SITE 807 HOLE A CORE 1H CORED INTERVAL 0.0-7.4 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
PLEISTOCENE	N22 - N23	NN20	*Amphirhopalum ypsilon - Buccinosphaera invaginata*	?	N (Brunnes)(inferred, not oriented)			1 2 3 4 5 CC	0.5 1.0				

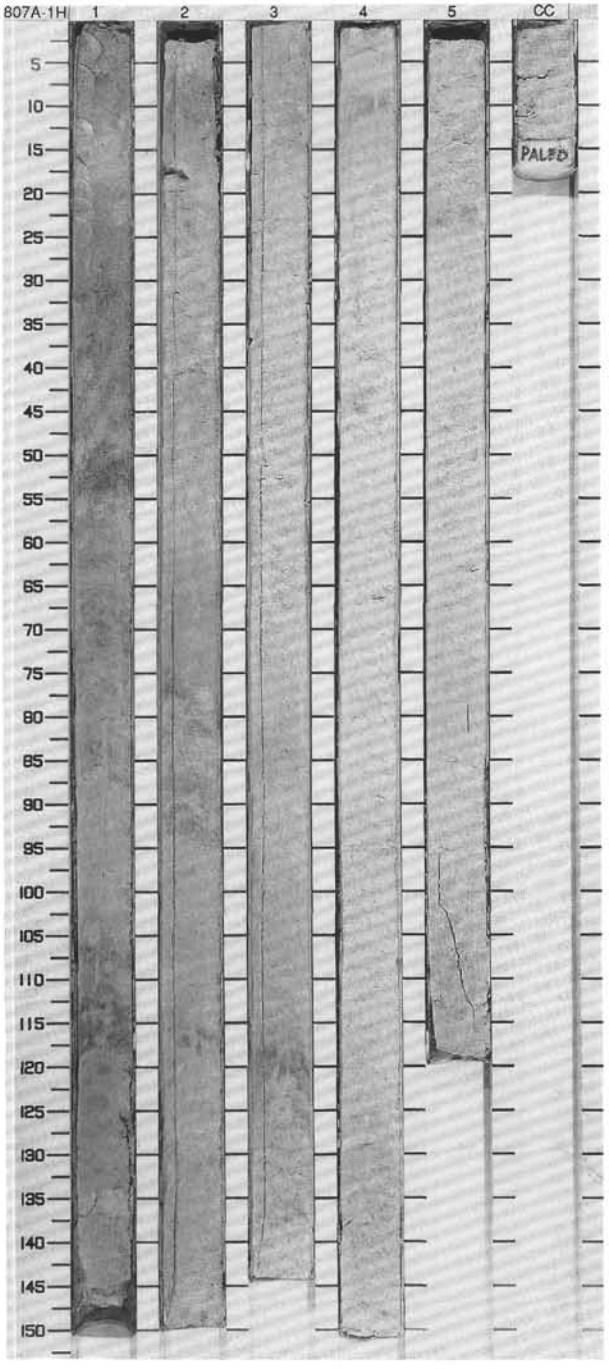
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The color of the sediment grades from pale brown (10YR 6/3) at the top of Section 1 into light gray (10YR 7/2) and white (10YR 8/2) in Section 3. Slight to moderate bioturbation is indicated by several light brownish gray (10YR 6/2) and light gray (10YR 7/2) mottles. Disseminated and smeared pyritized burrows are noted in Sections 3 and 4.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Diatoms	Tr
Foraminifers	20
Nannofossils	79
Siliceous fragments	1



SITE 807 HOLE A CORE 2H CORED INTERVAL 7.4-16.9 mbsf

PLEISTOCENE	TIME-ROCK UNIT
A/G N22	FORAMINIFERS
A/G NN19	NANNOFOSSILS
F/P ?	RADIOLARIANS
R/P ?	DIATOMS
	BIOSTRAT. ZONE/ FOSSIL CHARACTER
N (Jaramillo) / R (Matuyama)(inferred) / N (Bruhnes)(inferred, not oriented)	PALEOMAGNETICS
V=1586 ϕ=69.8 ρ=1.52 ● V=1623 ϕ=68.0 ρ=1.55 ● V=1557 ϕ=69.2 ρ=1.53 ● V=1564 ϕ=68.9 ρ=1.54 ● V=1568 ϕ=69.1 ρ=1.53 ● V=1597 ϕ=68.3 ρ=1.53 ● ϕ=67.8 ρ=1.54	PHYS. PROPERTIES
● %$CaCO_3$=89.9 ● %$CaCO_3$=91.7 ● %$CaCO_3$=88.8 ● %$CaCO_3$=88.7 ● %$CaCO_3$=87.8 ● %$CaCO_3$=91.3 ● %$CaCO_3$=89.8	CHEMISTRY
CC 7 6 5 4 3 2 1	SECTION
1.0 0.5	METERS
	GRAPHIC LITHOLOGY
	DRILLING DISTURB.
	SED. STRUCTURES
LIW	SAMPLES

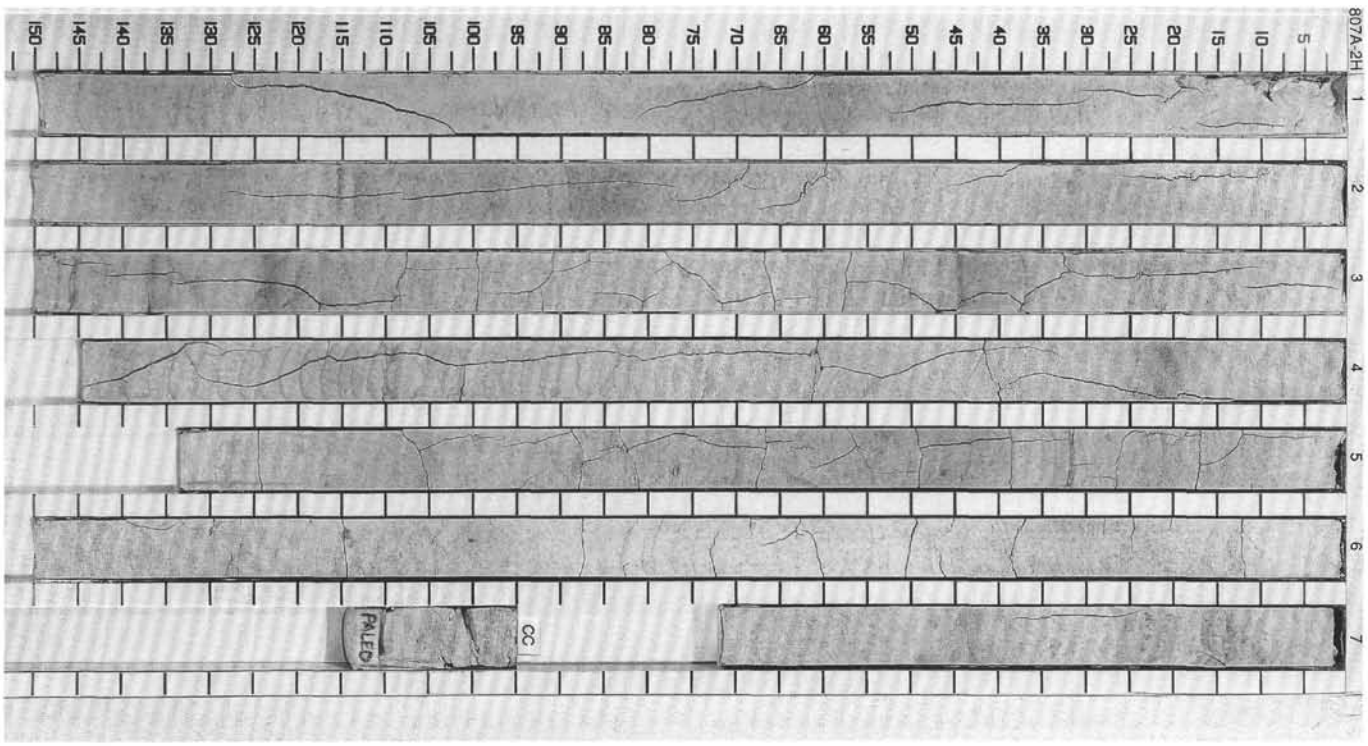
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Bioturbation is evident throughout the core. In Section 1, the ooze grades from yellowish white (10YR 8/1) above 43 cm to grayish white (7.5YR 8/0) below 43 cm. From the top of Section 2 downcore, the ooze exhibits cyclic color changes. The typical cycle is white (7.5YR 8/0), grading downward into a pale yellowish green (10GY 7/2) interval bounded by a sharp base. White bands are between 5 and 100 cm thick. Light gray bands are between 5 and 20 cm thick. Pale yellowish green bands are 1 to 5 cm thick.

SMEAR SLIDE SUMMARY (%):

	2, 74 D
TEXTURE:	
Sand	10
Silt	60
Clay	30
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr.
Foraminifers	20
Nannofossils	75
Siliceous fragments	3



SITE 807 HOLE A CORE 3H CORED INTERVAL 16.9-26.4 mbsf

TIME-ROCK UNIT: PLEISTOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS N22 A/G; NANNOFOSSILS NN19 A/G; RADIOLARIANS ? F/P; DIATOMS ? R/P

PALEOMAGNETICS: ?; R (Matuyama)

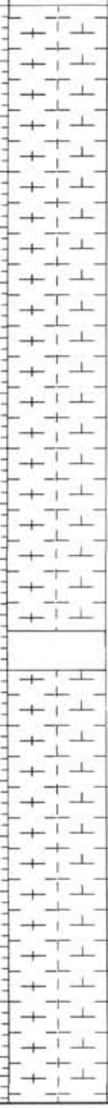
PHYS. PROPERTIES: ●Φ=68.1 ρ=1.55 V=1533; V=1604 ●Φ=68.4 ρ=1.56; V=1560 ●Φ=69.3 ρ=1.52; V=1564 ●Φ=66.0 ρ=1.58; V=1575 ●Φ=67.7 ρ=1.55; V=1557 ●Φ=67.6 ρ=1.55

CHEMISTRY: ●%CaCO3=89.1; ●%CaCO3=88.8; ●%CaCO3=88.6; ●%CaCO3=90.0; ●%CaCO3=89.0; ●%CaCO3=86.9

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY



DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: *, OG, IW

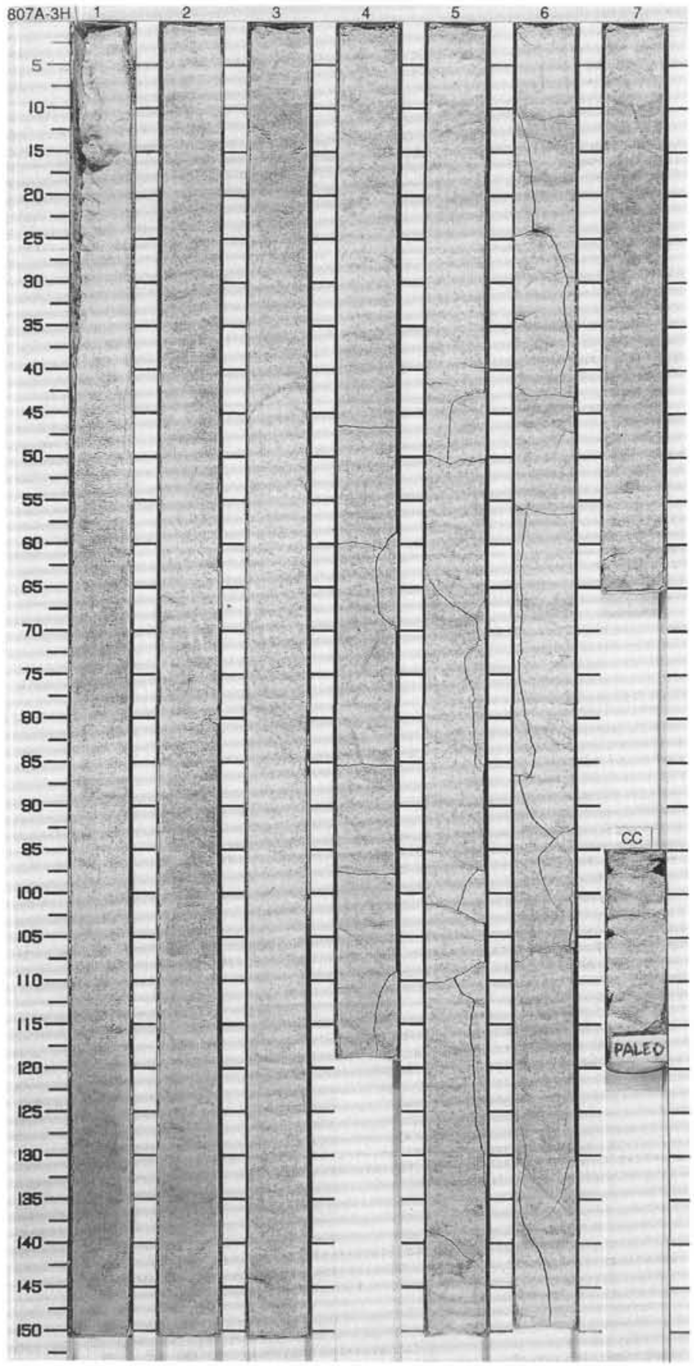
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The sediment is slightly bioturbated, homogeneous, and white (7.5YR 8/0). The few burrows present are filled with softer material. Slightly gray zones, approximately 20 cm in length, are observed throughout the core (about one per section).

SMEAR SLIDE SUMMARY (%):

	3, 74
	D
TEXTURE:	
Sand	15
Silt	60
Clay	25
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	28
Nannofossils	67
Siliceous fragments	3



SITE 807 HOLE A CORE 4H CORED INTERVAL 26.4-35.9 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/M; N21
- NANNOFOSSILS: A/M; NN18
- RADIOLARIANS: A/M; *Pteralinium prismatium*
- DIATOMS: R-F/P; ?

PALEOMAGNETICS: ? N (Olduvai) ? R (Matuyama)

PHYS. PROPERTIES: V=1597 ρ=1.56 ρ=68.0 %CaCO3=90.0; V=1543 ρ=1.55 ρ=68.3 %CaCO3=90.8; V=1608 ρ=1.54 ρ=69.2 %CaCO3=90.3; V=1600 ρ=1.51 ρ=70.4 %CaCO3=88.2; V=1600 %CaCO3=89.5; V=1553 ρ=1.57 ρ=66.6 %CaCO3=87.9; V=1575 ρ=1.53 ρ=69.2 %CaCO3=88.0

CHEMISTRY

SECTION: 1 2 3 4 5 6 7 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW

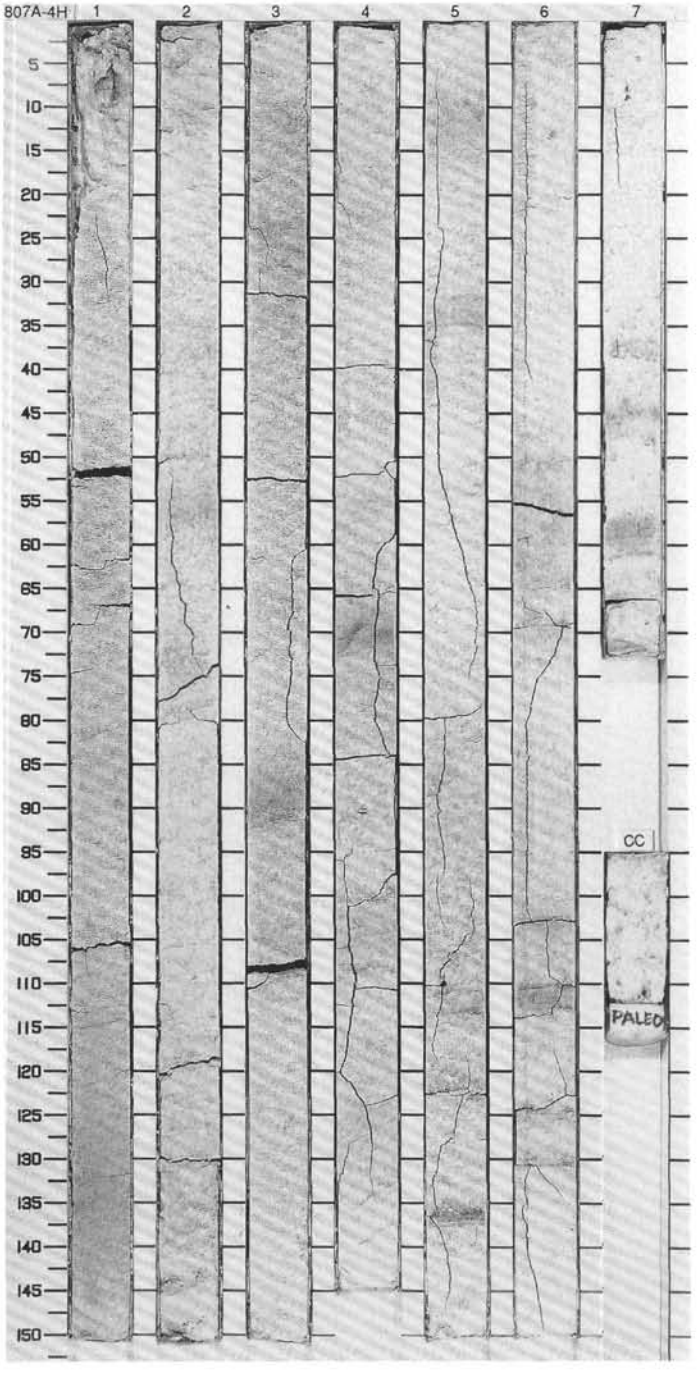
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains homogeneous FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The sediment is white (7.5YR 8/0 grading into 10YR 8/1 in Section 6) and slightly bioturbated, as indicated by a few watery, pyrite-filled burrows and by gray (10YR 6/1) and light gray (10YR 7/2) mottles below Section 6. In Sections 2 through 5, several diffuse cm scale, gray (7/5YR 6/0) and bluish gray (5B 6/1) zones are present. In Sections 6 and 7, a few diffuse, cm scale, bluish gray, reddish gray (10R 6/1) and greenish gray (5G 7/1) zones, as well as greenish gray color bands (cm scale), are noted.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	60
Clay	25
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	28
Nannofossils	67
Siliceous fragments	3



SITE 807 HOLE A CORE 5H CORED INTERVAL 35.9-45.4 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 PLIOCENE	A/M	A	A/M	C/M		V=1608 ρ=69.3 P=1.53 V=1575 ρ=68.9 P=1.53 V=1608 ρ=69.6 P=1.53 V=1608 ρ=67.1 P=1.56 V=1571 ρ=68.1 P=1.55 V=1589 ρ=69.7 P=1.52 V=1593 ρ= P=	%CaCO3=90.5 %CaCO3=91.5 %CaCO3=91.7 %CaCO3=92.6 %CaCO3=90.8 %CaCO3=90.4	1 2 3 4 5 6 7 CC	0.5 1.0				

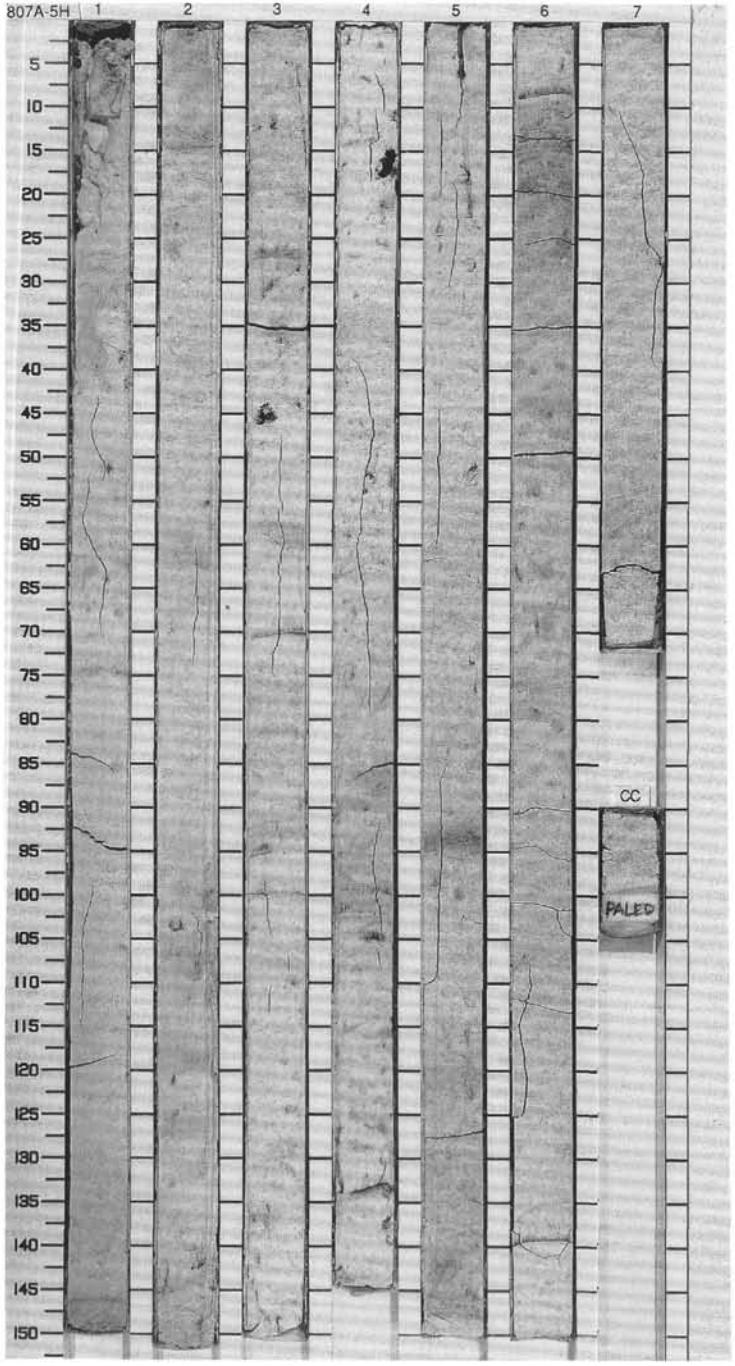
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (7.5YR 8/0) FORAMINIFER NANNOFOSSIL OOZ to NANNOFOSSIL OOZE with FORAMINIFERS, which grades into a 5 cm thick gray (N7/) interval at Section 1, 145 cm and a pale purple (5P 6/2) interval at Section 5, 95 cm. The sediment is slightly to heavily bioturbated, and contains watery pyrite-filled burrows and ligl gray (5Y 7/1) and light olive gray (5Y 6/2) mottling. A 2 cm long pyrite concretion is present in Section 4, 15 cm. Faint to sharp, pale blue (5PB 7/2), pale purple (5P 6/2), light greenis! gray (5G 7/1), and pale green (5G 6/2) color bands are common throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 66 D
TEXTURE:	
Sand	14
Silt	82
Clay	4
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	70
Radiolarians	2
Silicoflagellates	2
Spicules	1



SITE 807 HOLE A CORE 6H CORED INTERVAL 45.4-54.9 mbsf

TIME-ROCK UNIT	UPPER PLIOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	A/G
NANNOFOSSILS	A/P
RADIOLARIANS	A/M
DIATOMS	F-C/P-M
PALEOMAGNETICS	
PHYS. PROPERTIES	V=1593 ρ=1.55 ϕ=67.7; V=1593 ρ=1.55 ϕ=67.9; V=1568 ρ=1.54 ϕ=69.6; V=1533 ρ=1.54 ϕ=68.8; ρ=1.53 ϕ=69.2
CHEMISTRY	%$CaCO_3$=91.9; %$CaCO_3$=89.5; %$CaCO_3$=90.6; %$CaCO_3$=91.5; %$CaCO_3$=91.5
SECTION	CC, 7, 6, 5, 4, 3, 2, 1
METERS	1.0, 0.5
GRAPHIC LITHOLOGY	
DRILLING DISTURB.	
SED. STRUCTURES	
SAMPLES	TW, OG

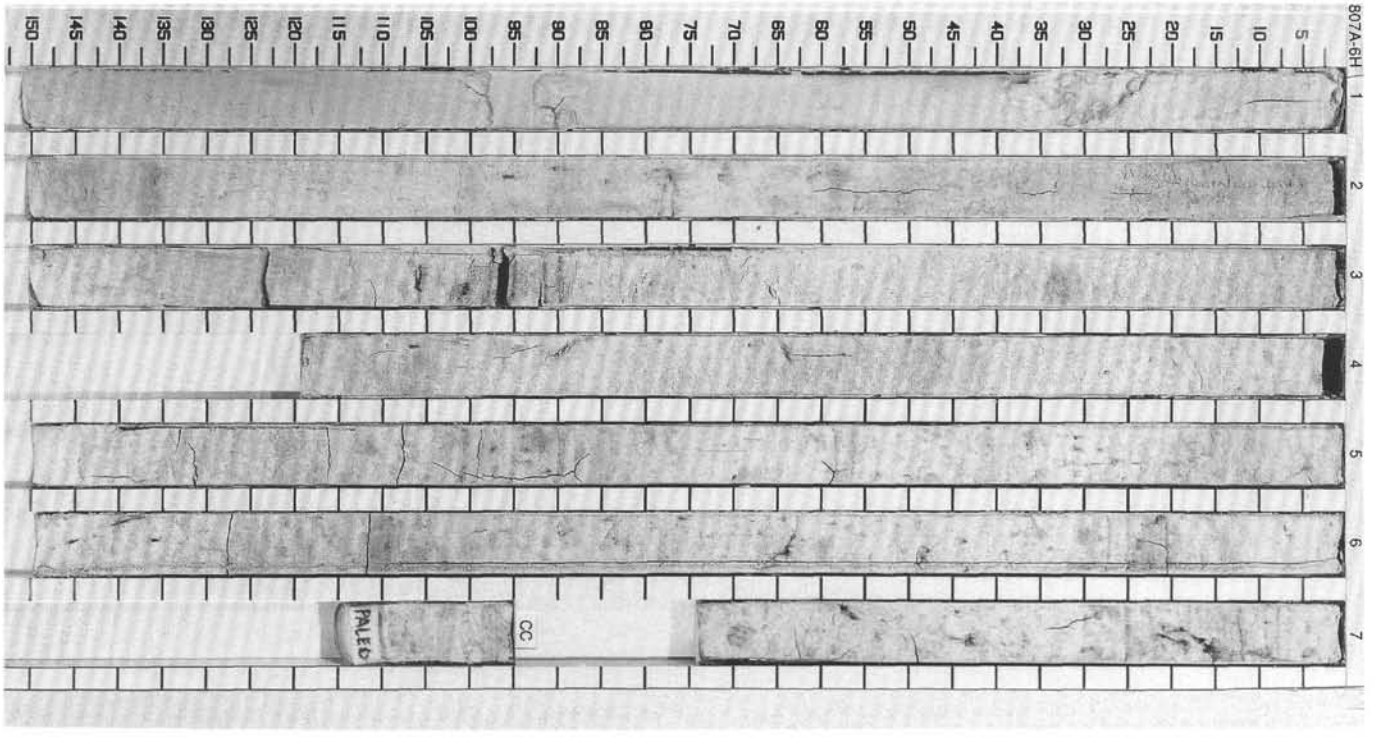
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology. This core contains NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The sediment is white (7.5YR 8/0 and 2.5Y 8/0) and slightly to moderately bioturbated, as indicated by light gray (5Y 7/1 and 5Y 7/2) mottles and mm to cm scale, pyrite-filled burrows. Light greenish gray (5G 7/1, pale blue (5PB 7/2), and grayish blue (5 PB 5/2) color bands are present throughout the core and form concentrated zones at Section 3, 90-105 cm; Section 5, 35-60 and 80-100 cm; Section 6, 22-27 cm; and Section 7, 0-26 cm.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	82
Radiolarians	2
Silicoflagellates	1



SITE 807 HOLE A CORE 7H CORED INTERVAL 54.9-64.4 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 PLIOCENE	A/M	A/M	A/M	R/P		V=1589 ρ=1.55 Φ=67.9 V=1593 ρ=1.53 Φ=69.0 V=1604 ρ=1.52 Φ=69.0 V=1578 ρ=1.52 Φ=69.6 V=1586 ρ=1.53 Φ=69.0 V=1568 ρ=1.55 Φ=67.5	●%$CaCO_3$=92.0 ●%$CaCO_3$=90.9 ●%$CaCO_3$=91.7 ●%$CaCO_3$=91.5 ●%$CaCO_3$=90.2 ●%$CaCO_3$=90.1	1 2 3 4 5 6 7 CC	0.5 1.0		O —	*	

N21 NN16 *Spongaster pentas* ?

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The sediment is white (2.5Y 8/0), grading to light gray (5Y 7/1) in the lower part of Section 7. Diffuse pale blue (5PB 7/2), light gray (N7/), and light bluish gray (5B 7/1) zones, 3 to 10 cm wide, are present in Sections 3 through 5. Moderate to heavy bioturbation is indicated by light gray (5Y 7/2) and grayish blue (5PB 5/2) mottling. Very fine-grained pyrite filled burrows are seen in all sections. A 4 cm diameter burrow "halo" is noted in Section 6. Diffuse to distinct, light greenish gray (5G 7/1), pale purple (5P 6/2), and grayish blue (5PB 5/2), 0.5 to 1 cm wide color bands are present.

SMEAR SLIDE SUMMARY (%):

	3, 70 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Foraminifers	12
Nannofossils	83
Radiolarians	2
Silicoflagellates	2
Spicules	1

SITE 807 HOLE A CORE 8H CORED INTERVAL 64.4-73.9 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/G — N19 - N20
- NANNOFOSSILS: A/M — NN16
- RADIOLARIANS: A/M — *Spongaster pentas*
- DIATOMS: R/P — ?

PALEOMAGNETICS

PHYS. PROPERTIES: V=1600 Φ=68.5 ρ=1.54; V=1571 Φ=67.3 ρ=1.56; V=1568 Φ=68.1 ρ=1.54; V=1568 Φ=68.9 ρ=1.53; V=1553 Φ=68.4 ρ=1.54; V=1604 Φ=66.9 ρ=1.55; V=1571 Φ=67.8 ρ=1.54

CHEMISTRY: %$CaCO_3$=92.7; %$CaCO_3$=92.4; %$CaCO_3$=92.0; %$CaCO_3$=93.0; %$CaCO_3$=92.4; %$CaCO_3$=93.2; %$CaCO_3$=92.3

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

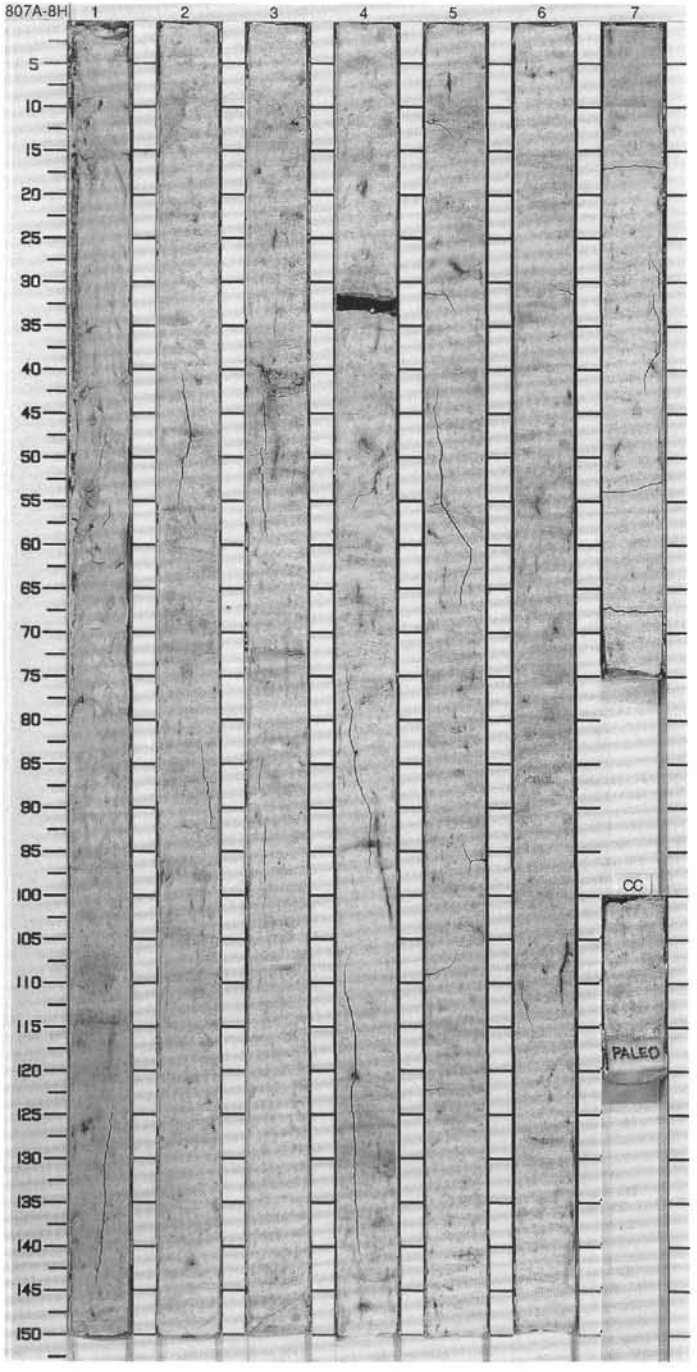
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology. This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Bioturbation is generally light to moderate throughout this core, but is heavy in Section 4, 0-70 and 135-150 cm. Evidence for bioturbation includes cm scale, light gray (5Y 7/1) horizontal burrows, and mm to cm scale, grayish blue (5PB 5/2) pyrite-filled burrows. Horizontal light greenish gray (5G 7/1), pale purple (5P 6/2), and pale blue (5PB 7/2) color bands are present to common.

SMEAR SLIDE SUMMARY (%):

	3, 90 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	17
Nannofossils	80
Radiolarians	2
Silicoflagellates	1



SITE 807 HOLE A CORE 9H CORED INTERVAL 73.9-83.4 mbsf

LOWER PLIOCENE	TIME-ROCK UNIT
A/M N19 - N20	FORAMINIFERS
A/M NN13 - NN14	NANNOFOSSILS
A/M Spongaster pentas	RADIOLARIANS
C/P-M base NTD 15a Rhizosolenia praebergonii	DIATOMS
	PALEOMAGNETICS
V=1560 ϕ=67.1 ρ=1.56 ●%$CaCO_3$=93.0 V=1586 ϕ=67.6 ρ=1.55 ●%$CaCO_3$=91.5 V=1550 ϕ=68.6 ρ=1.52 ●%$CaCO_3$=90.5 V=1553 ϕ=68.1 ρ=1.54 ●%$CaCO_3$=91.9 V=1557 ϕ=66.0 ρ=1.58 ●%$CaCO_3$=91.9 V=1568 ϕ=67.3 ρ=1.56 ●%$CaCO_3$=92.6	PHYS. PROPERTIES / CHEMISTRY
CC 7 6 5 4 3 2 1	SECTION
1.0 0.5	METERS
	GRAPHIC LITHOLOGY
	DRILLING DISTURB.
TW OG	SED. STRUCTURES
*	SAMPLES

BIOSTRAT. ZONE/FOSSIL CHARACTER

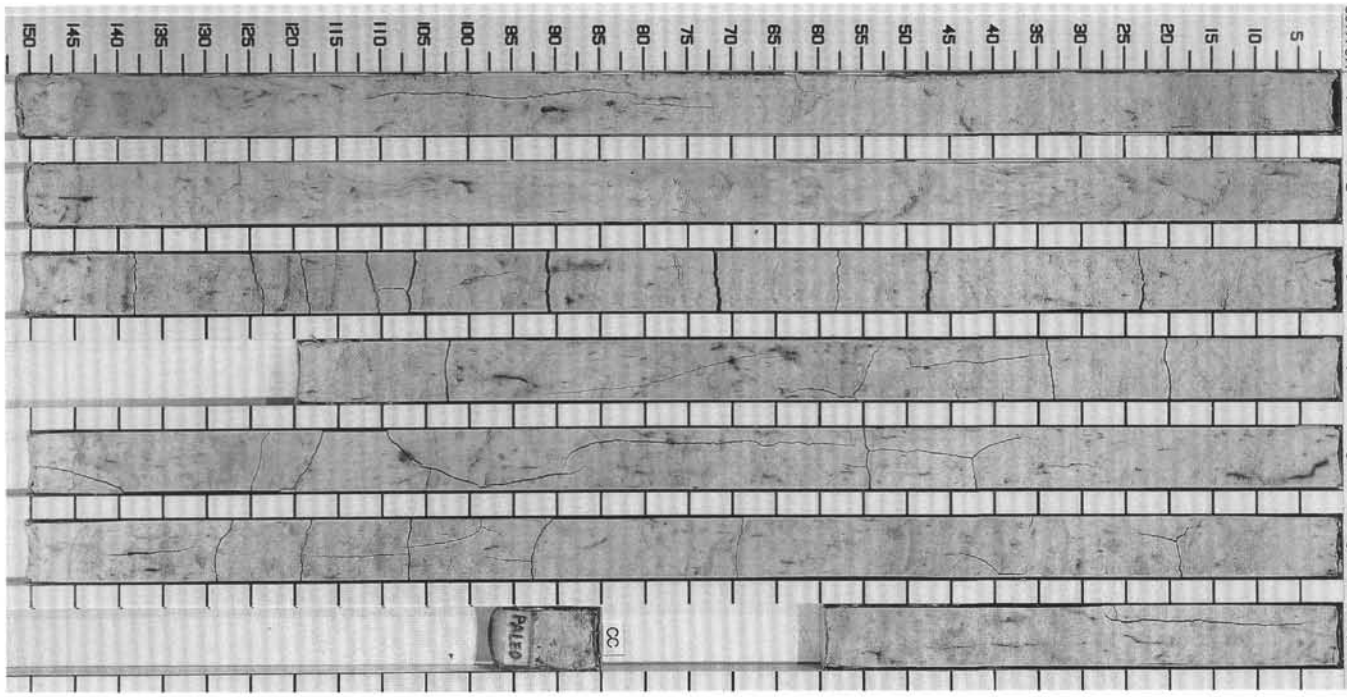
SMEAR SLIDE SUMMARY (%):

	1, 99	D
TEXTURE:		
Sand	25	
Silt	70	
Clay	5	
COMPOSITION		
Foraminifers	20	
Nannofossils	76	
Radiolarians	3	
Silicoflagellates	1	

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Slight to moderate bioturbation is indicated by pyritized, commonly vertical, dark gray (N4) burrows and associated grayish blue (5PB 5/2) mottling and "halos." Several cm scale, light gray (5Y 7/1) burrows and mottles are present. Distinct and diffuse, cm size, light greenish gray (5G 7/1) color bands are common throughout the core. Grayish blue (5PB 5/2) bands are present but less common.



SITE 807 HOLE A CORE 10H CORED INTERVAL 83.4-92.9 mbsf

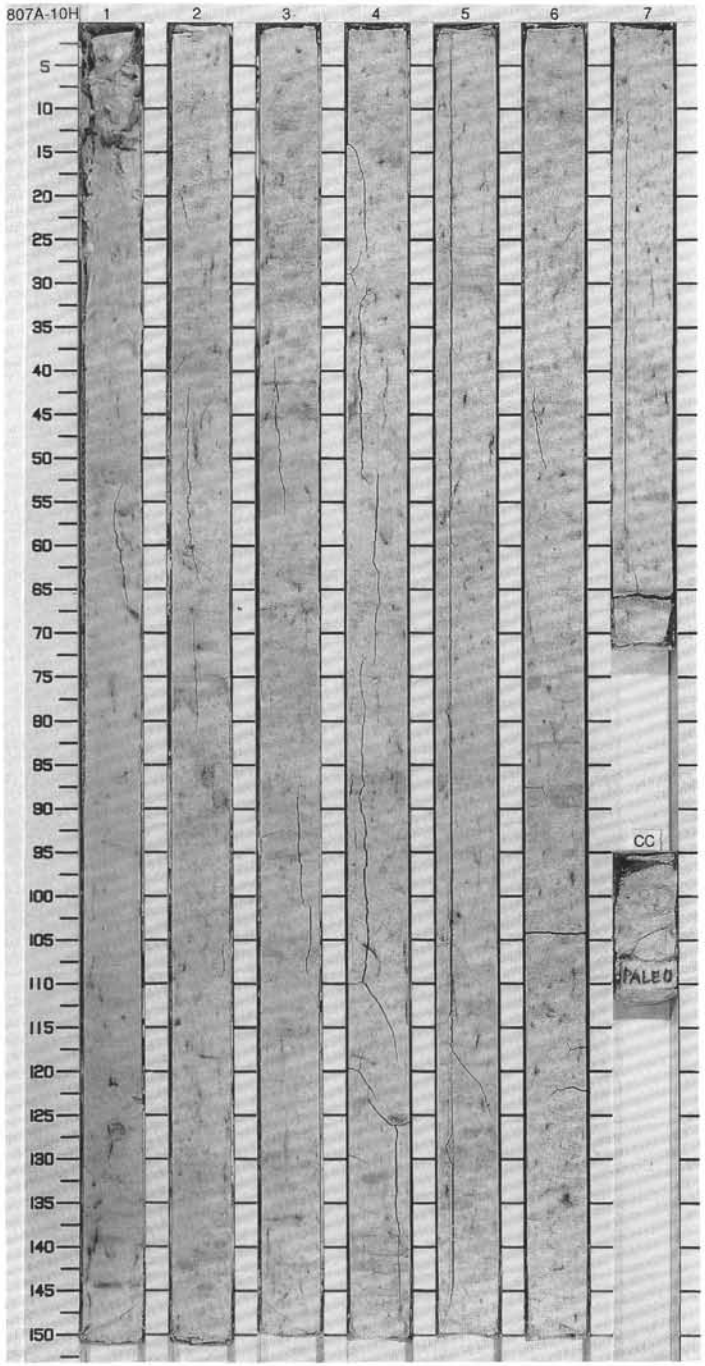
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER PLIOCENE	A/G N18 - N19	A/M NN12	A/M *Spongaster pentas*	C-A/P-M NTD 14 *Nitzschia jouseae*		V-1593 ρ=1.57 ϕ=67.0 V-1589 ρ=1.6 ϕ=64.9 V-1589 V-1589 ρ=1.56 ϕ=67.0 V-1589 ρ=1.54 ϕ=68.8 V-1586 ρ=1.58 ϕ=66.6	%$CaCO_3$=92.3 %$CaCO_3$=92.5 %$CaCO_3$=92.1 %$CaCO_3$=93.1 %$CaCO_3$=94.1 %$CaCO_3$=91.6	1 2 3 4 5 6 7 CC	0.5 1.0				*	

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Moderate bioturbation is evident as cm scale, light gray (5Y 7/1) mottles and mm to cm scale, grayish blue (5PB 5/2) pyrite-filled burrows and halos. Diffuse light greenish gray (5G 7/1) color banding is common, and pale purple (5P 6/2) bands are present, but rare.

SMEAR SLIDE SUMMARY (%):

	4, 75 D
TEXTURE:	
Sand	15
Silt	65
Clay	20
COMPOSITION:	
Foraminifers	25
Nannofossils	75
Radiolarians	Tr



SITE 807 HOLE A CORE 11H CORED INTERVAL 92.9-102.4 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
LOWER PLIOCENE	A/G	A/M	A/M	C-A/P-M				1	0.5				
	N18 - N19	NN12	*Spongaster pentas*	NTD 137 - 14					1.0				
								2					
								3					*
								4					
								5					MA LN
								6					
								7					
								CC					

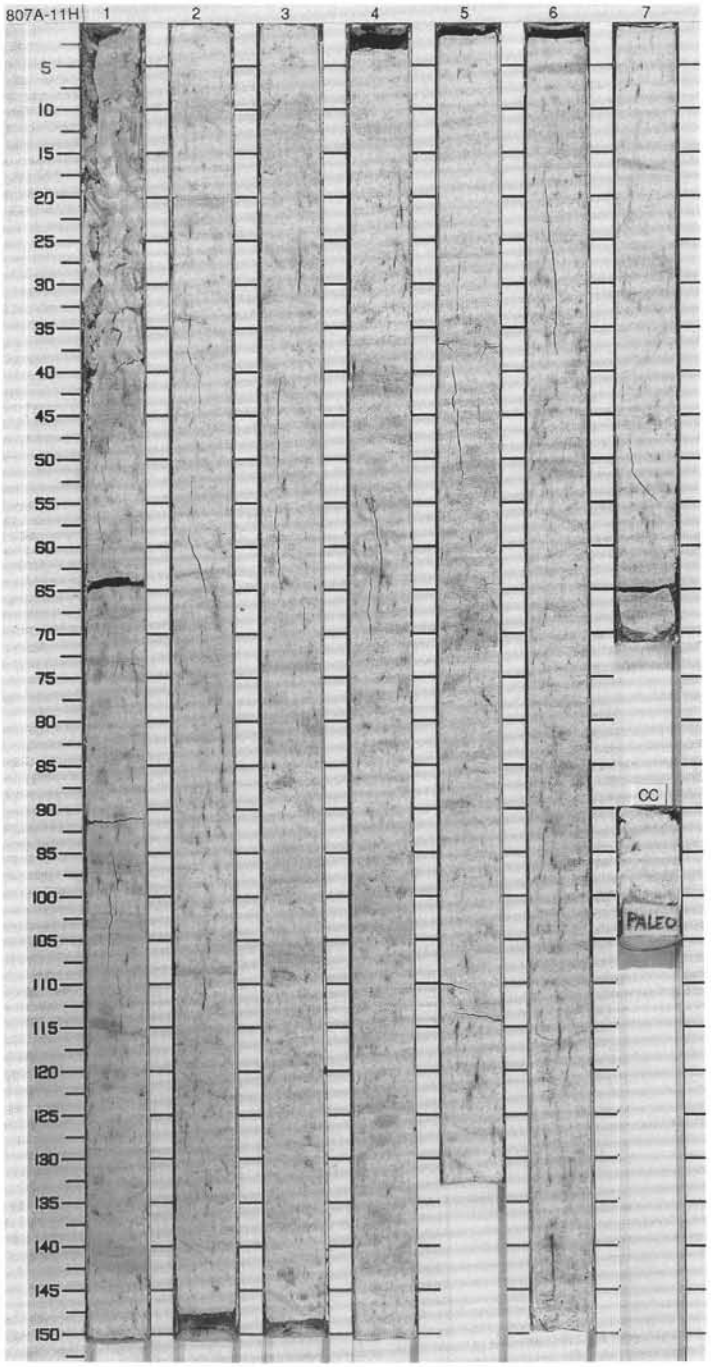
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Common to abundant, 1 m thick intervals of color banding are evident. The color bands are mostly pale yellowish green (10GY 7/2). Slight to moderate bioturbation is indicated by mottles (2.5Y 8/2) and burrow infillings of pyrite with pale purple (5P 7/2) borders and streaks.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	70
Clay	20
COMPOSITION:	
Diatoms	1
Foraminifers	25
Nannofossils	71
Radiolarians	1
Siliceous fragments	2



SITE 807 HOLE A CORE 12H CORED INTERVAL 102.4-111.9 mbsf

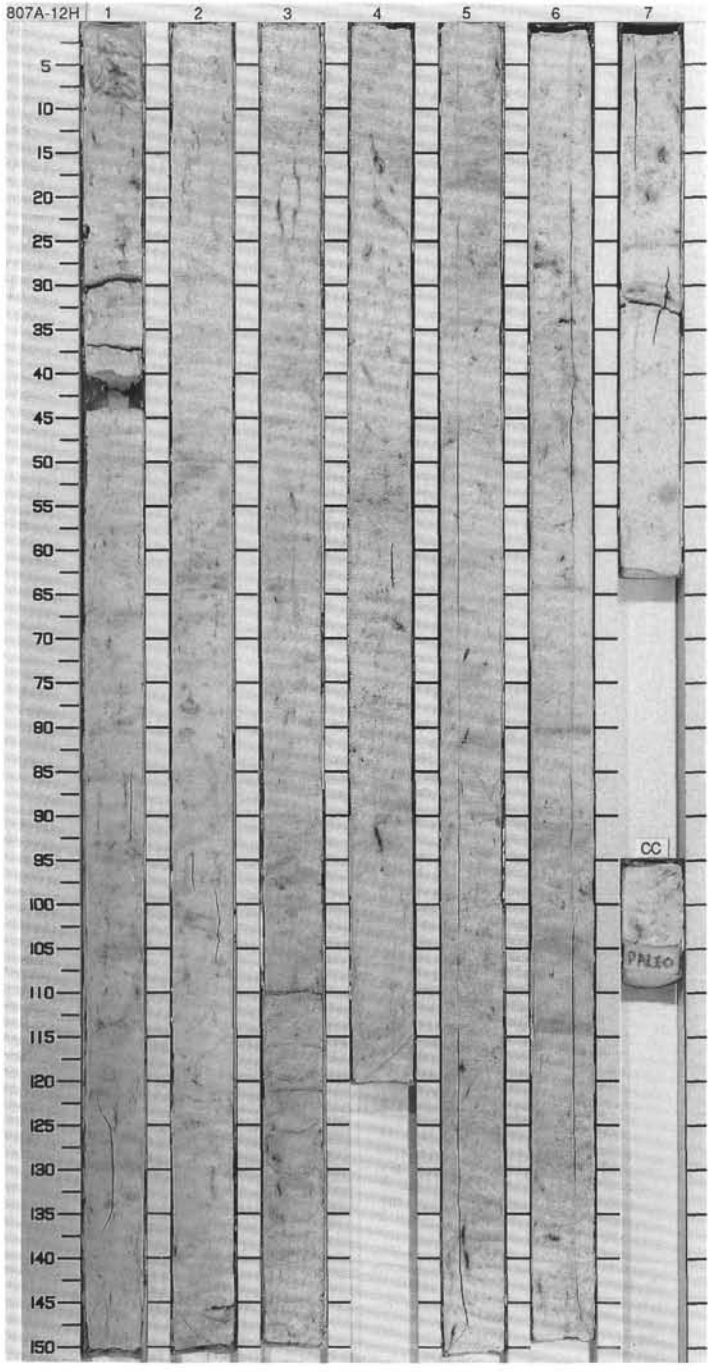
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER PLIOCENE	A/G	N18 - N19	NN12	*Spongaster pentas*	A/M	V-1535 ●Φ=65.5 ρ=1.58	●%$CaCO_3$=91.5	6					
						V-1549 ●Φ=66.1 ρ=1.58	●%$CaCO_3$=92.0	5					
						●Φ=64.4 ρ=1.61	●%$CaCO_3$=92.2	3					
						V-1532 ●Φ=65.1 ρ=1.59	●%$CaCO_3$=92.1	2					
						V-1536 ●Φ=64.9 ρ=1.6	●%$CaCO_3$=93.2	1	0.5 / 1.0				
	A/M		A/M	C-A/P-M NTD 13 *Thalassiosira convexa*				CC					

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Greenish gray (5G 7/1), pale yellowish green (10GY 7/2), and pale purple (5P 6/2) color banding is common. Moderate to heavy bioturbation is evident from abundant cm scale, light gray (2.5Y 7/2) mottles, pyrite-filled burrows, disseminated pyrite specks and pale purple (5P 6/2) mottles.

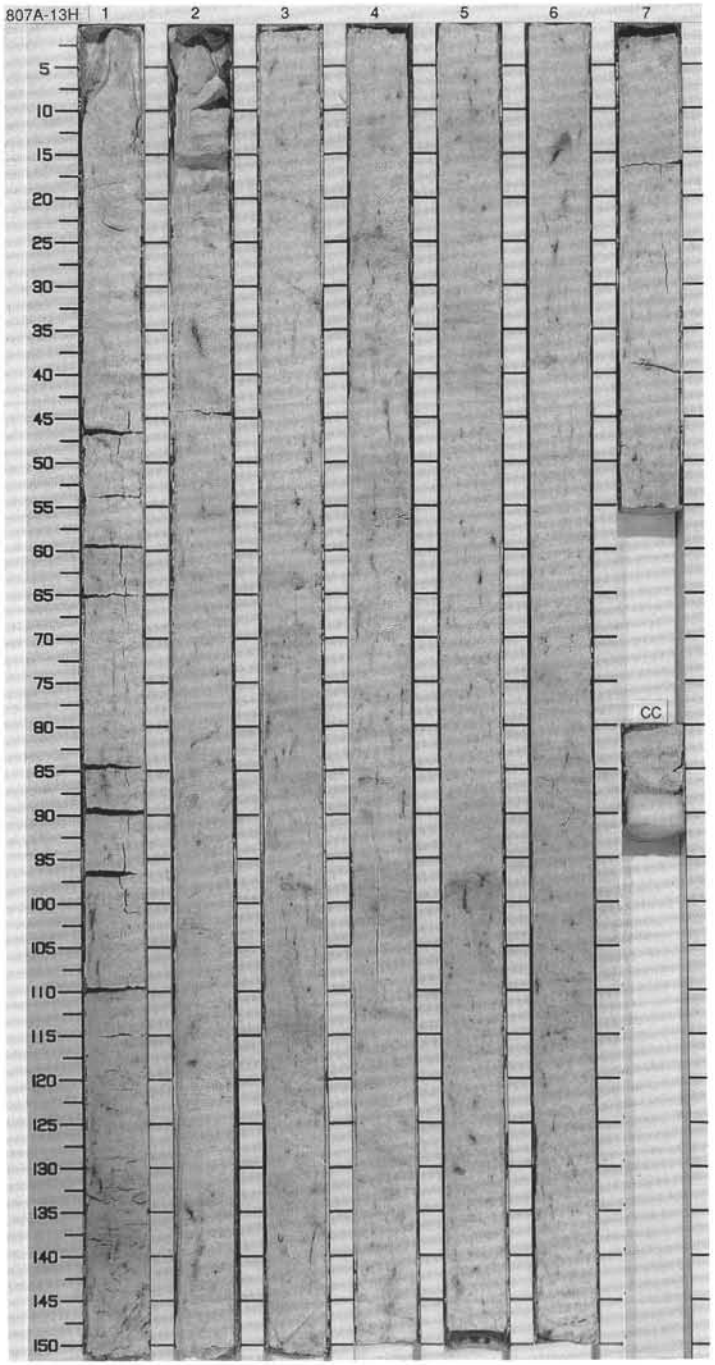
SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	70
Clay	20
COMPOSITION:	
Diatoms	Tr
Foraminifers	20
Nannofossils	78
Radiolarians	Tr
Siliceous fragments	2



SITE 807 HOLE A CORE 13H CORED INTERVAL 111.9-121.4 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
LOWER PLIOCENE	A/G	A/M	A/G	C/P-M		V-1594 ρ=65.9 β=1.59; V-1598 ρ=65.3 β=1.60; ρ=64.5 β=1.61; V-1552 ρ=65.5 β=1.59; V-1558 ρ=65.4 β=1.59	%$CaCO_3$=92.0; %$CaCO_3$=92.7; %$CaCO_3$=93.9; %$CaCO_3$=91.6; %$CaCO_3$=92.2	1 2 3 4 5 6 7 CC	0.5 1.0				*	NANNOFOSSIL OOZE with FORAMINIFERS Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. The sediment is moderately bioturbated, as indicated by white (2.5Y 8/2) and pale purple (5P 6/2) mottles, pyrite-filled burrows, and "halos". Very few diffuse cm thick, greenish gray (5G 7/1) and pale purple (5P 6/2) color bands and zones are present throughout the core. SMEAR SLIDE SUMMARY (%): 3, 74 D TEXTURE: Sand 12 Silt 55 Clay 33 COMPOSITION: Accessory minerals 2 Diatoms Tr Foraminifers 14 Nannofossils 81 Radiolarians Tr Siliceous fragments 3



SITE 807 HOLE A CORE 14H CORED INTERVAL 121.4-130.9 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
UPPER MIOCENE	A/M N17b	A/M NN11	A/G *Stichocorys peregrina*	C-A/P-M NTD 13? *Thalassiosira convexa*		V=1576 ● 0-66.2 P=1.59	●%$CaCO_3$=92.5	6					
						V=1583 ● 0-66.2 P=1.59	●%$CaCO_3$=89.0	5					
						V=1605 ● 0-64.6 P=1.61	●%$CaCO_3$=91.4	4					
						V=1605 ● 0-64.3 P=1.62	●%$CaCO_3$=93.3	3					*
								2					
								1	0.5				
									1.0				
								7					
								CC					

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The sediment is moderately to heavily bioturbated, as indicated by light gray (2.5Y 7/2) and pale purple (5P 6/2) mottles and pyrite-filled burrows and specks. A few diffuse cm scale, faint greenish gray (5G 7/1) and very few pale purple (5P 6/2) color bands are noted throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Accessory minerals	1
Diatoms	Tr
Foraminifers	27
Nannofossils	69
Radiolarians	Tr
Siliceous fragments	3

SITE 807 HOLE A CORE 15H CORED INTERVAL 130.9-140.4 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/M N17b; NANNOFOSSILS A/M NN11; RADIOLARIANS; DIATOMS C-A/P-M

PALEOMAGNETICS

PHYS. PROPERTIES

CHEMISTRY

SECTION

METERS

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

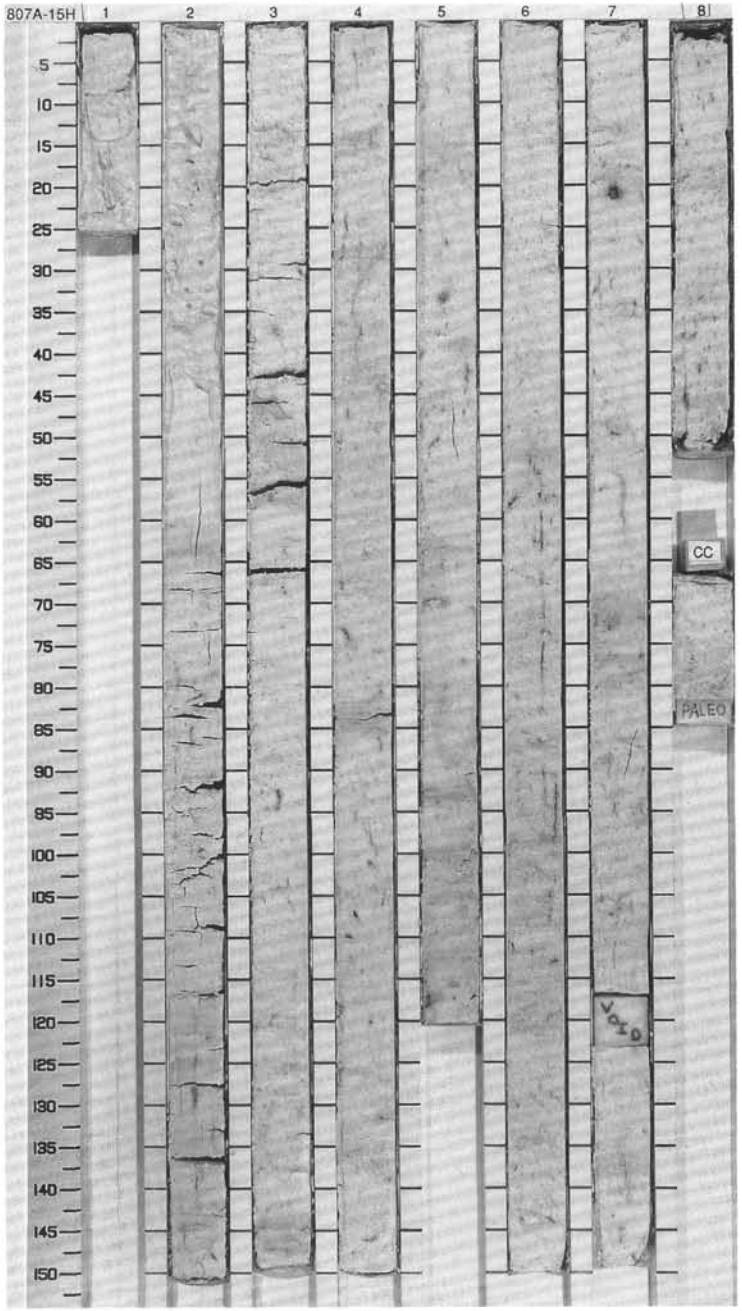
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to NANNOFOSSIL OOZE. The sediment is moderately bioturbated, as indicated by light gray (2.5Y 7/2) and pale purple (5P 6/2) mottles, pyrite-filled burrows, and halos. Diffuse faint greenish gray (5G 7/1) and pale purple (5P 6/2) color bands (cm scale) are noted throughout the core.

SMEAR SLIDE SUMMARY (%):

	4, 74
	D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	14
Nannofossils	80
Radiolarians	1
Siliceous fragments	3



SITE 807 HOLE A CORE 16H CORED INTERVAL 140.4–149.9 mbsf

TIME-ROCK UNIT	UPPER MIOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	N17b
NANNOFOSSILS	NN11
RADIOLARIANS	*Stichocorys peregrina*
DIATOMS	NTD 12?
PALEOMAGNETICS	
PHYS. PROPERTIES	V=1605 ρb=60.8 ρs=1.67; V=1590 ρb=62.8 ρs=1.63; V=1605 ρb=63.0 ρs=1.64; V=1558 ρb=62.5 ρs=1.63; V=1594 ρb=63.4 ρs=1.63; V=1554 ρb=64.9 ρs=1.60
CHEMISTRY	%$CaCO_3$=93.7; %$CaCO_3$=93.0; %$CaCO_3$=93.5; %$CaCO_3$=93.2; %$CaCO_3$=92.1; %$CaCO_3$=93.0
SECTION	CC, 7, 6, 5, 4, 3, 2, 1
METERS	1.0, 0.5
GRAPHIC LITHOLOGY	
DRILLING DISTURB.	
SED. STRUCTURES	
SAMPLES	*

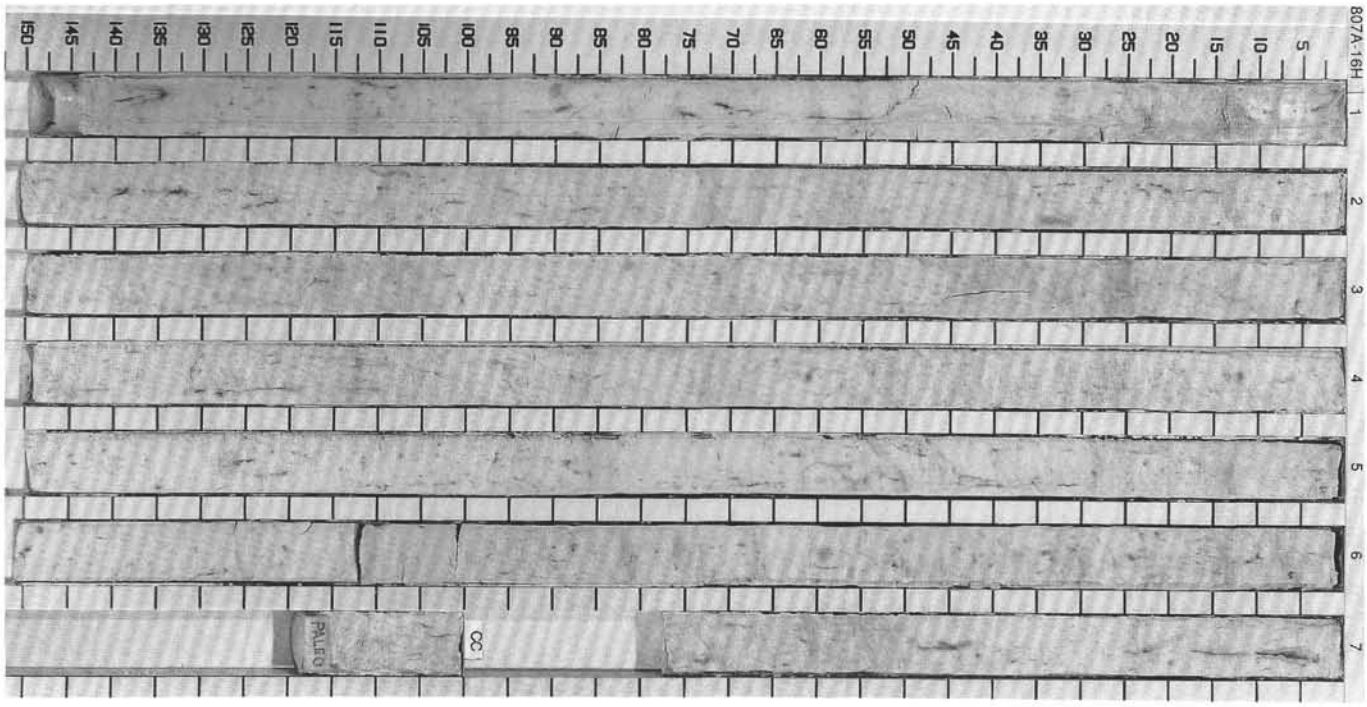
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to NANNOFOSSIL OOZE. Bioturbation is indicated by extensive white (2.5Y 8/2) mottles, burrow fills, pyrite specks, pale purple streaks, and purple "halos". Horizontal, 1 to 2 cm thick, faint pale purple (5P 6/2) and pale yellowish green (10GY 7/2) color bands are noted throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Accessory minerals	1
Foraminifers	22
Nannofossils	75
Radiolarians	Tr
Siliceous fragments	2



SITE 807 HOLE A CORE 17H CORED INTERVAL 149.9-159.4 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	A/M N17b	A/P NN11	C-A/M	NTD 12 *Nitzschia miocenica*		V=1624 ρ=1.66 Φ=62.2 V=1594 ρ=1.66 Φ=62.1 V=1598 ρ=1.61 Φ=62.4 V=1568 ρ=1.61 Φ=63.9 V=1598 ρ=1.61 Φ=64.2 V=1598 ρ=1.64 Φ=63.4	%$CaCO_3$=93.3 %$CaCO_3$=92.9 %$CaCO_3$=93.7 %$CaCO_3$=93.1 %$CaCO_3$=92.8 %$CaCO_3$=94.0	1 2 3 4 5 6 7 CC	0.5 1.0				

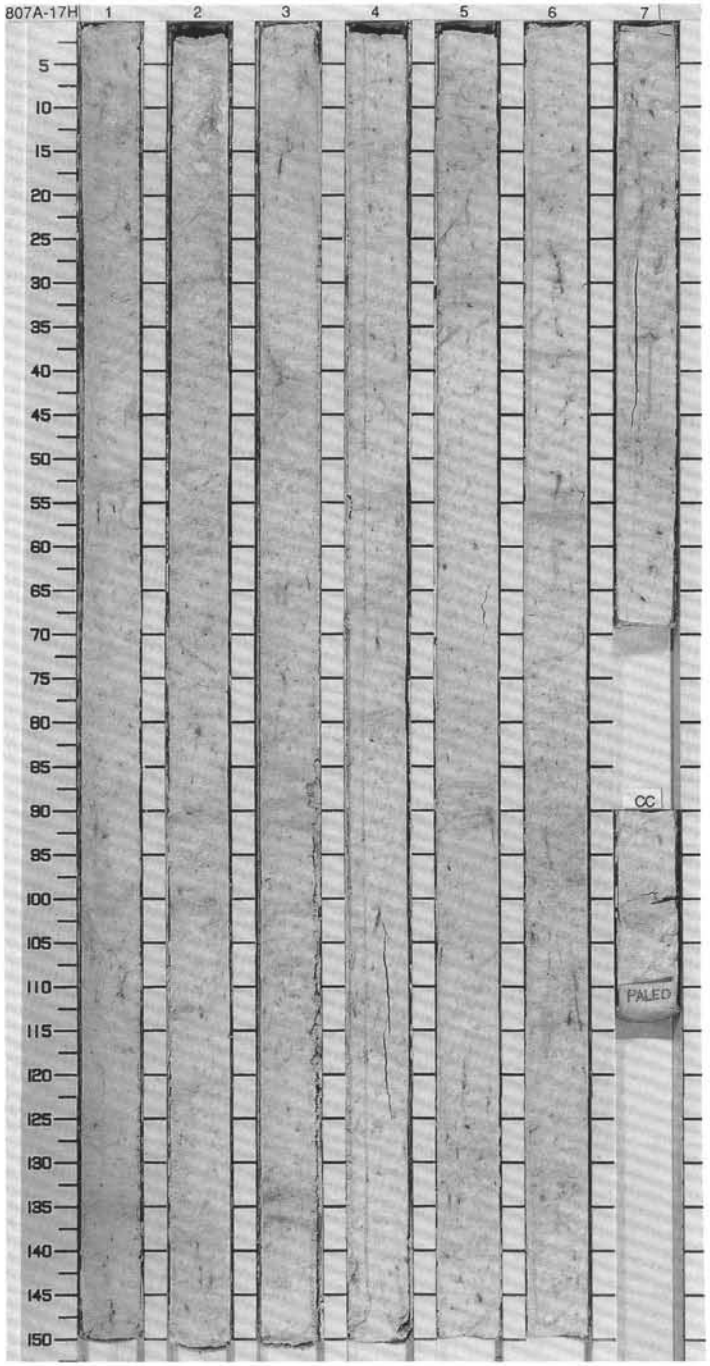
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The sediment is moderately bioturbated, as indicated by light gray (2.5Y 7/2) mottles, pyrite-filled burrows and pale purple (5P 6/2) "halos". Diffuse faint greenish gray (5G 7/1) and pale purple color bands (cm scale) are noted throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	75
Clay	15
COMPOSITION:	
Accessory minerals	Tr
Diatoms	Tr
Foraminifers	25
Nannofossils	74
Siliceous fragments	1



SITE 807 HOLE A CORE 18H CORED INTERVAL 159.4-168.9 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
UPPER MIOCENE	A/G N17a	A/M NN11	A/G *Stichocorys peregrina*	A/M NTD 12 *Nitzschia miocenica*		V-1598 ρ-63.6 p-1.63 %$CaCO_3$=93.3 V-1575 ρ-63.9 p-1.63 %$CaCO_3$=93.5 V-1554 ρ-62.8 p-1.63 %$CaCO_3$=93.0 V-1601 ρ-65.2 p-1.67 %$CaCO_3$=92.5 V-1590 ρ-63.4 p-1.63 %$CaCO_3$=93.0 V-1605 ρ-63.8 p-1.62 %$CaCO_3$=93.0	CC 7 6 5 4 3 2 1	1.0 0.5			*	OG W

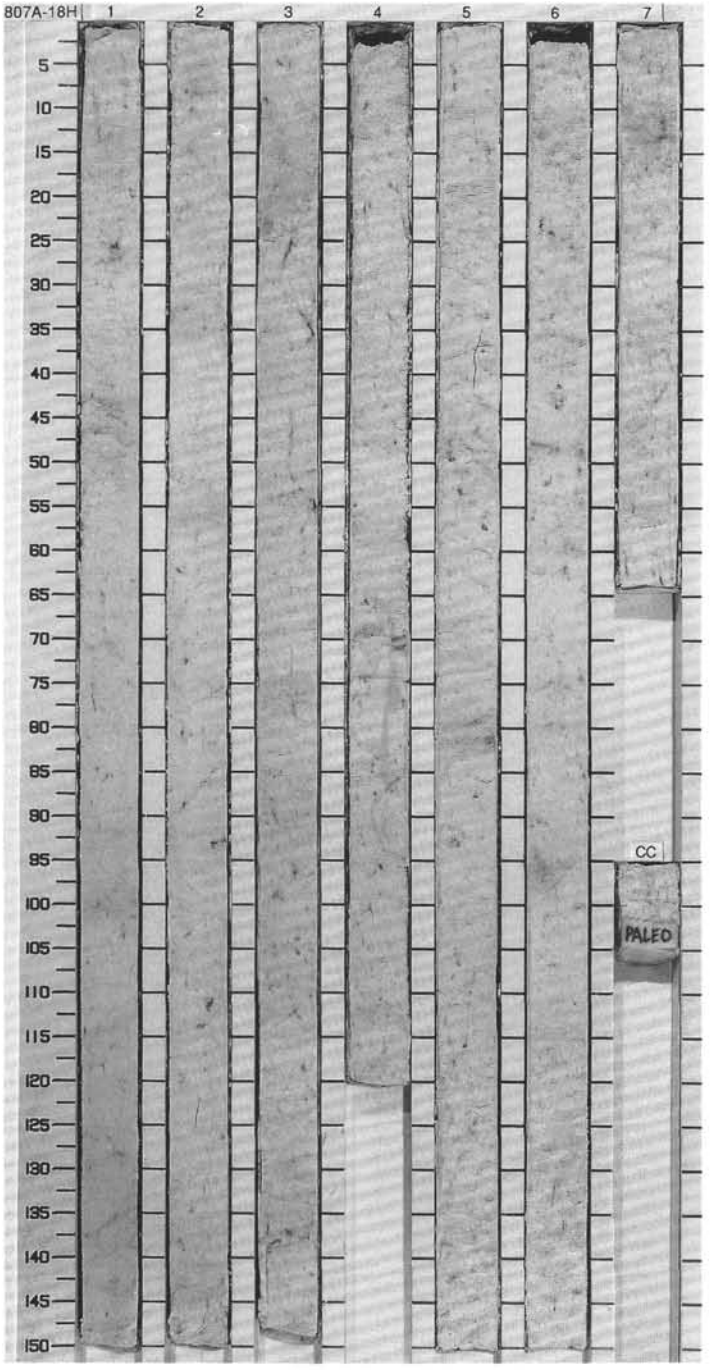
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Some intervals are coarser than others, suggesting intergradational bedding. The sediment is predominantly white (2.5Y 8/0) and commonly contains faint pale greenish gray (5G 7/1) color bands, about 1 cm in diameter, and pale purple (5P 6/2) to reddish gray (5R 6/1) color bands, several cm in diameter. Bioturbation is evident from abundant pyrite-filled burrows (very dusky purple (5P 2/2) in the center with borders of pale purple (5P 6/2)), and common light gray (2.5Y 7/2) burrow mottles, about 1 cm in diameter.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	15
Silt	60
Clay	25
COMPOSITION:	
Foraminifers	25
Nannofossils	75
Radiolarians	Tr
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 19H CORED INTERVAL 168.9-178.4 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	A/G	N17a	A/P	NN11	A/M	*Didymocyrtis penultima*	C-A/M	NTD 12 *Nitzschia miocenica*		V=1609 ● 0-63.6 P=1.64 %$CaCO_3$=93.5	V=1605 ● 0-63.6 P=1.64 %$CaCO_3$=92.2	V=1568 ● 0-63.1 P=1.64 %$CaCO_3$=94.5	V=1586 ● 0-62.8 P=1.65 %$CaCO_3$=93.2	V=1579 ● 0-62.7 P=1.65 %$CaCO_3$=93.5	V=1579 ● 0-62.8 P=1.63 %$CaCO_3$=94.4	1 2 3 4 5 6 7 CC	0.5 1.0			

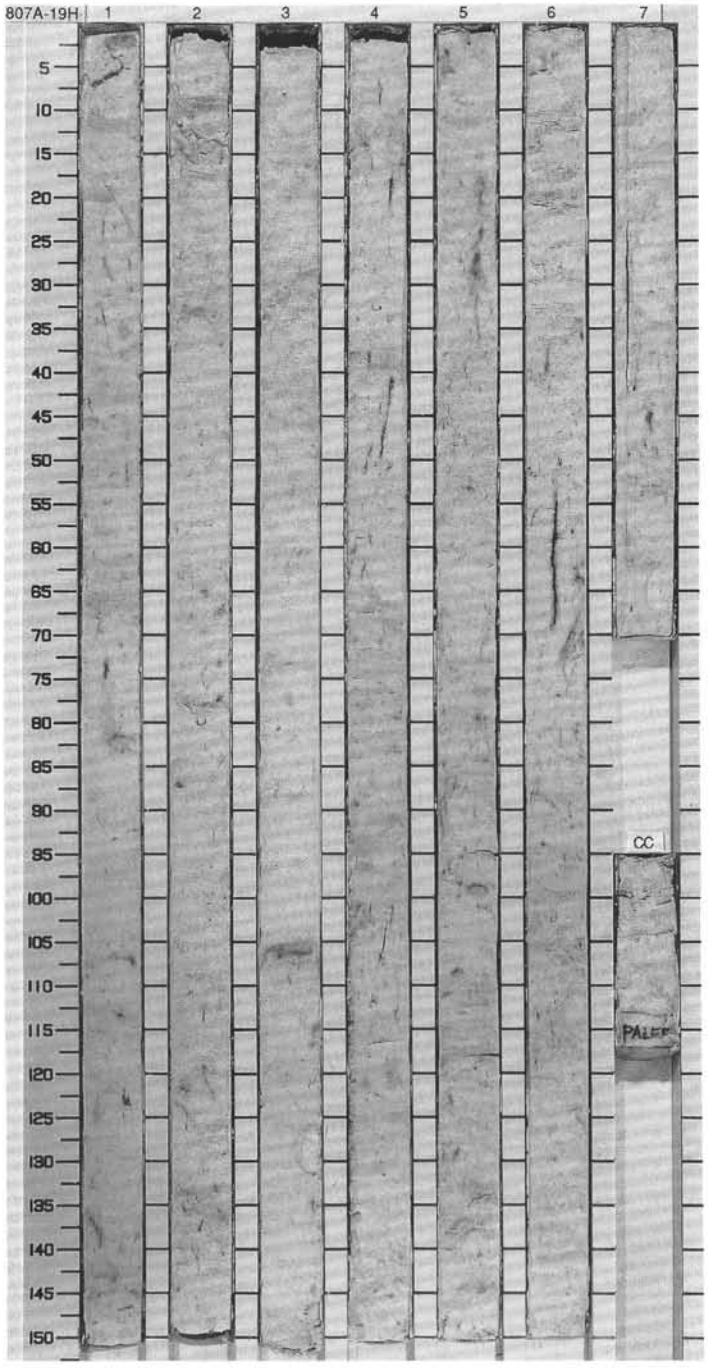
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/2) NANNOFOSSIL OOZE with FORAMINIFERS interbedded with FORAMINIFER NANNOFOSSIL OOZE. Very faint pale greenish gray (5G 7/1), 0.5 cm thick color bands are common to abundant. Pale purple (5P 6/2) to reddish gray (5R 6/1), 1 to 2 cm thick, color bands are also present. There are abundant pyrite-filled burrows and light gray (2.5Y 7/2) mottles, suggesting moderate to heavy bioturbation. The pyrite-filled trace structures are very dusky purple (5P 2/2) in the center with borders of pale purple (5P 6/2) and occur as specks, patches and vertical traces. Pale purple (5P 6/2) color migration fronts, which form "halo"-like structures, are also present.

SMEAR SLIDE SUMMARY (%):

	3, 75
	D
TEXTURE:	
Sand	10
Silt	60
Clay	30
COMPOSITION:	
Accessory minerals	Tr
Foraminifers	25
Nannofossils	75
Siliceous fragments	Tr



SITE 807 HOLE A CORE 20H CORED INTERVAL 178.4-187.9 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
UPPER MIOCENE	A/G	N17a				V=1616 ρb=1.67 %=61.8	%$CaCO_3$=84.1	6					
	A/P	NN11				V=1583 ρb=1.68 %=60.5	%$CaCO_3$=93.6	5					
	A/G	*Didymocyrtis penultima*				V=1590 ρb=1.64 %=63.2	%$CaCO_3$=93.5	4					
	C/P-M	NTD 11?				V=1575 ρb=1.67 %=61.4	%$CaCO_3$=94.1	3					
						V=1594 ρb=1.64 %=62.7	%$CaCO_3$=93.0	2					
						V=1609 ρb=1.64 %=63.5	%$CaCO_3$=93.9	1	0.5 1.0		O	*	

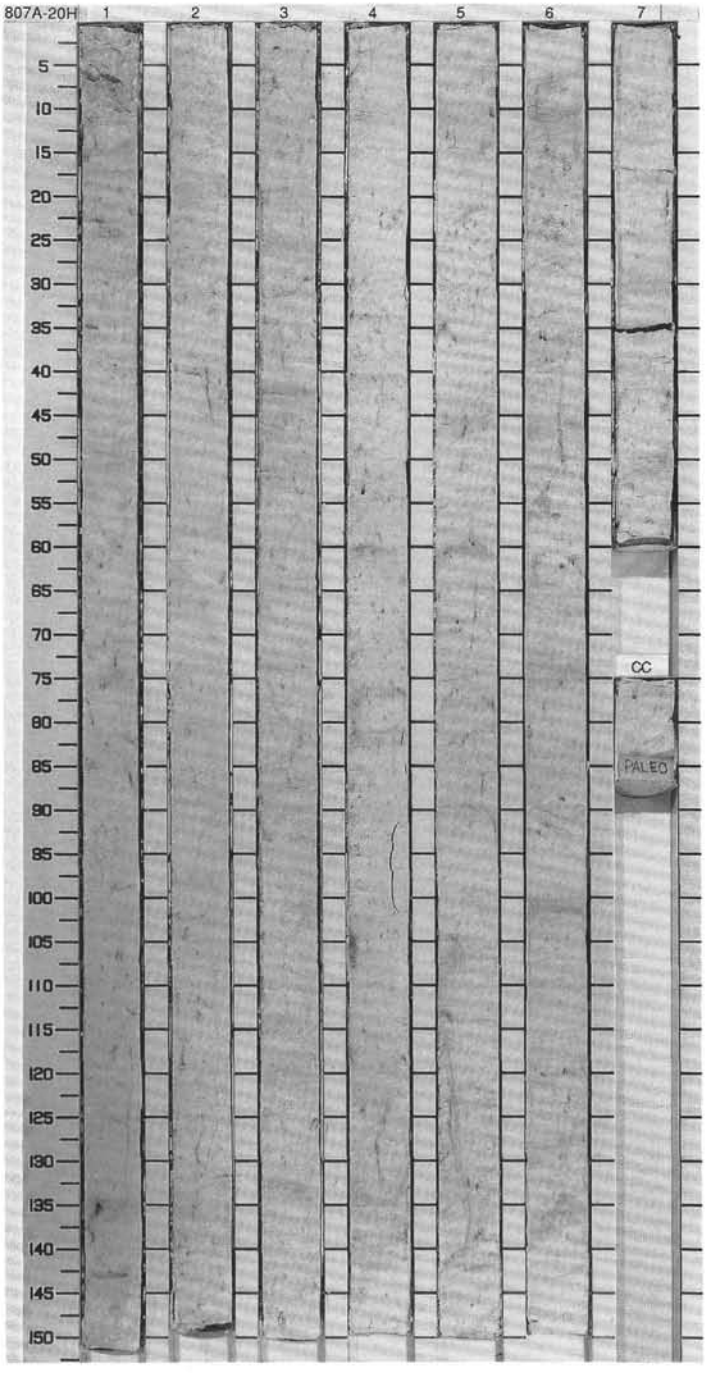
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5 7/2) NANNOFOSSIL OOZE with FORAMINIFERS. Pyritized burrows and light gray (2.5Y 7/2) mottles are abundant. Very faint greenish gray (5G 7/1), 0.5 cm thick color bands are common. Microfaults are observed at 140-150 cm in Sections 4 and 6. A large pale purple (5P 7/1) swirl is observed between 95 and 135 cm in Section 5, possibly indicating that the color, in this case, is related to fluid migration.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	70
Clay	20
COMPOSITION:	
Diatoms	Tr
Foraminifers	20
Nannofossils	79
Radiolarians	Tr
Siliceous fragments	1



SITE 807 HOLE A CORE 21H CORED INTERVAL 187.9-197.4 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	A/M N17a	A NN11	A/M *Didymocyrtis penultima*	C/M NTD 11 *Nitzschia porteri*		V-1547 ●0.60.5 ρ=1.69 V-1561 ●0.63.0 ρ=1.64 V-1398 ●0.62.9 ρ=1.64 V-1590 ●0.62.7 ρ=1.65 V-1594 ●0.62.3 ρ=1.64 V-1586 ●0.62.6 ρ=1.65	●%$CaCO_3$=93.8 ●%$CaCO_3$=93.0 ●%$CaCO_3$=92.7 ●%$CaCO_3$=92.9 ●%$CaCO_3$=94.3 ●%$CaCO_3$=93.5	1 2 3 4 5 6 7 CC	0.5 1.0				OG TW *

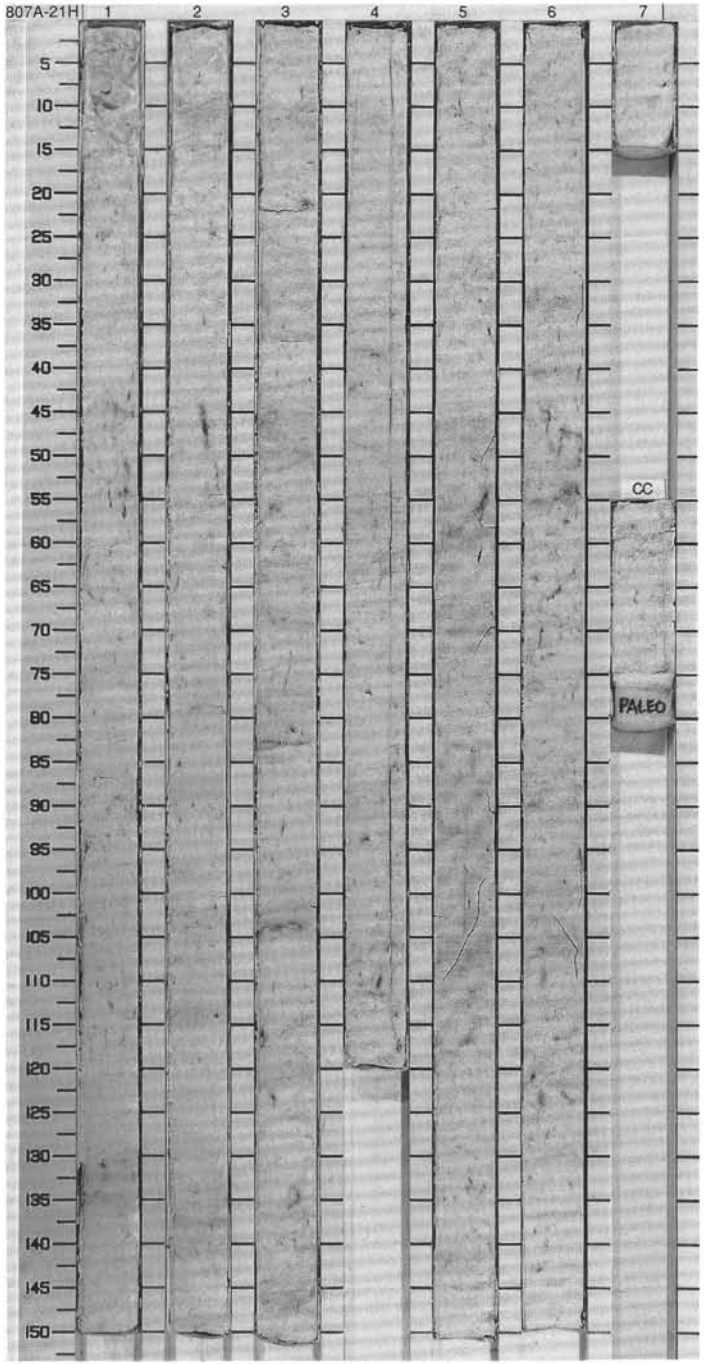
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. The bioturbation structures include mm to cm scale, grayish blue (5PB 5/2) pyrite-filled burrows. In Sections 3 and 6, these fills outline the spreiten in individual *Zoophycos* trace fossils. Diffuse light greenish gray (5G 7/1), pale purple (5PB 7/2), and grayish blue (5PB 5/2) color bands are common to abundant, ranging in thickness from 0.5 cm to several cm. Individual color bands are microfaulted near the tops of Sections 3 and 4.

SMEAR SLIDE SUMMARY (%):

	4, 69 D
TEXTURE:	
Sand	14
Silt	82
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	15
Nannofossils	78
Radiolarians	2
Silicoflagellates	3
Spicules	1



SITE 807 HOLE A CORE 22H CORED INTERVAL 197.4-206.9 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
UPPER MIOCENE	A/G N17a	A/P NN11	A/M *Didymocyrtis penultima*	C/P-M NTD 11 *Nitaschia porteri*		V=1620 ρ=60.3 p=1.68 V=1575 ρ=60.9 p=1.68 V=1586 ρ=61.6 p=1.67 V=1609 ρ=60.7 p=1.68 V=1579 ρ=62.1 p=1.66 V=1590 ρ=60.9 p=1.68	%$CaCO_3$=94.1 %$CaCO_3$=94.5 %$CaCO_3$=93.5 %$CaCO_3$=93.5 %$CaCO_3$=94.4 %$CaCO_3$=93.9	1 2 3 4 5 6 7 CC	0.5 1.0				LN MAR

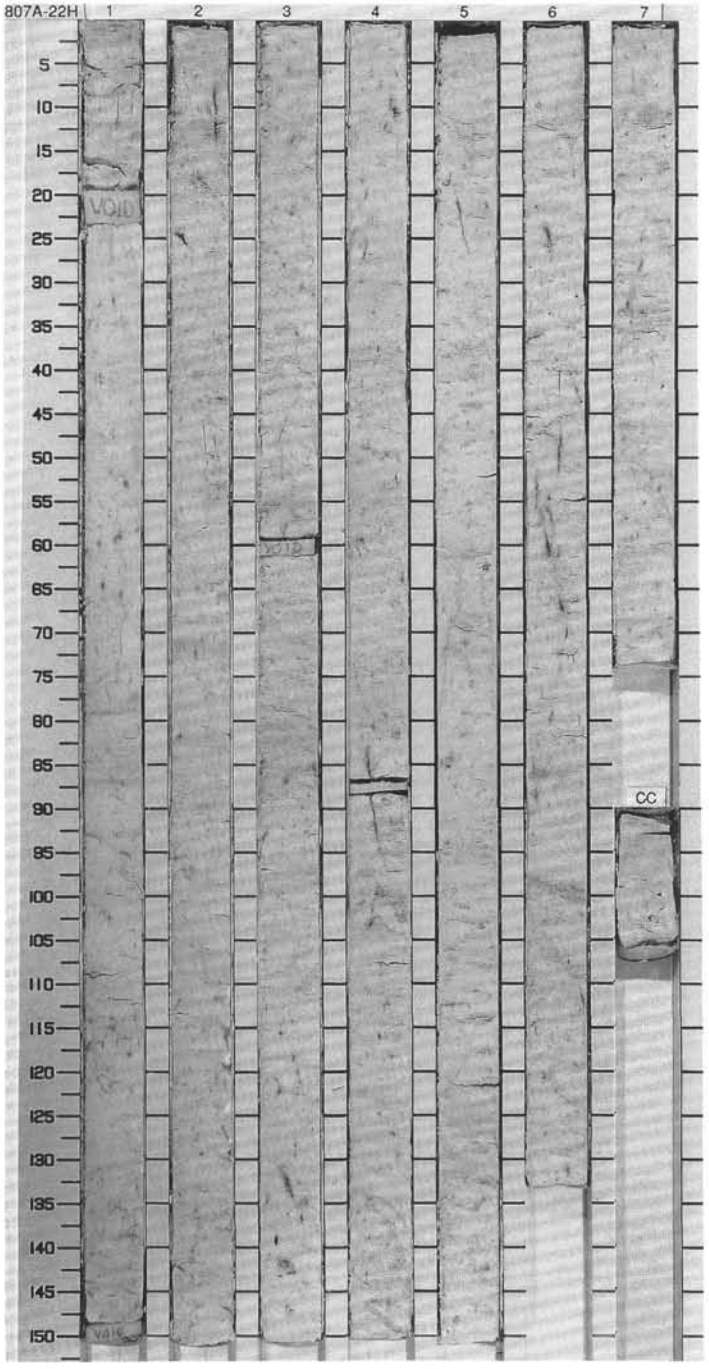
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation structures include mm to cm scale, grayish blue (5PB 5/2) pyrite-filled burrows, and light gray (2.5Y 7/2 and 5Y 7/1) mottling. Light greenish gray (5G 7/1), grayish blue (5PB 5/2), and pale purple (5PB 7/2) diffuse color banding is present to abundant.

SMEAR SLIDE SUMMARY (%):

	3, 92 D
TEXTURE	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	12
Nannofossils	81
Radiolarians	3
Silicoflagellates	2
Spicules	1



SITE 807 HOLE A CORE 23H CORED INTERVAL 206.9-216.4 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	A/G	A/M	A/G	C/M-P		V-1609 ρ-62.2 P-1.65 %$CaCO_3$=92.9 V-1676 ρ-58.5 P-1.72 %$CaCO_3$=92.3 V-1632 ρ-62.2 P-1.66 %$CaCO_3$=93.5 V-1632 ρ-60.3 P-1.68 %$CaCO_3$=94.4 V-1590 ρ-62.6 P-1.64 %$CaCO_3$=93.5 V-1612 ρ-61.7 P-1.67 %$CaCO_3$=93.7		1 2 3 4 5 6 7 CC	0.5 1.0			*	

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation structures include mm to cm scale, grayish blue (5PB 5/2), pyrite-filled burrows and light gray (2.5Y 7/2 and 5Y 7/2) mottling. Light greenish gray (5G 7/1), grayish blue (5PB 5/2), and pale purple (5PB 7/2) diffuse color banding is present to abundant.

SMEAR SLIDE SUMMARY (%):

	3, 71
	D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Diatoms	Tr
Foraminifers	10
Nannofossils	86
Radiolarians	2
Silicoflagellates	1
Spicules	1

SITE 807 HOLE A CORE 24H CORED INTERVAL 216.4-225.9 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
UPPER MIOCENE	A/G	N16 - N17a	NN11	*Didymocyris antepenultima*	A/G	NTD 11 *Nitzschia porteri*	A/M	●V-1640 ●V-1594 ●V-1612 ●V-1644	1 2 3 4 5 6 7 CC	0.5 1.0			OG TW

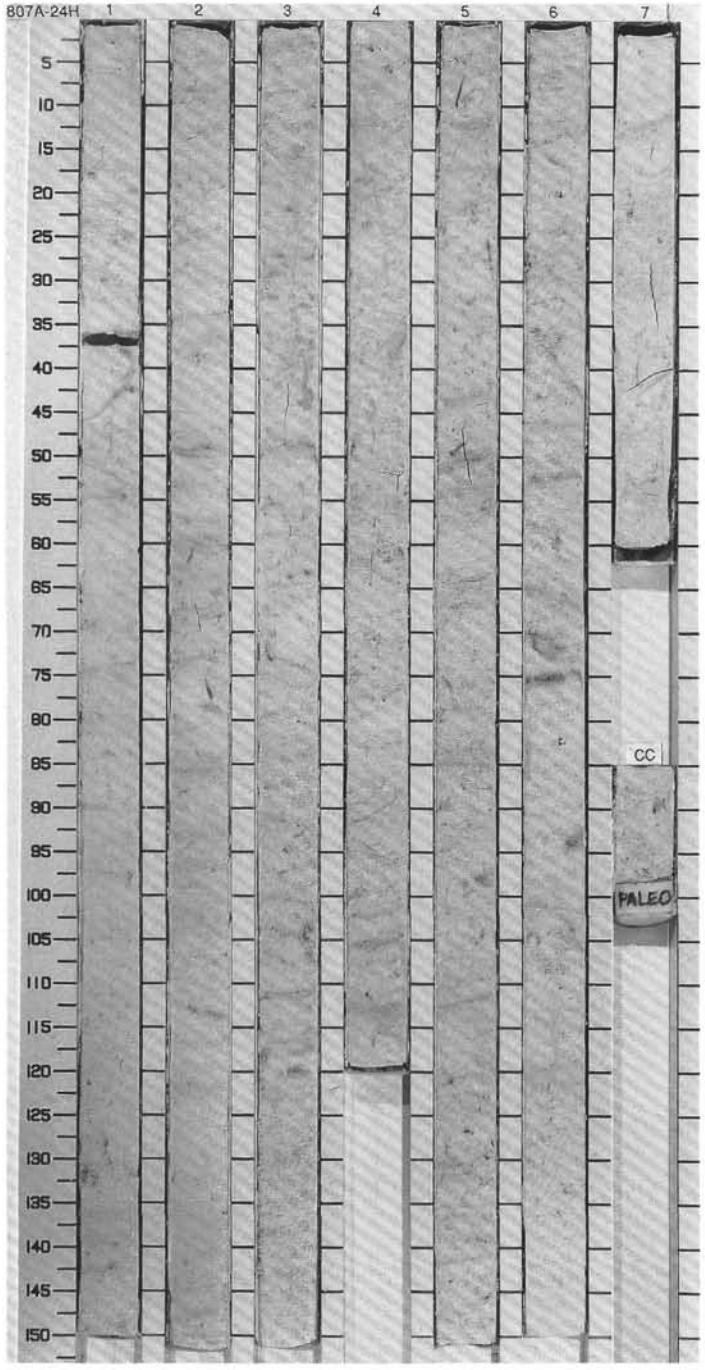
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains moderately to heavily bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Bioturbation structures include mm to cm scale, grayish blue (5PB 5/2), pyrite-filled burrows and light gray (2.5Y 7/2 and 5Y 7/2) mottling. The heavily bioturbated intervals are dominated by the light gray mottling. Light greenish gray (5G 7/1), grayish blue (5PB 5/2), and pale purple (5PB 7/2) diffuse color banding is present to abundant.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	15
Silt	81
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	25
Nannofossils	69
Radiolarians	2
Silicoflagellates	2
Spicules	1



SITE 807 HOLE A CORE 25H CORED INTERVAL 225.9-235.4 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	A/G N16 - N17a	A/M NN11	A/G *Didymocyrtis antepenultima*	A/M NTD 11a		●V-1616 ●V-1598 ●V-1540 ●V-1612 ●V-1601		1 2 3 4 5 6 7 CC	0.5 1.0			*	

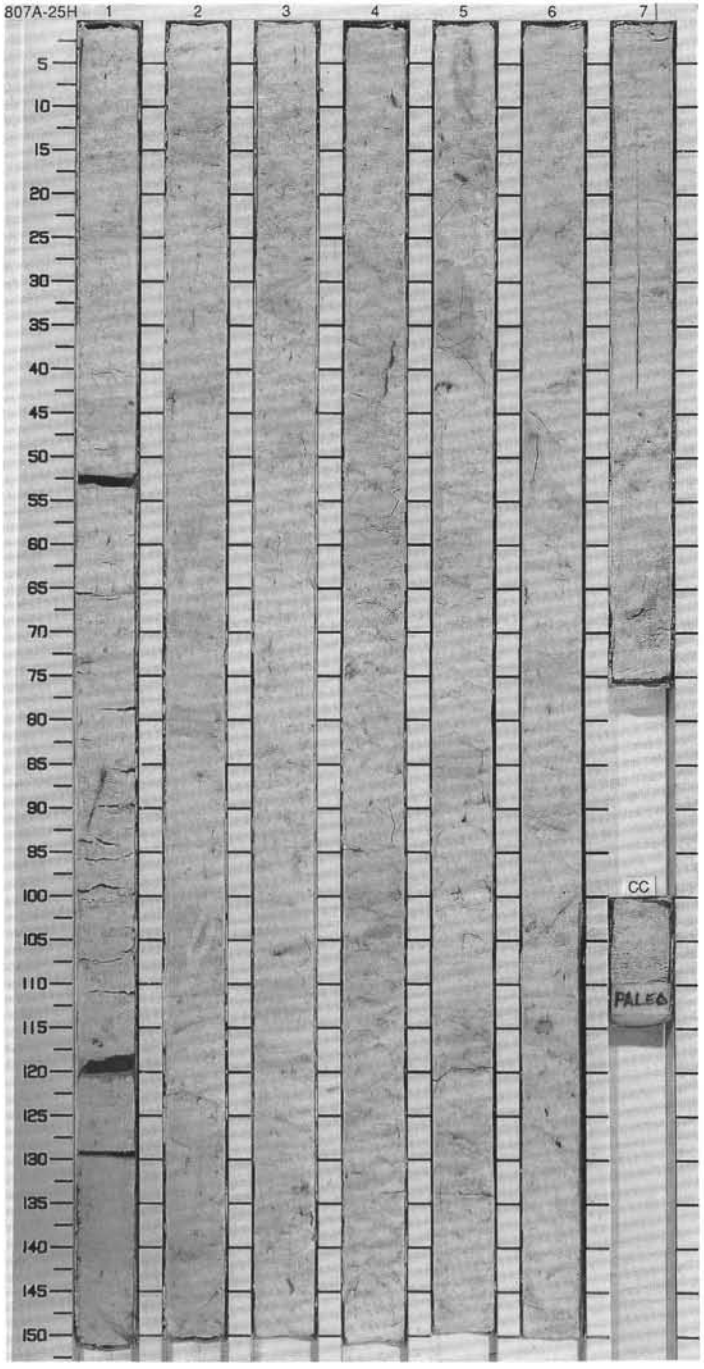
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE, with alternating soft and semi-indurated intervals. The color grades locally to light gray (N7/). The sediment is slightly to moderately bioturbated, as indicated by cm scale, light gray (5Y 7/2) mottling and mm scale, grayish blue (5PB 5/2) pyrite-filled burrows. A 10 cm long vertical pyritized burrow was observed in Section 1. Diffuse light greenish gray (5G 7/1), grayish blue (5PB 5/2), and pale purple (5P 6/2) color bands are common. In Section 2, a halo encircling a pyritized burrow apparently causes grayish blue (5PB 5/2) color bands to "fade" and leaves them greenish gray inside the halo. A light gray (N7/), 15 cm long patch in Section 5 may represent mottling or fluid migration.

SMEAR SLIDE SUMMARY (%):

	3, 79 D
TEXTURE:	
Sand	15
Silt	80
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	71
Radiolarians	2
Silicoflagellates	1
Spicules	1



SITE 807 HOLE A CORE 26H CORED INTERVAL 235.4-244.9 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
UPPER MIOCENE	A/G	N16				V=1616 ϕ=62.0 ρb=1.65	%CaCO3=92.9	6					
	A/M	NN10?				V=1628 ϕ=63.8 ρb=1.62	%CaCO3=91.6	5					
	A/G	*Didymocyrtis antepenultima*				V=1628 ϕ=62.1 ρb=1.64	%CaCO3=91.3	4					
	A/P-M	NTD10? - NTD 11				V=1628 ϕ=62.8 ρb=1.64	%CaCO3=92.3	3					*
						V=1624 ϕ=62.5 ρb=1.65	%CaCO3=90.9	2					
								1	0.5				
									1.0				
								CC					

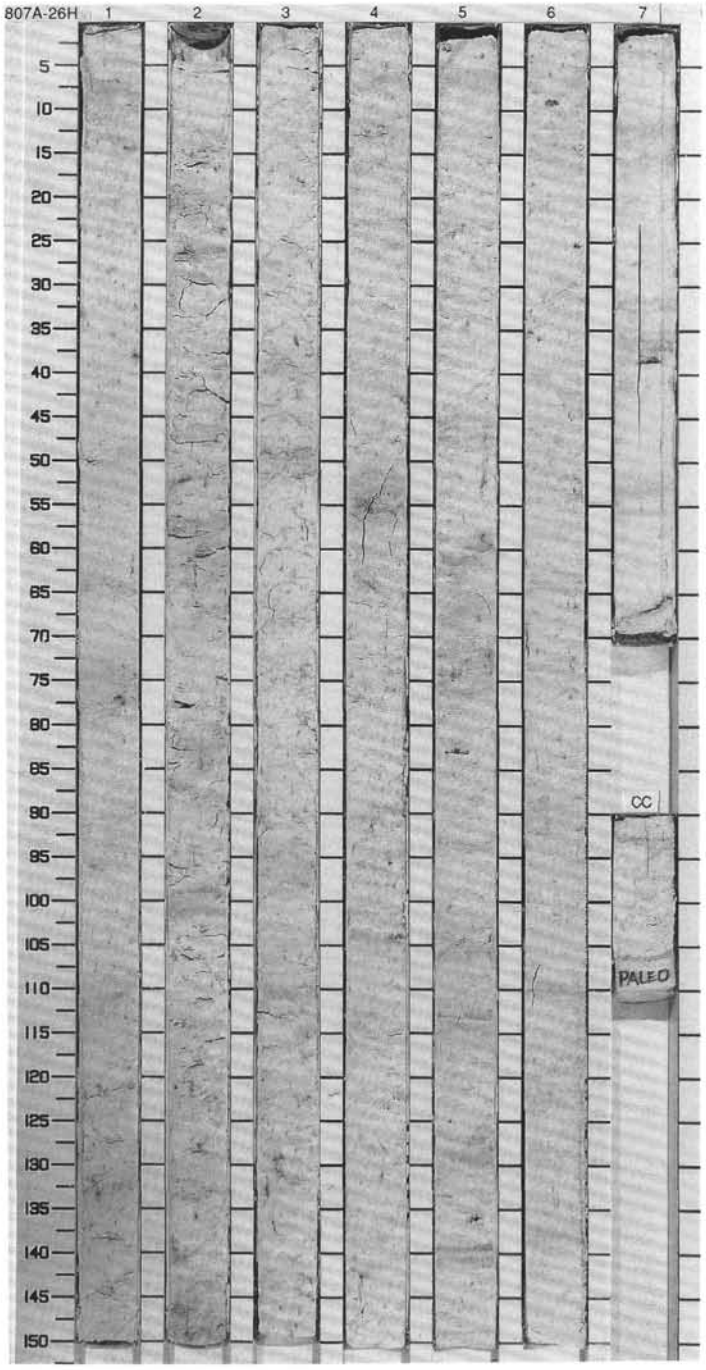
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS, which has formed drilling "biscuits" in Sections 1 through 3. The sediment is slightly to moderately bioturbated, with mm scale, grayish blue (5PB 5/2), pyrite-filled burrows common throughout the core. The more heavily bioturbated intervals also contain cm scale, light gray (5Y 7/1 and 2.5Y 7/2) mottling. Diffuse light greenish gray (5G 7/1), pale purple (5P 6/2), and pale blue (5PB 6/2) color bands generally become more abundant downcore. Microfaulted color bands are present at Section 5, 130 cm, and Section 6, 37 cm.

SMEAR SLIDE SUMMARY (%):

	3, 84 D
TEXTURE:	
Sand	18
Silt	78
Clay	4
COMPOSITION:	
Foraminifers	35
Nannofossils	62
Radiolarians	1
Silicoflagellates	1
Spicules	1



SITE 807 HOLE A CORE 27H CORED INTERVAL 244.9-254.4 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: N16; A/G
- NANNOFOSSILS: NN10; A/M
- RADIOLARIANS: *Didymocyrtis antepenultima*; A/G
- DIATOMS: NTD 10?; C-A/P-M

PALEOMAGNETICS

PHYS. PROPERTIES: Section 1: ϕ=61.3, ρ=1.66; Section 3: ϕ=61.9, ρ=1.65; Section 4: V=1664, ϕ=64.0, ρ=1.61

CHEMISTRY: Section 1: %$CaCO_3$=93.4; Section 3: %$CaCO_3$=91.5; Section 4: %$CaCO_3$=91.4

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: * (Section 3); OG, IW (Section 4)

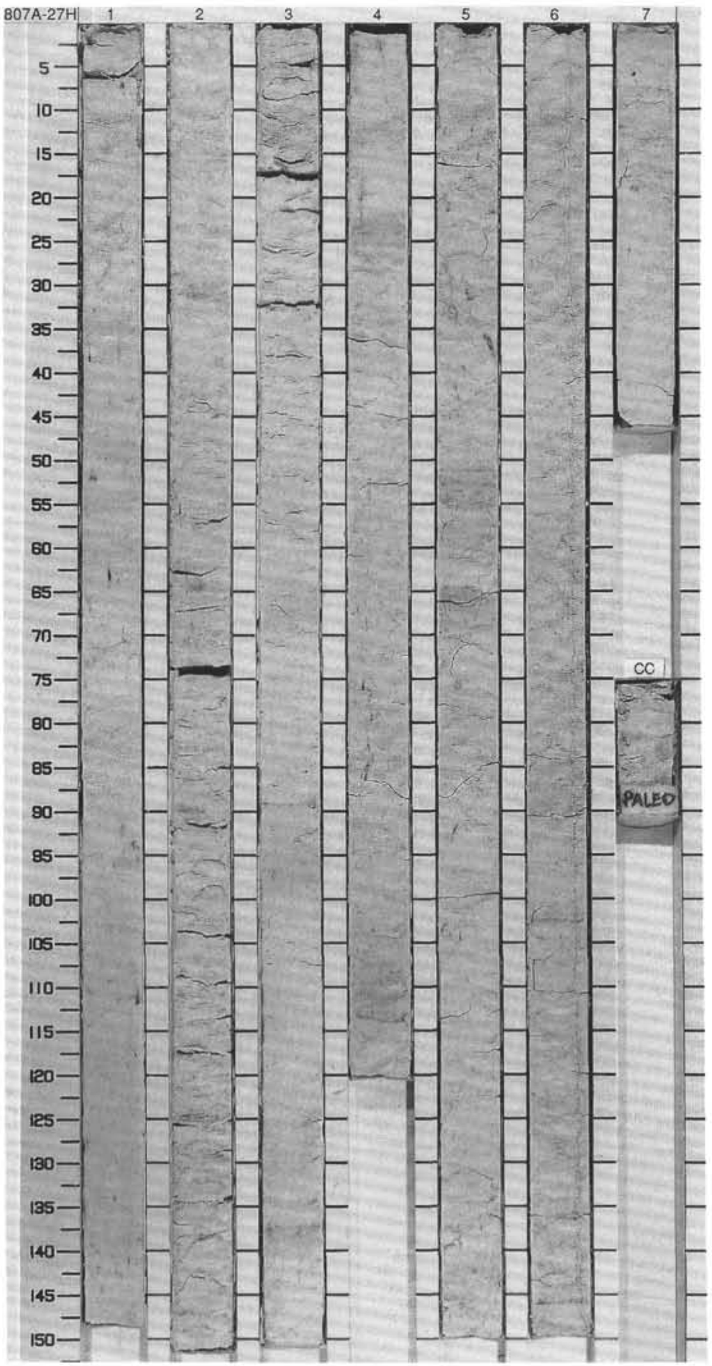
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE

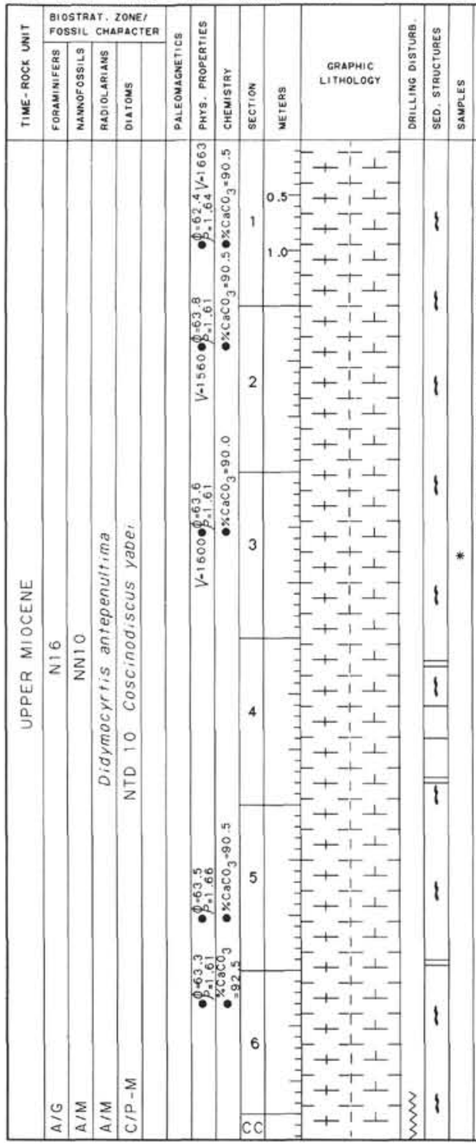
Major lithology: This core contains white (2.5Y 8/0 to 10YR 8/1) FORAMINIFER NANNOFOSSIL OOZE, which becomes more uniform in appearance downcore. Sections 1 through 5 are slightly to moderately bioturbated, with grayish blue (5PB 5/2) mm scale, pyrite-filled burrows and light gray (2.5Y 7/2), cm scale, mottling. Sections 6 through Core Catcher are slightly bioturbated, with few distinct mottles. Faint light greenish gray (5G 7/1), pale purple (5P 6/2), and pale blue (5PB 7/2) color bands are present to abundant in Sections 1 through 6.

SMEAR SLIDE SUMMARY (%):

	3, 86
	D
TEXTURE:	
Sand	15
Silt	81
Clay	4
COMPOSITION:	
Foraminifers	30
Nannofossils	65
Radiolarians	2
Silicoflagellates	2
Spicules	1



SITE 807 HOLE A CORE 28X CORED INTERVAL 254.4-264.1 mbsf



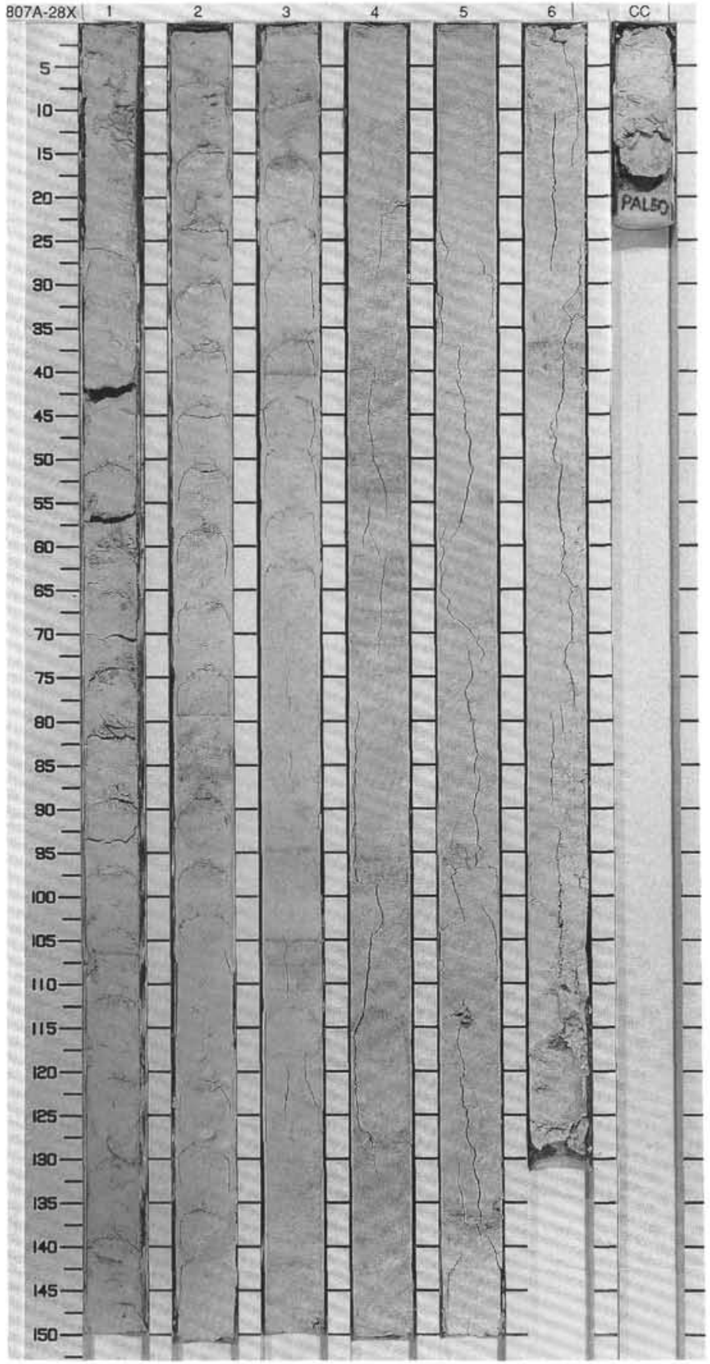
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (7.5YR 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The sediment is very stiff to hard and is biscuited by the drilling process. The core is relatively homogeneous, with infrequent 0.2 to 0.5 cm thick, greenish gray (5G 7/1), pale blue (5PB 7/2), pale purple (5P 6/2), and pale pink (5RP 8/2) color bands. Only a few signs of bioturbation are evident in the form of occasional pyrite-filled traces with purple borders, and small (0.5 to 1 cm thick), light gray (2.5Y 7/2) mottles.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	15
Silt	60
Clay	25
COMPOSITION:	
Foraminifers	23
Nannofossils	77
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 29X CORED INTERVAL 264.1-273.8 mbsf

TIME-ROCK UNIT	UPPER MIOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	A/G N16
NANNOFOSSILS	A/M NN10
RADIOLARIANS	A/G *Diartus petterssoni / Didymocyrtis antepenultima*
DIATOMS	C/M NTD 10a
PALEOMAGNETICS	
PHYS. PROPERTIES	V=1593 Φ=60.6 ρ=1.66; V=1608 Φ=61.5 ρ=1.67; V=1612 Φ=62.2 ρ=1.64; V=1640 Φ=59.8 ρ=1.68; V=1647 Φ=61.3 ρ=1.65
CHEMISTRY	%$CaCO_3$=93.1; %$CaCO_3$=92.9; %$CaCO_3$=94.0; %$CaCO_3$=92.6; %$CaCO_3$=93.2; %$CaCO_3$=93.0
SECTION	CC, 7, 6, 5, 4, 3, 2, 1
METERS	1.0, 0.5
GRAPHIC LITHOLOGY	
DRILLING DISTURB.	
SED. STRUCTURES	
SAMPLES	*

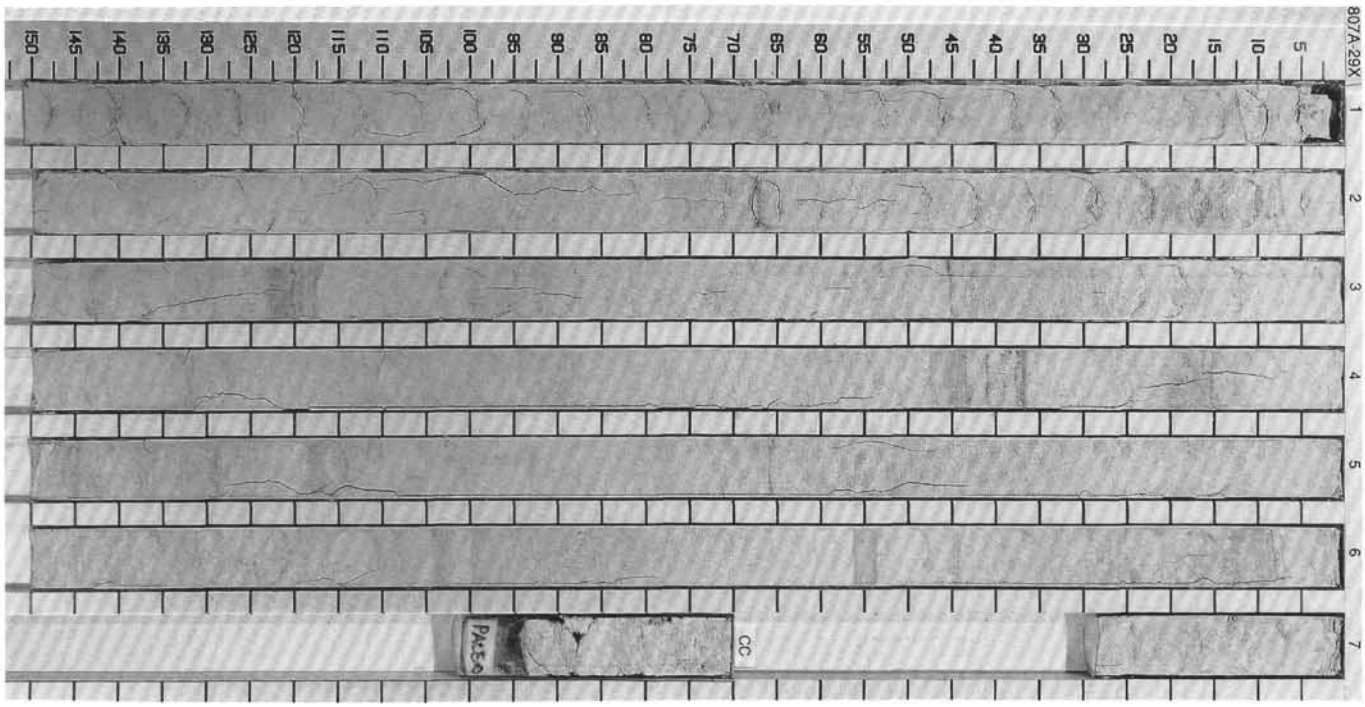
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains 60% NANNOFOSSIL OOZE with FORAMINIFERS and 40% NANNOFOSSIL CHALK with FORAMINIFERS; both predominantly white (7.5YR 8.0) in color. The ooze is very stiff and contains chalk biscuits. Pale pink (5RP 8.2), greenish gray (5G 7/1), and pale yellowish green (10GY 7.2); 1- to 10-cm thick color bands are common. Bioturbation is indicated by white (2.5Y 8/2) mottling.

SMEAR SLIDE SUMMARY (%):

	3, 74
	D
TEXTURE:	
Sand	12
Silt	55
Clay	33
COMPOSITION:	
Accessory minerals	2
Foraminifers	20
Nannofossils	75
Siliceous fragments	3
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 30X CORED INTERVAL 273.8-283.5 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
UPPER MIOCENE	A/G	N15	A/M	*Diartus pettersoni*	A/M	F-C/P	NTD 10 *Coscinodiscus yabei*							

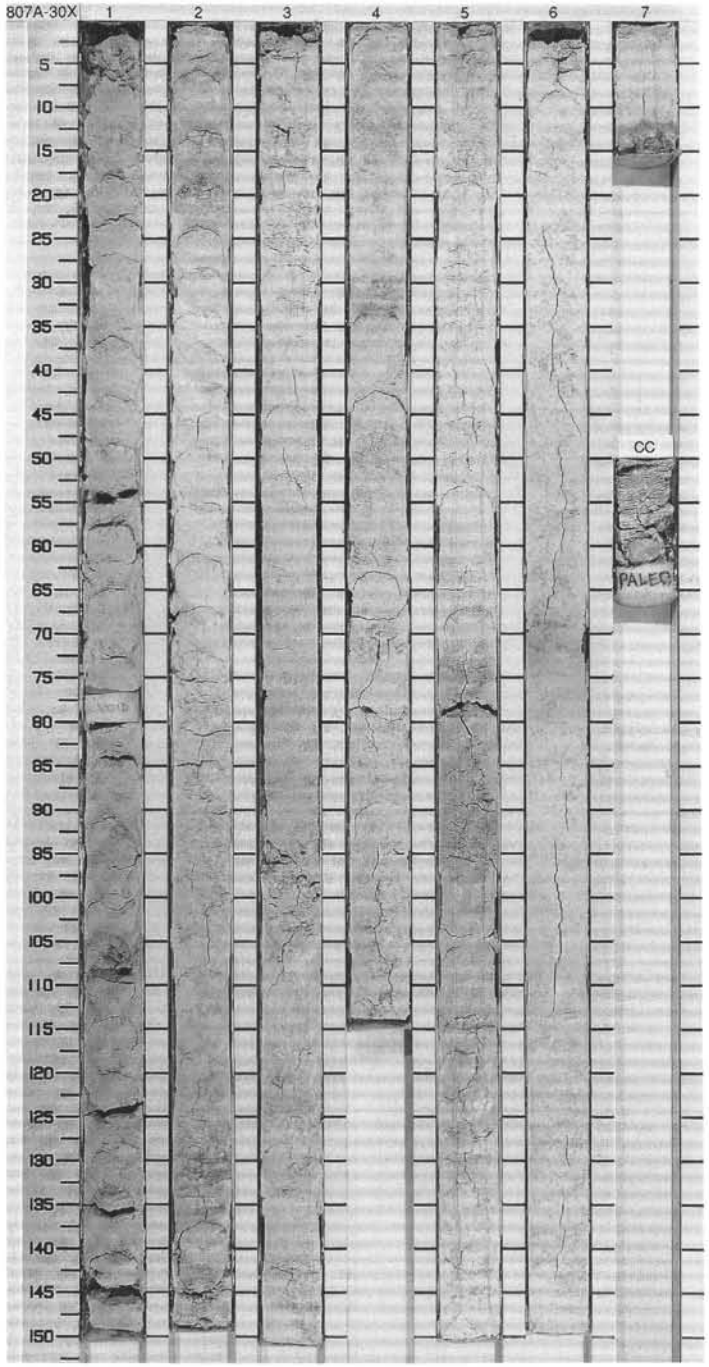
- PHYS. PROPERTIES: ●Φ=62.5, ρ=1.64; ●Φ=60.1, ρ=1.68; ●Φ=60.9, ρ=1.67; ●Φ=63.7, ρ=1.61; ●Φ=62.0, ρ=1.64
- CHEMISTRY: ●%$CaCO_3$=93.2; ●%$CaCO_3$=92.6; ●%$CaCO_3$=93.0; ●%$CaCO_3$=92.4; ●%$CaCO_3$=93.9
- SECTION: 1, 2, 3, 4, 5, 6, 7, CC
- METERS: 0.5, 1.0
- SAMPLES: OG, LW

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains 60% NANNOFOSSIL OOZE with FORAMINIFERS and 40% NANNOFOSSIL CHALK with FORAMINIFERS, both predominantly white (7.5YR 8/0) in color. The ooze is very stiff and contains biscuits of chalk. Only a few gray (7.5YR 6/0), 2 to 3 mm thick color bands, and several pale purple (5P 6/2), 3 to 5 cm thick bands are present. Faint pale purple (5P 6/2) zones, 10 to 25 cm thick, also are present.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	3
Silt	60
Clay	37
COMPOSITION:	
Accessory minerals	1
Foraminifers	15
Nannofossils	79
Radiolarians	2
Siliceous fragments	3
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 31X CORED INTERVAL 283.5-292.7 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
UPPER MIOCENE	A/G	N15	A/M	NN9	A/M	*Diartus pettersoni*	C/P-M	NTD 10		V=1571 ρ=1.62 ϕ=62.8 %$CaCO_3$=93.0 V=1630 ρ=1.63 ϕ=62.7 %$CaCO_3$=93.5 V=1568 ρ=1.67 ϕ=61.0 %$CaCO_3$=93.6 V=1539 ρ=1.65 ϕ=61.5 %$CaCO_3$=93.4	1 2 3 4 5 6 CC	0.5 1.0				

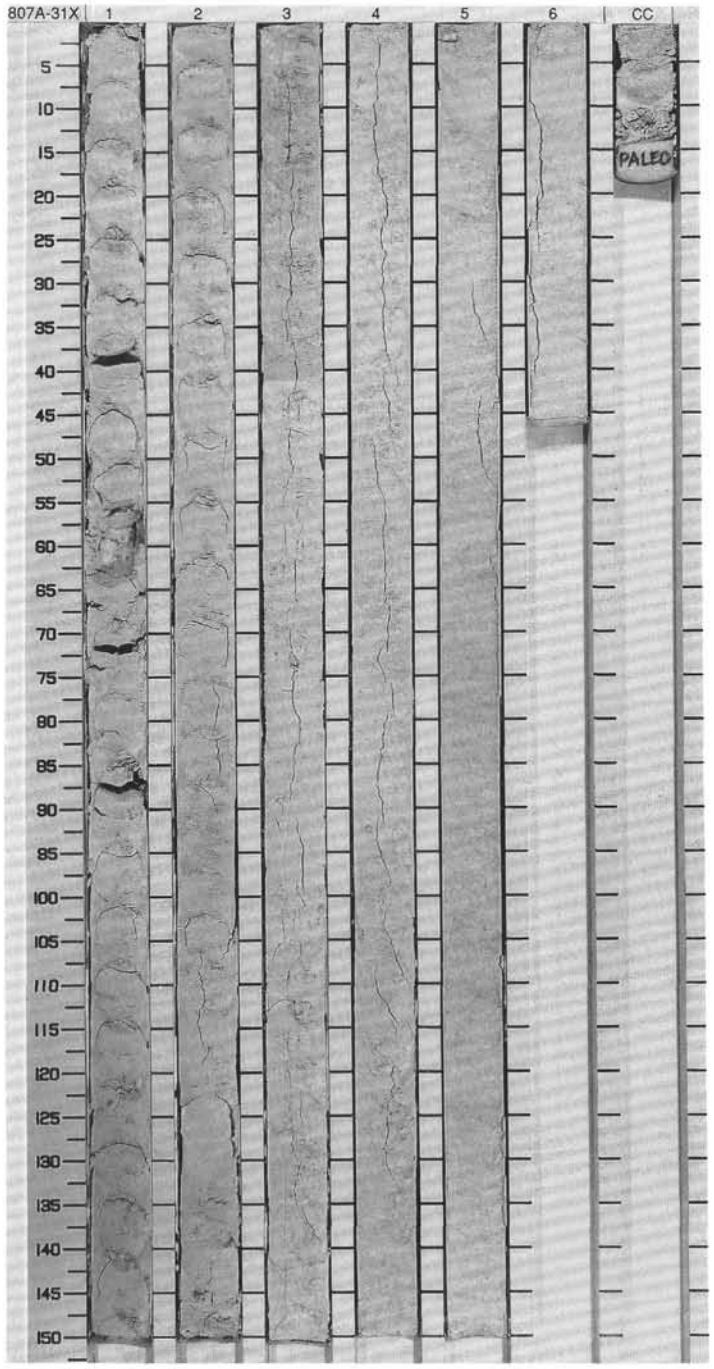
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (7.5YR 8/0) NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS. A 45 cm thick, pale purple (5P 6/2) interval is present at the top of Section 3. The sediment is hard, and chalky intervals *occur primarily as biscuits within Sections 1 through 4. Sections 5 and 6 are very stiff ooze.* There is a noticeable lack of bioturbation structures; only a few small, pyrite-filled burrows are present.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	5
Silt	70
Clay	25
COMPOSITION:	
Accessory minerals	1
Foraminifers	15
Nannofossils	82
Radiolarians	1
Siliceous fragments	1



SITE 807 HOLE A CORE 32X CORED INTERVAL 292.7-302.3 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	A/G N14	A/M NN9	A/P *Diartus petterssoni*	F/P ?		V=1614 ρ=59.7 P=1.70 V=1535 ρ=60.3 P=1.68 V=1565 ρ=60.0 P=1.68 V=1579 ρ=61.7 P=1.63	%$CaCO_3$=92.9 %$CaCO_3$=93.0 %$CaCO_3$=92.9 %$CaCO_3$=92.3	1 2 3 4 5 6 CC	0.5 1.0				*

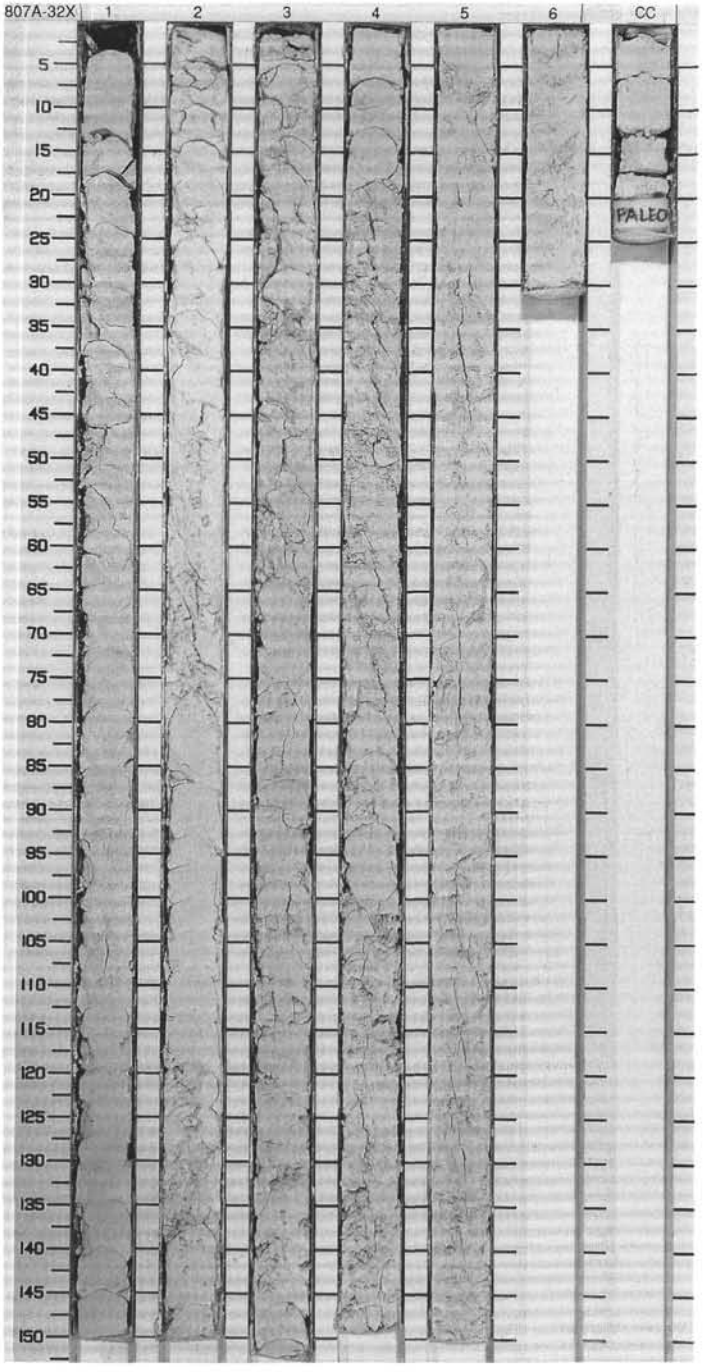
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0)NANNOFOSSIL CHALK with FORAMINIFERS. Slight bioturbation is indicated by very few mottles, pyrite-filled burrows, and specks. The drilling process has resulted in moderately fractured to highly fragmented biscuits in a stiff ooze matrix.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	7
Silt	55
Clay	37
COMPOSITION:	
Accessory minerals	2
Foraminifers	15
Nannofossils	80
Radiolarians	Tr
Siliceous fragments	3



SITE 807 HOLE A CORE 33X CORED INTERVAL 302.3-312.0 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	A/G	N14											
	A/M	NN6 - NN8											
	A/M	*Diartus pettersoni*											
	C-A/M-G			NTD 10									

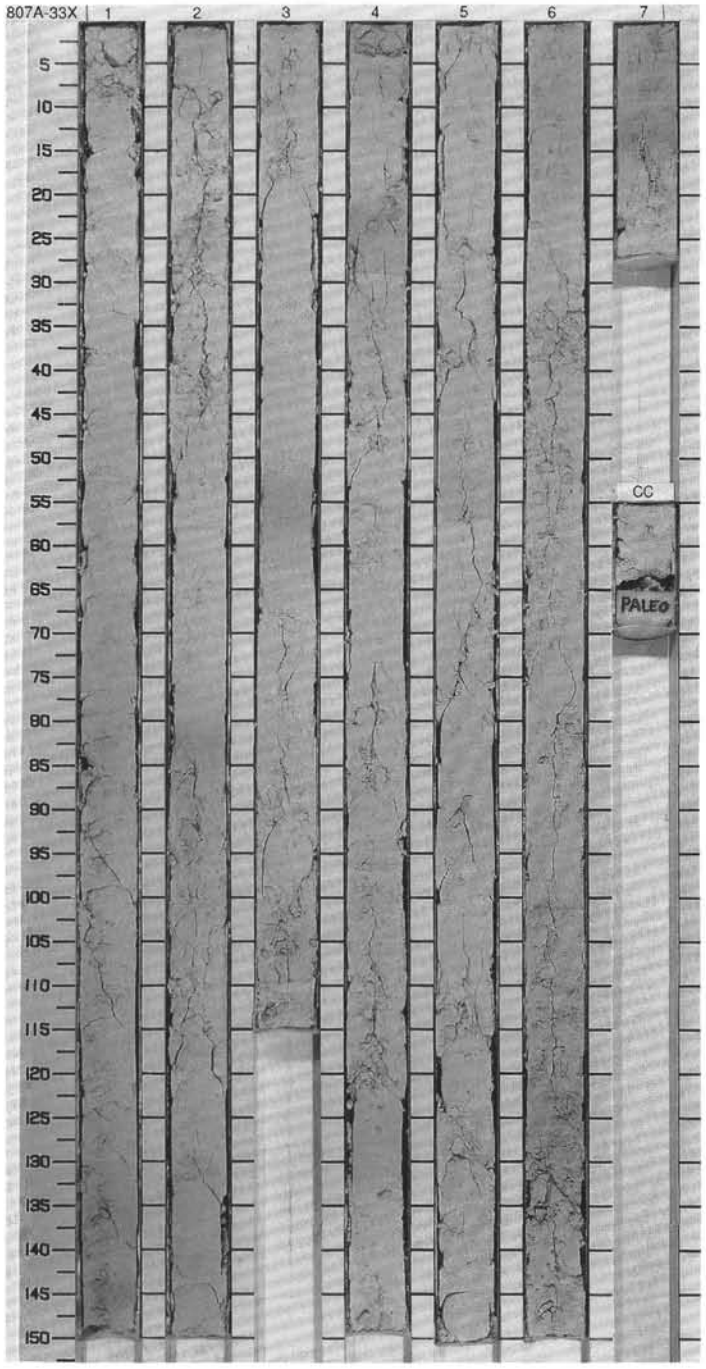
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL CHALK with FORAMINIFERS. The predominant color is white, with a few 10 cm thick, pale purple (5P 6/2) intervals. Thin (<1 mm), distinct, white color bands are abundant within these intervals. A few greenish gray (5G 7/1) color bands, 1 mm to 1 cm thick, also are present. Slight bioturbation is indicated by small (<1 cm thick), faint mottles and trace fossils.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	70
Clay	15
COMPOSITION:	
Accessory minerals	Tr
Foraminifers	15
Nannofossils	85
Radiolarians	Tr
Siliceous fragments	Tr



SITE 807 HOLE A CORE 34X CORED INTERVAL 312.0-321.2 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
MIDDLE MIOCENE	A/G N13 - N14	A/M NN6 - NN8	A/G *Diartus pettersoni*	A/M-G NTD 7? - NTD 9 *A. moronensis - C. coscinodiscus - IC. gigas var diorama*		0-55.3 P=1.75 0-57.8 P=1.72 V=1601 0-59.7 P=1.68 V=1540 0-59.5 P=1.69 V=1624 0-57.5 P=1.72 V=1616	%$CaCO_3$=91.6 %$CaCO_3$=92.3 %$CaCO_3$=93.0 %$CaCO_3$=92.1 %$CaCO_3$=89.1	1 2 3 4 5 6 7 CC	0.5 1.0				LND MAR

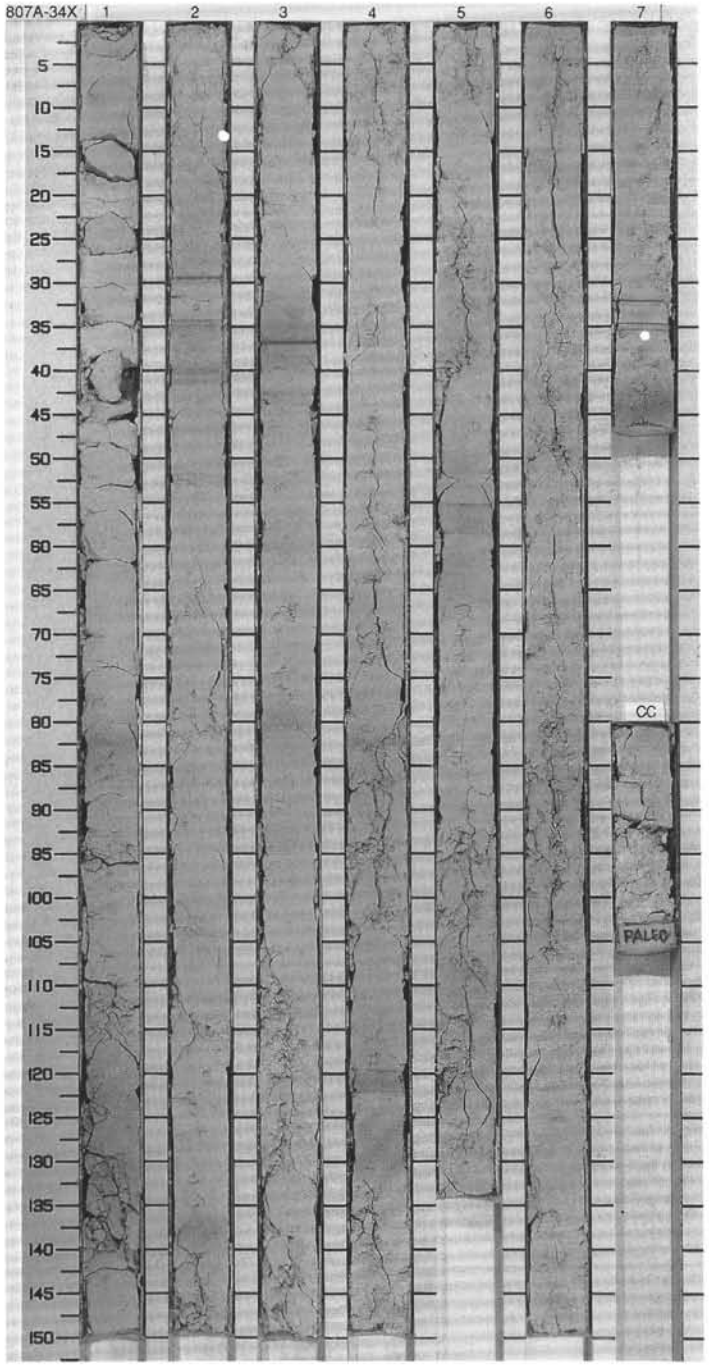
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Distinct mm thick, irregular, wavy, pale purple (5P 6/2) color bands are abundant in 10 to 50 cm thick intervals in Sections 1, 4, 6 and 7. In the remaining sections, a few pale purple color bands are observed and several greenish gray (5G 5/2) color bands are noted throughout the core. The white sediment shows signs of bioturbation, including mottles and pyritic specks. In some of the pale purple intervals, bioturbation is heavy as indicated by abundant burrows. The drilling process has resulted in moderately fractured biscuits in a stiff ooze matrix.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	15
Silt	65
Clay	20
COMPOSITION:	
Foraminifers	20
Nannofossils	80
Radiolarians	Tr



SITE 807 HOLE A CORE 35X CORED INTERVAL 321.2-330.9 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	A/G	N12						1	0.5				
	A/M	NN6 - NN8							1.0				
	A/M	*Diartus petterssoni*											
	A/M-G	NTD 8 *Craspedodiscus coscinodiscus*						2					*
								3					
								4					*
								5					
								6					
								CC					

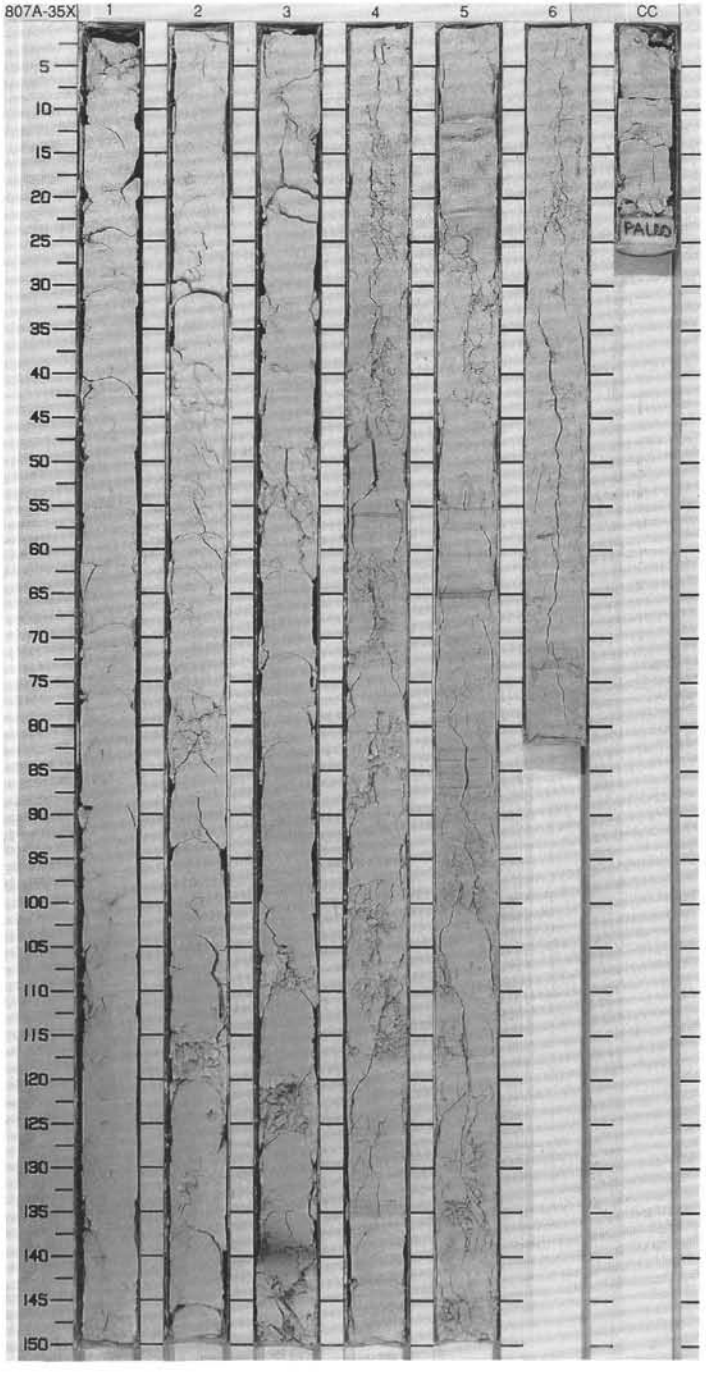
		2, 74	4, 57
		D	D
TEXTURE:			
Sand		10	6
Silt		70	60
Clay		20	34
COMPOSITION:			
Accessory minerals		—	2
Foraminifers		8	8
Nannofossils		92	87
Radiolarians		Tr	Tr
Siliceous fragments		—	3

LITHOLOGIC DESCRIPTION

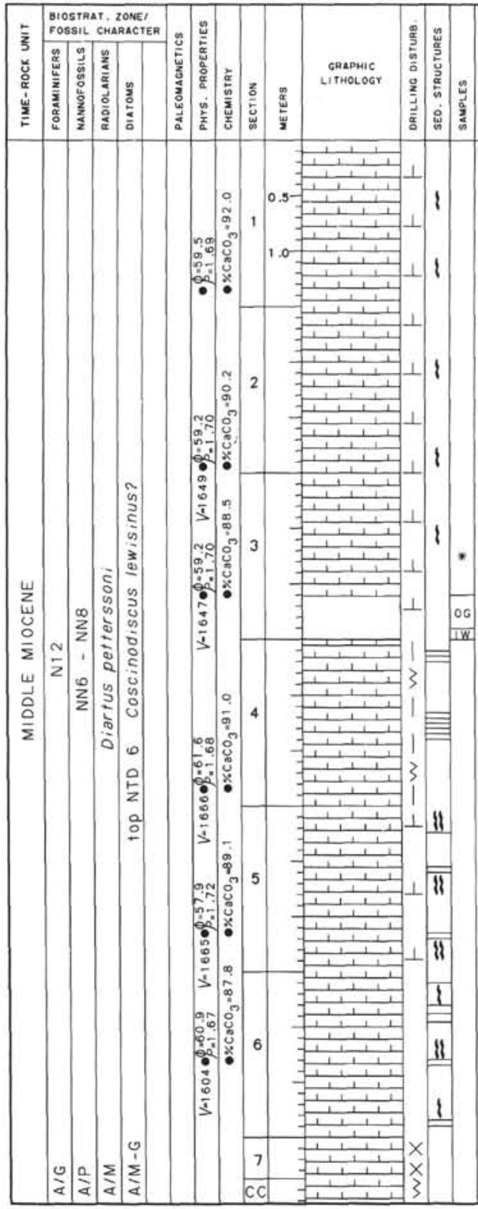
NANNOFOSSIL CHALK

Major lithology: This core contains white (7.5YR 8/0) NANNOFOSSIL CHALK. Sections 4 and 5 each have two pale pink (5RP 8/0) intervals (10-50 cm long). The sediment is slightly bioturbated as indicated by a few pyrite-filled mottles and specks. Distinct pale purple (5P 6/2) and greenish gray (5G 5/2), mm scale color bands and a few cm scale, pale purple zones are noted in Sections 3, 5 and 6. Drilling disturbance has resulted in moderately fractured biscuits in a stiff ooze matrix, except for Section 1, where the biscuits are highly fragmented.

SMEAR SLIDE SUMMARY (%):



SITE 807 HOLE A CORE 36X CORED INTERVAL 330.9-340.6 mbsf



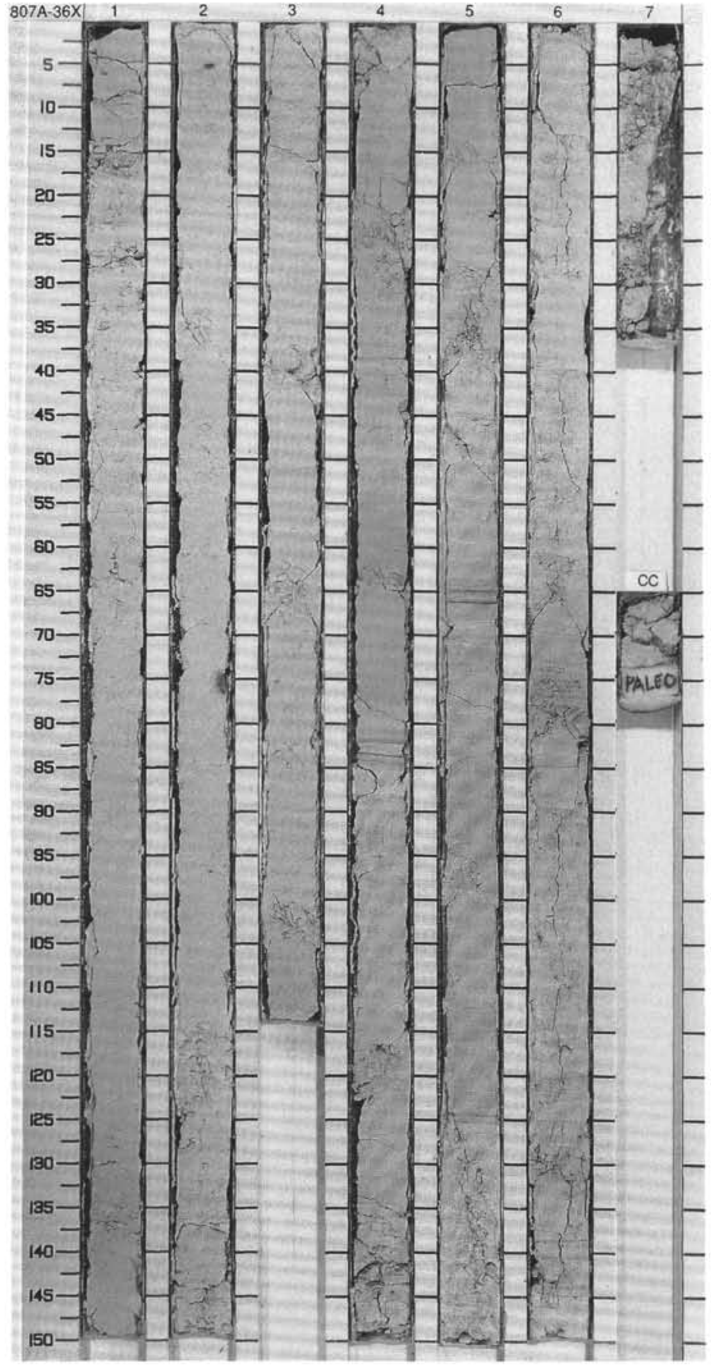
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (7.5YR 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Sections 1 through 3 are white and homogenous. From Section 4 to the base of the core, there are a few 20 to 30 cm thick intervals that exhibit fine-scale color banding that is primarily pale purple (5P 6/2) and, to a lesser extent, pale yellowish green (10GY 7/2). Fine-scale color banding imparts a pale pink (5RP 8/2) color to some intervals. A few pink intervals exhibit significant traces of bioturbation.

SMEAR SLIDE SUMMARY (%):

	3, 75
	D
TEXTURE:	
Sand	12
Silt	56
Clay	32
COMPOSITION:	
Accessory minerals	1
Foraminifers	12
Nannofossils	84
Radiolarians	Tr
Siliceous fragments	3



SITE 807 HOLE A CORE 37X CORED INTERVAL 340.6-350.2 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
MIDDLE MIOCENE	N12	NN6	*Dorcadospyris alata*			Φ=59.5 ρ_b=1.70	%$CaCO_3$=89.8	1	0.5				
	A/G	A/P	A/P						1.0				
						Φ=59.6 ρ_b=1.69	%$CaCO_3$=89.2	2					
					Φ=60.1 V_p=1620 ρ_b=1.70		%$CaCO_3$=91.3	3					*
					Φ=58.6 V_p=1612 ρ_b=1.71		%$CaCO_3$=88.5	4					
								5					
								6					
								7					
								CC					

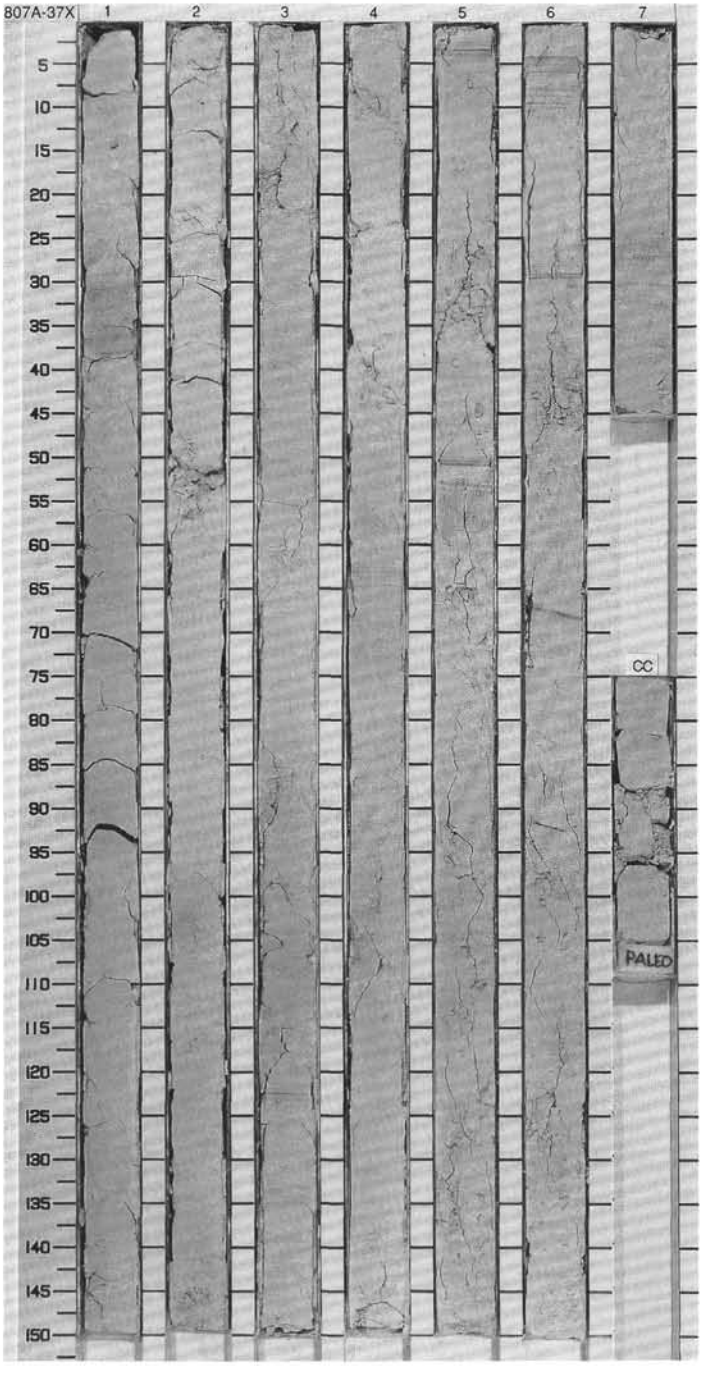
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (7.5YR 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Pale pink (5P 8/2), dm-scale intervals are observed in Sections 2-6. Signs of bioturbation are rare in the white intervals, but heavy bioturbation is observed in the pale pink parts of the core. A few zones of distinct mm scale, greenish gray (5G 7/1) color bands are noted throughout the core. The drilling process has resulted in slightly to moderately fractured biscuits in a stiff ooze matrix.

SMEAR SLIDE SUMMARY (%):

	3, 82 D
TEXTURE:	
Sand	10
Silt	55
Clay	35
COMPOSITION:	
Accessory minerals	1
Foraminifers	12
Nannofossils	83
Radiolarians	Tr
Siliceous fragments	4



SITE 807 HOLE A CORE 38X CORED INTERVAL 350.2-359.9 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	N11	NN6	*Dorcadospyris alata*	top NTD 6?		V-1595 ρ-61.5 ρ-2.66 V-1634 ρ-65.6 ρ-2.60 V-1620 ρ-61.3 ρ-2.67 V-1640 ρ-61.3 ρ-2.68 V-1591 ρ-61.4 ρ-2.68	%$CaCO_3$=91.9 %$CaCO_3$=89.3 %$CaCO_3$=91.2 %$CaCO_3$=91.3 %$CaCO_3$=90.9	1 2 3 4 5 6 CC	0.5 1.0				PAL

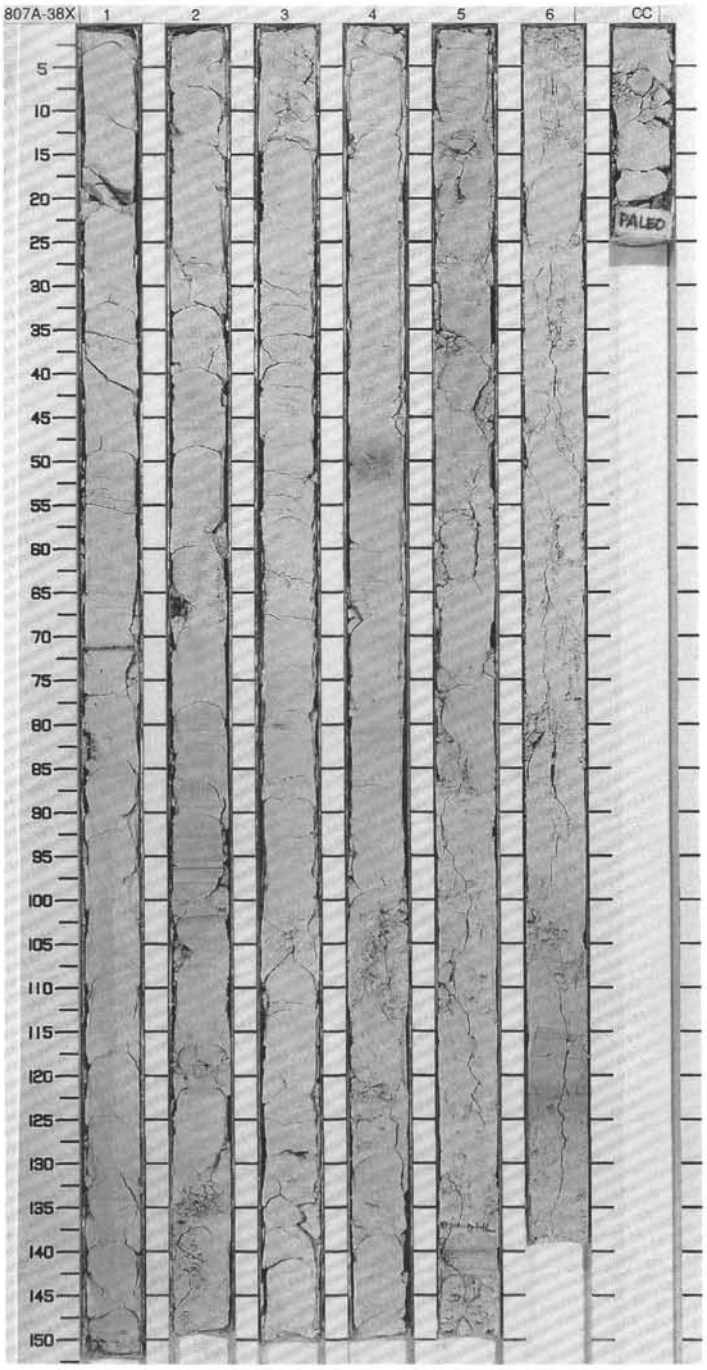
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

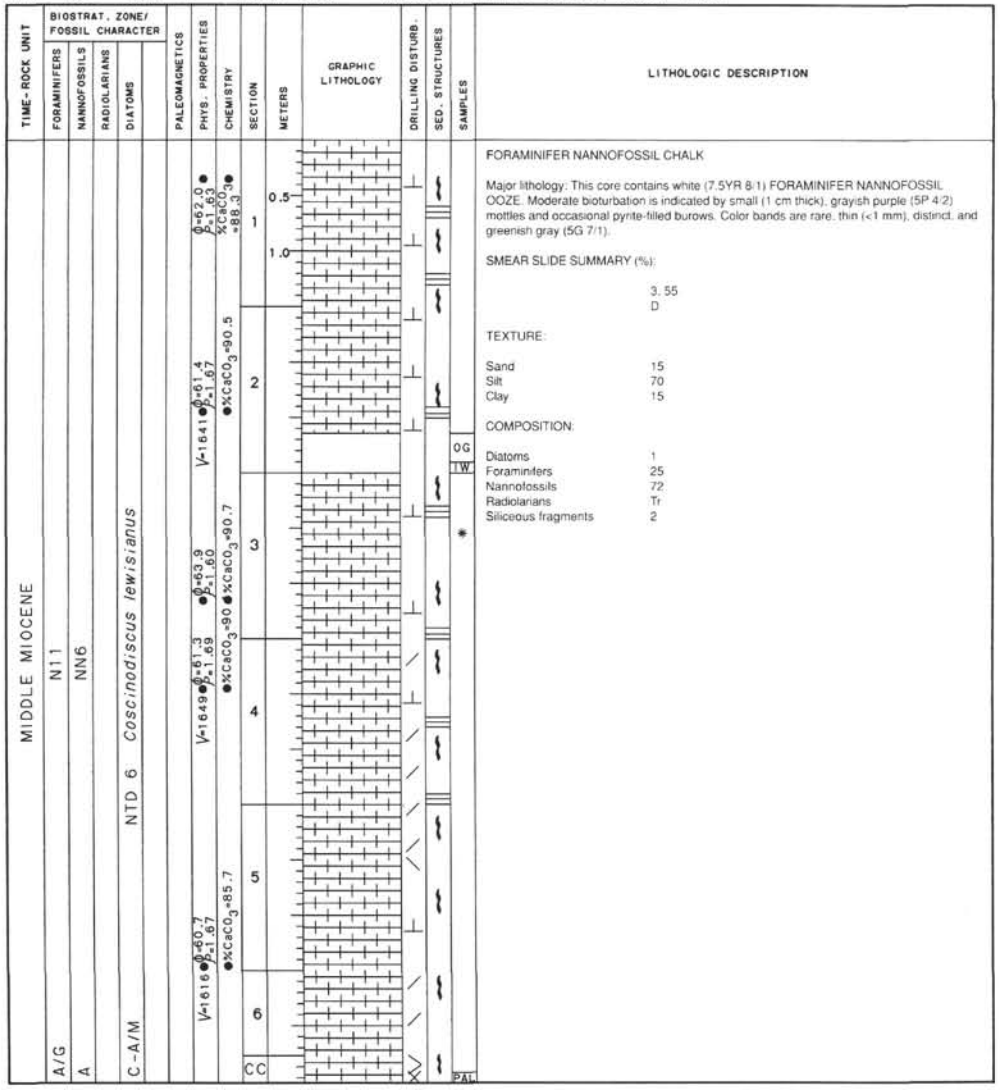
Major lithology: This core contains white (7.5YR 8/0) FORAMINIFER NANNOFOSSIL CHALK. Thin (0.1-1 cm), pale yellowish green (10GY 7/2), greenish gray (5G 7/1), grayish blue (5PB 5/2), and dark gray (N6/) color bands are common. At Section 5, 145 cm, gray bands begin to resemble flaser structures. Moderate bioturbation is evident from faint mottles and a few pyrite-filled burrows.

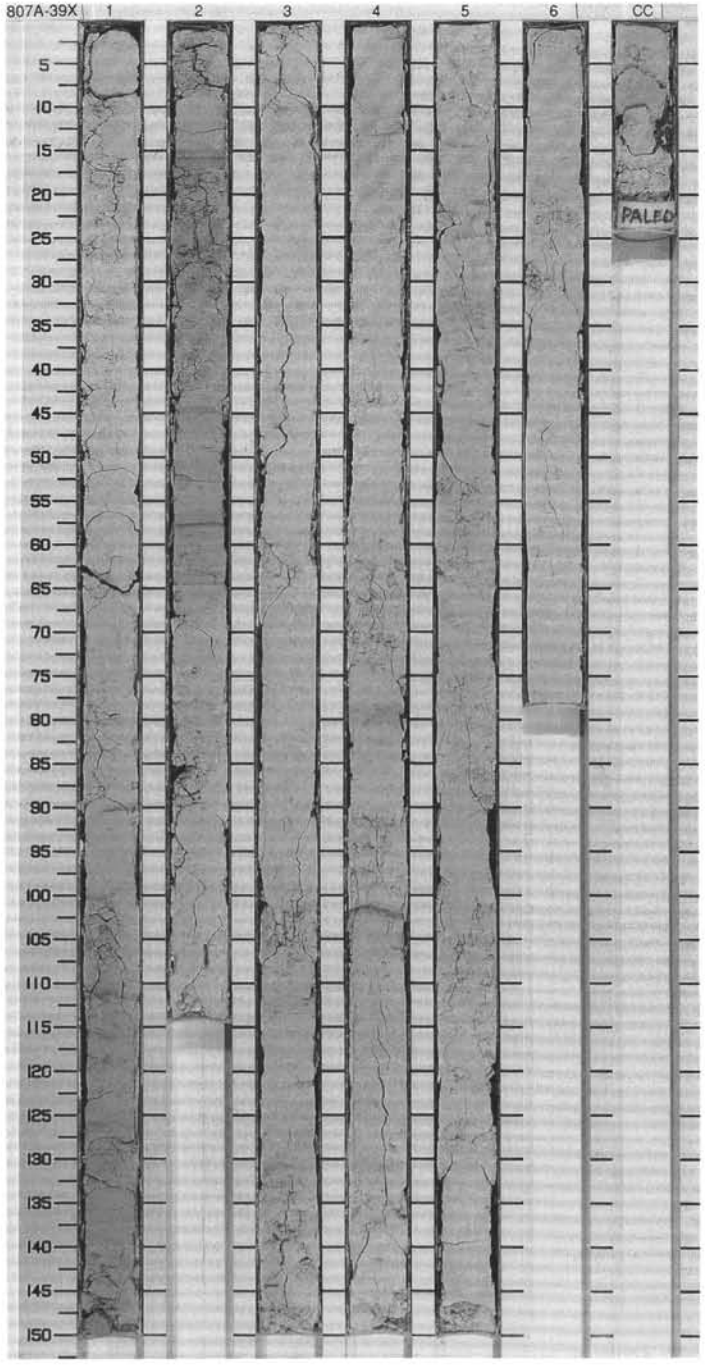
SMEAR SLIDE SUMMARY (%):

	3, 82 D
TEXTURE:	
Sand	15
Silt	50
Clay	35
COMPOSITION:	
Foraminifers	25
Nannofossils	74
Radiolarians	Tr
Siliceous fragments	1
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 39X CORED INTERVAL 359.9-369.7 mbsf





SITE 807 HOLE A CORE 40X CORED INTERVAL 369.7-379.5 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
MIDDLE MIOCENE	A/G	N11											
	A	NN5											
	C/P		*Dorcadospyris alata*										
	F-C/P			NTD 6?									

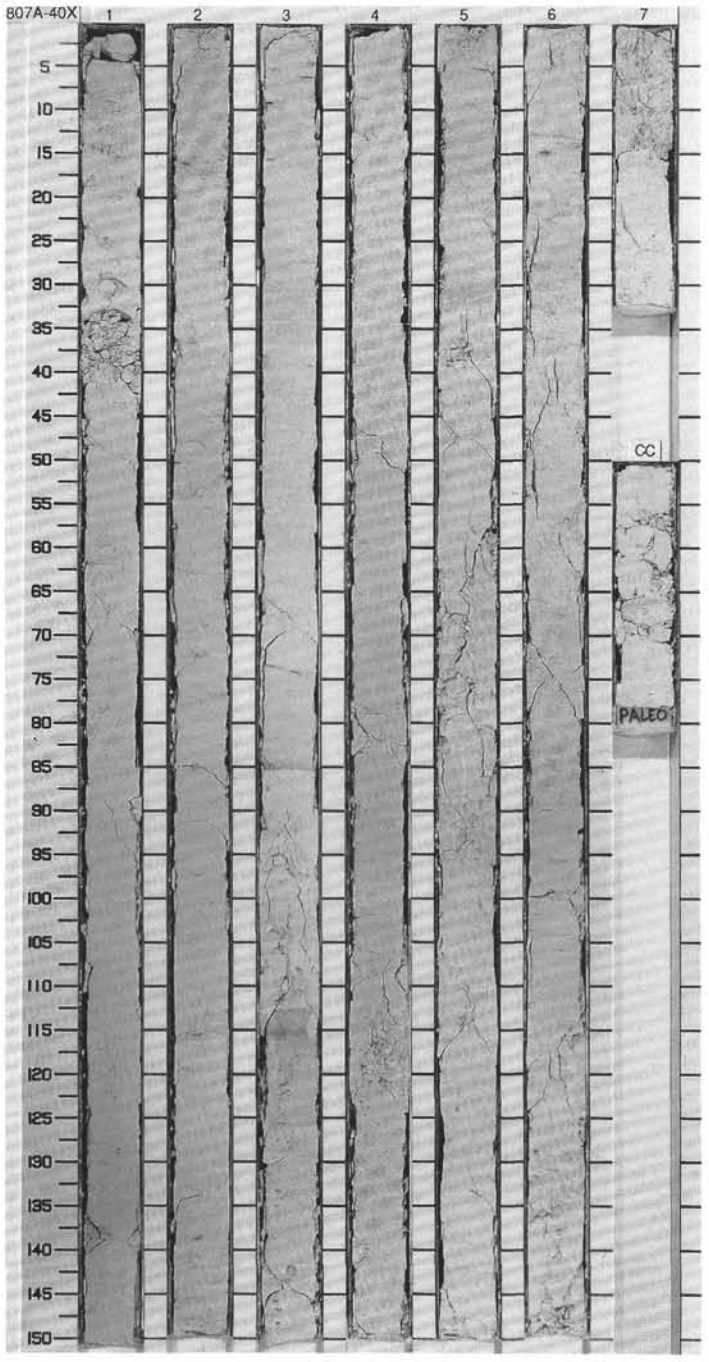
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (7.5YR 8/0) FORAMINIFER NANNOFOSSIL CHALK, with pale purple (5P 6/2) intervals present in Sections 2 and 3. In the white parts of the core, bioturbation is slight to moderate, as indicated by several pyrite-filled burrows and specks. Signs of heavy bioturbation, however, are noted in the pale purple intervals. In Sections 3 and CC, a few distinct, mm thick, greenish gray (5G 7/1) color bands are observed. Drilling disturbance is slight throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	20
Silt	65
Clay	15
COMPOSITION:	
Foraminifers	25
Nannofossils	74
Radiolarians	Tr
Siliceous sponge spicules	1



SITE 807 HOLE A CORE 41X CORED INTERVAL 379.5-389.2 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
MIDDLE MIOCENE	N11	NN5		?				1	0.5				
	C/M	A/M		F/P					1.0				
						V=1729 ρ=1.79	●%$CaCO_3$=88.3	6					
						V=1766 ρ=1.73	●%$CaCO_3$=84.7	5					
						V=1732 ρ=1.76	●%$CaCO_3$=92.8	4					
						V=1775 ρ=1.68	●%$CaCO_3$=89.4	3					
						V=1715 ρ=1.76	●%$CaCO_3$=91.4	2					
						V=1688 ρ=1.75	●%$CaCO_3$=94.0	1					
								CC					

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains moderately to highly bioturbated, white (7.5YR 8/0) FORAMINIFER NANNOFOSSIL CHALK. Disseminated pyrite-filled burrows are present but not abundant. Minor intervals of light greenish gray (5G 7/1) color bands are present in Section 2.

SMEAR SLIDE SUMMARY (%):

	2, 100 D
TEXTURE:	
Sand	35
Silt	60
Clay	5
COMPOSITION:	
Foraminifers	32
Nannofossils	65
Radiolarians	2
Silicoflagellates	1

SITE 807 HOLE A CORE 42X CORED INTERVAL 389.2-398.9 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	C/M N10	A/M NN5	C/P *Dorcadospyris alata*	R/P ?		V=1722 ϕ=56.5 ρ=1.77 V=1765 ϕ=54.1 ρ=1.79 V=1888 ϕ=56.3 ρ=1.83 V=1888 ϕ=55.1 ρ=1.78 V=1848 ϕ=55.3 ρ=1.77	●%$CaCO_3$=92.0 ●%$CaCO_3$=90.1 ●%$CaCO_3$=90.6 ●%$CaCO_3$=90.5 ●%$CaCO_3$=92.1	1 2 3 4 5 6 CC	0.5 1.0			OC TW	

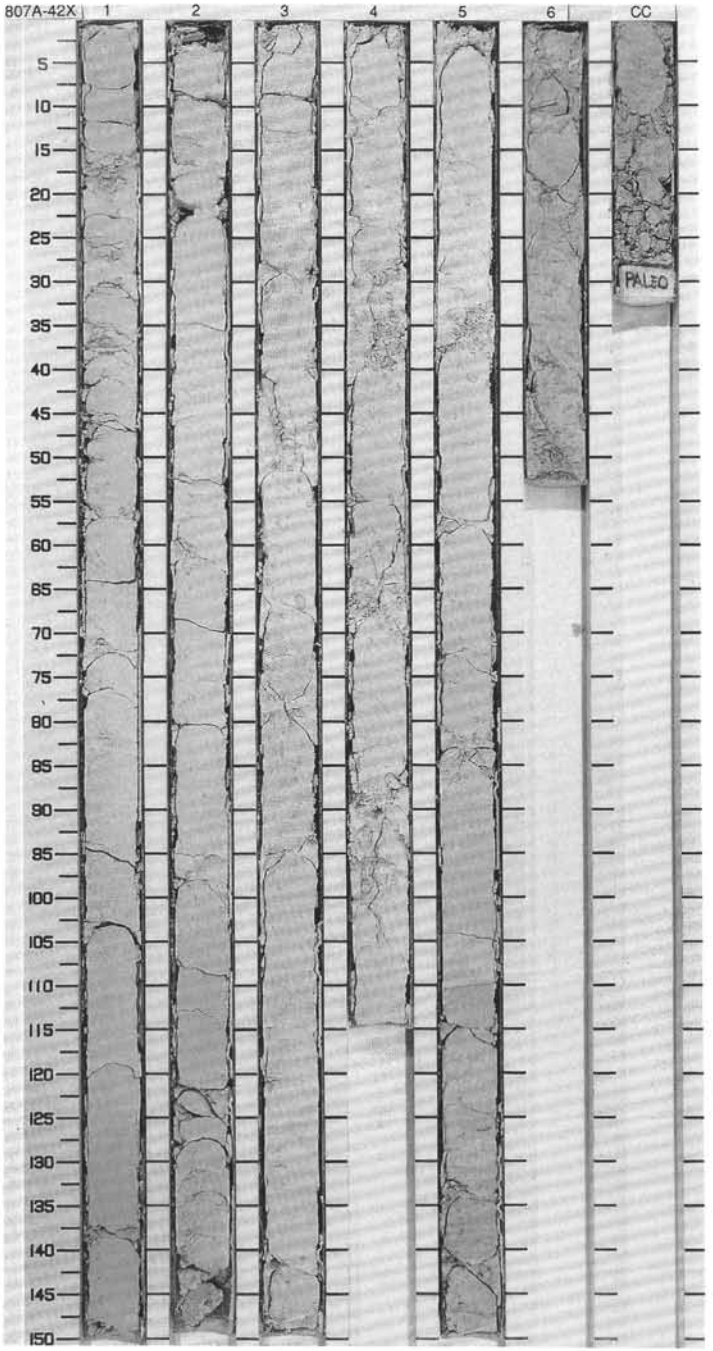
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (7.5YR 8/0), moderately to highly bioturbated FORAMINIFER NANNOFOSSIL CHALK. Indistinct burrow mottles are present in Sections 1 through 5. An interval of light greenish gray (5G 7/1) color bands is present at Section 5, 110 cm. Below this level, the sediments are extensively stained with grayish blue (5PB 5/2) pyrite-filled burrows.

SMEAR SLIDE SUMMARY (%):

	1, 72 D
TEXTURE:	
Sand	15
Silt	81
Clay	4
COMPOSITION:	
Foraminifers	30
Glass	Tr
Nannofossils	67
Radiolarians	1
Silicoflagellates	1
Spicules	1



SITE 807 HOLE A CORE 43X CORED INTERVAL 398.9-408.6 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	N8 - N9	NN5	*Dorcadospyris alata*	?	V=1824 ●D=55.7 ρ=1.78	V=1863 ●D=52.8 ρ=1.81	●%CaCO3=92.5	5					
						V=1887 ●D=54.7 ρ=1.78	●%CaCO3=88.8	4					
							●%CaCO3=90.6	3					
						●D=56.7 ρ=1.74	●%CaCO3=89.5	2					
						●D=55.9 ρ=1.75	●%CaCO3 =91.9	1	0.5				
									1.0				
								CC					

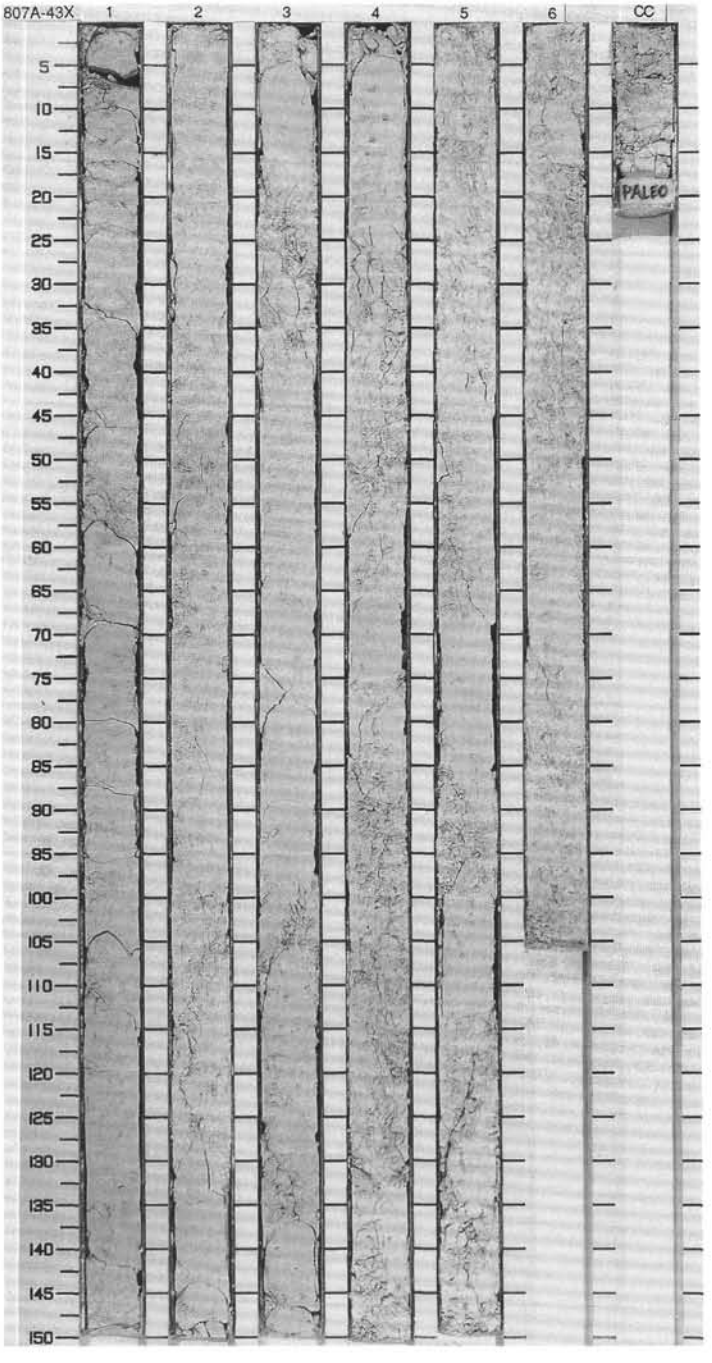
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (7.5YR 8/0 and 5Y 8/1) FORAMINIFER NANNOFOSSIL CHALK. The chalk is slightly to moderately bioturbated throughout, and Section 1 is stained by moderate amounts of grayish blue (5PB 5/2) pyrite-filled burrows. Several light gray (N7/), thin (mm scale) color bands are present at Section 5, 130 cm.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Foraminifers	25
Nannofossils	70
Radiolarians	4
Silicoflagellates	1



SITE 807 HOLE A CORE 44X CORED INTERVAL 408.6-418.3 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: N8 - N9 (A/G)
- NANNOFOSSILS: NN5 (A/M)
- RADIOLARIANS: *Calocycletta costata* (C/P)
- DIATOMS: ? (F/P)

PALEOMAGNETICS

PHYS. PROPERTIES:
- Φ=51.1, ρb=1.84
- Φ=57.4, ρb=1.74
- Φ=55.8, ρb=1.75
- Φ=50.9, ρb=1.85
- Φ=54.9, ρb=1.76

CHEMISTRY:
- %CaCO3=91.5
- %CaCO3=91.3
- %CaCO3=92.5
- %CaCO3=88.6
- %CaCO3=86.1

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: MAR, LND

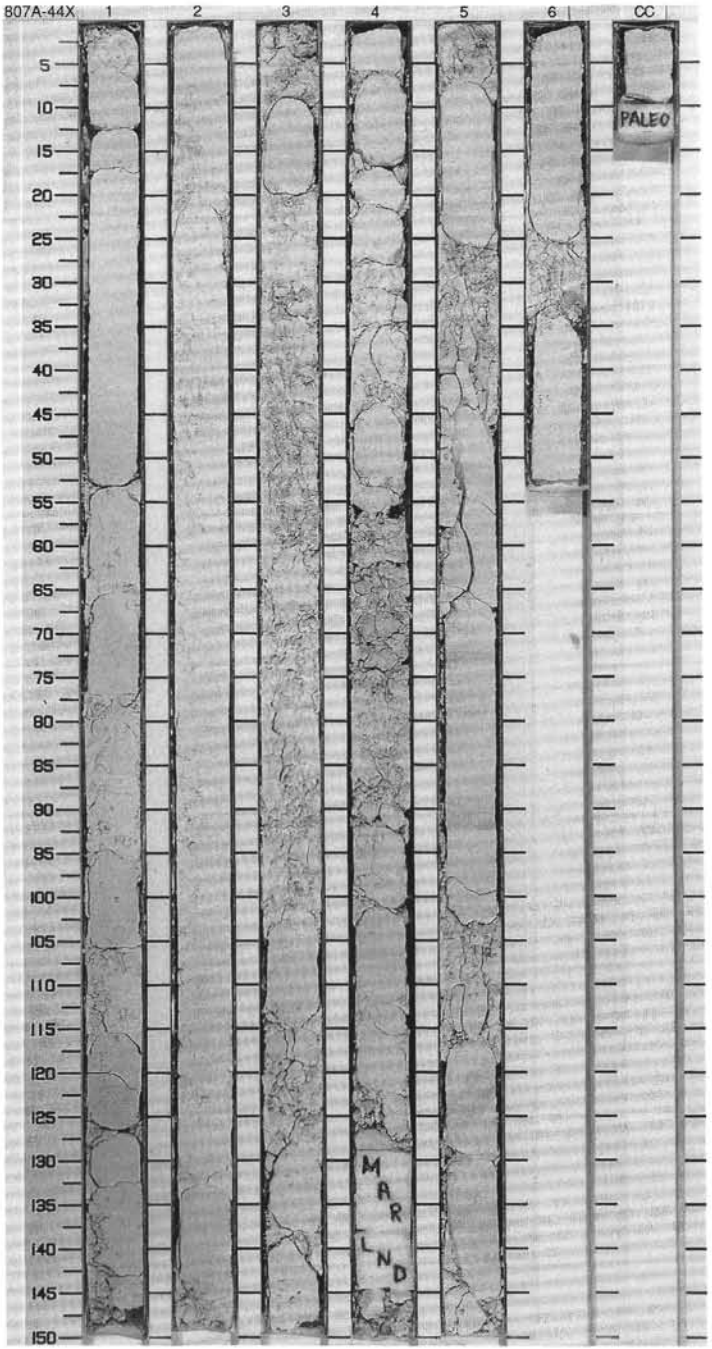
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (7/5YR 8/0, 2.5Y 8/0, and 5Y 8/1) FORAMINIFER NANNOFOSSIL CHALK. The sediments are slightly to moderately bioturbated, with indistinct mottling and minor staining by grayish blue (5PB 5/2), pyrite-filled burrows. Several light gray (5Y 7/1) color bands are present in Sections 1 and 5, and dip at angles of 10-30° across the core surface. These may represent sediment deformation zones.

SMEAR SLIDE SUMMARY (%):

	2, 79
	D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	25
Nannofossils	70
Radiolarians	4
Silicoflagellates	Tr



SITE 807 HOLE A CORE 45X CORED INTERVAL 418.3-427.8 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
MIDDLE MIOCENE	A/M	N8 - N9	NN5	A/P	?	F/P								

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (5Y 8/1 and 10YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. Moderate to heavy bioturbation is indicated by horizontal, 0.5 cm wide burrows and mottling, minor grayish blue (5PB 5/2) mottling, and pyrite-filled burrows. No color bands were seen.

SMEAR SLIDE SUMMARY (%):

	1, 100 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	18
Nannofossils	80
Radiolarians	2

SITE 807 HOLE A CORE 46X CORED INTERVAL 427.8-437.5 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
MIDDLE MIOCENE	A/M N8 - N9	A/P NN4 - NN5	A/P *Calocycletta costata*	C/P ?NTD 5 *Cestodiscus peplum*		ϕ=53.2 P=1.79 ϕ=50.7 P=1.85 V=1845 ϕ=56.3 P=1.75 ϕ=50.9 P=1.82 ϕ=54.3 P=1.78 ϕ=55.4 P=1.78	%$CaCO_3$=93.1 %$CaCO_3$=91.6 %$CaCO_3$=95.9 %$CaCO_3$=85.8 %$CaCO_3$=91.5 %$CaCO_3$=95.4	1 2 3 4 5 6 CC	0.5 1.0			* *	

LITHOLOGIC DESCRIPTION

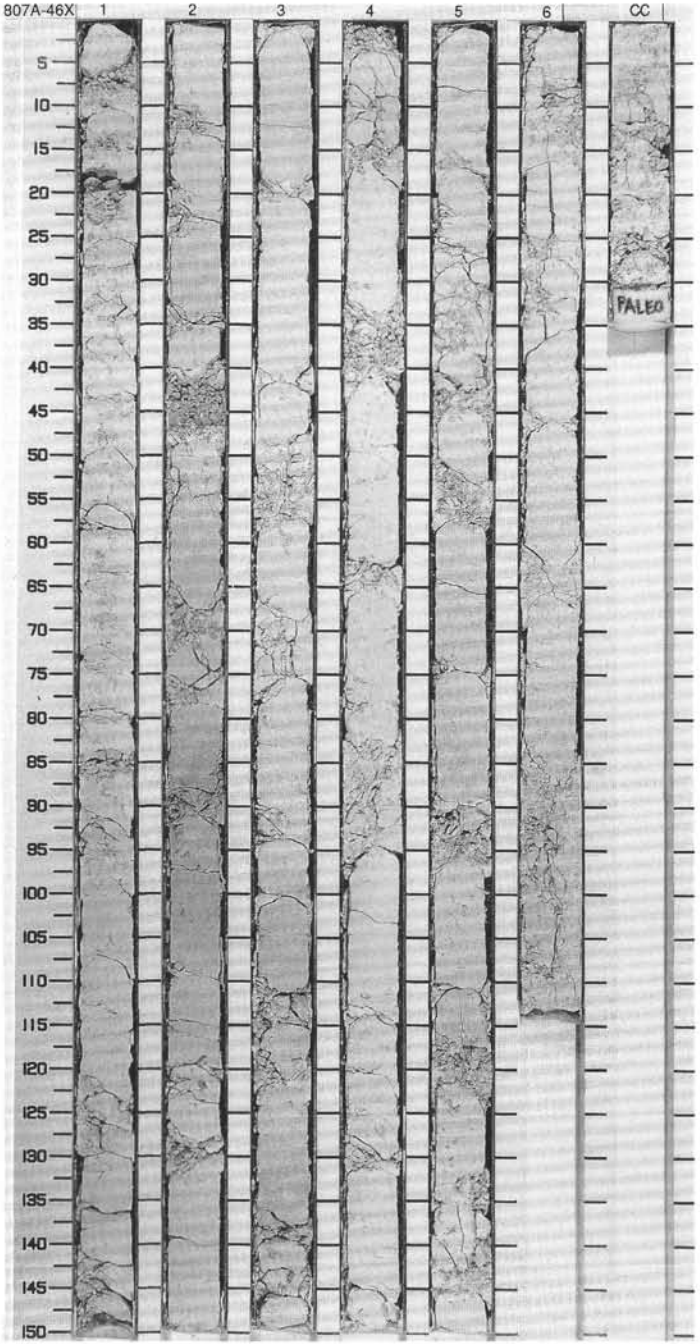
FORAMINIFER NANNOFOSSIL CHALK

Major lithology: The predominant lithology in this core is white (2.5Y 8/0 and 5Y 8/1) FORAMINIFER NANNOFOSSIL CHALK, with a 7 cm thick, coarse-grained, reddish gray (10R 6/1), graded bed located in Section 2. Heavy to slight bioturbation is indicated by white mottling on a 2 to 3 mm scale, and by single spots associated with pyritized burrows.

Minor lithology: Sections 2, 3 and 4 contain 10 to 50 cm thick beds of NANNOFOSSIL CHALK which grade into the major lithology. The sediment is white (2.5Y 8/0 and 5Y 8/1) and moderately bioturbated as indicated by white mottles and burrows, and by diffuse burrow associated pyritization.

SMEAR SLIDE SUMMARY (%):

	2, 30 D	3, 88 D
TEXTURE:		
Sand	2	15
Silt	94	81
Clay	4	4
COMPOSITION:		
Foraminifers	4	35
Nannofossils	93	61
Radiolarians	1	2
Silicoflagellates	–	1
Spicules	2	1



SITE 807 HOLE A CORE 47X CORED INTERVAL 437.5-447.1 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS
MIDDLE MIOCENE	N8 - N9	NN4	*Calocycletta costata*			V=1661 ● Φ=56.5 ρ=1.75	● %$CaCO_3$=93.3	1	0.5 / 1.0
						● Φ=54.4 ρ=1.78	● %$CaCO_3$=92.5	2	
						● Φ=53.2 ρ=1.80	● %$CaCO_3$=94.8	3	
						● Φ=51.9 ρ=1.81	● %$CaCO_3$=93.7	4	
						● Φ=53.8 ρ=1.79	● %$CaCO_3$=92.5	5	
						V=1864 ● Φ=54.3 ρ=1.79	● %$CaCO_3$=91.9	6	
	C/M	A/M	A/P					CC	

GRAPHIC LITHOLOGY | DRILLING DISTURB. | SED. STRUCTURES | SAMPLES

LITHOLOGIC DESCRIPTION

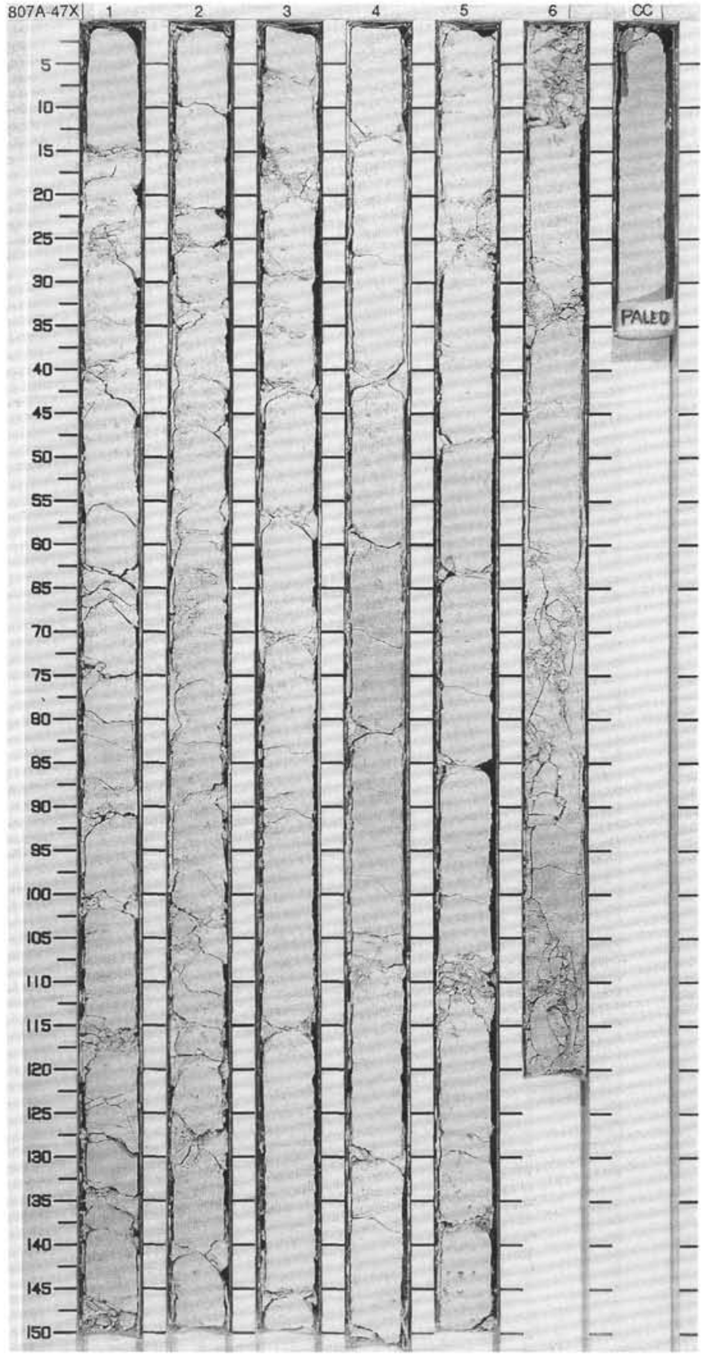
FORAMINIFER NANNOFOSSIL CHALK

Major lithology: The major portion of the core contains white (10YR 8/0 and 5Y 8/1) FORAMINIFER NANNOFOSSIL CHALK. The upper 4 sections are homogeneous with minor horizontal, pyrite-filled burrows. The entire core is moderately bioturbated.

Minor lithology: Below Section 5, 121 cm, 10 to 30 cm thick, white (5Y 8/1) intervals NANNOFOSSIL CHALK with FORAMINIFERS are interbedded with the major lithology.

SMEAR SLIDE SUMMARY (%)

	3, 80
	D
TEXTURE:	
Sand	20
Silt	76
Clay	4
COMPOSITION:	
Foraminifers	35
Nannofossils	62
Radiolarians	1
Spicules	2



SITE 807 HOLE A CORE 48X CORED INTERVAL 447.1-456.8 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
MIDDLE MIOCENE	C/M	N8				V=1784 ρ=53.3 P=1.80	%$CaCO_3$=95.0	6					
	A/P	NN4				V=1767 ρ=52.4 P=1.83	%$CaCO_3$=93.3	5					
	C/P	*Stichocorys wolffi*				V=1845 ρ=52.4 P=1.81	%$CaCO_3$=92.8	4					
	R/P	?				V=1821 ρ=52.2 P=1.82	%$CaCO_3$=91.3	3					
						V=1741 ρ=52.6 P=1.79	%$CaCO_3$=77.9	2					
						V=1777 ρ=53.1 P=1.80	%$CaCO_3$=90.6	1	0.5 1.0				
								7					
								CC					

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

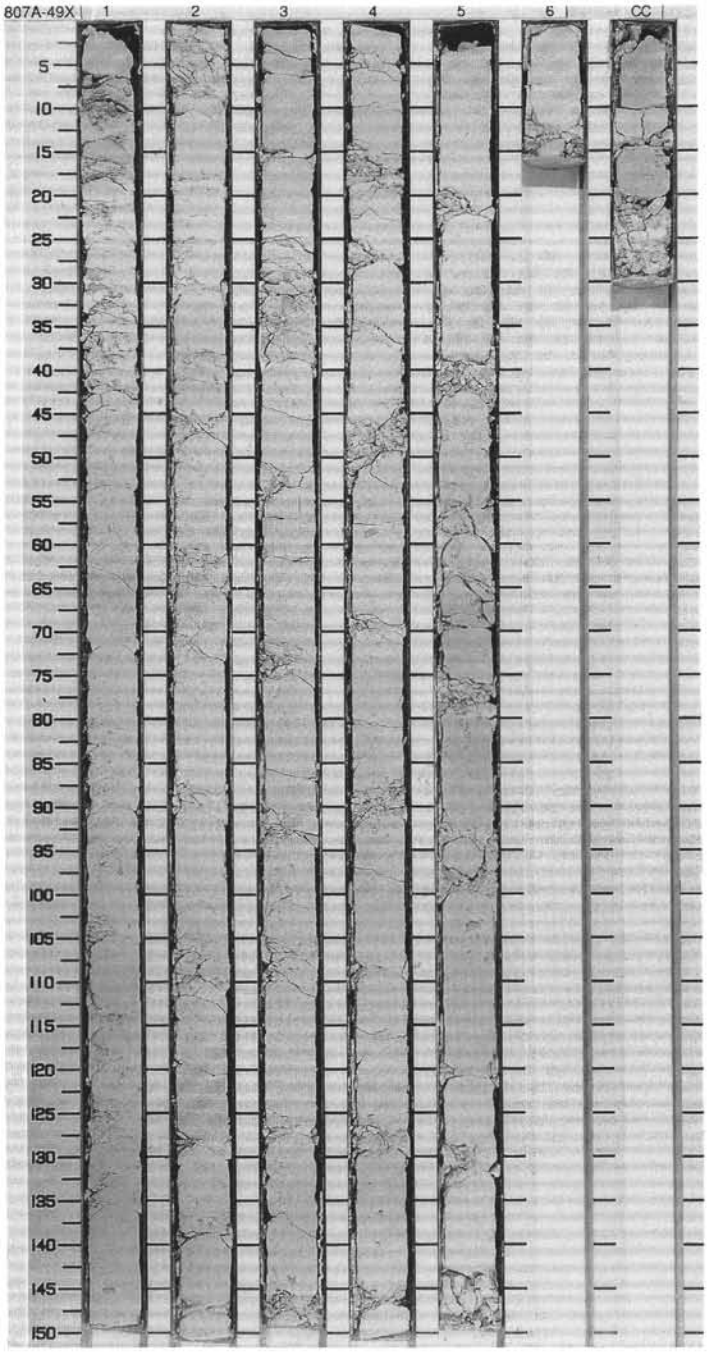
Major lithology: This core contains white (5Y 8/1 and 10YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. Bioturbation is heavy to slight throughout the core and decreases in intensity downcore. The bioturbation is generally expressed as simple horizontal burrow mottling, although a *Zoophycos* trace fossil is present in Section 1, and *Chondrites* is present in Section 4.

SMEAR SLIDE SUMMARY (%):

	4, 44 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Foraminifers	15
Nannofossils	82
Radiolarians	1
Silicoflagellates	1
Spicules	1

SITE 807 HOLE A CORE 49X CORED INTERVAL 456.8-466.4 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
LOWER MIOCENE	N6 - N7	NN3		?		V=1702 Φ=56.6 ρ=1.74 V=1829 Φ=54.2 ρ=1.78 V=1901 Φ=52.7 ρ=1.81 V=1817 Φ=51.5 ρ=1.82 V=1782 Φ=48.8 ρ=1.88	●%$CaCO_3$ =96.2 ●%$CaCO_3$=96.9 ●%$CaCO_3$=96.0 ●%$CaCO_3$=94.6 ●%$CaCO_3$=92.7	1 2 3 4 5 6 CC	0.5 1.0			*		NANNOFOSSIL CHALK with FORAMINIFERS Major lithology: This core contains white (10YR 8/1), moderately to heavily bioturbated NANNOFOSSIL CHALK with FORAMINIFERS. SMEAR SLIDE SUMMARY (%): 2, 116 D TEXTURE: Sand 9 Silt 85 Clay 6 COMPOSITION: Foraminifers 14 Nannofossils 85 Radiolarians Tr Siliceous fragments 1 Silicoflagellates Tr



SITE 807 HOLE A CORE 50X CORED INTERVAL 466.4-476.1 mbsf

TIME-ROCK UNIT: LOWER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/M — N5
- NANNOFOSSILS: A/M — NN2
- RADIOLARIANS: C/P — *Stichocorys wolffii*
- DIATOMS: R/P — ?

PALEOMAGNETICS

PHYS. PROPERTIES:
- V-1698 ●0-49.9 P-1.87
- V-1751 ●0-52.8 P-1.81
- V-1722 ●0-51.5 P-1.84
- V-1693 ●0-54.6 P-1.78
- V-1776 ●0-52.5 P-1.82
- V-1674 ●0-51.1 P-1.84

CHEMISTRY:
- ●%$CaCO_3$=95.8
- ●%$CaCO_3$=94.9
- ●%$CaCO_3$=95.1
- ●%$CaCO_3$=98.2
- ●%$CaCO_3$=96.1
- ●%$CaCO_3$=94.9

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID

DRILLING DISTURB.

SED. STRUCTURES: *

SAMPLES

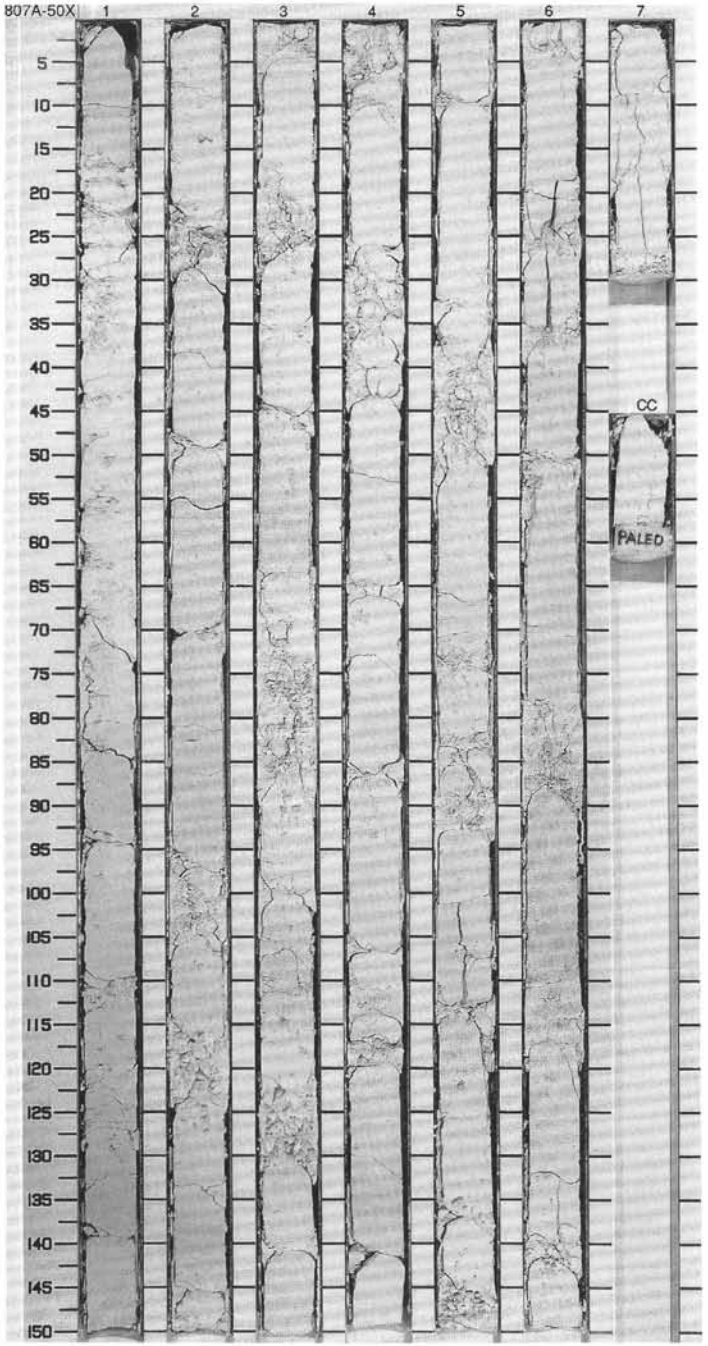
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER NANNOFOSSIL CHALK

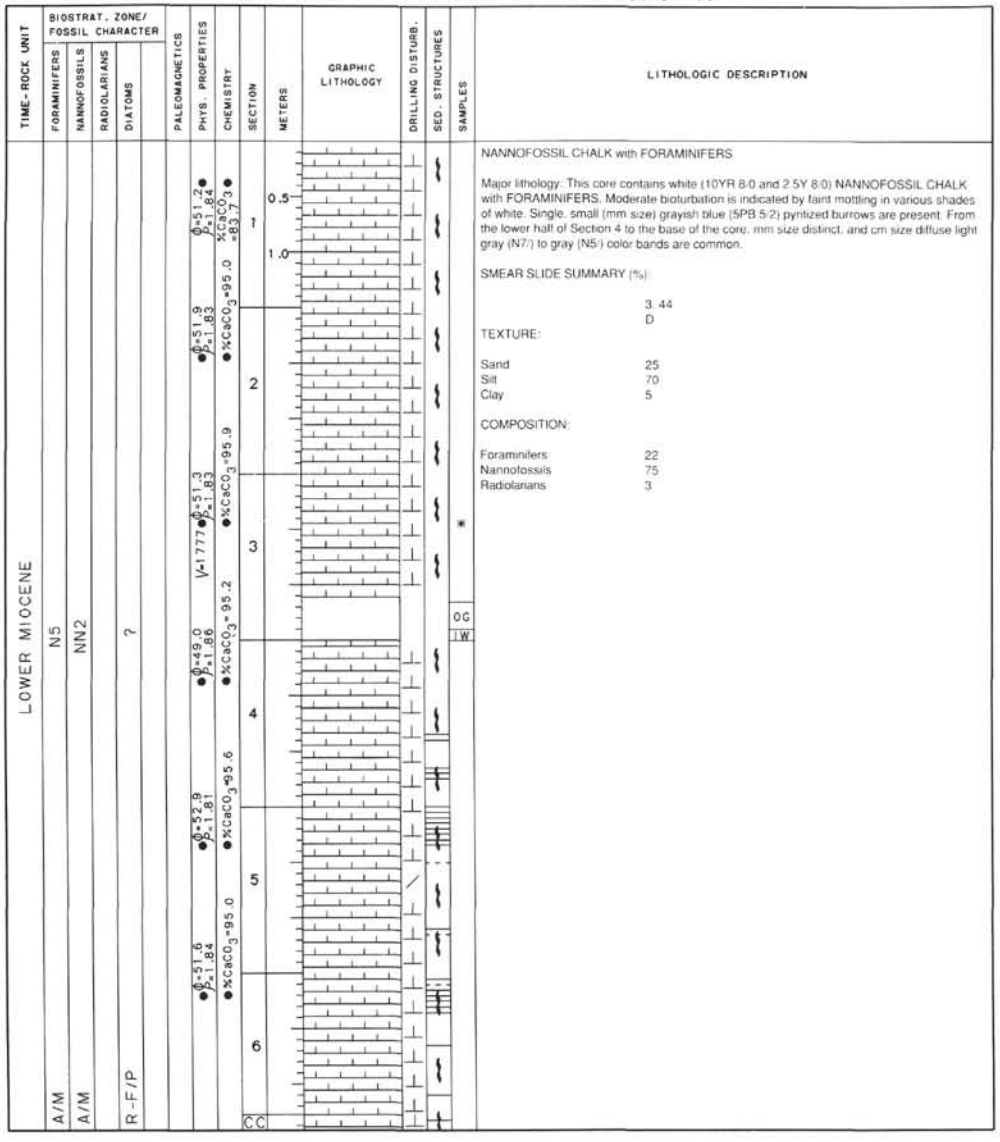
Major lithology: This core contains white (2.5Y 8/0, 5Y 8/1 and 10YR 8/0) NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER NANNOFOSSIL CHALK. It is moderately bioturbated with faint white mottling, mm to cm size burrows, and a few pale purple (5P 6/2) pyritized burrows.

SMEAR SLIDE SUMMARY (%):

	2, 66 D
TEXTURE:	
Sand	15
Silt	80
Clay	5
COMPOSITION:	
Foraminifers	25
Nannofossils	73
Radiolarians	1
Siliceous fragments	1
Silicoflagellates	Tr



SITE 807 HOLE A CORE 51X CORED INTERVAL 476.1-485.8 mbsf

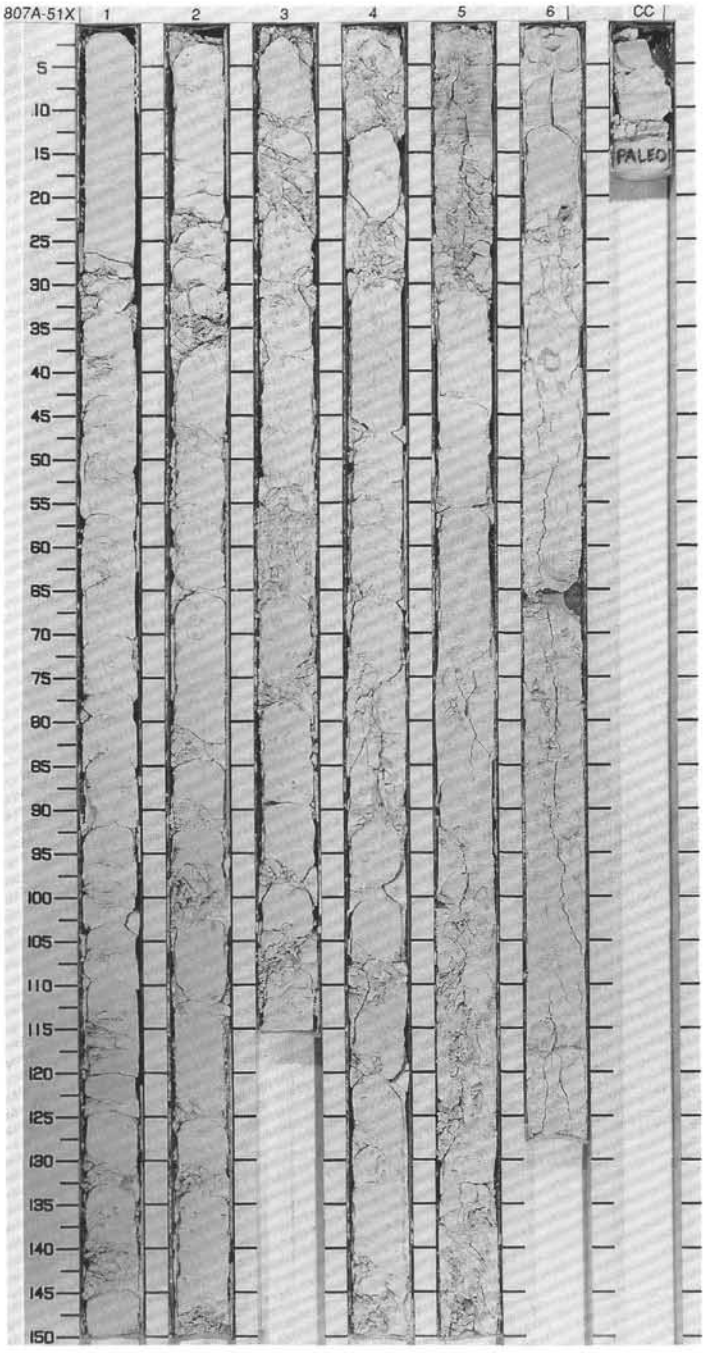


NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (10YR 8/0 and 2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Moderate bioturbation is indicated by faint mottling in various shades of white. Single, small (mm size) grayish blue (5PB 5/2) pyritized burrows are present. From the lower half of Section 4 to the base of the core, mm size distinct, and cm size diffuse light gray (N7/) to gray (N5/) color bands are common.

SMEAR SLIDE SUMMARY (%)

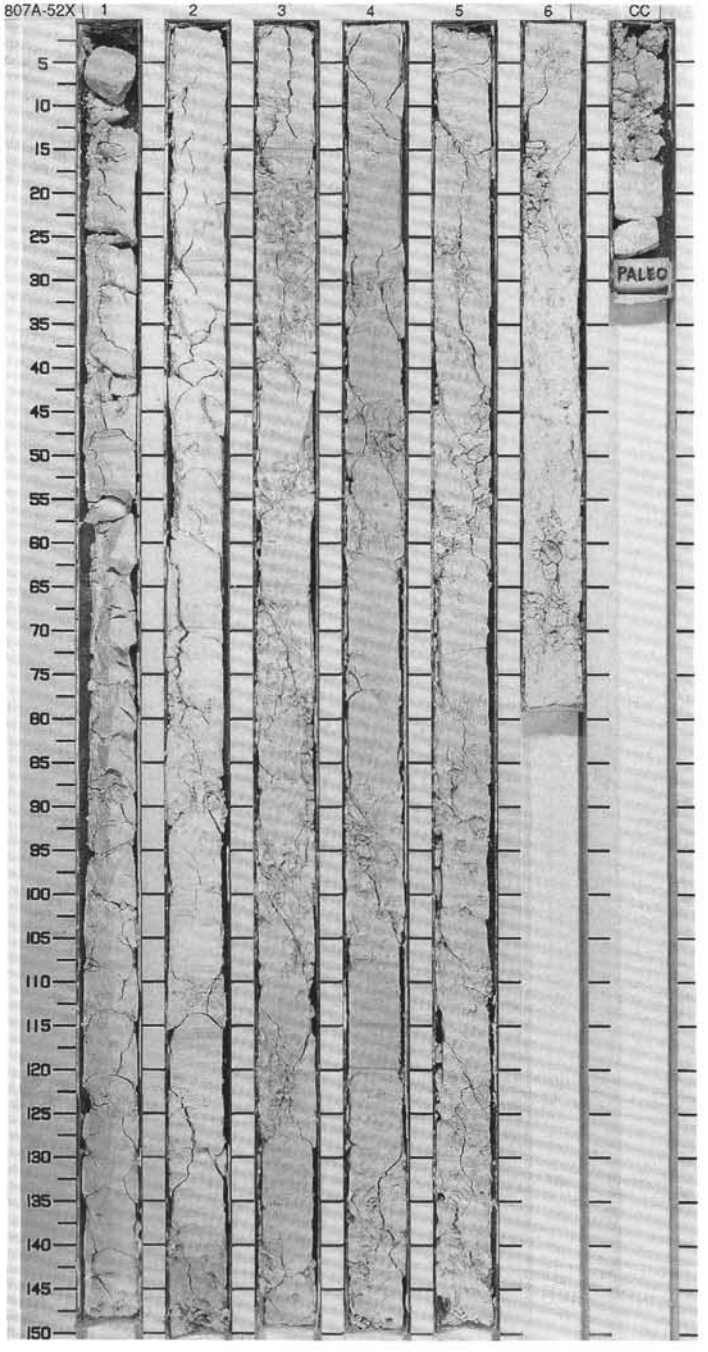
	3, 44
	D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	22
Nannofossils	75
Radiolarians	3



SITE 807 HOLE A CORE 52X CORED INTERVAL 485.8-495.4 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
LOWER MIOCENE	N5	NN2	*Stichocorys wolffii*	?		●Φ=51.1 ρ=1.84 ●Φ=53.7 ρ=1.79 ●Φ=55.0 ρ=1.77	●%$CaCO_3$=94.4 ●%$CaCO_3$=95.9 ●%$CaCO_3$=95.9	1 2 3 4 5 6 CC	0.5 1.0			Po	*	NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER NANNOFOSSIL CHALK. Major lithology: This core contains slightly to heavily bioturbated, white (2.5Y 8/0 and 10YR 8/0) NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER-NANNOFOSSIL CHALK. Pyrite-filled burrows give rise to a grayish blue (5PB 5/2) hue for the lower 10 cm of Section 2 and to a pale purple (5PB 7/2) hue in the lower 40 cm of Section 3. A single distinct, greenish gray (5G 6/1) color band and several mm to cm size diffuse light greenish gray (5G 7/1) bands are present. A 2 to 3 cm diameter porcellanite nodule is located in Section 6, 60 cm. SMEAR SLIDE SUMMARY (%): 3, 91 D TEXTURE: Sand 10 Silt 85 Clay 5 COMPOSITION: Foraminifers 25 Nannofossils 73 Radiolarians 1 Silicoflagellates 1

A/M A/P C/P R/P



SITE 807 HOLE A CORE 53X CORED INTERVAL 495.4-505.1 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
LOWER MIOCENE	A/M	NN5	A/M	C/P	ϕ=47.4 ρ=1.90	ϕ=54.2 ρ=1.79	%$CaCO_3$=92.4	5					
						ϕ=54.0 ρ=1.80	%$CaCO_3$=96.0	4					
						ϕ=53.4 ρ=1.79	%$CaCO_3$=95.4	3					
						ϕ=50.8 ρ=1.84	%$CaCO_3$=95.7	2					*
							%$CaCO_3$=94.9	1	0.5				
								CC	1.0				

Stichocorys delmontensis - Stichocorys wolffii

R/P ?

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL CHALK to NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL CHALK to NANNOFOSSIL CHALK with FORAMINIFERS. In Sections 1 through 4, moderate to heavy bioturbation is indicated by abundant mottles and grayish blue (5PB 5/2) pyrite filled burrows. In Sections 5 through CC, only a few signs of bioturbation are visible. Sections 3, 5, 6 and CC have several zones (a few cm thick) of light gray (5Y 7/1) flaser structures.

SMEAR SLIDE SUMMARY (%):

	2, 50 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	25
Nannofossils	70
Radiolarians	4
Silicoflagellates	Tr
Spicules	Tr

SITE 807 HOLE A CORE 54X CORED INTERVAL 505.1-514.8 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER MIOCENE	N4	NN2	*Stichocorys delmontensis*	?NTD 1 *Rosiella paleacea*		●Φ=54.4 ρ=1.79	●%CaCO3 =94.0	1	0.5, 1.0				
						●Φ=54.9 ρ=1.78	●%CaCO3=95.7	2					
						●Φ=53.9 ρ=1.80	●%CaCO3=96.9	3					* OG IW
						●Φ=55.8 ρ=1.77	●%CaCO3=95.0	4					
						●Φ=57.3 ρ=1.74	●%CaCO3=96.6	5					
						V=1693●Φ=57.2 ρ=1.72	●%CaCO3=94.4	6					
	A/G	A/M	C/P	R/P				CC					

BIOSTRAT. ZONE/FOSSIL CHARACTER

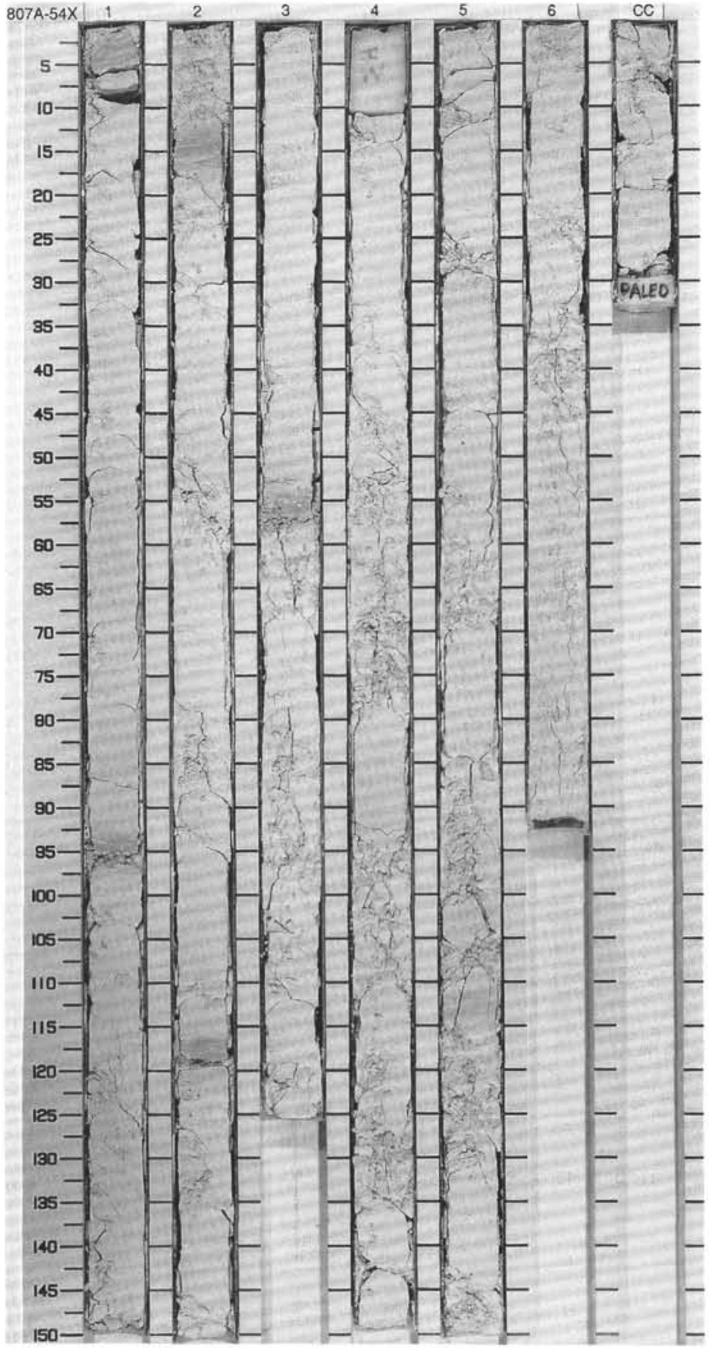
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. There are occasional flaser structures observed as braided color bands. Bioturbation is slight, with only a few disseminated pyrite specks in the core; otherwise the core is structureless.

SMEAR SLIDE SUMMARY (%):

	3, 74
	D
TEXTURE:	
Sand	12
Silt	60
Clay	28
COMPOSITION:	
Accessory minerals	2
Foraminifers	20
Nannofossils	75
Radiolarians	Tr
Siliceous fragments	3
Silicoflagellates	Tr



SITE 807 HOLE A CORE 55X CORED INTERVAL 514.8-524.0 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
LOWER MIOCENE	A/G N4	A/M NN2	R/P ?NTD 1		V-1809 Φ=55.5 ρb=1.76	V-1728 Φ=56.5 ρb=1.75 V-1806	●%CaCO3=95.6 ●%CaCO3=95.3	6					
						V-1728 Φ=52.2 ρb=1.83	●%CaCO3=95.4	5					
						V-1563 Φ=55.4 ρb=1.77	●%CaCO3=95.3	4					
								3					*
								2					LND
								1	0.5 1.0				
								CC					

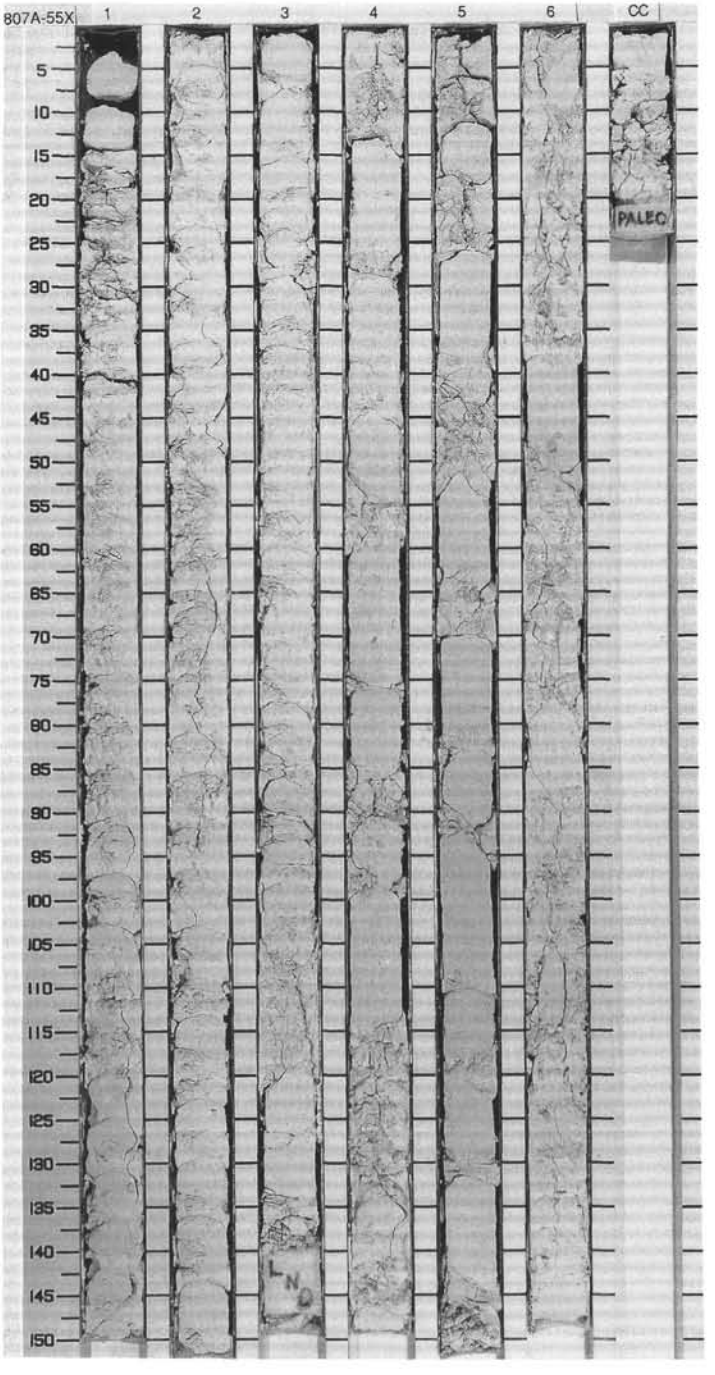
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. There is some indication of bioturbation, with faint mottles and a few pyrite-filled burrows. Sections 5 and 6 have abundant mm thick, light gray (5Y 7/1) and pale purple (5P 6/2) color bands. The drilling process has resulted in abundant fracturing and biscuit formation.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Accessory minerals	1
Foraminifers	18
Nannofossils	78
Siliceous fragments	3



SITE 807 HOLE A CORE 56X CORED INTERVAL 524.0-533.7 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
LOWER MIOCENE	N4 A/G	NN2 A/M	*Stichocorys delmontensis* A/M	? R-F/P		Φ=53.8 ρ=1.79	%CaCO$_3$=95.1	1	0.5, 1.0				
						V=1618 Φ=54.6 ρ=1.78	%CaCO$_3$=95.9; %CaCO$_3$=96.4	2					
						V=1677 Φ=53.0 ρ=1.81		3					*
						V=1711 Φ=51.5 ρ=1.85	%CaCO$_3$=95.5	4					
								5					
						V=1704 Φ=51.2 ρ=1.83	%CaCO$_3$=96.1	6					
								CC					

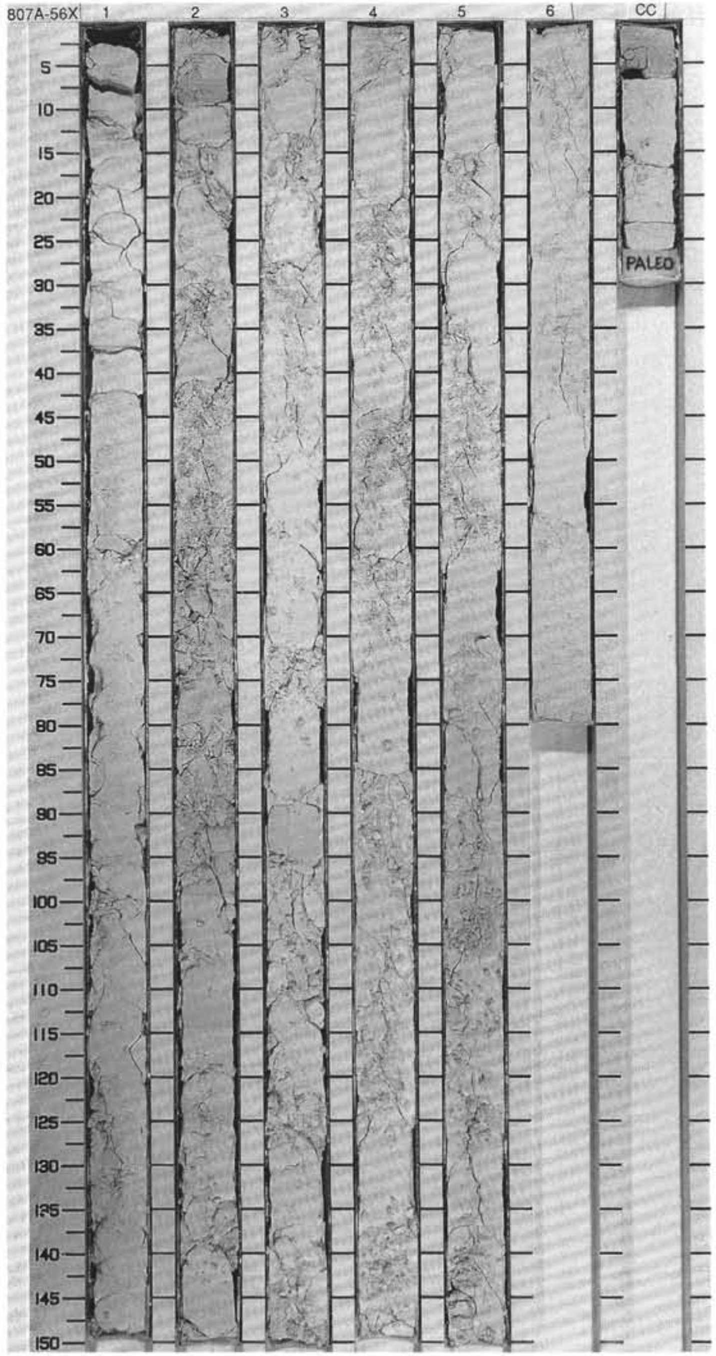
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. It is relatively structureless with only a few intervals showing bioturbation structures (mottles and pyrite-filled burrows), and some pale pink (5RP 8/2) intervals with frequent, fine-scale (< 1 mm) white color banding. Drilling disturbance is moderate to heavy.

SMEAR SLIDE SUMMARY (%):

	3, 79
	D
TEXTURE:	
Sand	5
Silt	75
Clay	20
COMPOSITION:	
Foraminifers	5
Nannofossils	95
Radiolarians	Tr
Siliceous fragments	Tr



SITE 807 HOLE A CORE 57X CORED INTERVAL 533.7-543.4 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
LOWER MIOCENE	N4	NN2	A/M	A/M	R/P	?		1 2 3 4 5 6 CC	0.5 1.0				OG IW

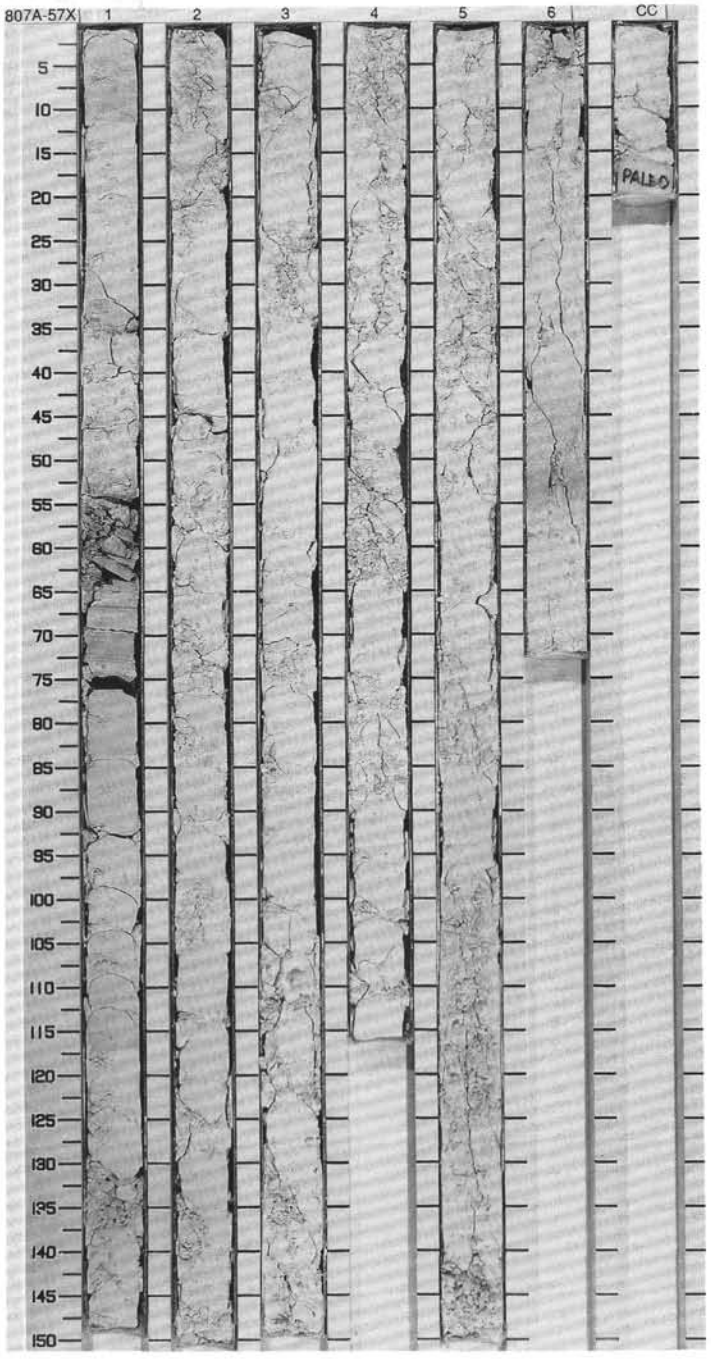
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. The chalk is predominantly homogeneous. A few 20 to 40 cm thick intervals are pale pink (5RP 8/2) and exhibit very fine-scale (1 mm) greenish gray (5G 7/1), pale purple (5P 6/2), and white (2.5Y 8/0) color bands. Bioturbation appears to be minor.

SMEAR SLIDE SUMMARY (%):

	3, 75
	D
TEXTURE:	
Sand	5
Silt	80
Clay	15
COMPOSITION:	
Diatoms	Tr
Foraminifers	20
Nannofossils	77
Siliceous fragments	2



SITE 807 HOLE A CORE 58X CORED INTERVAL 543.4-553.0 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
LOWER MIOCENE	A/G N4	A/M NN2	C/P *Stichocorys delmontensis*	F-C/P ?	V-1684 ●0=54.5 P=1.80	V-1690 ●0=55.1 P=1.79 V-1714 ●0=55.2 P=1.79 V-1714 ●0=53.8 P=1.79	●%$CaCO_3$=95.8 ●%$CaCO_3$=95.5 ●%$CaCO_3$=95.6 ●%$CaCO_3$=96.0	1 2 3 4 5 CC	0.5 1.0			⊙ ≀ ≀ *	

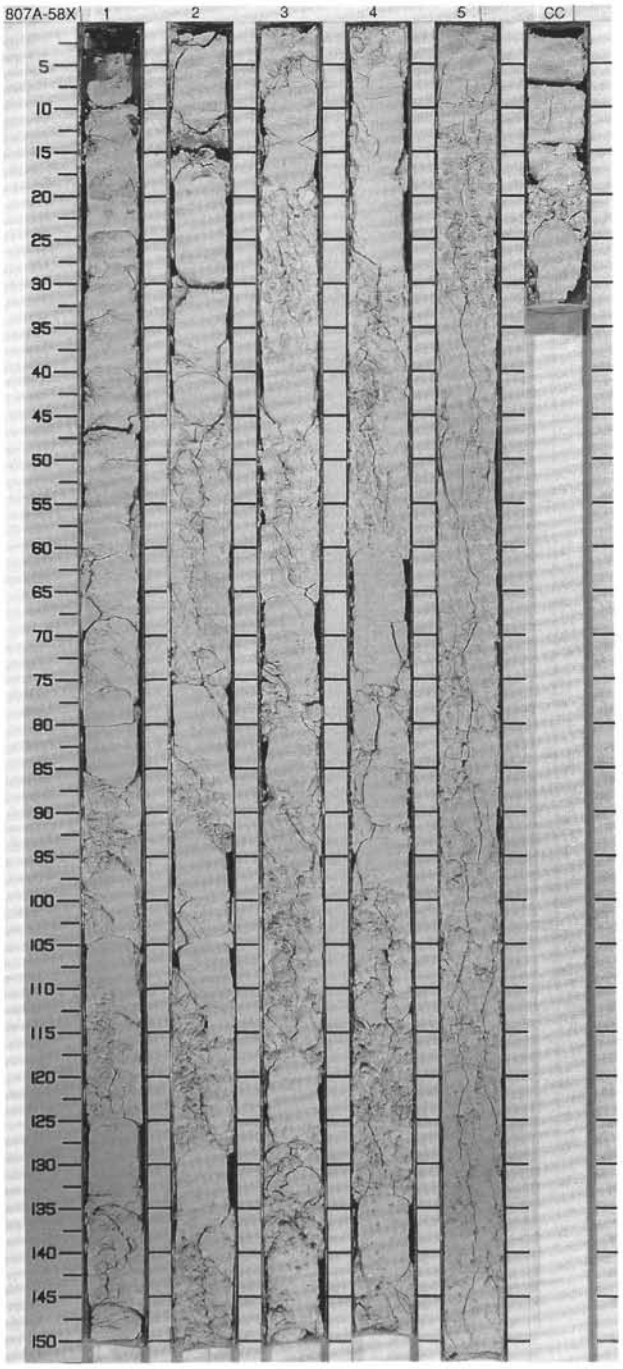
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains homogeneous, white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. The basal 10 cm of Sections 4 and 5 are pale pink (5RP 6/2) in color. One thin (1 mm) bluish gray color band is present above the pale pink interval in Section 5. There is very little evidence of bioturbation.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	60
Clay	30
COMPOSITION:	
Foraminifers	12
Nannofossils	88
Radiolarians	Tr
Siliceous fragments	Tr



SITE 807 HOLE A CORE 59X CORED INTERVAL 553.0-562.6 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
LOWER MIOCENE	A/M	N4						1	0.5				
	A/M	NN2							1.0				
	A/P		*Cyrtocapsella tetrapera*										
	F/P			?				2					
								3					
								4					
								5					
								CC					

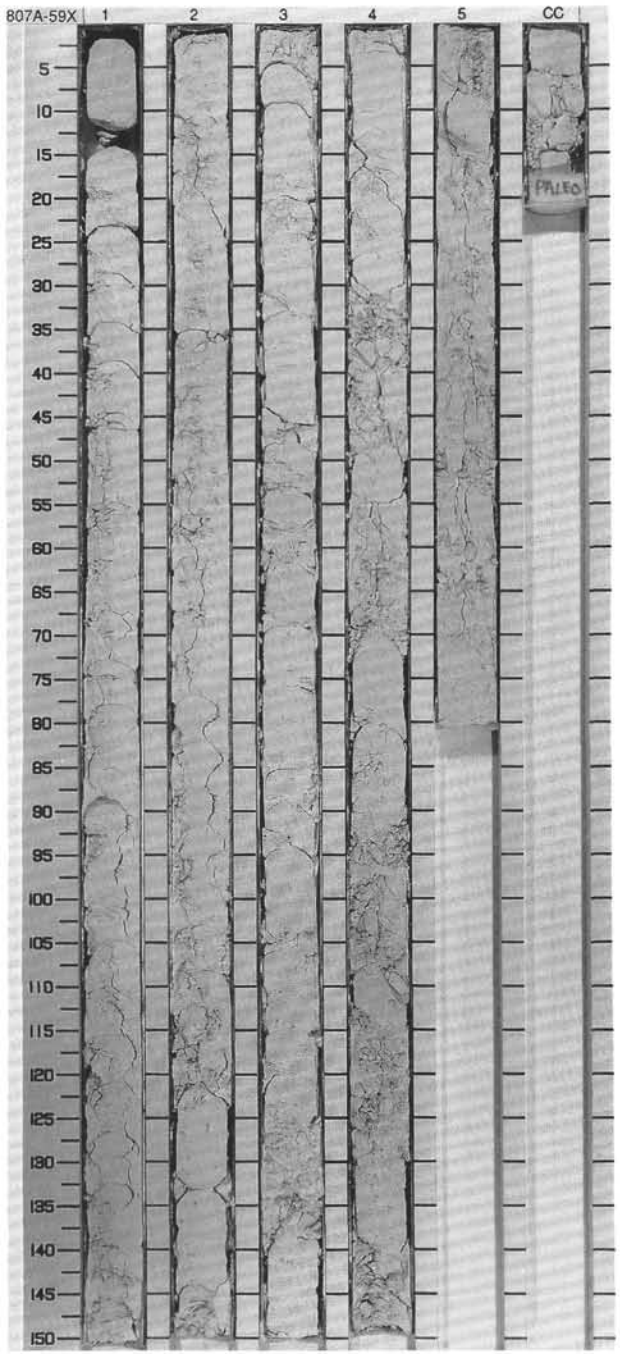
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains homogeneous white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. A few intervals of pale pink (5RP 8/2) and light gray (2.5Y 7/0) sediment are noted. Evidence of bioturbation is scarce and consists of a few pyritized burrows.

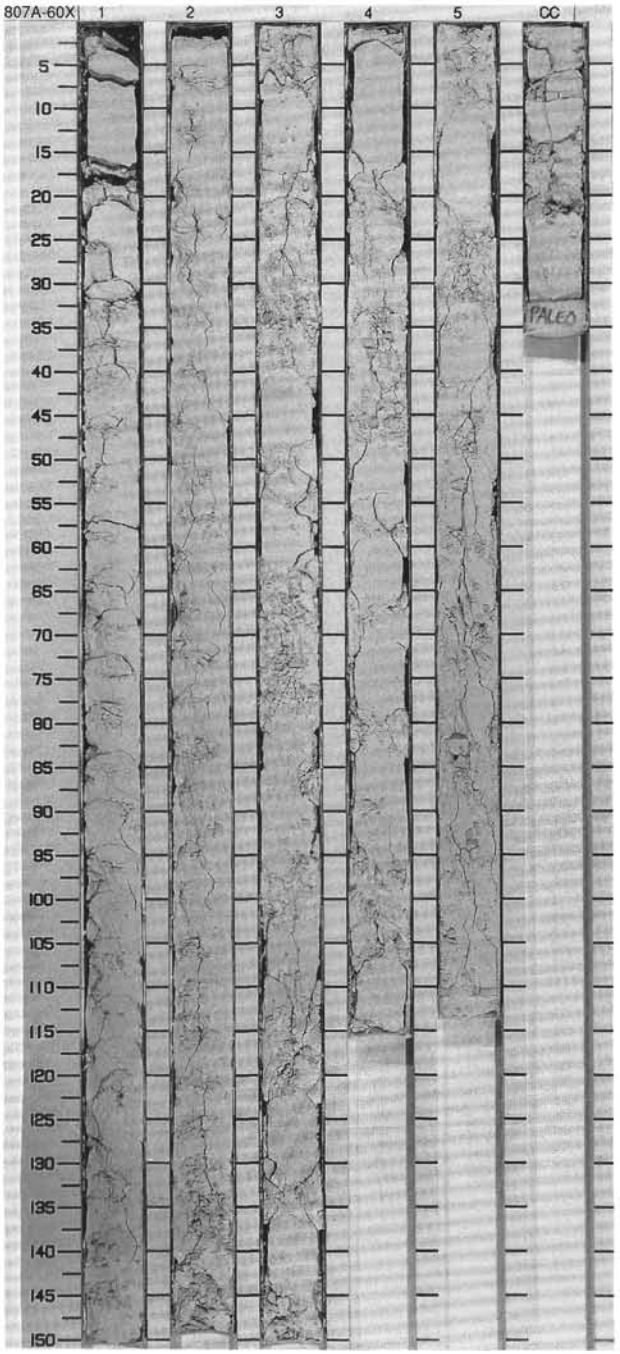
SMEAR SLIDE SUMMARY (%):

	3, 75
	D
TEXTURE:	
Sand	5
Silt	75
Clay	20
COMPOSITION:	
Foraminifers	10
Nannofossils	89
Siliceous fragments	1



SITE 807 HOLE A CORE 60X CORED INTERVAL 562.6-572.3 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
LOWER MIOCENE	A/G	N4	A/M	NN2	C/P	*Cryptocapsella tetrapera*	F/P	?		V-1718 ϕ=51.7 ρ=1.84	V-1718 ϕ=52.5 ρ=1.81 %$CaCO_3$=95.4	V-1718 ϕ=53.6 ρ=1.81 %$CaCO_3$=95.5	%$CaCO_3$=95.6	1 2 3 4 5 CC	0.5 1.0			OG IW	NANNOFOSSIL CHALK with FORAMINIFERS Major lithology: This core contains homogeneous, white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. A 1 cm thick interval, at the base of Section 5, has very thin, grayish blue (5PB 5/2) bands. Bioturbation structures are not seen. SMEAR SLIDE SUMMARY (%): 3, 74 D TEXTURE: Sand 10 Silt 55 Clay 35 COMPOSITION: Accessory minerals 1 Foraminifers 13 Nannofossils 84 Siliceous fragments 2



SITE 807 HOLE A CORE 61X CORED INTERVAL 572.3-581.9 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER MIOCENE	N4	NN1 - NN2	*Cyrtocapsella tetrapera*	?									
	A/G	A/M	A/P	R-F/P									

PALEOMAGNETICS: V=1780 Φ=52.9 ρ=1.81

PHYS. PROPERTIES: V=1680; V=1711 Φ=55.2 ρ=1.77; Φ=54.6 ρ=1.79

CHEMISTRY: %$CaCO_3$=93.6; %$CaCO_3$=94.6; %$CaCO_3$=93.4; %$CaCO_3$=93.0

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

METERS: 0.5, 1.0

SED. STRUCTURES: *

SAMPLES: *

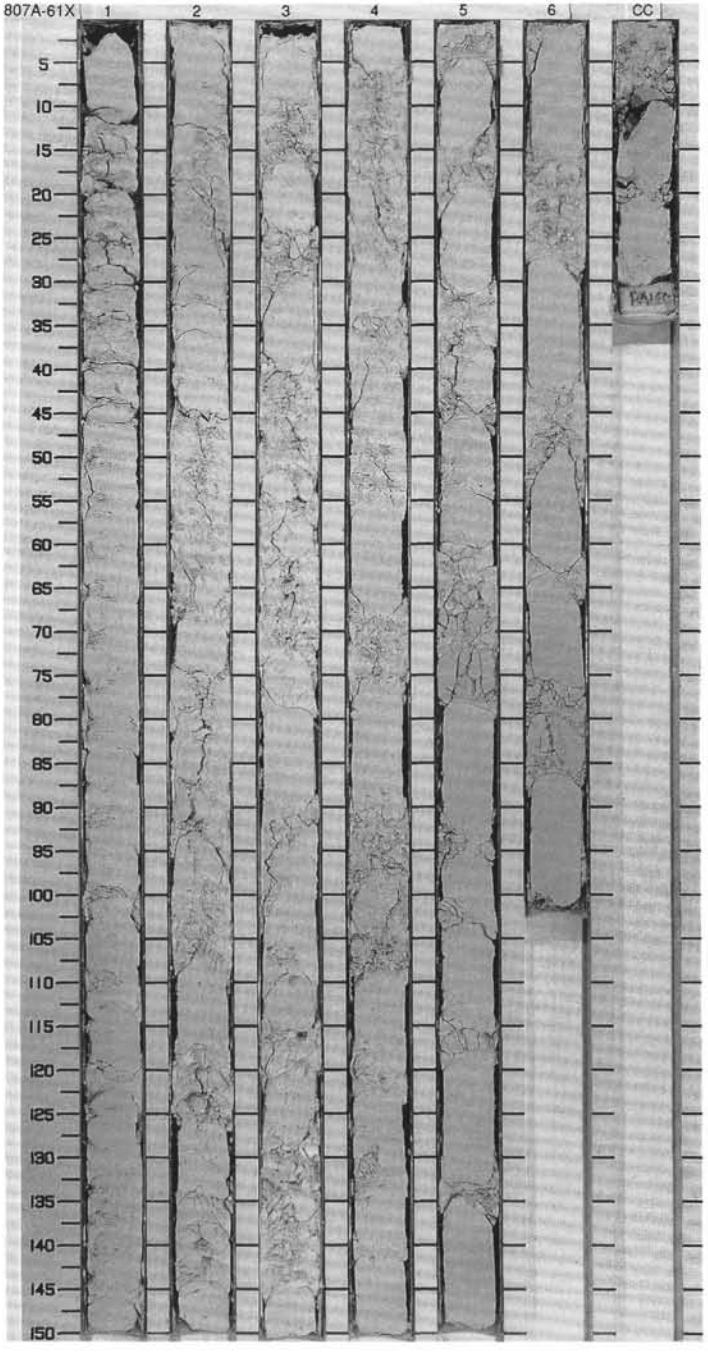
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0), homogeneous NANNOFOSSIL CHALK with FORAMINIFERS. The drilling process has resulted in abundant fracturing and biscuiting in the top three sections. Bioturbation is apparent on clean split faces as mottles that are compacted in the vertical direction.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Foraminifers	10
Nannofossils	89
Siliceous fragments	1
Siliceous sponge spicules	Tr



SITE 807 HOLE A CORE 62X CORED INTERVAL 581.9-591.6 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
UPPERMOST OLIGOCENE - basal MIOCENE	P22 - N4	NN1 - NN2	*Lychnocanoma elongata*	?	A/M	A/M	A/P	R/P					

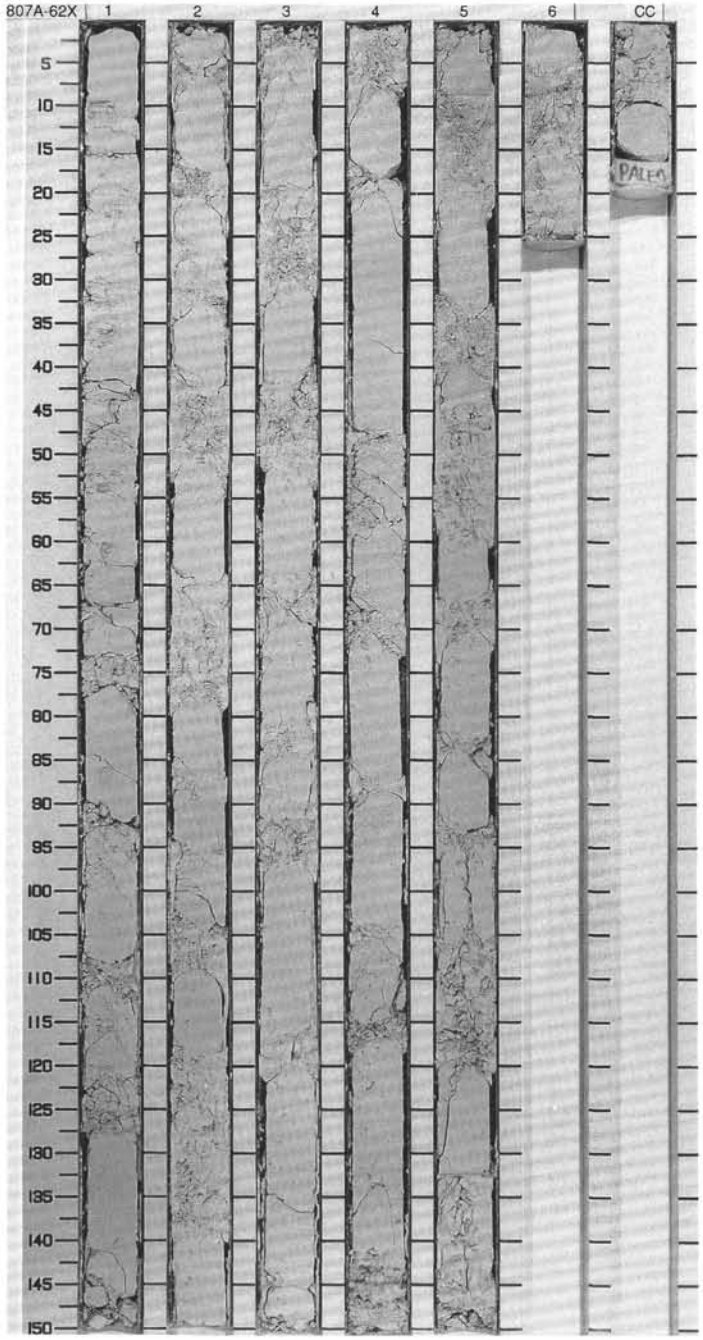
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (10YR 8/0 and 10YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. Bioturbation is apparent on clean split faces as predominantly horizontal mottles. The lower part of Sections 4 through CC are slightly tinted with grayish blue (5PB 5/2), pyrite-filled burrows. Poorly developed, gray (N6/) flaser structures and light gray (N7/) color bands appear in Section 4, 25-30 cm, in Section 5, 9 and 132 cm, and in Section 6, 9 cm.

SMEAR SLIDE SUMMARY (%):

	3, 78 D
TEXTURE:	
Sand	8
Silt	85
Clay	7
COMPOSITION:	
Foraminifers	15
Nannofossils	83
Radiolarians	1
Siliceous fragments	1



SITE 807 HOLE A CORE 63X CORED INTERVAL 591.6-601.3 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 OLIGOCENE	P22	NN1 - NN2	*Lychnocanoma elongata*	?	●ϕ=49.7 ρ=1.86 V=1764	●ϕ=48.8 ρ=1.89 V=1725 ●ϕ=51.5 ρ=1.84 V=1756 V=1773	●%CaCO3=93.5 ●%CaCO3=92.3 ●%CaCO3=92.5 ●%CaCO3=93.7	1 2 3 4 5 CC	0.5 1.0				OG IW

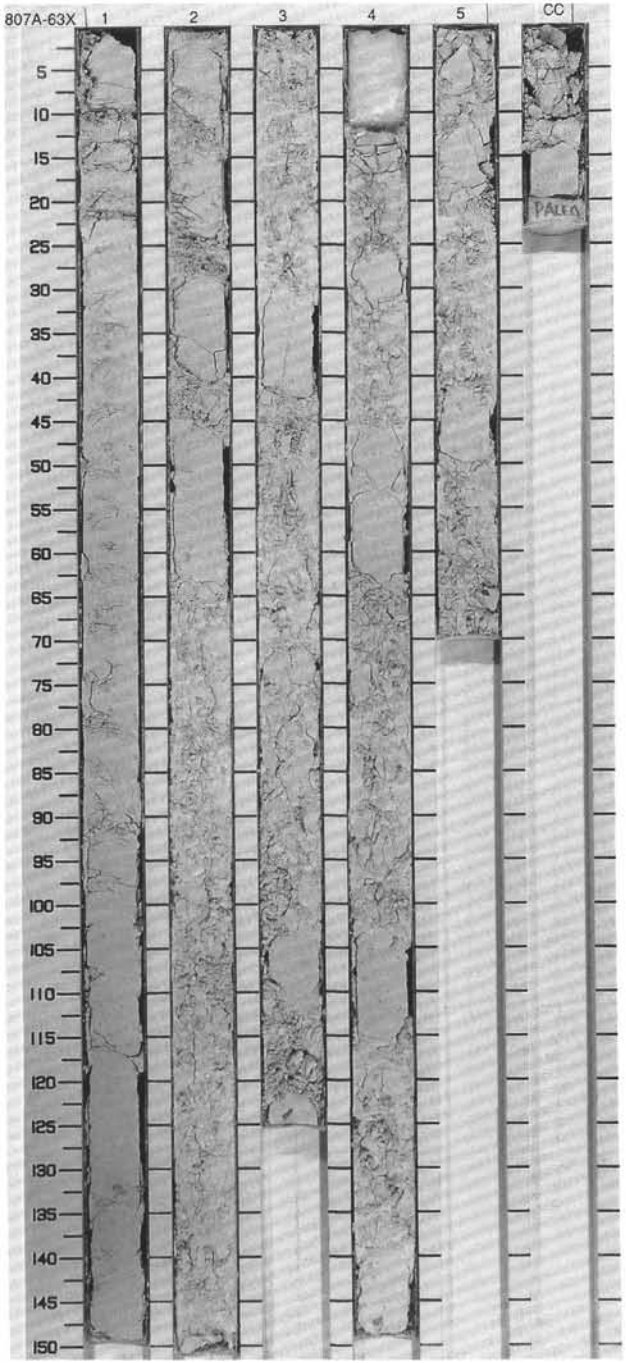
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains heavily to moderately bioturbated, white (10YR 8/0 and 10YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. Bioturbation appears as predominantly horizontal mottles. Sections 1,2 and 3 are tinted slightly with pale blue (5PB 7/2) and grayish blue (5PB 5/2) pyrite-filled burrows.

SMEAR SLIDE SUMMARY (%):

	4, 60
	D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	80
Radiolarians	4
Siliceous fragments	Tr
Silicoflagellates	Tr



SITE 807 HOLE A CORE 64X CORED INTERVAL 601.3-611.0 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
UPPER OLIGOCENE	A/M P22	A/P NN1 - NN2	A/P *Lynchnocanoma elongata*	R/P ?		V=1832 Φ=51.9 ρ=1.84 V=1816 Φ=49.2 ρ=1.87 V=1935 Φ=46.6 ρ=1.91 V=1767 Φ=51.0 ρ=1.84	%$CaCO_3$=91.5 %$CaCO_3$=91.5 %$CaCO_3$=89.6 %$CaCO_3$=93.5	1 2 3 4 5 CC	0.5 1.0			•	

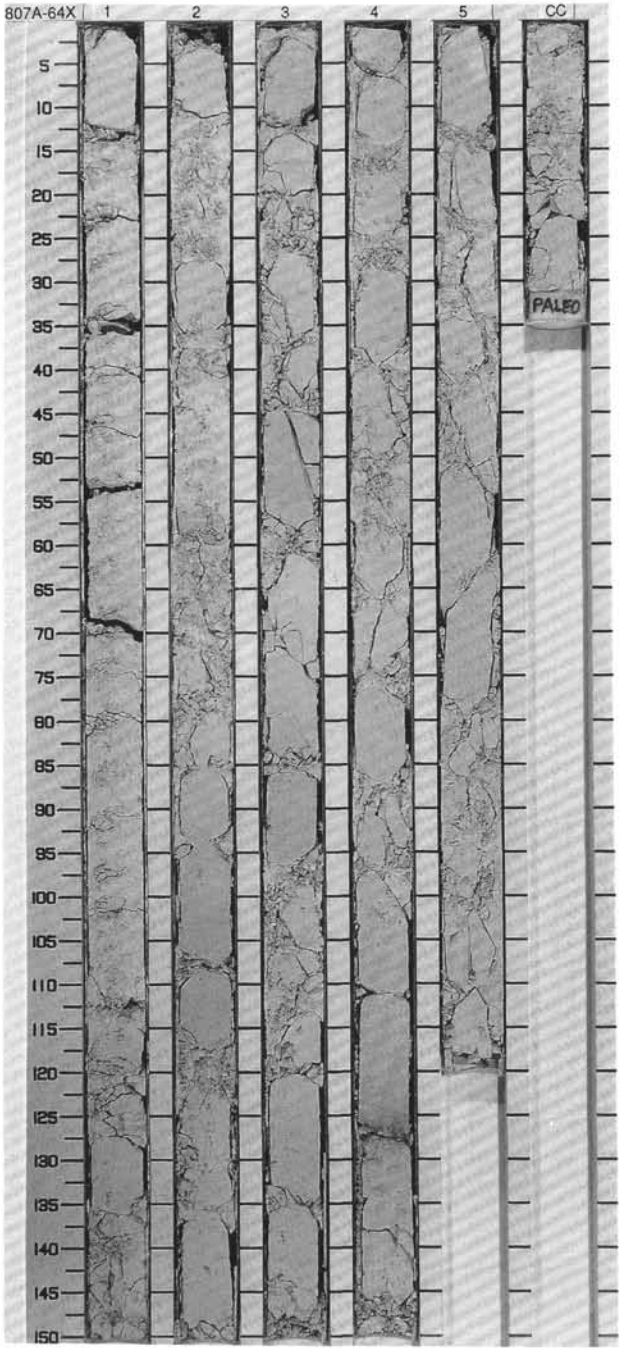
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated, white (10YR 8/1 and 2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Bioturbation structures appear predominantly as horizontal mottles. The interval from 120 to 135 cm in Section 4 is composed of gray (5YR 6/1) burrowed sediment, with probable *Teichichnus*-type burrows.

SMEAR SLIDE SUMMARY (%):

	3, 90 D
TEXTURE:	
Sand	8
Silt	88
Clay	4
COMPOSITION:	
Foraminifers	10
Nannofossils	86
Radiolarians	1
Silicoflagellates	1
Spicules	2



SITE 807 HOLE A CORE 65X CORED INTERVAL 611.0-620.6 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
UPPER OLIGOCENE	A/M P22	A/M NP25	A/M *Lychnocanoma elongata*	F/P *Rocella vigilans?*	V-1868 Φ=52.7 ρ=1.81	V-1827 Φ=53.6 ρ=1.78 Φ=50.0 ρ=1.86	%$CaCO_3$=90.0 %$CaCO_3$=91.8 %$CaCO_3$=92.6 %$CaCO_3$=90.7	1 2 3 4 5 CC	0.5 1.0				

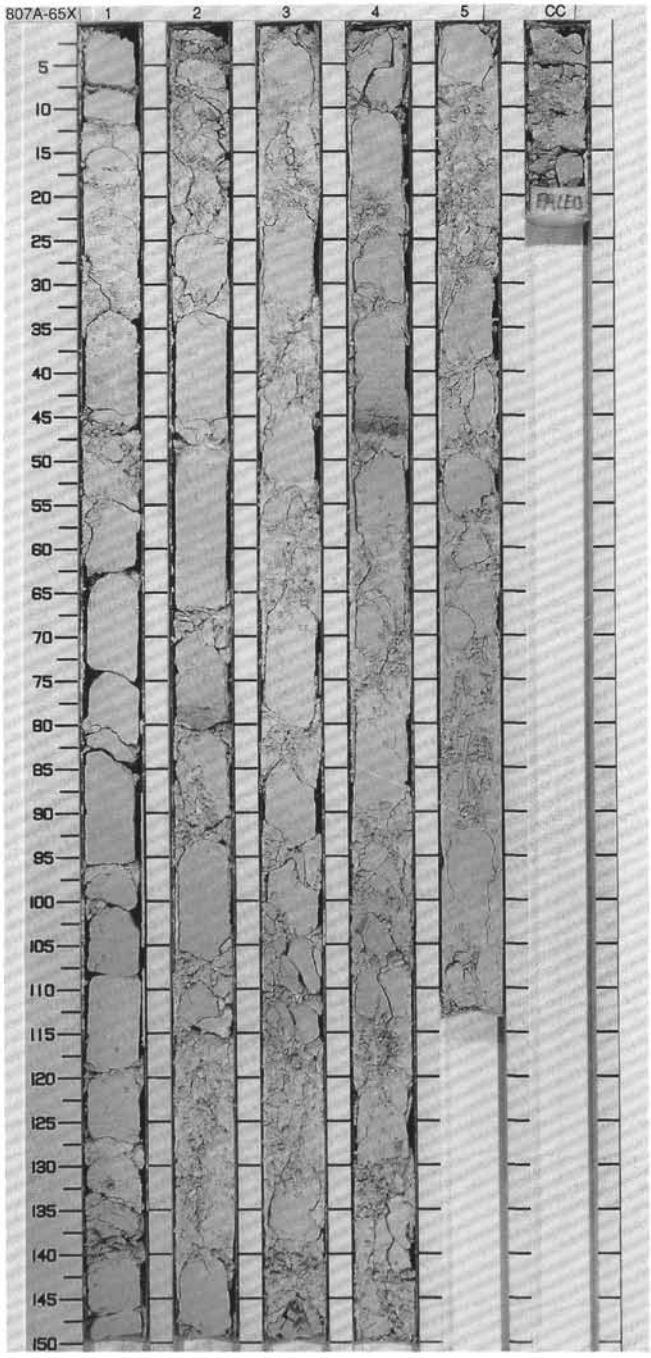
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains moderately to heavily bioturbated, white (10YR 8/1 to 2.5Y 8/0 and 7.5YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. Faint color banding is present in Section 4, 37-122 cm and Section 5, 35-112 cm, and results from a combination of abundant, semi-continuous horizontal burrows across the core surface and very faint, grayish blue (5PB 5/2) color banding. Well-developed, mm scale, light gray (N7/) and grayish blue (5PB 5/2) color bands are present at Section 4, 47-49 cm.

SMEAR SLIDE SUMMARY (%):

	2, 58 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	10
Nannofossils	85
Radiolarians	3
Silicoflagellates	Tr
Spicules	Tr



SITE 807 HOLE A CORE 66X CORED INTERVAL 620.6-630.3 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 OLIGOCENE	A/M P22	A/M NP25	A/P *Lychnocanoma elongata*	F-C/P *Rocella vigilans*		Φ=52.0 ρ=1.83 ● %$CaCO_3$ =94.5 Φ=50.9 ρ=1.88 ● %$CaCO_3$=91.1 Φ=51.6 ρ=1.82 ● %$CaCO_3$=92.3		1 2 3 4 5 CC	0.5 1.0				OG W ND

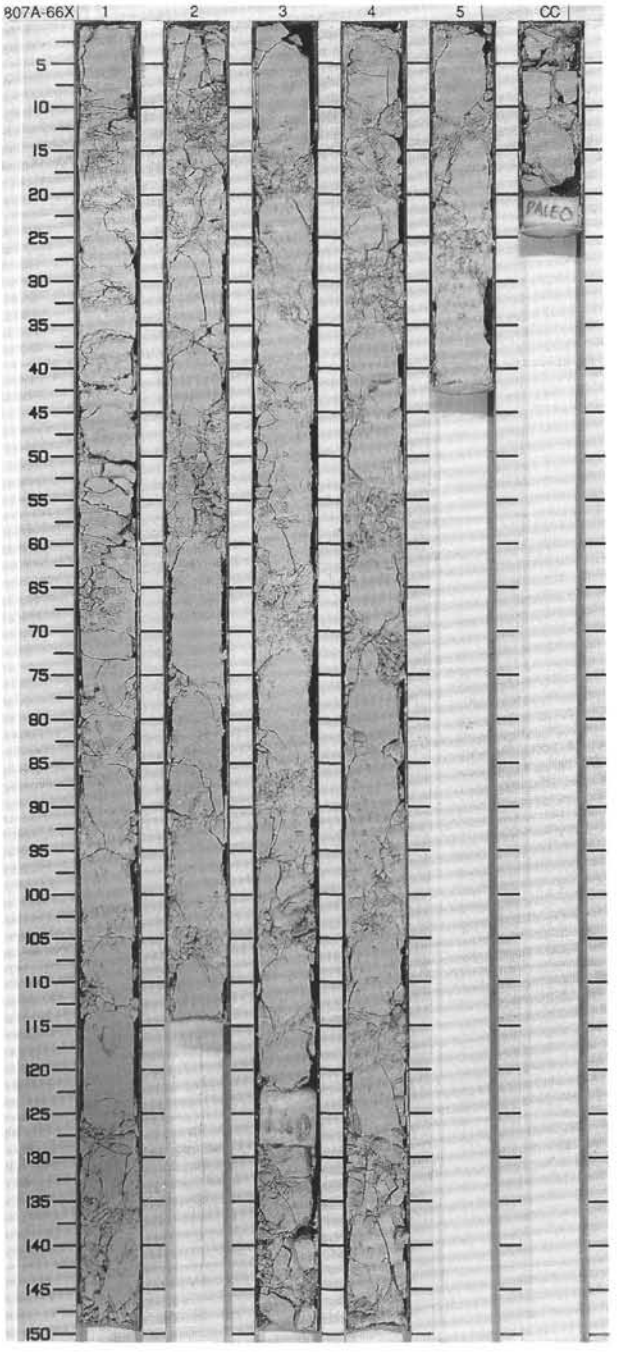
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (7.5YR 8/0 and 2.5Y 8/0) NANNOFOSSIL CHALK, which is moderately to heavily bioturbated throughout. The dominant style of bioturbation is simple, mm scale burrows. Very faint white and light gray color bands are present throughout Sections 4 and 5.

SMEAR SLIDE SUMMARY (%):

	2, 70 D
TEXTURE:	
Sand	5
Silt	75
Clay	20
COMPOSITION:	
Foraminifers	5
Nannofossils	95
Quartz	Tr
Silica	Tr
Spicules	Tr



SITE 807 HOLE A CORE 67X CORED INTERVAL 630.3-639.9 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER OLIGOCENE	P22	NP25	*Lychnocanoma elongata*	*Rocella vigilans*		ϕ=53.9 ρ_b=1.78	%$CaCO_3$=91.8	1	0.5 1.0				
	A/G	A/P	A/P	C/P				2					
								3					*
								4					
								CC					

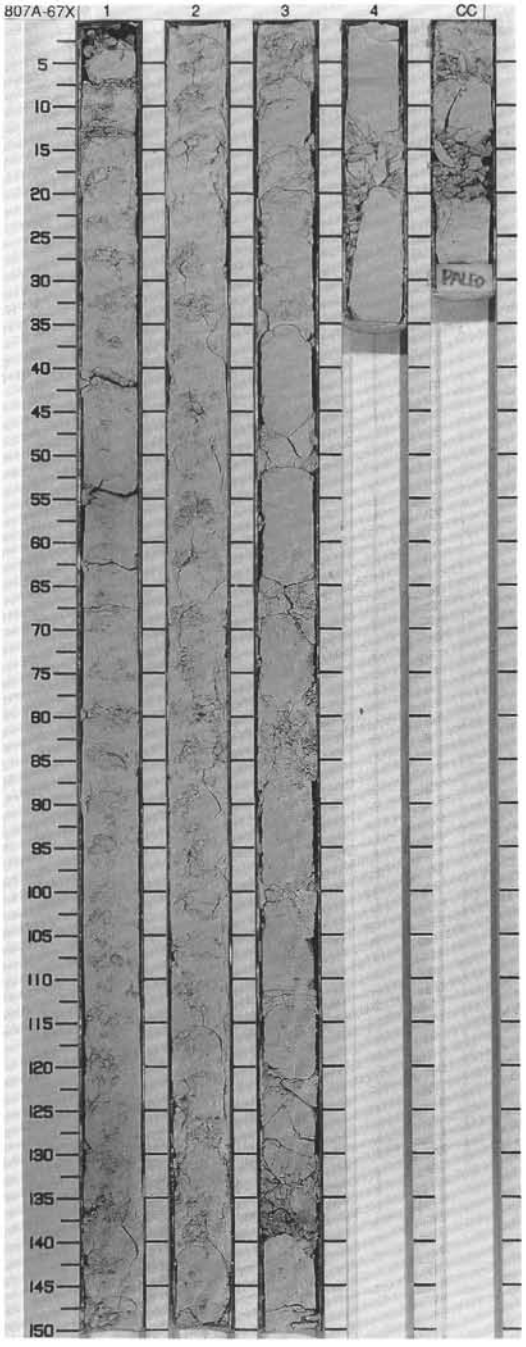
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS, which is slightly to moderately bioturbated throughout. Zones with minor tints of pale purple (5P 6/2) are present in Sections 1 and 2. Gray (N6/) mm scale color bands are present at Section 3, 133-137 cm, and light gray (N7/) mm scale color bands are present at Section 4, 7-9 cm. A sample from the Core Catcher that was processed for paleontologic analyses contained abundant volcanic ash; the volcanic ash was not obvious during inspection of the core itself.

SMEAR SLIDE SUMMARY (%):

	3, 56 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	80
Quartz	Tr
Silica	Tr
Silicoflagellates	1
Spicules	Tr



SITE 807 HOLE A CORE 68X CORED INTERVAL 639.9-649.6 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
UPPER OLIGOCENE	A/M	P22 / NP25	A/M	A/P	*Dorcadospyris ateuchus - Lychnocanoma elongata*	C/P	*Rocella vigilans*	ϕ=50.8 ρ=1.84	ϕ=49.1 ρ=1.88	ϕ=51.4 ρ=1.84	%$CaCO_3$=92.4	ϕ=51.1 ρ=1.84	%$CaCO_3$=91.3	ϕ=49.1 ρ=1.88	%$CaCO_3$=96.3	ϕ=51.4 ρ=1.84	%$CaCO_3$=93.3	1	0.5	1.0	2	3	4	5	CC					

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0 to 7.5YR 8/0) to light gray (2.5Y 7/0) NANNOFOSSIL CHALK with FORAMINIFERS. Bioturbation is moderate to heavy throughout the core, and is expressed as diffuse color mottling and simple burrows. Section 2, 62-68 cm is gray (N6/) in color and contains discontinuous burrows and a distinct *Zoophycos* trace fossil.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Foraminifers	12
Nannofossils	84
Silicoflagellates	1
Spicules	2

SITE 807 HOLE A CORE 69X CORED INTERVAL 649.6-659.2 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
UPPER OLIGOCENE	A/G P22	A/P NP25	*D. ateuchus - L. elongata* C/P	*Rocella vigilans* C-A/P				1	0.5				*
									1.0				
								CC					

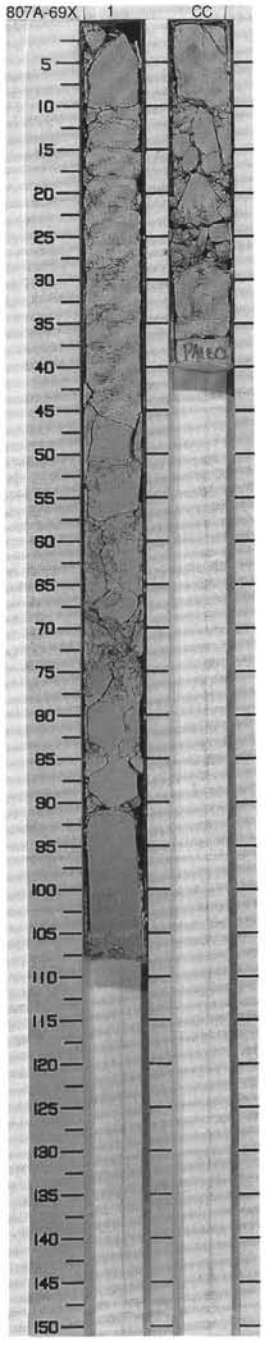
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (5YR 8 1) to light gray (5YR 7 1), heavily bioturbated NANNOFOSSIL CHALK with FORAMINIFERS. The sediments are relatively homogeneous, except for two cm scale, grayish red purple (5RP 4 2) burrow "halos" present in the Core Catcher.

SMEAR SLIDE SUMMARY (%):

	1, 54 D
TEXTURE:	
Sand	14
Silt	82
Clay	4
COMPOSITION:	
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Silicoflagellates	1
Spicules	2



SITE 807 HOLE A CORE 70X CORED INTERVAL 659.2-668.9 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
UPPER OLIGOCENE	P21b - P22	NP25?	*Dorcadopyris ateuchus - Lychnocanoma elongata*			●Φ=49.3 ●ρ=1.86	●%$CaCO_3$=92.7	1	0.5 1.0				
								2					
								3					*
								4					OG TW
						●Φ=46.7 ●ρ=1.91	●%$CaCO_3$=92.8	5					
								6					
	C/G	A/P	C/P	R/P				CC					

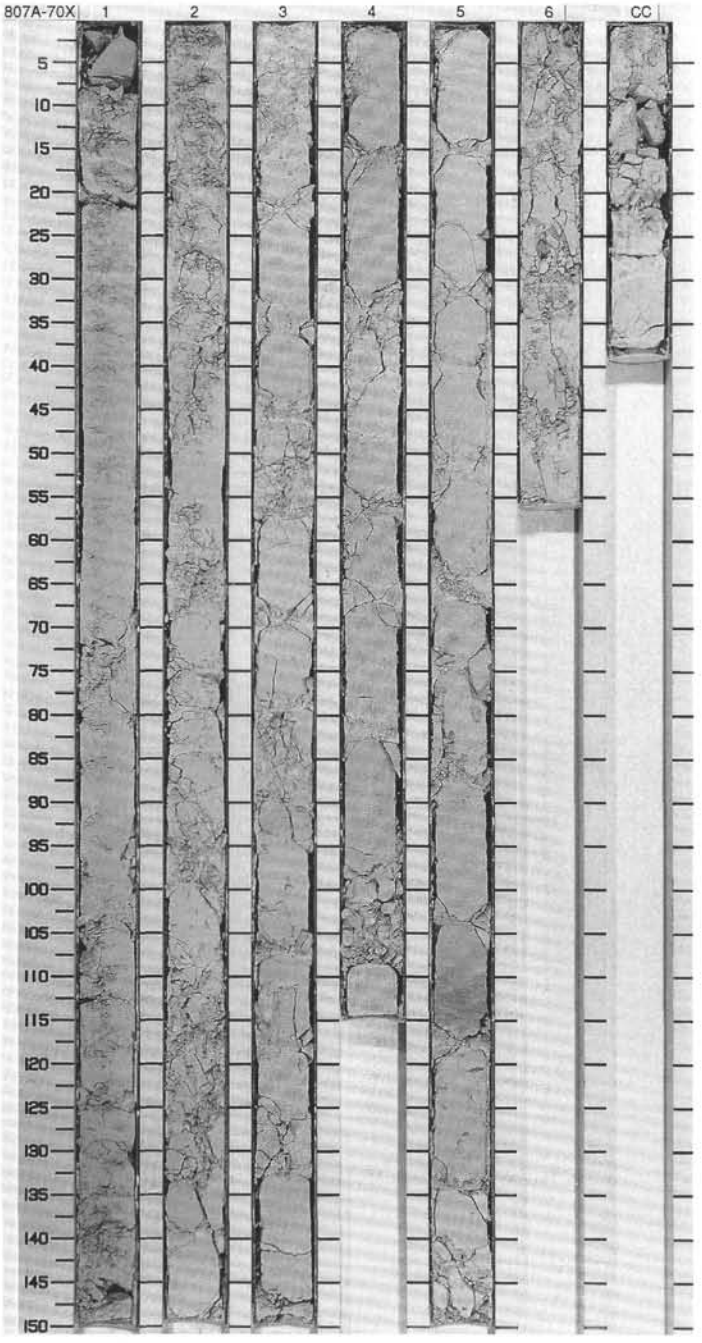
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

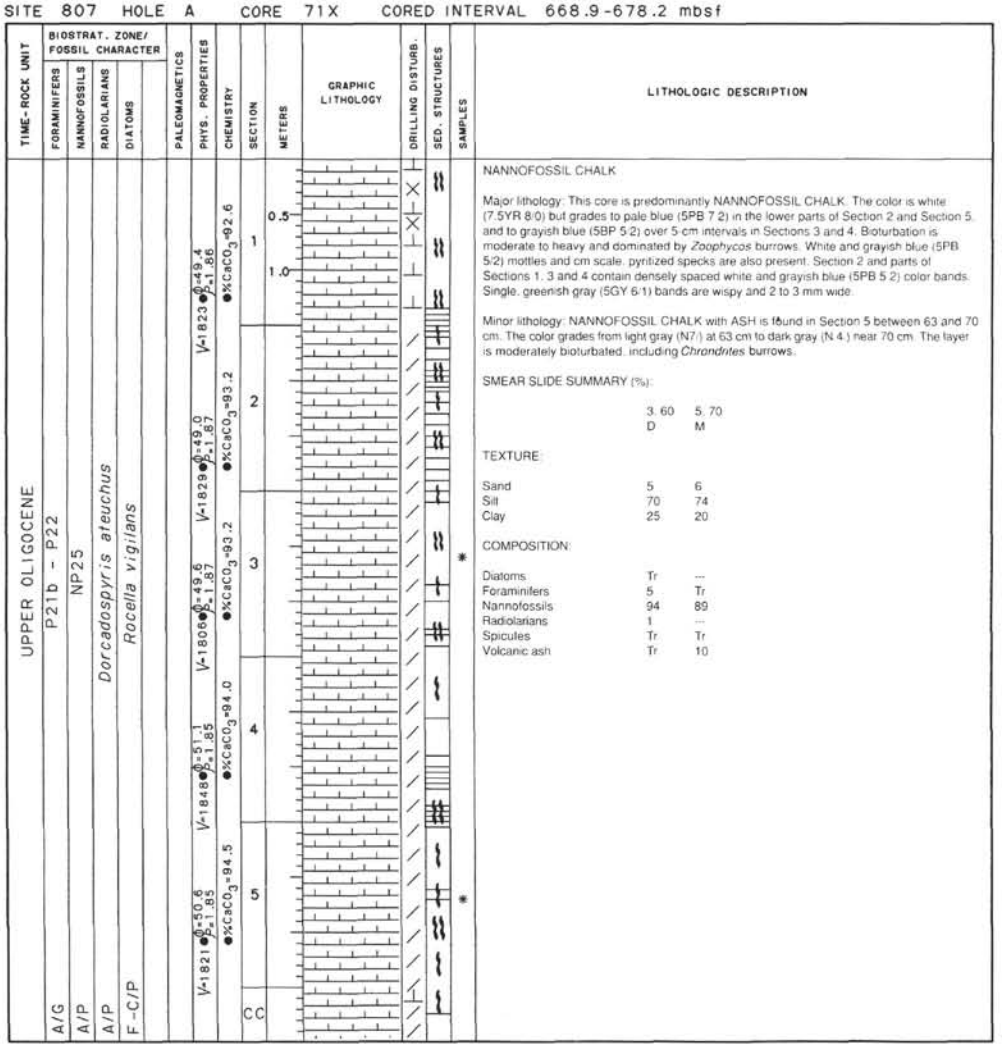
Major lithology: This core contains white (2.5Y 8/0 to 10YR 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. The entire core is moderately to heavily bioturbated with simple, mm scale, horizontal burrows. Section 5, 109-116 cm, contains white (2.5Y 8/0) and gray (N6/) chalk, extensively mixed by burrowing.

SMEAR SLIDE SUMMARY (%):

	3, 77 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Radiolarians	2
Silicoflagellates	Tr
Spicules	Tr



SITE 807 HOLE A CORE 71X CORED INTERVAL 668.9-678.2 mbsf



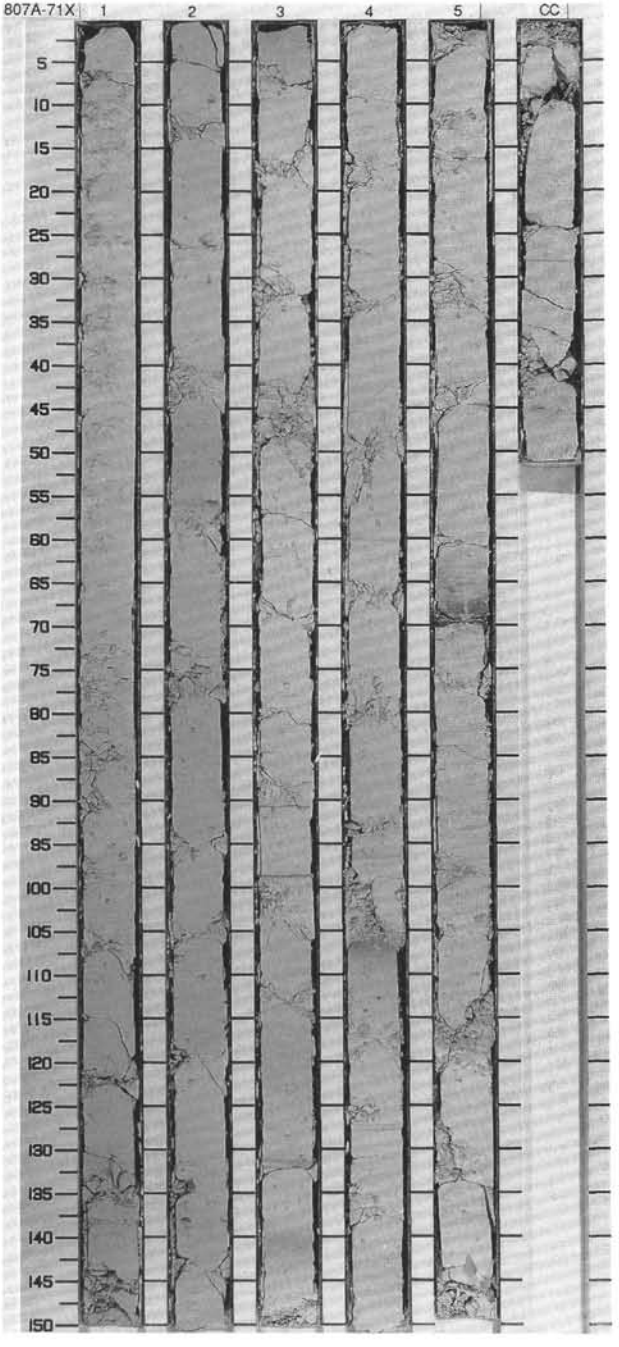
NANNOFOSSIL CHALK

Major lithology: This core is predominantly NANNOFOSSIL CHALK. The color is white (7.5YR 8/0) but grades to pale blue (5PB 7/2) in the lower parts of Section 2 and Section 5, and to grayish blue (5BP 5/2) over 5-cm intervals in Sections 3 and 4. Bioturbation is moderate to heavy and dominated by *Zoophycos* burrows. White and grayish blue (5PB 5/2) mottles and cm scale, pyritized specks are also present. Section 2 and parts of Sections 1, 3 and 4 contain densely spaced white and grayish blue (5PB 5/2) color bands. Single, greenish gray (5GY 6/1) bands are wispy and 2 to 3 mm wide.

Minor lithology: NANNOFOSSIL CHALK with ASH is found in Section 5 between 63 and 70 cm. The color grades from light gray (N7/) at 63 cm to dark gray (N 4/) near 70 cm. The layer is moderately bioturbated, including *Chrondrites* burrows.

SMEAR SLIDE SUMMARY (%):

	3, 60 D	5, 70 M
TEXTURE:		
Sand	5	6
Silt	70	74
Clay	25	20
COMPOSITION:		
Diatoms	Tr	---
Foraminifers	5	Tr
Nannofossils	94	89
Radiolarians	1	---
Spicules	Tr	Tr
Volcanic ash	Tr	10



SITE 807 HOLE A CORE 72X CORED INTERVAL 678.2-687.8 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 OLIGOCENE	A/G P21b - P22	A NP24	A/P *Dorcadospyris ateuchus*	A/M *Rocella vigilans*		V-1830 ϕ=49.1 ρ=1.83	●%$CaCO_3$=73.9	CC			X	~	*
						V-2000 ϕ=49.1 ρ=1.88	●%$CaCO_3$=91.0	3				#	
						V-1795 ϕ=50.7 ρ=1.84	●%$CaCO_3$=93.5	2	1.0			≈	*
						V-1955 ϕ=49.6 ρ=1.86	●%$CaCO_3$ =90.3	1	0.5			≈	OG IW

LITHOLOGIC DESCRIPTION

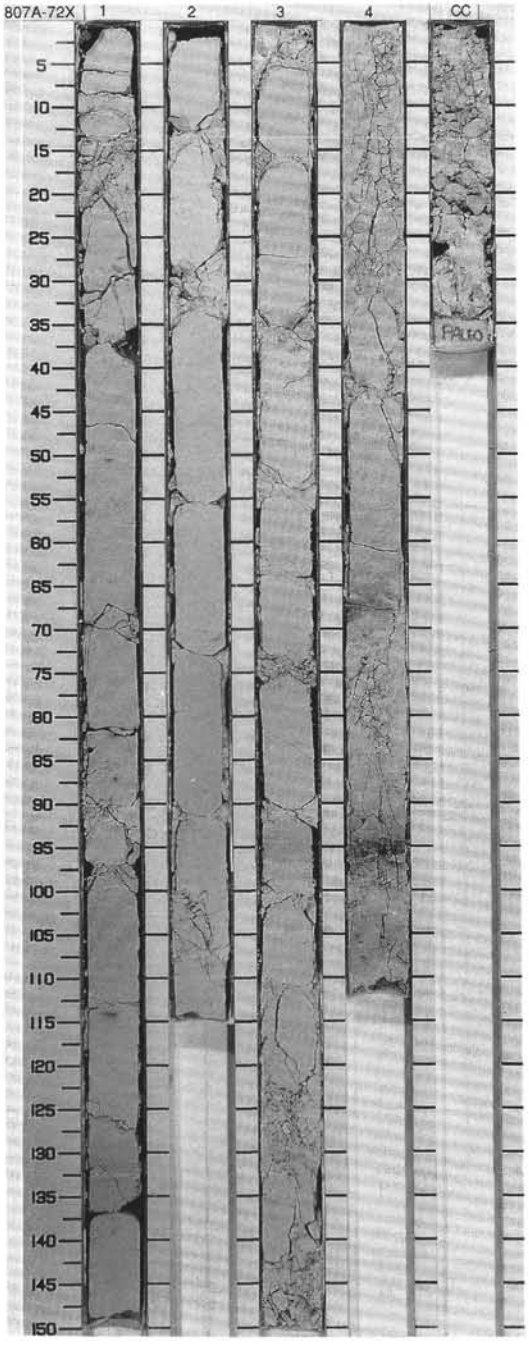
NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0), moderately to heavily bioturbated NANNOFOSSIL CHALK with FORAMINIFERS. Horizontal, mm to cm scale, white to light gray (N6) burrows are common throughout. Intervals of light gray (N6) flaser structures and wavy color bands are observed throughout. A few grayish blue (5PB 5/2), pyritized burrows were observed in Section 3.

Minor lithology: NANNOFOSSIL CHALK with ASH is found in Section 4 between 66 and 69 cm and between 94 and 98 cm. The color is gray (N6) in the upper ash layer and grades between gray (N6) and dark gray (N 3) in the lower ash zone. Both ash layers are bioturbated.

SMEAR SLIDE SUMMARY (%):

	2, 60 D	4, 96 M
TEXTURE:		
Sand	12	16
Silt	65	60
Clay	23	24
COMPOSITION:		
Diatoms	---	Tr
Foraminifers	10	5
Nannofossils	87	74
Radiolarians	2	1
Spicules	Tr	Tr
Volcanic ash	1	20



SITE 807 HOLE A CORE 73X CORED INTERVAL 687.8-697.5 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
UPPER OLIGOCENE	C/M	P21b - P22											
	A/M	NP23 - NP24											
	F-C/P			*Rocella vigilans*									

V=2074 Φ=48.4 P_1.87 ●%CaCO3=87.3
V=1978 Φ=50.2 P_1.85 ●%CaCO3=94.0
V=1778 Φ=49.7 P_1.86 ●%CaCO3=91.0
V=2074 Φ=50.6 P_1.84 ●%CaCO3=93.5
V=1842 Φ=52.9 P_1.81 ●%CaCO3=94.3

SECTION 1 2 3 4 5 6 CC

METERS 0.5 1.0

SAMPLES *

LITHOLOGIC DESCRIPTION

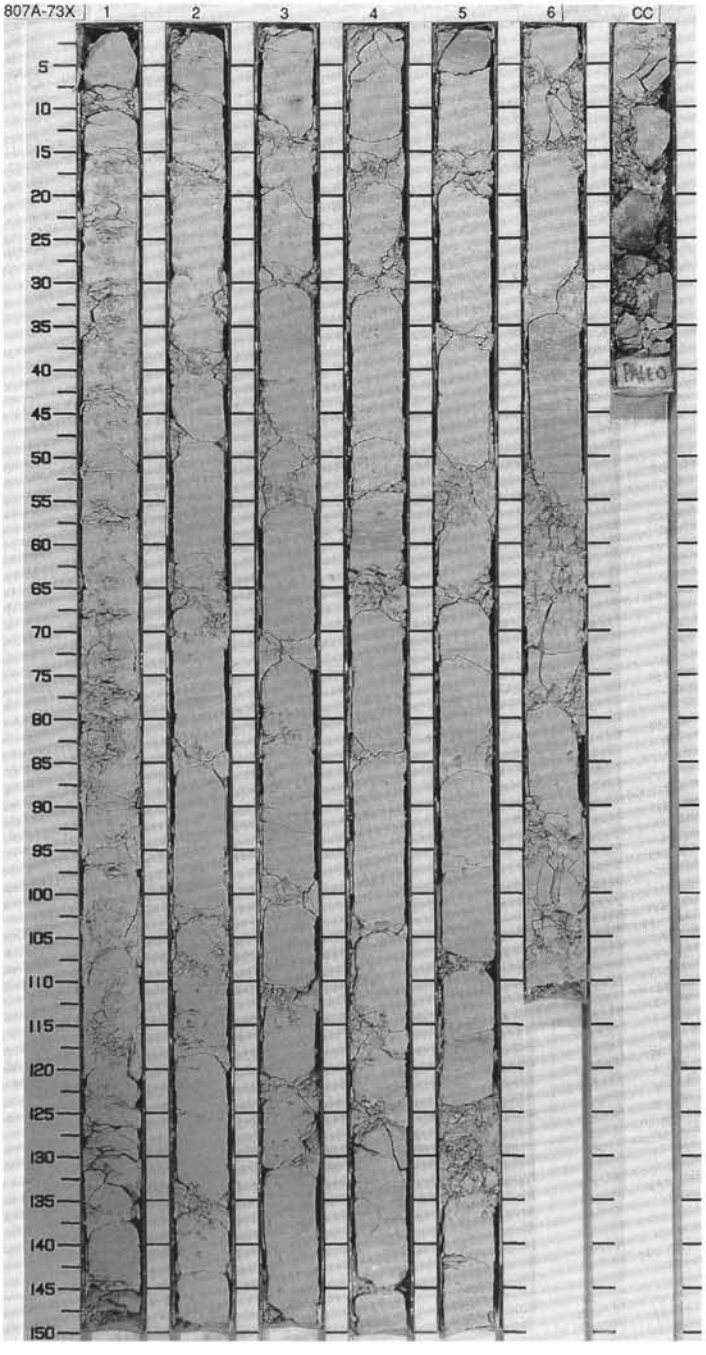
NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (10YR 8/1 and 2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK. Moderate to heavy bioturbation is indicated by white to light gray (N7/) mottling, by subhorizontal burrows, and by a single, 2 cm diameter, grayish purple (5P 4/2) "halo". Several intervals, up to 20 cm thick, contain wispy flaser structures. A single color-banded, pale blue (5PB 7/2) zone is noted in Section 5.

Minor lithology: NANNOFOSSIL CHALK with ASH is found in the Core Catcher between 27 and 34 cm. The color grades from light gray (N7/) near 27 cm to dark gray (N4/) near 34. The layer is bioturbated.

SMEAR SLIDE SUMMARY (%):

	3, 82 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	70
Radiolarians	Tr



SITE 807 HOLE A CORE 74X CORED INTERVAL 697.5-707.2 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
LOWER OLIGOCENE	P21a	NP23	*Dorcadospyris ateuchus*	?		●Φ=47.8 ρ=1.88 V=2024 ●Φ=50.6 ρ=1.85 ●%$CaCO_3$=94.0	%$CaCO_3$ ●=91.73 ●%$CaCO_3$=94.4	1 2 3 4 CC	0.5 1.0			*	

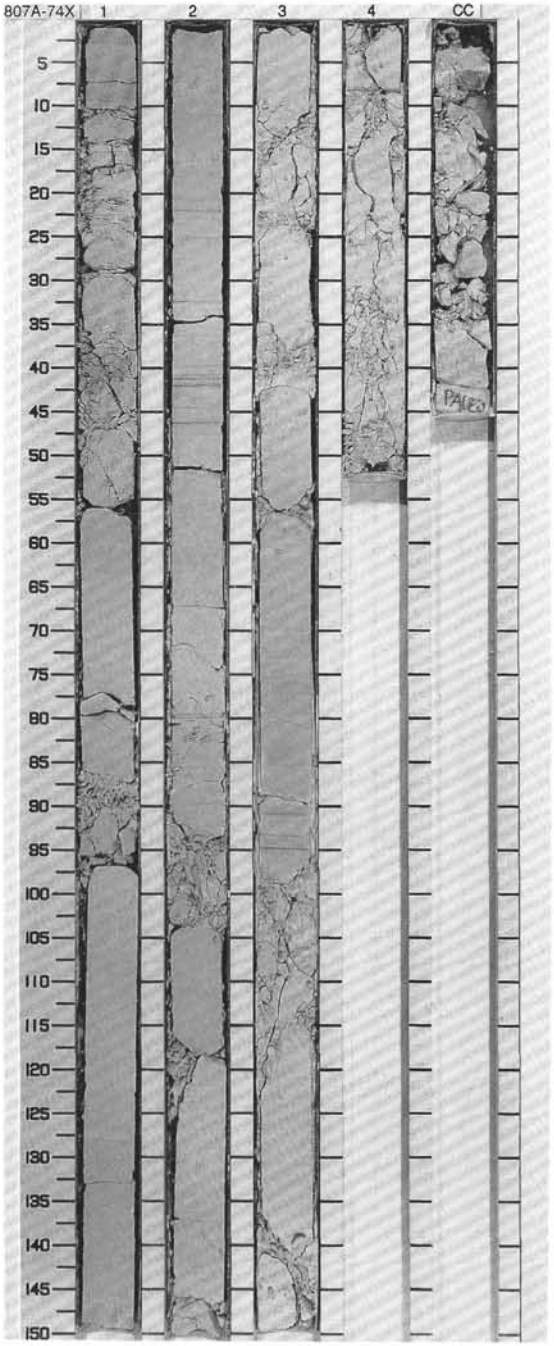
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK.

Major lithology: This core contains NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK. The sediment is white (2.5Y 8/0), with 5 to 15 cm thick intervals grading into light gray (2.5Y 7/0) in Section 2. The base of a light gray interval is often sharp. Moderate to heavy bioturbation is indicated by abundant mottling and sub-horizontal burrows. Thin (mm size), gray (N6/), wispy color bands with flaser structures are common in conjunction with microstylolites.

SMEAR SLIDE SUMMARY (%):

	2, 67
	D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	70
Quartz	Tr
Radiolarians	Tr
Silicoflagellates	Tr



SITE 807 HOLE A CORE 75X CORED INTERVAL 707.2-716.9 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
LOWER OLIGOCENE	P21a	NP23		?		V=2023 ρ=48.7 P=1.87 V=1771 ρ=48.1 P=1.89 V=2015 ρ=50.9 P=1.85 ρ=51.0 P=1.85	%CaCO3 =93.1 %CaCO3 =94.9 %CaCO3 =95.5 %CaCO3 =94.4	1 2 3 4 5 CC	0.5 1.0				OG W

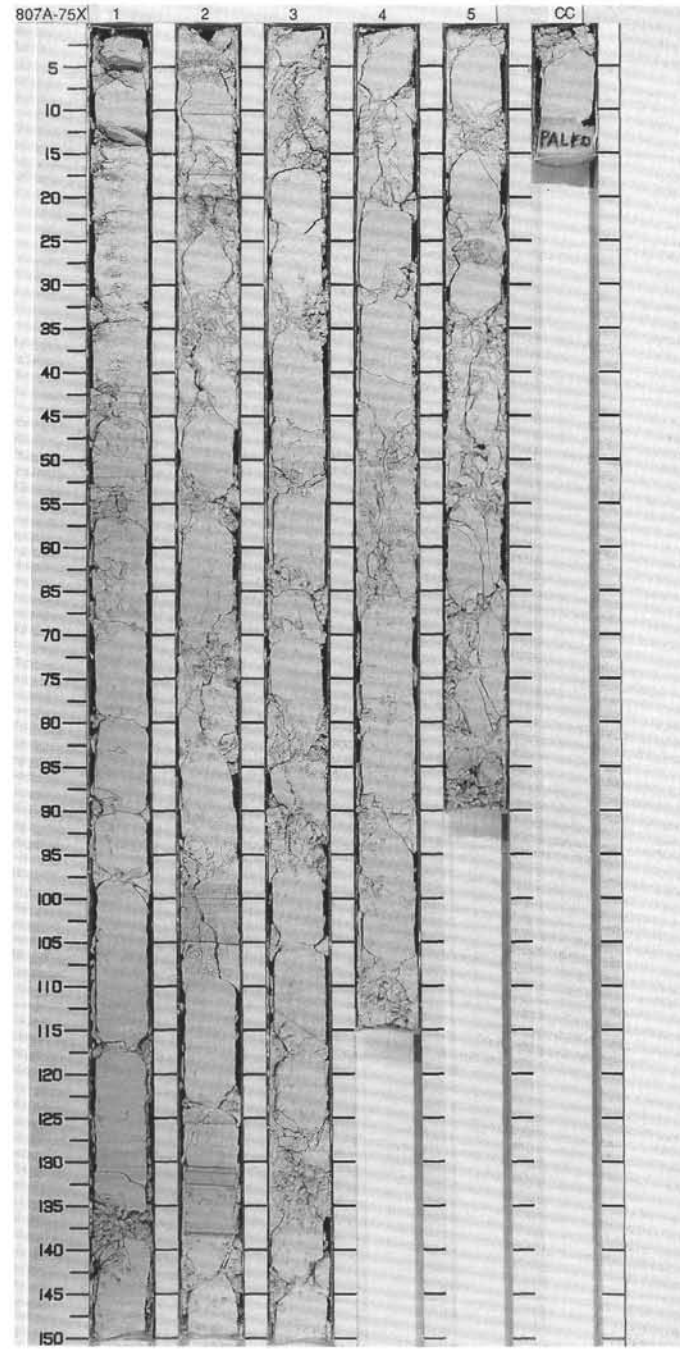
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS AND FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK, which becomes more uniform in appearance downcore. Gray (N6/) stylolites and distinct, mm thick, greenish gray (5G 6/1) color bands are common in Sections 1 and 2, whereas light gray (N7/) intervals of flaser structures with microstylolites are common in Sections 1 and 2, and present in Section 3. Sections 1 through 3 are slightly to moderately bioturbated; Sections 4 through Core Catcher are moderately to heavily bioturbated.

SMEAR SLIDE SUMMARY (%):

	2, 66 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	70
Quartz	Tr
Radiolarians	Tr
Silicoflagellates	Tr



SITE 807 HOLE A CORE 76X CORED INTERVAL 716.9-726.5 mbsf

TIME-ROCK UNIT: LOWER OLIGOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/M P21a
- NANNOFOSSILS: A/M NP23
- RADIOLARIANS: A/P *Dorcadospyris ateuchus*
- DIATOMS: C/P *Rocella vigilans*

PALEOMAGNETICS

PHYS. PROPERTIES
- ρ=49.2, P=1.87
- ρ=47.7, P=1.90
- ρ=50.0, P=1.86
- ρ=46.8, P=1.91
- ρ=49.6, P=1.86
- V=2086
- V=2086
- V=2156

CHEMISTRY
- %CaCO3=93.8
- %CaCO3=93.2
- %CaCO3=92.3
- %CaCO3=92.4
- %CaCO3=92.4

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: LND

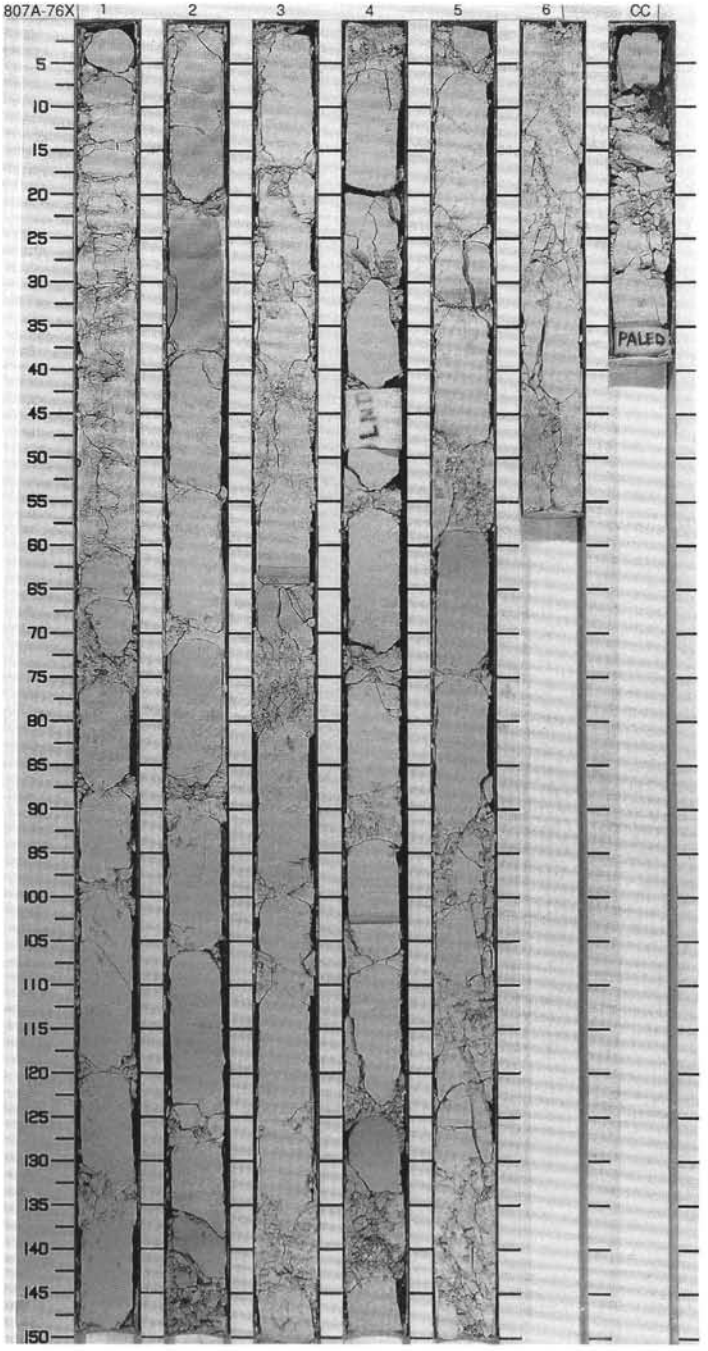
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

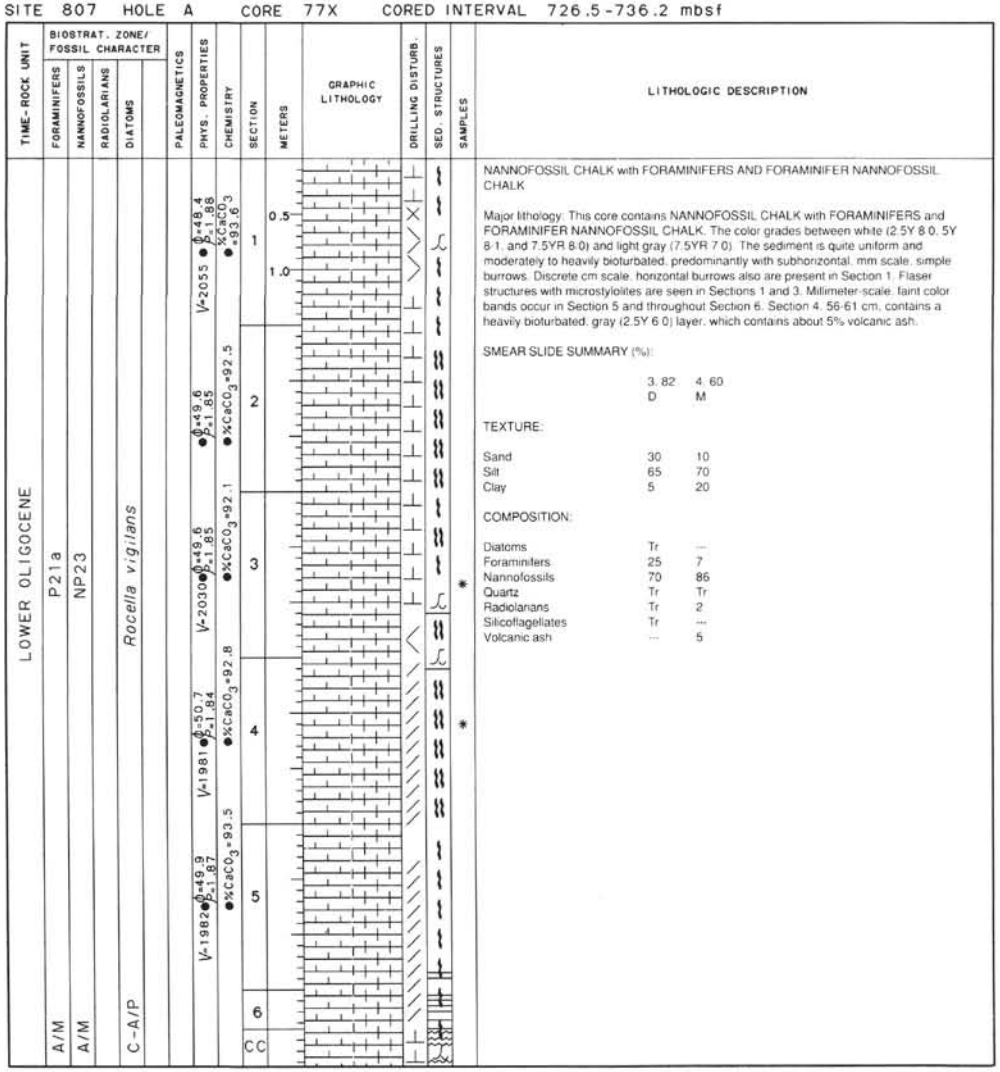
Major lithology: This core contains NANNOFOSSIL CHALK with FORAMINIFERS. The color grades between white (2.5Y 8.0 and 5Y 8.1), light greenish gray (5G 7.1), light gray (N7 and 5Y 7.1) and grayish blue (5PB 5.2), commonly with an overall wispy appearance. The sediment is slightly to heavily bioturbated throughout. Millimeter-scale, predominantly horizontal, and apparently flattened burrows predominate. Several 3 cm thick intervals of greenish gray (5G 6.1), mm scale color bands enclose zones of weakly developed flaser structures with possible microstylolites. White (2.5Y 8.0), gray (N 5), and grayish blue (5PB 5.2) color bands also are present throughout the core.

SMEAR SLIDE SUMMARY (%):

	2, 80
	D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Quartz	Tr
Radiolarians	Tr
Silicoflagellates	Tr



SITE 807 HOLE A CORE 77X CORED INTERVAL 726.5-736.2 mbsf

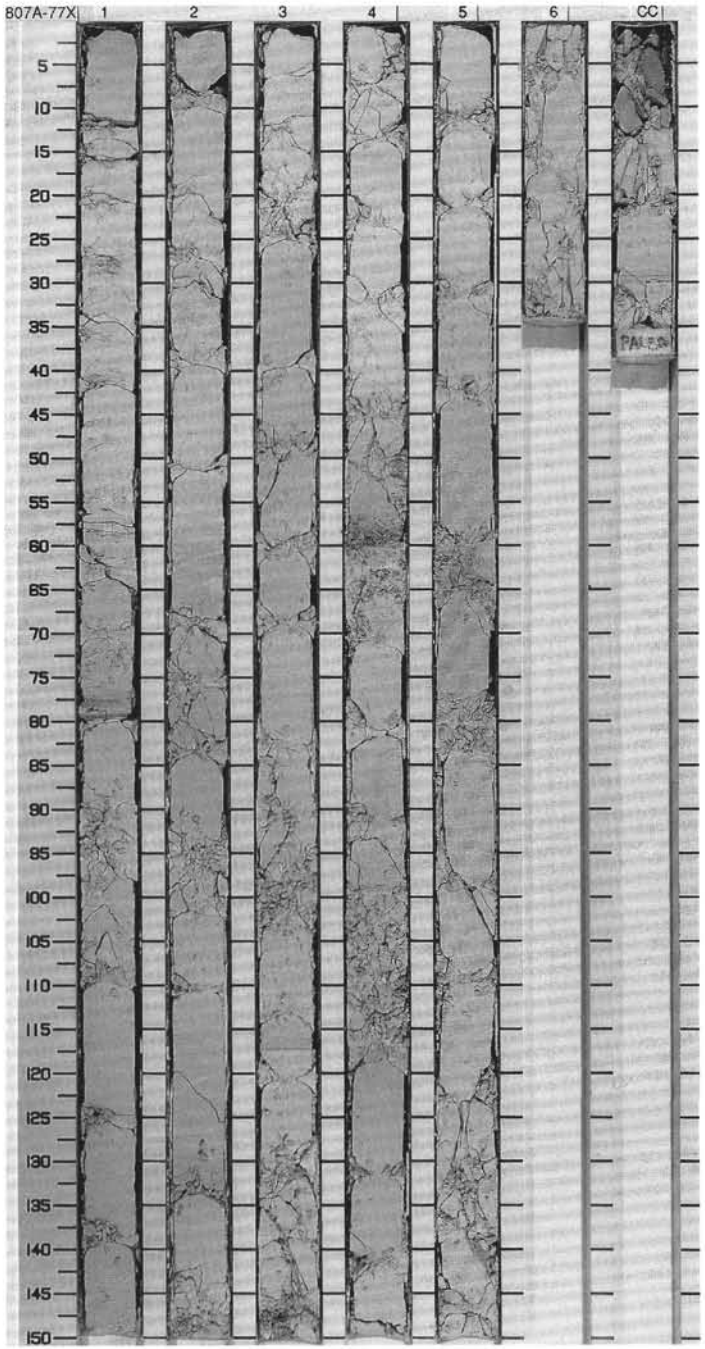


NANNOFOSSIL CHALK with FORAMINIFERS AND FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK. The color grades between white (2.5Y 8.0, 5Y 8/1, and 7.5YR 8/0) and light gray (7.5YR 7/0). The sediment is quite uniform and moderately to heavily bioturbated, predominantly with subhorizontal, mm scale, simple burrows. Discrete cm scale, horizontal burrows also are present in Section 1. Flaser structures with microstylolites are seen in Sections 1 and 3. Millimeter-scale, faint color bands occur in Section 5 and throughout Section 6. Section 4, 56-61 cm, contains a heavily bioturbated, gray (2.5Y 6/0) layer, which contains about 5% volcanic ash.

SMEAR SLIDE SUMMARY (%):

	3, 82 D	4, 60 M
TEXTURE:		
Sand	30	10
Silt	65	70
Clay	5	20
COMPOSITION:		
Diatoms	Tr	---
Foraminifers	25	7
Nannofossils	70	86
Quartz	Tr	Tr
Radiolarians	Tr	2
Silicoflagellates	Tr	---
Volcanic ash	---	5



SITE 807 HOLE A CORE 78X CORED INTERVAL 736.2-745.5 mbsf

TIME-ROCK UNIT: LOWER OLIGOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/M P21a
- NANNOFOSSILS: A/M NP23
- RADIOLARIANS: A/P *Dorcadospyris ateuchus*
- DIATOMS: A/M-G *Rocella vigilans*

PALEOMAGNETICS

PHYS. PROPERTIES: V=2003 ρ=51.7 P=1.82; V=2001 ρ=51.3 P=1.83; V=1803 ρ=51.7 P=1.82; V=1978 ρ=49.6 P=1.86; V=1976 ρ=49.9 P=1.86

CHEMISTRY: %$CaCO_3$=92.5; %$CaCO_3$=93.1; %$CaCO_3$=93.4; %$CaCO_3$=91.6; %$CaCO_3$=93.1

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW, OG

LITHOLOGIC DESCRIPTION

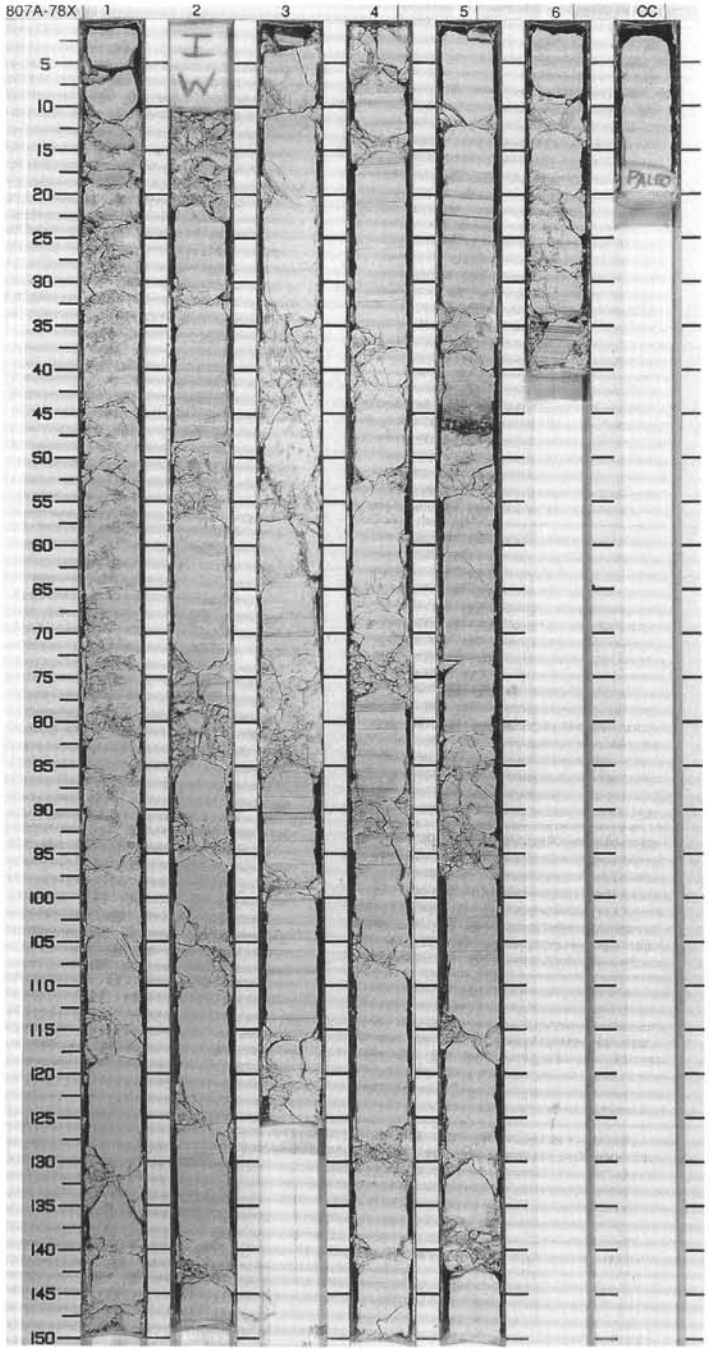
NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains bioturbated NANNOFOSSIL CHALK with FORAMINIFERS and FORAMINIFER NANNOFOSSIL CHALK in equal percentages. The chalk is predominantly white (2.5Y 8/0), with minor pale pink (5RP 8/2) intervals. The chalk has two styles of color banding: 5 to 15 cm thick, pale pink bands and 1 to 2 mm thick, dark gray (2.5Y 4/) bands that exhibit flaser structures.

Minor lithology: Section 5, 45-47 cm, contains a heavily bioturbated dark gray (2.5Y 4/0) NANNOFOSSIL CHALK with ASH.

SMEAR SLIDE SUMMARY (%):

	3, 75 D	5, 45 M
TEXTURE:		
Sand	10	10
Silt	60	60
Clay	30	30
COMPOSITION:		
Accessory minerals	---	5
Diatoms	Tr	---
Foraminifers	25	---
Nannofossils	73	60
Opaques	---	15
Radiolarians	1	8
Siliceous fragments	1	---
Siliceous sponge spicules	---	Tr
Volcanic ash	Tr	12



SITE 807 HOLE A CORE 79X CORED INTERVAL 745.5-755.2 mbsf

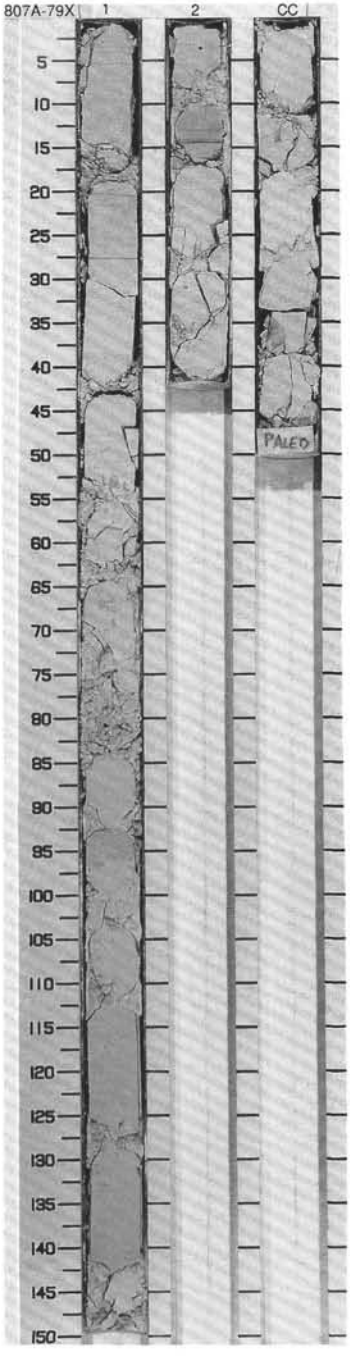
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEM. STRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER OLIGOCENE	A/M	P21a	A/M	NP23	A/M-G	*Rocella vigilans*		V=1995 ρ=1.83	%CaCO3 =94.0	1 2 CC	0.5 1.0			*	

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Several 10 cm thick, pale pink (5RP 8/2) to pale purple (5P 6/2) intervals are present and contain numerous distinct, sharp, thin (<1 mm) white color bands. Heavy bioturbation is indicated by numerous trace fossils. These structures appear to be compacted. A *Zoophycos* trace is present in Section 1, 98 cm. There are a few gray, wavy and braided color bands that may be flaser structures.

SMEAR SLIDE SUMMARY (%)

	2, 20 D
TEXTURE:	
Sand	10
Silt	75
Clay	15
COMPOSITION:	
Diatoms	Tr
Foraminifers	20
Nannofossils	79
Siliceous fragments	1



SITE 807 HOLE A CORE 80X CORED INTERVAL 755.2-764.9 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
LOWER OLIGOCENE	A/M	P20 - P21a	NP23	A	A/P	*Dorcadospyris ateuchus*	C-A/M-G	*Rocella vigilans*		V=1916 ρb=51.6 ρ=1.81 V=1917 ρb=52.0 ρ=1.82 V=1917 ρb=52.0 ρ=1.81 V=1707 ρb=52.9 ρ=1.81 %$CaCO_3$=91.0 %$CaCO_3$=91.4 %$CaCO_3$=94.0	1 2 3 CC	0.5 1.0				

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. Heavy bioturbation is evident from numerous trace fossils. A few thin (<1 mm) horizontal, wavy, braided color bands are present. Several pale pink (5RP 6/2) zones, with thin (<1 mm) white, distinct, horizontal bands are also present.

Minor lithology: Section 3, 48-50 cm contains a heavily bioturbated, dark gray (2.5Y 4/0) NANNOFOSSIL CHALK with ASH.

SMEAR SLIDE SUMMARY (%):

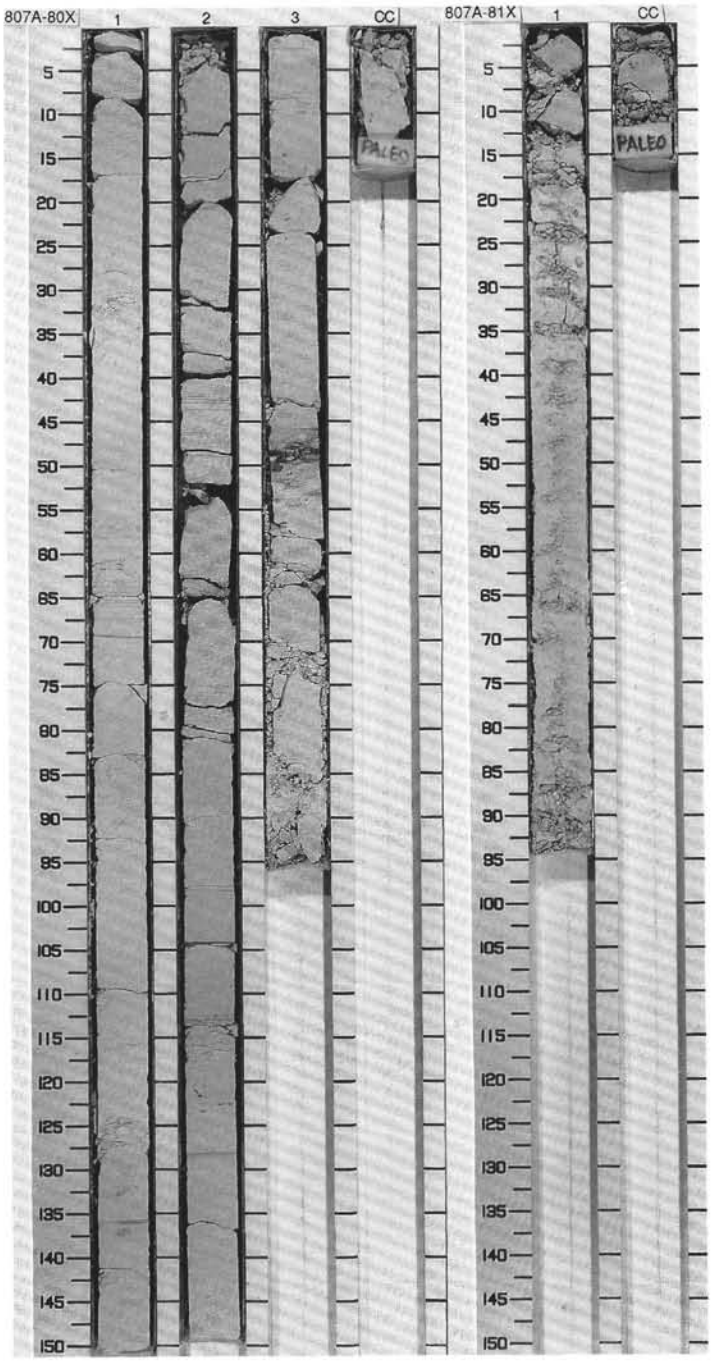
	3, 74 M
TEXTURE:	
Sand	10
Silt	55
Clay	35
COMPOSITION:	
Diatoms	Tr
Foraminifers	4
Glass	20
Nannofossils	66
Opaques	8
Siliceous fragments	2

SITE 807 HOLE A CORE 81X CORED INTERVAL 764.9-774.5 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 OLIGOCENE	A/M	P20 - P21a	NP23	A	C/M	*Rocella vigilans*					1 CC	0.5				

NANNOFOSSIL CHALK

Major lithology: This core contains white NANNOFOSSIL CHALK. Heavy bioturbation is indicated by numerous mottles and trace fossils. The core is highly fractured by drilling and contains a large amount of drilling breccia.



SITE 807 HOLE A CORE 82X CORED INTERVAL 774.5-784.2 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
LOWER OLIGOCENE	A/M	A/M	A/M	C-A/M	V-1728	●0-54.7 P-1.79	●%$CaCO_3$=94.5	4					
	P20	NP23	*Dorcadospyris ateuchus*	?		●0-54.5 P-1.78	●%$CaCO_3$=95.0	3					OC W
						V-2006 ●0-50.6 P-1.85	●%$CaCO_3$=95.0	2					
								1	0.5 1.0				
								CC					

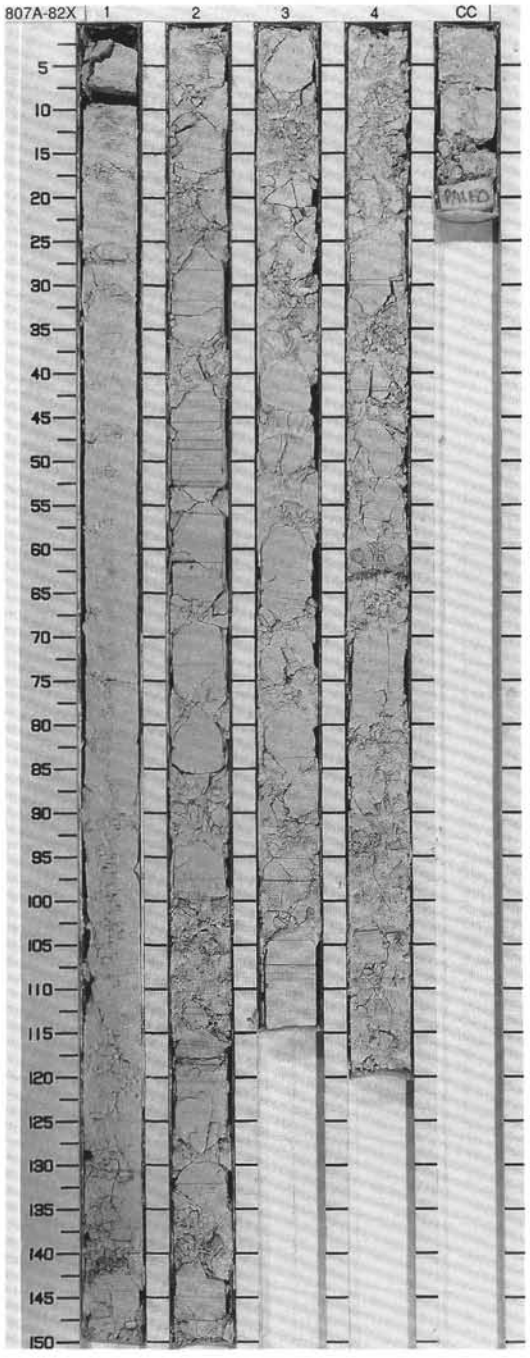
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL CHALK with FORAMINIFERS. The sediment is white (2.5Y 8/0) with some pale pink (5RP 6/2) zones. Heavy bioturbation is evident from numerous trace fosils. Numerous very thin (<<1mm), dark gray (2.5Y 4/0), horizontal, wavy, and braided bands are evident throughout the core. Fracturing occurs readily along these surfaces, possibly indicative of micro-stylolitization.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	55
Clay	35
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Siliceous fragments	3



SITE 807 HOLE A CORE 83X CORED INTERVAL 784.2-793.9 mbsf

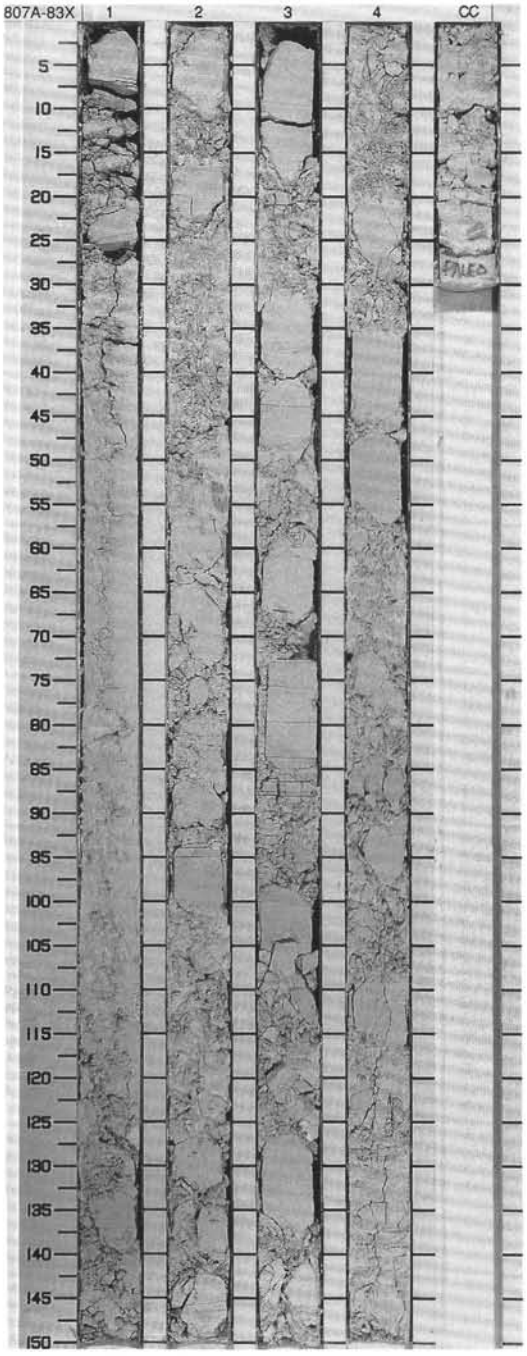
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER OLIGOCENE	A/M	A/P		C-A/P-M		V-1836 ρ-52.6 ρ-1.81	%$CaCO_3$-93.8	4						
	P19 - P20	NP23		?		V-1869 ρ-50.3 ρ-1.85	%$CaCO_3$-94.8	3						
						V-1855 ρ-52.0 ρ-1.82	%$CaCO_3$-93.4	2						
								1	0.5					
									1.0					
								CC						

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) to pale pink (5RP 8/2) NANNOFOSSIL CHALK with FORAMINIFERS. Abundant bioturbation can be observed as trace fossils. Ultra-thin dark gray (2.5Y 4/0) bands are evident throughout the core and fracturing occurs readily along them (possible microstylolites).

SMEAR SLIDE SUMMARY (%)

	3, 74
	D
TEXTURE:	
Sand	11
Silt	49
Clay	40
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Siliceous fragments	3



SITE 807 HOLE A CORE 84X CORED INTERVAL 793.9-803.6 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER OLIGOCENE	P19	NP23	*Dorcadospyris ateuchus* / *Theocyrtis tuberosa*	?			%CaCO3 =94.2 ●	1	0.5		X		
	A/G	A/M	C/P	C/P					1.0		X		
											X		
											X		
								2			X		
											X		
											X		
								3			X		*
											X		
											X		
											X		
								4			X		
											X		
											X		
											X		
								5			X		
											X		
											X		
											X		
								6			X		
											X		
											X		
											X		
								7			X		
								CC					

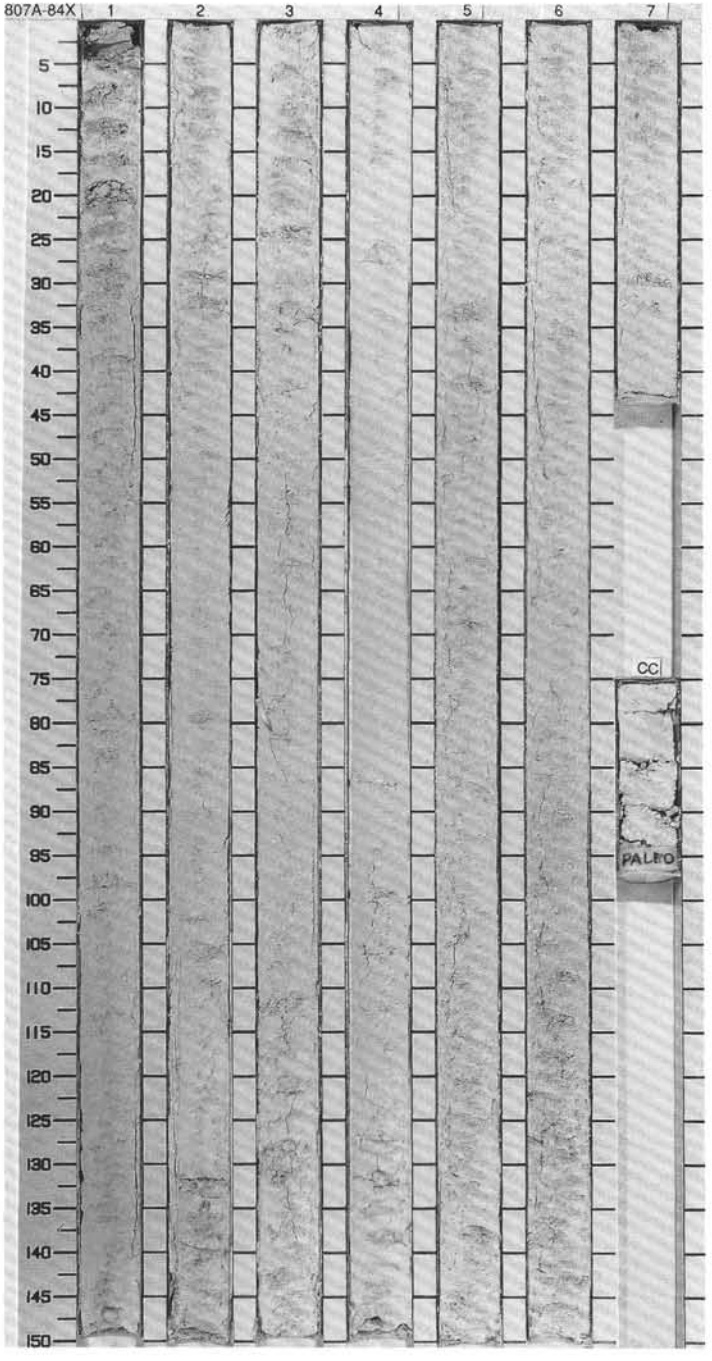
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK/OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK/OOZE with FORAMINIFERS. The core consists of highly fractured drilling biscuits and breccia in an ooze matrix. As a result, the *in-situ* state of lithification is not known. Structures are impossible to see as a result of this disturbance, though evidence for some of the ultra-thin gray bands (microstylolites?) can be seen.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	12
Silt	55
Clay	33
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	15
Nannofossils	80
Siliceous fragments	3



SITE 807 HOLE A CORE 85X CORED INTERVAL 803.6-813.2 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
LOWER OLIGOCENE	A/G	P19	A/M	NP23	A/P	*Theocyrtis tuberosa*	A/P-M	?						1, 2, 3, CC	0.5, 1.0				*

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK/OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK/OOZE. The entire core consists of highly fragmented drilling biscuits and breccia in an ooze matrix. A few signs of bioturbation are visible, such as *Zoophycos* trace fossils (Section 1), and faint mottles and pyritic specks. Fine-scale, dark gray (2.5Y 4/0), straight and braided bands are observed in Section 2. Both Sections 1 and 2 contain several mm thick layers of pyrite.

SMEAR SLIDE SUMMARY (%):

	2, 70 D
TEXTURE:	
Sand	5
Silt	60
Clay	3
COMPOSITION:	
Foraminifers	8
Nannofossils	92

SITE 807 HOLE A CORE 86X CORED INTERVAL 813.2-822.9 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
LOWER OLIGOCENE	A/M	P19	A/M	NP23	A/P	*Theocyrtis tuberosa*	C-A/M	*Coscinodiscus excavatus*						1, 2, CC	0.5, 1.0				LND, *

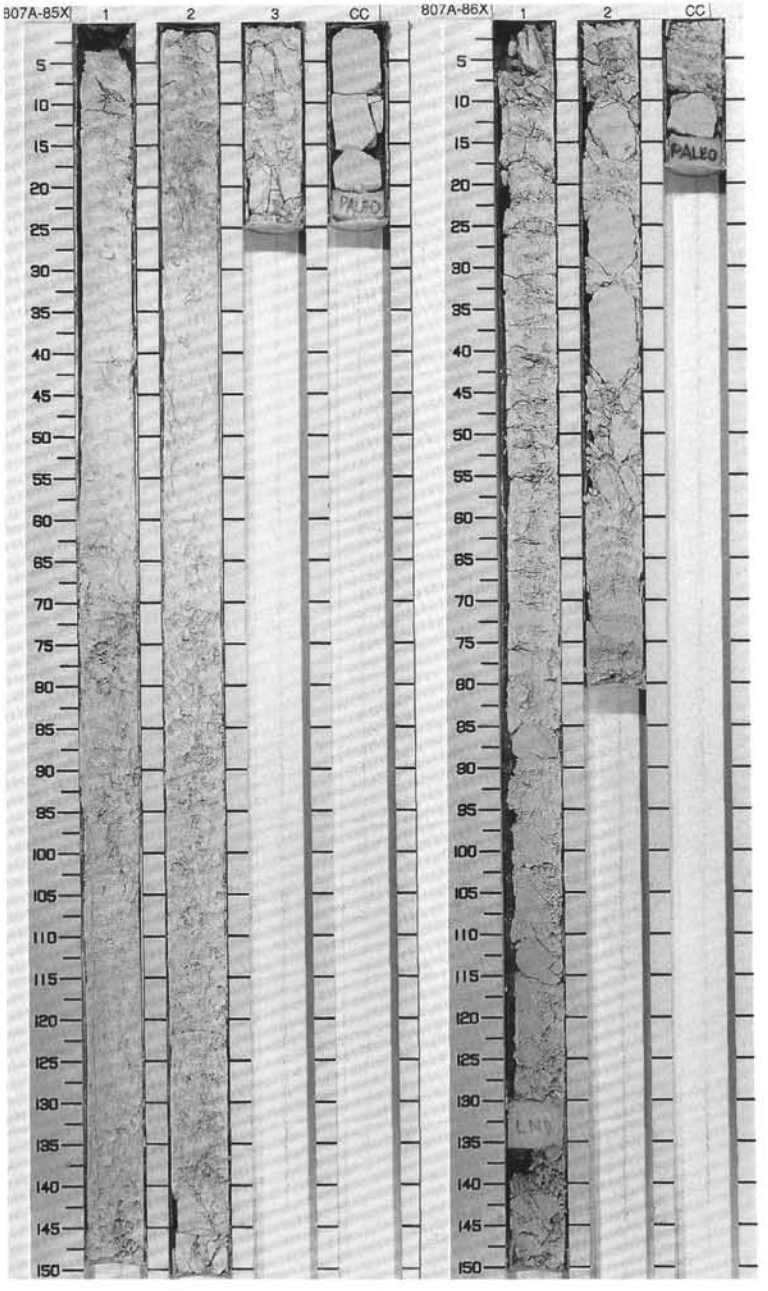
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Sections 2 and 3 grade to pale blue (5B 8/2) at their bottoms. Traces of heavy bioturbation, such as faint mottles are seen in intact biscuits. Drilling disturbance has produced highly fragmented biscuits in an ooze matrix.

SMEAR SLIDE SUMMARY (%):

	2, 13 D
TEXTURE:	
Sand	11
Silt	55
Clay	34
COMPOSITION:	
Accessory minerals	2
Foraminifers	15
Nannofossils	80
Radiolarians	1
Siliceous fragments	2



SITE 807 HOLE B CORE 1H CORED INTERVAL 0.0-3.1 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	A/G	A/G	A/G	C/M	N (Brunnes)(inferred, not oriented)	V=1598 ρ=70.3 ρ=1.51 ϕ=69.5 ρ=1.52		1, 2, CC	0.5, 1.0		○		*

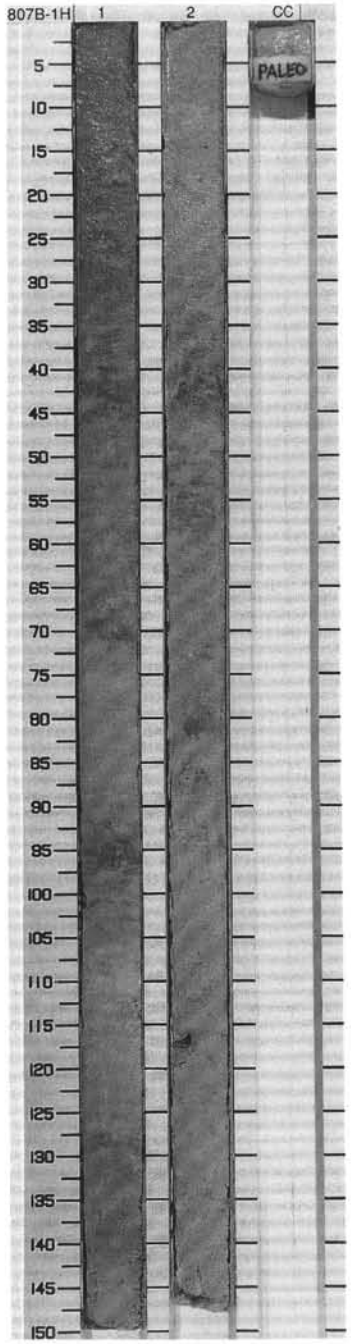
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. In the interval from the top of Section 1 through the base of Section 2, the color of the sediment grades from pale brown (10YR 6/3) to very pale brown (10YR 7/3) and into white (10YR 8/2); the remainder of the core is white (10YR 8/2). The core is slightly to heavily bioturbated, with light brownish gray (10YR 6/2 and 5Y 6/2) burrow mottling.

SMEAR SLIDE SUMMARY (%):

	2, 73 D
TEXTURE:	
Sand	45
Silt	50
Clay	5
COMPOSITION:	
Foraminifers	45
Nannofossils	53
Radiolarians	1
Silicoflagellates	Tr



SITE 807 HOLE B CORE 2H CORED INTERVAL 3.1-12.6 mbsf

PLEISTOCENE	TIME-ROCK UNIT
A/G: N22	FORAMINIFERS (BIOSTRAT. ZONE/FOSSIL CHARACTER)
A/G: NN19	NANNOFOSSILS
A/P: *Anthocyrotidium angulare - Buccinosphaera invaginata*	RADIOLARIANS
R-F/M: ?	DIATOMS
R: N (Bruhnes)(inferred,not oriented) NORMAL	PALEOMAGNETICS
V-1586 Φ=69.6 ρ=1.53; V-1579 Φ=68.8 ρ=1.54; V-1590 Φ=67.6 ρ=1.57; V-1598 Φ=70.0 ρ=1.54; V-1575 Φ=74.0 ρ=1.45; V-1579 Φ=70.2 ρ=1.52	PHYS. PROPERTIES
	CHEMISTRY
CC, 7, 6, 5, 4, 3, 2, 1	SECTION
1.0, 0.5	METERS
	GRAPHIC LITHOLOGY
	DRILLING DISTURB.
	SED. STRUCTURES
*	SAMPLES

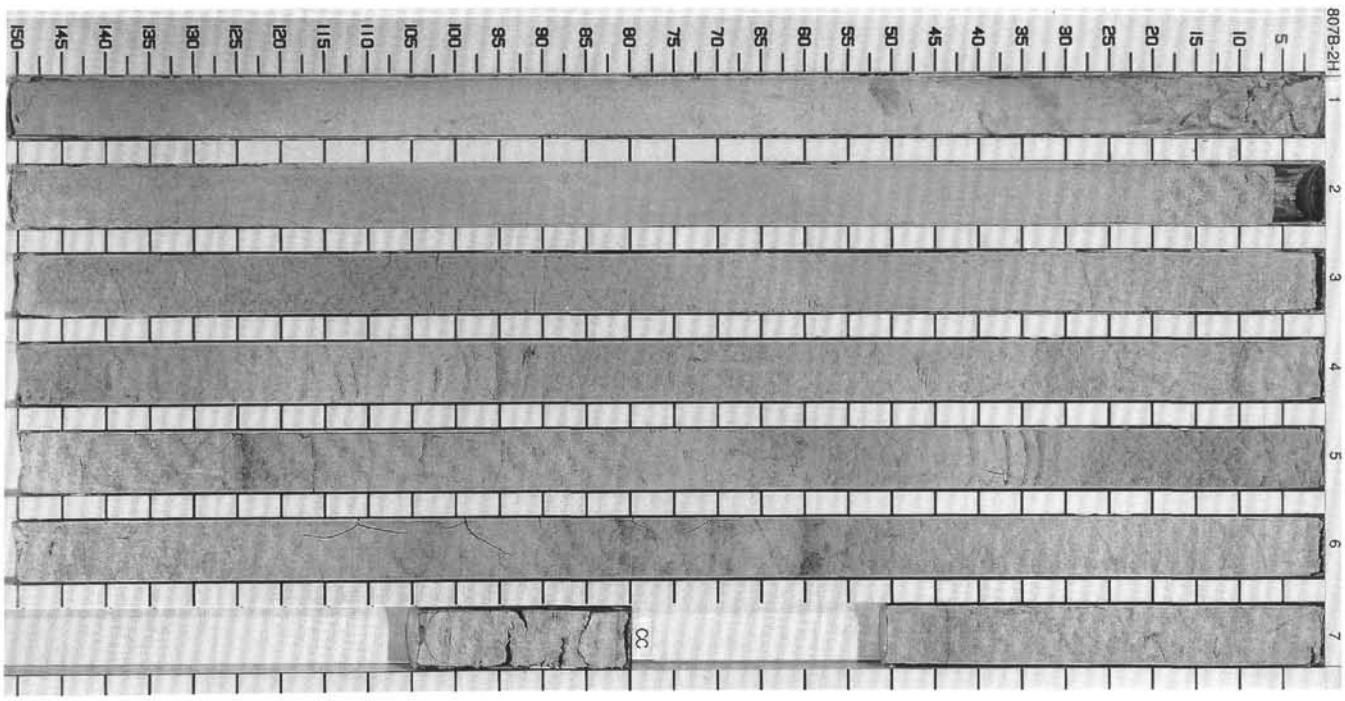
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The color from the top of Section 1 to Section 2, 120 cm, is white (10YR 8/2); the rest of the core alternates between white (2.5Y 8/0 and 7.5YR 8/0) and light gray (2.5Y 7/0). Below Section 4, light gray (5Y 7/1), cm scale mottles were observed. Light greenish gray (5G 7/1) color bands and rare grayish blue (5PB 5/2) color bands are present in Sections 4 through 7.

SMEAR SLIDE SUMMARY (%):

	4, 72
	D
TEXTURE:	
Sand	40
Silt	55
Clay	5
COMPOSITION:	
Foraminifers	30
Nannofossils	65
Radiolarians	3
Silicoflagellates	Tr



SITE 807 HOLE B CORE 3H CORED INTERVAL 12.6-22.1 mbsf

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS.

Major lithology: This core contains interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The color grades from light gray (N7) to white (2.5Y 8 0). Diffuse intervals of gray (N6) with a slight purplish tint are observed. Slight bioturbation is documented by grayish blue (5PB 5 2), pyrite-filled burrows and minor light gray (2.5Y 7 1) and gray (N6) mottling. Diffuse light greenish gray (5G 7 10) color bands are evident in Sections 1, 2 and 6.

SMEAR SLIDE SUMMARY (%)

	2, 75 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	25
Nannofossils	70
Quartz	Tr
Radiolarians	2
Silicoflagellates	Tr

SITE 807 HOLE B CORE 4H CORED INTERVAL 22.1-31.6 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
UPPER PLIOCENE	A/G basal N22	A/M NN18			R (Matuyama) N (Olduvai) R (Matuyama)			1 2 3 4 5 6 7 CC	0.5 1.0		O O		* *

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS.

Major lithology: This core contains interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The color of the sediment is gradational between light gray (N7/) and white (2.5Y 8/0). The sediment is slightly to moderately bioturbated with light gray (N7/) mottling. Faint light greenish gray (5G 7/1) color bands are observed in Sections 4 through 6.

SMEAR SLIDE SUMMARY (%):

	2, 70 D	3, 74 D
TEXTURE:		
Sand	48	15
Silt	50	60
Clay	2	25
COMPOSITION:		
Accessory minerals	—	2
Diatoms	—	Tr
Foraminifers	40	28
Nannofossils	55	67
Quartz	Tr	—
Radiolarians	2	—
Siliceous fragments	—	3
Silicoflagellates	Tr	—

SITE 807 HOLE B CORE 5H CORED INTERVAL 31.6-41.1 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	A/G N21	A/M NN18				V=1572 ρ=67.1 ρs=1.57 V=1537 ρ=67.1 ρs=1.58 ρ=67.9 ρs=1.56 V=1565 ρ=66.9 ρs=1.57 V=1579 ρ=66.5 ρs=1.58 V=1579 ρ=67.3 ρs=1.56		1 2 3 4 5 6 7 CC	0.5 1.0				*

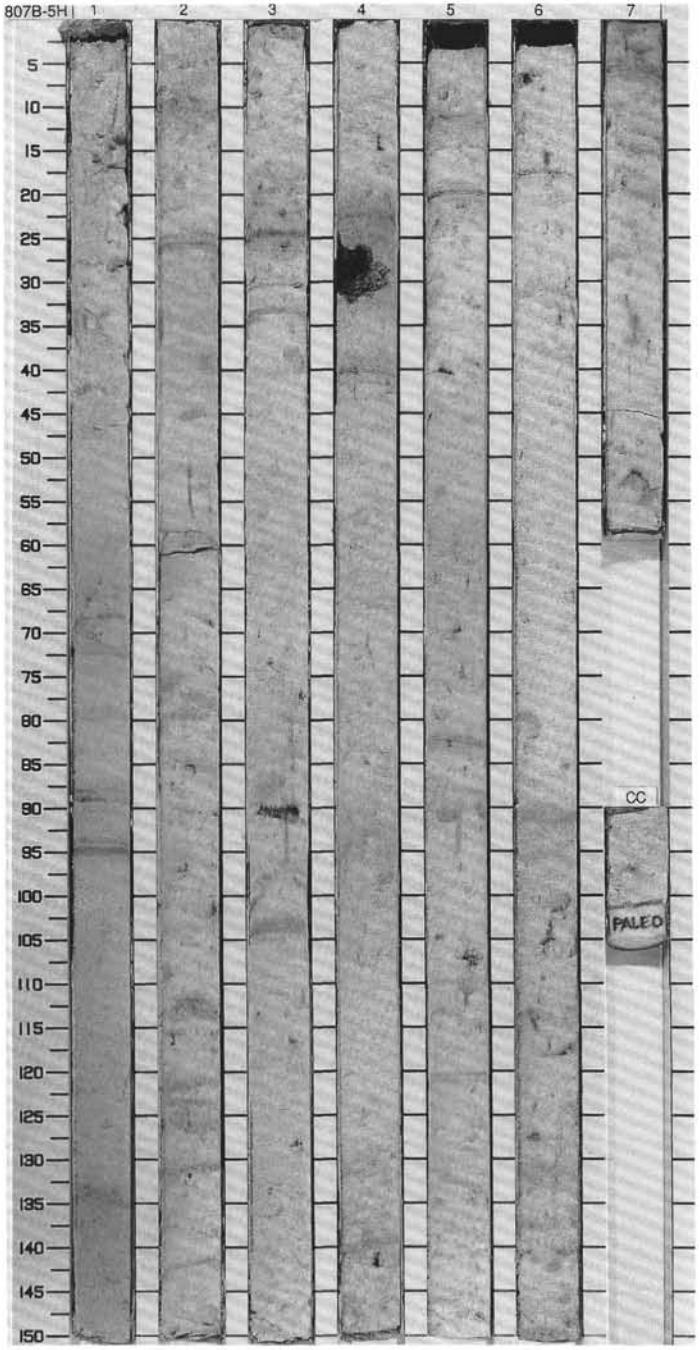
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8.0) interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation is slight to moderate in Sections 1 through 5, and moderate to heavy in Sections 6 through Core Catcher. Bioturbation is expressed as both cm scale light gray (2.5Y 7.2) mottling and cm scale dark gray (N5.1) pyrite-filled burrows. Light greenish gray (5G 7.1), light gray (N7.1), pale purple(5P 6.2), and grayish blue (5PB 5.2) color banding is present to abundant core.

SMEAR SLIDE SUMMARY (%):

	2, 92 D
TEXTURE:	
Sand	45
Silt	50
Clay	5
COMPOSITION:	
Foraminifers	38
Nannofossils	57
Quartz	Tr
Radiolarians	2
Silicoflagellates	Tr



SITE 807 HOLE B CORE 6H CORED INTERVAL 41.1-50.6 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
UPPER PLIOCENE	A/P N21	A/M NN16			V-1565 ● D=66.8 P=1.57; V-1583 ● D=68.2 P=1.55; V-1579 ● D=67.2 P=1.56; V-1550 ● D=65.9 P=1.60; V-1590 ● D=69.9 P=1.51; ● D=68.1 P=1.55			1 2 3 4 5 6 7 CC	0.5 1.0	V0:0			

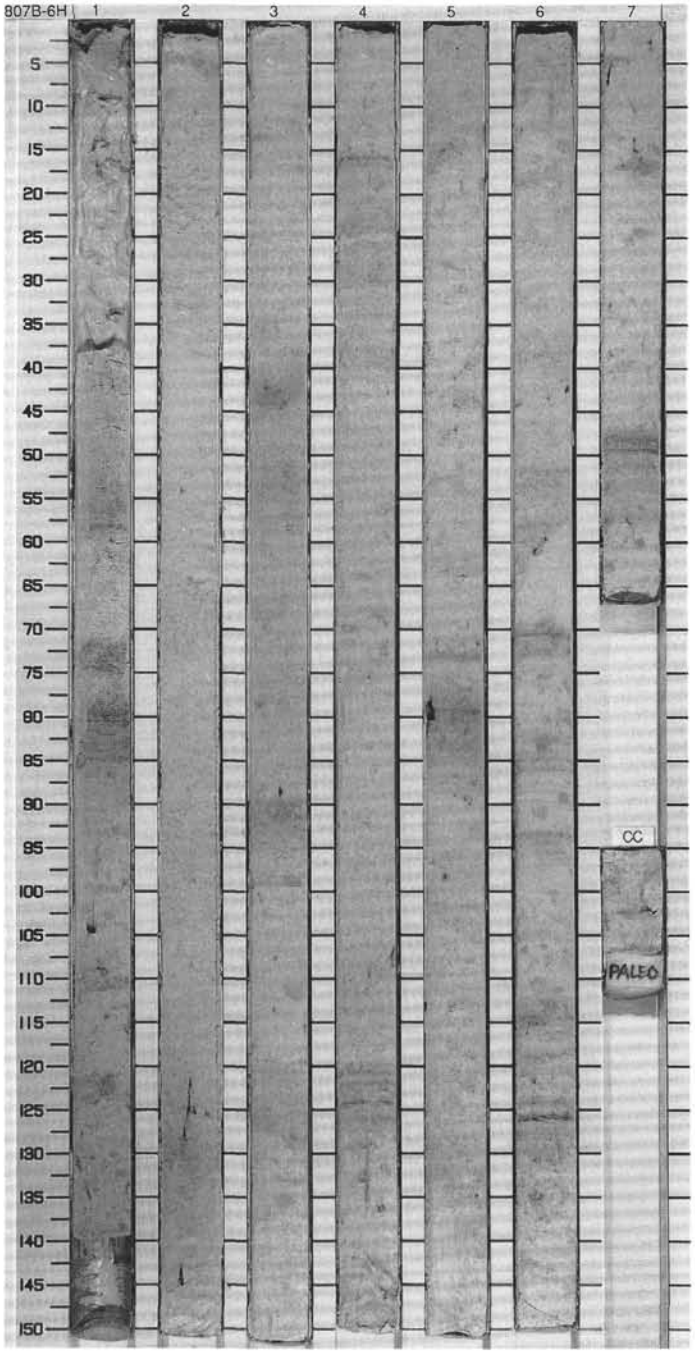
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0 to 10YR 8/1) and pale pink (5RP 8/2) interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Core is slightly to heavily bioturbated, with cm scale light gray (5Y 7/2) mottles and grayish blue (5PB 5/2), pyrite-filled burrows. Grayish blue (5PB 5/2), light greenish gray (5G 7/1), and pale purple (5P 6/2) to light gray (N7/) color bands are present to abundant. A microfault at Section 6, 60 cm, offsets color bands.

SMEAR SLIDE SUMMARY (%):

	5, 5 D
TEXTURE:	
Sand	15
Silt	80
Clay	5
COMPOSITION:	
Foraminifers	10
Nannofossils	85
Quartz	Tr
Radiolarians	2
Silicoflagellates	Tr



SITE 807 HOLE B CORE 7H CORED INTERVAL 50.6-60.1 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	A/P N21	A/M NN16				V-1583 @ 0=67.7 ρ=1.56 V-1566 @ 0=67.6 ρ=1.56 V-1579 @ 0=68.9 ρ=1.54 V-1583 @ 0=68.7 ρ=1.54 V-1568 @ 0=67.5 ρ=1.56 V-1590 @ 0=68.0 ρ=1.55		1 2 3 4 5 6 7 CC	0.5 1.0				

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The sediment is moderately to heavily bioturbated, with cm scale, light gray (5Y 7/2), vertical and horizontal burrows. The burrow fills are often sandier than the surrounding sediment. Grayish blue (5PB 5/2), commonly vertical, mm size, pyrite burrows are less common. Light greenish gray (5G 7/1), and pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are present to abundant.

SMEAR SLIDE SUMMARY (%):

	4, 79 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	35
Nannofossils	60
Quartz	Tr
Radiolarians	2
Silicoflagellates	Tr

SITE 807 HOLE B CORE 8H CORED INTERVAL 60.1-69.6 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/P; N19 - N20
- NANNOFOSSILS: A/G; NN16
- RADIOLARIANS
- DIATOMS

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

V-1583 ϕ=66.5 P=1.58
V-1554 ϕ=67.3 P=1.56
V-1550 ϕ=67.0 P=1.58
V-1572 ϕ=68.7 P=1.54
V-1550 ϕ=67.4 P=1.57
V-1554 ϕ=67.5 P=1.57

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

0.5
1.0

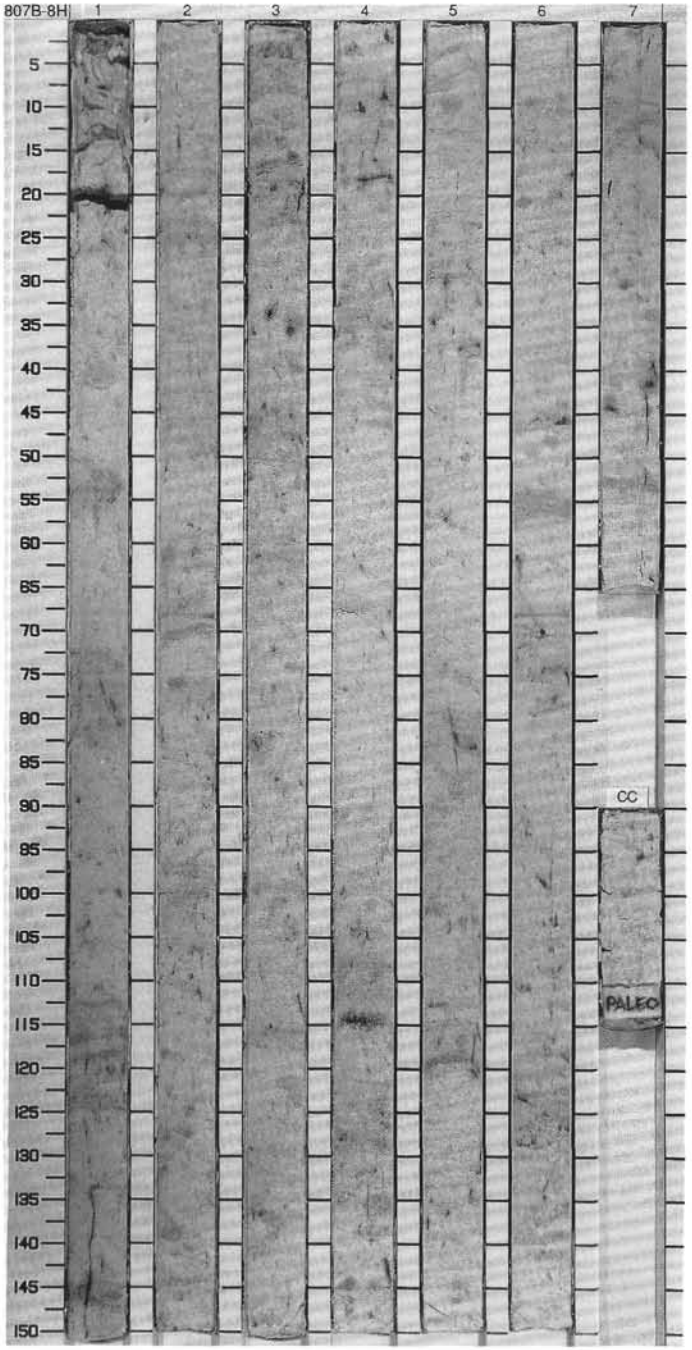
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE and NANNOFOSSIL OOZE with FORAMINIFERS. Slight to heavy bioturbation is indicated by cm scale, light gray (2.5Y 7/2) and grayish blue (5PB 5/2) pyritized burrows. Light greenish gray (5G 7/1) color bands are present to abundant throughout this core. Pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are less common and are present in Sections 1 through 5.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	35
Silt	60
Clay	5
COMPOSITION:	
Foraminifers	35
Nannofossils	60
Quartz	Tr
Radiolarians	2
Silicoflagellates	Tr



SITE 807 HOLE B CORE 9H CORED INTERVAL 69.6-79.1 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
LOWER PLIOCENE	A/P	A/G				V-1550 @65.4 ρ-1.58 V-1594 @67.7 ρ-1.56 V-1558 @66.0 ρ-1.63 V-1596 @64.0 ρ-1.63 V-1628 @65.5 ρ-1.59 V-1568 @67.6 ρ-1.55		1 2 3 4 5 6 7 CC	0.5 1.0				

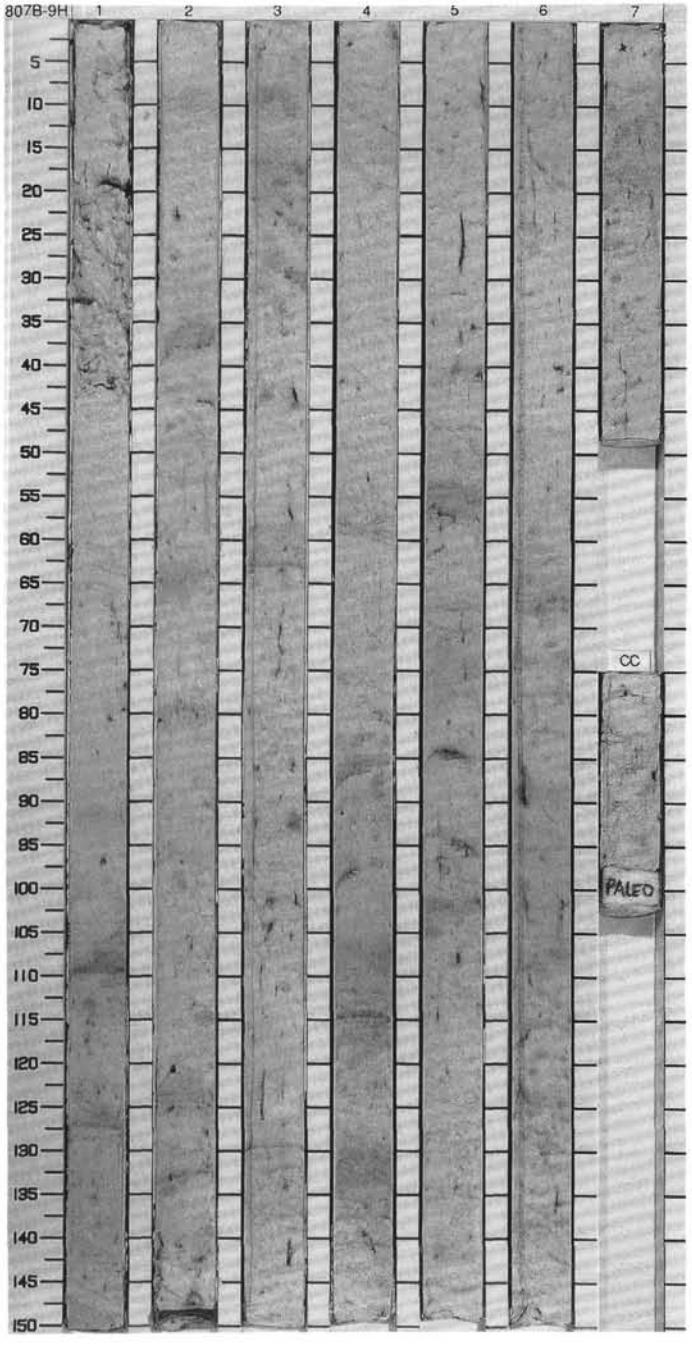
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Slight to heavy bioturbation is indicated by cm scale, light gray (2.5Y 7/2 and 5Y7/1) mottling and grayish blue (5PB 5/2) pyritized burrows. Light greenish gray (5G 7/1) color bands are present to abundant throughout the core, while pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are less common. A color band at 52-55 cm in Section 5 is microfaulted. Pyrite nodules are present in Sections 3 and 6.

SMEAR SLIDE SUMMARY (%):

	3, 79 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	30
Nannofossils	69
Siliceous fragments	1



SITE 807 HOLE B CORE 10H CORED INTERVAL 79.1-88.6 mbsf

TIME-ROCK UNIT: LOWER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/P; N18 - N19
- NANNOFOSSILS: A/M; NN13 - NN15
- RADIOLARIANS
- DIATOMS

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

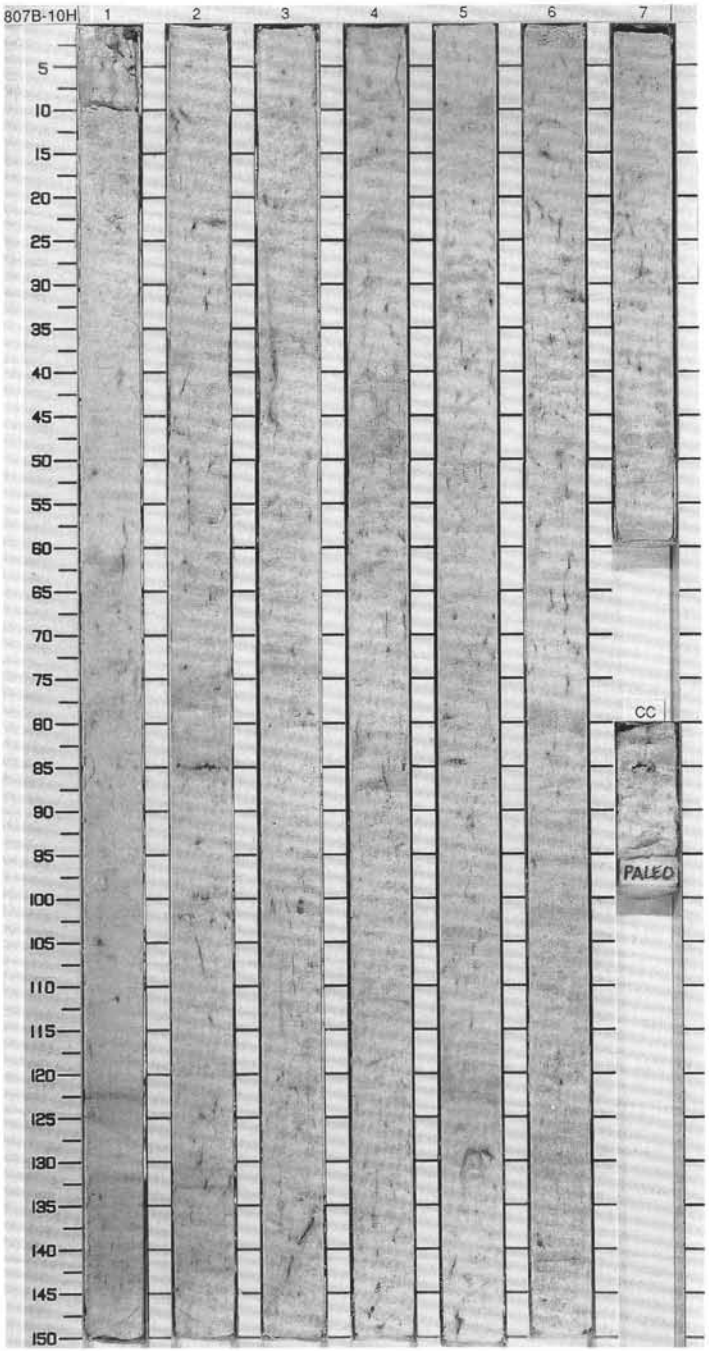
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE and NANNOFOSSIL OOZE with FORAMINIFERS. Slight to heavy bioturbation is indicated by cm scale, light gray (2.5Y 7/2) mottling, by individual, vertical and horizontal burrows, and by grayish blue (5PB 5/2), pyritized, commonly vertical, burrows. Light greenish gray (5G 7/1) color bands are common to abundant throughout this core, while pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are present but less common.

SMEAR SLIDE SUMMARY (%):

	3, 88 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foramnifers	28
Nannofossils	67
Radiolarians	2
Siliceous fragments	Tr
Silicoflagellates	Tr



SITE 807 HOLE B CORE 11H CORED INTERVAL 88.6-98.1 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
LOWER PLIOCENE	A/M N18 - N19	A/M NN13 - NN15				V-1586 ρ=63.8 ρs=1.63 V-1590 ρ=64.7 ρs=1.60 ρ=65.4 ρs=1.59 V-1590 ρ=68.2 ρs=1.56 V-1601 ρ=65.8 ρs=1.59 V-1572 ρ=65.4 ρs=1.59		1 2 3 4 5 6 7 CC	0.5 1.0		COO		*

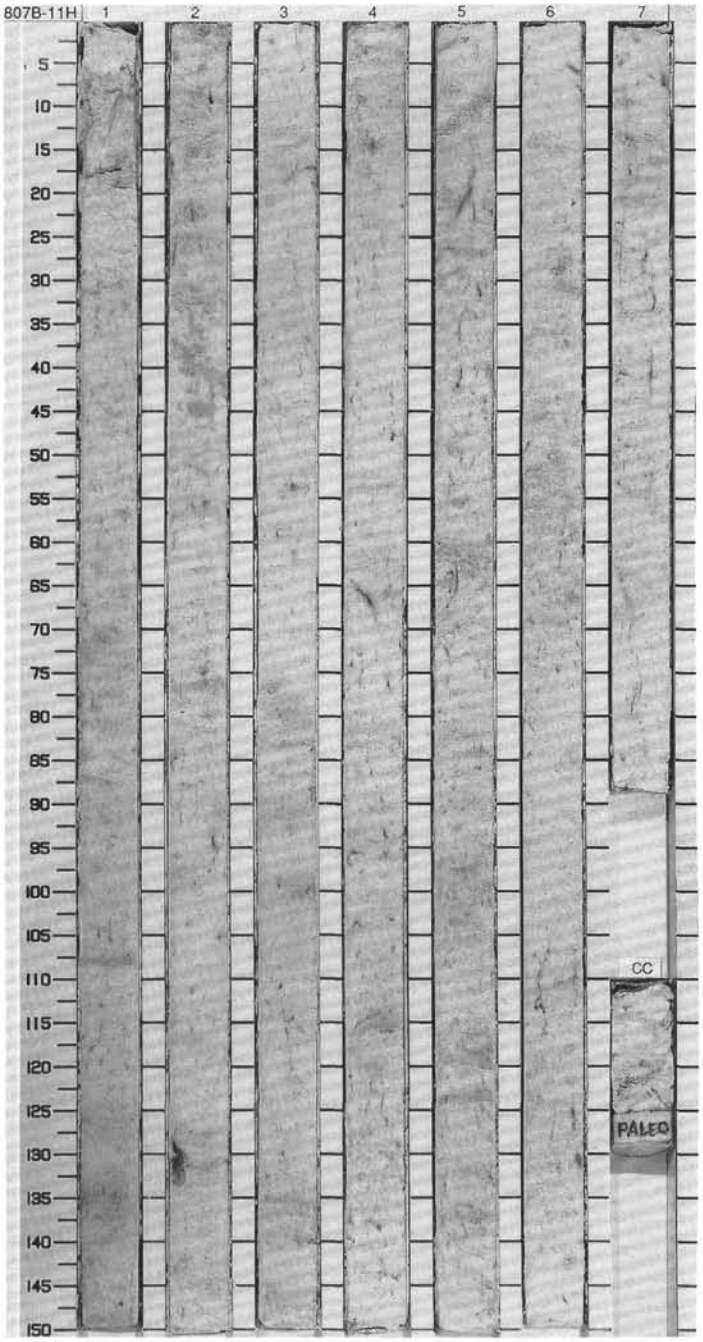
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE and NANNOFOSSIL OOZE with FORAMINIFERS. Slight to heavy bioturbation is indicated by cm scale, light gray (2.5Y 7/2) mottling, by individual, vertical and horizontal burrows, and by grayish blue (5PB 5/2), pyritized, commonly vertical, burrows. Light greenish gray (5G 7/1) color bands are common to abundant throughout this core, while pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are present but less common.

SMEAR SLIDE SUMMARY (%):

	2, 79 D
TEXTURE:	
Sand	30
Silt	65
Clay	5
COMPOSITION:	
Foraminifers	35
Nannofossils	60
Radiolarians	2
Siliceous fragments	Tr
Silicoflagellates	Tr



SITE 807 HOLE B CORE 12H CORED INTERVAL 98.1-107.6 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
LOWER PLIOCENE	A/M N18 - N19	A/G NN13 - NN15				V-1605 ● D=64.7 ρ=1.61 V-1568 ● D=64.7 ρ=1.61 V-1561 ● D=65.5 ρ=1.60 V-1554 ● D=64.7 ρ=1.61 V-1554 ● D=64.8 ρ=1.60 V-1572 ● D=64.8 ρ=1.60		1 2 3 4 5 6 7 CC	0.5 1.0				*

LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

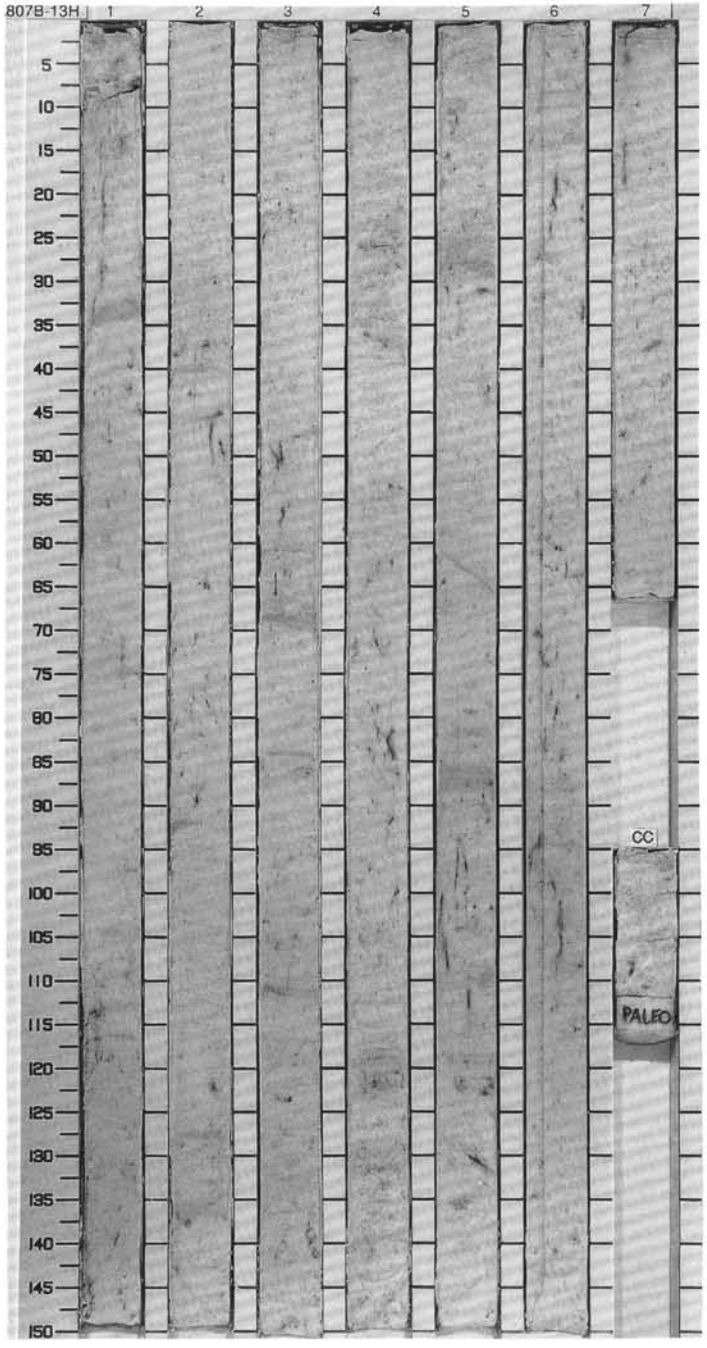
Major lithology: This core contains white (2.5Y 8/0) interbedded FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Slight to heavy bioturbation is represented by cm scale, light gray (2.5Y 7/2) mottling and grayish blue (5PB 5/2) pyritized, commonly vertical burrows. Light greenish gray (5G 7/1) color bands are common to abundant through this core, while pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are present but less common. Microfaults are observed in Section 3, 135 cm, and in Section 6, 35 cm; 70 cm; 95 cm 100 cm; 112 cm; and 121 cm.

SMEAR SLIDE SUMMARY (%):

	1, 97 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	20
Nannofossils	76
Radiolarians	2
Silicoflagellates	1

SITE 807 HOLE B CORE 13H CORED INTERVAL 107.6-117.1 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	A/M	A/M						1	0.5					NANNOFOSSIL OOZE with FORAMINIFERS
	N18 - N19	NN12							1.0					Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation is represented by cm scale, light gray (2.5Y 7/2 and 5Y 7/1) mottling and grayish blue (5PB 5/2) pyritized, commonly vertical, burrows. Light greenish gray (5G 7/1) and pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are common. Microfaults are observed at Section 6, 10-15 cm
						V-1590 ϕ=64.5 ρ=1.62								SMEAR SLIDE SUMMARY (%):
						V-1601 ϕ=65.5 ρ=1.59		2						3, 74 D / 3, 94 D
						V-1590 ϕ=65.8 ρ=1.59		3				*		TEXTURE:
					V-1613 ϕ=65.6 ρ=1.59			4				*		Sand 17 10
					V-1586 ϕ=67.0 ρ=1.57			5						Silt 63 65
														Clay 20 25
					V-1543 ϕ=64.9 ρ=1.60			6						COMPOSITION:
								7						Feldspar — Tr
								CC						Foraminifers 20 15
														Glass Tr Tr
														Nannofossils 80 84
														Quartz Tr Tr
														Radiolarians Tr 1
														Siliceous sponge spicules Tr Tr



SITE 807 HOLE B CORE 14H CORED INTERVAL 117.1-126.6 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
LOWER PLIOCENE	A/G N18 - N19	A/M NN12				V=1583 ϕ=66.0 ρ=1.58 V=1594 ϕ=65.4 ρ=1.59 V=1561 ϕ=65.2 ρ=1.60 V=1558 ϕ=65.2 ρ=1.58 V=1609 ϕ=65.5 ρ=1.61 V=1609 ϕ=65.8 ρ=1.58			1 2 3 4 5 6 7 CC	0.5 1.0		O	*	

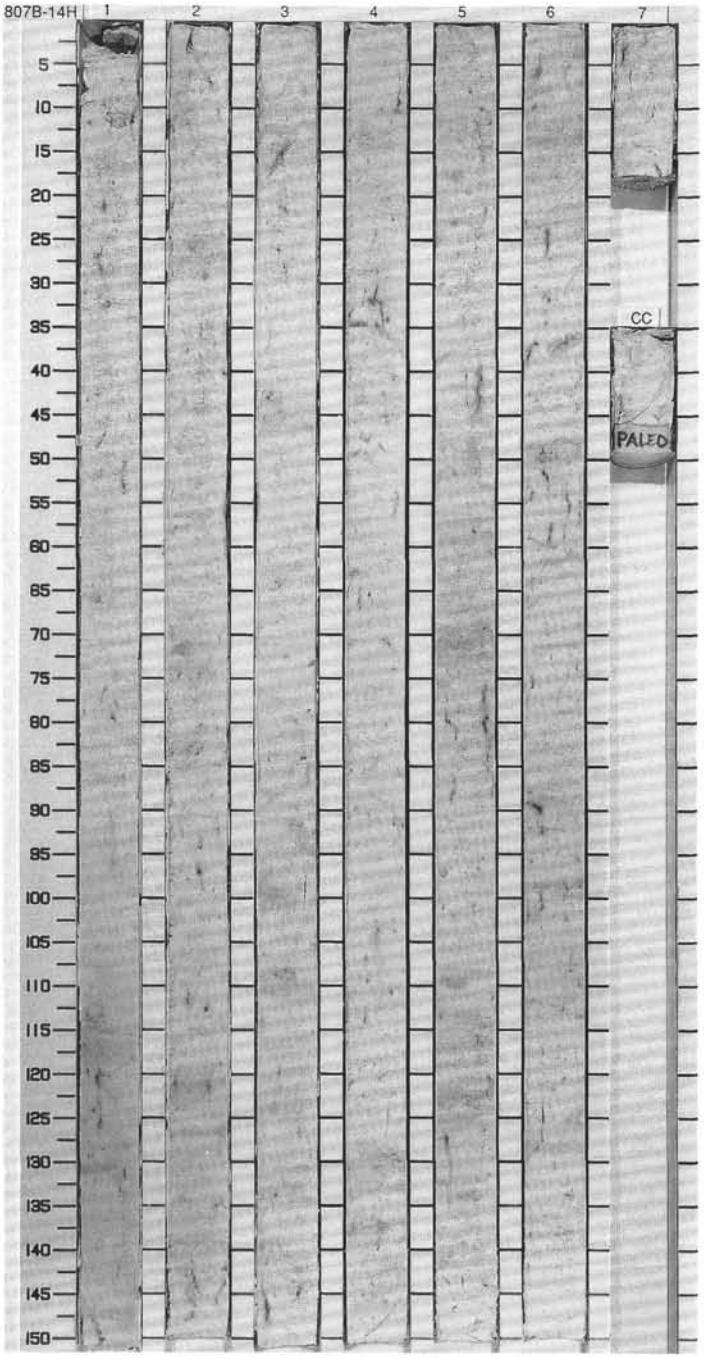
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Bioturbation is represented by cm scale, light gray (2.5Y 7/2 and 5Y 7/1), commonly horizontal burrows, and by grayish blue (5PB 5/2) pyritized, commonly vertical, burrows. Pale purple (5P 6/2) burrow "halos" are also present. Light greenish gray (5G 7/1) and pale purple (5P 6/2) to grayish blue (PB 5/2) color bands are common.

SMEAR SLIDE SUMMARY (%):

	3, 78 D
TEXTURE:	
Sand	5
Silt	90
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	83
Radiolarians	2
Siliceous sponge spicules	Tr



SITE 807 HOLE B CORE 15H CORED INTERVAL 126.6-136.1 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 MIOCENE	A/G	N17b				V-1561 ●0-64.5 ρ-1.62		1	0.5				
		NN11?							1.0				
	A					V-1550 ●0-64.4 ρ-1.61		2					*
						V-1572 ●0-65.7 ρ-1.59		3					
						V-1572 ●0-64.7 ρ-1.67		4					
						V-1579 ●0-64.8 ρ-1.60		5					
						V-1558 ●0-66.1 ρ-1.58		6					
								CC					

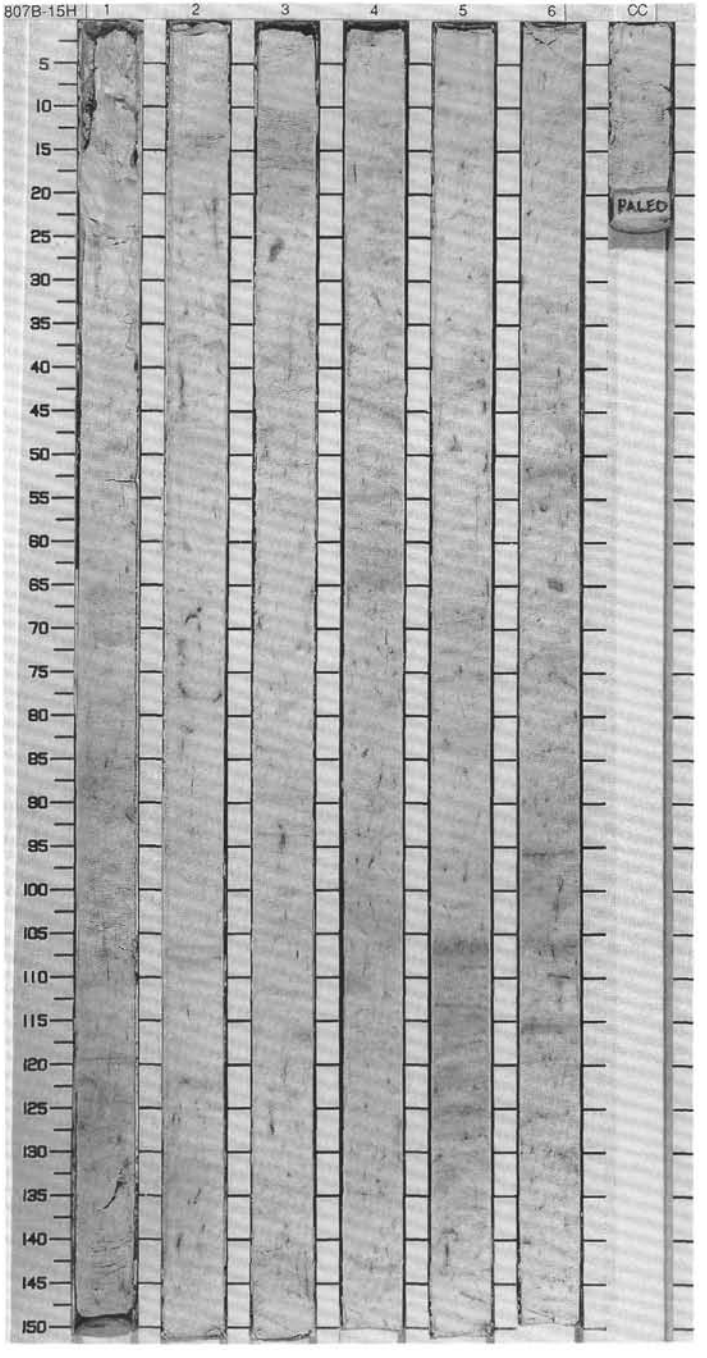
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation is represented by cm scale, light gray (2.5Y 7/2 and 5Y 7/1), commonly horizontal burrows, and by grayish blue (5PB 5/2) pyritized, mm scale, vertical burrows. Pale purple (5P 6/2) *burrow "halos" are also present. Light greenish gray (5G 7/1) and pale purple (5P 6/2)* to grayish blue (PB 5/2) color bands are common throughout. In Section 4, some of color bands are microfaulted.

SMEAR SLIDE SUMMARY (%):

	2, 87 D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Foraminifers	8
Nannofossils	90
Radiolarians	Tr
Siliceous sponge spicules	Tr
Silicoflagellates	Tr



SITE 807 HOLE B CORE 16H CORED INTERVAL 136.1-145.6 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/G N17b; NANNOFOSSILS A/M NN11; RADIOLARIANS; DIATOMS

PALEOMAGNETICS

PHYS. PROPERTIES

CHEMISTRY

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

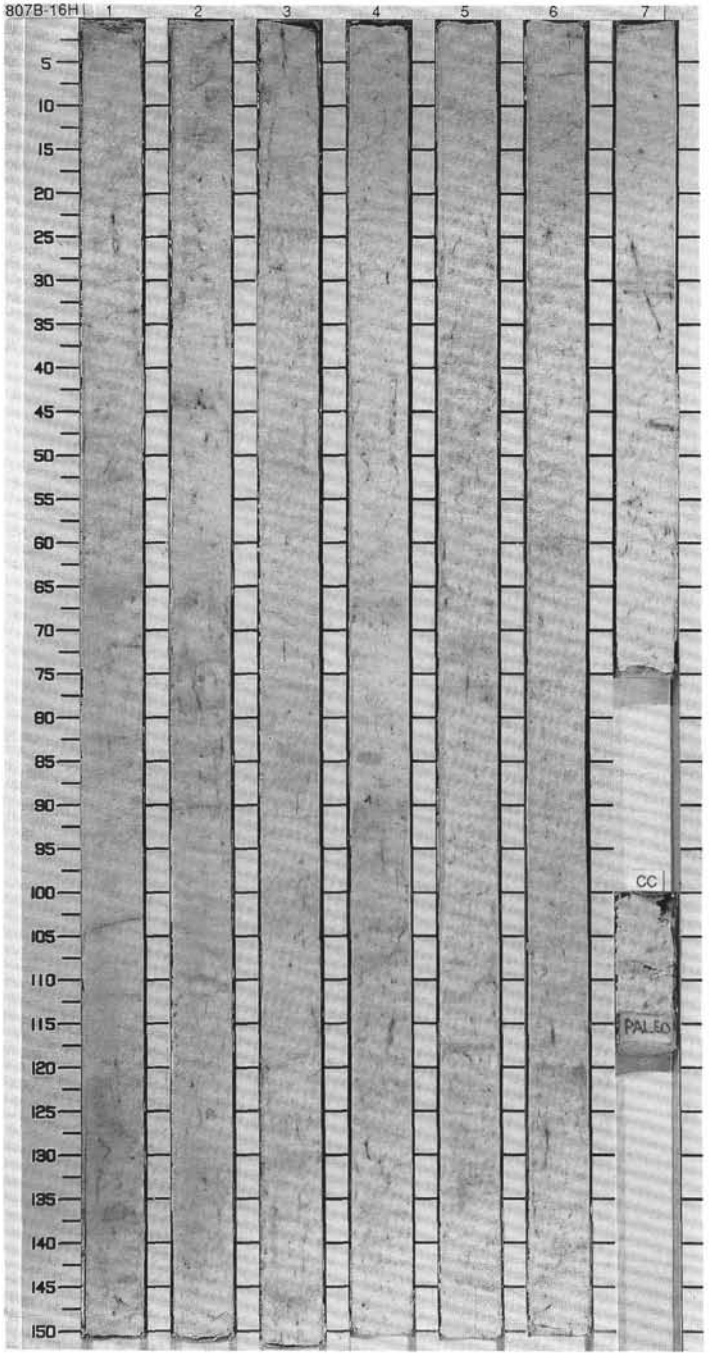
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation is expressed as cm scale, light gray (2.5Y 7/2) mottles and mm to cm scale grayish blue (5PB 5/2), pyrite-filled burrows. Faint, light greenish gray (5G 7/1) and pale purple (5P 6/2) color bands are present to abundant through this core. Grayish blue (5PB 5/2) color bands are less common.

SMEAR SLIDE SUMMARY (%):

	3, 80
	D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Foraminifers	8
Nannofossils	90
Radiolarians	Tr
Siliceous sponge spicules	Tr
Silicoflagellates	Tr



SITE 807 HOLE B CORE 17H CORED INTERVAL 145.6-155.1 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 MIOCENE	A/G	N17b / NN11				V-1565 ● 63.5 ρ 1.63 V-1620 ● 62.9 ρ 1.64 V-1601 ● 64.5 ρ 1.61 V-1628 ● 63.5 ρ 1.63 V-1605 ● 62.7 ρ 1.64 V-1594 ● 64.3 ρ 1.64		1 2 3 4 5 6 7 CC	0.5 1.0			*	

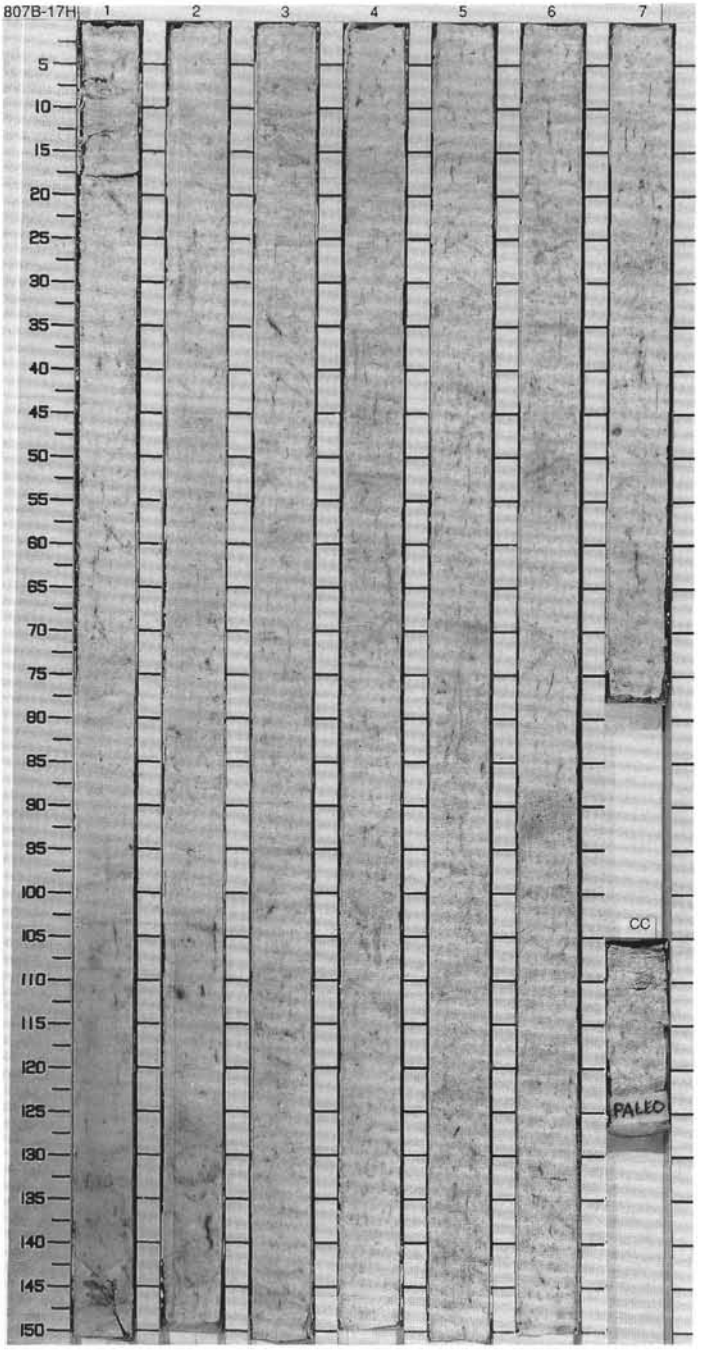
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains moderately to heavily bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Bioturbation is expressed as light gray (2.5Y 7/2) mottling and grayish blue (5PB 5/2) to pale purple (5P 6/2), pyrite-filled burrows and mottling. Diffuse light greenish gray (5G 7/1) and pale purple (5P 6/2) color bands are present to abundant.

SMEAR SLIDE SUMMARY (%):

	4, 81 D
TEXTURE:	
Sand	16
Silt	64
Clay	20
COMPOSITION:	
Foraminifers	15
Glass	Tr
Nannofossils	84
Quartz	Tr
Radiolarians	1
Siliceous sponge spicules	Tr



SITE 807 HOLE B CORE 18H CORED INTERVAL 1551.-164.6 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
UPPER MIOCENE	A/P	N17b	A	NN11		V=1543 ● D=65.0 ρ=1.61 V=1575 ● D=64.6 ρ=1.61 V=1565 ● D=64.0 ρ=1.62 V=1594 ● D=65.1 ρ=1.59 V=1631 ● D=64.5 ρ=1.61 V=1624 ● D=63.8 ρ=1.63		1 2 3 4 5 6 7 CC	0.5 1.0		S		*	

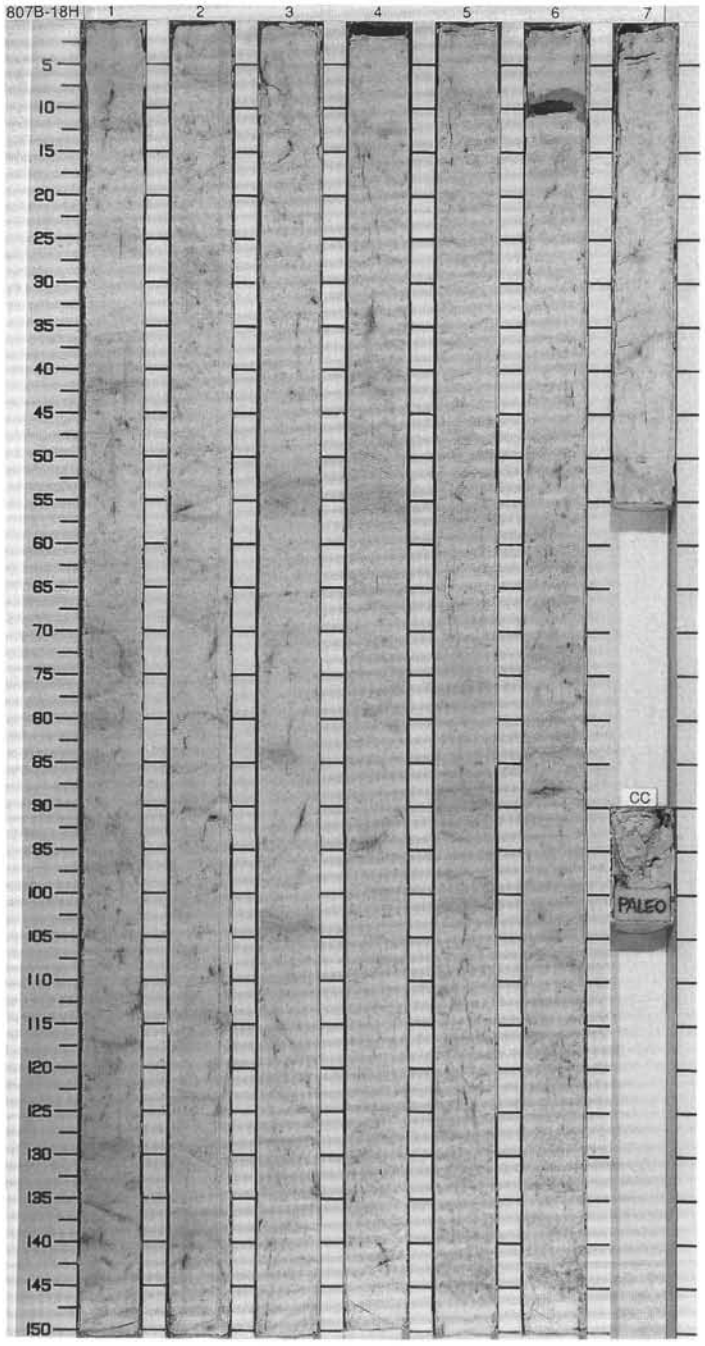
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Moderate to heavy bioturbation is evident from abundant pyrite-filled burrows, and light gray (2.5Y 7/2) mottles. Pale purple (5P 6/2), greenish gray (5G 7/1), and reddish gray (5R 6/1) color bands, about 1 cm in width, are common, usually occurring together in pairs and triplets. The color bands are usually faint.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	12
Silt	55
Clay	33
COMPOSITION:	
Accessory minerals	1
Foraminifers	21
Nannofossils	75
Siliceous fragments	3



SITE 807 HOLE B CORE 19H CORED INTERVAL 164.6-174.1 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 MIOCENE	A/G N17a	A/M NN11			V-1583 D=62.9 ρ=1.65; V-1575 D=64.8 ρ=1.60; V-1586 D=62.6 ρ=1.66; V-1575 D=61.9 ρ=1.68; V-1594 D=64.1 ρ=1.63			1, 2, 3, 4, 5, CC	0.5, 1.0			≈ ~	*

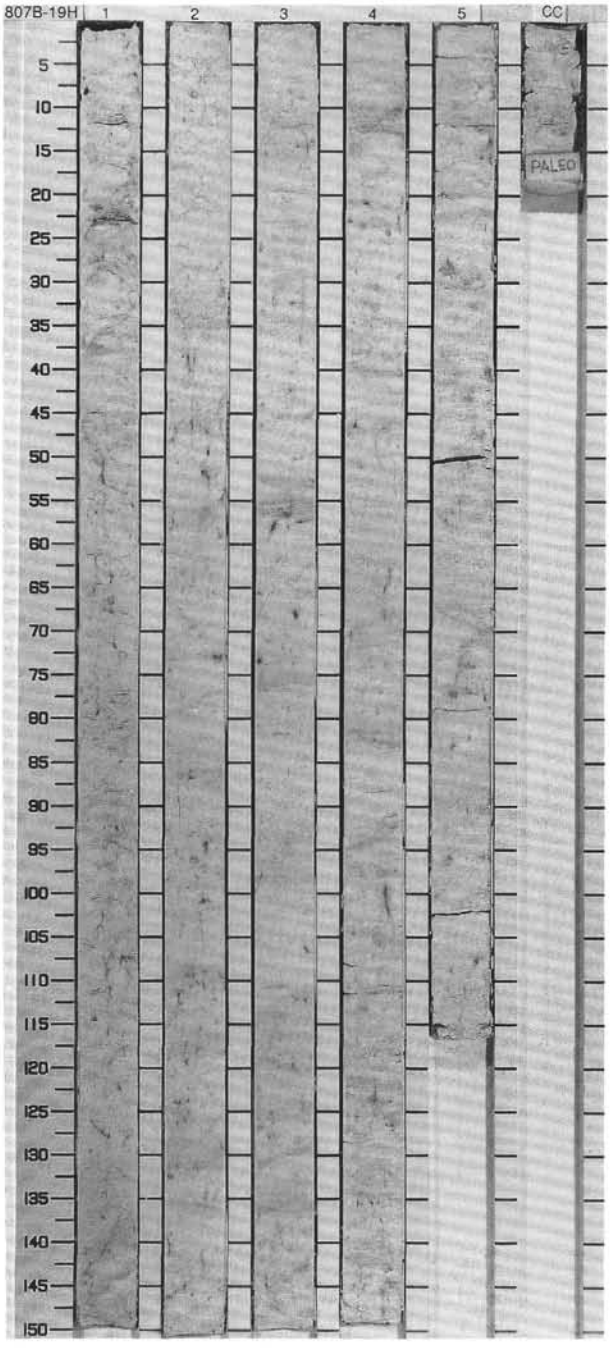
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Light gray (2.5Y 7/2) burrows and pale purple (5P 6/2) mottles and pyrite fragments indicate extensive bioturbation. Pale green (5G 7/1) and pale purple (5P 6/2) horizontal, 1 to 3 cm thick color bands are present throughout. A few intervals (< 1 cm thick) are stiffer than the rest of the sediment. There is a slight H_2S odor to the core. The base of Section 1 is microfaulted.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE	
Sand	15
Silt	55
Clay	30
COMPOSITION	
Accessory minerals	1
Foraminifers	22
Nannofossils	75
Siliceous fragments	2



SITE 807 HOLE B CORE 20H CORED INTERVAL 174.1-183.6 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
UPPER MIOCENE	A/G	A				χ=1586 ϕ=60.8 ρ=1.68; χ=1594 ϕ=62.1 ρ=1.65; χ=1590 ϕ=60.7 ρ=1.68; χ=1601 ϕ=62.3 ρ=1.65		1, 2, 3, 4, CC	0.5, 1.0			*	

N17a
NN11

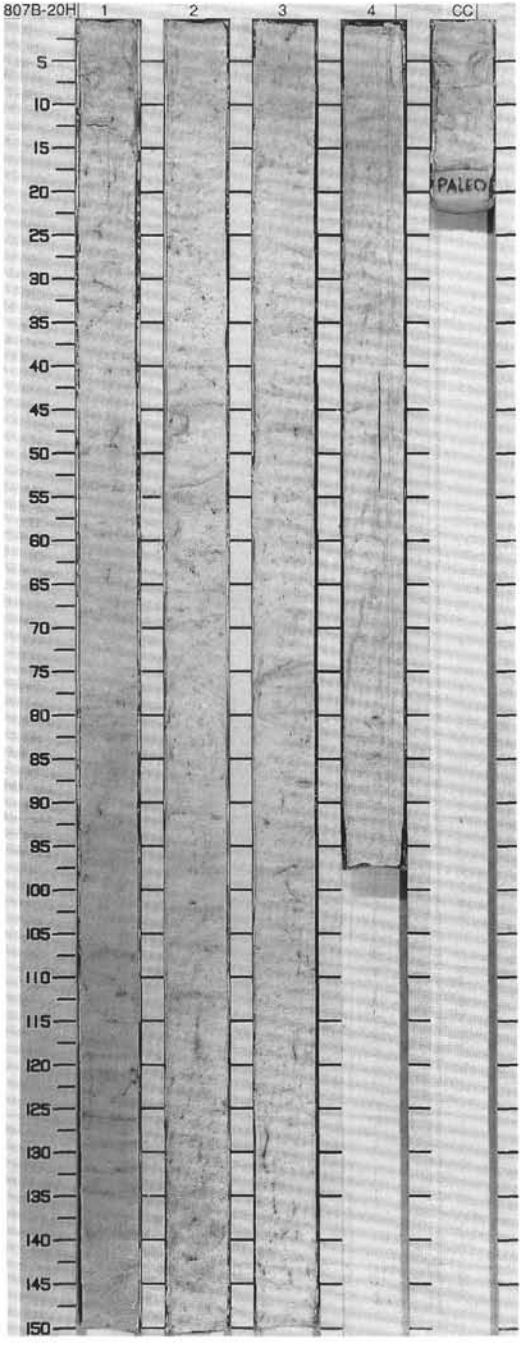
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Abundant cm-thick, greenish gray (5G 7/1), pale purple (5P 6/2), and reddish gray (5R 6/1) color banding is noted. Pyrite-filled burrows with purple borders also are abundant and indicative of heavy bioturbation. A slight H_2S odor was noted upon splitting the core.

SMEAR SLIDE SUMMARY (%):

	2, 75 D
TEXTURE:	
Sand	10
Silt	80
Clay	10
COMPOSITION:	
Diatoms	Tr
Foraminifers	15
Nannofossils	85
Radiolarians	Tr
Siliceous fragments	Tr



SITE 807 HOLE B CORE 21H CORED INTERVAL 183.6-193.1 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/P N17a; NANNOFOSSILS A NN11; RADIOLARIANS; DIATOMS

PALEOMAGNETICS; PHYS. PROPERTIES; CHEMISTRY

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

V-1575 ● 63.5 P-1.62
V-1583 ● 62.5 P-1.64
V-1590 ● 62.1 P-1.65
V-1572 ● 62.8 P-1.64
V-1582 ● 61.7 P-1.65
● 61.6 P-1.68

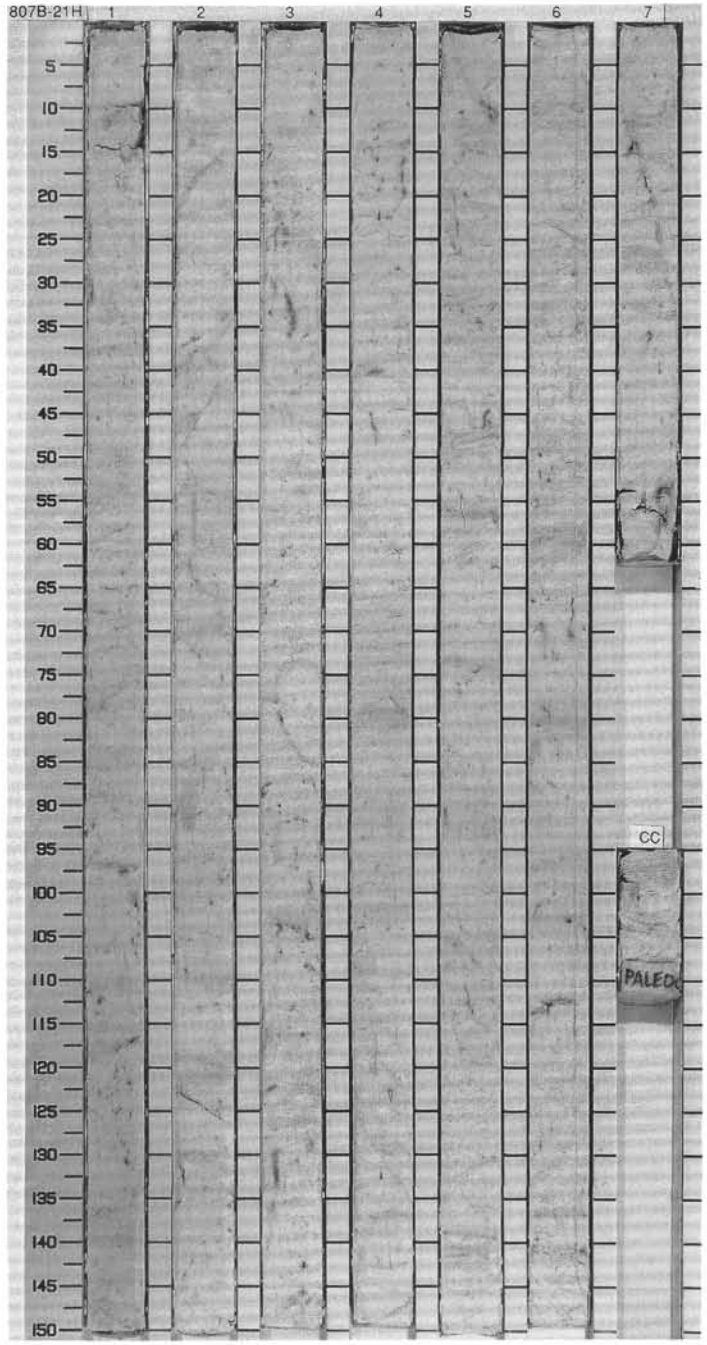
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Centimeter-scale greenish gray (5G 7/1), pale purple (5P 6/2) and reddish gray (5R 6/1) color banding is common. The color bands are typically faint, though some are distinct. A few gray (2.5Y 6/1) color bands are also noted. Heavy bioturbation is indicated by abundant pyrite filled burrows. Some pale purple swirls and halo structures were observed that appear to be related to fluid migration fronts. These features overprint the horizontal color bands. Centimeter-scale, slightly stiffer intervals were noted, often corresponding to intervals of color banding.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	5
Silt	75
Clay	20
COMPOSITION:	
Diatoms	Tr
Foraminifers	10
Nannofossils	89
Radiolarians	Tr
Siliceous fragments	Tr



SITE 807 HOLE B CORE 22H CORED INTERVAL 193.1-202.6 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
UPPER MIOCENE	A/G N17a	A/P NN11				V-1568 ρ=1.68 0-61.2; V-1568 ρ=1.67 0-61.3; V-1605 ρ=1.65 0-62.8; V-1572 ρ=1.67 0-61.3; V-1579 ρ=1.70 0-59.1; V-1590 ρ=1.68 0-61.0		1 2 3 4 5 6 7 CC	0.5 1.0				

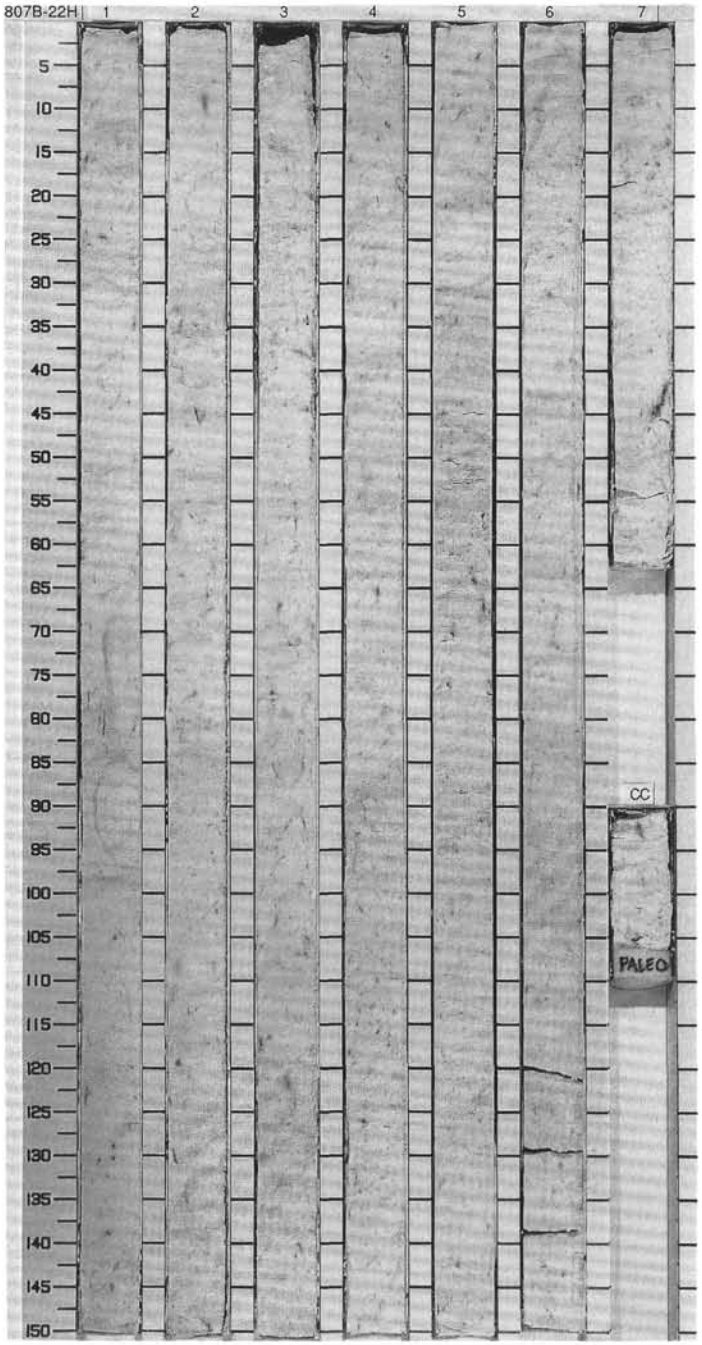
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains intensely bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Evidence for bioturbation consists of light gray (2.5Y 7/2) burrow-fills, and pyrite fragments, as well as pale purple (5P 6/2) halos, and mottles. Horizontal, 1 to 3 cm thick color bands are present throughout the core and are either pale purple (5P 6/2) or pale green (5G 7/2) in color. The bands are often overprinted by the pale purple mottles. A few microfaults are present in the top two sections. Some of the color bands are distinctly stiffer than the surrounding ooze.

SMEAR SLIDE SUMMARY (%):

	3, 74
	D
TEXTURE:	
Sand	13
Silt	55
Clay	32
COMPOSITION:	
Accessory minerals	1
Diatoms	Tr
Foraminifers	18
Nannofossils	79
Siliceous fragments	2



SITE 807 HOLE B CORE 23H CORED INTERVAL 202.6-212.1 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 MIOCENE	A/G	N17a				V-1598 ρ-1.69		1	0.5				
	A/P	NN11							1.0				
						V-1586 ρ-1.67		2					
						V-1598 ρ-1.68		3					*
						V-1575 ρ-1.66		4					
						V-1620 ρ-1.65		5					
						V-1579 ρ-1.68		6					
								7					
								CC					

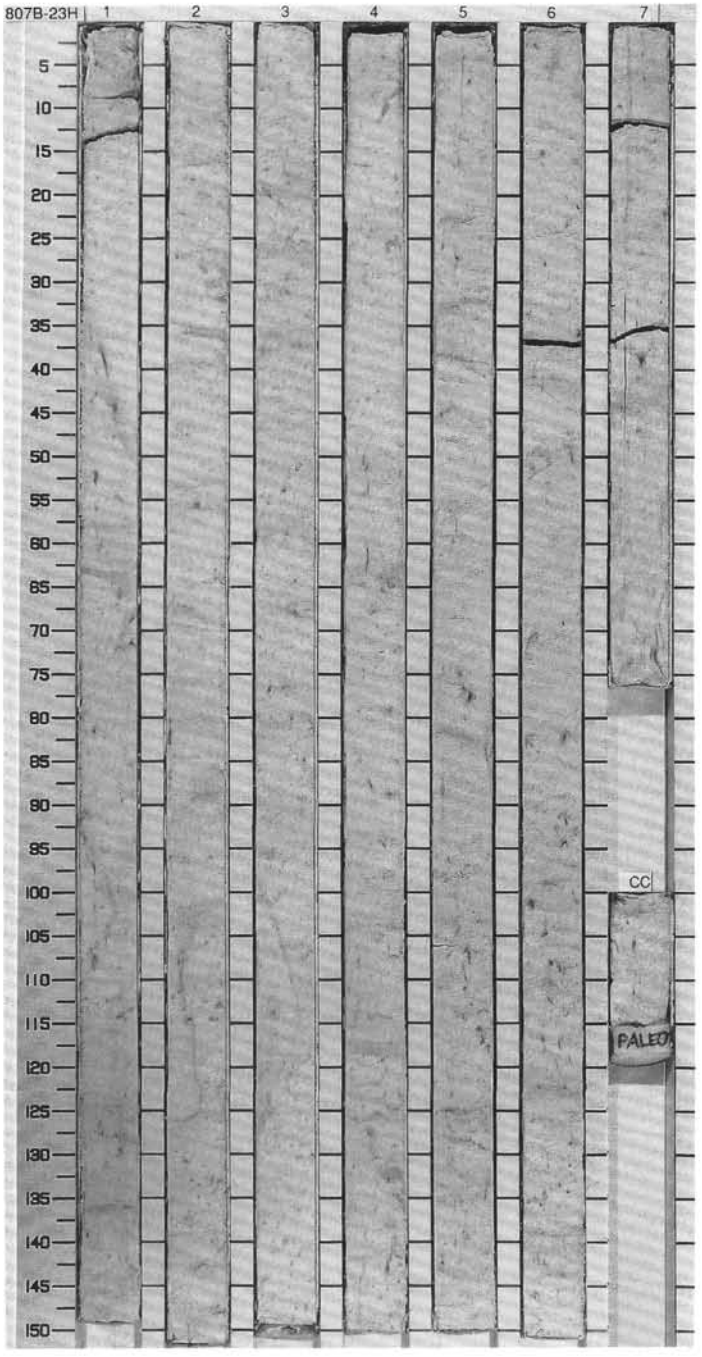
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS. Faint horizontal color bands appear throughout. The bands are predominantly pale purple (5P 6/2) and pale green (5G 7/2) in color. Evidence for bioturbation includes light gray (2.5Y 7/2) mottles and pyrite specks, as well as pale purple (5P 6/2) mottles. These mottles commonly overprint the faint color bands. Some of the color bands are slightly stiffer than the white ooze.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	50
Clay	35
COMPOSITION:	
Accessory minerals	1
Diatoms	Tr
Foraminifers	20
Nannofossils	77
Siliceous fragments	2



SITE 807 HOLE B CORE 24H CORED INTERVAL 212.1-221.6 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
UPPER MIOCENE	A/G N16 - N17a	A/P NN11				V=1579 0-63.5 p=1.63; V=1616 0-59.9 p=1.68; V=1583 0-63.3 p=1.62; V=1557 0-64.2 p=1.62; V=1594 0-62.1 p=1.65; V=1579 0-60.7 p=1.63		1 2 3 4 5 6 7 CC	0.5 1.0				

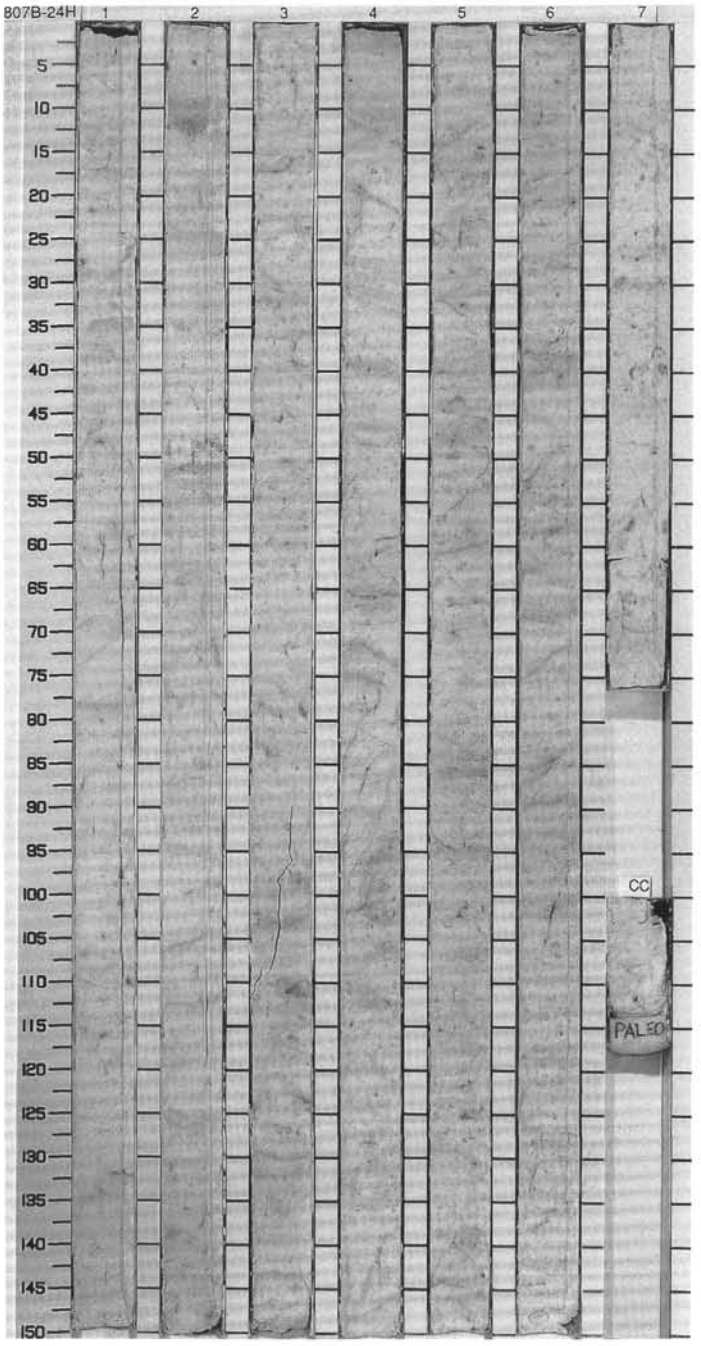
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. The sediment has faint, horizontal, pale purple (5P 6/2) and pale green (5G 7/2) color bands throughout. Bioturbaton is indicated by abundant light gray (2.5Y 7/2) and pale purple (5P 6/2) mottles. These mottles commonly overprint the faint color bands. Microfaults are apparant in sections 1,2 and 4. Some of the color bands are slightly stiffer than white ooze.

SMEAR SLIDE SUMMARY (%):

	3,74 D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Acccessory minerals	1
Diatoms	Tr
Foraminifers	21
Nannofossils	75
Siliceous fragments	3



SITE 807 HOLE B CORE 25H CORED INTERVAL 221.6-231.1 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 MIOCENE	A/G	A/M				V=1609 ρ=61.3 ρ_s=1.66		1	0.5				
	N16 - N17a	NN11							1.0				
						V=1598 ρ=63.0 ρ_s=1.64		2					
					V=1586 ϕ=64.5 ρ_s=1.60			3					*
					V=1616 ϕ=64.0 ρ_s=1.61			4					
								5					
					V=1598 ϕ=64.5 ρ_s=1.61			6					
								7					
								CC					

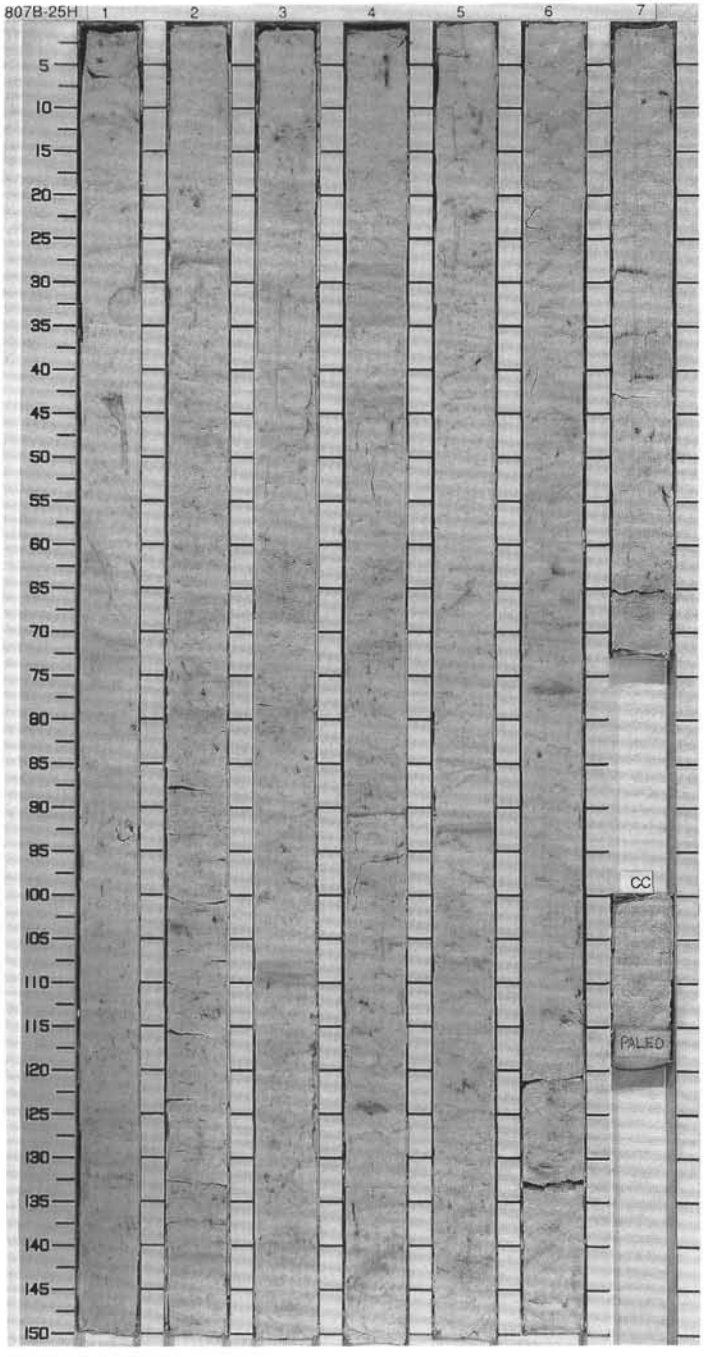
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSIL OOZE with FORAMINIFERS. The sediment has sub-horizontal, 1 to 2 cm thick, color bands throughout. The bands are predominantly pale purple (5P 6/2), pale green (5G 7/2) and, to a lesser extent, pale greenish gray (5G 7/1) and dark gray (2.5Y 5/0) in color. Intense bioturbation is indicated by abundant light gray (2.5Y 7/2) mottles, and pale purple halos. Some intervals (1-2 cm thick) are quite stiff to hard. A porcellanite nodule was found in Section 1, 95 cm.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	15
Silt	60
Clay	25
COMPOSITION:	
Diatoms	1
Foraminifers	30
Nannofossils	65
Radiolarians	Tr
Siliceous fragments	3
Siliceous sponge spicules	Tr



SITE 807 HOLE B CORE 26H CORED INTERVAL 231.1-240.6 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
UPPER MIOCENE	A/G	N16	A/M	NN10?		V=1565 ρ=61.2 P=1.66 V=1583 ρ=63.0 P=1.63 V=1575 ρ=63.2 P=1.64 V=1583 ρ=62.9 P=1.63 V=1601 ρ=63.1 P=1.63		1 2 3 4 5 6 7 CC	0.5 1.0				*

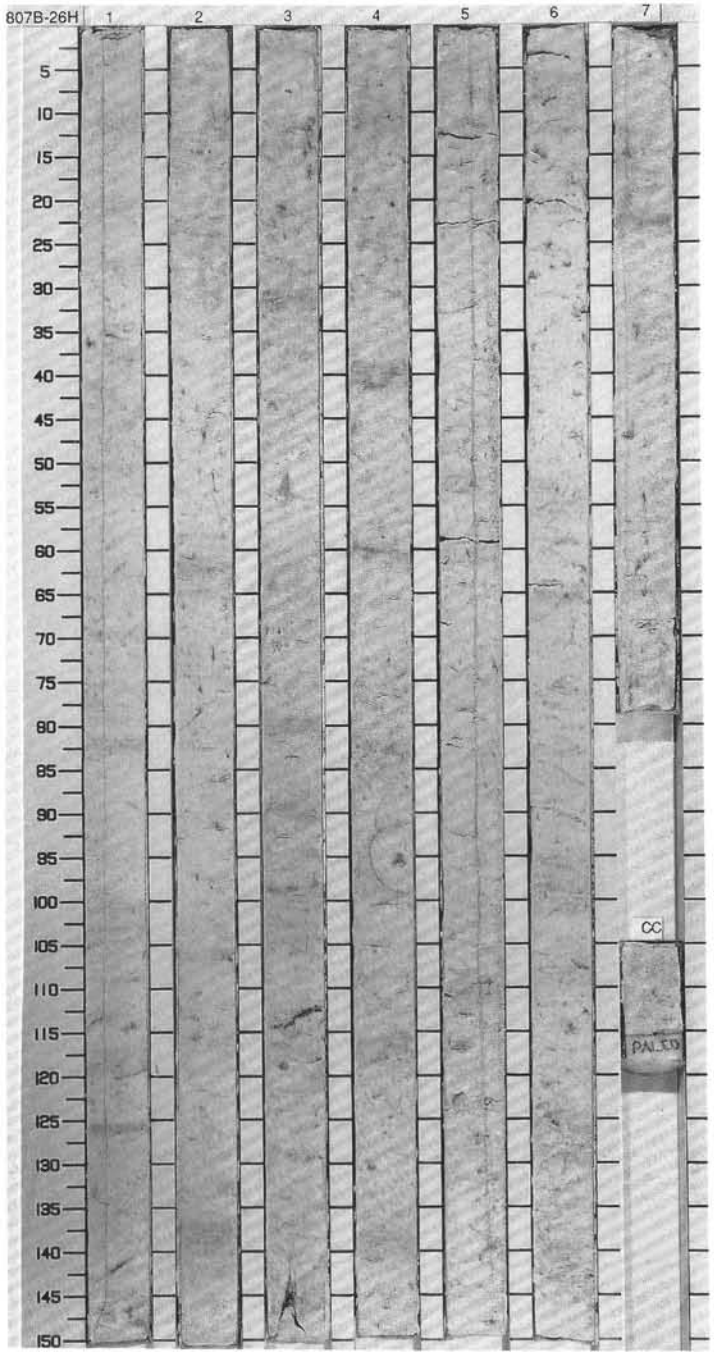
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE with FORAMINIFERS to FORAMINIFER NANNOFOSSIL OOZE. Moderate to heavy bioturbation is indicated by light gray (2.5Y 7.2) mottles, pale purple (5P 6/2) halos and pyrite-filled burrows, traces, and specks. Diffuse irregular color bands, greenish gray (5G7/1) and, less commonly, pale purple in color, are observed throughout the core. Some bands are subhorizontal. Very stiff, 1 to 2 cm thick intervals are distributed irregularly (spaced at 5-15 cm intervals) throughout the core.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	15
Silt	55
Clay	30
COMPOSITION:	
Accessory minerals	1
Diatoms	Tr
Foraminifers	22
Nannofossils	75
Radiolarians	Tr
Siliceous fragments	2



SITE 807 HOLE B CORE 27H CORED INTERVAL 240.6-250.1 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 MIOCENE	A/G N16	A/M NN10			V-1586 @63.7 P=1.60; V-1568 @63.0 P=1.62; V-1594 @61.8 P=1.65; V-1590 @62.1 P=1.66; V-1557 @62.6 P=1.64; V-1579 @61.7 P=1.66			1 2 3 4 5 6 7 CC	0.5 1.0				*

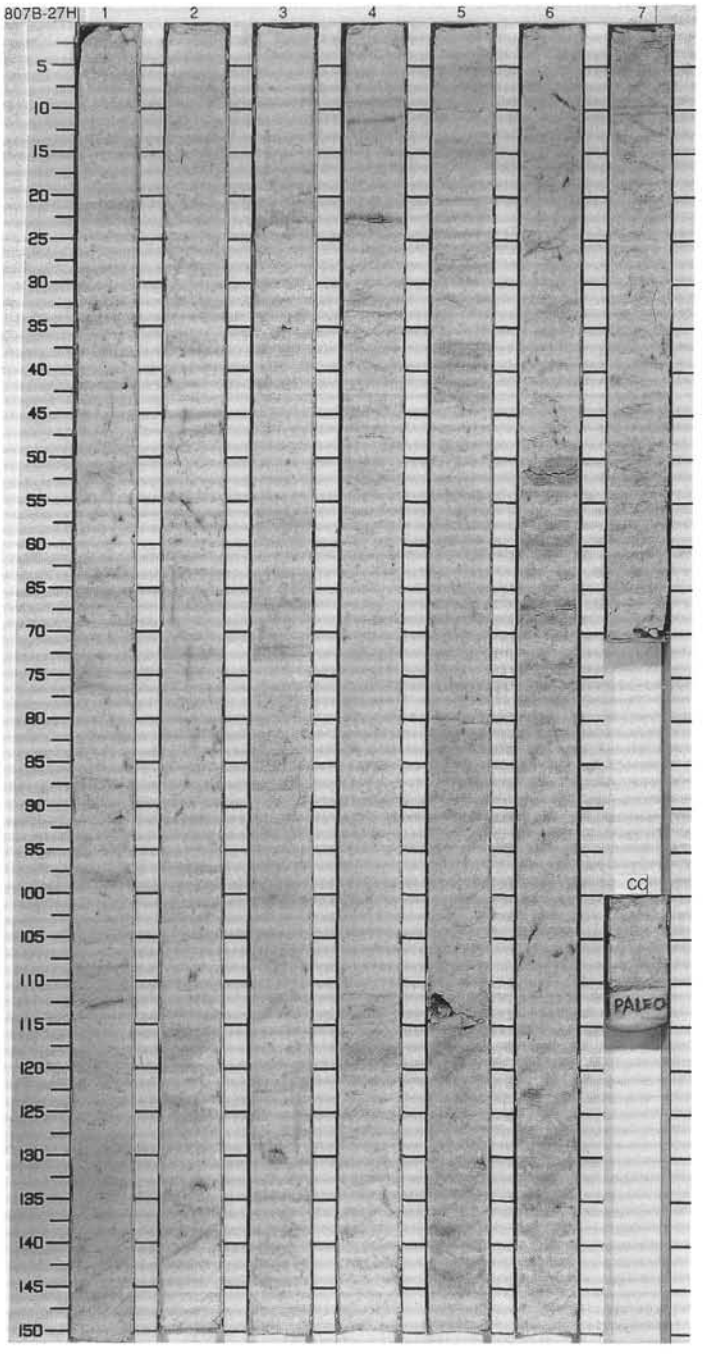
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE. There are faint and distinct, 1 cm thick, greenish gray (5G 7/1) and pale purple (5P 6/2) color bands. Abundant evidence for bioturbation includes mottles, and pyrite-filled burrows. Frequent, stiff to hard,1 to 2 cm thick intervals are present every 3 to 4 cm. Microfaults are noted in Sections 4 and 5.

SMEAR SLIDE SUMMARY (%):

	2, 75 D
TEXTURE:	
Sand	20
Silt	60
Clay	20
COMPOSITION:	
Diatoms	Tr
Foraminifers	30
Nannofossils	70
Radiolarians	Tr



SITE 807 HOLE B CORE 28H CORED INTERVAL 250.1-259.6 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: A/G, N16; NANNOFOSSILS: A/M, NN10; RADIOLARIANS; DIATOMS

PALEOMAGNETICS

PHYS. PROPERTIES: V-1572 ρB=61.6 ρs=1.65; V-1616 ρB=63.9 ρs=1.63; V-1583 ρB=63.9 ρs=1.63; V-1583 ρB=60.6 ρs=1.67; V-1636 ρB=63.2 ρs=1.63; V-1609 ρB=63.5 ρs=1.61

CHEMISTRY

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: *

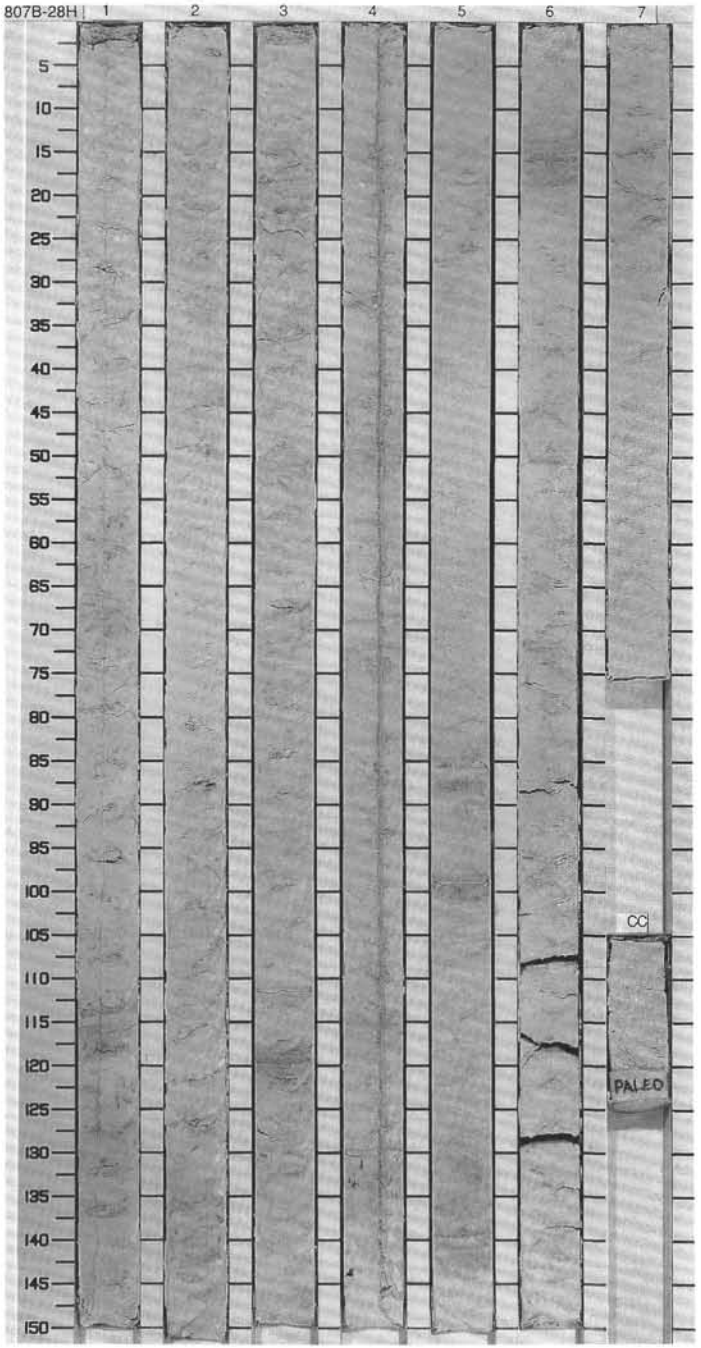
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) FORAMINIFER NANNOFOSSIL OOZE to NANNOFOSSIL OOZE with FORAMINIFERS. The ooze is very stiff in numerous, 2 to 4 cm thick intervals. Some of the stiff intervals contain consolidated nodules. Color bands are present but very faint. The bands are 1 to 2 cm thick and vary from pale purple (5P 6/2) to pale green (5G 7/2) in color. Bioturbation structures include light gray (2.5Y 7/2) mottles, and pale purple halos.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	5
Silt	80
Clay	15
COMPOSITION:	
Diatoms	2
Foraminifers	25
Nannofossils	69
Radiolarians	1
Siliceous fragments	3
Siliceous sponge spicules	Tr



SITE 807 HOLE B CORE 29H CORED INTERVAL 259.6-269.1 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 MIOCENE	N16	NN10				V-1613 ρb=62.5 ρs=1.64 V-1632 ρb=60.5 ρs=1.67 V-1594 ρb=61.7 ρs=1.65 V-1613 ρb=60.5 ρs=1.68		1 2 3 4 5 6 7 CC	0.5 1.0				*

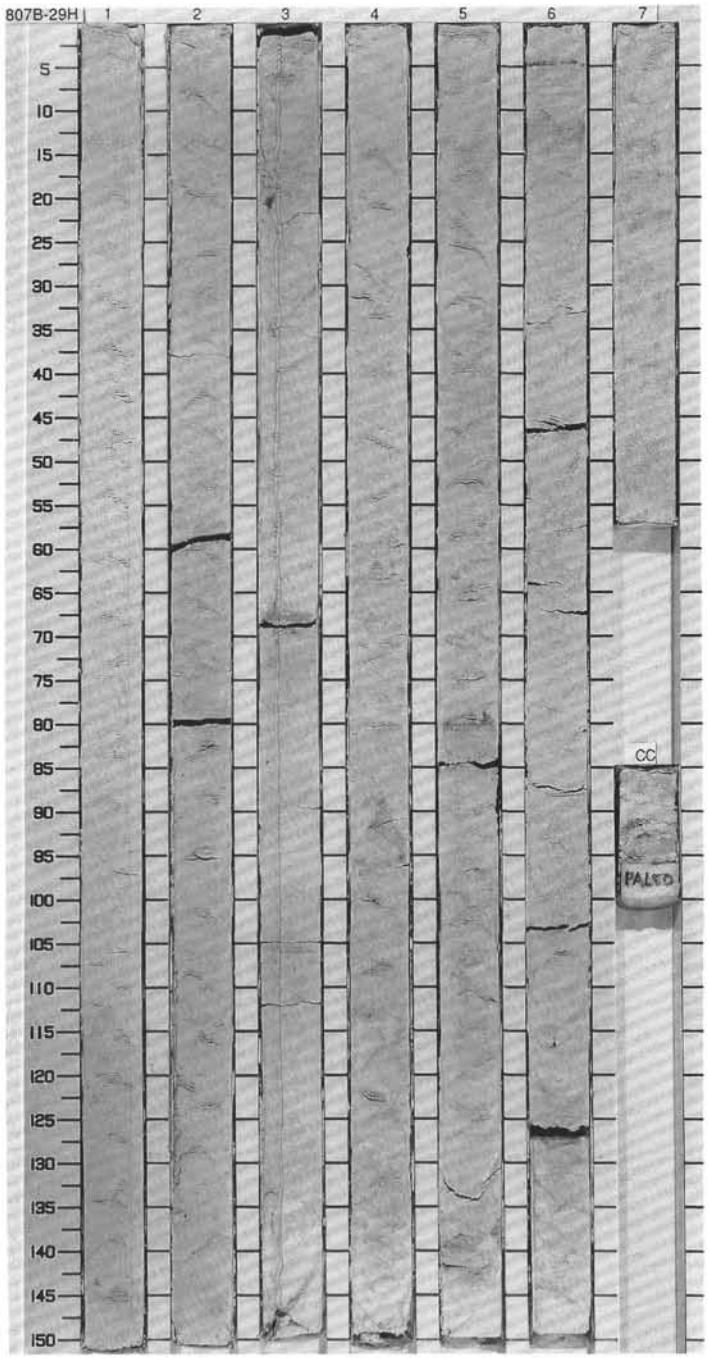
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains 60% NANNOFOSSIL OOZE with FORAMINIFERS and 40% NANNOFOSSIL CHALK with FORAMINIFERS, both of white (2.5Y 8/0) color. Slightly to moderately fractured drilling "biscuits" are embedded in a stiff ooze matrix. The sediment is slightly to moderately bioturbated and relatively uniform in appearance. Minor pale blue (5PB 7/2), light greenish gray (5G 7/1), and pale purple (5P 6/2) color bands are present and become more abundant from Section 5 through the Core Catcher.

SMEAR SLIDE SUMMARY (%):

	3, 84 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Foraminifers	12
Nannofossils	83
Radiolarians	2
Siliceous fragments	Tr
Siliceous sponge spicules	Tr



SITE 807 HOLE B CORE 30H CORED INTERVAL 269.1-278.6 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
UPPER MIOCENE	A/G N15	A/P NN10			V-1609 D=60.3 P=1.69; V-1620 D=61.5 P=1.66; V-1586 D=62.6 P=1.65; V-1594 D=58.2 P=1.71			1 2 3 4 5 6 7 CC	0.5 1.0				*

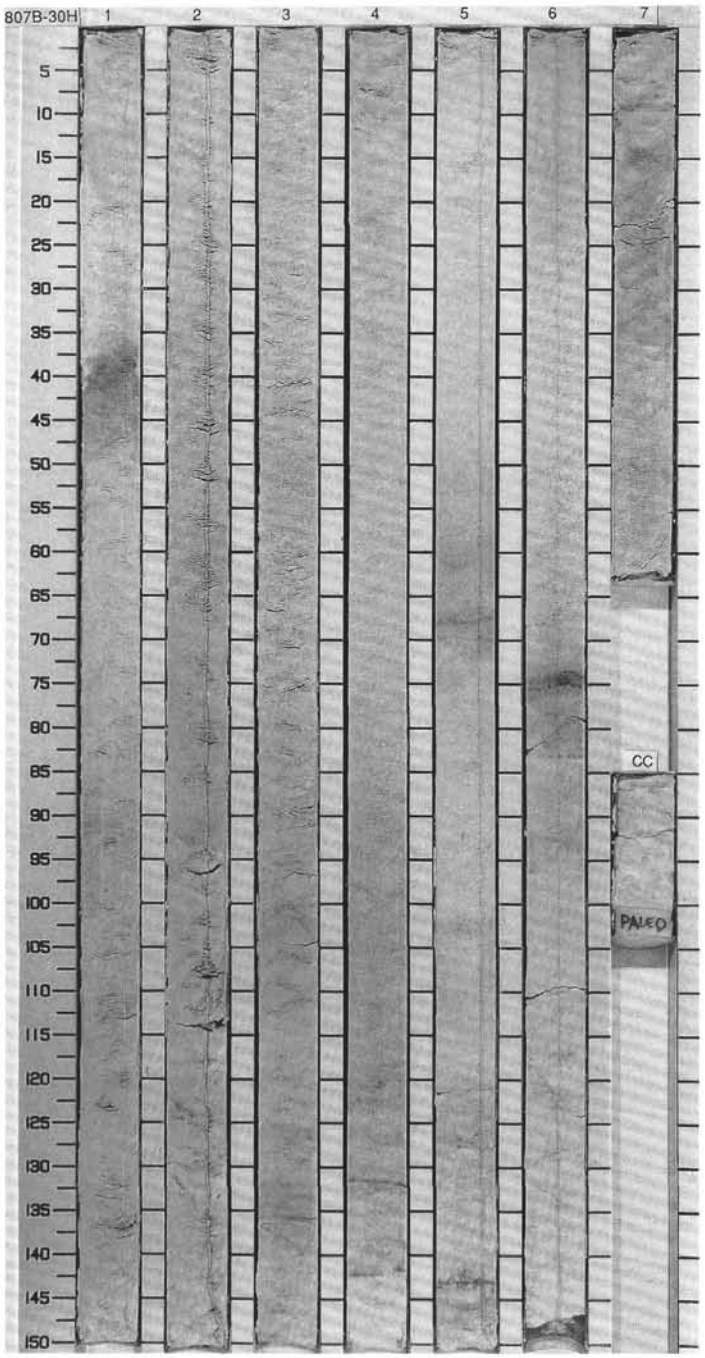
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) to pale purple (5Y 6/2) and pale pink (5RP 8/2) NANNOFOSSIL OOZE with FORAMINIFERS (60%) and NANNOFOSSIL CHALK with FORAMINIFERS (40%). The sediment ranges from uniformly stiff ooze to moderately fractured biscuits. Faint pale purple (5P 6/2), grayish blue (5PB 5/2), light gray (N7), and light greenish gray (5G 7/1) color bands are present and locally abundant. A color band at Section 4, 140 cm is microfaulted.

SMEAR SLIDE SUMMARY (%):

	3, 80 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	80
Quartz	Tr
Radiolarians	2
Siliceous fragments	Tr
Siliceous sponge spicules	Tr



SITE 807 HOLE C CORE 1R CORED INTERVAL 780.0-789.7 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	LITHOLOGIC DESCRIPTION
LOWER OLIGOCENE	A/M	A/M	A/M	A/M				CC					*	NANNOFOSSIL CHALK with FORAMINIFERS
	P19	NP23	*Dorcadospyris ateuchus*	*Rocella vigilans*										Major lithology: This core contains slightly bioturbated, highly fragmented, white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS.

SMEAR SLIDE SUMMARY (%):

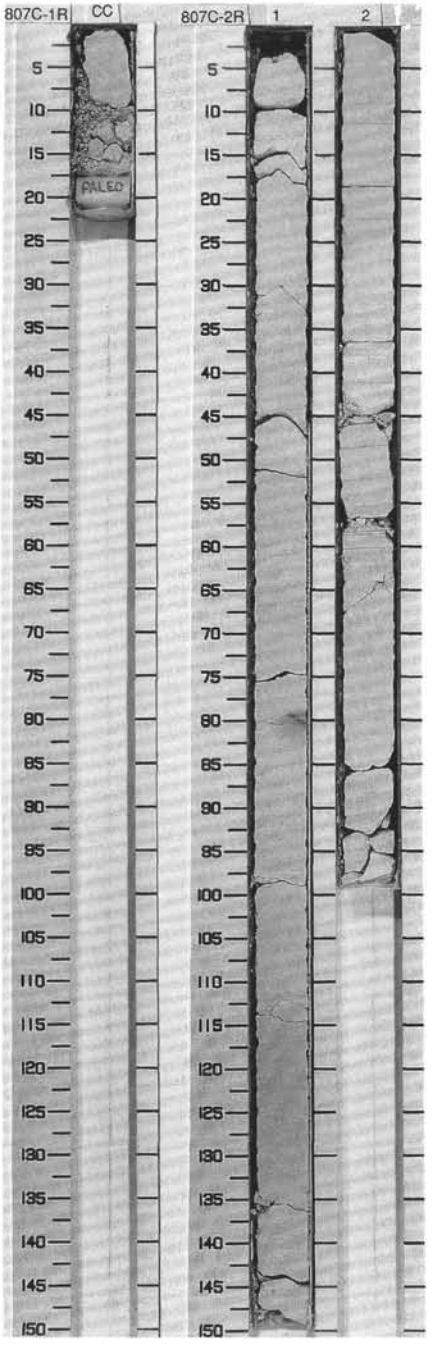
	CC, 6 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Foraminifers	12
Nannofossils	80
Quartz	Tr
Radiolarians	3
Silicoflagellates	Tr

SITE 807 HOLE C CORE 2R CORED INTERVAL 789.7-799.3 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
LOWER OLIGOCENE	A/M	A/M	A/M	A/M		V=1791 ● 0.51.0 P=1.85 ● 0.51.6 P=1.82	● %$CaCO_3$=96.1 %$CaCO_3$ ● =95.0	1	0.5					NANNOFOSSIL CHALK with FORAMINIFERS
	P19	NP23	*Dorcadospyris ateuchus / Theocotyle tuberosa*	*Rocella vigilans?*				2	1.0				*	Major lithology: This core contains heavily bioturbated, white (2.5Y 8/0) to pale pink (5RP 8/2) NANNOFOSSIL CHALK with FORAMINIFERS. A well-developed *Zoophycos* trace fossil is present in Section 1, 110-130 cm. Gray (N4/) microstylolites are common below Section 2, 30 cm.

SMEAR SLIDE SUMMARY (%):

	2, 39 D
TEXTURE:	
Sand	20
Silt	75
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	82
Quartz	Tr
Radiolarians	3
Silicoflagellates	Tr

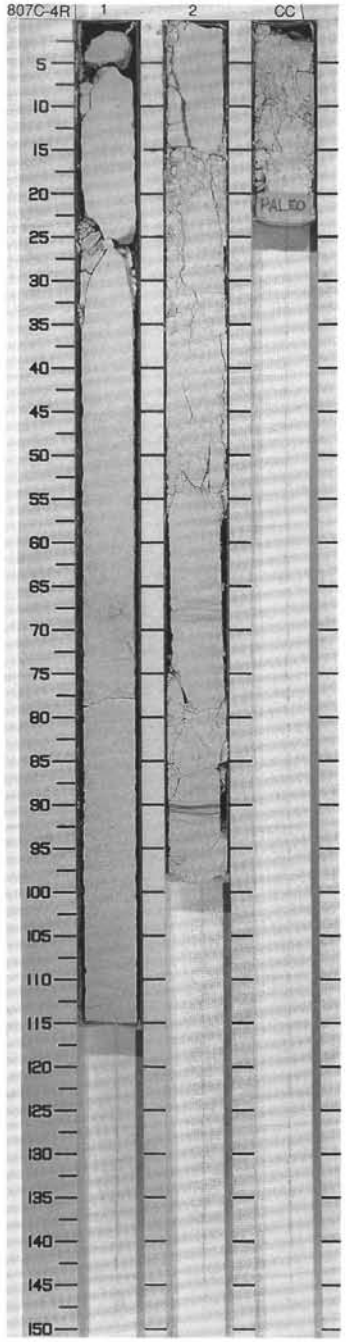


SITE 807 HOLE C CORE 3R CORED INTERVAL 799.3-809.0 mbsf

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
LOWER OLIGOCENE	A/M	A/M	A/M	C/M										THE ENTIRE CORE CATCHER (3 cm) WAS USED FOR PALEONTOLOGICAL ANALYSIS.
	P19	NP23	*Theocotyle tuberosa*	*Rocella vigilans?*										

SITE 807 HOLE C CORE 4R CORED INTERVAL 809.0-818.6 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
LOWER OLIGOCENE	C/P	A/M	A/M	C/M		χ=1809 β=48.5 ρ=1.87 χ=1857 β=52.0 ρ=1.82	%$CaCO_3$=90.5 %$CaCO_3$=95.0	1 2 CC	0.5 1.0				OG W *	NANNOFOSSIL CHALK with FORAMINIFERS Major lithology. This core contains heavily to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Diffuse and discontinuous, wavy, light gray (N7/) color bands (<1 mm thick) are observed in Section 1. Gray (N6/) microstylolites are common in Section 2. SMEAR SLIDE SUMMARY (%): 2, 60 D TEXTURE: Sand 20 Silt 70 Clay 5 COMPOSITION: Foraminifers 15 Nannofossils 80 Quartz Tr Radiolarians 3 Silicoflagellates Tr
	P19	NP23	*Theocotyle tuberosa*	*Rocella vigilans?*										



SITE 807 HOLE C CORE 5R CORED INTERVAL 818.6-828.3 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
LOWER OLIGOCENE	A/M P19	A/M NP23		A/M *Coscinodiscus excavatus*										THE ENTIRE CORE CATCHER (2 cm) WAS USED FOR PALEONTOLOGICAL ANALYSIS.

SITE 807 HOLE C CORE 6R CORED INTERVAL 828.3-838.0 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
LOWER OLIGOCENE	A/M	P19	A/M	NP23	A/G	*Theocotyle tuberosa*	A/M-G	*Coscinodiscus excavatus*											

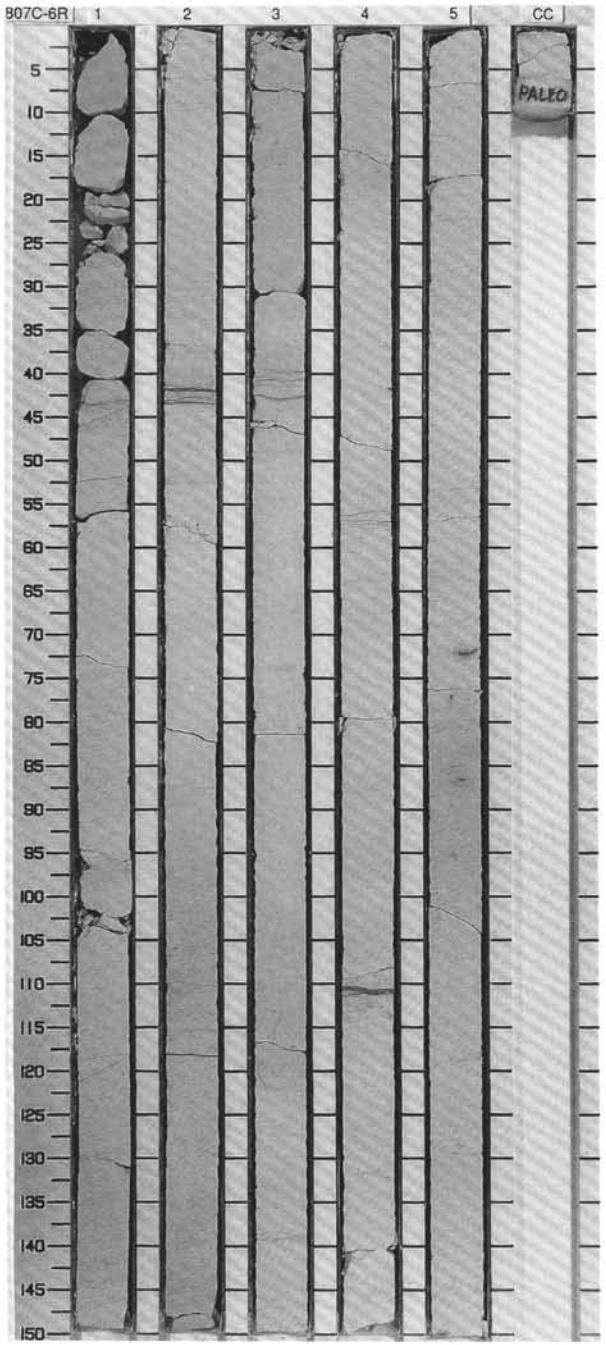
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) to pale purple (5P 6/2) and grayish blue (5PB 5/2) NANNOFOSSIL CHALK with FORAMINIFERS. The entire core is moderately to heavily bioturbated. Intervals of discontinuous, thin (< 1 mm thick), gray (N5/) "incipient" microstylolites/flaser structures are common throughout the core. Well-developed, 1 mm to 1 cm thick, gray (N4/) stylolites are present in Sections 1 through 4.

SMEAR SLIDE SUMMARY (%):

	2, 58 D
TEXTURE:	
Sand	25
Silt	70
Clay	5
COMPOSITION:	
Foraminifers	20
Nannofossils	75
Quartz	Tr
Radiolarians	3
Silicoflagellates	Tr



SITE 807 HOLE C CORE 7R CORED INTERVAL 838.0-847.7 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	LITHOLOGIC DESCRIPTION
LOWER OLIGOCENE	A/M P19	A/M NP23		A/M *Coscinodiscus excavatus*				CC					*	NANNOFOSSIL CHALK with FORAMINIFERS Major lithology: This core contains white (2.5Y 8/0), highly fragmented NANNOFOSSIL CHALK with FORAMINIFERS. SMEAR SLIDE SUMMARY (%): CC, 5 D TEXTURE: Sand 20 Silt 75 Clay 5 COMPOSITION: Foraminifers 20 Nannofossils 75 Quartz Tr Radiolarians 2 Silicoflagellates Tr

SITE 807 HOLE C CORE 8R CORED INTERVAL 847.7-857.4 mbsf

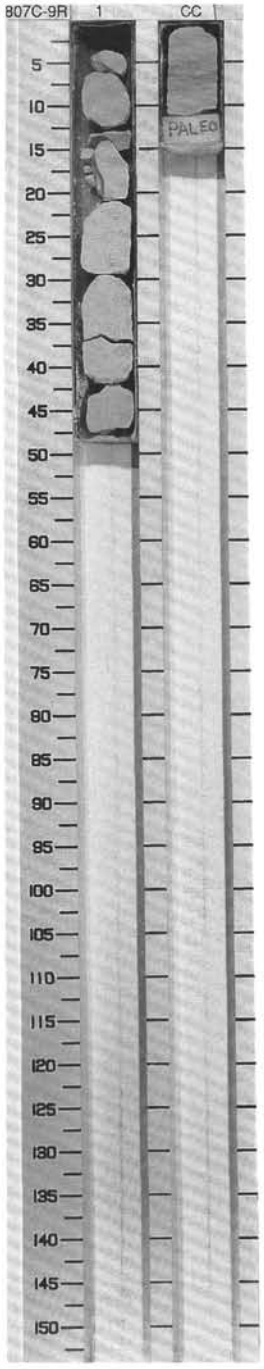
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
LOWER OLIGOCENE	C/M P19	A/M NP23	A/M *Theocotyle tuberosa*	A/M *Coscinodiscus excavatus*										THE ENTIRE CORE CATCHER (1 cm) WAS USED FOR PALEONTOLOGICAL ANALYSIS.

SITE 807 HOLE C CORE 9R CORED INTERVAL 857.4-867.1 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 OLIGOCENE	P19 A/M	NP22 A/M		*Coscinodiscus excavatus* A/M		Φ=53.2 ● ρ=1.80 V=1853 %CaCO3 =91.7 ●		1 CC					*	NANNOFOSSIL CHALK Major lithology: This core contains moderately to heavily bioturbated, white (2.5Y 8/0) to light greenish gray (5G 7/1) NANNOFOSSIL CHALK. Thin (< 1 mm thick) light greenish gray (5G 7/1) flaser structures are common in the lower portion of Section 1 and throughout the CC. SMEAR SLIDE SUMMARY (%): 1, 32 D TEXTURE: Sand 7 Silt 90 Clay 3 COMPOSITION: Foraminifers 9 Nannofossils 88 Quartz Tr Radiolarians 3 Silicoflagellates Tr

807 C 10R NO RECOVERY

807 C 11R NO RECOVERY



SITE 807 HOLE C CORE 12R CORED INTERVAL 876.6-881.9 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
LOWER OLIGOCENE	C/M	A/M	A/M	A/M		V=1771 ρ=2.5 ρ=1.83 %CaCO3 =95.0	● ●	1					*

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Heavy bioturbation is evident from faint mottles, burrows and disseminated pyrite specks. *Ultra-thin (<<1 mm) wavy and braided color bands are present throughout the core.*

SMEAR SLIDE SUMMARY (%):

	1, 30 D
TEXTURE:	
Sand	8
Silt	80
Clay	12
COMPOSITION:	
Diatoms	Tr
Foraminifers	12
Nannofossils	87
Radiolarians	Tr
Siliceous fragments	Tr

SITE 807 HOLE C CORE 13R CORED INTERVAL 881.9-888.9 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
LOWER OLIGOCENE	C/M	A/P	A/M					CC			X		*

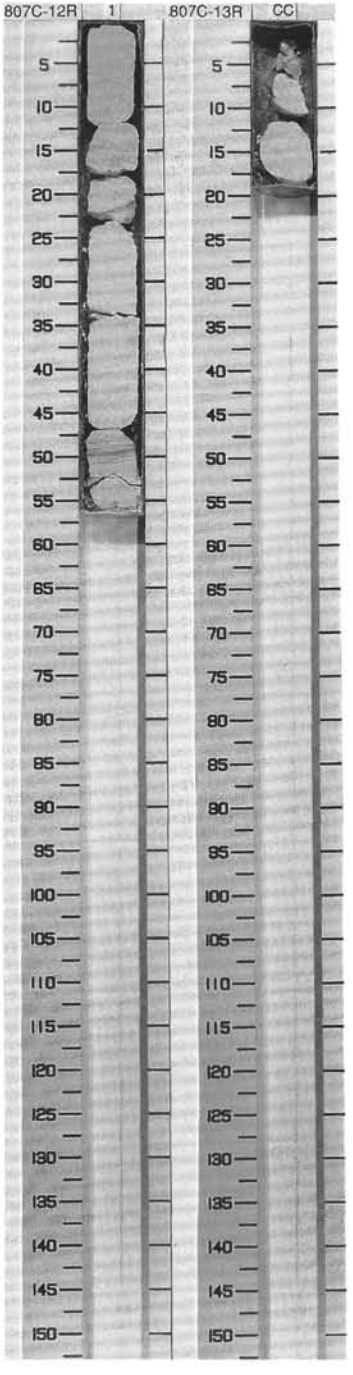
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains bioturbated, white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. A few specks of an opaque mineral are scattered over the few chert nodules in the core.

SMEAR SLIDE SUMMARY (%):

	1, 9 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Accessory minerals	1
Foraminifers	20
Nannofossils	78
Siliceous fragments	1



SITE 807 HOLE C CORE 14R CORED INTERVAL 888.9-893.9 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
LOWER OLIGOCENE	C/M	A/P	A/P	A/M-G				CC			X		*	NANNOFOSSIL CHALK with FORAMINIFERS

P18 NP21 *Theocotyle tuberosa* *Coscinodiscus excavatus*

Major lithology: This core contains bioturbated white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. A few specks of an opaque mineral are scattered over the few chert nodules in the core.

SMEAR SLIDE SUMMARY (%):

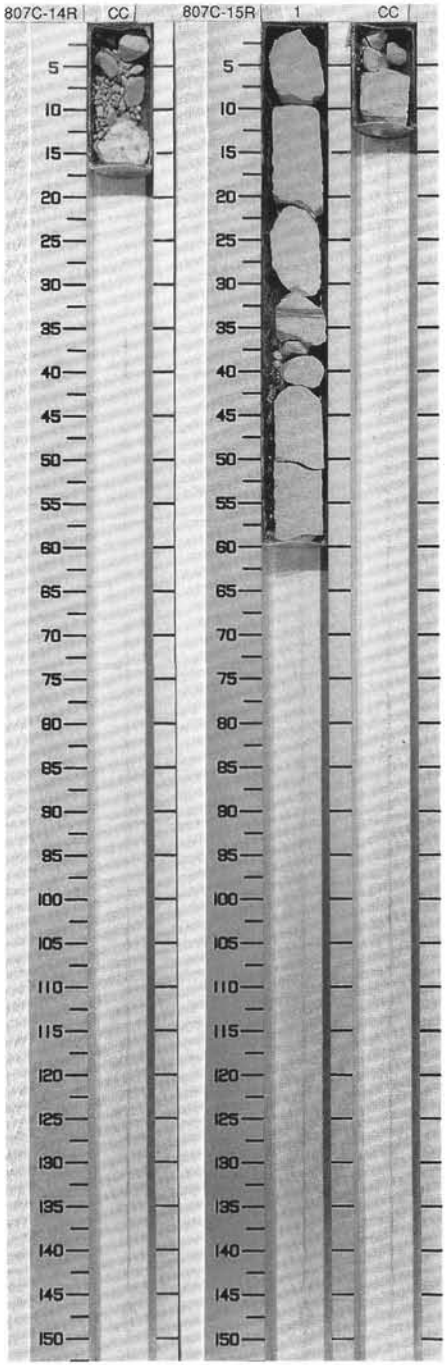
	CC, 5 D
TEXTURE:	
Sand	8
Silt	65
Clay	27
COMPOSITION:	
Accessory minerals	1
Foraminifers	18
Nannofossils	80
Siliceous fragments	1

SITE 807 HOLE C CORE 15R CORED INTERVAL 893.9-898.9 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
LOWER OLIGOCENE	A/M	A/M	A/G					1	0.5					NANNOFOSSIL CHALK
								CC						

P18 NP21 *Theocotyle tuberosa*

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. Moderate to heavy bioturbation is evident from burrows and abundant trace fossils that appear compacted. One thin zone (1 cm thick) of braided, ultra-thin, light olive gray (5Y 6/2) color bands is present in Section 1, 34 cm. Stylolites are noted throughout the core.



SITE 807 HOLE C CORE 16R CORED INTERVAL 898.9-903.9 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
LOWERMOST OLIGOCENE	F/P	A/P	A/M	*Theocotlye tuberosa*		V-2005 ● ρ 1.92	%$CaCO_3$ -91.7	1	0.5 1.0				*
	P18?	NP21											
				A/M-G basal *Coscinodiscus excavatus*									

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Numerous ultra-thin, braided, light olive gray (5Y 6/2) color bands/stylolites are located in Section 1 at 65-78 cm and 109-115 cm. Heavy bioturbation is indicated by trace fossils that appear to have been compacted.

SMEAR SLIDE SUMMARY (%):

	1, 85 D
TEXTURE:	
Sand	3
Silt	75
Clay	22
COMPOSITION:	
Foraminifers	10
Nannofossils	89
Radiolarians	Tr
Siliceous fragments	1
Siliceous sponge spicules	Tr

SITE 807 HOLE C CORE 17R CORED INTERVAL 903.9-908.9 mbsf

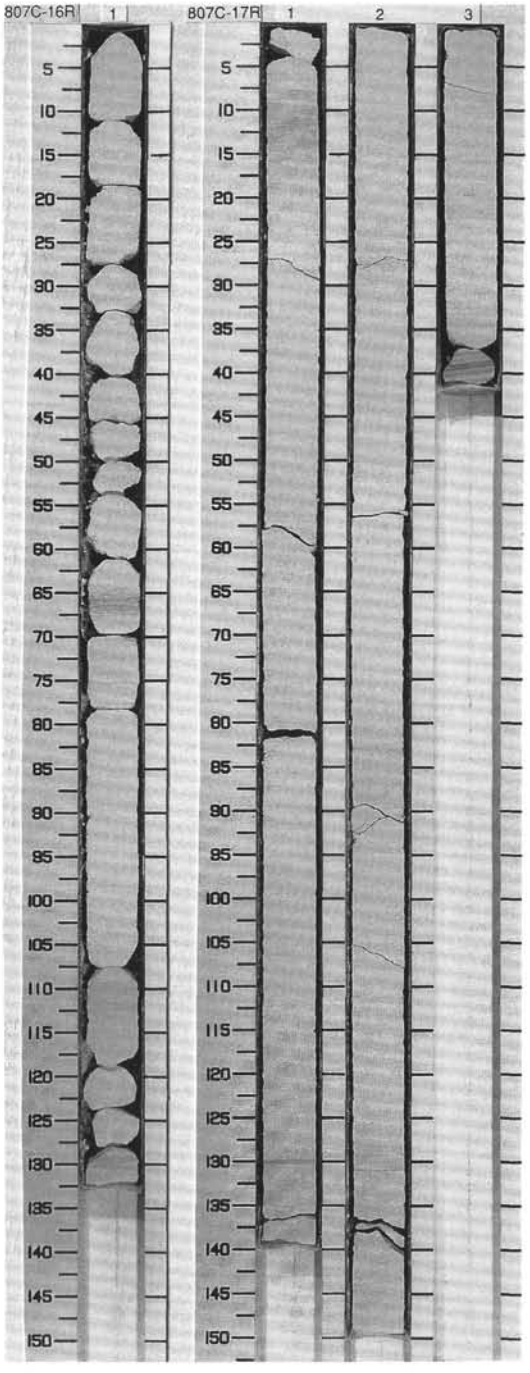
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWERMOST OLIGOCENE	R/P	A	A/M	C-A/G		V-1835 ● ρ 2.05 ρ 1.83 V-1752 ρ 1.83	%$CaCO_3$ +92.6 %$CaCO_3$ +92.0	1	0.5 1.0				CW
	P18?	NP21	*Cryptopora ornata* [= upper *Throsocyrtis bromia*]	*Bacteriopsis bruni*				2				SGS	*
								3					

NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS to FORAMINIFER NANNOFOSSIL CHALK. There are several 5 to 10 cm thick zones of braided, light olive gray (5Y 6/2) color bands. Several gray bands are very distinct. Bioturbation structures are common and include mottles and trace fossils. The lowermost part of the core contains abundant faint, pale purple (5P 6/2) to greenish gray (5G 6/1) color bands. The base of the core has a 5 cm thick interval of very distinct, thin (<<1 mm), horizontal, straight color bands.

SMEAR SLIDE SUMMARY (%):

	2, 75 D
TEXTURE:	
Sand	10
Silt	80
Clay	10
COMPOSITION:	
Diatoms	Tr
Foraminifers	25
Nannofossils	69
Radiolarians	1
Siliceous fragments	4
Siliceous sponge spicules	Tr



SITE 807 HOLE C CORE 18R CORED INTERVAL 908.9-913.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	BIOSTRAT. ZONE/ FOSSIL CHARACTER: NANNOFOSSILS	BIOSTRAT. ZONE/ FOSSIL CHARACTER: RADIOLARIANS	BIOSTRAT. ZONE/ FOSSIL CHARACTER: DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
UPPER EOCENE	C/M	A	A/G	C-A/M-G		●	●	CC					*	NANNOFOSSIL CHALK with FORAMINIFERS

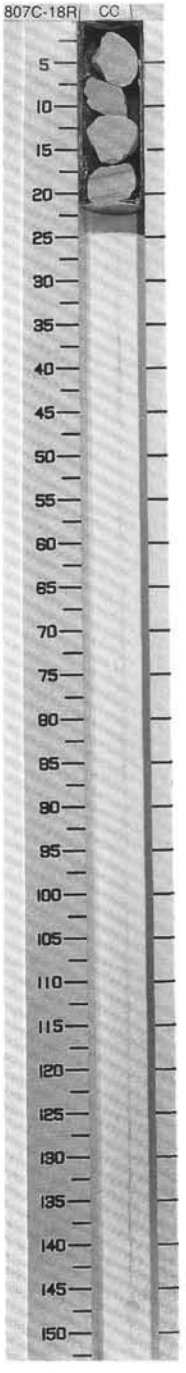
Cryptopora ornata [upper Thyrosocyrtis bromia] Baxteriopsis bruni

P17 NP19 - NP20

Major lithology: This core contains white (2.5Y 8/0), moderately bioturbated NANNOFOSSIL CHALK with FORAMINIFERS. Gray (N6/) microstylolites and flaser structures are common.

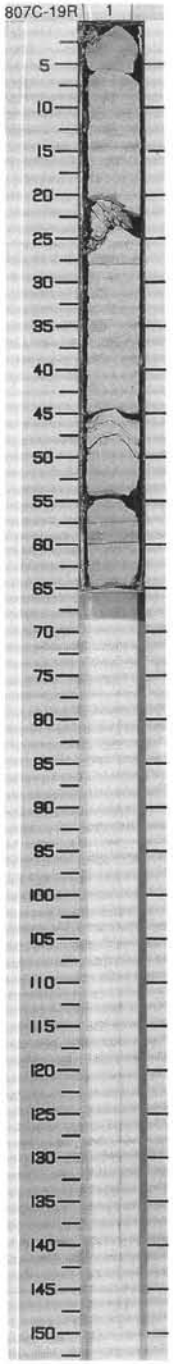
SMEAR SLIDE SUMMARY (%):

	CC, 10 D
TEXTURE:	
Sand	15
Silt	81
Clay	4
COMPOSITION:	
Foraminifers	15
Nannofossils	83
Radiolarians	1
Siliceous sponge spicules	1



SITE 807 HOLE C CORE 19R CORED INTERVAL 913.9-918.9 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
UPPER EOCENE	A/M	A/P	A/M	C-A/M		Φ=51.7 ρ=1.83 %CaCO3=82.0		1	0.5				*	NANNOFOSSIL CHALK Major lithology: This core contains white (2.5Y 8/0), moderately bioturbated NANNOFOSSIL CHALK. Gray (N6/) microstylolites and color bands with flaser structures are common. SMEAR SLIDE SUMMARY (%): 1, 30 D TEXTURE: Sand 10 Silt 85 Clay 5 COMPOSITION: Diatoms 1 Foraminifers 5 Nannofossils 87 Radiolarians 3 Siliceous sponge spicules 2 Silicoflagellates 2
	P17	upper *Thyrosocyrtis bromia* NP19 - NP20	*Cryptopora ornata* [=upper *Thyrosocyrtis bromia*]	*Baxteriopsis bruni*										



SITE 807 HOLE C CORE 20R CORED INTERVAL 918.9-923.9 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
UPPER EOCENE	P17 A/M	NP19 - NP20 A/P	*Cryptopora ornata* [=upper *Thyrosocyrtis bromia*] A/M	*Baxteriopsis bruni* C-A/M				1					*	NANNOFOSSIL CHALK Major lithology: This core contains white (2.5Y 8/0), moderately bioturbated NANNOFOSSIL CHALK. Stylolites are present in Section 1 at 12-15 cm. SMEAR SLIDE SUMMARY (%): 1, 10 D TEXTURE: Sand 10 Silt 8 Clay 5 COMPOSITION: Diatoms 1 Foraminifers 8 Nannofossils 87 Radiolarians 2 Siliceous sponge spicules 2

SITE 807 HOLE C CORE 21R CORED INTERVAL 923.9-933.7 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
UPPER EOCENE	P16 - P17 A/M	NP19 - NP20 A/P	*Cryptopora ornata* [=upper *Thyrosocyrtis bromia*] A/M	*Baxteriopsis bruni* C/P-M		Φ=47.0 ● ρ=1.91 V=1838	%CaCO3 =91.9 ●	1					*

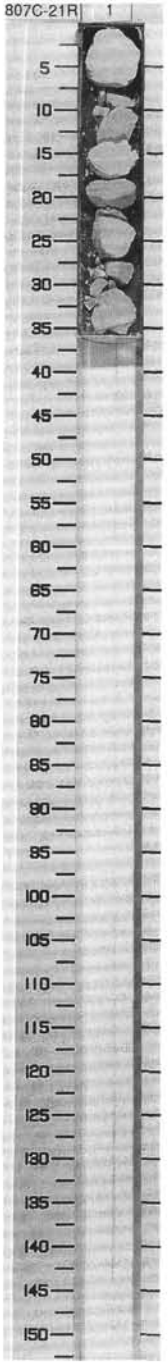
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0), moderately bioturbated NANNOFOSSIL CHALK. A gray (N6/) color band with flaser structure is noted at 17-20 cm.

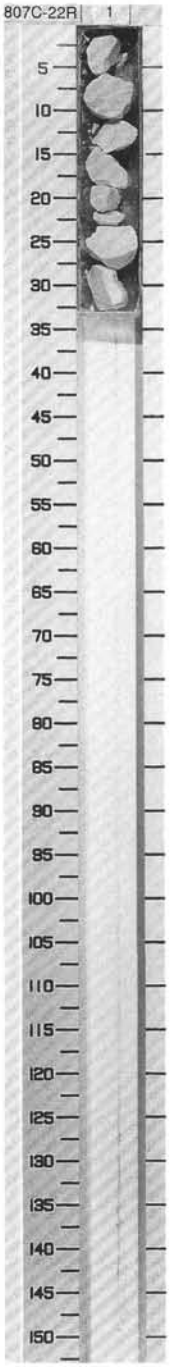
SMEAR SLIDE SUMMARY (%):

	1, 20 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	7
Nannofossils	82
Radiolarians	5
Siliceous sponge spicules	3
Silicoflagellates	2



SITE 807 HOLE C CORE 22R CORED INTERVAL 933.7-938.7 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	LITHOLOGIC DESCRIPTION
UPPER EOCENE	P14 - P17 C/P	NP17 - NP19 A/P	Cryptopora ornata [=upper Thyrosocyrtis bromia] A/P	Asterolampra marylandica? F-C/P-M				1					*	NANNOFOSSIL CHALK with FORAMINIFERS Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Moderate to heavy bioturbation is indicated by mottling and mm scale pyrite-filled burrows. SMEAR SLIDE SUMMARY (%): 1, 19 D TEXTURE: Sand 15 Silt 81 Clay 4 COMPOSITION: Diatoms 1 Foraminifers 10 Nannofossils 78 Radiolarians 4 Siliceous sponge spicules 5 Silicoflagellates 2



SITE 807 HOLE C CORE 23R CORED INTERVAL 938.7-943.7 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
UPPER EOCENE	C/M P15 - P17	A/P NP17 - NP19	A/P *C. bandyca* [=middle *Thyrosocyrtis bromia*]	F-C/P-M	V=1935	V=1919 ϕ=48.1 ρ=1.89 V=2015 ϕ=44.6 ρ=1.92 V=1898 ϕ=50.2 ρ=1.84	%$CaCO_3$=91.5 %$CaCO_3$=91.8 %$CaCO_3$=85.0 %$CaCO_3$=91.2	1 2 3 4 CC	0.5 1.0			OG IW	*

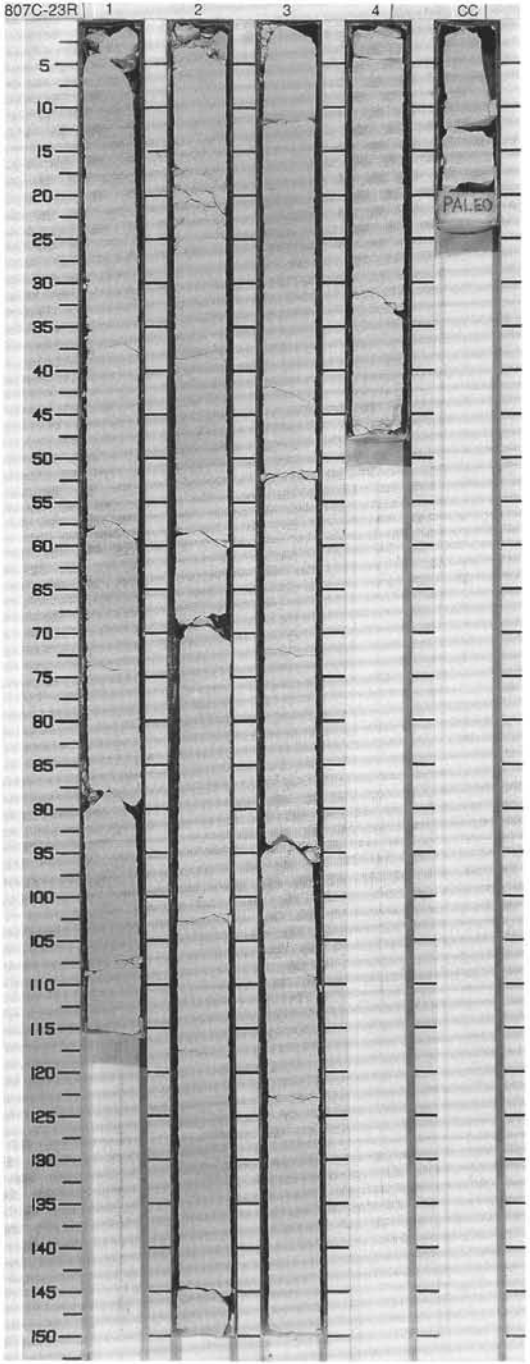
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. It is moderately to heavily bioturbated with mm to cm scale, generally horizontal and compacted burrows.

SMEAR SLIDE SUMMARY (%):

	1, 58 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Diatoms	1
Foraminifers	8
Nannofossils	80
Radiolarians	4
Siliceous sponge spicules	6
Silicoflagellates	1



SITE 807 HOLE C CORE 24R CORED INTERVAL 943.7-948.4 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 EOCENE	F/M P15 - P17	A/P NP17 - NP19	A/M C. bandyca [=middle Thyrosocyrtis bromia]	C/M Asterolampra marylandica ?		V-1804 ϕ=51.0 ρ=1.82 V-1838 ϕ=48.0 ρ=1.88	%CaCO3=91.0 %CaCO3=91.8	1 2 CC	0.5 1.0				LND

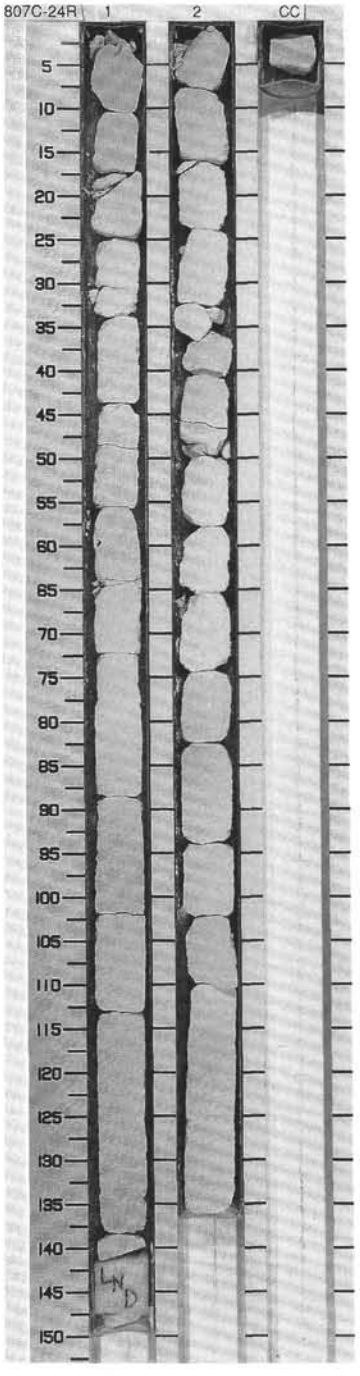
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. It is moderately to heavily bioturbated with mm to cm scale, flattened burrows and mm scale pyrite filled burrows. Burrows, grading into flaser structures, are noted in Section 1, 90-105 cm, and a single, 1 cm thick light gray (N7/) color band with only slight flaser structure is observed in the CC.

SMEAR SLIDE SUMMARY (%):

	1, 100 D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	4
Nannofossils	90
Quartz	Tr
Radiolarians	4
Siliceous sponge spicules	Tr

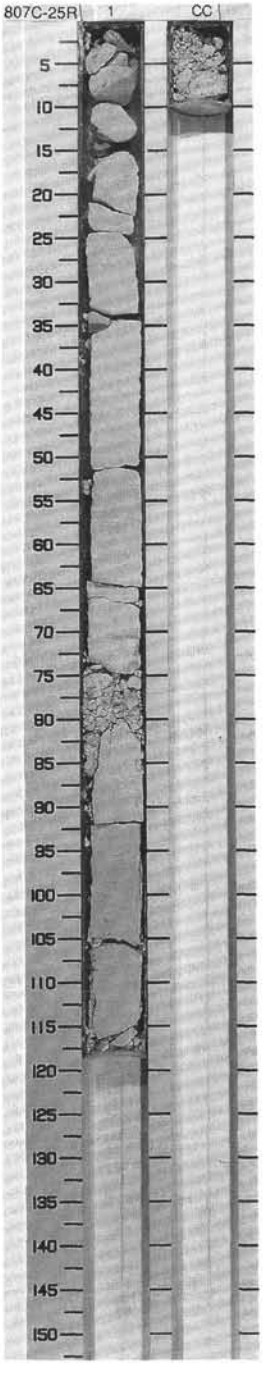


SITE 807 HOLE C CORE 25R CORED INTERVAL 948.4-958.1 mbsf

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
UPPER EOCENE	F/M P15 - P17	A/M NP17 - NP19	A/M	F/P-M		V-1902 ρ=47.1 ρ=1.90	%CaCO3 =87.5	1	0.5 1.0					NANNOFOSSIL CHALK Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. Moderate to heavy bioturbation is indicated by mottling in shades of white. SMEAR SLIDE SUMMARY (%): 1, 100 D TEXTURE: Sand 10 Silt 85 Clay 5 COMPOSITION: Diatoms Tr Foraminifers 2 Nannofossils 90 Quartz Tr Radiolarians 3 Siliceous sponge spicules Tr

C. bandyca [=middle T. bromia]

Asterolampra marylandica?



SITE 807 HOLE C CORE 26R CORED INTERVAL 958.1-967.8 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
MIDDLE EOCENE?	?	NP17 - NP19	*C. bandyca* [=middle *T. bromia*]	B		V=2003 ●2.356 ●2.210	%CaCO3 ●94.8	1	0.5 1.0				*
	R/P	A/P	R/P					CC					

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK. Moderate to heavy bioturbation is indicated by mottling in shades of white. A single stylolite is present in Section 1, 45 cm, and zones with flaser structures are noted in Section 1, 50-57 cm and 78-85 cm. Chert nodules surrounded by thin, partly silicified rims are found near the bottom of the core.

SMEAR SLIDE SUMMARY (%):

	1, 100 D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Diatoms	Tr
Foraminifers	8
Nannofossils	85
Quartz	Tr
Radiolarians	3
Siliceous sponge spicules	Tr

SITE 807 HOLE C CORE 27R CORED INTERVAL 967.8-977.5 mbsf

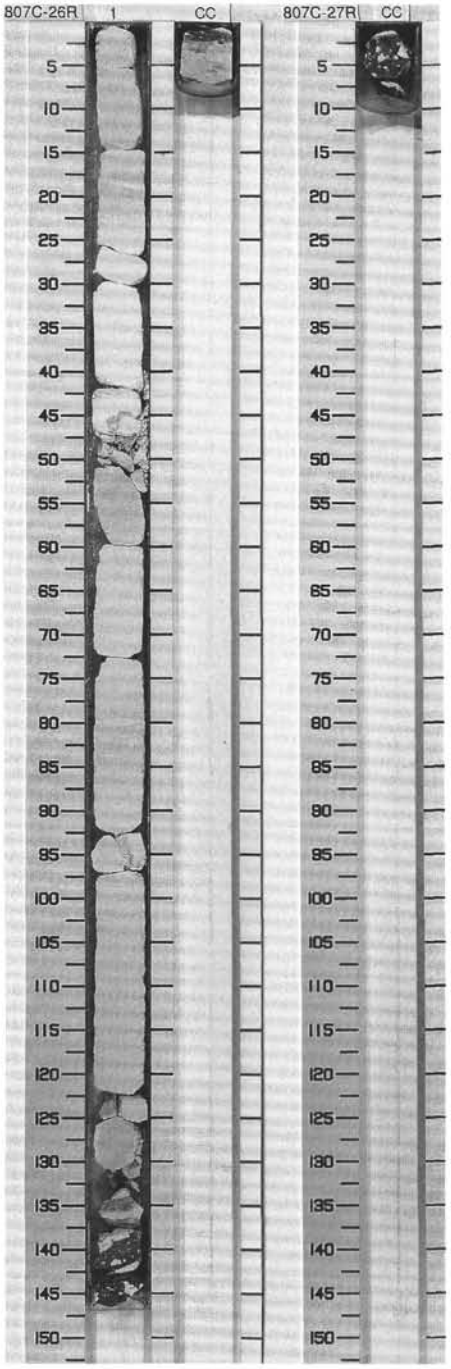
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE EOCENE?	A/P	NP17 - NP19	B	B				CC					

LITHOLOGIC DESCRIPTION

CHERT

Major lithology: The core contains two fragments of gray (N5) CHERT, probably of nodular origin. The larger fragment is 6 cm in diameter. The smaller fragment is 3 cm in diameter.

Minor lithology: White (2.5Y 8/0) NANNOFOSSIL CHALK occurs around the perimeter of the chert and is present as 5 mm wide inclusions in the chert.

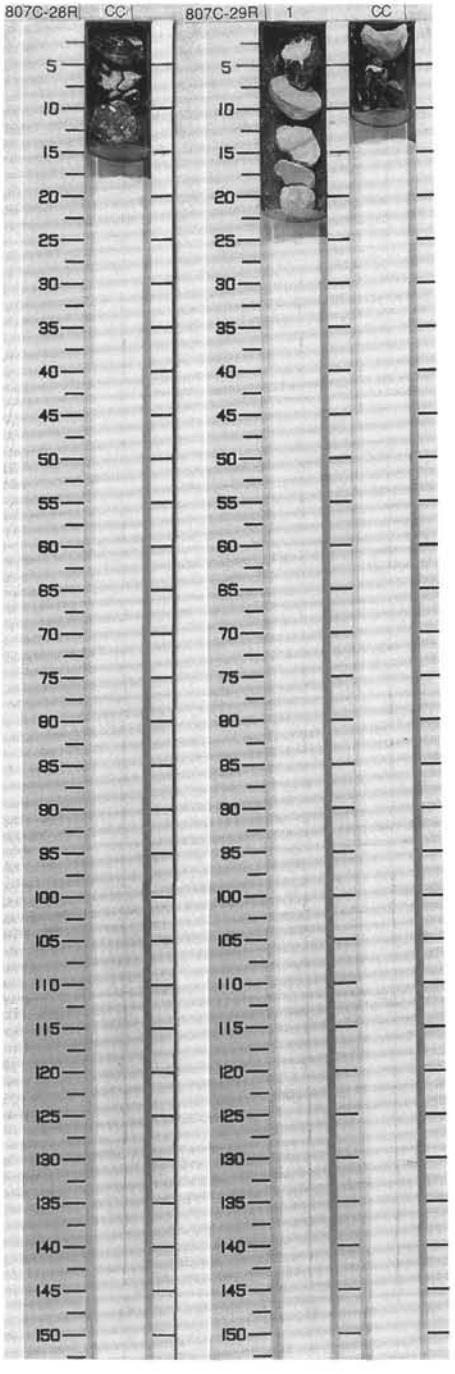


SITE 807 HOLE C CORE 28R CORED INTERVAL 977.5-987.1 mbsf

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
MIDDLE EOCENE?	A/P		B					CC						CHERT Major lithology: The majority of the recovered core is gray (N5) CHERT, probably of nodular origin. The fragments are 2 to 5 cm in diameter. Minor lithology: White (2.5Y 8/0) NANNOFOSSIL CHALK occurs around the perimeter of the chert and as inclusions in the chert.
NP17 - NP19														

SITE 807 HOLE C CORE 29R CORED INTERVAL 987.1-996.8 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
MIDDLE EOCENE	A/P	NP16	R/P	B				1					•	NANNOFOSSIL CHALK and CHERT Major lithology: The dominant lithology of this core is white (2.5Y 8/0) NANNOFOSSIL CHALK. It is slightly to moderately bioturbated with flattened horizontal burrows. Flaser structures and microstylolites are observed in Section 1, 13-15 cm. Gray (N5/) CHERT, probably of nodular origin, constitutes the second major lithology. The chert has a horizontal contact with the chalk and contains mm scale chalk inclusions. SMEAR SLIDE SUMMARY (%): 1, 10 D TEXTURE: Sand 10 Silt 85 Clay 5 COMPOSITION: Diatoms Tr Foraminifers 6 Nannofossils 90 Quartz Tr Radiolarians 2 Siliceous sponge spicules Tr
MIDDLE - UPPER EOCENE								CC						



SITE 807 HOLE C CORE 30R CORED INTERVAL 996.8-1006.5 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
MIDDLE EOCENE	A/M P14	A/M NP16	B	B		V=1971 ● Φ=43.7 ρ=1.96 V=1982 Φ=43.4 ρ=1.98 ●		1 2 CC	0.5 1.0	VOID			IW

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains white (5Y 8/1) NANNOFOSSIL CHALK with FORAMINIFERS. They are abundant, very thin (<< 1 mm), wavy, braided, gray (5Y 6/1) color bands that appear as flaser structures. Abundant, faint burrows have been compacted.

Minor lithology: Dark gray (5Y 6/1) CHERT is present as cobbles within the core.

SMEAR SLIDE SUMMARY (%):

	2, 40 D
TEXTURE:	
Sand	4
Silt	86
Clay	10
COMPOSITION:	
Foraminifers	10
Nannofossils	90

SITE 807 HOLE C CORE 31R CORED INTERVAL 1006.5-1016.1 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
MIDDLE EOCENE	P10 - P14 R/P	NP16 A/P	*Podocyrtis chalara* C/P	B		V=2716 Φ=21.7 ρ=2.22 ●		1 CC	0.5			⊙	*

LITHOLOGIC DESCRIPTION

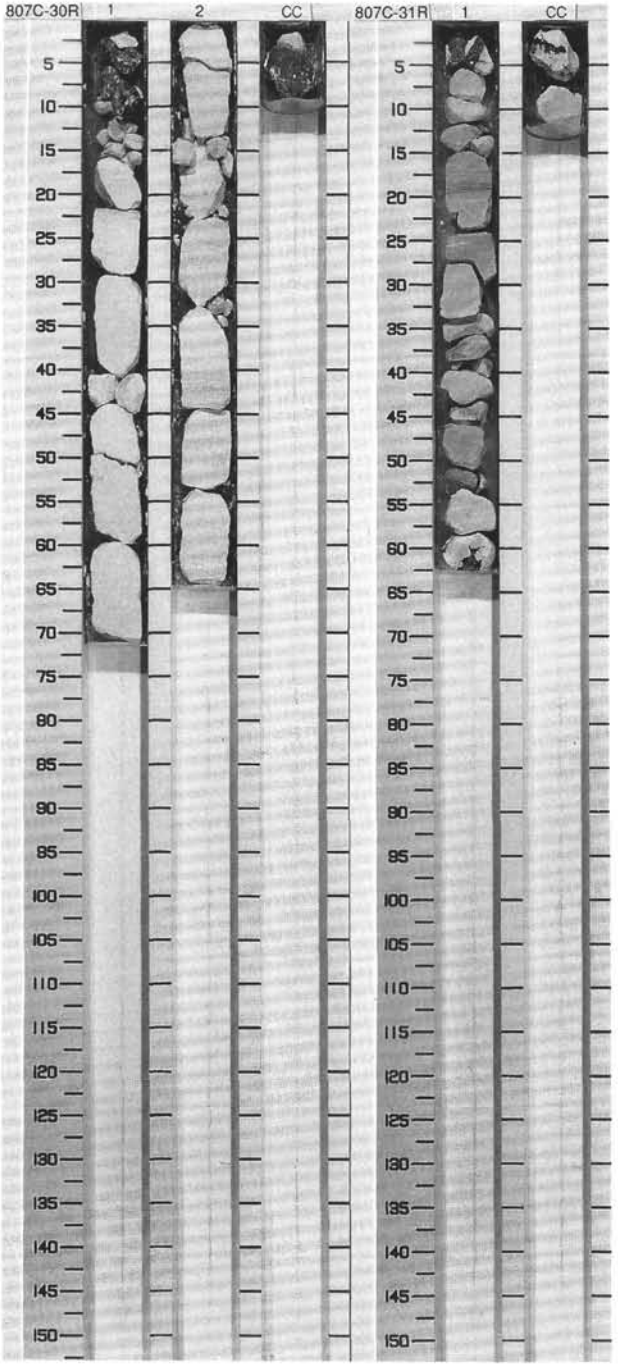
NANNOFOSSIL CHALK with FORAMINIFERS

Major lithology: This core contains numerous cobbles of NANNOFOSSIL CHALK with FORAMINIFERS. It is white (2.5Y 8/0) and greenish gray (5G 7/1) in color. The greenish gray color comes from abundant flaser structures/color bands, which occur in cm scale zones. The chalks are extremely well-cemented.

Minor lithology: This core also contains several cobbles of white (2.5Y 8/0) LIMESTONE and several cobbles of CHERT. Bands of chert run through some of the limestone cobbles.

SMEAR SLIDE SUMMARY (%):

	1, 20 D	1, 61 M
TEXTURE:		
Sand	2	---
Silt	80	70
Clay	18	30
COMPOSITION:		
Accessory minerals	---	Tr
Foraminifers	10	4
Nannofossils	89	96
Radiolarians	Tr	---
Siliceous fragments	Tr	---



SITE 807 HOLE C CORE 32R CORED INTERVAL 1016.1-1025.4 mbsf

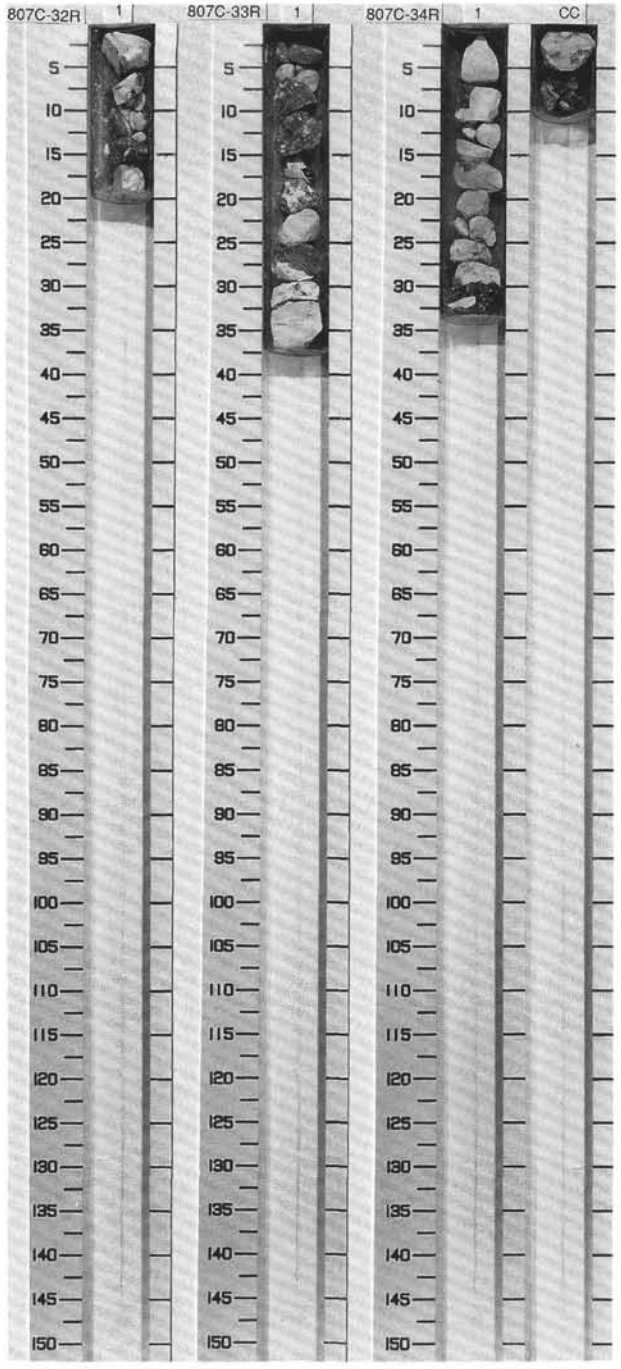
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
MIDDLE EOCENE	P12 - P14 C/P	NP15 - NP16 A/M	B	B				1						NANNOFOSSIL CHALK, LIMESTONE, and CHERT Major lithology: This core contains several cobbles of CHALK, LIMESTONE, and CHERT. The chalk and limestone are white (2.5Y 8/0), and the chert is mostly gray to dark gray (5Y 6/1).

SITE 807 HOLE C CORE 33R CORED INTERVAL 1025.4-1034.6 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
MIDDLE EOCENE	NP15 - NP16 F/P	*T. triacantha* - *T. bromia* R/P		B				1						CHERT, LIMESTONE, and CHALK Major lithology: This core contains several cobbles of CHERT, LIMESTONE, and CHALK. The limestone and chalk are mostly white (2.5Y 8/0). The chert is gray to dark gray (5Y 6/1). The limestone cobbles have inclusions of chert.

SITE 807 HOLE C CORE 34R CORED INTERVAL 1034.6-1044.3 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
MIDDLE EOCENE	P10 - P14 F/P	NP15 - NP16 A/P	B	B				1 CC						CHERT and LIMESTONE Major lithology: This core contains pebbles of LIMESTONE and CHERT. The limestone is light gray (5Y 3/1) and bioturbated. The chert is very dark gray (5Y 3/1). The limestone pebbles contain pieces of chert.

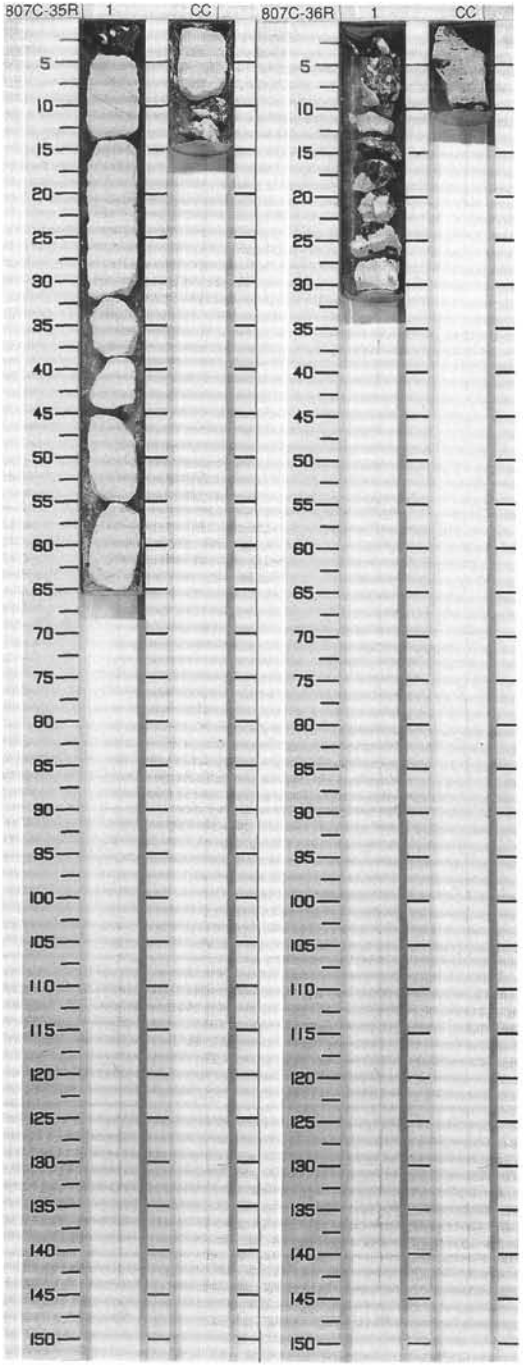


SITE 807 HOLE C CORE 35R CORED INTERVAL 1044.3-1054.0 mbsf

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 EOCENE	P10 - P14 A/M	NP15 - NP16 A/M	B	B		V=1772 D=1.45 P=1.94		1 CC	0.5				*	NANNOFOSSIL CHALK with FORAMINIFERS Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK with FORAMINIFERS. Moderate bioturbation is indicated from abundant compacted mottles. Steeply dipping stylolites are observed in Section 6, 10 cm. It is not clear if the dip is natural or the result of drilling disturbance. Several mottles appear to be aligned with the dipping stylolites. Minor lithology: Several pieces of dark gray (2.5Y 4/0) CHERT are present at the top of Section 1 and in the CC. SMEAR SLIDE SUMMARY (%): 1, 25 D TEXTURE: Silt 80 Clay 20 COMPOSITION: Accessory minerals Tr Foraminifers 20 Nannofossils 80

SITE 807 HOLE C CORE 36R CORED INTERVAL 1054.0-1063.7 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	LITHOLOGIC DESCRIPTION
MIDDLE EOCENE	P10 - P14 A/M	NP15 - NP16 R/P	*Podocyrtis chalara* R/P	B				1 CC			X			NANNOFOSSIL CHALK with FORAMINIFERS and CHERT Major lithology: This core contains white (5Y 8/1) NANNOFOSSIL CHALK with FORAMINIFERS and dark gray (2.5Y 4/0) CHERT. Drilling has brecciated the section.



SITE 807 HOLE C CORE 37R CORED INTERVAL 1063.7-1073.2 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
MIDDLE EOCENE	? R/P	NP15 - NP16 C/P	*T. triacantha* - *T. bromia* R/P	B		Φ-29.1 P-2.11		1					*

LITHOLOGIC DESCRIPTION

NANNOFOSSIL LIMESTONE to CHALK

Major lithology: The recovered material contains white (2.5Y 8/0) NANNOFOSSIL LIMESTONE to CHALK. Moderate bioturbation is indicated by compacted horizontal burrows. The hardness probably varies with silica content.

Minor lithology: A piece of reddish gray (10R 5/1) CHERT is present in Section 1, 26-29 cm. It has a sharp contact with the chalk and also contains cm scale inclusions of chalk.

SMEAR SLIDE SUMMARY (%):

	1, 15 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Carbonate particles	42
Foraminifers	8
Nannofossils	50

SITE 807 HOLE C CORE 38R CORED INTERVAL 1073.2-1082.4 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
MIDDLE EOCENE	C/M P11	A/P NP15	B	B				1	0.5				*

LITHOLOGIC DESCRIPTION

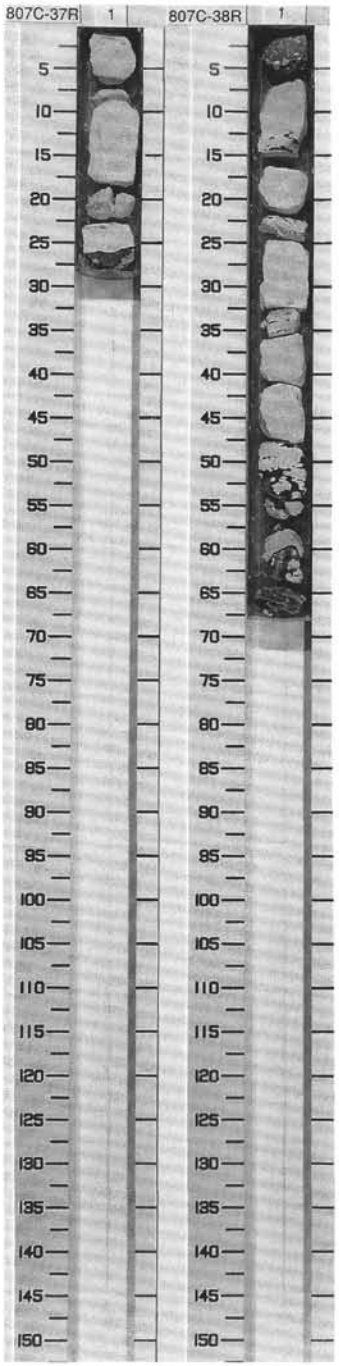
NANNOFOSSIL CHALK to SILICIFIED LIMESTONE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL CHALK to SILICIFIED LIMESTONE. It is moderately bioturbated with horizontal, compacted burrows.

Minor lithology: The core also contains gray (N6) CHERT, which may be nodular in origin and which contains cm scale bands and inclusions of chalk limestone.

SMEAR SLIDE SUMMARY (%):

	1, 30 D
TEXTURE:	
Sand	10
Silt	86
Clay	4
COMPOSITION:	
Carbonate particles	45
Foraminifers	5
Nannofossils	50



SITE 807 HOLE C CORE 39R CORED INTERVAL 1082.4-1092.0 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE EOCENE	? R/M	NP15 A/P	*Thyrosocyrtis triacantha* A/M	B				1			X X		*

LITHOLOGIC DESCRIPTION

CHERT and SILICIFIED LIMESTONE

Major lithology: The recovered material is dominated by CHERT, which may be nodular and contains up to cm size inclusions of limestone. The chert pieces are gray (N5 and 5YR 5/1) and dark reddish gray (5YR 4/2), and have chalk along some of the outer rims. The chert pieces vary between 1 cm and 5 cm in diameter.

The remainder of the recovered material is slightly bioturbated, white (2.5Y 8/0) SILICIFIED LIMESTONE.

SMEAR SLIDE SUMMARY (%):

	1, 23 D
TEXTURE:	
Silt	95
Clay	5
COMPOSITION:	
Carbonate particles	44
Foraminifers	1
Nannofossils	50
Siliceous fragments	5

SITE 807 HOLE C CORE 40R CORED INTERVAL 1092.0-1097.7 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE EOCENE	R/P ?	A/P NP14 - NP15	F/P *Theocotyle cryptocephala - Pterocodon ampla*	B		●21.8 ●27.8		1 2	0.5 1.0				TW *

LITHOLOGIC DESCRIPTION

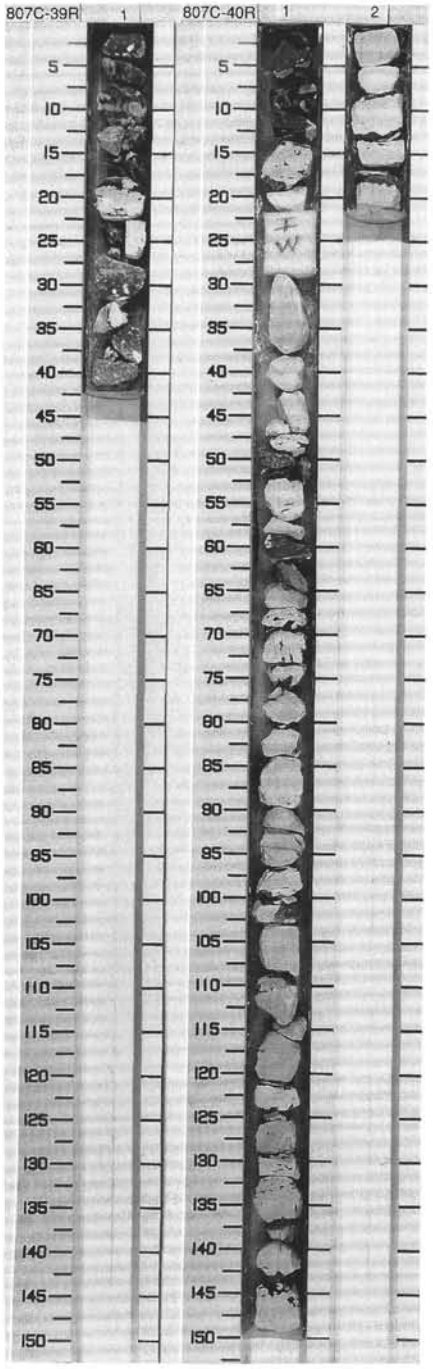
NANNOFOSSIL CHALK to SILICEOUS NANNOFOSSIL LIMESTONE and CHERT

Major lithology: The recovered material contains white (2.5Y 8/0 and 5Y 8/1) and moderately bioturbated NANNOFOSSIL CHALK to SILICEOUS NANNOFOSSIL LIMESTONE.

Compacted horizontal burrows are common. The core also contains reddish gray (10R 5/1) to gray (N6/) CHERT, possibly of nodular origin. It has thin layers and inclusions of chalk. Some of the chalk pieces contain layers and cm scale inclusions of chert.

SMEAR SLIDE SUMMARY (%):

	1, 38 D
TEXTURE:	
Silt	95
Clay	5
COMPOSITION:	
Carbonate particles	34
Foraminifers	4
Nannofossils	60
Siliceous fragments	2

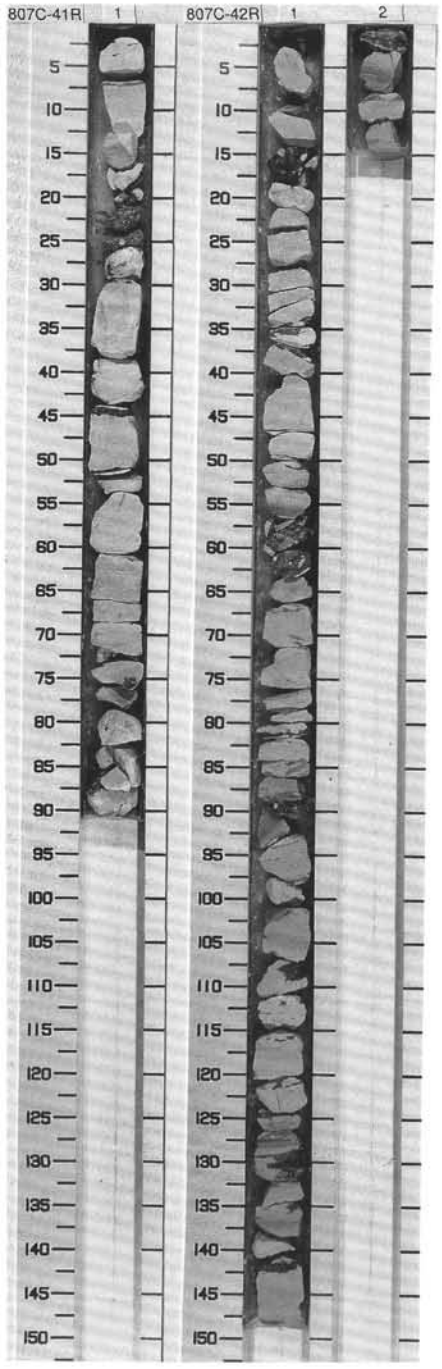


SITE 807 HOLE C CORE 41R CORED INTERVAL 1097.7-1102.4 mbsf

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 EOCENE?		C/P NP14	R/P ?	B		Φ=23.2 ρ=2.25		1	0.5				*	LIMESTONE Major lithology: This core contains white (2.5Y 8/0) LIMESTONE with flaser structures and relict bioturbation structures. Minor lithology: The limestone pieces have 0.5 cm thick rims of light greenish gray (5GY 7/1) CHALK. Gray (5Y 5/1) and reddish gray (5YR 5/2) CHERT nodules (up to 2 cm thick) with mm size inclusions of limestone comprise about 5% of the recovered material. SMEAR SLIDE SUMMARY (%): 1, 47 D — 1, 84 D TEXTURE: Sand 5 — Silt 90 95 Clay 5 5 COMPOSITION: Accessory minerals — 1 Carbonate particles — 47 Foraminifers 5 Tr Micrite 95 — Nannofossils — 50 Siliceous fragments — 2

SITE 807 HOLE C CORE 42R CORED INTERVAL 1102.4-1106.4 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
LOWER EOCENE	R/P ?	C/P NP12	R/P ?	B		Φ=26.0 ρ=2.21		1	0.5				*	LIMESTONE and CHERT Major lithology: This core contains white (5Y 8/1) LIMESTONE and light brownish gray (10YR 6/2) and gray (2.5YR 5/0) CHERT. The limestone is moderately bioturbated with compacted horizontal burrows and faint flaser structures. The limestone pieces contain as much as 50% chert in the form of thin stringers and inclusions. The chert is present as nodules (ca. 3 cm in diameter) with cm scale chalk/limestone inclusions. SMEAR SLIDE SUMMARY (%): 1, 57 D TEXTURE: Sand 30 Silt 65 Clay 5 COMPOSITION: Accessory minerals Tr Carbonate particles 35 Foraminifers Tr Nannofossils 60 Siliceous fragments Tr
								1	1.0					
								2						



SITE 807 HOLE C CORE 43R CORED INTERVAL 1106.4-1116.0 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
LOWER EOCENE	?	?	?	B		ϕ=16.7 ρ=2.28		1	0.5 1.0				**

LITHOLOGIC DESCRIPTION

LIMESTONE and CHERT

Major lithology: This core contains white (5Y 8/1) LIMESTONE and gray (2.5Y 5/0) CHERT. The limestone exhibits compacted burrows and wispy horizontal laminations. The chert is present as stringers and cm scale inclusions, as well as pieces up to 4 cm thick.

Minor lithology: A piece of white (10YR 8/1) RADIOLARITE is present in Section 1, 106 cm.

SMEAR SLIDE SUMMARY (%):

	1, 99 D	1, 110 M
TEXTURE:		
Sand	5	80
Silt	60	15
Clay	35	5
COMPOSITION:		
Calcareous fragments	38	—
Diatoms	Tr	—
Foraminifers	1	—
Nannofossils	60	—
Quartz	—	Tr
Radiolarians	1	95
Siliceous fragments	—	Tr
Siliceous sponge spicules	Tr	—
Silicoflagellates	—	Tr

SITE 807 HOLE C CORE 44R CORED INTERVAL 1116.0-1125.6 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
LOWER EOCENE	? R/P	NP12 C/P	B	B		V=2520 ϕ=30.2 ρ=2.20		1	0.5				* * *

LITHOLOGIC DESCRIPTION

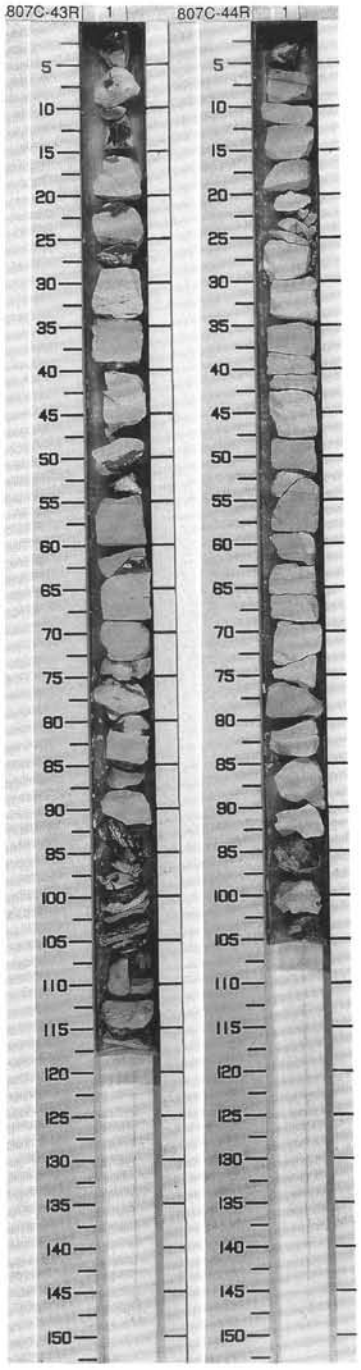
LIMESTONE

Major lithology: This core contains white (2.5Y 8/0) LIMESTONE. Very thin, wavy greenish gray (5GY 7/1) color bands are common throughout the core. Stylolites are common in Section 1, at 40 and 67 cm, and a few pebbles of chalk are noted in Section 1, 22-25 cm. The limestone has very compacted, mm size burrows.

Minor lithology: Gray (2.5Y 5/0) CHERT pebbles are found at the top of the Section 1 and between 94-106 cm.

SMEAR SLIDE SUMMARY (%):

	1, 29 D	1, 46 D	1, 101 M
TEXTURE:			
Sand	9	2	5
Silt	90	50	75
Clay	1	48	20
COMPOSITION:			
Calcareous fragments	—	90	80
Foraminifers	10	—	—
Micrite	90	—	—
Nannofossils	—	—	10
Siliceous fragments	—	10	10



SITE 807 HOLE C CORE 45R CORED INTERVAL 1125.6-1135.2 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
LOWER EOCENE? [P4 - P5]	C/M	R/P ?	F/P	NP12 C/P	[NP9]	B	B	ρ=23.4 ρ=2.29 ρ=16.9 ρ=2.38 V-3280	1 2 CC	0.5 1.0			

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains LIMESTONE. It is white (2.5Y 8/0) to light gray (5Y 7/1) in color. The light gray color is found in zones composed of abundant wispy color bands, such as at Section 1, 86-150 cm, and Section 2,73-82 cm. Several well-formed chert nodules and chert bands are apparent (e.g. nodules at 3 cm and 52 cm in Section 1). A thin interval (2 cm) of fine, wavy, dark gray, purple, and light gray, flaser-like color bands is present at Section 1, 116-118 cm. A stylolite is observed at Section 1, at 132 cm. Section 1, 0-87 cm contains numerous small clasts.

SMEAR SLIDE SUMMARY (%):

	1, 45 D	2, 51 D	2, 79 M
TEXTURE:			
Sand	20	1	5
Silt	80	50	60
Clay	—	49	35
COMPOSITION:			
Accessory minerals	—	Tr	Tr
Calcareous fragments	—	26	95
Foraminifers	20	10	Tr
Micrite	80	—	—
Nannofossils	—	60	Tr
Radiolarians	—	Tr	Tr
Siliceous fragments	—	3	5

SITE 807 HOLE C CORE 46R CORED INTERVAL 1135.2-1140.2 mbsf

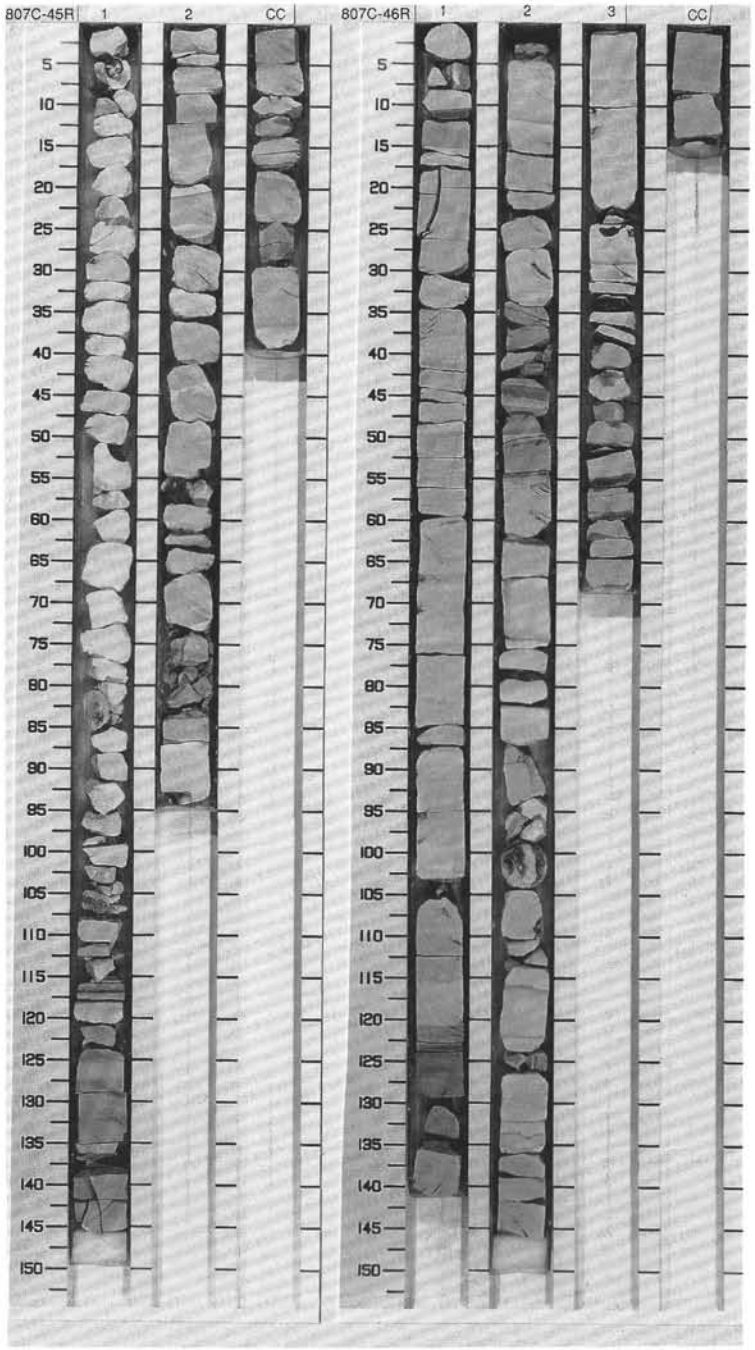
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER EOCENE	A/G P5	R/P NP11	R/P NP11	B	V-3520	V-4263		1 2 3 CC	0.5 1.0				TW

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 5Y 8/1) to light gray (5Y 7/1) LIMESTONE. Moderate to heavy bioturbation is indicated by elongate, compacted burrow traces. Faint, small-scale flaser structures are observed in the light gray (5Y 7/1) zones. Rare and thin (<2 mm thick) stylolites are present in Section 3.

Minor lithology: Dark gray (5YR 5/1), gray (N5/) and light gray (N6/) CHERT is observed in three forms: 1) horizontally discontinuous 1 to 2 mm thick layers 2) continuous horizontal layers, up to 1 cm thick, and 3) irregularly shaped masses in limestone, up to 2 cm in diameter.



SITE 807 HOLE C CORE 47R CORED INTERVAL 1140.2-1145.2 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PALEOCENE	R?	C/P	B	B		V=3799 ● ϕ=16.5 ρ=2.44 V=4305 ● V=4772		1, 2, CC	0.5, 1.0				* *

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 5Y 8/1) LIMESTONE. Moderate bioturbation is evident as elongate, compacted burrow traces. Faint, small-scale flaser structures are abundant. Thin (<1 mm thick) stylolites are present to abundant.

Minor lithology: Dark gray (5YR 5/1), gray (N5) and light gray (N6) CHERT is observed in three forms: 1) horizontally discontinuous 1 to 2 mm thick layers, 2) continuous horizontal layers, up to 12 cm thick, and 3) irregularly shaped masses in limestone, up to 2 cm in diameter. A layer of gray (N4), finely laminated VOLCANIC ASH, approximately 1 cm thick, is present at Section 1, 40 cm.

SMEAR SLIDE SUMMARY (%):

	1, 37 M	1, 40 M
TEXTURE:		
Sand	—	5
Silt	90	93
Clay	10	2
COMPOSITION		
Calcareous fragments	55	3
Nannofossils	—	2
Volcanic ash	45	95

SITE 807 HOLE C CORE 48R CORED INTERVAL 1145.2-1150.2 mbsf

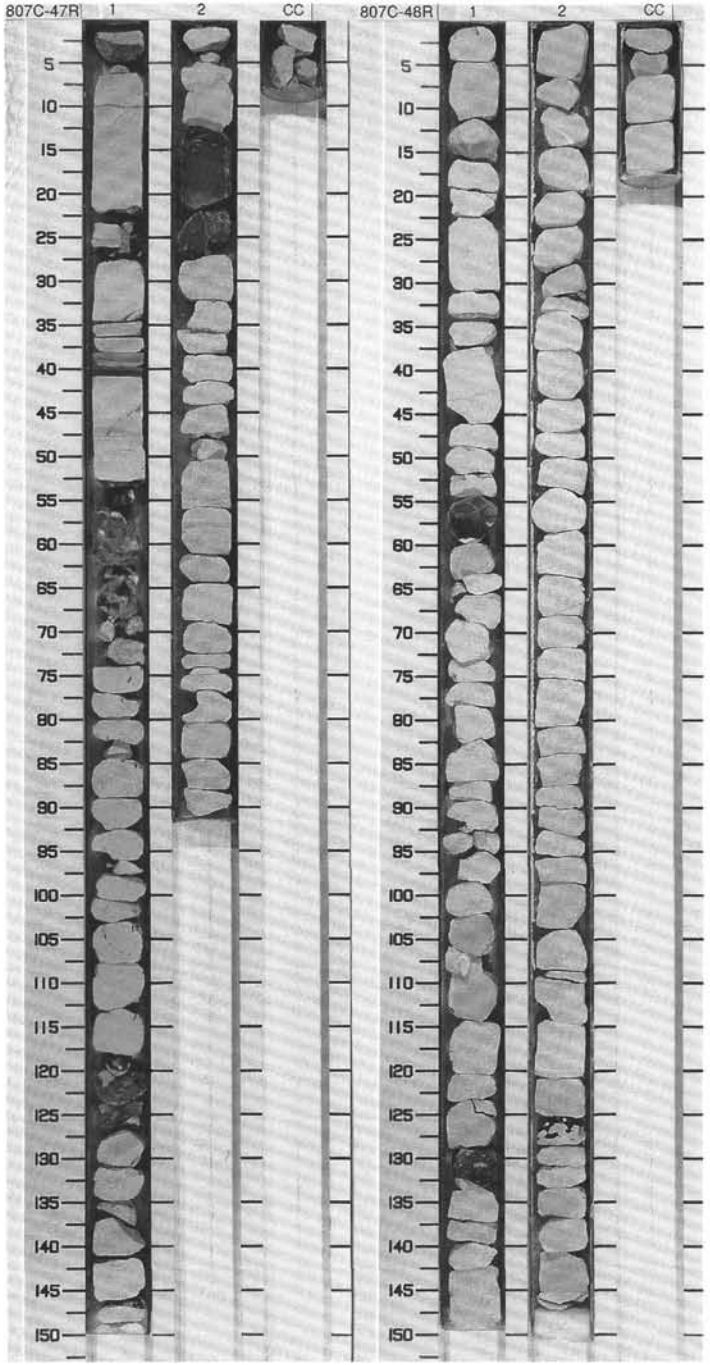
TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PALEOCENE	?	NP9	F/P	B		V=3726 ● ϕ=14.8 ρ=2.46 V=4158 ●		1, 2, CC	0.5, 1.0				

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 5Y 8/1) LIMESTONE. Moderate bioturbation is evident as elongate compacted burrows. Faint, small-scale flaser structures are present in Section 2. Thin (<1 mm thick) stylolites are common throughout the core.

Minor lithology: Gray (N5) and brownish gray (5YR 6/1) CHERT is observed in Sections 1 as horizontally discontinuous layers (1-2 cm thick) or in continuous horizontal layers up to 5 cm thick. The chert appears spotty with light gray (N7) and very light gray (N8), cm scale inclusions. In Section 2, limestone inclusions are present in the chert layer.



SITE 807 HOLE C CORE 49R CORED INTERVAL 1150.2-1155.2 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
UPPER PALEOCENE	R/P P3 - P4	F/P NP9	B	B		ϕ=13.0 P=2.51	%$CaCO_3$ =98.1	1	0.5 1.0				

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (2.5Y 8/0) LIMESTONE. Moderate bioturbation is evident as elongate compacted burrows. Faint, small-scale flaser structures are present in minor intervals. Thin (<1 mm thick) stylolites are present to abundant.

Minor lithology: Gray chert (N5) is present as a thin band and as a nodule 3 cm in diameter in the interval between 100 and 104 cm. The chert band has a sharp contact with the limestone.

SITE 807 HOLE C CORE 50R CORED INTERVAL 1155.2-1160.2 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
UPPER PALEOCENE	R/P P2 - P4	A/M-P NP9	B	B		ϕ=12.7 P=2.56	%$CaCO_3$ =98.9	1 2	0.5 1.0				* *

LITHOLOGIC DESCRIPTION

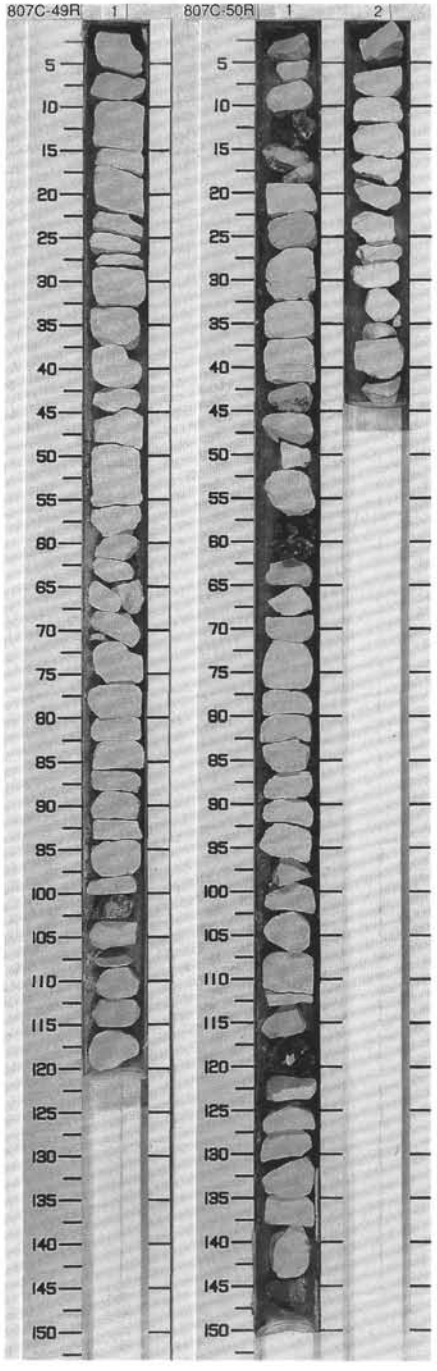
LIMESTONE

Major lithology: This core contains white (2.5Y 8/0) LIMESTONE. Moderate bioturbation is indicated by mm scale horizontal and compacted burrows. Stylolites are present in Section 1, 42 and 44 cm.

Minor lithology: Gray (N5/), 2 to 5 cm thick pieces of CHERT with limestone inclusions are common. Section 1, 12-15 cm contains 100% VOLCANIC ASH, composed of abundant clear ash particles and common brown particles.

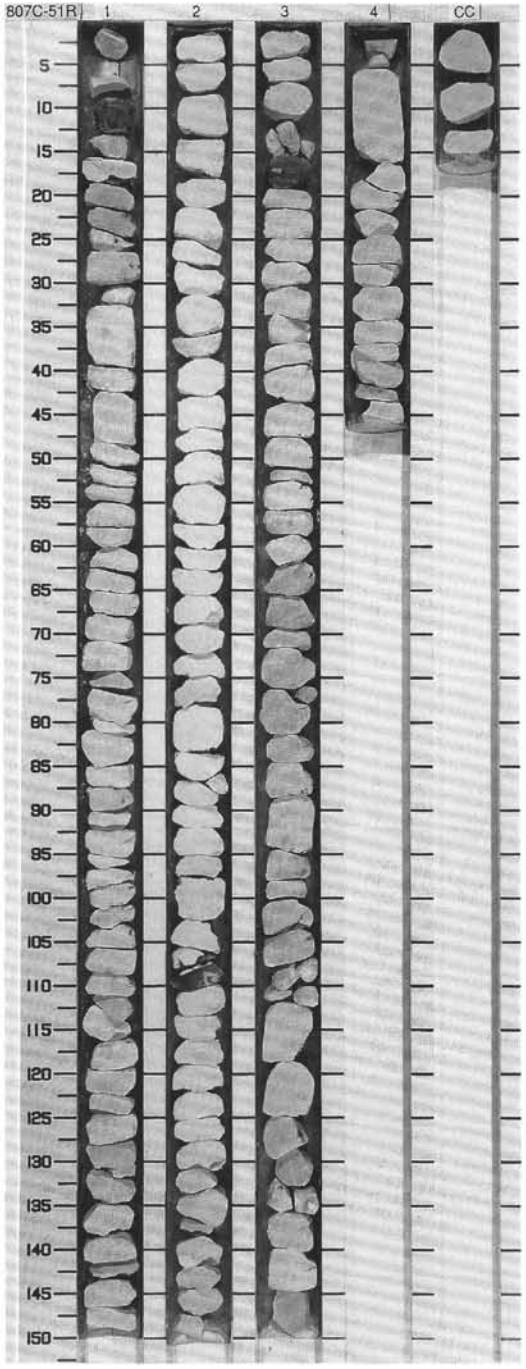
SMEAR SLIDE SUMMARY (%):

	1, 12 M	1, 39 D
TEXTURE:		
Sand	1	5
Silt	80	90
Clay	19	5
COMPOSITION:		
Calcareous fragments	Tr	100
Nannofossils	Tr	—
Volcaic ash	100	—

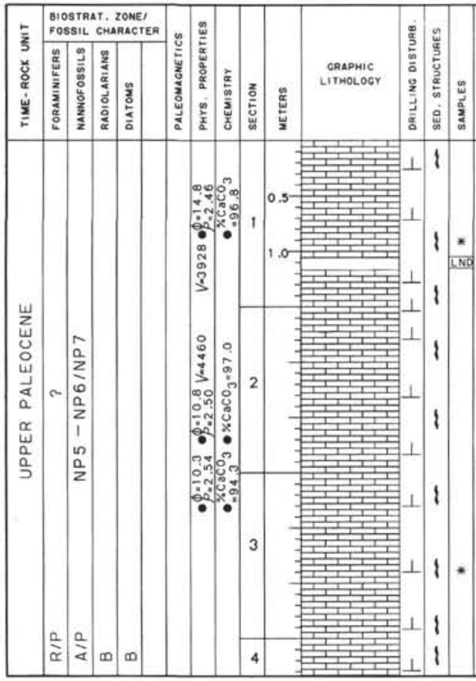


SITE 807 HOLE C CORE 51R CORED INTERVAL 1160.2-1169.8 mbsf

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 PALEOCENE	A/P	NP9	B	B		I=4589 D=19.20 P=2.56 I=4349 D=14.0 P=2.47 3972 D=15.5 P=2.45	•%$CaCO_3$=98.5 •%$CaCO_3$=98.4 •%$CaCO_3$ =98.6	1 2 3 4 CC	0.5 1.0					LIMESTONE Major lithology: This core contains white (5Y 8/1) LIMESTONE, with slight to moderate amounts of bioturbation indicated by mm scale mottling. Millimeter-scale, disseminated grayish blue (5PB 5/2) pyrite-filled burrows are abundant below Section 3, 57 cm. Stylolites are not common in the fragments recovered, but features on the tops and bottoms of the core fragments suggest that stylolites are abundant in the original section. Minor lithology: Gray (N5/) to light gray (N7/) CHERT is present as fragments of layers and/or nodules in Section 1, 9-19 cm, Section 2, 106-110 cm, and Section 3, 16-20 cm. SMEAR SLIDE SUMMARY (%): 1, 101 D TEXTURE: Sand 10 Silt 85 Clay 5 COMPOSITION: Calcareous fragments 88 Nannofossils 10



SITE 807 HOLE C CORE 52R CORED INTERVAL 1169.8-1179.4 mbsf



LITHOLOGIC DESCRIPTION

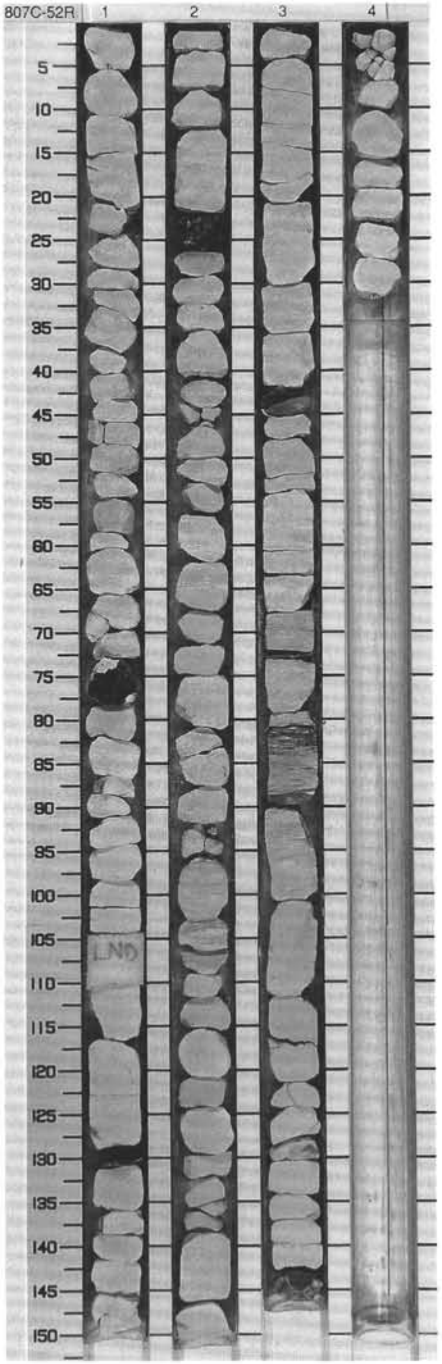
LIMESTONE

Major lithology: This core contains white (2.5Y 8/0) LIMESTONE. Moderate bioturbation is evident from abundant discolored mottles, as well as zones of disseminated pyrite. Section 2 contains a zone of black bands exhibiting flaser and lensoid structures (*microstylolites?*). The core in Section 3, 67-100 cm is white (5Y 8/1), with abundant mm-thick, gray (5Y 5/1) bands (ash?). The remainder of the core has light gray (5Y 7/1) burrows and very thin flaser structures. At Section 3, 177 cm, stylolites displace a burrow.

Minor lithology: CHERT pieces, several cm in diameter, are present in Sections 1 and 2. The color varies from reddish brown (4YR 4/2) to grayish blue (5PB 5/2). Section 3 contains a piece of gray (5Y 6/1) chert or highly siliceous limestone.

SMEAR SLIDE SUMMARY (%):

	1, 91	3, 89
	D	M
TEXTURE:		
Silt	50	30
Clay	50	70
COMPOSITION:		
Calcareous fragments	100	70
Glass	—	30



SITE 807 HOLE C CORE 53R CORED INTERVAL 1179.4-1188.8 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 PALEOCENE	R/P P1	R/P NP3 - NP4	B	B	●ϕ=11.2 ρ=2.52	V=4329 ●ϕ=22.8 ρ=2.30	●%CaCO$_3$=95.1	4					
						V=4329 ●ϕ=4.80 ρ=2.65	●%CaCO$_3$=97.4	3					
						V=5329 ●ϕ=4.80 ρ=2.65	●%CaCO$_3$=98.1	2					
						V=4270 ●ϕ=8.20 ρ=2.61	●%CaCO$_3$ =95.9	1	0.5 1.0				

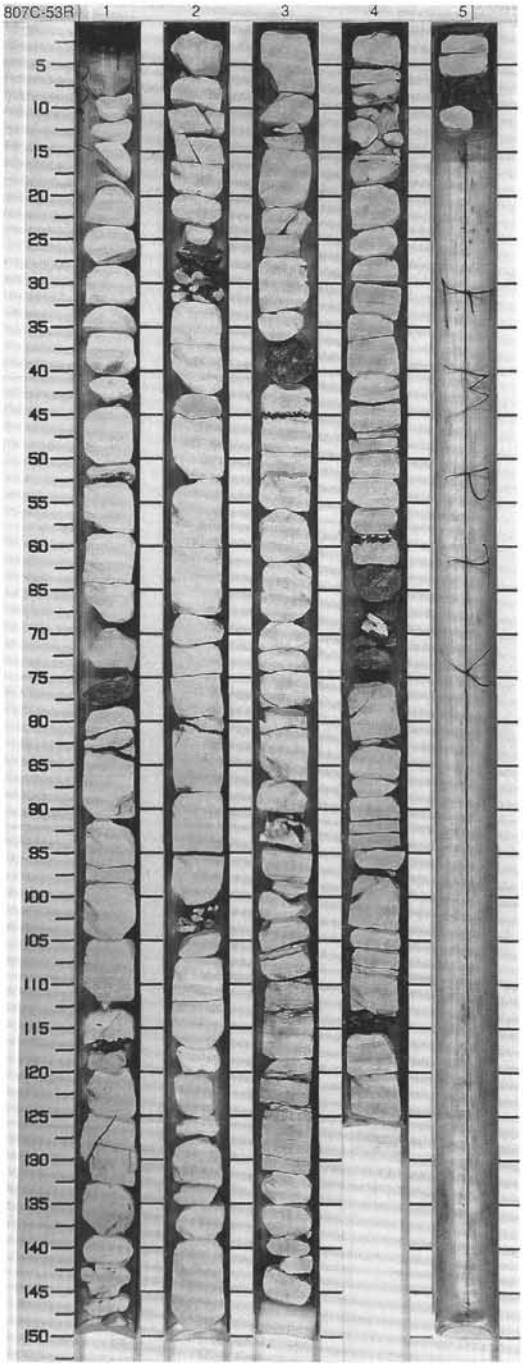
LIMESTONE

Major lithology: The core contains white (2.5Y 8/0) LIMESTONE. Highly compacted, lensoid shaped burrows are common throughout the core. Gray (5Y 7/1), very thin, irregular and wavy, color bands are abundant and often surround these lensoid burrow structures. Some of these gray bands are shaley when fractured and are not as well cemented as the surrounding limestone. Well-formed stylolites are common (about 2-3 per section). Some of the drilling fractures appear to have occurred at stylolites.

Minor lithology: This core contains occasional cobbles of CHERT, 2-12 cm in diameter. The chert comprises less than 5% of the recovered material in the core.

SMEAR SLIDE SUMMARY (%):

	4, 48 M
TEXTURE:	
Sand	8
Silt	60
Clay	32
COMPOSITION	
Calcareous fragments	65
Feldspar	5
Glass	20
Siliceous fragments	10



SITE 807 HOLE C CORE 54R CORED INTERVAL 1188.8-1196.9 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
UPPER MAASTRICHTIAN / LOWER PALEOCENE	R/P P1a		B	B				1 2 3 4	0.5 1.0				* *

LITHOLOGIC DESCRIPTION

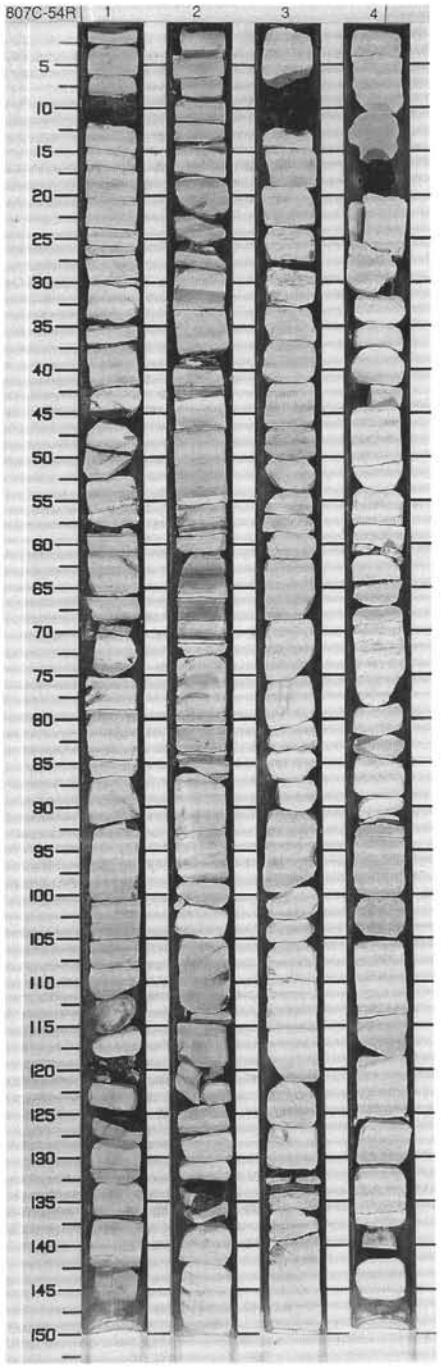
LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 10YR 8/1)) to light gray (N7/) LIMESTONE, with variable amounts of silica cement. The sediment is moderately to highly bioturbated with mm to cm scale subhorizontal, compacted burrows. Faint, light gray (N7/) sub mm scale flaser structures are present to abundant in Sections 1 through 3. Faint, light gray (10YR 7/2) color bands are common in Section 4. Stylolites are common in Section 4, and evidence for stylolites is present in Section 1 as gray coatings and irregular ends on limestone pieces.

Minor lithologies: Dark reddish gray (5YR 4/2) CHERT is present as fragments of continuous layers up to 6 cm thick and as irregularly shaped masses in limestone pieces. Thin intervals (<1 cm thick) of gray (N5/) LIMESTONE WITH VOLCANIC ASH are present at Section 1, 40, 63, and 138 cm, and Section 2, 13, 16, 60, 70, 83, and 115 cm, and Section 3, 27 and 134 cm.

SMEAR SLIDE SUMMARY (%):

	3, 34 M	3, 71 D
TEXTURE:		
Sand	15	—
Silt	80	95
Clay	5	5
COMPOSITION:		
Calcareous fragments	85	100
Nannofossils	5	—
Volcanic ash	5	—



SITE 807 HOLE C CORE 55R CORED INTERVAL 1196.9-1206.6 mbsf

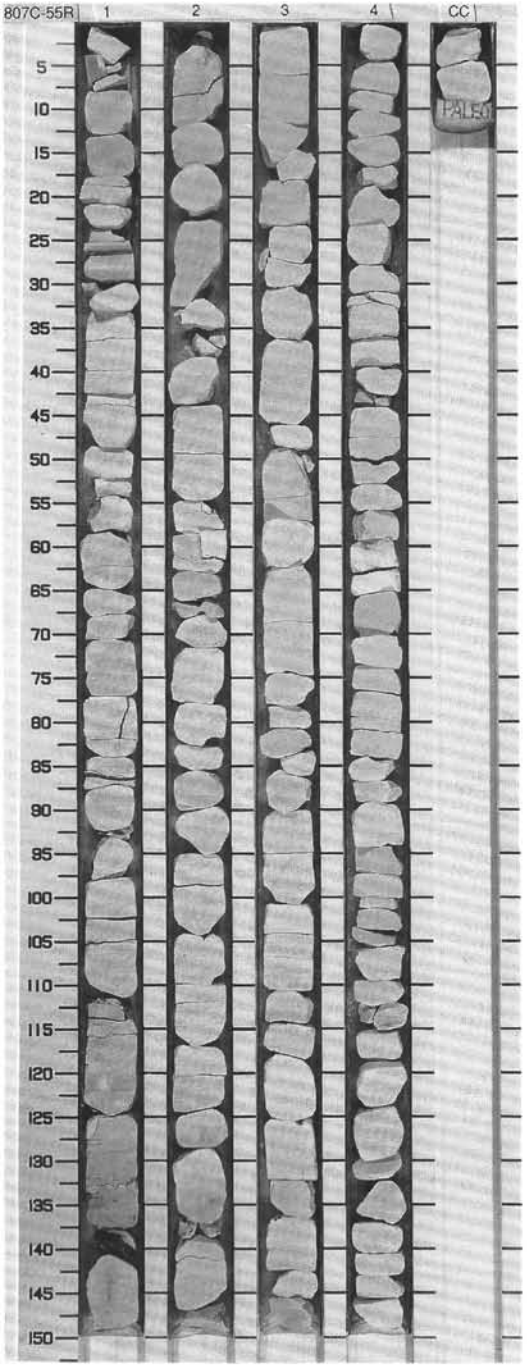
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
UPPER MAASTRICHTIAN		F/P	B	B				1	0.5, 1.0				*	LIMESTONE
								2						
								3					*	
								4						
								CC						

Major lithology: This core contains white (5Y 8/1 and 10YR 8/1) LIMESTONE. The color grades to light gray (5Y 7/1) in the lower part of Section 1. Slight to heavy bioturbation is indicated by white and light gray mottling. Less bioturbated intervals are homogeneous, 5-10 cm thick and interbedded with 10-20 cm thick intervals containing numerous, flattened burrows. Burrows are predominantly mm scale, but rare cm scale ones are observed. Millimeter- scale, white and light gray (10YR 7/1) color banding is found in Section 1, 0 and 30 cm, in Section 3, 22 and 98 cm, and in Section 4, 85 and 128 cm. The banding in Section 1 is partly due to grain size variations and may represent primary lamination. Dusky blue (5PB 3/2) mottling is present in Sections 1 and 2 and may represent very finely disseminated pyritic material. Stylolites are found in all sections.

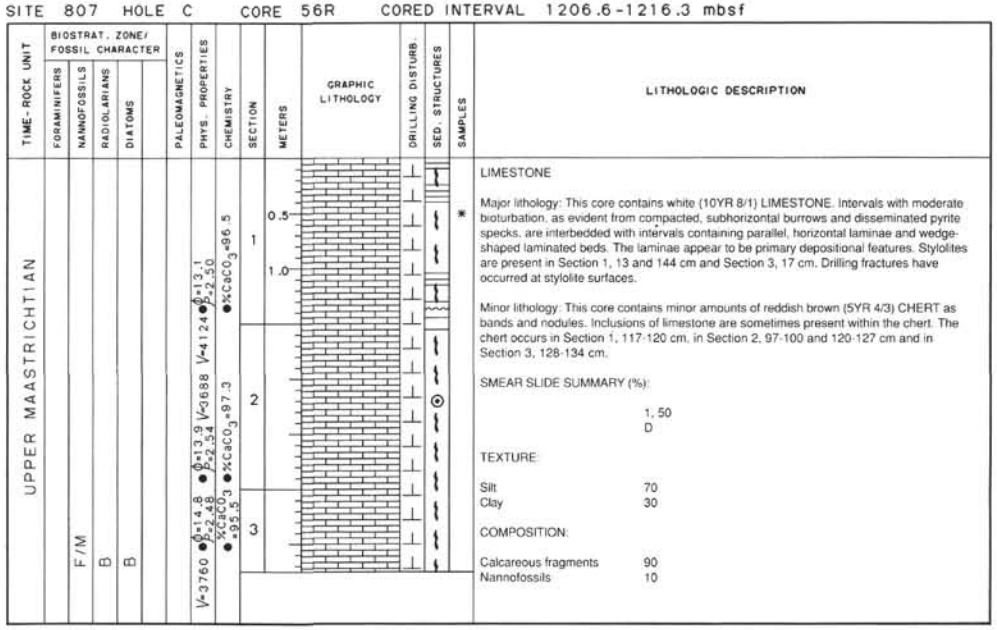
Minor lithology: Pieces of reddish brown (5YR 4/3) CHERT, up to 2 cm diameter, are present in Section 1, 93 cm and 140 cm and in Section 2, 140 cm. The single pieces may represent nodules or thin chert layers. Dark gray (5Y 4/1) layers of LIMESTONE with less than 10% volcanic ash are found in Section 1, 27 cm and 87 cm.

SMEAR SLIDE SUMMARY (%):

	1, 26 M	3, 70 D
TEXTURE:		
Sand	15	15
Silt	80	80
Clay	5	5
COMPOSITION:		
Calcareous fragments	90	95
Volcanic ash	5	—



SITE 807 HOLE C CORE 56R CORED INTERVAL 1206.6-1216.3 mbsf



LIMESTONE

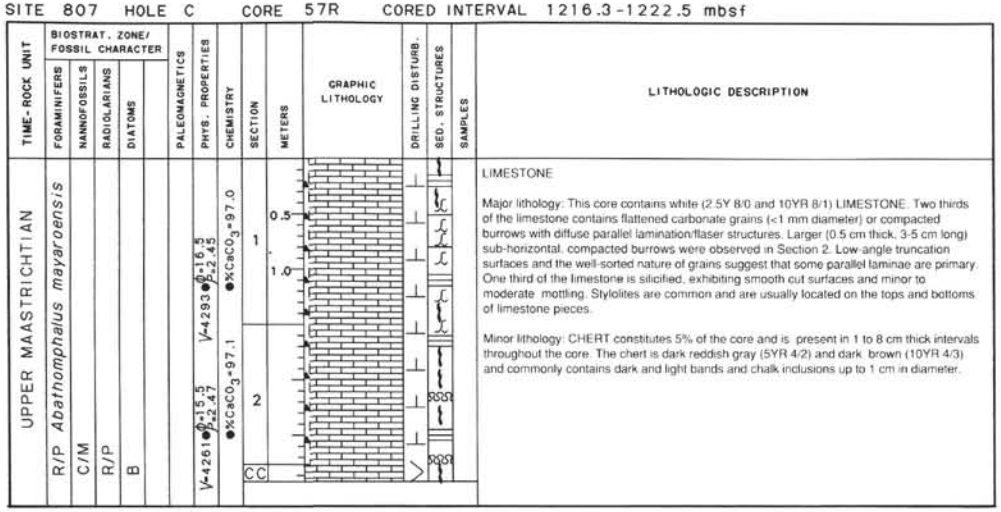
Major lithology: This core contains white (10YR 8/1) LIMESTONE. Intervals with moderate bioturbation, as evident from compacted, subhorizontal burrows and disseminated pyrite specks, are interbedded with intervals containing parallel, horizontal laminae and wedge-shaped laminated beds. The laminae appear to be primary depositional features. Stylolites are present in Section 1, 13 and 144 cm and Section 3, 17 cm. Drilling fractures have occurred at stylolite surfaces.

Minor lithology: This core contains minor amounts of reddish brown (5YR 4/3) CHERT as bands and nodules. Inclusions of limestone are sometimes present within the chert. The chert occurs in Section 1, 117-120 cm, in Section 2, 97-100 and 120-127 cm and in Section 3, 128-134 cm.

SMEAR SLIDE SUMMARY (%):

	1, 50
	D
TEXTURE:	
Silt	70
Clay	30
COMPOSITION:	
Calcareous fragments	90
Nannofossils	10

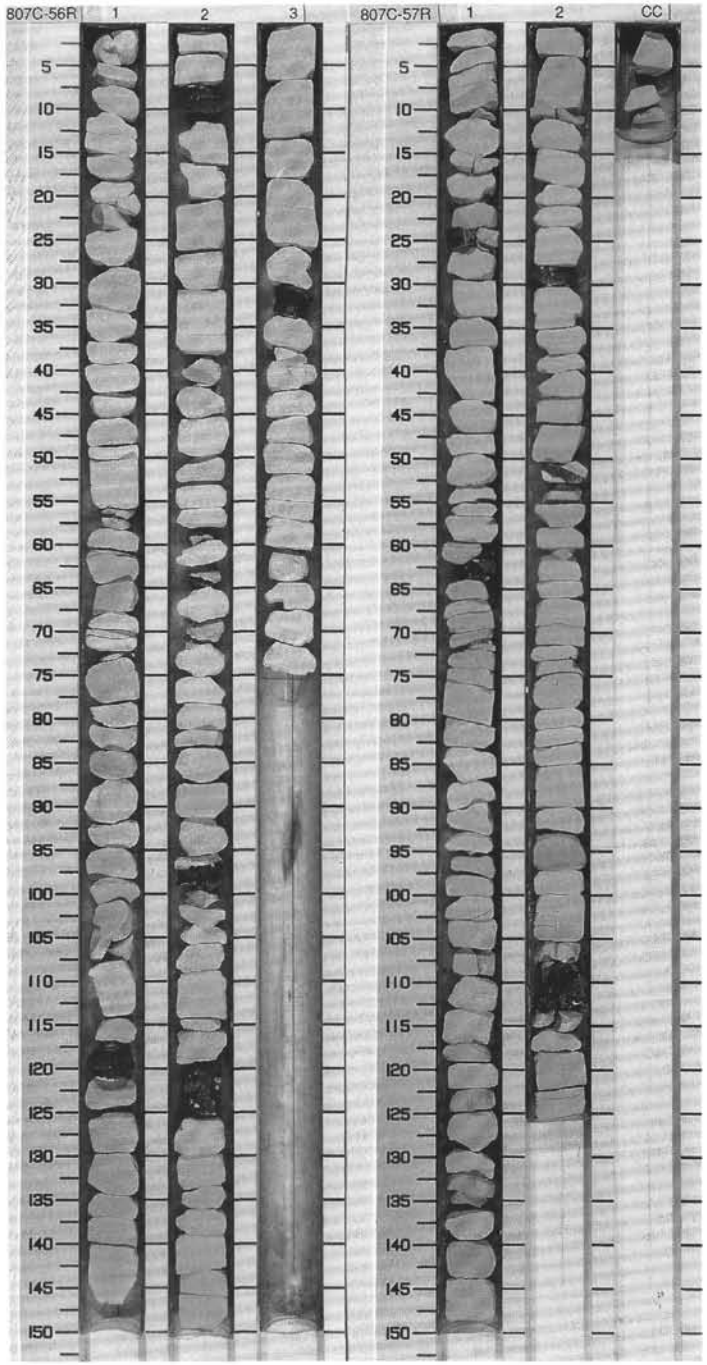
SITE 807 HOLE C CORE 57R CORED INTERVAL 1216.3-1222.5 mbsf



LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 10YR 8/1) LIMESTONE. Two thirds of the limestone contains flattened carbonate grains (<1 mm diameter) or compacted burrows with diffuse parallel lamination/flaser structures. Larger (0.5 cm thick, 3-5 cm long) sub-horizontal, compacted burrows were observed in Section 2. Low-angle truncation surfaces and the well-sorted nature of grains suggest that some parallel laminae are primary. One third of the limestone is silicified, exhibiting smooth cut surfaces and minor to moderate mottling. Stylolites are common and are usually located on the tops and bottoms of limestone pieces.

Minor lithology: CHERT constitutes 5% of the core and is present in 1 to 8 cm thick intervals throughout the core. The chert is dark reddish gray (5YR 4/2) and dark brown (10YR 4/3) and commonly contains dark and light bands and chalk inclusions up to 1 cm in diameter.



SITE 807 HOLE C CORE 58R CORED INTERVAL 1222.5-1232.2 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
MIDDLE MAASTRICHTIAN	*Gansserina gansseri* C/M	B	B			V-4598	●%CaCO3 =97.4	1					* *

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (10YR 8/1) LIMESTONE, generally in rounded pieces between 1 and 4 cm in thick. In Section 1, 0-5 cm and 28-52 cm, carbonate particles, possibly representing overgrown or recrystallized foraminifers are present as "spots" on the core. Slight banding in various shades of white is seen in Section 1, 9-15 cm. This banding may be of depositional or of diagenetic origin. In the relatively homogeneous interval at Section 1, 15 to 41 cm, slight bioturbation is indicated by weak mottling. Stylolites with dark greenish gray drapes are found at Section 1, 3 cm and 49 cm.

Minor lithology: Dark gray (5YR 4/1) CHERT is found in Section 1 at 30-32 cm and 41-45 cm. The pieces are homogeneous, have broken surfaces, and may represent nodules or continuous layers.

SMEAR SLIDE SUMMARY (%):

	1, 3 M	1, 23 D
TEXTURE:		
Sand	10	5
Silt	85	90
Clay	5	5
COMPOSITION:		
Calcareous fragments	95	95
Nannofossils	Tr	Tr

SITE 807 HOLE C CORE 59R CORED INTERVAL 1232.2-1241.8 mbsf

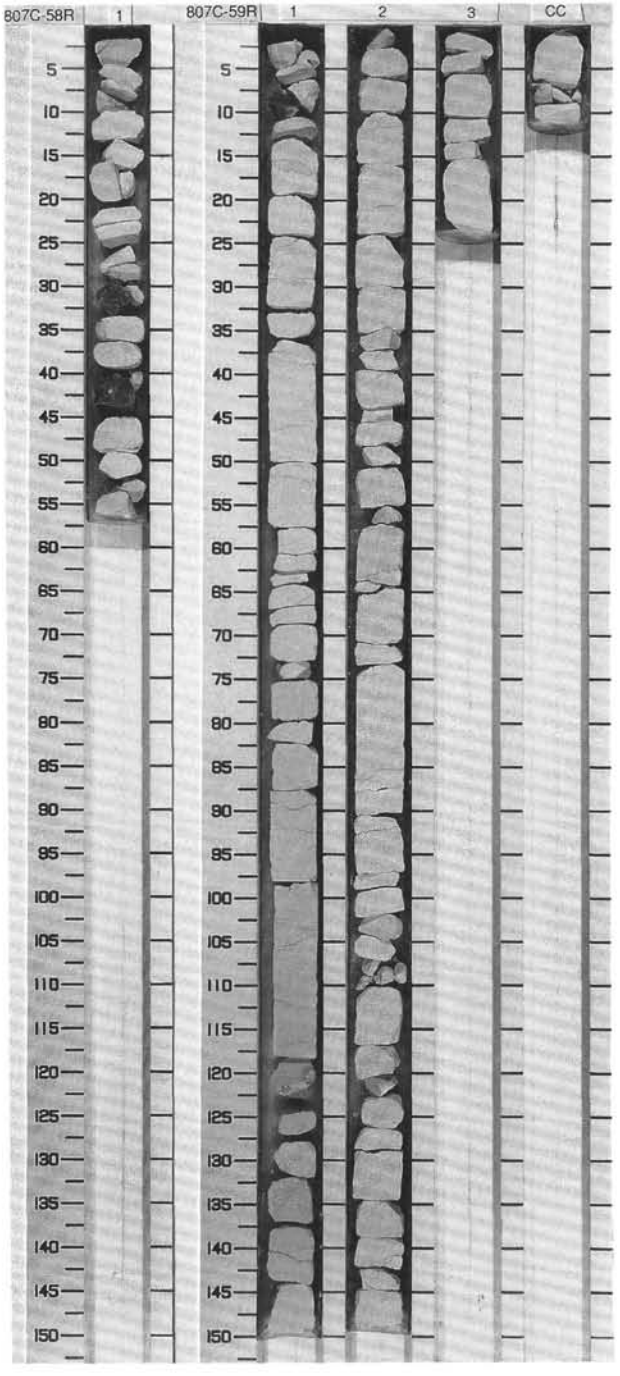
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
MIDDLE MAASTRICHTIAN	F/P *Gansserina gansseri*	A/M	B	B		V-3138 V-3326	●%CaCO3 =97.2	1 2 3	0.5 1.0				

LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (10YR 8/1) LIMESTONE. Specks of pyrite are disseminated throughout the core. White (2.5Y 8/0), mm size, slightly compacted clasts, which are finer grained than the matrix, are common. Stylolites are well-developed and some exhibit tension cracks.

Minor lithology: Dark reddish gray (5YR 4/2) CHERT comprises about 40% of the Core-Catcher.

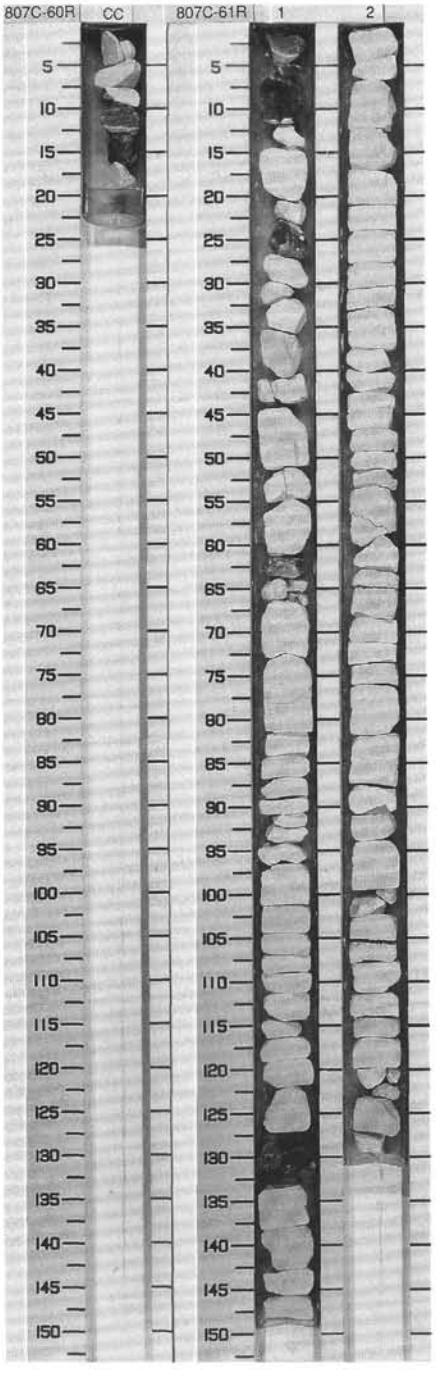


SITE 807 HOLE C CORE 60R CORED INTERVAL 1241.8-1251.5 mbsf

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
MIDDLE MAASTRICHTIAN	R/P	A/P	B	B				CC		▲ ▲				LIMESTONE Major lithology: This core contains white (10YR 8/0) LIMESTONE. The limestone has a few elongate, mm scale, white (2.5Y 8/0) clasts. Tiny dark specks of pyrite(?) are abundant throughout. Minor lithology: Chert comprises about 40% of the CC.

SITE 807 HOLE C CORE 61R CORED INTERVAL 1251.5-1261.2 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
UPPER CAMPANIAN - LOWER MAASTRICHTIAN	R/P	B	B			ϕ=18.9 ρ=2.43 V-3895 ϕ=19.8 ρ=2.43 V-3673	%$CaCO_3$=97.2 %$CaCO_3$=97.2	1 2	0.5 1.0					LIMESTONE Major lithology: This core contains white (10YR 8/0) to gray (2.5Y 8/0) LIMESTONE. Disseminated pyrite specks are abundant throughout the core. Small (<1mm) compacted clasts appear to have a parallel alignment. A few trace fossils are apparent. Well-developed stylolites are also present. Minor lithology: CHERT occurs as three concretions in Section 1. It is dusky blue (5PB 3/2) and dark brown (7.5YR 4/2) in color.



SITE 807 HOLE C CORE 62R CORED INTERVAL 1261.2-1270.8 mbsf

TIME-ROCK UNIT: UPPER CAMPANIAN - LOWER MAASTRICHTIAN

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

PALEOMAGNETICS

PHYS. PROPERTIES: ϕ=21.2 ρ=2.38; ϕ=20.5 ρ=2.38; ϕ=22.7 ρ=2.34; V-3419; V-3435

CHEMISTRY: %CaCO3=95.7; %CaCO3=96.0; %CaCO3=97.0

SECTION: 1, 2, 3, 4

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: *

LITHOLOGIC DESCRIPTION

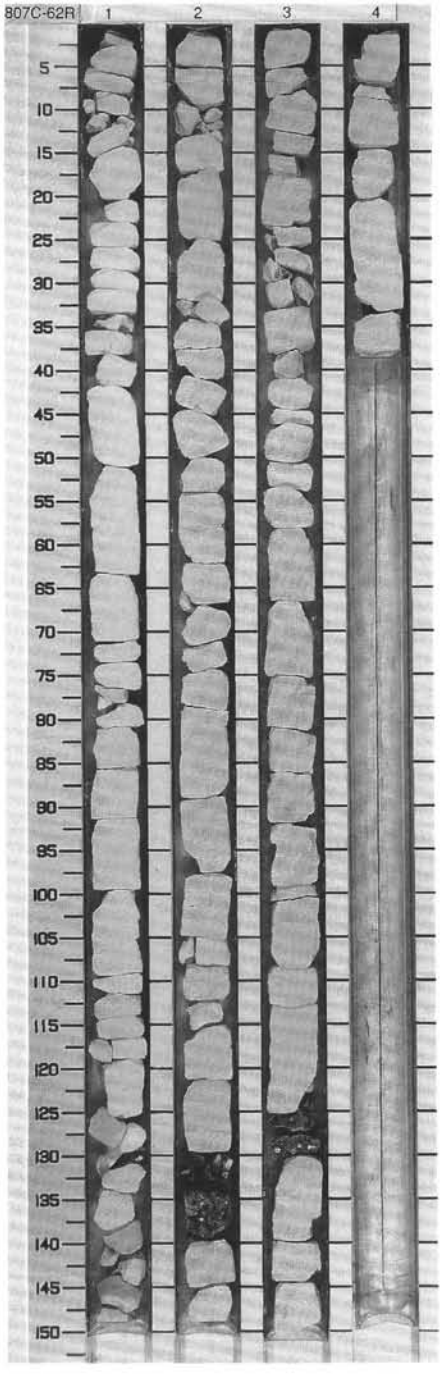
LIMESTONE

Major lithology. This core contains white (7.5 YR 8/0) LIMESTONE. White and light gray clasts, 1 to 5 mm in diameter and normally graded, are abundant at Section 2, 57 to 150 cm. The clasts are slightly compacted and oriented subhorizontally. Stylolites are common and sometimes truncate the clasts. Patches of purple-colored specks (pyrite) and disseminated specks of an unknown dark mineral are observed throughout. In Section 3, 7 to 10 cm, fold structures are apparent in two separate pieces of limestone, which are underlain by a piece with a microfault. The microfault is apparent from the displacement of disseminated purple specks (pyrite?).

Minor lithology. Several 2 to 10 cm thick intervals of dark brown (7.5YR 4/2) CHERT are present within the core.

SMEAR SLIDE SUMMARY (%):

	2, 100
	D
TEXTURE:	
Sand	1
Silt	99
COMPOSITION:	
Foraminifers	1
Micrite	99



SITE 807 HOLE C CORE 63R CORED INTERVAL 1270.8-1280.5 mbsf

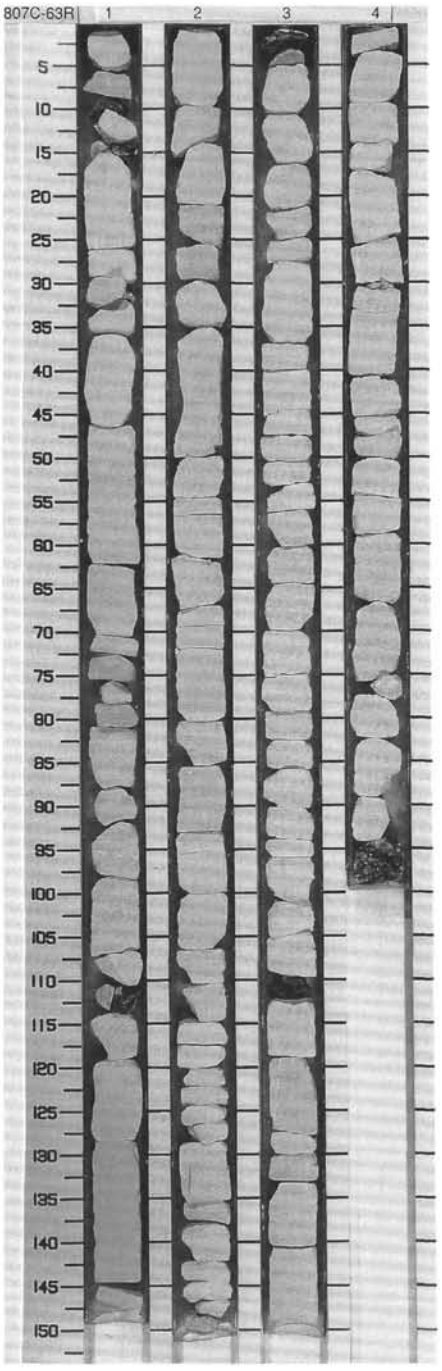
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER CAMPANIAN - LOWER MAASTRICHTIAN	R A/P B					V-3565 Φ=19.2 ρ=2.40 V-3582 Φ=21.9 ρ=2.38	%CaCO3=96.2 %CaCO3=96.8 %CaCO3=94.6	1 2 3 4	0.5 1.0				

LITHOLOGIC DESCRIPTION

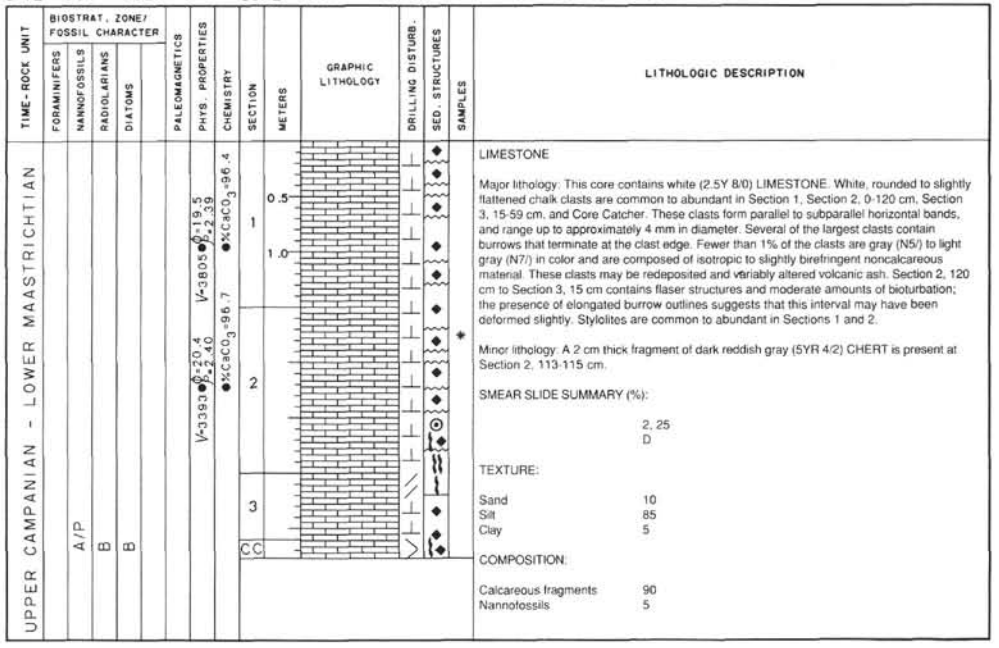
LIMESTONE

Major lithology: This core contains white (7.5YR 8/0) LIMESTONE. Intervals of disseminated grayish blue (5PB 5/2) specks (pyrite?), possibly representing bioturbation, are common. Thin, intervals of horizontal, parallel swirls, possibly representing flow structures, are located in Section 1, 73-86 cm and 94-103 cm and in numerous intervals in Section 2. Very thin laminae (1 grain thick) of material that is coarser than the surrounding matrix are noted in Section 2, 79-80 cm. These laminae are distinct, horizontal, and parallel. Below the laminae are the subhorizontal swirl features. Several intervals of small (<< 1 mm) bright white and gray clasts are seen in Section 4, 7-15 cm and 40-95 cm.

Minor lithology: Dark brown (7.5YR 4/2) to weak red (2.5YR 4/2) CHERT is present as 2 to 10 cm thick pieces in the core at a spacing of one per section.



SITE 807 HOLE C CORE 64R CORED INTERVAL 1280.5-1290.1 mbsf



LITHOLOGIC DESCRIPTION

LIMESTONE

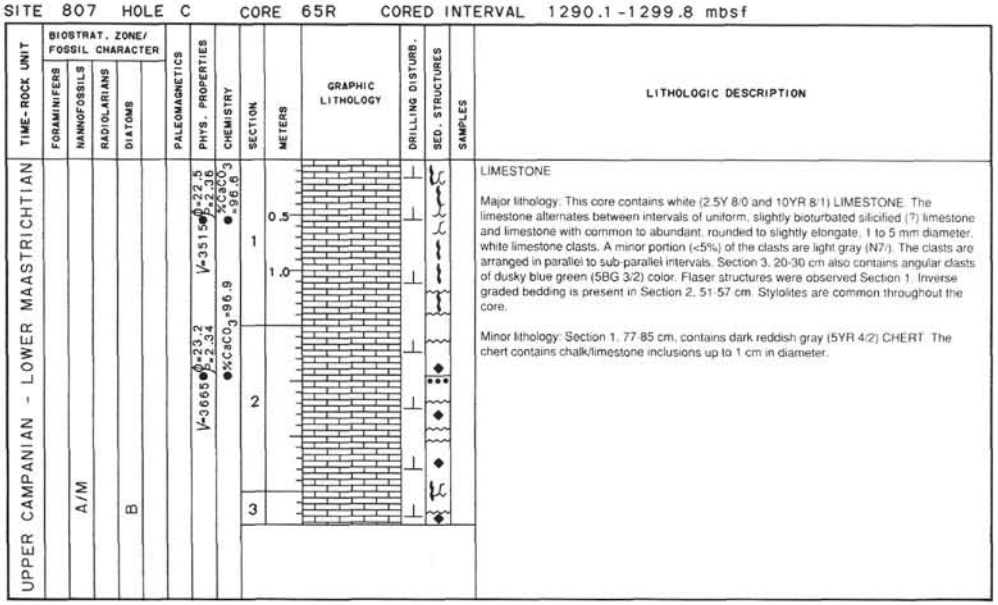
Major lithology: This core contains white (2.5Y 8/0) LIMESTONE. White, rounded to slightly flattened chalk clasts are common to abundant in Section 1, Section 2, 0-120 cm, Section 3, 15-59 cm, and Core Catcher. These clasts form parallel to subparallel horizontal bands, and range up to approximately 4 mm in diameter. Several of the largest clasts contain burrows that terminate at the clast edge. Fewer than 1% of the clasts are gray (N5/) to light gray (N7/) in color and are composed of isotropic to slightly birefringent noncalcareous material. These clasts may be redeposited and variably altered volcanic ash. Section 2, 120 cm to Section 3, 15 cm contains flaser structures and moderate amounts of bioturbation; the presence of elongated burrow outlines suggests that this interval may have been deformed slightly. Stylolites are common to abundant in Sections 1 and 2.

Minor lithology: A 2 cm thick fragment of dark reddish gray (5YR 4/2) CHERT is present at Section 2, 113-115 cm.

SMEAR SLIDE SUMMARY (%):

	2, 25 D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Calcareous fragments	90
Nannofossils	5

SITE 807 HOLE C CORE 65R CORED INTERVAL 1290.1-1299.8 mbsf

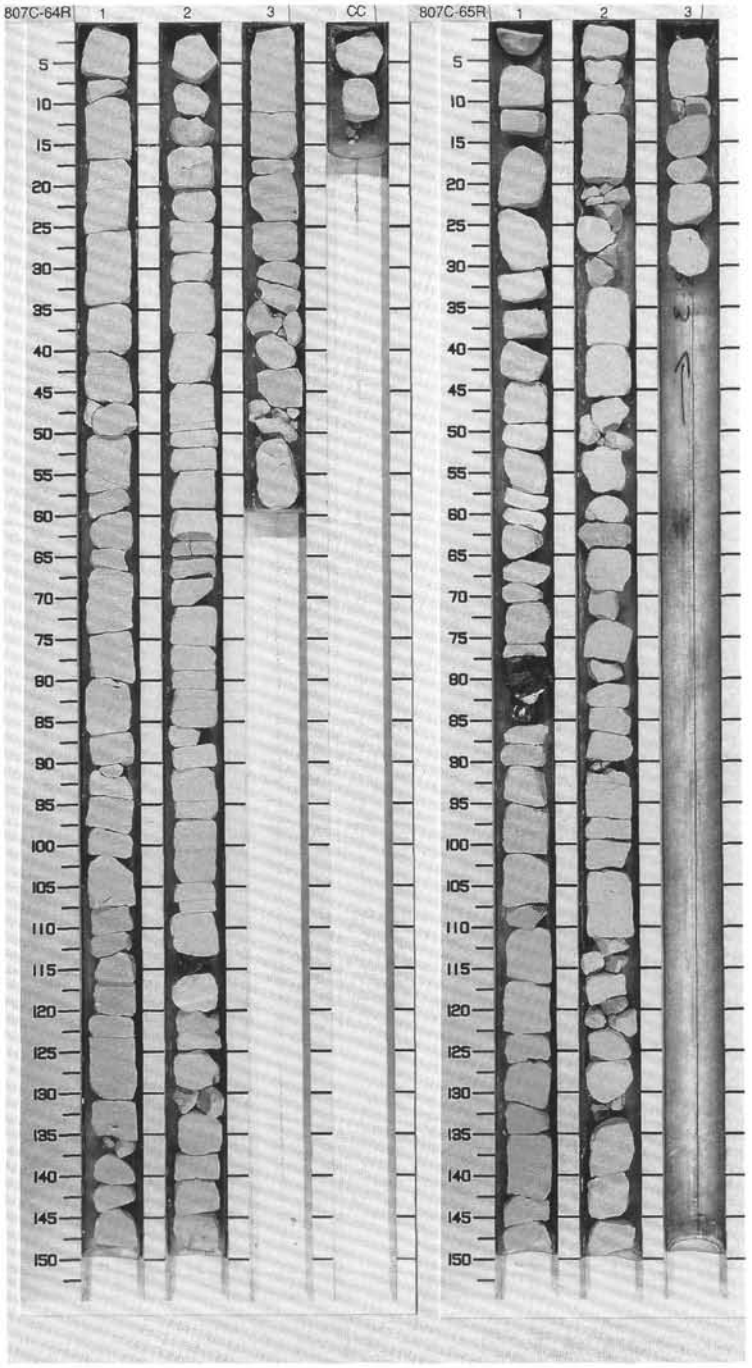


LITHOLOGIC DESCRIPTION

LIMESTONE

Major lithology: This core contains white (2.5Y 8/0 and 10YR 8/1) LIMESTONE. The limestone alternates between intervals of uniform, slightly bioturbated silicified (?) limestone and limestone with common to abundant, rounded to slightly elongate, 1 to 5 mm diameter, white limestone clasts. A minor portion (<5%) of the clasts are light gray (N7/). The clasts are arranged in parallel to sub-parallel intervals. Section 3, 20-30 cm also contains angular clasts of dusky blue green (5BG 3/2) color. Flaser structures were observed Section 1. Inverse graded bedding is present in Section 2, 51-57 cm. Stylolites are common throughout the core.

Minor lithology: Section 1, 77-85 cm, contains dark reddish gray (5YR 4/2) CHERT. The chert contains chalk/limestone inclusions up to 1 cm in diameter.



SITE 807 HOLE C CORE 66R CORED INTERVAL 1299.8-1309.5 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
UPPER CAMPANIAN - LOWER MAASTRICHTIAN		C/M	R/P	B		V-3464 ρ=24.2 P-2.31 V-3546 ρ=24.3 P-2.30 V-3426 ρ=24.2 P-2.32 V-3426	%$CaCO_3$=95.5 %$CaCO_3$=95.5 %$CaCO_3$=96.6	1 2 3	0.5 1.0				* *

LITHOLOGIC DESCRIPTION

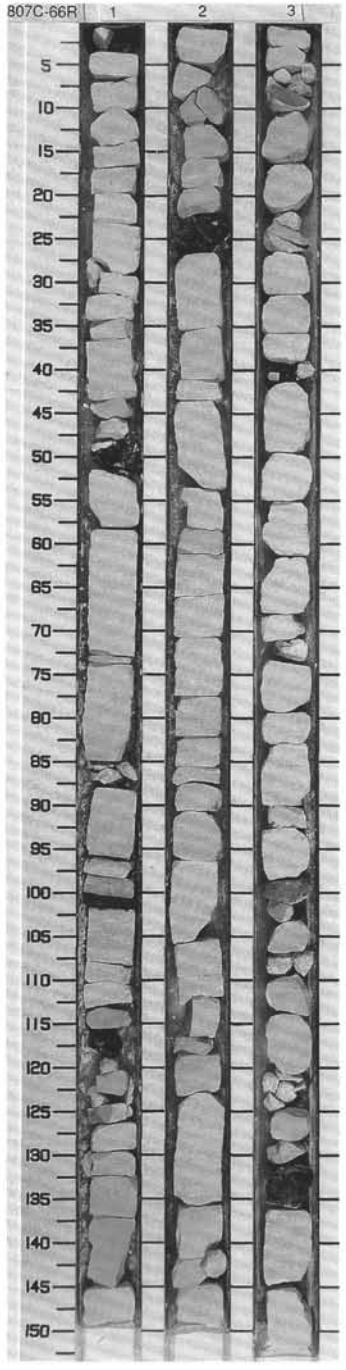
LIMESTONE

Major lithology: This core contains white (2.5Y 8.0 and 10YR 8.1) LIMESTONE. The limestone alternates in composition between uniform, moderately to heavily bioturbated limestone, and limestone with faint horizontal laminae or flaser structures. Both vertical and horizontal burrows are visible. A dark gray (N3), 1 cm thick ash layer is noted in Section 1, 102 cm. White, mm scale limestone clasts are observed in Section 2, 124-135 cm. Stylolites are present throughout the core.

Minor lithology: Dark reddish brown (5YR 3/3) and reddish brown (5YR 4/3) CHERT is present as nodules or in 1 to 5 cm thick layers. The chert contains chalk limestone inclusions up to 1 cm in diameter.

SMEAR SLIDE SUMMARY (%):

	1, 102 M	2, 109 D
TEXTURE:		
Sand	20	—
Silt	75	90
Clay	5	10
COMPOSITION:		
Carbonate particles	—	95
Foraminifers	*Tr*	—
Nannofossils	*Tr*	5
Volcanic ash	95	—



SITE 807 HOLE C CORE 67R CORED INTERVAL 1309.5-1319.1 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 CAMPANIAN - LOWER MAASTRICHTIAN		F/M	B	B		V-3570 ϕ=23.3 P=2.33 V-3811 ϕ=21.8 P=2.34 V-3442 ϕ=21.1 P=2.35 V-3366 ϕ=20.1 P=2.38 ϕ=21.7 P=2.35	%CaCO3 =95.6 %CaCO3 =96.3 %CaCO3 =95.8 %CaCO3 =95.8 %CaCO3 =96.0	1 2 3 4 5	0.5 1.0				*

LITHOLOGIC DESCRIPTION

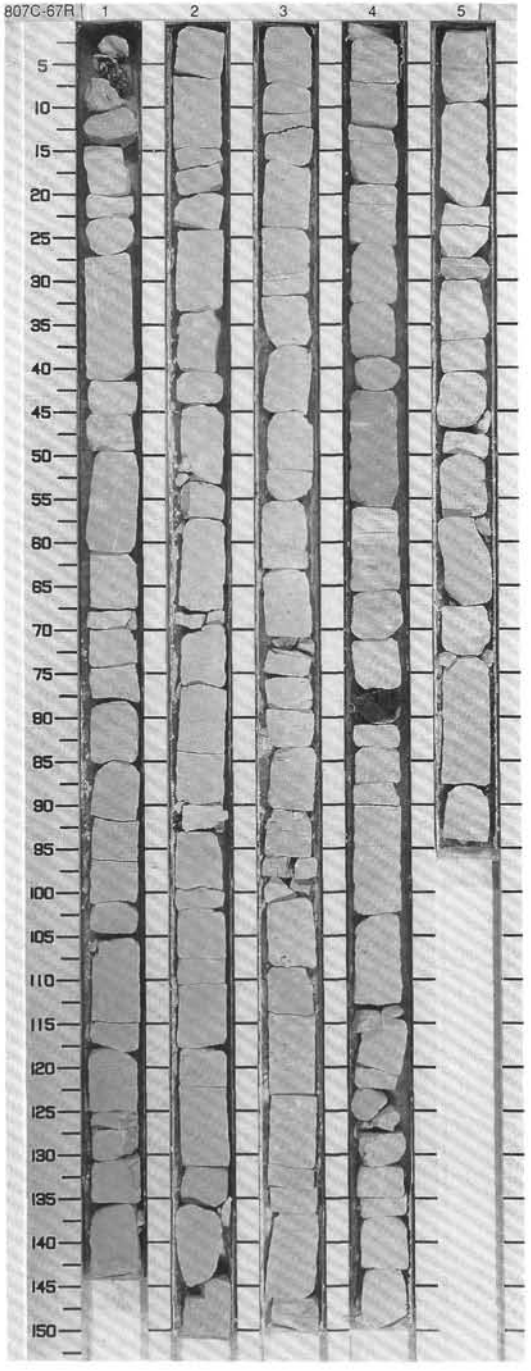
LIMESTONE

Major lithology: This core contains white (5YR 8/1 to 2.5Y 8/0) LIMESTONE. From Section 1, 120 cm to Section 3, 107 cm, the limestone contains common to abundant, mm-scale, rounded to slightly flattened clasts of three types: white (2.5Y 8/0) limestone, light gray (N7/) limestone?, and greenish gray (5G 5/1), more angular ?clay or glauconite?. The clasts are aligned in parallel to subparallel, horizontal bands. From Section 3, 107 cm to Core Catcher, the sediment is slightly to heavily bioturbated; the more heavily burrowed zones are mottled and contain flaser structures, whereas the less heavily burrowed intervals are more homogenous in appearance. Stylolites are present in Sections 1 and 3, and common in Section 2.

Minor lithology: CHERT, dark reddish gray (5YR 4/2) to dusky red (10R 3/3) CHERT is present as 2 to 3 cm thick fragments at Section 1, 5-15 cm and Section 4, 80-83 cm.

SMEAR SLIDE SUMMARY (%):

	1, 66 D
TEXTURE:	
Silt	90
Clay	10
COMPOSITION:	
Carbonate particles	90
Nannofossils	10



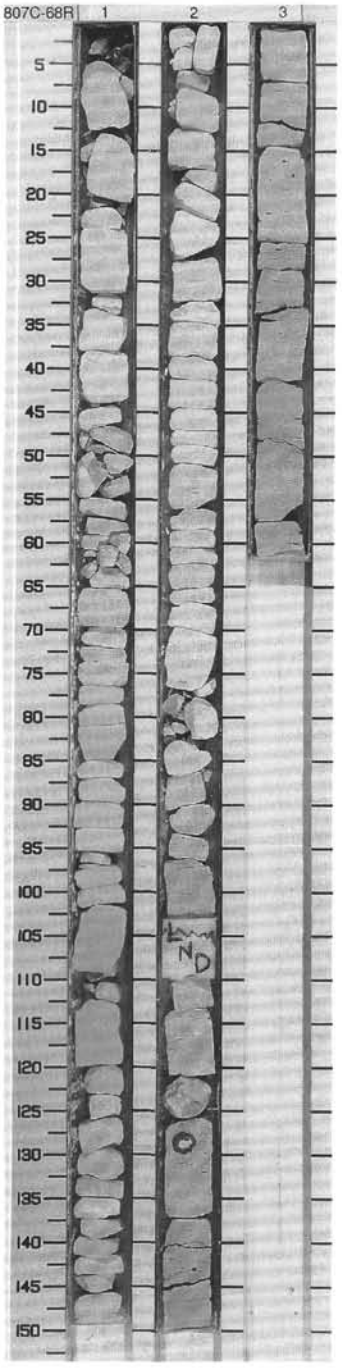
SITE 807 HOLE C CORE 68R CORED INTERVAL 1319.1-1328.8 mbsf

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 CAMPANIAN - LOWER MAASTRICHTIAN	C/P	B	B		V-3630 Φ=20.2 ρ=2.37 V-3482 Φ=23.1 ρ=2.31 V-3361 Φ=23.4 ρ=2.32	●%$CaCO_3$=94.6 ●%$CaCO_3$=95.5 ●%$CaCO_3$=96.0	1 2 3	0.5 1.0				LN	

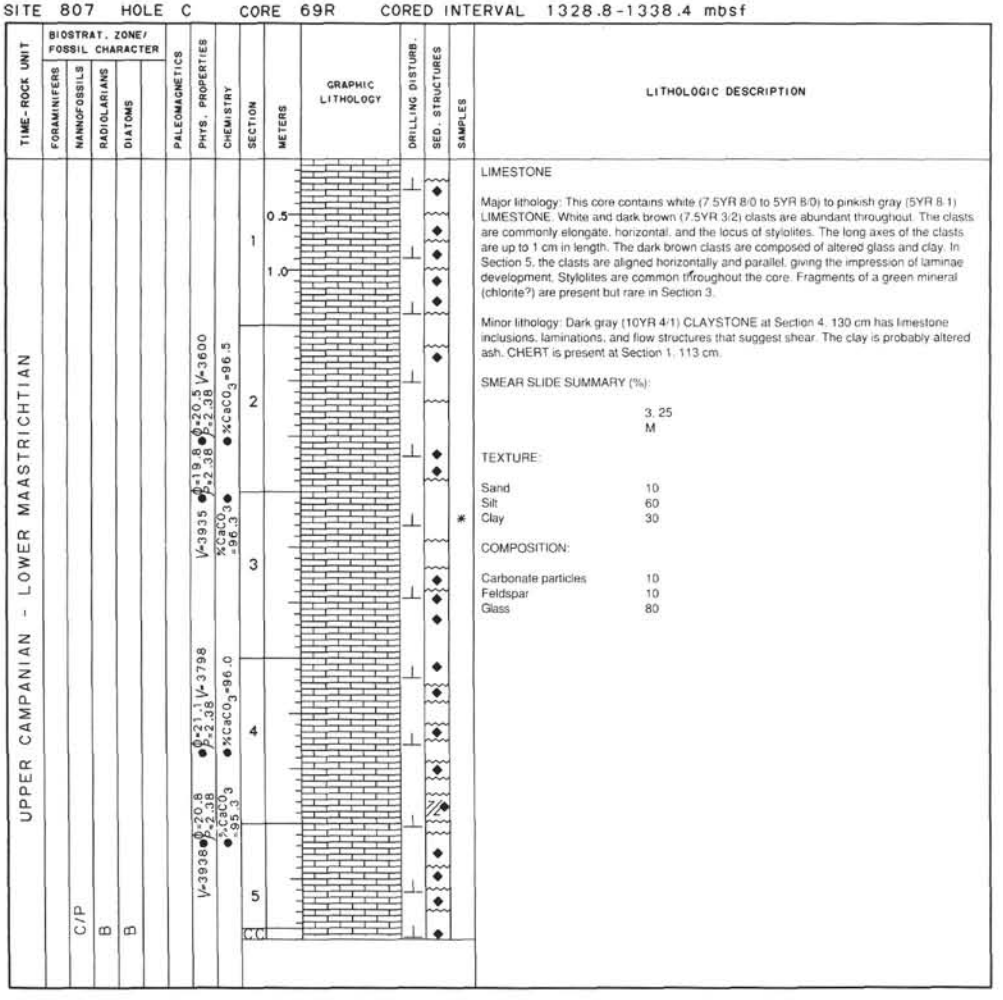
LIMESTONE

Major lithology: This core contains white (7.5YR 8/0 to 5YR 8/0) LIMESTONE. The limestone is strongly bioturbated, particularly in Section 1, 34-43 cm, 63-67 cm, and 130-140 cm. Some 10 to 20 cm thick intervals are structureless. White clasts, up to 5 mm in diameter and elongated in a horizontal direction, are abundant below Section 2, 90 cm. The clast-rich interval does not have a graded texture. Dark brown (7.5YR 3/2) clay layers and flattened clasts are present below Section 2, 123 cm. Clay minerals are more abundant in Section 3, where the limestone is pinkish gray (5YR 8/1). Clay layers are the locus of numerous stylolites.

Minor lithology: Dark reddish gray (5YR 4/2) to dusky red (10R 3/3) CHERT is present in Section 1, 0-2 cm and in Section 2, 125 cm.



SITE 807 HOLE C CORE 69R CORED INTERVAL 1328.8-1338.4 mbsf



LITHOLOGIC DESCRIPTION

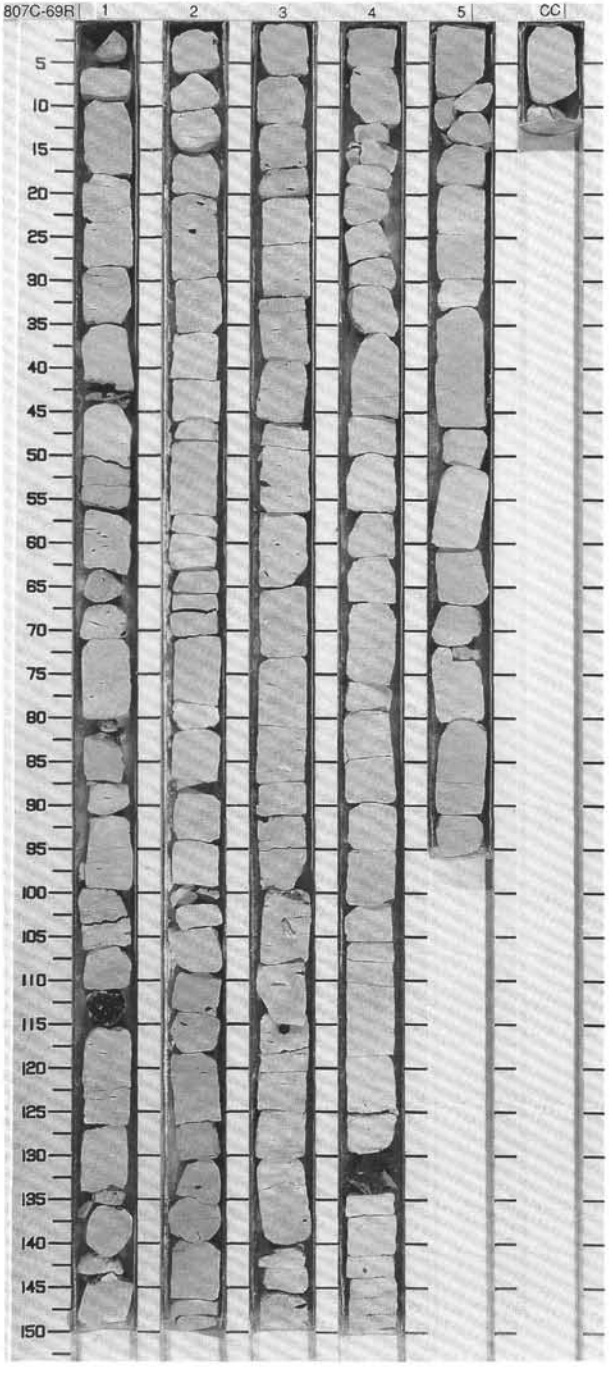
LIMESTONE

Major lithology: This core contains white (7.5YR 8/0 to 5YR 8/0) to pinkish gray (5YR 8/1) LIMESTONE. White and dark brown (7.5YR 3/2) clasts are abundant throughout. The clasts are commonly elongate, horizontal, and the locus of stylolites. The long axes of the clasts are up to 1 cm in length. The dark brown clasts are composed of altered glass and clay. In Section 5, the clasts are aligned horizontally and parallel, giving the impression of laminae development. Stylolites are common throughout the core. Fragments of a green mineral (chlorite?) are present but rare in Section 3.

Minor lithology: Dark gray (10YR 4/1) CLAYSTONE at Section 4, 130 cm has limestone inclusions, laminations, and flow structures that suggest shear. The clay is probably altered ash. CHERT is present at Section 1, 113 cm.

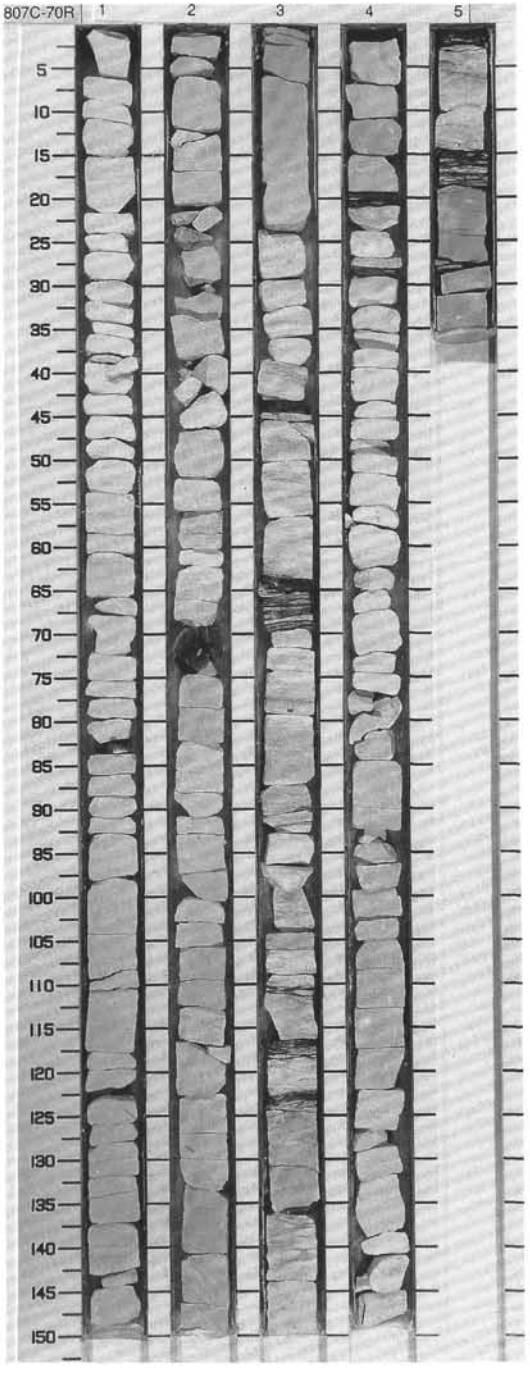
SMEAR SLIDE SUMMARY (%):

	3, 25 M
TEXTURE:	
Sand	10
Silt	60
Clay	30
COMPOSITION:	
Carbonate particles	10
Feldspar	10
Glass	80

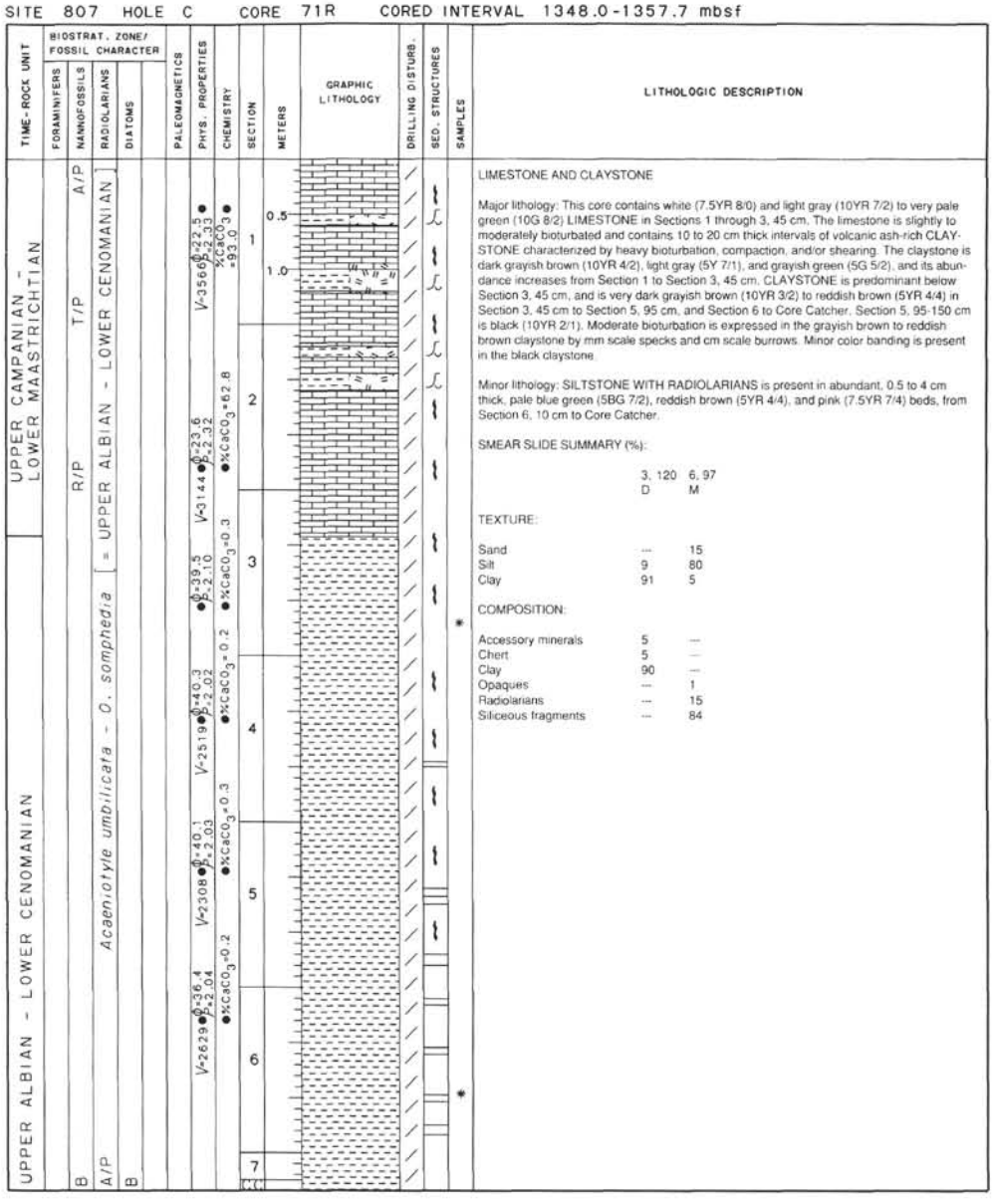


SITE 807 HOLE C CORE 70R CORED INTERVAL 1338.4-1348.0 mbsf

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
UPPER CAMPANIAN - LOWER MAASTRICHTIAN		C/P	B	B		▽-3663 ● ρ=2.26 ρ=2.08 ▽-3663 ρ=2.35 ▽-3784 ● ρ=22.4 ρ=2.35 ▽-3887 ● ρ=21.0 ρ=2.36	●%$CaCO_3$=96.8 ●%$CaCO_3$=96.3 ●%$CaCO_3$=94.3 ●%$CaCO_3$=96.3	1 2 3 4 5	0.5 1.0					LIMESTONE Major lithology: This core contains white (10YR 8/1)LIMESTONE. Much of the core is composed of intervals of marbled brown, light gray, and white colors. This marbling is subhorizontal in orientation and possibly represents sheared sedimentary and bioturbation features, with a diagenetic overprinting. Small clasts (<1 mm) in the limestone matrix are scattered throughout Section 3. These clasts are especially evident in Section 3, 0-20 cm, and are underlain by a fold structure. Only a few, poorly developed stylolites are present Minor lithology: Thin beds (1-15 cm) of CLAYSTONE are interbedded within the limestone in Sections 3, 4, and 5 (11 beds total). The claystone is dark brown (10YR 3/3) in color. The beds are laminated and typically wavy or even braided in appearance. They may represent layers of altered ash beds. CHERT is also present in small amounts in this core (several 1-to 2-cm-thick intervals).



SITE 807 HOLE C CORE 71R CORED INTERVAL 1348.0-1357.7 mbsf



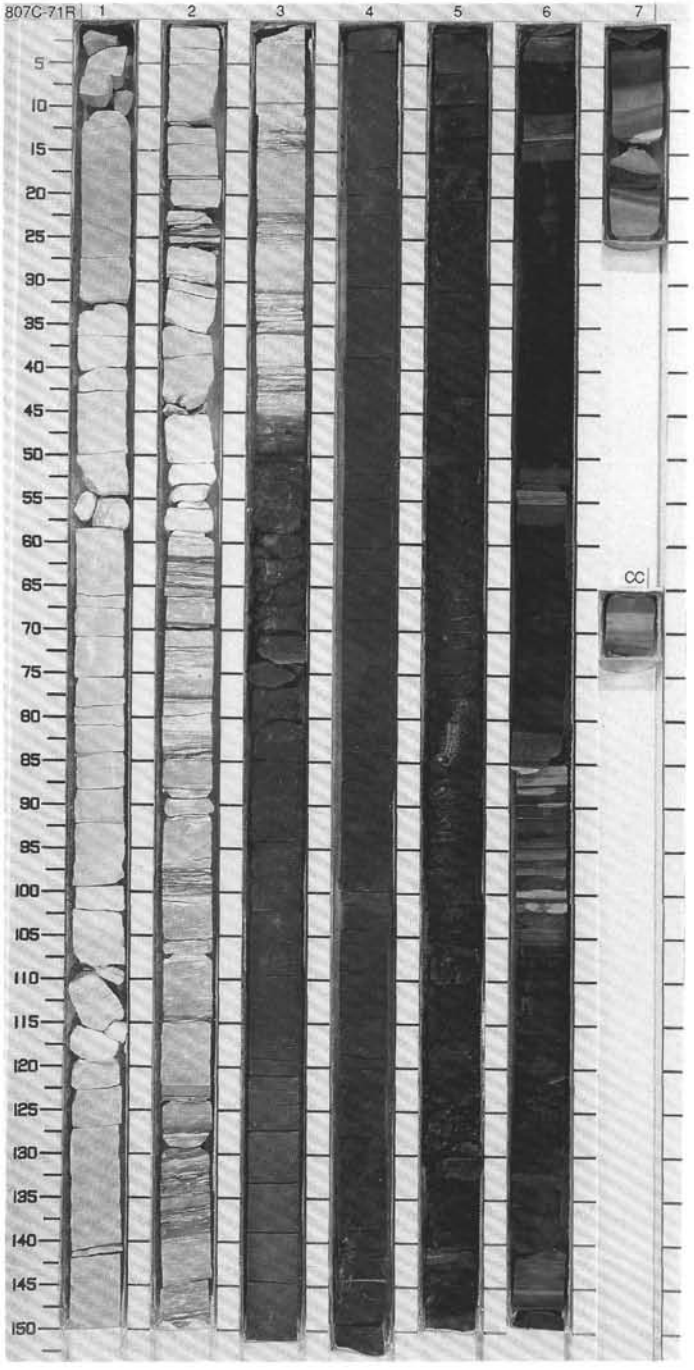
LIMESTONE AND CLAYSTONE

Major lithology: This core contains white (7.5YR 8/0) and light gray (10YR 7/2) to very pale green (10G 8/2) LIMESTONE in Sections 1 through 3, 45 cm. The limestone is slightly to moderately bioturbated and contains 10 to 20 cm thick intervals of volcanic ash-rich CLAYSTONE characterized by heavy bioturbation, compaction, and/or shearing. The claystone is dark grayish brown (10YR 4/2), light gray (5Y 7/1), and grayish green (5G 5/2), and its abundance increases from Section 1 to Section 3, 45 cm. CLAYSTONE is predominant below Section 3, 45 cm, and is very dark grayish brown (10YR 3/2) to reddish brown (5YR 4/4) in Section 3, 45 cm to Section 5, 95 cm, and Section 6 to Core Catcher. Section 5, 95-150 cm is black (10YR 2/1). Moderate bioturbation is expressed in the grayish brown to reddish brown claystone by mm scale specks and cm scale burrows. Minor color banding is present in the black claystone.

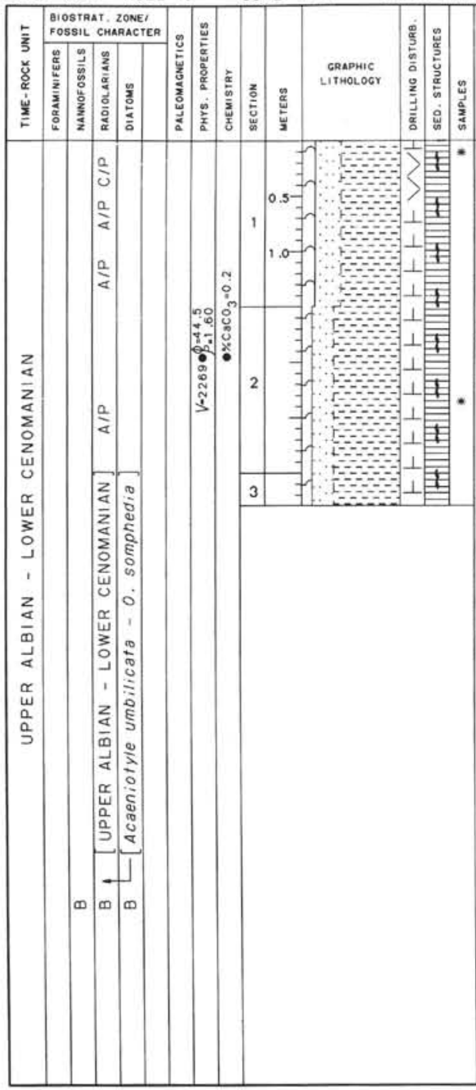
Minor lithology: SILTSTONE WITH RADIOLARIANS is present in abundant, 0.5 to 4 cm thick, pale blue green (5BG 7/2), reddish brown (5YR 4/4), and pink (7.5YR 7/4) beds, from Section 6, 10 cm to Core Catcher.

SMEAR SLIDE SUMMARY (%):

	3, 120 D	6, 97 M
TEXTURE:		
Sand	--	15
Silt	9	80
Clay	91	5
COMPOSITION:		
Accessory minerals	5	--
Chert	5	--
Clay	90	--
Opaques	--	1
Radiolarians	--	15
Siliceous fragments	--	84



SITE 807 HOLE C CORE 72R CORED INTERVAL 1357.7-1367.4 mbsf



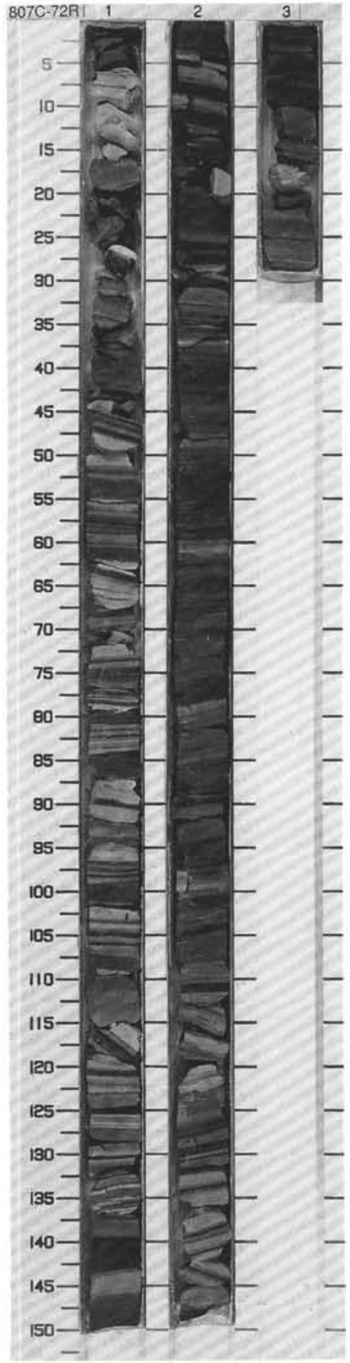
LITHOLOGIC DESCRIPTION

CLAYSTONE and RADIOLARIAN SILTSTONE

Major lithology: Approximately 65% of the core consists of dark brown (10YR 3/2) CLAYSTONE. The rock is interbedded with RADIOLARIAN SILTSTONE. Slight bioturbation is indicated by faint mm to cm scale burrows in some layers. Flaser structures and wavy discontinuous thin layers are common. The interbeds display either sharp contacts or normal grading with fine-scale lamination. Evidence of microfaulting is observed in Section 1, 135 cm. Scouring and flow structures are observed in Section 2, 122 cm. Approximately 35% of the core is composed of pinkish gray (7.5YR 7/2) and light gray (N7/) RADIOLARIAN SILTSTONE. This lithology is interbedded with the claystone and forms mm to 5 cm thick beds. Individual beds are partially laminated, and often stretched and discontinuous. A few beds display weak normal grading. Faint burrowing indicates slight bioturbation. Smear slide analysis indicates that the non-radiolarian fragments are fine-grained silicic particles of undetermined origin.

SMEAR SLIDE SUMMARY (%)

	1, 10 M	2, 87 D
TEXTURE:		
Sand	20	10
Silt	75	70
Clay	5	20
COMPOSITION:		
Accessory minerals	Tr	Tr
Clay	—	99
Glass	—	1
Quartz	—	Tr
Radiolarians	30	Tr
Siliceous fragments	70	—



SITE 807 HOLE C CORE 73R CORED INTERVAL 1367.4-1375.4 mbsf

TIME-ROCK UNIT: APTIAN - ALBIAN; UPPER ALBIAN - LOWER CENOMANIAN

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: C/P; RADIOLARIANS: B *Acaeniotyle umbilicata* - *O. somphedia* [UPPER ALBIAN - LOWER CENOMANIAN ●A/P; DIATOMS: B

PALEOMAGNETICS

PHYS. PROPERTIES: V-2773 ● 1.36 / 2.07; V-2021 ● 0.42 / 1.84

CHEMISTRY: $\%CaCO_3$ ~0.2 ● $\%CaCO_3$ ~0.2

SECTION: 1, 2

METERS

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

CLAYSTONE and RADIOLARIAN SANDY SILTSTONE overlying LIMESTONE

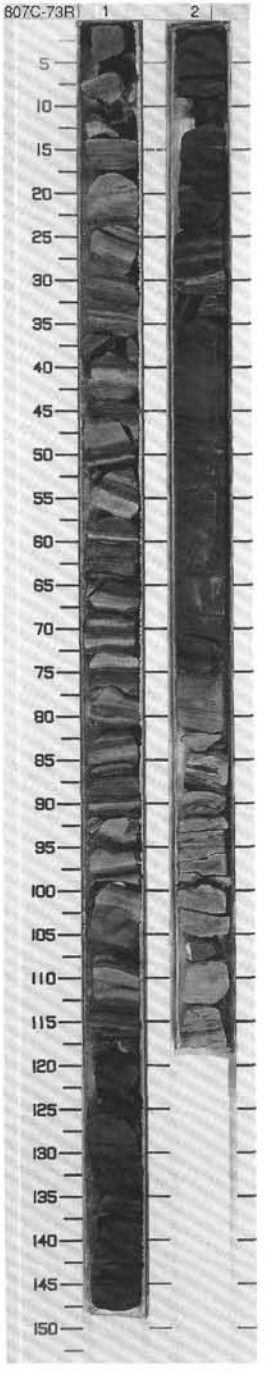
Major lithology: Approximately 60% of this core is very dark gray (10YR 3/1) CLAYSTONE. It is interbedded on a 2 mm to 2 cm scale with grayish brown (10YR 5/2) to gray (10YR 6/1) and light brownish gray (10YR 6/2) RADIOLARIAN SANDY SILTSTONE, which comprises about 35% of the core. The contacts between the two sediment types are mostly gradational but sharp contacts are also common. Graded bedding is seen in upper part of Section 1. Wavy interfaces are common, and not all layers are continuous across the core. No clear evidence of scouring or load structures was found. Very dark gray (10YR 3/1) and brown (7.5YR 5/4) burrows occur in Section 2 between 27 and 34 cm. Flattened burrows can be discerned in some of the laminated sequences.

Minor lithology: Below Section 2, 82 cm, the core is moderately bioturbated gray (10YR 6/1) LIMESTONE. Steeply dipping, very fine anastomosing fractures are seen below Section 2, 96 cm.

Black (2.5YR 2.5/0) cm scale CHERT nodules are seen in Section 1, 10 cm and in Section 2, 105 cm.

SMEAR SLIDE SUMMARY (%):

	1, 81 D	1, 83 D	2, 98 D
TEXTURE:			
Sand	2	35	—
Silt	20	60	30
Clay	78	5	70
COMPOSITION:			
Accessory minerals	—	—	3
Carbonate grains	—	—	96
Chert	—	2	—
Clay	93	5	—
Glass	1	—	Tr
Nannofossils	—	—	1
Oxide	5	—	—
Radiolarians	1	35	—
Siliceous fragments	—	58	—



SITE 807 HOLE C CORE 74R CORED INTERVAL 1375.4-1385.2 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
APTIAN - ALBIAN		A/P	R/P	R				1	0.5	BASALT			*	LIMESTONE AND CHERT
		APTIAN - CENOMANIAN ?		?				1	1.0					Major lithology: This core contains 25 cm of moderately fragmented, dark gray (N5/) CHERT and dark grayish brown (10YR 4/2) to light gray (10YR 7/2) LIMESTONE. The chert contains limestone inclusions, brecciated fragments, and external coatings, and appears to have formed post-depositionally as nodules. The limestone exhibits pervasive flaser structures on a scale of 5 mm to 3 cm. The largest piece of limestone, which is located at Section 1, 19-25 cm, contains three major microfaults and abundant healed tensional cracks.
								2						SMEAR SLIDE SUMMARY (%):
								3						1, 14 D
								4						TEXTURE:
								CC						Silt 50 Clay 50
														COMPOSITION:
														Carbonate grains 92 Chert 2 Glass 1 Nannofossils 5

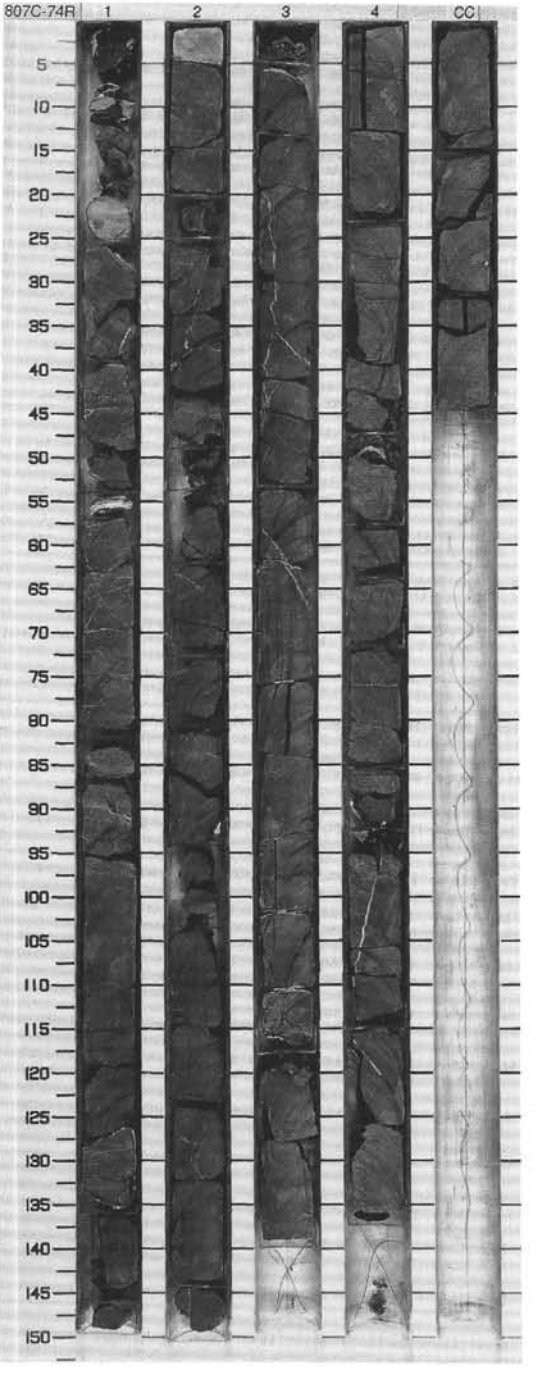
807 C 75R HARD ROCK

807 C 76R HARD ROCK

807 C 77R HARD ROCK

807 C 78R HARD ROCK

807 C 79R HARD ROCK

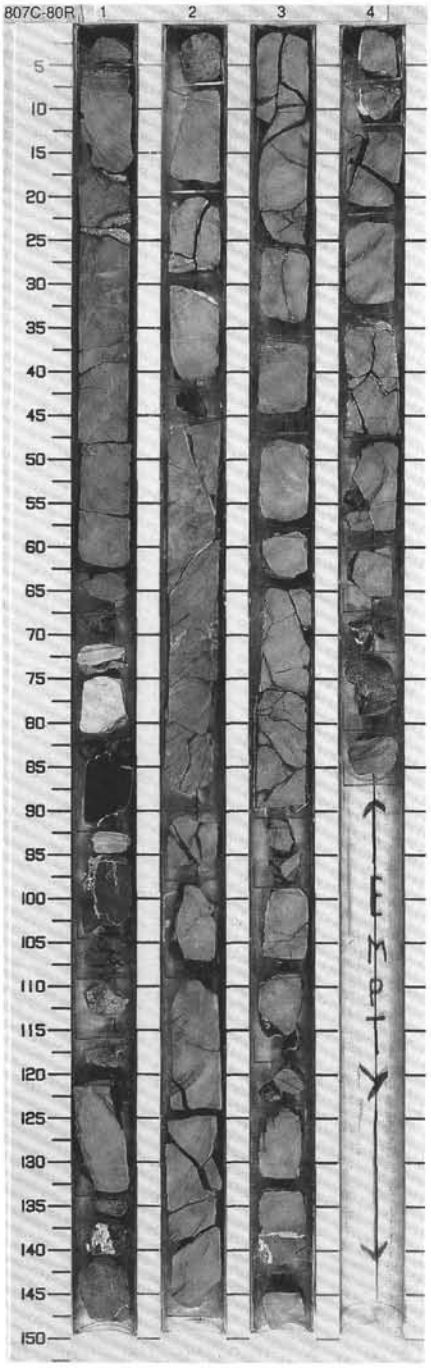


SITE 807 HOLE C CORE 80R CORED INTERVAL 1423.9-1433.6 mbsf

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
LOWER CRETACEOUS								1	0.5	BASALT			* *	LIMESTONE and CLAYEY VITRIC TUFF with OXIDES
									1.0					Major lithology: Brecciated pieces of LIMESTONE interbedded with CLAYEY VITRIC TUFF with OXIDES comprise the material in Section 1, 70-120 cm. The limestone is white (10YR 8/1 to 10YR 8/2) and contains angular fragments and clasts of vitric tuff and basaltic glass. Rounded fragments of altered vitric tuff, 1 to 2 mm thick concentrations of carbonate, and lensoid concentrations of sand-sized grains, including vitric tuff and basaltic clasts, are also observed. Some pieces have fracture fills of sparry calcite. The clayey vitric tuff is dark reddish brown (5YR 3/3) to reddish brown (5YR 4/3). The clays are probably smectite. One piece of the tuff contains long, vertical and horizontal, carbonate-filled fractures, up to 1 cm wide, and angular vitric tuff clasts.
								2		BASALT				SMEAR SLIDE SUMMARY (%):
								3						TEXTURE:
								4						COMPOSITION:

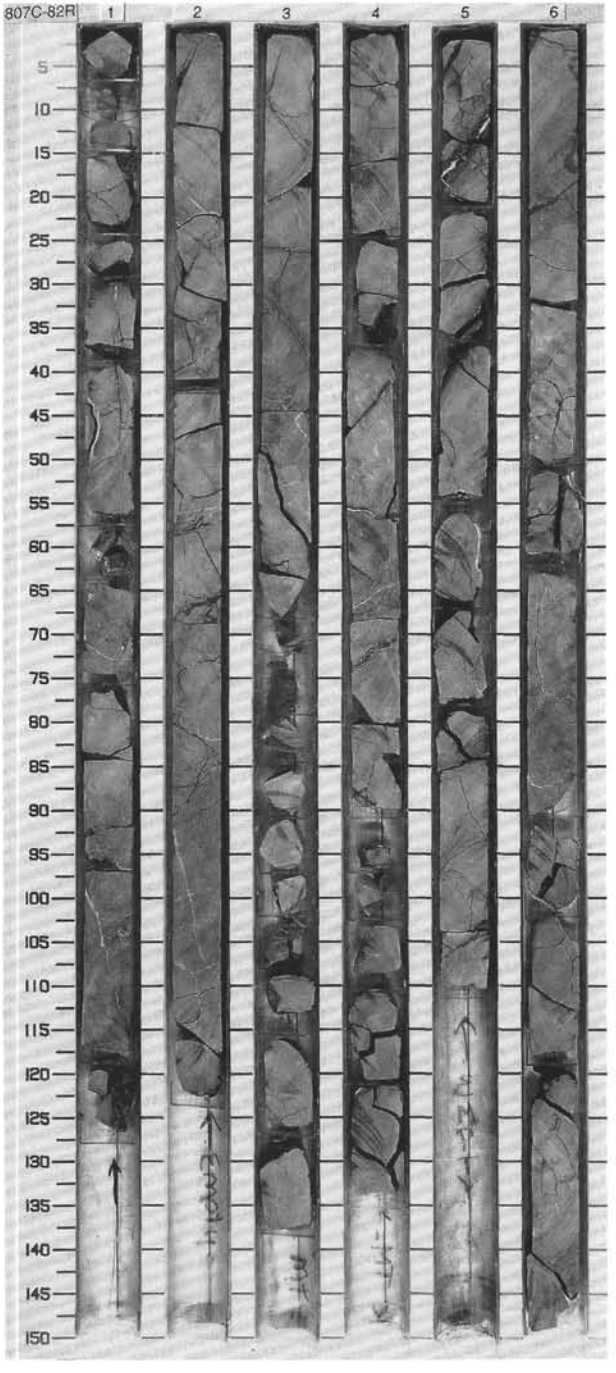
	1, 80 D	1, 90 D
TEXTURE:		
Silt	80	60
Clay	20	40
COMPOSITION:		
Carbonate grains	100	---
Clay	---	30
Diatoms	Tr	---
Glass	Tr	60
Nannofossils	Tr	---
Oxide	---	10

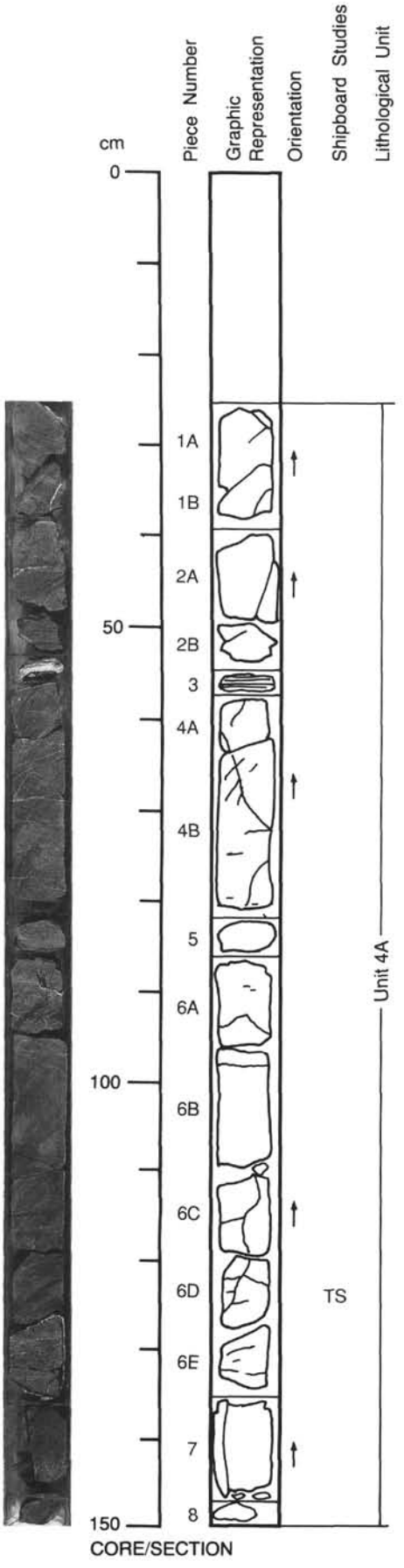
807 C 81R HARD ROCK



SITE 807 HOLE C CORE 82R CORED INTERVAL 1438.2-1447.2 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 CRETACEOUS								1	0.5	BASALT				CLAYEY LIMESTONE Major lithology: One piece of olive brown CLAYEY LIMESTONE is present in Section 3, 72-79 cm. The clay is probably smectite, and iron oxides are common to abundant. The limestone contains 5-10% grayish green (5G 5/2) clasts that are 2-3 mm in diameter and range in shape from elongate and angular to pelletal. These clasts could be glauconite or basaltic debris.
									1.0					
								2						
								3						
								4		BASALT				
								5						
								6						





130-807C-74R-1

UNIT 4A: APHYRIC BASALT

Pieces 1, 2

CONTACTS: Pillow margin.
PHENOCRYSTS:
Pyroxene - ~1%; 1 mm; euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Gray to red-brown.
STRUCTURE: Pillow.
ALTERATION: Highly altered, mottled and banded appearance.
VEINS/FRACTURES: ~1%; 0.5-2 mm; subvertical to subhorizontal; calcite filled.

UNIT 4A: APHYRIC BASALT

Pieces 3, 4

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 1-2 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Gray with red-brown patches.
STRUCTURE: Pillow lava.
ALTERATION: Moderate to high, mottled appearance near top.
VEINS/FRACTURES: 2-3%; 0.2-2 mm; subvertical to subhorizontal; brown and green clay vein filling, blue-green mineral present.
ADDITIONAL COMMENTS: Piece 3 is an inter-pillow breccia consisting of green altered glass (celadonite?) and calcite.

UNIT 4A: APHYRIC BASALT

Piece 5

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Gray.
STRUCTURE: Pillow lava.
ALTERATION: Moderate to high.
VEINS/FRACTURES: ~1%; 0.2-1 mm; varied orientations; calcite.

UNIT 4A: APHYRIC BASALT

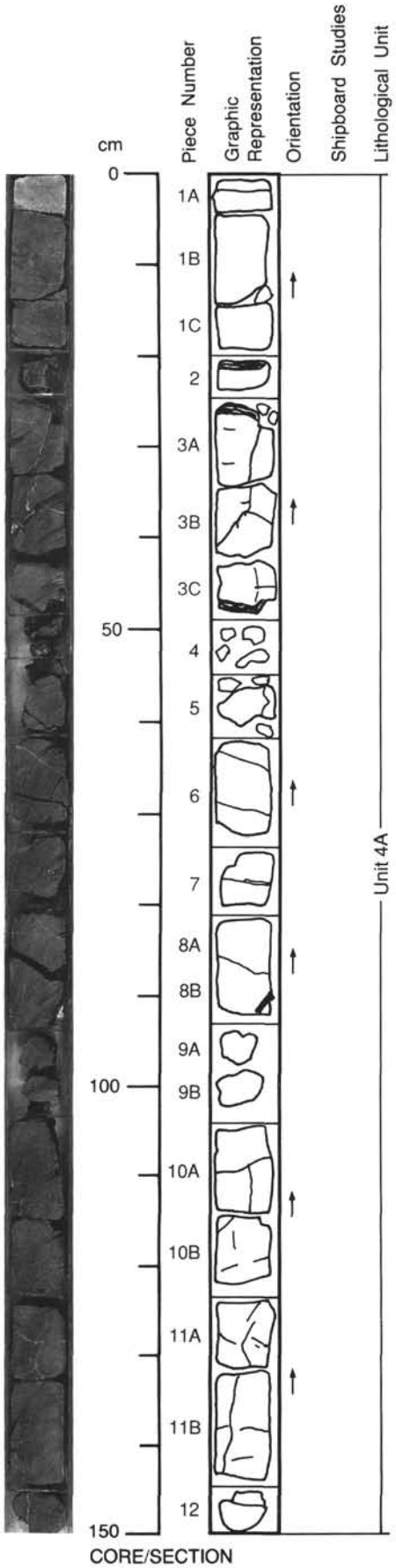
Piece 6

CONTACTS: None.
PHENOCRYSTS: Piece 6D contains 5 mm aggregate of plagioclase phenocrysts.
Plagioclase - <1%; 1-3 mm; euhedral.
GROUNDMASS: Fine grained to glassy.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to high.
VEINS/FRACTURES: ~3%; 0.5-1 mm; subvertical to subhorizontal; calcite, green and brown clay.

UNIT 4A: APHYRIC BASALT

Pieces 7, 8

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Gray.
STRUCTURE: None.
ALTERATION: Moderate.
VEINS/FRACTURES: <1%; 0.2-1 mm; subvertical; calcite.



130-807C-74R-2

UNIT 4A: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained with glass margins.
VESICLES: Nonvesicular.
COLOR: Dark gray to medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slightly altered near margin to moderately altered interior.
VEINS/FRACTURES: <1%; 0.5-2 mm; subvertical and subhorizontal; calcite filled with minor clays and/or iron oxides.
ADDITIONAL COMMENTS: Piece 1A is a banded limestone vein filling. The upper 1-1.5 cm contains a green mineral (epidote?). It shows a sharp contact with a light brownish band (~2.5 cm thick), very fine grained at top, coarser (~1 mm grain size) at bottom.

UNIT 4A: APHYRIC BASALT

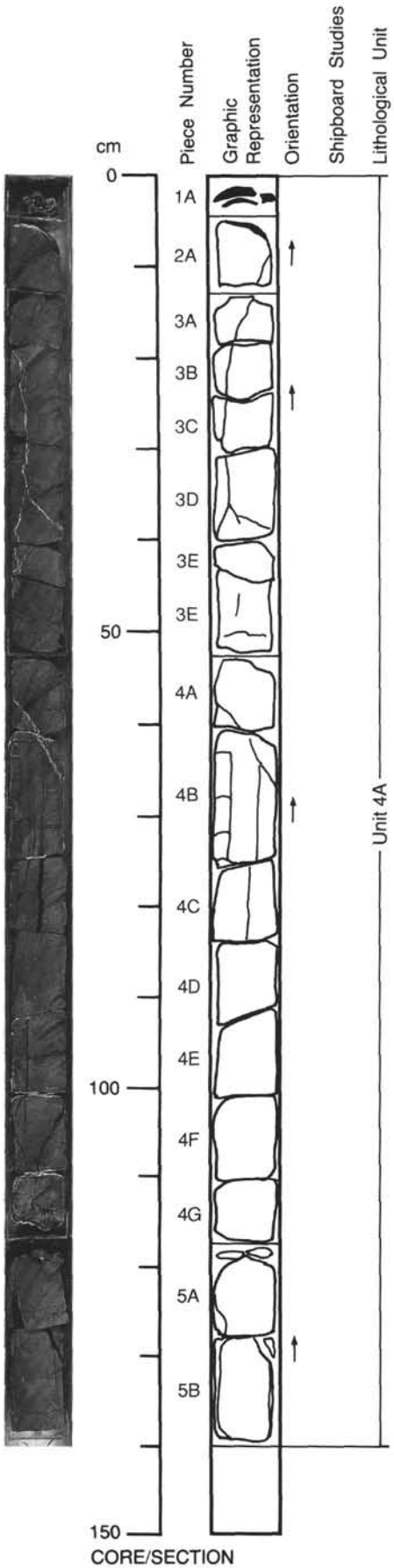
Pieces 4-8

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Nonvesicular.
COLOR: Dark to medium gray with blotchy appearance in interior.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate, some brown-red Fe-oxide staining.
VEINS/FRACTURES: <1%; 1-2 mm; several at 30°-45°; calcite and brown clay and/or Fe-oxides; glass altered to celadonite (?) and brown clay.

UNIT 4A: APHYRIC BASALT

Pieces 9-12

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 3 mm; very rare subhedral laths.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Nonvesicular.
COLOR: Medium gray to dark gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate, blotchy alteration in Piece 10A.
VEINS/FRACTURES: <1%; 0.5-2 mm; near vertical; calcite filled, small amounts of green mineral and dark brown Fe-oxides and/or clay.

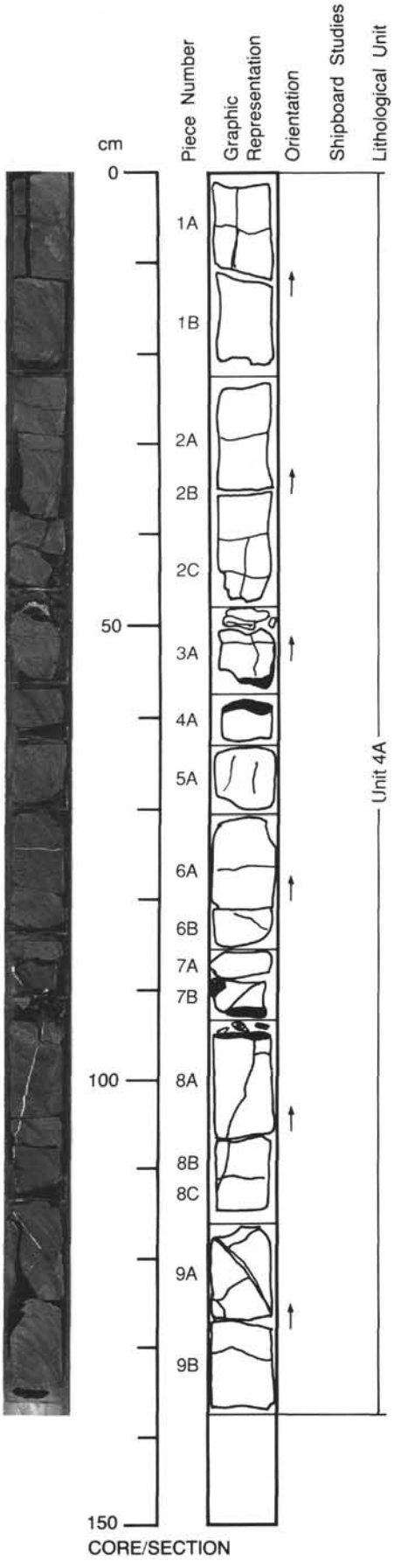


130-807C-74R-3

UNIT 4A: APHYRIC BASALT

Pieces 1-5

CONTACTS: Top of pillow.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained with glassy top margin, coarsening towards bottom.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow top, massive. interior.
ALTERATION: Slight to moderate, staining near vertical fractures.
VEINS/FRACTURES: <1%; 1-3 mm; vertical and at ~ 60°; calcite and olive green mineral.



130-807C-74R-4

UNIT 4A: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained with glassy margin at bottom.
VESICLES: Nonvesicular.
COLOR: Dark gray.
STRUCTURE: Massive top, chilled bottom.
ALTERATION: Slight to moderate, gray staining near veins.
VEINS/FRACTURES: <1%; 0.5-5 mm; mostly subhorizontal; calcite, celadonite (?), brown clay and/or Fe-oxides.

UNIT 4A: APHYRIC BASALT

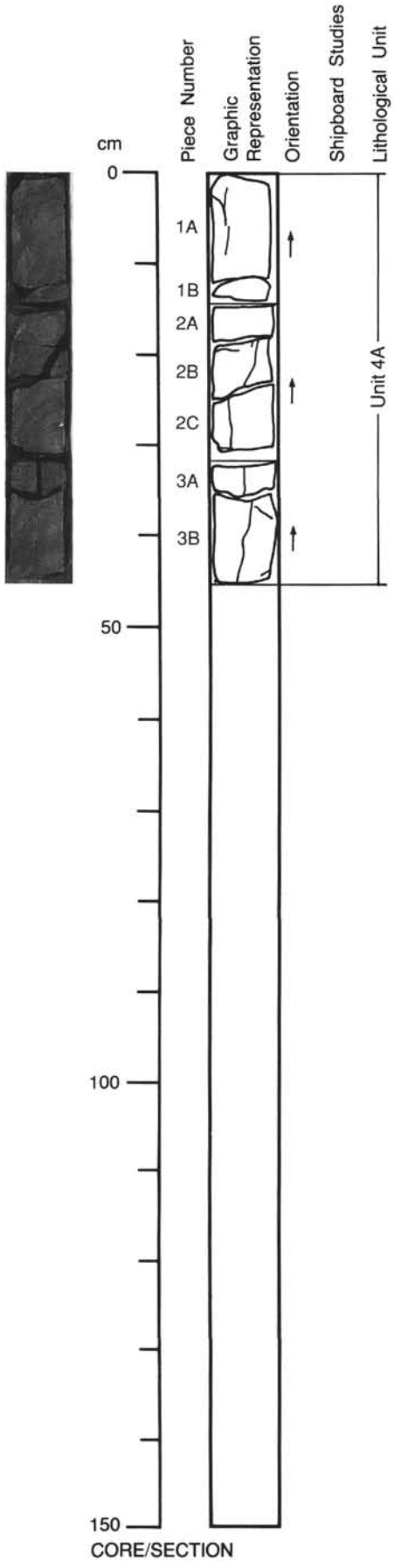
Pieces 4-7

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained with glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; up to 2 mm; subvertical to subhorizontal; calcite.

UNIT 4A: APHYRIC BASALT

Pieces 8, 9

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; up to 3 mm; euhedral laths.
GROUNDMASS: Fine grained, glassy top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow to massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 2-3 mm; subvertical to 45°; calcite.

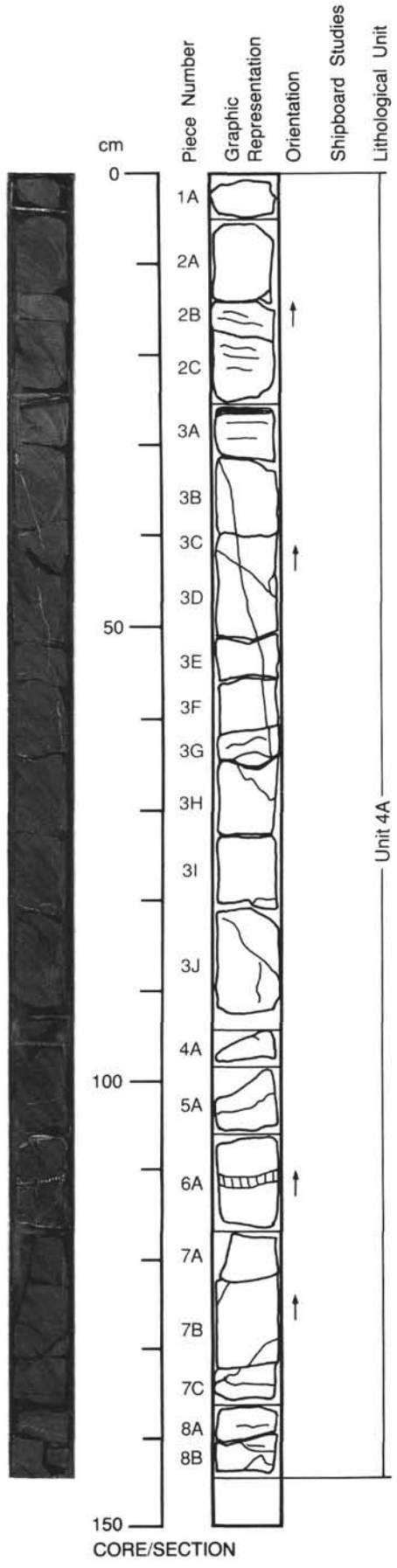


130-807C-74R-5

UNIT 4A: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 2 mm; euhedral laths.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; ~0.5 mm; subvertical; calcite.



130-807C-75R-1

UNIT 4A: APHYRIC BASALT

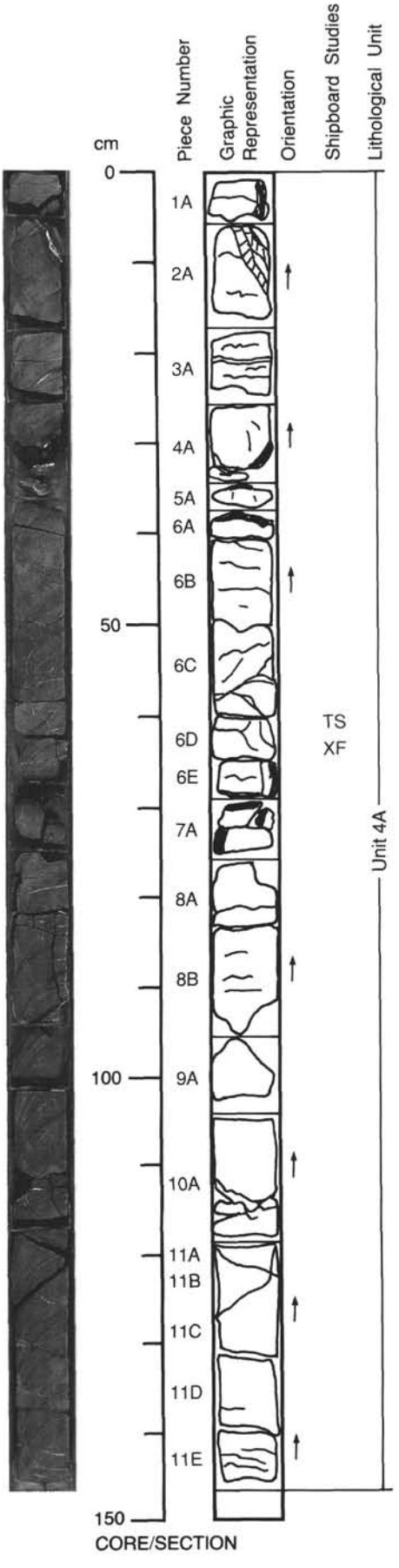
Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, horizontal flow banding in Pieces 2B and 2C.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <0.5 mm; irregular; calcite, clay and or Fe-oxides.

UNIT 4A: APHYRIC BASALT

Pieces 3-8

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Glassy at top of Piece 3, otherwise fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; ~1-2 mm; subhorizontal to subvertical; calcite with minor clay and chlorite (?).



130-807C-75R-2

UNIT 4A: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Piece 3 contains 3 mm calcite, chlorite (?) and clays filled vesicle.
COLOR: Medium gray with slight brown-red staining in a few patches.
STRUCTURE: Pillow.
ALTERATION: Moderate; glass altered to bright blue-green and dark green minerals.
VEINS/FRACTURES: <1%; 0.5-1 mm; subhorizontal; calcite and dark green and brown clays and/or Fe-oxides; Piece 2 has 5 mm calcite vein in glass.

UNIT 4A: APHYRIC BASALT

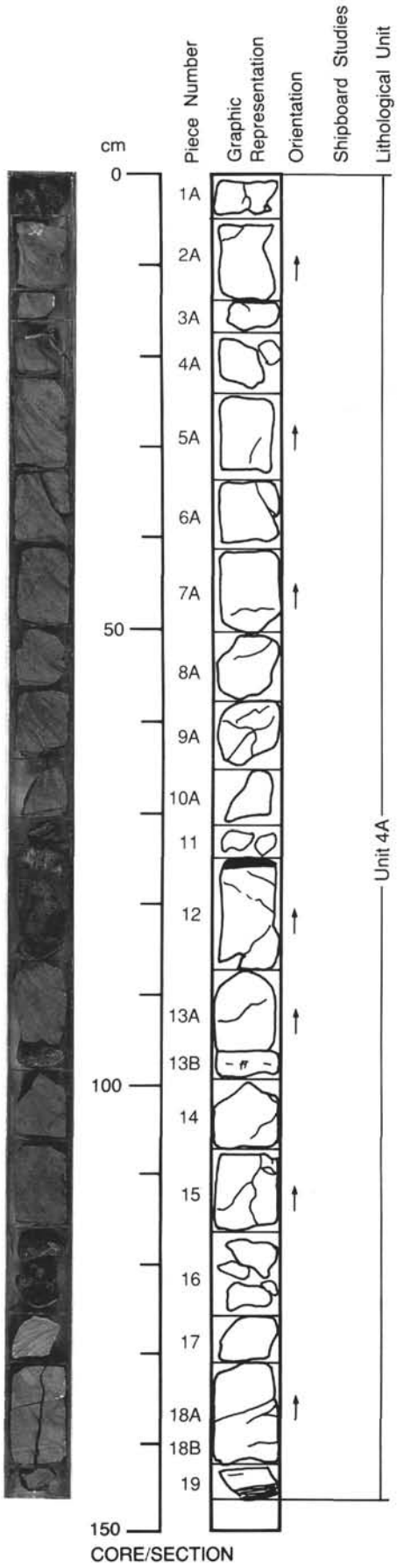
Pieces 5, 6

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; ~1 mm; euhedral.
GROUNDMASS: Fine grained, glass at margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate, freshest near glassy margins.
VEINS/FRACTURES: <1%; 0.5- 1 mm; various; brown clay or Fe-oxide, dark blue-green clay; one vug filled with olive-green mineral (epidote?).
ADDITIONAL COMMENTS: Piece 5 is inter-pillow calcite with a greenish mineral (chlorite?, smectite?).

UNIT 4A: APHYRIC BASALT

Pieces 7-11

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; ~ 1; euhedral.
GROUNDMASS: Fine grained near glassy top of Piece 7; coarser in interior of flow.
VESICLES: Nonvesicular, but one ~5 mm amygdule filled with calcite, dark green clay and olive-green mineral (epidote?).
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Moderate.
VEINS/FRACTURES: <1%; 0.5-2 mm; subhorizontal; green clay.



130-807C-75R-3

UNIT 4A: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray with green and brown blotches.
STRUCTURE: Pillow?
ALTERATION: Moderate to high.
VEINS/FRACTURES: <1%; up to 5 mm; varied orientation; calcite and minor dark green mineral.

UNIT 4A: APHYRIC BASALT

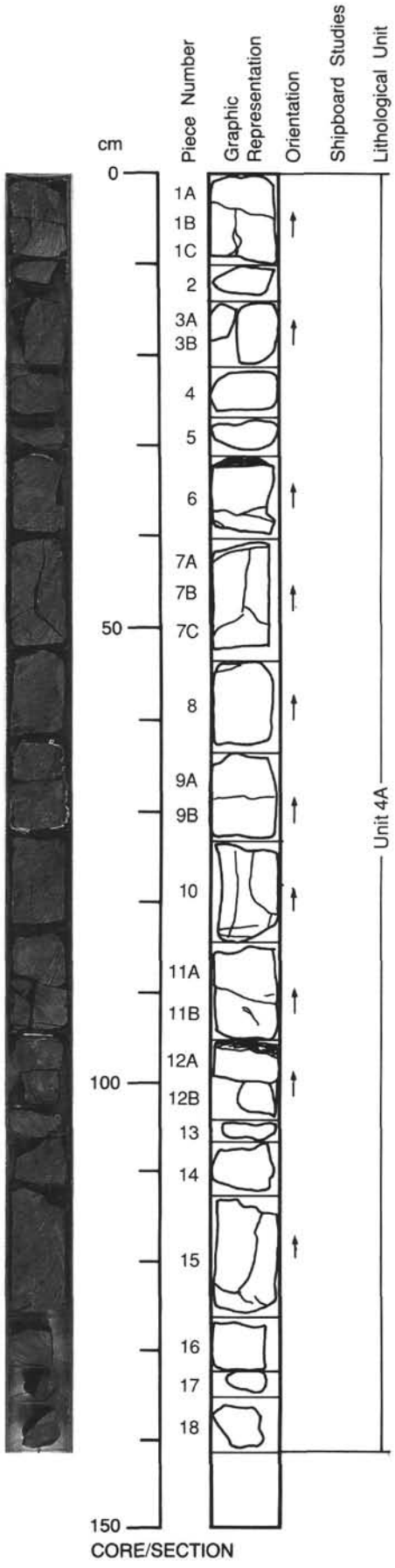
Pieces 4-11

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; ~1 mm; cluster of euhedral laths.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray, mottled in places.
STRUCTURE: Massive.
ALTERATION: Moderate.
VEINS/FRACTURES: <1%; ~0.5 mm; varied orientation; calcite with lesser brown clay and/or Fe-oxides.

UNIT 4A: APHYRIC BASALT

Pieces 12-19

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 1-3 mm; euhedral.
GROUNDMASS: Fine grained with glassy top and bottom.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow to massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; varied orientation; calcite and minor green clay.



130-807C-75R-4

UNIT 4A: APHYRIC BASALT

Pieces 1-5

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 0.5 mm; vertical; calcite, brown clay and/or Fe oxide.

UNIT 4A: APHYRIC BASALT

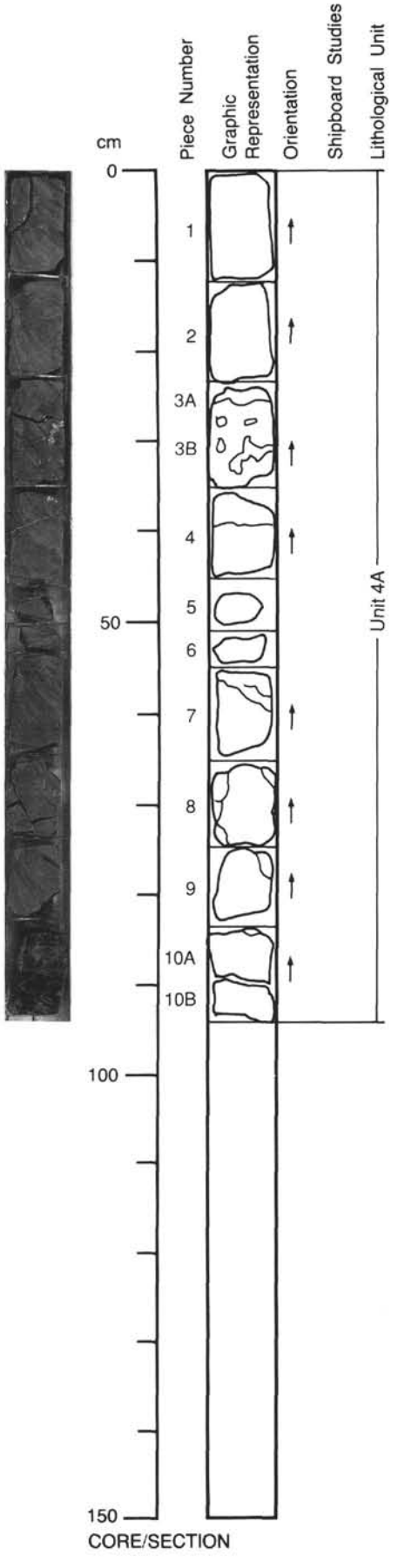
Pieces 6-11

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <<1%; 1-2 by 0.5-1 mm; euhedral.
GROUNDMASS: Fine grained, glassy at top of Piece 6.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; subvertical to subhorizontal; calcite veins.

UNIT 4A: APHYRIC BASALT

Pieces 12-18

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <<1%; 1-2 by 0.5 mm; euhedral.
GROUNDMASS: Fine grained, glassy at top of Piece 12.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray, mottled in upper part.
STRUCTURE: Massive.
ALTERATION: Slight to moderate, some blotchy alteration.
VEINS/FRACTURES: <<1%; 0.5-1 mm; varied orientation; calcite and clay filled.

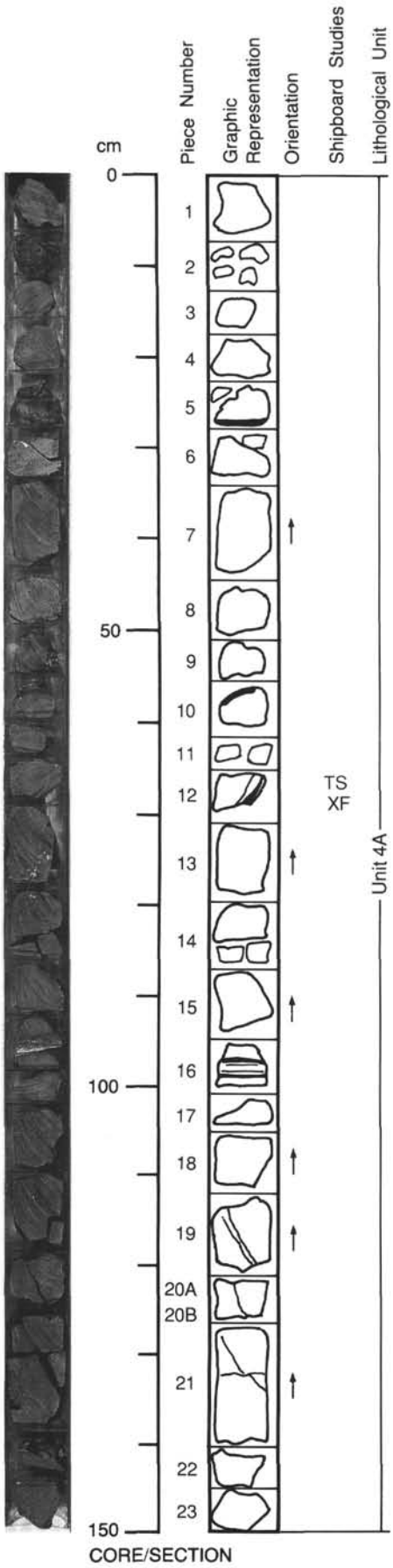


130-807C-75R-5

UNIT 4A: APHYRIC BASALT

Pieces 1-10

CONTACTS: None.
PHENOCRYSTS: Rare.
Plagioclase - <<1%; 1-2 by 1- 2 mm; euhedral to subhedral.
GROUNDMASS: Fine grained.
VESICLES: Irregular amygdules filled with calcite and green clay in Pieces 3 and 4.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 0.5 mm; subhorizontal; calcite and light green clay.



130-807C-76R-1

UNIT 4A: APHYRIC BASALT

Pieces 1-5

CONTACTS: None.
PHENOCRYSTS: Sparse.
Plagioclase - <<1%; 2 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Moderate, slightly blotchy.
VEINS/FRACTURES: <<1%; 0.5 mm; varied orientation; calcite and clay filled.

UNIT 4A: APHYRIC BASALT

Pieces 6-9

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Moderate.
VEINS/FRACTURES: <<1%; 0.5-1 mm; varied orientation; calcite, clay and/or Fe-oxide.

UNIT 4A: APHYRIC BASALT

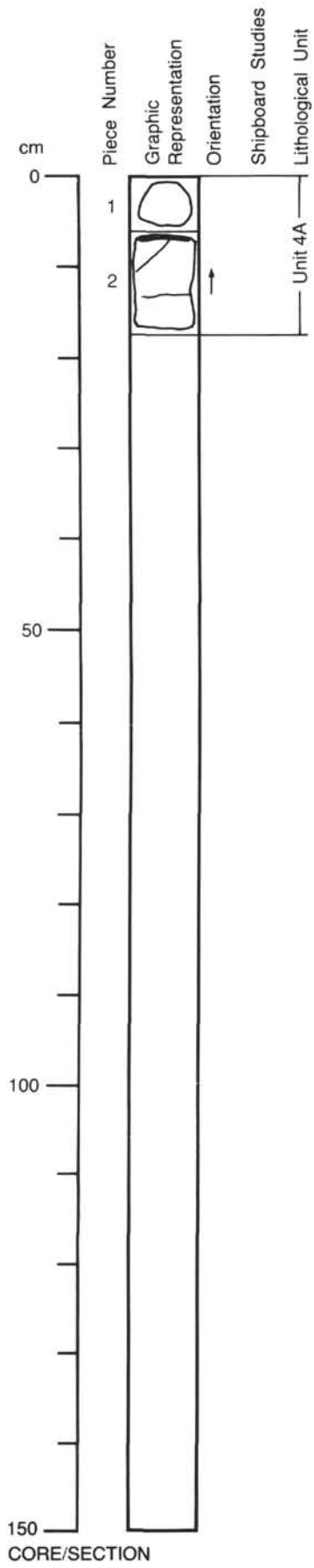
Pieces 10-15

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, glassy at top and bottom.
VESICLES: In Pieces 13 and 14 sparse, irregular amygdules (1-5 mm), calcite and clay filled.
COLOR: Medium gray, slight blotchy texture lower down.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: Sparse, radial fractures.

UNIT 4A: APHYRIC BASALT

Pieces 16-23

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, glassy upper margin on Piece 16.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: Mostly unfractured, a little clay filling.

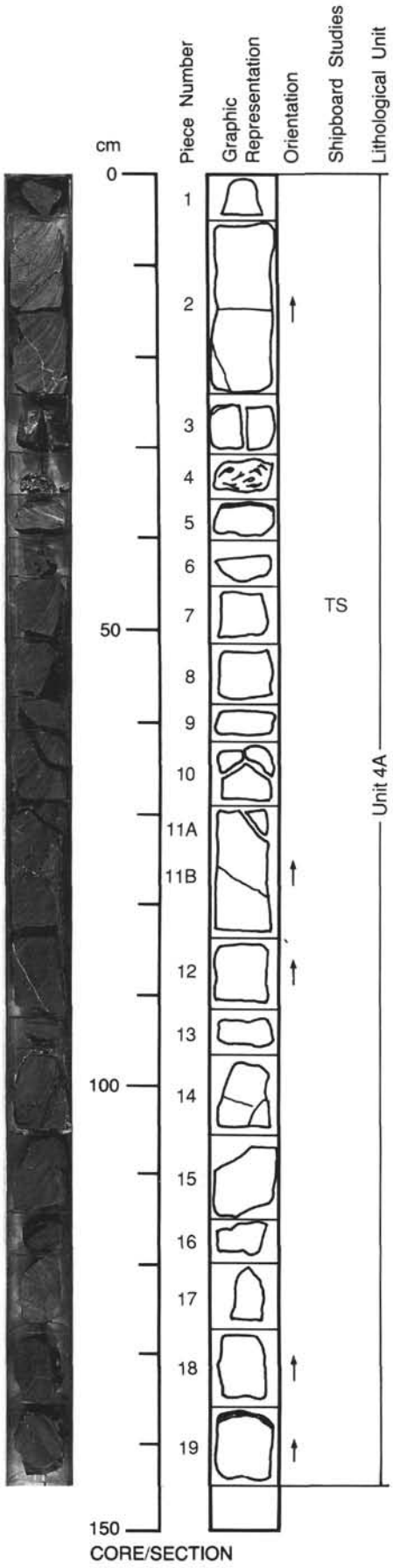


130-807C-76R-2

UNIT 4A: APHYRIC BASALT

Pieces 1-2

CONTACTS: Glassy on one margin.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, glassy margin on Piece 2.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava fragments.
ALTERATION: Moderate.
VEINS/FRACTURES: <<1%; ~0.5 mm; varied orientation; calcite with some brown and dark green clay.



130-807C-77R-1

UNIT 4A: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 1-2 mm thick; varied orientation; calcite and minor dark green and brown clay.

UNIT 4A: APHYRIC BASALT

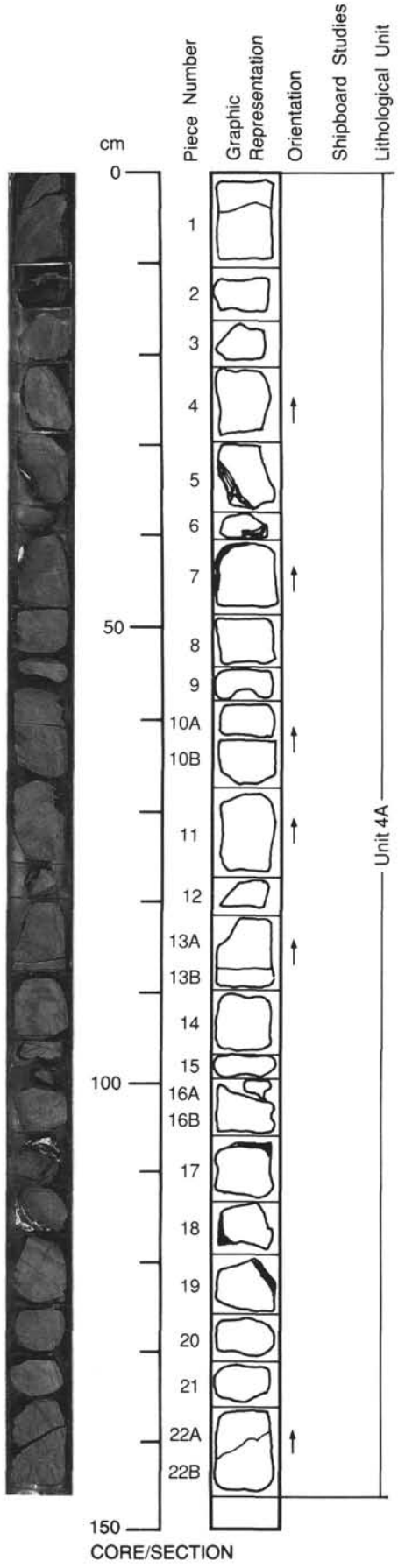
Pieces 4-18

CONTACTS: Glass.
PHENOCRYSTS: Very sparse.
Plagioclase - <<1%; ~1 mm; subhedral.
Clinopyroxene - <<1%; ~1 mm; subhedral.
GROUNDMASS: Fine grained, glass at top.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 0.5-2 mm thick; varied; calcite with minor clay.
ADDITIONAL COMMENTS: Piece 4 is an inter-pillow breccia of glass shards (pillow rim), ~1.5 cm long, moderately fresh to very altered, in calcite matrix.

UNIT 4A: APHYRIC BASALT

Piece 19

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Glassy to fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow top.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; ~0.5 mm thick; varied orientation; calcite with minor clay.



130-807C-77R-2

UNIT 4A: APHYRIC BASALT

Pieces 1-6

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy margins (Pieces 5 and 6).
VESICLES: Nonvesicular.
COLOR: Medium gray with brown-green color patches.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 1-2 mm thick; varied orientation; minor clay and calcite filling.

UNIT 4A: APHYRIC BASALT

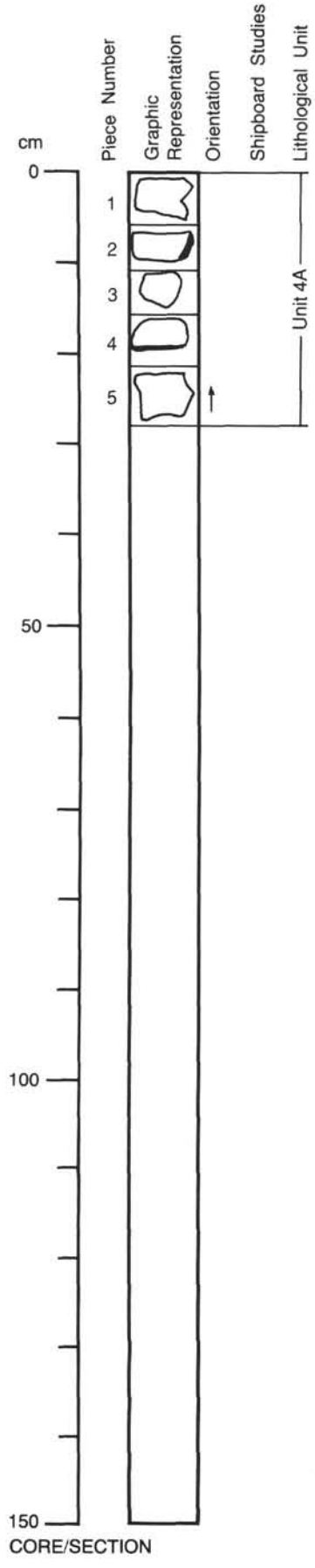
Pieces 7-16

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, glassy rim on Piece 7.
VESICLES: Nonvesicular.
COLOR: Medium to light gray, slight amount of greenish staining.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; <0.5 mm; varied orientation; fractures with minor clay; calcite near glass on Piece 7.

UNIT 4A: APHYRIC BASALT

Pieces 17-22

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy at the rims.
VESICLES: Nonvesicular.
COLOR: Light to medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; <0.5 mm; varied orientation; fractures with minor calcite and brown clay; calcite matrix invades glassy rims on Pieces 17, 18, 19.

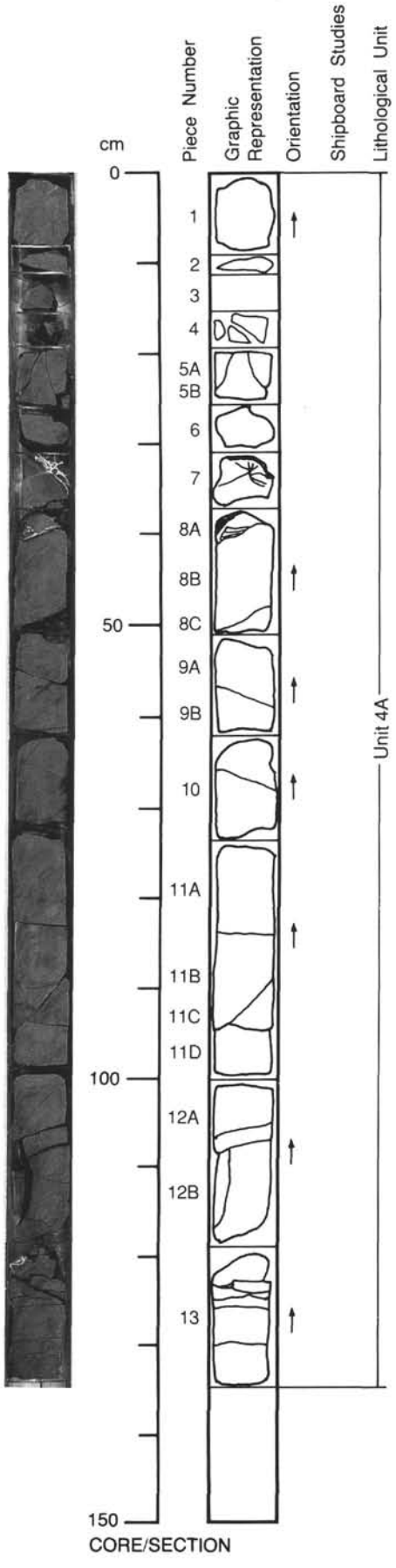


130-807C-77R-3

UNIT 4A: APHYRIC BASALT

Pieces 1-5

CONTACTS: None.
PHENOCRYSTS: Sparse.
Plagioclase - <1%; 2-3 mm; euhedral.
GROUNDMASS: Glassy to fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to light gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 0.5 mm or less; varied orientation; calcite veins with minor clay; inter-pillow calcite on glass rim of Piece 2.



130-807C-78R-1

UNIT 4A: APHYRIC BASALT

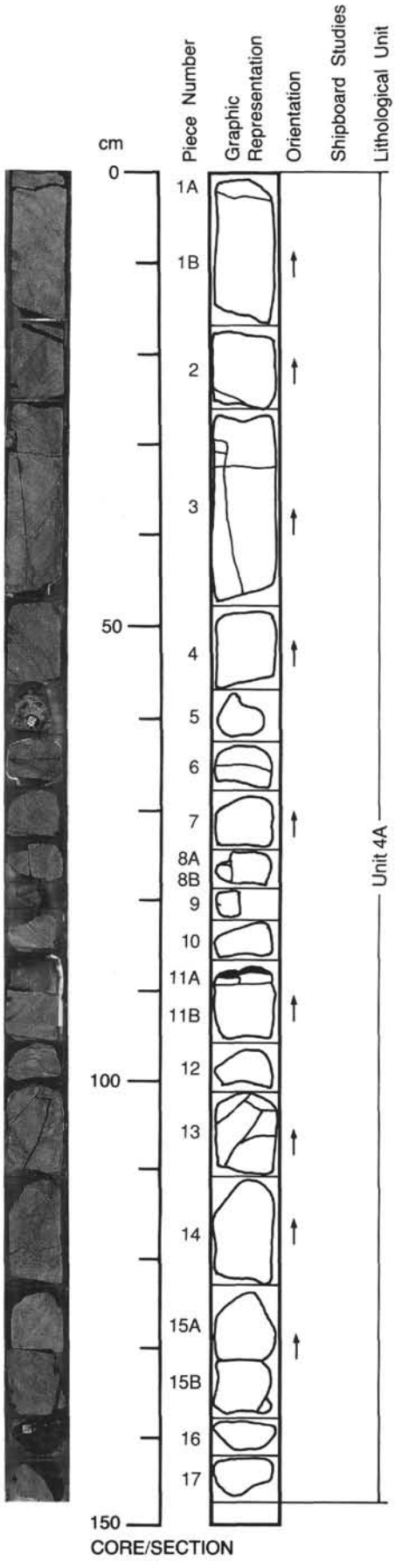
Pieces 1-6

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Thick pillow or massive flow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; <0.5 mm; subvertical.

UNIT 4A: APHYRIC BASALT

Pieces 7-13

CONTACTS: Glass.
PHENOCRYSTS: Very rare.
Plagioclase - <<1%; ~1 mm; subhedral.
GROUNDMASS: Fine grained, glassy at top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; ~1-3 mm thick; varied orientation; calcite near glassy top, contains minor green clays; fractures sparse, with minor brown clay and/or iron oxide.



130-807C-78R-2

UNITS 4A: APHYRIC BASALT

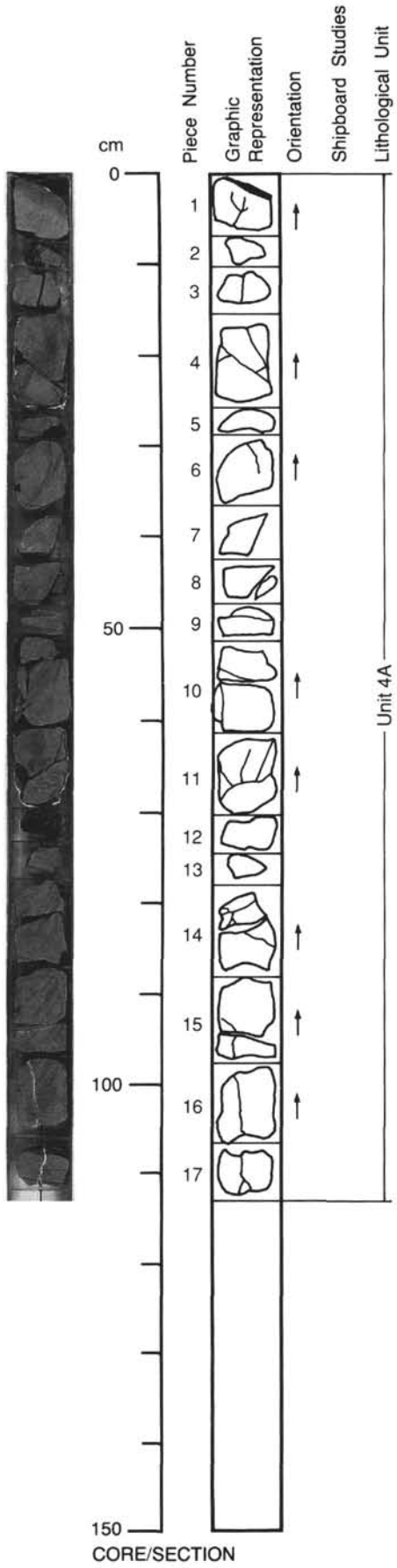
Pieces 1-10

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; <0.5 mm; subvertical to subhorizontal; fractures with minor clay.

UNITS 4A: APHYRIC BASALT

Pieces 11-17

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; <0.5 mm thick; varied orientation; fractures with minor clay and calcite.

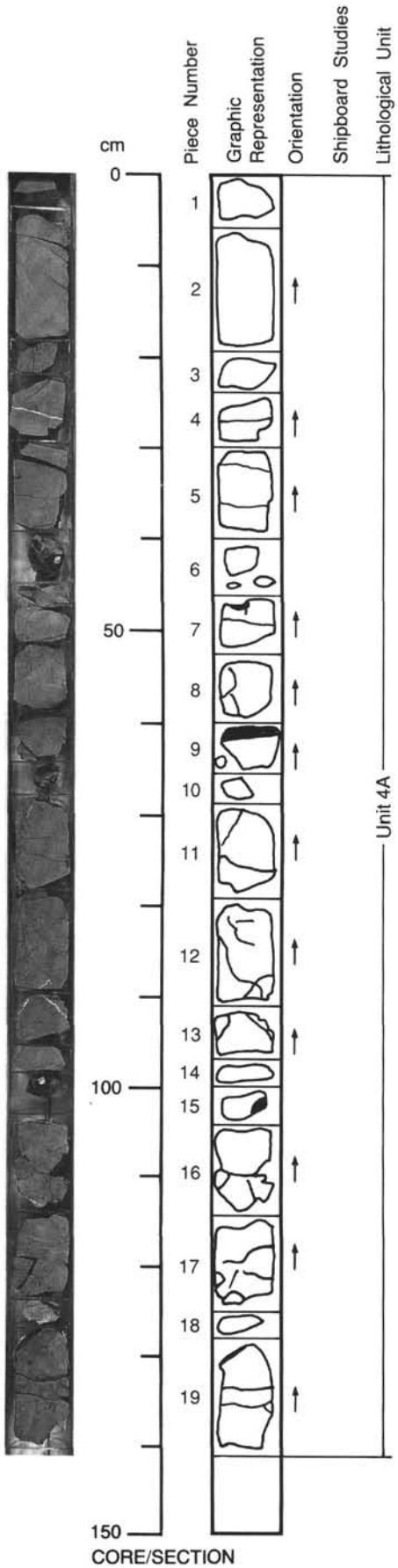


130-807C-78R-3

UNITS 4A: APHYRIC BASALT

Pieces 1-17

CONTACTS: Glass.
PHENOCRYSTS: Very sparse.
Plagioclase - <<1%; ~2 mm across; euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Light to medium gray.
STRUCTURE: Massive with pillow top.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <<1%; 1-2 mm thick; horizontal and vertical; calcite and clay veins, one horizontal 0.5-mm-thick red-brown Fe-oxide or clay (?) vein.



130-807C-79R-1

UNIT 4A: APHYRIC BASALT

Pieces 1-6

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 1-2 mm; varied orientation; calcite.

UNIT 4A: APHYRIC BASALT

Pieces 7,8

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy (Piece 7).
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow.
ALTERATION: Slight.
VEINS/FRACTURES: None.

UNIT 4A: APHYRIC BASALT

Pieces 9-14

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy (Piece 9).
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow to massive.
ALTERATION: Slight.
VEINS/FRACTURES: 2%; 0.5 - 2 mm; varied orientation; calcite and green and brown clay.

UNIT 4A: APHYRIC BASALT

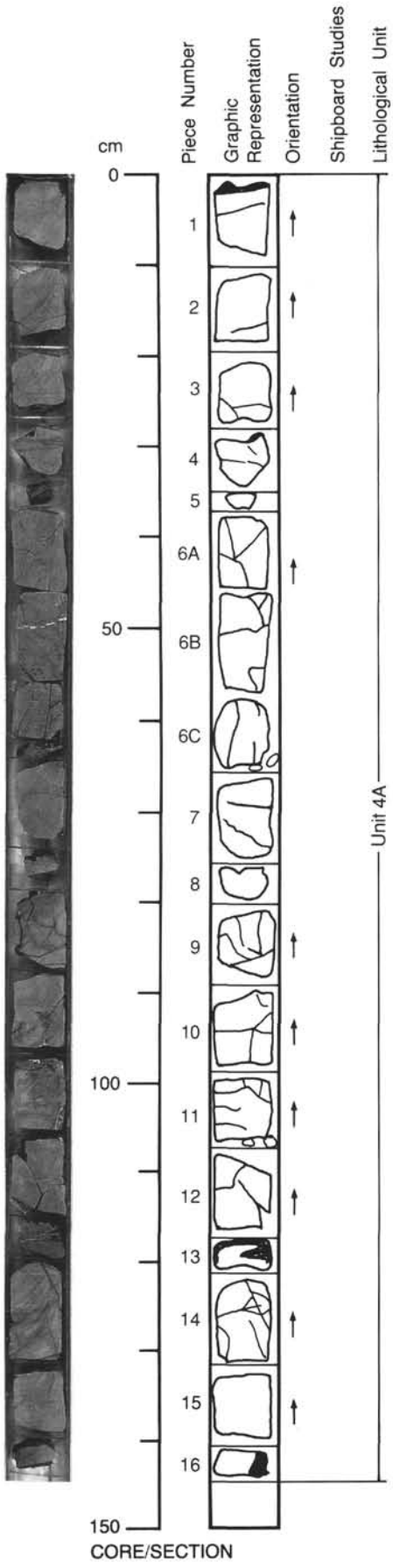
Pieces 15-17

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Light to medium gray.
STRUCTURE: Pillow.
ALTERATION: Moderate.
VEINS/FRACTURES: 2-3%; 1-2 mm; varied orientation; calcite and clay.

UNIT 4A: APHYRIC BASALT

Pieces 18,19

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy.
VESICLES: Nonvesicular.
COLOR: Light to dark gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: ~1%; 0.5 mm; varied orientation; green clay.
ADDITIONAL COMMENTS: Piece 18 is a breccia consisting of green altered basalt fragments in a calcite and clay matrix.



130-807C-79R-2

UNIT 4A: APHYRIC BASALT

Pieces 1-7

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained; Piece 1 has a glassy rim.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive with pillow top.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-4 mm; varied orientation; calcite and clay.

UNIT 4A: APHYRIC BASALT

Pieces 8-12

CONTACTS: Glass.
PHENOCRYSTS: Very rare.
Plagioclase - <1%; 1-2 mm; euhedral laths.
GROUNDMASS: Fine grained; Piece 8 has glassy rim.
VESICLES: Nonvesicular.
COLOR: Light to dark gray.
STRUCTURE: Massive with pillow top.
ALTERATION: Moderate.
VEINS/FRACTURES: 2-3%; 0.5-4 mm; varied orientation; calcite and clay.

UNIT 4A: APHYRIC BASALT

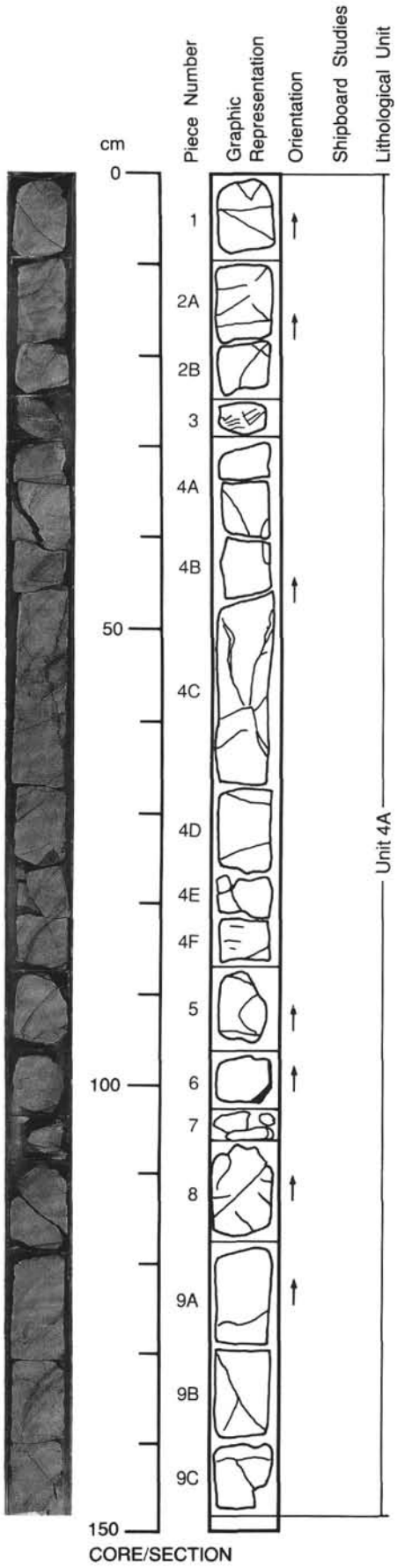
Pieces 13-15

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Moderate.
VEINS/FRACTURES: 2-3%; 0.3-3 mm; varied orientation; calcite, green and brown clay.

UNIT 4A: APHYRIC BASALT

Piece 16

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <1%; 1 mm; euhedral laths.
GROUNDMASS: Fine grained, glassy rim.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow.
ALTERATION: Moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; varied orientation; calcite and clay.



130-807C-79R-3

UNIT 4A: APHYRIC BASALT

Pieces 1,2

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <1%; 1 mm; euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Gray green, purplish gray.
STRUCTURE: Massive.
ALTERATION: Moderate to high.
VEINS/FRACTURES: 2-3%; 0.3-1 mm; mostly subhorizontal; green and brown clays.

UNIT 4A: APHYRIC BASALT

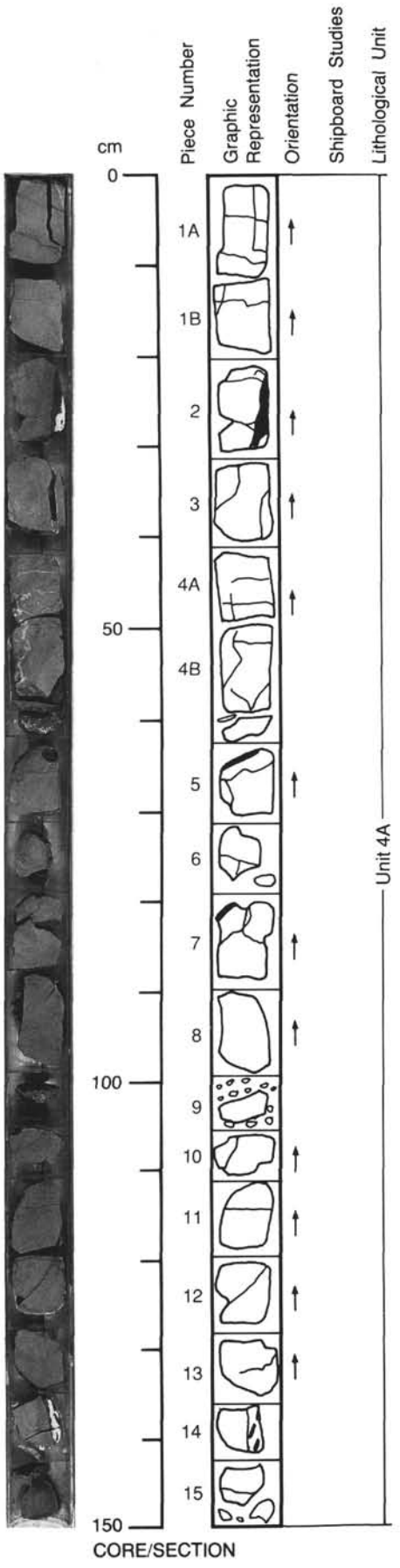
Pieces 3-5

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <<1%; ~1 mm; euhedral laths.
GROUNDMASS: Fine grained, fining towards top of Piece 3.
VESICLES: Nonvesicular.
COLOR: Medium gray
STRUCTURE: Massive.
ALTERATION: Moderate.
VEINS/FRACTURES: 2-3%; 0.3-4 mm; mostly subhorizontal; mainly clay.

UNIT 4A: APHYRIC BASALT

Pieces 6-9

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <1%; 1-2 mm; euhedral laths.
GROUNDMASS: Fine grained. Piece 6 has glassy margin.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 1%; 0.5-1 mm; varied orientation; green and brown clay.
ADDITIONAL COMMENTS: Piece 8 contains a 10 mm aggregate of plagioclase phenocrysts.



130-807C-79R-4

UNIT 4A: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
PHENOCRYSTS: Very rare.
Plagioclase - <<1%; 1-2 mm; euhedral laths.
GROUNDMASS: Fine grained to glassy (Piece 2).
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 1-2%; 0.5-10 mm; varied orientation; clay and calcite

UNIT 4A: APHYRIC BASALT

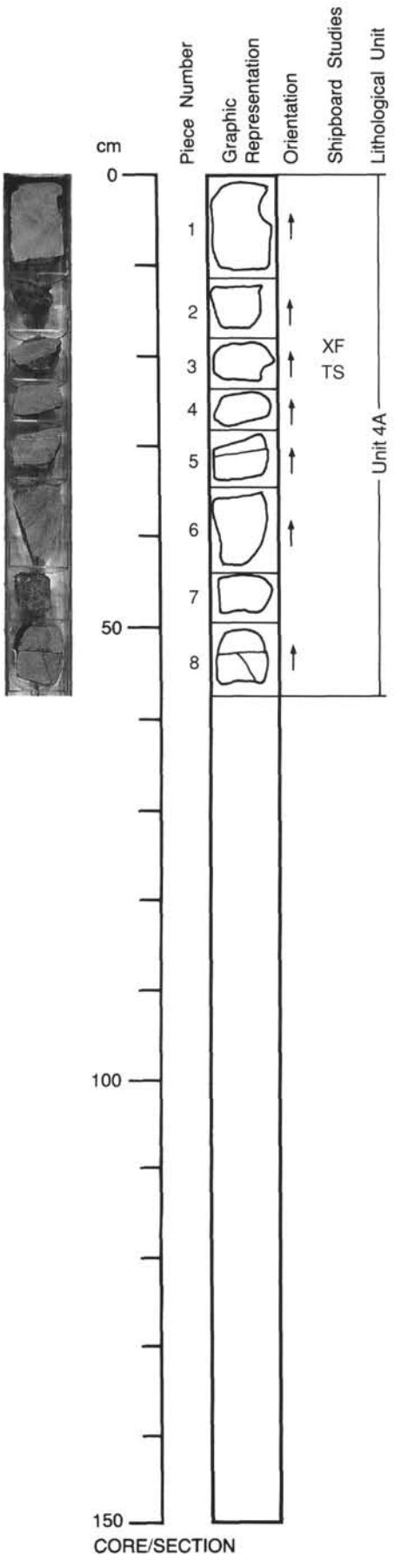
Pieces 5-13

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained to glassy (Pieces 5, 6, and 7).
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; varied orientation; clays.

UNIT 4A: APHYRIC BASALT

Pieces 14, 15

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained, glassy margin.
VESICLES: Nonvesicular.
COLOR: Gray.
STRUCTURE: Pillow margin fragments.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <0.5 mm; varied orientation; Piece 14 has breccia margin of altered glass shards up to 1.5 cm long in calcite matrix.

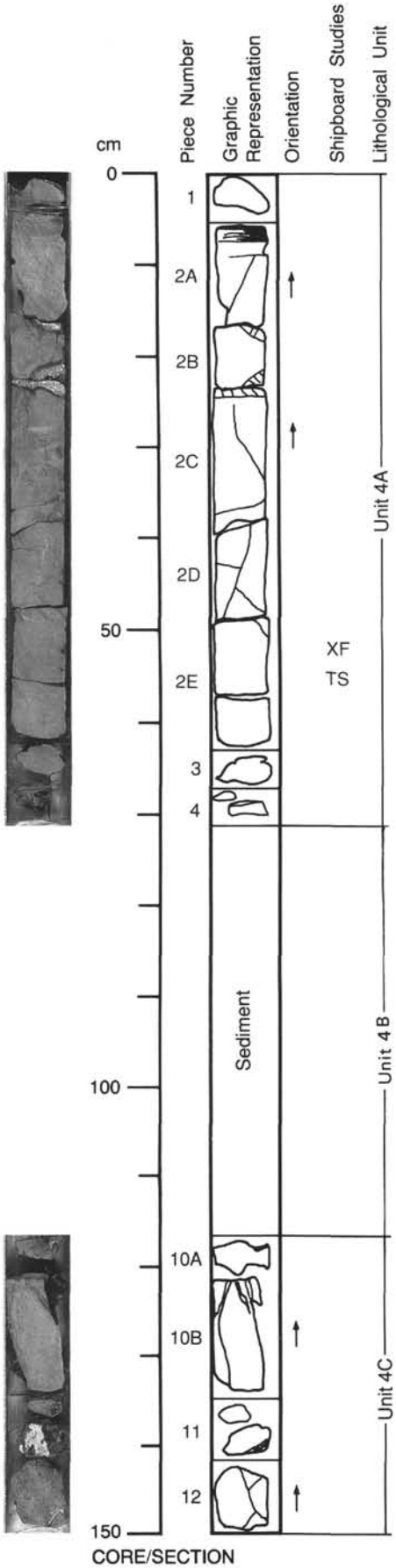


130-807C-79R-5

UNIT 4A: APHYRIC BASALT

Pieces 1-8

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; up to 2 mm; subhorizontal; calcite and clay.



130-807C-80R-1

SUBDIVISION 4A: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS: Aphyric.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 0.3 mm; varied orientation; brown clay.

UNIT 4A: APHYRIC BASALT

Pieces 2-4

CONTACTS: Glass.
PHENOCRYSTS: Aphyric.
Plagioclase - <1%; up to 3 mm; euhedral laths.
GROUNDMASS: Fine grained, glassy at top of Piece 2A.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 2-3%; *up to 2 mm; varied orientation; calcite and clay filled;* Pieces 2B and 2C contain irregular vugs up to 4 cm in width, infilled with calcite, quartz, zeolites(?), green mineral. Rim of vug consists of 5-mm-thick dark-green clay

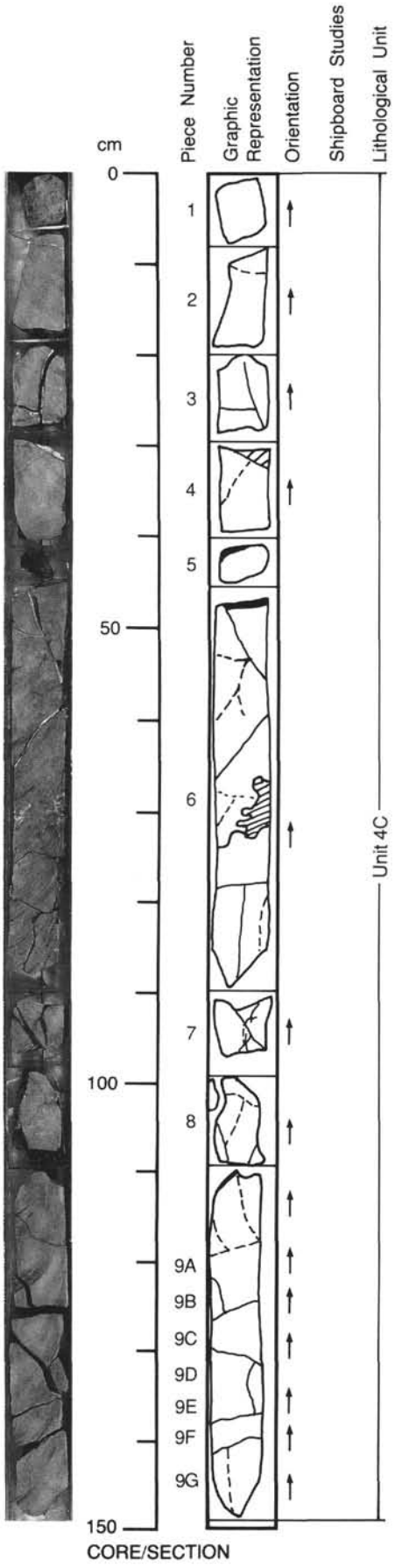
UNIT 4B: SEDIMENT

COMMENTS: Major lithology: Breccia pieces of LIMESTONE interbedded with CLAYEY VITRIC TUFF with OXIDES comprise the material in section 1, 70-120 cm. The limestone is white (10YR 8/1 to 10YR 8/2) and contains angular fragments and clasts of altered vitric tuff and basaltic glass. Rounded fragments of altered vitric tuff, 1-2 mm thick concentrations of carbonate, and lensoid concentrations of sandsized grains, including vitric tuff and basaltic clasts, are also obsereved. Some pieces have have fracture fills of sparry calcite. The clayey vitric tuff is dark reddish brown (5YR 3/3) to reddish brown (5YR 4/3). The clays are probably smectite. One piece of the tuff contains long, vertical and horizontal, corbonate-filled fractures, up to 1 cm wide, and angular vitric tuff clasts.

UNIT 4C: APHYRIC BASALT

Pieces 10-12

CONTACTS: None.
PHENOCRYSTS:
Olivine - ~1%; up to 1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; ~1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Light to medium gray; top 1-2 cm of Piece 10B is yellow-brown.
STRUCTURE: Massive.
ALTERATION: Moderate; top of Piece 10B is highly altered to highly weathered, top of flow.
VEINS/FRACTURES: 1-2%; 0.5-3 mm; subvertical to subhorizontal; calcite, brown clay, red-brown mineral (Fe-oxides?) stains on some fracture surfaces.



130-807C-80R-2

UNIT 4C: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1.5 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to high (in vicinity of veins).
VEINS/FRACTURES: 1-2%; 0.2-8 mm; subvertical to subhorizontal; calcite center, thin brown clay margin.

UNIT 4C: APHYRIC BASALT

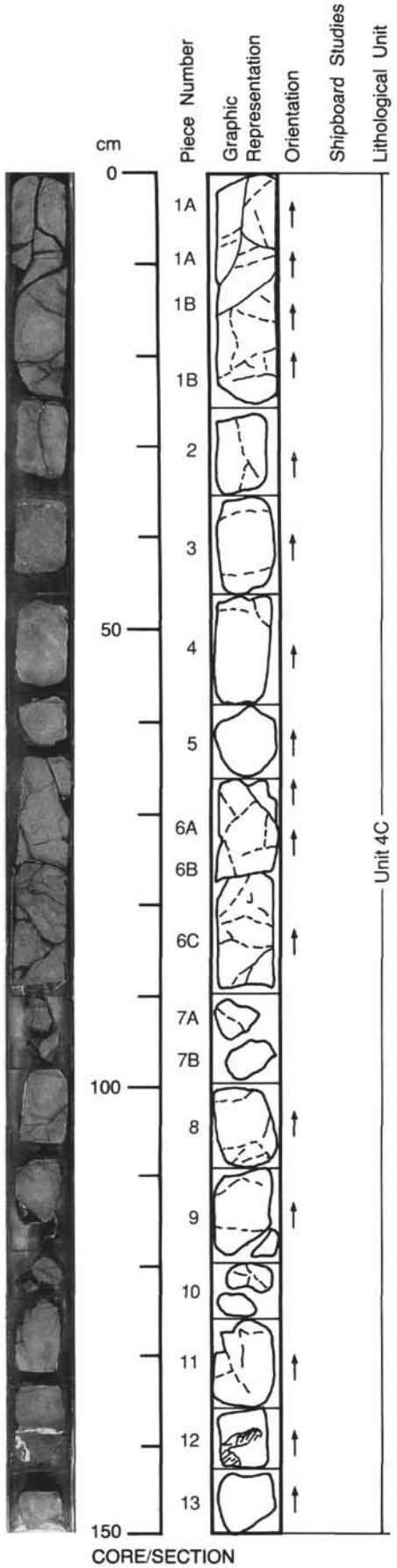
Pieces 5-8

CONTACTS: Glass.
PHENOCRYSTS:
Plagioclase - <1%; ~0.5 mm; euhedral to subhedral.
Olivine? - ~1%; 0.5-1 mm; subhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral.
GROUNDMASS: Fine grained; Pieces 5 and 6 have glassy margins at top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive..
ALTERATION: Slight to high (in vicinity of veins).
VEINS/FRACTURES: 2-3%; 0.2-2 mm; subvertical to subhorizontal; conjugate set of veins at 60° in Piece 7; Piece 6 contains irregular shaped vugs up to 1.5 cm in width containing calcite and red-brown mineral (clay?).

UNIT 4C: APHYRIC BASALT

Piece 9

CONTACTS: Glass.
PHENOCRYSTS:
Plagioclase - <1%; up to 1 mm; subhedral.
Olivine? - ~1%; 0.3-1 mm; subhedral.
Clinopyroxene? - <1%; 0.3-1 mm; subhedral.
GROUNDMASS: Fine grained, glassy margin at top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 1%; 0.5-2 mm; subvertical to subhorizontal; calcite and green-brown clay.

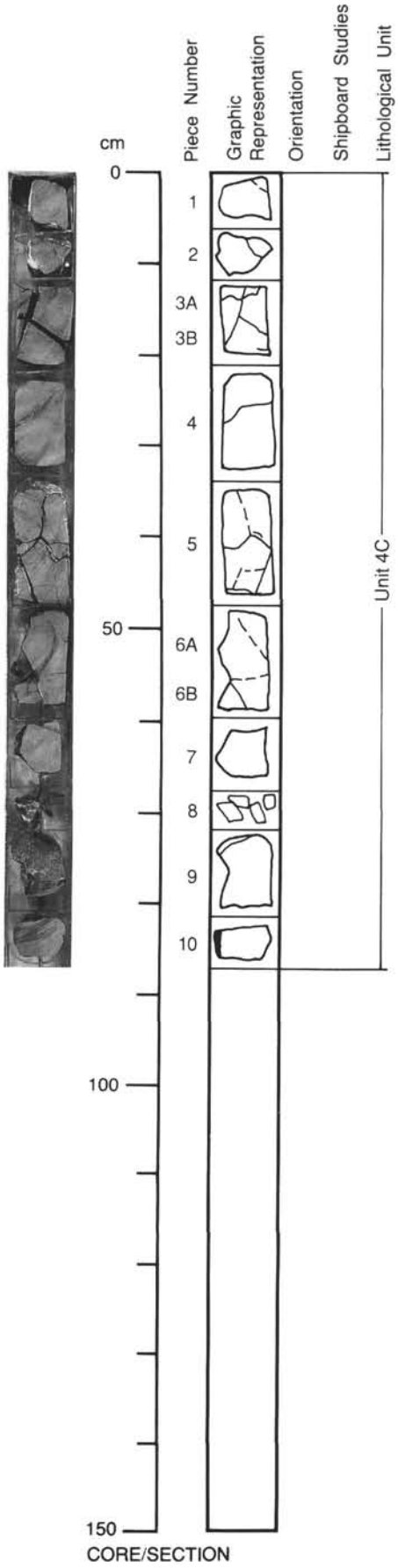


130-807C-80R-3

UNIT 4C: APHYRIC BASALT

Pieces 1-13

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; up to 1 mm; subhedral to euhedral.
Olivine? - 1-3%; 0.3-1 mm; subhedral.
Clinopyroxene? - <1%; 0.3-1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to light gray, gray-green.
STRUCTURE: Massive.
ALTERATION: Slight to high.
VEINS/FRACTURES: <1-4%; <0.5-5 mm; varied orientation; mostly green-brown clay with some calcite. Piece 12 has ~2-cm-thick horizontal vein mainly consisting of calcite with dark green and brown-red minerals at vein/basalt contact. Pieces 1 and 6 have 3-4% veins.



130-807C-80R-4

UNIT 4C: APHYRIC BASALT

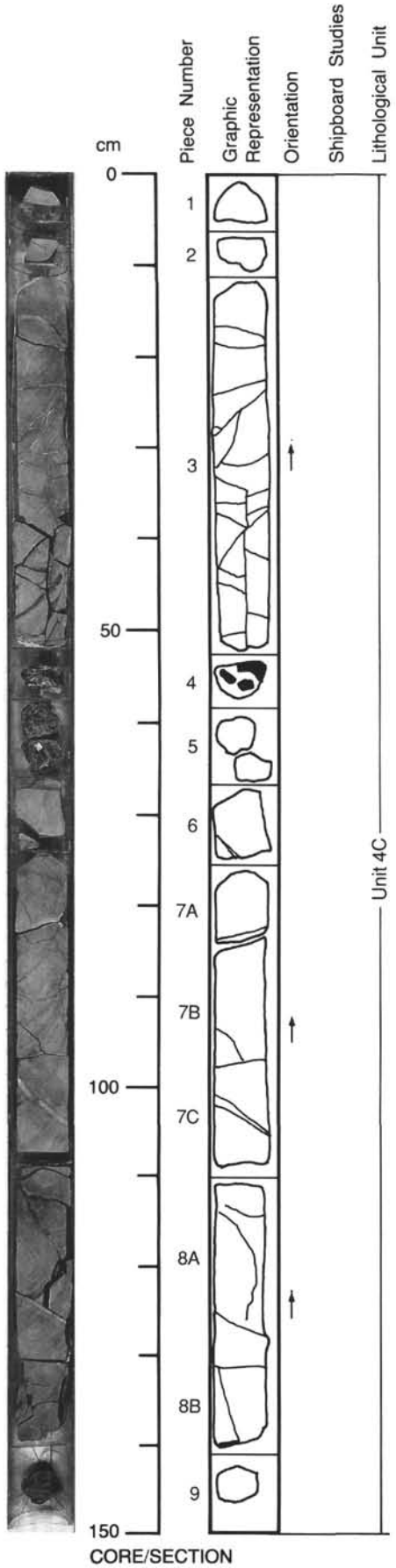
Pieces 1-9

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; up to 1 mm; subhedral.
Olivine? - ~1%; up to 1 mm; subhedral to euhedral laths.
Clinopyroxene? - <1%; up to 1 mm; subhedral to euhedral laths.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to light gray.
STRUCTURE: Massive.
ALTERATION: Slight to high.
VEINS/FRACTURES: <1-5%; <2 mm; varied orientation; calcite and brown clay, some fracture surfaces stained by green mineral.

UNIT 4C: APHYRIC BASALT

Piece 10

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; up to 1 mm; subhedral to euhedral.
Olivine? - ~1%; up to 1 mm; subhedral.
Clinopyroxene? - <1%; up to 1 mm; subhedral.
GROUNDMASS: Fine grained with glassy margin.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Part of pillow?
ALTERATION: Slight.
VEINS/FRACTURES: None.



130-807C-81R-1

UNIT 4C: APHYRIC BASALT

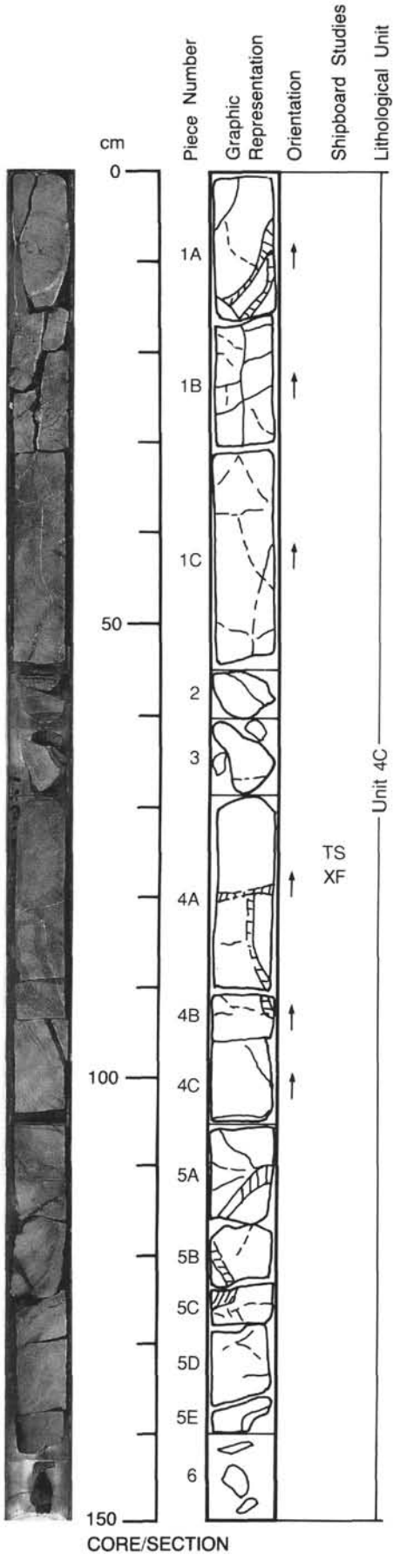
Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 1 mm; subhedral to euhedral laths.
Olivine? - ~1%; 1 mm; subhedral to euhedral laths.
Clinopyroxene? - <1%; 1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to light gray to gray-green.
STRUCTURE: Massive.
ALTERATION: Slight to high.
VEINS/FRACTURES: Piece 3 heavily fractured (5%), subvertical to subhorizontal, filled with calcite and brown clay.

UNIT 4C: APHYRIC BASALT

Pieces 4-9

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
Olivine? - ~1%; 1 mm; subhedral.
Clinopyroxene? - <1%; 1 mm; subhedral.
GROUNDMASS: Fine grained to glassy (bottom of Piece 8B).
VESICLES: Non-vesicular.
COLOR: Medium to light gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <5%; <0.5-6 mm; varied orientation; up to 5% in Pieces 7 and 8, filled by calcite with some clay and/or Fe-oxide.
ADDITIONAL COMMENTS: Piece 4 is a breccia consisting of angular, green altered glass fragments (celadonite?) up to 2 cm, in matrix of calcite and clay.

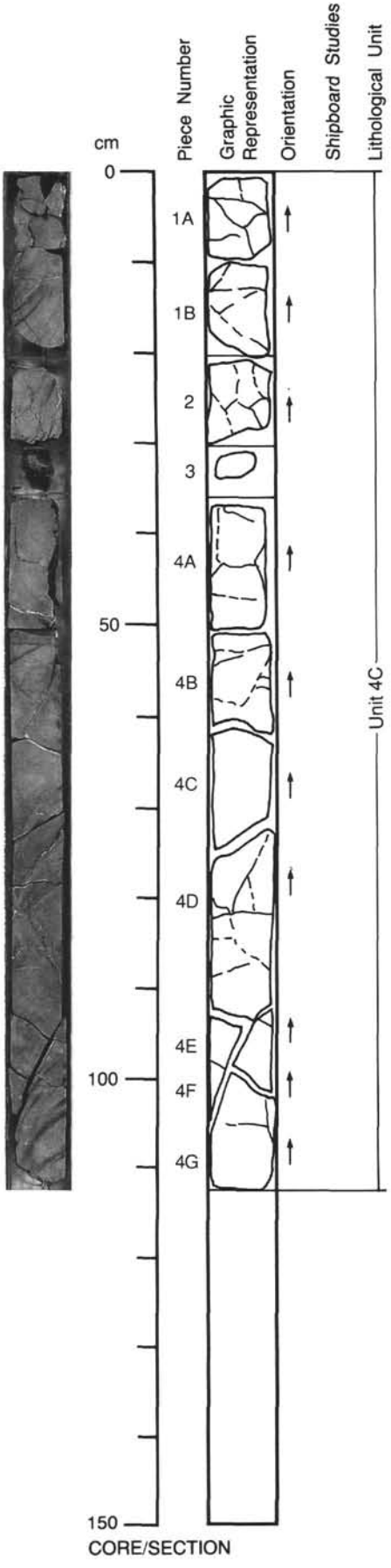


130-807C-81R-2

UNIT 4C: APHYRIC BASALT

Pieces 1-6

CONTACTS: None.
PHENOCRYSTS: Plagioclase - <1%; <1 mm; subhedral to euhedral laths.
Olivine? - ~1%; 0.2-1 mm; subhedral.
Clinopyroxene? - <1%; 0.2-1 mm; subhedral.
GROUNDMASS: Fine grained to glassy (top of Piece 1A, bottom of Pieces 5E and 6).
VESICLES: Nonvesicular.
COLOR: Dark to light gray.
STRUCTURE: Massive.
ALTERATION: Slight to high.
VEINS/FRACTURES: <1-7%; 0.2 - 8 mm; varied orientation; up to 7% in Piece 1B. Mostly calcite with some green and red-brown clay. Piece 5A has 8 mm red-brown clay vein.
ADDITIONAL COMMENTS: Section through a thick pillow?

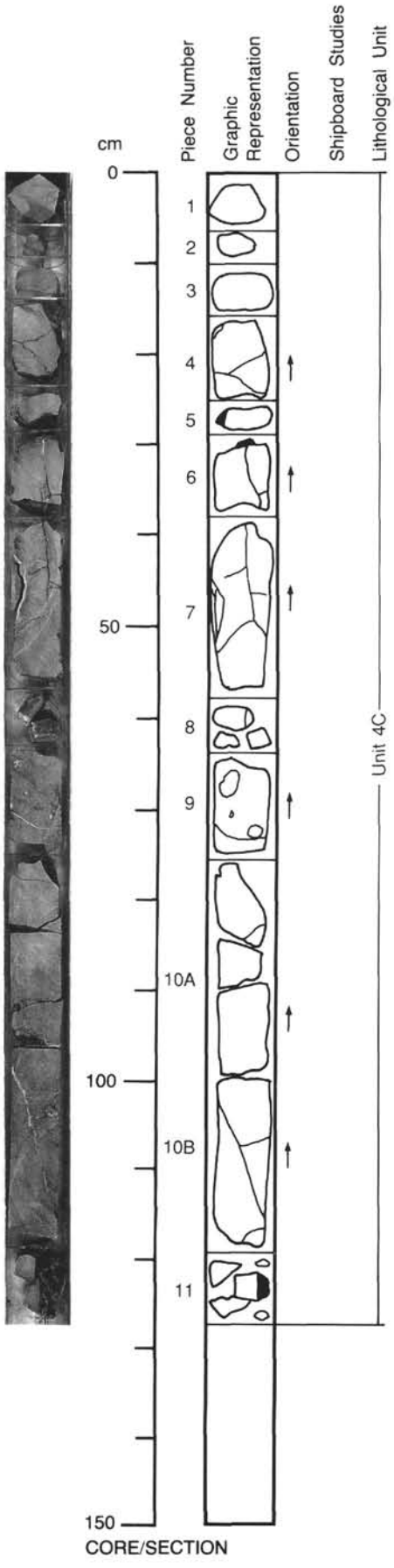


130-807C-81R-3

UNIT 4C: APHYRIC BASALT.

Pieces 1-4

CONTACTS: None
PHENOCRYSTS: Glomeroporphyritic texture.
Plagioclase - ~1%; 0.5 mm; subhedral to euhedral.
Clinopyroxene? - <1%; <0.2-1 mm; subhedral.
Olivine? - ~1%; 0.2-1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Dark to medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 2-3%; <0.3-3 mm; varied orientation; filled with calcite and green-gray to brown clay.



130-807C-82R-1

UNIT 4C: APHYRIC BASALT

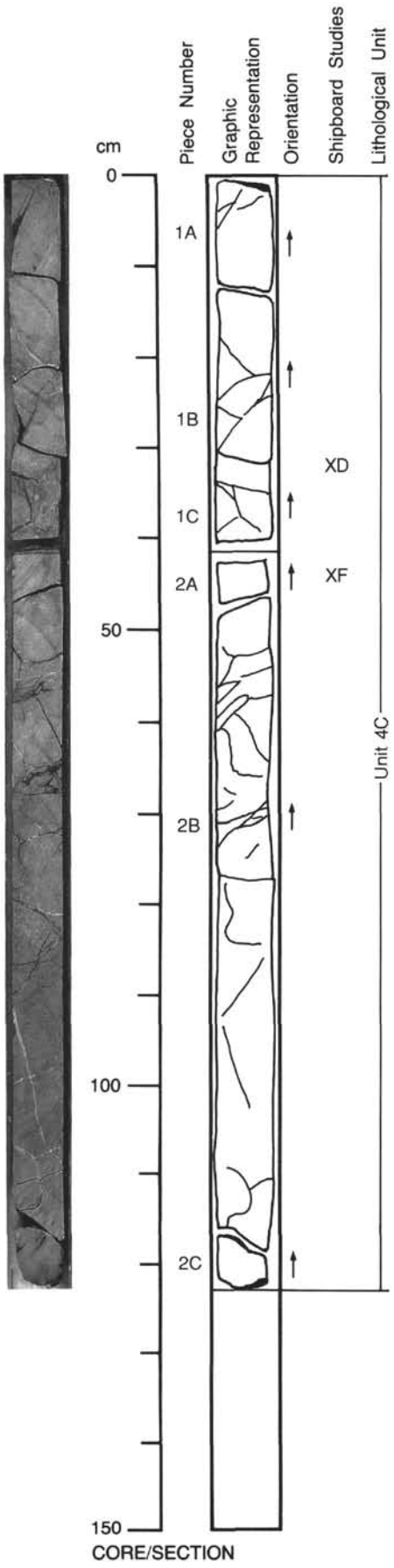
Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 1 mm; euhedral.
Olivine - ~1%; 0.2-1 mm; subhedral.
GROUNDMASS: Fine grained, coarsest in Pieces 2 and 3.
VESICLES: Nonvesicular.
COLOR: Gray to gray-green.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <2-3%; 0.5-3 mm; varied orientation; filled with calcite, green and brown clay.

UNIT 4C: APHYRIC BASALT

Pieces 5-11

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.2-0.75 mm; subhedral to euhedral.
Olivine? - ~1%; 0.2-0.75 mm; subhedral.
Clinopyroxene? - <1%; 0.2-0.75 mm; subhedral.
GROUNDMASS: Fine grained with glassy rinds (Pieces 5 and 11).
VESICLES: Nonvesicular. Piece 9 has several irregular vugs up to 1 cm wide containing calcite and brown clay.
COLOR: Medium to light gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <5%; 0.5-4 mm; varied orientation; up to 5% in Pieces 7 and 10A, mostly calcite filled but also red-brown and dark gray-green clay.

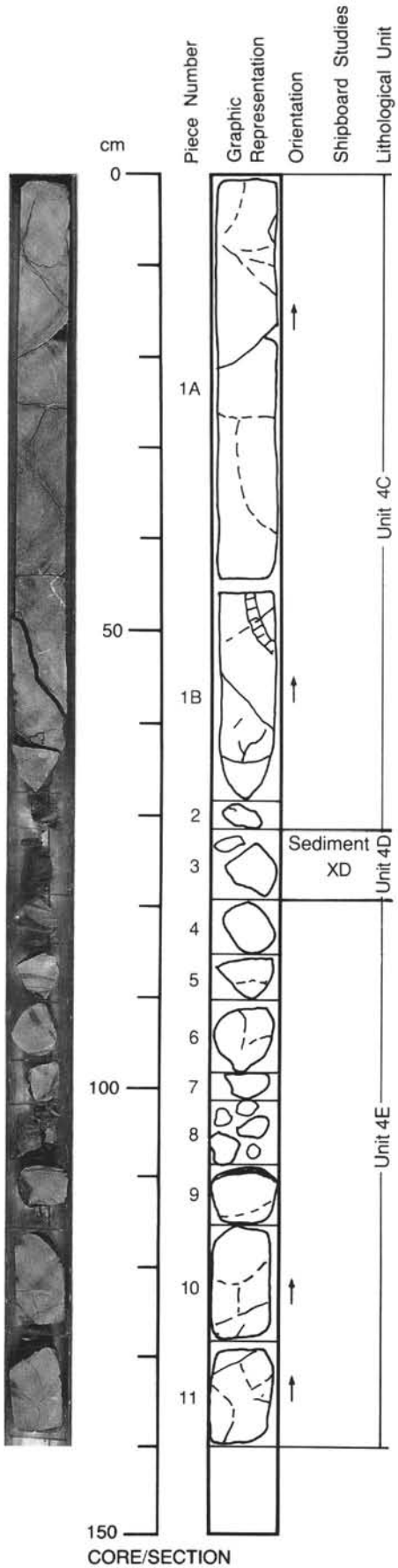


130-807C-82R-2

UNIT 4C: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS: Glomeroporphyritic texture, aggregates up to approximately 3 mm.
Plagioclase - <1%; <0.2-0.75 mm; euhedral to subhedral.
Olivine? - ~1-2%; <0.2-0.75 mm; euhedral to subhedral.
Clinopyroxene? - ~1-2%; 0.2-0.75 mm; euhedral to subhedral.
GROUNDMASS: Fine-grained to glassy (rims of Pieces 1A and 2C).
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <5%; <0.2-10 mm; varied orientation; most are subvertical or subhorizontal and are infilled with calcite, brown and green-blue clays (?). Brown clay (?) fillings at 40 and 58 cm contain small (0.5 to 1.0 mm) pieces of native copper.



130-807C-82R-3

UNIT 4C: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; <0.2-0.75 mm; subhedral to euhedral laths.
Olivine? - ~1%; <0.2-0.75 mm; anhedral to subhedral.
Clinopyroxene? - <1%; 0.2-0.75 mm; anhedral to subhedral.
GROUNDMASS: Fine grained to glassy (top of Piece 1A).
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <2-3%; <3 mm; varied orientation; calcite and brown clay fill.

UNIT 4D: SEDIMENT

Piece 3

COMMENTS: 72-79 cm; Olive brown (2.5YR 4/4) clayey limestone; clay is probably smectite and iron oxides are common to abundant. Limestone contains ~ 5-10% clasts that are 2-3 mm in diameter, range in shape from elongate and angular to pelletal, and are grayish green (5G 5/2) in color. There appears to be glauconite, although there may also be basaltic debris.

UNIT 4E: APHYRIC BASALT

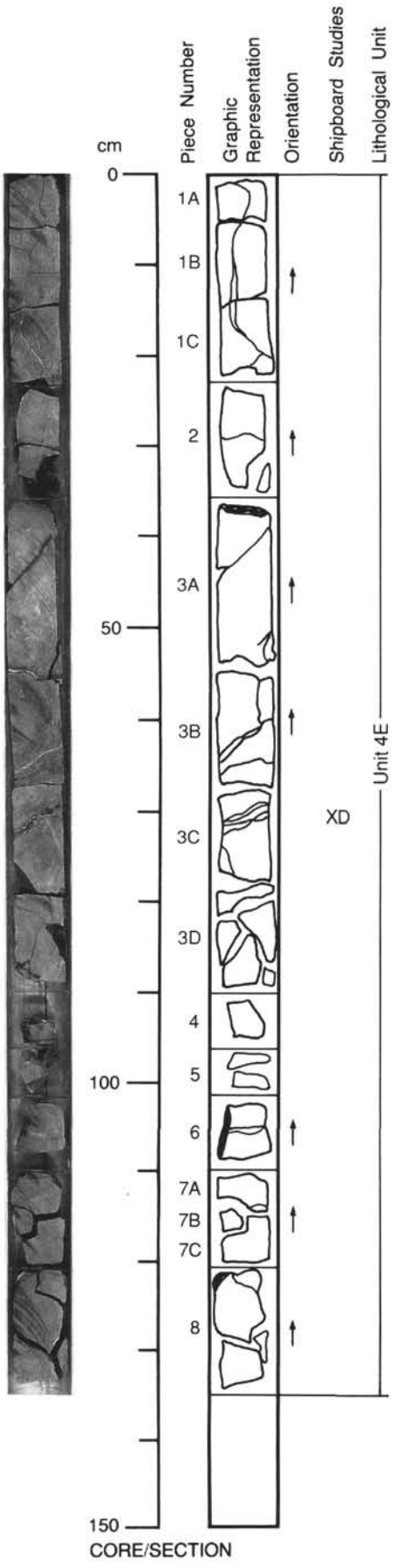
Pieces 4-8

CONTACTS: None.
PHENOCRYSTS: Glomeroporphyritic texture.
Plagioclase - ~1%; <0.2-1.0 mm; anhedral-euhedral.
Olivine? - ~1-2%; <0.2-1.0 mm; anhedral-subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: Thin (0.5 mm) vein in Piece 5A, filled with green-brown clay.

UNIT 4E: SPARSELY OLIVINE-PHYRIC BASALT

Pieces 9, 10, 11

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; <0.2-1.0 mm; anhedral to euhedral.
Olivine? - ~2%; <0.2-1.0 mm; anhedral to subhedral.
Clinopyroxene? - <1%; 0.2 to 1 mm; anhedral to subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: 1%; 0.2-1.0 mm; varied orientation; filled with calcite and green and brown clays.



130-807C-82R-4

UNIT 4E: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; <0.5 mm; subhedral to anhedral.
Olivine? - 1%; 0.2-0.5 mm; subhedral.
Clinopyroxene? - <1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Moderate; greater near veins with Fe-oxide staining.
VEINS/FRACTURES: <1%; 0.3-2 mm; varied orientations; calcite with minor green clay and reddish Fe-oxide.

UNIT 4E: APHYRIC BASALT

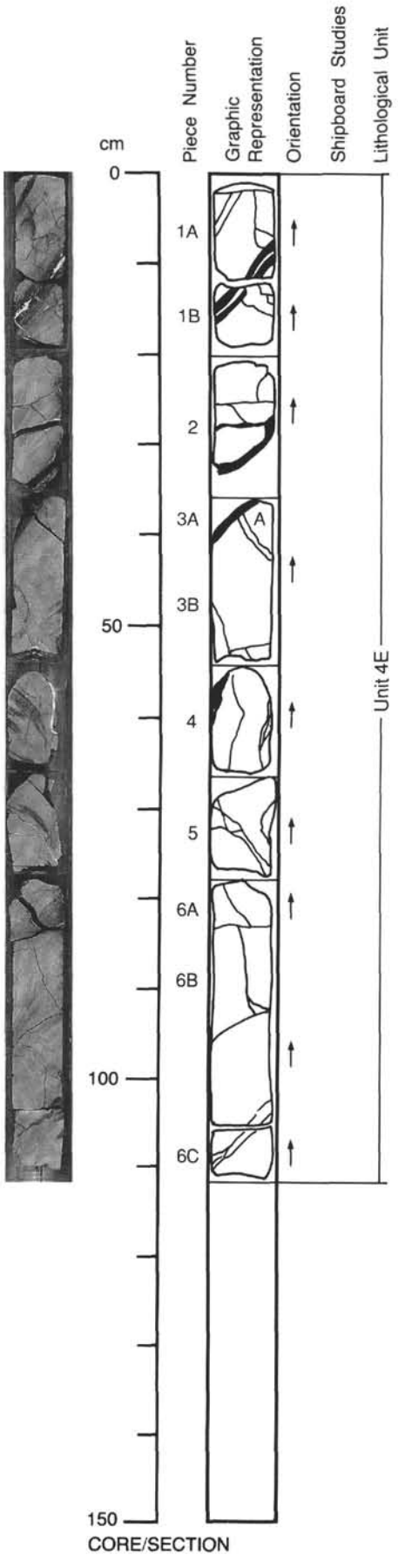
Pieces 3-6

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; <0.5 mm; anhedral to subhedral.
Olivine? - ~1%; 0.2-1.0 mm; subhedral.
Clinopyroxene? - <1%; 0.2-1.0 mm; subhedral.
GROUNDMASS: Fine grained with glassy top and bottom.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive (could be a thick pillow).
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 2%; 0.5-8 mm; subhorizontal; calcite filling. One vein has a 2-3-mm-thick red zone (Fe-oxide rich?), another has interior zone of dark green clay.

UNIT 4E: APHYRIC BASALT

Pieces 7, 8

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; <0.5 mm; subhedral.
Olivine? - ~1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained with glassy margin.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-2 mm; varied orientation; calcite filled.



130-807C-82R-5

UNIT 4E: APHYRIC BASALT

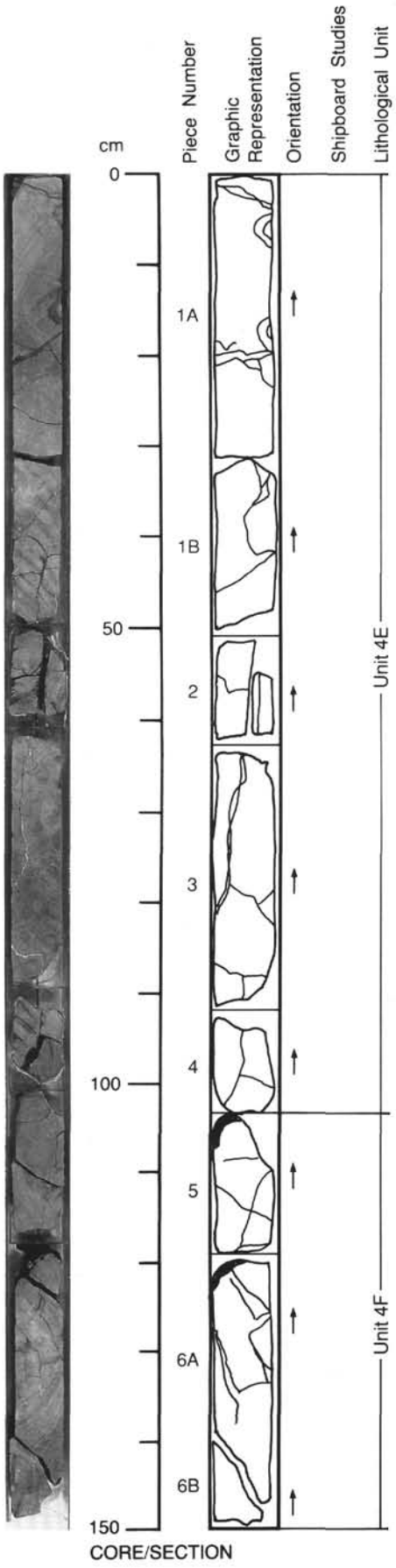
Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; 0.2-0.3 mm; anhedral.
Olivine? - ~1%; 0.3-0.5 mm; subhedral.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 2%; <1 - 6 mm; varied orientation; calcite between glass rims; brown clay with calcite elsewhere; minor dark green clay.

UNIT 4E: APHYRIC BASALT

Pieces 3-6

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; 0.2-0.5 mm; anhedral.
Olivine? - ~1%; 0.25-1.0 mm; subhedral to anhedral.
Clinopyroxene? - <1%; 0.25-1.0 mm; subhedral to anhedral.
GROUNDMASS: Fine grained with glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <0.5-3 mm; varied orientation; filled with calcite and lesser amounts of dark green clay. Two brown clay and/or Fe-oxide veins in Piece 6.



130-807C-82R-6

UNIT 4E: APHYRIC BASALT

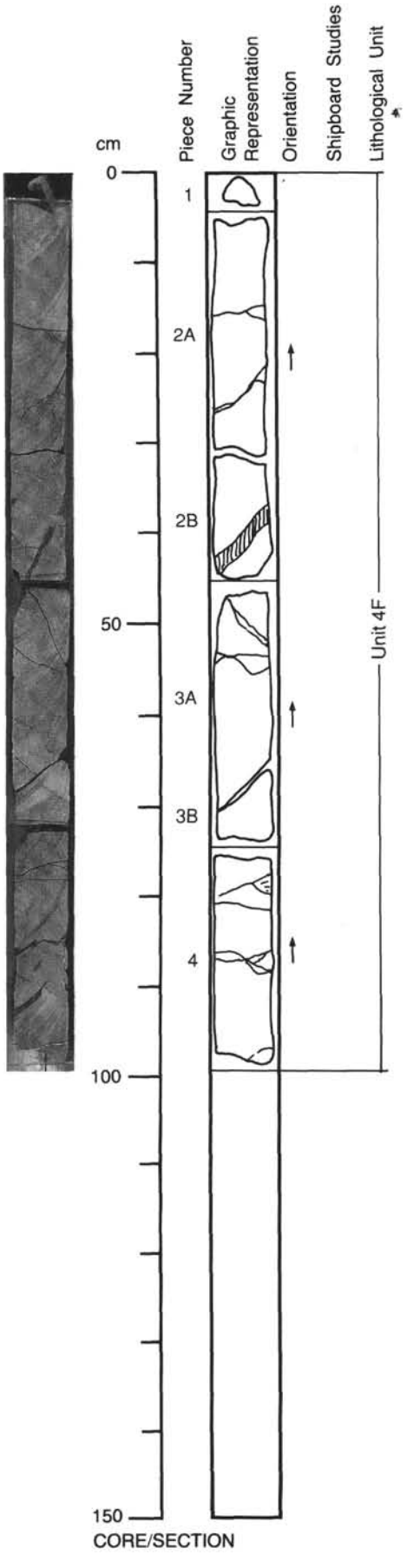
Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; <0.5 mm; subhedral, mostly associated with olivine/clinopyroxene.
Olivine? - 1%; 0.25-1 mm; euhedral to subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray, slight greenish to darker gray mottling.
STRUCTURE: Massive.
ALTERATION: Slight to moderate (in coarser grained areas).
VEINS/FRACTURES: 2%; <1-6 mm; varied orientation; dark brown clay and/or oxide veins in Pieces 1 and 2, one with dark blue-green clay edges and secondary veinlets (earlier, non-crosscutting). Also calcite with greenish clay and reddish Fe-oxide(?).

UNIT 4F: APHYRIC BASALT

Pieces 5, 6

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.2-0.5 mm; subhedral.
Olivine? - 1%; 0.25-1.0 mm; subhedral to euhedral.
GROUNDMASS: Fine grained, glassy at top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow to massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1.0 mm; varied orientation; dark green clay and calcite; minor dark brown clay and green clay in Piece 6.

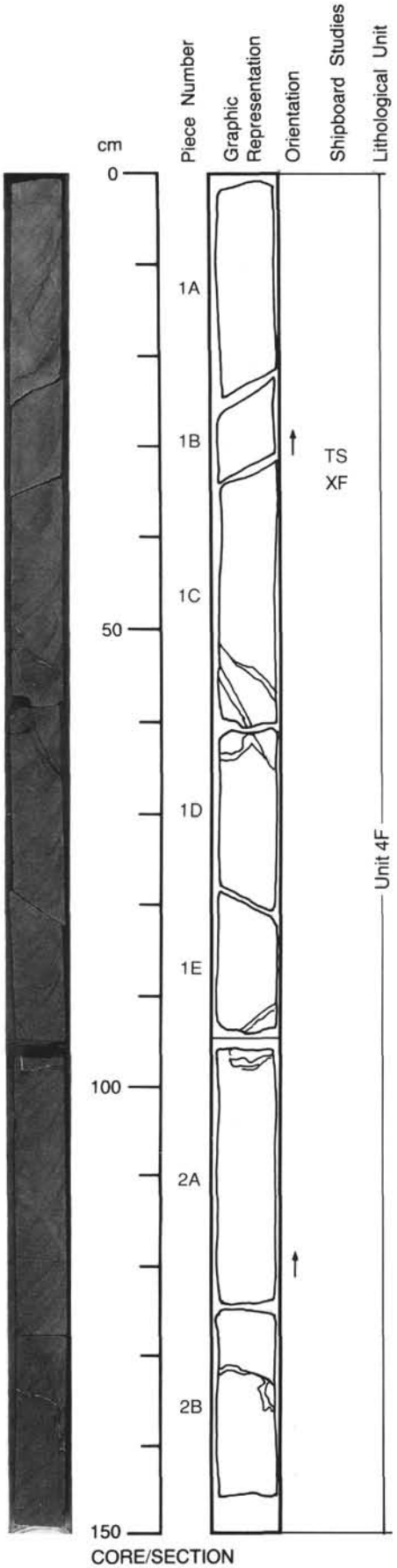


130-807C-83R-1

UNIT 4F: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; 0.2-0.5 mm; subhedral.
Olivine? - 1%; 0.2-1.0 mm; subhedral.
Clinopyroxene? - <1%; 0.2-1.0 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: 1%; 0.5-6 mm; horizontal to 45°; calcite with and brown clays, some dark green clay.

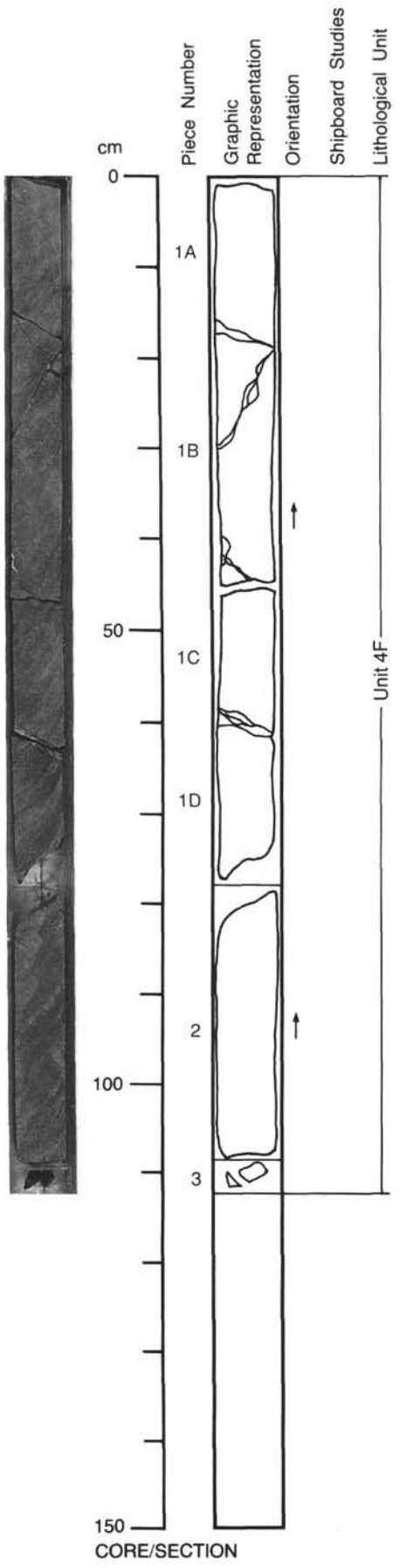


130-807C-83R-2

UNIT 4F: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1.0 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight, moderate in places (blotches).
VEINS/FRACTURES: <1%; 0.5-3 mm; varied orientation; calcite with lesser brown or green clay.

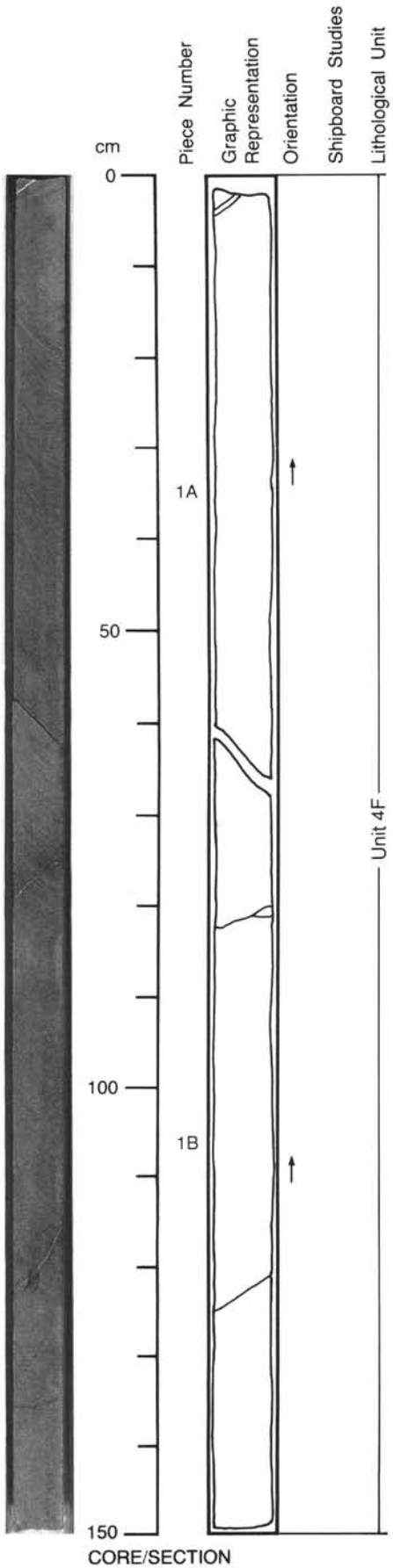


130-807C-83R-3

SUBDIVISION 4F: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; 0.5-1.0 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; <0.5-5 mm; horizontal and at 45°; calcite and nearly black to dark brown clays.
ADDITIONAL COMMENTS: Piece 3 consists of two vein fragments; one a brown clay, the other a dark green-gray clay with calcite.

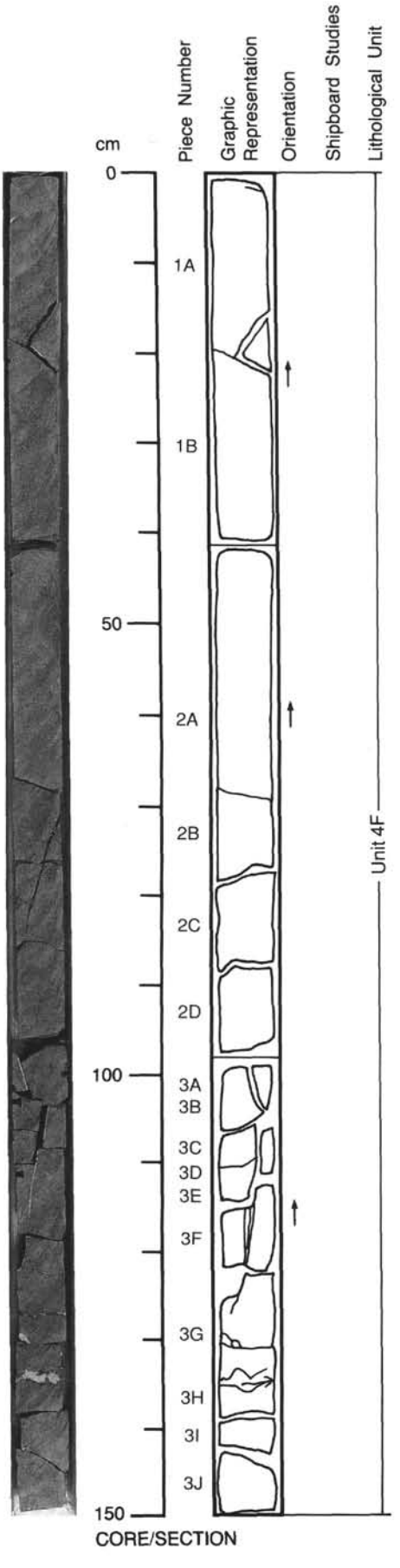


130-807C-83R-4

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; 0.5-1.0 mm; subhedral to anhedral.
GROUNDMASS: Fine grained (coarser than Core 83R-3).
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Relatively fresh to slightly altered.
VEINS/FRACTURES: <<1%; 0.5-2mm; horizontal and at 45°; calcite filled.

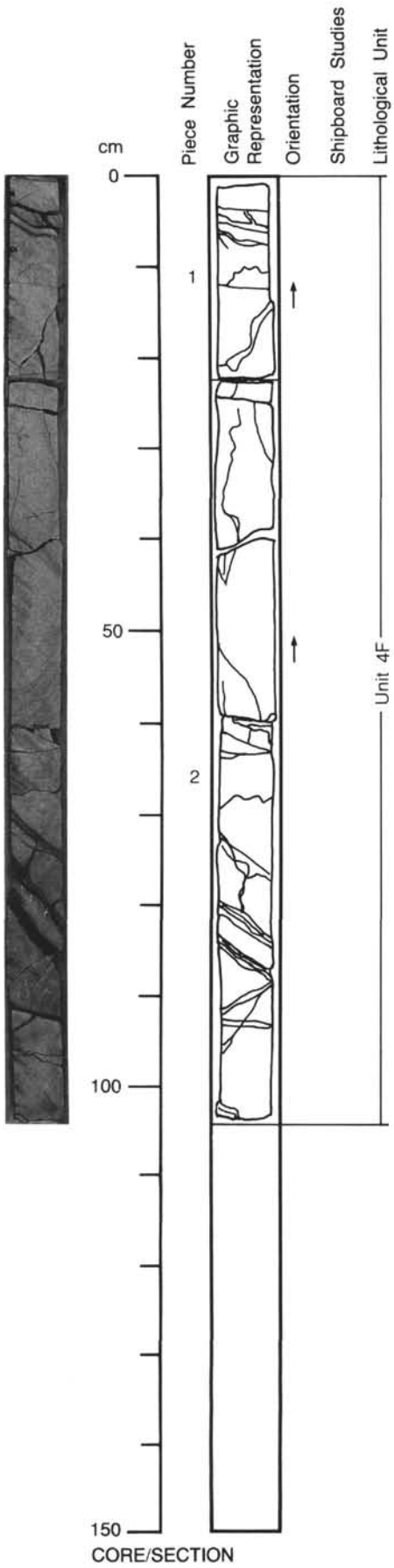


130-807C-83R-5

UNIT 4F: APHYRIC BASALT

Pieces 1, 2, 3

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; up to 1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 0.5-10 mm; subhorizontal to subvertical; calcite with lesser black and olive green clay.

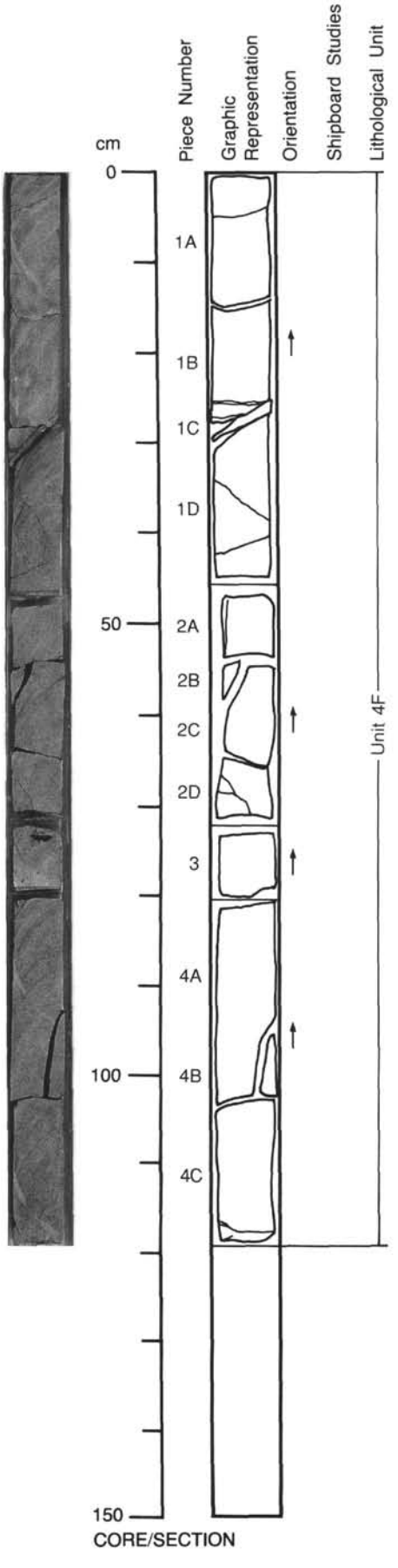


130-807C-83R-6

UNIT 4F: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Olivine? - 1%; 0.3-1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Light to medium gray with dark gray and greenish patches toward the bottom.
STRUCTURE: Massive.
ALTERATION: Slight to high (near large veins).
VEINS/FRACTURES: 5%; <1-25 mm; varied orientation; large vein (~2.5 mm thick) at 45° (at interval 75-87 cm) consisting of outer zone of black clay with an inner zone of a yellow-brown mineral containing angular black clay clasts. Other veins of black clay, yellow brown clay, and minor calcite. Sediment injected into fracture?

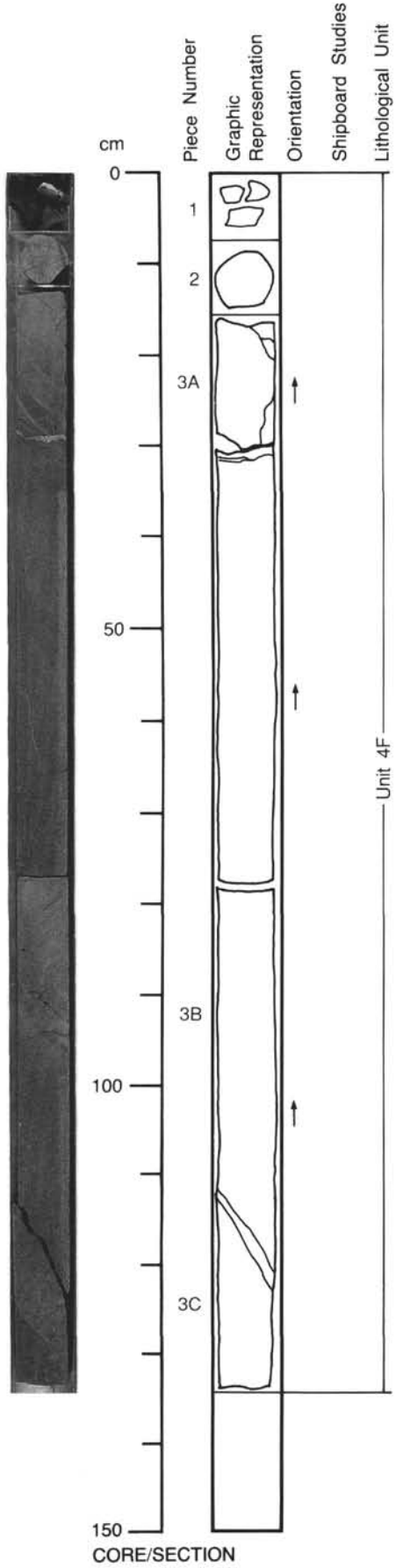


130-807C-83R-7

UNIT 4F: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.5-0. 8 mm; euhedral.
Olivine? - 1%; 0.5-1.0 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; <0.5-7 mm; subhorizontal and at 45°; calcite with black clay. One 7-mm-thick vein with light brown clay interior and outer zone of dark gray to black clay.

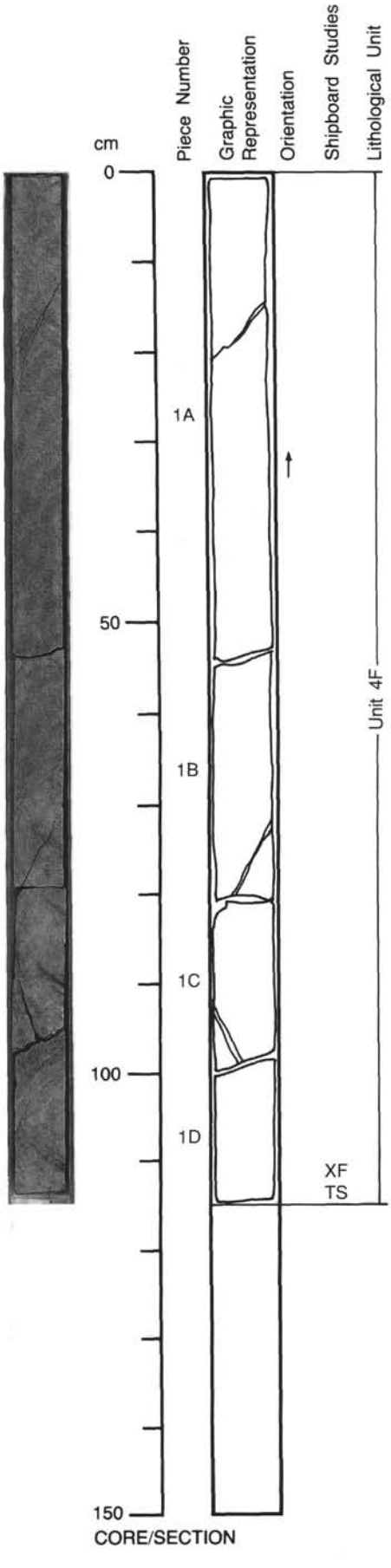


130-807C-84R-1

UNIT 4F: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; 0.5-1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; <1-5 mm; varied orientation; calcite with minor black and green clay.
ADDITIONAL COMMENTS: Piece 1 contains 3 fragments: (i) chert, probably washed downhole; (ii) brown clay vein; (iii) fine-grained basalt.

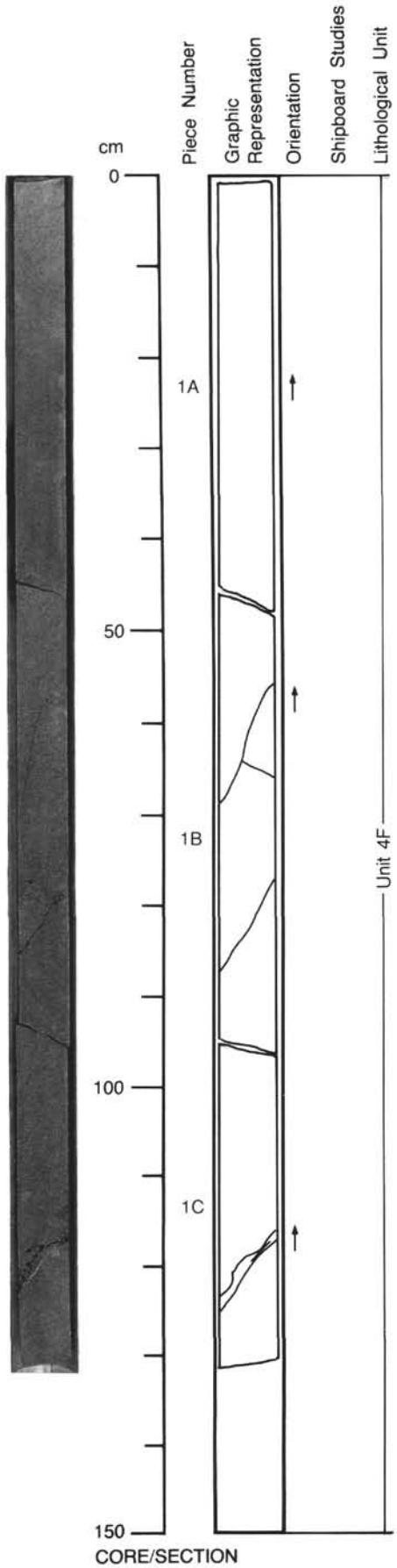


130-807C-84R-2

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; 0.5-1mm; subhedral.
Plagioclase - <1%; 0.5-1mm; euhedral to subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 0.2-4 mm; subhorizontal and at ~60°; calcite and dark gray clay(?).

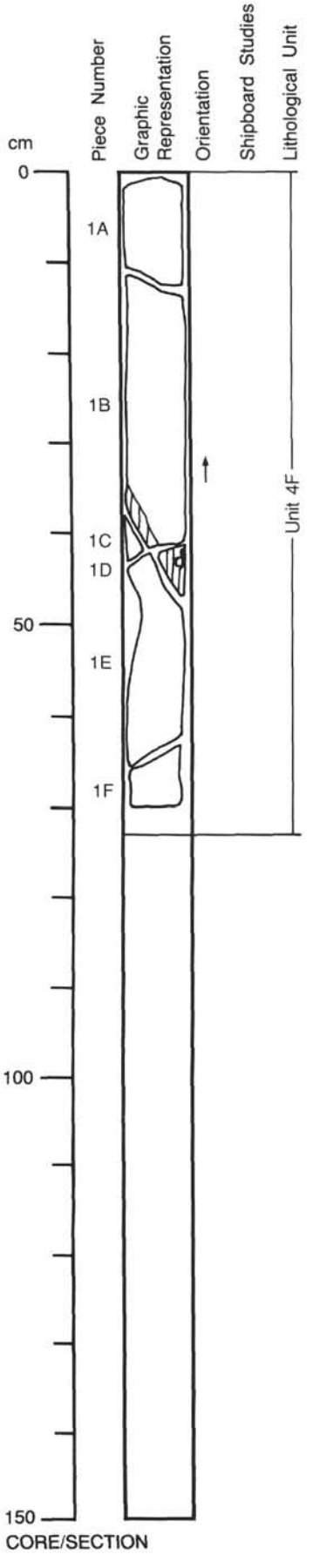


130-807C-84R-3

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.5-4 mm; varied orientation; mostly dark gray clay, thin (1 mm) pyrite vein near bottom of Piece 1C.

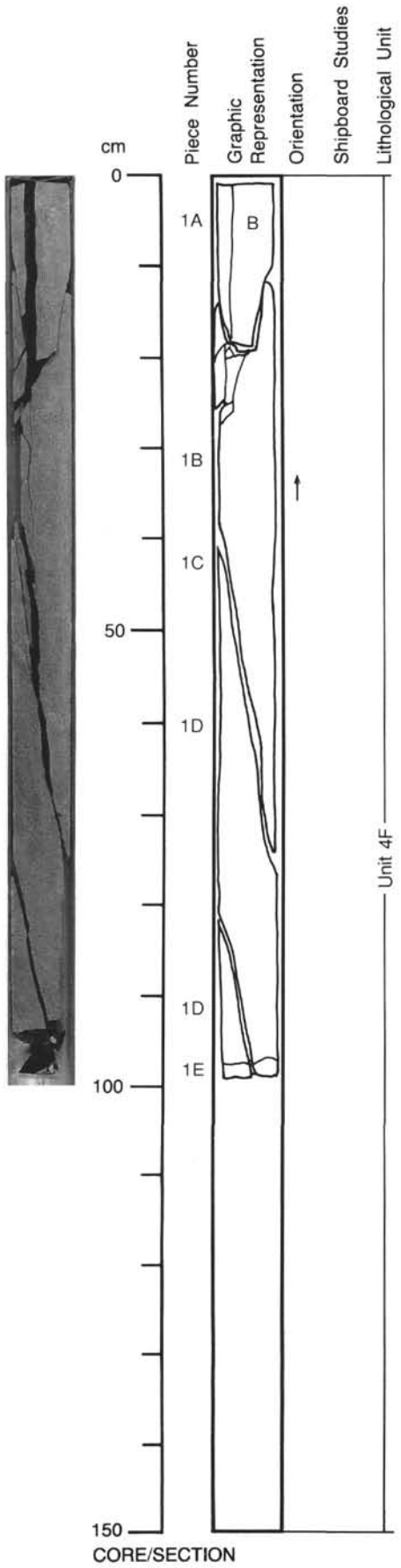


130-807C-84R-4

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5- 1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 1-10 mm; varied orientation; dark gray-green clay. From the bottom of Piece 1B and continuing into Piece 1D is a 10 mm thick composite vein, the bottom half consisting of calcite with minor pyrite and clays, and the top half of a ~5 mm thick basalt dike.

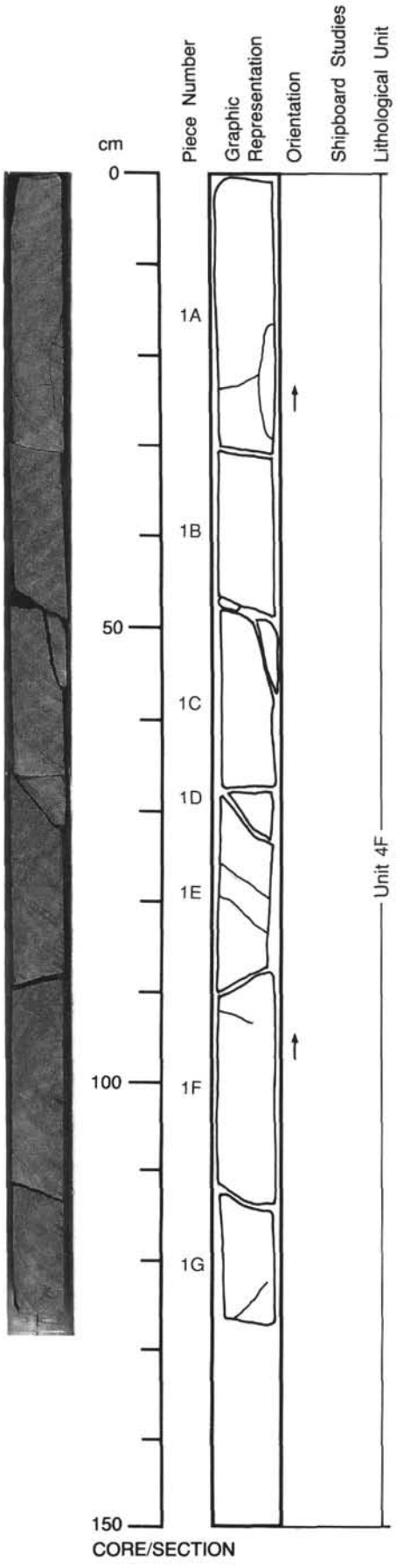


130-807C-84R-5

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - 1-2%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.2-2 mm; subvertical; gray-green clays, heavily fractured.

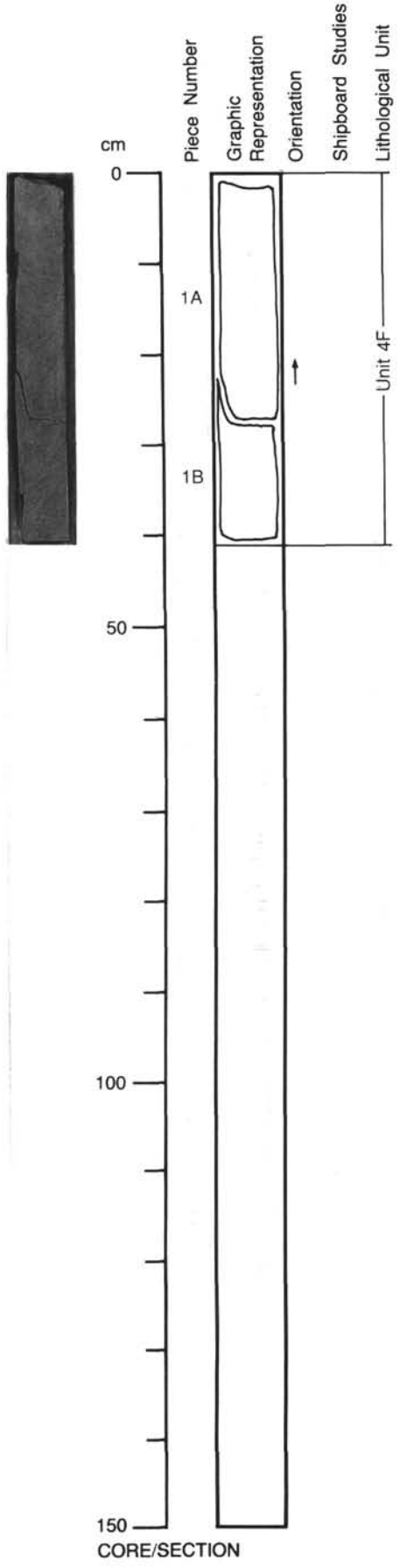


130-807C-84R-6

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS: Glomeroporphyritic texture.
Olivine? - ~1%; 0.3-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; up to 1 mm; subhedral to euhedral.
Plagioclase - <1%; up to 1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.2-1 mm; varied orientation; dark gray clay, calcite.

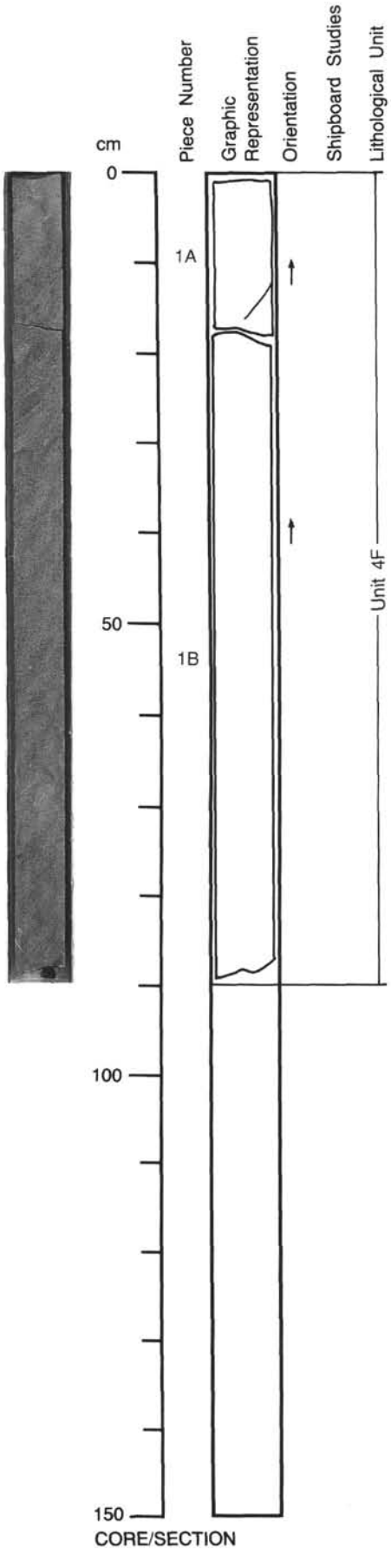


130-807C-84R-7

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; up to 1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; ~0.5 mm; subvertical; dark gray clay.

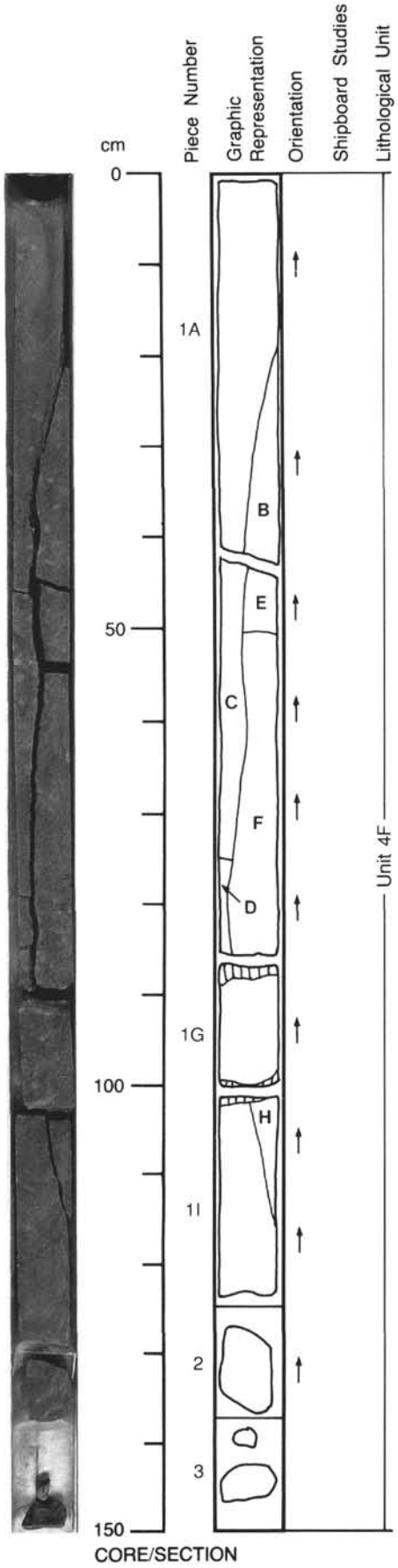


130-807C-85R-1

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.5 mm; high angles; gray clay filled vein in Piece 1A.

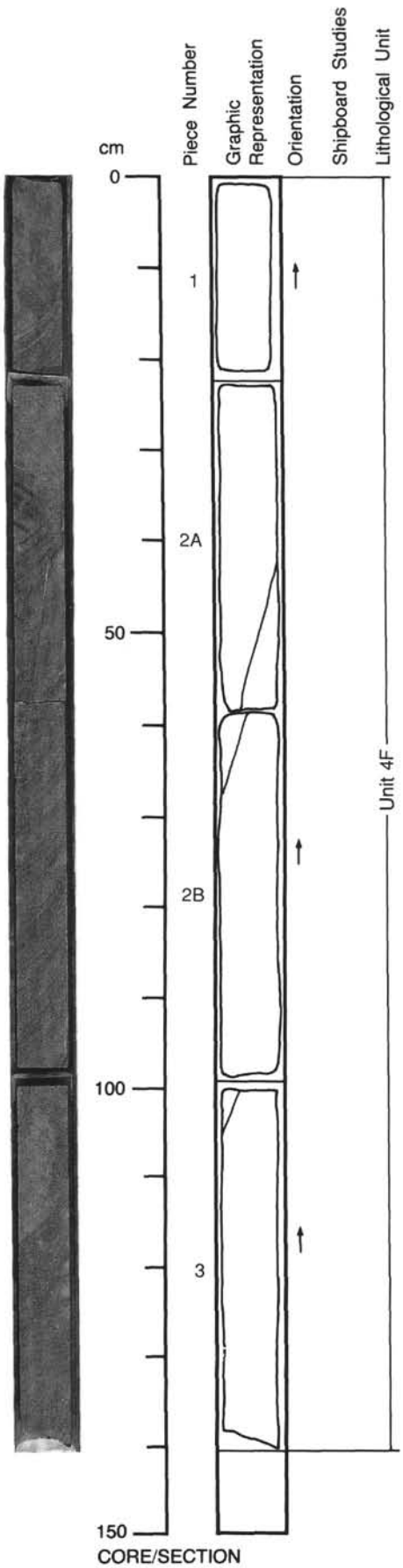


130-807C-85R-2

UNIT 4F: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: ~1%; 0.5-5 mm; subvertical to subhorizontal; filled with dark gray-green clay.

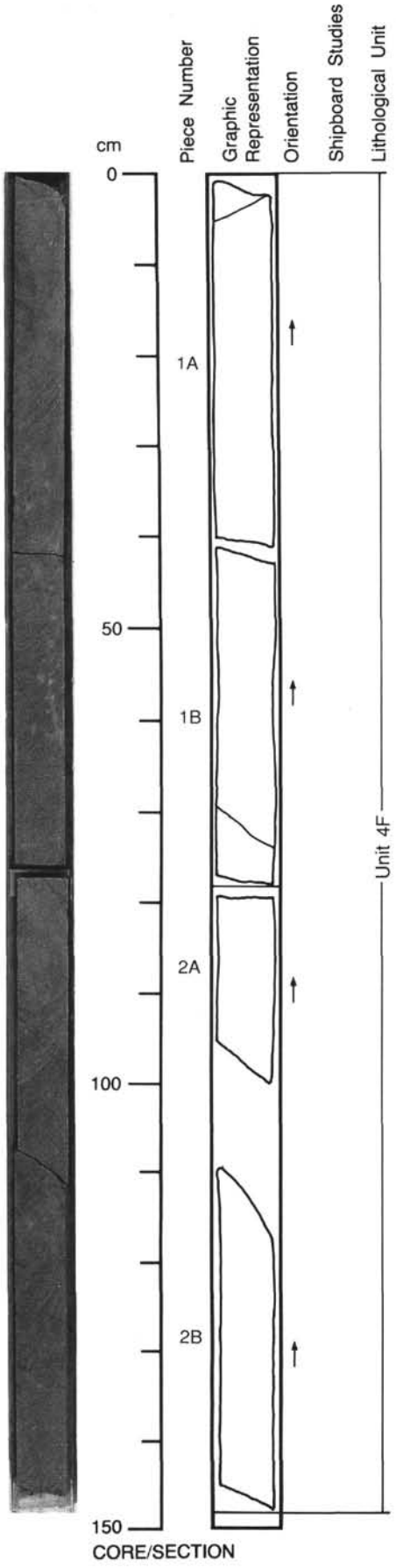


130-807C-85R-3

UNIT 4F: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.5-1 mm; subvertical; filled with dark gray clay.

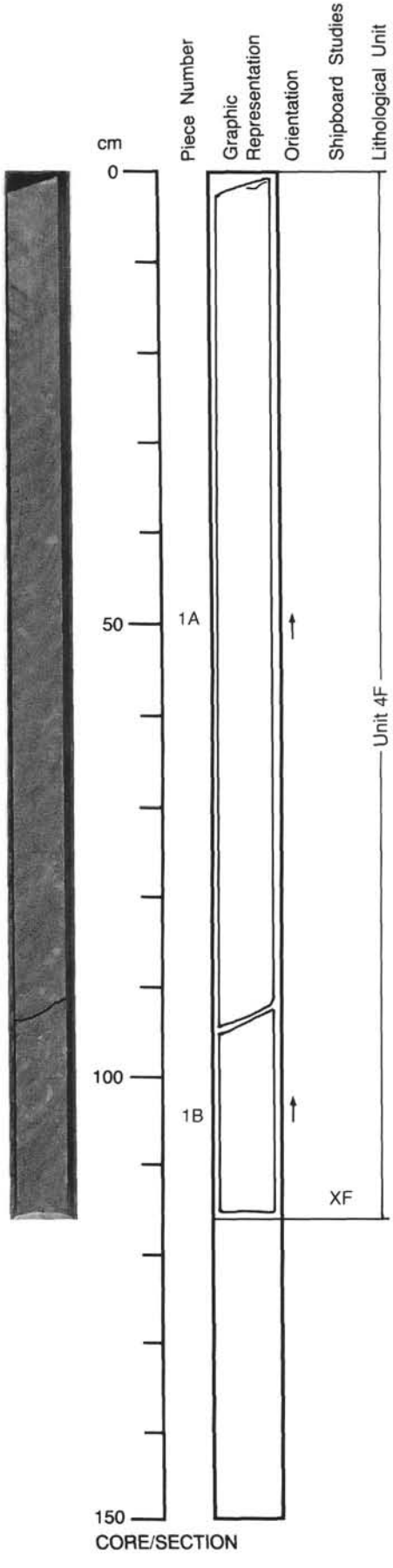


130-807C-85R-4

UNIT 4F: APHYRIC BASALT

Pieces 1, 2

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; 0.2-1 mm; varied orientation; filled with dark gray clay.

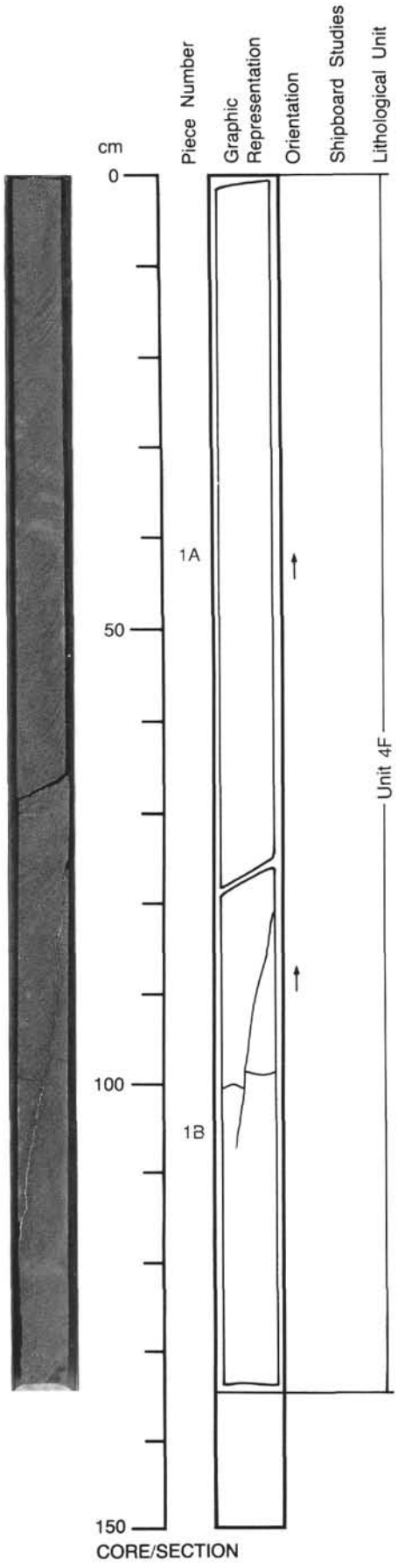


130-807C-85R-5

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: None.

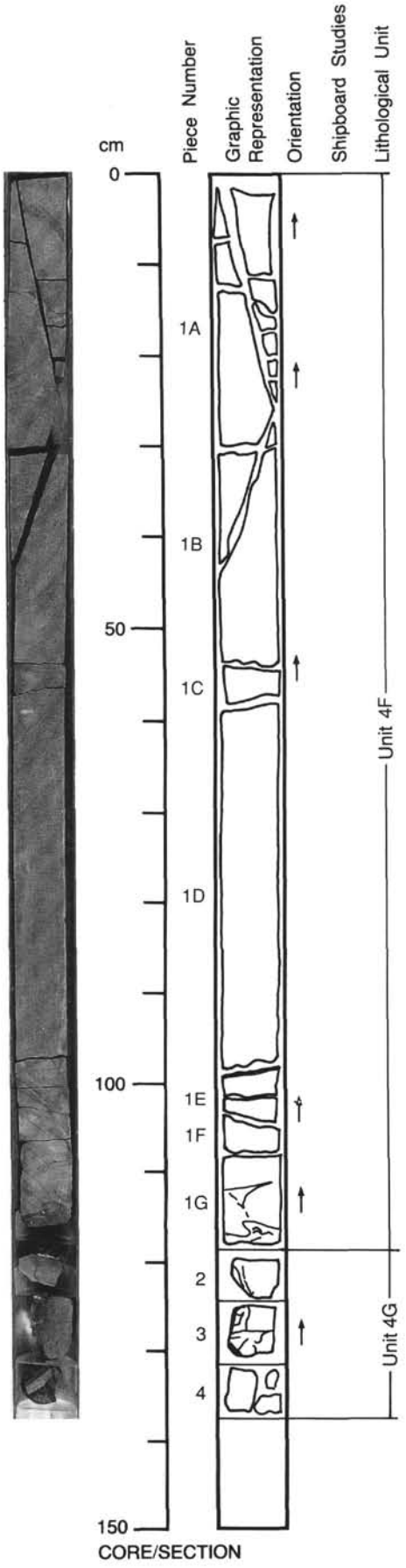


130-807C-85R-6

UNIT 4F: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: ~1%; 0.2-3 mm; subvertical to subhorizontal; filled with calcite and dark green-gray clay.



130-807C-85R-7

UNIT 4F: APHYRIC BASALT

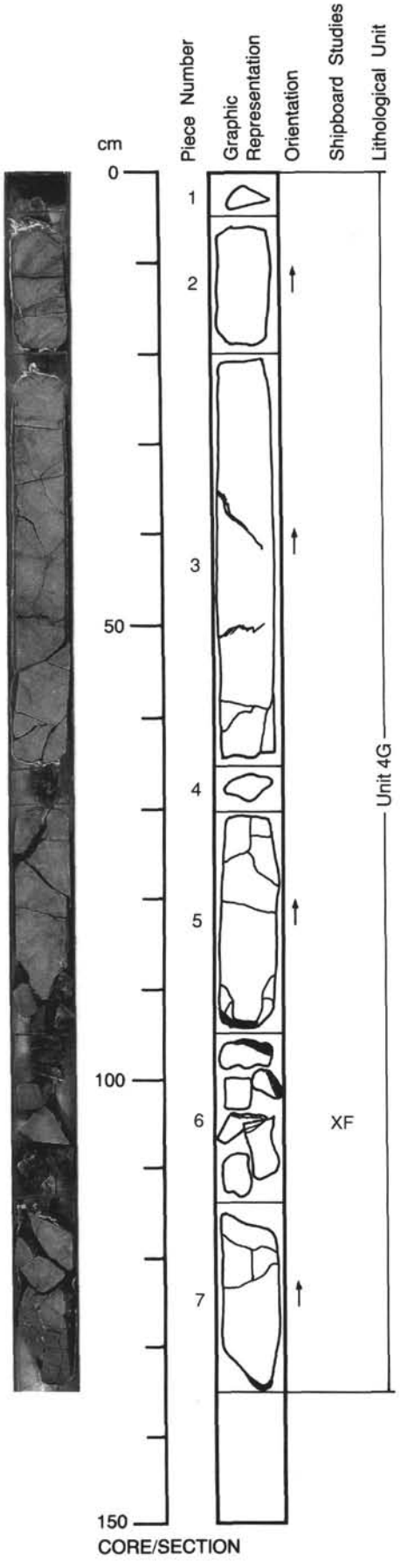
Piece 1

CONTACTS: Piece 1G is the base of this flow.
PHENOCRYSTS: Glomeroporphyritic texture, crystal aggregates up to 3 mm.
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral to euhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained, becoming finer grained in Pieces 1F and 1G.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive, base of flow slightly brecciated (Piece 1G).
ALTERATION: Slight, moderate in Piece 1G.
VEINS/FRACTURES: <1%; 0.2-2 mm; horizontal and high angle; filled with calcite and dark clays; irregularly orientated vein in Piece 1G contains calcite and brown clay and/or Fe-oxide (?).

UNIT 4G: APHYRIC BASALT

Pieces 2-4

CONTACTS: Fine-grained to glassy flow margin.
PHENOCRYSTS:
Olivine? - ~1%; 0.5-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.5-1 mm; subhedral.
Plagioclase - <1%; 0.5-1 mm; subhedral to euhedral, associated with livine and/or clinopyroxene phenocrysts.
GROUNDMASS: Fine grained to glassy.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Flow margin, slightly brecciated.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 2-3%; 0.2-5 mm; varied orientation; mainly calcite with green and brown clays; veins concentrated in the very fine grained to glassy margins of Pieces 2 and 3.



130-807C-86R-1

UNIT 4G: APHYRIC BASALT

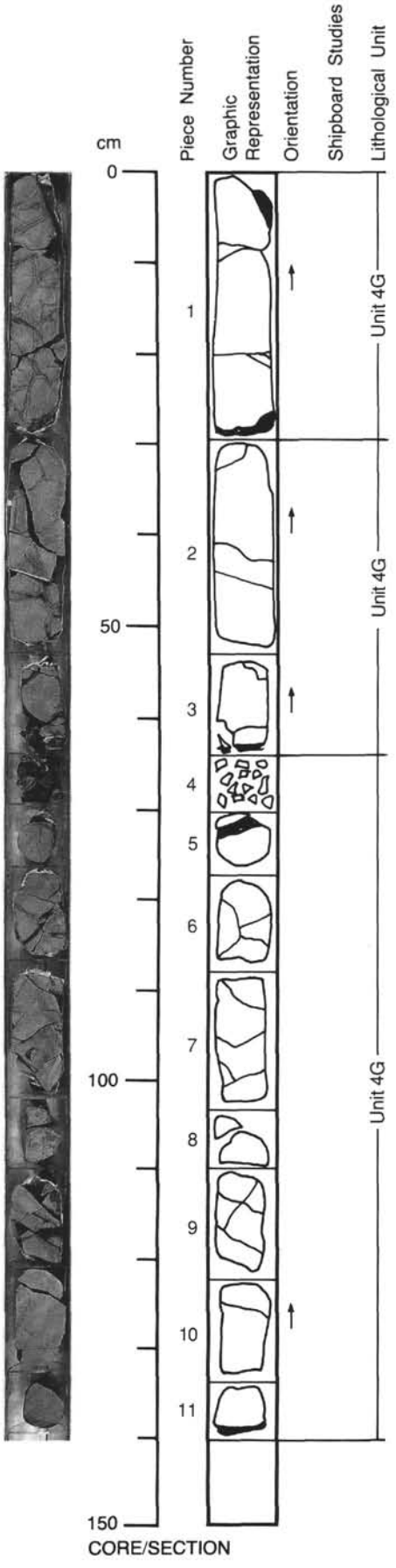
Pieces 1-5

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - ~1%; 0.5-1 mm; euhedral to subhedral.
Olivine? - ~1%; 0.3-1 mm; euhedral to subhedral.
Clinopyroxene? - <1%; 0.3-1 mm; euhedral to subhedral.
GROUNDMASS: Fine grained to glassy, at bottom.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: ~1%; <1-3 mm; varied orientation; filled with brown clay and/or Fe-oxide, some calcite. Highly fractured.

UNIT 4G: APHYRIC BASALT

Pieces 6,7

CONTACTS: Glassy.
PHENOCRYSTS:
Plagioclase - <1%; 0.2-0.5 mm; subhedral.
Olivine? - ~1%; 0.3-1 mm; subhedral.
Clinopyroxene? - <1%; up to 1 mm; subhedral.
GROUNDMASS: Fine grained with glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: ~2%; 0.5-2 mm; varied orientation; filled with calcite and brown and greenish clays, highly fractured.



130-807C-86R-2

UNIT 4G: APHYRIC BASALT

Piece 1

CONTACTS: Glassy.
PHENOCRYSTS:
Plagioclase - <1%; 0.3-0.5 mm; euhedral to subhedral.
Olivine? - ~1%; 0.3-1 mm; euhedral to subhedral.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 0.5-2 mm; varied orientation; filled with calcite and red-brown clay and/or Fe-oxide, some black clay.

UNIT 4G: APHYRIC BASALT

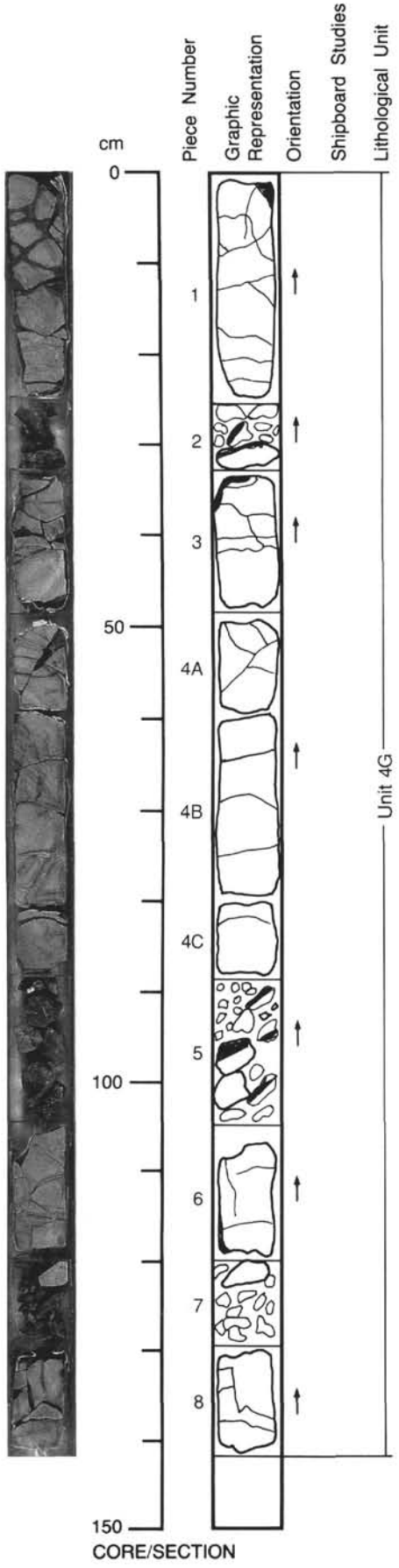
Pieces 2,3

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.2-0.5 mm; subhedral.
Clinopyroxene - ~1%; 0.2-0.8 mm; subhedral to euhedral.
GROUNDMASS: Very fine grained with glassy lower margin
VESICLES: Nonvesicular
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; <0.5 mm; varied; one calcite vein (~2 mm) at glass margin.

UNIT 4G: APHYRIC BASALT

Pieces 4-11

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.3-0.5 mm; subhedral to euhedral.
Olivine? - ~1%; 0.3-1 mm; euhedral.
Clinopyroxene? - <1%; 0.3-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained with glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <0.5-2 mm; varied orientation; filled with calcite and dark green clay.
ADDITIONAL COMMENTS: Piece 4 consists of small chips of altered glass and basalt; Piece 5 has top of inter-pillow calcite breccia with glass clasts totally altered to green clay.



130-807C-86R-3

UNIT 4G: APHYRIC BASALT

Pieces 1,2

CONTACTS: Glassy.
PHENOCRYSTS: Some plagioclase is associated with olivine and/or clinopyroxene.
Plagioclase - <1%; 0.3-0.5 mm; euhedral to subhedral.
Olivine? - ~1%; 0.3-0.8 mm; euhedral to subhedral.
Clinopyroxene? - <1%; 0.3-0.8 mm; euhedral to subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: ~2%; <0.5-2 mm; varied orientation; filled with brown and green clay, calcite.

UNIT 4G: APHYRIC BASALT

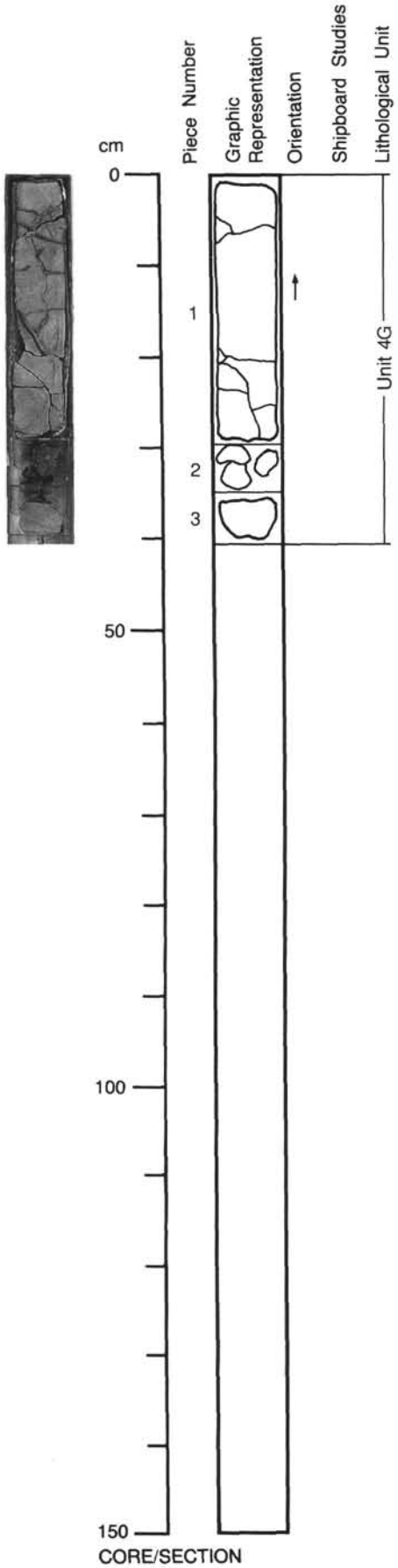
Pieces 3,4

CONTACTS: Glassy.
PHENOCRYSTS:
Plagioclase - <1%; 0.3-0.8 mm; subhedral to euhedral.
Olivine? - ~1%; 0.3-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.3-0.8 mm; subhedral to euhedral.
GROUNDMASS: Fine grained, glassy at top margin.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <1 mm; subhorizontal to about 45°; a few radial pillow cracks. Filled with brown and green clays.

UNIT 4G: APHYRIC BASALT

Pieces 5-8

CONTACTS: Glassy.
Plagioclase - <1%; 0.2-1 mm; euhedral to subhedral.
Olivine - ~1%; 0.2-0.8 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glass (highly altered) in Piece 5.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight to moderate, high in chips from Pieces 5 and 7.
VEINS/FRACTURES: ~1%; <1 mm; varied orientation; highly fractured; filled with brown clay, minor calcite.

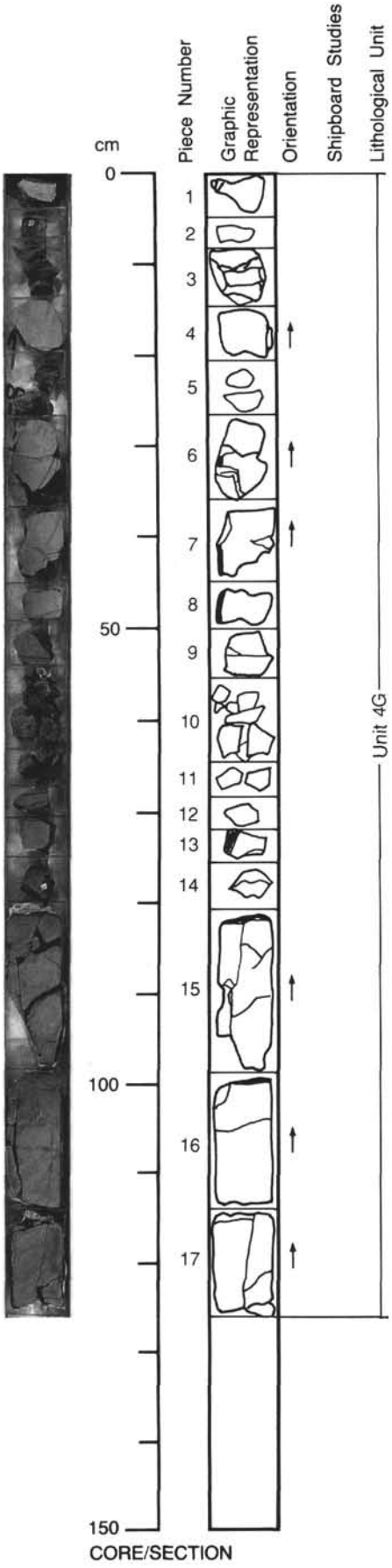


130-807C-86R-4

UNIT 4G: APHYRIC BASALT

Pieces 1-3

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <1%; 0.2-0.5 mm; euhedral.
Olivine? - ~1%; 0.2-0.8 mm; euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive, probably pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <0.5-2 mm; subvertical to subhorizontal; filled with brown clay and minor calcite.

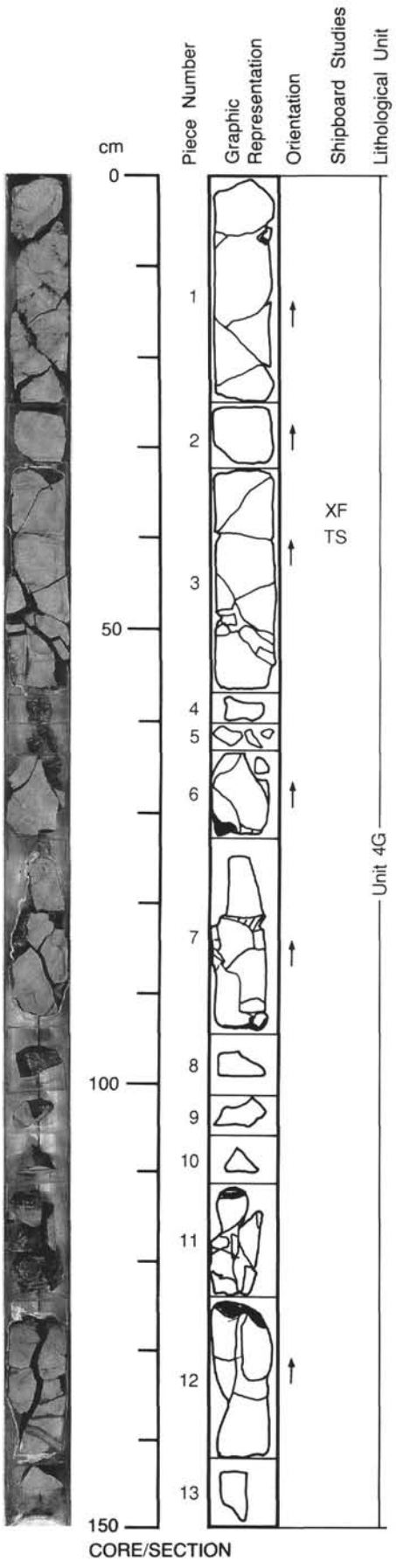


130-807C-87R-1

UNIT 4G: APHYRIC BASALT

Pieces 1-17

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; 0.3-0.5 mm; subhedral.
Olivine? - ~1%; 0.3-0.8 mm; euhedral to subhedral.
GROUNDMASS: Fine grained with glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow fragments.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <1 mm; varied orientation; filled with black clay and minor calcite.

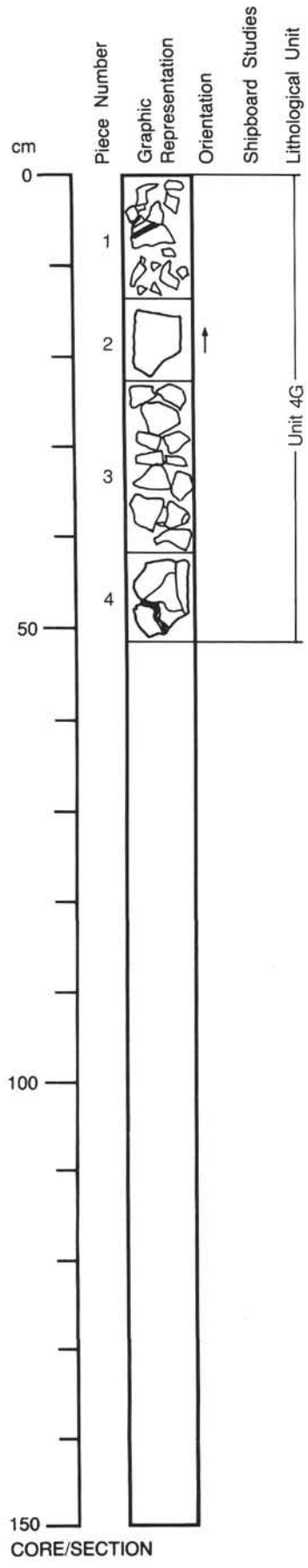


130-807C-87R-2

UNIT 4G: APHYRIC BASALT

Pieces 1-13

CONTACTS: Glassy rim fragments.
PHENOCRYSTS:
Plagioclase - <1%; 0.3-0.8 mm; subhedral, some in association with olivine and/or clinopyroxene.
Olivine? - ~1%; 0.3-1 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.3-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy near several rims.
VESICLES: Nonvesicular.
COLOR: Medium gray with blotchy, black areas of alteration in Piece 1.
STRUCTURE: Pillow lava fragments.
ALTERATION: Slight to high in Piece 1, irregular blotches of black to dark green clay up to 3 cm across in Piece 1.
VEINS/FRACTURES: ~1%; <0.5-2 mm; varied; highly fractured; veins filled with dark green to black clay, some Fe-oxide (?), minor calcite.

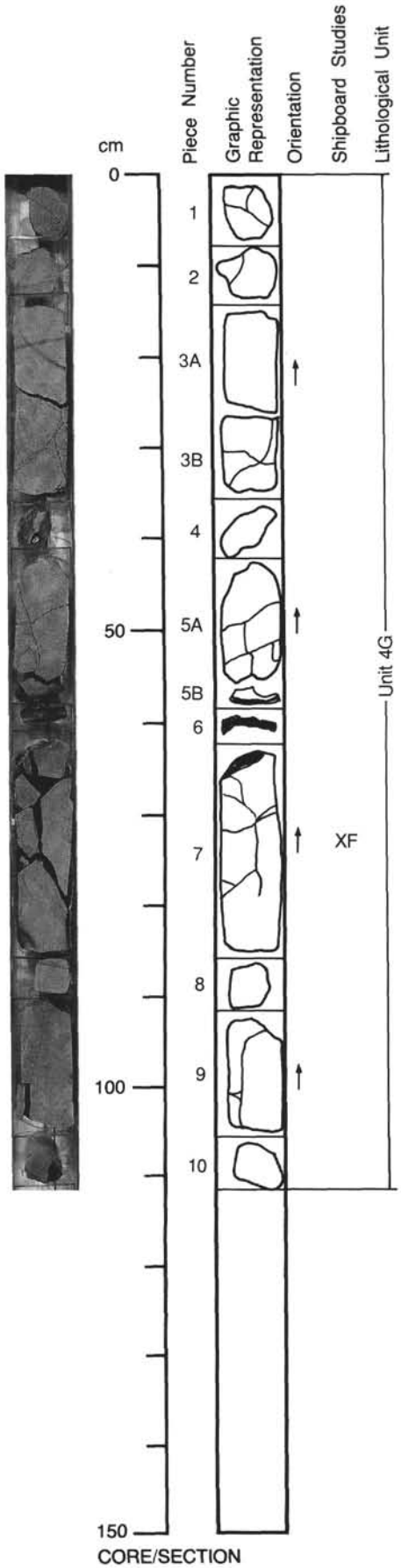


130-807C-87R-3

UNIT 4G: APHYRIC BASALT

Pieces 1-4

CONTACTS: None.
Plagioclase - <<1%; 0.3-0.5 mm; subhedral.
Olivine? - ~1%; 0.3-1 mm; euhedral to subhedral.
GROUNDMASS: Fine grained; some very altered glass in Piece 1.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillows.
ALTERATION: Slight in Pieces 2 and 4.
VEINS/FRACTURES: ~3%; <0.5-3 mm; original orientation unknown; filled with brown clay and/or Fe-oxide.



130-807C-88R-1

UNIT 4G: APHYRIC BASALT.

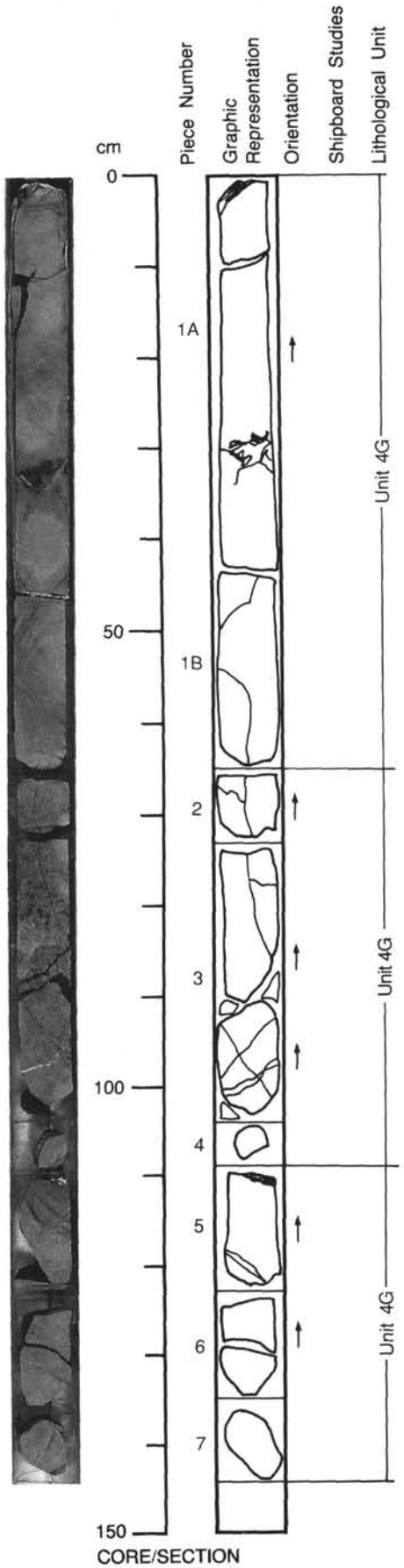
Pieces 1-5

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-0.8 mm; subhedral to euhedral.
Clinopyroxene? - <<1%; 0.2-0.8 mm; subhedral to euhedral.
Plagioclase - <<1%; 0.2-0.8 mm; euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive, probably thick pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; 0.5-1 mm; varied orientation; filled with brown clay and/or oxide.

UNIT 4G: APHYRIC BASALT

Pieces 6-10

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-1 mm; subhedral to euhedral.
Clinopyroxene? - <<1%; up to 1 mm; subhedral.
Plagioclase - <<1%; up to 0.5 mm; subhedral.
GROUNDMASS: Fine grained, glassy upper margin.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive, probably thick pillow lava flow.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; ~0.5 mm; varied orientation; filled with dark green clay.



130-807C-88R-2

UNIT 4G: APHYRIC BASALT

Piece 1

CONTACTS: Glass at top and bottom.
PHENOCRYSTS:
Olivine? - <1%; 0.2-0.8 mm; subhedral.
Clinopyroxene? - <<1%; 0.2-0.5 mm; subhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained, coarser in interior.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive, thick pillow (?).
ALTERATION: Slight except near vein at 34 cm.
VEINS/FRACTURES: <1%; <0.5-3 mm; subhorizontal; irregular brown and black blotches up to 6 mm across.

UNIT 4G: APHYRIC BASALT

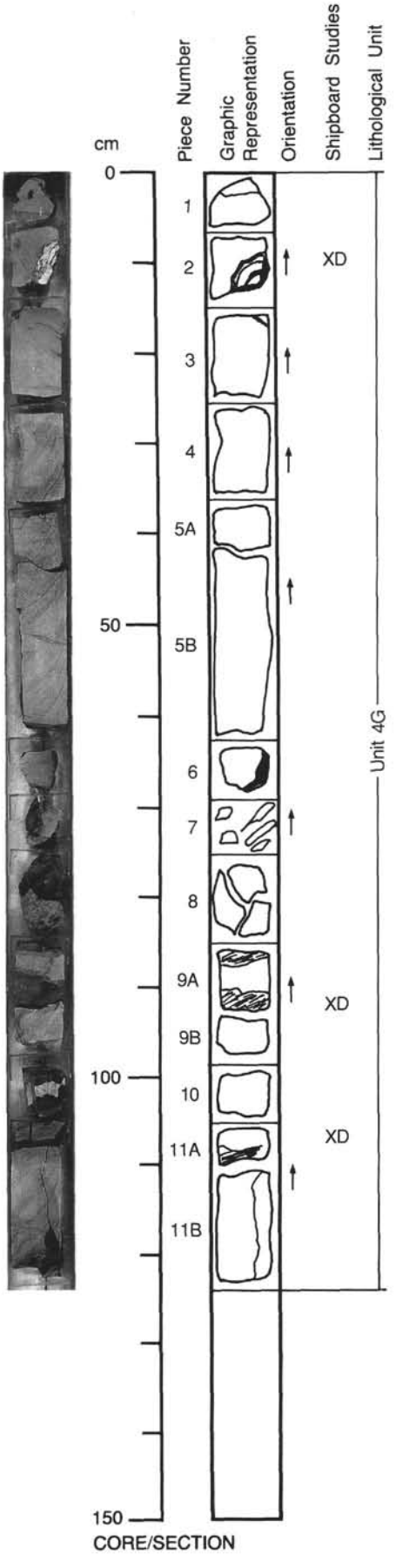
Pieces 2-4

CONTACTS: Upper glassy margin.
PHENOCRYSTS:
Clinopyroxene? - <1%; 0.2-1 mm; subhedral.
Olivine? - <1%; 0.2 mm; subhedral.
GROUNDMASS: Fine grained to glassy at top of Piece 2.
VESICLES: Nonvesicular.
COLOR: Medium gray to dark gray and brown in altered patches.
STRUCTURE: Massive.
ALTERATION: Slight to high in central portion.
VEINS/FRACTURES: 2%; <0.5-3.0 mm; varied orientation; one subhorizontal calcite vein; one subvertical dark brown oxide and/or clay vein.

UNIT 4G: APHYRIC BASALT

Pieces 5-7

CONTACTS: Piece 5 has glassy margin.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-1 mm; euhedral to subhedral.
Clinopyroxene? - <1%; 0.2-1 mm; euhedral to subhedral.
GROUNDMASS: Fine grained to glassy at top.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; ~1 mm; minor radial fractures' calcite in glass (Piece 5).

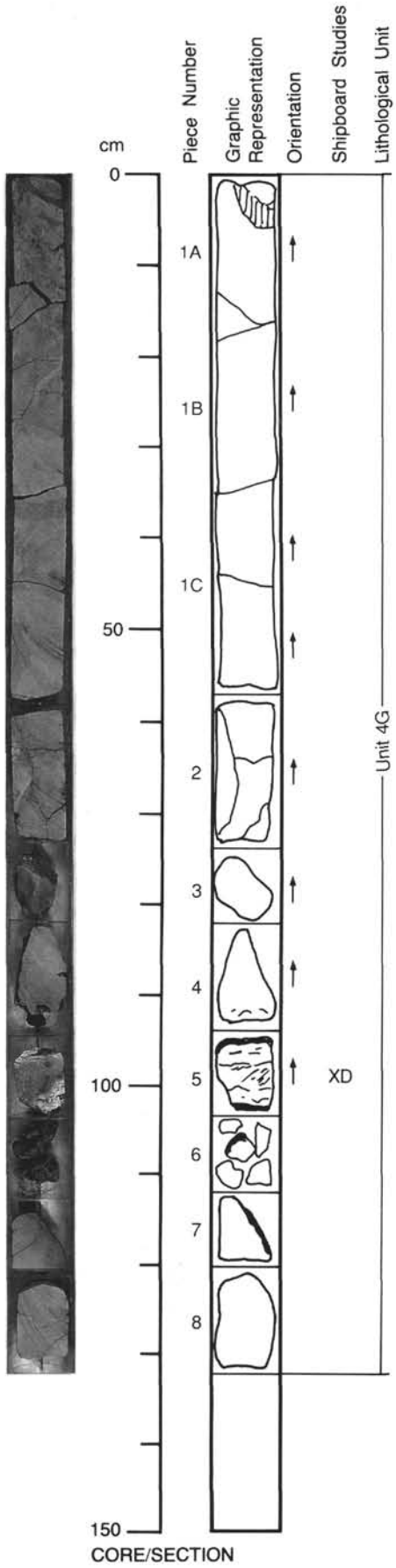


130-807C-88R-3

UNIT 4G: APHYRIC BASALT

Pieces 1-11

CONTACTS: Glassy margins in Pieces 2, 3, and 6.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-1 mm; subhedral to euhedral.
Clinopyroxene? - <<1%; 0.2-1 mm; subhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral
GROUNDMASS: Fine grained to glassy margins.
VESICLES: Nonvesicular.
COLOR: Medium gray to dark gray in patches.
STRUCTURE: Pillow to massive.
ALTERATION: Slight to high.
VEINS/FRACTURES: Piece 2 has part of a vein ~1-3 cm thick between two inter-pillow glass and calcite rims. The vein material is light gray-green, hard, and effervesces only slightly in HCl (baked sediment?). Pieces 3-6 have <1% veins/fractures, <0.5 mm-1.5 mm, varied orientations between horizontal and 45°, infilled by orange-brown mineral; Piece 9 has 2 veins (one 3 cm wide) of a blue-green mineral with blebs of an orange-brown mineral, along with black clay.
ADDITIONAL COMMENTS: Piece 11 has veins at upper and lower contacts with basalt. Vein material nearest the contact with the basalt consists of a dark-green to blue-green mineral, 0.5-1 cm thick. The material which forms the center of the vein consists of a dark blue-gray mineral with patches of a red-brown mineral that has a slight metallic to waxy luster on fresh cut surfaces.



130-807C-88R-4

UNIT 4G: APHYRIC BASALT

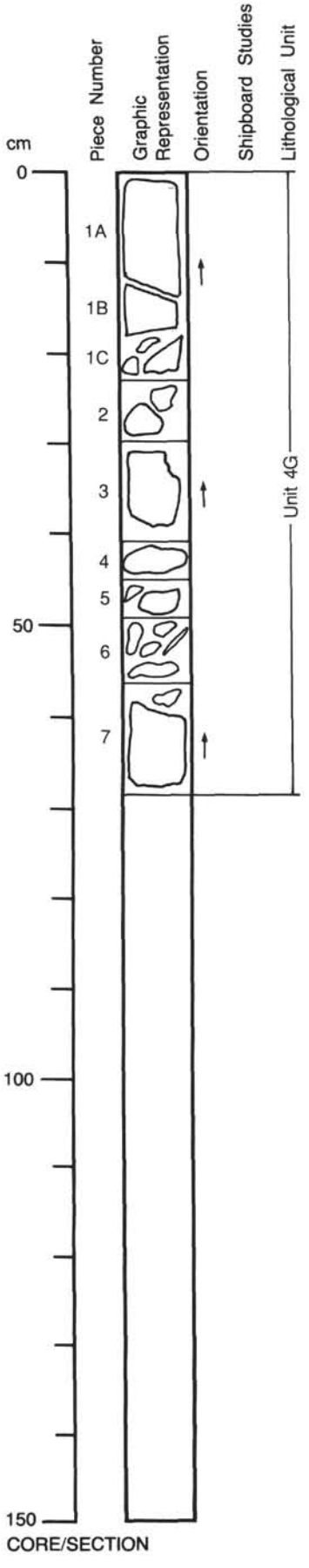
Pieces 1-4

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-0.8 mm; subhedral to euhedral.
Clinopyroxene? - <<1%; 0.2-0.8 mm; subhedral.
Plagioclase - <<1%; 0.2-0.8 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray to bluish or greenish gray in altered patches.
STRUCTURE: Massive.
ALTERATION: Slight to high, especially top of Piece 1.
VEINS/FRACTURES: ~3%; <0.5 mm to >3 cm; varied orientation; thin veins consist of green and brown minerals;one thick vein at the top with ~ 6-10 mm dark green mineral (clay?) in layer nearest basalt, top 1.5 cm contains dark-gray and reddish-brown minerals.

UNIT 4G: APHYRIC BASALT

Pieces 5-8

CONTACTS: Glass on Piece 7 (pillow margin).
PHENOCRYSTS:
Olivine? - ~1%; 0.2-1 mm; subhedral.
Clinopyroxene? - <<1%; 0.2-0.5 mm; subhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained to glassy at margin of Piece 7.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive-pillow.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; <1 mm; varied orientation; filled with brown clay.
ADDITIONAL COMMENTS: Piece 5 is an interflow limestone breccia with green altered glass shards on either side of a 2.5-4 cm thick vein with irregular margins. Vein filling is light brown on top, non-effervescing in HCl, darker brown in middle, with calcite and light green mineral on bottom.

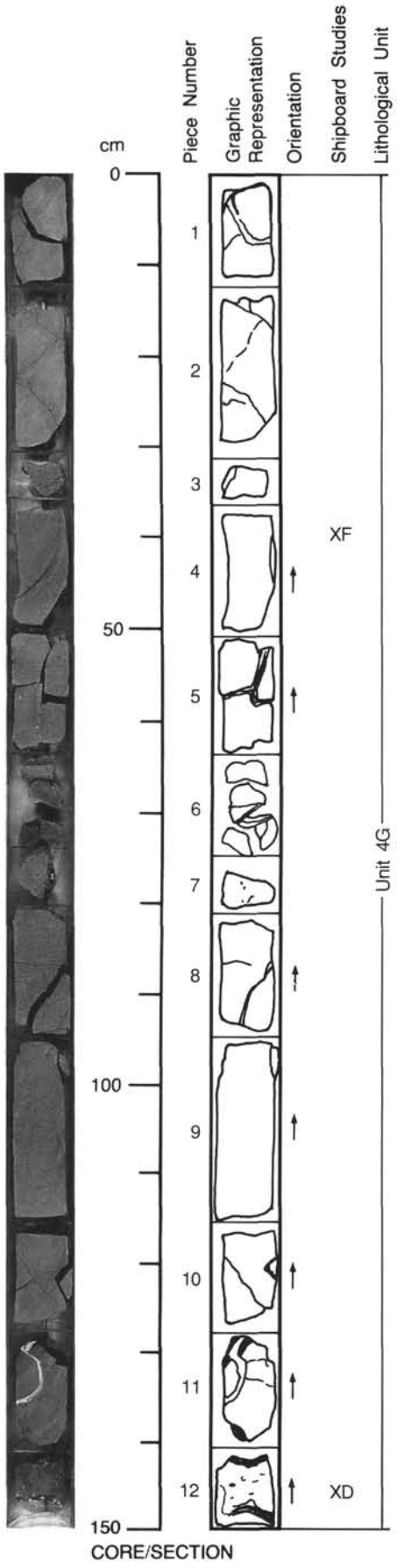


130-807C-88R-5

UNIT 4G: APHYRIC BASALT

Pieces 1-7

CONTACTS: None.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-0.8 mm; subhedral.
Clinopyroxene? - <<1%; 0.2-0.5 mm; subhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive in Piece 1.
ALTERATION: Slight.
VEINS/FRACTURES: <1%; <0.5 to 1 mm; varied orientation; filled with brown clay (?), lesser calcite.



130-807C-89R-1

UNIT 4G: APHYRIC BASALT

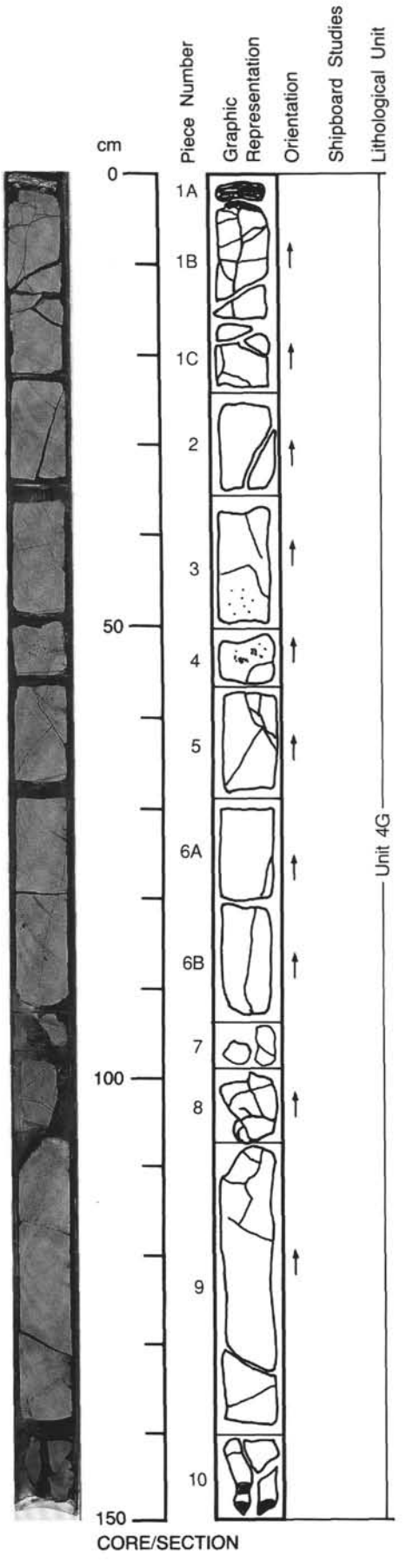
Pieces 1-10

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <1%; 0.2-0.8 mm; euhedral to subhedral.
Clinopyroxene? - <<1%; 0.2-0.8 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray, bluish tinge in altered zone near veins.
STRUCTURE: Massive.
ALTERATION: Slight, moderate in a few small patches, minor pyrite in groundmass.
VEINS/FRACTURES: <<1%; <0.5-1 mm; varied orientation; dark blue clay, calcite and pyrite (fracture in Piece 5).

UNIT 4G: APHYRIC BASALT

Pieces 11,12

CONTACTS: Glassy upper and lower margins.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-0.8 mm; euhedral to subhedral.
Clinopyroxene? - <1%; 0.2-1 mm; subhedral.
Plagioclase - <1%; 0.2-1 mm; subhedral.
GROUNDMASS: Fine grained to glassy at margins.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Small pillow.
ALTERATION: Slight.
VEINS/FRACTURES: ~5%; 2-5 mm; varied orientation; calcite vein; <0.5 mm brown clay and/or Fe-oxide (?) vein.
ADDITIONAL COMMENTS: Piece 12 is a vein of a dark-olive green mineral, as in Piece 2, Core 130-807C-88R. Non-effervescent in HCl. Contains 0.5-2 mm clasts (?) of calcite which look like subhedral pseudomorphs of another mineral. Upper and lower portions of this piece are glassy-calcite inter-pillow breccias. Could be baked clay sediment.



130-807C-89R-2

UNIT 4G: APHYRIC BASALT

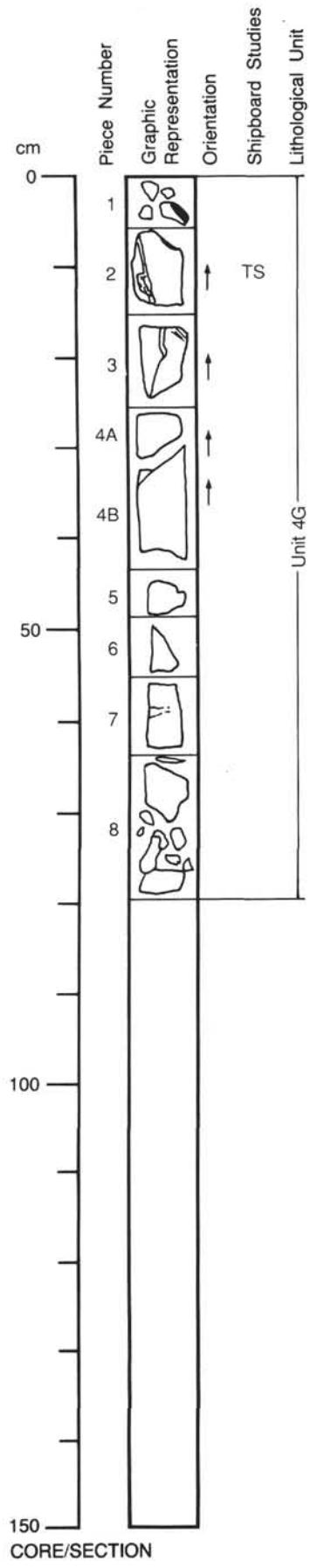
Pieces 1-6

CONTACTS: Glassy top.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-1 mm; euhedral to subhedral.
Clinopyroxene? - <<1%; 0.2-0.5 mm; subhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral, associated with olivine and/or clinopyroxene.
GROUNDMASS: Fine grained, glassy at top margin.
VESICLES: Nonvesicular.
COLOR: Medium gray; bluish gray in altered patches.
STRUCTURE: Massive.
ALTERATION: Slight to moderate; bluish patches in Pieces 1 and 2.
VEINS/FRACTURES: ~1%; <0.5-2 mm; varied orientation; mostly in Piece 1; filled with brown clay and dark brown to dark blue-gray clay; minor calcite.

UNIT 4G: APHYRIC BASALT

Pieces 7-10

CONTACTS: Lower glassy margin.
PHENOCRYSTS:
Olivine? - ~1%; 0.2-0.5 mm; euhedral to subhedral.
GROUNDMASS: Fine grained, glassy at bottom.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow or thin, massive. flow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; <1 mm wide; varied orientation; filled with brown or dark blue-green clays.

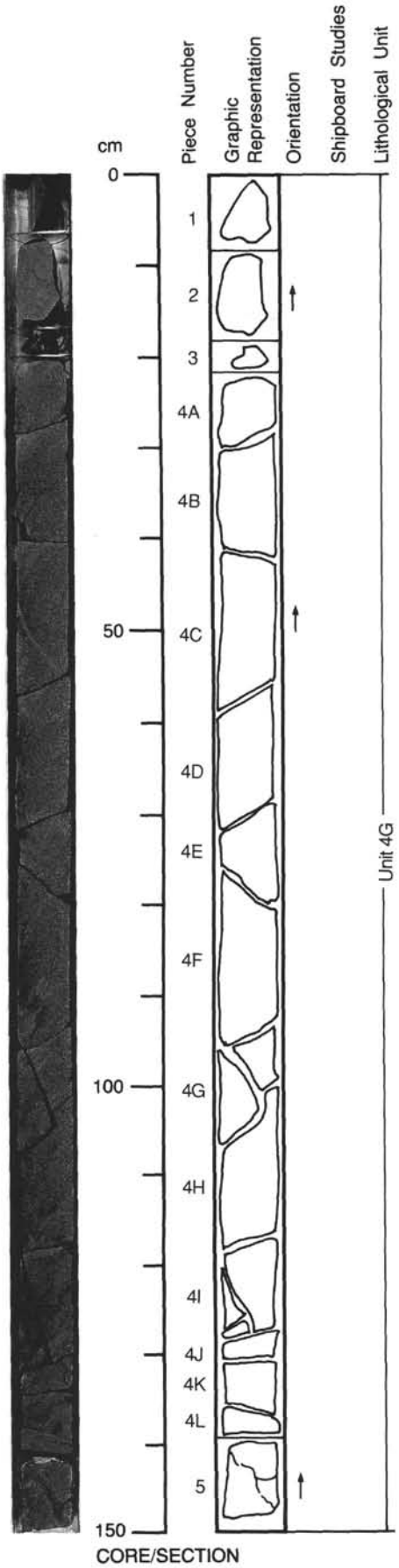


130-807C-89R-3

UNIT 4G: APHYRIC BASALT

Pieces 1-8

CONTACTS: None.
PHENOCRYSTS:
Plagioclase - <<1%; 0.2-0.8 mm; subhedral.
Olivine? - ~1%; 0.2-0.8 mm; subhedral to euhedral.
Clinopyroxene? - <1%; 0.2-0.8 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive or thick pillow lava.
ALTERATION: Slight.
VEINS/FRACTURES: ~2%; <1-3 mm; subvertical; Pieces 2 and 3 have brownish mineral and dark blue-green to black clays.

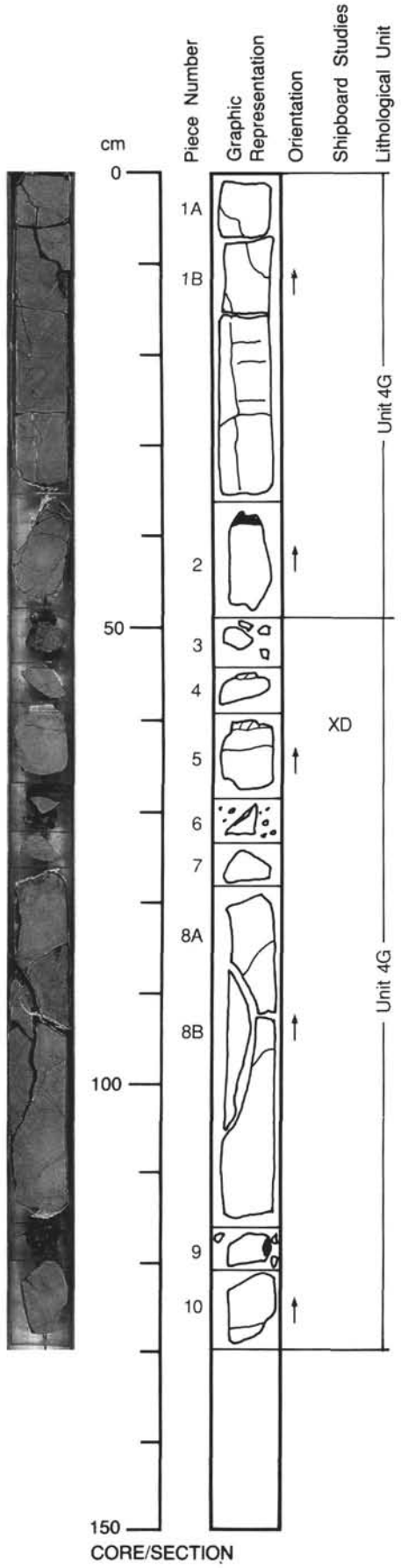


130-807C-90R-1

UNIT 4G: APHYRIC BASALT

Pieces 1-5

CONTACTS: None.
PHENOCRYSTS:
Olivine? - <<1%; ~1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive flow.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; <1 mm; varied orientation; small amounts of calcite, dark smectite and traces of pyrite.



130-807C-90R-2

UNIT 4G: APHYRIC BASALT

Pieces 1, 2

CONTACTS: Glassy pillow margin, Piece 2.
PHENOCRYSTS: Olivine mainly altered to dark green clay.
Olivine - ~1%; 0.2-0.6 mm; subhedral to eudedral.
Plagioclase - <1%; 0.2-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy (margin of Piece 2).
VESICLES: Nonvesicular.
COLOR: Medium gray
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 1%; 0.5-3 mm; subvertical to subhorizontal; calcite, green blue (clay?) mineral, orange-brown mineral (goethite).

UNIT 4G: APHYRIC BASALT

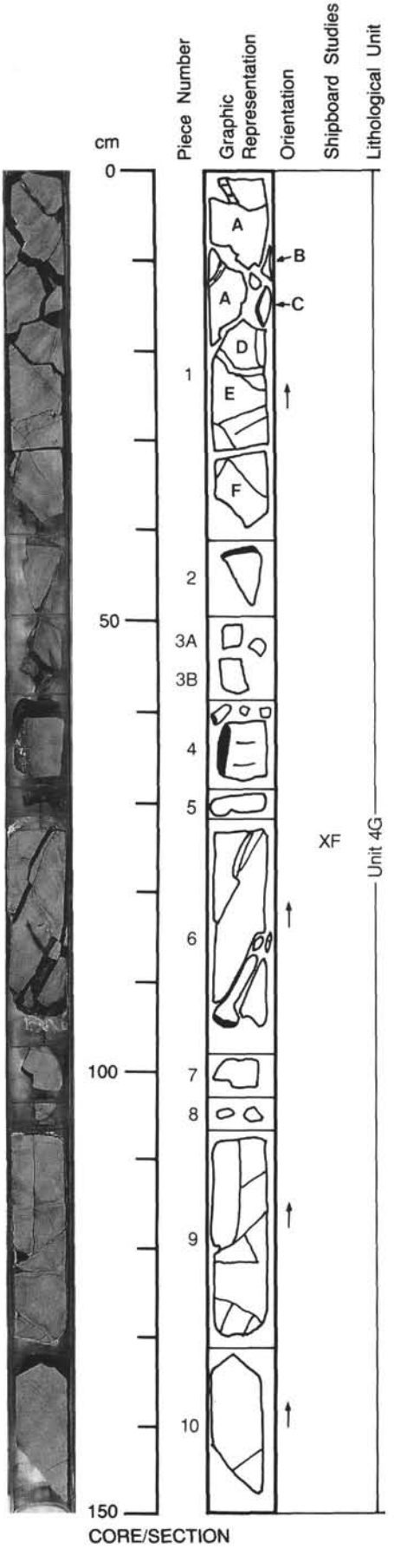
Pieces 3-8

CONTACTS: None.
PHENOCRYSTS:
Olivine - <1%; 0.2-0.6 mm; subhedral to euhedral.
Plagioclase - <<1%; 0.2-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: ~1%; up to 4 mm; oval to irregular; top of Piece 8A; infilled with green/brown clays.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Moderate.
VEINS/FRACTURES: ~1%; 1-3 mm; varied orientation; infilled with calcite, green-blue clay (?), an orange-brown mineral (goethite?). Piece 4 and 5 have a subhorizontal 1 cm vein containing calcite and a light green mineral, with lesser amounts of orange-brown mineral. The margin of the vein consists of very dark gray-green mineral (0.5 mm thick). Veins also are located in Pieces 1B and 8B.

UNIT 4G: APHYRIC BASALT

Pieces 9, 10

CONTACTS: None.
PHENOCRYSTS:
Olivine - ~1%; 0.2-0.5 mm; subhedral to euhedral.
Plagioclase - <1%; 0.2-1mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy (margin Piece 9).
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; varied orientation; filled with calcite, clays and orange-brown mineral (goethite?).



130-807C-90R-3

UNIT 4G: APHYRIC BASALT

Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine - ~1%; 0.3-0.8 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: ~1%; 0.5-5 mm; varied orientation; calcite, filled with dark gray-blue clay (?), pyrite, a light orange-brown mineral, with semi-metallic luster (goethite?).

UNIT 4G: APHYRIC BASALT

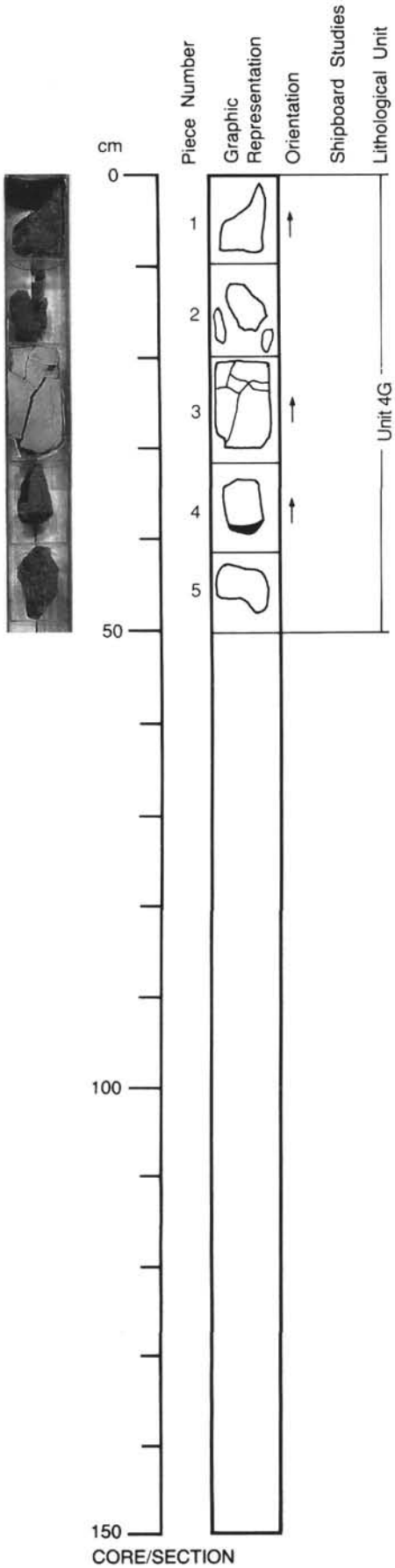
Pieces 2-6

CONTACTS: Glassy pillow margin (Pieces 2, 4, and 6).
PHENOCRYSTS:
Olivine? - ~1%; 0.3-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-4 mm; varied orientation; glass margin on Piece 4 is heavily calcite veined. Piece 6 has 1 mm thick vein at top consisting of a dark gray-green mineral with small (~0.2 mm) blebs of a orange-brown mineral (goethite?).

UNIT 4G: APHYRIC BASALT

Pieces 7-10

CONTACTS: None.
PHENOCRYSTS:
Olivine - <1%; 0.3-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: ~1%; 0.5-2 mm; vertical, subhorizontal and ~ 45°; dark gray-green clay, minor pyrite.

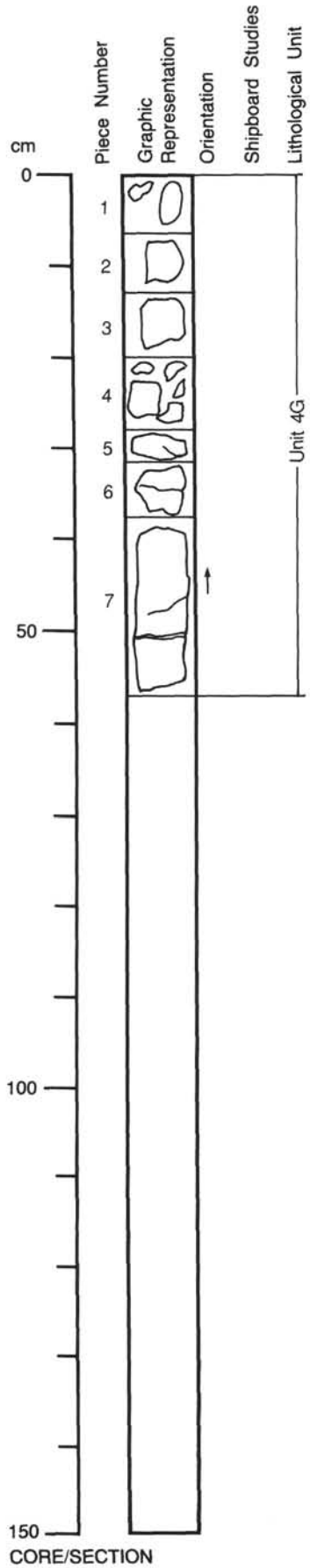


130-807C-90R-4

UNIT 4G: APHYRIC BASALT

Pieces 1-5

CONTACTS: Glassy pillow margin (Piece 4).
PHENOCRYSTS:
Olivine - ~1%; 0.2-0.8 mm; subhedral to euhedral.
Plagioclase - <<1%; 0.2-0.8 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; ~0.5 mm; varied orientation; fracture surfaces stained black (manganese?), yellow-brown (Fe-oxides?) and/or dark green.

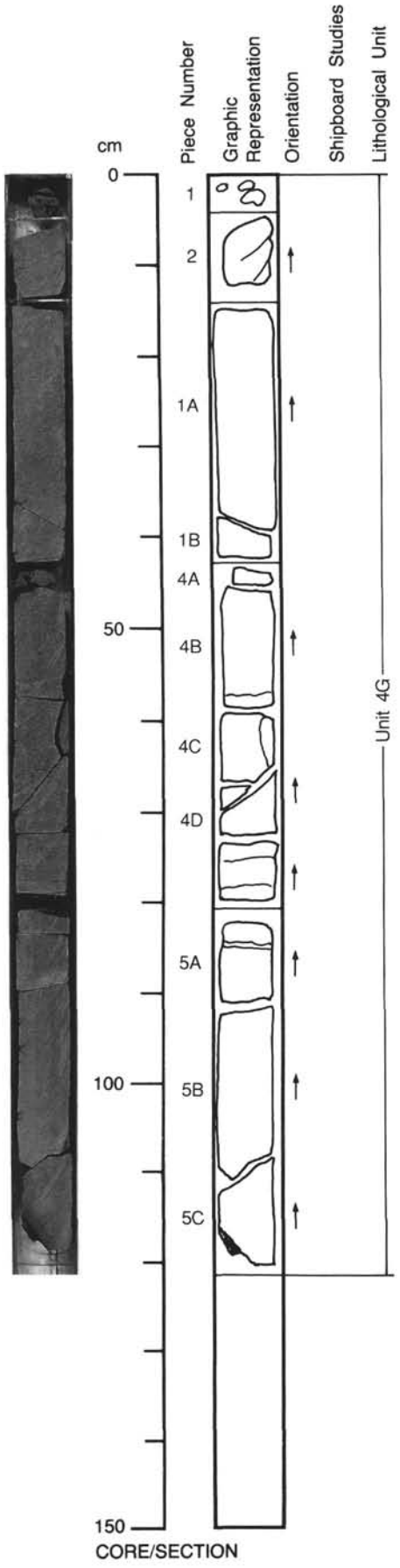


130-807C-91R-1

UNIT 4G: APHYRIC BASALT

Pieces 1-7

CONTACTS: None.
PHENOCRYSTS:
Olivine - <1%; 0.3-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: <1%; 0.5-1 mm; subhorizontal; filled with dark gray clay, minor pyrite.

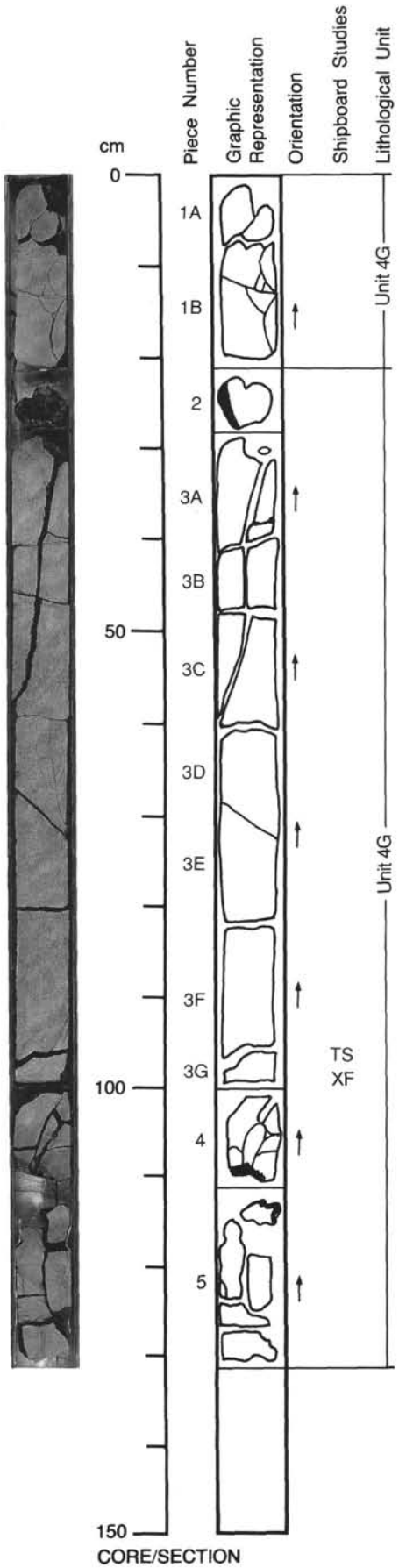


130-807C-92R-1

UNIT 4G: APHYRIC BASALT

Pieces 1-5

CONTACTS: Glassy flow margin, bottom of Piece 5C.
PHENOCRYSTS:
Olivine - ~1%; 0.2-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy (bottom of Piece 5C).
VESICLES: Nonvesicular.
COLOR: Medium to dark gray.
STRUCTURE: Massive.
ALTERATION: Slight.
VEINS/FRACTURES: <<1%; <1 mm; subhorizontal and 45°; filled with clay and calcite.



130-807C-92R-2

UNIT 4G: APHYRIC BASALT

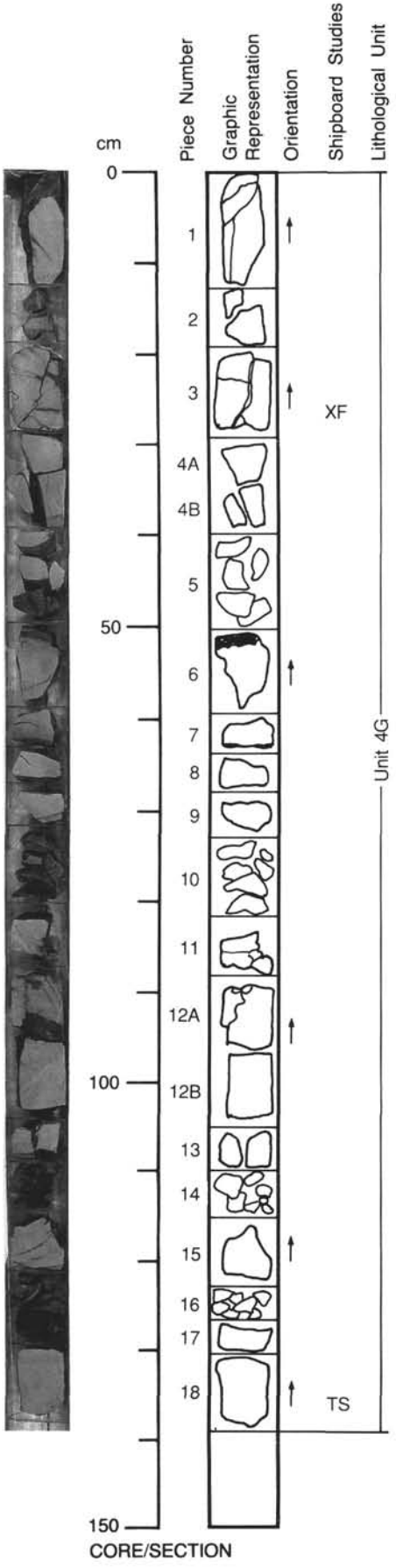
Piece 1

CONTACTS: None.
PHENOCRYSTS:
Olivine - <1%; 0.2-0.8 mm; anhedral to euhedral.
Plagioclase - <<1%; 0.2-1mm; subhedral to euhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: 1%; <0.5-2 mm; varied orientation; infilled by an orange-brown mineral (goethite?), minor calcite, and green clays.

UNIT 4G: APHYRIC BASALT

Pieces 2-5

CONTACTS: Glassy flow margins, Pieces 2, 4, and 5.
PHENOCRYSTS:
Olivine - <1%; 0.2-0.8 mm; subhedral to euhedral.
Plagioclase - <<1%; 0.2-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained to glassy (Pieces 2, 4, and 5).
VESICLES: Nonvesicular.
COLOR: Medium gray to gray-black.
STRUCTURE: Thick pillow or massive.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: ~1%; <0.5-2 mm; mostly subvertical and subhorizontal; infilled by blue-gray clays, and an orange-brown mineral. Glass in Piece 4 heavily veined by calcite.

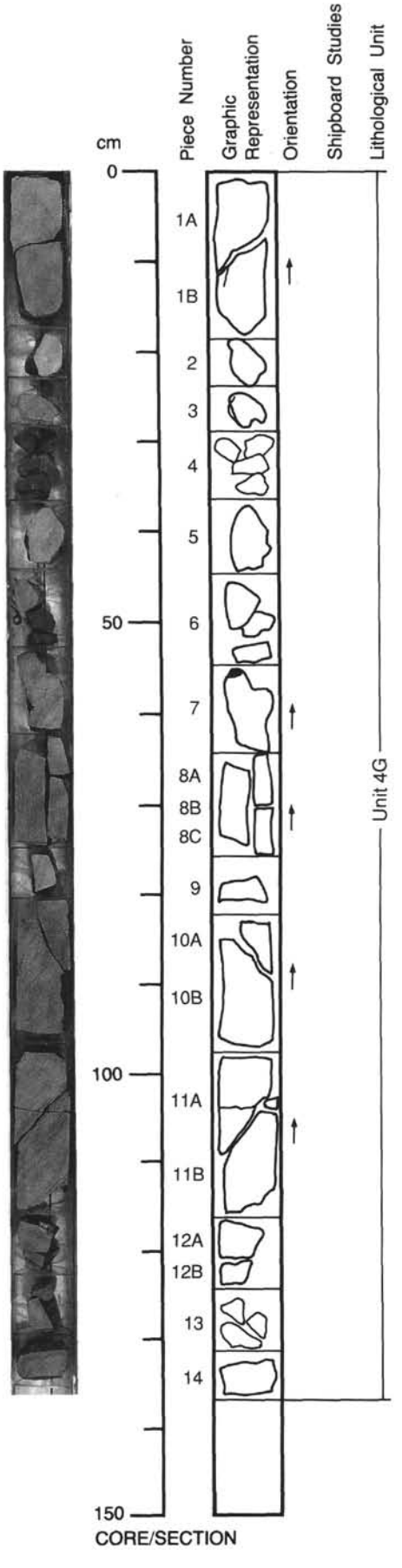


130-807C-93R-1

UNIT 4G: APHYRIC BASALT

Pieces 1-18

CONTACTS: Glassy rims on Pieces 6 and 7.
PHENOCRYSTS:
Olivine - ~1%; 0.2-0.8 mm; subhedral to euhedral.
Plagioclase - <<1%; 0.2-0.5 mm; subhedral.
GROUNDMASS: Fine grained to glassy (rims of Pieces 6 and 7).
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Fragments of pillow lava.
ALTERATION: Slight, to moderate in Pieces 11 and 12 (near veins).
VEINS/FRACTURES: ~1%; <1->6 mm; varied orientation; filled with clay and small amounts of pyrite; 1 mm thick calcite veins in glass on Piece 6.

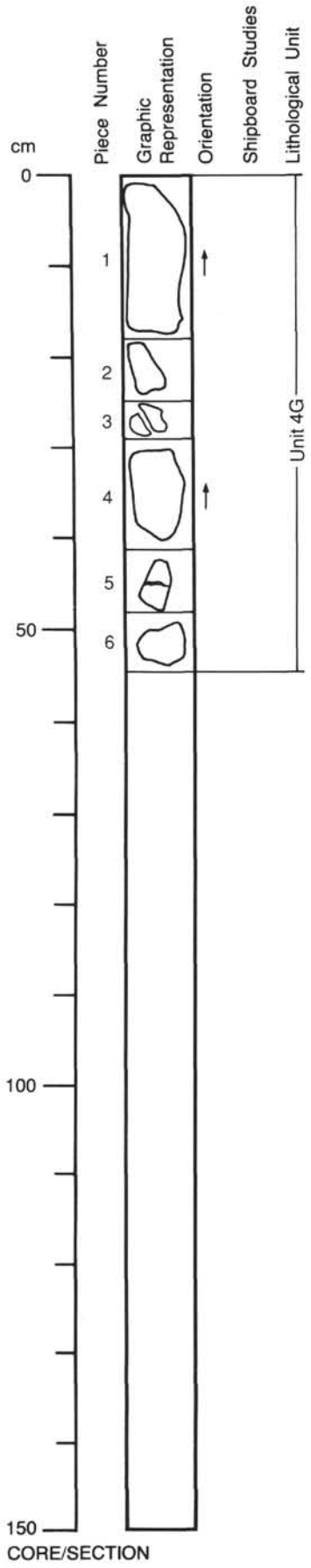


130-807C-93R-2

UNIT 4G: APHYRIC BASALT

Pieces 1-14

CONTACTS: None.
Olivine - ~1%; 0.2-1 mm; euhedral to subhedral.
Plagioclase - <<1%; 0.2-1 mm; subhedral.
GROUNDMASS: Fine grained.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Pillow lava fragments; Pieces 7-14 are possibly fragments of more massive* flow.
ALTERATION: Slight to moderate in a few patches.
VEINS/FRACTURES: <<1%; <1 mm; varied orientation; filled with dark gray clay and minor pyrite.



130-807C-93R-3

UNIT 4G: APHYRIC BASALT

Pieces 1-6

CONTACTS: None.
PHENOCRYSTS:
Olivine - ~1%; 0.2-1 mm; subhedral to euhedral.
GROUNDMASS: Fine grained; dark band (1-5 mm wide) of mafic minerals in Piece 5.
VESICLES: Nonvesicular.
COLOR: Medium gray.
STRUCTURE: Massive. lava fragments.
ALTERATION: Slight to moderate.
VEINS/FRACTURES: None; filled with minor clays and calcite.

130-807C-74R-01 (Piece 6D,124-127 cm) OBSERVER: JJM WHERE SAMPLED: Pillow

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intersertal

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	<1	<1	0.3-1		euhedral	
Clinopyroxene	<1	<1	~0.3		subhedral	
GROUNDMASS						
Plagioclase	40	40	<0.5-0.1		laths	
Clinopyroxene	15	20	<0.1		anhedral	
Opaques	5	5	<0.05		anhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	35	glass	Brownish.
Clays	5	clinopyroxene	Greenish to brown.
Clays	<1	vein	Bright green celadonite and black clay.

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

130-807C-75R-02 (Piece 6D,60-61 cm) OBSERVER: STO WHERE SAMPLED: Pillow interior

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intergranular

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
Plagioclase	30	30	0.05-0.5		subhedral to euhedral	
Clinopyroxene	10	10	~0.05		anhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	50		

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

130-807C-77R-01 (Piece 7,46-48 cm) OBSERVER: JJM WHERE SAMPLED: Pillow interior

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intersertal

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	<1	<1	0.5-1		euhedral	
Clinopyroxene	<<1	<<1	0.3-0.5		anhedral	
GROUNDMASS						
Plagioclase	30	30	?		subhedral	
Clinopyroxene	10	20	?		anhedral	
Glass	10	47	?		?	
Opaques	3	3	?		?	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays and oxides	10	clinopyroxene	Red-brown.
Clays	37	glass	Dark brown.

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

130-807C-78R-02 (Piece 7,72-73 cm) OBSERVER: STO WHERE SAMPLED: Part of massive flow

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Subophitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	<1	<1	~0.5		euhedral laths	
Clinopyroxene	<1	<1	~0.4		anhedral	
GROUNDMASS						
Plagioclase	40	40	0.1-0.4		thin euhedral laths	
Clinopyroxene	40	40	0.05-0.3		anhedral	
Opaques	10	10	0.01-0.1		anhedral	Some thin skeletal grains (ilmenite?).

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	10	glass?	

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

130-807C-79R-05 (Piece 3,28-30 cm) OBSERVER: STO WHERE SAMPLED: Part of massive flow

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intergranular

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Plagioclase	<1	<1	~1		euhedral laths	
GROUNDMASS						
Plagioclase	60	60	0.1-0.5		thin euhedral laths	
Opaques	5	5	0.02-0.1		anhedral-subhedral	
Clinopyroxene	20	20	0.02-0.2		anhedral-subhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	15	glass?	

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

130-807C-80R-01 (Piece 6,49-51 cm) OBSERVER: STO WHERE SAMPLED: Near flow top

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intergranular

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
Plagioclase	35	35	0.1-0.5		euhedral thin laths	
Clinopyroxene	30	30	0.02-0.1		anhedral	
Opaques	5	5	0.01-0.1		equant and skeletal	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	30	glass	Green smectite.

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

130-807C-81R-02 (Piece 4A,74-77 cm) OBSERVER: STO WHERE SAMPLED: Part of massive flow

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: Intergranular-subophitic

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
? Clinopyroxene	<1	<1	up to 0.8		euhedral-subhedral	Altered to smectite.
GROUNDMASS						
Plagioclase	55	55	?		?	
Clinopyroxene	10	10	?		?	
Opaques	3	3	?		subhedral-anhedral	Equant and skeletal.

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	32	mainly glass	Green and yellow-green smectites.

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

130-807C-83R-02 (Piece 1B,28-30 cm) OBSERVER: STO WHERE SAMPLED: Part of massive flow

ROCK NAME: Aphyric basalt

GRAIN SIZE: Fine grained

TEXTURE: ??

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
PHENOCRYSTS						
Olivine	<1	<1	~0.6		subhedral-euhedral	Completely replaced by olive-green mineral.
Plagioclase	<1	<1	~1		euhedral	
Clinopyroxene	<1	<1	~0.8		subhedral	
GROUNDMASS						
Plagioclase	40	40	0.1-1		thin euhedral laths	
Clinopyroxene	40	40	0.1-0.3		anhedral-subhedral	
Opaques	7	7	0.05-0.2		anhedral-subhedral	

SECONDARY MINERALOGY	PERCENT	REPLACING/ FILLING	COMMENTS
Clays	13	glass?	

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