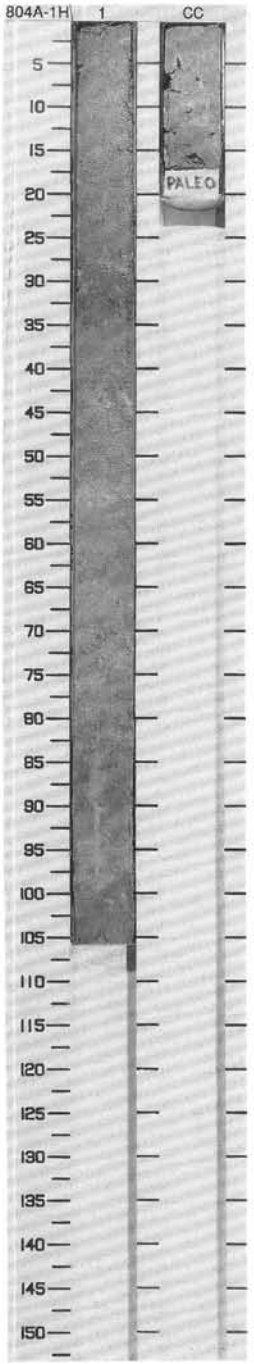
SITE 804 HOLE A CORE 1H CORED INTERVAL 0.0-1.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
PLEISTOCENE	*Globorotalia truncatulinoides* N23 A/M	NN20 A/M	*Collosphaera tuberosa* A/G	NTD 17 *Psudoeunotia doliolus* A/G-C		γ-1528 ● Φ-69.7 ρ-1.51	%CaCO3 =80.6 ●	1 CC	0.5				*	NANNOFOSSIL OOZE with FORAMINIFERS Major lithology: This core contains heavily bioturbated, mottled, pale brown (10YR 6/3) to light yellowish brown (10YR 6/4) NANNOFOSSIL OOZE with FORAMINIFERS. SMEAR SLIDE SUMMARY (%): 1, 14 D TEXTURE: Sand 10 Silt 80 Clay 10 COMPOSITION: Foraminifers 14 Nannofossils 85 Radiolarians 1



SITE 804 HOLE A CORE 2H CORED INTERVAL 1.2-10.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	A/M	A/M						1	0.5				
	Globorotalia truncatulinoides	NN19							1.0				
	N22							2					*
								3					
								4					
								5					
								6					*
								7					
								CC					

(Jaramillo)

N R N (Bruunhes, ANOMALY 1)

PALEOMAGNETICS: ϕ=67.2 J=1.56 V=1535 %CaCO3=87.9; ϕ=69.9 J=1.51 V=1535 %CaCO3=79.8; ϕ=69.0 J=1.53 V=1528 %CaCO3=81.1; ϕ=69.6 J=1.52 V=1535 %CaCO3=86.1; ϕ=69.9 J=1.53 V=1535 %CaCO3=83.1; ϕ=69.6 J=1.52 V=1528 %CaCO3=77.1

PHYS. PROPERTIES: ϕ=71.7 J=1.49 V=1535 %CaCO3=73.9

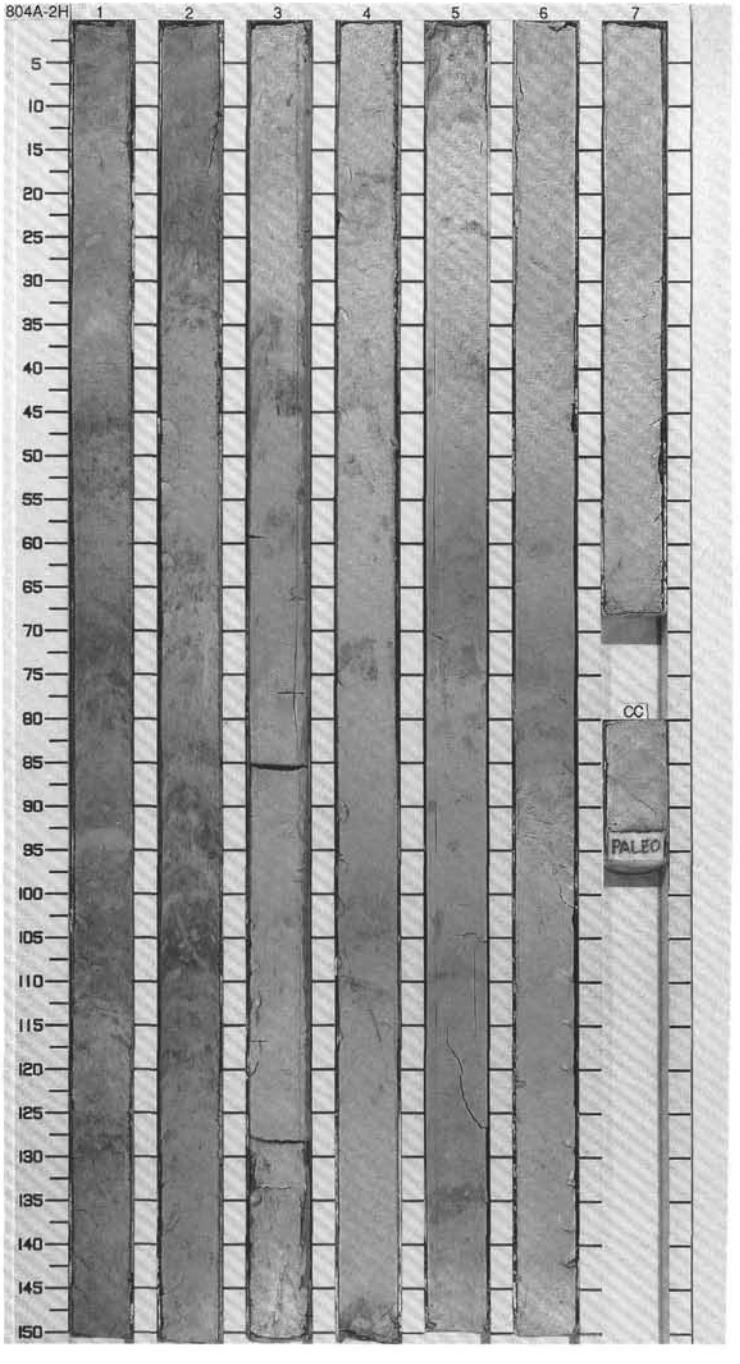
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE. The first section is heavily bioturbated and is dominantly very pale brown (10YR 7/3) with pale brown (10YR 6/3) mottling. The lower sections are moderately bioturbated. The color varies between pale brown (10YR 6/3) and very pale brown (10YR 7/3) on a 25 cm scale in Section 2, is very brown (10YR 7/3) in Section 3, and is white (10YR 8/2 to 10YR 8/1) to light gray (10YR 7/2) in the lowest part of the core.

SMEAR SLIDE SUMMARY (%):

	2, 79 D	6, 100 D
TEXTURE:		
Sand	1	1
Silt	95	95
Clay	4	4
COMPOSITION:		
Diatoms	Tr	—
Foraminifers	4	4
Nannofossils	95	95
Radiolarians	1	1



SITE 804 HOLE A CORE 3H CORED INTERVAL 10.7-20.2 mbsf

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains moderately to heavily bioturbated NANNOFOSSIL OOZE with FORAMINIFERS. Section 1 through Section 6, 25 cm, have colors grading between white (10YR 8/1, 10YR 8/2 and 2.5Y 8/2) and light gray (10YR 7/2, 5Y 7/1, 5Y 7/2 and 2.5Y 7/2) to light brownish gray (2.5Y 6/2) on a 10 to 50 cm scale. Below Section 6, 25 cm, the color is bluish gray (5B 6/1) grading to light gray (5Y 7/1 and 10YR 7/1) and light greenish gray (5G 5/1). Three diffuse mm size light greenish gray (5G 5/1) color bands are present in Section 7.

SMEAR SLIDE SUMMARY (%):

	2, 101 D	6,43 D
TEXTURE:		
Sand	10	10
Silt	85	85
Clay	5	5
COMPOSITION:		
Foraminifers	10	10
Nannofossils	90	90

SITE 804 HOLE A CORE 4H CORED INTERVAL 20.2-29.7 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 PLIOCENE	A/M	A/M			N (Gauss, ANOMALY 2A) R (Matuyama) ? R ?			1 2 3 4 5 6 7 CC	0.5 1.0				

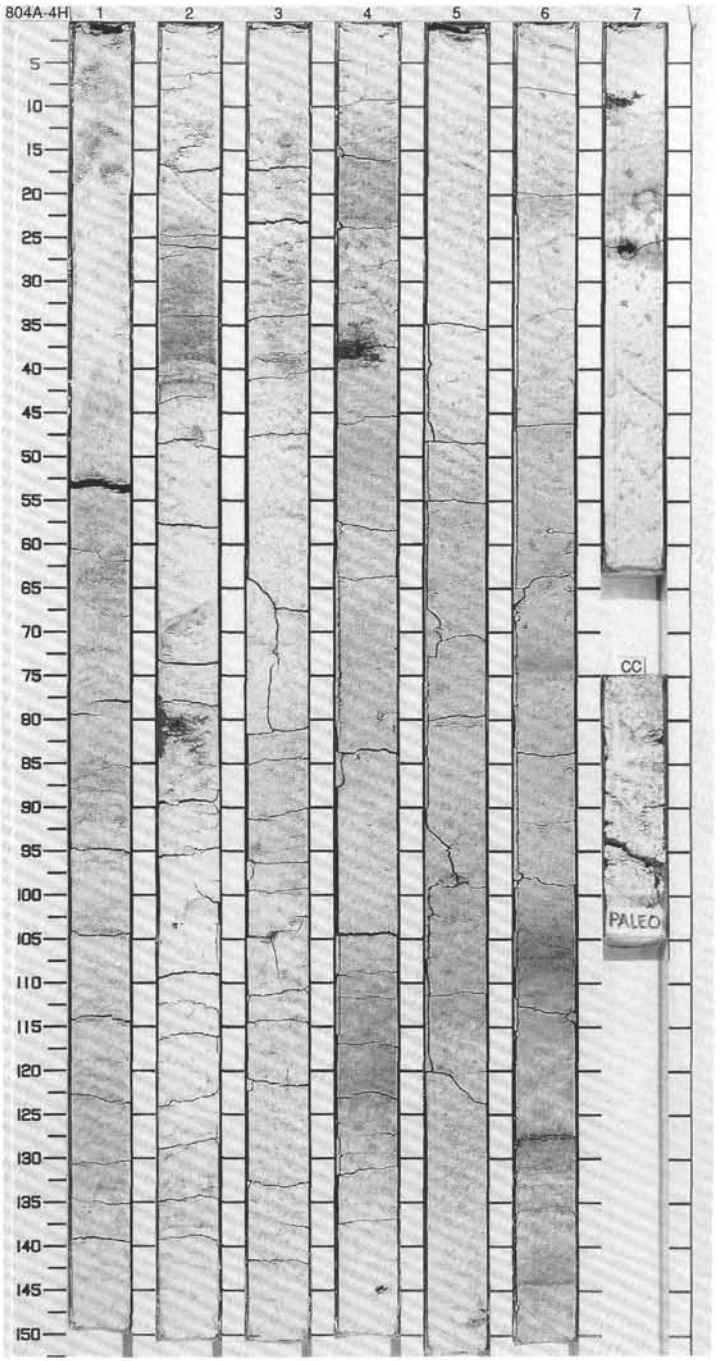
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE. It is moderately to heavily bioturbated and mottled, with a few mm to cm size pyrite nodules. The dominant color is white (10YR 8/1), with minor intervals of light gray (5Y 7/1). Color bands are light olive gray (5Y 6/2), pale purple (5P 6/2), dusky blue (5PB 3/2), pale yellowish green (10GY 7/2) and medium light gray (5B N6/6).

SMEAR SLIDE SUMMARY (%):

	4, 71 D
TEXTURE:	
Sand	2
Silt	90
Clay	8
COMPOSITION:	
Foraminifers	4
Nannofossils	95
Radiolarians	1



SITE 804 HOLE A CORE 5H CORED INTERVAL 29.7-39.2 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 PLIOCENE	A/P N19	A/G NN15		(N) (Mammoth) (Kaena?)	R (Gilbert) ↑ N (Gauss) R ? ↑								
					R (Gilbert) N (Gauss, ANOMALY 2A) R								

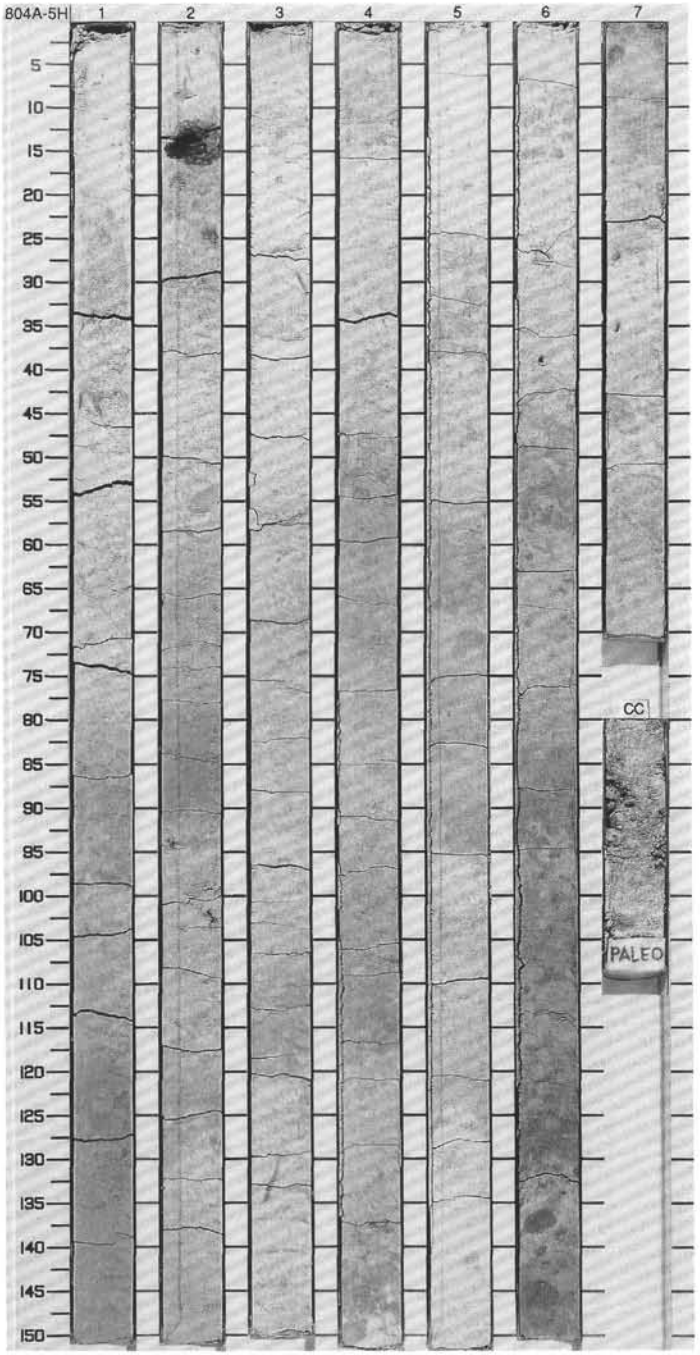
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

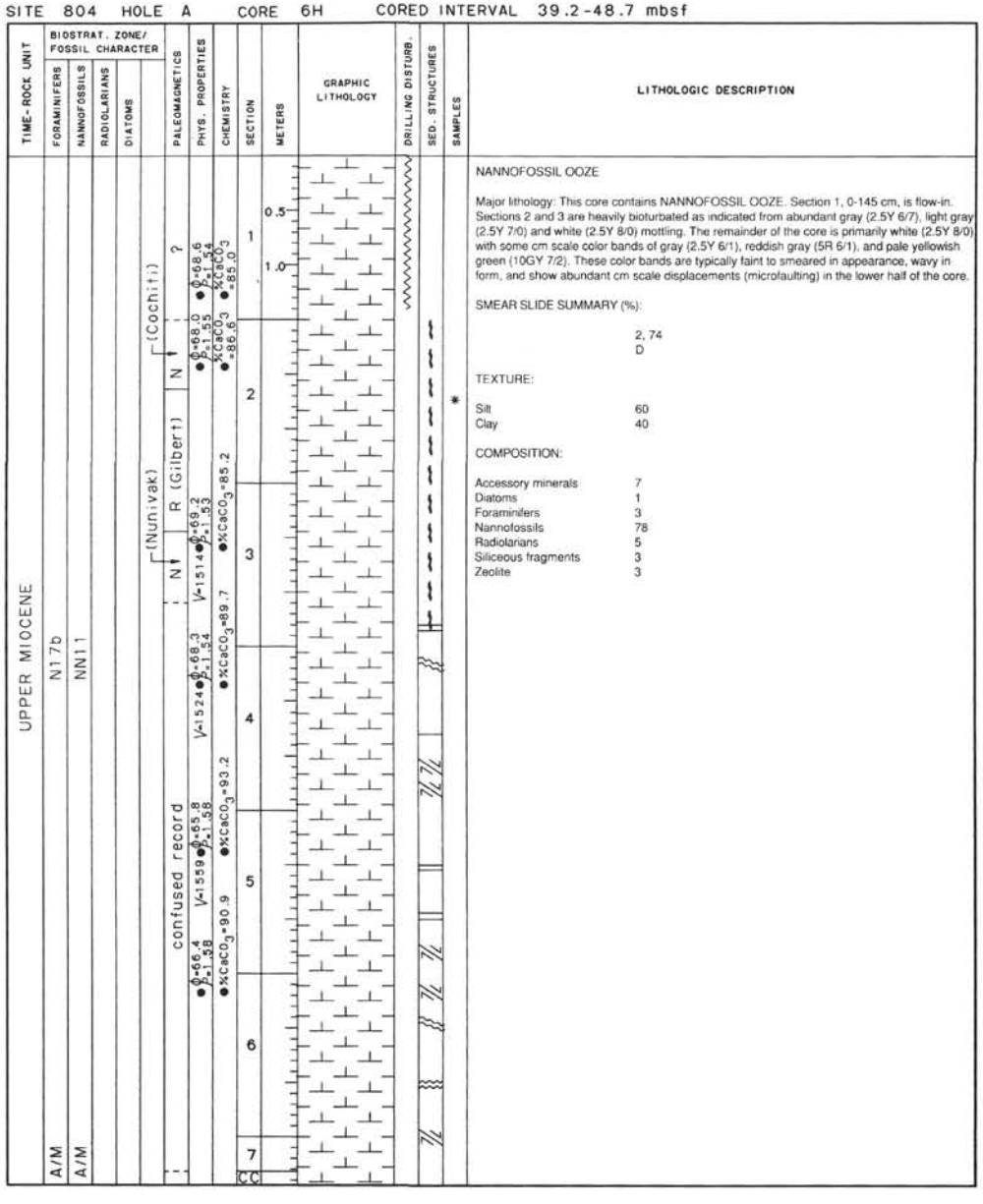
Major lithology: This core contains NANNOFOSSIL OOZE. *Foraminifers locally constitute up* to 10% of the sediment. The sediment is moderately to heavily bioturbated and mottled, with isolated mm to cm size pyrite nodules. The dominant color is light gray (5Y 7/1) and mottle colors range from olive (5Y 5/2) to light gray (5Y 7/1). Color bands vary in thickness from 5 mm near the base of Section 3 to 30 cm in Sections 5, 6, and 7, and range in color from gray (2.5Y 6/1) to reddish gray (5R 6/1) to pale yellowish green (10GY 7/2).

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	1
Silt	60
Clay	39
COMPOSITION:	
Diatoms	1
Foraminifers	7
Nannofossils	71
Radiolarians	3
Siliceous fragments	3
Zeolite	15



SITE 804 HOLE A CORE 6H CORED INTERVAL 39.2-48.7 mbsf

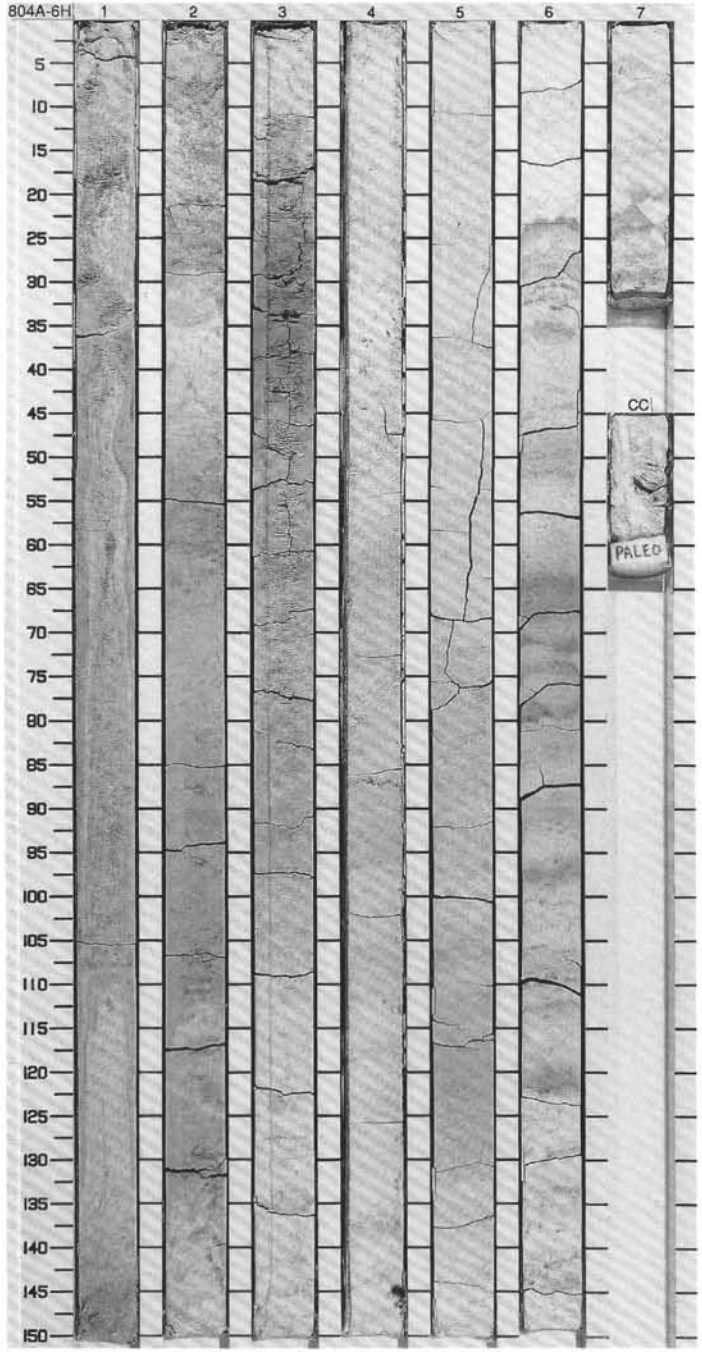


NANNOFOSSIL OOZE

Major lithology: This core contains NANNOFOSSIL OOZE. Section 1, 0-145 cm, is flow-in. Sections 2 and 3 are heavily bioturbated as indicated from abundant gray (2.5Y 6/7), light gray (2.5Y 7/0) and white (2.5Y 8/0) mottling. The remainder of the core is primarily white (2.5Y 8/0) with some cm scale color bands of gray (2.5Y 6/1), reddish gray (5R 6/1), and pale yellowish green (10GY 7/2). These color bands are typically faint to smeared in appearance, wavy in form, and show abundant cm scale displacements (microfaulting) in the lower half of the core.

SMEAR SLIDE SUMMARY (%):

	2, 74 D
TEXTURE:	
Silt	60
Clay	40
COMPOSITION:	
Accessory minerals	7
Diatoms	1
Foraminifers	3
Nannofossils	78
Radiolarians	5
Siliceous fragments	3
Zeolite	3



SITE 804 HOLE B CORE 1H CORED INTERVAL 0.0-4.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	A/M N22 - N23 *Globorotalia truncatulinoides*	A/M NN19			N (Brunhes, ANOMALY 1)	V=1518 ϕ=70.2 ρ=2.50 V=1531 ϕ=70.7 ρ=2.51 V=1514 ϕ=70.5 ρ=2.50		1 2 3 CC	0.5 1.0				(1W)

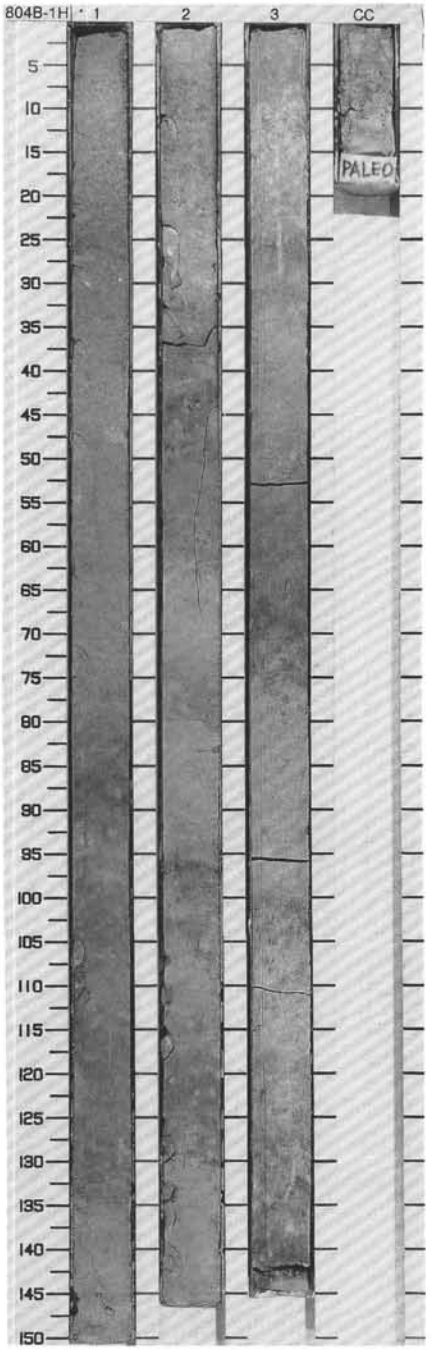
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains heavily bioturbated, mottled, pale yellow (2.5Y 7/4) to light yellowish brown (10YR 6/4) NANNOFOSSIL OOZE with FORAMINIFERS. Color bands in Section 3 are 25 to 35 cm thick and alternate between light gray (2.5Y 8/2) and white (2.5Y 7/2).

SMEAR SLIDE SUMMARY (%):

	2, 58 D
TEXTURE:	
Sand	5
Silt	55
Clay	40
COMPOSITION:	
Accessory minerals	5
Diatoms	2
Foraminifers	15
Nannofossils	70
Radiolarians	5
Siliceous fragments	3



SITE 804 HOLE B CORE 2H CORED INTERVAL 4.7-14.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	A/M N22 *Globorotalia truncatulinoides*	A/P NN19			(Jaramillo) N↑ R (Matuyama) N R (Matuyama) N R (Matuyama) N (Brunhes, ANOMALY 1)↓ ?			1 2 3 4 5 6 7 CC	0.5 1.0			*	OG

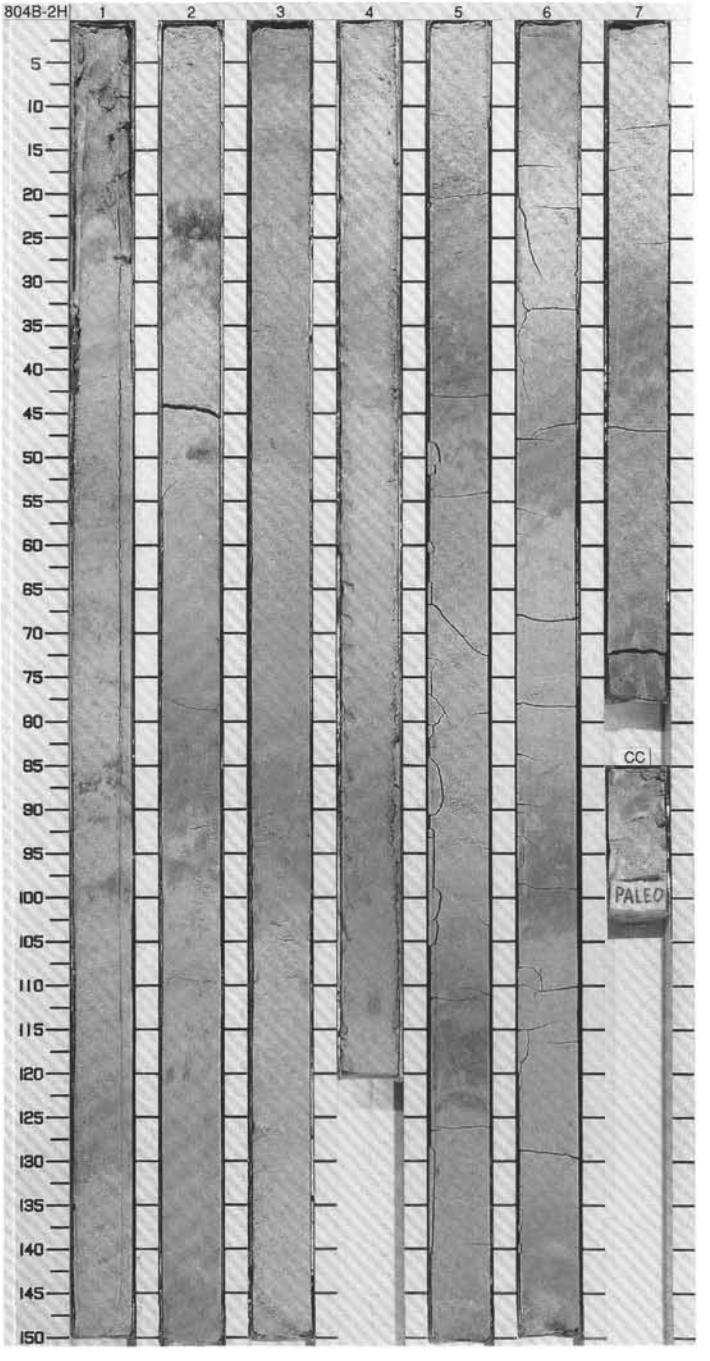
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

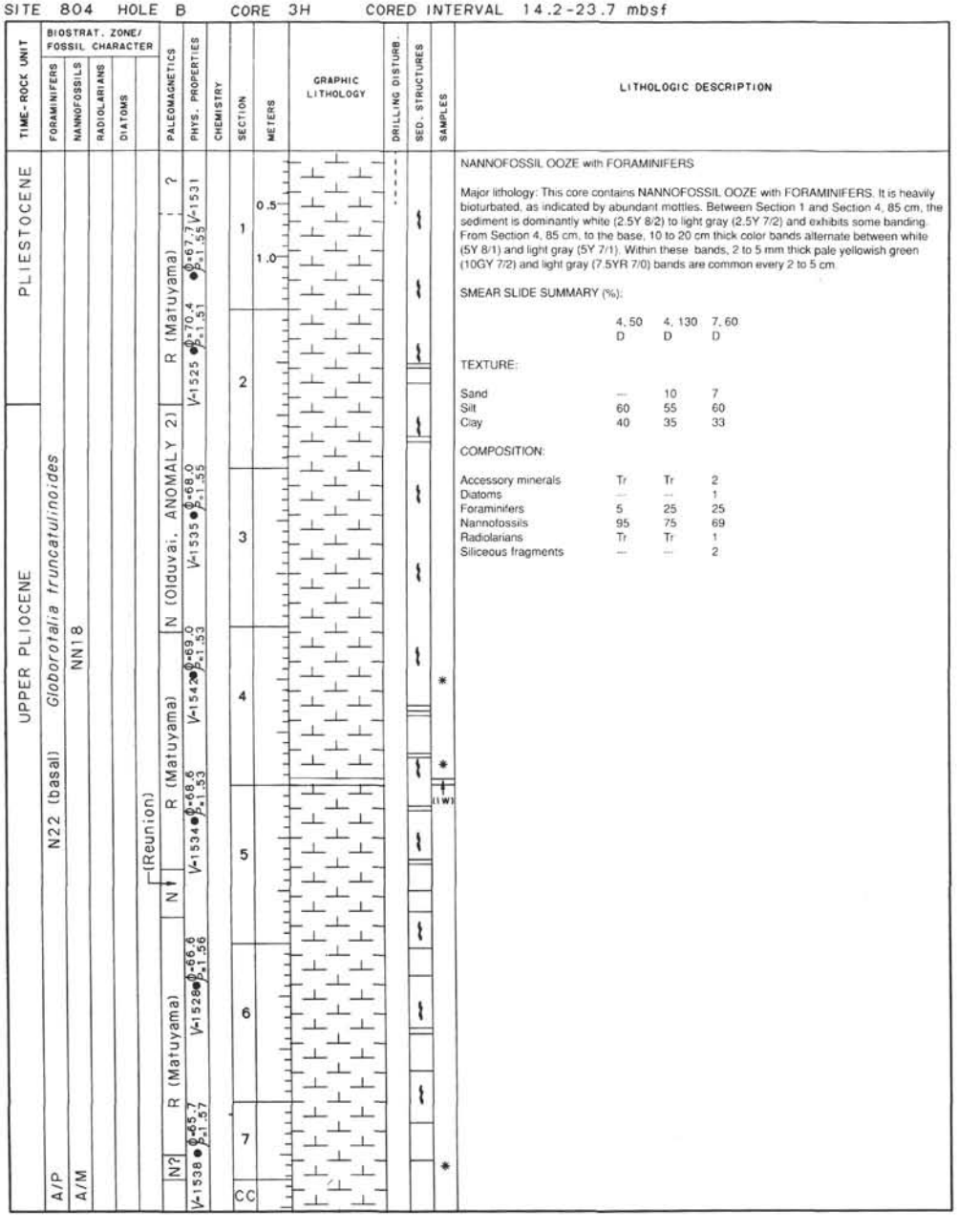
Major lithology: This core contains white (2.5Y 8/2) to light gray (2.5Y 7/2) NANNOFOSSIL OOZE with FORAMINIFERS. It is heavily bioturbated, as indicated by abundant light gray (2.5Y 7/2) mottles that typically occur in zones 25 to 35 cm thick and approximately 60 to 80 cm apart.

SMEAR SLIDE SUMMARY (%):

	2, 110 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Accessory minerals	3
Diatoms	1
Foraminifers	15
Nannofossils	72
Radiolarians	3
Siliceous fragments	3
Silicoflagellates	3



SITE 804 HOLE B CORE 3H CORED INTERVAL 14.2-23.7 mbsf

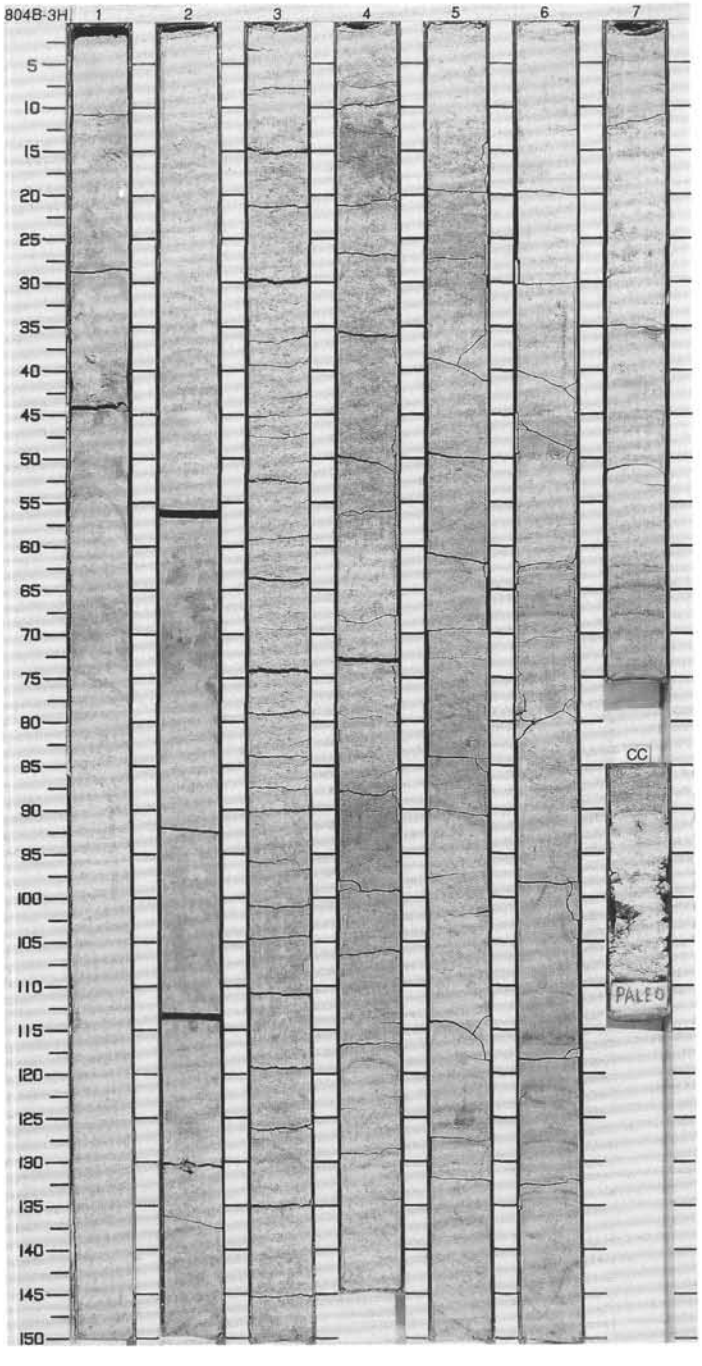


NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS. It is heavily bioturbated, as indicated by abundant mottles. Between Section 1 and Section 4, 85 cm, the sediment is dominantly white (2.5Y 8/2) to light gray (2.5Y 7/2) and exhibits some banding. From Section 4, 85 cm, to the base, 10 to 20 cm thick color bands alternate between white (5Y 8/1) and light gray (5Y 7/1). Within these bands, 2 to 5 mm thick pale yellowish green (10GY 7/2) and light gray (7.5YR 7/0) bands are common every 2 to 5 cm.

SMEAR SLIDE SUMMARY (%):

	4, 50 D	4, 130 D	7, 60 D
TEXTURE:			
Sand	—	10	7
Silt	60	55	60
Clay	40	35	33
COMPOSITION:			
Accessory minerals	Tr	Tr	2
Diatoms	—	—	1
Foraminifers	5	25	25
Nannofossils	95	75	69
Radiolarians	Tr	Tr	1
Siliceous fragments	—	—	2



SITE 804 HOLE B CORE 4H CORED INTERVAL 23.7-33.2 mbsf

TIME-ROCK UNIT: UPPER PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: C/P; N21 *Globorotalia tosaensis*
- NANNOFOSSILS: A/M; NN16
- RADIOLARIANS
- DIATOMS

PALEOMAGNETICS: R (Mammoth) | N | R (Kaena) | N (Gauss, ANOMALY 2A) | N | R (Matuyama)

PHYS. PROPERTIES

CHEMISTRY

SECTION / METERS

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

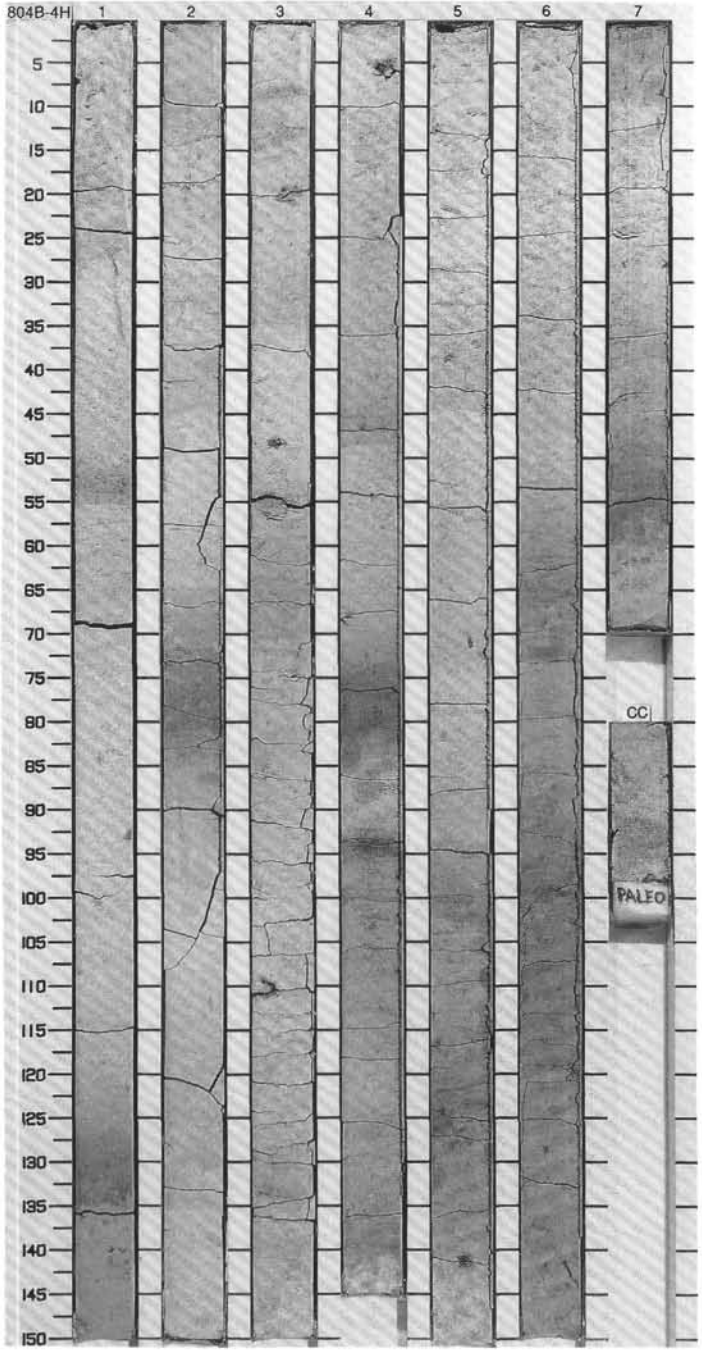
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core consists of NANNOFOSSIL OOZE with FORAMINIFERS. The dominant color is white (5Y 8/1), with light gray (5Y 7/1), cm thick intervals 60 to 80 cm apart. In Sections 1 and 4, sharp color contacts between gray (2.5Y 6/0) and white (5Y 8/1) are noted. Also in Section 4, a few pale yellowish green (10GY 7/2) mm to cm thick bands are observed. Slight bioturbation is indicated by mottles, and burrows are filled with softer or pyritized material.

SMEAR SLIDE SUMMARY (%):

	3, 75 D
TEXTURE:	
Sand	10
Silt	55
Clay	35
COMPOSITION:	
Accessory minerals	Tr
Diatoms	Tr
Foraminifers	15
Nannofossils	85
Radiolarians	Tr



SITE 804 HOLE B CORE 5H CORED INTERVAL 33.2-42.7 mbsf

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS. Sections 1, 2 and 6 are mainly white (5Y 8/1), with intervals (up to 70 cm thick) of light gray (5Y 7/1). Sections 3, 4, 5 and 7 are predominantly light gray (5Y 7/1), with intervals of white and gray up to 50 cm thick. Seven very pale green (10GY 7/2) color bands (about 1 cm thick) are present in Section 2, 97-117 cm. The sediment is slightly bioturbated as indicated by mottles and a few pyritized burrow fills.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Accessory minerals	1
Diatoms	2
Foraminifers	20
Nannofossils	75
Radiolarians	1
Spicules	1

SITE 804 HOLE B CORE 6H CORED INTERVAL 42.7-52.2 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 MIOCENE / LOWER PLIOCENE	C/M A/M N17b	C/M N19	A/M NN11		N R N			1 2 3 4 5 6 7 CC	0.5 1.0				* * LW

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with RADIOLARIANS and NANNOFOSSIL OOZE

Major litholog; This core contains NANNOFOSSIL OOZE with RADIOLARIANS, grading to NANNOFOSSIL OOZE below Section 1. Section 1 is light gray (2.5Y 7/1) and gray (2.5Y 6/1), grading to light gray (7.5YR 7/0) below 128 cm. Colors in Section 2 grade from light gray (7.5YR 7/0) to white (7.5YR N8/) downsection. White (7.5YR N8/ and 2.5Y 8/0) dominates below Section 2. Faint light greenish gray (5G 7/1) and light gray (N7/) color banding is common to abundant in Sections 2 through 7. The entire core is slightly to moderately bioturbated.

SMEAR SLIDE SUMMARY (%):

	1, 44	4, 89
	D	D
TEXTURE:		
Sand	3	1
Silt	90	95
Clay	7	4
COMPOSITION:		
Diatoms	1	Tr
Foraminifers	1	3
Nannofossils	87	95
Radiolarians	10	2
Spicules	1	Tr

SITE 804 HOLE B CORE 7H CORED INTERVAL 52.2-61.7 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE	N17a	NN11				V-1552 ● Φ=64.8 ● ρ=1.6	%CaCO$_3$ ● =89.8	1	0.5 / 1.0				*
						V-1535 ● Φ=64.2 ρ=1.62	● %CaCO$_3$ =68.6 ; ● %CaCO$_3$=93.8	2					
						V-1570 ● Φ=61.7 ρ=1.65	● %CaCO$_3$= 95.0	3					
						V-1566 ● Φ=61.7 ρ=1.65	● %CaCO$_3$=93.9	4					
						V-1552 ● Φ=61.3 ρ=1.66	● %CaCO$_3$ =90.4	5					
						● Φ=64.6 ρ=1.60 ; V-1599 ●	● %CaCO$_3$=91.0 ●	6					
[N16]	A/M A/G	A/M				Φ=63.4 ρ=1.62		7					
								CC					

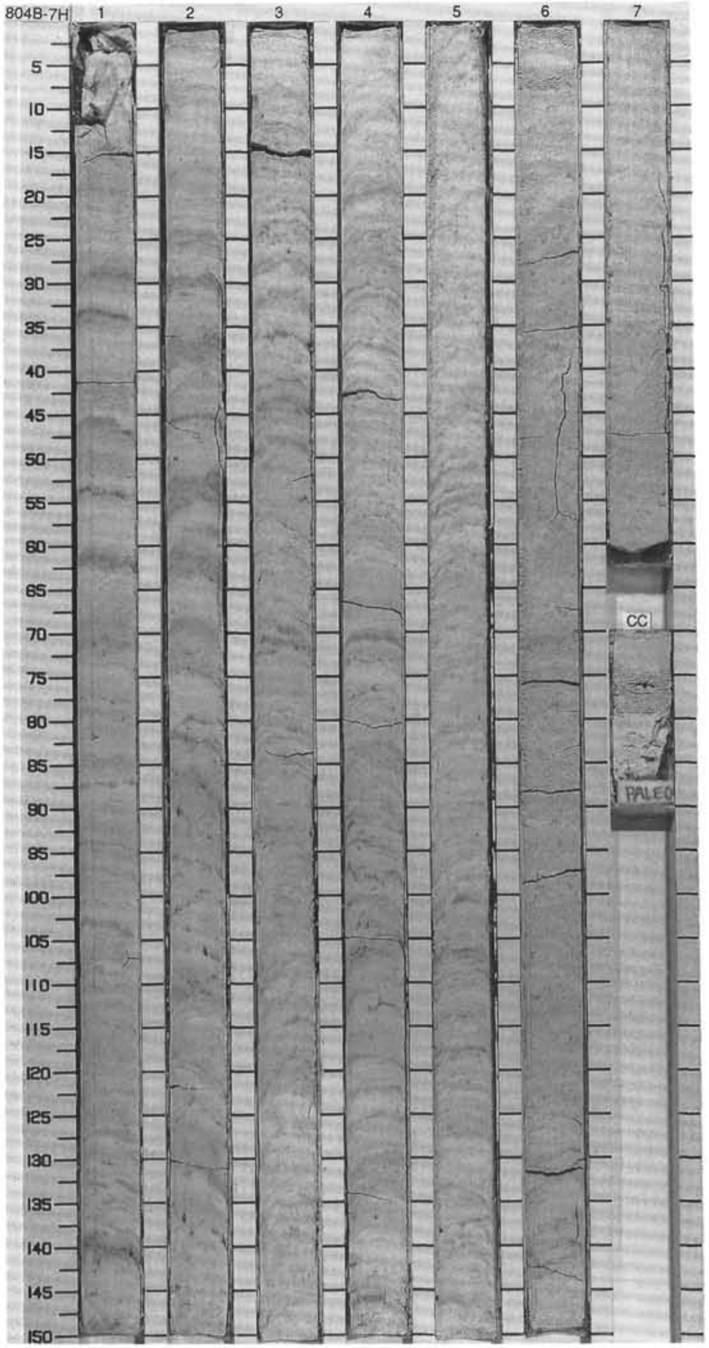
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

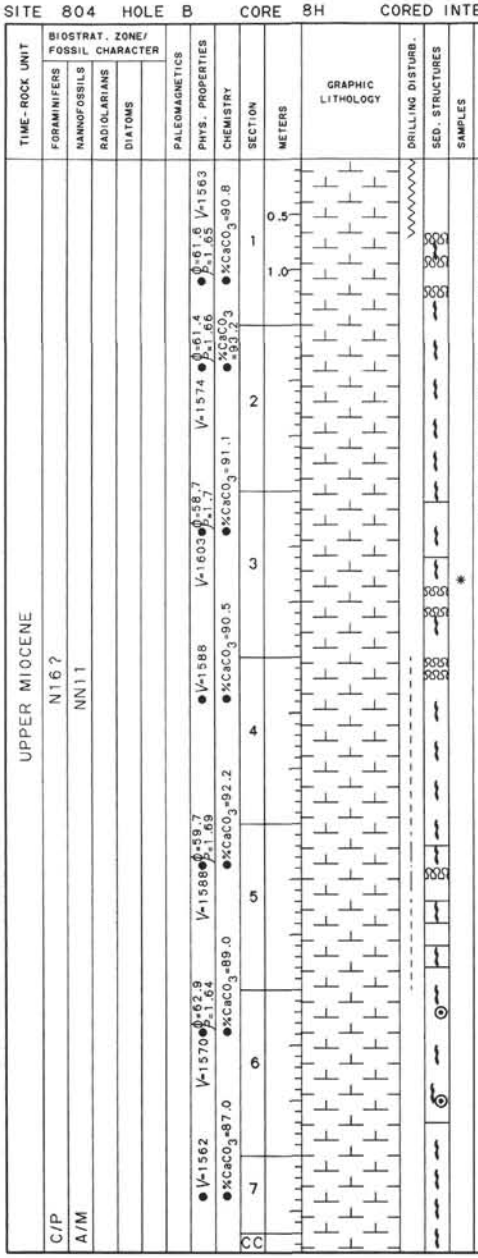
Major lithology: This core contains slightly to heavily bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE. Numerous reddish gray (5R 6/1), light gray (N7/) and light greenish gray, (5G 7/1) faint color bands and mottles are present throughout. Centimeter-scale microfaults are located in Section 1, 20-30 cm, Section 2, 40-50 cm and Section 3, 80-107 cm.

SMEAR SLIDE SUMMARY (%):

	1, 100
	D
TEXTURE:	
Sand	5
Silt	90
Clay	5
COMPOSITION:	
Nannofossils	97
Radiolarians	3



SITE 804 HOLE B CORE 8H CORED INTERVAL 61.7-71.2 mbsf



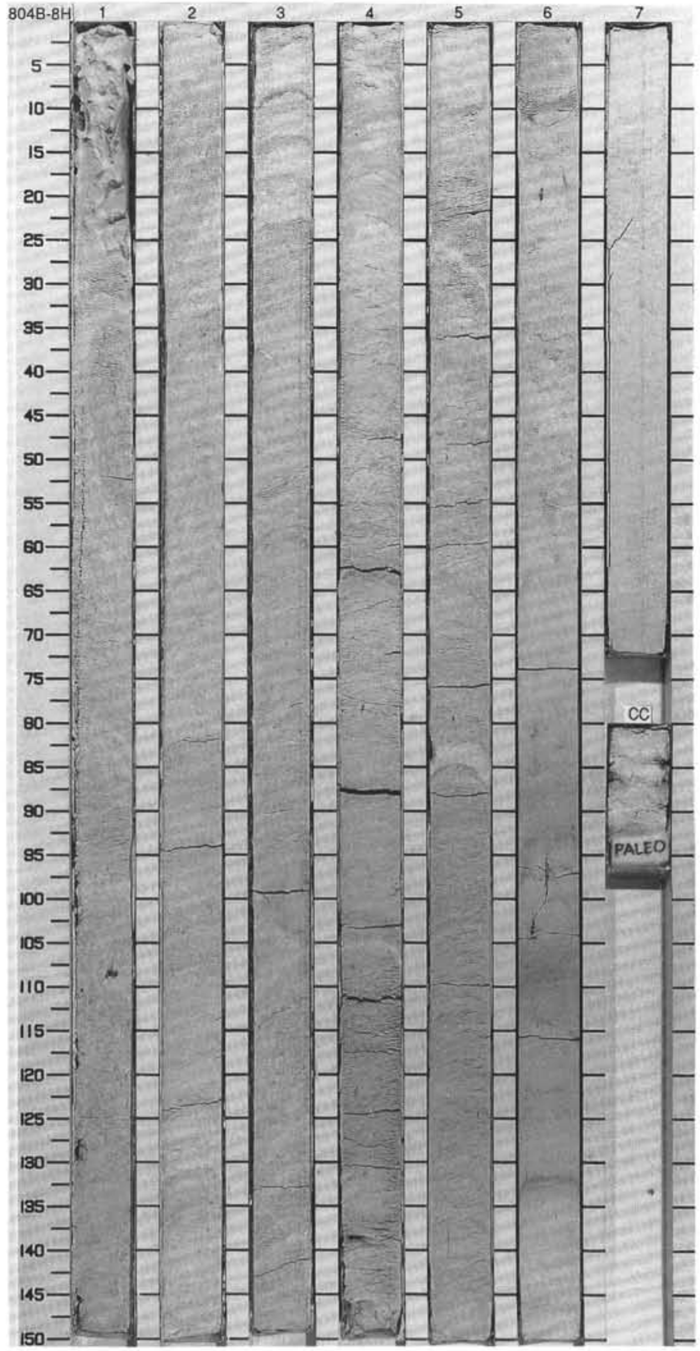
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

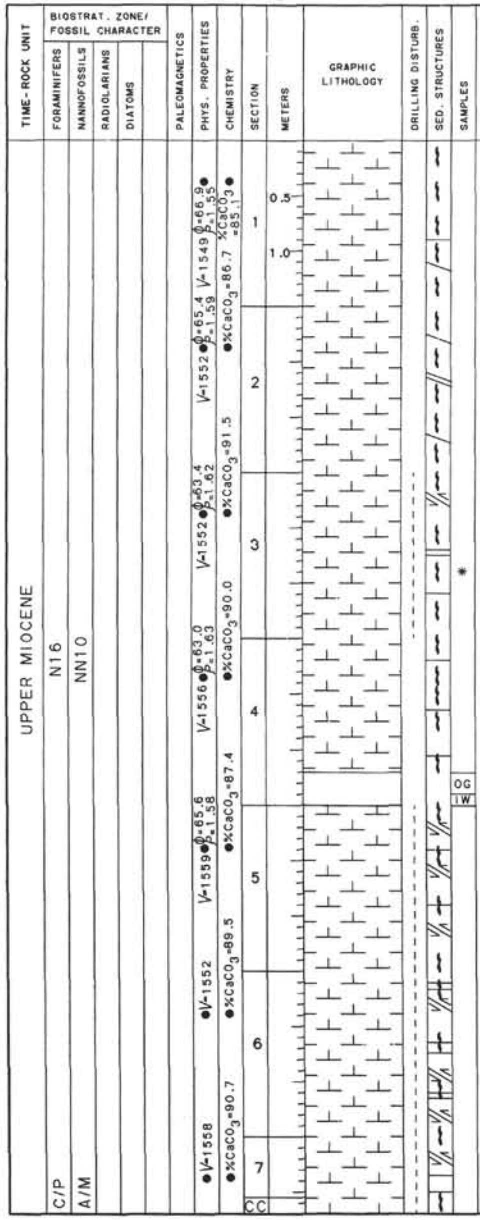
Major lithology: This core contains NANNOFOSSIL OOZE. The core is white (2.5Y 8/0) and slightly to moderately bioturbated throughout, with abundant light gray (N7/ and 5Y 7/1) mottling in Sections 1-4. Sections 5 through CC have a more homogeneous appearance. Color banding is contorted in the following intervals: Section 1, 80-115 cm; Section 3, 90-115 cm; Section 4, 0-20 cm; Section 5, 25-44 cm.

SMEAR SLIDE SUMMARY (%):

	3, 80
	D
TEXTURE:	
Sand	5
Silt	90
Clay	5
COMPOSITION:	
Foraminifers	3
Nannofossils	95
Radiolarians	2



SITE 804 HOLE B CORE 9H CORED INTERVAL 71.2-80.7 mbsf



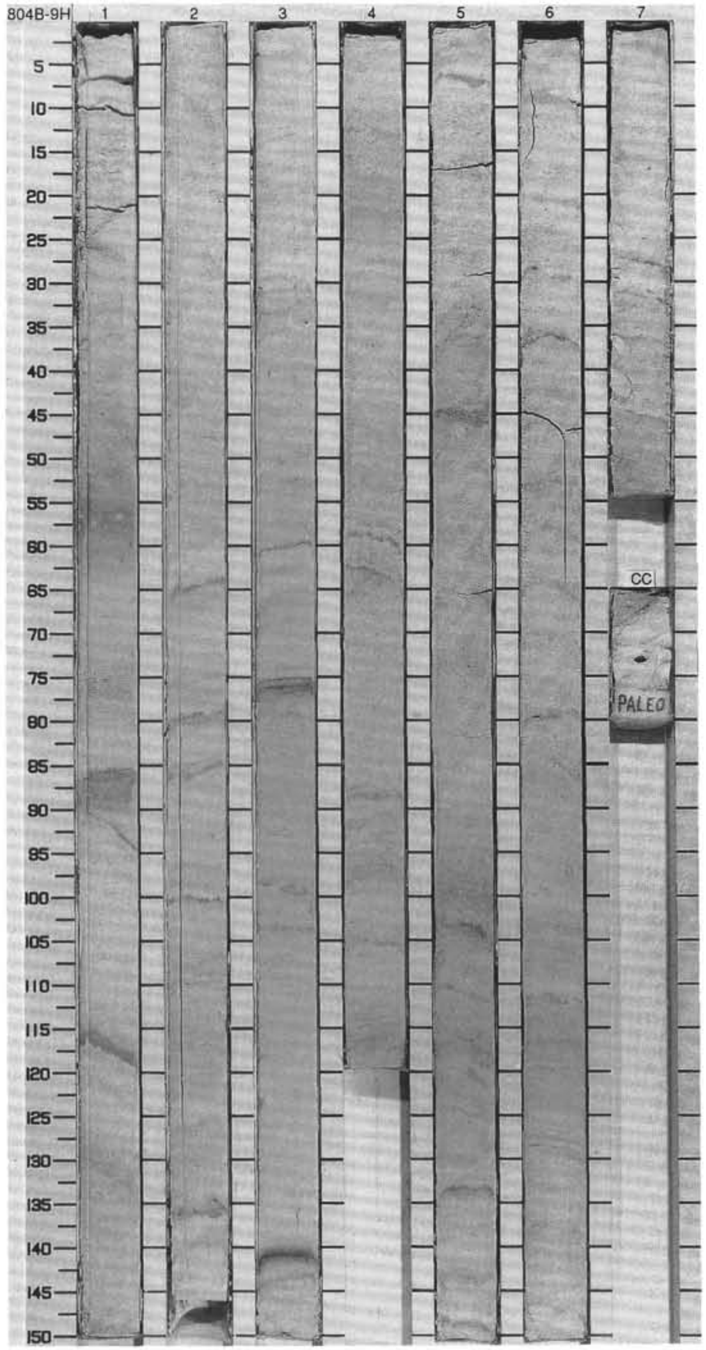
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y N8/) to light gray (N7/), and slightly to moderately bioturbated NANNOFOSSIL OOZE. Light blue gray (5B 7/1), pale red (5RP 6/2), and yellowish gray (5Y 8/1) color bands are abundant throughout the core. The color bands are, at times, slightly tilted and display cm-scale microfaults in Sections 4-7.

SMEAR SLIDE SUMMARY (%):

	3, 89
	D
TEXTURE:	
Sand	7
Silt	93
COMPOSITION:	
Foraminifers	2
Nannofossils	93
Radiolarians	5



SITE 804 HOLE B CORE 10H CORED INTERVAL 80.7-90.2 mbsf

TIME-ROCK UNIT	UPPER MIOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	C/P: N16
NANNOFOSSILS	A/M: NN10
RADIOLARIANS	
DIATOMS	
PALEOMAGNETICS	
PHYS. PROPERTIES	V=1552 Φ=61.6 ρ=1.65; V=1563 Φ=62.6 ρ=1.64; V=1566 Φ=61.1 ρ=1.67; V=1552 Φ=64.4 ρ=1.60; V=1566; V=1566 Φ=63.8 ρ=1.61; Φ=62.4 ρ=1.63 V=1566
CHEMISTRY	%$CaCO_3$=89.5; %$CaCO_3$=91.9; %$CaCO_3$=91.5; %$CaCO_3$=76.9; %$CaCO_3$=89.9; %$CaCO_3$=87.9; %$CaCO_3$=91.5
SECTION	CC; 7; 6; 5; 4; 3; 2; 1
METERS	1.0; 0.5
GRAPHIC LITHOLOGY	
DRILLING DISTURB.	
SED. STRUCTURES	
SAMPLES	* *

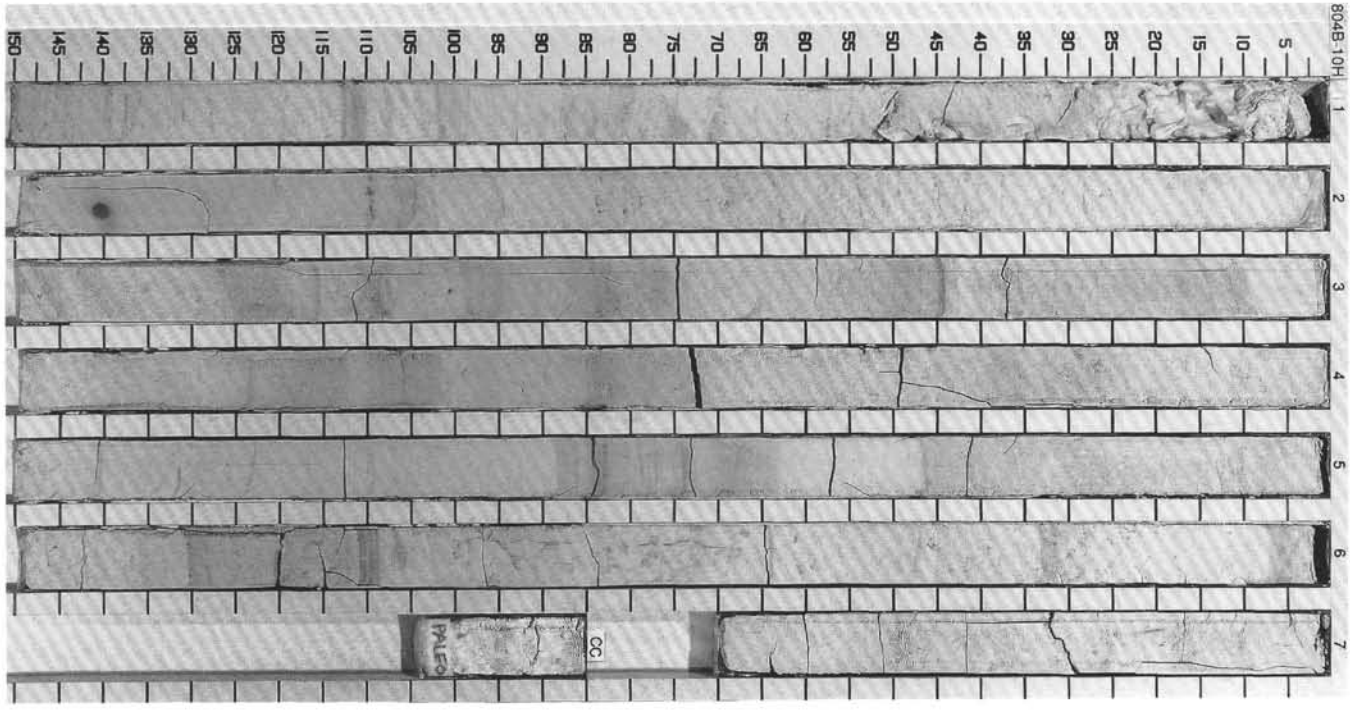
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y N8) to light gray (N7), slightly to moderately bioturbated NANNOFOSSIL OOZE. Pale green (10G 6/2) and reddish gray (5R 6/1) color bands are common in Sections 3-6. Microfaulting is evident in Section 1, 110-115 cm, and Section 2, 50-110 cm.

SMEAR SLIDE SUMMARY (%):

	2, 89	5, 80
	D	D
TEXTURE:		
Silt	100	100
COMPOSITION:		
Foraminifers	1	1
Nannofossils	95	95
Radiolarians	3	3
Spicules	1	1



SITE 804 HOLE B CORE 11H CORED INTERVAL 90.2-99.7 mbsf

TIME-ROCK UNIT: UPPER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/G N16; NANNOFOSSILS A/M NN9; RADIOLARIANS; DIATOMS

PALEOMAGNETICS

PHYS. PROPERTIES: V-1614 ρ-62.2 ρ-1.65; V-1584 ρ-60.5 ρ-1.67; V-1603 ρ-62.7 ρ-1.62; V-1592 ρ-61.9 ρ-1.64; V-1592 ρ-63.9 ρ-1.60; V-1570 ρ-65.1 ρ-1.58; V-1588 ρ-66.1 ρ-1.56

CHEMISTRY: %CaCO3=91.5; %CaCO3=89.0; %CaCO3=89.8; %CaCO3=89.2; %CaCO3=90.1; %CaCO3=83.3; %CaCO3=83.7

SECTION: 1 2 3 4 5 6 7 CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID

DRILLING DISTURB.

SED. STRUCTURES: * ** *

SAMPLES

LITHOLOGIC DESCRIPTION

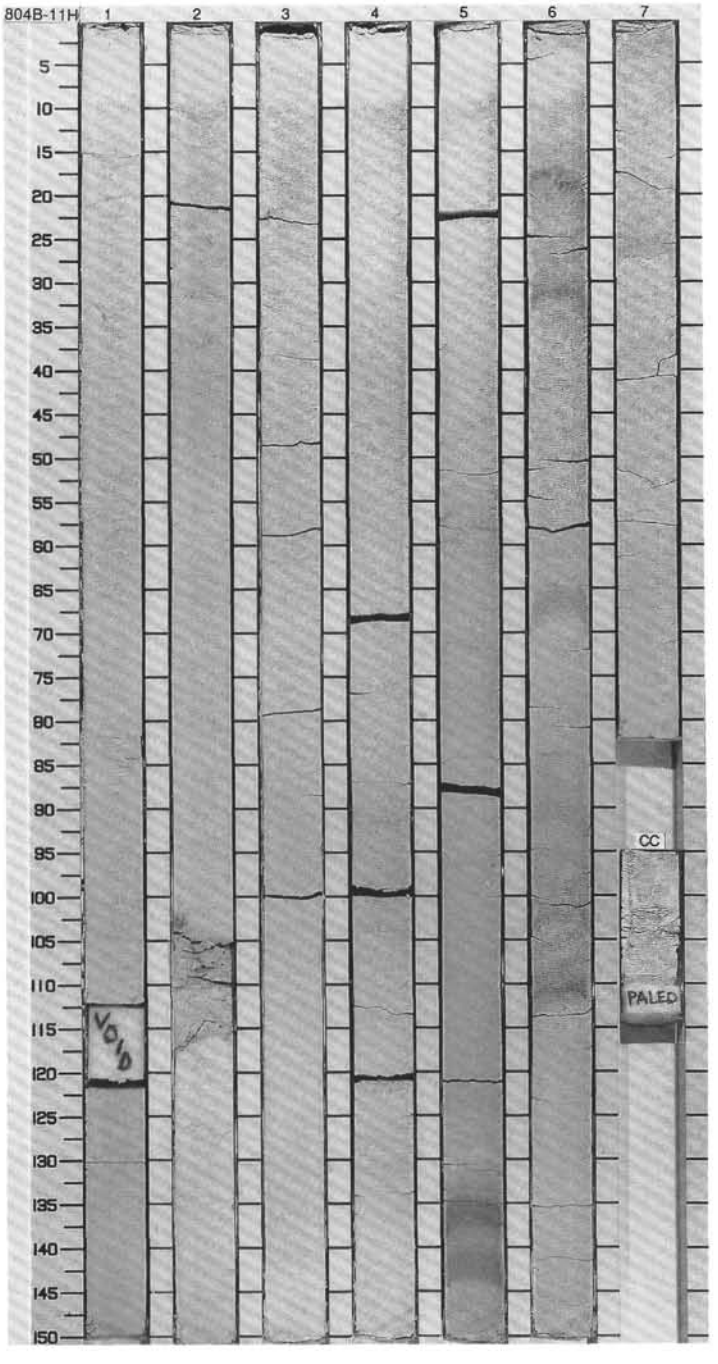
NANNOFOSSIL OOZE and NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL OOZE, which grades into NANNOFOSSIL OOZE with FORAMINIFERS in Section 2. The core is white (2.5Y N8/), faintly mottled and is more uniform and less banded than the overlying cores. Broad pale blue (5PB 7/2) color bands are present in Sections 5-7.

Minor lithology: Section 2, 105-115 cm, contains NANNOFOSSIL FORAMINIFER OOZE. The interval has a sharp base and grades upward into FORAMINIFER NANNOFOSSIL OOZE.

SMEAR SLIDE SUMMARY (%):

	2, 76 D	2, 107 M	2, 115 M	6, 17 M
TEXTURE:				
Sand	2	20	30	2
Silt	95	75	65	95
Clay	3	5	5	3
COMPOSITION				
Bioclast	—	10	10	Tr
Diatoms	Tr	Tr	1	Tr
Feldspar	—	—	—	1
Foraminifers	3	30	45	8
Nannofossils	90	55	35	90
Radiolarians	7	5	8	1
Spicules	Tr	Tr	1	Tr



SITE 804 HOLE B CORE 12H CORED INTERVAL 99.7-109.2 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 MIOCENE	C/P N15?	A/P NN9				Φ=59.5 ρ=1.68 V=1645 ● Φ=59.3 ρ=1.69 V=1634 ● Φ=59.0 ρ=1.70 V=1649 ● Φ=62.4 ρ=1.60 V=1622 ● Φ=60.5 ρ=1.67 V=1607 ● Φ=62.9 ρ=1.63 V=1603 ● Φ=62.2 ρ=1.64 V=1607	%CaCO3=92.0 ● %CaCO3=91.5 ● %CaCO3=92.0 ● %CaCO3=93.6 ● %CaCO3=92.3 ● %CaCO3=92.3 ● %CaCO3=92.5	1 2 3 4 5 6 7 CC	0.5 1.0		OO	*	OC TW *

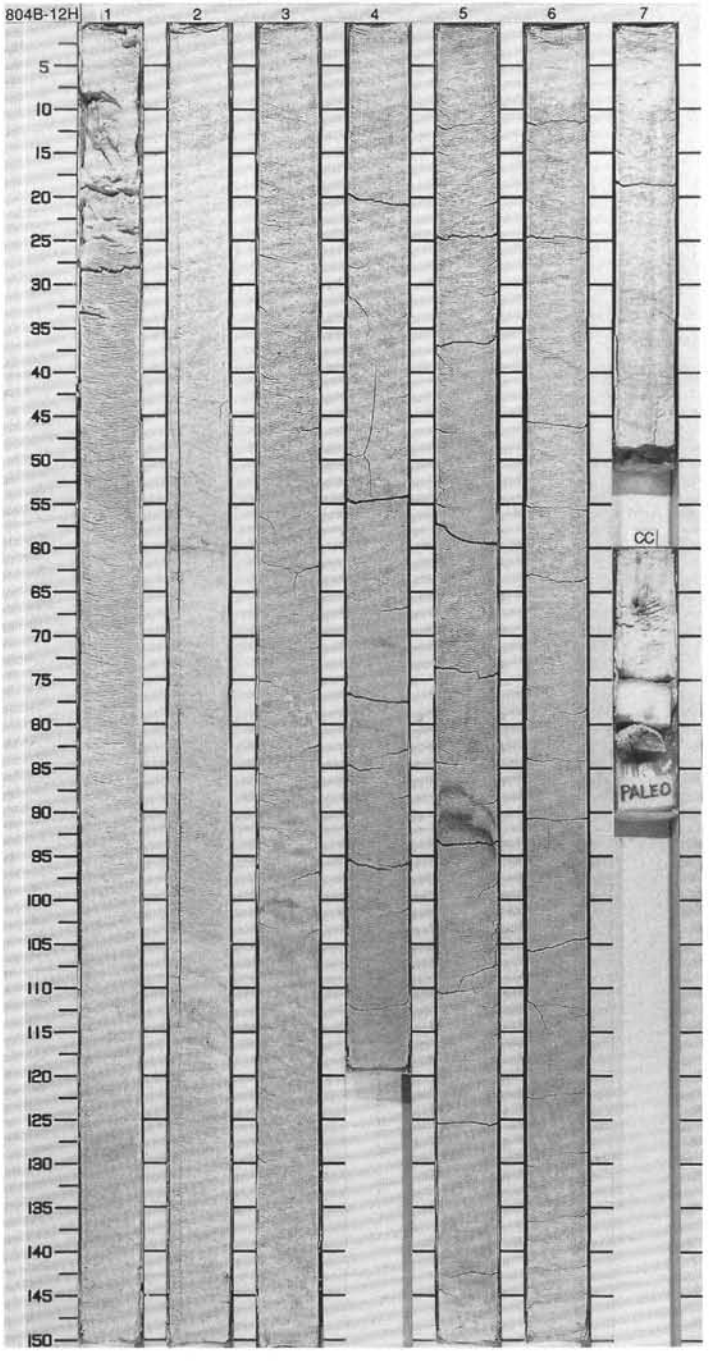
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

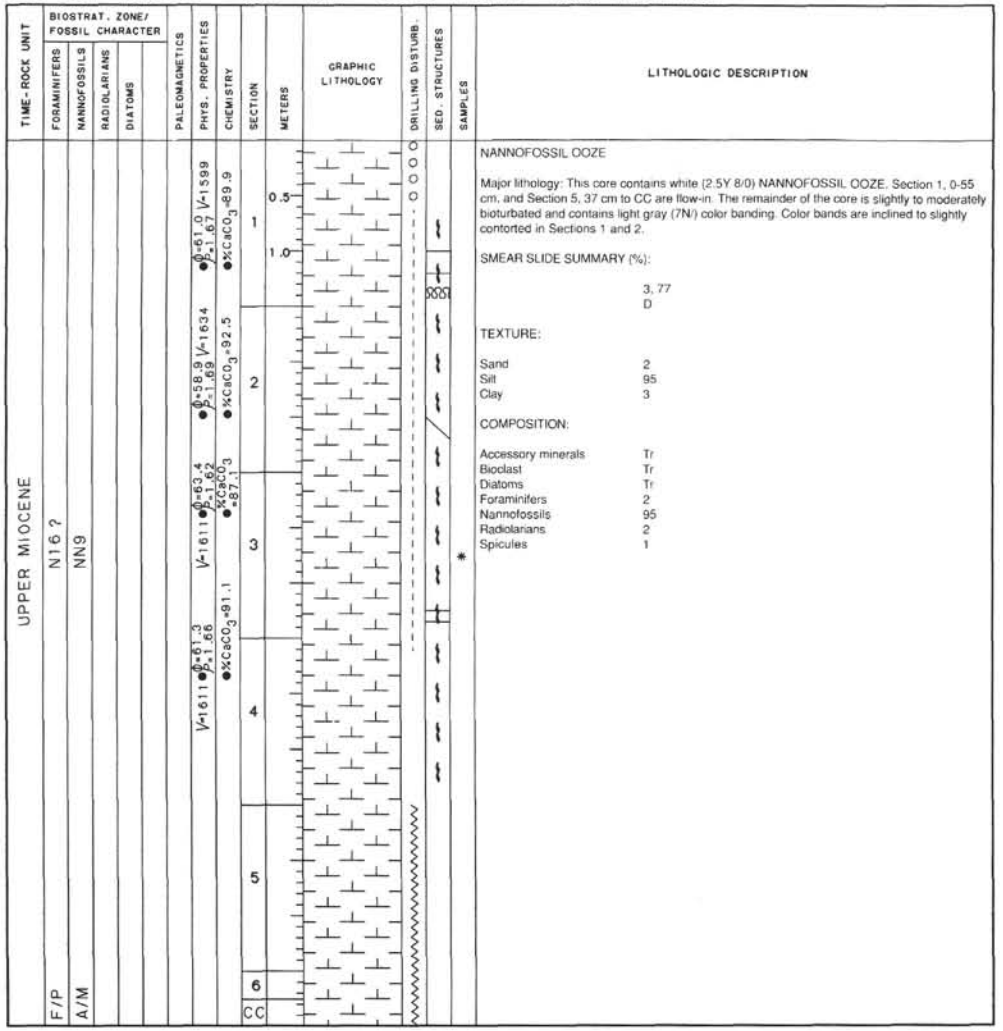
Major lithology: This core contains white (2.5Y N8/), faintly mottled, and uniform NANNOFOSSIL OOZE. Faint pale pink (5RP 8/2) and dusky blue (5BP 3/2) color bands are present in Sections 1-5.

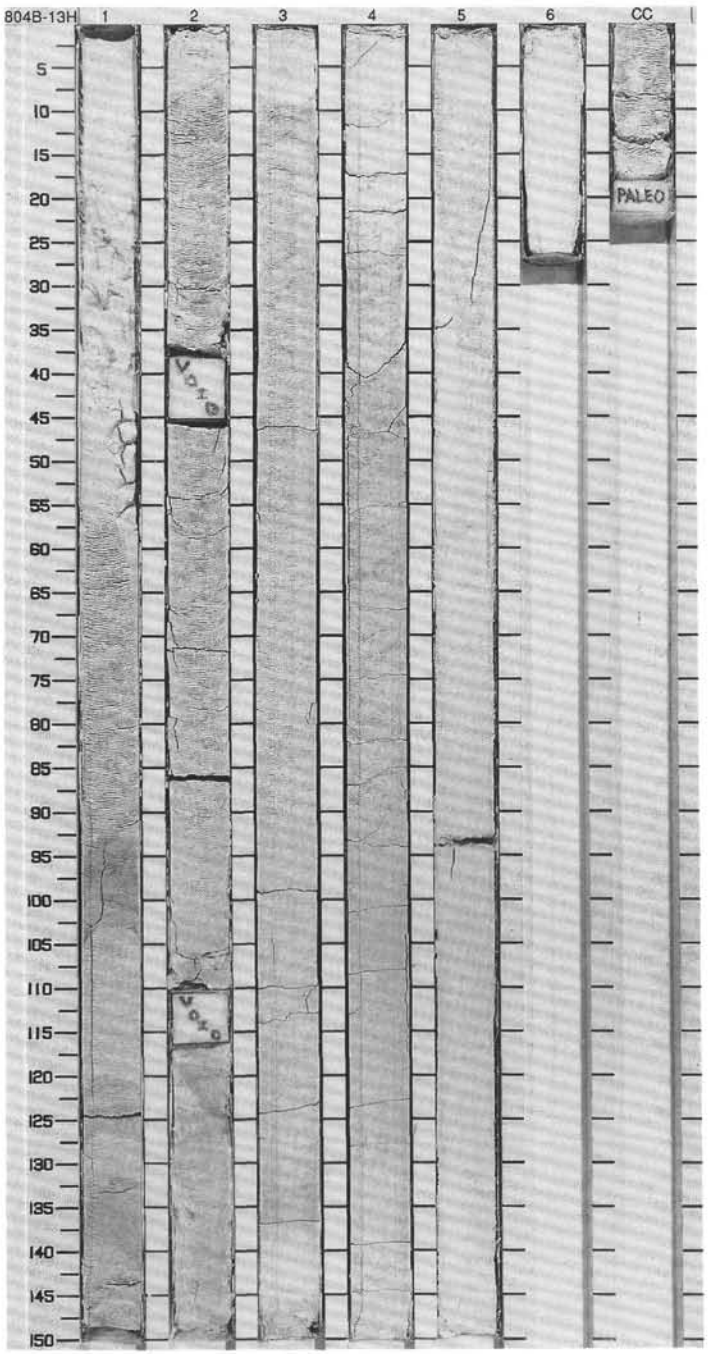
SMEAR SLIDE SUMMARY (%):

	2, 111 D	6, 24 D
TEXTURE:		
Sand	10	5
Silt	85	90
Clay	5	5
COMPOSITION:		
Accessory minerals	1	Tr
Bioclast	2	2
Diatoms	Tr	1
Feldspar	Tr	Tr
Foraminifers	20	3
Nannofossils	75	90
Radiolarians	2	3
Spicules	Tr	1



SITE 804 HOLE B CORE 13H CORED INTERVAL 109.2-118.7 mbsf





SITE 804 HOLE B CORE 14H CORED INTERVAL 118.7-128.2 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE ?	N14	NN9				V=1552 ●Φ=51.7 ρ=1.83	●%CaCO$_3$=92.7	1	0.5, 1.0				
						V=1577 ●Φ=73.3 ρ=1.46	●%CaCO$_3$=91.2	2					*
						V=1588 ●Φ=60.9 ρ=1.67	●%CaCO$_3$=92.6	3					
						V=1599 ●Φ=60.1 ρ=1.67	●%CaCO$_3$=93.3	4					
						V=1592 ●Φ=60.8 ρ=1.67	●%CaCO$_3$=92.5	5					*
						V=1622 ●Φ=59.6 ρ=1.69	●%CaCO$_3$=92.8	6					
						V=1618 ●Φ=59.6 ρ=1.69	●%CaCO$_3$=91.9	7					
	C/P	A/M						CC					

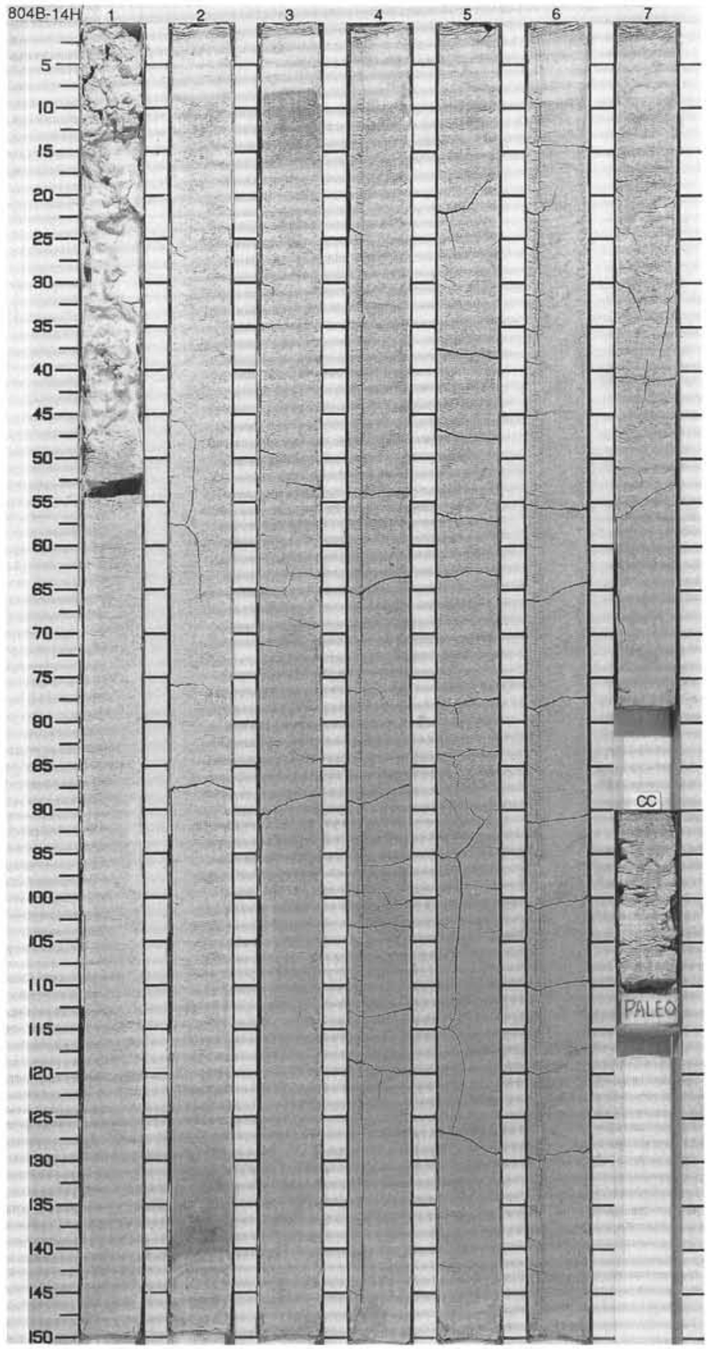
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains homogeneous, structureless, and dominantly white (2.5Y 8/0) NANNOFOSSIL OOZE. Two light gray (2.5Y 7/0) intervals (about 10 cm thick) are observed in Sections 2 and 3, both exhibiting sharp color contacts (except the top of Section 2). Also in Section 2, a few cm thick, light gray color bands are noted. The core is slightly bioturbated as indicated by rare pyritized burrows.

SMEAR SLIDE SUMMARY (%):

	2, 100 D	5, 100 D
TEXTURE:		
Silt	60	60
Clay	40	40
COMPOSITION:		
Foraminifers	2	2
Nannofossils	98	98
Quartz	—	Tr
Spicules	Tr	Tr



SITE 804 HOLE B CORE 15H CORED INTERVAL 128.2-137.7 mbsf

TIME-ROCK UNIT: UPPER MIOCENE ?

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS ? C/P; NANNOFOSSILS NN9 A/P; RADIOLARIANS; DIATOMS; PALEOMAGNETICS

PHYS. PROPERTIES: V-1596 0-65.4 ρ=1.59; V-1596 0-63.8 ρ=1.60; V-1591 0-64.1 ρ=1.60; V-1588 0-63.2 ρ=1.60; V-1584 0-63.5 ρ=1.60; V-1649 0-57.8 ρ=1.72

CHEMISTRY: %CaCO3=92.0; %CaCO3=90.4; %CaCO3=97.5; %CaCO3=92.9; %CaCO3=91.2; %CaCO3=88.1; %CaCO3=85.2

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: CC, W

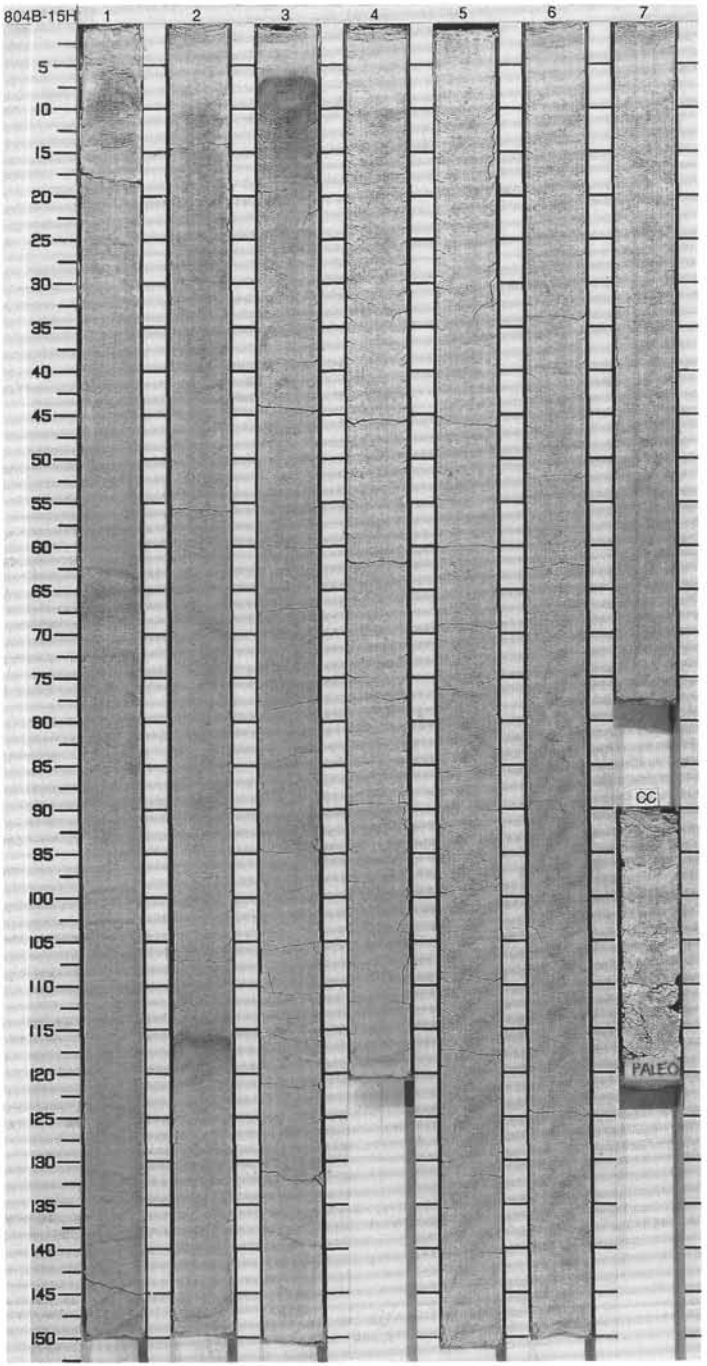
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains homogeneous, structureless, bioturbated and predominantly light gray (2.5Y 7/0) to white (2.5Y 8/0) NANNOFOSSIL OOZE. Color changes are gradational. Rare, faint light gray (2.5Y 7/0) and gray (2.5Y 6/0) color bands are apparent in Sections 1-3 and 6.

SMEAR SLIDE SUMMARY (%):

	3, 8 D	5, 74 D
TEXTURE:		
Sand	5	5
Silt	65	65
Clay	30	30
COMPOSITION:		
Foraminifers	6	3
Nannofossils	93	95
Siliceous fragments	1	2



SITE 804 HOLE C CORE 1H CORED INTERVAL 0.0-6.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLEISTOCENE	A/M N22 *Globorotalia truncatulinoides*	A/M NN19	A/G *Amphirhopalium ypsilon*	C/G NTD 17 *Pseudoeunotia doliolus*	N (Brunhes, ANOMALY 1)	V=1532 ● Φ=68.9 ρ=1.53 V=1538 ● Φ=69.0 ρ=1.53 V=1545 ● Φ=71.0 ρ=1.50 V=1521 ● Φ=71.9 ρ=1.48		1 2 3 4 CC	0.5 1.0	VOID VOID		~	*

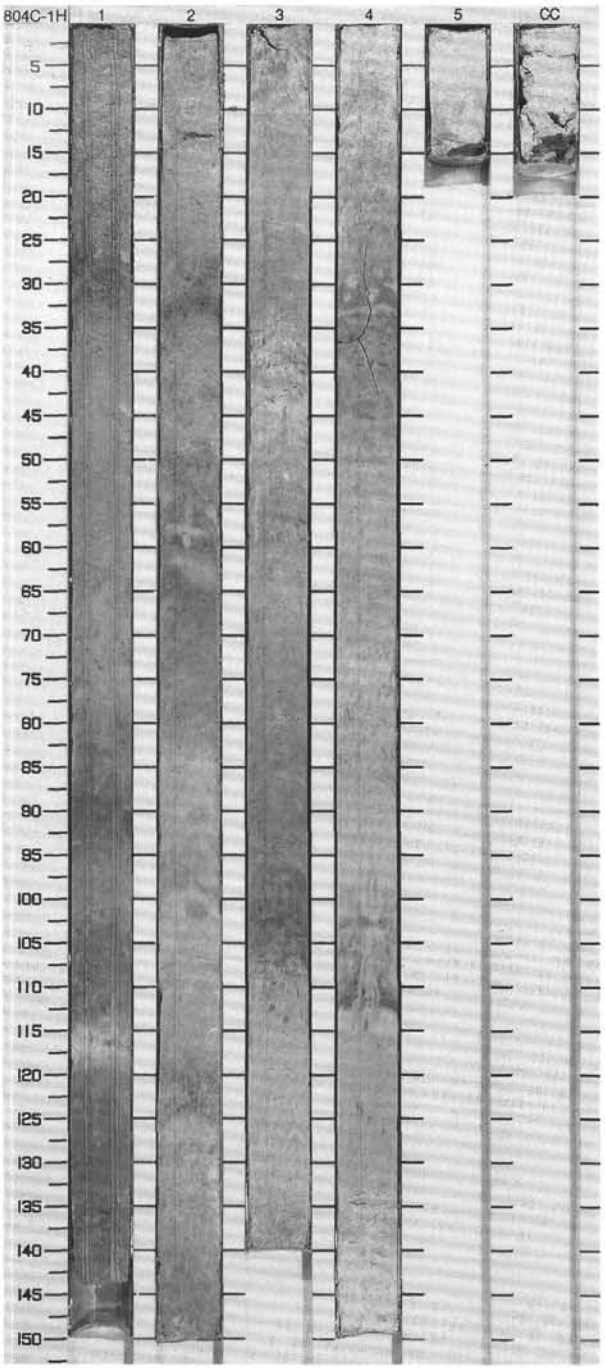
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

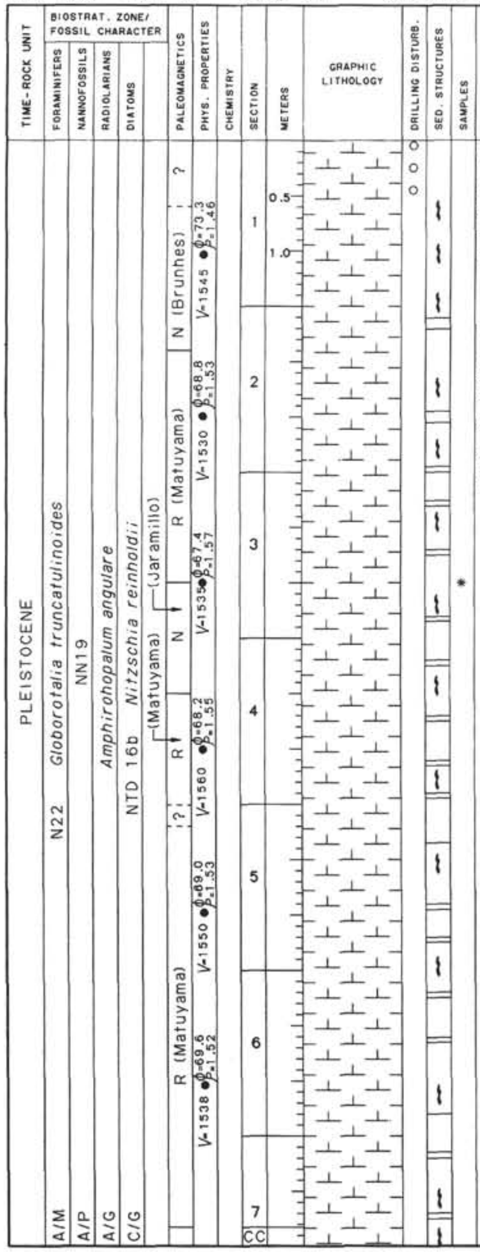
Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS. It is homogeneous, with abundant color mottling indicative of heavy bioturbation. Alternations of pale brown (10YR 6/3) and light gray (10YR 7/2) colors are present throughout the core. Bioturbation is also evident from zones of disseminated pyrite.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	3
Silt	65
Clay	32
COMPOSITION:	
Accessory minerals	5
Clay	2
Foraminifers	2
Nannofossils	87
Siliceous fragments	3



SITE 804 HOLE C CORE 2H CORED INTERVAL 6.3-15.8 mbsf



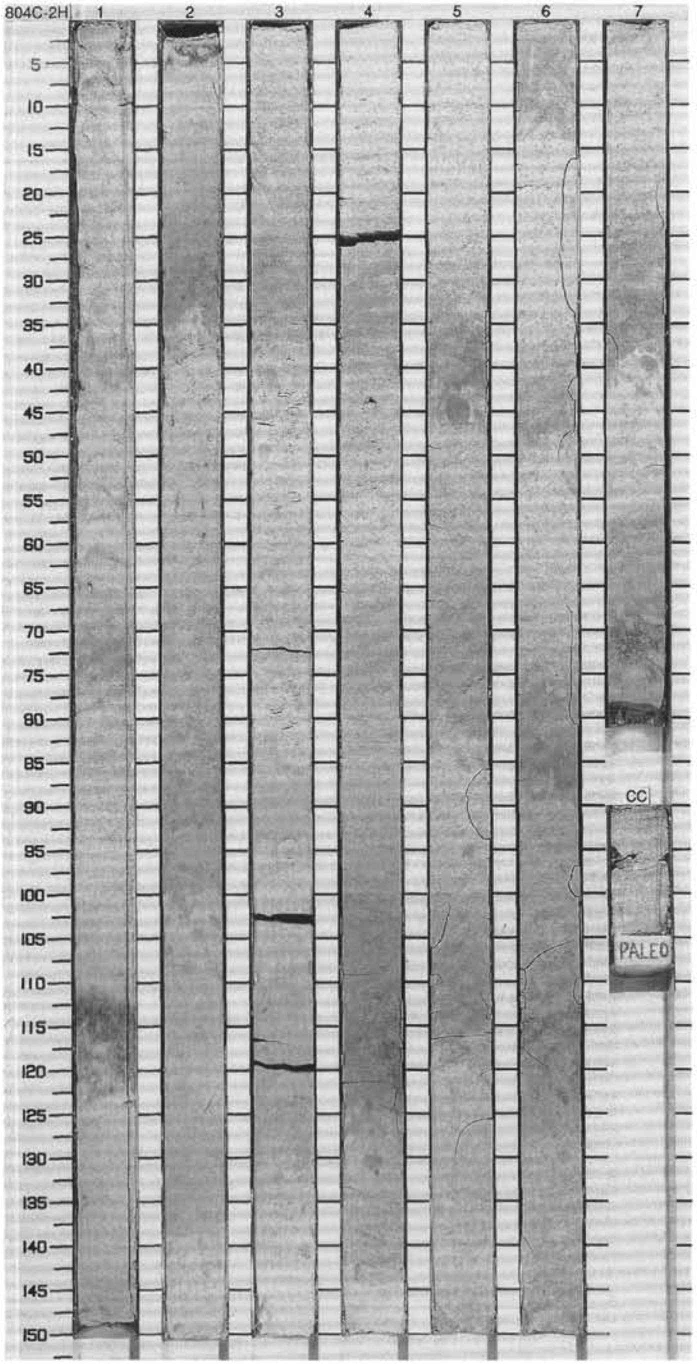
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

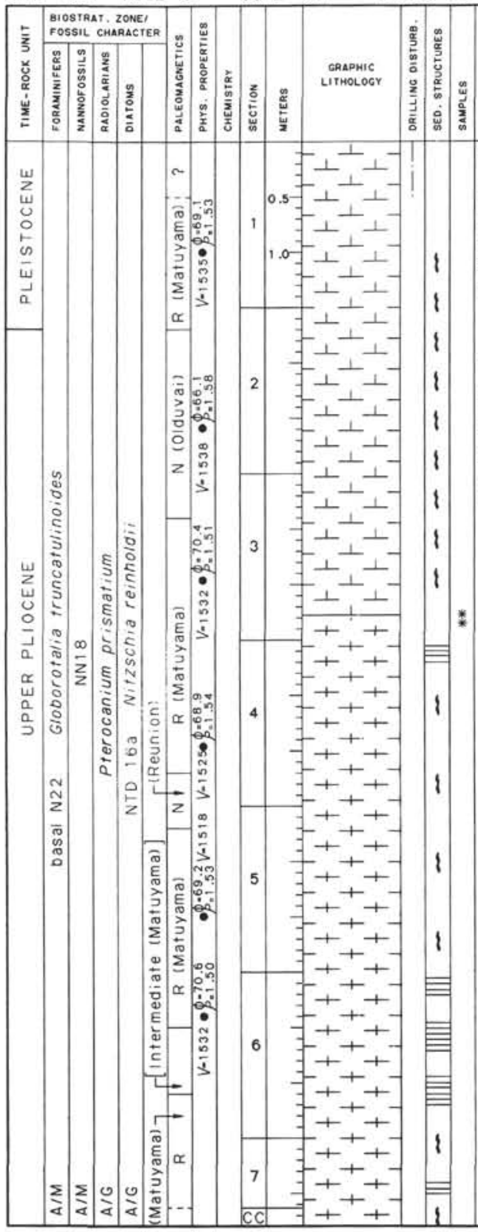
Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS. It is homogeneous, with abundant color mottling indicative of heavy bioturbation. The sediment is dominantly white (10YR 8/2) but exhibits 10 to 20 cm thick, light gray (10YR 7/2) intervals that are spaced 20 to 30 cm apart.

SMEAR SLIDE SUMMARY (%):

	3, 100
	D
TEXTURE:	
Sand	5
Silt	55
Clay	40
COMPOSITION:	
Accessory minerals	1
Foraminifers	14
Nannofossils	85



SITE 804 HOLE C CORE 3H CORED INTERVAL 15.8-25.3 mbsf



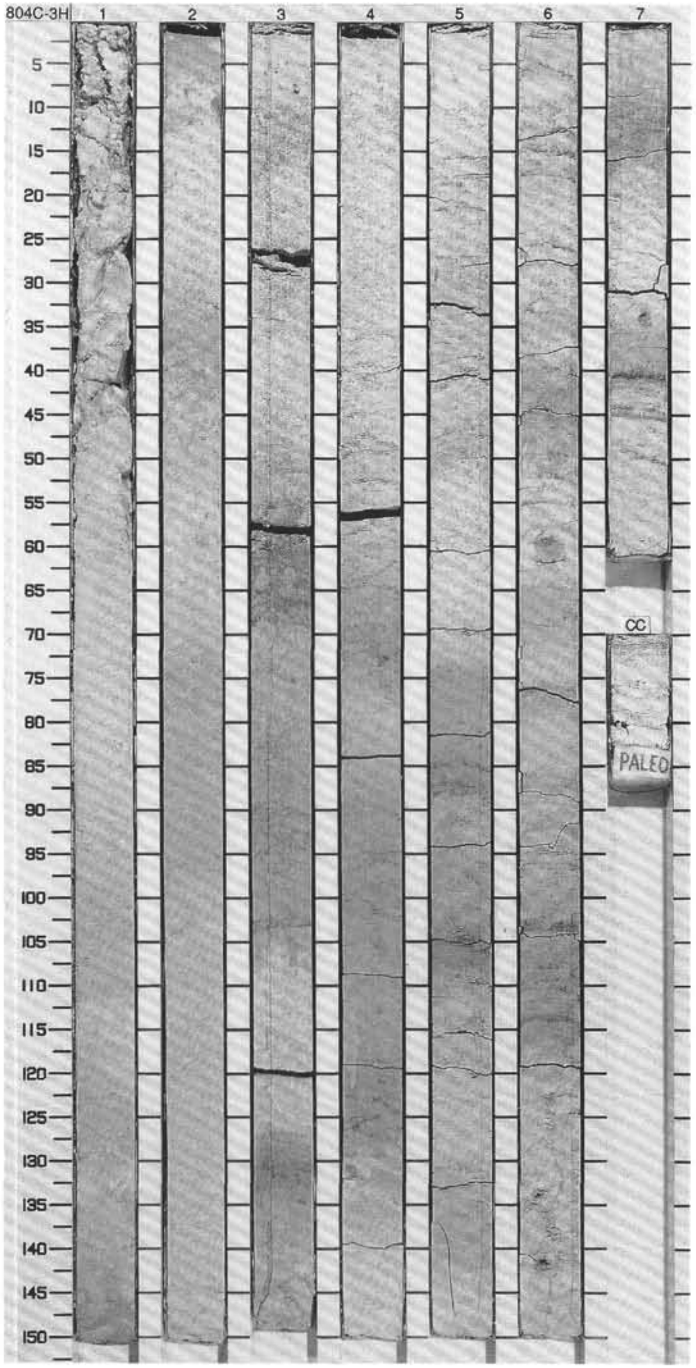
LITHOLOGIC DESCRIPTION

FORAMINIFER NANNOFOSSIL OOZE and NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: Section 1 to Section 3, 129 cm, contains NANNOFOSSIL OOZE with FORAMINIFERS, which is dominantly white (10YR 8/2) and homogeneous, with abundant color mottling indicative of heavy bioturbation. Section 3, 129 cm to CC is FORAMINIFER NANNOFOSSIL OOZE, which is dominantly white (2.5Y 8/0) with 10 to 20 cm thick, light gray (2.5Y 7/0) intervals that are spaced 20 to 30 cm apart. Pale, 2 to 5 mm thick grayish green bands also are present in the light gray intervals.

SMEAR SLIDE SUMMARY (%):

	3, 127 D	3, 135 D
TEXTURE:		
Sand	12	15
Silt	53	50
Clay	35	35
COMPOSITION:		
Foraminifers	20	30
Nannofossils	80	70



SITE 804 HOLE C CORE 4H CORED INTERVAL 25.3-34.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER PLIOCENE	C/P basal N21 / uppermost N19	A/M NN16	A/G *Spongaster penias*	A/G NTD 15 *Rhizosolenia praebergonii* (Mammoth)	N (Gauss) R (Kaena) N (Gauss)	? (disturbed) V-1526 ϕ=68.4 ρ=1.54 V-1528 ϕ=69.3 ρ=1.53 N (Gauss) V-1525 ϕ=72.1 ρ=1.48 ϕ=68.8 ρ=1.53		1 2 3 4 5 6 7 CC	0.5 1.0				

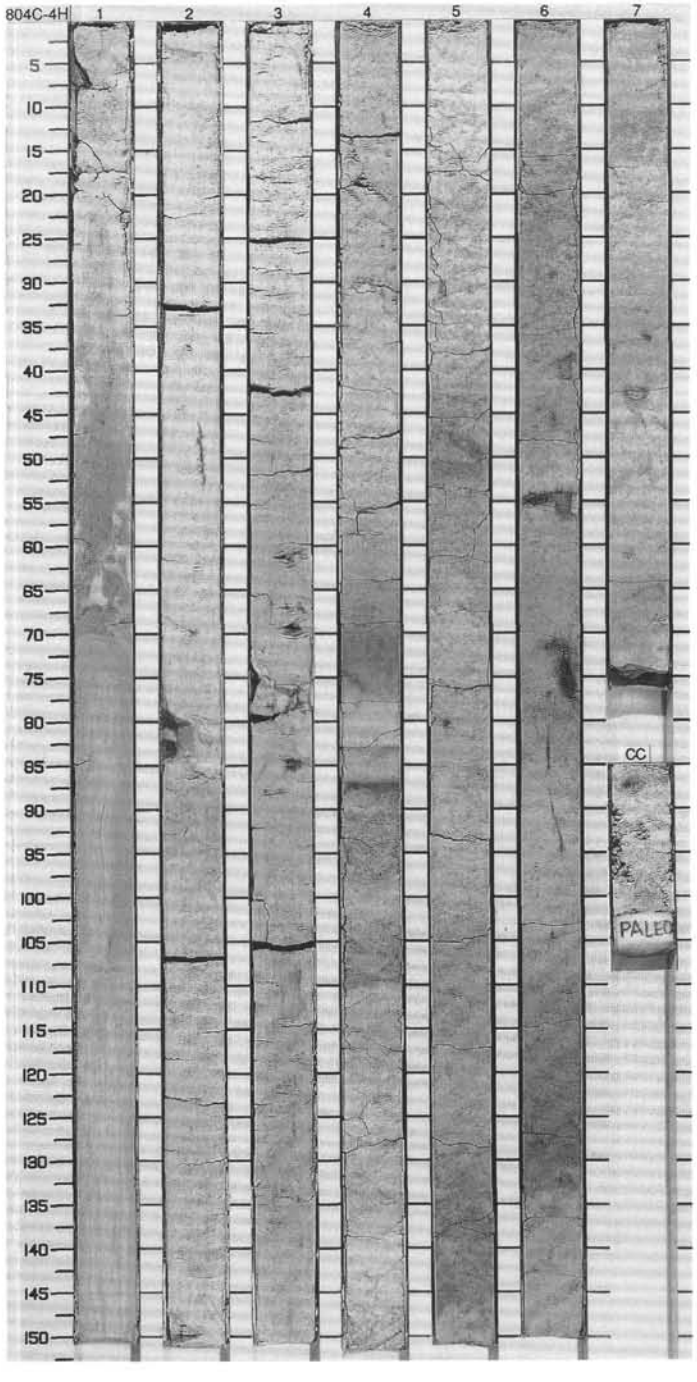
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS. Sections 1 through 4, 40 cm, contain flow-in. The remaining sediments alternate between white (5Y 8/1) and light gray (5Y 7/1). Color contacts are gradational and color intervals are approximately of 10 to 35 cm thick and spaced about 40 cm apart. The degree of mottling and pyritized burrow infills suggests that the sediment has been moderately to heavily bioturbated.

SMEAR SLIDE SUMMARY (%):

	5, 75 D
TEXTURE:	
Sand	10
Silt	50
Clay	40
COMPOSITION:	
Accessory minerals	2
Foraminifers	15
Nannofossils	83



SITE 804 HOLE C CORE 5H CORED INTERVAL 34.8-44.3 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
LOWER PLIOCENE	C/P N18?	A/M NN14?	A/G *Spongaster pentas*	A/G ?NTD 14 (*Nitzschia jouseae*) – NTD 13 (*Thalassiosira convexa*)	disturbed			1, 2, 3, 4, 5, 6, 7, CC	0.5, 1.0				*

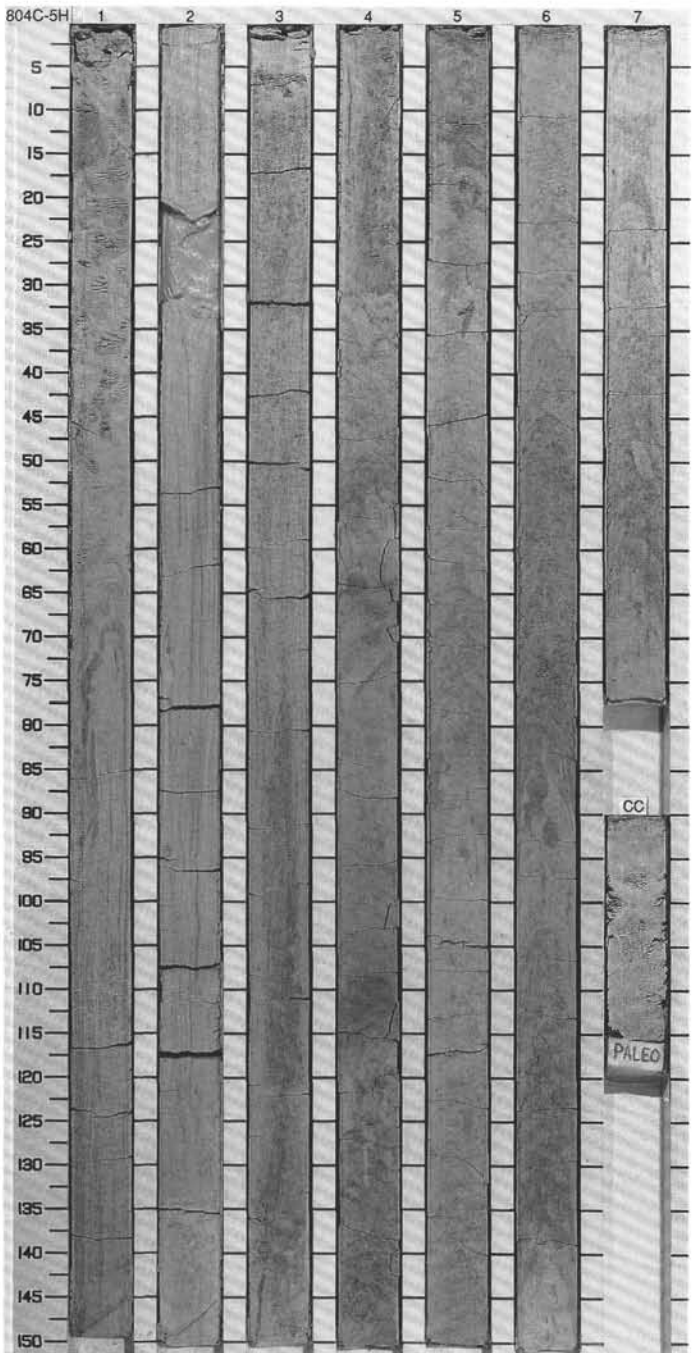
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains flow-in. Sections 1 through 3 and 6 through 7 are highly disturbed due to flow-in. From Section 4, 35 cm, to Section 6, 60 cm, drilling disturbance is moderate. The lithology within this interval is light gray (5Y 7/1) and heavily bioturbated NANNOFOSSIL OOZE with FORAMINIFERS.

SMEAR SLIDE SUMMARY (%):

	5, 30 D
TEXTURE:	
Sand	5
Silt	65
Clay	30
COMPOSITION:	
Accessory minerals	3
Diatoms	2
Foraminifers	15
Nannofossils	74
Radiolarians	3
Siliceous fragments	3



SITE 804 HOLE C CORE 6H CORED INTERVAL 44.3-53.8 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE	C/M	N17a	NN11	*Spongaster peregrina*	N ?	●V-1532	●V-1532	1	0.5				
	A/P								1.0				
	A/G							2					
	A/G			NTD 12a *Nitzschia miocenica*				3					*
								4					
								5					
								6					
								7					
								CC					

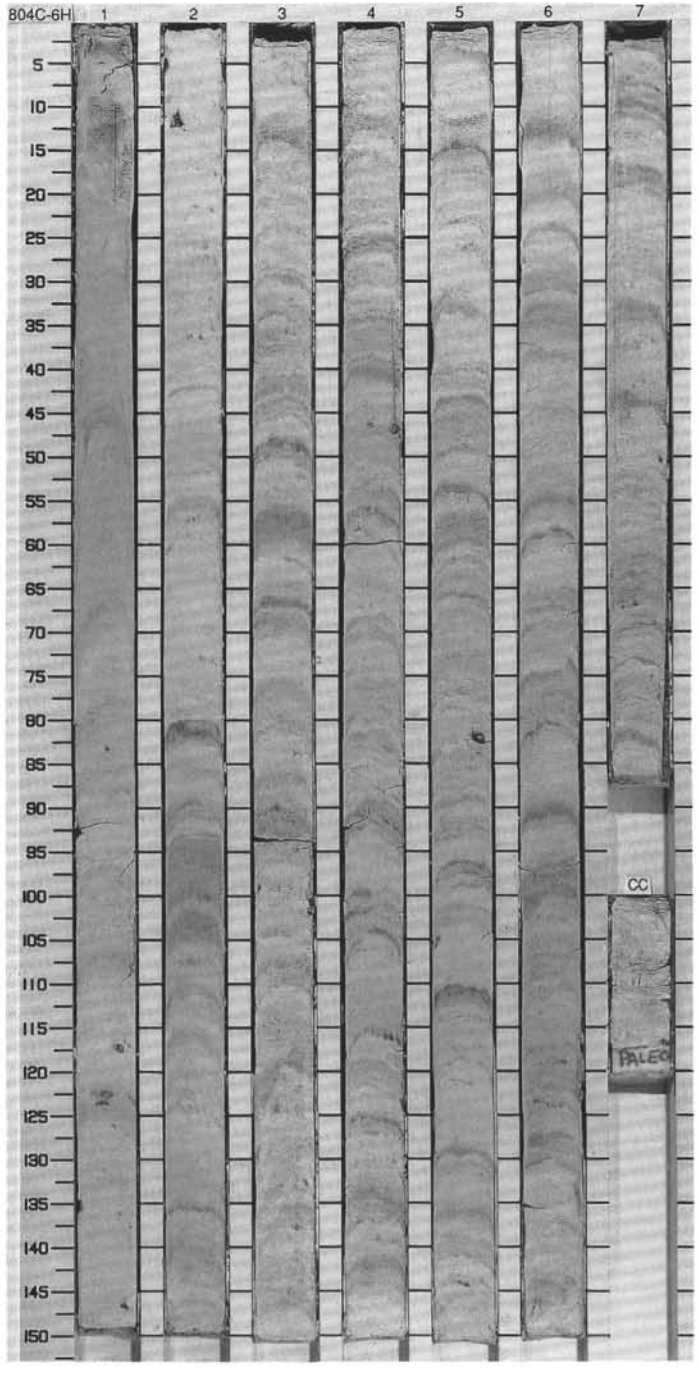
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core consists of white (2.5Y 8/0) NANNOFOSSIL OOZE (Section 1, 0-50 cm, is flow-in. The core catcher is also highly disturbed). Abundant, irregular and wavy, mm to cm thick color bands are noted throughout the core. Most of the bands are gray (7.5R 6/0) or green (10GY 7/2), but a few white (2.5Y 8/2) bands are noted. All show gradational color contacts. Microfaulting was observed in Sections 3, 5, 6 and 7. Moderate bioturbation is indicated by mottles, pyritized burrow fills and disseminated pyrite.

SMEAR SLIDE SUMMARY (%):

	3, 74 D
TEXTURE:	
Sand	5
Silt	60
Clay	35
COMPOSITION:	
Accessory minerals	Tr
Diatoms	Tr
Foraminifers	2
Nannofossils	97
Radiolarians	Tr
Siliceous fragments	1



SITE 804 HOLE C CORE 7H CORED INTERVAL 53.8-63.3 mbsf

TIME-ROCK UNIT	UPPER MIOCENE
BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	C/M N17a
NANNOFOSSILS	A/P NN11
RADIOLARIANS	A/G *Didymocyrtis penultima*
DIATOMS	
PALEOMAGNETICS	
PHYS. PROPERTIES	V-1542 ϕ=63.4 ρ=1.62; ϕ=60.0 ρ=1.70 V-1556; ϕ=59.4 ρ=1.70 V-1550; ϕ=62.9 ρ=1.63 V-1552; V-1535 ϕ=61.7 ρ=1.65; V-1521 ϕ=62.1 ρ=1.66
CHEMISTRY	
SECTION	CC 7 6 5 4 3 2 1
METERS	1.0 0.5
GRAPHIC LITHOLOGY	
DRILLING DISTURB.	
SED. STRUCTURES	
SAMPLES	*

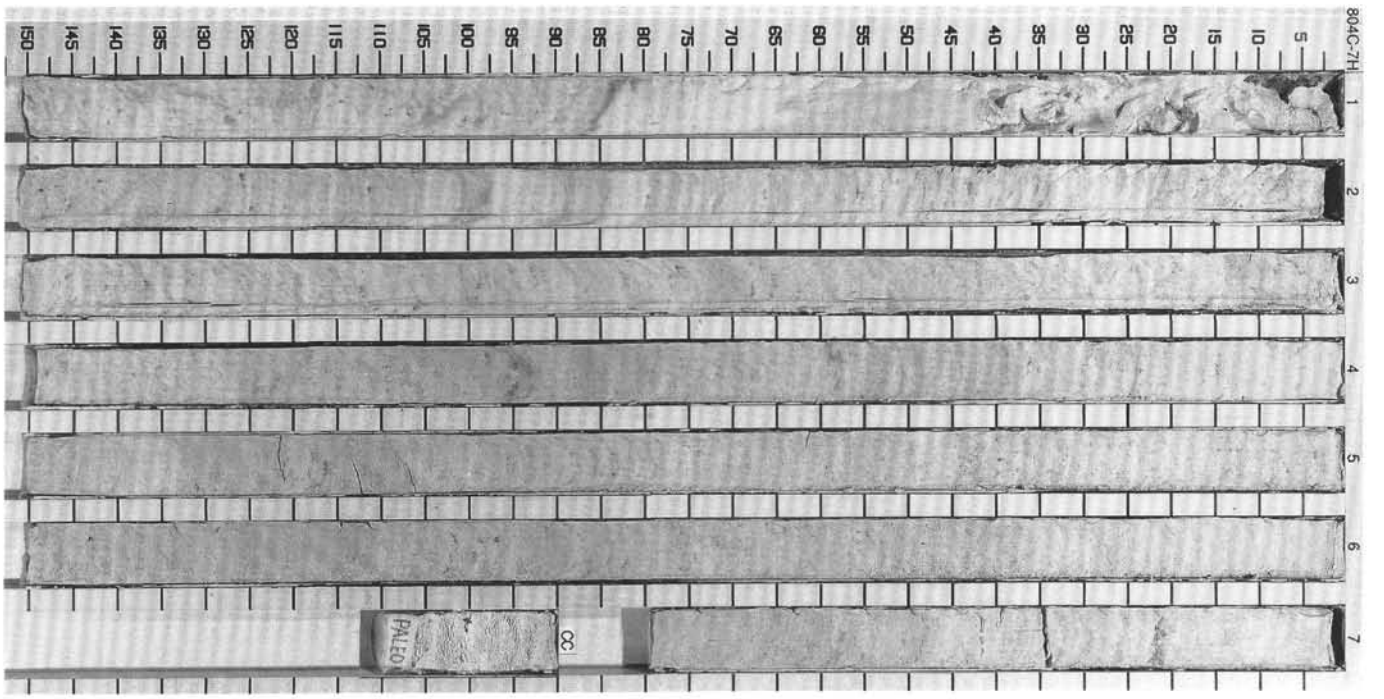
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains homogeneous and predominantly white (2.5Y 8/0) NANNOFOSSIL OOZE. Subhorizontal reddish gray (5R 6/1), white (2.5Y 8/2) and pale yellowish green (10GY 7/2) bands are present throughout. The bands are 2 to 10 mm thick and are spaced 1 to 10 cm apart. The sediment is bioturbated and has some pyritized burrow fills.

SMEAR SLIDE SUMMARY (%):

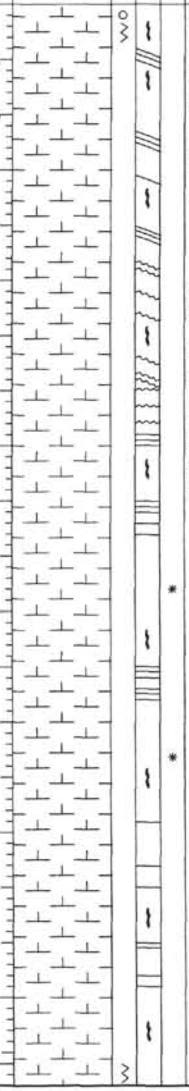
	3, 75 D
TEXTURE:	
Silt	40
Clay	60
COMPOSITION:	
Accessory minerals	2
Diatoms	Tr
Foraminifers	3
Nannofossils	95
Radiolarians	Tr
Siliceous fragments	Tr



SITE 804 HOLE C CORE 8H CORED INTERVAL 63.3-72.8 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS
UPPER MIOCENE	N17a?	NN10	*Didymocyrtis antepenultima*	NTD 11a *Nitzschia porteri*		V-1574 ● φ-57.8 ρ-1.72		1	0.5, 1.0
						● V-1567		2	
						● V-1525		3	
						● V-1535		4	
						● V-1532		5	
						● V-1542		6	
								7	
	C/M	A/P	A/G	A/G				CC	

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



LITHOLOGIC DESCRIPTION

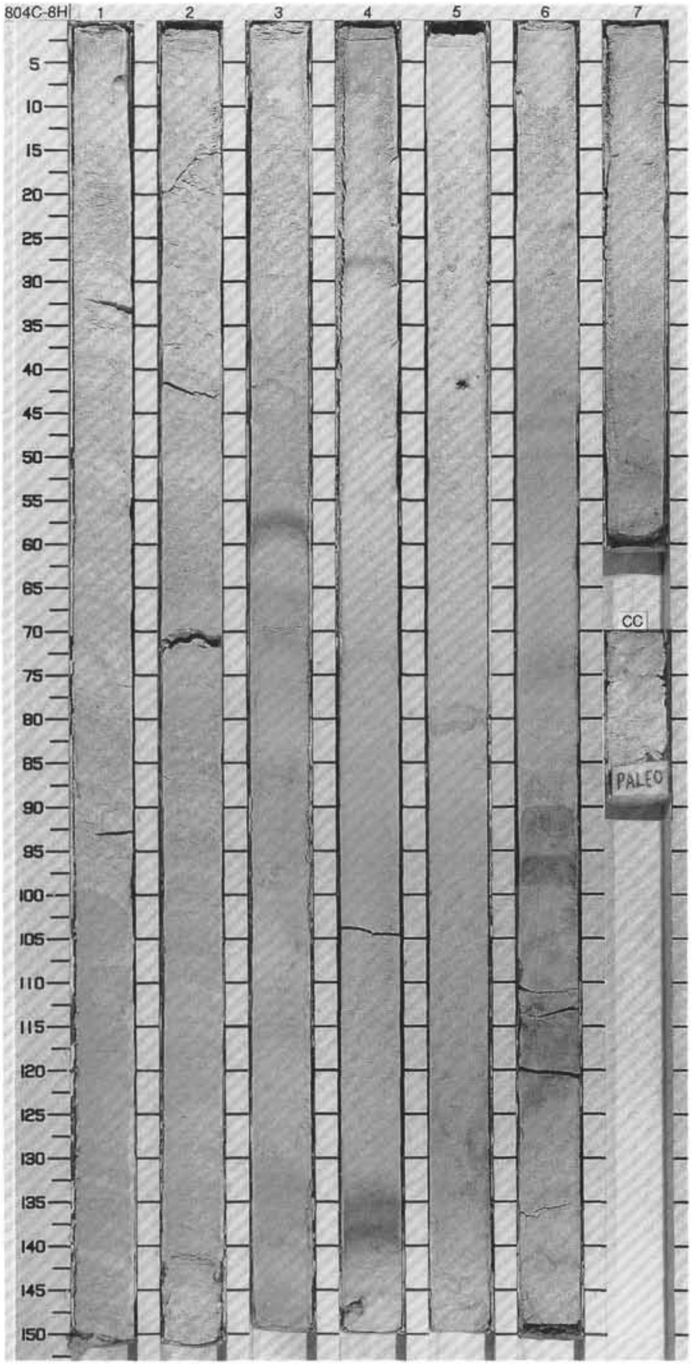
NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0) NANNOFOSSIL OOZE. Sections 1 and 2 contain abundant, tilted and wavy, faint, reddish gray (5R 6/1) color bands. The bands are about 0.5 to 1 cm thick and are separated by about 0.5 to 1 cm of white (2.5Y 8/0) ooze. Color banding is parallel and horizontal from Section 2, 130 cm, to Section 4, 28 cm. Only occasional color banding is observed below this level in the core.

Minor lithology: A thin (3 cm thick) bed of FORAMINIFER NANNOFOSSIL OOZE is noted in Section 5, 78-81 cm. It forms a graded bed with a sharp, irregular lower contact and a distinct upper contact. This bed is very soft in comparison with the surrounding sediment.

SMEAR SLIDE SUMMARY (%):

	4, 80 D	5, 81 M
TEXTURE:		
Sand	1	20
Silt	59	50
Clay	40	30
COMPOSITION:		
Accessory minerals	2	—
Diatoms	5	2
Foraminifers	8	30
Nannofossils	74	58
Opaques	—	5
Radiolarians	5	2
Siliceous fragments	5	3
Siliceous sponge spicules	—	Tr
Silicoflagellates	1	—



SITE 804 HOLE C CORE 9H CORED INTERVAL 72.8-82.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE	F/M N16 - N17a	A/P NN10	A/G *Didymocyrtis antepenultima*	A/G	V-1545 @=63.0 P=1.63	V-1545 @=61.5 P=1.66 V-1542 @=61.8 P=1.66 V-1545 @=63.0 P=1.64 V-1521 @=64.6 P=1.61		1 2 3 4 5 6 CC	0.5 1.0				*

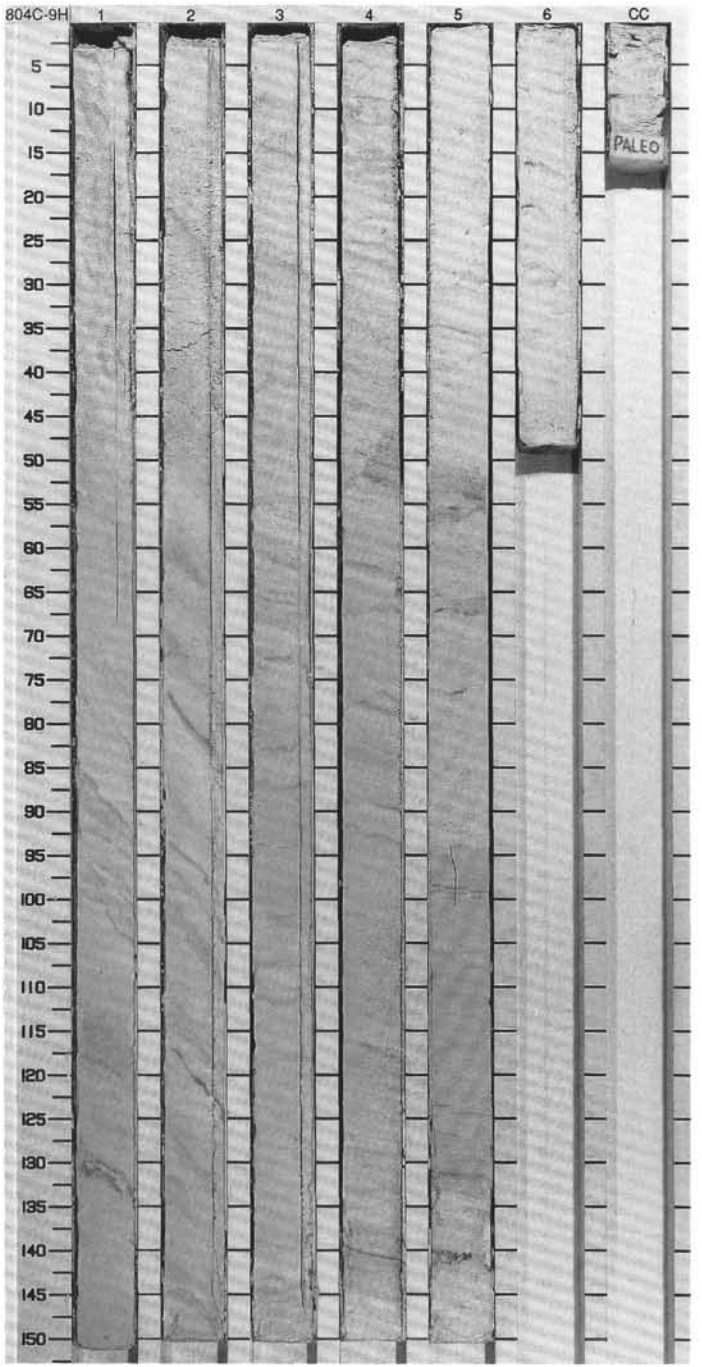
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains slightly to moderately bioturbated, white (2.5Y 8/0) NANNOFOSSIL OOZE. Sections 1 through 4 display abundant tilted, reddish gray (5R 6/1), pale blue (5PB 7/2), pale blue green (5BG 7/2), and green (10GY 6/1) color bands. In Sections 3 and 5, color bands display mm to cm size microfaults.

SMEAR SLIDE SUMMARY (%):

	3, 89 D
TEXTURE:	
Sand	5
Silt	80
Clay	15
COMPOSITION:	
Accessory minerals	1
Diatoms	1
Foraminifers	5
Nannofossils	86
Radiolarians	5
Silicoflagellates	1
Spicules	1



SITE 804 HOLE C CORE 10H CORED INTERVAL 82.3-91.8 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 MIOCENE	F/P	N16				V=1559 ρ=62.8 ρs=1.63		4					
	A/P	NN10				V=1552 ρ=62.1 ρs=1.66		3					
	A/G					V=1549 ρ=63.6 ρs=1.62		2					*
	A/G	NTD 10b *Coscinodiscus yabei*				V=1545 ρ=63.3 ρs=1.63		1	0.5 1.0				
								5					*
								6 CC					

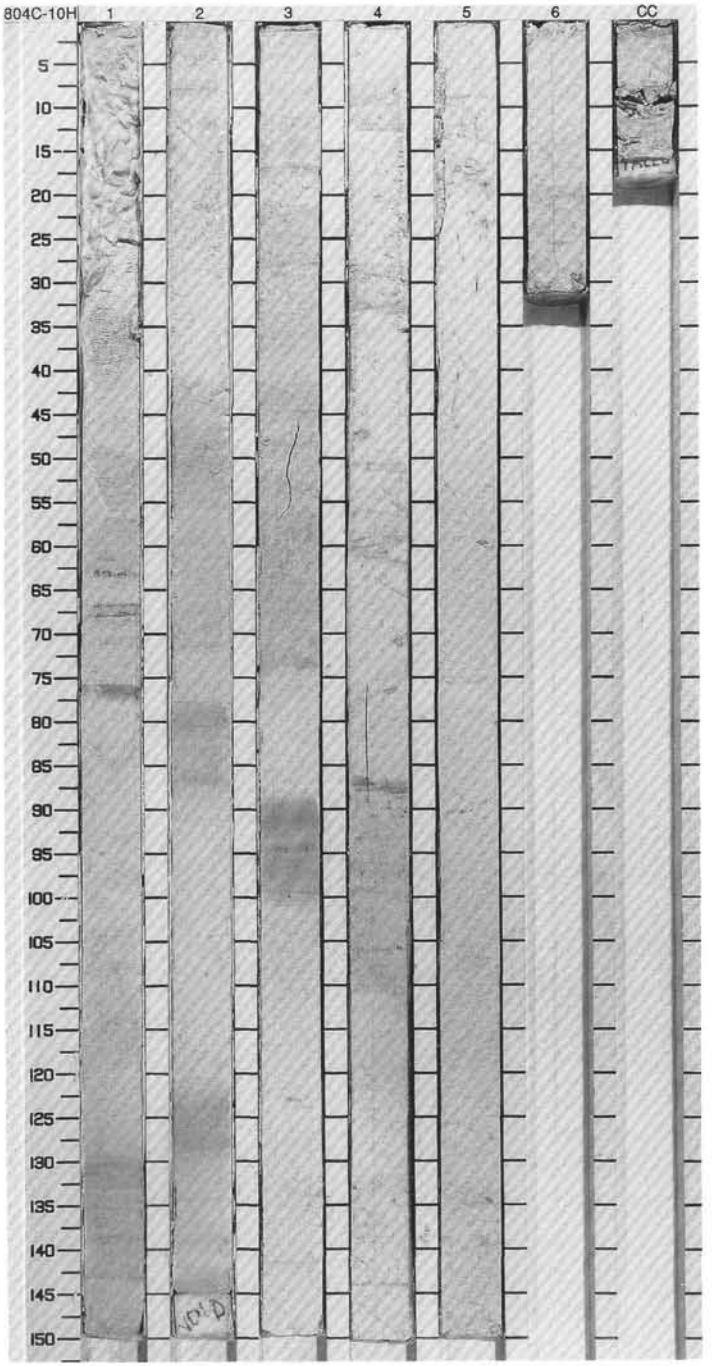
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

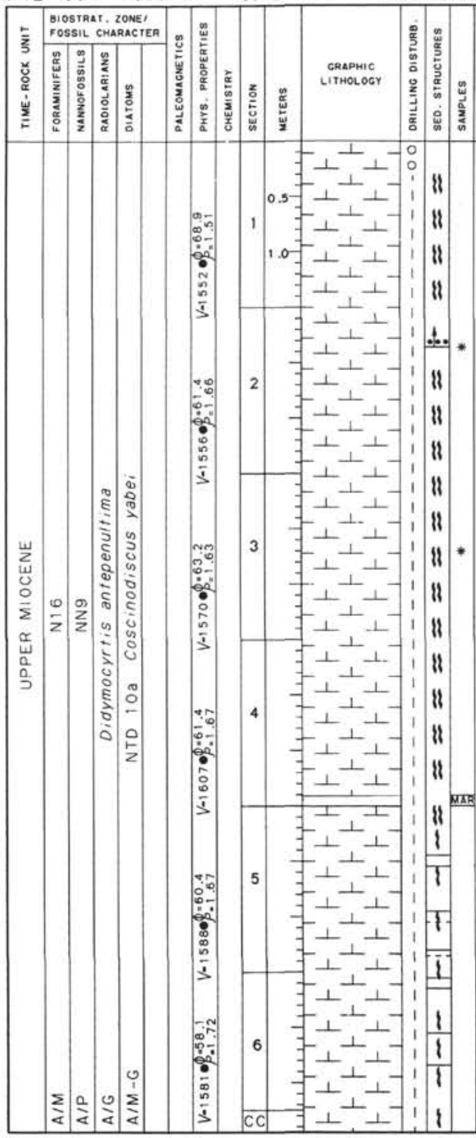
Major lithology: This core contains slightly to heavily bioturbated white (2.5Y 8/0) NANNOFOSSIL OOZE. Faint pale blue (5PB 7/2), pale purple (5P 6/2), and white (5YR 8/1) color bands are common throughout. Some color bands in Section 3 are heavily bioturbated.

SMEAR SLIDE SUMMARY (%):

	2, 92 D	5, 84 D
TEXTURE:		
Sand	2	5
Silt	95	90
Clay	3	5
COMPOSITION:		
Accessory minerals	Tr	Tr
Bioclast	—	1
Diatoms	1	Tr
Foraminifers	2	3
Nannofossils	94	93
Radiolarians	2	3
Silicoflagellates	Tr	Tr
Spicules	1	Tr



SITE 804 HOLE C CORE 11H CORED INTERVAL 91.8-101.3 mbsf



LITHOLOGIC DESCRIPTION

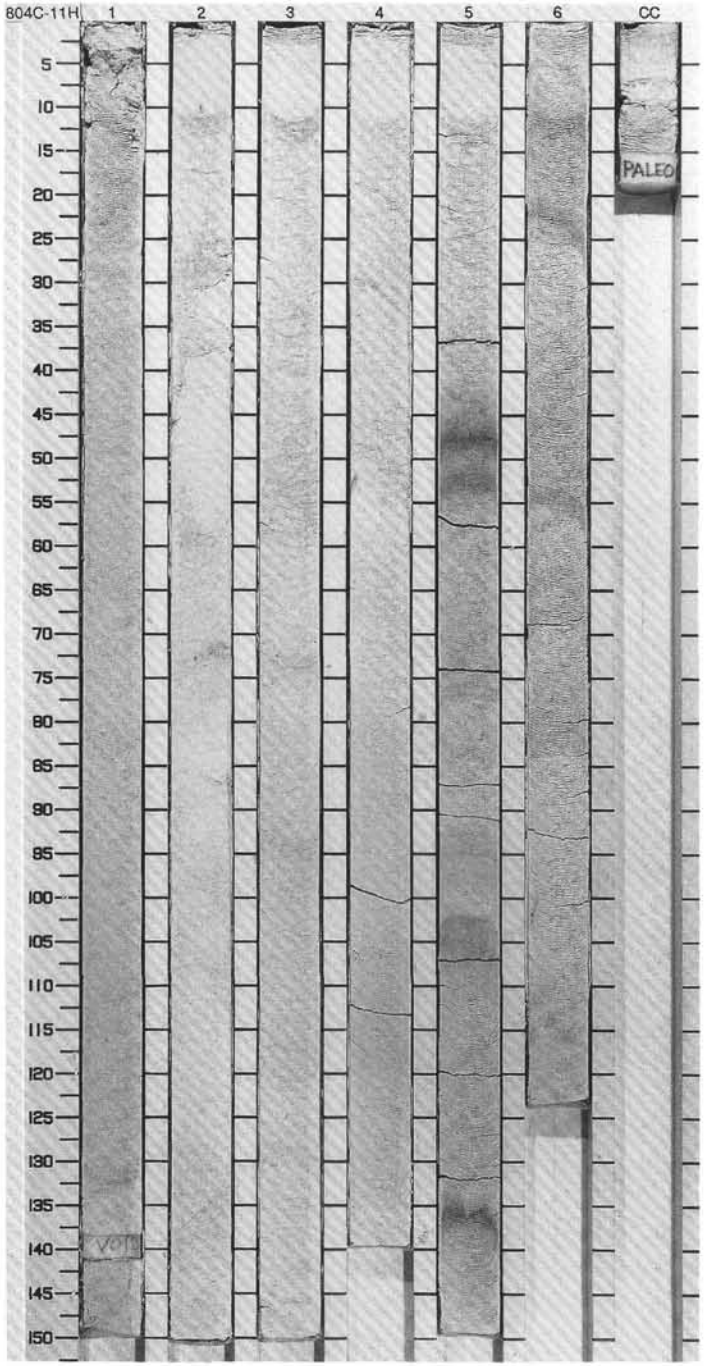
NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0), slightly to heavily bioturbated NANNOFOSSIL OOZE. The core is more homogeneous and has less color banding than overlying cores. Faint pale blue (5PB 7/2) and grayish blue (5PB 5/2) color bands are present in Sections 5 and 6.

Minor lithology: Section 2, 28-42 cm, contains NANNOFOSSIL FORAMINIFER OOZE. This interval has a sharp base and grades upward into the overlying lithology.

SMEAR SLIDE SUMMARY (%):

	2, 37	3, 70
	M	D
TEXTURE:		
Sand	50	5
Silt	45	90
Clay	5	5
COMPOSITION:		
Accessory minerals	Tr	Tr
Bioclast	10	1
Diatoms	Tr	Tr
Foraminifers	50	5
Nannofossils	40	89
Opaques	Tr	Tr
Radiolarians	Tr	5
Silicoflagellates	Tr	Tr
Spicules	Tr	Tr



SITE 804 HOLE C CORE 12H CORED INTERVAL 101.3-110.8 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 MIOCENE	C/P	N16	A/P	NN9	A/G	*Didymocyrtis antepenultima*	C/M	NTD 10 / NTD 9 (*Actinocyclus moronensis*)	V-1615 ϕ-61.8 ρ-1.65	V-1600 ϕ-61.4 ρ-1.66	V-1605 ϕ-58.8 ρ-1.70	V-1600 ϕ-57.7 ρ-1.72	V-1607 ϕ-60.2 ρ-1.68	V-1611 ϕ-60.9 ρ-1.68		1	0.5						
																1	1.0						
																2							
																3							
																4							
																5							
																6							
																7							
																CC							

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0), slightly to heavily bioturbated NANNOFOSSIL OOZE. Faint pale blue (5PB 7/2), pale purple (5RP 7/2), and grayish blue (5PB 5/2) color bands are present in Sections 3, 6 and 7. Microfaults are evident in Section 3, 6 and 7.

SMEAR SLIDE SUMMARY (%):

	2, 80
	D
TEXTURE:	
Sand	7
Silt	70
Clay	23
COMPOSITION:	
Foraminifers	5
Nannofossils	90
Radiolarians	5
Volcanic ash	Tr

SITE 804 HOLE C CORE 13H CORED INTERVAL 110.8-120.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
? UPPER MIOCENE	A/G	N16	NN9	*Diartus pettersoni*				1	0.5				
	A/P			NTD 9 (*Actinocyclus moronensis*)					1.0				
	C/P							2					*
								3					
								4					
								5					
								6					
								7					
								CC					

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0), slightly to heavily bioturbated NANNOFOSSIL OOZE. Faint reddish gray (5R 6/1), pale pink (5 RP 8/2), pale blue (5PB 7/2), pale purple (5RP 7/2), and grayish blue (5PB 5/2) color bands are present in Sections 1 through 3.

SMEAR SLIDE SUMMARY (%):

	2, 65 D
TEXTURE:	
Sand	5
Silt	87
Clay	8
COMPOSITION:	
Diatoms	1
Foraminifers	5
Nannofossils	92
Radiolarians	1
Silicoflagellates	1

SITE 804 HOLE C CORE 14X CORED INTERVAL 120.3-129.8 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 MIOCENE	A/C	N14			V-1588 ϕ=62.7 ρ=1.63	V-1603 ϕ=61.6 ρ=1.65 V-1552 ϕ=63.3 ρ=1.63 V-1581 ϕ=62.5 ρ=1.64		1	0.5				
	A/M	NN9							1.0				
	A/G	*Discoaster pentaradiatus*						2					
	C-A/G-M	NTD 9						3					*
								4					
								5					
								CC					

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0), slightly to heavily bioturbated NANNOFOSSIL OOZE with FORAMINIFERS. The core is homogeneous with faint pale blue (5PB 7/2) color bands present in Section 2 only.

SMEAR SLIDE SUMMARY (%):

	3, 100 D
TEXTURE:	
Sand	15
Silt	85
COMPOSITION:	
Foraminifers	10
Nannofossils	85
Radiolarians	5

SITE 804 HOLE C CORE 15X CORED INTERVAL 129.8-139.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
UPPER MIOCENE?	? F/P	NN9 A/M				V-1538 ρ=65.6 P=1.58; V-1607 ρ=60.6 P=1.96; ρ=65.8 P=1.58	%$CaCO_3$=94.5; %$CaCO_3$=88.2; %$CaCO_3$=89.8	1, 2, 3, 4, CC	0.5, 1.0				*

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS

Major lithology: This core contains white (2.5Y 8/0), slightly to heavily bioturbated NANNOFOSSIL OOZE with FORAMINIFERS. The core is relatively homogeneous with faint grayish blue (5PB 5/2) color band present only in Section 2.

SMEAR SLIDE SUMMARY (%):

	2, 80 D
TEXTURE:	
Sand	12
Silt	88
COMPOSITION:	
Foraminifers	10
Nannofossils	88
Radiolarians	1
Silicoflagellates	1

SITE 804 HOLE C CORE 16X CORED INTERVAL 139.3-148.8 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 MIOCENE?	A/P	NN9	*Diartus pettersoni*	C - A/M NTD 9		V-1542 ρ=67.1 P=1.57; V-1542 ρ=66.1 P=1.58	%$CaCO_3$=86.9; %$CaCO_3$=87.4	1, 2, CC	0.5, 1.0				*

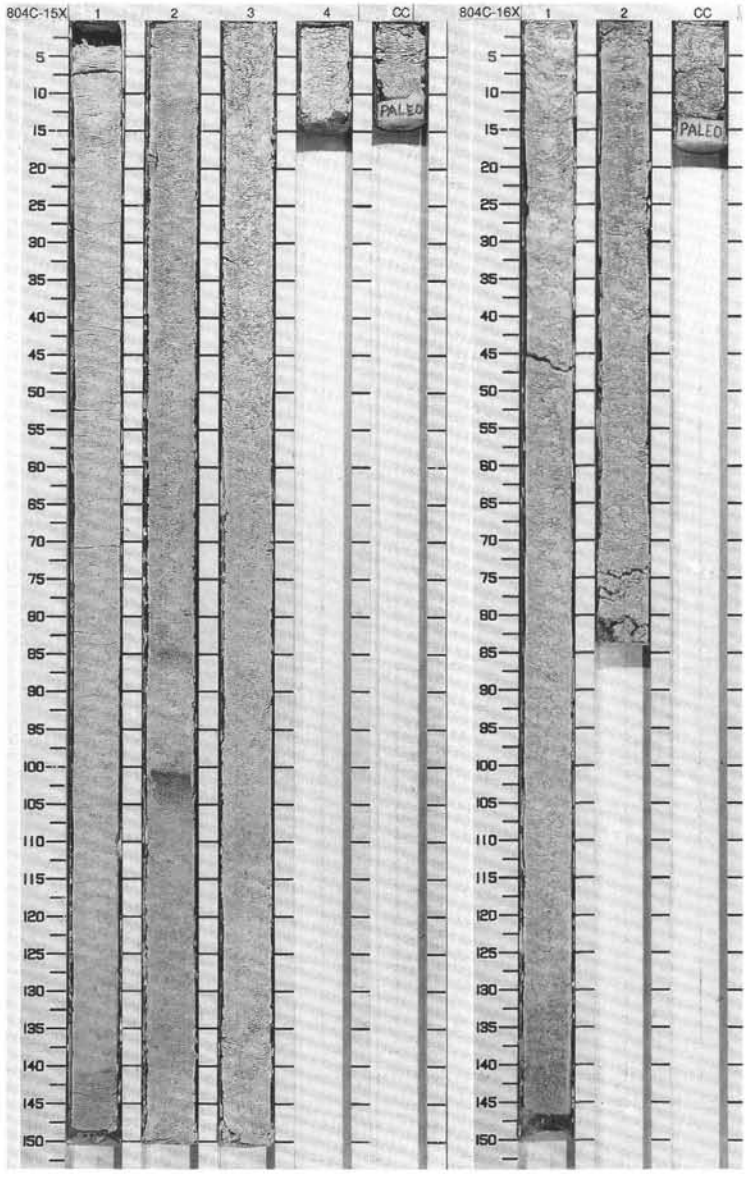
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE

Major lithology: This core contains white (2.5Y 8/0), homogeneous, moderately bioturbated NANNOFOSSIL OOZE.

SMEAR SLIDE SUMMARY (%):

	1, 70 D
TEXTURE:	
Sand	1
Silt	95
Clay	4
COMPOSITION:	
Foraminifers	2
Nannofossils	96
Radiolarians	2



SITE 804 HOLE C CORE 17X CORED INTERVAL 148.8-158.3 mbsf

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and FORAMINIFER NANNOFOSSIL OOZE

Major lithology: Section 1 through Section 4, 55 cm, contain moderately bioturbated NANNOFOSSIL OOZE with FORAMINIFERS. In Sections 1 through 3, the color of the sediment is white (2.5Y 8/0) grading down to light gray (N7/) and light greenish gray (5G 7/1). The lower part of the core contains FORAMINIFER NANNOFOSSIL OOZE. The color grades from light blue gray (5B 7/1) to white (2.5Y N8/0), with slight to moderate mottling. A cm scale burrow fill, with possible offset along a microfault, is seen in Section 6 between 100 and 125 cm.

SMEAR SLIDE SUMMARY (%):

	2, 55 D	5, 111 D
TEXTURE:		
Sand	15	25
Silt	85	75
COMPOSITION:		
Foraminifers	13	25
Nannofossils	85	74
Radiolarians	1	1
Silicoflagellates	1	—

SITE 804 HOLE C CORE 18X CORED INTERVAL 158.3-168.0 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	F/P N12	A/M NN6	A/G *Dorcadospyris alata*	A/G NTD 8 *Craspedodiscus coscinodiscus*		ρ=1.59 ρ=1.60 ρ=1.58 ρ=1.61 ρ=1.63 V=1528 V=1577	%$CaCO_3$=80.8 %$CaCO_3$=84.7 %$CaCO_3$=86.6 %$CaCO_3$=90.5 %$CaCO_3$=89.5 %$CaCO_3$=86.3	1 2 3 4 5 6 CC	0.5 1.0				OG TW

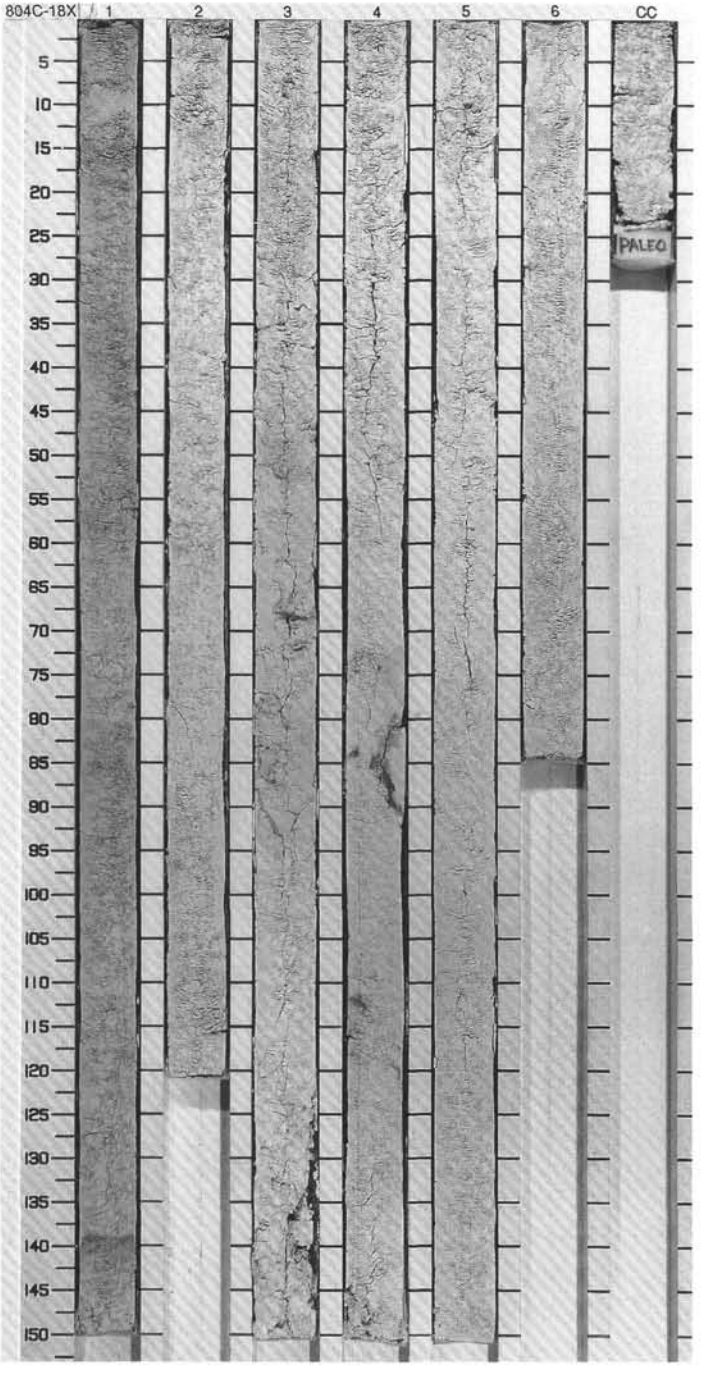
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with RADIOLARIANS

Major lithology: This core contains slightly bioturbated NANNOFOSSIL OOZE with RADIOLARIANS. Section 1 is light gray (2.5Y 7/0) with a gray (2.5Y 6/0) color band at 140 cm. The remainder of the core is white (2.5Y 8/0). The sediment appears more lithified and harder than in the overlying cores, with relatively hard pieces within a softer matrix. Section 4, 80-95 cm appears disturbed by coring processes.

SMEAR SLIDE SUMMARY (%):

	1, 80 D	4, 53 D
TEXTURE:		
Sand	10	10
Silt	90	90
COMPOSITION:		
Diatoms	1	1
Foraminifers	5	3
Nannofossils	82	80
Radiolarians	10	15
Siliceous sponge spicules	2	1



SITE 804 HOLE C CORE 19X CORED INTERVAL 168.0-177.7 mbsf

LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with FORAMINIFERS and NANNOFOSSIL OOZE with RADIOLARIANS

Major lithology: This core contains NANNOFOSSIL OOZE with FORAMINIFERS, grading to NANNOFOSSIL OOZE with RADIOLARIANS in Sections 5 through the Core Catcher. The core is predominantly white (2.5Y 8/0), with minor gradations to light blue gray (5B 7/1) and white (5YR 8/1). Light greenish gray (5GY 8/1), greenish gray (5GY 6/1), pale blue (5PB 7/2), and pale red purple (5RP 6/2) color bands are rare to common throughout the core. The entire core is moderately to heavily bioturbated.

Minor lithology: Two normally-graded layers of NANNOFOSSIL FORAMINIFER OOZE are present in this core; the first is at Section 1, 30-80 cm, and the second is at Section 3, 10-22 cm. Both are white (2.5Y 8/0), have sharp top and bottom contacts, and are probably turbidites.

SMEAR SLIDE SUMMARY (%):

	1, 61 M	1, 78 D	4, 32 D	5, 52 D
TEXTURE:				
Sand	80	10	10	15
Silt	20	90	90	85
COMPOSITION:				
Foraminifers	68	12	10	6
Nannofossils	30	85	86	74
Radiolarians	2	2	2	12
Siliceous sponge spicules	—	—	—	5
Silicoflagellates	—	1	1	2

SITE 804 HOLE C CORE 20X CORED INTERVAL 177.7-187.4 mbsf

TIME-ROCK UNIT: MIDDLE MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS ?; NANNOFOSSILS NN5; RADIOLARIANS *Calocycletta costata*; DIATOMS NTD 5 *Cestodiscus peplum*

PALEOMAGNETICS

PHYS. PROPERTIES

CHEMISTRY

SECTION

METERS

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

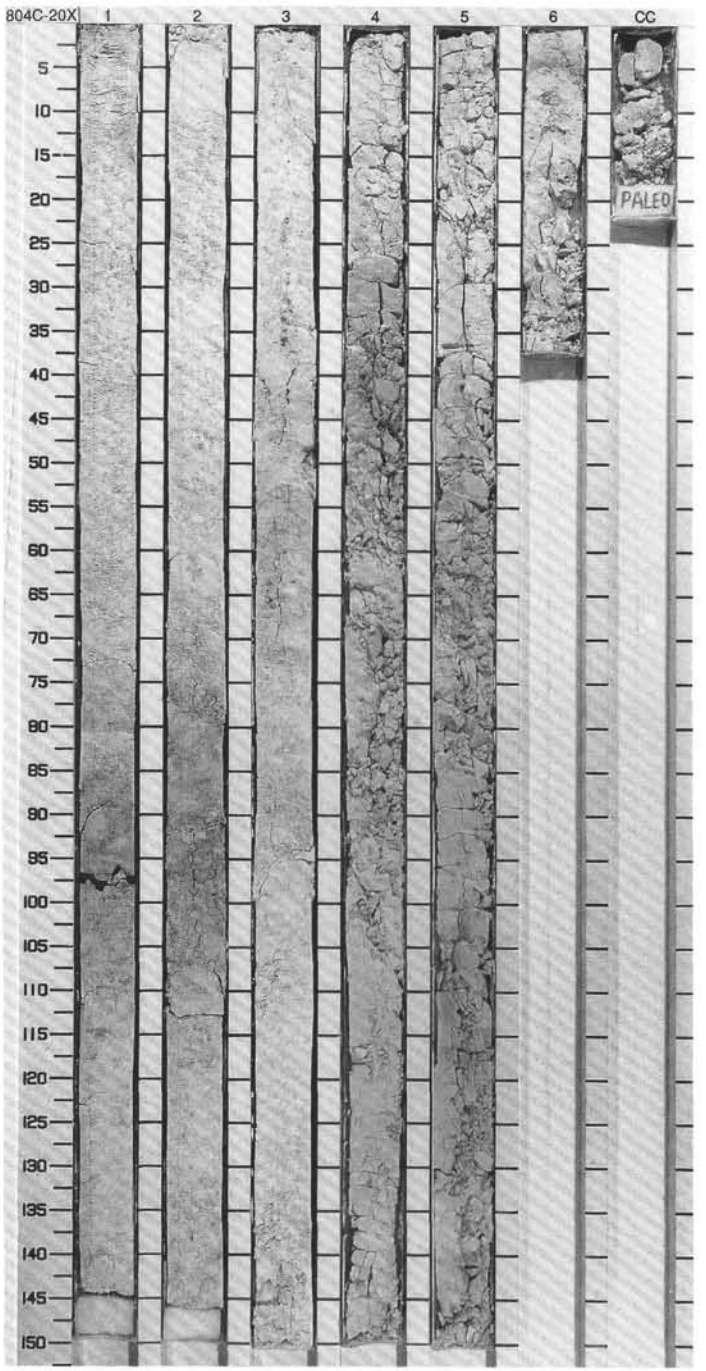
LITHOLOGIC DESCRIPTION

NANNOFOSSIL OOZE with RADIOLARIANS grading to NANNOFOSSIL CHALK

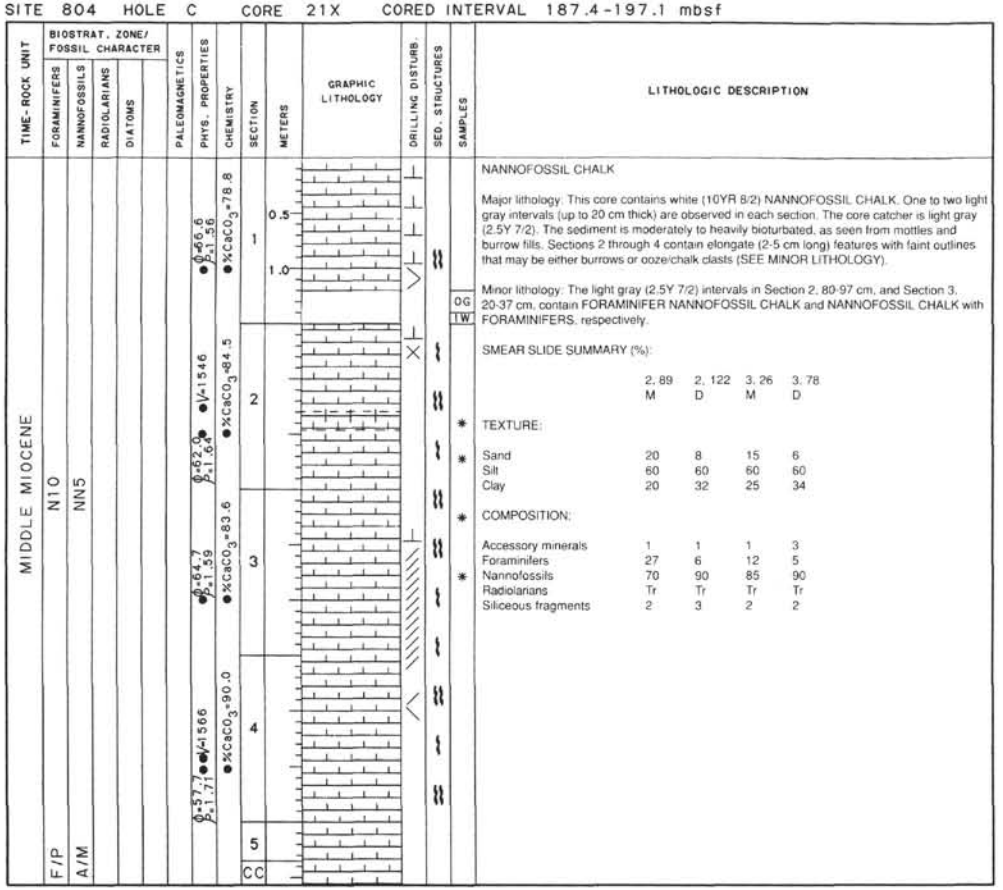
Major lithology: This core contains bioturbated NANNOFOSSIL OOZE with RADIOLARIANS grading to NANNOFOSSIL CHALK in Section 3, 35 cm. The color of the sediment grades from white (2.5Y 8/0) to white (5Y 8/1 and 5Y 8/2). Light gray (N7/ and 5Y 7/1) and light greenish gray (5GY 7/1), 2 to 20 cm thick, heavily burrowed zones are present at 150 cm intervals.

SMEAR SLIDE SUMMARY (%):

	3, 78 D	5, 94 D
TEXTURE:		
Sand	15	10
Silt	85	90
COMPOSITION:		
Foraminifers	3	5
Nannofossils	87	90
Radiolarians	10	5



SITE 804 HOLE C CORE 21X CORED INTERVAL 187.4-197.1 mbsf



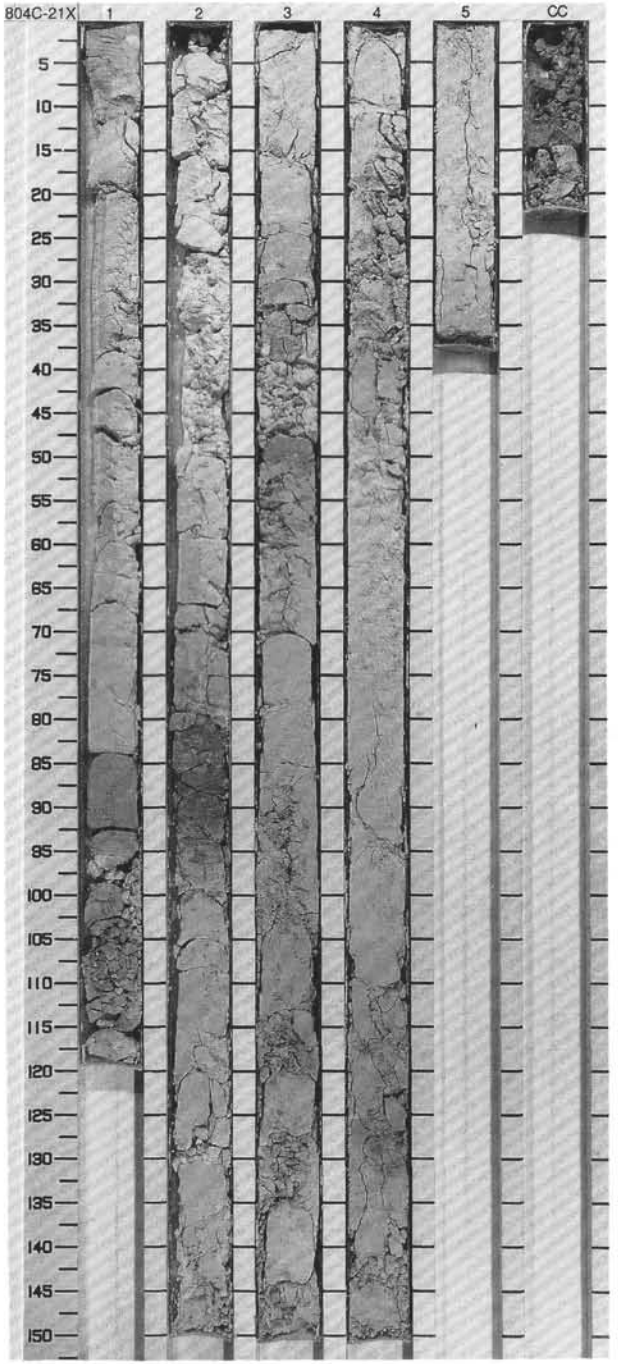
NANNOFOSSIL CHALK

Major lithology: This core contains white (10YR 8/2) NANNOFOSSIL CHALK. One to two light gray intervals (up to 20 cm thick) are observed in each section. The core catcher is light gray (2.5Y 7/2). The sediment is moderately to heavily bioturbated, as seen from mottles and burrow fills. Sections 2 through 4 contain elongate (2-5 cm long) features with faint outlines that may be either burrows or ooze/chalk clasts (SEE MINOR LITHOLOGY).

Minor lithology: The light gray (2.5Y 7/2) intervals in Section 2, 80-97 cm, and Section 3, 20-37 cm, contain FORAMINIFER NANNOFOSSIL CHALK and NANNOFOSSIL CHALK with FORAMINIFERS, respectively.

SMEAR SLIDE SUMMARY (%):

	2, 89 M	2, 122 D	3, 26 M	3, 78 D
TEXTURE:				
Sand	20	8	15	6
Silt	60	60	60	60
Clay	20	32	25	34
COMPOSITION:				
Accessory minerals	1	1	1	3
Foraminifers	27	6	12	5
Nannofossils	70	90	85	90
Radiolarians	Tr	Tr	Tr	Tr
Siliceous fragments	2	3	2	2



SITE 804 HOLE C CORE 22X CORED INTERVAL 197.1-206.8 mbsf

TIME-ROCK UNIT: LOWER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: ?, R/P
- NANNOFOSSILS: NN2, A/P
- RADIOLARIANS: *Calocycletta costata*, A/M
- DIATOMS: NTD 5a (*Cestodiscus peplum*), F-C/M-P

PALEOMAGNETICS
PHYS. PROPERTIES: V=1523 ρ=67.6 P=1.52; V=1558; V=1526 ρ=61.7 P=1.68; V=1530 ρ=62.4 P=1.62
CHEMISTRY: %$CaCO_3$=65.0; %$CaCO_3$=76.6; %$CaCO_3$=83.4; %$CaCO_3$=71.0
SECTION: 1, 2, 3, 4, 5, 6, CC
METERS: 0.5, 1.0
GRAPHIC LITHOLOGY
DRILLING DISTURB.
SED. STRUCTURES
SAMPLES: MAR

LITHOLOGIC DESCRIPTION

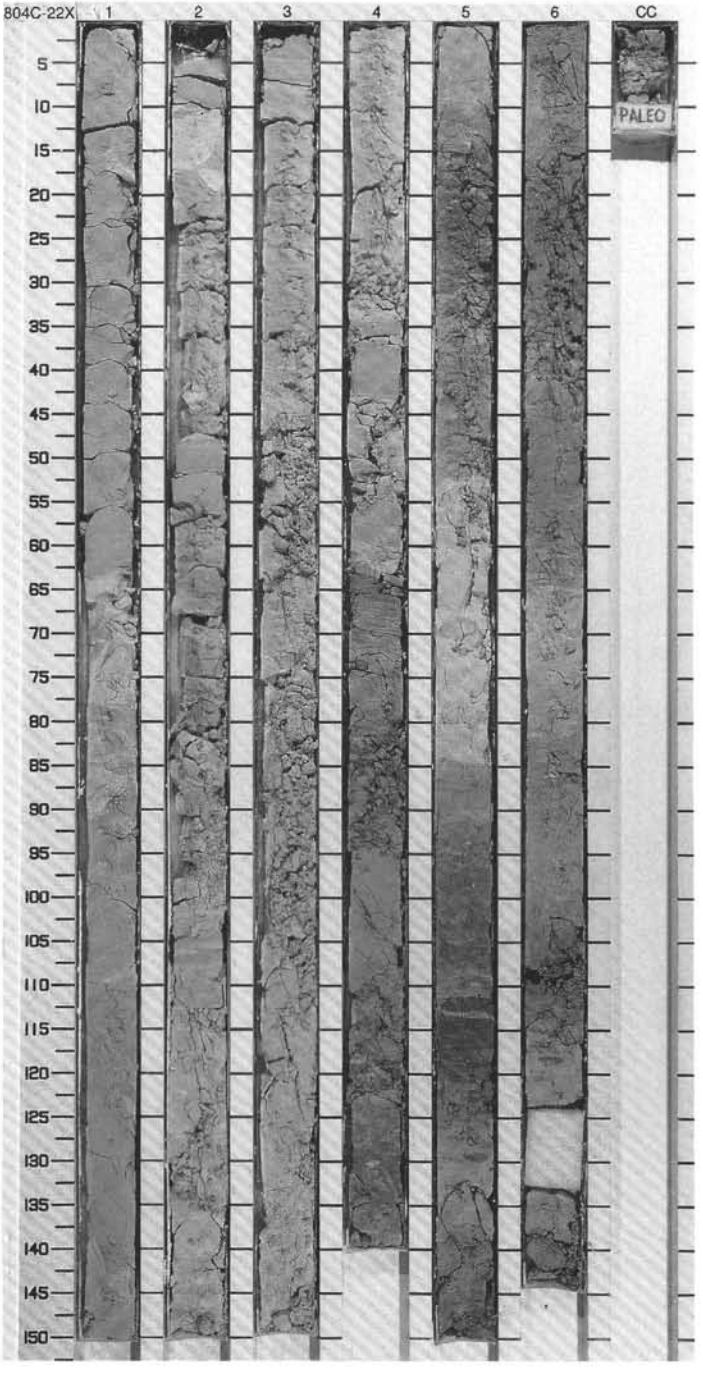
RADIOLARIAN NANNOFOSSIL CHALK

Major lithology: This core contains RADIOLARIAN NANNOFOSSIL CHALK. The sediment color varies between very pale brown (10YR 8/4) and white (10YR 8/2). Intense bioturbation is indicated by abundant burrows, trace fossils, and mottling. Most of the bioturbation is highly contorted, swirled, or fractured. Thin color banding or lamination in Section 4, 63-72 cm, appears to be stretched. Thin banding elsewhere exhibits micro-faulting, rotation, and irregular contacts. Angular, very pale brown (10YR 7/3) clasts are distributed irregularly through the core.

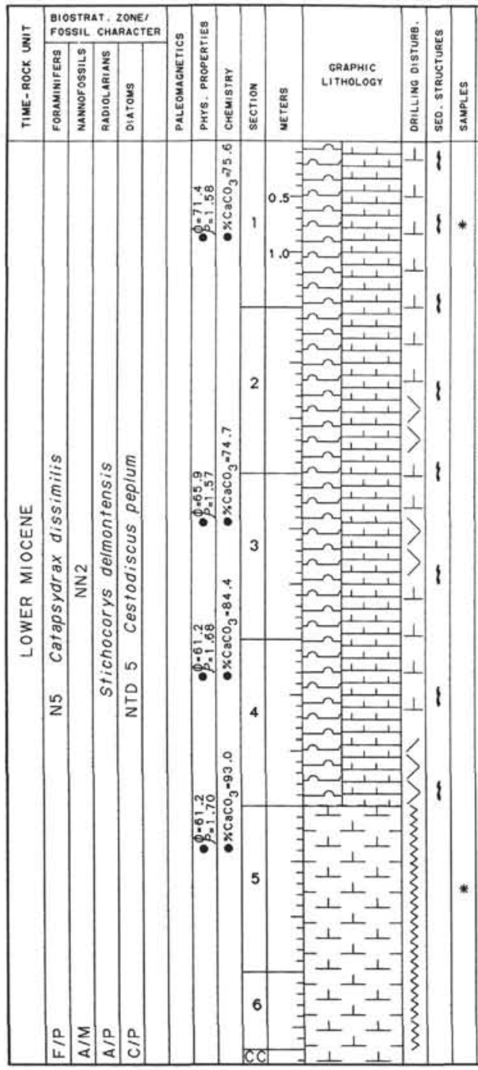
Minor lithology: A biscuit in Section 5, 115 cm, consists of NANNOFOSSIL RADIOLARITE.

SMEAR SLIDE SUMMARY (%):

	1, 92 D	5, 112 M	6, 57 D
TEXTURE:			
Sand	15	15	15
Silt	60	60	60
Clay	25	25	25
COMPOSITION:			
Nannofossils	60	30	55
Radiolarians	40	70	45
Siliceous sponge spicules	Tr	Tr	Tr



SITE 804 HOLE C CORE 23X CORED INTERVAL 206.8-216.5 mbsf



LITHOLOGIC DESCRIPTION

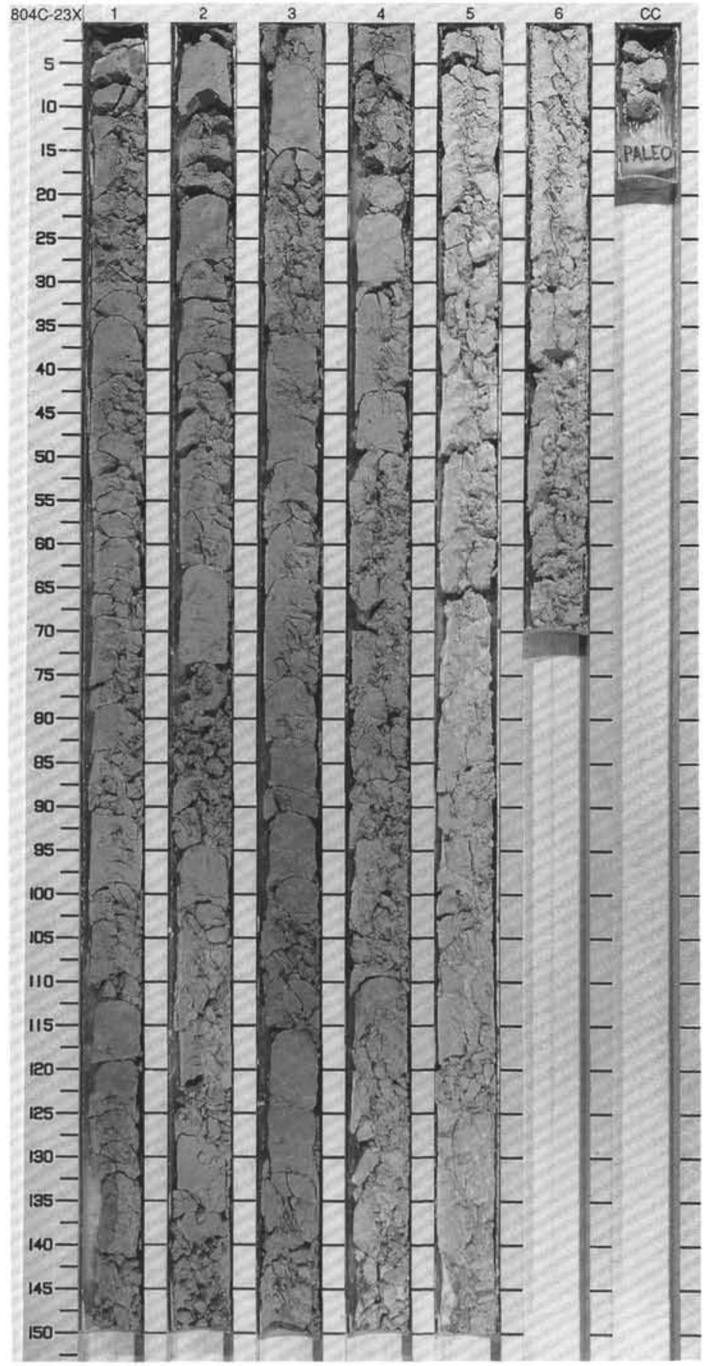
RADIOLARIAN NANNOFOSSIL CHALK

Major lithology: Sections 1 through 4 of this core contain pale brown (10YR 7/4) RADIOLARIAN NANNOFOSSIL CHALK. Moderate to heavy bioturbation is evident from well-preserved trace fossils. The sediment is otherwise structureless, although drilling disturbance is heavy. Section 4 grades from very pale brown (10YR 8/3) to white (10YR 8/1). This color gradation marks a transition from radiolarian nannofossil chalk to nannofossil ooze.

Minor lithology: White (10YR 8/1), homogeneous NANNOFOSSIL OOZE is present in Sections 5 and 6 of this core. It is very stiff, structureless, and heavily disturbed by drilling.

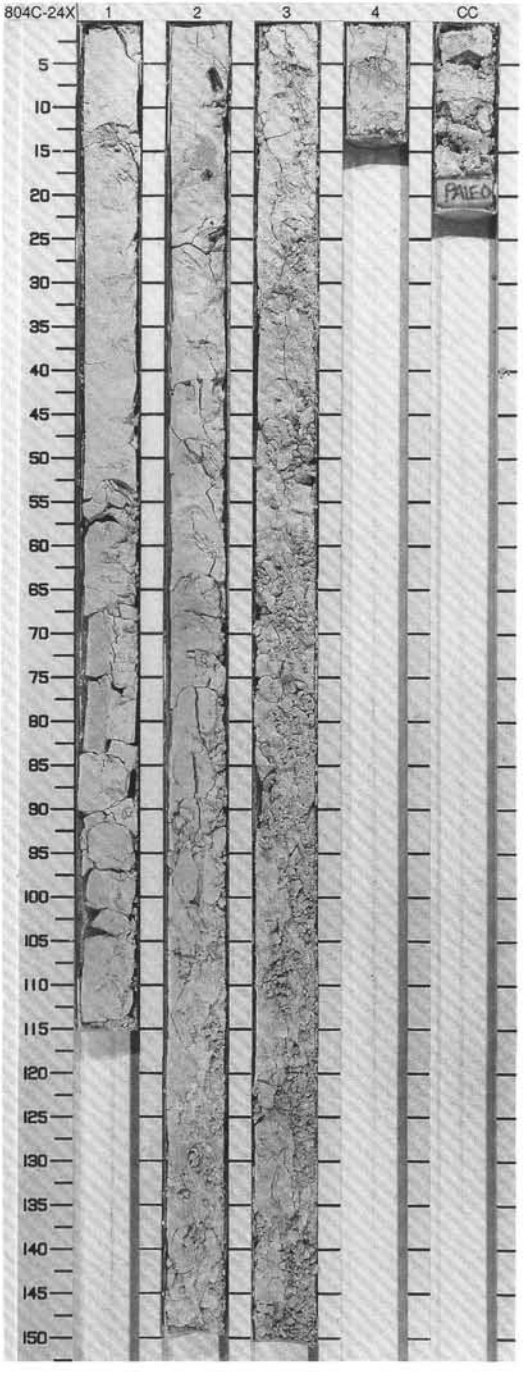
SMEAR SLIDE SUMMARY (%):

	1, 75 D	5, 74 M
TEXTURE:		
Sand	10	5
Silt	55	60
Clay	35	35
COMPOSITION:		
Foraminifers	—	1
Nannofossils	60	89
Radiolarians	40	9
Siliceous fragments	—	1
Siliceous sponge spicules	Tr	—



SITE 804 HOLE C CORE 24X CORED INTERVAL 216.5-226.2 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 MIOCENE	F/P N5 *Catapsydrax dissimilis*	NN2	*Stichocorys delmontensis*	A/P NTD 2 *Craspedodiscus elegans* C/M		● Φ=56.8 ρ_a=1.76 ● Φ=60.3 ρ_a=1.68	● %$CaCO_3$=93.5 ● %$CaCO_3$=92.0	1 2 3 4 CC	0.5 1.0				OG IW * *	NANNOFOSSIL OOZE Major lithology: This core contains white (2.5Y 8/2), homogeneous, bioturbated NANNOFOSSIL OOZE. The top of Section 2 contains a few pyritized burrow fragments up to 20 mm long. Adjacent to one pyrite fragment is a pod of white (2.5Y 8/0) NANNOFOSSIL OOZE with RADIOLARIANS. SMEAR SLIDE SUMMARY (%): 2, 16 M — 2, 75 D TEXTURE: Sand 5 — Silt 60 40 Clay 35 60 COMPOSITION: Foraminifers 1 — Nannofossils 78 99 Radiolarians 20 Tr Siliceous fragments 1 1



SITE 804 HOLE C CORE 25X CORED INTERVAL 226.2-235.8 mbsf

TIME-ROCK UNIT: LOWER MIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS ?; NANNOFOSSILS NN2; RADIOLARIANS F/P; DIATOMS A/P

PALEOMAGNETICS

PHYS. PROPERTIES: V-1556 Φ=55.6 ρ=1.83; V-1596 Φ=59.1 ρ=1.71; V-1608 Φ=53.2 ρ=1.81; V-1598 Φ=59.9 ρ=1.67; V-1621 Φ=57.2 ρ=1.67

CHEMISTRY: %$CaCO_3$=87.9; %$CaCO_3$=81.6; %$CaCO_3$=90.0; %$CaCO_3$=82.0; %$CaCO_3$=82.8

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

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

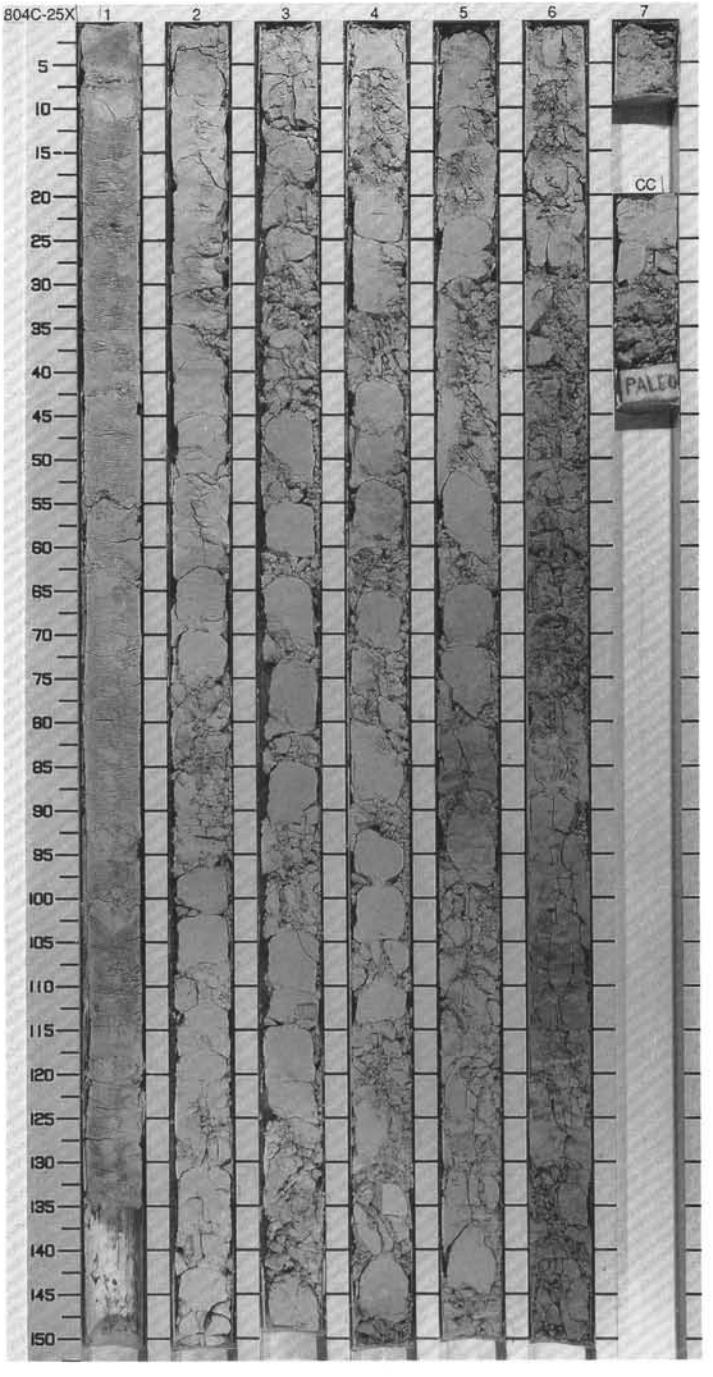
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains NANNOFOSSIL CHALK that grades to ooze in a few intervals. In Section 1, the chalk contains a significant percentage of RADIOLARIANS. The chalk is predominantly white (10YR 8/2) with intervals of light gray (10YR 7/2) that are 10 to 30 cm thick. The white colored intervals are slightly bioturbated and the light gray intervals are heavily bioturbated. Color bands (mm-scale) in the gray intervals of Section 2 are contorted.

SMEAR SLIDE SUMMARY (%):

	1, 149 M	3, 75 D	6, 75 D
TEXTURE:			
Sand	10	5	5
Silt	60	40	35
Clay	30	55	60
COMPOSITION:			
Accessory minerals	—	—	Tr
Clay	—	—	8
Nannofossils	87	99	90
Radiolarians	12	1	2
Siliceous fragments	1	Tr	Tr
Siliceous sponge spicules	—	Tr	—



SITE 804 HOLE C CORE 26X CORED INTERVAL 235.8-245.9 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 MIOCENE	F/M N4 *Globorotalia kugleri*	A/P NN2	A/P *Cyrtocapsella tetrapera*	C-A, P-M NTD 1 *Rosiella paleacea*	V-1569 ●0-60.1 ρ=1.87	V-1549 ●0-57.8 ρ=1.72 %CaCO3 88.1	●%CaCO3=82.8	5					
						V-1550 ●0-55.2 ρ=1.77	●%CaCO3=89.6	3					
						V-1592 ●0-69.1 ρ=1.58	●%CaCO3=83.1	2					
						V-1608 ●0-62.3 ρ=1.68	●%CaCO3=78.1	1	0.5 / 1.0				*

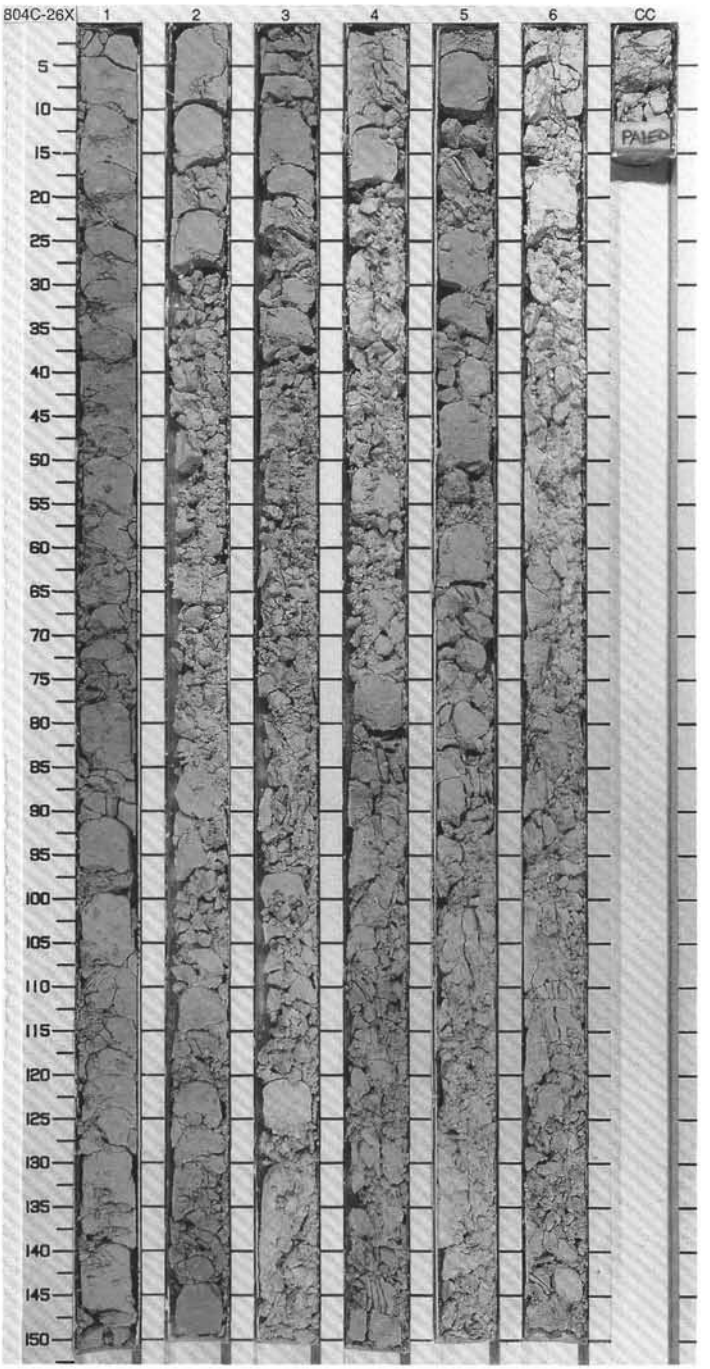
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: This core contains white (10YR 8/1 and 10YR 8/2) NANNOFOSSIL CHALK with RADIOLARIANS. Heavy bioturbation is indicated by abundant trace fossils. Drilling disturbance is severe, resulting in abundant fragmentation and brecciation of the core.

SMEAR SLIDE SUMMARY (%):

	1, 93 D	4, 74 D
TEXTURE:		
Sand	15	10
Silt	55	70
Clay	30	20
COMPOSITION:		
Accessory minerals	Tr	Tr
Clay	Tr	Tr
Foraminifers	—	4
Nannofossils	75	71
Radiolarians	20	20
Siliceous fragments	5	5



SITE 804 HOLE C CORE 27X CORED INTERVAL 245.9-255.1 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	?	NN1?	*Lychnocanoma elongata*	NTD 1		V-1568 Φ=55.6 ρ=1.74	%$CaCO_3$ =80.2	1	0.5				IW
									1.0				
								2					
						V-1542 Φ=52.1 ρ=1.80	%$CaCO_3$=89.8	3					*
								4					
								5					
						V-1571 Φ=56.4 ρ=1.72	%$CaCO_3$=81.0	6					
	R	A/P	A/M	R-F/P				CC					

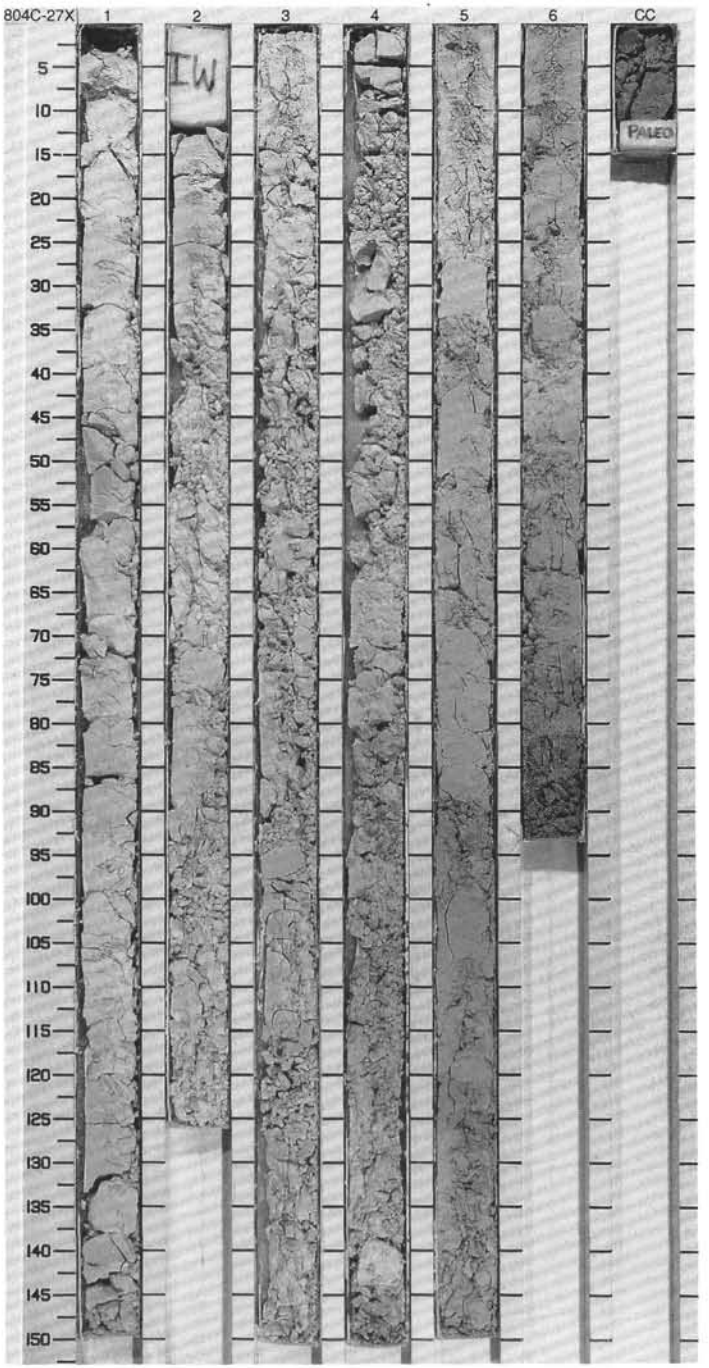
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: This core consists of white (10YR 8/1) NANNOFOSSIL CHALK with RADIOLARIANS. The color grades from very pale brown (10YR 7/3) in Section 3 to a darker shade of very pale brown (10YR 7/4) in Section 4. Sections 2, 3, 4, 6 and CC are brecciated or highly fragmented into biscuits.

SMEAR SLIDE SUMMARY (%):

	3, 96 D
TEXTURE:	
Sand	7
Silt	60
Clay	33
COMPOSITION:	
Accessory minerals	2
Clay	Tr
Foraminifers	2
Nannofossils	80
Radiolarians	11
Siliceous fragments	5



SITE 804 HOLE C CORE 28X CORED INTERVAL 255.1-264.7 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 OLIGOCENE	P22 - P21b	NN1?	*Lychnocanoma elongata*	*Borgovia veniamini*	●I/A 1604 I/A 1662	●I/A 1576 ●I/A 1532	●%$CaCO_3$=89.5 ●%$CaCO_3$=81.4 ●%$CaCO_3$=86.3 ●%$CaCO_3$=65.6	1 2 3 4 5 6 CC	0.5 1.0				*

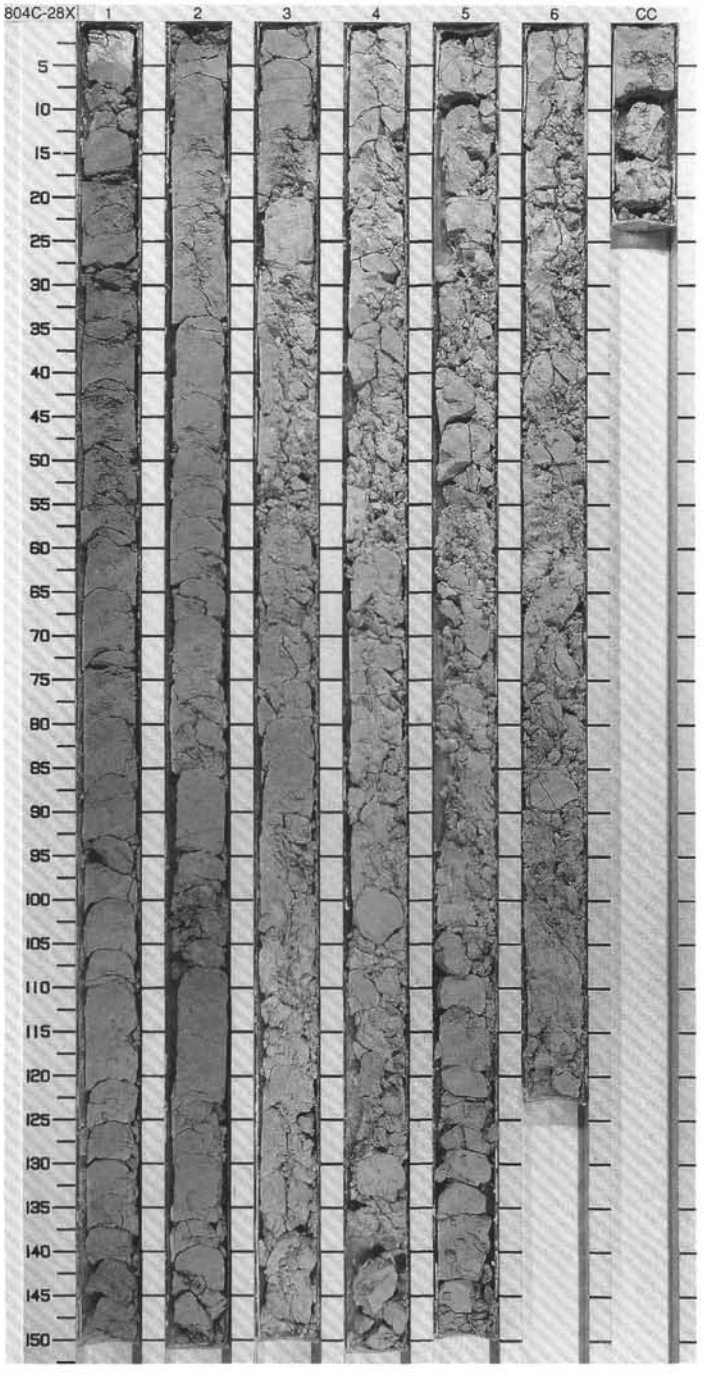
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK and NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: Sections 1 through 3 are very pale brown (10YR 7/4 to 10YR 8/3) NANNOFOSSIL CHALK with RADIOLARIANS. These sections are heavily bioturbated as evidenced from abundant trace fossils. Below Section 3, the color grades from very pale brown (10YR 8/3) to white (10YR 8/2 and 10YR 8/1). The radiolarian content is reduced in the lower part of the core, where it becomes a NANNOFOSSIL CHALK. Bioturbation is abundant in this interval. Drilling disturbance is moderate to severe throughout the core.

SMEAR SLIDE SUMMARY (%):

	1, 75 D	4, 63 D
TEXTURE:		
Sand	5	5
Silt	50	55
Clay	45	40
COMPOSITION:		
Clay	5	—
Foraminifers	Tr	3
Nannofossils	85	92
Radiolarians	10	5



SITE 804 HOLE C CORE 29X CORED INTERVAL 264.7-274.4 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
OLIGOCENE	F/M P21a *Globorotalia opima*	NP24 - NP25	A/P *Dorcadospyris ateuchus - Lychnocanoma elongata*	A/P	V-1556	●D-57.9 ●P-1.71 ●%$CaCO_3$ =78.8	●D-60.8 V-1523 ●P-1.63 ●%$CaCO_3$ =66.9	1 2 3 4 5 6 CC	0.5 1.0				*

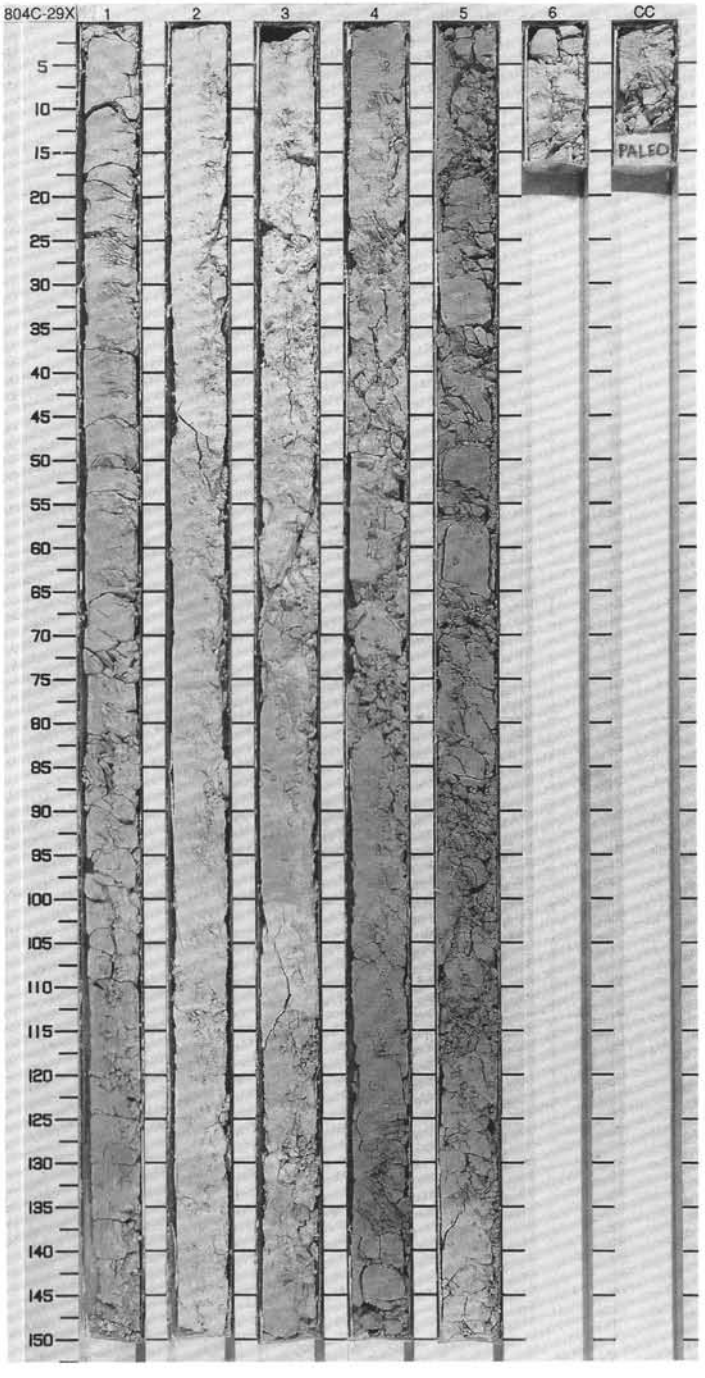
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: This core contains slightly to heavily bioturbated NANNOFOSSIL CHALK with RADIOLARIANS. The color grades from white (2.5Y 8/0) in the upper three sections to alternating intervals of white (2.5Y 8/0) and very pale brown (10YR 8/3) in Sections 4 through 6. Drilling disturbance is moderate to severe throughout the core.

SMEAR SLIDE SUMMARY (%):

	4, 82 D
TEXTURE:	
Sand	10
Silt	85
Clay	5
COMPOSITION:	
Foraminifers	15
Nannofossils	85
Radiolarians	Tr



SITE 804 HOLE C CORE 30X CORED INTERVAL 274.4-284.0 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	C/M P21a *Globorotalia opima*	NP23 - NP24	A/M	C/P *Lychnocanoma elongata*				1	0.5				
				R/P *Rocella vigilans, A?*					1.0				
								2					
								3					
								4					
								5					
								6					CC
								CC					

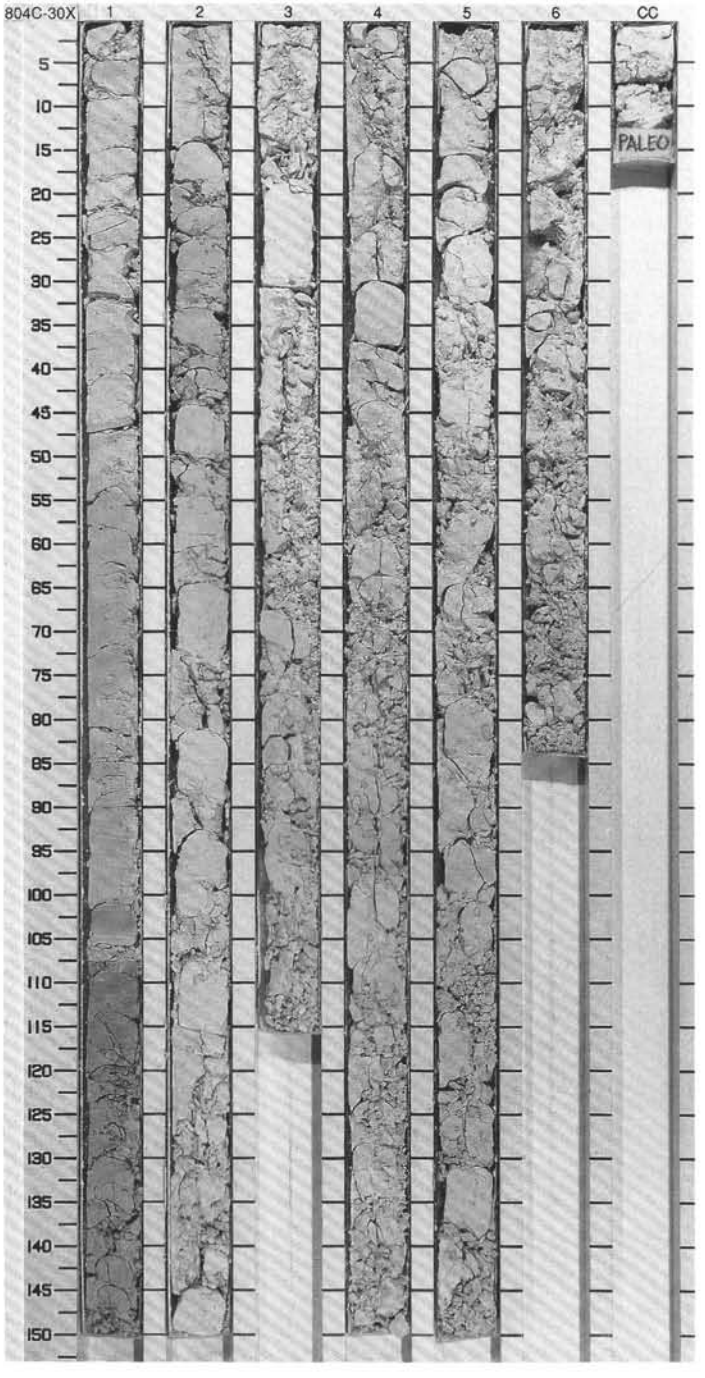
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains NANNOFOSSIL CHALK. The color varies between shades of white (10YR 8/2, 10YR 8/1) in Section 1 and 2, and is more uniformly white (10YR 8/1) in the remainder of the core. Hard intervals are intermixed with softer ones in Section 1. In Section 1, 100 cm, there is a 5 cm thick section that exhibits discontinuous parallel lamination. The entire core is slightly to heavily bioturbated and is moderately fractured by drilling.

SMEAR SLIDE SUMMARY (%):

	1, 117 D	2, 67 D
TEXTURE:		
Sand	5	5
Silt	95	95
COMPOSITION:		
Foraminifers	2	2
Nannofossils	91	90
Radiolarians	2	3
Silicoflagellates	5	5



SITE 804 HOLE C CORE 31X CORED INTERVAL 284.0-293.7 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
LOWER OLIGOCENE	F/M P21a *Globorotalia opima*	A/P NP23?	A/P *Dorcadospyris ateuchus*			ϕ=51.3 ρ=1.81 V=17450 ϕ=42.6 ρ=1.97 ϕ=53.9 ρ=1.79	%$CaCO_3$=92.5 %$CaCO_3$=92.3 %$CaCO_3$=91.2	1 2 3 4 5 6 CC	0.5 1.0				*

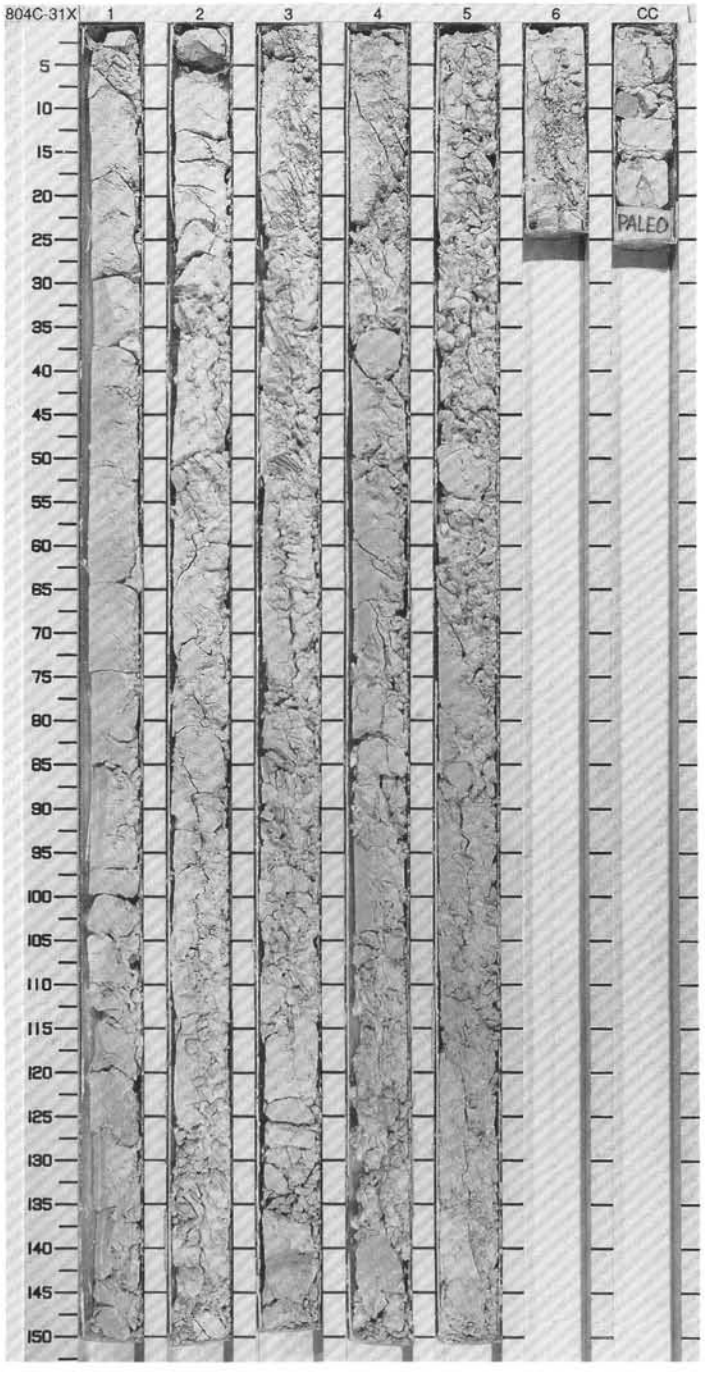
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK

Major lithology: This core contains NANNOFOSSIL CHALK. The core is white (10YR 8/1), grading to white (10YR 8/2) at the base of Section 3. Bioturbation varies from minor to heavy throughout the core.

SMEAR SLIDE SUMMARY (%):

	2, 83 D
TEXTURE:	
Sand	4
Silt	96
COMPOSITION:	
Foraminifers	1
Nannofossils	98
Radiolarians	1



SITE 804 HOLE C CORE 32X CORED INTERVAL 293.7-303.3 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
LOWER OLIGOCENE	C/G P21a *Globorotalia opima*	A/P NP23 - NP24	A/P *Dorcadospyris ateuchus*	A/G basal *Rocella vigilans*	V=1832	V=1632 ● D=51.7 ● D=1.83 ● %$CaCO_3$ =94.2	● D=55.4 V=1658 ● D=1.76 ● %$CaCO_3$=93.6	● D=55.3 V=1698 ● D=1.78 ● %$CaCO_3$=93.2	V=1621 ● D=53.2 ● D=1.80 ● %$CaCO_3$=93.3	1 2 3 4 5 CC 0.5 1.0		* *	

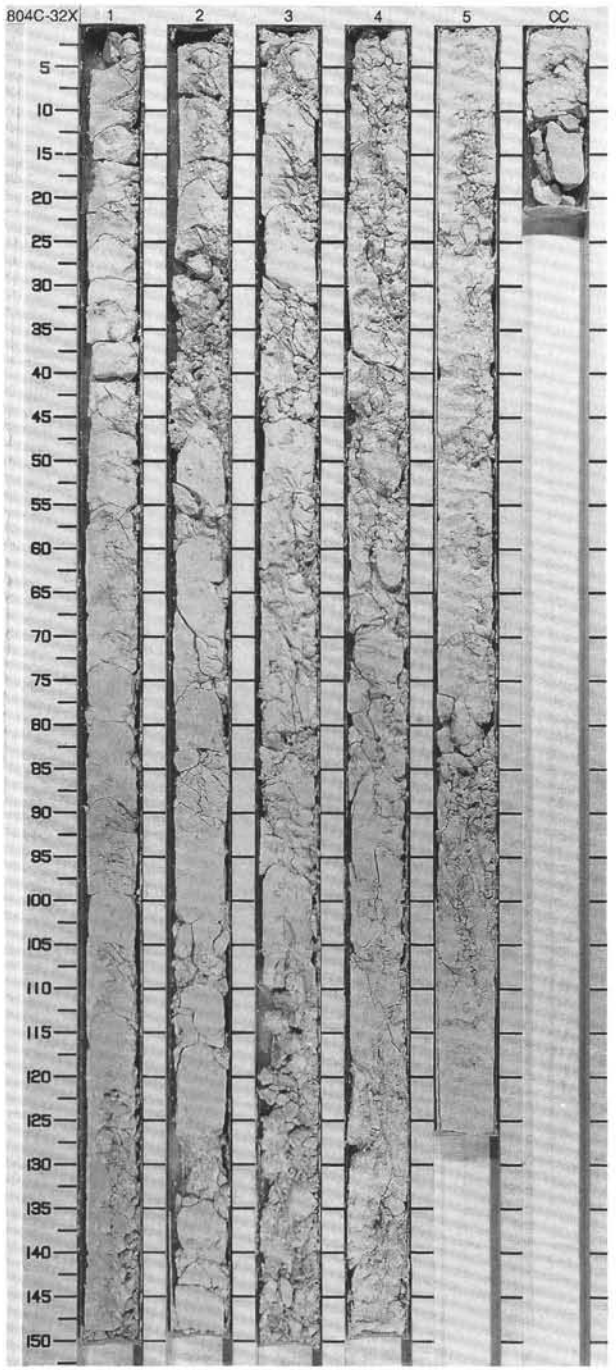
LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK to NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: This core contains NANNOFOSSIL CHALK, grading to NANNOFOSSIL CHALK with RADIOLARIANS. The core is white (10YR 8/1 to 10YR 8/2) in both sediment types. Bioturbation is slight to heavy throughout the core, including well-developed *Zoophycos* trace fossils in Section 1.

SMEAR SLIDE SUMMARY (%):

	1, 70 D	2, 49 D
TEXTURE:		
Sand	8	5
Silt	90	95
Clay	2	---
COMPOSITION:		
Diatoms	1	---
Foraminifers	1	1
Nannofossils	81	94
Quartz	1	---
Radiolarians	10	3
Siliceous sponge spicules	5	2



SITE 804 HOLE C CORE 33X CORED INTERVAL 303.3-312.5 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	?	NP23	*Theocotyle tuberosa*	*Cestodiscus reticulatus* - *Coscinodiscus excavatus*		▽-1580 ●0-59.8 □-1.66 ▽-1519 ●0-59.1 □-1.70 ▽-1519 ●0-59.1 □-1.70 ▽-1519 ●0-57.4 □-1.71 ▽-1542 ●0-58.6 □-1.69 ▽-1583 ●0-58.7 □-1.68	●%$CaCO_3$ =79.8 ●%$CaCO_3$=87.1 ●%$CaCO_3$=84.4 ●%$CaCO_3$=86.2 ●%$CaCO_3$=82.9	1 2 3 4 5 6 CC	0.5 1.0	VOID			OG IW	* *

LITHOLOGIC DESCRIPTION

NANNOFOSSIL CHALK to NANNOFOSSIL CHALK with RADIOLARIANS

Major lithology: This core contains NANNOFOSSIL CHALK, grading to NANNOFOSSIL CHALK with RADIOLARIANS. The core is white (10YR 8/1 to 10YR 8/2) in both sediment types. Bioturbation is slight to heavy throughout the core, including well-developed *Zoophycos* trace fossils in Section 1.

SMEAR SLIDE SUMMARY (%):

	1, 70 D	2, 49 D
TEXTURE:		
Sand	8	5
Silt	90	95
Clay	2	–
COMPOSITION:		
Diatoms	1	–
Foraminifers	1	1
Nannofossils	81	94
Quartz	1	–
Radiolarians	10	3
Siliceous sponge spicules	5	2