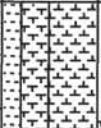



SITE 960 HOLE A CORE 1R

CORED 0.0 - 1.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	late Pleist.		— ○○○○○○○ ○○○○○○○ ○○○○○○○ ○○○○○○○ ○○○○○○○ ○○○○○○○	S M	5G 4/1	FORAM NANNOFOSSIL OOZE WITH CLAY Major Lithology: Dark greenish gray (5G 4/1) FORAM NANNOFOSSIL OOZE WITH CLAY. The top is slightly disturbed, otherwise the sediment is soupy due to drilling disturbance.

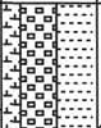
SITE 960 HOLE A CORE 2R

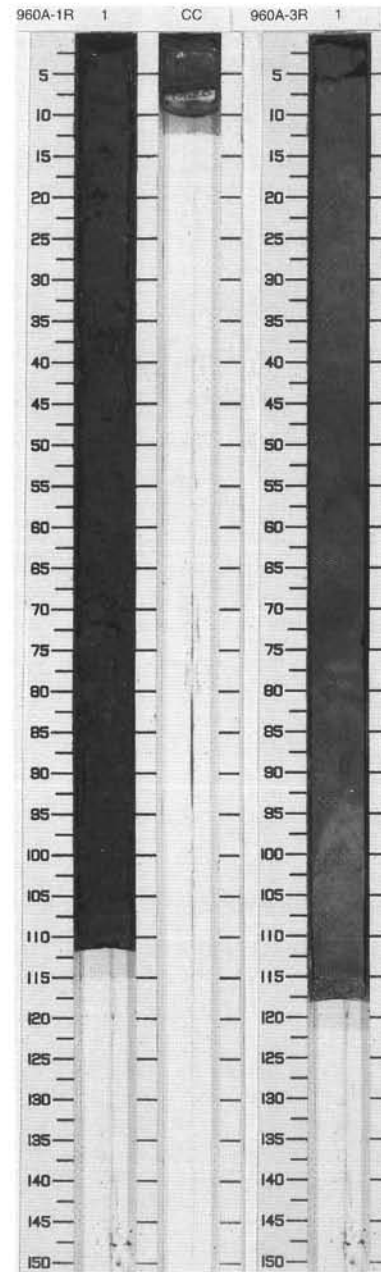
CORED 1.2 - 10.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
								NANNOFOSSIL FORAM OOZE WITH CLAY Major Description: Only 2 cm of dark greenish gray (5G 4/1), NANNOFOSSIL FORAM OOZE WITH CLAY were recovered and consumed as a paleontology sample. Washing residues indicate about 50% foraminifers as constituents of a sediment that is otherwise similar to Core 159-960A-1R. General Description: The age is early Pleistocene.

SITE 960 HOLE A CORE 3R

CORED 10.6 - 19.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	early Plio. P		— wwwwww wwwwww wwwwww wwwwww wwwwww wwwwww wwwwww	S S M	5GY 5/1 To 5GY 6/1	CLAYEY NANNOFOSSIL FORAM MICRITE OOZE Major Lithology: Irregular layers and patches of greenish gray (5GY 5/1 to 5GY 6/1), slightly bioturbated CLAYEY NANNOFOSSIL FORAM MICRITE OOZE. Lighter parts contain slightly more calcareous components and less plant debris and clay than the darker parts.



SITE 960 HOLE A CORE 4R

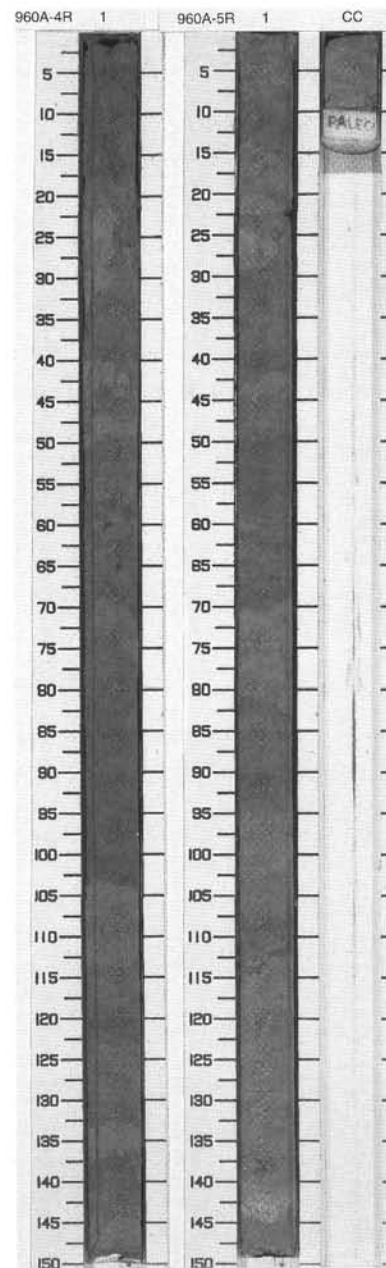
CORED 19.9 - 29.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Pliocene		..	S S	5GY 5/1 To 5GY 4/1	CLAYEY MICRITE NANNOFOSSIL OOZE WITH FORAMS and CLAYEY FORAM NANNOFOSSIL OOZE Major Lithologies: The color alternation between lighter greenish gray (5GY 5/1) CLAYEY FORAM NANNOFOSSIL OOZE and darker greenish gray (5GY 4/1) CLAYEY MICRITE NANNOFOSSIL OOZE WITH FORAMS corresponds to an enrichment of pyrite and plant debris in the darker intervals, and their depletion in the lighter intervals. The lighter intervals contain more intact foraminifers which appear to have been altered to micrite in the darker intervals.

SITE 960 HOLE A CORE 5R

CORED 29.6 - 39.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Pliocene			M S	5GY 5/1 To 5GY 4/1	CLAYEY NANNOFOSSIL OOZE WITH MICRITE AND FORAMS and CLAYEY FORAM NANNOFOSSIL OOZE Major Lithologies: Slightly bioturbated alternation between lighter greenish gray (5GY 5/1) CLAYEY FORAM NANNOFOSSIL OOZE and darker greenish gray (5GY 4/1) CLAYEY NANNOFOSSIL OOZE WITH MICRITE AND FORAMS. Minor Lithology: A light greenish gray (5GY 6/1) layer in Section 1, 141-145 cm consists of NANNOFOSSIL OOZE WITH FORAMS AND CLAY. General Description: As in Core 159-960A-4R, the color alternation is thought to correspond to an enrichment of pyrite and plant debris in the darker intervals, and their depletion in the lighter intervals.



SITE 960 HOLE A CORE 6R

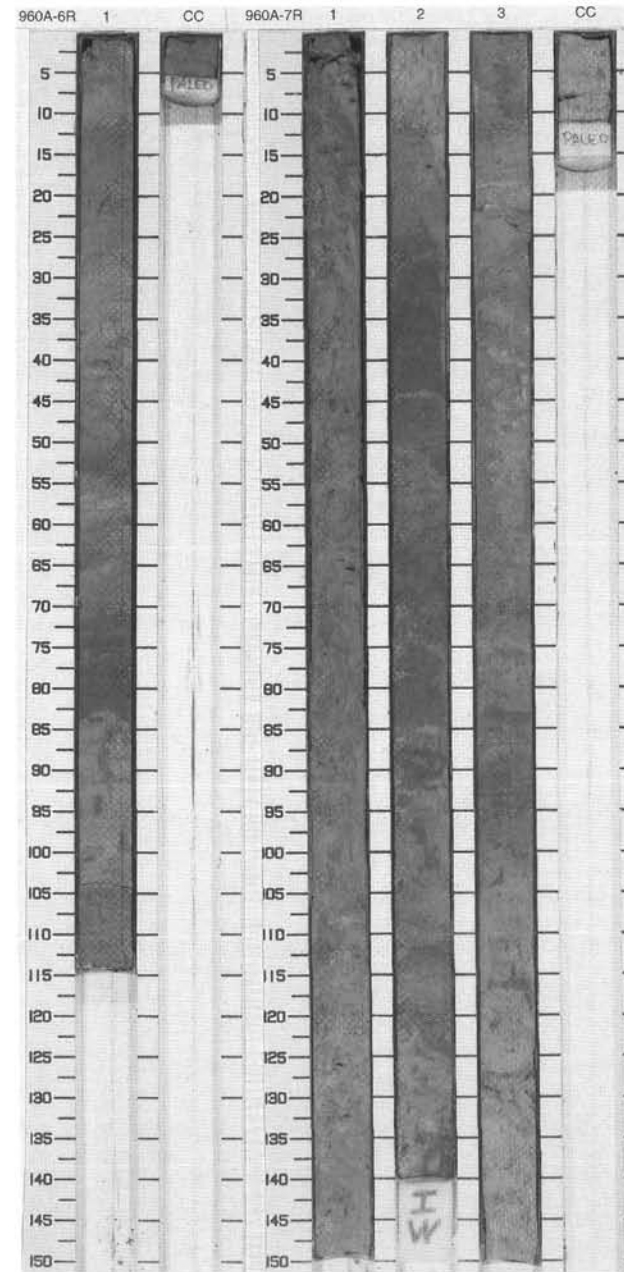
CORED 39.3 - 49.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Pliocene			S	5G 6/1 To 5Y 5/1	NANNOFOSSIL OOZE WITH FORAMS AND CLAY and NANNOFOSSIL OOZE WITH CLAY, FORAMS, AND MICRITE
<p>Major Lithologies: Most of the core consists of greenish gray (5G 6/1), slightly bioturbated NANNOFOSSIL OOZE WITH FORAMS AND CLAY. In Section 1, 5-6, 28-50, and 57-72 cm, irregular layers or patches (burrows?) of brownish (5Y 4/1) NANNOFOSSIL OOZE WITH CLAY, FORAMS, AND MICRITE are intercalated. These layers also contain siderite.</p> <p>Minor Lithologies: Slightly bioturbated lighter greenish gray (5GY 5/1) CLAYEY FORAM NANNOFOSSIL OOZE and darker greenish gray (5GY 4/1) CLAYEY NANNOFOSSIL OOZE WITH MICRITE AND FORAMS occur as darker layers in Section 1, 11-28, 50-57, 72-83, and 110-115 cm.</p>								

SITE 960 HOLE A CORE 7R

CORED 49.1 - 58.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	late Miocene				5GY 5/1 To 5GY 6/1	NANNOFOSSIL CHALK WITH FORAMS AND CLAY and CLAYEY NANNOFOSSIL CHALK WITH FORAMS AND MICRITE
2		2					5GY 4/1	Lighter greenish gray (5GY 5/1 to 5GY 6/1) NANNOFOSSIL CHALK WITH FORAMS AND CLAY alternates with a darker greenish gray (5GY 4/1) CLAYEY NANNOFOSSIL CHALK WITH FORAMS AND MICRITE. Pyrite and foraminifer tests are disseminated throughout the core. Glauconite-rich horizons are present in all three sections.
3		3				I W	5GY 4/1	
4		3				M	5GY 5/1 To 5GY 6/1	

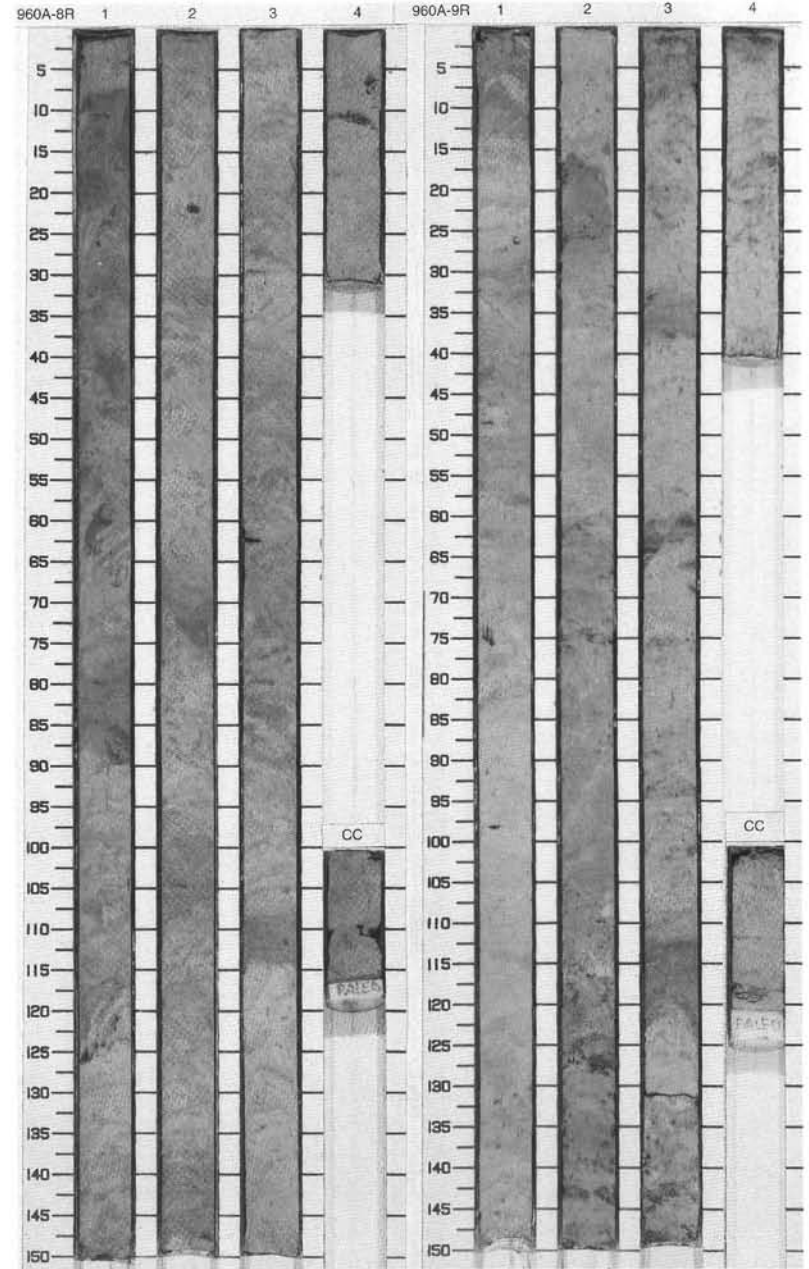


SITE 960 HOLE A CORE 8R CORED 58.9 - 68.6 mbsf

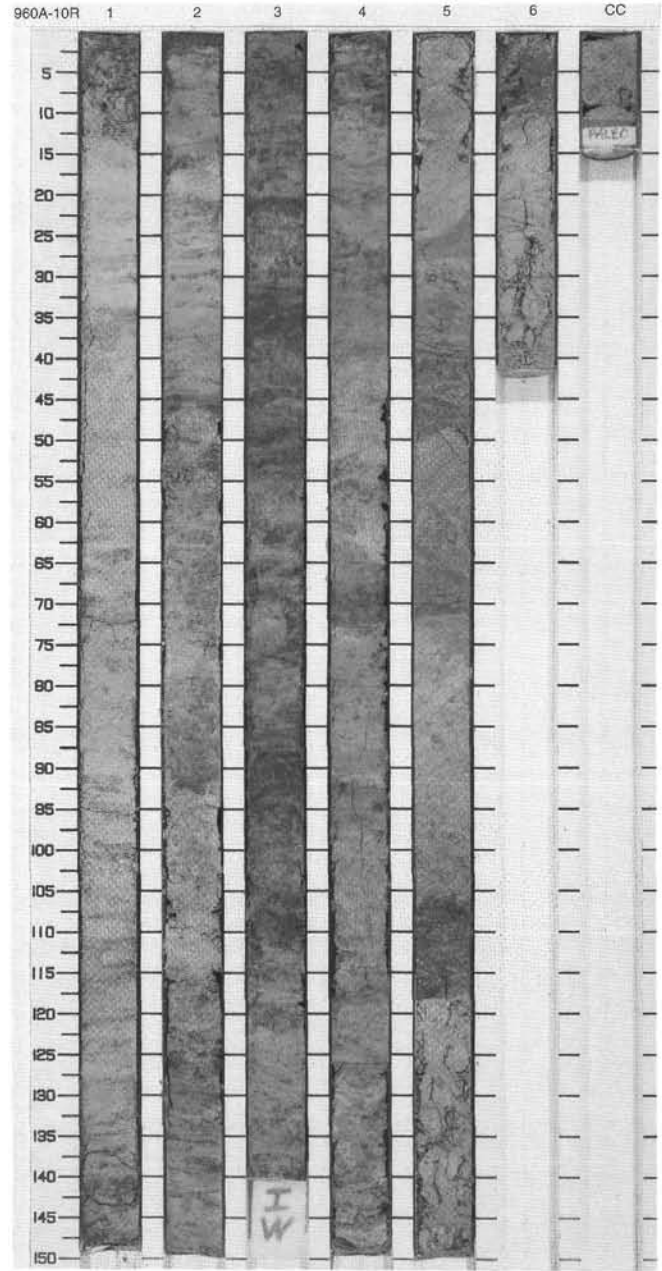
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	late Miocene	P	W	S	5GY 4/1 To 5GY 6/1	<p>NANNOFOSSIL CHALK and NANNOFOSSIL CHALK WITH FORAMS</p> <p>Major Lithologies: Mottled dark to light gray NANNOFOSSIL CHALK, with interbeds of lighter NANNOFOSSIL CHALK WITH FORAMS. Color mixing, forming the mottles, arises from moderate bioturbation. Burrows in Sections 1, 2, and 4 are filled with siderite. Small black specks of pyrite are disseminated throughout.</p> <p>Minor Lithology: Light green NANNOFOSSIL CHALK WITH GLAUCONITE forms green bands and mottles within the dominant lithologies.</p>
2	[Pattern]	2		P	W	D		
3	[Pattern]	3		P	W	S		
4	[Pattern]	4		P	W	M		

SITE 960 HOLE A CORE 9R CORED 68.6 - 78.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	middle Miocene	G	W	S	5GY 6/1	<p>NANNOFOSSIL CHALK</p> <p>Major Lithology: Light gray (5GY 6/1) NANNOFOSSIL CHALK, slightly bioturbated. Very small glauconite specks, less than 1 mm across, are sparsely disseminated throughout the core; pyrite specks at Section 1, 75 cm. Brownish gray (5Y 5/1) NANNOFOSSIL CHALK WITH FORAMS is intercalated within light gray NANNOFOSSIL CHALK. The former comprises 80% nannofossils and 20% foraminifers. Greenish gray zone in Section 2 is richer in glauconite specks.</p>
2	[Pattern]	2		G	W	S		
3	[Pattern]	3		G	W	S	2.5G 5/2	
4	[Pattern]	4		G	W	M	5GY 6/1	



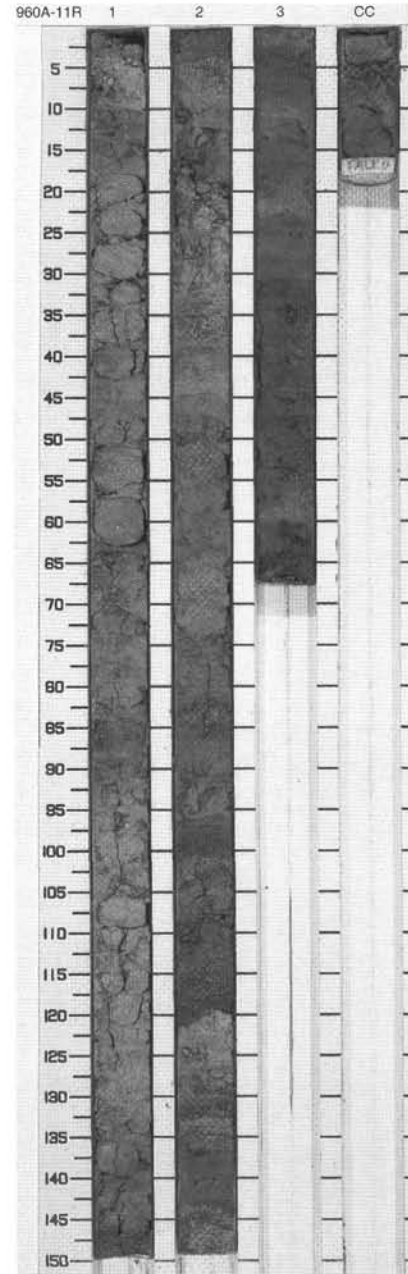
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	early Miocene	P	G			<p>NANNOFOSSIL CHALK, NANNOFOSSIL CHALK WITH FORAMS and NANNOFOSSIL CHALK WITH GLAUCONITE</p> <p>Major Lithologies: Interbeds of greenish gray NANNOFOSSIL CHALK, light brown NANNOFOSSIL CHALK WITH FORAMS, and light grayish green NANNOFOSSIL CHALK WITH GLAUCONITE, alternating in laminated and bioturbated intervals 50 to 80 cm thick. Bioturbation by <i>Zoophycos</i> and <i>Chondrites</i> is present; composite burrows are also visible. Black pyrite specks are scattered throughout the core. In Sections 6 and Core Catcher, large glauconite pellets are dispersed throughout, and concentrated in lags.</p> <p>Minor Lithology: In Section 5, two 20-cm-thick brown, highly bioturbated beds are enriched in diatoms, FORAM NANNOFOSSIL CHALK WITH CLAY AND DIATOMS.</p>
2	[Pattern]	2		P	G			
3	[Pattern]	3		P	G			
4	[Pattern]	4		P	G			
5	[Pattern]	5		P	G			
6	[Pattern]	6		P	G			
7	[Pattern]	7		P	G			
8	[Pattern]	8		P	G			
							5GY 4/1 To 5GY 6/2	
								S
								I
								S
								S
								S
								M



SITE 960 HOLE A CORE 11R

CORED 88.0 - 97.6 mbsf

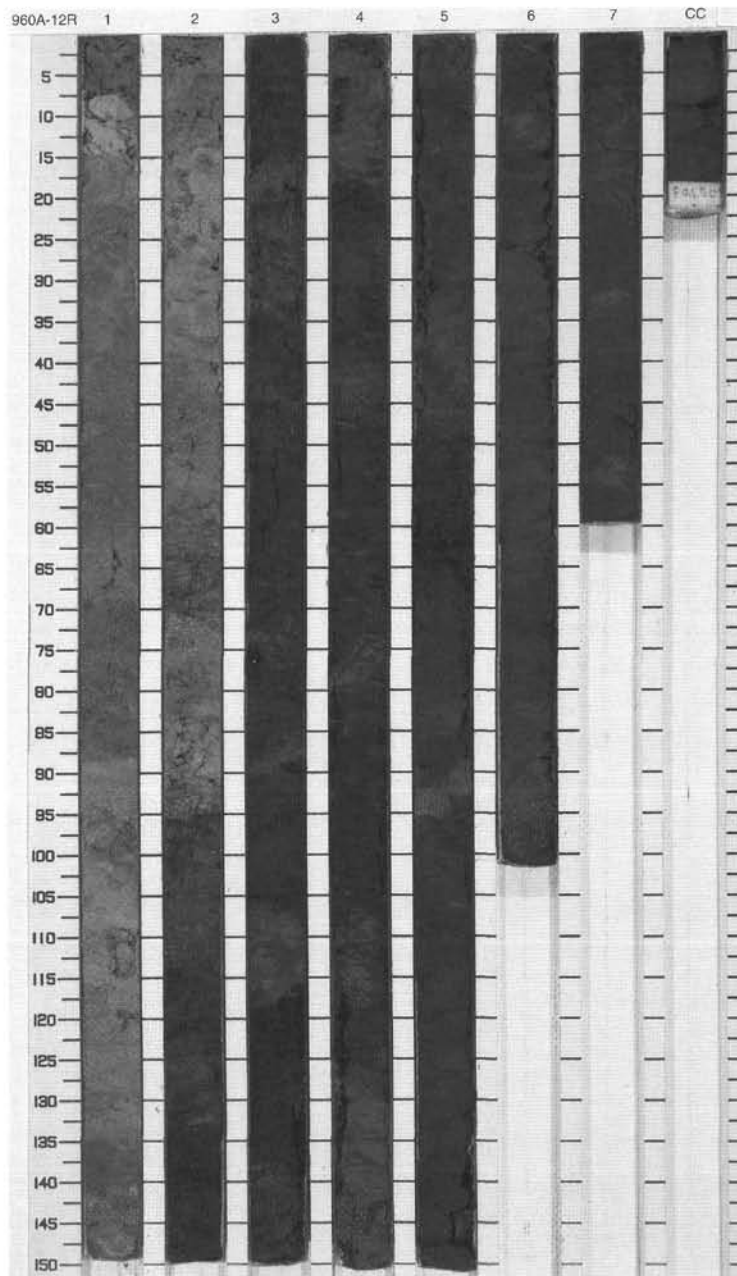
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Miocene	②		S	2.5G 5/0	<p>NANNOFOSSIL GLAUCONITE SILTY SANDSTONE, CLAY WITH GLAUCONITE and NANNOFOSSIL MICRITE CHALK WITH CLAY</p> <p>Major Lithologies: Greenish gray (2.5G 5/0) NANNOFOSSIL GLAUCONITE SILTY SANDSTONE, moderately bioturbated, interbedded with dark greenish gray CLAY WITH GLAUCONITE and brownish gray NANNOFOSSIL MICRITE CHALK WITH CLAY. Glauconite specks are disseminated throughout the core. Burrows of <i>Chondrites</i> occur in Section 1, 145–150 cm. Core is fractured by drilling into biscuits which are enmeshed in drilling-induced mud.</p>
2		2						
3		3						
		CC				M		



SITE 960 HOLE A CORE 12R




CORED 97.6 - 107.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		[Symbol]	[Symbol]		5GY 4/1 To 5GY 6/1	<p>NANNOFOSSIL CLAYSTONE, GLAUCONITIC SILTY SANDSTONE and GLAUCONITE CLAYSTONE WITH ZEOLITE</p> <p>Major Lithologies: Greenish gray to dark greenish gray NANNOFOSSIL CLAYSTONE, in drilling biscuits, from top of core to Section 2, 95 cm. Increasing content of glauconite pellets and size of pellets downcore. A few drilling biscuits are brown, highly bioturbated, and enriched in diatoms. Below a sharp, wavy contact, GLAUCONITE SILTY SANDSTONE, i.e., a greensand, noncalcareous. Drilling disturbance and a coating of glauconitic slurry formed during core splitting make distinction between coherent sediment and drilling biscuits extraordinarily difficult. Some biscuits are composed entirely of glauconitic pellets; others are a brown clay highly enriched in glauconitic pellets. Beginning with Section 4, drilling disturbance is slightly decreased, and alternating beds, 10- to 30-cm-thick, can be seen between massive and bioturbated intervals. Beginning in Section 5, 60 cm, to base of the core, brown GLAUCONITE CLAYSTONE WITH ZEOLITE drilling biscuits are rotated at 45 degree angles, giving a zig-zag pattern to the core. This sediment is slightly to moderately bioturbated with <i>Chondrites</i> and <i>Planolites</i>, and enriched in sand-sized glauconite pellets.</p>
2	[Pattern]	2		[Symbol]	[Symbol]			
3	[Pattern]	3		P	[Symbol]			
4	[Pattern]	4		P	[Symbol]		5G 4/2	
5	[Pattern]	5		P	[Symbol]			
6	[Pattern]	6		P	[Symbol]			
7	[Pattern]	7		Z	[Symbol]		5G 4/2 To 10Y 3/1	
8	[Pattern]	6		Z	[Symbol]			
9	[Pattern]	7		Z	[Symbol]			
	CC				M			



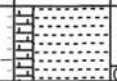


SITE 960 HOLE A CORE 13R

CORED 107.3 - 116.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1				MS	10Y 3/1	ZEOLITE CLAYSTONE WITH PYRITE
<p>Major Lithology: Dark olive gray ZEOLITE CLAYSTONE WITH PYRITE, moderately bioturbated with 1-cm-sized burrows preserved. Abundant pyrite is disseminated throughout as small framboids. Zeolite present within matrix, creating a meshwork crystalline texture.</p> <p>General Description: The age of this core is unknown.</p>								

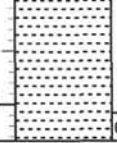


SITE 960 HOLE A CORE 14R

CORED 116.9 - 126.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	middle Eoc.			S	7.5GY 3/1	GLAUCONITE CLAYSTONE WITH NANNOFOSSILS AND ZEOLITE
<p>Major Lithology: GLAUCONITE CLAYSTONE WITH NANNOFOSSILS AND ZEOLITE, a dark green to brown lithology exhibiting vague laminations (2-4 mm thick). This lamination may reflect the compaction of burrows rather than representing primary depositional laminae. Glauconite locally defines discrete, coarser laminae. Nannofossils become more abundant downcore.</p>								

SITE 960 HOLE A CORE 15R

CORED 126.6 - 136.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	middle Eocene			S	N3	ZEOLITE CLAYSTONE WITH GLAUCONITE
<p>Major Lithology: Highly drilling disturbed, brown to black ZEOLITE CLAYSTONE WITH GLAUCONITE, contains up to 10% pyrite, is very porous, low density, and is slightly bioturbated.</p>								



SITE 960 HOLE A CORE 16R CORED 136.2 - 145.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	▲▲▲▲▲	CC		3 =	∇	M	N3	CHERT
<p>Major Lithology: Drilling breccia of black, calcareous CHERT, with laminae preserved. Foraminifers visible.</p> <p>General Description: The age of the core is early Eocene.</p>								

SITE 960 HOLE A CORE 17R CORED 145.8 - 155.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC						CHERT
<p>Major Lithology: Three pieces of black (N3) to brown CHERT, weakly calcareous, as drilling breccia.</p> <p>General Description: The age is early Eocene.</p>								

960A 18R NO RECOVERY

SITE 960 HOLE A CORE 19R CORED 164.8 - 174.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	▨▨▨▨▨	CC	1 early Eoc.	(Ba) (Ba) (Ba)	wwwww	D S M	5B 5/1	<p>PALYGORSKITE CLAYSTONE WITH BARITE NODULES</p> <p>Major Lithology: Bluish gray, highly drilling disturbed, PALYGORSKITE CLAYSTONE WITH BARITE NODULES. Palygorskite was determined by X-ray diffraction. Ten barite nodules up to 4 cm in diameter (rounded by drilling) with 2–8-mm-long prisms radiating from finer grained cores are embedded in the claystone.</p>



SITE 960 HOLE A CORE 20R

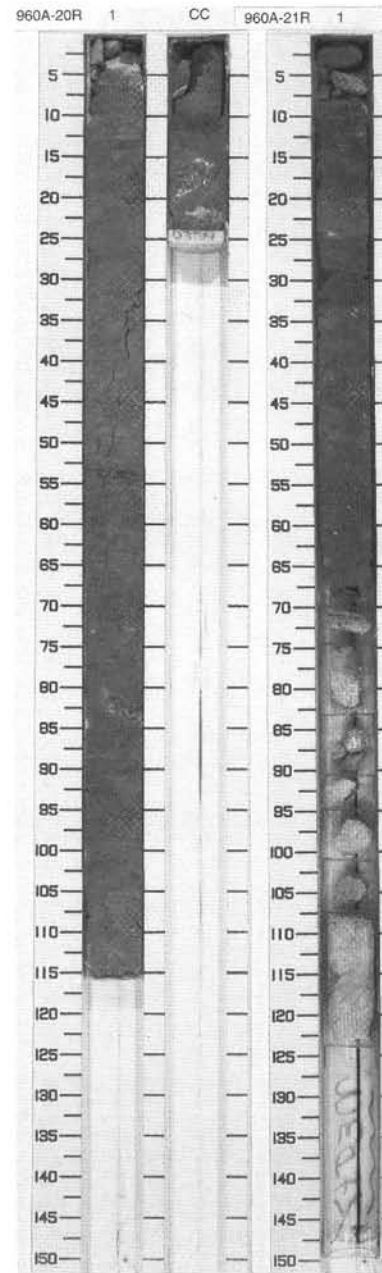
CORED 174.5 - 184.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		(Ba) (Ba) (Ba) (Ba)	X /	S D S M	5BG 4/1 To 5BG 5/1 5Y 5/1	<p>CLAYSTONE and GRAINSTONE</p> <p>Major Lithologies: Dominant lithology is bluish green (5BG 4/1 to 5BG 5/1) CLAYSTONE associated with two intervals of brownish gray (5Y 5/1) massive GRAINSTONE in Section 1, 0-5 cm and Core Catcher, 0-12 cm. Lower interval contains some fish debris and barite. Crystalline barite concretions, 2-4 cm in diameter, occur in Section 1, 50-55, 70-72, 80-84, 105-107 cm and Core Catcher, 19-24 and 25-26 cm. The largest crystals are up to 1 cm long.</p> <p>General Description: This interval is Santonian to Coniacian.</p>

SITE 960 HOLE A CORE 21R

CORED 184.1 - 193.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		α Ω ⊙	V X X X X V	D D S T M	5GY 5/1 To 5Y 7/1	<p>GLAUCONITE CLAYSTONE, QUARTZ SAND GRAINSTONE and LIMESTONE</p> <p>Major Lithologies: The core consists of GLAUCONITE CLAYSTONE with fragments of LIMESTONE, shell fragments and fish debris i.e., fish teeth mixed with loose clay and carbonate material. Rock fragments in the upper part of the core and in interval 70-110 cm include gray (5Y 5/1) to light gray (5Y 7/1) QUARTZ SAND GRAINSTONE and greenish gray (5GY 5/1) LIMESTONE. In interval 75-85 cm, medium-grained QUARTZ SAND GRAINSTONE shows a higher content of quartz. This lithology has an irregular lower boundary with light gray (5Y 6/1) brecciated LIMESTONE at 115 cm.</p> <p>General Description: The age of the core is unknown.</p>



SITE 960 HOLE A CORE 22R

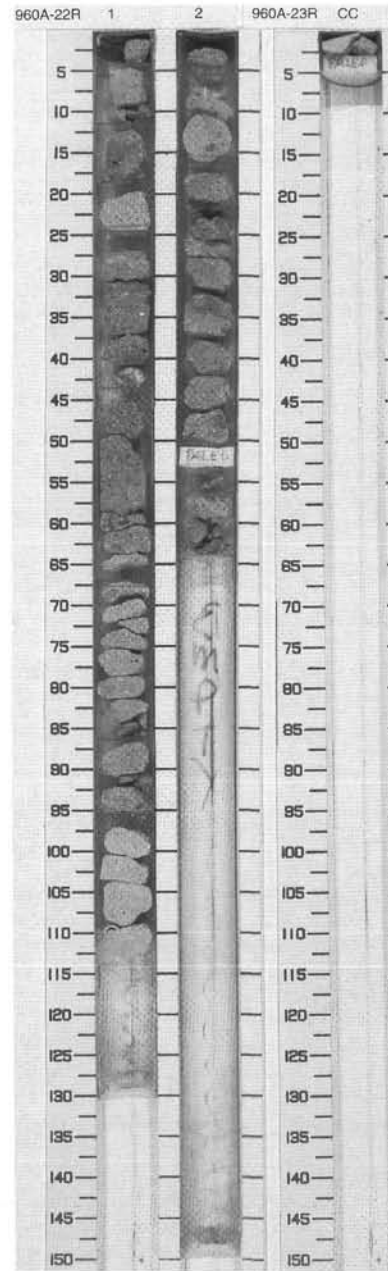
CORED 193.8 - 203.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		↑ F ◇		T	5GY 6/1 To 5Y 7/1	<p>BIOCLAST GRAINSTONE, QUARTZ SAND GRAINSTONE and QUARTZ SAND FLOATSTONE</p> <p>Major Lithologies: The core consists of light gray (5GY 6/1 to 7/1) coarse-grained BIOCLAST GRAINSTONE with clasts including shell fragments, fragmentary carbonate and quartz. QUARTZ SAND GRAINSTONE occurs at Section 1, 65–115 cm and Section 2, 55–64 cm. Poorly sorted QUARTZ SAND FLOATSTONE at Section 1, 25–65 cm fines upward to BIOCLAST GRAINSTONE. The largest vein quartz clast is subrounded and 3 cm in diameter. Bioclasts make up to 40% of total sediment, which includes well-rounded quartz sandstone and carbonate rock pebbles, and quartz in carbonate-cemented matrix. QUARTZ SAND FLOATSTONE in Section 2, 15–46 cm has a higher content of quartz. Some quartz sandstone clasts are slightly greenish.</p> <p>General Description: The age of this interval is unknown.</p>
		2		◆		S		
				◇		S		
				◆		T		
				◇		M		

SITE 960 HOLE A CORE 23R

CORED 203.4 - 213.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC						<p>BIOCLAST GRAINSTONE</p> <p>Major Lithology: There are two biscuits of BIOCLAST GRAINSTONE in the Core Catcher. One lithology is gray (5Y 8/1), fine-grained, and has many large gastropod shells, some of which are complete and up to 3 cm long. The second biscuit is very fine- to fine-grained, gray (N7) and has numerous small (1–2 mm) broken shells. A paleontology sample was taken from the Core Catcher.</p> <p>General Description: The age of the interval is unknown.</p>



SITE 960 HOLE A CORE 24R CORED 213.0 - 222.7 mbsf

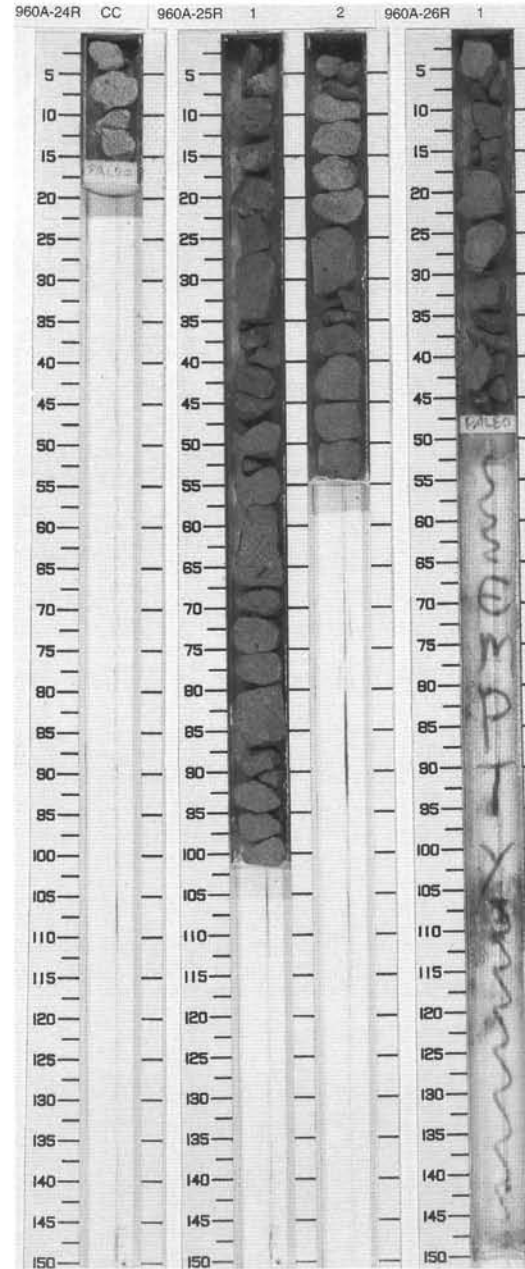
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC				M		QUARTZ SAND FLOATSTONE
<p>Major Lithology: Biscuits of gray colored (5Y 8/1) poorly sorted QUARTZ SAND FLOATSTONE in the Core Catcher. Some pebbles appear to be lithic fragments, and are up to 1 cm in diameter. The sandstone has several shell fragments (mainly gastropods), which range up to 15 mm across. A paleontology sample was taken from the Core Catcher.</p> <p>General Description: The age of the interval is unknown.</p>								

SITE 960 HOLE A CORE 25R CORED 222.7 - 232.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1					N5 To N6	QUARTZ SAND FLOATSTONE and QUARTZ SAND GRAINSTONE
		2				M		Major Lithologies: Poorly sorted, gray (N5-N6) QUARTZ SAND FLOATSTONE occurs as biscuits at the top of Section 1. Pebble sizes are up to 3 cm in diameter. There are many shell fragments which are mostly gastropods. The lower part of the core is represented by fine- to medium-grained, gray (N6) QUARTZ SAND GRAINSTONE. It also contains bioclasts, which are less than 5 mm, and quartz grains.
<p>General Description: The age of the interval is unknown.</p>								

SITE 960 HOLE A CORE 26R CORED 232.4 - 242.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1				M	N6	QUARTZ SAND GRAINSTONE
<p>Major Lithology: Fine- to medium-grained, gray (N6) CALCAREOUS SANDSTONE contains shell fragments, which are mostly gastropods. They are less than 5 mm across.</p> <p>General Description: The age of the interval is unknown.</p>								



SITE 960 HOLE A CORE 27R

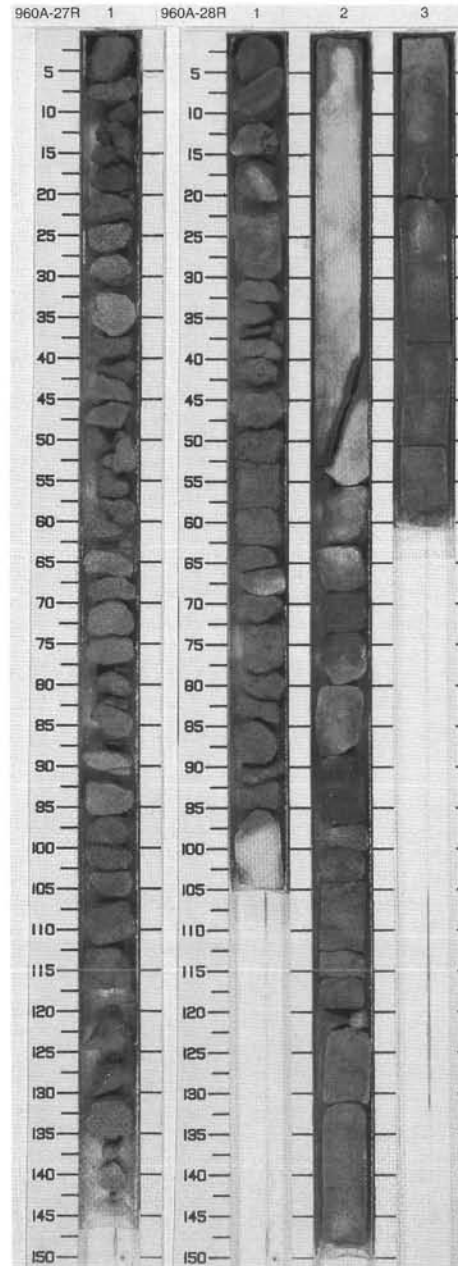
CORED 242.1 - 251.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				M T	N5 To N6	<p>QUARTZ SAND GRAINSTONE</p> <p>Major Lithology: The core consists of medium to medium light gray (N5 to N6) QUARTZ SAND GRAINSTONE, which is medium- to coarse-grained, and moderately to poorly sorted. Quartz grains are subangular to subrounded. Carbonate grains comprise gastropod and bivalve shell fragments up to 2 cm in diameter.</p> <p>General Description: The age of the core is unknown.</p>

SITE 960 HOLE A CORE 28R

CORED 251.7 - 256.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				T	5Y 6/1	<p>SKELETAL QUARTZ SAND GRAINSTONE and SKELETAL QUARTZ SAND PACKSTONE</p> <p>Major Lithologies: The upper part of this interval consists of moderately sorted, medium-sized SKELETAL QUARTZ SAND GRAINSTONE. Texturally, this lithology contains abundant micrite matrix; however, evidence for cross-stratification suggests that carbonate micrite was deposited as sand-sized peloids. The lower part of the core consists of abundant molds of skeletal fragments, which have been replaced by calcite cement, forming SKELETAL QUARTZ SAND PACKSTONE. Some moldic porosity remains unfilled.</p>
2		2				T	N5 To N4	<p>General Description: The age of this interval is unknown.</p>
3		3				T M	N4 To N3	



SITE 960 HOLE A CORE 29R

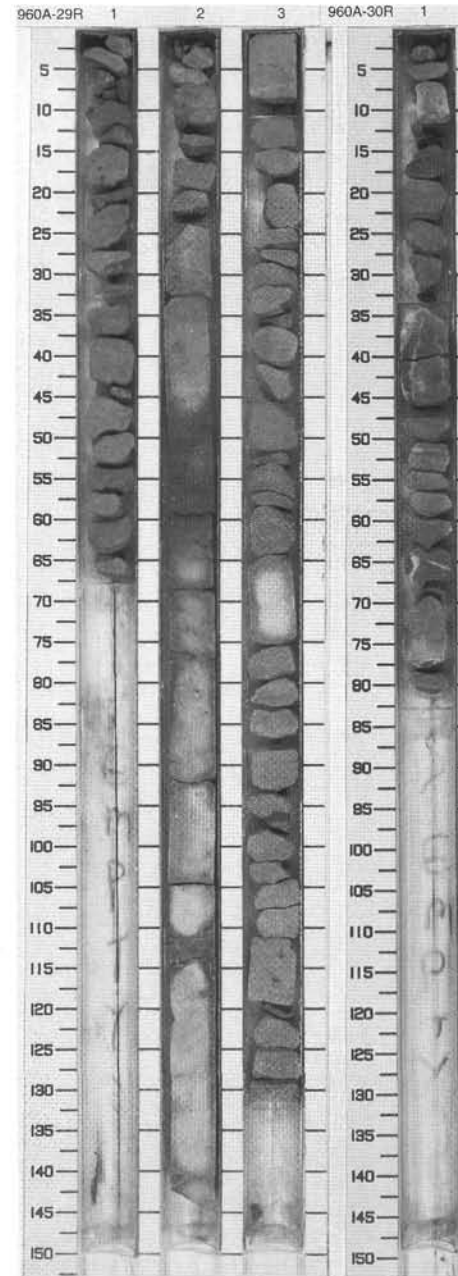
CORED 256.4 - 261.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1						QUARTZ SAND GRAINSTONE Major Lithology: Gray (5GY 5/1) QUARTZ SAND GRAINSTONE, massive, fine to medium grained, poorly to well sorted but generally medium sorted. Subangular to angular quartz grains are present. Relative amount of quartz is up to 30%. Clayey stylolite is developed at Section 2, 48-66 cm. Bioturbation is only faintly visible present except in Section 2, 130-133 cm, where faint laminae are finely disrupted. General Description: The age of the core is unknown.
2		2					5GY 5/1	
3		3						

SITE 960 HOLE A CORE 30R

CORED 261.4 - 271.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				T M	5GY 5/1	QUARTZ SANDY LIMESTONE Major Lithology: This interval is composed of a QUARTZ SANDY LIMESTONE comprising subordinate amounts of medium-grained, subangular to subrounded, quartz sand distributed throughout a SKELETAL GRAINSTONE. This lithology is moderately well washed and cemented by a micritic calcite cement; local late fractures are cemented with equant calcite spar. Skeletal grains consist of bivalve fragments, benthic foraminifers, and echinoderm debris. Sand grains include metamorphic quartz and lithoclasts. General Description: The age of this interval is unknown.
						T M		



SITE 960 HOLE A CORE 31R

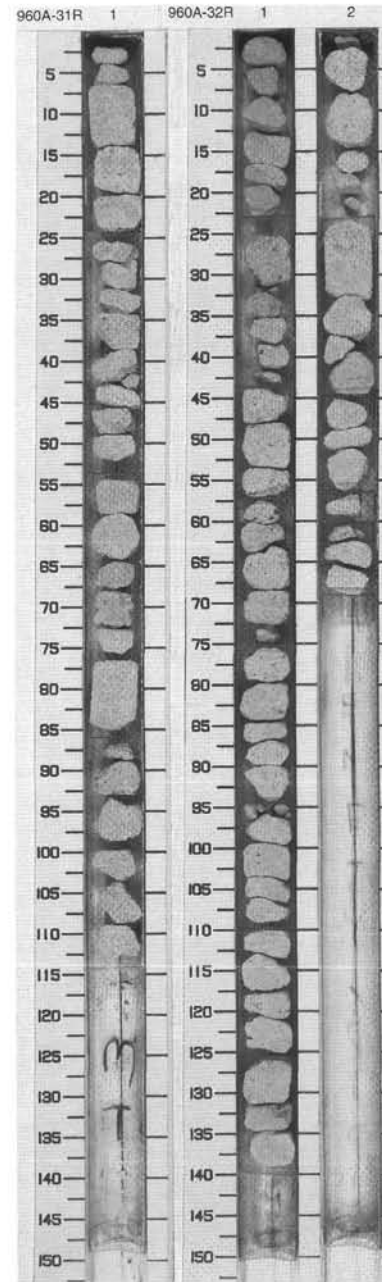
CORED 271.1 - 280.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				T	5GY 5/1	<p>SKELETAL GRAINSTONE and SKELETAL PACKSTONE</p> <p>Major Lithology: This interval consists of light to medium gray SKELETAL GRAINSTONE containing up to 5% subangular, fine-grained, quartz sand. Grain size becomes coarse toward the base, while the upper part of the core grades into a SKELETAL PACKSTONE. Skeletal components include molluscan fragments (bivalves and gastropods), echinoderm debris, and benthic foraminifers. Vuggy porosity is developed where molluscan debris has been dissolved; locally, these pores are filled with clear calcite cement. Occasional burrows are present.</p> <p>General Description: The age is unknown.</p>
		CC				M		

SITE 960 HOLE A CORE 32R

CORED 280.7 - 290.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				T	2.5Y 7/2	<p>SKELETAL GRAINSTONE</p> <p>Major Lithology: Light gray, medium- to coarse-grained SKELETAL GRAINSTONE, composed of molluscan and echinoderm shell fragments. This sediment is not well sorted, but is well washed (i.e., micrite poor). Samples exhibit vuggy porosity, which is invariably filled by equant calcite cement. Degree of cementation increases downcore, resulting in well-cemented, less porous limestones in Section 2. Note that large 1-mm- to 1-cm-sized lithoclasts of fine-grained sandstone and siltstone are occasionally present, for example in Section 1, 120 cm and 40-41 cm, and in Section 2, 1-8 cm. These clasts are carbonate-free.</p> <p>General Description: The age of the core is unknown.</p>
		2				M		
		CC						



SITE 960 HOLE A CORE 33R

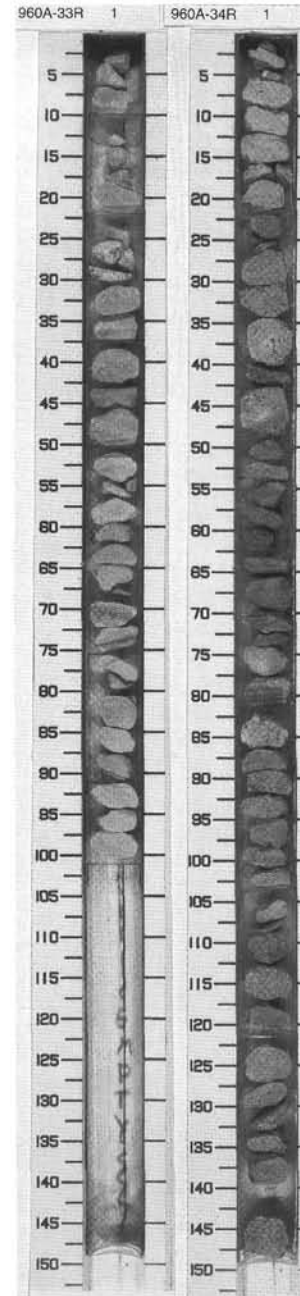
CORED 290.3 - 299.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				MT T	5Y 7/1	<p>SKELETAL GRAINSTONE WITH INTRACLASTS</p> <p>Major Lithology: This interval consists of medium- to coarse-grained SKELETAL GRAINSTONE WITH INTRACLASTS. Lithoclasts of quartz siltstones and well-cemented limestone (0.5 to 2 cm) are distributed in a matrix of skeletal debris comprising bivalves, echinoderms, algae, and bryozoa. In the lower part of this interval, Section 1, 80–90 cm, ooids are present, intermixed with peloids and skeletal grains; quartz is absent to rare at this level.</p> <p>General Description: The age of this interval is unknown.</p>

SITE 960 HOLE A CORE 34R

CORED 299.6 - 309.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1					5Y 8/1 5Y 5/1 To 5Y 6/1	<p>SKELETAL GRAINSTONE and SKELETAL GRAINSTONE WITH MUDSTONE INTRACLASTS</p> <p>Major Lithologies: Light gray (5Y 8/1) coarse-grained SKELETAL GRAINSTONE and slightly darker gray (5Y 6/1) medium- to very coarse-grained SKELETAL GRAINSTONE WITH MUDSTONE INTRACLASTS. The intraclasts are dark brownish (5Y 2.5/1), and are sometimes granule sized. Rounded clasts of quartz sandstone, which are sometimes up to 4 mm across, are occasionally present in the lower part of the core.</p> <p>Minor Lithology: Light gray (5Y 5/1), fine-grained PACKSTONE occurs at 18–20 and 75–80 cm. Calcite fills veins in the latter interval.</p> <p>General Description: The age of this interval is unknown.</p>



SITE 960 HOLE A CORE 35R

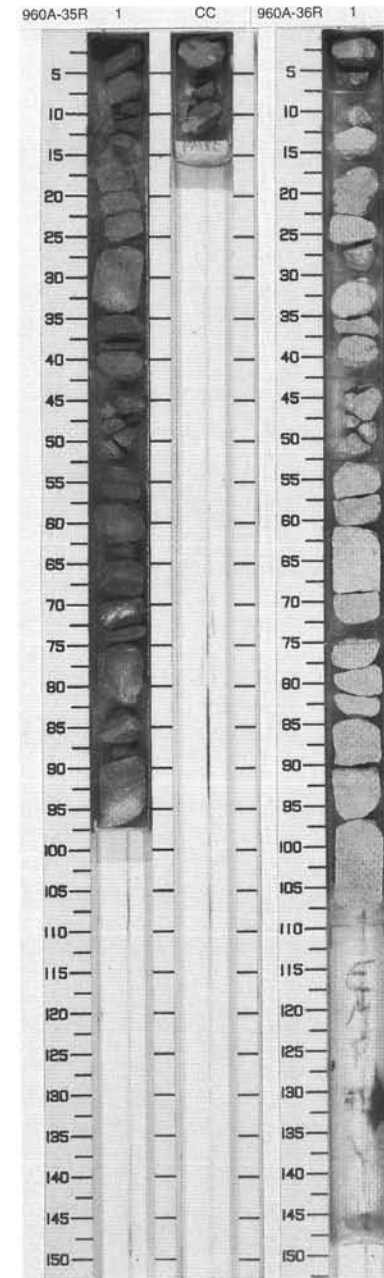
CORED 309.2 - 318.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				T M	5Y 6/1 5Y 8/1	<p>SKELETAL GRAINSTONE and SKELETAL GRAINSTONE WITH MUDSTONE INTRACLASTS</p> <p>Major Lithologies: Light gray (5Y 6/1) medium- to coarse-grained bedded SKELETAL GRAINSTONE alternates with slightly lighter gray (5Y 8/1), very coarse-grained, poorly sorted SKELETAL GRAINSTONE WITH MUDSTONE INTRACLASTS. Bioclasts are up to 2 mm in diameter. The coarsest horizons contain some quartz.</p> <p>Minor Lithology: Thin intervals of light gray (5Y 6/1) fine-grained PACKSTONE occur in the lower part of the core. Calcite fills veins at 35–40 and 68–70 cm.</p> <p>General Description: The age of this interval is unknown.</p>

SITE 960 HOLE A CORE 36R

CORED 318.9 - 328.5 mbsf

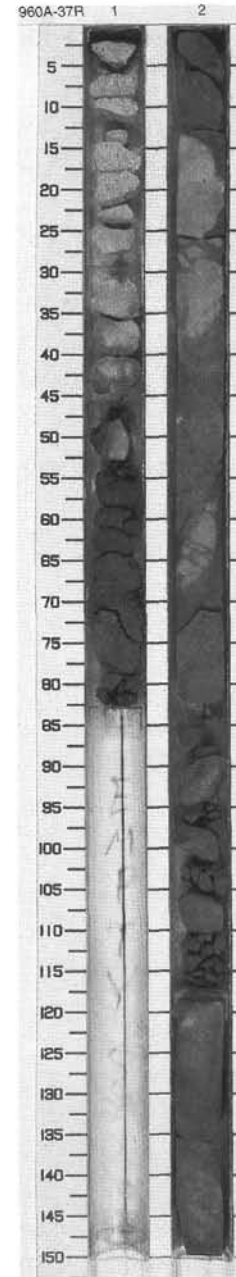
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				M	5Y 7/1 To 5Y 8/1	<p>SKELETAL PACKSTONE WITH MUDSTONE INTRACLASTS</p> <p>Major Lithology: The core consists of light yellowish gray (5Y 7/1 to 5Y 8/1) medium to coarse-grained SKELETAL PACKSTONE WITH MUDSTONE INTRACLASTS. Some intraclasts are silt-sized material. Coarse-grained bioclasts are embedded within fine micritic carbonate matrix. The coarsest sediment contains some disseminated pyrite.</p> <p>General Description: The age of the core is unknown.</p>



SITE 960 HOLE A CORE 37R

CORED 328.5 - 338.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0		1				S T T	5Y 7/1	<p>SKELETAL GRAINSTONE, MICRITIC SANDSTONE WITH INTRACLASTS and SANDSTONE WITH MICRITE AND INTRACLASTS</p> <p>Major Lithologies: Section 1, 0–45 cm consists of light yellowish gray (5Y 7/1) medium-grained, moderately sorted SKELETAL GRAINSTONE. Clasts include bioclasts, carbonate rock fragments, mudstone, and quartz. The contact with the underlying predominately siliciclastic succession is highly disturbed by drilling, and the dark gray (5Y 3/1) drilling breccia consists of fragments of siltstone and loose carbonate material, silt and clay. The remaining part of the core consists of cross-bedded to laminated, dark gray (10Y 4/1), fine- to medium-grained MICRITIC SANDSTONE WITH INTRACLASTS, and massive to crudely bedded, medium- to coarse-grained SANDSTONE WITH MICRITE AND INTRACLASTS. A coarsening-upward trend occurs at Section 2, 40–65 cm, while Section 2, 106–112 cm shows horizontal lamination and water-escape convolution. Intraclasts vary from carbonate rock fragments to mudstone fragments. Clastic dikes and veins are filled with silty to clayey material, with some crystalline calcite near the contacts with the dominant lithologies, at Section 2, 25–30 cm, 45–60 cm and 73–85 cm. Pyrite-bearing veins occur in Section 1, 44–45 cm, Section 2, 40–42 cm and 130–133 cm.</p> <p>Minor Lithology: CONGLOMERATE WITH MUDSTONE INTRACLASTS occurs as a thin layer between two sandstone beds at Section 1, 60–65 cm.</p> <p>General Description: The age of the interval is unknown.</p>
1							5Y 3/1	
2							5Y 4/1 To 10Y 4/1	
2		2				M		
2								



SITE 960 HOLE A CORE 38R

CORED 338.2 - 347.9 mbsf

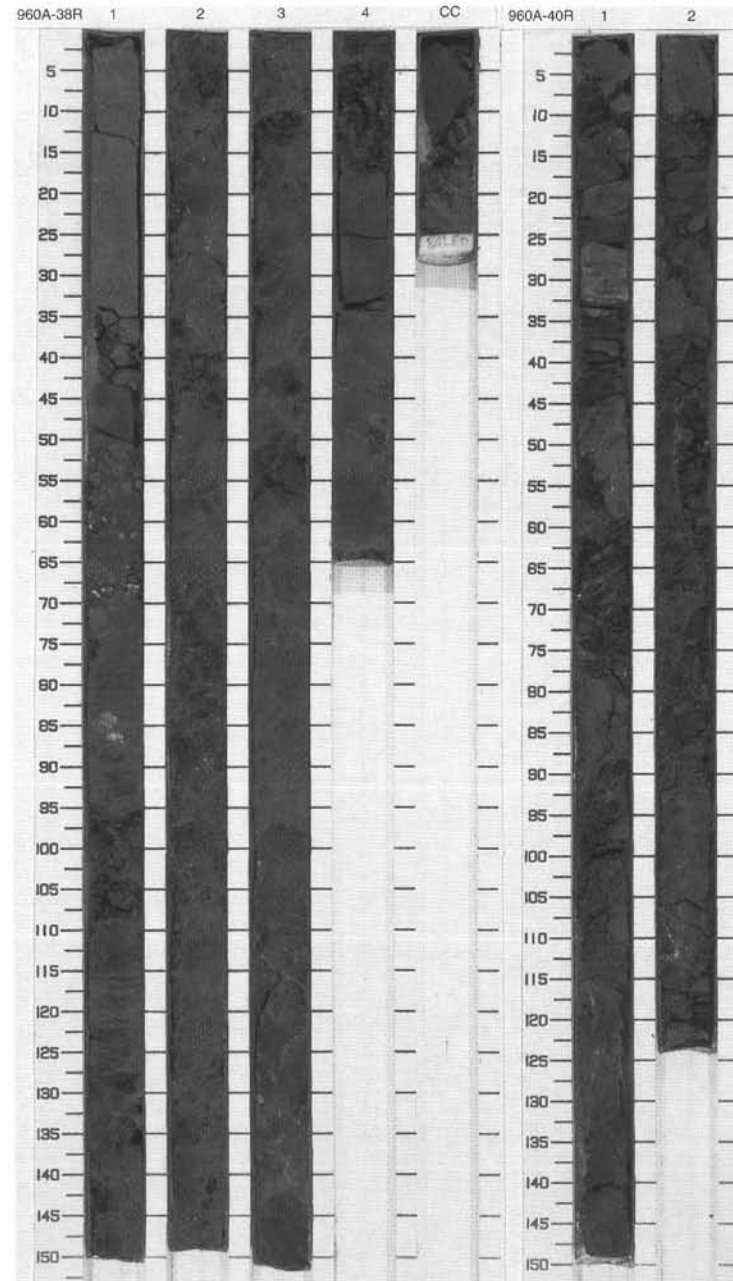
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		(P) X			5Y 4/1	CLAYSTONE Major Lithology: Black (5GY 2/1) CLAYSTONE, moderately fractured, with pyrite disseminated throughout. Quartz veins are developed at Section 1, 70 cm and Section 3, 100-150 cm. The CLAYSTONE shows a foliated fracture cleavage. Fractures are filled with pyrite in some places. Laminae are faintly visible at Section 4, 16-32 cm.
2	[Dotted pattern]	2		(P)			5GY 2/1	
3	[Dotted pattern]	3						Minor Lithology: A massive, gray (5Y 4/1) SANDSTONE occurs at the top of the core. It is very fine- to fine-grained, well sorted and calcareous. The SANDSTONE is moderately fractured, and cracks are filled with pyrite at some horizons.
4	[Dotted pattern]	4		(P) X			5Y 2/1	
5	[Dotted pattern]	CC						General Description: The age of this interval is unknown.

960A 39R NO RECOVERY

SITE 960 HOLE A CORE 40R

CORED 348.3 - 351.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		(Ca) } (P) <1			N2	CLAYSTONE Major Lithology: Black CLAYSTONE, most of it churned into drilling breccia. Coherent pieces are in Section 1, 6-41 and 63-77 cm, Section 2, 12-23, 38-93, and 114-118 cm. The rock is fissile and cleaved. Faint, slight bioturbation traces and thin veins filled with kaolinite are visible as intact pieces. The remains of a pyrite vein, 2 cm wide, is visible in Section 1, 69 cm. Marcasite plates are sprinkled throughout the drilling breccia.
2	[Dotted pattern]	2						
		CC						General Description: The age of the core is unknown.



SITE 960 HOLE A CORE 41R CORED 351.0 - 353.5 mbsf

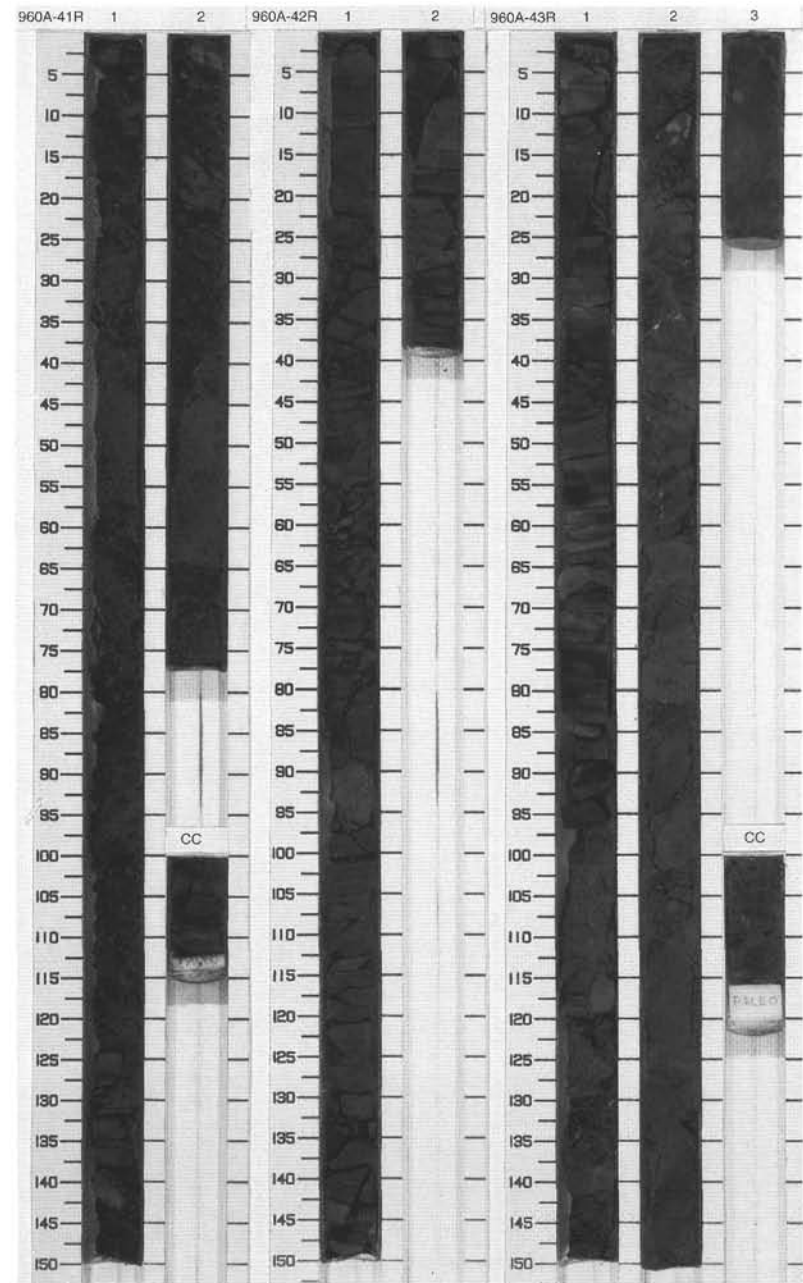
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		<	XXXX	S	5GY 2/1	CLAYSTONE and SHALE General Description: Structureless black CLAYSTONE with disseminated siderite (10–20 µm size). Areas of drilling breccia exhibit some fissile bedding. Minor vein mineralization with kaolinite is present; carbonate concretion (3 cm diameter) occurs at Section 1, 142 cm. Claystone exhibits minor shaly cleavage.
2		2	Ca	XXXX	S			
		CC				M		General Description: The age of this unit is unknown.

SITE 960 HOLE A CORE 42R CORED 353.5 - 357.5 mbsf

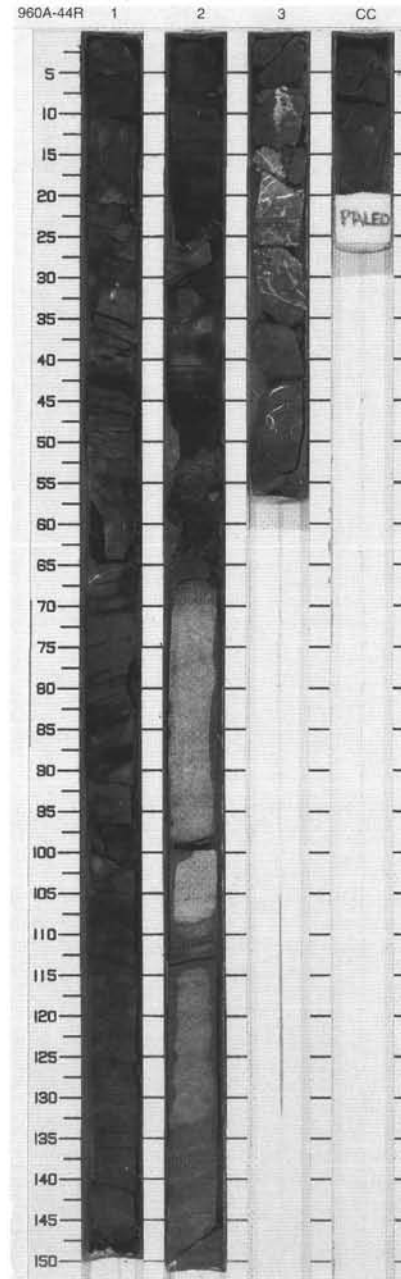
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		~			N2.5/1	CLAYSTONE Major Lithology: Black CLAYSTONE, massive, non-fissile and faintly bioturbated. Several fault planes in Section 1, 60–80 cm, are slickensided. Marcasite plates are visible in drilling-induced mud, Section 1, 89–97 cm.
2		2		~		M		
		CC						General Description: The age of this interval is unknown.

SITE 960 HOLE A CORE 43R CORED 357.5 - 362.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		~		S	10Y 3/1	CLAYSTONE Major Lithology: Purplish black CLAYSTONE with disseminated siderite and pyrite framboids. Bedding is dominantly massive, but the rock is weakly laminated, weakly fissile, and weakly microbioturbated. A few veins are present. Calcite concretions are occasionally present.
2		2	Ca	<				
3		3		<		M		
		CC						General Description: The age of this unit is unknown.



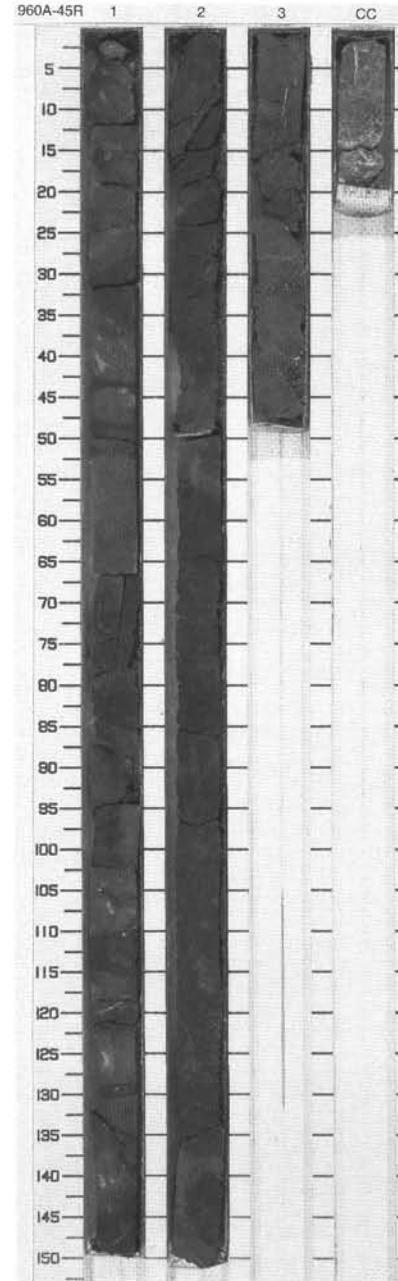
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Symbol]	[Symbol]	S	N2 To N3	<p>SIDERITIC CLAYSTONE and SIDERITIC SILTSTONE</p> <p>Major Lithologies: The upper part of the core (down to Section 2, 67 cm) consists of grayish black to dark gray (N2 to N3) consolidated, structureless SIDERITIC CLAYSTONE. The rest of the core is made up of dark to medium gray (N3 to N5), highly bioturbated SIDERITIC SILTSTONE. Burrows are indistinct and are less than 0.5 cm in diameter. Parallel and cross-lamination are visible in the slightly less bioturbated intervals of Section 2.</p>
2	[Dotted pattern]	2		[Symbol]	[Symbol]	D		
3	[Dotted pattern]	3		[Symbol]	[Symbol]	S D T	N3 To N5	
		CC				M	N4	<p>Minor Lithology: Very light gray to white (N8 to N9) SIDERITIC KAOLINITE fills veins and tension gashes throughout the core.</p> <p>General Description: The age of this core is unknown.</p>



SITE 960 HOLE A CORE 45R

CORED 367.2 - 371.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1				S	N4 To N5	<p>CLAYSTONE WITH SIDERITE CEMENT and CLAYSTONE WITH QUARTZ SILT AND SIDERITE CEMENT</p> <p>Major Lithologies: Section 1 consists of medium dark to medium gray (N4 to N5), slightly bioturbated CLAYSTONE WITH SIDERITE CEMENT. Sections 2 and 3 consist of dark to medium dark gray (N3 to N4), very slightly bioturbated CLAYSTONE WITH QUARTZ SILT AND SIDERITE CEMENT. The core is lightly fractured to locally highly fractured.</p> <p>Minor Lithologies: The Core Catcher consists of a medium dark gray to medium gray (N4 to N5) BRECCIA made up of components similar to the sediment in Section 1. The matrix is constituted of CLAYSTONE WITH QUARTZ SILT AND SIDERITE CEMENT. Very light gray to white (N8 to N9) SIDERITIC KAOLINITE fills veins throughout the core.</p> <p>General Description: Besides the veins filled with light minerals, the silt-bearing sediment is dissected by fractures filled with stiff mud of the same composition. The silt-bearing sediment appears to be less well cemented than the silt-free sediment. The age of this core is unknown.</p>
2		2				S	N3 To N4	
3		3				S D	N4 To N5	
		CC				M	N4 To N5	



SITE 960 HOLE A CORE 46R

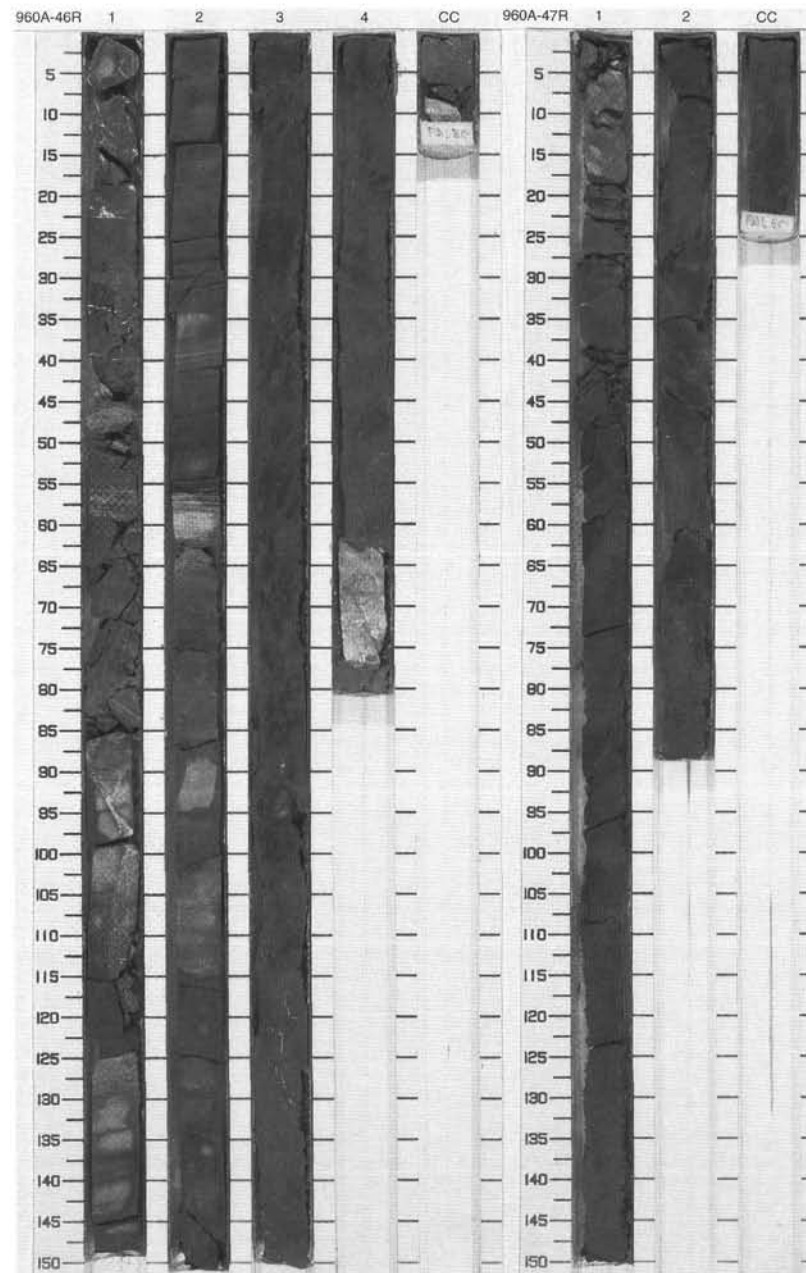
CORED 371.8 - 376.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Wavy lines]	[X marks]	T	N5/1 To N6	<p>SILTY SANDSTONE</p> <p>Major Lithology: Moderately well-sorted, quartzose, very fine- to fine-grained, gray SILTY SANDSTONE. The rock is flaser-bedded to rippled, with some convolute laminae at Section 1, 0-92 cm, and Section 2, 56-150 cm. The interval from Section 1, 96 cm to Section 2, 56 cm, is parallel laminated (mm-scale), with thin intervals containing wavy laminae. A biogenic escape structure occurs at Section 1, 92-96 cm. A salt-and-pepper color in some parts of the rock is due to the presence of subrounded quartz grains and ferromagnesian minerals, principally biotite.</p> <p>Minor Lithology: Sections 3 to Core Catcher comprises drilling breccia, with one piece of coherent rock in Section 4, which consists of sedimentary BRECCIA. Clasts include laminated, rippled, and massive SILTY SANDSTONE, similar to the lithology in Sections 1 and 2.</p>
2	[Dotted pattern]	2		[Wavy lines]	[X marks]	T		
3	[Dotted pattern]	3		[Wavy lines]	[X marks]	T		
4	[Dotted pattern]	4		[Wavy lines]	[X marks]	T		
5	[Dotted pattern]	CC		[Wavy lines]	[X marks]	M		
<p>General Description: The age of this core is unknown.</p>								

SITE 960 HOLE A CORE 47R

CORED 376.8 - 379.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Wavy lines]	[X marks]	S	N2.5/1	<p>SILTY SANDSTONE and SILTY CLAYSTONE</p> <p>Major Lithologies: Section 1, 0-18 cm has drilling fragments of SILTY SANDSTONE, which is moderately sorted. The rock has subangular quartz grains, convolute laminae, and is rippled and lenticular bedded. Section 1, 18-130 cm is SILTY CLAYSTONE, which is black and lenticular bedded. The rest of the core consists of drilling breccia, and no structures are visible.</p>
2	[Dotted pattern]	2		[Wavy lines]	[X marks]	S		
CC	[Dotted pattern]	CC		[Wavy lines]	[X marks]	M		
<p>General Description: The age of the core is unknown.</p>								



SITE 960 HOLE A CORE 48R

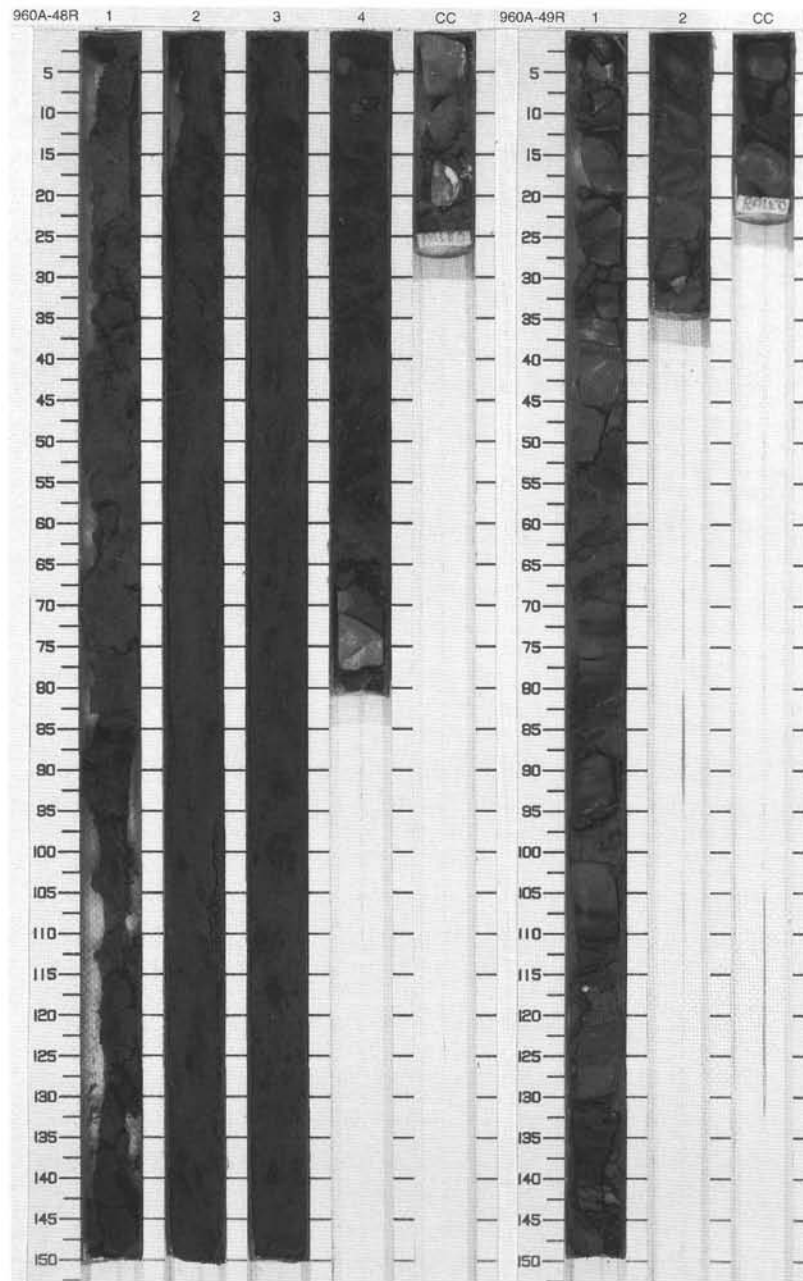
CORED 379.3 - 386.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			X			<p>CLAYEY SILTSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: Section 1, 76–85 cm, has a somewhat intact piece of black CLAYEY SILTSTONE. Section 4, 68–80 cm, has a piece of very fine SILTY SANDSTONE, with a wavy, erosive contact within it. Above the contact are somewhat rounded pieces of the underlying sandstone in a darker (more biotite-rich) matrix. The clasts are irregular in outline, coherent, but probably not lithified when transported. Below the contact, the sandstone is calcite-cemented. In the Core Catcher, there are two pieces of medium to light gray (N6/1), very fine SILTY SANDSTONE, moderately sorted, slightly bioturbated and structureless, with small white clay (kaolinite) veins throughout. One piece of calcite cemented, structureless, very fine SILTY SANDSTONE, with a calcite vein attached to it, is present at the bottom of the Core Catcher.</p> <p>General Description: The age of this interval is unknown.</p>
2		2			X		N2.5/1	
3		3			X			
4		4			X		N6/1	
5		CC			X			

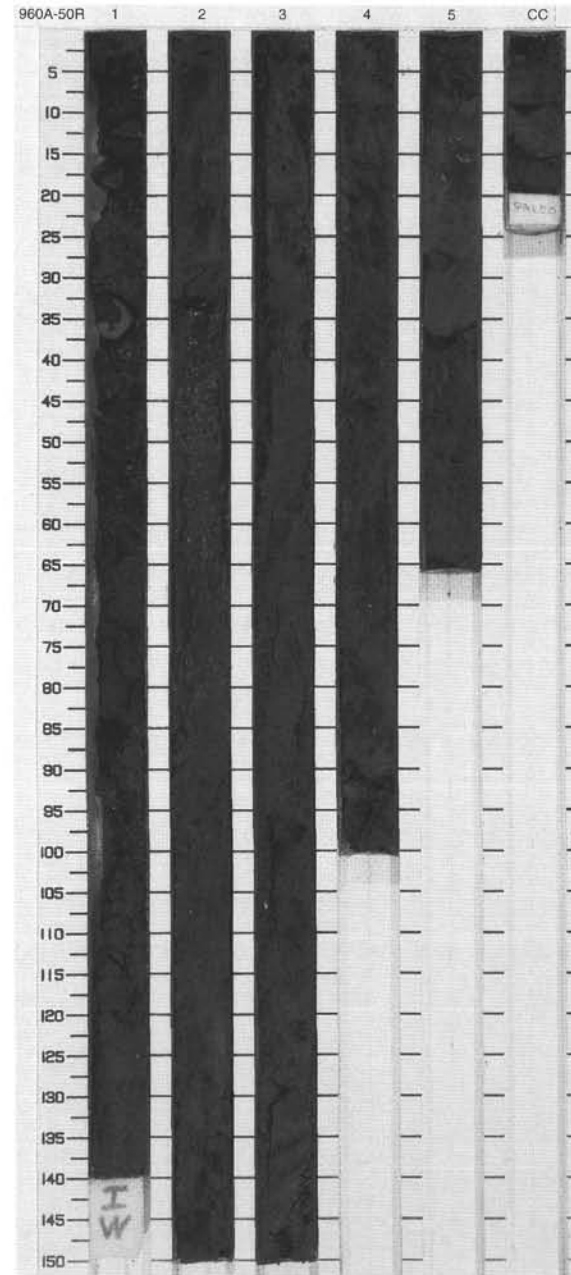
SITE 960 HOLE A CORE 49R

CORED 386.4 - 391.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			+			<p>CLAYSTONE</p> <p>Major Lithology: Black (7.5GY 3/1) CLAYSTONE, massive, moderately bioturbated. Fracture or cleavage, nearly parallel to laminae(?) is faintly visible in Section 1, 130–140 cm, and Section 2, 0–15 cm. Calcite veins are present in Section 1. Dark gray carbonate concretion, 3 cm across, occurs in the Core Catcher.</p> <p>General Description: The age of the core is unknown.</p>
2		2			+		7.5GY 3/1	
		CC			+			



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	Void	1			S	T		<p>CLAYSTONE</p> <p>Major Lithology: Grayish black to dark gray (N2 to N3), structureless CLAYSTONE.</p> <p>General Description: The core is highly fractured. Broken, mineral-filled veins occur in Sections 3, 4, 5, and in the Core Catcher. A large, cylindrical fossil of unknown taxonomic affinity is found in a subhorizontal position at 29–36 cm. It measures at least 4 cm along its long axis, 1.5 cm across, and has a spiral internal structure in cross-section. The fossil is made up of black material cut by pyritic whorls. The whorls are segmented by crenulated pyrite septae. A white mineral has grown irregularly within the chambers. The age of this core is unknown.</p>
2	Void	2			I			
3		3		/	X		N2 To N3	
4		4			X			
5		5			X			
6		5			X			
		CC			M			

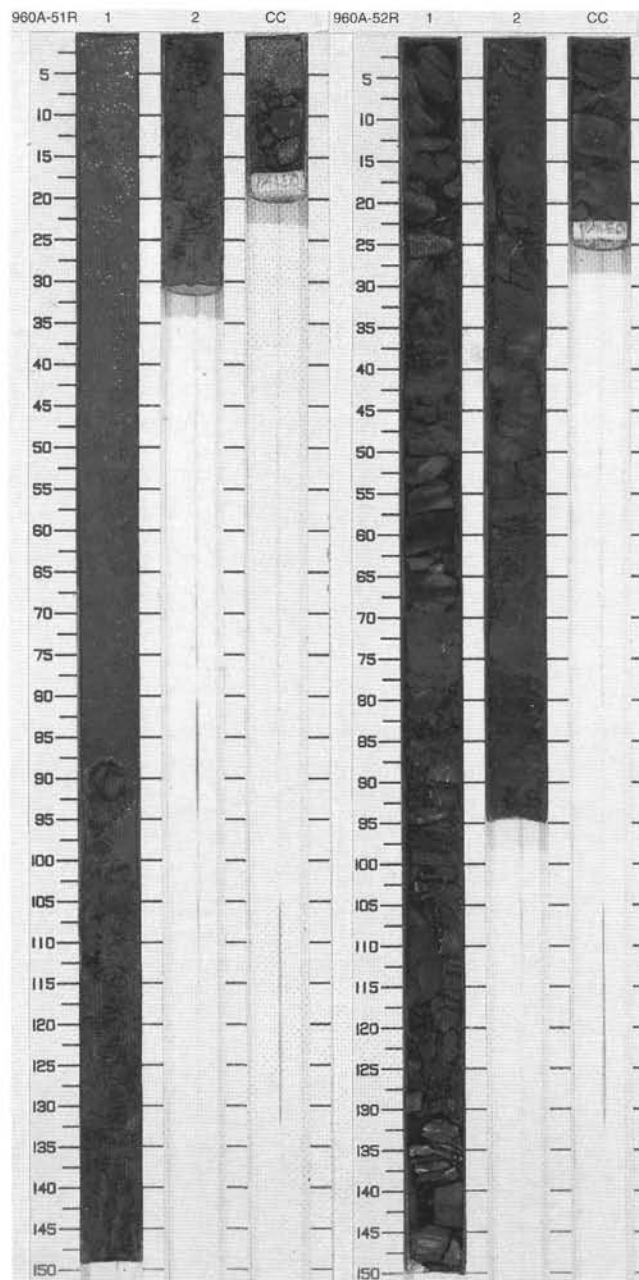


SITE 960 HOLE A CORE 51R CORED 396.1 - 397.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1			X		5G 3/1	CLAYSTONE Major Lithology: Black (5G 3/1) CLAYSTONE, massive. Cleavage is faintly visible. General Description: The age of the core is unknown.
		2			X	M		
		CC						

SITE 960 HOLE A CORE 52R CORED 397.3 - 403.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines]	X	D S	N2	CLAYSTONE Major Lithology: The core consists of grayish black (N2) massive CLAYSTONE with some carbonate (siderite) occurring as a cement and vein-fill. Fractures are filled with kaolinite in Section 1, 80-95 cm, and Section 2, 20-25 and 65-70 cm. Siderite fills fractures in Section 1, 110-105 cm. Pyrite concretions occur in Core Catcher. General Description: The age of the core is unknown.
2		2						
		CC						



SITE 960 HOLE A CORE 53R CORED 403.3 - 413.1 mbsf

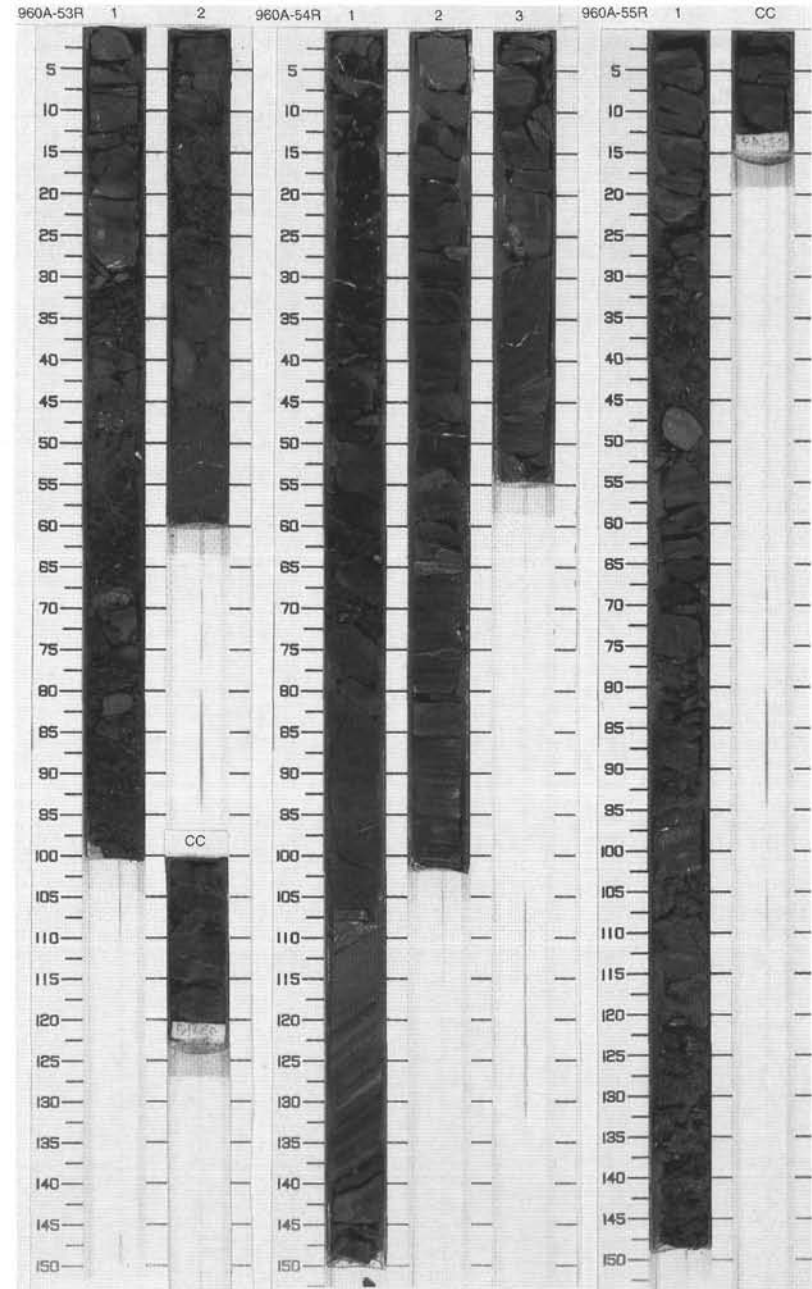
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines]	[X]		N2	CLAYSTONE Major Lithology: Grayish black (N2) massive CLAYSTONE. Fractures are filled with carbonate in Section 1, 10–15 cm and Core Catcher, 4–5 cm. Kaolinite fills fractures in Section 1, 70–74 cm and Section 2, 8–9 cm and 50–54 cm.
	[Dotted pattern]	2		[Diagonal lines]	[X]			
	[Dotted pattern]	CC		[Diagonal lines]	[X]	M		
General Description: The age of the core is unknown.								

SITE 960 HOLE A CORE 54R CORED 413.1 - 417.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines]	[X]		N2	SILTY CLAYSTONE Major Lithology: Grayish black (N2) parallel-laminated SILTY CLAYSTONE. Section 1, 79–111 cm is slightly clayey and massive; otherwise the sediment shows some grading and mm-scale lamination throughout. Upper part of Section 1 shows fractures filled with carbonate (siderite). Bedding is notably dipping.
2	[Dotted pattern]	2		[Diagonal lines]	[X]			
3	[Dotted pattern]	3		[Diagonal lines]	[X]	M		
General Description: The age of this interval is unknown.								

SITE 960 HOLE A CORE 55R CORED 417.8 - 422.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines]	[X]		10Y 3/1 To 5GY 3/1	SILTY CLAYSTONE Major Lithology: Very dark gray (10Y 3/1) to dark greenish gray (5GY 3/1) SILTY CLAYSTONE is finely parallel laminated. Very dark gray SILTY CLAYSTONE laminae alternate with dark gray SILTY CLAYSTONE laminae. Contorted laminae are present in Section 1, 47–52 cm. Syn-sedimentary faults, nearly parallel to laminae are visible.
	[Dotted pattern]	CC		[Diagonal lines]	[X]	M		
General Description: The age is unknown.								

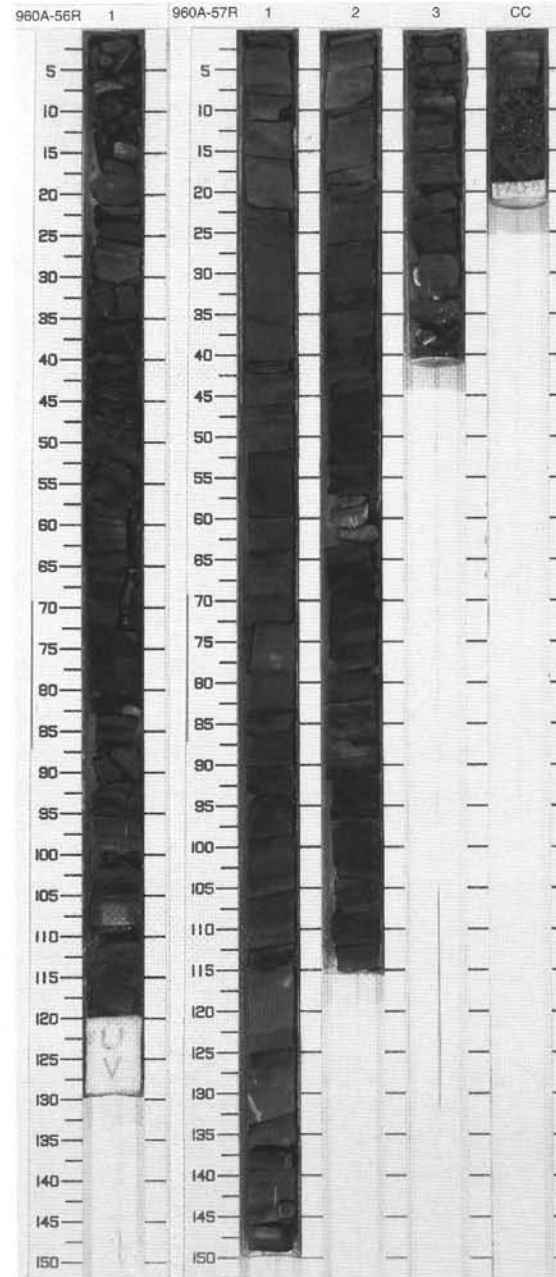


SITE 960 HOLE A CORE 56R CORED 422.8 - 427.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1					5G 2/1	<p>SILTY CLAYSTONE</p> <p>Major Lithology: Greenish black (5G 2/1), finely parallel-laminated SILTY CLAYSTONE.</p> <p>Minor Lithology: 3-cm-thick layer of dark gray SILTSTONE is present in Section 1, 107–110 cm.</p> <p>General Description: The age of the core is unknown.</p>

SITE 960 HOLE A CORE 57R CORED 427.4 - 432.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1					N6 To N2	<p>SANDY SILTSTONE</p> <p>Major Lithology: Fine SANDY SILTSTONE, moderately sorted, black to gray, in a series of fining-upward sequences, Section 1, 0 cm to Section 2, 17 cm. The thickest is 20 cm, but most are 2–4 cm thick, with sharp, scoured lower contacts, or lower contacts showing 3–4-mm-sized ball-and-pillow structure. Massive sand is locally overlain by faintly planar laminae, which are in turn overlain by rippled laminae. In between fining-upward sequences, and in Sections 2, 17 cm to CC, the sediment is finely laminated on a mm-scale, with only rare alternations in grain size. Zeolites, exhibiting cone-in-cone structure, are occasionally present along partings parallel to bedding.</p> <p>General Description: The age of this interval is unknown.</p>
2		2						
3		3						



SITE 960 HOLE A CORE 58R

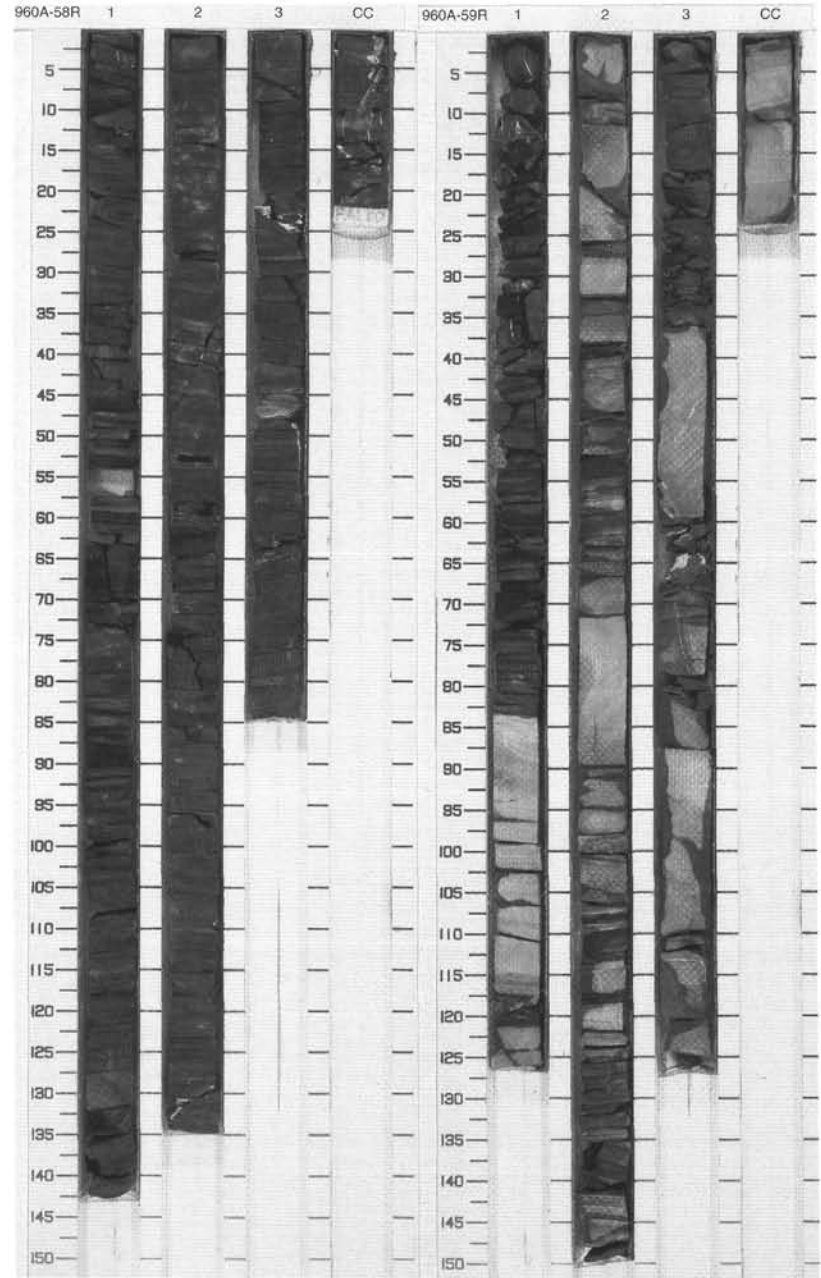
CORED 432.4 - 437.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Horizontal lines with 'F' and arrows]	[Vertical lines]	S	N2 To N5	<p>SILTY CLAYSTONE and SILTSTONE</p> <p>Major Lithologies: Grayish black (N2) laminated SILTY CLAYSTONE with minor intervals and laminae of slightly lighter medium gray (N5) SILTSTONE. Silty intervals are 1–2 cm in thickness; otherwise the sediment shows mm-scale lamination and some grading. Load structures are preserved in Section 1, 58–60 cm. Kaolinite fills some fractures which show slickensides in Sections 1 and 2. Carbonate concentration occurs in Section 3, 50–51 cm.</p>
2	[Dotted pattern]	2		[Horizontal lines with 'F' and arrows]	[Vertical lines]	S		
3	[Dotted pattern]	3		[Horizontal lines with 'F' and arrows]	[Vertical lines]	D		
		CC				M		<p>General Description: The age of the core is unknown.</p>

SITE 960 HOLE A CORE 59R

CORED 437.0 - 442.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Horizontal lines with 'F' and arrows]	[Vertical lines]		N2	<p>SILTY CLAYSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: Grayish black (N2), laminated SILTY CLAYSTONE interbedded with medium dark gray to dark gray (N3-N4), massive to laminated SILTY SANDSTONE, which is rich in mica and micrite. Lamination is on a mm-scale. Fining-upward intervals are present, and load structures, water escape structures, veins, and microfaults are present. The veins are infilled with kaolinite in the SILTY CLAYSTONE, but chiefly with carbonate in the SILTY SANDSTONE. Pyrite is absent except at Section 3, 100–110 cm where it fills a vein.</p> <p>Minor Lithology: A bed of dark gray to grayish black (N2-N3) SILTSTONE occurs at Section 2, 126–150 cm. It shows wavy lamination at the base of the section.</p>
2	[Dotted pattern]	2		[Horizontal lines with 'F' and arrows]	[Vertical lines]		N3 To N4	
3	[Dotted pattern]	3		[Horizontal lines with 'F' and arrows]	[Vertical lines]		N2 To N3	
4	[Dotted pattern]	3		[Horizontal lines with 'F' and arrows]	[Vertical lines]		N3 To N4	
		CC				M		<p>General Description: The age of this core is unknown.</p>



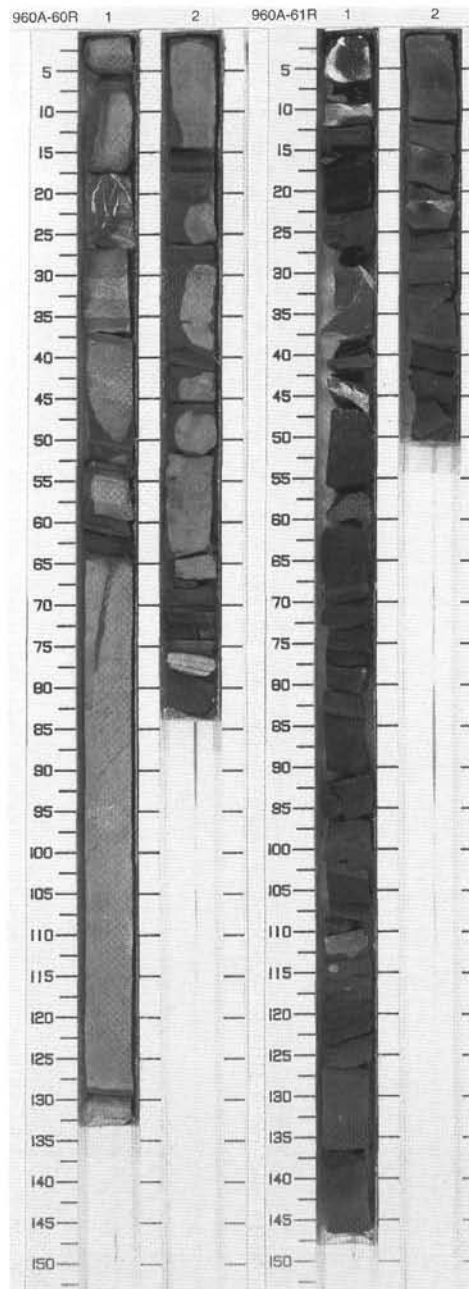
SITE 960

SITE 960 HOLE A CORE 60R CORED 442.0 - 446.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines, arrow, F, <I>]	S		N3 To N4	<p>SILTY SANDSTONE</p> <p>Major Lithology: Medium dark gray to dark gray (N3-N4) SILTY SANDSTONE, micaceous, mainly massive, with a few laminated layers. Laminated horizons are much more clayey. The sequence shows discrete fining-upward units, with slightly lighter units grading upward into darker units. The darker color is due to an increase in plant debris and organic matter. Several quartz-filled microfaults occur at Section 1, 21-27 cm. Water-escape structures and carbonate-filled veins are also present.</p> <p>General Description: The age of the core is unknown.</p>
2		2		[Diagonal lines, arrow, F, <I>]	S	T		

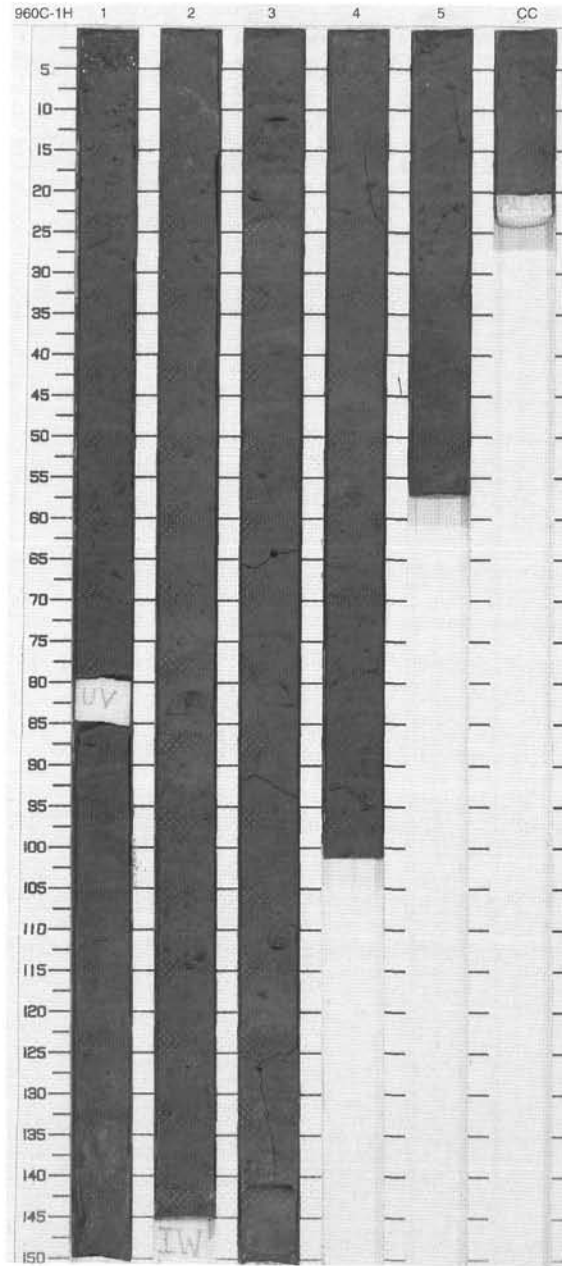
SITE 960 HOLE A CORE 61R CORED 446.2 - 451.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1		[Diagonal lines, 2, <I>]	T		10Y 3/1 To 2.5G 2.5/0	<p>SILTY SANDSTONE, CLAYEY SILTSTONE and SILTY CLAYSTONE</p> <p>Major Lithologies: Graded quartz and clay occurring in upward fining sequences comprising medium dark gray to dark gray, SILTY SANDSTONE, CLAYEY SILTSTONE and SILTY CLAYSTONE (10Y 3/1 to 2.5G 2.5/0). Lower boundaries are occasionally scoured and lithoclasts and fluid escape structures are present at the base of some cycles. SILTY CLAYSTONE and CLAYEY SILTSTONE are characteristically laminated on a mm-scale with fine alternations of light and dark layering. Soft sediment, slump and deformation structures are locally present. Mica flakes occur in all lithologies of this interval and prytite is notably absent.</p> <p>General Description: The age is unknown.</p>
2		2		[Diagonal lines, 2, <I>]	M			



960B 1H Entire core archived; no description.

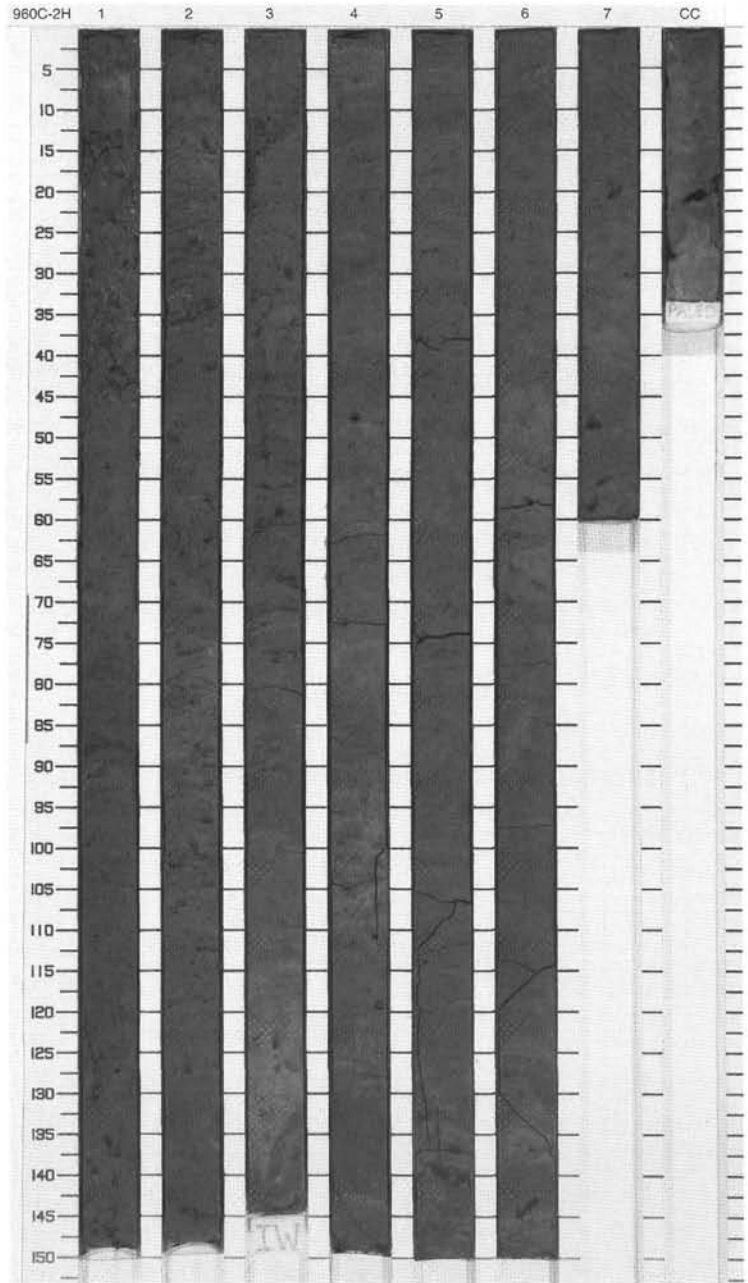
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.0 - 1.0	Void	1			⊖	S	5GY 4/1	FORAM NANNOFOSSIL OOZE and NANNOFOSSIL FORAM OOZE Major Lithologies: Alternating, 20- to 40-cm-thick beds of dark green gray FORAM NANNOFOSSIL OOZE and light green gray NANNOFOSSIL FORAM OOZE. Color variation is related to changes in the abundance of foraminifers: lighter intervals have up to 60% foraminifers. Large burrows are scattered throughout, although these are concentrated in the lighter beds. Glauconite, appearing as dark green to black sand-sized grains, is concentrated in burrows where it replaces foraminifers (e.g., Section 5, 22 cm).
1.0 - 2.0		2	late Pleistocene	>>>		S		
2.0 - 3.0		3				I		
3.0 - 4.0		4					5GY 4/1 To 7.5GY 4/1	
4.0 - 5.0		5						
5.0 - 6.2		CC				M		



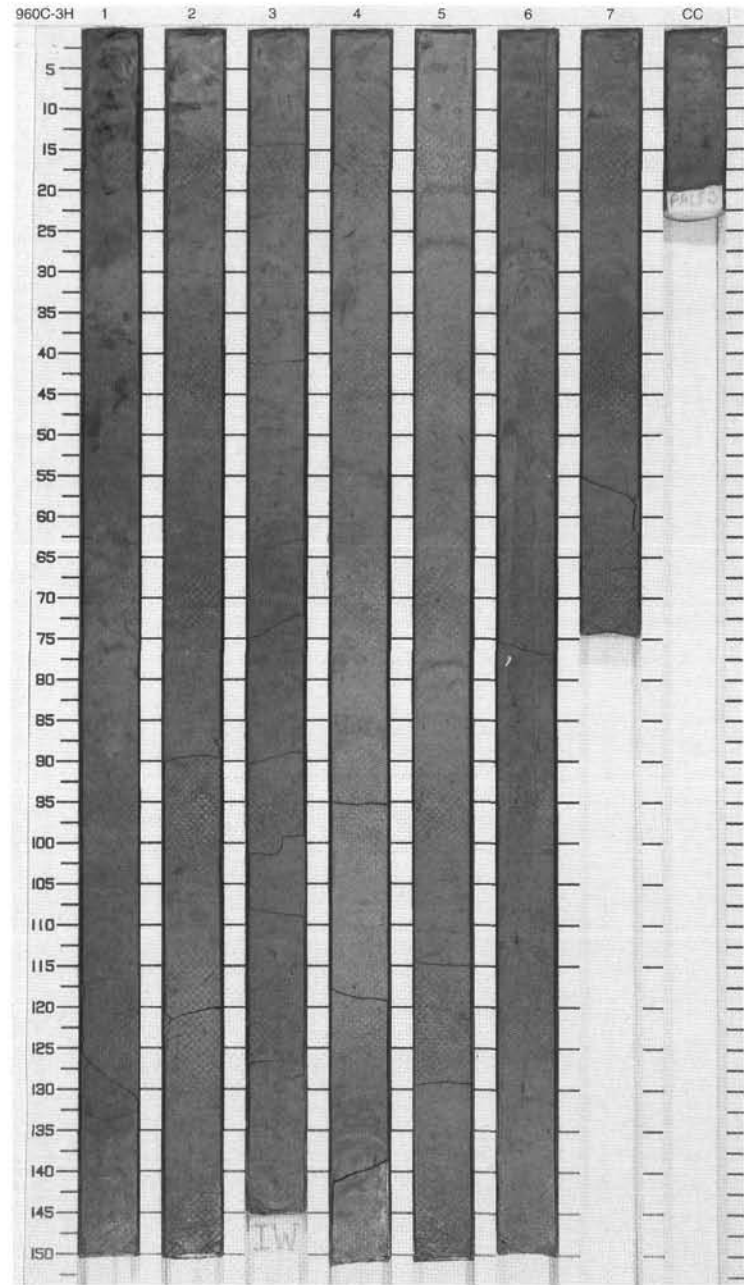
SITE 960 HOLE C CORE 2H

CORED 6.2 - 15.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Cross-hatched pattern]	1	P	[Symbol]	W		10Y 4/1	<p>FORAM NANNOFOSSIL OOZE and NANNOFOSSIL FORAM OOZE</p> <p>Major Lithologies: Interbeds of gray (10Y 5/1) NANNOFOSSIL FORAM OOZE and dark gray (10Y 4/1) FORAM NANNOFOSSIL OOZE. Contacts are gradational, generally due to slight bioturbation. Burrows up to 4 cm across throughout; most are subhorizontal. Thin scoured contacts throughout have 1- to 3-mm-thick foraminifer-enriched ooze above them. Pyrite is disseminated throughout. Glauconite pellets are concentrated in burrows where they replace foraminifers.</p>
2	[Cross-hatched pattern]	2	P	[Symbol]			10Y 4/1	
3	[Cross-hatched pattern]	3	P	[Symbol]			10Y 4/1	
4	[Cross-hatched pattern]	3	P	[Symbol]			10Y 5/1	
5	[Cross-hatched pattern]	4	P	[Symbol]			10Y 4/1	
6	[Cross-hatched pattern]	4	P	[Symbol]			10Y 5/1	
7	[Cross-hatched pattern]	5	P	[Symbol]			10Y 4/1	
8	[Cross-hatched pattern]	6	P	[Symbol]			10Y 4/1	
9	[Cross-hatched pattern]	6	P	[Symbol]			10Y 4/1	
CC	[Cross-hatched pattern]	7	P	[Symbol]			10Y 4/1	
						M		

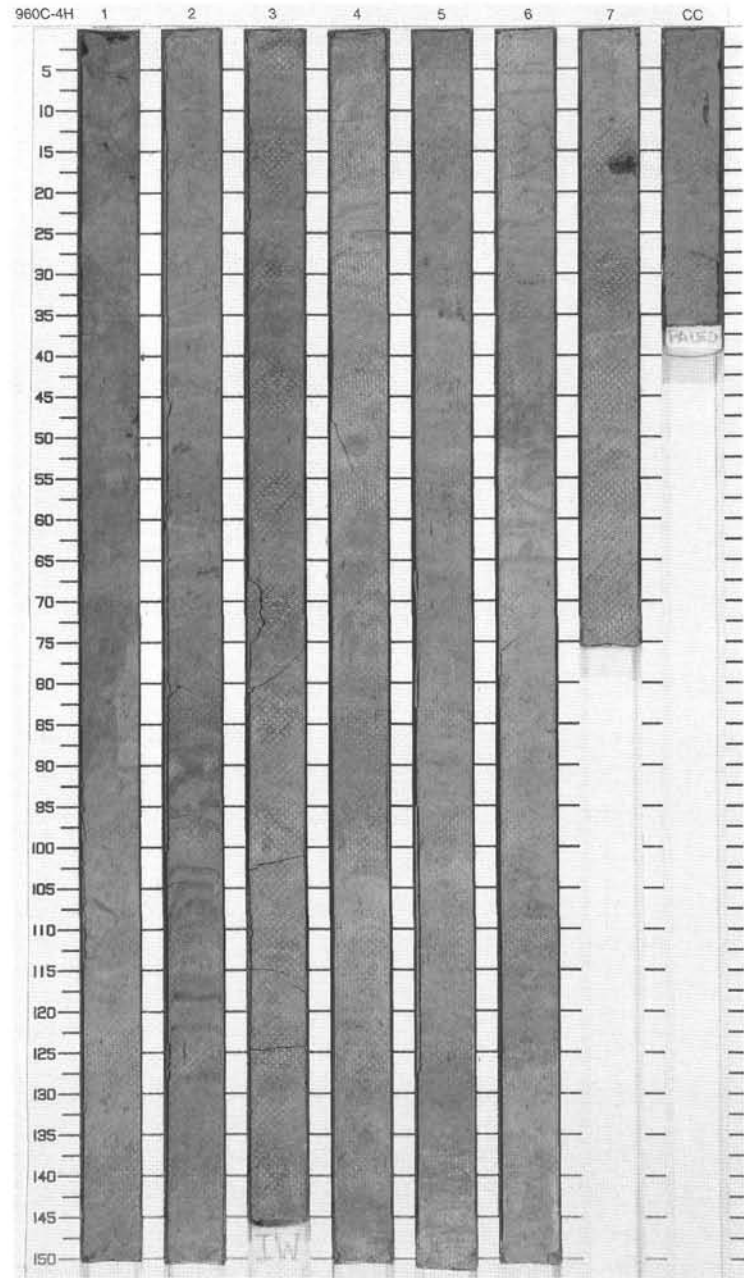


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Cross-hatched pattern]	1		⊙	—	S		<p>NANNOFOSSIL MICRITE OOZE WITH FORAMS AND CLAY and MICRITE OOZE WITH FORAMS, NANNOFOSSILS, AND CLAY</p> <p>Major Lithologies: Olive gray (10Y 4/2) NANNOFOSSIL MICRITE OOZE WITH FORAMS AND CLAY, lightening in color in Section 4 to gray (10Y 5/1) MICRITE OOZE WITH FORAMS, NANNOFOSSILS, AND CLAY. Slightly to moderately bioturbated, with glauconite pellets and pyrite disseminated throughout. Local color darkening arises from increased glauconite; lightening results from decrease in nannofossil content with concomitant increase in micrite. A bivalve fragment is present at Section 6, 54 cm.</p> <p>Minor Lithology: Faintly browner beds, 3 to 20 cm thick, of MICRITE OOZE WITH NANNOFOSSILS in Sections 1, 3, 4, 5, and 6.</p>
2	[Cross-hatched pattern]	2		⊙	—	P	10Y 5/1 To 10Y 4/2	
3	[Cross-hatched pattern]	3		⊙	—	P		
4	[Cross-hatched pattern]	3		—	—	S		
5	[Cross-hatched pattern]	4	late Pliocene	—	—	I		
6	[Cross-hatched pattern]	4		P	—	S	10Y 5/1	
7	[Cross-hatched pattern]	5		P	—	S		
8	[Cross-hatched pattern]	6		P	—	P	10Y 5/1 To 10Y 4/2	
9	[Cross-hatched pattern]	7		P	—	P		
CC		CC			—	M		

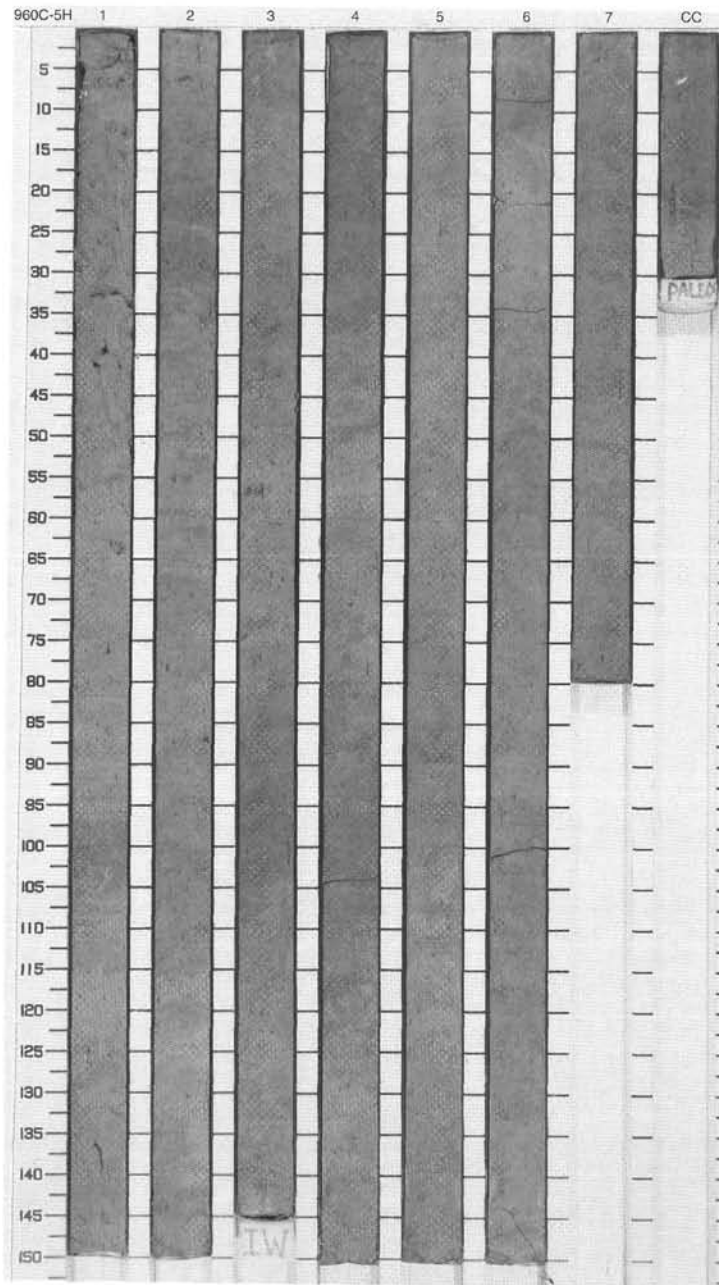


SITE 960 HOLE C CORE 4H CORED 25.2 - 34.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Graphic Lith. Pattern]	1		(G) P	WW OOO	S	10Y 4/1	NANNOFOSSIL MICRITE OOZE WITH FORAMS and FORAM NANNOFOSSIL MICRITE OOZE
2	[Graphic Lith. Pattern]	2		P			5Y 5/1 To 5GY 5/1	Major Lithologies: Interbeds of dark gray (10Y 4/1 to 10Y 5/1) NANNOFOSSIL MICRITE OOZE WITH FORAMS and greenish gray to olive gray (5GY 5/1 to 5Y 5/1) FORAM NANNOFOSSIL MICRITE OOZE. Contacts are usually gradational because of slight to moderate bioturbation. Burrows are mainly subhorizontal, forming color bands up to 2 cm wide. Pyrite and foraminifer tests are disseminated throughout. Some glauconite-rich horizons are present.
3	[Graphic Lith. Pattern]	3		(G) P		S	10Y 4/1 To 10Y 5/1	
4	[Graphic Lith. Pattern]	3	early Pliocene-late Pliocene	P				
5	[Graphic Lith. Pattern]	4		(G) P			5Y 5/1	
6	[Graphic Lith. Pattern]	5		P			10Y 5/1	
7	[Graphic Lith. Pattern]	5		(G) P			5Y 5/1	
8	[Graphic Lith. Pattern]	6		(G) P			5Y 5/1 To 10Y 4/1	
9	[Graphic Lith. Pattern]	7		(P) P			5Y 5/1 To 10Y 5/1	
10	[Graphic Lith. Pattern]	CC		P		M		

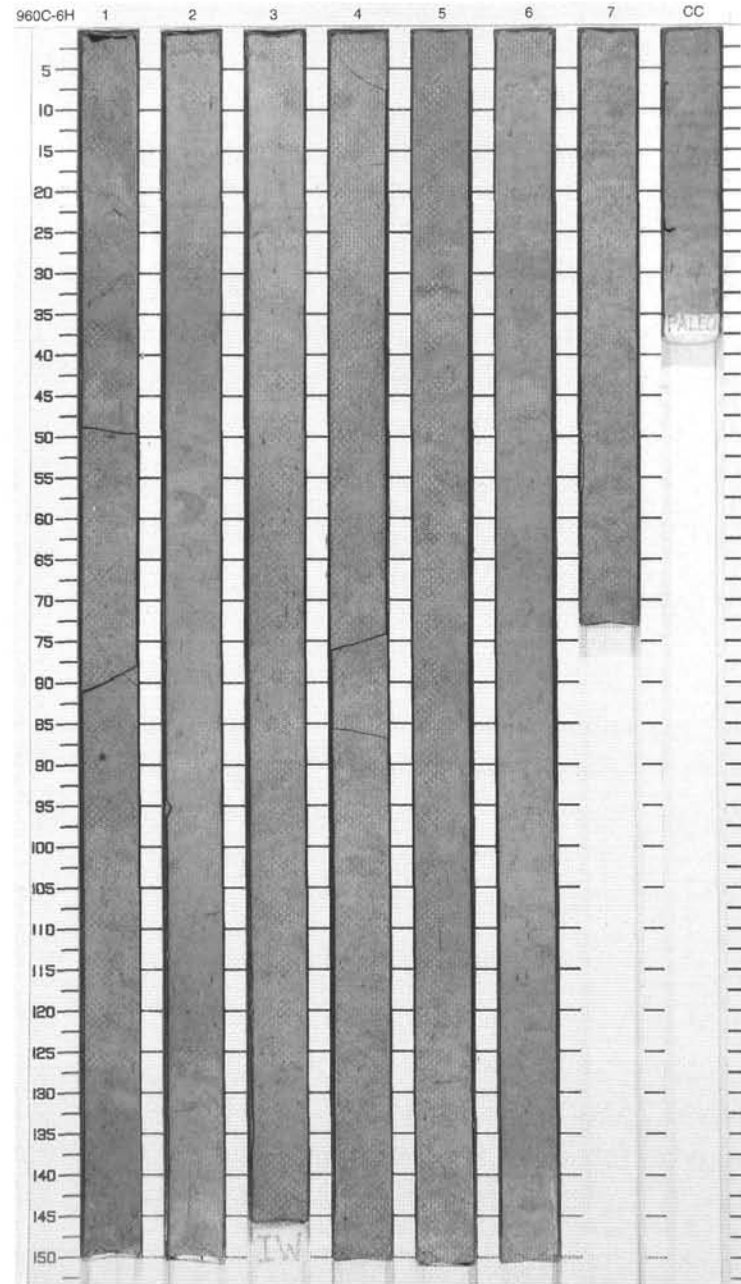


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Pliocene	P	I	S	5GY 5/1	<p>NANNOFOSSIL OOZE WITH CLAY AND FORAMS</p> <p>Major Lithology: The dominant lithology is greenish gray (5GY 5/1 to 2.5GY 5/1), slightly bioturbated NANNOFOSSIL OOZE WITH CLAY AND FORAMS and with scattered sand-sized shell fragments. A darker greenish gray (2.5GY 4/1 to 5GY 4/1) bed of CLAYEY NANNOFOSSIL OOZE occurs in Section 2, 15-33 cm.</p>
2		P		S				
3		P						
4		P						
5		P						
6		P						
7		P						
8		P						
9		P						
10		CC		M				

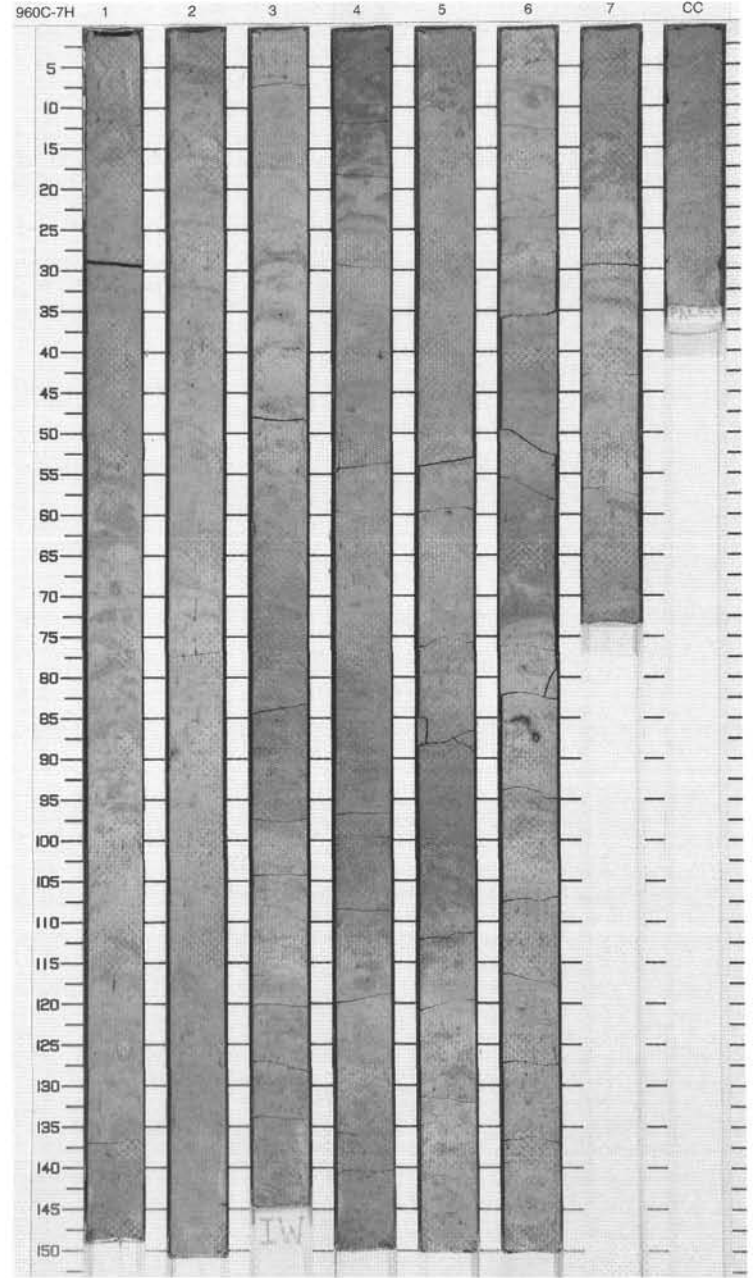


SITE 960 HOLE C CORE 6H CORED 44.2 - 53.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		[Symbol]		S	5GY 4/1	<p>NANNOFOSSIL OOZE WITH FORAMS AND MICRITE</p> <p>Major Lithology: Dominant lithology is greenish gray (5GY 5/1) massive NANNOFOSSIL OOZE WITH FORAMS AND MICRITE alternating with slightly darker (5GY 4/1) NANNOFOSSIL OOZE WITH FORAMS AND MICRITE. The darker portions show lower contents of foraminifers and are slightly richer in pyrite and organic matter. Contacts are gradational and usually moderately bioturbated. Burrows form color bands and irregular spots. Pyrite and some larger foraminifer tests are disseminated throughout the core. Glauconite-bearing color bands are present in Sections 2, 3, and 7.</p>
2	[Pattern]	2		[Symbol]		S	5GY 5/1 To 5GY 4/1	
3	[Pattern]	3		[Symbol]		S	5GY 5/1 To 5GY 4/1	
4	[Pattern]	3		[Symbol]		S	5GY 5/1 To 5GY 4/1	
5	[Pattern]	4	early Pliocene	[Symbol]		I	5GY 5/1	
6	[Pattern]	5		[Symbol]		I	5GY 5/1	
7	[Pattern]	6		[Symbol]		I	5GY 5/1 To 5GY 4/1	
8	[Pattern]	6		[Symbol]		I	5GY 5/1 To 5GY 4/1	
9	[Pattern]	7		[Symbol]		I	5GY 5/1 To 5GY 4/1	
10	[Pattern]	CC		[Symbol]		M	5GY 5/1 To 5GY 4/1	



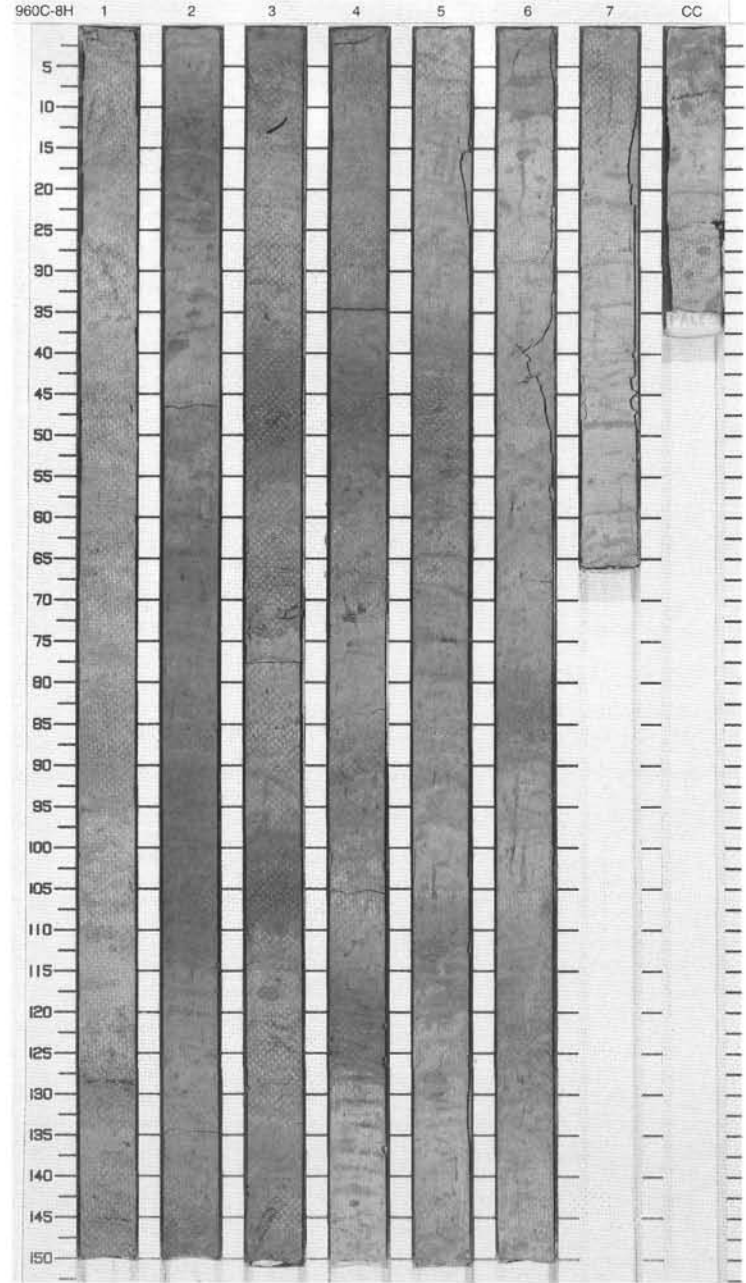
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	early Pliocene	P			5GY 5/1	<p>NANNOFOSSIL CHALK WITH CLAY and CLAYEY NANNOFOSSIL CHALK</p> <p>Major Lithologies: Irregular alternation of lighter greenish gray (5GY 6/1) NANNOFOSSIL CHALK WITH CLAY and darker greenish gray (5GY 5/1) CLAYEY NANNOFOSSIL CHALK. Contacts between these lithologies are often marked by mottling. Slight bioturbation is indicated throughout the core by lack of clear bedding and irregular dark, pyritic spots.</p> <p>Minor Lithologies: Brownish gray CLAYEY NANNOFOSSIL CHALK WITH FORAMS fills irregular layers and patches in Section 3, 30-60 cm. A dark greenish gray (5GY 4/1) NANNOFOSSIL CLAY layer occurs in Section 4, 0-15 cm. Glauconite-filled burrows occur in Section 2, 85-90 cm and in Section 6, 78-88 cm. Color bands with glauconite layers occur in Sections 3, 100-130 cm, Section 5, 35-45 and 145-147 cm, Section 6, 0-37 cm, and Section 7, 22-66 cm.</p>
2	[Pattern]	2		P			5GY 6/1 To 5GY 5/1	
3	[Pattern]	3		P	S		5GY 5/1	
4	[Pattern]	4		P	S		5GY 5/1	
5	[Pattern]	5		P	S		5GY 6/1 To 5GY 5/1	
6	[Pattern]	6		P	S		5GY 6/1 To 5GY 5/1	
7	[Pattern]	7		P	S		5GY 6/1 To 5GY 5/1	
8	[Pattern]	8		P	S		5GY 6/1 To 5GY 5/1	
9	[Pattern]	9		P	S		5GY 6/1 To 5GY 5/1	
10	[Pattern]	10		P	S		5GY 6/1 To 5GY 5/1	
		CC						



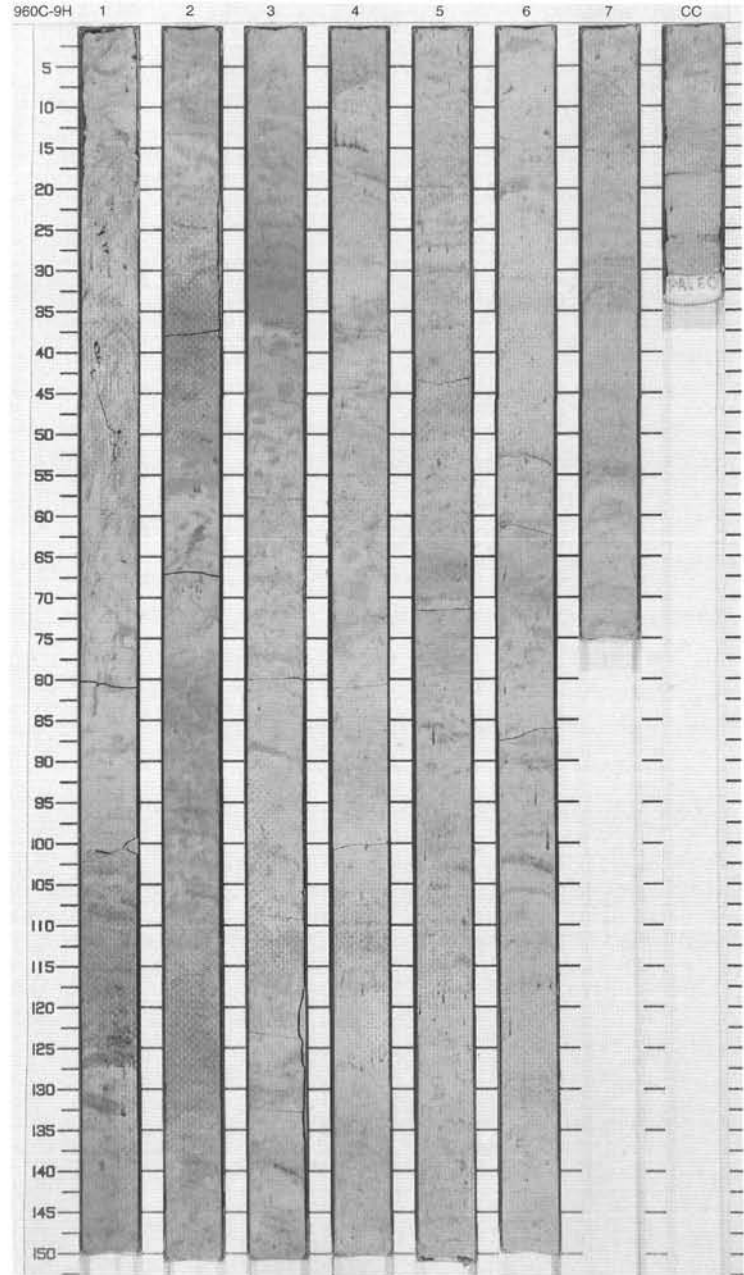
SITE 960 HOLE C CORE 8H

CORED 63.2 - 72.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Pliocene			S	5GY 6/1 To 5GY 4/1	<p>NANNOFOSSIL CHALK WITH FORAMS and NANNOFOSSIL CHALK WITH FORAMS AND SIDERITE</p> <p>Major Lithologies: Greenish gray (5GY 6/1) NANNOFOSSIL CHALK WITH FORAMS alternates with intervals of darker greenish gray (5GY 4/1) NANNOFOSSIL CHALK WITH FORAMS AND SIDERITE. Darker portions have a lower content of foraminifers and are slightly enriched with pyrite and organic matter. Contact zones are usually moderately burrowed or show color mottles. Thin glauconite-bearing color bands occur throughout the core. Disseminated foraminifer tests occur in Sections 1, 2, and 4. Pyrite occurs as dark concretions and disseminated particles within the sediment.</p> <p>Minor Lithology: Carbonate recrystallization is seen as layers and small portions of SIDERITIC NANNOFOSSIL CHALK WITH FORAMS especially in Section 3, 68-75 cm.</p>
2		2				S	5GY 6/1	
3		3				S	5GY 4/1	
4		4				S	5GY 6/1	
5		5				S	5GY 6/1 To 5GY 4/1	
6		6				S	5GY 6/1 To 5GY 4/1	
7		7		late Miocene			S	
10		CC				M		

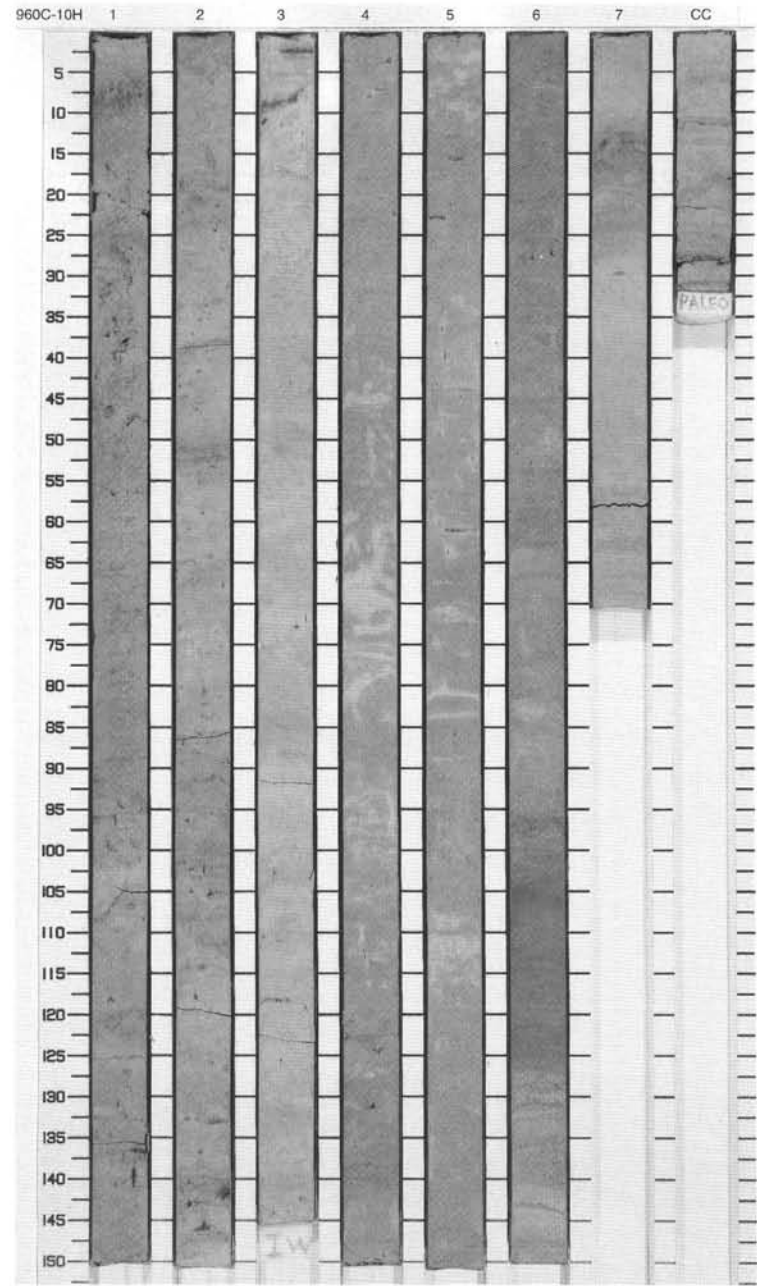


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		P			10Y 6/2	<p>NANNOFOSSIL CHALK, NANNOFOSSIL CHALK WITH FORAMS and FORAM NANNOFOSSIL CHALK</p> <p>Major Lithologies: The intervals from Section 1 to Section 3, 38 cm, and Section 3, 82-115 cm consist of alternating horizons of light olive gray (10Y 6/2) NANNOFOSSIL CHALK and greenish gray (5GY 5/1) NANNOFOSSIL CHALK WITH FORAMS. Coarser grained, greenish gray (5GY 6/1) FORAM NANNOFOSSIL CHALK occurs in Section 3, 38-82 cm and in the lower half of the core, with a few interbeds of NANNOFOSSIL CHALK. Foraminifer tests and pyrite framboids are disseminated throughout the three lithologies. The core is slightly bioturbated. Enrichment of greenish glauconite and brownish siderite in subhorizontal burrows results in thin color bands with diffuse boundaries. Two microfaults occur in Section 4.</p>
2	[Pattern]	2		P			5GY 5/1 To 10Y 6/2	
3	[Pattern]	3		P			5GY 6/1	
4	[Pattern]	3		P			10Y 6/2	
5	[Pattern]	4	late Miocene	P				
6	[Pattern]	4		P				
7	[Pattern]	5		P			5GY 6/1	
8	[Pattern]	6		P				
9	[Pattern]	7		P				
10	[Pattern]	CC		P				

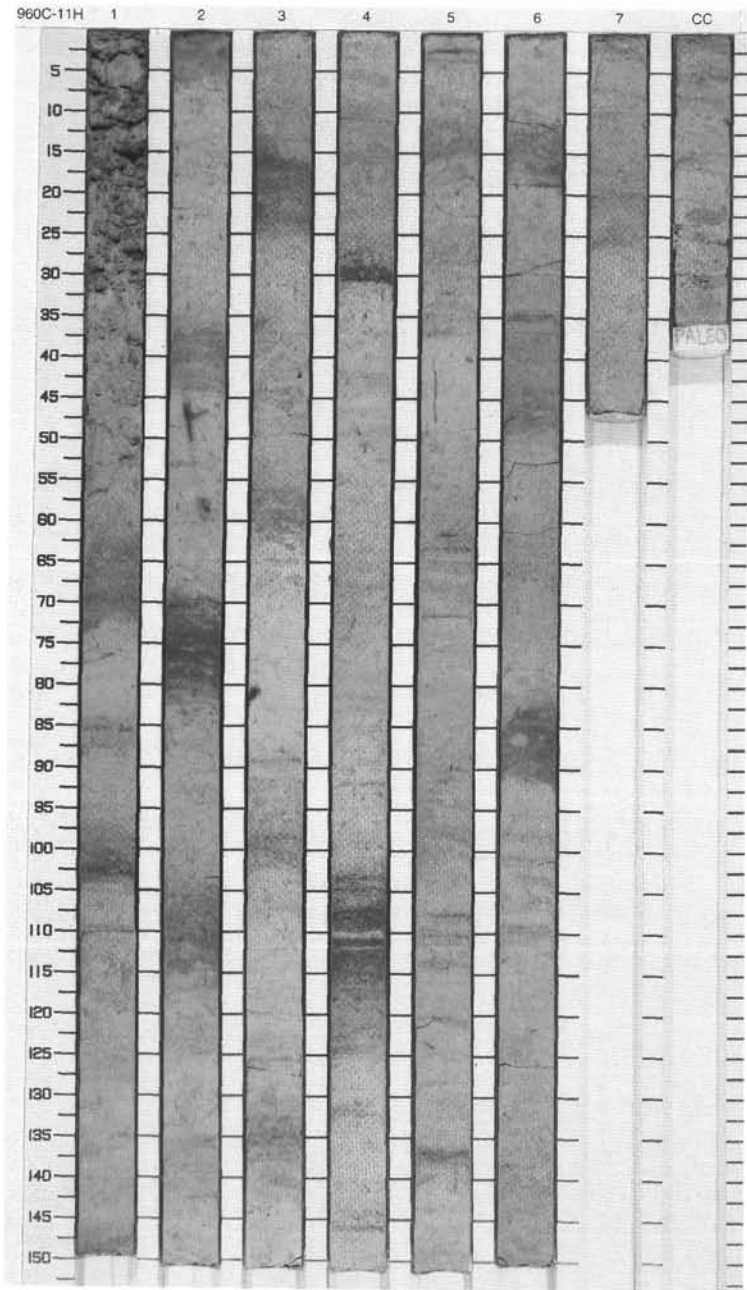


SITE 960 HOLE C CORE 10H CORED 82.2 - 91.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		P				<p>NANNOFOSSIL CHALK WITH FORAMS</p> <p>Major Lithology: Olive gray (5GY 5/1) and yellowish brown (5Y 5/2) NANNOFOSSIL CHALK WITH FORAMS, slightly bioturbated. Greenish thin bands are present in Sections 1 and 2, while light gray thin bands occur in Sections 6, 7, and Core Catcher. Foraminifers are sparsely disseminated throughout the core. Pyrite is present in Sections 1 to 6, and glauconite was observed in Sections 7 and Core Catcher.</p>
2	[Pattern]	2		P		S	5GY 5/1	
3	[Pattern]	3		P				
4	[Pattern]	3		P				
5	[Pattern]	4	late Miocene	P				
6	[Pattern]	4		P		S		
7	[Pattern]	5		P			5Y 5/2	
8	[Pattern]	6		P				
9	[Pattern]	6		P			5GY 5/1	
10	[Pattern]	7		P			10GY 6/2	
		CC		G		M		

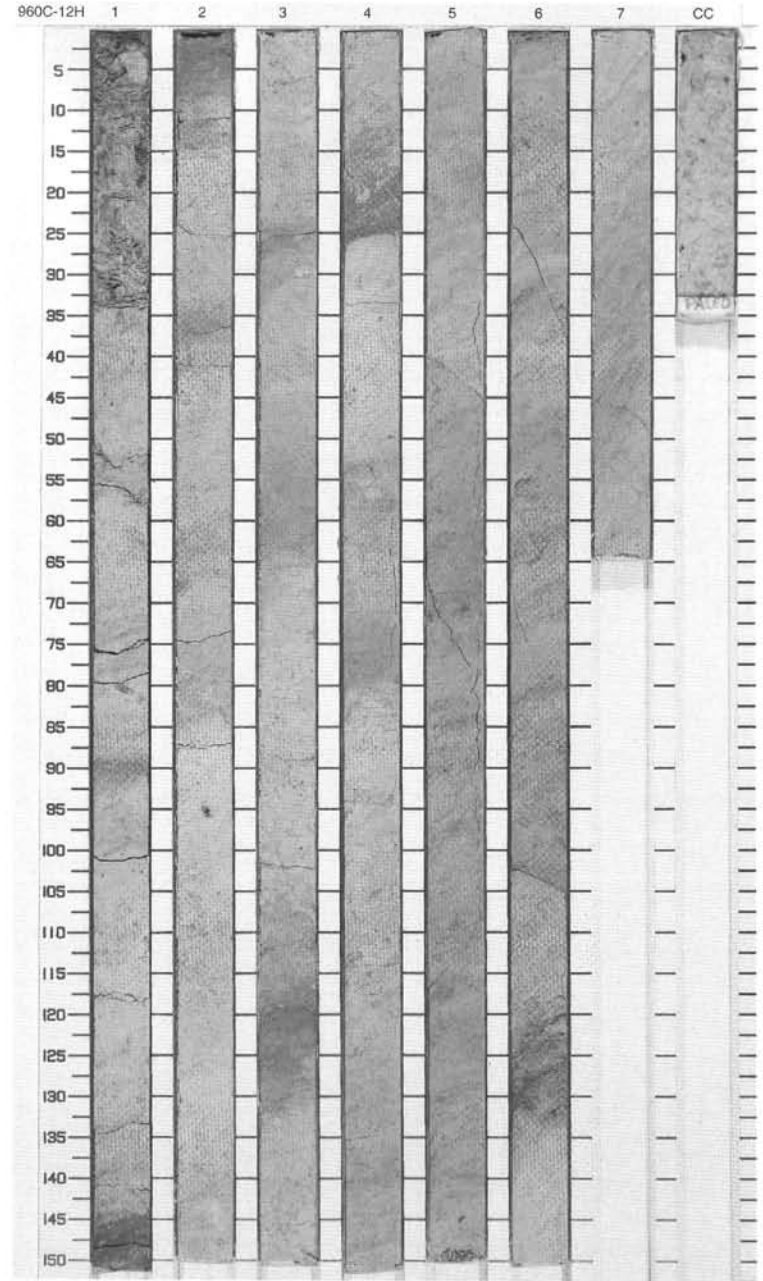


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			W	S		<p>NANNOFOSSIL CHALK WITH FORAMS AND CLAY and NANNOFOSSIL CHALK WITH CLAY, FORAMS AND PYRITE</p> <p>Major Lithologies: Dominantly light greenish gray (5G 7/1) NANNOFOSSIL CHALK WITH FORAMS AND CLAY with minor interbeds of greenish gray (5G 5/1) NANNOFOSSIL CHALK WITH CLAY, FORAMS, AND PYRITE. Interbeds are 3 to 20 cm thick and tend to be more bioturbated than the rest of the sediment. Glauconite pellets and green bands are scattered throughout, as are black pyrite streaks. Several glauconite pellet lags are indicated as individual laminae.</p>
2		2						
3		3						
4		3						
5		4	Middle Miocene				5G 5/1 To 5G 7/1	
6		4				S		
7		5						
8		6						
9		7						
		CC				M		

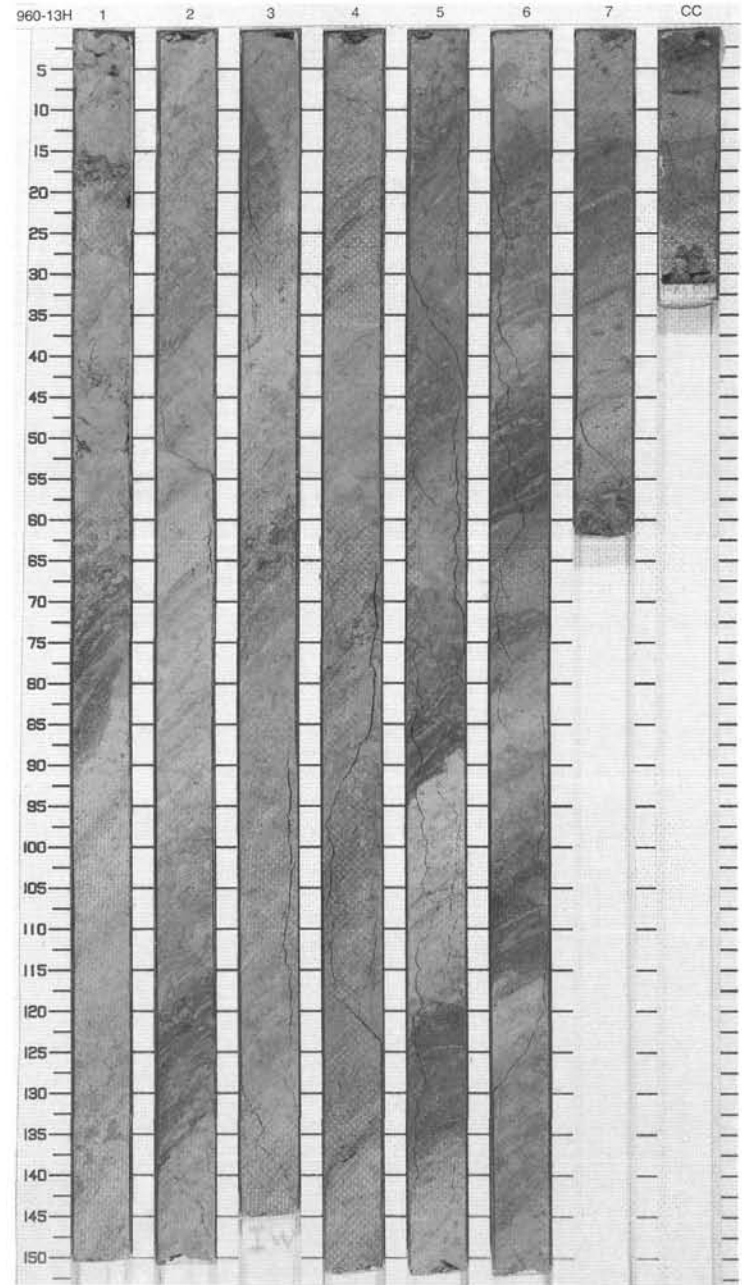


SITE 960 HOLE C CORE 12H CORED 101.2 - 110.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	early Miocene-middle Miocene	[Symbol]	W			NANNOFOSSIL CHALK WITH CLAY, NANNOFOSSIL CHALK WITH CLAY AND GLAUCONITE and NANNOFOSSIL CHALK WITH FORAMS
2	[Pattern]	2		[Symbol]	S			Major Lithologies: This interval consists of thick alternating lithologies of light brown NANNOFOSSIL CHALK WITH CLAY and olive brown NANNOFOSSIL CHALK WITH FORAMS. Locally, darker green laminae of NANNOFOSSIL CHALK WITH CLAY AND GLAUCONITE are present, which contain higher concentrations of glauconite occurring as replacements of peloids and pellets. The NANNOFOSSIL CHALK WITH FORAMS contains disseminated pyrite, whose oxidation may be responsible for the slight shift toward brownish coloration. Bioturbation is moderate (<i>Zoophycos</i> and <i>Chondrites</i>) throughout the core except for local areas where green glauconite-rich laminae are preserved. Glauconite, ubiquitous in this interval, locally comprises 15%–20% of the sediment occurring as disseminated peloids.
3	[Pattern]	3		[Symbol]	S		10Y 3/1 To 7.5GY 5/1	
4	[Pattern]	3		[Symbol]	S			One exception is a coarse glauconite sand layer in Section 4, 15–20 cm, which is present above a sharp scour? contact. In addition to glauconite, small angular lithoclasts (1–3 mm) are present as rip-up clasts within both lithologies. Bedding dips change from nearly horizontal to steeply dipping in Section 6 through the Core Catcher.
5	[Pattern]	4		[Symbol]	S		2.5Y 6/2	
6	[Pattern]	5		[Symbol]	[Symbol]			
7	[Pattern]	5		[Symbol]	[Symbol]			
8	[Pattern]	6		[Symbol]	[Symbol]			10Y 3/1 To 7.5GY 5/1
9	[Pattern]	7		[Symbol]	[Symbol]			
	CC			[Symbol]	M			



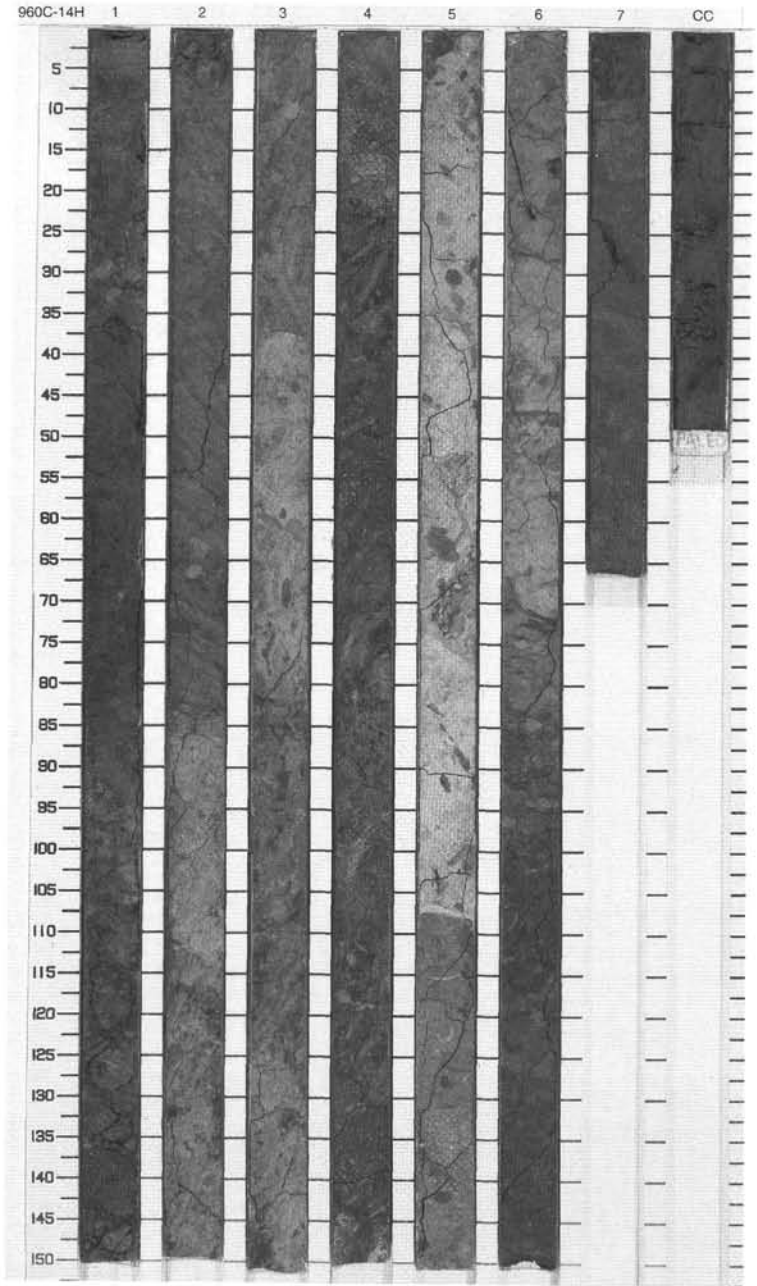
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		[Symbol]	WWW			<p>NANNOFOSSIL CLAYSTONE WITH FORAMS and CLAYEY NANNOFOSSIL CHALK WITH RADIOLARIANS</p> <p>Major Lithologies: Light greenish gray (5GY 7/1) NANNOFOSSIL CLAYSTONE WITH FORAMS, alternating with olive (5Y 4/3) CLAYEY NANNOFOSSIL CHALK WITH RADIOLARIANS, the latter comprising 10- to 20-cm-thick interbeds. All the beds are strongly dipping, and numerous macrofaults juxtapose the different lithotypes, masking their real periodicity. Slightly to moderately bioturbated with <i>Zoophycos</i>, <i>Chondrites</i>, <i>Planolites</i>, and composite burrows. Glauconite pellets are scattered throughout, comprising 10%–15% of the sediment. Several glauconitic hardgrounds occur, some 2–3 cm thick remain, others are just a few mm thick. Rip-up clasts from the hardgrounds occur mixed in other sediment and are clearly visible above some of the thicker hardgrounds.</p>
2	[Pattern]	2		[Symbol]				
3	[Pattern]	3		[Symbol]	S			
4	[Pattern]	3		[Symbol]				
5	[Pattern]	4	early Miocene	[Symbol]	S		5Y 4/3 To 5GY 7/1	
6	[Pattern]	5		[Symbol]				
7	[Pattern]	6		[Symbol]	S			
8	[Pattern]	6		[Symbol]				
9	[Pattern]	7		[Symbol]				
CC	[Pattern]	CC		[Symbol]	M			



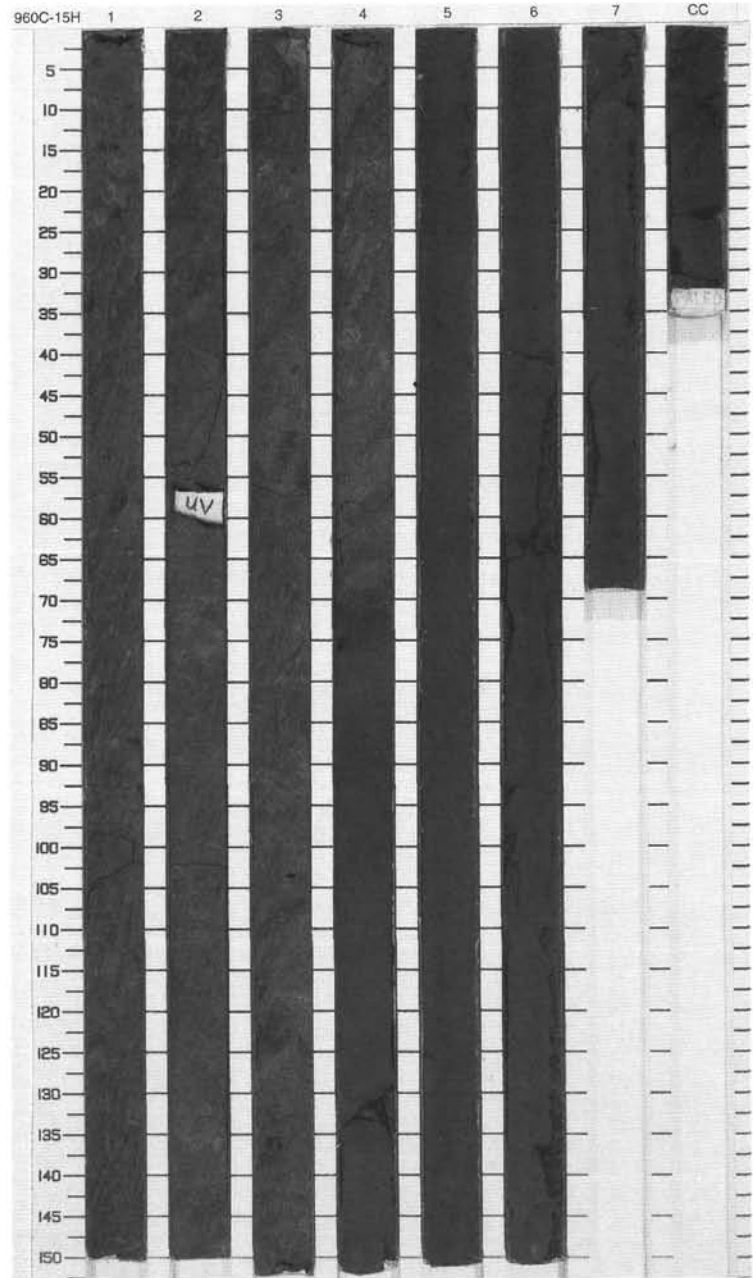
SITE 960 HOLE C CORE 14H

CORED 120.2 - 129.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		(G) P				<p>MICRITE NANNOFOSSIL CHALK WITH CLAY and PORCELLANITE WITH GLAUCONITE AND MICRITE</p> <p>Major Lithologies: Grayish green (5G 4/2) MICRITE NANNOFOSSIL CHALK WITH CLAY and abundant dispersed glauconite pellets down to Section 2, 83 cm. Moderately to heavily bioturbated with <i>Zoophycos</i>, <i>Planolites</i>, <i>Chondrites</i>, and composite burrows. Below Section 2, 83 cm and to base of the core, beds are chaotic: slumped, fractured, and show evidence of soft sediment flow, with beds dipping steeply to overturned. In some parts, ductile flow has erased all primary sedimentary structure. Glauconite content increases, calcareous content decreases, and opal increases downcore, so that in the last two sections the sediment is PORCELLANITE WITH GLAUCONITE AND MICRITE.</p>
2	[Pattern]	2		(G) P				
3	[Pattern]	3		(G) S				
4	[Pattern]	4		(G) S				
5	[Pattern]	5	early Miocene	(G) S			5G 4/2 To 5GY 7/1	
6	[Pattern]	6		(G) S				
7	[Pattern]	7		(G) S				
8	[Pattern]	8		(G) S				
9	[Pattern]	9		(G) S				
10	[Pattern]	10		(G) CC				



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Symbol]	1		Z		S		<p>GLAUCONITIC CLAYSTONE WITH OPAL AND ZEOLITE and CLAYEY RADIOLARITE</p> <p>Major Lithologies: The top of the core to Section 4, 70 cm consists of a chaotic mixture of lighter greenish gray (5GY 6/1) and darker brownish gray (5Y 4/2) GLAUCONITIC CLAYSTONE WITH OPAL AND ZEOLITE. The glauconite content, derived from smear-slide analysis, largely underestimates the real proportions, but suggests that the darker lithology is depleted in glauconite compared with the lighter one. Rare <i>Zoophycos</i> burrows indicate steep dips. Below a sharp contact in Section 4, 70 cm, the sediment consists of dark olive gray (2.5Y 3/2) CLAYEY RADIOLARITE with frequent disseminated glauconite. Slight bioturbation and irregular lamination in Section 4, 70–110 cm is contorted, folded, and steeply dipping. This may be related either to original shearing by the overlying slump deposit or drilling disturbance. Pyrite and zeolite are disseminated throughout and an accumulation of pyrite crystals occurs in Section 1, 56–59 cm. Subhorizontal minor faults cut the core in Section 1, 97–104 cm and Section 3, 1–10 cm. An unknown void occurs in Section 2, 55–60 cm.</p>
2	[Symbol]	2		Z				
2	Void			Z	O		5GY 6/1 To 5Y 4/2	
3	[Symbol]	3		Z		S		
4	[Symbol]	3		Z		S		
5	[Symbol]	4	middle Eocene	Z				
6	[Symbol]	5		P				
7	[Symbol]	5		P		S		
8	[Symbol]	6		P			2.5Y 3/2	
9	[Symbol]	7		P				
10	[Symbol]	CC		P		M		

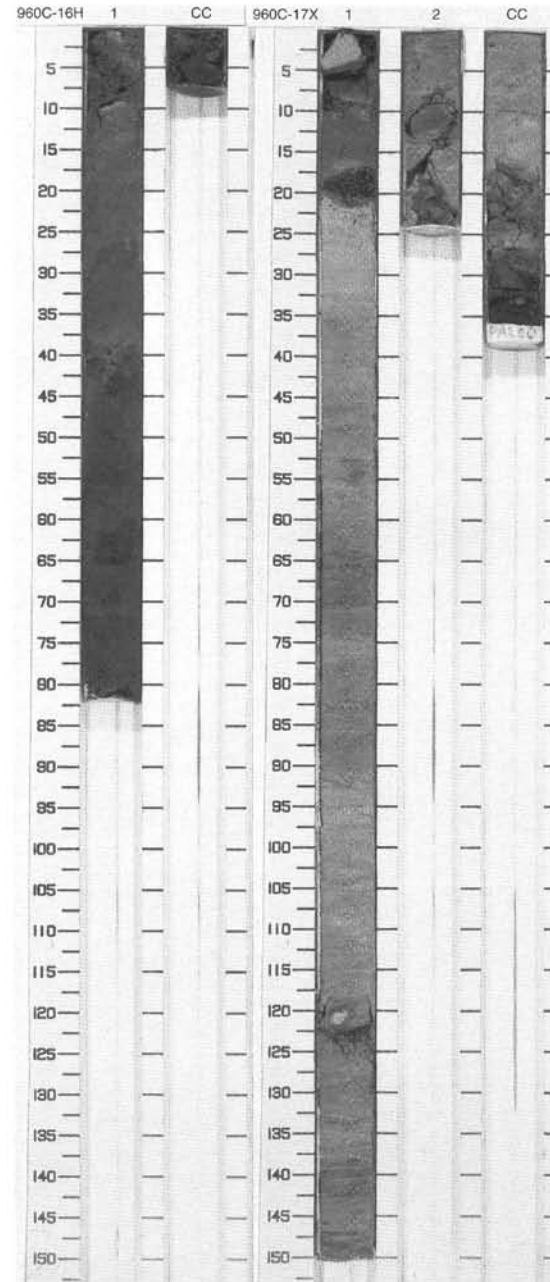


SITE 960 HOLE C CORE 16H CORED 139.2 - 140.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1	[Lith. symbols]	1	middle Eoc.	[Structure symbols]	[Disturb symbols]	S M	2.5Y 3/2	PORCELLANITE CLAYSTONE WITH NANNOFOSSILS AND GLAUCONITE and MICRITIC CLAYSTONE WITH NANNOFOSSILS AND OPAL-CT
<p>Major Lithologies: Dominant lithology is dark olive gray (2.5Y 3/2) PORCELLANITE CLAYSTONE WITH NANNOFOSSILS AND GLAUCONITE. The upper part of the core is more calcareous and consists of slightly lighter gray (2.5Y 4/2) MICRITIC CLAYSTONE WITH NANNOFOSSILS AND OPAL-CT.</p>								

SITE 960 HOLE C CORE 17X CORED 140.2 - 150.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1	[Lith. symbols]	1	middle Eocene	[Structure symbols]	[Disturb symbols]	D	5GY 4/1 To 5Y 5/1	MICRITIC CLAYSTONE WITH NANNOFOSSILS AND FORAMS and CHERT
1-2	[Lith. symbols]	2		[Structure symbols]	[Disturb symbols]	S		
2	[Lith. symbols]	CC		[Structure symbols]	[Disturb symbols]	M		
<p>Major Lithologies: Dark greenish gray (5GY 4/1) MICRITIC CLAYSTONE WITH NANNOFOSSILS AND FORAMS. The highly disturbed intervals are slightly lighter gray (5Y 5/1). Faint burrows are still visible. Some burrows are glauconite-filled. Trace fossils, such as <i>Zoophycos</i> and <i>Planolites</i>, are present in the lower part of the core. Brownish black (5YR 2/1) CHERT is present in Core Catcher, 28–36 cm.</p>								



SITE 960 HOLE C CORE 18X

CORED 150.0 - 159.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	early Eocene	P >>>	X X X	S	5Y 3/2	ZEOLITIC PORCELLANITE WITH NANNOFOSSILS AND CLAY and PORCELLANITE WITH ZEOLITE Major Lithologies: Sections 1 and 2 consist of dark olive gray to very dark grayish brown (5Y 3/2 to 10YR 3/2) ZEOLITIC PORCELLANITE WITH NANNOFOSSILS AND CLAY, while very dark grayish brown (10YR 3/2) PORCELLANITE WITH ZEOLITE occurs in the Core Catcher. The core is slightly to moderately bioturbated by <i>Planolites</i> and <i>Zoophycos</i> .
2		2	early Eocene	>>>	X X X	S	10YR 3/2	
		CC		>>>	X X X	MS		

SITE 960 HOLE C CORE 19X

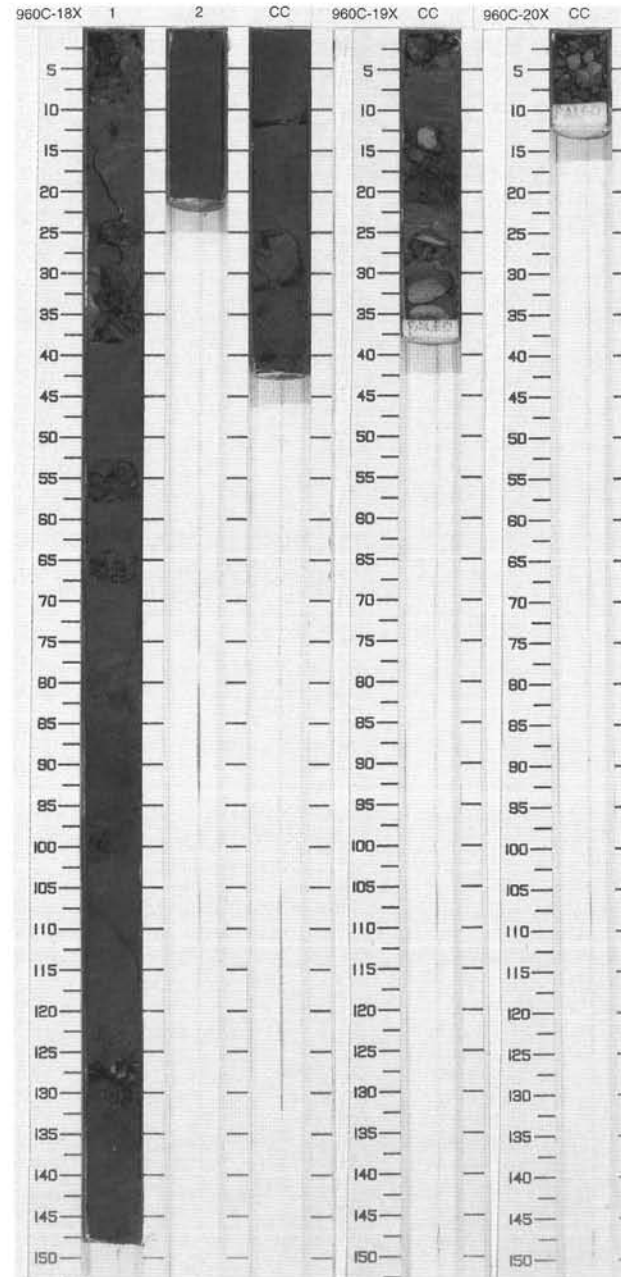
CORED 159.7 - 169.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC		>>>	X X X	M D		PORCELLANITE WITH ZEOLITE and CHERT Major Lithologies: Interbedding of dark olive gray to very dark brown (5Y 3/2 to 10YR 3/2) PORCELLANITE WITH ZEOLITE and CHERT. The chert occurs as drilling breccia at 0-4, 13-19, and 26-28 cm. <i>Chondrites</i> burrows occur at 30-35 cm, in the moderately bioturbated porcellanite. General Description: This interval is early Eocene.




SITE 960 HOLE C CORE 20X

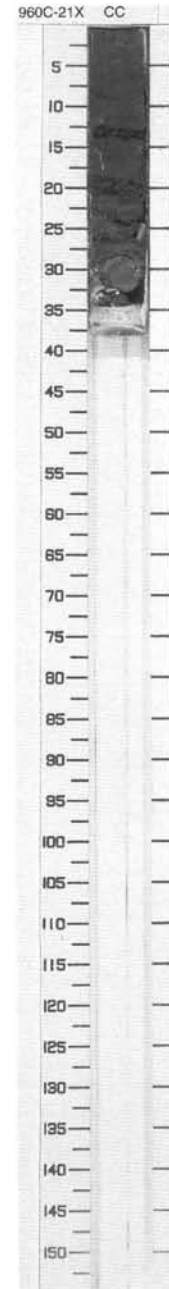
CORED 169.4 - 179.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC		>>>	X X X	M		CHERT Major Lithology: The Core Catcher consists of drilling breccia with fragments of brownish black (5YR 2/1) CHERT, some of which shows slight bioturbation. General Description: This interval is early Eocene.



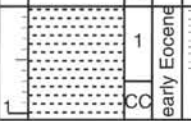
SITE 960 HOLE C CORE 21X CORED 179.0 - 188.6 mbsf

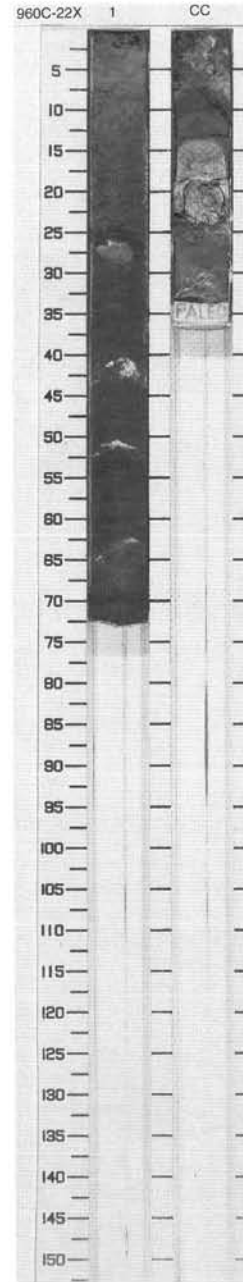
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC		 (Ba)		S M D		PALYGORSKITE CLAYSTONE WITH BARITE NODULES
<p>Major Lithology: Dark bluish gray (5B 4/1) PALYGORSKITE CLAYSTONE WITH BARITE NODULES. A barite nodule, which is 4 cm across, occurs at 28–32 cm. Faint irregular but planar laminations are visible.</p> <p>General Description: The age of the interval is early Eocene.</p>								



SITE 960 HOLE C CORE 22X




CORED 188.6 - 198.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	early Eocene	(Ba) (Ba) (Ba)	W	S S S DMS	5B 5/1 To 5Y 4/1	<p>PALYGORSKITE CLAYSTONE and BARITE NODULES</p> <p>Major Lithologies: Medium bluish gray (5B 5/1) PALYGORSKITE CLAYSTONE. In Section 1, 17–63 cm, blue claystone is interbedded with laminae of brownish gray (5Y 4/1) PALYGORSKITE CLAYSTONE that is richer in pyrite and organic matter. BARITE NODULES occur in Section 1, 26–29 cm, as a nodule with coarse sand-sized barite crystals in the center and prismatic crystals protruding into the surrounding claystone. An irregular accumulation of barite crystals (up to 5 mm long) occurs in a matrix of powdery white, very fine-grained barite silt. A lens-shaped concentration of barite crystals occurs at Section 1, 51–52 cm and two spots of white, powdery barite silt occur at 62–65 cm. The Core Catcher consists of an alternation of bluish gray PALYGORSKITE CLAYSTONE and yellowish gray (5Y 8/1) BARITE SILTSTONE.</p> <p>Minor Lithologies: The Core Catcher consists of an alternation of PALYGORSKITE CLAYSTONE and yellowish gray (5Y 8/1) to light bluish gray (5B 7/1) BARITE SILTSTONE. The siltstone grades into a greenish gray (5GY 7/1) CALCAREOUS SILTSTONE WITH BARITE. Greenish gray (5BG 5/1) CLAYEY PORCELLANITE WITH NANNOFOSSILS occurs in the Core Catcher, 10–13 cm.</p>



SITE 960 HOLE C CORE 23X

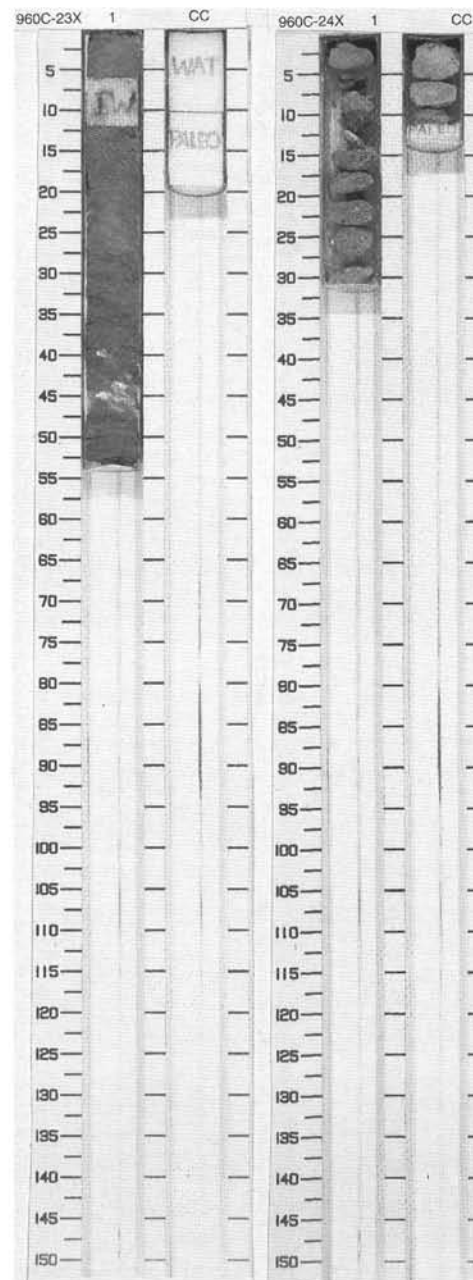
CORED 198.3 - 207.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		(Ba)  	I	F	5B 5/1	<p>PALYGORSKITE CLAYSTONE WITH BARITE and PHOSPHATIC SKELETAL GRAINSTONE</p> <p>Major Lithology: Dominantly consists of bluish green PALYGORSKITE CLAYSTONE WITH BARITE. Barite occurs as concretions, 2-4 mm across, which contain coarse radial prisms, with clay filling inter-crystalline pore space. The base of Section 1, 53-54 cm is a PHOSPHATIC SKELETAL GRAINSTONE hardground, composed of fish skeletal debris and disseminated nannofossils and foraminifers.</p> <p>General Description: The age of the core from Section 1, 0-53 cm is early Eocene, and Santonian to Coniacian below that depth.</p>

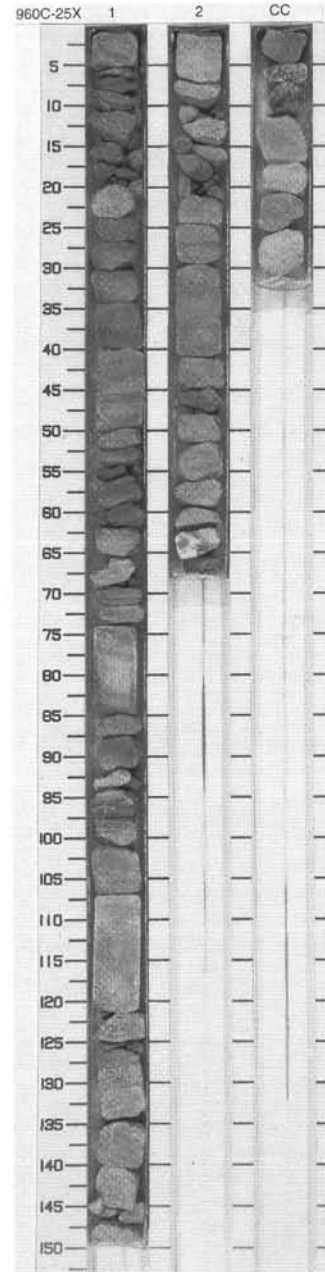
SITE 960 HOLE C CORE 24X

CORED 207.9 - 210.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		 	I	M T		<p>QUARTZ SAND SKELETAL GRAINSTONE WITH INTRACLASTS</p> <p>Major Lithologies: Medium gray QUARTZ SAND SKELETAL GRAINSTONE WITH INTRACLASTS. Medium-grained, angular to subangular quartz sand is intermixed within a skeletal grainstone consisting of bivalve and echinoid fragments, benthic foraminifers, and calcareous algae. The lithologies are not well sorted, with grain size ranging from medium sand to occasional pebble-sized intraclasts of cemented green siltstones. This interval is well cemented by micrite and sparry calcite.</p> <p>General Description: The age of this interval is unknown.</p>



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			T		5Y 5/1	<p>SKELETAL GRAINSTONE and SKELETAL PACKSTONE</p> <p>Major Lithologies: This interval is characterized by an intermixture of three varieties of SKELETAL GRAINSTONE and SKELETAL PACKSTONE: 1) INTRACLAST SKELETAL GRAINSTONE AND PACKSTONE WITH SAND; 2) QUARTZ SAND SKELETAL GRAINSTONE AND PACKSTONE, and 3) SKELETAL GRAINSTONE AND PACKSTONE. Quartz sand varies in grain size from medium to coarse sand, in texture from subangular to subrounded, and in abundance from about 30% to 5%.</p> <p>Sorting is poor throughout. Lithic fragments include intraclasts of black laminated clayey siltstones and calcite-cemented siltstones (Section 1, 110-140 cm), to composite grains consisting of strained metamorphic quartz. Thin wispy intercalations of packstone are present between intervals of coarse grainstones. These packstones contain pelagic faunas including planktonic foraminifers and nanofossils. Fragments of bivalves are present throughout the sediment.</p> <p>General Description: The age of this interval is unknown.</p>
2		2			T			
					T			
		CC			M			



SITE 960 HOLE C CORE 26X

CORED 343.2 - 352.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description	
1		1	Turonian				5Y 4/1	<p>SKELETAL GRAINSTONE, SKELETAL PACKSTONE and MICRITE CLAYSTONE</p> <p>Major Lithologies: The upper part of this interval comprises medium- to coarse-grained SKELETAL GRAINSTONES and SKELETAL PACKSTONES which are poorly sorted and locally contain intraclasts of black siltstone or microlaminated silty claystone. A minor amount of quartz sand is present throughout, but ranges up to a maximum of 5% to 10%. Graded units of coarse skeletal- and intraclast-rich beds are locally present (Section 1, 126–135 cm) and are overlain or interbedded with finer grained packstones containing planktonic foraminifers. The lower part of the interval contains black to gray, laminated MICRITE CLAYSTONE which contains a diverse planktonic microfauna, and when not lithified by carbonate, is petroliferous. Thin layers containing isolated quartz sand grains or skeletal fragments are locally present (Section 2, 42–48 cm). Barite occurs as isolated authigenic crystals or as 1–3-cm-thick, tabular concretions, nucleated on layers of bioclasts or intraclasts (Section 2, 80–95 cm).</p>	
2		2				S			5Y 4/1 To 5YR 2/1
3		CC				M			

