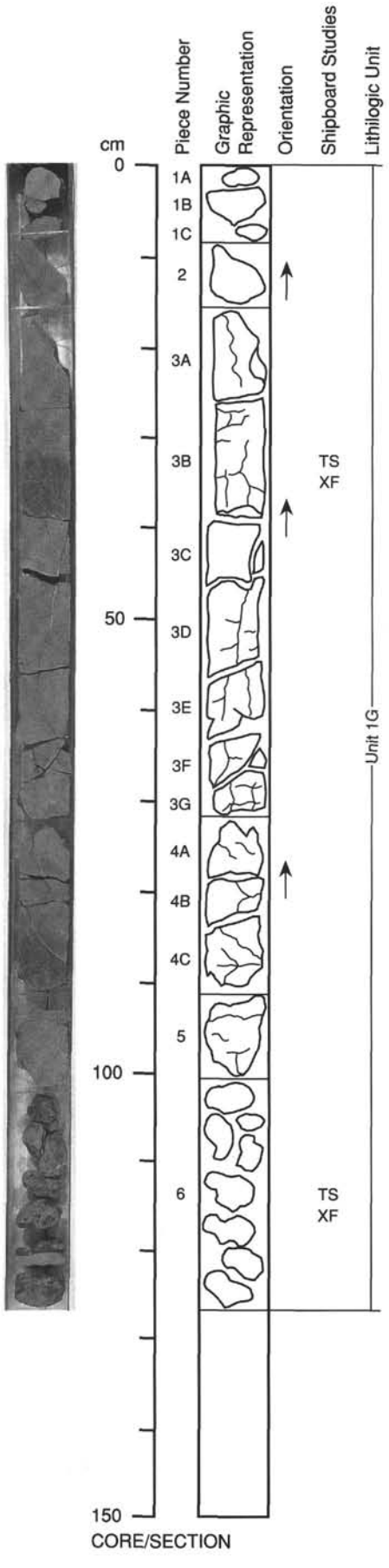


131-808C-106R-2

UNIT 1F: CLINOPYROXENE-PLAGIOCLASE PHYRIC TO APHYRIC BASALT

Pieces 1-11

CONTACTS: None.
PHENOCRYSTS: Homogeneous distribution in Pieces 1-2. Pieces 3-11 aphyric.
Plagioclase - 0-3%; ~0.8 mm; euhedral, tabular, fresh
Clinopyroxene - 0-1%; up to 1 mm; subhedral, prismatic, fresh
GROUNDMASS: Medium grained intersertal divergent to doleritic consisting of 40% plagioclase laths (0.3-1 mm), ~40% slightly altered clinopyroxene, ~10% subhedral olivine completely replaced by green chlorite(?), 2% magnetite, and interstitial altered glass (smectite?).
VESICLES: Nonvesicular.
COLOR: Gray to very dark gray, greenish gray the altered portions.
STRUCTURE: Massive.
ALTERATION: Slightly altered, expecially glassy mesostasis (smectite?).
VEINS/FRACTURES: 0-7%; 0.8-0.3 mm; mainly irregular, sometimes subhorizontal; some veins are filled prevalently with fibrous calcite, other with calcite and zeolite, other with smectite, chlorite and minor pyrite(?); the thinnest ones are filled with microcrystalline calcite. Piece 5 shows a large (3 mm) vein filled with chlorite and fibrous actinolite(?) (borders) and minor large calcite crystals (center).
ADDITIONAL COMMENTS: After Piece 3 (rubble) grain size decreases slightly; Piece 3 shows thin variolitic glassy margins (different subunit?) Pieces 1-2 are the coarsest grained of all basalts recovered. From Piece 3 to 11 basalts are aphyric. Pieces 9-10 are constituted by small rounded fragments of reddish-brown very fine grained baked slate.

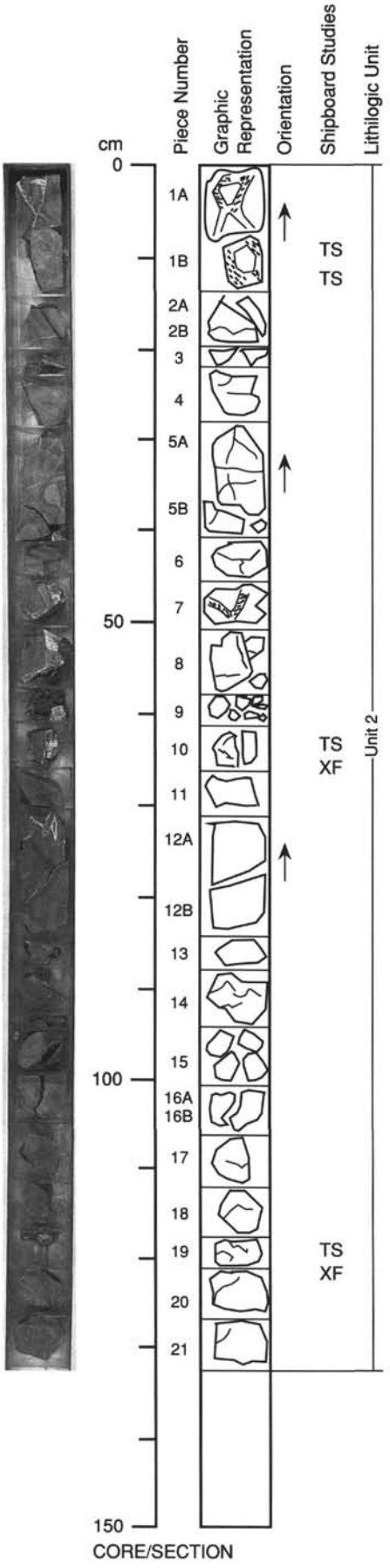


131-808C-107R-1

UNIT 1G: APHYRIC BASALT

Pieces 1-6

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Very fine grained intersertal often radiating made of 20% plagioclase laths (~0.8 mm),~25% prismatic or tabular clinopyroxene (~0.5 mm), ~5% subhedral olivine totally altered, trace of magnetite, and 10-40% interstitial partly devitrified and altered glass.
VESICLES: 0-2%; ~0.3 mm; spherical; randomly distributed; filled mainly with calcite, sometimes with spherulitic texture.
COLOR: Gray to yellowish gray with reddish haloes.
STRUCTURE: Massive.
ALTERATION: Slightly to moderately altered.
VEINS/FRACTURES: 2-10%; 0.5-3 mm; irregular;occur throughout the unit cross cutting each other: very often pieces broke along veins and commonly oxidation reddish haloes are observed on both sides of veins. One large (2-3 mm) vein crosses Pieces 3B and 3C (dip 70°) and is filled with fibrous calcite, chlorite, smectite, and Fe-oxide. Thinner veins are filled mainly with calcite or calcite and smectite and minor zeolite (?).
ADDITIONAL COMMENTS: *Texture and mineral proportion are very constant along the subunit.*



131-808C-108R-1

UNIT 2: APHYRIC TO PLAGIOCLASE PHYRIC BASALT

Pieces 1-21

CONTACTS: None, but upper pieces show pillow breccia structure.
PHENOCRYSTS:
Plagioclase - 0-1%; ~0.7 mm; tablets, subhedral, altered.
Olivine - 0-1%; ~0.7 mm; subhedral, completely replaced by greenish alteration minerals.
GROUNDMASS: Very fine grained hypocrystalline hyalopilitic, consisting of 25% skeletal altered plagioclase, ~20% anhedral mafic minerals completely pseudomorphed by secondary minerals (calcite?), and 50% brown partly devitrified and altered glass.
VESICLES: 0-5%; 0.1-0.2 mm; rounded; randomly distributed; filled with calcite, smectite, and chlorite(?)
COLOR: Whitish (matrix) and greenish gray to reddish gray (rock fragments).
STRUCTURE: Pillow lava. Autobrecciated upper pieces suggest pillow upper part. Angular fragments from 1 to several centimeters across are healed together by calcite and green fine-variolitic glass with minor smectite. From Piece 1 to 10 structure is brecciated: matrix decreasing and fragment size increasing downwards. From Piece 10 to 21 structure is massive (pillow interior?) and the rocks contain much less glass.
ALTERATION: Moderately to highly altered.
VEINS/FRACTURES: Veins and fractures are filled with carbonate-glassy material. Veins in largest fragments sometimes show double haloes: internal yellowish (up to 1 mm) and external reddish brown (up to 5 mm)
ADDITIONAL COMMENTS: Matrix composition suggest that fragmentation occurred both during cooling (fragments healed together by glass) and under subsolidus condition (secondary minerals, as carbonate, veining variolitic glass). Pieces from 4 to 9 are fragments of the breccia.

131-808C-105R-01 (Piece 3,8-19 cm) OBSERVER: SIE WHERE SAMPLED: rubble

ROCK NAME: Aphyric to plagioclase phyric basalt

GRAIN SIZE: very fine grained

TEXTURE: intersertal to hyalopilitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	0.2	1	0.8		euhedral tabular	dusty with a narrow fresh rim (overgrown?)
GROUNDMASS						
plagioclase	30	40	~0.4	An 52-54	euhedral to subhedral	laths
clinopyroxene	3	10	0.3-0.4		subhedral	prismatic
olivine	0	10	up to 0.3		subhedral	totally pseudomorphed

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	10.8	plagioclase	
chlorite	10	clinopyroxene, olivine	
serpentine	5	olivine	
Fe-oxide	2	olivine	
smectite	12	glassy mesostasis, vesicles	
calcite	3	vesicles	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	5	even	0.2-0.4	smectite, calcite	spherical

COMMENTS: Almost all glass devitrified. Perlitic and spherulitic textures are common in mesostasis

131-808C-105R-01 (Piece 15,102-105 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Aphyric basalt

GRAIN SIZE: fine grained

TEXTURE: intersertal to intergranular, locally ophitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
plagioclase	35	40	~0.4	An 54-56	subhedral	sometimes skeletal, partly opacized by clay minerals
clinopyroxene	15	20	0.3-0.4		anhedral to subhedral	
olivine	0	15	0.1-0.2		subhedral	totally pseudomorphed by serpentine and Fe-oxide
magnetite	5	5	0.01-0.03		subhedral to euhedral	cubic

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	5	plagioclase	
chlorite	5	clinopyroxene	
serpentine	10	olivine	
Fe-oxide	5	olivine	
smectite	8	vesicles, glassy mesostasis	
calcite	3	vesicles	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	5	even	0.2-0.4	smectite, calcite	spherical or slightly lobated

COMMENTS: 0.3-0.4 mm brownish variolitic glassy margin occurs, where patches of fresh variolitic devitrified glass are surrounded by a narrow smectite rim.

131-808C-106R-01 (Piece 2,5-9 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Clinopyroxene-plagioclase-olivine moderately phyric basalt

GRAIN SIZE: fine grained

TEXTURE: intergranular to doleritic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
olivine	0	5	0.3-0.5		subhedral	microphenocrysts, sometimes enclosed in plagioclase; totally pseudomorphed
plagioclase	0	3	0.5-0.8		subhedral to euhedral	totally opacized by clay minerals
clinopyroxene	0.5	0.5	~0.5		subhedral to euhedral	prismatic, fresh
GROUNDMASS						
plagioclase	40	40	0.3-0.5	An 64	subhedral	elongate laths, sometimes radiating, fresh
clinopyroxene	30	44	0.2-0.4		subhedral to anhedral	prismatic, often skeletal, slightly altered
magnetite	2	3	0.05-0.1		subhedral	sometimes oxidized to hematite

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
serpentine	3	olivine, veins	
Fe-oxide	1	olivine	
chlorite	17	olivine, clinopyroxene, veins	
clay	3	plagioclase	
hematite	1	magnetite	
smectite	2	glassy mesostasis	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					non vesicular
veins	2	irregular	0.1-0.2	chlorite, serpentine		

COMMENTS: Glassy mesostasis (3%) is generally devitrified (rare varioles) and altered to smectite.

131-808C-106R-01 (Piece 6A,28-31 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Aphyric basalt

GRAIN SIZE: fine-medium grained, holocrystalline

TEXTURE: intergranular divergent

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
plagioclase	50	50	0.3-0.9	An 70	subhedral to euhedral	laths
clinopyroxene	20	35	0.2-0.6		subhedral	prismatic or, more commonly, subequant
olivine	0	6	0.4		subhedral	totally replaced by alteration minerals
magnetite	4	4	0.01-0.2		subhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
chlorite	16	clinopyroxene, olivine, veins	
Fe-oxide	2	olivine	
smectite	1	glass	
actinolite(?)	7	veins, clinopyroxene	fibrous, highly pleochroic, high birefringence

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					non vesicular
veins	4		0.6	chlorite and actinolite (?)		often straight and subparallel

COMMENTS: 1% glassy mesostasis totally altered to chlorite and reddish smectite

131-808C-106R-01 (Piece 9,74-75 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Plagioclase phyric basalt

GRAIN SIZE: fine-medium grained

TEXTURE: intergranular to doleritic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	1	5	up to 5		euhedral	tabular, almost totally opacized by clay minerals. Patches of groundmass inclusions (devitrified glass) give them a sponge-like appearance. Narrow fresh rims (overgrown?)
GROUNDMASS						
plagioclase	30	35	0.5-1	An 65-70	subhedral	laths
clinopyroxene	35	35	0.3-0.5		anhedral	subequant or skeletal
olivine	0	12	0.4		subhedral	completely replaced by iddingsite and Fe-oxide (rims)

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	9	plagioclase	
iddingsite	10	olivine	
Fe-oxide	2	olivine	
smectite	4	glass, vesicles	
chlorite	0.5	veins	border of veins
actinolite (?)	0.5	veins	border of veins
calcite	1	veins	large crystals in central part of veins

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	1	even	0.2	smectite	
veins	1		0.8	chlorite, actinolite (?), calcite	irregular

COMMENTS: 4% glss totally devitrified (spherulites) and altered in green smectite

131-808C-106R-01 (Piece 10A,90-93 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Aphyric to plagioclase phyric basalt

GRAIN SIZE: fine-medium grained

TEXTURE: intergranular to subophitic, locally ophitic for large clinopyroxenes including plagioclase laths

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	0.5	1	0.5-0.6	nd	subhedral to euhedral	
GROUNDMASS						
plagioclase	25	30	0.5-0.8	nd	subhedral	laths sometimes with altered cores
clinopyroxene	20	20	0.3-0.8		subhedral to anhedral	fresh and sometimes intergrown with plagioclase
olivine	0	14	0.1-0.3		subhedral	totally pseudomorphed
magnetite	6	6	0.02-0.1		subhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
calcite,epidote	16	plagioclase, veins	
chlorite	26	olivine, glass, veins	
smectite	3	glss	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					
veins	24	throughout	0.7-8	chlorite, calcite, and devitrified glass		The largest ones contain large calcite crystals in central part. Some veins contain spherulitic glass

COMMENTS: 5% devitrified glass with spherulitic texture, altered to chlorite and smectite

131-808C-106R-01 (Piece 13,122-125 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Aphyric to plagioclase phyric basalt

GRAIN SIZE: fine-medium grained

TEXTURE: intersertal to intergranular, locally subophitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	1	1	0.3-0.7	An 70	subhedral	tabular, fresh
GROUNDMASS						
plagioclase	30	40	up to 0.8	An 60	subhedral	laths
clinopyroxene	20	30	0.4		anhedral	
olivine	0	10	0.3-0.4		subhedral	sometimes subequant
magnetite	6	6	~0.7		subhedral	also in aggregates

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	5	plagioclase	
sericite	5	plagioclase	
actinolite(?)	9	clinopyroxene,veins	
chlorite	7	clinopyroxene, olivine, veins	
epidote	2	clinopyroxene	
serpentine	4	olivine	
Fe-oxide	2	olivine	
smectite	10	glass	1-2%calcite in veins

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					
veins	4		0.3-0.7	actinolite (?), calcite		the largest veins are zoned with fibrous actinolite(?) at the borders and large calcite crystals in the centre; the thinnest ones are filled only with actinolite (?) and/or chlorite

COMMENTS: 10% glass totally devitrified and altered to smectite

131-808C-106R-02 (Piece 1C,17-22 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Clinopyroxene plagioclase phyric basalt

GRAIN SIZE: medium grained

TEXTURE: holocrystalline,intergranular to subophitic with ophitic patches

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	3	3	0.6-0.8	An 70	euhedral tabular	fresh
clinopyroxene	1	1	0.5		subhedral	prismatic fresh, slightly pinkish in PPL
GROUNDMASS						
plagioclase	35	40	0.3-1	An 64	subhedral	very elongate laths, only slightly altered
clinopyroxene	30	38	0.4-0.6		subhedral to euhedral	prismatic, sometimes intergrown with plagioclase; slightly altered to chlorite
olivine	0	10	~0.5		subhedral	totally replaced by chlorite

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	5	plagioclse	
chlorite	18	clinopyroxene, olivine	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					non vesicular
veins	0					

131-808C-106R-02 (Piece 5,60-64 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Plagioclase phyric basalt

GRAIN SIZE: medium-fine grained

TEXTURE: holocrystalline intergranular to subophitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	2	2	0.8-1	An 65	euhedral	tabular, fresh
GROUNDMASS						
plagioclase	40	48	0.3-0.7	An 60	subhedral	laths
clinopyroxene	30	30	~0.6		subhedral	prismatic or subequant
olivine	0	10	0.4		subhedral	totally replced by alteration minerals
magnetite	6	6	~0.3		subhedral	sometimes cubic

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	8	plagioclase	
chlorite	8	olivine	
Fe-oxide	2	olivine	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					
veins	5		~0.6	calcite,chlorite		zoned filling with calcite in the inner part and chlorite at the borders

COMMENTS: very little (<1%) devitrified and altered glass

131-808C-107R-01 (Piece 3B,28-31 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Aphyric basalt

GRAIN SIZE: very fine grained

TEXTURE: intersertal divergent

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
plagioclase	30	30	up to 0.8	An 68-70	subhedral to euhedral	laths often radiating or branching,fresh
clinopyroxene	35	36	0.6-0.8		subhedral	elongate prisms sometimes skeletal
olivine	0	10	~0.3		subhedral to anhedral	totally replaced by serpentine and chlorite

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
calcite	2	vesicles	
serpentine	8	olivine	
smectite	8	glass	
chlorite	5	glass, clinopyroxene, olivine	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	2	random distribution	up to 0.3	calcite and minor chlorite and smectite	spherical	often spherulitic filling
veins	10		0.1-0.3			very often cross cutting each other

COMMENTS: 10% glass partly devitrified and altered to smectite and chlorite

131-808C-107R-01 (Piece 6,104-128 cm) OBSERVER: SIE WHERE SAMPLED:

ROCK NAME: Plagioclase phyric basalt

GRAIN SIZE: very fine grained

TEXTURE: hypocrystalline, intersertal divergent

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	2	2	2	An 70	euhedral	fresh, with inclusions of groundmass
GROUNDMASS						
plagioclase	20	20	0.1-0.3	nd	subhedral	needle-like, skeletal H-shaped, often radiating
clinopyroxene	15	18	~0.3		anhedral	subequant or skeletal
olivine	0	2	0.05		subhedral	totally replaced by chlorite and Fe-oxide
oxide	3	3	0.01-0.03		subhedral to anhedral	sometimes in aggregates

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
chlorite	7	clinopyroxene, olivine	
Fe-oxide	1	olivine	
smectite	1	vesicles	
calcite	4	veins	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	1	sparse	0.02	smectite, chlorite	spherical	
veins	7		~0.5	fibrous calcite or chlorite		the thinnest are filled with altered glass or microcrystalline calcite

COMMENTS: abundant (40%) glassy mesostasis patchy devitrified

131-808C-108R-01 (Piece 1B,6-12 cm) OBSERVER: SIE WHERE SAMPLED: matrix-rich part of the piece

ROCK NAME: Aphyric basaltic breccia

GRAIN SIZE: very fine grained

TEXTURE: brecciated: basaltic fragments hypocrystalline hyalopilitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
plagioclase	15	25	0.1-0.6	An 54 (or more)	subhedral to euhedral	needle-like, skeletal H-shaped, often radiating; only few determinations of An content
clinopyroxene	0	10	0.05-0.1		subhedral to anhedral	totally pseudomorphed by calcite
olivine	0	10	0.05-0.07		subhedral to anhedral	totally pseudomorphed by calcite

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
calcite	33	plagioclase, mafic minerals,vesicles	
smectite	31	mesostasis, vesicles	
chlorite	21	mesostasis, vesicles	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	5	throughout	0.1-0.2	chlorite,smectite, calcite	rounded

COMMENTS: 50% glassy mesostasis almost all devitrified and altered to smectite and chlorite (in rock fragments). Matrix is constituted by calcite,that veins variolitic and/or spherulitic glass; sometimes plagioclase microlites are nuclei of varioles. Varioles are lobated and up to 0.5 mm long. Glass is almost all devitrified but fresh (only minor oxidized patches). May be the upper brecciated part of a pillow

131-808C-108R-01 (Piece 1B,12-15 cm) OBSERVER: SIE WHERE SAMPLED: large rock fragment in the breccia

ROCK NAME: Aphyric to olivine-plagioclase phyric basalt

GRAIN SIZE: fine grained (not uniformely crystallized)

TEXTURE: intersertal divergent

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	0.5	1	0.4-0.9	nd	subhedral to euhedral	elongate tablets
olivine	0	1	0.6-0.8		subhedral	totally pseudomorphed
GROUNDMASS						
plagioclase	45	50	0.3-0.8	An 60	subhedral	sometimes skeletal H-shaped, radiating or branching
olivine	0	5	~0.03		anhedral to subhedral	subequant and totally pseudomorphed by carbonate and chlorite
clinopyroxene	0	5	~0.3		anhedral	as olivine

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
calcite	5.5	plagioclase,olivine, clinopyroxene	
chlorite	15.5	olivine, clinopyroxene, mesostasis	
Fe-oxide	0.5	olivine	
clay	5	plagioclase	
smectite	10	mesostasis	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					non vesicular

COMMENTS: 30% glass almost totally devitrified (variolitic texture: 3% varioles, 0.3 mm), slightly altered to smectite and chlorite.

131-808C-108R-01 (Piece 10,63-66 cm) OBSERVER: SIE WHERE SAMPLED: pillow interior

ROCK NAME: Aphyric basalt

GRAIN SIZE: fine to medium grained

TEXTURE: intergranular, locally intersertal

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
plagioclase	40	45	0.2-1	An 68	subhedral	elongate laths often radiating
clinopyroxene	20	25	0.3-0.7		anhedral	prismatic skeletal, more rarely subequant, slightly replaced by calcite
olivine	0	10	0.2-0.3		subhedral	totally replaced
oxide	5	5	0.2-0.4		anhedral	small aggregates

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
clay	5	plagioclase	
calcite	15	clinopyroxene, olivine, veins	
serpentine	2	olivine	
Fe-oxide	4	olivine, glass	
iddingsite	3	olivine	
smectite	7	mesostasis, veins	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE	COMMENTS
Vesicles	0					
veins	10		0.7-1	calcite, smectite		filled with medium grained calcite and a film of smectite on the walls

COMMENTS: 5% glassy mesostasis totally devitrified and altered to brownish smectite and oxide.

131-808C-108R-01 (Piece 19,118-121 cm) OBSERVER: SIE WHERE SAMPLED: pillow bottom (?)

ROCK NAME: Plagioclase phyric basalt

GRAIN SIZE: very fine grained

TEXTURE: intersertal divergent

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
plagioclase	3	6	0.5-0.8	An 80	subhedral	strongly zoned; cores sometimes totally replaced by calcite, sericite, epidote; rims fresh
GROUNDMASS						
plagioclase	25	30	0.3-0.7	An 57	subhedral	acicular, skeletal H-shaped
clinopyroxene	20	30	~0.4		subhedral to anhedral	columnar skeletal, often grown perpendicular plagioclase surface
olivine	0	10	0.2-0.3		anhedral	totally pseudomorphed by iddingsite, calcite, chlorite
oxide	3	3	0.01		subequant	fine aggregates

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
sericite	3	plagioclase	
epidote	3	plagioclase	
calcite	7	plagioclase, olivine	
chlorite	13	clinopyroxene, olivine	
iddingsite	4	olivine	
smectite	7	mesostasis	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	0				

COMMENTS: 7% devitrified glass totally altered to smectite