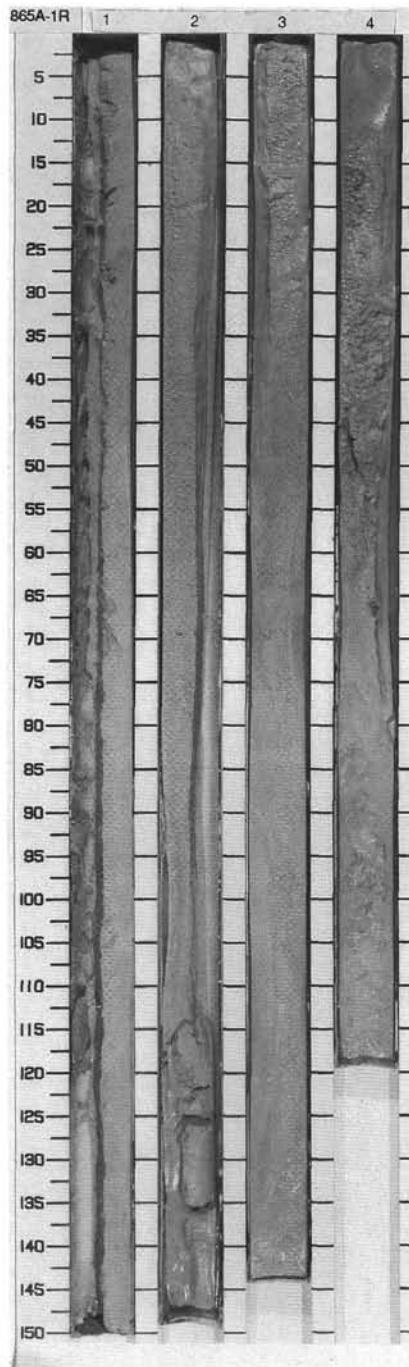


SITE 865 HOLE A CORE 1B

CORED 0.0 - 5.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
0	-	1			○	P		FORAMINIFER OOZE and FORAMINIFER NANNOFOSSIL OOZE
1	-	2			○	S P		Major Lithologies: Sections 1 and 2 are FORAMINIFER OOZE, very sandy, tan (10YR 7/3), soupy fabric. Sections 3 and 4 are FORAMINIFER NANNOFOSSIL OOZE, tan (10YR 7/3), soupy fabric. Small black specks suspected to be manganese micronodules occur throughout Sections 3 and 4.
2	-	3	Quaternary		○	S P	10YR 7/3	
3	-	4			○	I		
4	-				○	P		
5	-				○			

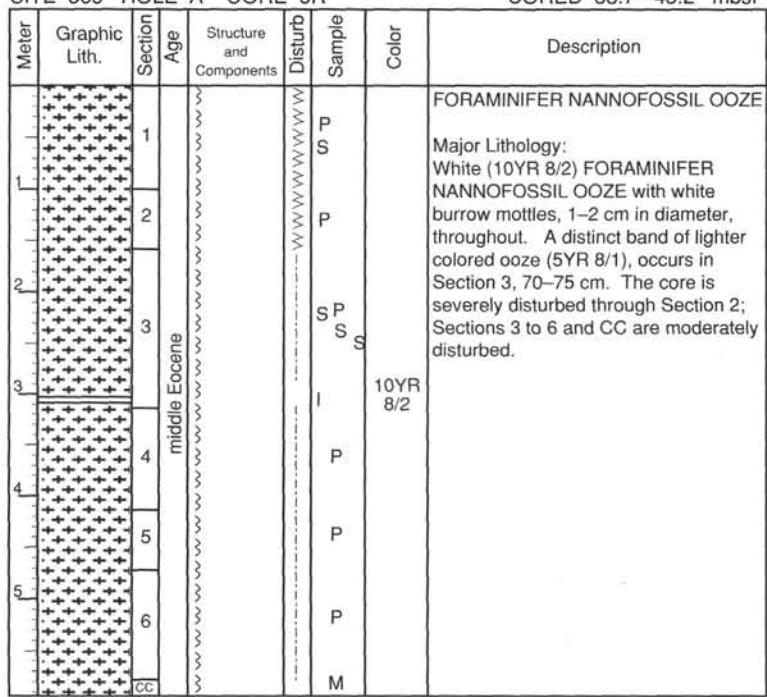
Information on Core Description Forms, for ALL sites, represents field notes taken aboard ship. Some of this information has been refined in accord with post-cruise findings, but production schedules prohibit definitive correlation of these forms with subsequent findings. Thus, the reader should be alerted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



SITE 865 HOLE A CORE 2R

CORED 5.7 - 14.7 mbsf

SITE 865 HOLE A CORE 5R



CORED 33.7 - 43.2 mbsf

Description

Major Lithology:
White (10YR 8/2) FORAMINIFER NANNOFOSSIL OOZE with white burrow mottles, 1-2 cm in diameter, throughout. A distinct band of lighter colored ooze (5YR 8/1), occurs in Section 3, 70-75 cm. The core is severely disturbed through Section 2; Sections 3 to 6 and CC are moderately disturbed.

1

65A-5R | 1 2 3 4 5 6 | CC

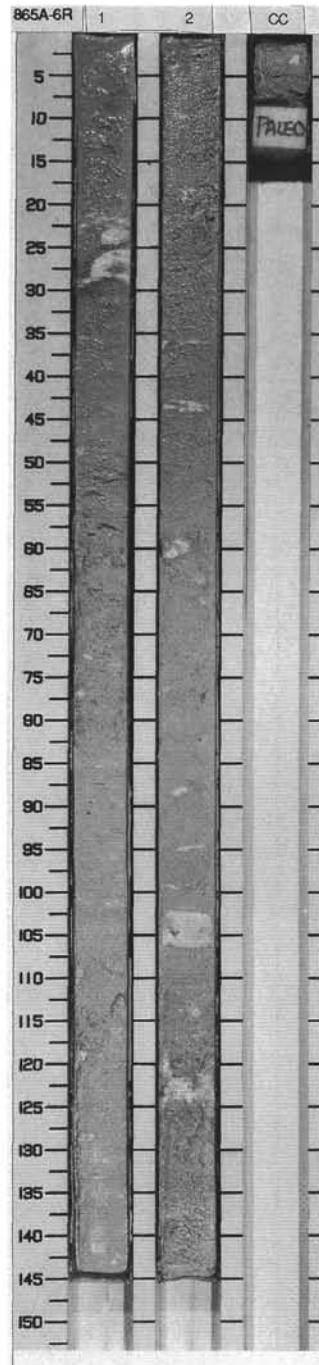
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150

PALEO

SITE 865 HOLE A CORE 6R

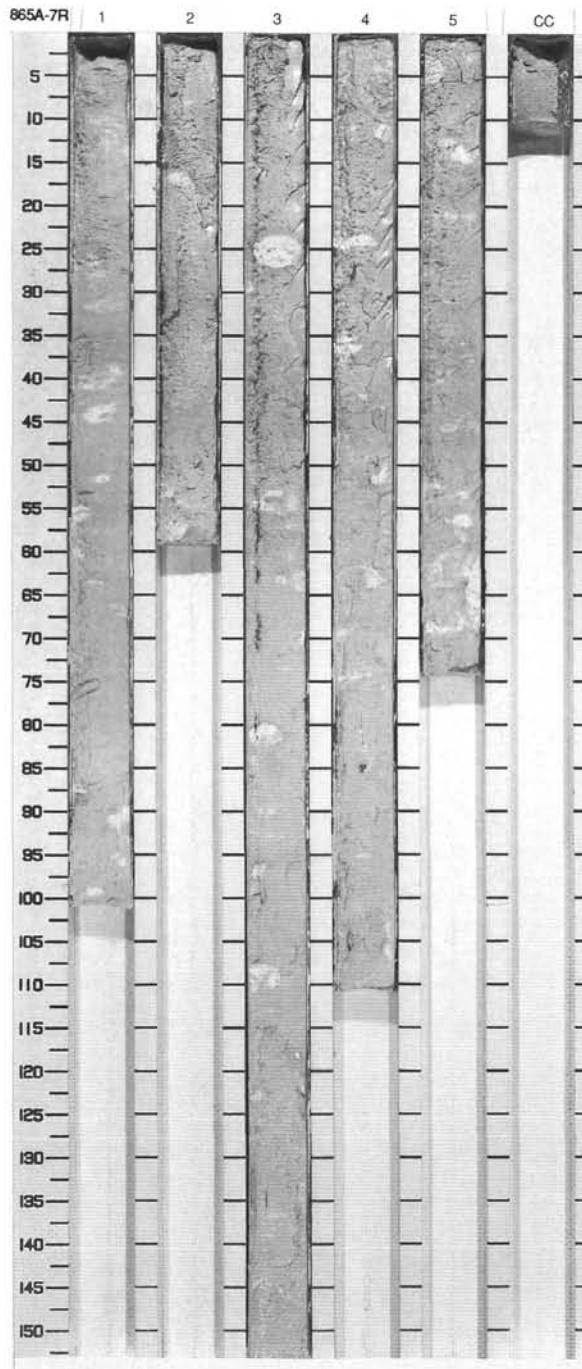
CORED 43.2 - 52.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	[Detailed graphic description of lithology 1]	1	middle Eocene	gg ~ ~	www	P S I P S	10YR 8/1 To 10YR 8/2	FORAMINIFER NANNOFOSSIL OOZE Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2 to 10YR 8/1), with small mottles of lighter colored ooze. Distinct white patches occur at Section 1, 24-28 cm, Section 2, 100-105 cm and 120-125 cm.
2	[Detailed graphic description of lithology 2]	2		~ ~ ~	www	M		
3	[Detailed graphic description of lithology 3]	CC		~ ~	www			

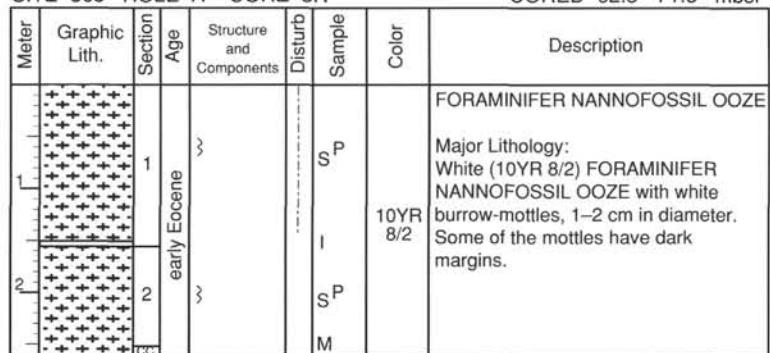


SITE 865 HOLE A CORE 7R

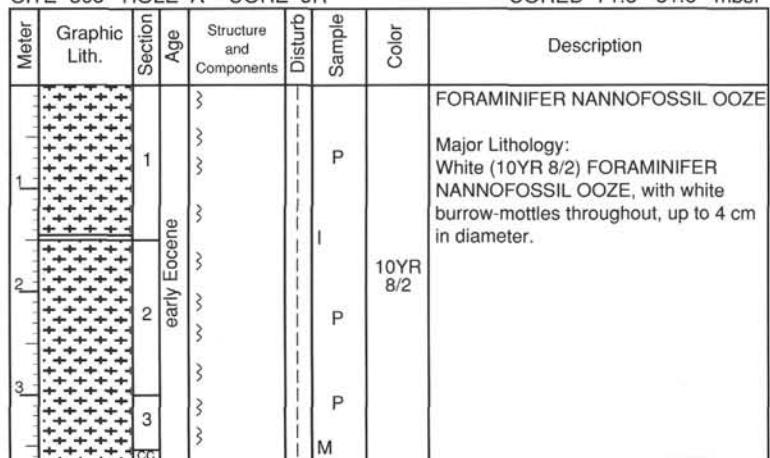
CORED 52.7 - 62.3 mbsf



SITE 865 HOLE A CORE 8R



SITE 865 HOLE A CORE 9R



CORED 62.3 - 71.8 mbsf

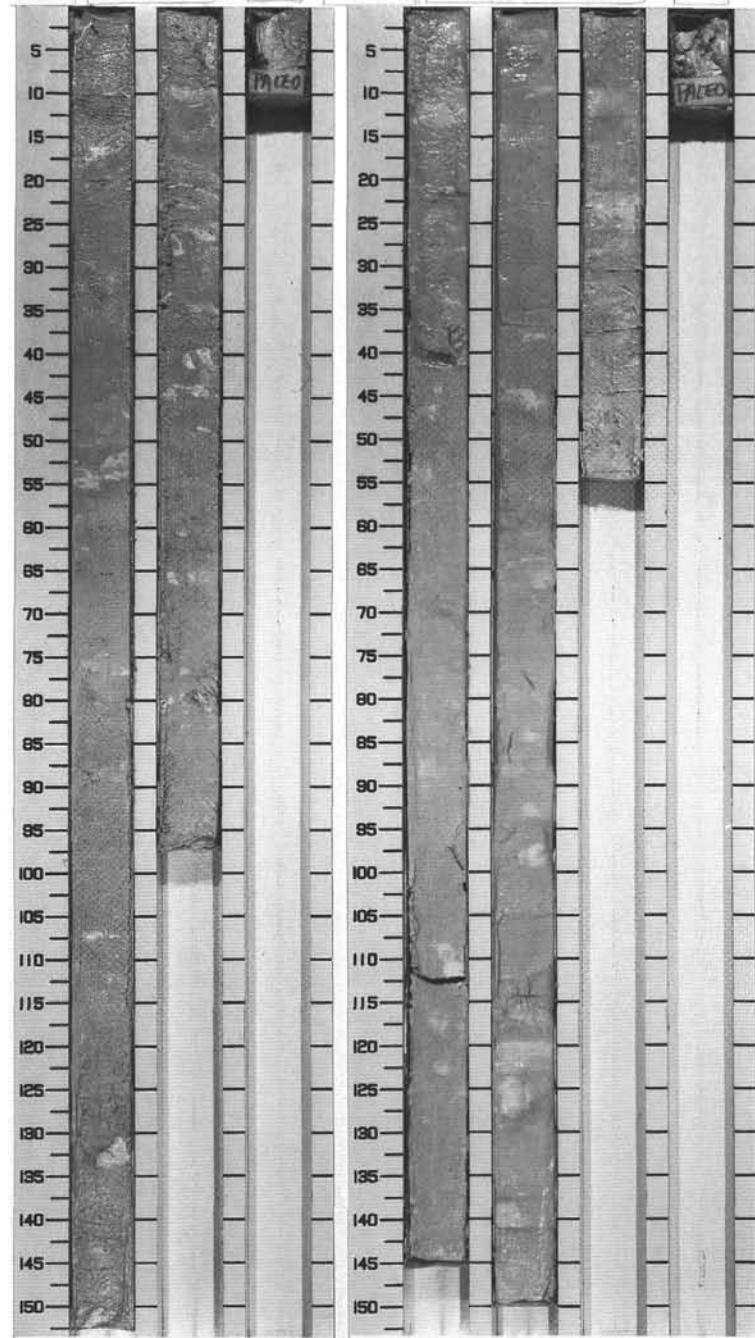
Description

FORAMINIFER NANNOFOSSIL OOZE

Major Lithology:
White (10YR 8/2) FORAMINIFER NANNOFOSSIL OOZE with white burrow-mottles, 1-2 cm in diameter. Some of the mottles have dark margins.

865A-8R

365A-9R



SITE 865 HOLE A CORE 10R

CORED 81.8 - 91.5 mbsf

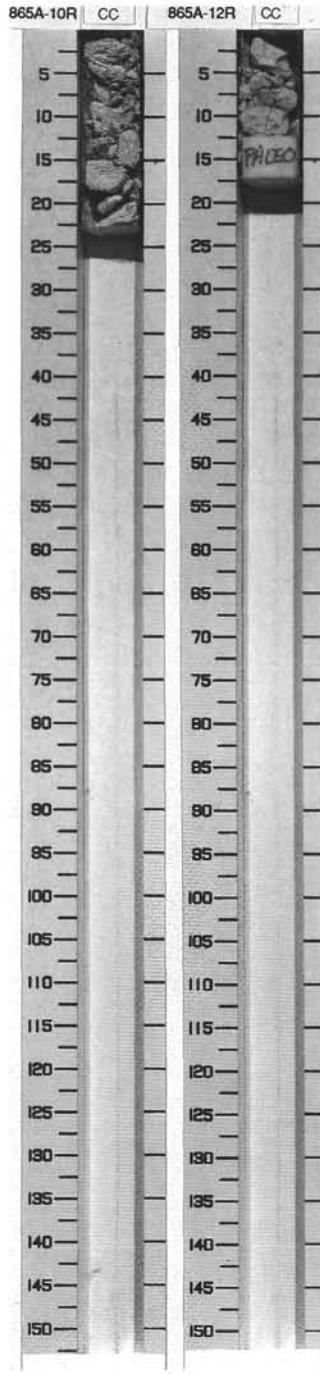
Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
	+++ + CC	early Eocene		W	SMP		FORAMINIFER NANNOFOSSIL OOZE Major Lithology: Severely disturbed FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/1).

865A-11R Entire core given to paleontologists.

SITE 865 HOLE A CORE 12R

CORED 101.2 - 110.8 mbsf

Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
	+++ + CC	late Paleocene			SMP	10YR 8/1	FORAMINIFER NANNOFOSSIL OOZE Major Lithology: Severely disturbed, white (10YR 8/1) FORAMINIFER NANNOFOSSIL OOZE.

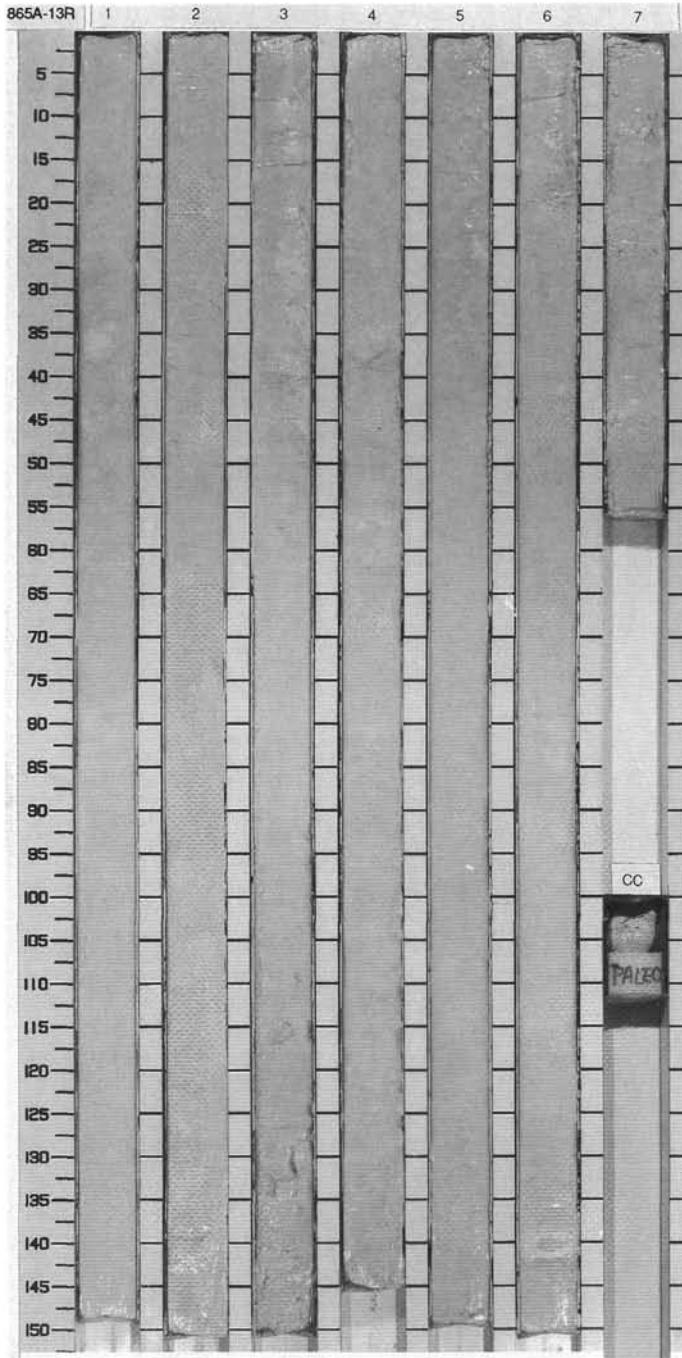


SITE 865 HOLE A CORE 13R

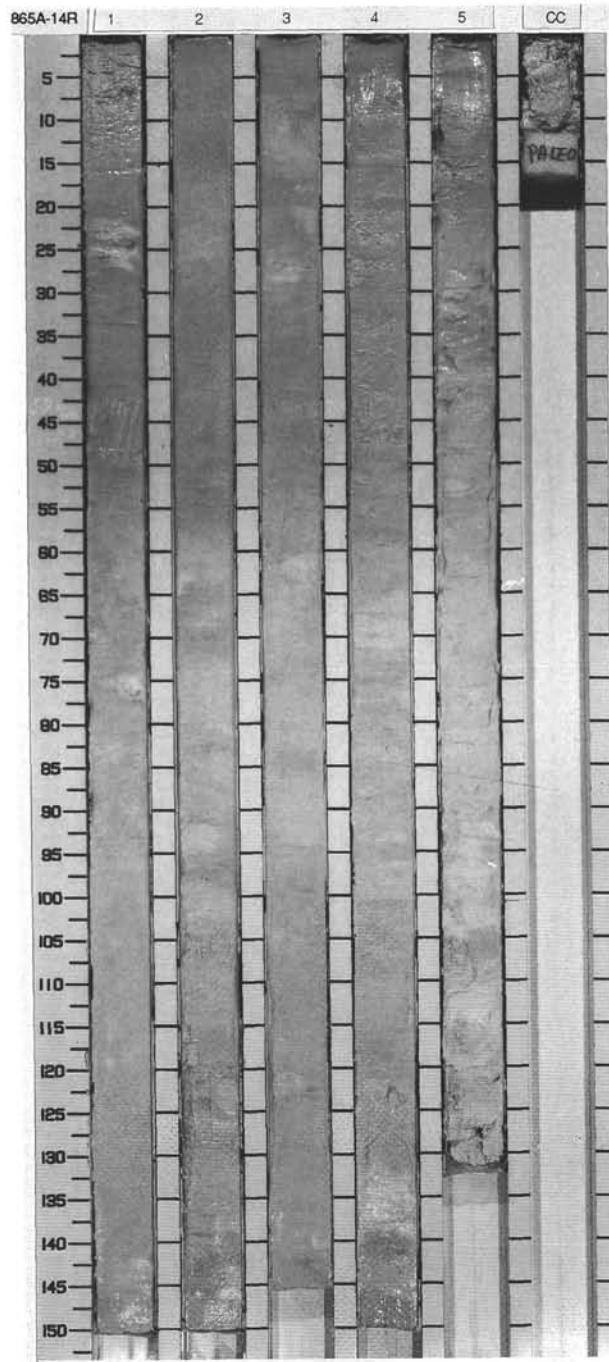
CORED 110.8 - 120.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1	~	~		P		FORAMINIFER NANNOFOSSIL OOZE
2		2	~	~		S		Major Lithology: White (N9) FORAMINIFER NANNOFOSSIL OOZE. Slight bioturbation throughout, with more distinct burrowing in Section 1, 33–50cm, Section 2, 128–132 cm, and Section 6, 140–145 cm.
3		3	~	~		P		
4		3	~	~		S		
5		4	~	~	I	P	N9	
6		5	~	~	P			
7		6	~	~				
8		7	~	~				
9		8	~	~				
10		9	~	~				

late Paleocene



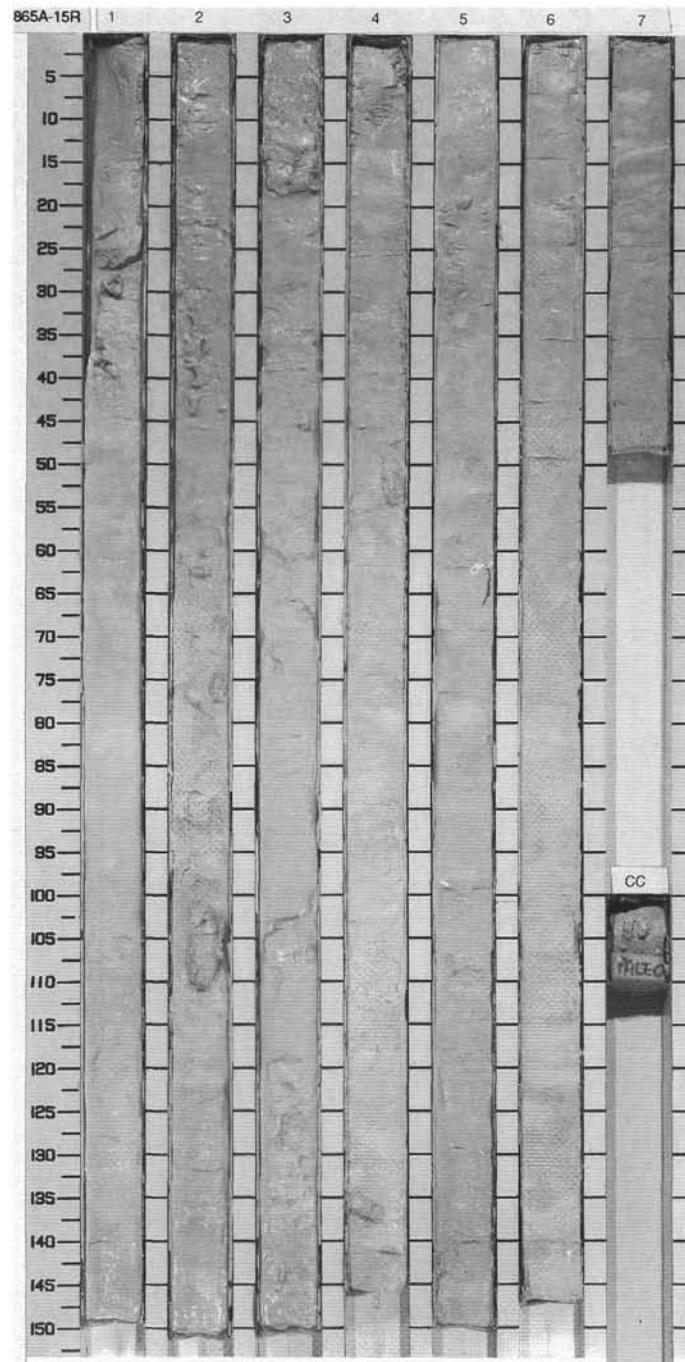
SITE 865 HOLE A CORE 14R							CORED 120.5 - 130.1 mbsf		
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description	
1	+	1		~		P		FORAMINIFER NANNOFOSSIL OOZE	
2	+	2		~		P		Major Lithology: White (N9), mildly bioturbated FORAMINIFER NANNOFOSSIL OOZE. Burrow mottles tend to be whiter than surrounding ooze, but some contain darker streaks.	
3	+	3	late Paleocene	~		S			
4	+	4		~		P	N9		
5	+	5		~		P			
	CC					P			
						M			



SITE 865 HOLE A CORE 15R

CORED 130.1 - 135.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+	1		~	-	P		FORAMINIFER NANNOFOSSIL OOZE
2	+	2		~	-	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (N9), slightly burrowed.
3	+	3		~	-	P		
4	+	4	late Paleocene	~	-	I		
5	+	5		~	-	P		
6	+	6		~	-	S		
7	+	7		~	-	P		
8	+	8		~	-	I		
9	+	9		~	-	M		



SITE 865 HOLE A CORE 16R

CORED 135.1 - 139.7 mbsf

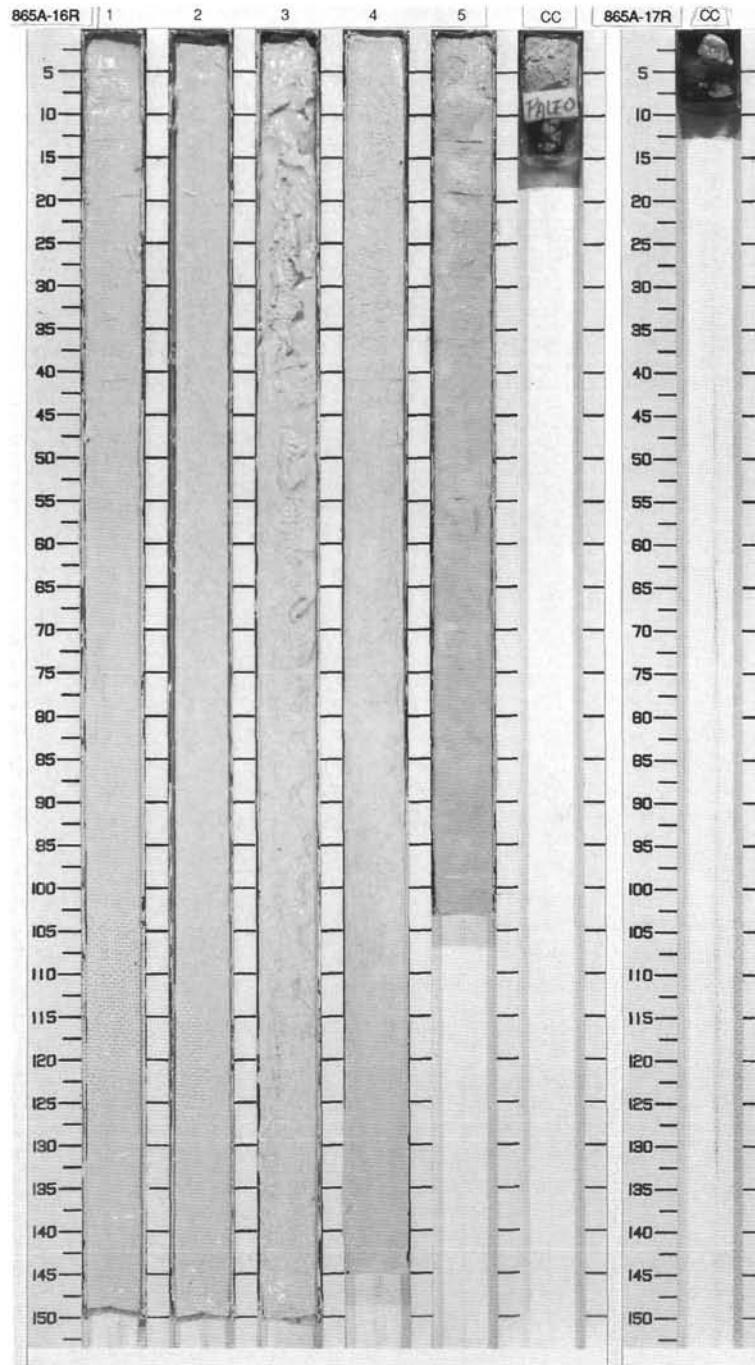
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+++	1		~		P		FORAMINIFER NANNOFOSSIL OOZE
2	+++	2		~	I	S		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (N9), slightly burrowed.
3	+++	3	late Paleocene	~	P		N9	Minor Lithologies: Manganese encrusted PHOSPHATIZED LIMESTONE (WACKESTONE) fragment, Section CC, 10-14 cm.
4	+++	4		~	P			
5	+++	5		~	S			
6	+++			~	P			
7	+++			~	I			
	CC		(Ph)	~	M			

SITE 865 HOLE A CORE 17R

CORED 139.7 - 144.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CCCC		late Albian	(Ph) Mn	X	T	5B 9/1 and 10YR 8/2	WACKESTONE and PHOSPHORITE

Major Lithology:
Partially silicified WACKESTONE and
manganese oxide-encrusted
PHOSPHORITE with some angular
limestone fragments.



SITE 865 HOLE A CORE 18R

CORED 144.7 - 149.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W E P E C C		late Albian	⊗ ⊗ D	X	T	10YR 8/2-3	WACKESTONE-PACKSTONE Major Lithology: WACKESTONE-PACKSTONE with minor grainstone, white (10YR 8/2-8/3), containing numerous requieniid rudists. Aragonitic layer of rudists and gastropods is leached. Foraminifers, notably miliolids, are common. Piece 3 shows small-scale (mm-cm) syn-sedimentary breccia. Pieces 3 and 4 have geopetal cavities with internal brown sediment.

SITE 865 HOLE A CORE 19R

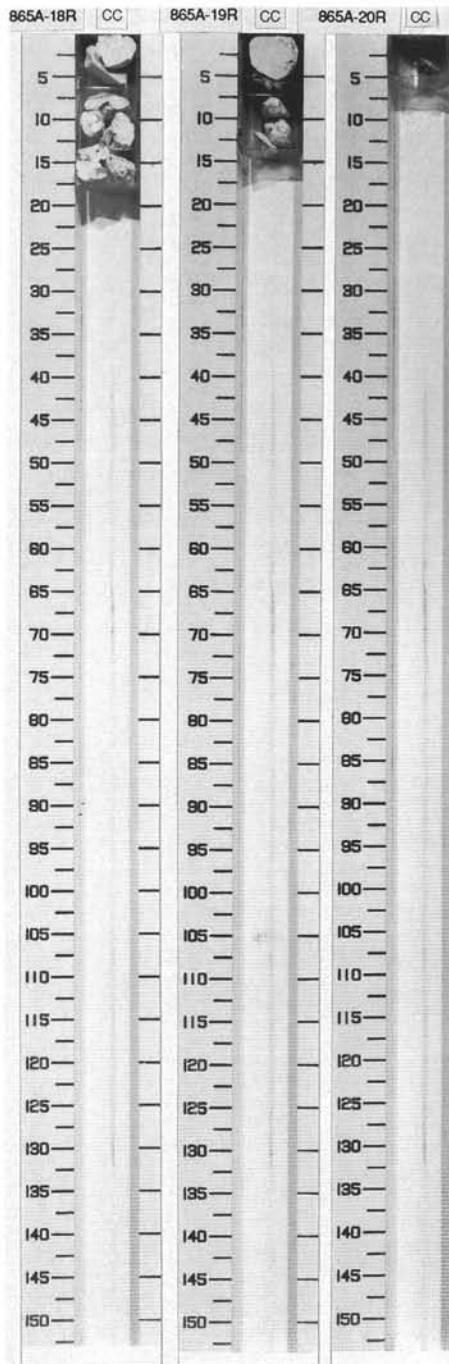
CORED 149.4 - 159.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	P P P P C C		late Albian	⊗ (Mn) (Ph)	X	T T	10YR 7/3 and N9 to 10YR 8/2	MANGANESE OXYHYDROXIDE-PHOSPHORITE and WACKESTONE/FLOATSTONE Major Lithologies: In top of core catcher MANGANESE OXYHYDROXIDE-PHOSPHORITE cemented breccia of beige (10YR 7/3), angular limestone clasts. In lower core catcher WACKESTONE/FLOATSTONE, white (N9-10YR 8/2), with common foraminifers, carbonate-replaced sponge spicules, gastropod molds and dark micritic cavity fills. Syn-sedimentary breccia is present locally.

SITE 865 HOLE A CORE 20R

CORED 159.1 - 168.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	G G G G C C		late Albian	● ♦	X		10YR 7/4	PHOSPHATIZED LIMESTONE (GRAINSTONE) Major Lithology: PHOSPHATIZED PACKSTONE with pellets and foraminifers, beige (10YR 7/4), stained and replaced by brown phosphate and black manganese oxide.



SITE 865 HOLE A CORE 21R

CORED 168.8 - 178.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	(V) 8 6	X	M	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2), vuggy with gastropod and bivalve molds.

SITE 865 HOLE A CORE 22R

CORED 178.4 - 188.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	33 8 6	X	T M	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2) with gastropods and some bivalve molds lined by yellow stain (10YR 8/8). Foraminifers (especially miliolids) are abundant. Some synsedimentary breccia is present.

SITE 865 HOLE A CORE 23R

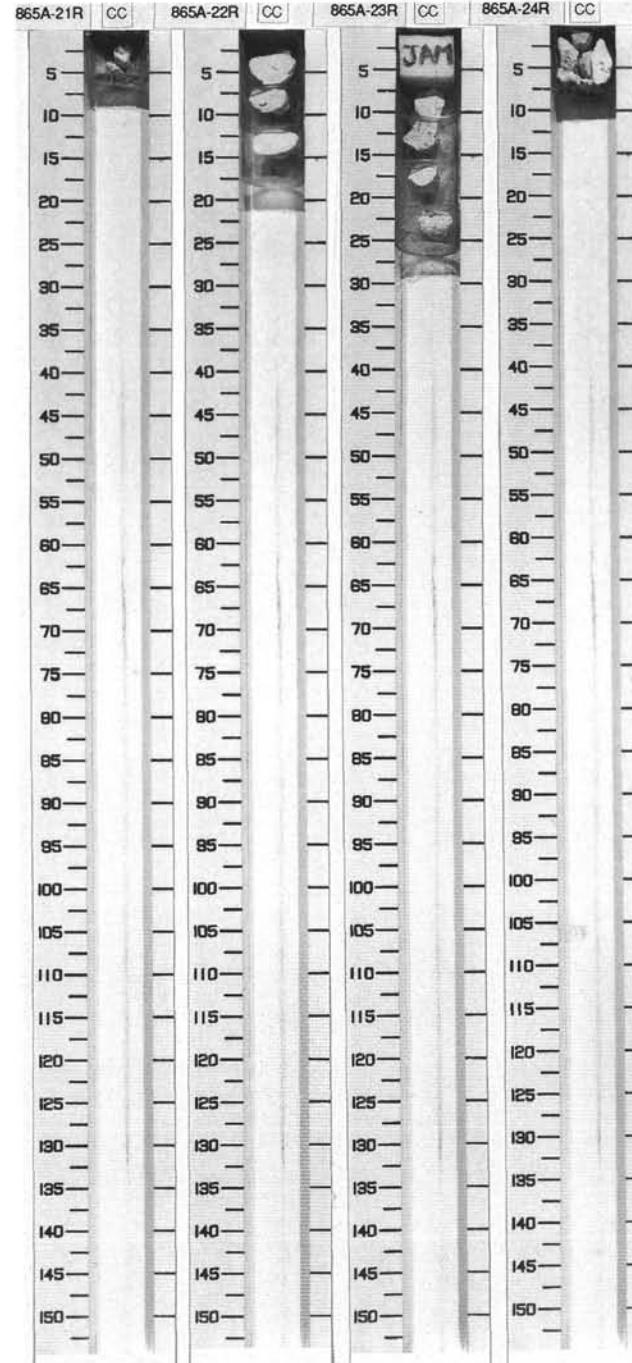
CORED 188.0 - 197.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	33 8 6	X	T M P	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2) with abundant gastropods, some preserved as molds, some recrystallized as calcite, and thin-shelled bivalves. Bioturbation is pervasive.

SITE 865 HOLE A CORE 24R

CORED 197.7 - 207.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	33 6	X	T M	10YR 8/2	MUDSTONE Major Lithology: MUDSTONE, white (10YR 8/2) locally with some foraminifers and burrows. Gastropod molds are outlined by gray sediment.



SITE 865 HOLE A CORE 25R

CORED 207.3 - 217.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	≥ 6	φ	X	T M	10YR 8/1	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1), bioturbated, with foraminifers and gastropod molds.

SITE 865 HOLE A CORE 26R

CORED 217.0 - 226.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	≥ 6	⊕	X		10YR 8/1	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1), with gastropods, some recrystallized, some as molds, and one coral. No photo available.

SITE 865 HOLE A CORE 27R

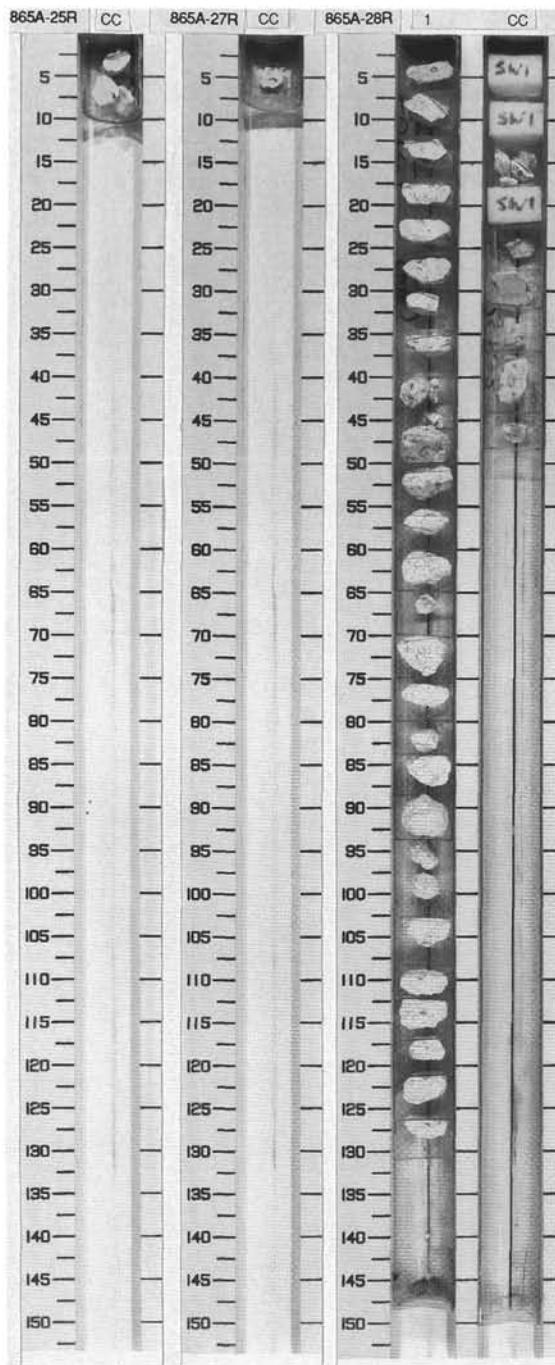
CORED 226.6 - 236.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	D 8	●	X	T	10YR 8/1	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1) with gastropod molds, some filled with fecal pellets and requieniid rudist shell fragments (common in Piece 2).

SITE 865 HOLE A CORE 28R

CORED 236.3 - 245.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	CC	late Albian	≥ 6 D	⊕	X		10YR 8/1	REQUIENIID WACKESTONE Major Lithology: REQUIENIID WACKESTONE, white (10YR 8/1), with entire rudist shells (some probably in life position) and some yellow-stained gastropod molds.



SITE 865 HOLE A CORE 29R

CORED 245.9 - 255.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W W CC	late Albian	8 6	X			10YR 8/1	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1), bioturbated with gastropod molds, small bivalves and foraminifers.

SITE 865 HOLE A CORE 30R

CORED 255.6 - 265.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	W W W W W CC	late Albian	6	X			2.5Y 8/2	WACKESTONE Major Lithology: WACKESTONE, white (2.5Y 8/2) with many gastropod molds.

SITE 865 HOLE A CORE 31R

CORED 265.2 - 274.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W W CC	late Albian	8 6	X	I M T P	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2) with abundant molds of bivalve fragments and gastropods.	

SITE 865 HOLE A CORE 32R

CORED 274.9 - 284.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W W CC	late Albian	6 8 ♀	X	M T	10YR 8/1	MUDSTONE-WACKESTONE AND WACKESTONE Major Lithology: White (10YR 8/1) MUDSTONE-WACKESTONE with benthic foraminifers and few gastropod and bivalve molds; WACKESTONE with gastropods, bivalves and foraminifers.	



SITE 865 HOLE A CORE 33R

CORED 284.6 - 294.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W	CC		late Albian	6	X	M	10YR 8/1	MUDSTONE-WACKESTONE Major Lithology: White (10YR 8/1), fine-grained, MUDSTONE-WACKESTONE with rare molds of small gastropods; very porous (chalky), but very indurated.

SITE 865 HOLE A CORE 34R

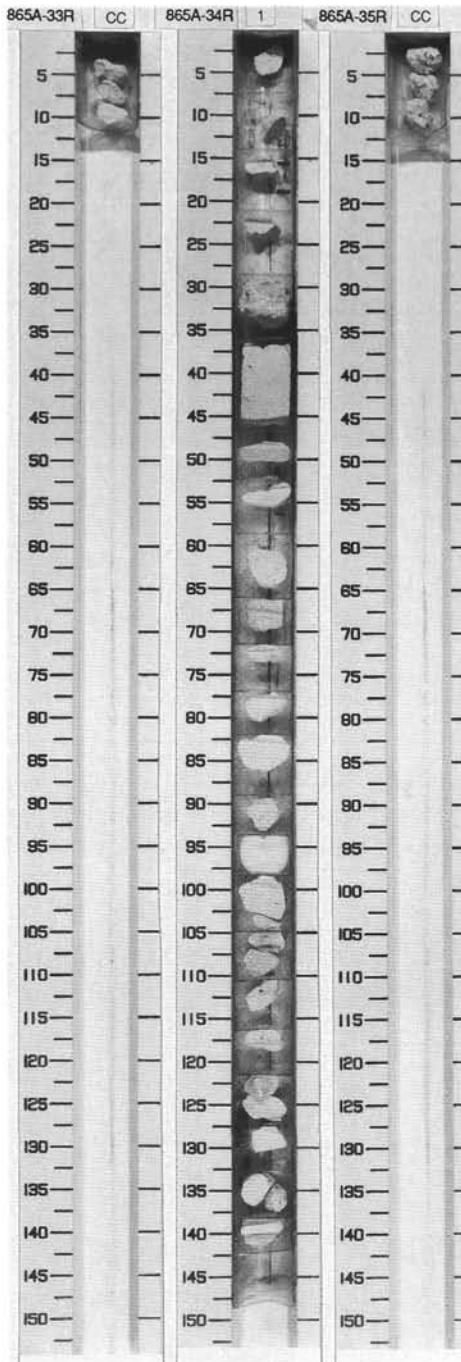
CORED 294.2 - 303.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W P G G P G G	CC	1	late Albian	6 Ø ● 6 Ø ● 6 Ø ● 6 Ø ● 6 Ø ●	X X X X	P	10YR 8/1	GRAINSTONE AND PACKSTONE Major Lithology: White (10YR 8/1) GRAINSTONE and PACKSTONE. GRAINSTONE has moldic gastropods and sand-sized bioclastic debris; Packstone has pellets and large gastropods. Minor Lithologies: Wackestone of gray micrite with foraminifers, gastropods, and sponge spicules.

SITE 865 HOLE A CORE 35R

CORED 303.5 - 313.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W	CC		late Albian	6 D	X	T M	10YR 8/1	WACKESTONE Major Lithology: White (10YR 8/1) WACKESTONE with abundant gastropods and requieniid rudists.



SITE 865 HOLE A CORE 36R

CORED 313.1 - 322.8 mbsf

Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
1	W W W W W W W W	CC late Albian	G Ø	X	M P	10YR 8/1	MUDSTONE-WACKESTONE and WACKESTONE Major Lithology: White (10YR 8/1) MUDSTONE- WACKESTONE with gastropods and benthic foraminifers; WACKESTONE with gastropods, burrows infilled with yellowish sediments.

SITE 865 HOLE A CORE 37R

CORED 322.8 - 332.4 mbsf

Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
1	W W W W W W W W	CC late Albian	G Ø	X		10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2), with gastropods and benthic foraminifers.

SITE 865 HOLE A CORE 38R

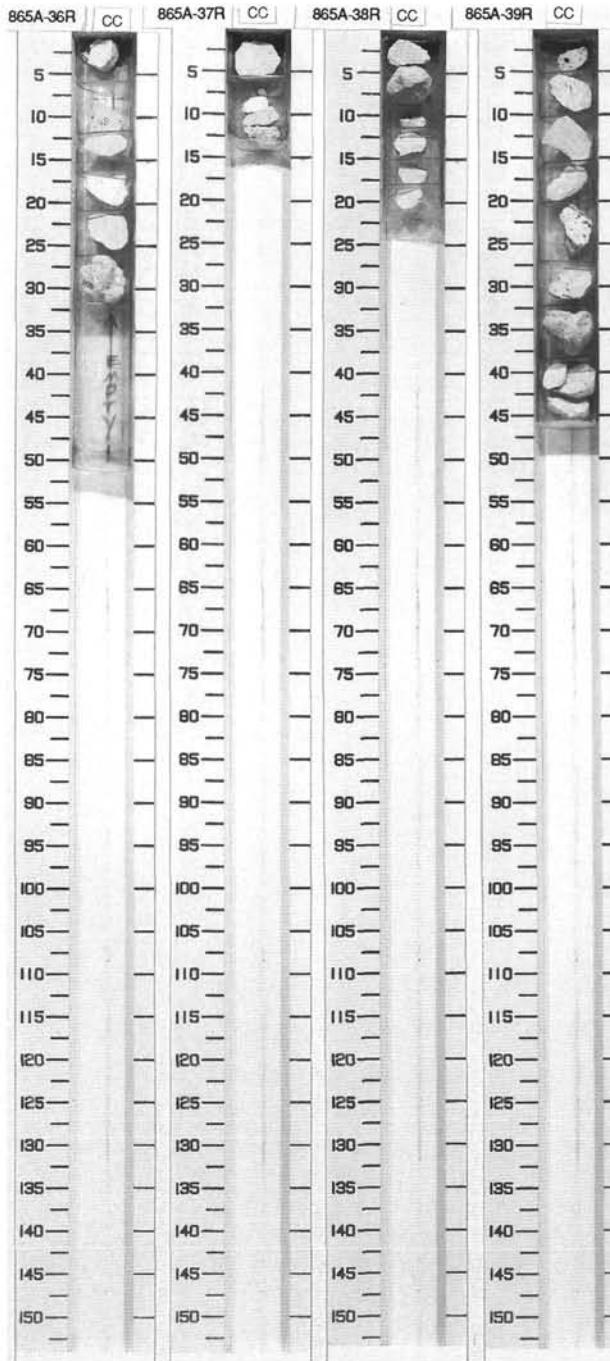
CORED 332.4 - 341.9 mbsf

Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
1	W W W W W W W W	CC late Albian	G W	X	M P	10YR 8/2	WACKESTONE TO MUDSTONE Major Lithology: White (10YR 8/2) WACKESTONE TO MUDSTONE with gastropods. Exposure surface recognized.

SITE 865 HOLE A CORE 39R

CORED 341.9 - 351.6 mbsf

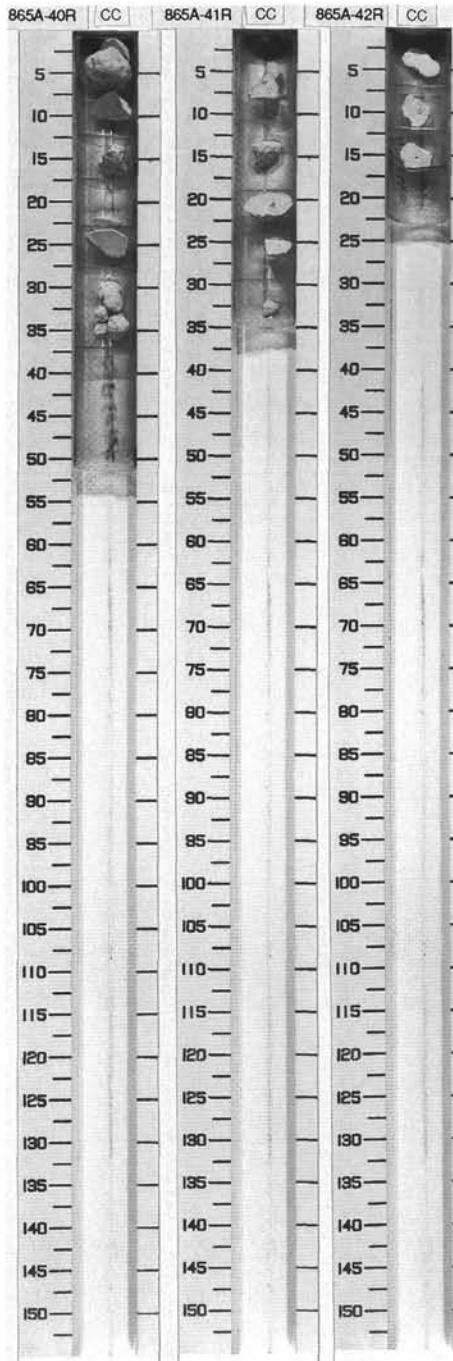
Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
1	R Ø W W R Ø W W	CC late Albian	G Ø	XX	M P	10YR 8/2	WACKESTONE, PACKSTONE and GRAINSTONE Major Lithology: White (10YR 8/2) massive peloid/bioclastic WACKSTONE, GRAINSTONE of peloids and small bioclastic debris, and massive peloid PACKSTONE. Burrows infilled with pellets or bioclastic debris.



SITE 865 HOLE A CORE 40R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W W W W W	CC	late Albian	G Ø	X	P M	10YR 8/2	WACKESTONE, MUDSTONE and PACKSTONE Major Lithology: White (10YR 8/2) WACKESTONE with gastropods, bivalves, and benthic foraminifers; MUDSTONE with benthic foraminifers and gastropods; PACKSTONE composed of well sorted peloidal grains. Burrows infilled with yellowish sediments are common.

CORED 351.6 - 361.2 mbsf



SITE 865 HOLE A CORE 41R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	P W W W W W W W	CC	late Albian	G Ø G	X	M	10YR 8/1 To 10YR 8/2	WACKESTONE and PACKSTONE-GRAINSTONE Major Lithology: White (10YR 8/1 to 10YR 8/2) WACKESTONE with gastropods, benthic foraminifers and dasycladacean (?) algae; PACKSTONE-GRAINSTONE with benthic foraminifers.

CORED 361.2 - 370.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W W	CC	late Albian	G Ø	X	M	5Y 8/2 To 10Y 8/2	WACKESTONE Major Lithology: White (5Y 8/2) WACKESTONE, with gastropods and benthic foraminifers. Burrows are infilled with carbonate mud.

CORED 370.8 - 380.5 mbsf

SITE 865 HOLE A CORE 43R

CORED 380.5 - 390.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W M M	CC	late Albian	6 8 ♀ X	T M		10YR 8/2	WACKESTONE Major Lithology: White (10YR 8/2) WACKESTONE with gastropods, bivalves, and benthic foraminifers. Ostracods and sponge fragments are observed in thin section.

SITE 865 HOLE A CORE 44R

CORED 390.1 - 399.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W W W	CC	late Albian	6 8 ♀ X	MP		10YR 8/2	LIMESTONE and BIVALVE SHELL Major Lithology: White (10YR 8/2) WACKESTONE with gastropods, bivalves (molds), and benthic foraminifers. Burrows are infilled with yellowish sediments of fecal pellets.

SITE 865 HOLE A CORE 45R

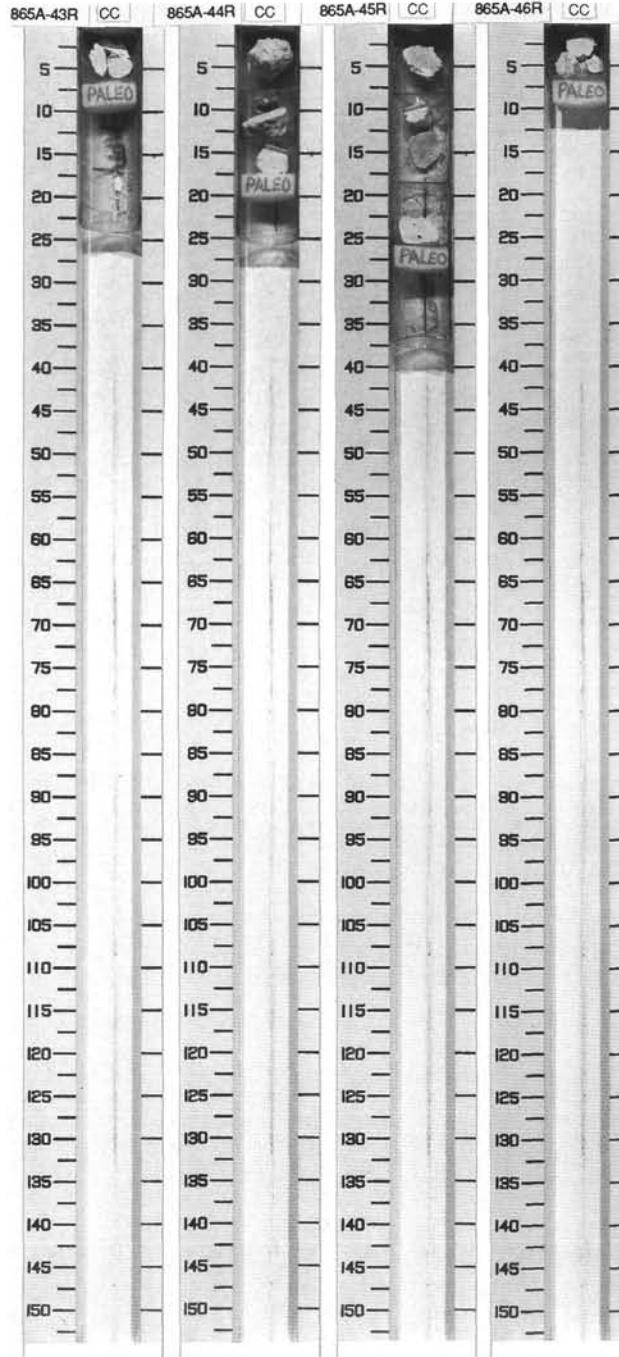
CORED 399.9 - 409.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W M M	CC	late Albian	6 8 ♀ X	M		10YR 8/2	WACKESTONE Major Lithology: White (10YR 8/2) WACKESTONE, with gastropods, bivalves, benthic foraminifers, and sponge fragments and rare intraclasts.

SITE 865 HOLE A CORE 46R

CORED 409.6 - 419.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W M M	CC	late Albian	6 8 ♀ X	T M		10YR 8/1 To 10YR 8/2	MUDSTONE-WACKESTONE Major Lithology: White (10YR 8/1 to 10YR 8/2), chalky, MUDSTONE to WACKESTONE with gastropods, bivalves, and benthic foraminifers. Ostracods seen in thin section. Intraclasts occur rarely. No visible sedimentary structure.



SITE 865 HOLE A CORE 47R

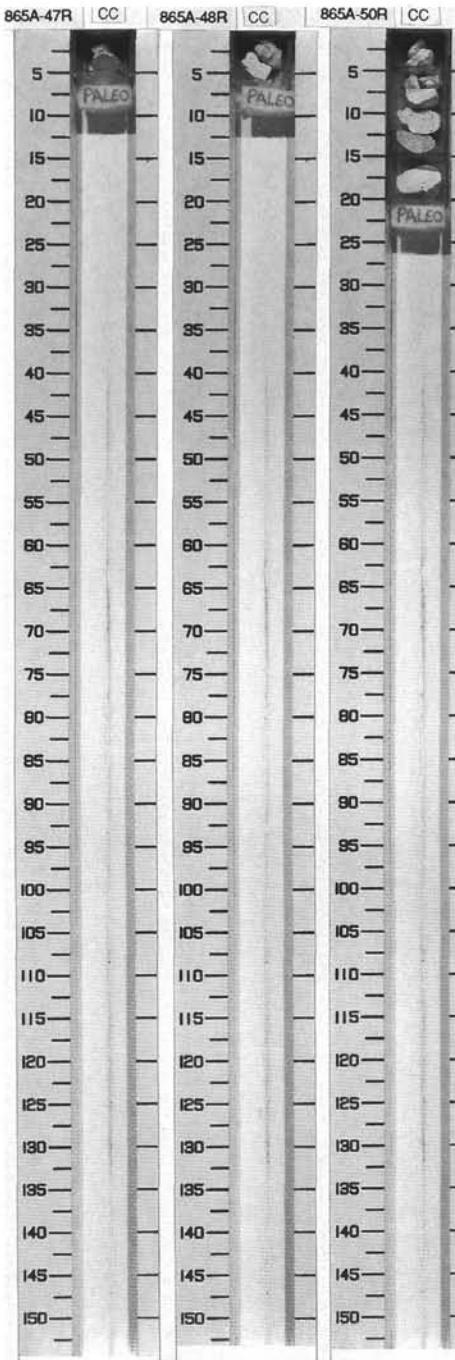
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	M M M M CC		late Albian	6 ♀ ● ✕	T M		10YR 8/1 To 10YR 8/3	MUDSTONE Major Lithology: MUDSTONE (to PACKSTONE), white (10YR 8/1 to 10YR 8/3), with gastropods and benthic foraminifers. Burrows often stained yellowish, sometimes infilled with pellets.

CORED 419.2 - 428.9 mbsf

SITE 865 HOLE A CORE 48R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	M M W W CC		late Albian	6 ♀ ● ✕	T M		10YR 8/2	WACKESTONE and MUDSTONE Major Lithology: White (10YR 8/2) WACKESTONE and MUDSTONE: WACKESTONE, with benthic foraminifers; chalky MUDSTONE with gastropods and foraminifers. Burrows infilled with fecal pellets observed. Foraminifers include uniserial, milloid shapes (molds).

CORED 428.9 - 438.3 mbsf



865A-49R NO RECOVERY

SITE 865 HOLE A CORE 50R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	M M W W CC		late Albian	6 ♀ ● ✕	M		10YR 8/1	MUDSTONE/WACKESTONE and WACKESTONE Major Lithology: White (10YR 8/1) MUDSTONE/ WACKESTONE with gastropods (molds) and WACKESTONE with benthic foraminifers. Burrows and molds of gastropods are yellow-stained. Some burrows are infilled with fecal pellets.

CORED 448.0 - 457.6 mbsf

SITE 865 HOLE A CORE 51R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	III III III CC		late Albian		X	M	10YR 8/2	MUDSTONE Major Lithology: White (10YR 8/2) MUDSTONE with some moldic porosity and some bioclasts.

SITE 865 HOLE A CORE 52R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	WWWW CC		late Albian	6 8 ♂	X	T M F	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2) with spicules, gastropods, small bivalves, and some foraminifers, mostly as molds.

SITE 865 HOLE A CORE 53R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	⊗ ♂ ●	X		10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2), with moldic porosity, some foraminifers, and burrows filled with pellets.

SITE 865 HOLE A CORE 54R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	III III III CC		late Albian	⊗ 6 ♂	X		10YR 8/2	MUDSTONE Major Lithology: White (10YR 8/2), MUDSTONE, with some patches of peloidal grainstone, burrowed with foraminifers, gastropod molds, possible dasycladacean algae.



SITE 865 HOLE A CORE 55R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	G		X	M	10YR 8/1 to 10YR 8/3	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1 to 10YR 8/3, with yellowish-stained gastropod molds and common dasycladacean algae.

CORED 496.3 - 505.9 mbsf

SITE 865 HOLE A CORE 56R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	G		X	T M P	10YR 8/2 to 10YR 8/3	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2 to 10YR 8/3), with many gastropods and some foraminifers.

CORED 505.9 - 515.5 mbsf

SITE 865 HOLE A CORE 57R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian			X	T M	10YR 8/1	MUDSTONE Major Lithology: White (10YR 8/1) MUDSTONE with minor WACKESTONE, much moldic porosity, apparently unfossiliferous.

CORED 515.5 - 525.2 mbsf

SITE 865 HOLE A CORE 58R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	?? G		X	T M P	10YR 8/2 to 10YR 8/3	WACKESTONE Major Lithology: WACKESTONE, whitish (10YR 8/2 to 10YR 8/3), burrowed with considerable moldic porosity, dasycladacean algae, dissolved sponge spicules.

CORED 525.2 - 534.8 mbsf



SITE 865 HOLE A CORE 59R

CORED 534.8 - 544.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	33	G 8	X	TM	10YR 8/3	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/3) with gastropod, dasycladacean algal, coral, bivalve and foraminiferal molds and some burrows filled with pellets.

SITE 865 HOLE A CORE 60R

CORED 544.5 - 554.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	33	G	X	TP	10YR 8/3 to 10YR 8/4	MUDSTONE Major Lithology: MUDSTONE, beige (10YR 8/3 to 8/4), containing burrows with yellow stain and dasycladacean algae.

SITE 865 HOLE A CORE 61R

CORED 554.2 - 563.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	33	∅ ●	X	M	10YR 8/1	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1), with burrows, abundant foraminifers, intraclasts, and peloids.

865A-62R NO RECOVERY

865A-63R NO RECOVERY

SITE 865 HOLE A CORE 64R

CORED 583.1 - 592.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	33	G ∅ ●	X	TM	10YR 8/1	MUDSTONE-WACKESTONE Major Lithology: MUDSTONE-WACKESTONE, white (10YR 8/1), containing burrows, infilled with pellets, foraminifers, ostracods, and locally abundant spicules and gastropods (as molds). There is a red stain on some surfaces.



SITE 865 HOLE A CORE 65R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	⊗ G	X	M	10YR 8/1	WACKESTONE	Major Lithology: WACKESTONE, white (10YR 8/1), with foraminifers, dasycladacean algae (?), spicules (as molds), and burrows, locally yellow-stained.

CORED 592.8 - 602.5 mbsf

SITE 865 HOLE A CORE 66R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	G G	X	T M P	10YR 8/2 to 10YR 7/2	PACKSTONE and WACKESTONE	Major Lithology: WACKESTONE and PACKSTONE, white (10YR 8/2 to 10YR 7/2), with common dasycladacean algae, spicules, molds of high-spined gastropods, some cementation.

CORED 602.5 - 612.2 mbsf

SITE 865 HOLE A CORE 67R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	G G	X	T M	10YR 8/4	PACKSTONE	Major Lithology: PACKSTONE, beige (10YR 8/4), with abundant molds, some infilled with sparry calcite, foraminifers, spicules (one is triaxial), dasycladacean algae (?), calcisponge, high-spined gastropods as molds.

CORED 612.2 - 621.9 mbsf

SITE 865 HOLE A CORE 68R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC	late Albian	⊗	X	M P	10YR 8/2 to 10YR 2/2	WACKESTONE	Major Lithology: WACKESTONE, white (10YR 8/2) with dark brown-black clay seams (10YR 2/2) which are 2 mm thick and at low angles to bedding, some stylolite sand compacted burrows. Possible spicules are preserved as molds.

CORED 621.9 - 631.5 mbsf



SITE 865 HOLE A CORE 69R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	68+G	X	T M	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2), with corals, bivalves, gastropods, and dasycladacean algae. Dark clasts (probably limestone) are present at the top.

CORED 631.5 - 641.0 mbsf

SITE 865 HOLE A CORE 70R

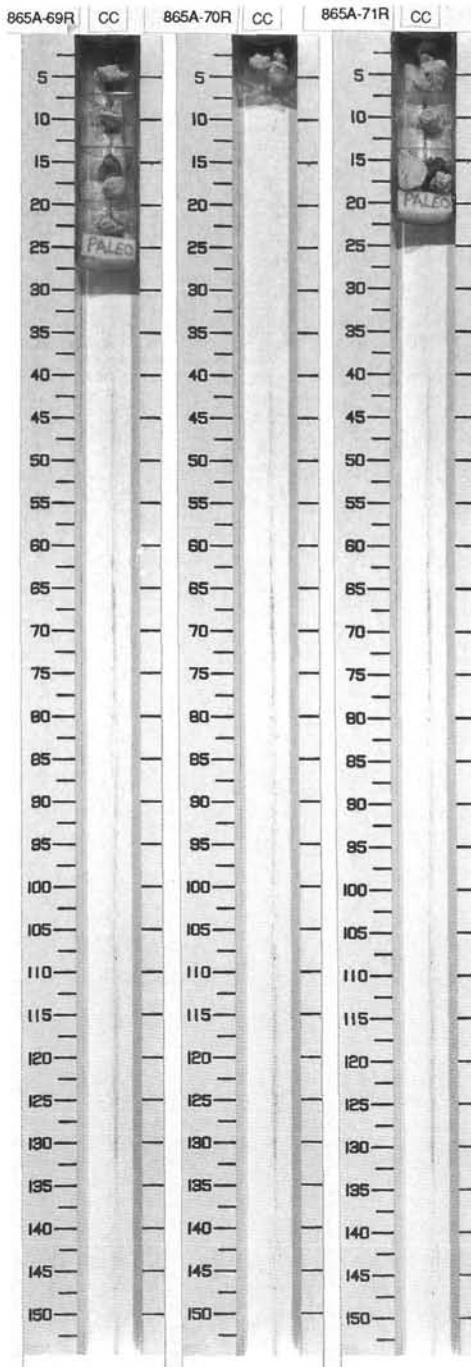
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	38	X	M	10YR 8/2	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/2), with abundant peloids, burrows, foraminifers, dark-stained spicules, and some clayey laminae.

CORED 641.0 - 650.8 mbsf

SITE 865 HOLE A CORE 71R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	CC		late Albian	68 P	X	M	10YR 8/2 to 10YR 6/1	WACKESTONE Major Lithology: WACKESTONE and minor PACKSTONE, white (10YR 8/2), with numerous gastropod molds. A slightly darker lithology (10YR 6/1) has dark (10YR 8/3) clayey seams which transgress bedding and contains peloids.

CORED 650.8 - 660.4 mbsf



SITE 865 HOLE A CORE 72R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
100-1000	W W W W W CC	late Albian	G o L	X		P	10YR 8/2 to 10YR 6/1-6/3	WACKESTONE Major Lithology: WACKESTONE, some white (10YR 8/2), some darker gray (10YR 6/1), with dark clay seams (10YR 6/3), undulose and discontinuous with some stylolitic contacts, locally peloidal with numerous molds of gastropods and sponge spicules. Dolomite rhombs occur in the clay seams.
								Minor Lithology: CLAYEY LIMESTONE (MUDSTONE).

SITE 865 HOLE A CORE 73R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	[Wavy Lines]	1	late Albion	[Vertical Lines] [Circles]	X X X	P	10YR 8/1-8/3 and 10YR 6/4	WACKESTONE Major Lithology: WACKESTONE, white (10YR 8/1), locally with 1 cm thick gray clay seam (10YR 8/3).
								Minor Lithology: Brown (10YR 6/4) peloidal PACKSTONE, sucrosic.

SITE 865 HOLE A CORE 74R

CORED 660.4 - 670.1 mbsf

SITE 865 HOLE A CORE 75R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	W W W W W W W W	1	late Albian	8 6 Ø 8 6 Ø	X X	P M	10YR 8/2 To 10YR 7/2	WACKESTONE Major Lithology: WACKESTONE (0-45 cm), white (N9 to 10YR 8/2) displaying moldic porosity, foraminifers, and sponge spicules; in parts strongly stylolitized; stylolites often marked by dark clay layers with pyrite and rhombic crystals of calcite. WACKESTONE (45-118 cm), white (10YR 7/2) displaying moldic porosity.

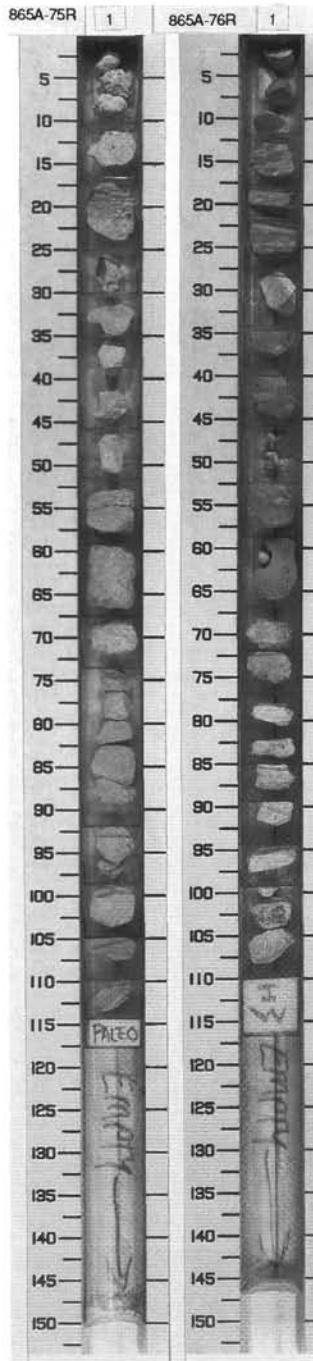
CORED 689.4 - 699.1 mbsf

SITE 865 HOLE A CORE 76R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	G w G w G w G w G w G w G w	1	late Albian	(C) 	 	T P I M	10YR 7/2 To 10YR 5/1	CLAYEY LIMESTONE and WACKESTONE/PACKSTONE/ GRAINSTONE

Major Lithology:
 Interbedded CLAYEY LIMESTONE and friable WACKESTONE/
 PACKSTONE/GRAINSTONE, white
 (10YR 7/2 to 10YR 5/1) with some
 stylolites alternating fine-grained
 CLAYEY LIMESTONE with
 concretions and pyrite;
 GRAINSTONE, with foraminifers,
 algae, pellets, and some volcanic
 grains; PACKSTONE; well-indurated
 WACKESTONE with gastropods,
 other molluscs (molds), and
 foraminifers. Cylindrical-shaped
 gray (10YR 6/1) concentric zones
 surrounding each burrow (at 100–101
 cm). The burrows are infilled by
 sparry dolomite.

CORED 699.1 - 708.7 mbsf



SITE 865 HOLE A CORE 77R

CORED 708.7 - 718.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W CC	late Albian	Φ		X M T		2.5Y 7/2		WACKESTONE Major Lithology: WACKESTONE, light gray (2.5Y 7/2) granular appearance, moldic porosity, foraminifers, gastropods, and spicules; one lithoclast of gray mudstone. Bottom as above except for numerous stylolites marked by dark gray layers.

SITE 865 HOLE A CORE 78R

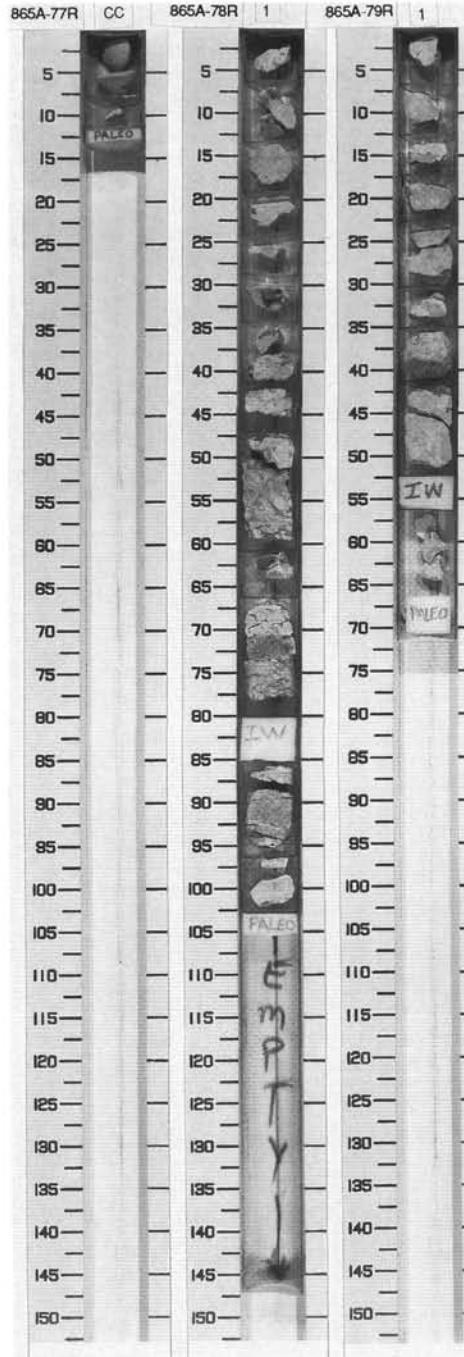
CORED 718.3 - 728.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W M M M M 1	late Albian	Φ		L X X P I S M T		10YR 6/1 To 10YR 8/2		MUDSTONE/WACKESTONE Major Lithology: MUDSTONE/WACKESTON, some poorly cemented, white (10YR 8/1 to 10YR 8/2), some yellowish to bluish (10YR 6/1 to 10YR 8/1) stained, with foraminifers (miliolid) and gastropods, burrows infilled with rhombic crystals of dolomite, common stylolites. Lithoclasts of clayey sediment, light gray in centers to blue gray on perimeter.

SITE 865 HOLE A CORE 79R

CORED 728.1 - 737.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W W W 1	late Albian	Φ L		X X P I M T		10YR 7/1 To 10YR 8/2		WACKESTONE Major Lithology: WACKESTONE, white (10YR 7/1 to 10YR 8/2), fairly well-cemented, some moldic porosity, foraminifers (some moldic), burrows infilled with dolomite and pyrite, dark specks (pyrite and volcanic fragments).



SITE 865 HOLE A CORE 80R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W P P F W W P P F	1	late Albian	»»	Ø Ø	X X	M T	7.5YR 5/0-6/0	WACKESTONE-PACKSTONE Major Lithology: WACKESTONE-PACKSTONE, gray (7.5YR 5/0-6/0), with burrows filled with dolomite and pyrite, black pebbles, ostracods, bivalves, wavy clay seams, horse-tailing. Bottom of core is white (10YR 8/2-8/3) with molds of small bivalves and foraminifers and finely disseminated organic matter.

SITE 865 HOLE A CORE 81R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	P P P P F			P	X	T		PACKSTONE and WACKESTONE
	P P P P F F	1	late Albian	G	X	P	10YR 7/3	Major Lithology: PACKSTONE and WACKESTONE,
	P P P P F F			G	X	T	To 10YR	mostly beige (10YR 7/3-7/1), with
	P P P P F F			G	X	T	7/1	burrows, very porous with foraminiferal and other molds, some dolomite, disseminated organic matter, mm-cm-size black pebbles. Dasycladacean algae and ostracods are also present. Black clayey seams with pyrite and organic matter and gray (10YR 4/4) seams wrapping around the limestone fragments occur in some intervals. Large nerineid gastropod at Section 2, 55 cm.
	P P P P F F	2		G	X	T		
	P P P P F F			G	X	T M		

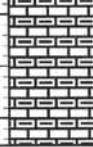
SITE 865 HOLE A CORE 82R

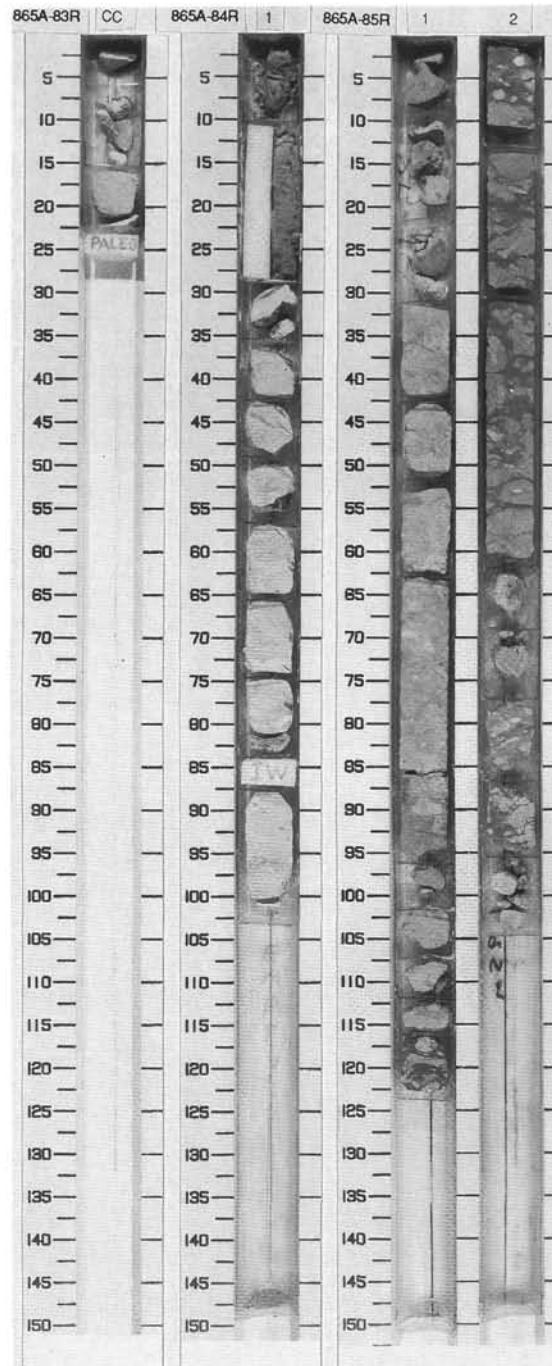
SITE 865 HOLE A CORE 83R

SITE 865 HOLE A CORE 84R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	[Graphic Lithology: Wackestone, light gray]	1	late Albian	Wavy bedding; P	X X X X	I T M	10YR 7/1	<p>WACKESTONE</p> <p>Major Lithology: WACKESTONE, light gray (10YR 7/1), with foraminifers, ostracods, small bivalves, some dolomitization particularly of the burrows, finely disseminated pyrite, and dispersed organic matter. Top 30 cm of core consists of sand size limestone pieces. Blackened particles (mm-size) and blackened burrows occur at some levels.</p>

SITE 865 HOLE A CORE 85R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1	late Albian	& P G & G & G & G & G & G & G &	- - -		10YR 8/2 To 10YR 7/1	CLAYEY LIMESTONE Major Lithology: CLAYEY LIMESTONE, white (10YR 8/2) groundmass with light gray (10YR 7/1) mottled appearance owing to burrowing, with peloids, foraminifers, and replaced gastropod shells, some with dolomite. Many molds filled with pyrite and volcanic black grains as well as dolomite. Section 1, 96-106 cm, abundant lithoclasts, dark gray (10YR 5/1 to 10YR 4/1).
2		2		G & G & G & G & G & G & P	X X	M T	10YR 5/1 To 10YR 7/1	Minor Lithology: Section 1, 117-124 cm, very dark gray (10YR 3/1) MUDSTONE, extensively bioturbated.



SITE 865 HOLE A CORE 86R

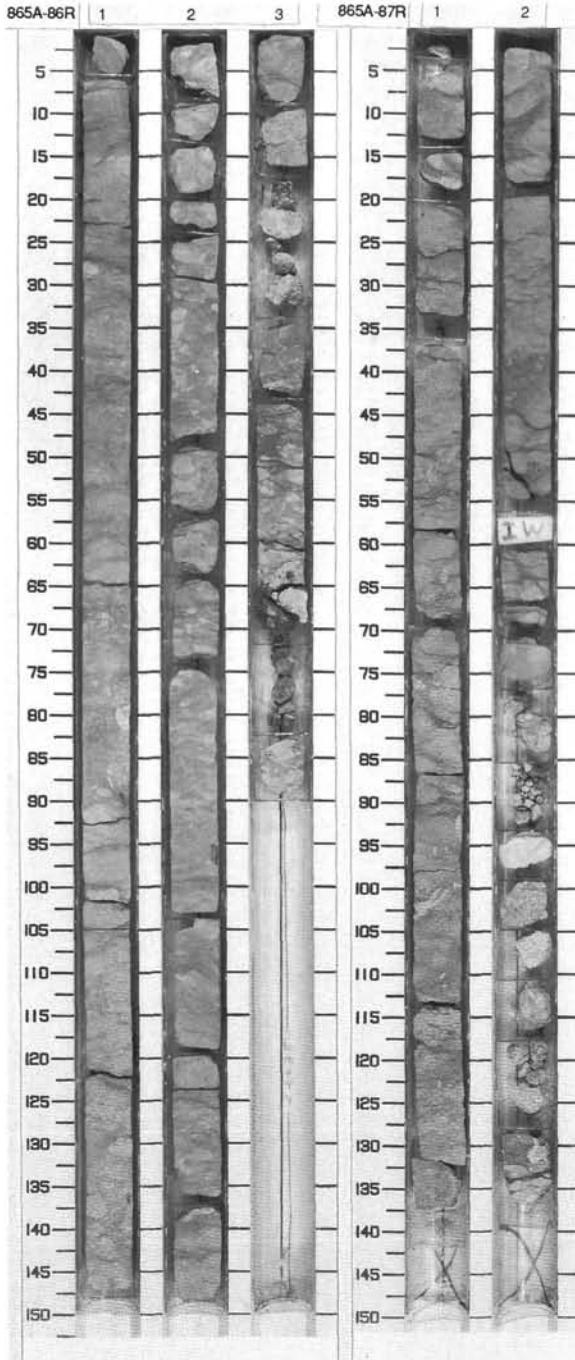
CORED 795.8 - 805.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1		III = 8 III = 6 III = 5 III = 4 III = 3 III = 2 III = 1 III = 0			10YR 8/1 To 10YR 6/1	CLAYEY LIMESTONE (PACKSTONE) Major Lithology: White to gray (10YR 8/1 to 7.5YR 8/4) CLAYEY LIMESTONE (PACKSTONE), peloidal, with foraminifers, bivalves, and gastropods; occasional small, elongate black fragments, possibly lignite (Section 2); many small oyster-fragments; mostly heavily to moderately bioturbated. Burrow mottles make round and oval shapes of lighter color in darker matrix. Light colored burrows are less compacted and contain less-carbonates. Fine disseminated pyrite abundant in molds; dolomite common throughout.
2		2	late Albian	III = 8 III = 6 III = 5 III = 4 III = 3 III = 2 III = 1 III = 0			7.5YR 8/4 To 10YR 5/1	
3		3		III = 8 III = 6 III = 5 III = 4 III = 3 III = 2 III = 1 III = 0		T M	7.5YR 7/4 To 10YR 5/1	

SITE 865 HOLE A CORE 87R

CORED 805.4 - 815.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1		III = 8 III = 6 III = 5 III = 4 III = 3 III = 2 III = 1 III = 0	- - - - -		10YR 8/1 To 10YR 5/1	CLAYEY LIMESTONE (WACKESTONE/PACKSTONE), PACKSTONE AND MUDSTONE Major Lithology: Gray to white (10YR 5/1 to 10YR 8/1), intensively bioturbated, laminated
2		2	late Albian	III = 8 III = 6 III = 5 III = 4 III = 3 III = 2 III = 1 III = 0	WVVVVV	I P	10YR 6/2 10YR 6/1	CLAYEY LIMESTONE (WACKESTONE/PACKSTONE) with benthic foraminifers (Section 1). Burrows are often infilled with whitish sediments and less compacted than matrix. Section 2, 0–76 cm, burrowed, light brownish gray to gray (10YR 6/2 to 10YR 5/1) PACKSTONE of peloids with benthic foraminifers. Section 2, 76–138 cm, gray (10YR 7/1) MUDSTONE with abundant black particles and rare pellet-filled burrows. In Section 2, burrowing swirls light and dark sediments together; occasional intervals which appear laminated with closely spaced wavy microstylolites. Throughout the Sections 1 and 2, disseminated pyrite abundant; small rhombic crystals of dolomite and organic matter (particles) common.



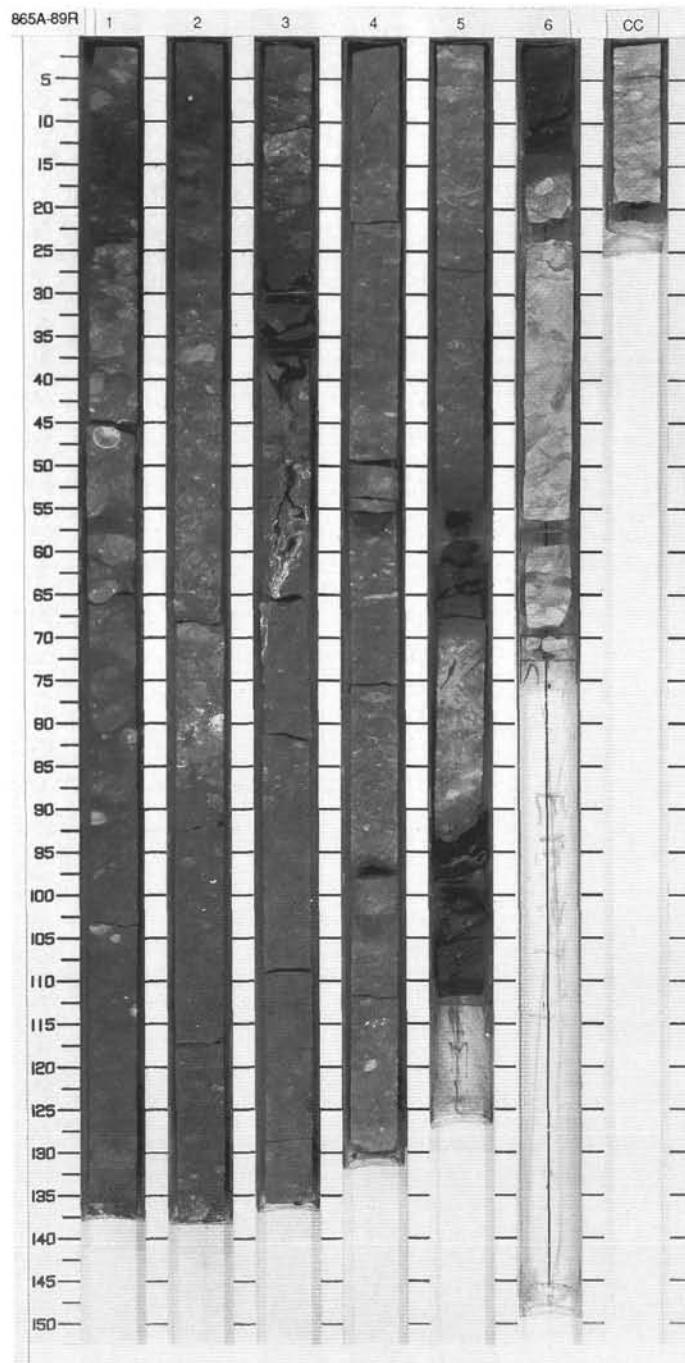
SITE 865 HOLE A CORE 88R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1	late Albian	~ Ø ~ Ø ~ Ø ~ Ø ~ Ø	W -- W		10YR 8/2 To 10YR 5/1	CLAYEY LIMESTONE (PACKSTONE) Major Lithology: Section 1, bioturbated CLAYEY LIMESTONE (PACKSTONE), white (10YR 8/1) to gray (10YR 5/1), with benthic foraminififers, gastropods, bivalves (oyster ?), ostracods, and sponge spicules, intercalated with thin, dark clayey layers. Section 2, bioturbated CLAYEY LIMESTONE (PACKSTONE), gray (10YR 6/1) at 0-20 and 64 to 143 cm and grayish brown with benthic foraminifers (throughout the section), and thin-shelled bivalve fragments (64-143 cm). Wood fragment in Section 2, 122 cm. Very clay-rich horizon occur in Section 2, 103-122 cm. Volcanic sand in Section 2, 123-124 cm. Many wavy-laminae or pseudo-laminae (stylolites bunched together). Burrows infilled with lighter colored, uncompacted sediments abundant in both sections. Disseminated pyrite abundant; small rhombic crystals of dolomite common; small-sized, organic matter (particles) throughout.
2		2		~ Ø ~ Ø ~ Ø ~ Ø	W -- W -- W	I T T M	10YR 6/1 To 10YR 5/2	



SITE 865 HOLE A CORE 89R

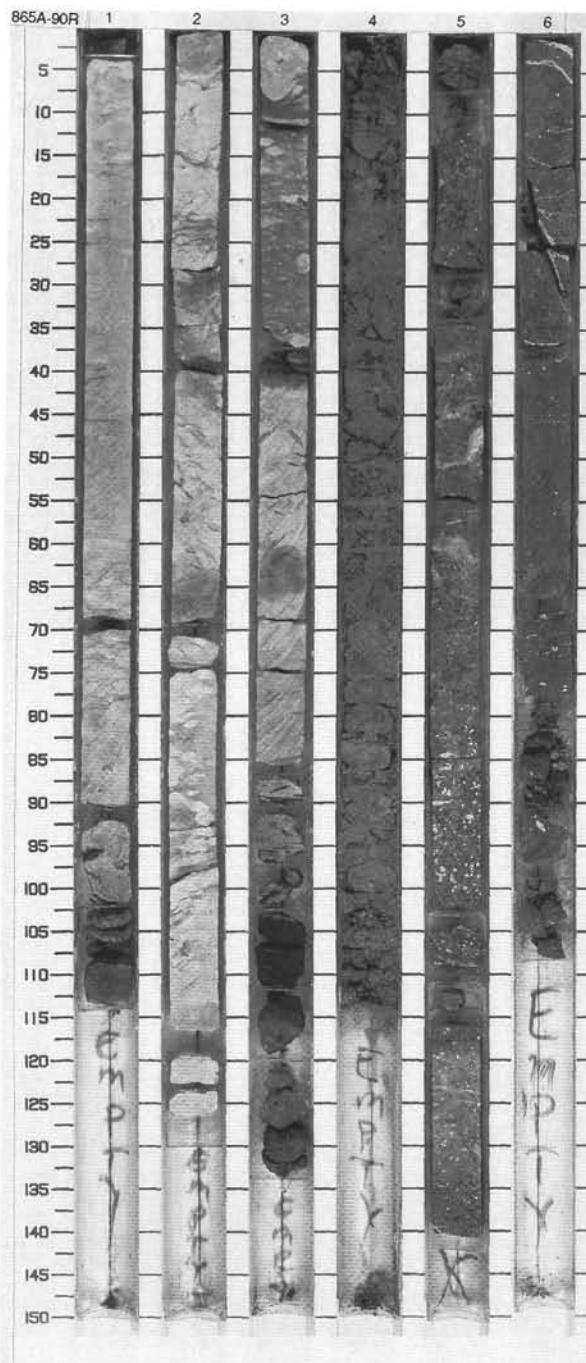
CORED 824.8 - 831.8 mbsf



SITE 865 HOLE A CORE 90R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
		1		P G	—			CLAYEY LIMESTONE (PACKSTONE) and LIGNITIC CLAY
1		2		P G	—	P		Major Lithologies: CLAYEY LIMESTONE (PACKSTONE), Sections 1 to 3, gray (10YR 7/1 to 10YR 3/1), with large gastropods, peloids, foraminifers, abundant sponge spicules, and finely disseminated organic matter and pyrite, pervasively bioturbated with mottled burrows. Clay is present in compacted seams. LIGNITIC CLAY occurs in Section 4, and contains patches of pyrite, calcareous flecks, and pieces of lignite.
2		3	late Albian	P G	—			Minor Lithology: COAL, black (10YR 2/1), in Section 3, 35–40 cm and 116–134 cm.
3		4		P G	—			
4		5		P G	—			
5		6		P G	—			
6								
7								
8								

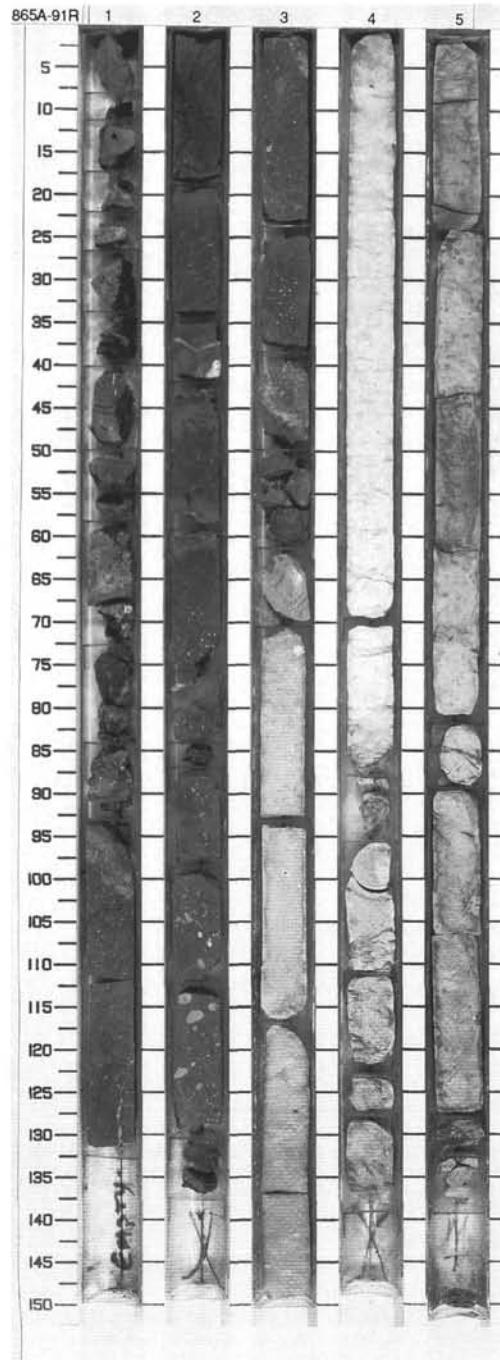
CORED 831.8 - 841.1 mbsf



SITE 865 HOLE R CORE 91R

CORED 841.1 - 847.2 mbsf

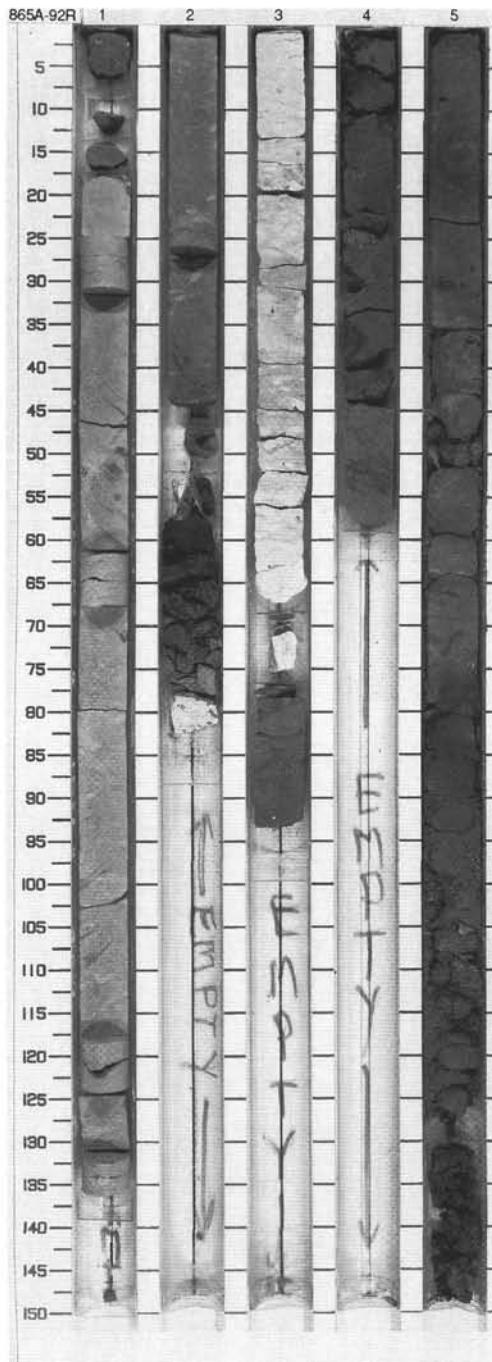
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1			X	D		BASALT, CLAYEY LIMESTONE, and WACKESTONE
2		2			X	F		Major Lithology: BASALT (Section 1, 0 cm to Section 3, 75 cm). Gray (10YR 6/1) CLAYEY LIMESTONE (Section 3, 75 cm to Section 4, 5 cm), heavily bioturbated, moldic porosity with gastropods infilled with dolomite. Bedding contact with lower limestone is sharp.
3		3		zzz zzz o	X	D		WACKESTONE (Section 4, 5-150 cm), bioturbated, minor moldic porosity, at 43 cm bivalve (1 cm), at 104 cm pyrite (1 cm). Strongly compacted, numerous stylolites: dolomite in part. Fragmented bivalve shells and spicules, small foraminifers, gastropods. CLAYEY LIMESTONE (WACKESTONE)
4	w w w w w w	4		zzz zzz 8		10YR 6/1		(Section 5), gray (10YR 6/1), strongly bioturbated; some burrows show a concretion of fine-grained organic particles; small shell fragments occur throughout.
5	w w w w w w	5		zzz zzz 8		10YR 8/1		
6	w w w w w w			zzz zzz 8		10YR 6/1		
7	w w w w w w			zzz zzz 8				



SITE 865 HOLE A CORE 92R

CORED 847.2 - 853.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1		8 6 8 6 8 6		P P	10YR 8/5 To 10YR 5/2	CLAYEY LIMESTONE TO CLAYSTONE and BASALT Major Lithologies: CLAYEY LIMESTONE brown (10YR 8/5), pervasively bioturbated, with discrete burrows, numerous large gastropod molds, bivalves with nacreous luster and some organic flecks. Section 2, 55–77 cm is black CLAYSTONE, pyritic and locally green (2.5G 3/2) and laminated on a mm scale. Volcanic(?) fragments were seen in the base of Section 3. BASALT, Section 1, 0–14cm and Sections 4 and 5.
2		2		8 6 8 6				
3		3		8 6				
4		4		8 6				
5		5		8 6				



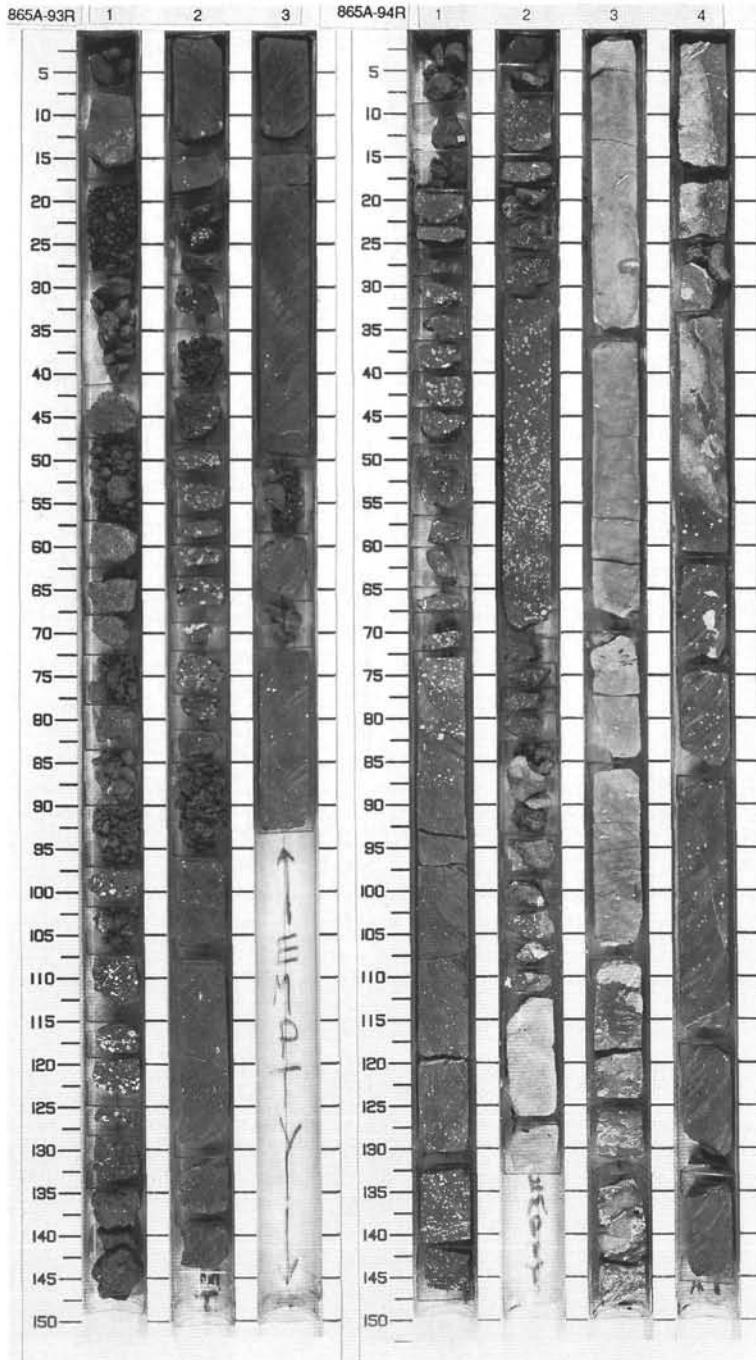
SITE 865 HOLE A CORE 93R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1								BASALT
2		1				D		
3		2			VV X	P		

SITE 865 HOLE A CORE 94R

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1								CLAYEY LIMESTONE and BASALT
2		1			VVVVV			
3		2			XXXXXX	P		
4		3				P	7.5YR 7/2 To 7.5YR 5/2	Major Lithology: Biotaubulated CLAYEY LIMESTONE, pinkish gray (7.5YR 7/2) to black (7.5YR N3/0), becoming darker toward lower horizon, abundant carbonaceous particles, some appear woody; numerous gastropods, bivalves, some woody pieces replaced by pyrite. Abundant "oyster" type shells, some recrystallized to calcite; few benthic foraminifers; volcanic lithoclasts. Section 4, 0-100 cm, intrusive contact of BASALT and CLAYEY LIMESTONE, excellent miliolid benthic foraminifers preserved in recrystallized calcite; ostracods, "oyster" shells, calcite veining.
5		4			T		7.5YR N5/0 To 7.5YR N3/0	
					F			

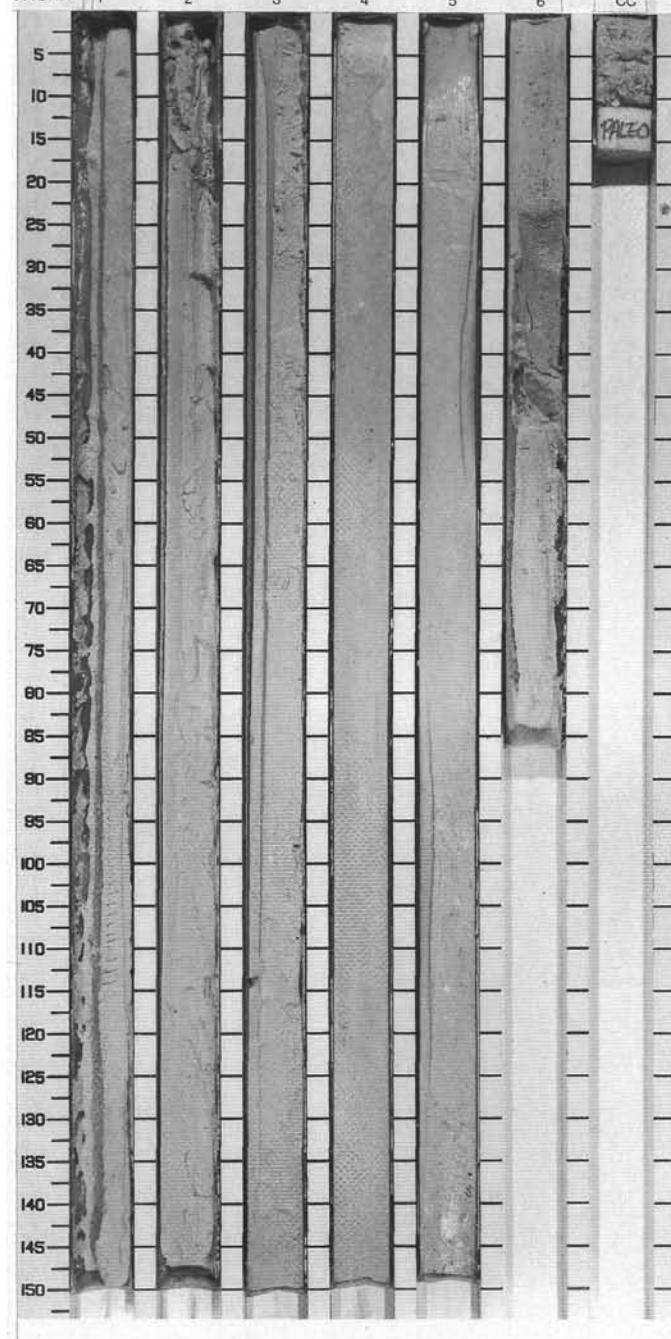
CORED 853.4 - 863.1 mbsf



SITE 865 HOLE B CORE 1H

CORED 0.0 - 8.5 mbsf

865B-1H | 1 | 2 | 3 | 4 | 5 | 6 | CC

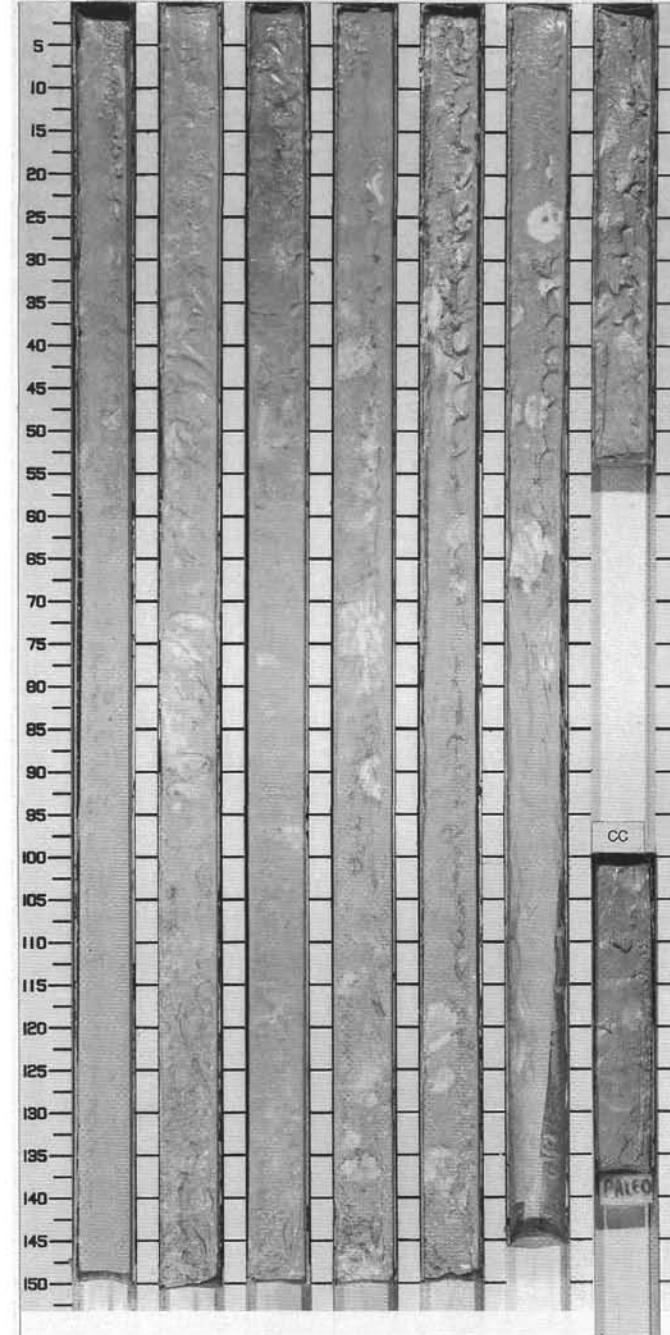


SITE 865 HOLE B CORE 3H

CORED 18.0 - 27.5 mbsf

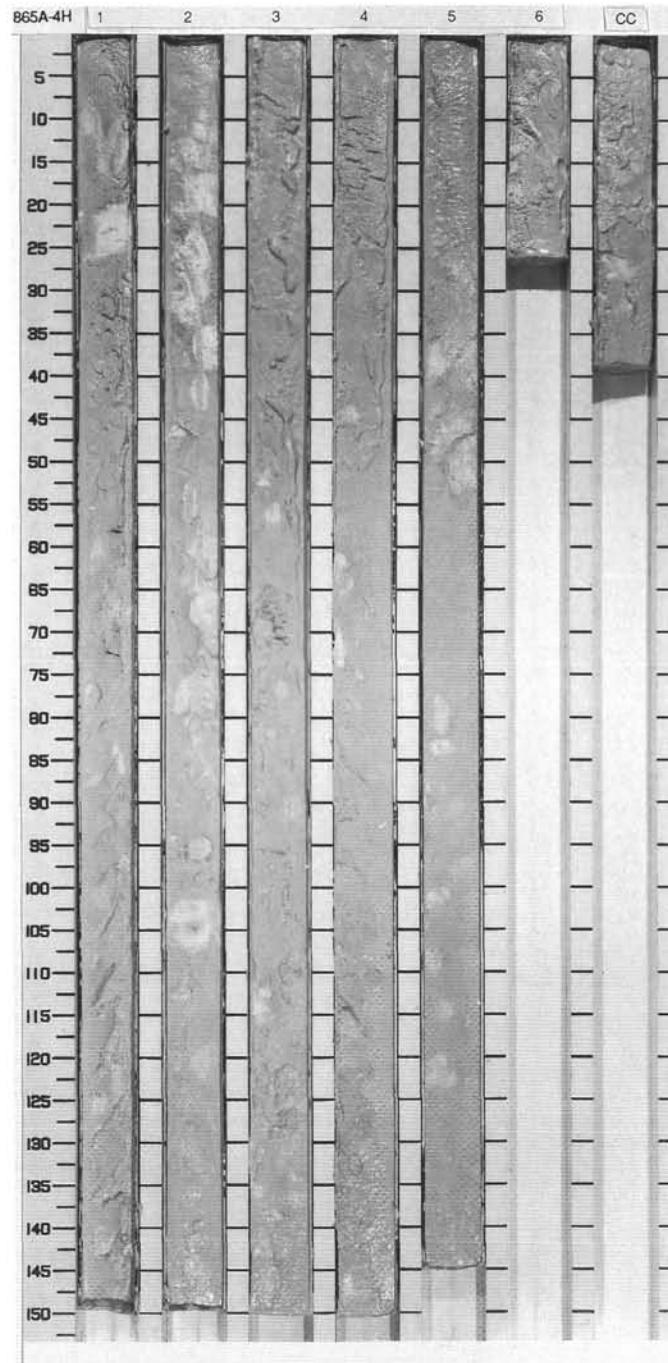
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+		1	early Oligocene	~~~	P		FORAMINIFER NANNOFOSSIL OOZE
2	+		2			P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), soupy, with burrow mottles infilled with whiter fine-grained nannofossil ooze.
3	+		3			S P		Minor Lithology: NANNOFOSSIL OOZE, white (N9 to 10YR 8/1), infilling burrows.
4	+		4			P	10YR 8/2 To N9	
5	+		5	late Eocene	~~~ ~~~~	P		
6	+		6		~~~	P		
7	+		7		~~~	I P		
8	+	CC				P M		

865B-3H 1 2 3 4 5 6 7



SITE 865 HOLE B CORE 4H

CORED 27.5 - 37.0 mbsf

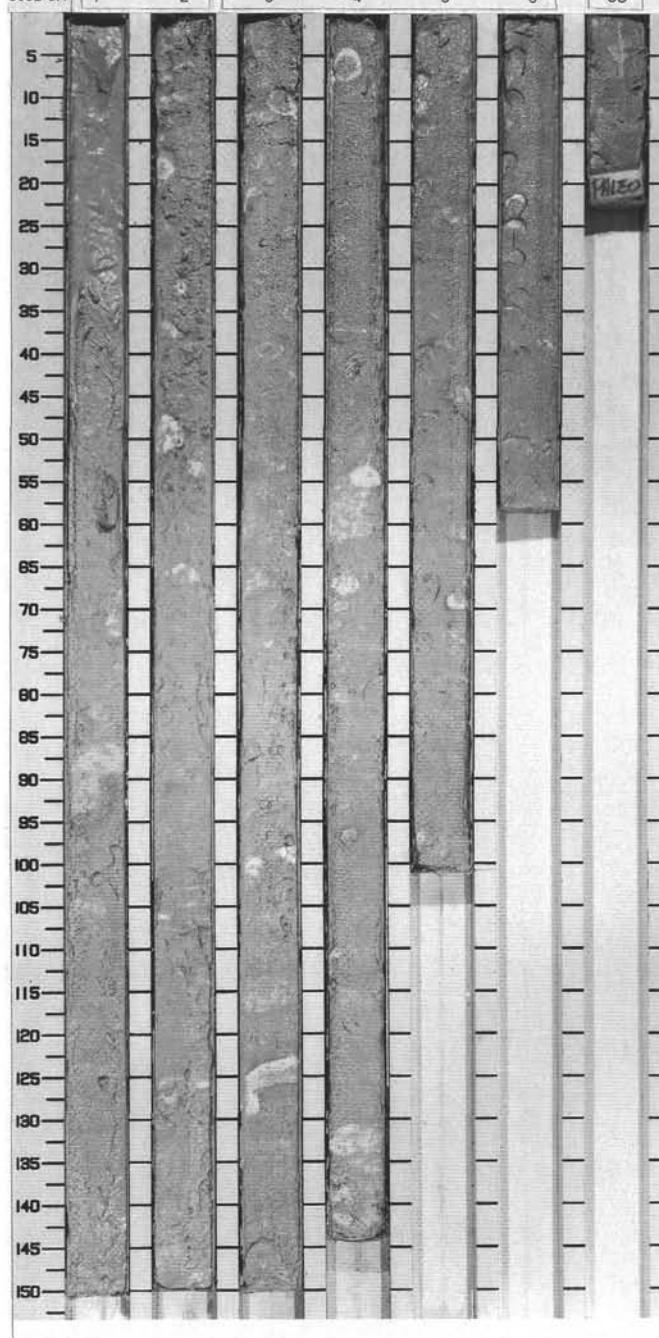


SITE 865 HOLE B CORE 5H

CORED 37.0 - 46.5 mbsf

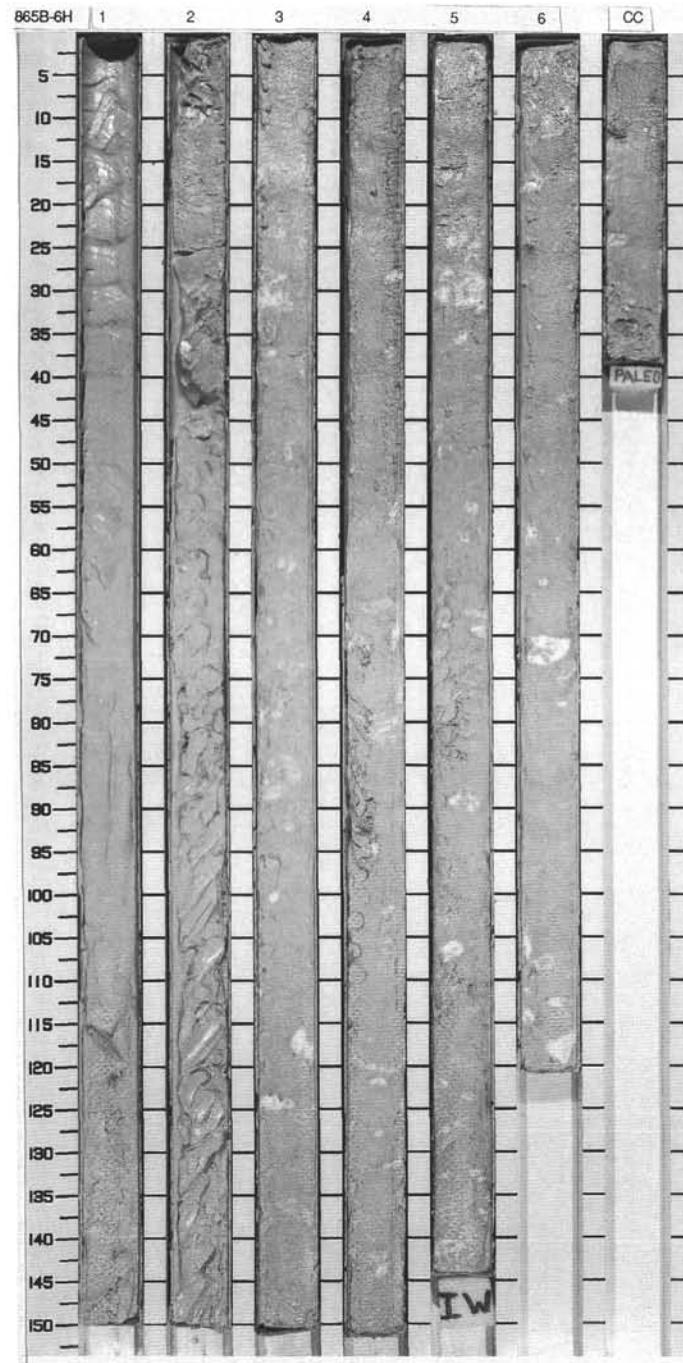
Description

865B-5H | 1 | 2 | 3 | 4 | 5 | 6 | CC |



SITE 865 HOLE B CORE 6H

CORED 46.5 - 56.0 mbsf

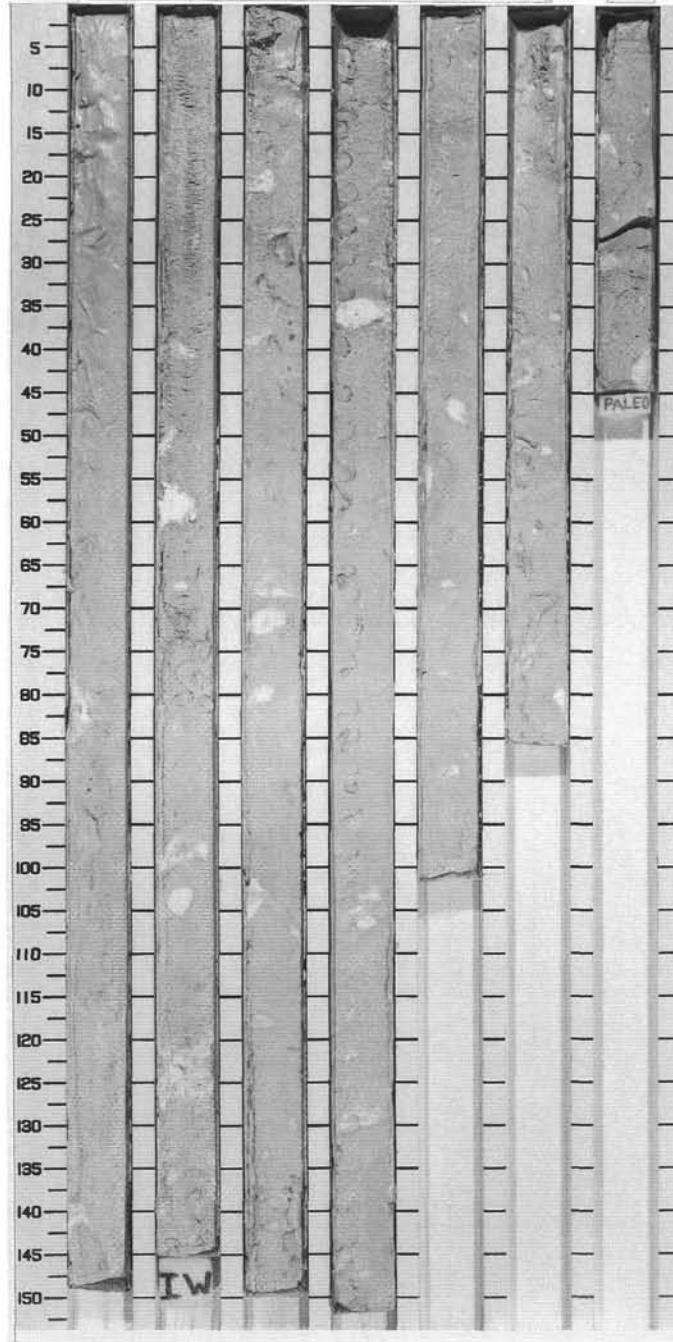


SITE 865 HOLE B CORE 7H

CORED 56.0 - 65.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1			-	P		FORAMINIFER NANNOFOSSIL OOZE
2		2			-	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), with white (N9) mottles.
3		3			-	P		
4		middle Eocene			-	P	10YR 8/2	
5		4			-	P		
6		5			-	P		
7		6			-	P		
8	CC				-	MP		

865B-7H | 1 2 3 4 5 6 | CC



SITE 865 HOLE B CORE 8H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+			⌘				FORAMINIFER NANNOFOSSIL OOZE
1	+	1		⌘		P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), with white (N9) burrow mottles.
2	+	2		⌘		P		
3	+	middle Eocene		⌘				
3	+	3		⌘		P		
4	+			⌘		P	10YR 8/2	
4	+	4		⌘		S P		
5	+			⌘		P		
6	+	early Eocene		⌘		P		
6	+	5		⌘		I		
7	+			⌘		P		
8	+			⌘		M		
	CC							

CORED 65.5 - 75.0 mbsf

Description

FER NANNOFOSSIL

ogy:
FER NANNOFOSSIL
e (10YR 8/2), with white
mottles.

SITE 865 HOLE B CORE 9H

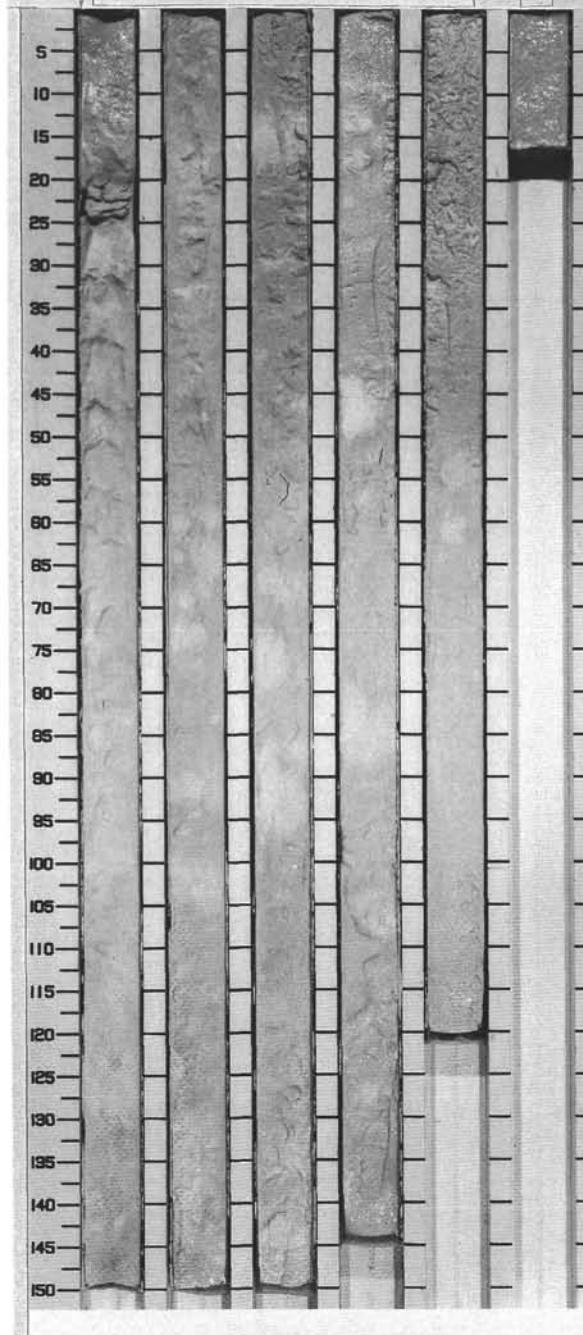
CORED 75.0 - 84.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1		≥	-	P		FORAMINIFER NANNOFOSSIL OOZE
2		2		≥	-	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), with disturbed white (N9) mottles.
3		3		≥	-	P		
4		4	early Eocene	~	-	P	10YR 8/2	
5		5		~	-	P		
6		6		~	-	P		
7				~	I			
8				~	P M			

SITE 865 HOLE B CORE 10H

CORED 84.5 - 94.0 mbsf

865B-10H | 1 2 3 4 5 | CC

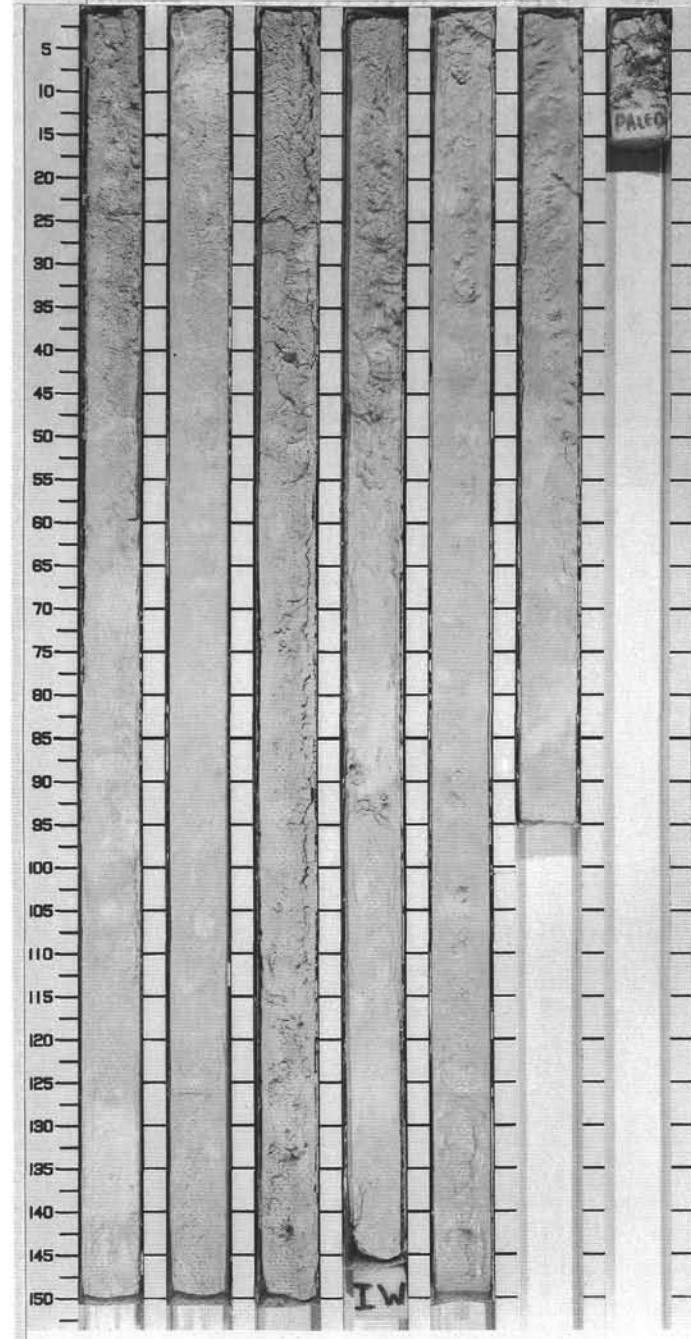


SITE 865 HOLE B CORE 11H

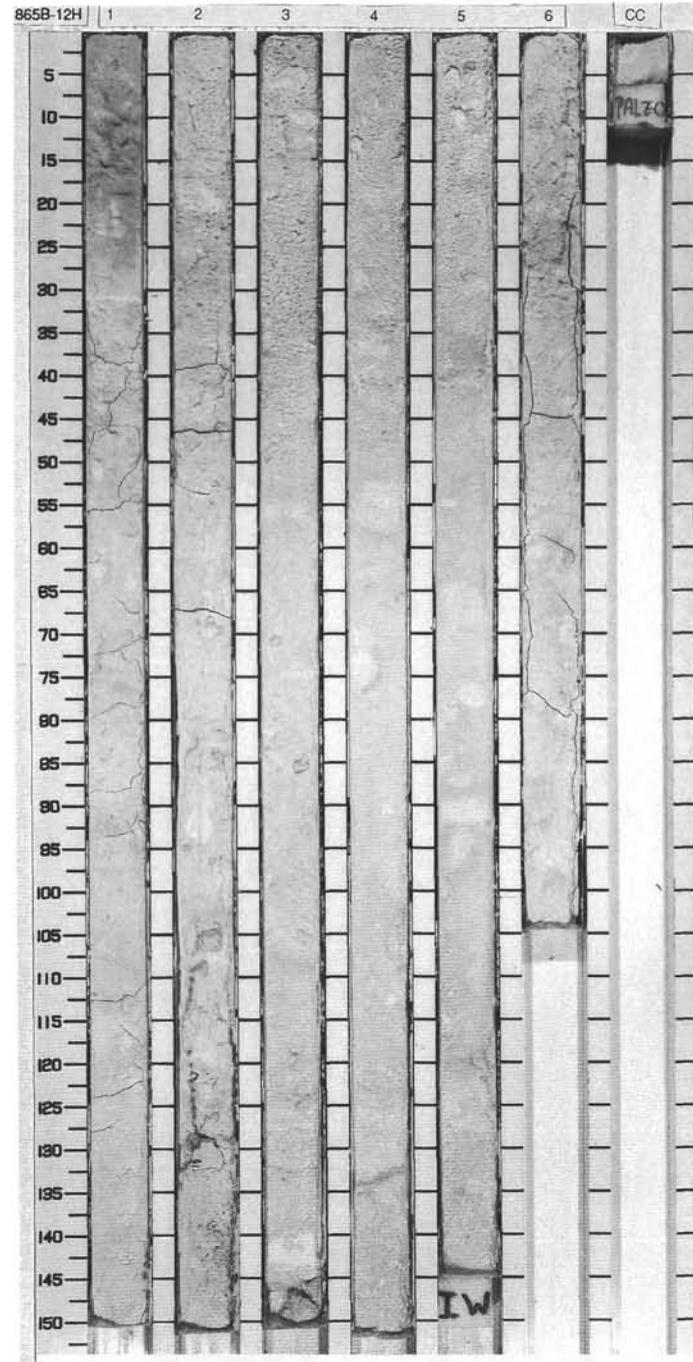
CORED 94.0 - 103.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
0								
1		1		~	--	P		FORAMINIFER NANNOFOSSIL OOZE
2		2	early Eocene	~	S	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/1) to 10YR 8/2, with burrow mottles infilled with whiter nannofossil ooze.
3		3		~				Minor Lithology: White (N9) bed in Section 1, 127–140 cm, composed of NANNOFOSSIL OOZE.
4		4		~		P	10YR 8/2 To 10YR 8/1	
5		5		~		P		
6		6	late Paleocene	~	I	P		
7				~				
8				~		P		
9	CC			~	M			

865B-11H | 1 2 3 4 5 6 CC



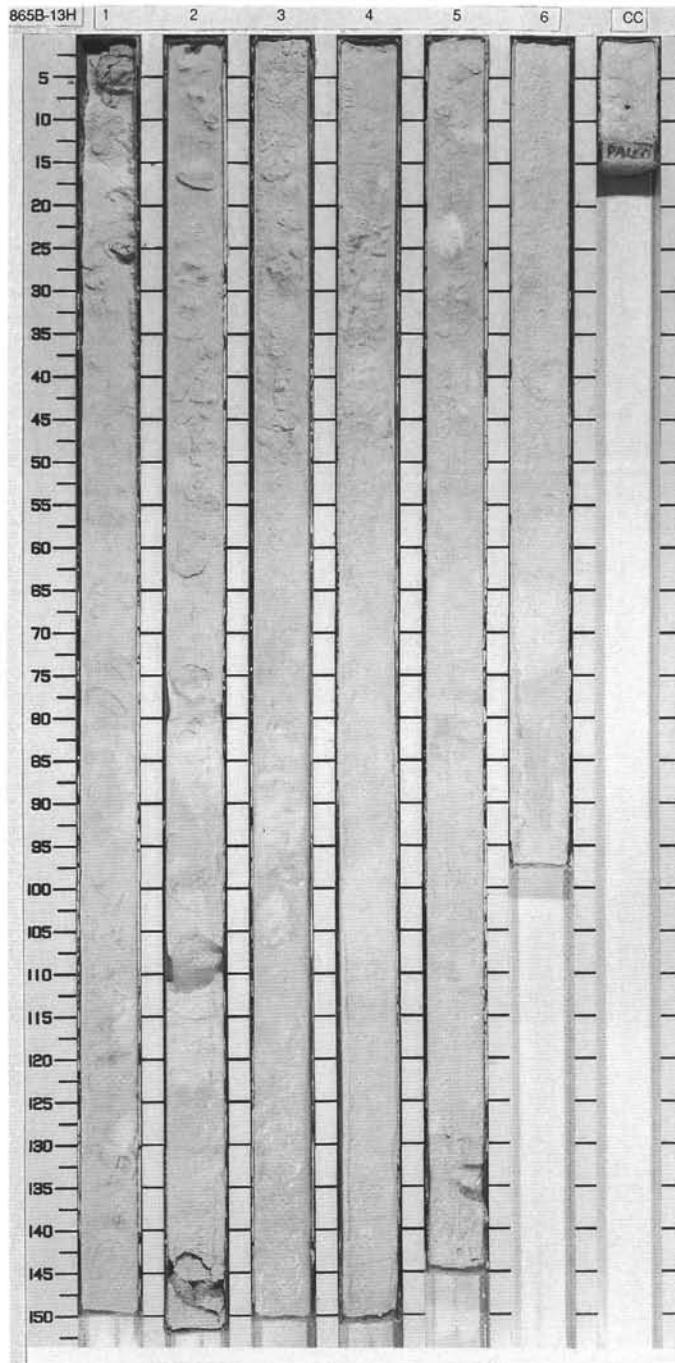
SITE 865		HOLE B	CORE 12H	CORED 103.5 - 113.0 mbsf				
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+	1		~	-	P		FORAMINIFER NANNOFOSSIL OOZE
2	+	2		~	-	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2 to 10YR 8/1), with white (N9) burrow infillings, and small manganese micronodules.
3	+	3		~	-	P		
4	+	4	late Paleocene	~	-	P	10YR 8/2 To 10YR 8/1	
5	+	5		~	-	P		
6	+	6		~	-	P		
7	+			~	-			
8	+			~	-			
	CC				M			



SITE 865 HOLE B CORE 13H

CORED 113.0 - 122.5 mbsf

Meter	Graphic Lith.	Section Age	Structure and Components	Disturb	Sample	Color	Description
1	+	1	~	-	P		FORAMINIFER NANNOFOSSIL OOZE
2	+	2	~	-	P		Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2 to N9), with white (N9) burrow mottles.
3	+	3	~	-	P		
4	+	late Paleocene	~	-	S	10YR 8/2 To N9	
5	+	4	~	-	P		
6	+	5	~	-	P		
7	+	6	~	-	I		
8	+	CC	~	-	M		



SITE 865 HOLE B CORE 14H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
0	+							
1	+	1				P		FORAMINIFER NANNOFOSSIL OOZE
2	+	2				P		Major Lithology: White (10YR 8/2), FORAMINIFER NANNOFOSSIL OOZE. Bioturbation throughout; burrow mottles, white (N9) with occasional darker rims and centers; burrows, 2-5 cm in diameter. Very fine-grained black specks occur in Section 3, 140-145 cm.
3	+	3				P		
4	+	4			S	10YR 8/2		
5	+	4	late Paleocene		-	P		
6	+	5			-	P		
7	+	6			-	P		
8	+	6			-	P		
	CC					M		

CORED 122.5 - 132.0 mbsf

Description

FORAMINIFER NANNOFOSSIL OOZE

Major Lithology:
White (10YR 8/2), FORAMINIFER NANNOFOSSIL OOZE. Bioturbation throughout; burrow mottles, white (N9) with occasional darker rims and centers; burrows, 2–5 cm in diameter. Very fine-grained black specks occur in Section 3, 140–145 cm.

865B-14H | 1 2 3 4 5 6 | CC

5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150

PALEO

SITE 865 HOLE B CORE 15X

SITE 865 HOLE B CORE 16X

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	w w P P	CC	I. Albian	Mn	V/V	M T	10YR 8/2	WACKESTONE-PACKSTONE Major Lithology: WACKESTONE-PACKSTONE, white (10YR 8/2), small pieces with very dark gray (7.5YR 3/0) manganese- oxide coatings (0-4 cm), with benthic foraminifers. Some show solution features; cracks and cavities with yellowish, multilayered sediments, manganese-oxide coatings and sparry calcite.

SITE 865 HOLE B CORE 17X

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
	W W P P W w P P	CC I. Albanian	Mh		✓ X	P M T	10YR 8/2	WACKESTONE-PACKSTONE Major Lithology: WACKESTONE-PACKSTONE, mostly white (10YR 8/2), with benthic foraminifers and intraclasts. Several cavities with complex, multiple stages of infillings (containing planktonic foraminifers).



SITE 865 HOLE B CORE 18X

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W	CC	I. Albian	(Ph Mn)	>	M	10YR 8/1		WACKESTONE Major Lithology: Well indurated, white (10YR 8/1) WACKESTONE, with cavities (molds and dissolution-vugs), some of which are filled with laminated dark brown phosphatic material, sparry calcite, black frambooidal manganese-oxide, and/or pelagic sediments.

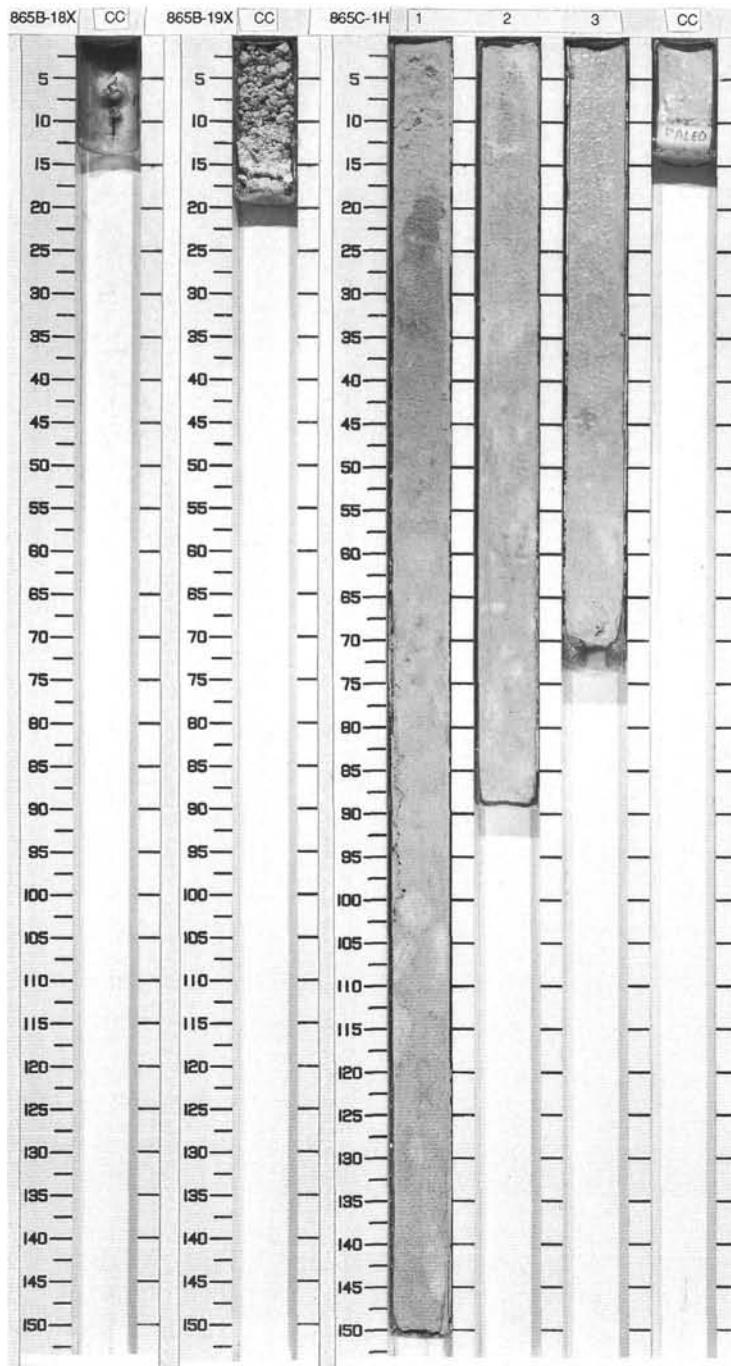
SITE 865 HOLE B CORE 19X

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
W W W W	CC	I. Albian	(Ph Mn)	G D B	—	M	10YR 8/3 10YR 8/1	WACKESTONE AND FORAMINIFER NANNOFOSSIL OOZE Major Lithology: Granule- to pebble-sized WACKESTONE (0-10 cm), very-pale brown (10YR 8/3), with benthic foraminifers and nerineid gastropods, mostly with phosphatic and manganese oxide crusts. White (10YR 8/1), FORAMINIFER NANNOFOSSIL OOZE (10-19 cm).

SITE 865 HOLE C CORE 1H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+	1						NANNOFOSSIL FORAMINIFER OOZE
2	+	2	Quaternary	~	—	—		Major Lithology: NANNOFOSSIL FORAMINIFER OOZE, mottled white (10YR 8/2) with burrows (1-2 cm) and gray patches (10YR 7/1) and disseminated manganese micronodules (0.1 mm). Most of the foraminifers are crushed.
3	+	3		~~~	—	—	M	

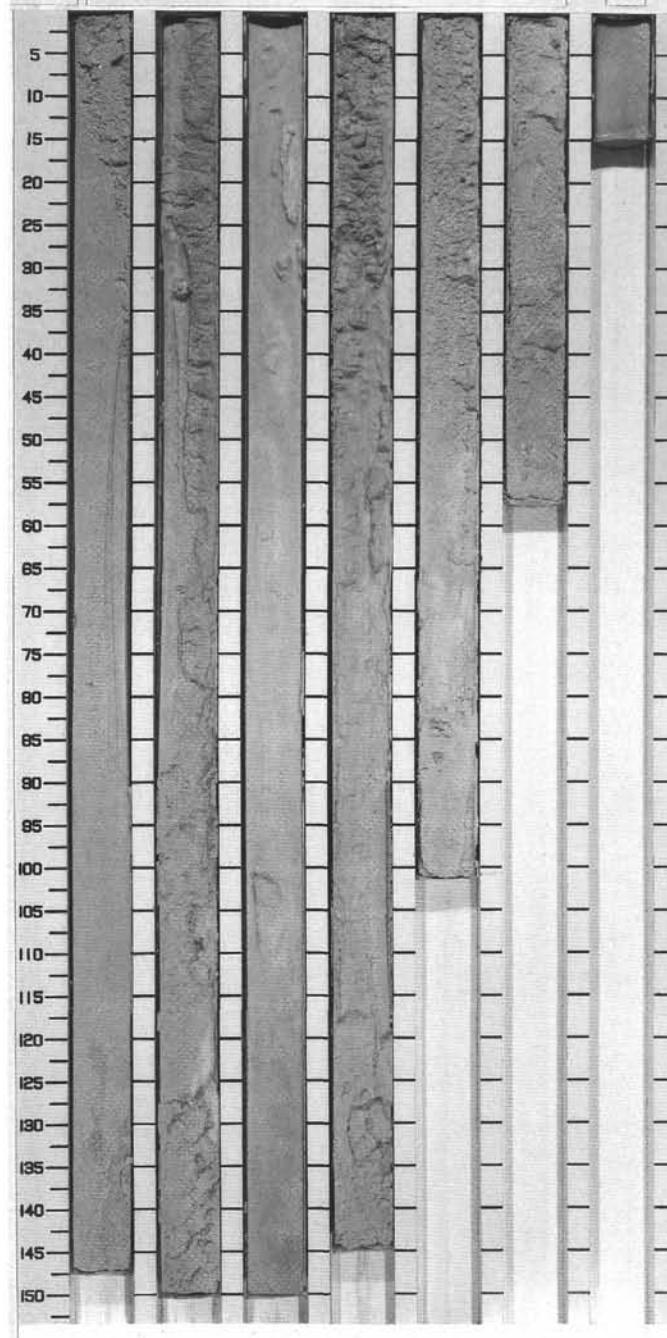
CORED 146.2 - 155.8 mbsf



SITE 865 HOLE C CORE 2H

CORED 3.3 - 12.8 mbsf

865C-2H | 1 2 3 4 5 6 | CC



SITE 865 HOLE C CORE 3H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
0	+	1			- C			FORAMINIFER NANNOFOSSIL OOZE
1	+	1			-			Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), with white (N9) burrow mottles and manganese-iron micronodules throughout but concentrated around burrows.
2	+	2			-			
3	+	3	early Oligocene		-			
4	+	4			-			
5	+	5			-			
6	+	6			-			
7	+	5	late Eocene		-			
8	+	6			-			
	CC				M			

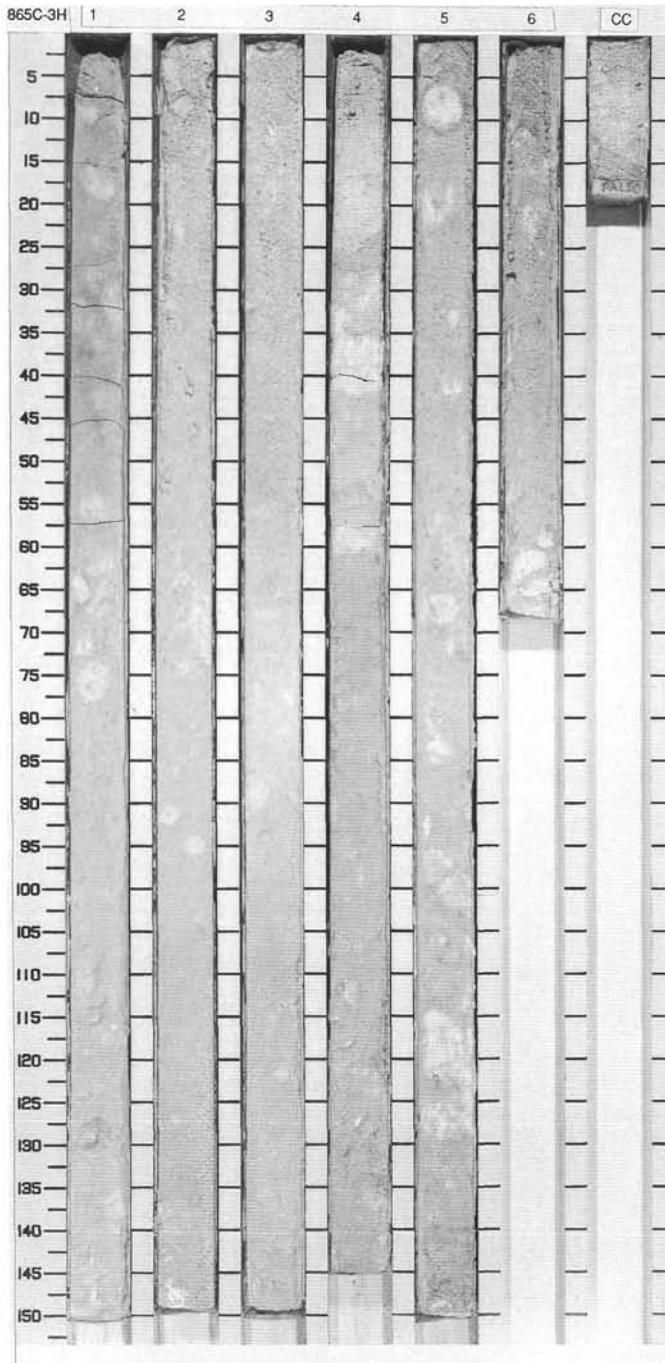
CORED 12.8 - 22.3 mbsf

Description

Major Lithology:
FORAMINIFER NANNOFOSSIL
OOZE, white (10YR 8/2), with white
(N9) burrow mottles and
manganese-iron micronodules
throughout but concentrated around
burrows.

10YR
8/2

1



SITE 865 HOLE C CORE 4H

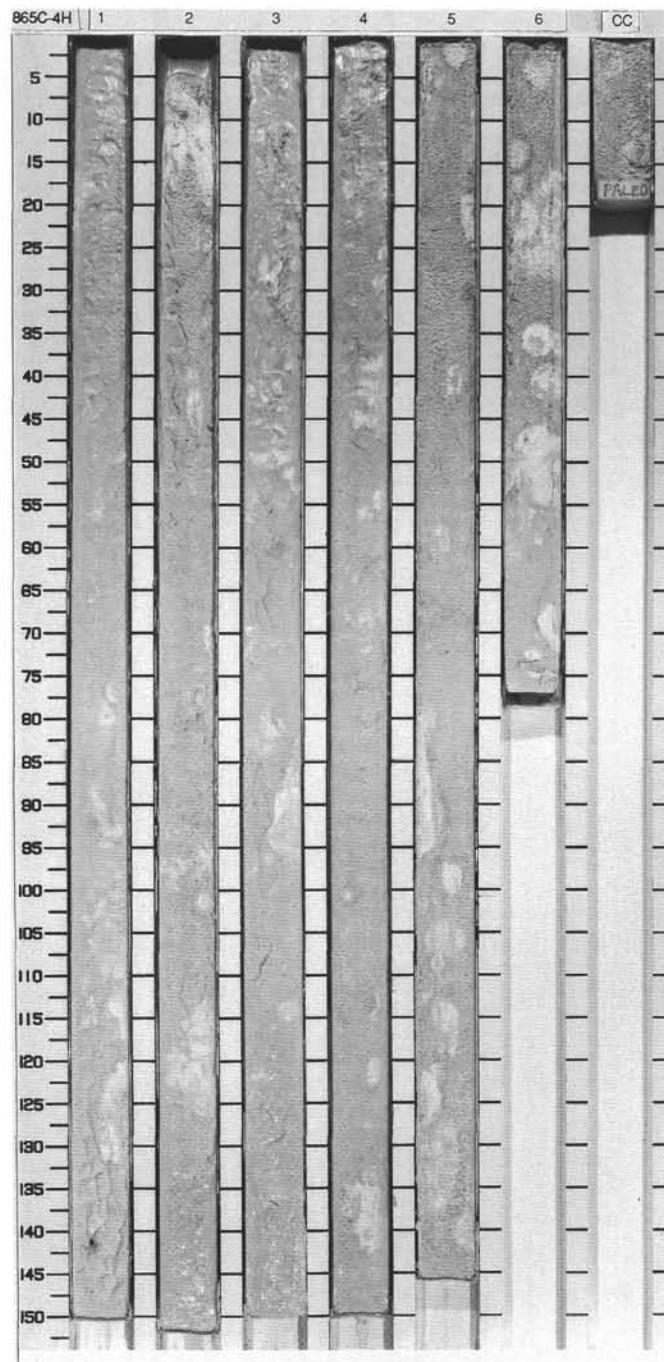
CORED 22.3-31.8 mbsf

Meter	Graphic Lith.	Section	Age	Disturb	Sample	Color	Description
1		1		Mn			FORAMINIFER NANNOFOSSIL OOZE
2		2	>	Mn			Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), with white (N9) mottles which are round-oblong in Section 6 and some gray (10YR 7/1) patches inside and outside the structures.
3		3	>	Mn			
4		4	>	Mn			
5		5	>	Mn			
6		6	>	Mn			
7			>	Mn			
8			>	Mn			
	CC						

middle Eocene

10YR 8/2

M



SITE 865 HOLE C CORE 5H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+		1	3	-			FORAMINIFER NANNOFOSSIL OOZE
2	+		2	3	-			Major Lithology: White (10YR 8/2) FORAMINIFER NANNOFOSSIL OOZE, with white (N9) burrow mottles of nannofossil ooze.
3	+		3	3	-			
4	+		middle Eocene	3	-			
5	+		4	3	-			
6	+		5	3	-			
7	+		6	3	-			
8	+		CC	3	M			

CORED 31.8 - 41.3 mbsf

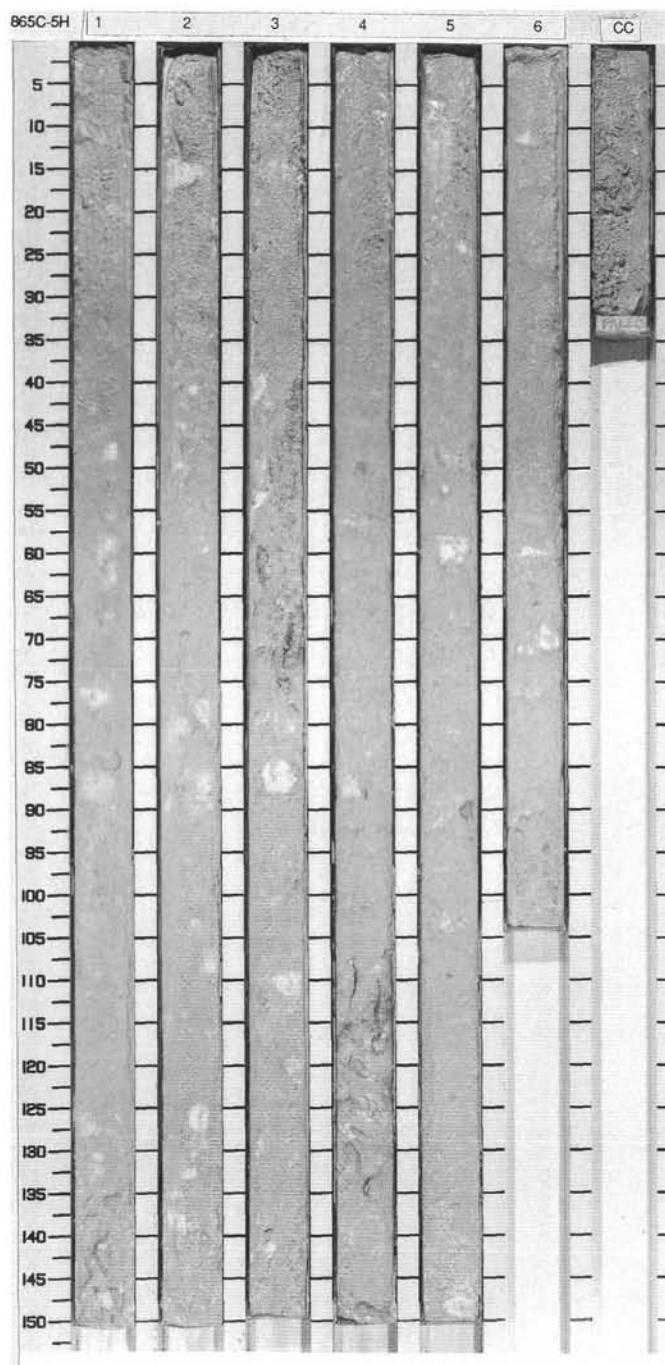
FORAMINIFER NANNOFOSSIL OOZE

Major Lithology:
White (10YR 8/2) FORAMINIFER NANNOFOSSIL OOZE, with white (N9) burrow mottles of nannofossil ooze.

10YR

10YR

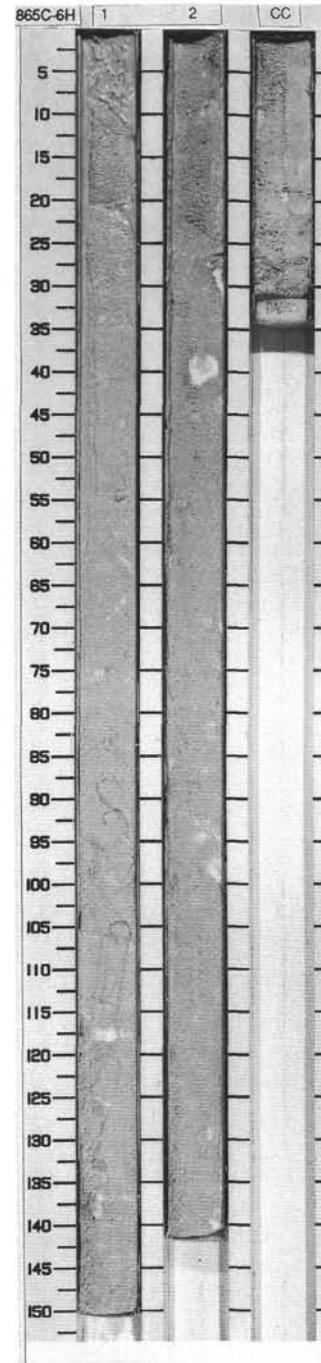
10



SITE 865 HOLE C CORE 6H

CORED 41.3 - 50.8 mbsf

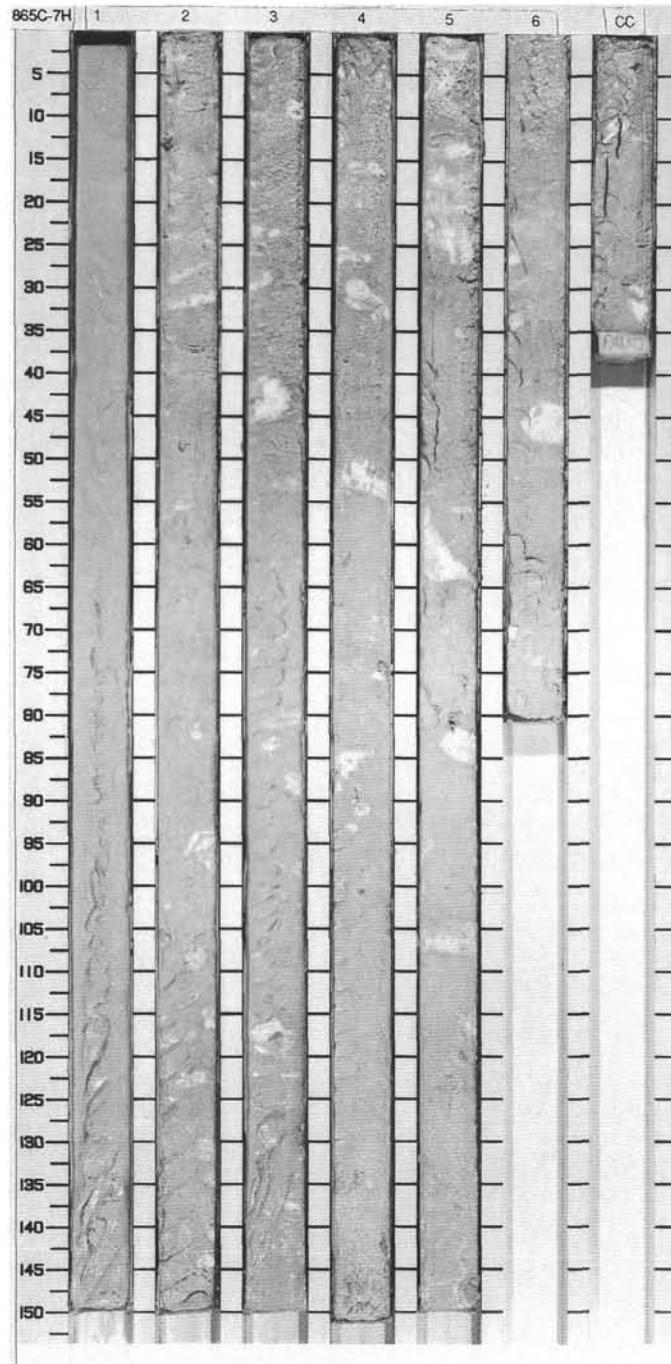
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1	+	1						FORAMINIFER NANNOFOSSIL OOZE
2	+	2	middle Eocene	~~~	---	M	10YR 8/2	Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), burrowed, white infillings with dark organic linings around burrows (circular, 3 cm diameter).



SITE 865 HOLE C CORE 7H

CORED 50.8 - 60.3 mbsf

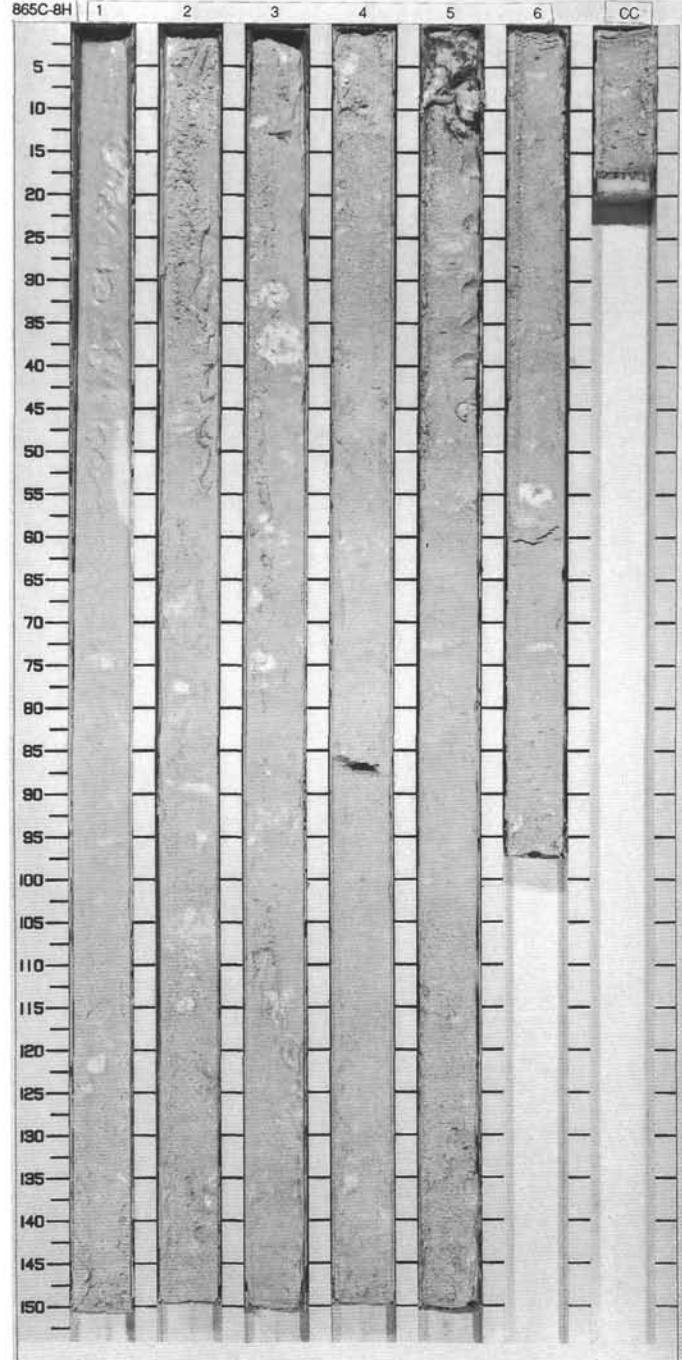
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1						FORAMINIFER NANNOFOSSIL OOZE
2		2						Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2) to light gray (10YR 7/2), burrow mottles of whiter (N9) nannofossil ooze with dark organic linings throughout.
3		3						
4		4	middle Eocene					
5		5						
6		6						
	CC					M		



SITE 865 HOLE C CORE 8H

CORED 60.3 - 69.8 mbsf

865C-8H 1 2 3 4 5 6 CC



SITE 865 HOLE C CORE 9H

Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1				~	--			FORAMINIFER NANNOFOSSIL OOZE
2		1		~	--			Major Lithology: White (10YR 8/2 to 10YR 7/2), FORAMINIFER NANNOFOSSIL OOZE, slight to moderate bioturbation throughout, burrow mottles of white (N9) nannofossil ooze. Small (< 1 cm in cutting section) gray (10YR 7/1 to 10YR 6/1) patches scattered throughout the core.
3		2		~	--			
4		3		~	--			
5		early Eocene		~	--			
6		4		~	--			
7		5		~	--			
8		6		~	--			
9	CC			~	--	M		

CORED 69.8 - 79.3 mbsf

Description

FORAMINIFER NANNOFOSSIL OOZE

Major Lithology:
White (10YR 8/2 to 10YR 7/2),
FORAMINIFER NANNOFOSSIL OOZE, slight to moderate bioturbation throughout, burrow mottles of white (N9) nanofossil ooze. Small (< 1 cm in cutting section) gray (10YR 7/1 to 10YR 6/1) patches scattered throughout the core.

10YR
8/2
To
10YR
7/2

1

A vertical column of six sedimentary core samples, labeled 1 through 6, arranged from left to right. Each sample is a dark, rectangular block with a vertical scale to its left ranging from 5 to 150 cm. Sample 6 shows a distinct horizontal layer at approximately 145 cm. The labels 1 through 6 are positioned above their respective cores, and a label 'CC' is located at the top right.

SITE 865 HOLE C CORE 10H

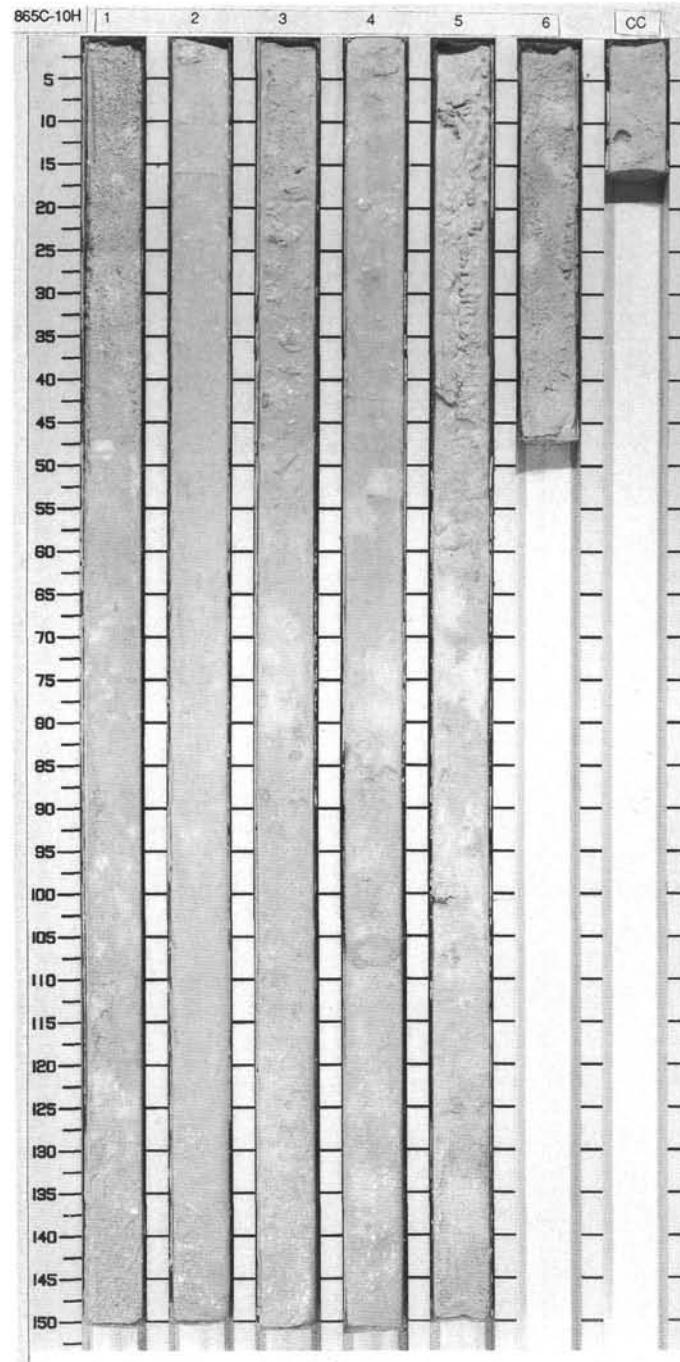
CORED 79.3 - 88.8 mbsf

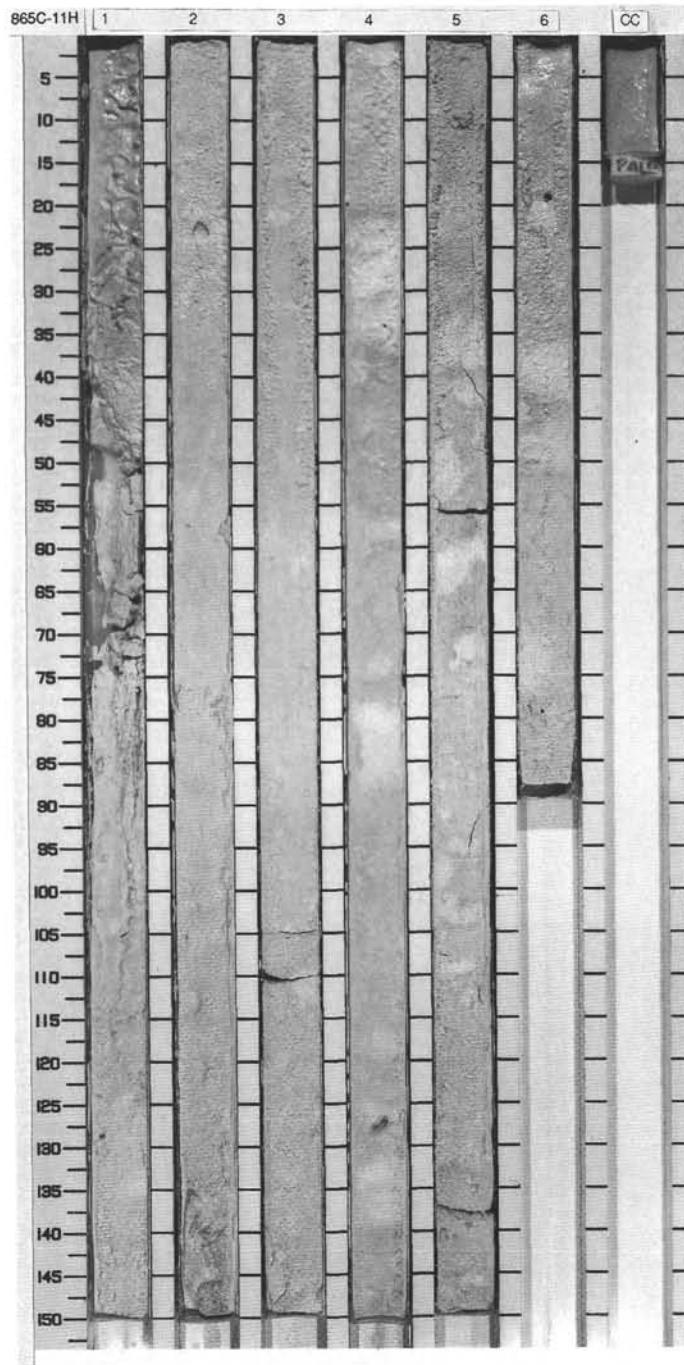
Meter	Graphic Lith.	Section	Age	Structure and Components	Disturb	Sample	Color	Description
1		1						FORAMINIFER NANNOFOSSIL OOZE
2		2						Major Lithology: FORAMINIFER NANNOFOSSIL OOZE, white (10YR 8/2), burrowed throughout, white (N9) infillings of nannofossil ooze.
3		3	early Eocene					
4		4						
5		5						
6		6						
7		7						
8		8						

10YR
8/2

S

M

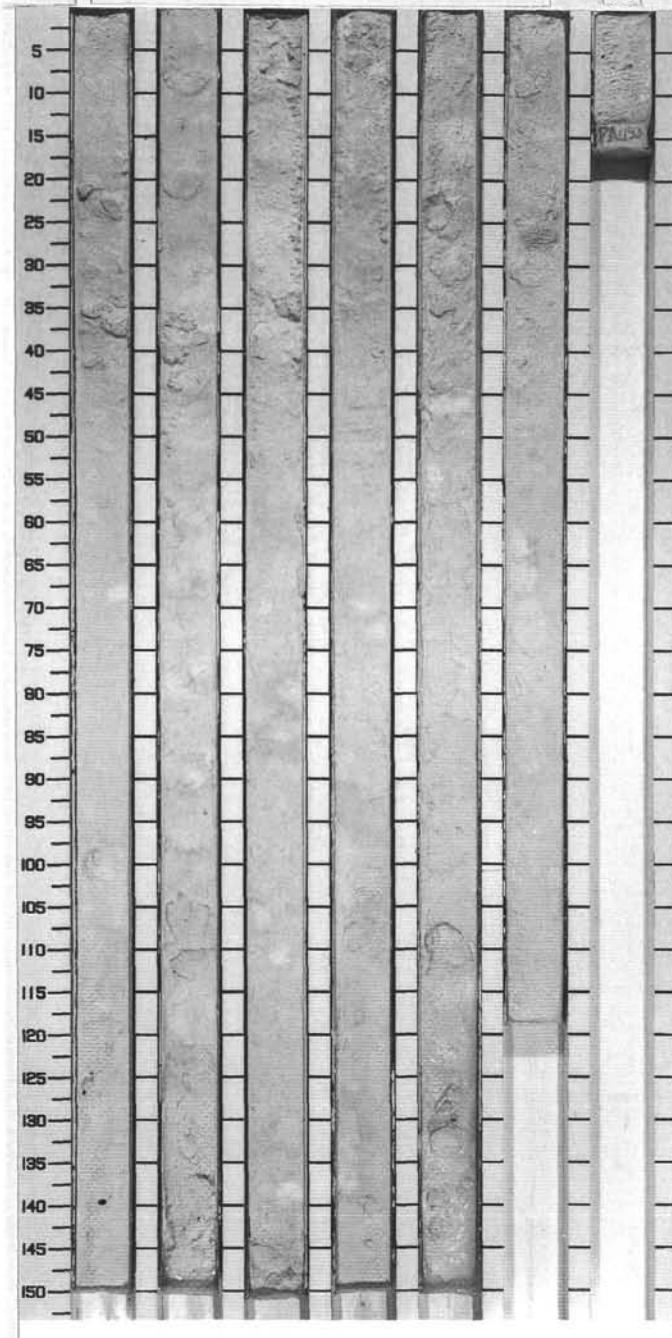




SITE 865 HOLE C CORE 13H

CORED 107.8 - 117.3 mbsf

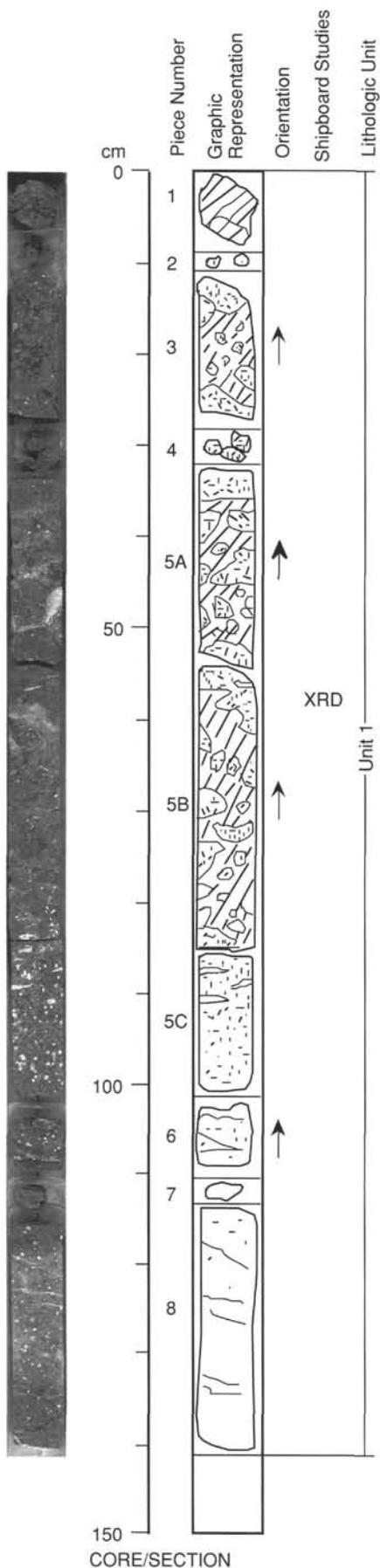
865C-13H | 1 2 3 4 5 6 CC



SITE 865 HOLE C CORE 14H

CORED 117.3 - 126.8 mbsf

143-865A-90R-5

**UNIT 1: BASALT****Pieces 5C to 8**

CONTACTS: Intrusive; contact is gradational and with an alteration halo.

PHENOCRYSTS: All olivine have been pseudomorphed by clays and Fe-oxyhydroxide; almost all pyroxene has also been replaced.

Pyroxene - Trace; 1.5 mm maximum length; subhedral prisms.

Olivine - ~1%; ~1.0 mm maximum size; subhedral grains.

GROUNDMASS: Microcrystalline; intergranular.

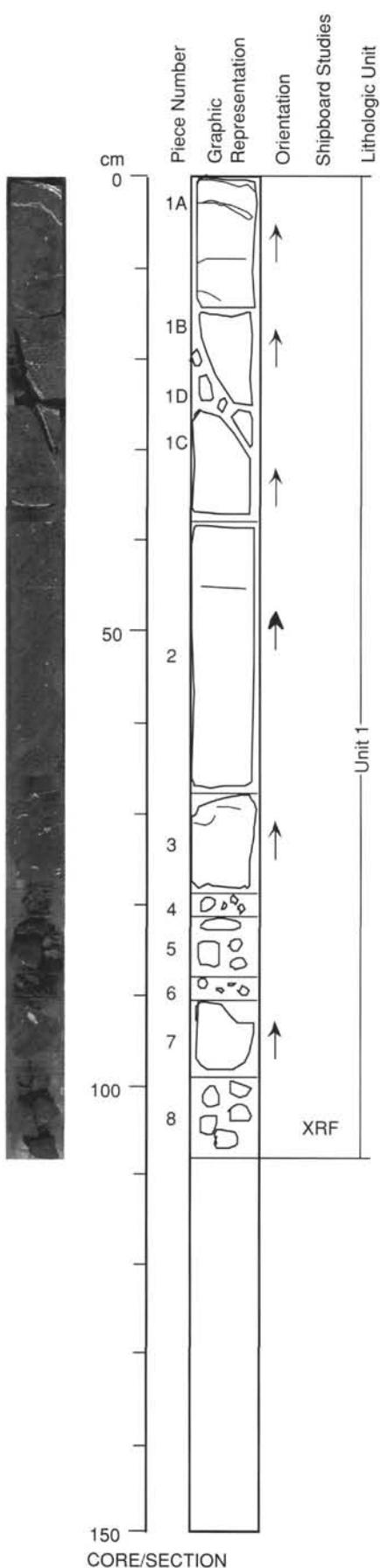
VESICLES: 15%; 1.0–9.0 mm; mostly subrounded; irregular distribution; size and density higher along the contact; infilled mostly with calcite and less commonly with green clays and Fe-oxyhydroxide.

COLOR: Dark gray (2.5G 6/0).

STRUCTURE: Sill intruded into clayey bioclastic limestone.

ALTERATION: Highly altered; mostly to clay, calcite, and Fe-oxyhydroxide.

VEINS/FRACTURES: 1%; ~1.0 mm; subhorizontal; infilled with calcite and Fe-oxyhydroxide.

**UNIT 1: SPARSELY MICROPHYRIC OLIVINE-PYROXENE BASALT****Pieces 1A to 8**

CONTACTS: None observed.

PHENOCRYSTS: All olivine has been pseudomorphed by green clays and occasionally rimmed with Fe-oxyhydroxide; pyroxene appears to be highly altered.
Pyroxene - ~1%; 1.5 mm average size; subhedral prisms.

Olivine - 1%-2%; 1.0 mm average size; subhedral grains.

GROUNDMASS: Microcrystalline; intergranular.

VESICLES: ~5%; 2.0–8.0 mm diameter; mostly subrounded; irregular distribution. All vesicles infilled with green clays but some are rimmed with green clays and infilled with calcite and Fe-oxyhydroxide in the center; a few are completely infilled with calcite.

COLOR: Dark gray (2.5G 4/0) with light greenish gray (2.5G 6/2) or white amygdules.

STRUCTURE: Sill; continuation of Unit 1.

ALTERATION: Highly altered; mostly to clays and Fe-oxyhydroxide.

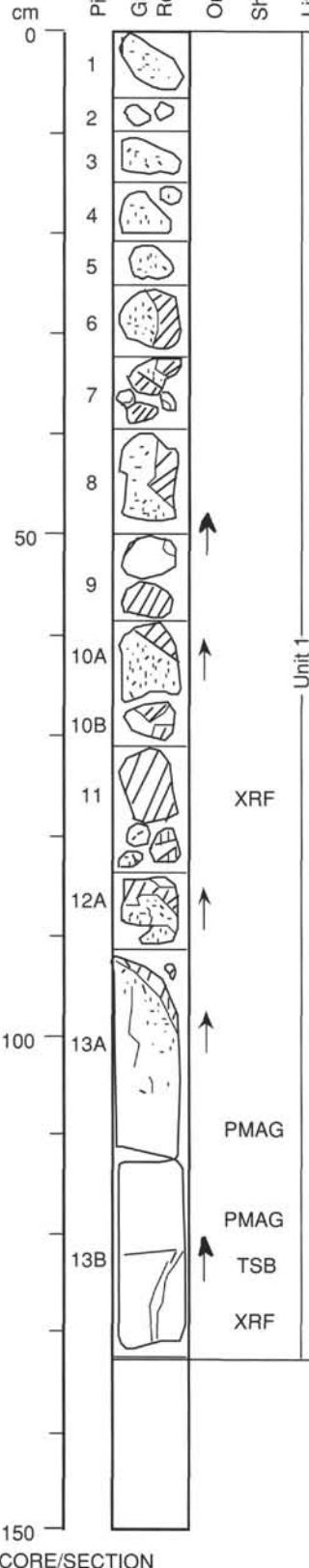
VEINS/FRACTURES: 1%; <2.0 mm; mostly subhorizontal but crosscutting; infilled with calcite.



143-865A-91R-1

UNIT 1: SPARSELY OLIVINE-PYROXENE MICROPHYRIC BASALT

Pieces 1 to 13B



CONTACTS: Very irregular contact with enclosed, thermally metamorphosed sediment; alteration halo present.

PHENOCRYSTS: All olivine has been pseudomorphed by green clays, but are occasionally rimmed with pyrite or contain Fe-oxyhydroxide; pyroxene has been moderately altered to clay and also occasionally rimmed with pyrite.

Pyroxene - ~1%; 1.0 mm average size; subhedral prisms.
Olivine - ~1%; 1.5 mm average size; subhedral grains.

GROUNDMASS: Microcrystalline; intergranular.

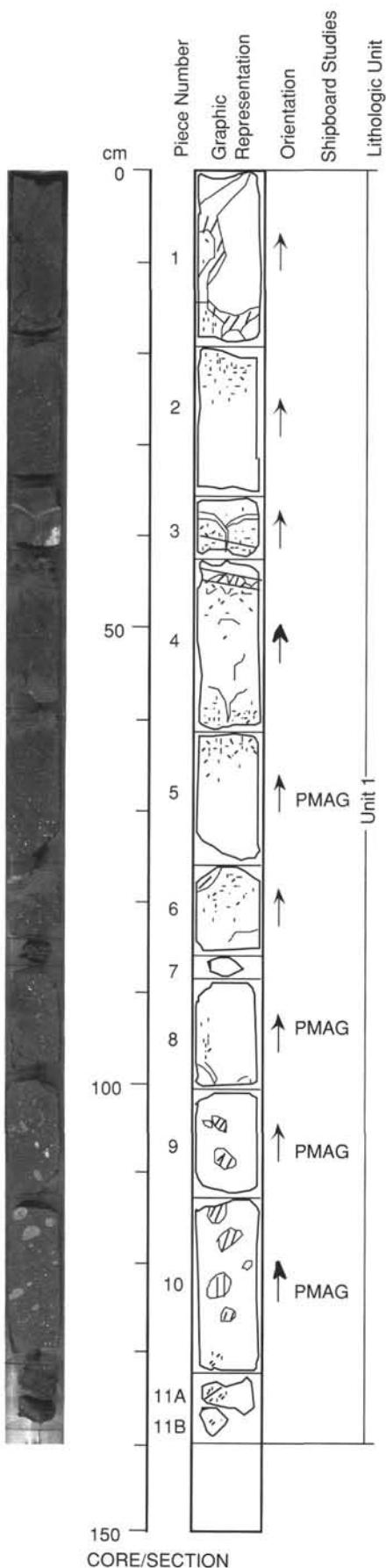
VESICLES: 3%–5%; 1.0–6.0 mm; mostly subrounded; irregularly distributed; infilled mostly with green clays (95%) and less commonly with calcite (4%); a few (1%) are empty although their walls are still lined with green clays.

COLOR: Dark gray (2.5G 4/0) grading to grayish green (2.5G 5/2).

STRUCTURE: Sill; continuation of Unit 1.

ALTERATION: Highly altered with portions near the enclosed sediments very highly altered; mostly to green clays (95%) and less so to calcite and Fe-oxyhydroxide (5%); alteration halo present around enclosed metamorphosed sediments.

VEINS/FRACTURES: ~1%; 1.0–2.0 mm; mostly subhorizontal but crosscutting; infilled with calcite.



UNIT 1: SPARSELY OLIVINE-PYROXENE MICROPHYRIC BASALT

Pieces 1 to 11B

CONTACTS: None observed, but alteration halos are present around enclosed thermally metamorphosed calcareous sediments.

PHENOCRYSTS: All olivine has been pseudomorphed mostly by green clays and less so with calcite; pyroxene is highly altered.

Pyroxene - 1%; 2.5 mm average size; subhedral prisms.

Olivine - ~2%; 1.5 mm average size; subhedral grains.

GROUNDMASS: Microcrystalline; intergranular.

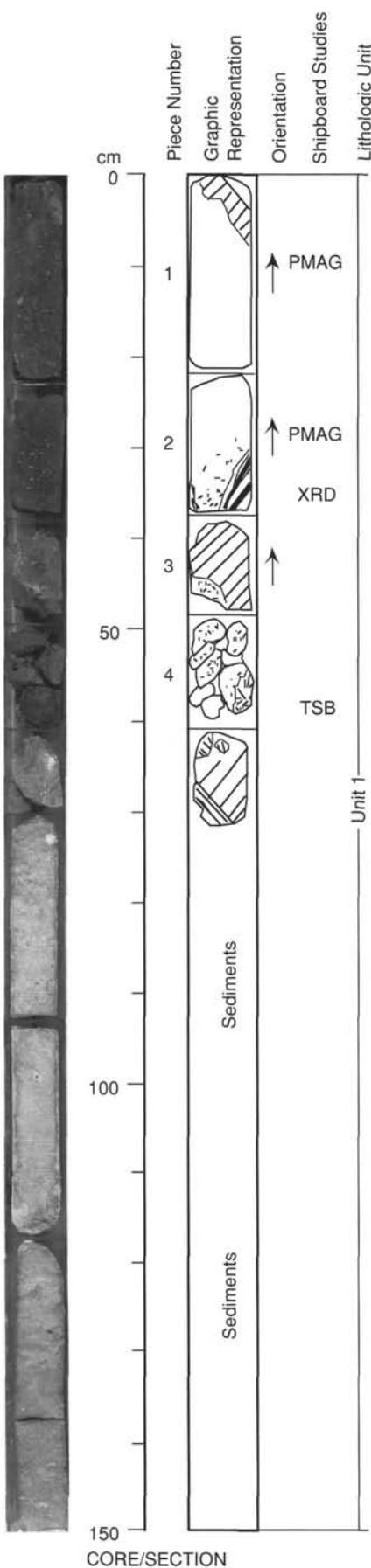
VESICLES: 3%; 1.0–4.0 mm; mostly subrounded; generally absent in the alteration halos; infilled mostly with green clays and less so with calcite; 1% are empty although still lined with green clays.

COLOR: Dark gray (2.5G 4/0) grading to grayish green (2.5G 5/2) toward alteration halos.

STRUCTURE: Continuation of Unit 1.

ALTERATION: Highly altered; mostly to green clays (98%) and less so to calcite (2%).

VEINS/FRACTURES: 2%; 1.0–3.0 mm; mostly subhorizontal and crosscutting; infilled with green clays and calcite.



UNIT 1: SPARSELY OLIVINE-PYROXENE MICROPHYRIC BASALT

Pieces 1 to 4

CONTACTS: Lower contact with the underlying limestone irregular and gradational; no pronounced glassy margin observed; enclosed sediments in Pieces 1, 2, and 3 are calcareous; top of limestone has basalt intrusion that almost blends with the limestone matrix.

PHENOCRYSTS: All olivine has been pseudomorphed mostly by green clays and occasionally by calcite plus pyrite; pyroxene is highly altered; plagioclase is only slightly altered.

Pyroxene - 1%; 2.0 mm ave size; subhedral prisms.

Olivine - ~2%; 1.0 mm ave size; subhedral grains.

Plagioclase - Trace; 1.0 mm average size; subhedral laths.

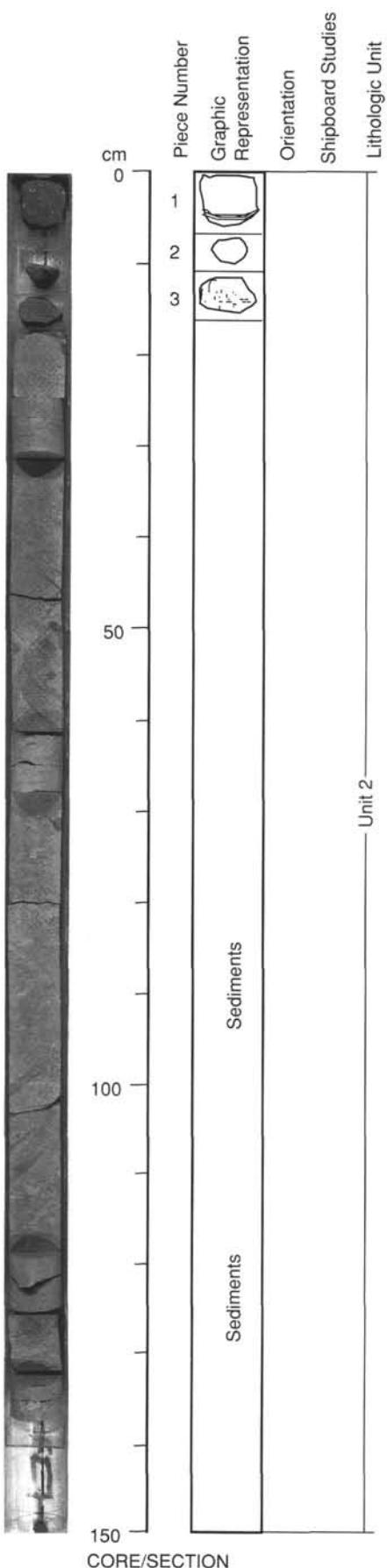
GROUNDMASS: Microcrystalline; intergranular.

VESICLES: 5%; 1.0–6.0 mm; subrounded; less vesicles near the contact; infilled with green clays away from the contact and infilled with calcite near the contact.

COLOR: Dark gray (2.5G 4/0) with green and white amygdules and grading to grayish green (2.5G 5/2) near contacts.

STRUCTURE: Bottom part of the intrusive sill Unit 1.

ALTERATION: Highly altered; mostly to clays and less so to calcite.

**UNIT 2: SPARSELY OLIVINE MICROPHYRIC BASALT****Pieces 1 to 3**

CONTACTS: None observed but bottom piece has alteration halo.

PHENOCRYSTS: All olivine has been pseudomorphed by green clays plus Fe-oxyhydroxide; some are altered to calcite; pyroxene is highly altered.
Olivine - 1%; ~2.0 mm ave size; subhedral grains.

Pyroxene - Trace; ~1.0 mm ave size; subhedral prisms.

GROUNDMASS: Microcrystalline; intergranular.

VESICLES: Trace; 2.0 mm diameter; subrounded; irregularly distributed; infilled with calcite, Fe-oxyhydroxide, and green clays.

COLOR: Dark gray (2.5G 4/0) grading to light grayish green (2.5G 4/2) towards Piece 3.

STRUCTURE: Most probably cobbles from Unit 1.

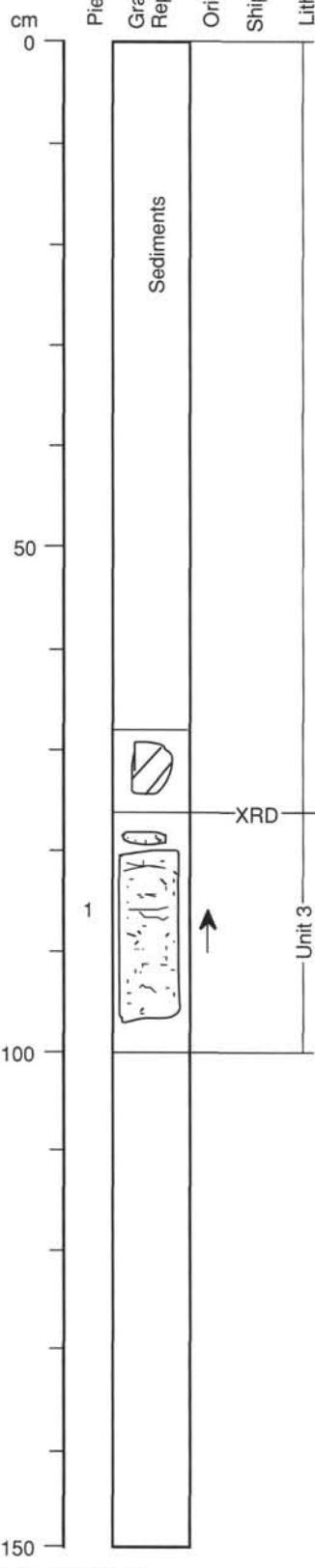
ALTERATION: Highly altered to very highly altered towards the bottom; mostly to green clays, Fe-oxyhydroxide, and calcite.

ADDITIONAL COMMENTS: These cobbles are unlikely to be pieces of a sill because of a lack of top and bottom contacts which are present in the other sills.

143-865A-92R-3

UNIT 3: VERY HIGHLY ALTERED BASALT

Piece 1

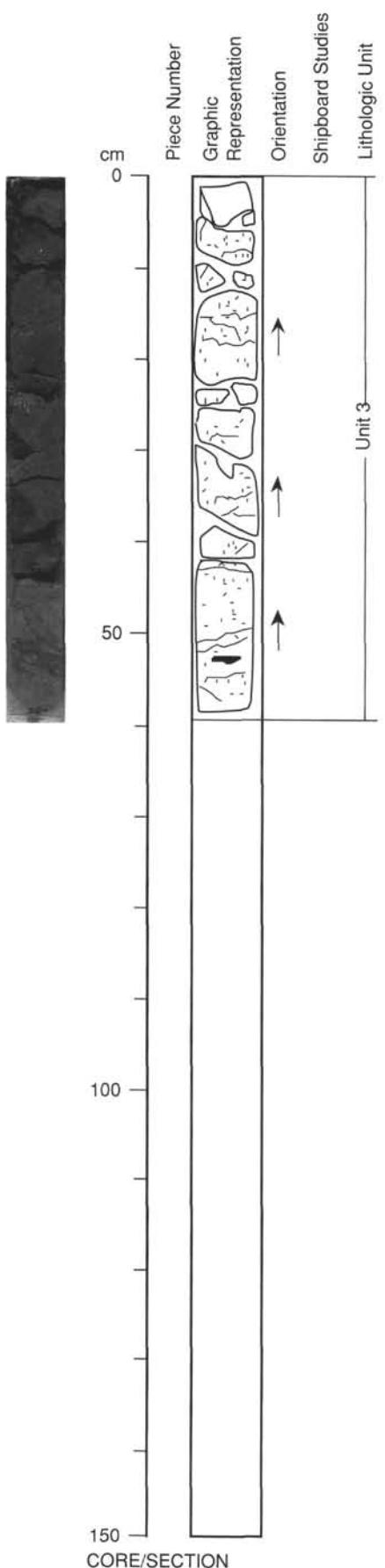
**CONTACTS:** None observed, but alteration becomes less towards the bottom.**PHENOCRYSTS:** All phenocrysts completely altered to clays, Fe-oxyhydroxide, and calcite.

Plagioclase - Trace; ~2.0 mm ave size; anhedral laths.

Olivine - Trace; ~1.0 mm ave size; anhedral grains.

Pyroxene - Trace; ~2.0 mm ave size; anhedral grains.

GROUNDMASS: Originally microcrystalline, now completely clayey.**VESICLES:** ~1%; 1.0 to 4.0 mm diameter; subrounded to elongated; irregular distribution; infilled with green clays and occasionally with calcite.**COLOR:** Very dark gray (2.5G 3/0) grading to dark grayish green (2.5G 4/2) towards the bottom.**STRUCTURE:** Most probably the top of a sill unit similar to Unit 1.**ALTERATION:** Very highly altered to clay, Fe-oxyhydroxide, and calcite.**VEINS/FRACTURES:** 1%; <1 mm; subhorizontal; infilled with green clays and Fe-oxyhydroxide.



UNIT 3: VERY HIGHLY ALTERED BASALT

CONTACTS: None observed.

PHENOCRYSTS: All phenocrysts completely altered to Fe-oxyhydroxide (plus pyrite) and clays.

Plagioclase - Trace; ~1.0 mm ave size; anhedral grains.

Olivine - Trace; ~1.0 mm average size; anhedral grains.

GROUNDMASS: Originally microcrystalline but now clayey.

VESICLES: Trace; indeterminate size; anhedral; randomly distributed; almost indistinguishable from the clayey groundmass.

COLOR: Reddish brown (5YR 3/2) to dark reddish gray (5YR 4/2) near fractures.

STRUCTURE: Possibly a sill similar to Unit 1.

ALTERATION: Very highly altered to clay and Fe-oxyhydroxide (plus pyrite).

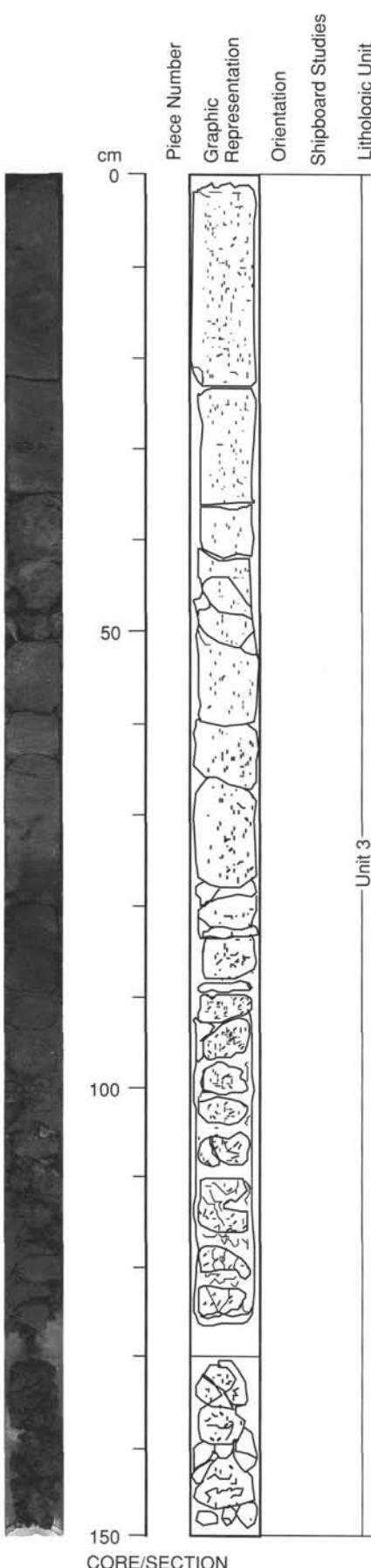
VEINS/FRACTURES: 5%; 1.0 to 0.03 mm; crosscutting; infilled with green clays and Fe-oxyhydroxide (plus pyrite).

143-865A-92R-5

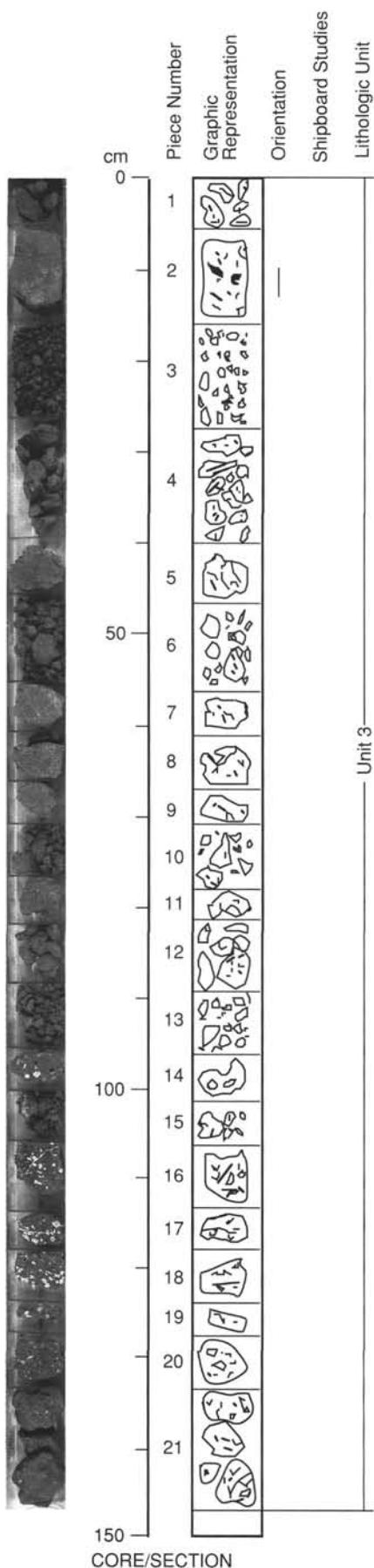
UNIT 3: VERY HIGHLY ALTERED BASALT**Pieces all****CONTACTS:** None observed.**PHENOCRYSTS:** Completely altered to clays and pyrite that is being altered to Fe-oxyhydroxide.

Pyroxene - Trace; 1.0–2.0 mm; anhedral grains.

Olivine - Trace; 1.0–2.0 mm; anhedral grains.

GROUNDMASS: Originally microcrystalline but is now clayey.**VESICLES:** Trace; indeterminate size; anhedral; randomly distributed; hard to differentiate from the clayey matrix.**COLOR:** Dark reddish brown (5YR 3/2) to dark reddish gray (5YR 4/2) near fractures.**STRUCTURE:** Continuation of Unit 3 which is most probably a sill.**ALTERATION:** Very highly altered to clay and Fe-oxyhydroxide (plus pyrite); alteration becoming more intense towards the bottom of the section.**VEINS/FRACTURES:** 10%; <1.0 mm; randomly distributed; increasing towards the bottom where it is more clayey.

143-865A-93R-1

**UNIT 3: HIGHLY OLIVINE-PYROXENE MICROPHYRIC BASALT****Pieces 1 to 21****CONTACTS:** None observed.**PHENOCRYSTS:** Pyroxene highly altered to chlorite and clay minerals; olivine highly altered to serpentine and Fe-hydroxides.

Pyroxene - ~2%; 2 mm long; subhedral prisms.

Olivine - 10%; <2 mm; subhedral grains.

GROUNDMASS: Microcrystalline; <0.5 mm size; 30% feldspar laths; 35% pyroxene grains.**VESICLES:** 3%–25%; 1.0 cm maximum diameter; rounded to elongate; maximum in Pieces 14, 16–20; some only partly infilled with zeolites and calcite; others are open, with bluish gray lining.**COLOR:** Dark bluish gray (5B 4/1).**STRUCTURE:** None observed.**ALTERATION:** Moderately altered to chlorite, clay minerals, and Fe-hydroxides.**VEINS/FRACTURES:** 1%; ~1 mm; 30°–80°; filled with calcite and Fe-oxides.

143-865A-93R-2

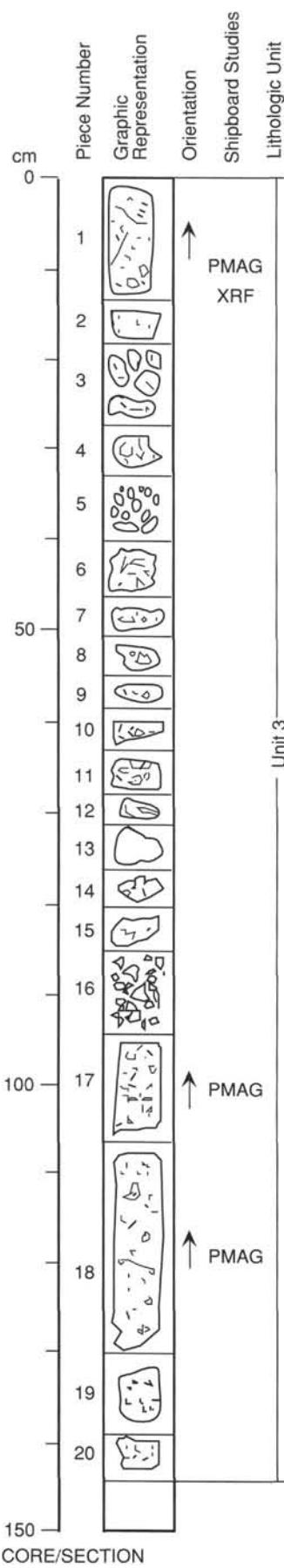
UNIT 3: HIGHLY OLIVINE-PYROXENE MICROPHYRIC BASALT

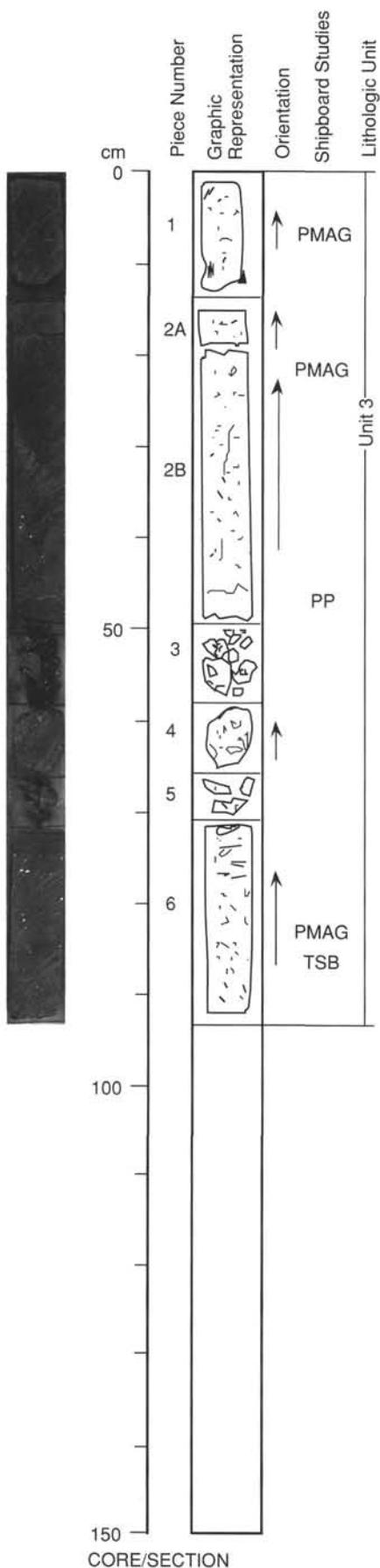
Pieces 1 to 20

CONTACTS: None observed.**PHENOCRYSTS:** Olivine highly altered to clay minerals and Fe-hydroxides; pyroxene highly altered to chlorite and clay minerals.

Pyroxene - ~3%; <2.0 mm; subhedral prisms.

Olivine - ~10%; <2.0 mm; subhedral prisms.

GROUNDMASS: Microcrystalline; feldspar <0.5 mm, 30%; pyroxene <0.3 mm, 35%.**VESICLES:** 2%–25%; 1.0 cm maximum diameter; subrounded to irregular; maximum in Pieces 4 and 6–14; mainly open with thin coating of pale blue mineral; some calcite amygdules in Pieces 1 and 2.**COLOR:** Dark bluish gray (5B 4/1).**STRUCTURE:** Continuation of Unit 3.**ALTERATION:** Moderately altered to chlorite, clay minerals, and Fe-hydroxides.**VEINS/FRACTURES:** <1%; <1.0 mm; 80°, 100°, 120°; filled with calcite and Fe-hydroxides.

**UNIT 3: HIGHLY OLIVINE-PYROXENE MICROPHYRIC BASALT****Pieces 1 to 6****CONTACTS:** None observed.**PHENOCRYSTS:** Olivine highly altered to clay minerals and Fe-hydroxides; pyroxene highly altered to chlorite and clay minerals.

Pyroxene - ~3%; <2.0 mm; subhedral prisms.

Olivine - ~10%; <2.0 mm; subhedral prisms.

GROUNDMASS: Microcrystalline; feldspar <0.5 mm, 30%; pyroxene <0.3 mm, 35%.**VESICLES:** 2%-5%; rounded; maximum in Piece 4; filled with calcite and zeolite.**COLOR:** Dark bluish gray (5B 4/1).**ALTERATION:** Moderately altered to chlorite, clay minerals, and Fe-hydroxides.**VEINS/FRACTURES:** <0.5%; 5.0 mm, 100°.**ADDITIONAL COMMENTS:** Rounded blebs of calcareous sediments, <1 cm, 0-8% by volume, maximum in Pieces 10 and 11.

143-865A-94R-1

UNIT 3: HIGHLY OLIVINE-PYROXENE MICROPHYRIC BASALT

Pieces 1 to 19

CONTACTS: None observed.

PHENOCRYSTS: Olivine highly altered to serpentine minerals and Fe-hydroxides; pyroxene highly altered to chlorite and clay minerals.

Pyroxene - ~4%; <2.0 mm; subhedral prisms.

Olivine - 1%-8%; <2.0 mm; subhedral prisms.

GROUNDMASS: Microcrystalline; feldspar <0.5 mm, 35% by volume; pyroxene <0.3 mm, 30% by volume.

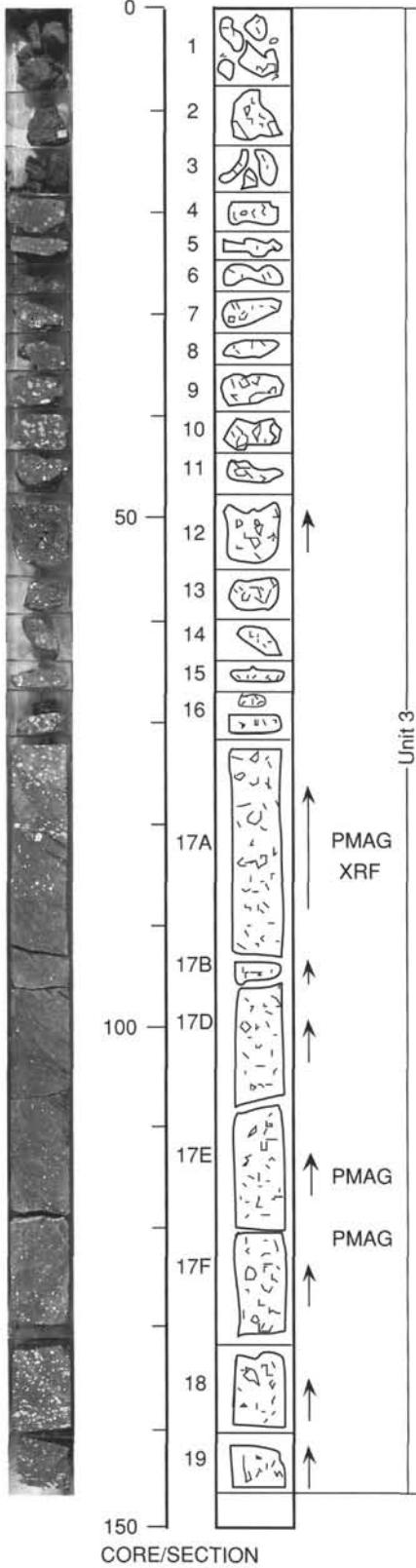
VESICLES: 1%-6%; irregular; minimum in Pieces 17-19; maximum in Piece 12; some partially filled with calcite and zeolites.

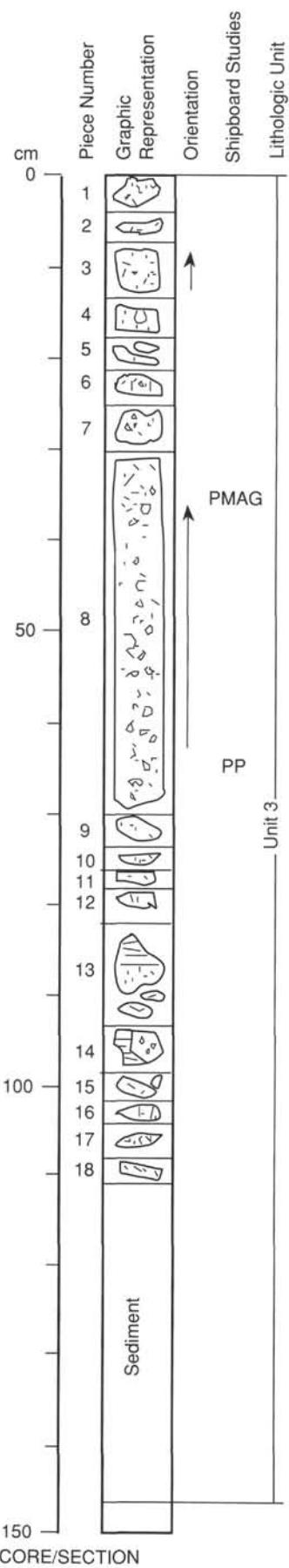
COLOR: Dark grayish brown (5B 4/1) in Pieces 1-3; dark bluish gray (5B 4/1) in Pieces 17-19.

ALTERATION: Moderately altered to chlorite, clay minerals, and Fe-oxides.

VEINS/FRACTURES: 1%; <0.5 mm; 110°; filled with calcite.

ADDITIONAL COMMENTS: Rounded blebs of calcareous sediments, <1.0 cm, 0-10% by volume with maximum in Pieces 16 and 17A.





UNIT 3: HIGHLY PYROXENE-OLIVINE MICROPHYRIC BASALT

Pieces 1 to 18

CONTACTS: Contact of basalt sill with calcareous sediment in Pieces 13–18.

PHENOCRYSTS: Olivine highly altered to clay minerals and Fe-hydroxides; pyroxene highly altered to chlorite and clay minerals.

Pyroxene - ~4%; <2 mm; subhedral prisms.

Olivine - 1%–5%; <2 mm; subhedral prisms.

GROUNDMASS: Microcrystalline; feldspar <0.5 mm, 35% by volume; pyroxene <0.3 mm, 30% by volume.

VESICLES: 1%–5%; <4.0 mm; subrounded; partially filled with calcite and zeolites.

COLOR: Dark bluish gray (5B 4/1).

ALTERATION: Moderately altered to chlorite, clay minerals, and Fe-oxides.

VEINS/FRACTURES: <1.0 mm; 30°, 120°; filled with calcite and zeolites.

ADDITIONAL COMMENTS: Blebs of calcareous sediments <0.7 cm make up maximum of 15% volume (Piece 8).

143-865A-94R-4

UNIT 4: MODERATELY PYROXENE-OLIVINE MICROPHYRIC BASALT

Pieces 1 to 9

CONTACTS: Sharp but irregular contact with calcareous sediments in Pieces 1, 2 and 4.**PHENOCRYSTS:** Olivine highly altered to clay minerals; pyroxene highly altered to chlorite and clay minerals.

Pyroxene - 1%–5%; <2.0 mm; subhedral prisms.

Olivine - ~1%; <2.0 mm; subhedral prisms.

GROUNDMASS: Microcrystalline; feldspar <0.5 mm, 35% by volume; pyroxene <0.3 mm, 30% by volume.**VESICLES:** 1%–3%; <4.0 mm; subrounded; partially filled with calcite, zeolites, and smectite.**COLOR:** Dark bluish gray (5B 4/1).**ALTERATION:** Moderately altered to chlorite, clay minerals, and Fe-oxides.**VEINS/FRACTURES:** <2.0 mm; 20°, 40°, 70°, 170°; filled with calcite and zeolite.**ADDITIONAL COMMENTS:** Blebs and irregular patches of sediments caught up in the basalt sill in Pieces 1 to 6, with smaller (5-mm) blebs in other pieces.