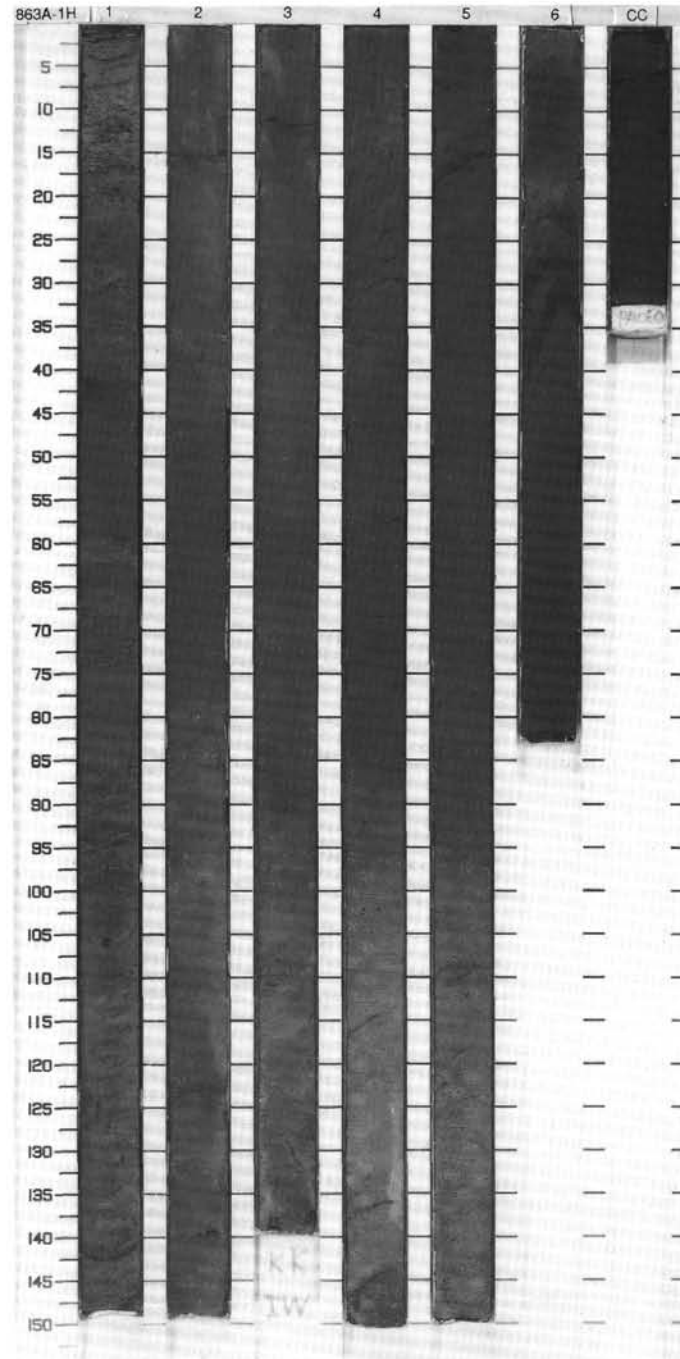


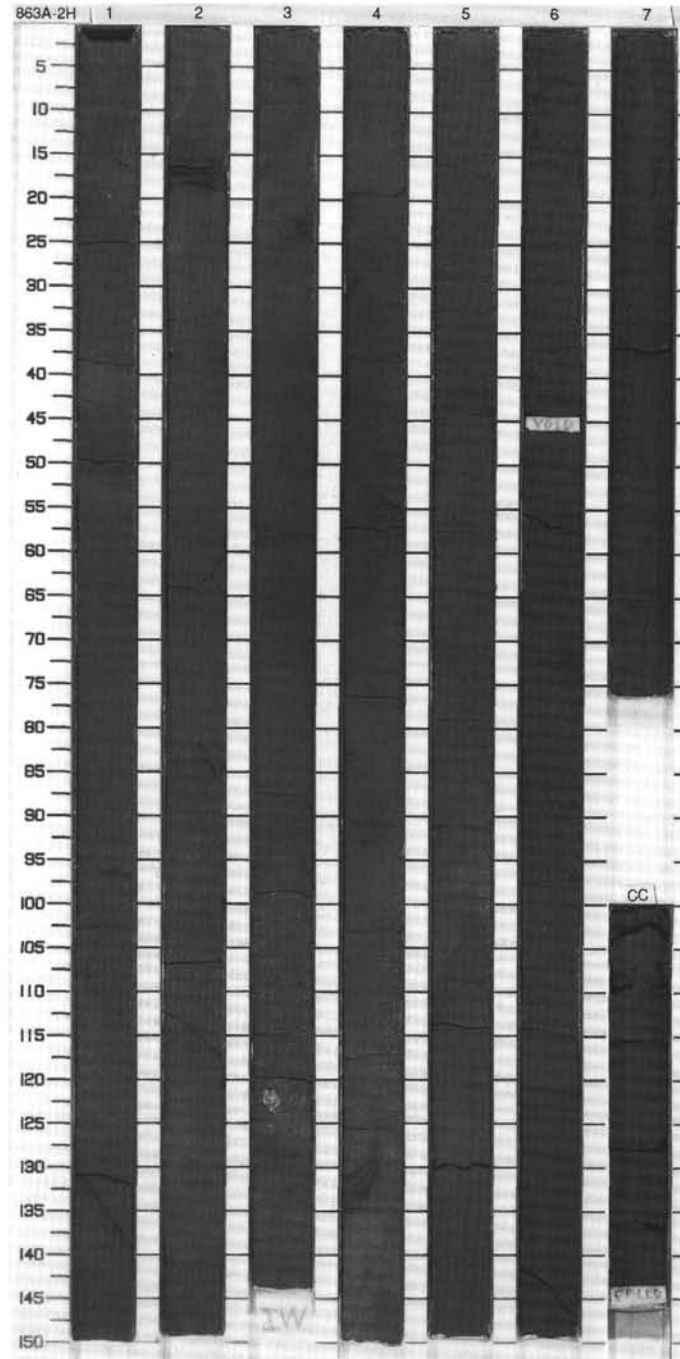
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Hatched pattern]	1	Pleistocene	}		S		CLAYEY SILT and SILTY CLAY
1.0						S		Major Lithologies: The core predominantly consists of mottled interbeds of olive gray (5Y 3/2) CLAYEY SILT to SILTY CLAY.
	[Hatched pattern]	2	Pleistocene	}		S	5Y 3/2	Minor Lithologies: Diffuse zones and intervals of SANDY SILTY CLAY occur in Sections 2, 4, 5, 6 and CC. One interval of olive black (5Y 2/1) opaque-rich CLAY occurs in Section 3; the darker color results from higher concentration of black organic/sulfide-rich material.
						S		Laminations of olive black and olive gray CLAY occur from Section 5, 120 cm to Section 6, 10 cm.
	[Hatched pattern]	3	Pleistocene	}		S		General Description: Organic/sulfide(?) -rich pods, irregular streaks, and wavy laminations are concentrated in the following intervals: Section 1, 35-60 cm; Section 3, 73-140 cm; Section 4, 0-85 cm; Section 5, 60-150 cm; Section 6, 0-82 cm; and throughout Section CC. These unusual features may be primary, but are more likely related to diagenetic, sulfide-producing reactions within the sediments. In Section 3, irregular-shaped black zones show lighter halos. Isolated pods of silt in Section 1 are likely burrow fillings. The core is cut by numerous listric normal faults. Section 1 was cut with a wire, whereas the remaining sections were cut with a saw.
						S		
	[Hatched pattern]	4	lower (?) Pleistocene	}		S	5Y 2/1	
						S		
	[Hatched pattern]	5	Pleistocene	}		S	5Y 3/2	
						S		
	[Hatched pattern]	6	Pleistocene	}		S	5Y 2/1 to 5Y 3/2	
						S		
		CC				M		



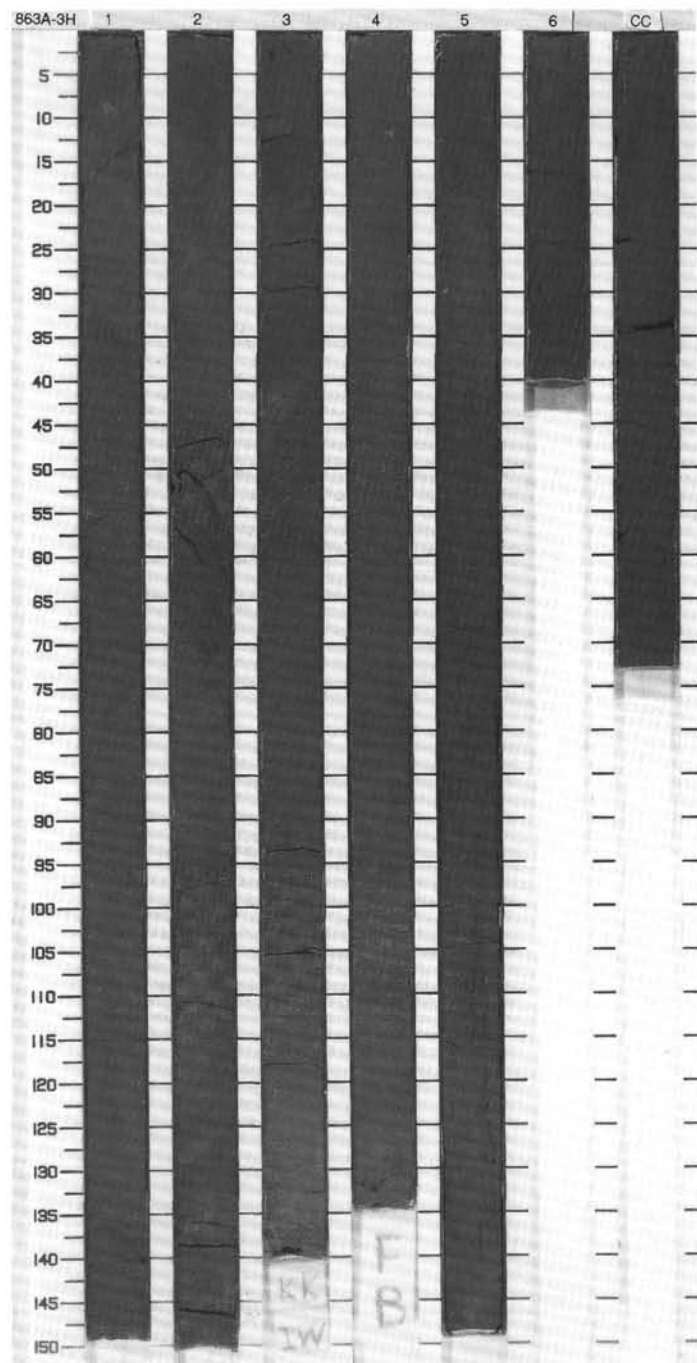
SITE 863 HOLE A CORE 2H

CORED 8.6 - 18.1 mbsf

Meter	Graphic Lith.	Section Age	Structure	Disturb	Sample	Color	Description
0.5		1			S		<p>SILTY CLAY TO CLAYEY SILT</p> <p>Major Lithology: This core consists of predominantly dark greenish gray (5GY 4/1) and medium dark gray (N 4) SILTY CLAY and CLAYEY SILT, with nannofossil contents in places up to about 30%.</p> <p>Minor Lithology: This core contains numerous SAND beds (many with pyrite) in intervals: Section 1, 15.0-15.1 cm, 58-58.5 cm, 91-95 cm, 130-141 cm; Section 2, 16-19 cm, 80-85 cm; Section 3, 3-7 cm, 20-24 cm, 124-128 cm; Section 4, 29-31 cm, 53-57 cm, 82-82.3 cm, 120-138 cm; Section 6, 0-15 cm. An angular fragment of granodiorite is found in Section 3, 121-124 cm (size 3x2 cm). The lower part of this dropstone is located in sands with pyrite. Disseminated pyrite is widespread in this core, as well as pyrite concretions. Shell fragments (approximately 3x4 mm) occur in Section 7 (40-55 cm).</p> <p>General Description: Beds are parallel-laminated. Sediments are moderately bedded throughout. In upper part of core, bedding is convoluted. Sediments are also slightly to moderately disturbed by drilling. This core is distinctive in its dark gray to black colors with large pyrite concretions, organic matter, and the stink of hydrogen sulfide. The upper part of the core is characterized by moderately to steeply inclined bedding (slump folds?), and complex multiple generations of deformation bands and faults, most with reverse separation. From Section 4, 75 cm to CC, 45 cm, all original structures have been disrupted by drilling.</p>
1.0		2			S		
		3			S	5GY 4/1 To N 4	
		4			S		
		5			S	5Y 5/1	
		6			S	5Y 4/1	
		7			S	N 4	
		CC			S	5Y 4/1	
					M		



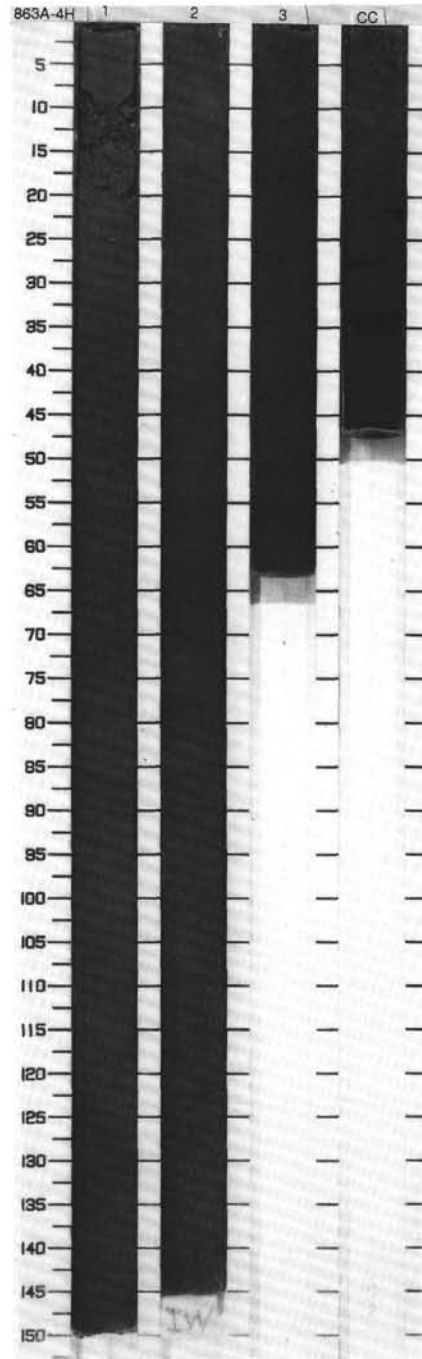
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	Pleistocene	P		S	5Y 3/2	SILTY CLAY and CLAYEY SILT
1.0	S					5Y 2/1		
		2	Pleistocene	P		S S	5Y 3/2	Major Lithologies: The core predominantly consists of olive gray (5Y 3/2) to olive black (5Y 2/1) SILTY CLAY to CLAYEY SILT.
						S	5Y 3/2	
		3	Pleistocene	P		S	5Y 3/2 and N1	Minor Lithologies: Olive black (5Y 2/1) opaque-rich CLAY occurs in Section 1, and in Sections 5, 6, and CC, where it is intermixed by drilling. This CLAY contains organic/sulfide pods, streaks and laminae, some of which are deformed. One interval of black (N1) SILTY CLAY to CLAYEY SILT (Section 2, 80-150 cm, and Section 3, 0-40 cm) was black (N1) when first cut, but turned olive green (5Y 3/2) when exposed to the atmosphere during core description (probable oxidation reaction). From 40-52 cm in Section 3, there is a bioturbated zone with intermixed NANNOFOSSIL SILT and SILTY CLAY. A laminated, fine- to medium-grained SAND bed occurs in Section 2; the base of this bed is abrupt, and the upper portion grades into CLAYEY SILT. Some of the coarser SAND laminae in this bed appear to be inversely graded (with respect to present orientation). This bed is truncated along the hanging wall of a reverse fault. SANDY SILTY CLAY occurs in Section 4 at 0-68 cm, and 111-135 cm.
						S	5Y 3/2 and 5Y 4/1	
		4	Pleistocene	P		S	5Y 3/2 and 5Y 4/1	General Description: Organic/sulfide-rich intervals include: Section 1, 40-100 cm; Section 2, 0-5 cm, and 80-150 cm; Section 3, 0-40 cm; and intermixed (flow-in) in Section 5, 15-150, Section 6, and Section CC. Sections 5, 6, and CC are incoherent, highly disturbed flow-in. The core is cut by a number of reverse faults.
						S		
		5						
		6						
		CC						



SITE 863 HOLE A CORE 4H CORED 27.6 - 37.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description		
0.5		1	Pleistocene	~ P P P P P	W	S	N3 and N2	CLAYEY SILT and SILTY CLAY		
1.0										
		2		~ P P P P	S	S	S	5Y 3/2 and 5Y 2/1	Major Lithologies: The core consists of variegated CLAYEY SILT to SILTY CLAY, with color related to organic/sulfide content. Where organic/sulfide concentrations are high, the core is black (N1); with decreasing organic/sulfide concentration color ranges from grayish black (N2) to dark gray (N3) and olive black (5Y 2/1) to olive gray (5Y 3/2).	
		3		~ P P	I	S	S	N1 and 5Y 2/1	Minor Lithology: One interval of olive gray (5Y 3/2)	
		CC					M	S	5Y 2/1	CLAYEY SILTY SAND occurs in Section 2, 10-28 cm.
									N2	

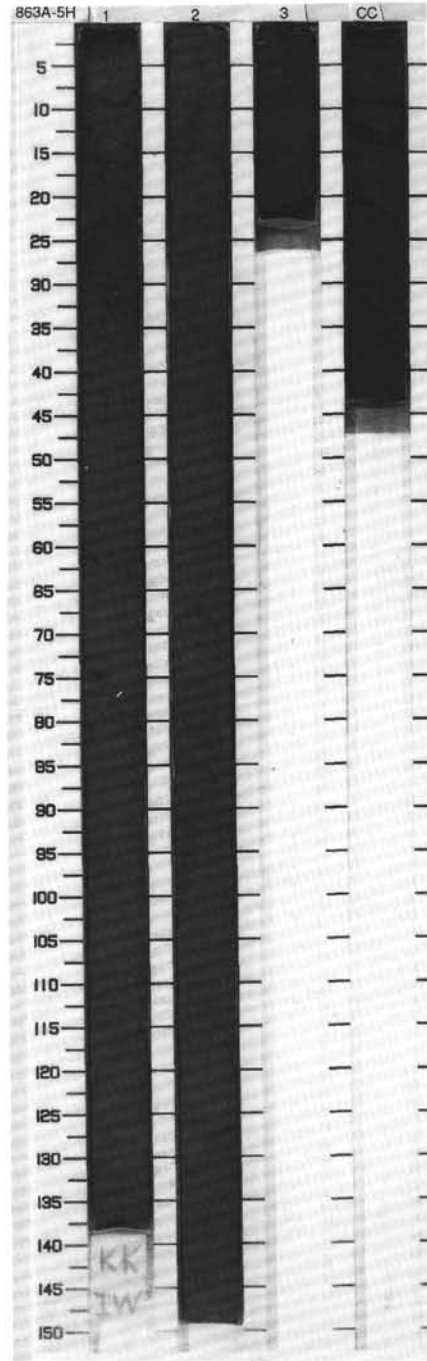
General Description:
The black organic/sulfide concentrations appear to be related to sedimentological features (e.g., bioturbation in Section 1, 30-50 cm and laminations in Section 2, 86-90 cm) and/or to structural deformation (black material concentrated along fault planes). These concentrations are probably related to diagenetic sulfide-producing reactions within the sediments. This core is structurally complex in that it is cut by a series of reverse faults offset by normal faults. These faults juxtapose intervals of variegated sediment (olive gray to olive black), with varying proportions of horizontal to vertical black bands and irregular pods, some smeared by deformation, others in anastomosing networks. The black sulfide/organic zones often have lighter halos which mimic their irregular shape (e.g., throughout Section 1 and Section 2, 40-70 cm).



SITE 863 HOLE A CORE 5H

CORED 37.1 - 46.6 mbsf

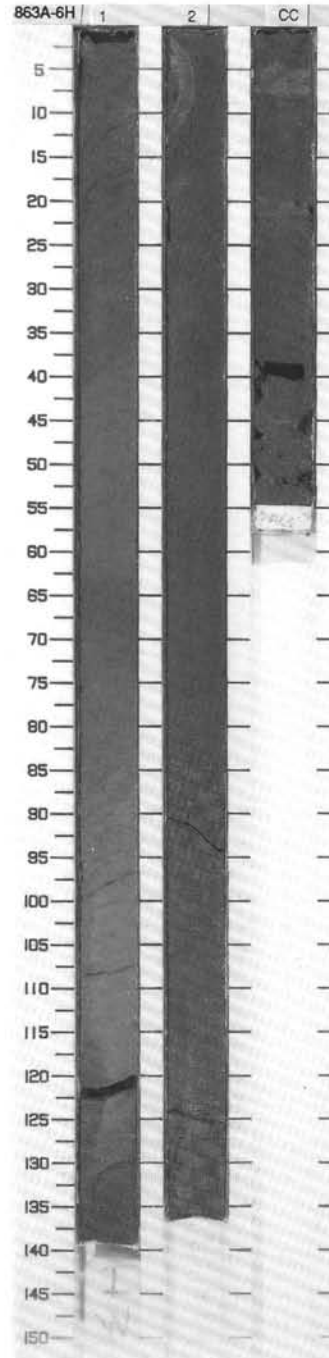
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Graphic Lithology: Horizontal lines with wavy patterns]	1	Pleistocene	[Structure: Wavy lines, some with 'P' in circles]	W	S	N 4 To 5Y 4/1	SILTY CLAY TO CLAYEY SILT Major Lithology: The core predominantly consists of interbedded SILTY CLAY to CLAYEY SILT beds with colors ranging from olive gray (5Y 4/1) to medium dark gray (N4). Sediments are moderately bedded. Minor Lithologies: The core contains thin beds of FINE-GRAINED SAND with pyrite in the following intervals: Section 1, 21-26 cm; Section 2, 126-128 cm. General Description: Slight bioturbation is observed in Sections 1 and 2. Sediment contains traces of laminae structure, but is presently convoluted due to post-depositional disturbance. Pyrite is also found as very small concretions in many parts of the core. Sections 1 and 2 consist of broken formation with no primary bedding surfaces preserved. Complex multiple sets of deformation bands and faults exhibit mostly reverse separation, with normal and strike-slip separation on some features.
1.0						S		
						I W		
		2				S		
		3				S		
		CC			WW	S		
						M		



SITE 863 HOLE A CORE 6H CORED 46.6 - 56.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	Pleistocene		-----	S	5Y 4/1 To 4	<p>SILTY CLAY TO CLAYEY SILT</p> <p>Major Lithology: This core consists predominantly of interbedded medium to dark gray (N4 to N3) and dark greenish gray (5Y 4/1) SILTY CLAY to CLAYEY SILT. In the SILTY CLAY there are scattered very small grains of pyrite and grains with dark green and black color.</p> <p>Minor Lithology: In Section 1 SAND beds occur in Intervals 7-8 cm, 99-100 cm, 108-110 cm and 129-132 cm.</p>
		2			WWWWWWWWWW	I		
		CC				M		

General Description:
Sediments are moderately to very disturbed by drilling. These sediments are moderately bedded, and in intervals 0-40 cm and 60-75 cm they are laminated, but disrupted by tectonism and drilling to produce convoluted bedding structure. Pyrite concretions are found in Section 1 at 5 cm, 25 cm, 33 cm, 62 cm, 100 cm, 110 cm, and 130 cm. In Section 1, 125-126 cm, shell fragments (size 1x2 mm) are observed. Moderately inclined bedding is preserved in Section 1, 30-120 cm. No deformation bands or microfaults are observed in this core.



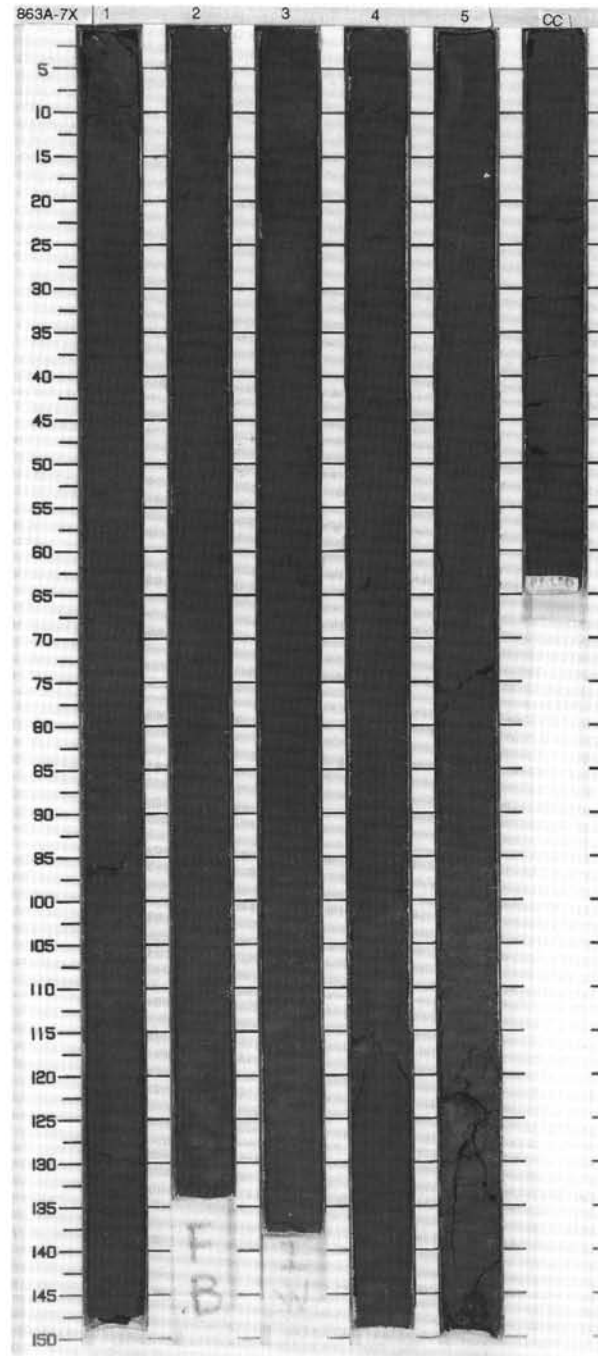
SITE 863 HOLE A CORE 7X

CORED 56.1 - 65.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description						
0.5	[Graphic Lithology: Horizontal lines with varying patterns]	1	Pleistocene	P	W	S	N 4 To 5Y 4/1	SILTY CLAY TO CLAYEY SILT, SAND and SILTY SAND						
1.0								2	S					
								3	S					
								4	S					
								5	S					
								CC						

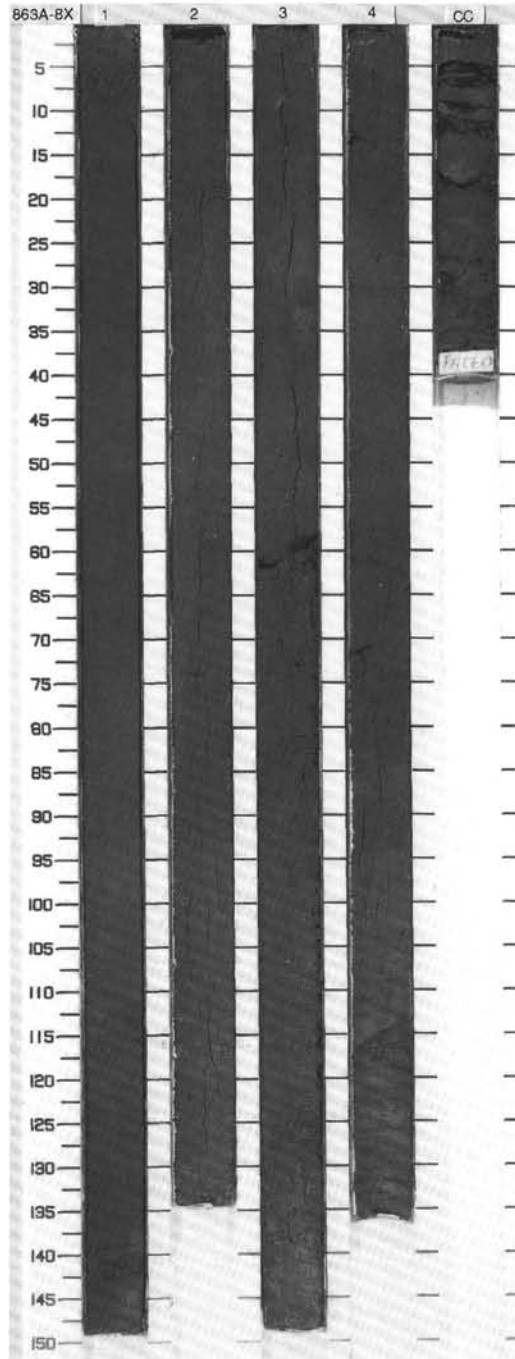
Major Lithologies:
The core consists of SILTY CLAY to CLAYEY SILT with color of medium dark gray (N4) to dark gray (N3), interbedded with sediment of olive gray color (5Y 4/1), probably representing interbedded oxidized and reduced zones. In Section 1, 11-20 cm and 51-59 cm, the color is lighter gray (5/1). The same interbedded color zones are observed in the other sections.

General Description:
Sediment is moderately bedded and convoluted with elements of laminar structure. Pyrite is disseminated throughout the core. Pyrite nodules (sizes 2-4 mm) are found in sand beds in Section 1 (53-54 cm, 114-115 cm, 129-130 cm), Section 3 (50-51 cm, 60-64 cm, 137-138 cm), Section 5 (52-53 cm, 77-78 cm). Sediment is heavily bioturbated in Section 1, 3-8 cm, and slightly bioturbated in Section 4, 15-25 cm, 60-65 cm, 95-115 cm. The entire core is highly fluidized and disturbed by drilling, but some original structures are preserved within drill biscuits. The thinly laminated sediment is crosscut by faults lined with dark mud; separations of 2-4 mm in a strike-slip sense are typical. The laminated intervals are interbedded with more massive calcareous intervals in which original structures are poorly preserved.



SITE 863 HOLE A CORE 8X CORED 65.5 - 75.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Graphic Lithology: Dotted pattern]	1	upper Pleistocene	X	W	S	5G 2/1 to 5GY 2/1	SILTY CLAY TO CLAYEY SILT WITH NANNOFOSSILS Major Lithology: The core consists of greenish black (5G 2/1 and 5GY 2/1) SILTY CLAY TO CLAYEY SILT WITH NANNOFOSSILS. Minor Lithologies: Olive black (5Y 2/1) SILTY CLAY WITH NANNOFOSSILS occurs in Section 1, 38-48 cm. This lithology is thinly interbedded with the major lithology in Section 1, 117-140 cm and found as one isolated and disturbed layer in Section 2, 55-60 cm. Interval 110-117 cm in Section 1 is disturbed and consists of silty clay to clay, some pyrite grains and one 3-cm mud clast. Layers of silty clay with recrystallized clay occur in Section 1, 140-144 cm. Dark greenish gray (5GY 4/1) slightly coarsening upward CLAYEY SILT TO CLAYEY SAND occurs as an interbed in Section 3, 60-100 cm.
1.0								
	[Graphic Lithology: Horizontal lines]	2		X	W	S		
	[Graphic Lithology: Horizontal lines]	3		C	W	S		
	[Graphic Lithology: Horizontal lines]	4		P	W	S		General Description: Interval 75-130 cm in Section 4 is moderately bedded. Small pyrite concentrations are present in Sections 1 and 4. Drilling biscuits occur throughout the whole core except the middle parts of Section 1.
	CC							



SITE 863 HOLE A CORE 9X

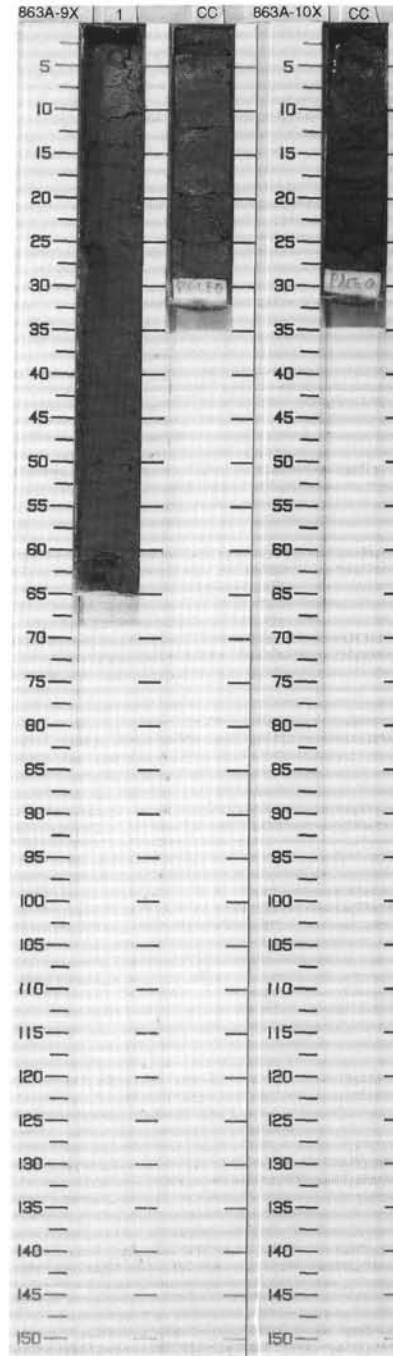
CORED 75.4 - 85.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5-1.0		1 CC	Pleistocene		W S M S	S S S S	5GY 4/1	<p>SILTY CLAY</p> <p>Major Lithology: This core consists of dark greenish gray (5GY 4/1) SILTY CLAY. It is slightly laminated in Section CC, 6-8 cm.</p> <p>Minor Lithology: A small spot of slightly yellowish, dark greenish gray (5GY 4/1) SILTY CLAY with nannofossils occurs in Section 1, 54-56 cm. A layer of greenish black (5GY 2/1) SANDY SILT TO SILT is present in Section CC, 2-3 cm. There are a few dispersed concretions of pyrite and carbonate in Section CC. The lower part of Section CC is fragmented and is a mixture of silt, clay, some sand, and pieces of nannofossil silty clay.</p> <p>General Description: The core is very disturbed and is biscuited.</p>

SITE 863 HOLE A CORE 10X

CORED 85.1 - 94.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.2		CC	Pleistocene		W S M S	S M S	5Y 3/2	<p>SILTY CLAY, SANDY SILTY CLAYSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) fragments of SANDY SILTY CLAYSTONE, SILTY SANDSTONE and soupy SILTY CLAY.</p> <p>General Description: The core is highly deformed by drilling (soupy/biscuited/fragmented) and is structureless except for carbonate-filled fractures.</p>



SITE 863 HOLE A CORE 11X CORED 94.7 - 104.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1		CC	Pleistocene		V O V C	S	5Y 3/2	CLAYEY SILTSTONE
				V O V C	M			Major Lithology: The core consists of an olive gray (5Y 3/2), soupy, drilling breccia of structureless fragments of CLAYEY SILTSTONE.

Note expanded vertical scale.

863A-12X NO RECOVERY

863A-13X NO RECOVERY

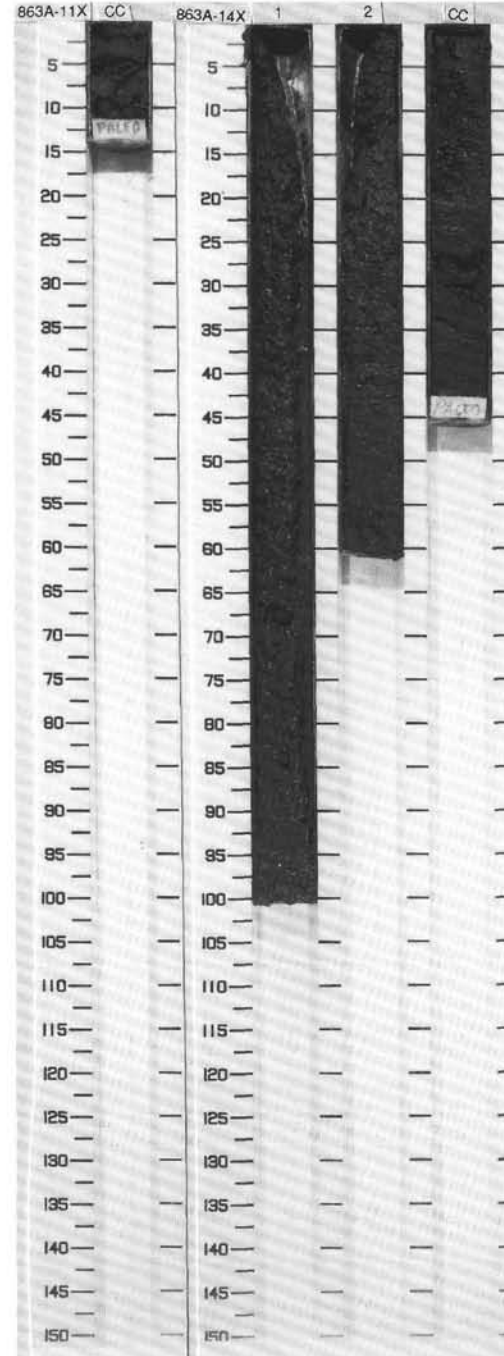
SITE 863 HOLE A CORE 14X CORED 123.7 - 133.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	Pleistocene		O X O	S	5Y 3/2	SANDSTONE, SANDY SILTY CLAYSTONE and SILTY CLAYSTONE
1.0		2			O X O	S		
		CC			V X O X O	S M		

Major Lithologies:
The core primarily consists of olive gray (5Y 3/2) drilling breccia with fragments of SANDSTONE, SANDY SILTY CLAYSTONE, and SILTY CLAYSTONE in a soupy, sandy silty clay drilling matrix.

Minor Lithology:
One interval of drilling-deformed medium to coarse SAND occurs in Section CC, 10-20 cm.

General Description:
Some of the fragments are carbonate-cemented, medium- to well-sorted, fine-grained sandstone with angular to rounded grains. Section CC contains drilling biscuits. A meshwork of carbonate veins occurs in a biscuited fragment at Section CC, 30-34 cm.



SITE 863 HOLE A CORE 15X

CORED 133.4 - 143.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1 0.2		CC	Pleistocene		XXXXX - XXXXX	S M	5Y 3/2	<p>SILTY SANDSTONE TO SANDY SILTSTONE</p> <p>Major Lithology: The core catcher consists of angular to rounded fragments of olive gray (5Y 3/2) SILTY SANDSTONE to SANDY SILTSTONE, 0.5-3 cm in diameter.</p> <p>General Description: Intervals 0-5 cm and 12-17 cm are moderately fractured. Original structure may have been moderately bedded.</p>

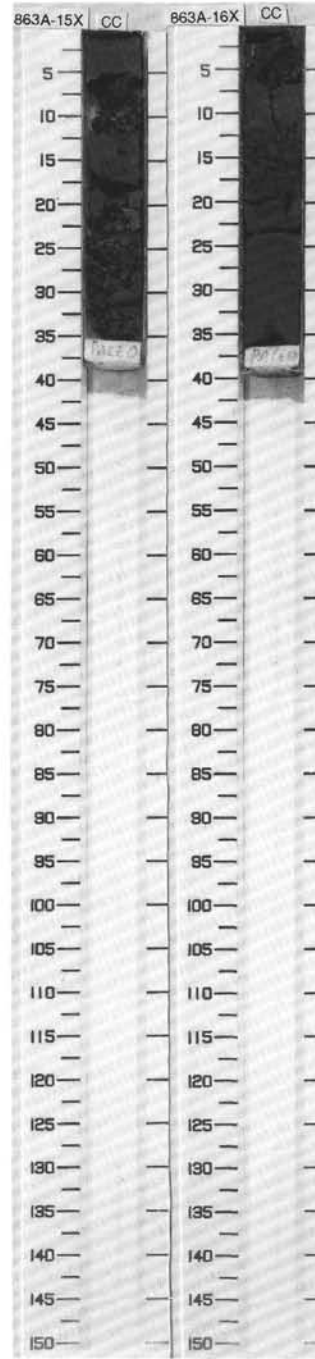
Note expanded vertical scale.

SITE 863 HOLE A CORE 16X

CORED 143.0 - 152.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1 0.3		CC	Pleistocene		XXXXX - XXXXX - XXXXX	S S M	5Y 3/2	<p>SILTY SANDSTONE TO SANDY SILTSTONE</p> <p>Major Lithology: The core catcher consists of olive gray (5Y 3/2) SILTY SANDSTONE to SANDY SILTSTONE.</p> <p>General Description: The sediment is soupy (0-5 cm), moderately fractured (5-10 cm), and the remaining part is drilling breccia. In Intervals 0-5 cm and 10-20 cm the core consists of rock fragments with sizes from 3 mm to 1 cm. The fragments are angular and rounded. Structure may have been moderately bedded, but it has been destroyed by drilling.</p>

Note expanded vertical scale.



SITE 863 HOLE A CORE 17X CORED 152.7 - 162.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1			X	S	5Y 3/2	SILTY SANDSTONE TO SANDY SILTSTONE
		CC				S		
			Pleistocene			M		Major Lithology: This core consists of olive gray (5Y 3/2) SILTY SANDSTONE to SANDY SILTSTONE. The rock is massive without bedding and consists of drilling fragments with angular and rounded fragments (sizes from 2 mm to 3 cm) and drilling biscuits. Below 10 cm the sandstone is coherent but moderately fractured.

SITE 863 HOLE A CORE 18X CORED 162.4 - 172.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1					X			SILTY SANDSTONE TO SANDY SILTSTONE
		CC				S	5Y 3/2	Major Lithology: The core catcher consists of olive gray (5Y 3/2) SILTY SANDSTONE to SANDY SILTSTONE.
0.4			Pleistocene			M		General Description: The core consists of drilling biscuits but locally the sandstone within biscuits appears to be laminated.

Note expanded vertical scale.



SITE 863 HOLE A CORE 19X

CORED 172.0 - 181.6 mbsf

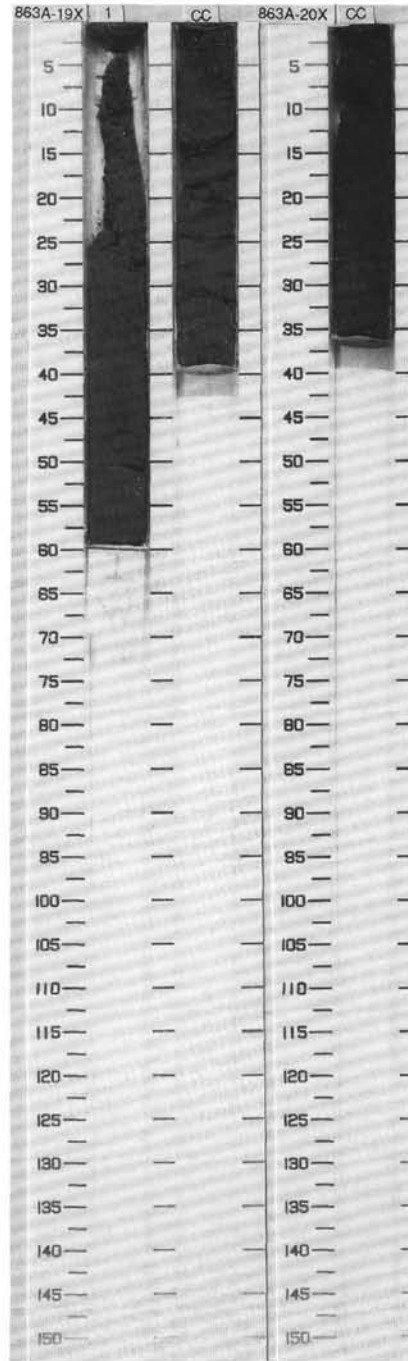
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	Pleistocene		XX	I	5Y 3/2	<p>SILTY SANDSTONE TO SANDY SILTSTONE</p> <p>Major Lithology: The core consists of olive gray (5Y 3/2) SILTY SANDSTONE to SANDY SILTSTONE.</p> <p>Minor Lithology: Section 2, 34-36 cm contains a dark yellowish brown (10YR 4/2) bed composed of NANNOFOSSIL CHALK.</p> <p>General Description: The rock is moderately bedded within drilling biscuits. In Section 1, 0-24 cm the core is soupy, 24-75 cm is drilling breccia and 75-110 cm is highly fractured. Drilling breccia consists of angular and rounded fragments with sizes from 3 mm to 1 cm.</p>
1.0		CC						

SITE 863 HOLE A CORE 20X

CORED 181.6 - 191.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1		CC	Pleistocene		XX	S	5Y 3/2	<p>SILTY SANDSTONE TO SANDY SILTSTONE and SANDSTONE</p> <p>Major Lithologies: The core catcher consists of laminated olive gray (5Y 3/2) SILTY SANDSTONE TO SANDY SILTSTONE and SANDSTONE.</p> <p>General Description: The rock is drilling deformed, but fining-upward sequences can be seen from features preserved within biscuits.</p>
						S		
0.3						S M		

Note expanded vertical scale.



SITE 863 HOLE A CORE 21X CORED 191.3 - 200.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	Pleistocene			S	5Y 3/2	SILTSTONE, CLAYEY SILTSTONE TO SILTY SANDSTONE and GRAVEL
1.0		CC				I		
<p>Major Lithologies: This core consists of olive gray (5Y 3/2) SILTSTONE, CLAYEY SILTSTONE to SILTY SANDSTONE, and dark gray (N3) GRAVEL. The core is highly deformed by drilling, but within drill biscuits there are graded fining-upward cycles from GRAVEL to SILTSTONE. GRAVEL is in Section 1, 0-10 cm and 36-37 cm.</p> <p>General Description: The core catcher consists of drilling biscuits. A spot of fine-grained sand at 3-4 cm in CC is the result of bioturbation.</p>								

SITE 863 HOLE A CORE 22X CORED 200.9 - 210.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1		CC	Pleistocene			S	5Y 3/2	SILTSTONE, SILTY SANDSTONE AND SANDSTONE
0.2								
<p>Major Lithology: The core catcher consists of olive gray SILTSTONE, SILTY SANDSTONE and SANDSTONE. In 0-28 cm the grain size decreases upward from SILTY SANDSTONE and SANDSTONE to SILTSTONE. In 28-42 cm the SANDSTONE AND SILTSTONE are bedded with laminations; the rock exhibits an incipient fissility. SANDSTONE forms flame-like structures. In 0-4 cm are fragments of siltstone with sizes to 0.8 cm.</p>								

Note expanded vertical scale.



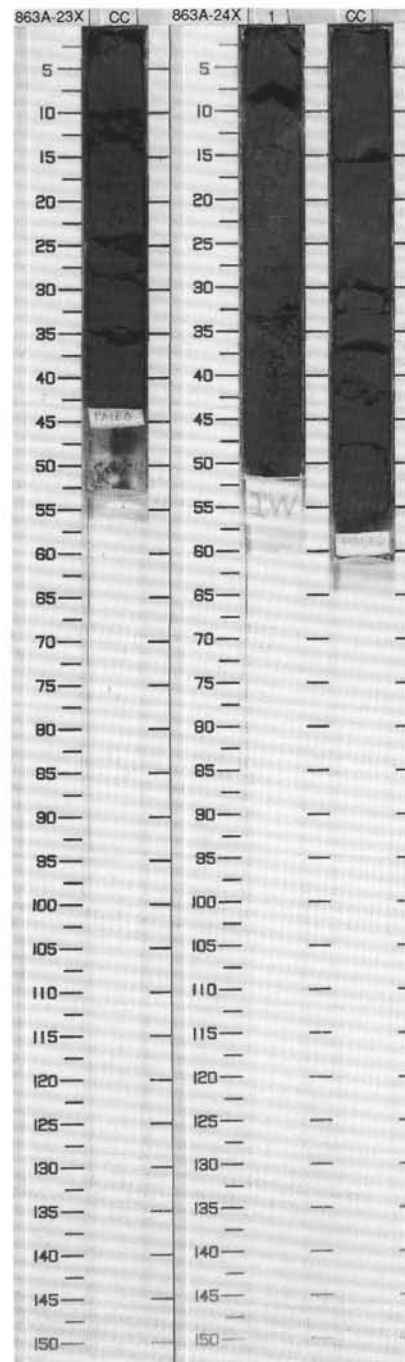
SITE 863 HOLE A CORE 23X CORED 210.6 - 220.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1 0.2 0.3 0.4		CC	Pleistocene			M	5Y 3/2	<p>SANDY SILTSTONE TO SILTY SANDSTONE</p> <p>Major Lithology: The core catcher consists of olive gray (5Y 3/2) SANDY SILTSTONE to SILTY SANDSTONE.</p> <p>Minor Lithology: Beds of fine-grained SANDSTONE are present at 16-20 cm, 29-32 cm, and 34-35 cm.</p> <p>General Description: The rock is highly fractured by drilling and has drilling biscuit structure.</p>

Note expanded vertical scale.

SITE 863 HOLE A CORE 24X CORED 220.3 - 229.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1 CC	lower Pleisto.	~ ~ ~		1 S M	5Y 3/2	<p>SILTSTONE, SANDSTONE, SANDY SILTSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE, SANDSTONE, SANDY SILTSTONE and SILTY SANDSTONE.</p> <p>Minor Lithologies: The siltstone in Section 1 contains clots of fine-grained sandstone (10-15 cm and 27-30 cm). These spots look like traces of bioturbation. These sand clots also are observed in the core catcher, 10-14 cm and 54-55 cm. Beds of SILTY SANDSTONE occur in CC, 28-28.5 cm, 33-34 cm, 37-38 cm, 43-43.5 cm, 45-46 cm, 53-54 cm. Small spots of sponge spicules (sizes 3-4 mm) are found in CC, 12 cm, 18 cm, 22,26 cm, 80-85 cm and 105 cm.</p>



SITE 863 HOLE A CORE 25X

CORED 229.8 - 239.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[diagonal lines]	1	lower Pleistocene	[biscuit structure]	+	I	5Y 3/2	<p>SILTSTONE TO SILTY SANDSTONE, CLAYEY SILTSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE TO SILTY SANDSTONE, CLAYEY SILTSTONE, and SANDSTONE.</p> <p>General Description: Small clots of sponge spicules approximately 3-4 mm in diameter are found in Section 1, 13-18 cm, 21 cm, and 40 cm, Section 2, 34 cm and Section 2, 11 cm. A rounded fragment of sedimentary rock 2 cm in diameter (sparry siltstone) occurs in CC, 36-38 cm. The sediment is moderately fractured and in Section 1, 0-5 cm is brecciated by drilling. The rest of the core has drilling biscuit structure. The sediment is moderately bedded. Variations in texture and color suggest a steeply inclined bedding that has been rotated about the vertical axis to different orientations in adjacent biscuits. The maximum apparent dip is approximately 65 degrees.</p>
1.0	[diagonal lines]	2		[biscuit structure]	+	S		
	[diagonal lines]	CC		[biscuit structure]	+	S		



SITE 863 HOLE A CORE 26X

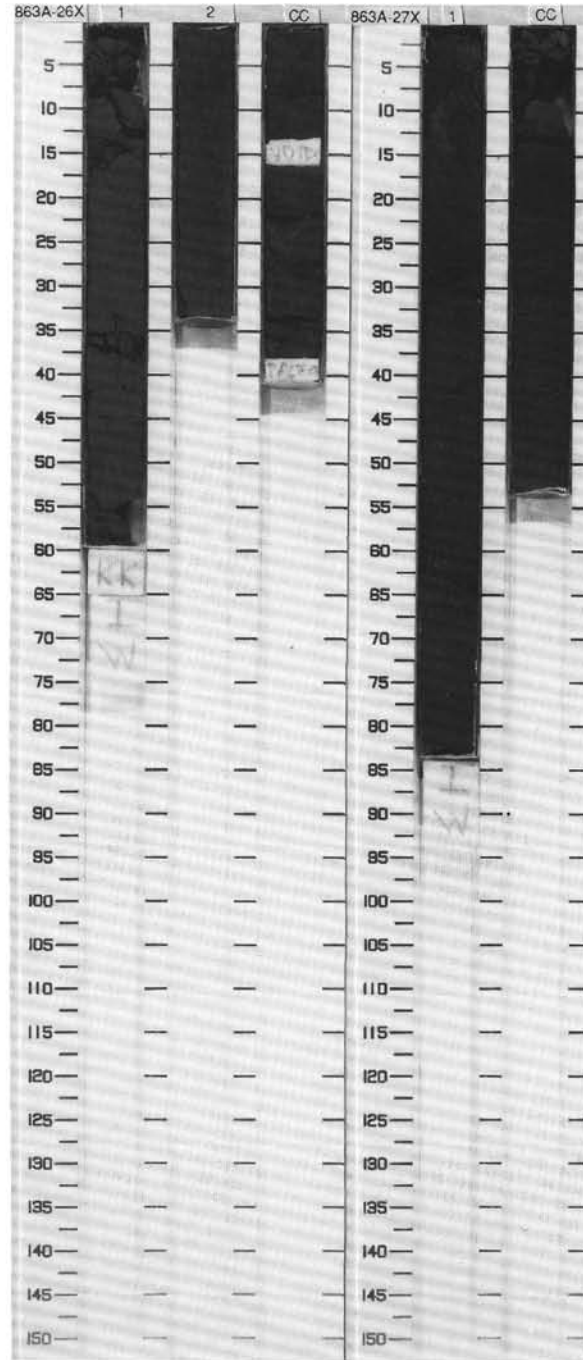
CORED 239.5 - 249.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	lower Pleistocene			SS	5Y 3/2	SILTSTONE, SANDSTONE and SILTY SANDSTONE to CLAYEY SANDY SILTSTONE
1.0		2						
		CC						Major Lithologies: The core consists of moderately bedded olive gray (5Y 3/2) SILTY SANDSTONE to CLAYEY SILTSTONE, SANDSTONE and SANDY SILTSTONE.
<p>General Description: In Section 1, 12 cm, 100 cm, 128 cm, 137 cm there are spots (sizes 1-3 mm) of sponge spicules. A pyrite concretion occurs at Section 1, 45 cm. The core is slightly bioturbated. In Section 1 are graded beds, and in CC is a laminated bed of sandstone (27-29 cm). The rock is moderately fractured by drilling, and Section 2 is biscuited.</p>								

SITE 863 HOLE A CORE 27X

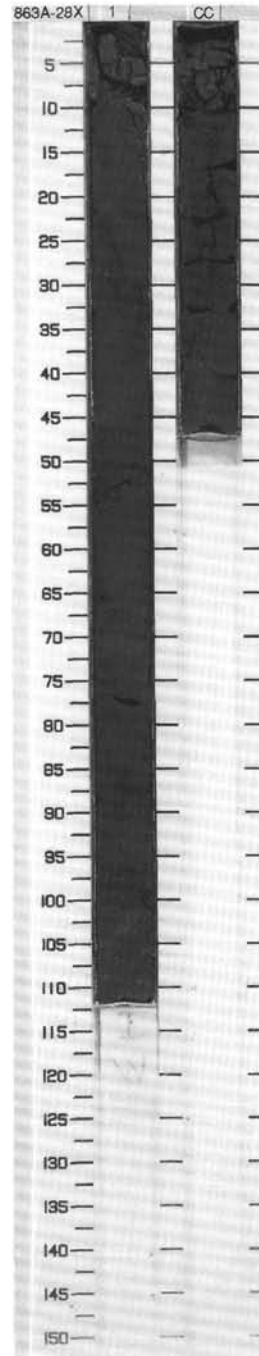
CORED 249.2 - 258.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	lower Pleistocene			SS	5Y 4/1	CLAYEY SILTSTONE TO CLAYEY SANDSTONE
1.0		CC						
<p>Major Lithology: This core consists of olive gray (5Y 4/1) CLAYEY SILTSTONE TO CLAYEY VERY FINE-GRAINED SANDSTONE.</p> <p>General Description: Horizontal lamination is preserved in Section 1, 26-30 cm and Section CC, 15-20 cm, otherwise the core is totally disturbed by biscuiting.</p>								

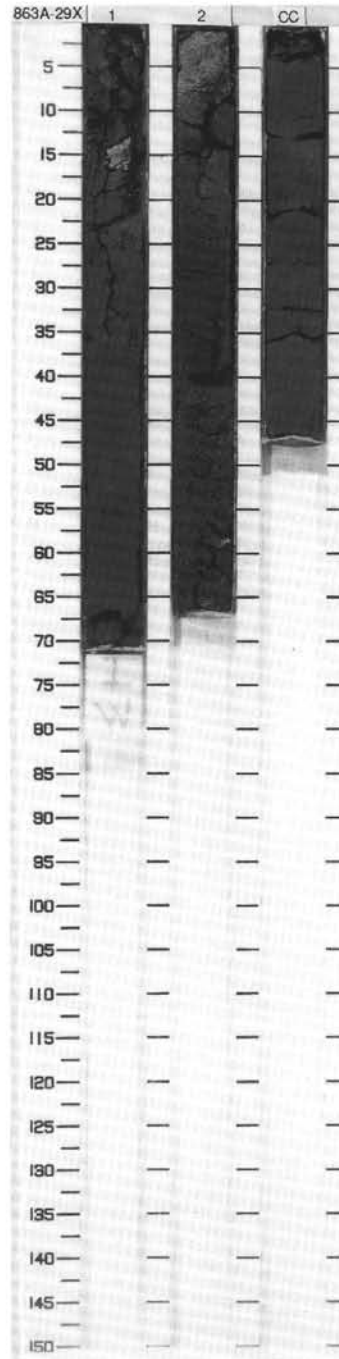


SITE 863 HOLE A CORE 28X CORED 258.8 - 268.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	lower Pleistocene	-		S	5Y 4/1	<p>CLAYEY SILTSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 4/1) CLAYEY SILTSTONE and olive gray (5Y 3/2) poorly sorted, massive SANDSTONE. The contact zone between these is gradational and disturbed.</p> <p>Minor Lithologies: Isolated fragments of SANDSTONE are present in Section 1, 50-55 cm and 68-70 cm. Round cavities (1-2 mm) filled with sponge spicules occur in the upper part of Section 1 and in the middle of Section CC.</p> <p>General Description: The core is biscuited by drilling.</p>
1.0		S				5Y 3/2		
		M						
		CC						



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1 2 CC	lower Pleistocene	(P) ~ ~ ~ (P) ~ (P)	▽ 	S I SM	5Y 3/2	<p>SANDY SILTY CLAYSTONE</p> <p>Major Lithology: The core primarily consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE.</p> <p>Minor Lithologies: SILTY CLAYSTONE to CLAYEY SILTSTONE is present in Section 1, 0-28 cm. Minor lithologies are also present within biscuited intervals in Section CC. These include olive gray (5Y 3/2) SILTY CLAYSTONE to CLAYEY SILTSTONE to SILTSTONE.</p> <p>General Description: Undisturbed sections of this core are massive, with some bioturbation. Bioturbation features include chondrites (Section 2, 0-2 cm, and 20-30 cm), and zoned (rind?) burrows with outer rims composed of sponge spicules (Section CC). Contacts dip at high angles, are locally faulted, and may be structurally-modified depositional features.</p>



SITE 863 HOLE A CORE 30X

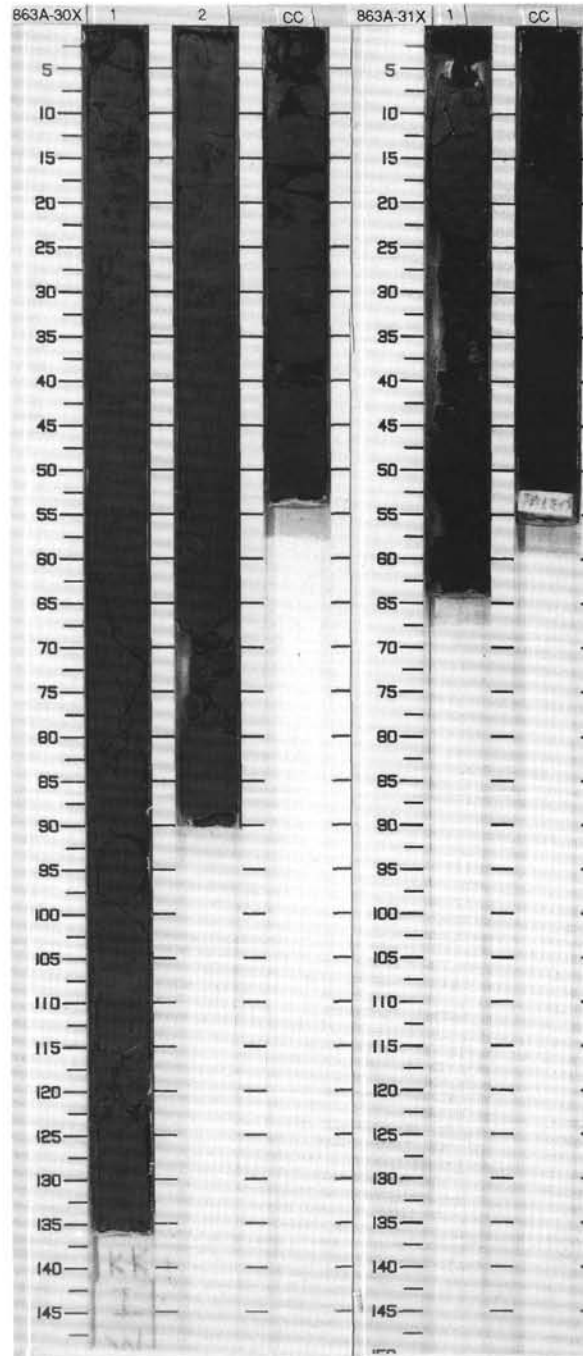
CORED 278.1 - 287.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	lower Pleistocene	}		S	5Y 3/2	CLAYEY SILTSTONE TO SILTY CLAYSTONE and SANDSTONE
1.0		S						
		2	lower Pleistocene	}		S	5Y 3/2	Major Lithologies: The core predominantly consists of olive gray (5Y 3/2) CLAYEY SILTSTONE TO SILTY CLAYSTONE and SANDSTONE.
		S						
		CC						Minor Lithology: One interval of SANDY SILTY CLAYSTONE occurs in Section 1, 50-88 cm.
<p>General Description: The core consists of drilling biscuits, with within-biscuit bedding contacts only in Sections 2 and CC. Bedding is nearly vertical in this core, and so, a laminated, graded, fine-grained sandstone bed is repeated from biscuit to biscuit in Section 2. This sandstone bed fines to the right. Bioturbation features include chondrites-like burrows and zoned (rind?), spicule-rich burrows. Some biscuits show web structure and are cut by shallow normal faults.</p>								

SITE 863 HOLE A CORE 31X

CORED 287.6 - 297.3 mbsf

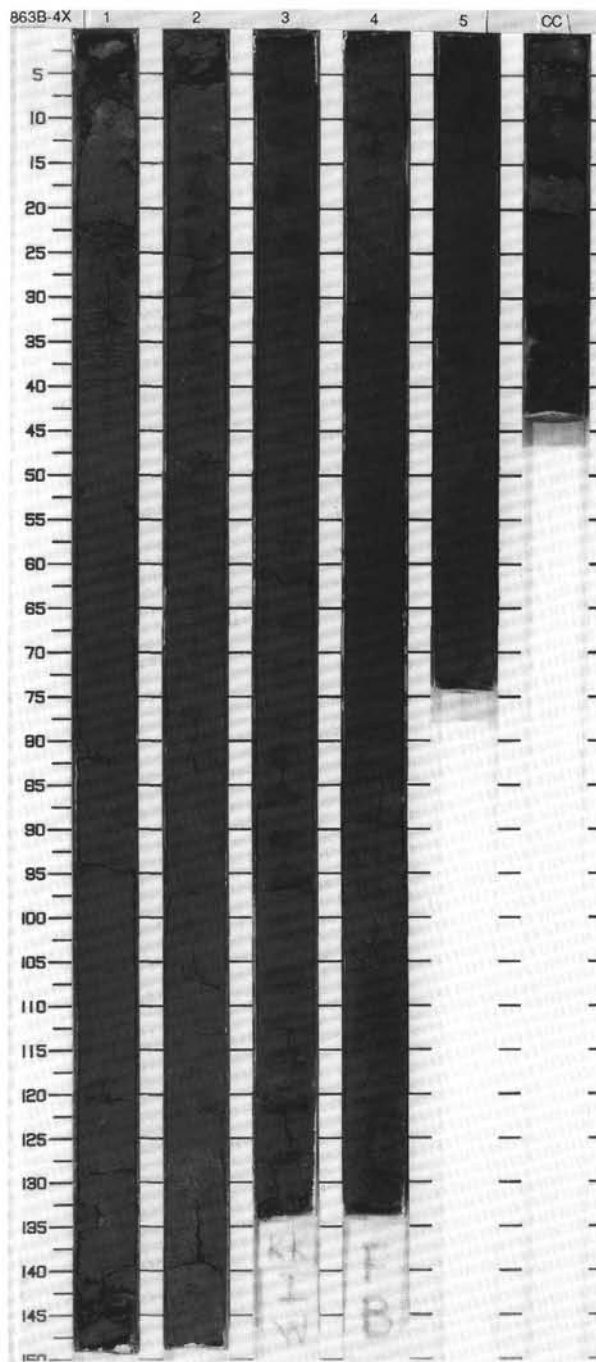
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	lower Pleisto.	}		S	5Y 3/2	SANDY SILTY CLAYSTONE
1.0		S						
		CC						Major Lithology: The core predominantly consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE.
<p>Minor Lithologies: Minor lithologies include a fragment of carbonate-cemented, medium- to fine-grained SANDSTONE in Section 1, 0-10 cm, and intervals of CLAYEY SILTSTONE and CLAYEY SANDSTONE.</p> <p>General Description: The core is disturbed by drilling, and no bedding features are present.</p>								



863B-1X THROUGH 3X NO RECOVERY

SITE 863 HOLE B CORE 4X CORED 325.9 - 335.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	◇ † F 	X	S	5Y 3/2	<p>CLAYEY SILTSTONE and SANDSTONE</p> <p>Major Lithologies: This core is composed of olive gray (5Y 3/2) CLAYEY SILTSTONE and very fine- to fine-grained SANDSTONE.</p> <p>Minor Lithologies: Medium-grained olive black (5Y 2/1) slightly laminated SANDSTONE with vertical bedding occurs in Section 1, 21-52 cm and in Section 2, 1-5 cm. Sandstone contains some shell fragments. Interval 114-150 cm in Section 1 shows vertical bedding and fining upward succession towards left. Laminated sandstone grades to siltstones and clayey siltstones within the core diameter.</p> <p>General Description: Some round sponge-spicule concentrations are present in Sections 1, 2, and 3. The whole core is disturbed and biscuited. Thin curved bands between the biscuits are olive black (5Y 2/1) and within the sandy portions biscuiting is more dense. Some rounded pebble-like fragments of siltstone produced in drilling occur in the top of the Section 1. Near-vertical bedding makes nominal location of units in core somewhat arbitrary.</p>
1.0						S	5Y 2/1	
						S		
						S		
						S		
		2						
		3					5Y 3/2	
		4				I W		
		5				S		
		CC				S W		
						M		

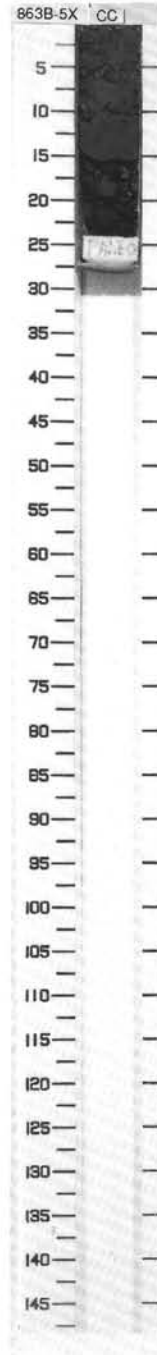


SITE 863 HOLE B CORE 5X

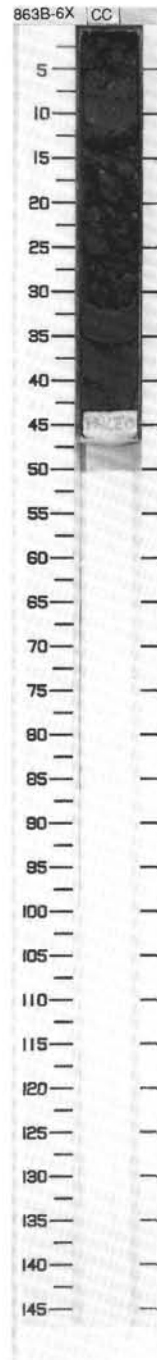
CORED 335.6 - 345.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1 0.2		CC	Upper Pleistocene			S M	5Y 3/2	SILTSTONE, SILTY SANDSTONE and SANDSTONE Major Lithologies: This core catcher consists of olive gray (5Y 3/2) SILTSTONE, SILTY SANDSTONE and SANDSTONE.
<p>General Description: From 0–15 cm the core is highly fractured (drilling biscuits) and from 15–24 cm it is drilling breccia. The original structure is destroyed by drilling in 0–15 cm, highly fractured (drilling biscuits) and 15–24 cm, drilling breccia. In 6–8 cm, 10.5–12 cm, and 13–15 cm primary sedimentary laminae are preserved. Bedding dips steeply (60–75 degrees). Sand beds preserved within a drilling biscuit at 11–15 cm are cross-laminated and cut by normal microfaults; tops are to the west in core reference frame.</p>								

Note expanded vertical scale.

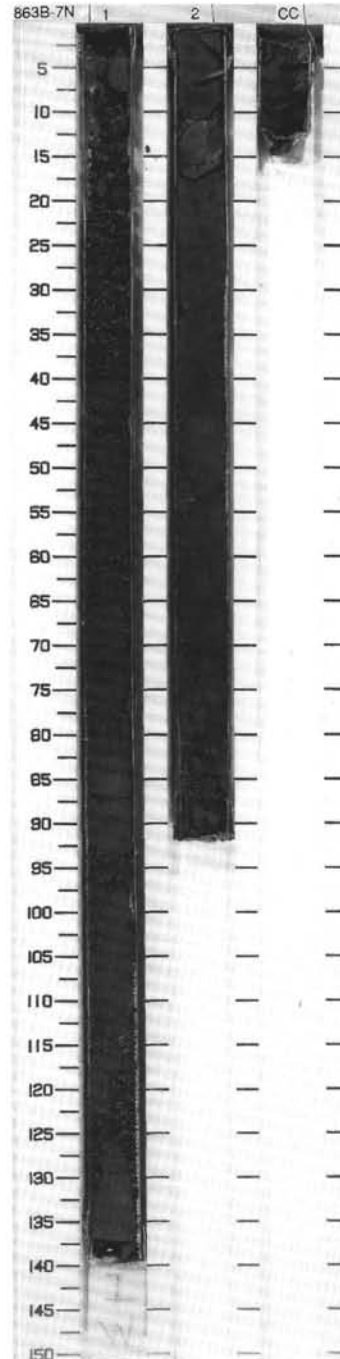


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1		CC	upper Pleistocene			S S M	5Y 3/2	<p>SILTSTONE, SILTY SANDSTONE and SANDSTONE</p> <p>Major Lithologies: This core catcher consists of olive gray (5Y 3/2) SILTSTONE, SILTY SANDSTONE and SANDSTONE.</p> <p>General Description: The core is disrupted by drilling in the following intervals: 0-16 cm and 31-35 cm, drilling breccia; 16-31 cm and 35-44 cm, highly fractured. In 20-25 cm, 28-31 cm, and 36-43 cm, primary laminated sedimentary structure is preserved. Beds dip vertically, parallel to the core. At 21-27 cm a small (slump?) fold is preserved within a fragment of drilling breccia, and at 36-43 cm, an isolated clast with bedding striking into and wrapping around it suggests intraformational breccia.</p>
0.2								
0.3								
0.4								



SITE 863 HOLE B CORE 7N CORED 354.9 - 357.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene			S	5Y 3/2	SANDY SILTY CLAYSTONE and SILTY CLAYSTONE TO CLAYEY SILTSTONE Major Lithologies: The core predominantly consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE and SILTY CLAYSTONE TO CLAYEY SILTSTONE. Minor Lithologies: Minor lithologies include interbeds of SANDSTONE, SILTY SANDSTONE, and SILTSTONE. One bioturbated and/or structurally dismembered 2 cm-thick bed of SILTY CLAYSTONE WITH NANNOFOSSILS occurs in Section 1, 110-112 cm. General Description: Because bedding is near vertical, beds and contacts extend for 15 to 20 cm down the length of the core. True stratigraphic thickness is approximately 50% of the recovered interval. Anastomosing vein structures and reverse faults occur throughout the core.
1.0		2				S		
					S			
					I			
					S			
					M			



SITE 863 HOLE B CORE 8N

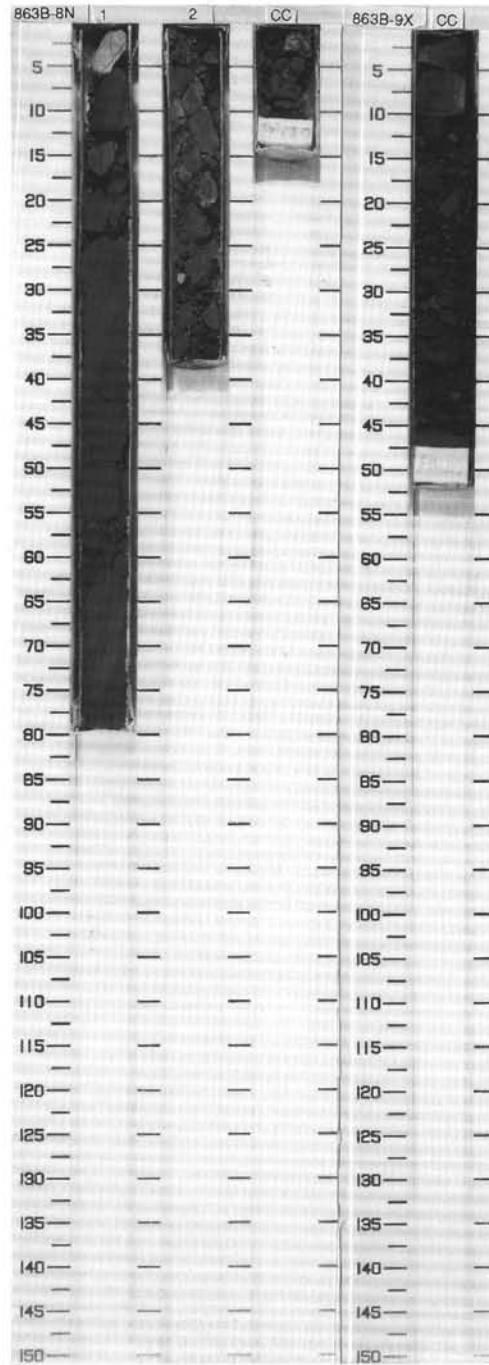
CORED 357.4 - 361.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleisto.			S S S	5Y 3/2	<p>CLAYSTONE, SANDSTONE and SILTY CLAYSTONE TO CLAYEY SILTSTONE</p> <p>Major Lithologies: The core consists of interbeds of olive gray (5Y 3/2) CLAYSTONE, SANDSTONE, and SILTY CLAYSTONE TO CLAYEY SILTSTONE.</p> <p>General Description: The majority of Section 1 consists of a series of steeply-dipping, laminated to cross-laminated, fine-sandstone beds which fine to the left into silty claystone to clayey siltstone and then claystone. Because bedding is near vertical, the same stratigraphic interval can be repeated for up to 25 cm along the length of the core. The core is cut by reverse faults.</p>
1.0		2						

SITE 863 HOLE B CORE 9X

CORED 361.4 - 371.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		CC	↑ upper Pleistocene		X	S S	5Y 3/2	<p>SILTY SANDSTONE and SANDY SILTY CLAYSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) fragments and drilling breccia of SILTY SANDSTONE and SANDY SILTY CLAYSTONE.</p>



SITE 863 HOLE B CORE 10R

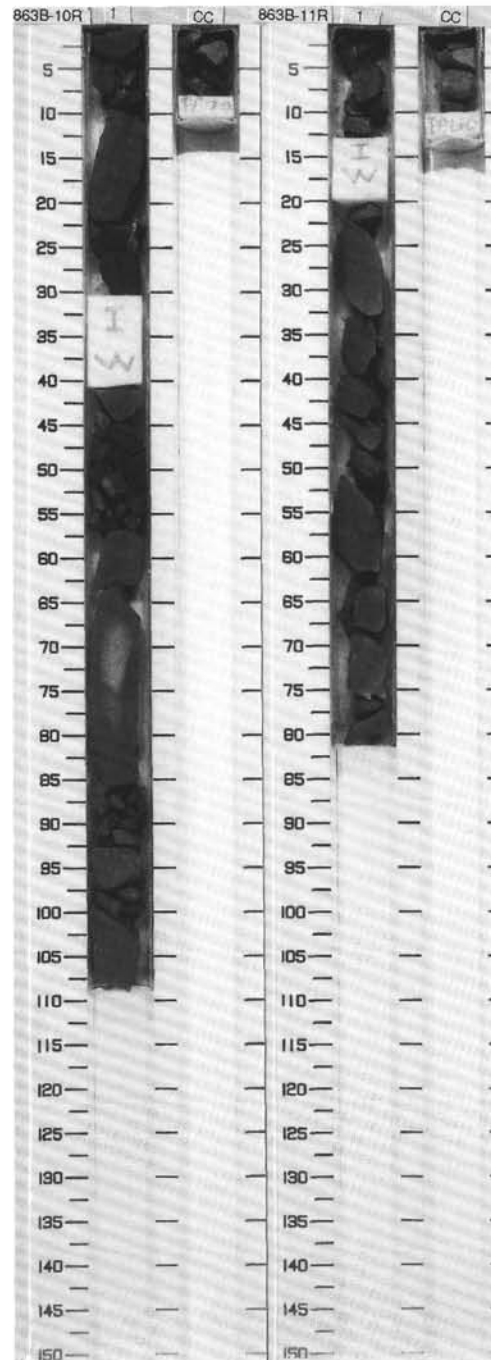
CORED 371.0 - 376.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleisto.			S S S M	5Y 3/2 To 5Y 3/1	<p>SILTSTONE WITH NANNOFOSSILS, SANDSTONE and CLAYEY SILTSTONE WITH NANNOFOSSILS</p> <p>Major Lithologies: This core consists of moderately interbedded olive gray (5Y 3/1 to 5Y 3/2) SILTSTONE WITH NANNOFOSSILS, SANDSTONE and CLAYEY SILTSTONE WITH NANNOFOSSILS. The SANDSTONE has angular to subangular clasts of medium sand cemented in sparry calcite. Smear slides of the SILTSTONE and CLAYEY SILTSTONE have 15% to 20% nannofossils.</p> <p>General Description: Bedding is steeply inclined to vertical. At least three ages of deformation bands are present in the finer grained lithologies. The sandstone contains a wide zone of deformation bands, but relative ages within the zone are not clear.</p>

SITE 863 HOLE B CORE 11R

CORED 376.6 - 386.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene			S M	5Y 3/2	<p>SILTSTONE</p> <p>Major Lithology: This core consists of olive gray (5Y 3/2) CLAYEY SILTSTONE with intense bioturbation.</p> <p>Minor Lithology: Some of the burrows are filled with a fine to medium SANDSTONE.</p> <p>General Description: No bedding is preserved due to bioturbation. There are rare foram tests and white spots of sponge spicules. At least three ages of deformation bands are present; some bound lithologic packets. Original bedding disrupted by burrowing and by tectonism.</p>



SITE 863 HOLE B CORE 12R

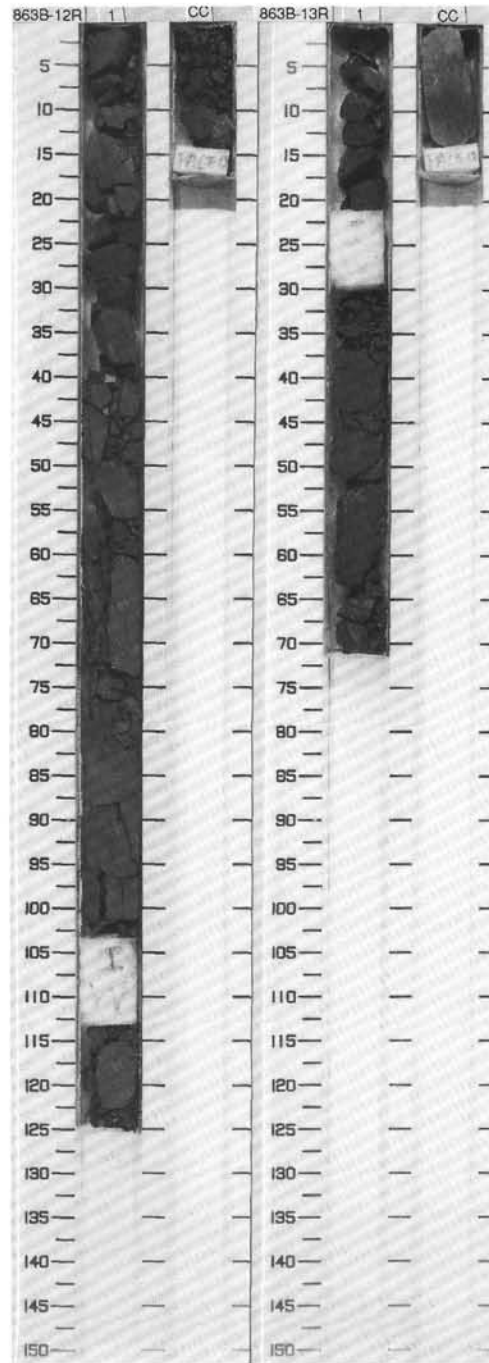
CORED 386.3 - 395.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1 CC	upper Pleistocene			S S I M	5Y 3/2	<p>SILTY CLAYSTONE TO CLAYEY SILTSTONE and CLAYSTONE</p> <p>Major Lithologies: The core predominantly consists of olive gray (5Y 3/2) SILTY CLAYSTONE TO CLAYEY SILTSTONE which grades into CLAYSTONE.</p> <p>Minor Lithology: Interbeds of fine- to medium-grained, locally carbonate-cemented, SANDSTONE are present.</p> <p>General Description: Sandstone beds show sharp to scoured lower contacts. Bedding is nearly vertical. The core is cut by reverse faults.</p>

SITE 863 HOLE B CORE 13R

CORED 395.8 - 405.5 mbsf

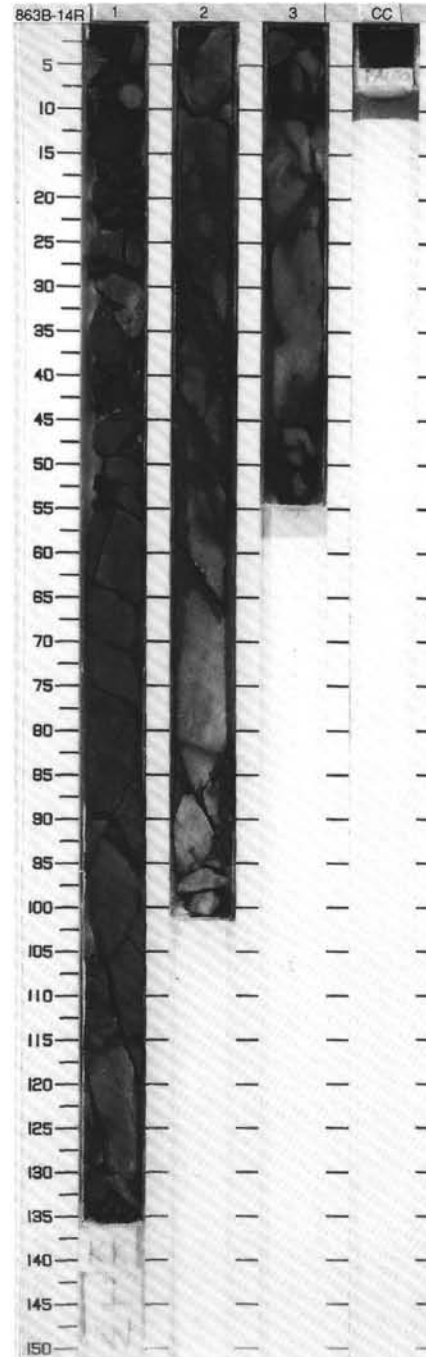
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1 CC	↑ upper Pleistocene			I S MS	5Y 3/2	<p>CLAYEY SILTSTONE TO SILTY CLAYSTONE, SILTSTONE and SANDSTONE</p> <p>Major Lithologies: This core consists of olive gray (5Y 3/2) CLAYEY SILTSTONE TO SILTY CLAYSTONE, SILTSTONE and fine-grained massive SANDSTONE.</p> <p>General Description: In Section CC sandstone is concentrated on the right-hand side of the core with irregular but sharp contact against siltstone indicating near-vertical bedding. Siltstone in Section CC is slightly burrowed. Calcite-filled fractures (<1mm) in Section CC contain some crystalline pyrite and overprint older fractures.</p>



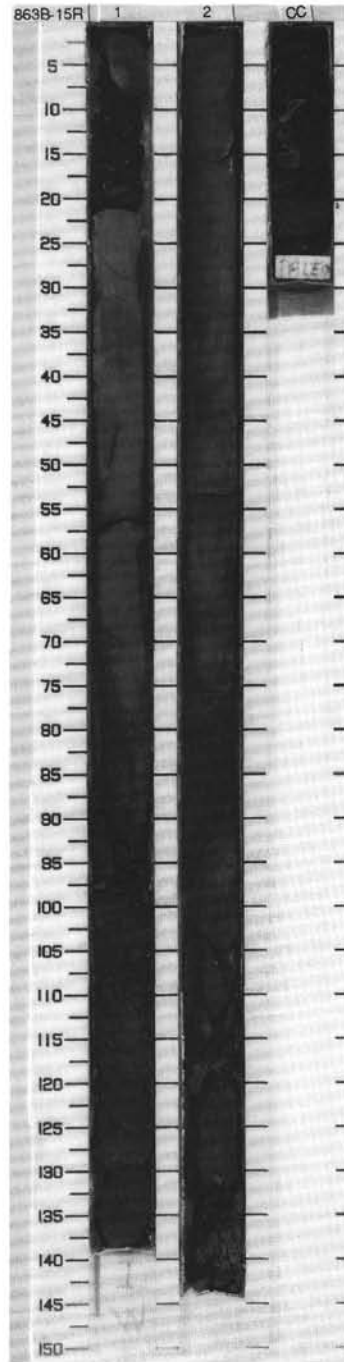
SITE 863 HOLE B CORE 14R

CORED 405.5 - 415.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S	5Y 2/1	<p>CLAYSTONE, SANDY SILTY CLAYSTONE and SANDSTONE</p> <p>Major Lithologies: This core consists of olive black (5Y 2/1) CLAYSTONE and interbeds of fine-grained SANDSTONE. There are 3 massive sandy beds, each about several centimeters in thickness. Lower contacts are partly irregular due to burrowing. Sandstone interbeds grade to SANDY SILTY CLAYSTONE and CLAYSTONE.</p> <p>General Description: General bedding is relatively vertical. Lower contacts of sandstones occur on the right-hand side of Section 2 and they grade towards the left. Claystones contain small amount of micritic carbonate as recrystallized nannofossils and foraminifers. Concentrations of sponge spicules occur in the lower part of the Section 1. Some rounded drilling-produced pebbles of claystones and sandstones occur at the top of the core.</p>
		2				S W S		
		3				M		

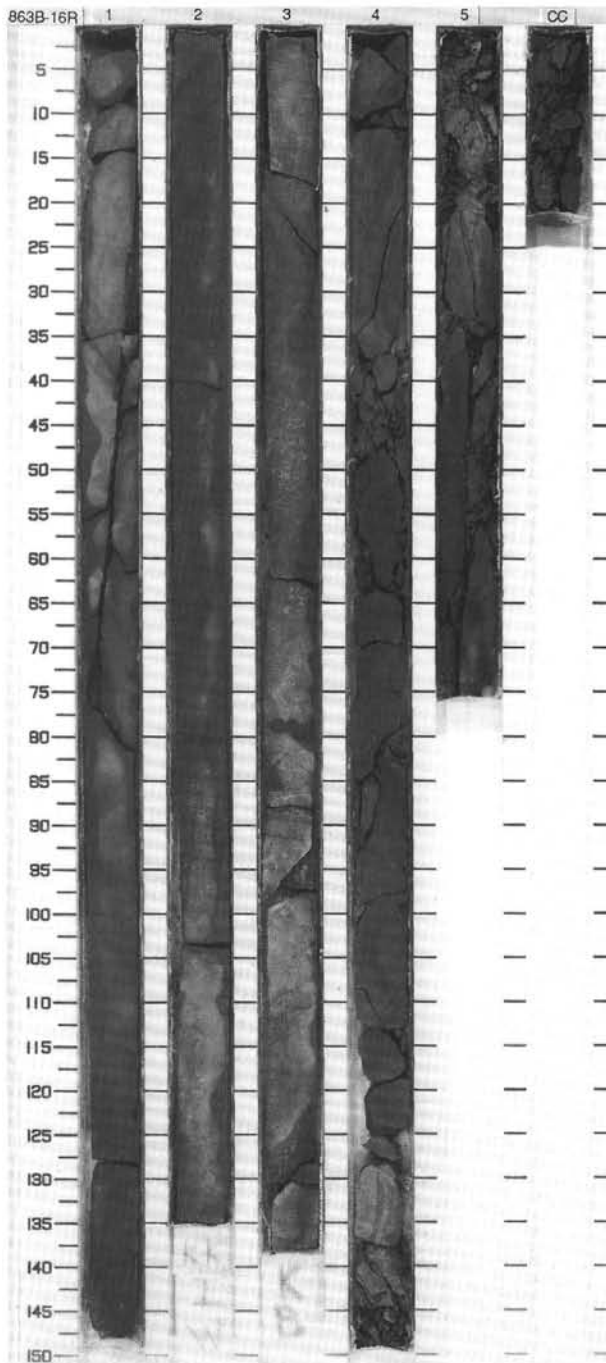


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Sandstone pattern]	1	upper Pleistocene	[Bedding symbols]	[Disturbance symbols]	S	5Y 3/2	<p>SANDSTONE</p> <p>Major Lithology: The core predominantly consists of olive black (5Y 2/1) SANDSTONE. Grain size varies from coarse to very fine down core. This sandstone is carbonate cemented in Section 1, 0-10 cm, and is cross-cut by carbonate-filled veins.</p>
1.0						S		
	[Sandstone pattern]	2	upper Pleistocene	[Bedding symbols]	[Disturbance symbols]	I	5Y 2/1	<p>Minor Lithology: One interval of bioturbated olive gray (5Y 3/2) CLAYEY SILTSTONE is present.</p>
						S		
		CC				M		<p>General Description: Because the core exhibits near-vertical bedding, bed thicknesses are greatly exaggerated and lithological contacts occur along 40-cm intervals of the core. The section youngs to the left, and down core. Thus, in Section 1, bioturbated clayey siltstone is truncated at a scoured contact, and overlain (present orientation is overturned) by a coarse- to very fine-grained sandstone bed which fines down through the base of Section 1, through Section 2, and into the core catcher.</p>



SITE 863 HOLE B CORE 16R CORED 424.7 - 434.4 mbsf

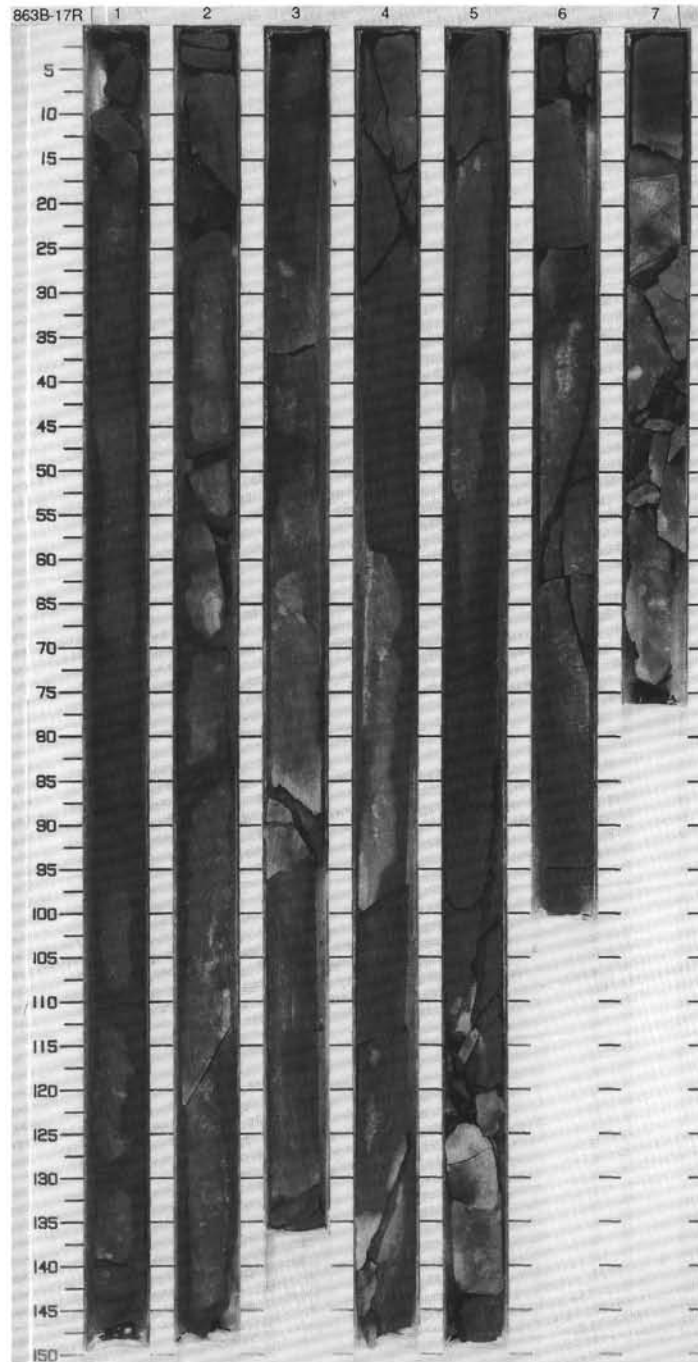
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Graphic Lithology: Sandstone and claystone patterns]	1	upper Pleistocene	[Structural symbols]	[Disturbance symbols]	S	5Y 3/2 to 5Y 2/1	<p>SANDY SILTY CLAYSTONE and SANDSTONE</p> <p>Major Lithologies: The core predominantly consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE and olive black (5Y 2/1) SANDSTONE.</p> <p>Minor Lithologies: Minor lithologies include SILTY SANDSTONE, SILTY CLAYSTONE and CLAYSTONE.</p> <p>General Description: Because the core exhibits near vertical bedding, bed thicknesses are greatly exaggerated. In Section 1, above a vertical scoured contact (135-145 cm), SANDSTONE grades up into SILTY SANDSTONE, overlain by bioturbated SANDY SILTY CLAYSTONE. This contact continues down into Section 2 (3-100 cm), where it is underlain by SANDY SILTY CLAYSTONE (right of core) and overlain by SANDSTONE (left of core). The bioturbated SANDY SILTY CLAYSTONE continues down through Section 3. SANDSTONE at contacts is locally carbonate cemented. Sharp contacts in Sections 4 and 5 are probably faults or fault-modified bedding contacts. The core is cross-cut by a number of normal and reverse faults. Section 1 youngs to the right, whereas Section 2 youngs to the left.</p>
1.0						S		
2						S		
3						W		
4						S		
5	M							
CC								



SITE 863 HOLE B CORE 17R

CORED 434.4 - 444.0 mbsf

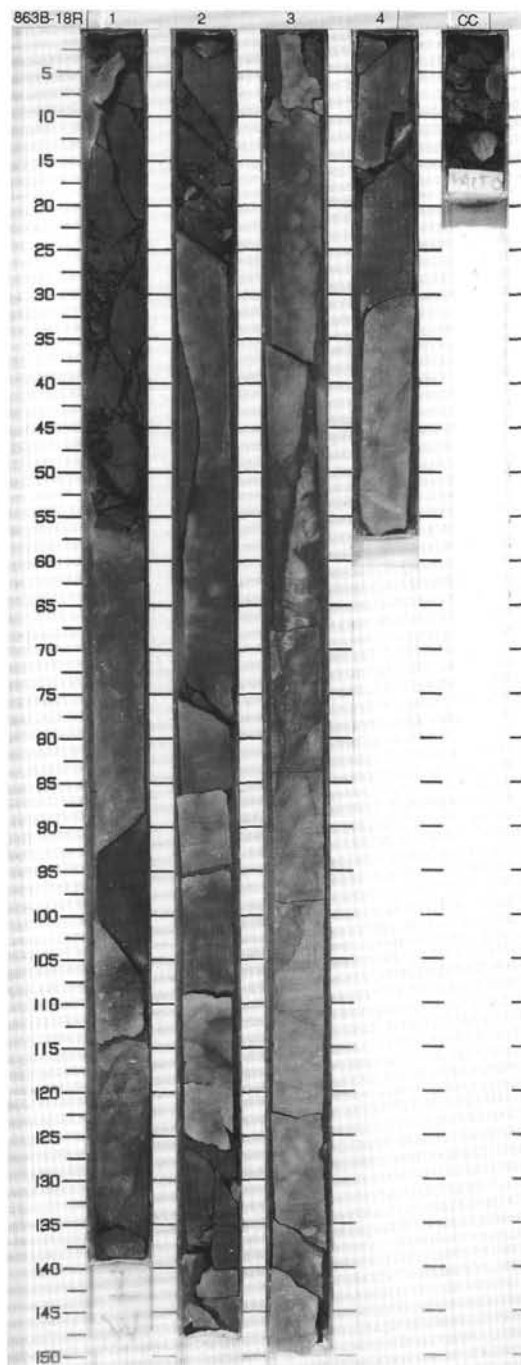
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Dotted pattern]	1	upper Pleistocene	[Wavy lines]	[Vertical lines]	S	5Y 3/2	<p>SILTY SANDSTONE TO SANDY SILTSTONE, SANDSTONE, SILTSTONE and SILTY CLAYSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTY SANDSTONE TO SANDY SILTSTONE, SANDSTONE, SILTSTONE AND SILTY CLAYSTONE. In Section 1 at 11.5 cm the sharp basal contact of SANDSTONE and SANDY SILTSTONE is scoured; in Section 5, 85-110 cm the semivertical contact between SILTY SANDSTONE and SANDY SILTSTONE is scoured, and in Section 7 a scoured contact is located in 14-19 cm.</p> <p>General Description: The rocks are intensely bioturbated; burrows are filled with calcite-cemented sand and silt. Although some beds appear to be horizontal on core face, true dips range from 32 to 79 degrees within the core reference frame. Two to three sets of deformation bands are present, best developed within the finer-grained rocks at Section 1, 125-135 cm; Section 2, 83-91 cm; Section 3, 100-130 cm; Section 6, 55-60 cm. Tectonically modified lithologic boundaries outlined by deformation bands occur at Section 1, 110 cm; Section 2, 100-140 cm; Section 7, 27-32 cm; and possibly Section 5, 90-110 cm. The large sandstone-filled burrow at Section 3, 62-29 cm is both outlined and offset by deformation bands. Separation on deformation bands is difficult to determine, but stepped slickenlines at Section 7, 27-32 cm indicate normal-sense dip slip.</p>
1.0						S	N 4	
						S		
						S		
						S		
						S		
						S		
		2						
		3						
		4						
		5						
		6						
		7						



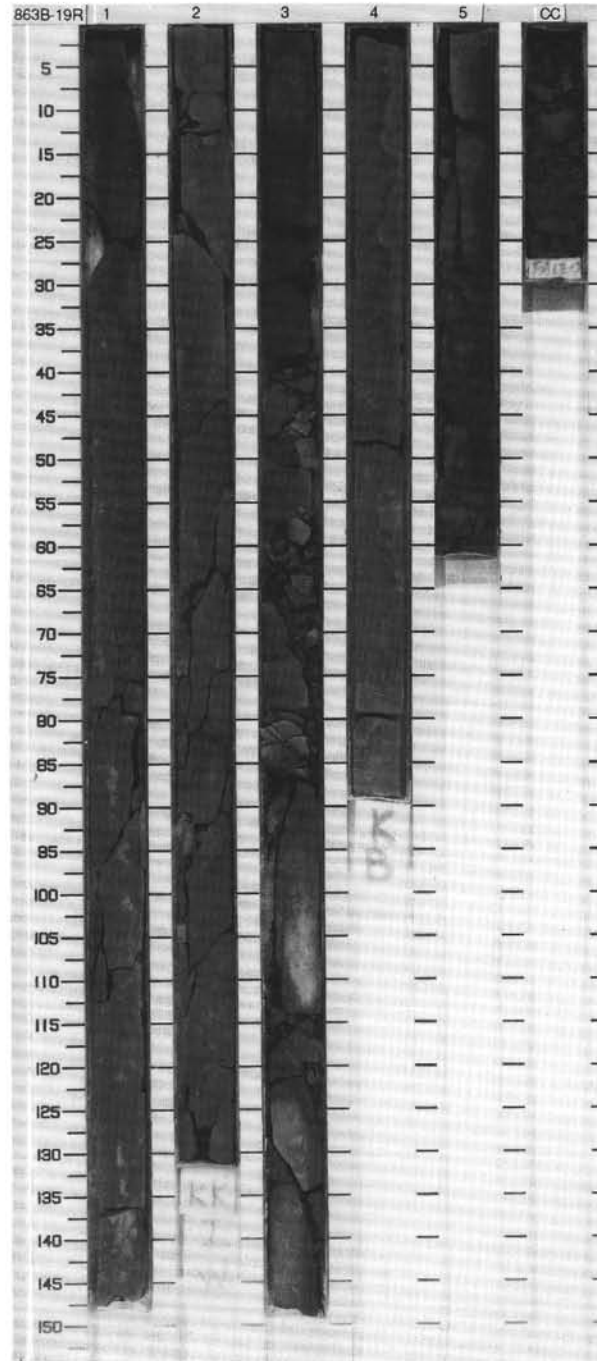
SITE 863 HOLE B CORE 18R

CORED 444.0 - 453.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description						
0.5		1	upper Pleistocene	}}		S	5Y 3/2	CLAYEY SILTSTONE TO SANDY SILTSTONE						
1.0								Major Lithology: The core consists of olive gray (5Y 3/2) CLAYEY SILTSTONE to SANDY SILTSTONE. A scoured subvertical bedding contact between CLAYEY SILTSTONE and SANDY SILTSTONE occurs in Section 3, 30-68 cm.						
								General Description: In Section 3, 5-11 cm, white veins 1-2 mm thick occur; the filling is not calcareous. The entire core is intensely bioturbated; burrows are filled with dark mudstone and light gray (N 7) pyritiferous sandstone cemented with sparry calcite. Concentrations of sponge spicules, 1-4 mm in diameter are disseminated throughout the core. In Section 1, 100-140 cm, the rock consists of intraformational breccia with deformation bands bounding lithologic packets. Similar breccias occur in Section 3, 65-105 cm, and possibly Section 4, 0-30 cm. Deformation bands occur in Sections 2, 3, and 4. The nearly vertical deformation band at Section 3, 20-40 cm merges gradually with the top of the subvertical sandstone bed in 25-69 cm to become a bedding plane fault.						
								2	}}		S	5Y 3/2		
								3	}}					
								4	}}		S	5Y 3/2		
								CC	}}					
								M	}}					



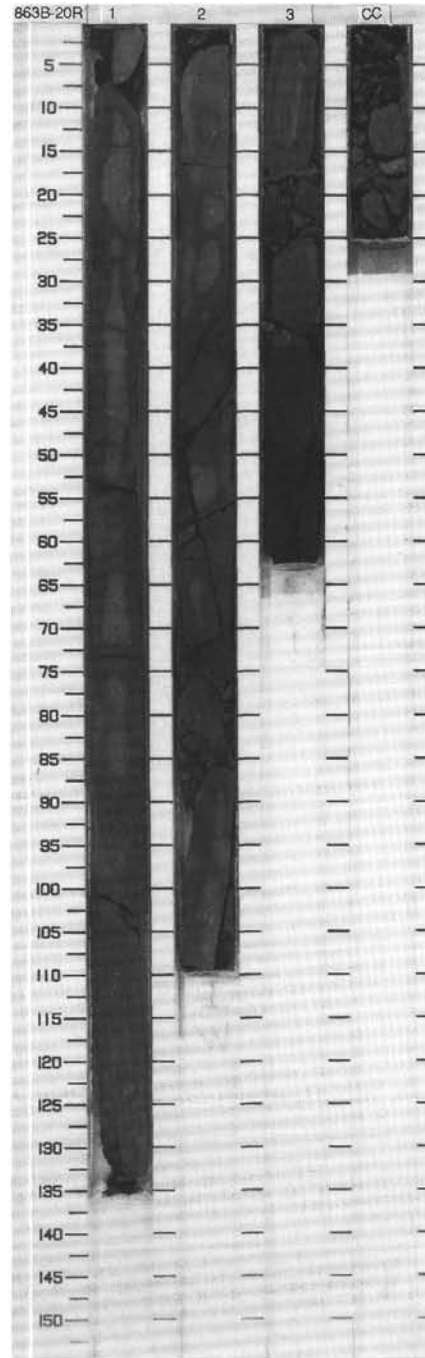
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Lithological patterns for sections 1-5]	1	upper Pleistocene	[Structural symbols]	[Disturbance symbols]	I W S S W M	5Y 3/2	SILTSTONE, SANDSTONE and CLAYEY SILTSTONE
1.0		2						Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE, SANDSTONE and CLAYEY SILTSTONE. In Section 4 the rock is olive gray (5Y 3/2) to (5Y 5/1).
		3						General Description: Bioturbation ranges from slight to moderate throughout the core. Subvertical scoured contacts between SILTSTONE and SANDSTONE are observed in Section 1 (10-35 cm and 85-105 cm), Section 3 (82-115 cm) all of Section 4, and possibly in Section 5, 0-20 cm. Textural grading in the subvertical sandstone bed indicates a fining-upward sequence from sandstone to sandy siltstone to clayey siltstone, passing through an intensely burrowed interval above the sandstone. Burrows filled with sponge spicules are present throughout the core. Locally, dark deformation bands of indeterminate separation occur.
		4						
		5						
		CC						



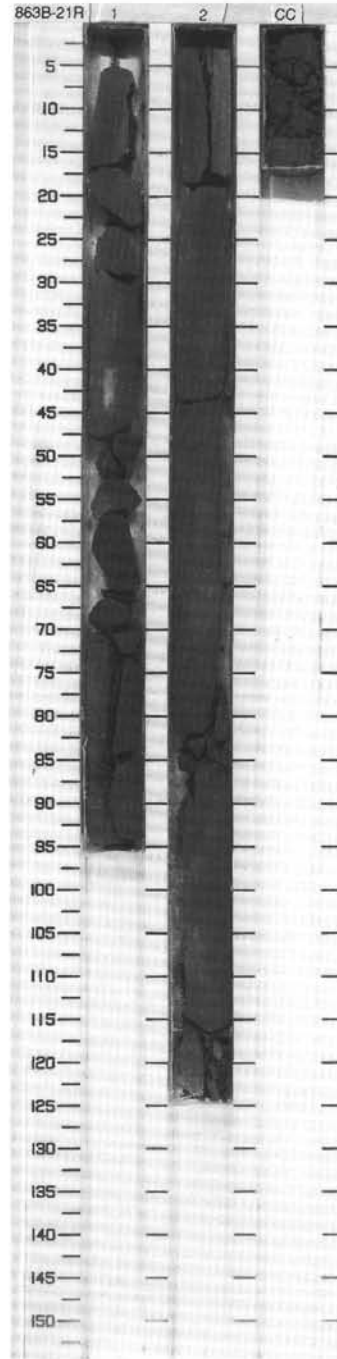
SITE 863 HOLE B CORE 20R

CORED 463.4 - 473.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene		/	S S	5Y 3/2	<p>SANDY SILTY CLAYSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE and fine- to medium-grained gray (N4) to olive gray (5Y 3/2) SANDSTONE.</p> <p>General Description: Because the core shows vertical bedding, the lower parts and the basal contact of one distinct sandstone bed are seen throughout Sections 1 and 2, having a total length of 237 cm. Younging direction is towards the left of the archive-half. SANDY SILTY CLAYSTONE is slightly to heavily bioturbated and contains chondrites-type burrows. Nannofossil content varies from 5% to 10%. Generally the contact zone against sandstone is relatively sharp but irregular partly due to this bioturbation. Burrows are filled with some amount of sand-sized material. Some burrows are filled with sponge spicules. Fine-grained sediments contain some small fine-grained blackish pyrite concentrations. Sandstone interval in Section 3, 35-50 cm shows wavy- to cross-lamination and some syn-sedimentary deformation. Sandstone in Section CC is carbonate-cemented.</p>
1.0		2						
		3						
		CC			X	M		

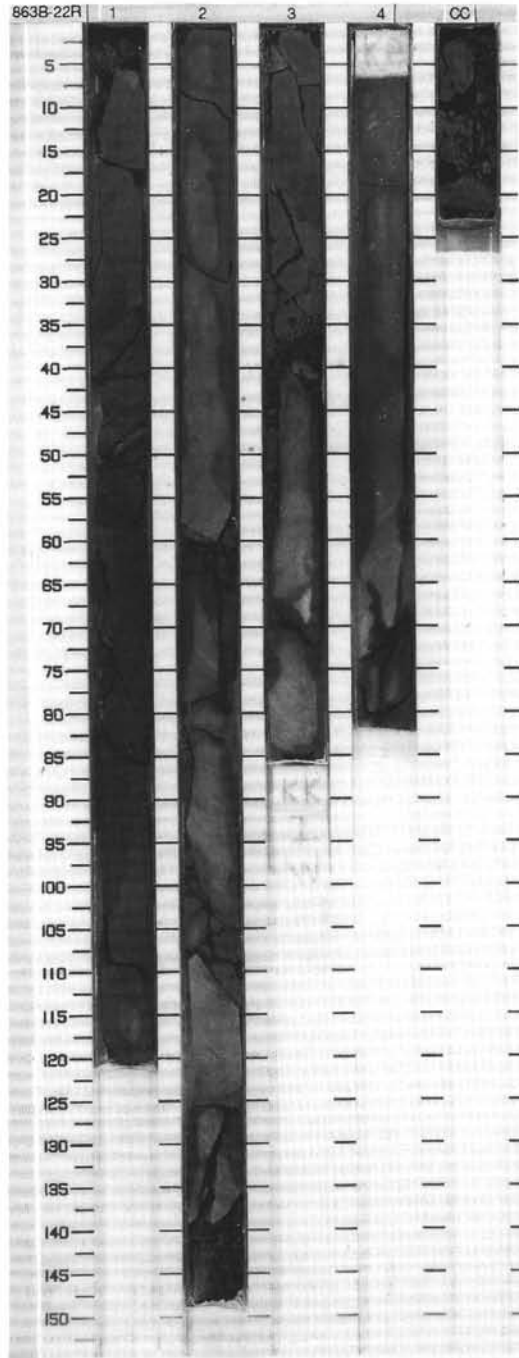


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene			S	4N	<p>SANDSTONE</p> <p>Major litholgy: This core consists of medium dark gray (N4) fine- to medium-grained SANDSTONE.</p> <p>General Description: Bedding is vertical. Section 1, 30-50 cm shows trend from horizontal laminated medium-grained sandstone to wavy-laminated and cross-laminated fine-grained sandstone, implying younging towards the right-hand side of the archive half. The same trend is seen also in Section 2, except that the lowermost sandstone in left side of the core is relatively massive. Sandstone contains some shell-fragments.</p>
1.0		2				I		
		CC				S		
					X	M		



SITE 863 HOLE B CORE 22R CORED 482.7 - 492.4 mbsf

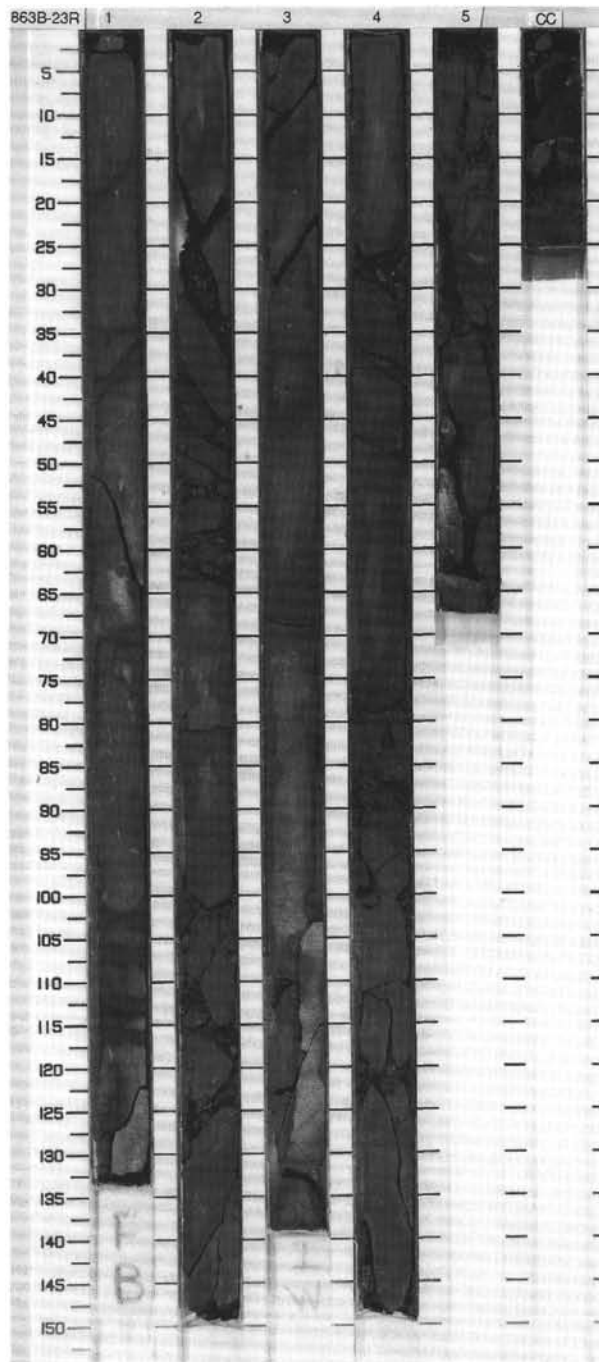
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description	
0.5	[Graphic Lithology: Dotted pattern]	1	upper Pleistocene	[Structure: wavy lines]	[Disturb: vertical lines]	S	5Y 2/1	<p>SANDY SILTY CLAYSTONE</p> <p>Major Lithology: The core predominantly consists of olive black (5Y 2/1), bioturbated SANDY SILTY CLAYSTONE.</p> <p>Minor Lithologies: Minor lithologies include medium- to fine-grained SANDSTONE, SILTY CLAYSTONE, and SILTY SANDSTONE.</p> <p>General Description: Near vertical bedding and faulting obscure sedimentary relationships. There is no distinct sense of younging in the core. The few sedimentary contacts are bioturbated. Rind burrows are common.</p>	
1.0									S
									S
									S
		2		[Structure: wavy lines]	[Disturb: vertical lines]				
		3		[Structure: wavy lines]	[Disturb: vertical lines]				
		4		[Structure: wavy lines]	[Disturb: vertical lines]				
		CC		[Structure: wavy lines]	[Disturb: vertical lines]				



SITE 863 HOLE B CORE 23R

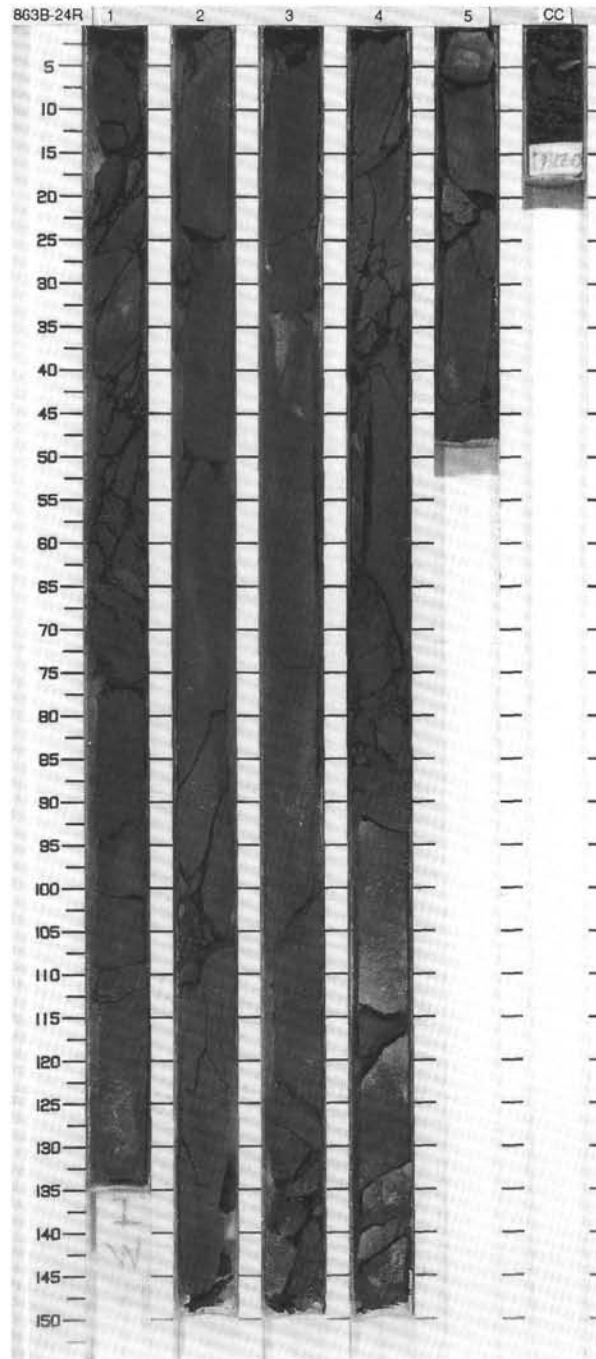
CORED 492.4 - 502.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	⋈		S	5Y 3/2 to 5Y 2/1	<p>SANDY SILTY CLAYSTONE WITH NANNOFOSSILS</p> <p>Major Lithology: The core predominantly consists of olive gray (5Y 3/2) to olive black (5Y 2/1) bioturbated SANDY SILTY CLAYSTONE WITH NANNOFOSSILS.</p> <p>Minor Lithologies: Interbeds of bioturbated SILTY CLAYSTONE WITH NANNOFOSSILS, SANDSTONE, and SILTY SANDSTONE occur throughout the core. The SANDSTONE is medium to fine grained, and locally cemented by carbonate.</p> <p>General Description: Bedding orientations shift from near vertical to horizontal to near vertical across a zone of intense faulting in Sections 2 and 3. Younging directions change accordingly from down-core in Section 1 (overturned; fining-downward!), to up-core in Section 2 and 3, then to the left in Section 4. The faults show primarily reverse offsets, and are in some places cross-cut by normal faults. Some sedimentary contacts in Sections 2 and 3 have been modified by faulting. The fining-upward sequences often begin at a bioturbated contact, overlain by medium- to fine-grained SANDSTONE which grades up into increasingly bioturbated SANDY SILTY CLAYSTONE WITH NANNOFOSSILS. Large rind burrows occur in the upper parts of these sequences. In Sections 4 and 5 bedding is steeply dipping and lithological contacts occur along 40- to 50-cm intervals of the core.</p>
1.0		2		⋈		S		
		3		⋈		S		
		4		⋈		S		
		5		⋈		S		
		CC		X	M			



SITE 863 HOLE B CORE 24R CORED 502.0 - 511.7 mbsf

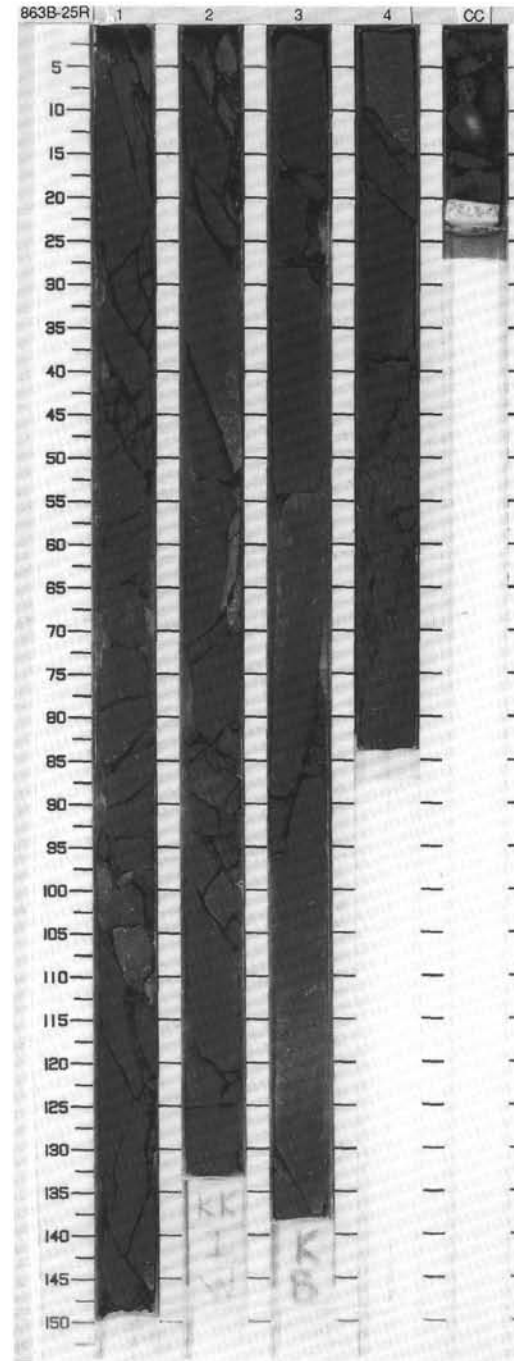
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	~ ~ ~ ~		I S S	5Y 2/1 to 5Y 3/2	<p>SANDSTONE and SANDY SILTY CLAYSTONE</p> <p>Major Lithologies: The entire core consists of alternating beds of olive black (5Y 2/1) fine- to very fine-grained SANDSTONE and olive gray (5Y 3/2), bioturbated SANDY SILTY CLAYSTONE. The SANDSTONE is locally carbonate-cemented.</p> <p>General Description: Bedding is near vertical and highly oblique to the core face. One to two SANDSTONE beds occur along the length of Sections 2, 3, and 4; these beds have bioturbated contacts. Rind burrows are present in bioturbated intervals. Sections 1, 0-70 cm, and 5 are complexly faulted/sheared, with numerous dark seams. The sense of displacement along most faults is indeterminant. Younging directions can only be determined in Section 2, but these vary due to core rotation (younging to the left: 0-25 cm and 104-145; younging to the right: 50-105 cm).</p>
1.0		2		~ ~ ~				
		3		~ ~ ~				
		4		~ ~ ~				
		5		~ ~ ~				
		CC				M		



SITE 863 HOLE B CORE 25R

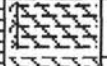


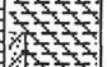
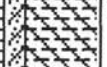
CORED 511.7 - 521.4 mbsf

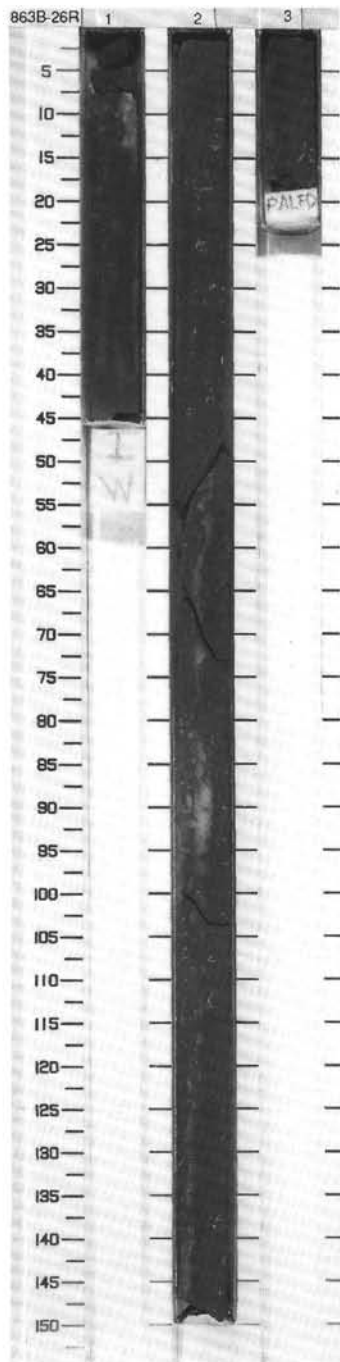
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	} ~ } ~ }	/ / /	S	5Y 3/2	CLAYEY SILTSTONE WITH NANNOFOSSILS and SILTY SANDSTONE WITH NANNOFOSSILS Major Lithologies: The core consists of olive gray (5Y 3/2) CLAYEY SILTSTONE WITH NANNOFOSSILS and SILTY SANDSTONE WITH NANNOFOSSILS. Nannofossils constitute 15%-30% of the clayey siltstone and 3%-15% of the silty sandstone. Minor Lithology: Spots of sponge spicules are disseminated throughout the core. Bioturbation is moderate to intense; some burrows are filled with light gray SANDSTONE containing pyrite. General Description: Although primary bedding contacts are preserved, at least two sets of deformation bands are present, with both normal and reverse separations. A subvertical, scoured contact is observed between CLAYEY SILTSTONE and SILTY SANDSTONE in Section 1, 50-75 cm; Section 2, 23-52 cm and 100-132 cm; Section 3, 0-37 cm; Section 4, 34-41 cm and 55-85 cm.
1.0								
		3		~ } ~ }	S W			
						4		
		CC			X	M		



SITE 863 HOLE B CORE 26R

CORED 521.4 - 530.6 mbsf

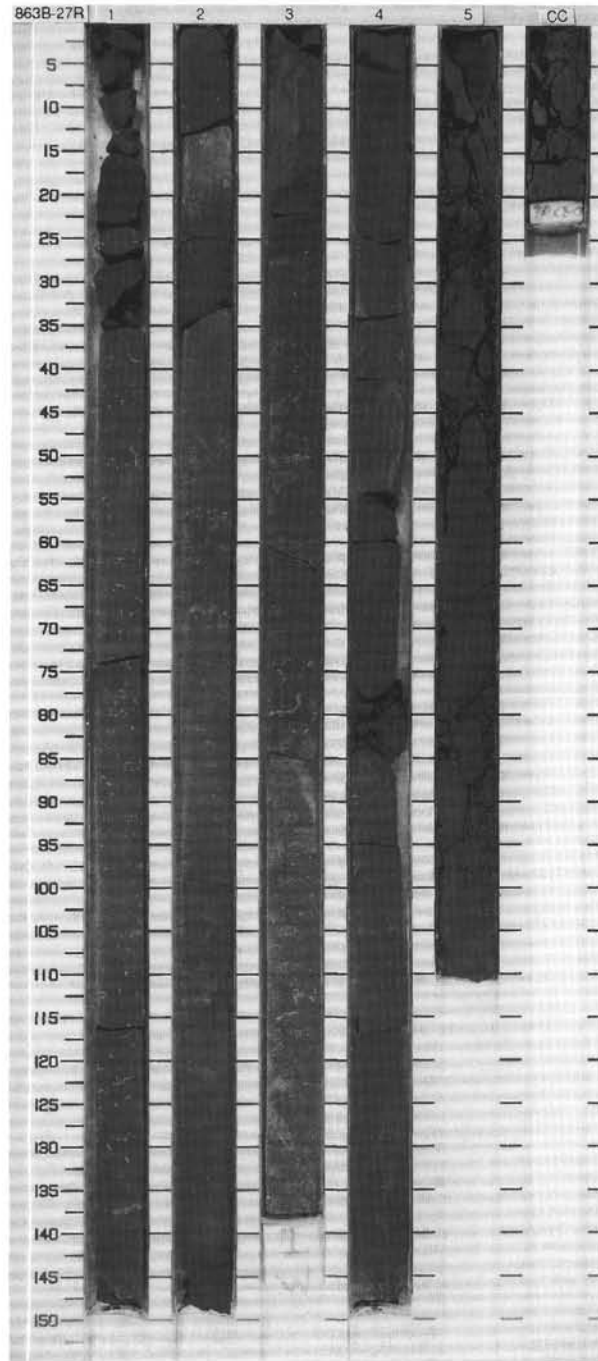
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene			I	5Y 3/2	CLAYEY SILTSTONE and SANDY SILTSTONE
1.0		2						
		3						
						M		<p>Major Lithologies: The core consists of olive gray (5Y 3/2) CLAYEY SILTSTONE and SANDY SILTSTONE. The contact between CLAYEY SILTSTONE and SANDY SILTSTONE is scoured.</p> <p>General Description: Sponge spicule concentrations are disseminated throughout the core (diameter to 2.5 cm, length to 3.5 cm). The rock is moderately to heavy bioturbated. Section 1, 3-18 cm contains a large burrow filled with white calcareous sand, and a vein (0.2 mm) filled with calcite (?). In Section 2, 55-150 cm, a concentrated zone of intense burrowing dips 85 degrees relative to the core walls; it is not clear whether or not this feature represents bedding. This core is similar to Core 25R.</p>



SITE 863 HOLE B CORE 27R

CORED 530.6 - 540.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Dotted pattern]	1	upper Pleistocene	~		S	5Y 3/2	<p>SANDY SILTSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTSTONE and SILTY SANDSTONE. The SANDY SILTSTONE contains nanofossils in places up to 40%. In Section 3, 22-25 cm a bed of SILTY SANDSTONE has a scoured base. In Section 4, 113-127 cm a vertical bed of SILTY SANDSTONE has cross bedded structure. In Sections 4 and 5 the SILTY SANDSTONE is in contact with SANDY SILTSTONE along a complexly burrowed, near-vertical zone.</p> <p>General Description: The sediment is slightly to intensely bioturbated and contains spots of sponge spicules. Undulating near-vertical bedding in Section 4, 110-150 cm suggests that the rocks are folded. Dips within core reference frame vary from 21 to 84 degrees. Deformation bands and small faults of indeterminate separation occur in Sections 1, 132-138 cm; 2, 20-25 cm and 105-117 cm; and 3, 15-20 cm.</p>
1.0								
1.5								
2.0								
2.5								
3.0	[Dotted pattern]	2	upper Pleistocene	~		S	5Y 3/2	
3.5								
4.0	[Dotted pattern]	3	upper Pleistocene	~		S	5Y 3/2	
4.5								
5.0	[Dotted pattern]	4	upper Pleistocene	~		I	5Y 3/2	
5.5								
6.0	[Dotted pattern]	5	upper Pleistocene	~		I	5Y 3/2	
6.5								
7.0	[CC]							



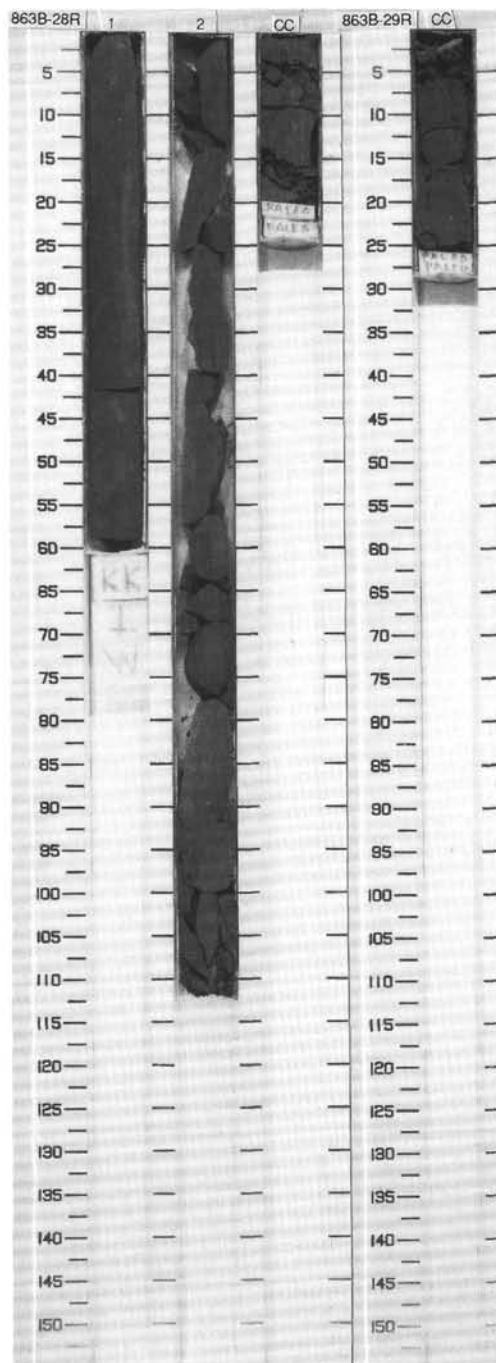
SITE 863 HOLE B CORE 28R CORED 540.2 - 549.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Diagonal hatching pattern]	1	upper Pleistocene	[Wavy line pattern]	[Vertical line pattern]	I W S S	5Y 3/2	<p>SANDY SILTSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTSTONE and SILTY SANDSTONE.</p> <p>General Description: Bioturbation varies from slight to moderate. Sponge spicule concentrations occur throughout the core. The core catcher is drilling breccia. In Sections 1 and 2 a scoured contact between SANDY SILTSTONE and SILTY SANDSTONE is preserved in separate broken pieces of rock; dips vary from 85 degrees to vertical within core reference frame.</p>
1.0		2						
		CC						

SITE 863 HOLE B CORE 29R CORED 549.7 - 559.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1	[Diagonal hatching pattern]	CC	upper Pleistocene	[Vertical line pattern]	[X pattern]	M	5Y 3/2	<p>SANDY SILTSTONE and SILTY SANDSTONE</p> <p>Major Lithologies: This core catcher consists of olive gray (5Y 3/2) SANDY SILTSTONE and SILTY SANDSTONE.</p> <p>General Description: The core is mostly drilling breccia with drilling biscuits. An isolated fragment of SILTY SANDSTONE occurs at 10-15 cm.</p>
0.2								

Note expanded vertical scale.



SITE 863 HOLE B CORE 30R

CORED 559.4 - 569.1 mbsf

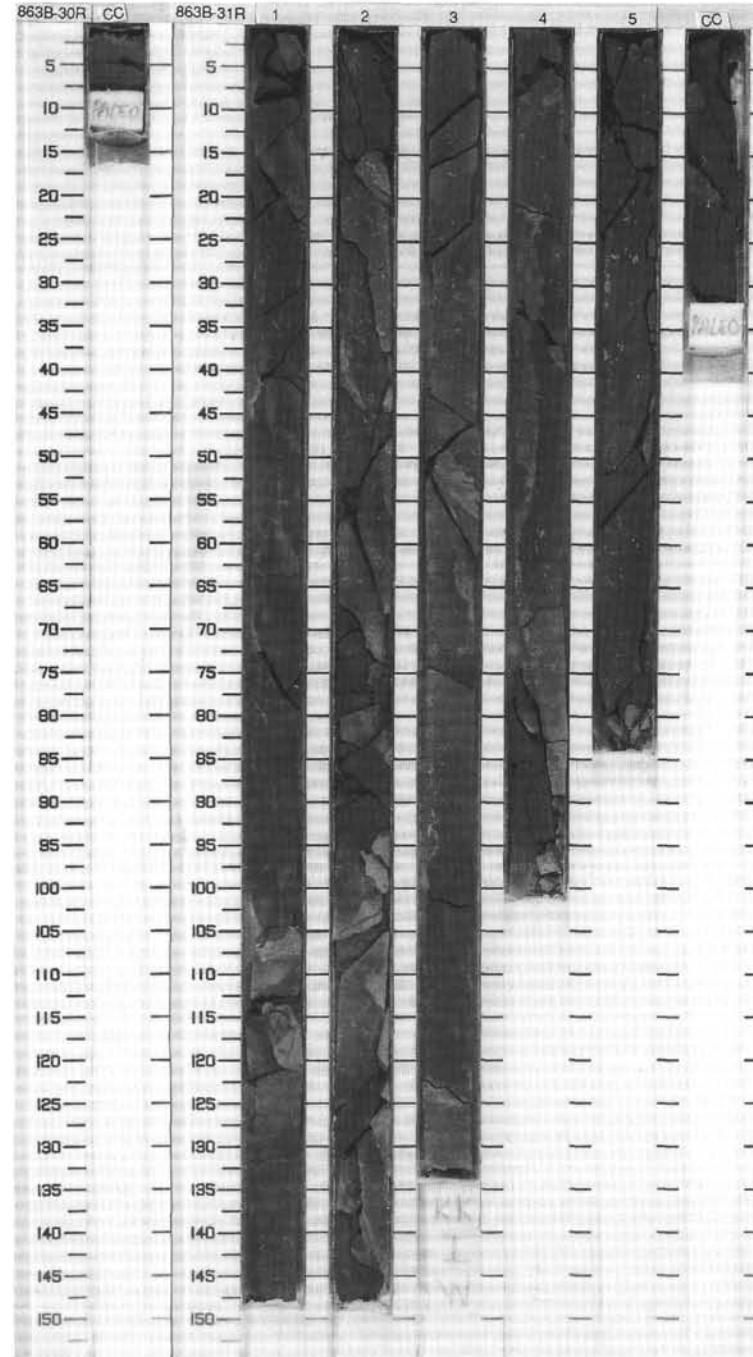
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.1		CC			XXXX	M	5Y 3/2	CLAYEY SILTSTONE Major Lithology: This core catcher consists of olive gray (5Y 3/2) CLAYEY SILTSTONE drilling breccia.
↑ upper Pleistocene								

Note expanded vertical scale.

SITE 863 HOLE B CORE 31R

CORED 569.1 - 578.8 mbsf

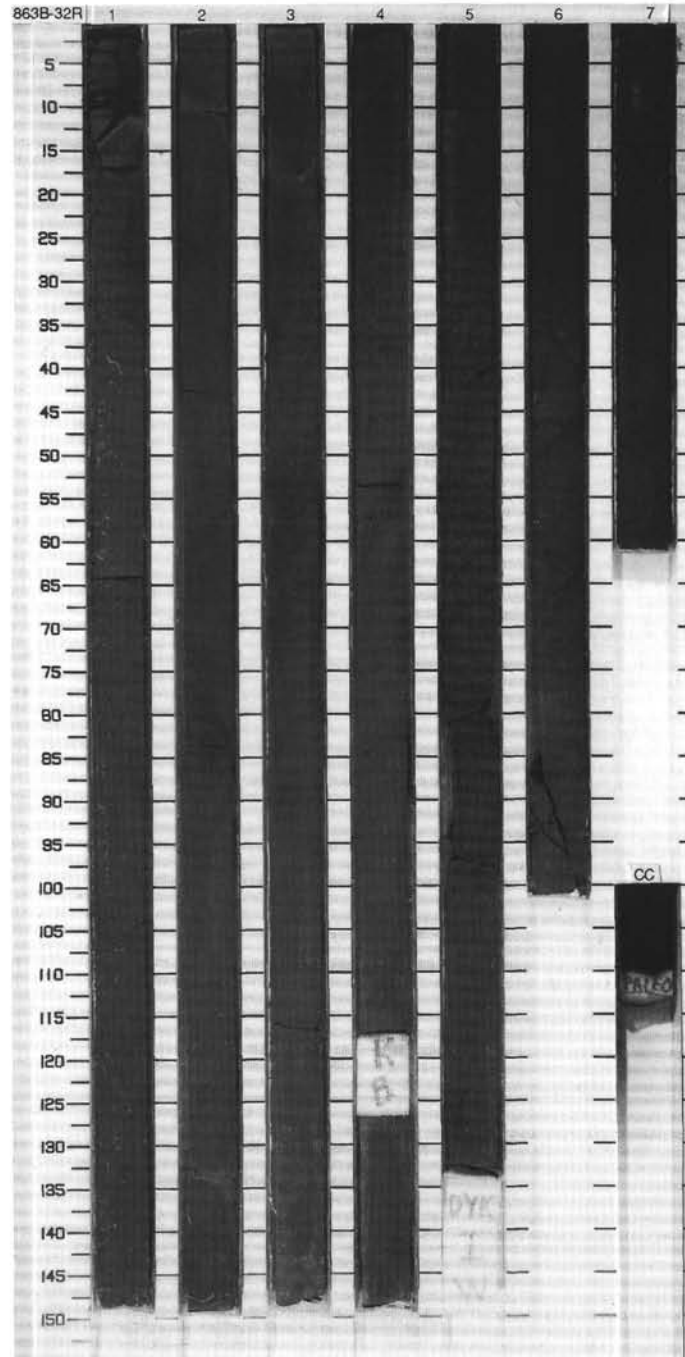
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1 2 3 4 5 CC	upper Pleistocene			I W S S M	5Y 3/2	SANDY SILTSTONE, CLAYEY SILTSTONE and SANDSTONE Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTSTONE, CLAYEY SILTSTONE and SANDSTONE. General Description: In Section 1, 105-107 cm, an open cavity occurs, lined with crystals (sizes 0.5 to 1 mm) of quartz and calcite. The rock is slightly drilling fractured. The entire core is slightly to intensely bioturbated. Sediment is mainly massive, but in Sections 3, 100-130 cm, and 4, 20-65 cm, 78-95 cm, scoured contacts between SANDSTONE and SANDY SILTSTONE are subvertically oriented. In Section 3, 54-65 cm, there are steeply inclined laminae. The core is highly deformed down to Section 4, 90 cm, being crosscut by multiple sets of deformation bands with both reverse and normal separations and faults with both normal and reverse separations. Broad (to 8 mm) shear zones of indeterminate sense occur in Section 1, 29-31 cm, Section 3, 51-63 cm, and Section 4, 70-90 cm. Below the fault zone, Sections 4, 5, and CC are massive and relatively structureless.



SITE 863 HOLE B CORE 32R

CORED 578.8 - 588.4 mbsf

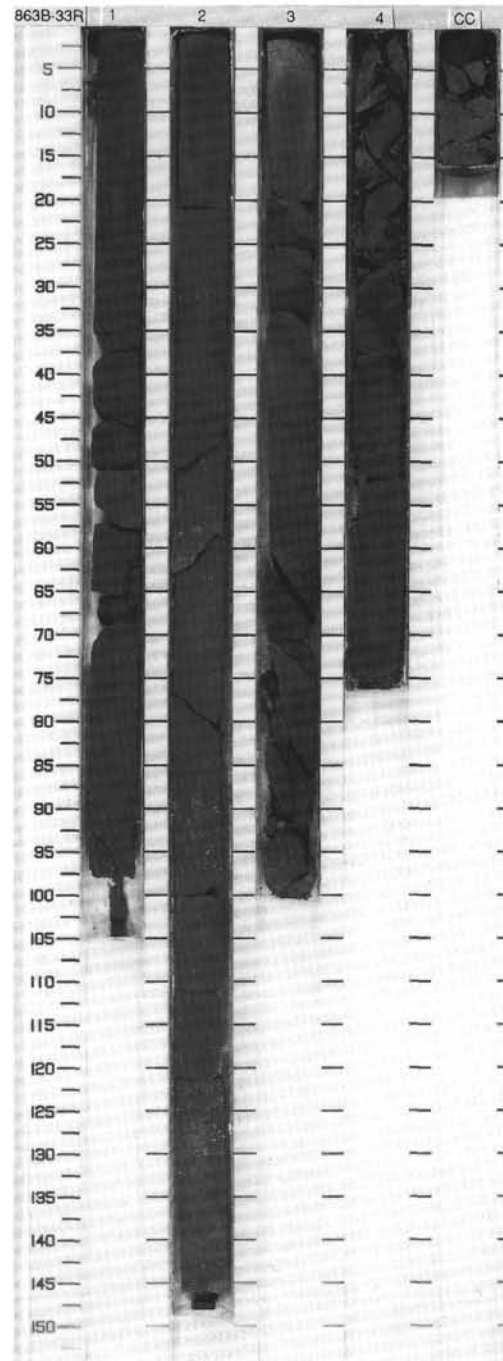
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1		}}		S		SANDY SILTY CLAYSTONE TO CLAYEY SANDSTONE and SANDSTONE
1.0		2		}}		S		Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE TO CLAYEY SANDSTONE interbedded with five beds of very fine- to fine-grained SANDSTONE. Bedding is near vertical and sandstone beds are 2-5 cm in thickness. Fine-grained intervals are approximately 20 cm in thickness.
		3		}}			5Y 3/2	General Description: The lower parts of the sandstone beds are often scoured with load casts, and are massive to slightly graded. In Section 5 one sandstone bed shows wavy laminations near its base and an overlying 1-2 cm interval of current ripples. These sandstones then generally grade to clayey sandstones and sandy silty claystones. Younging directions seen in these sandstone-beds are towards the left of the archive-half and because of near-vertical bedding, lower contacts range in length from 45 cm to 90 cm. Sandy silty claystone is slightly to moderately bioturbated (e.g. rind burrows). Some burrows are filled with sponge spicules.
		4	upper Pleistocene	}}				
		5		↑ F }}				
		6		}}				
		7		}}			5Y 3/2	
	CC					M		



SITE 863 HOLE B CORE 33R

CORED 588.4 - 598.1 mbsf

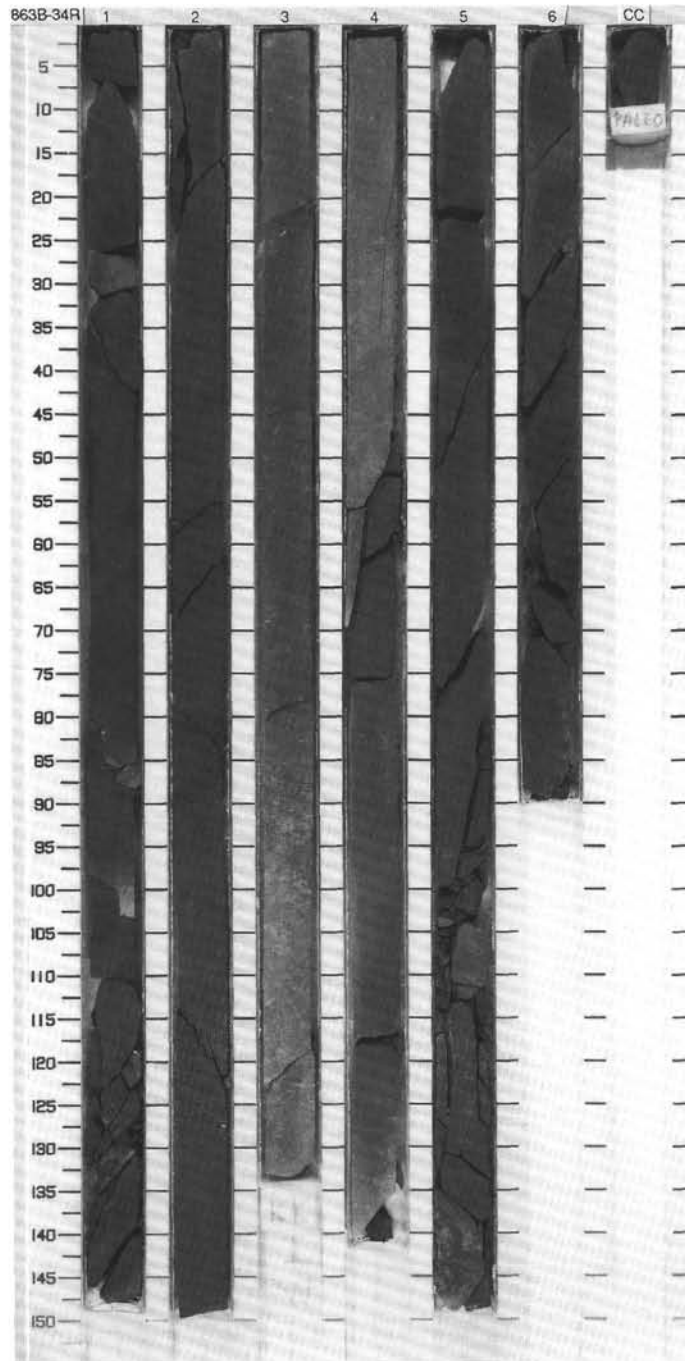
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Stippled pattern]	1	upper Pleistocene	}}		I S	5Y 3/2 to 5Y 2/1	SANDY SILTY CLAYSTONE and SANDSTONE Major Lithologies: The core consists of olive gray (5Y 3/2) to olive black (5Y 2/1) SANDY SILTY CLAYSTONE and SANDSTONE. General Description: Because bedding is near-vertical and the core is cut at a highly oblique angle to bedding, contacts are irregular and distorted, especially in Sections 1 and 2. A single bioturbated contact between SANDY SILTY CLAYSTONE and SANDSTONE may be repeated throughout much of the core, and so, only representative contacts are indicated. The core is cross-cut by normal faults.
1.0	[Stippled pattern]	2		}}				
	[Stippled pattern]	3		}}				
	[Stippled pattern]	4		}}				
	[Stippled pattern]	CC			V	M		



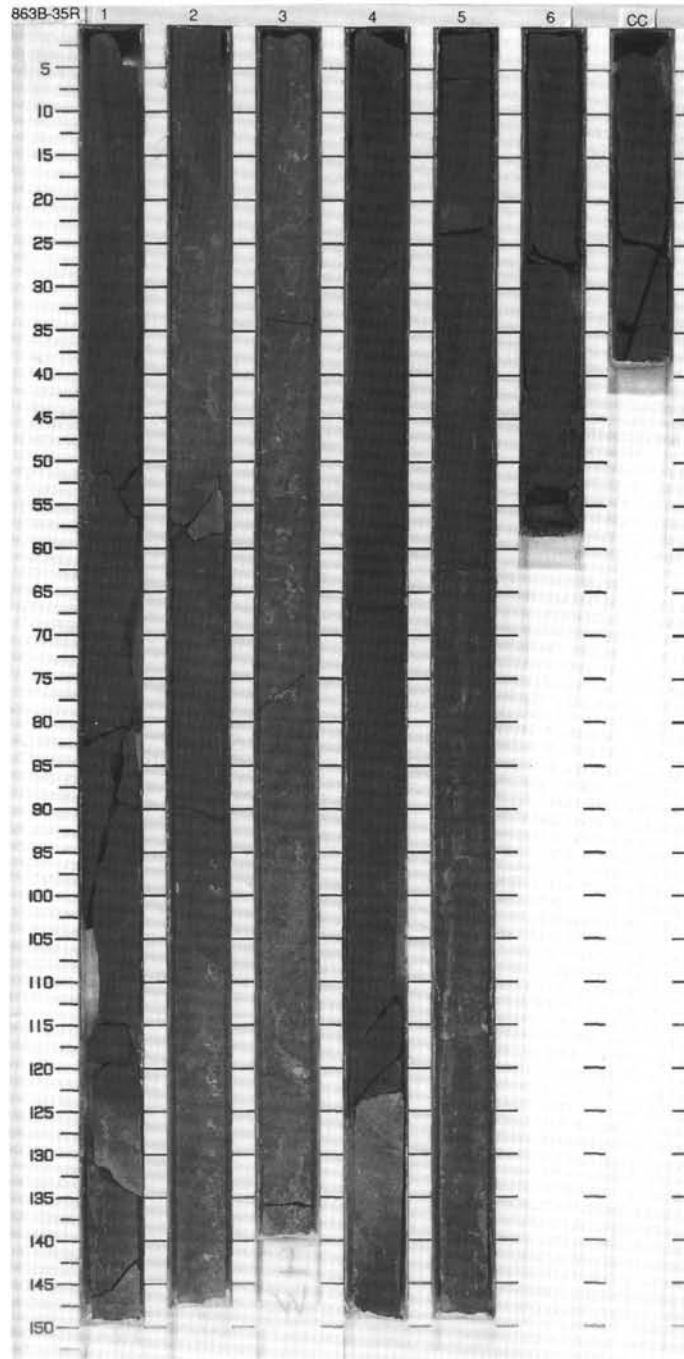
SITE 863 HOLE B CORE 34R

CORED 598.1 - 607.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1		~				SANDY SILTY CLAYSTONE
1.0		2		~		S		Major Lithology: This core consists predominantly of olive gray (5Y 3/2) moderately to heavily bioturbated SANDY SILTY CLAYSTONE.
		3		~		I W	5Y 3/2	Minor Lithology: Olive gray (5Y 3/2) fine-grained SANDSTONE in Section 1, 0-45 cm has a scoured lower contact and slight grading towards the right-hand side of the archive-half.
		4	upper Pleistocene	~				General Description: Bedding is near vertical. Sandstone interval in Section 5, 60-100 cm shows irregular bedding due to heavy bioturbation. Bioturbated portions show some rind burrows. Some burrows in Section 1 are filled with sponge spicules. Fractures in Section 1 are filled with calcite.
		5		~		S		
		6		~				
		CC				M		



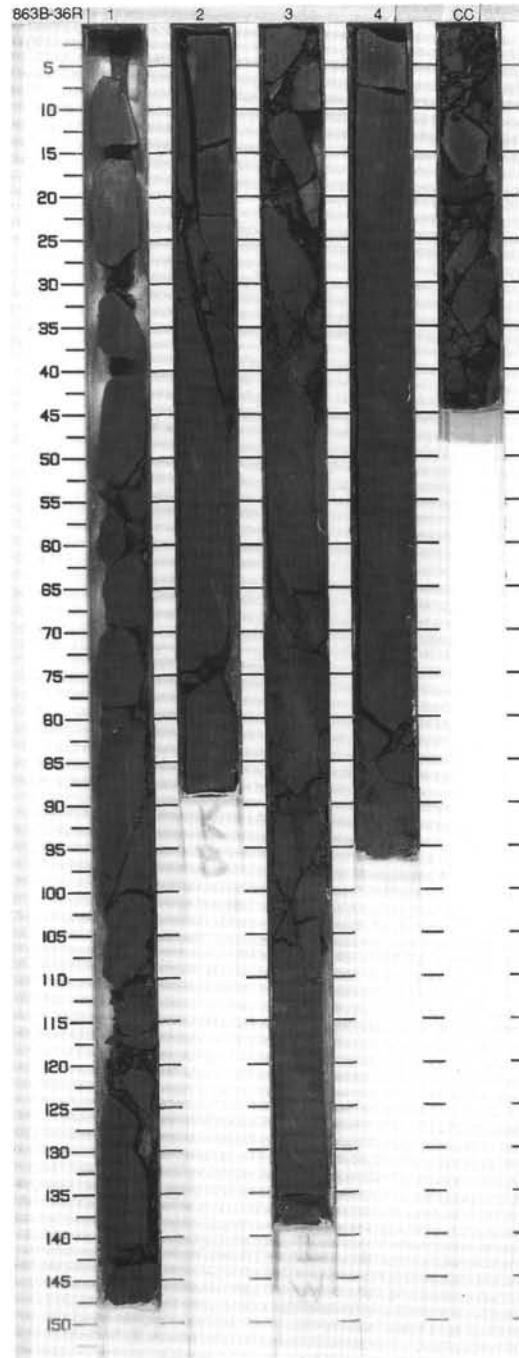
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Stippled pattern]	1		Ⓢ		S		SANDY SILTY CLAYSTONE
1.0	[Stippled pattern]	2		Ⓢ		S		Major Lithology: The core predominantly consists of bioturbated, olive black (5Y 2/1) SANDY SILTY CLAYSTONE. General Description: Only one, near-vertical, bioturbated contact is present in Section 1, 0-45 cm. Grading in the SILTY SANDSTONE above this contact indicates a younging direction to the right. Because bedding is near-vertical, the majority of this core may represent one thin bed of SANDY SILTY CLAYSTONE. Up to 10% of this bed is comprised of distinct, better-sorted, sand-rich, carbonate-cemented burrows.
	[Stippled pattern]	3	upper Pleistocene	Ⓢ		I W		
	[Stippled pattern]	4		Ⓢ			5Y 2/1	
	[Stippled pattern]	5		Ⓢ				
	[Stippled pattern]	6		Ⓢ				
	[Stippled pattern]	CC		Ⓢ				



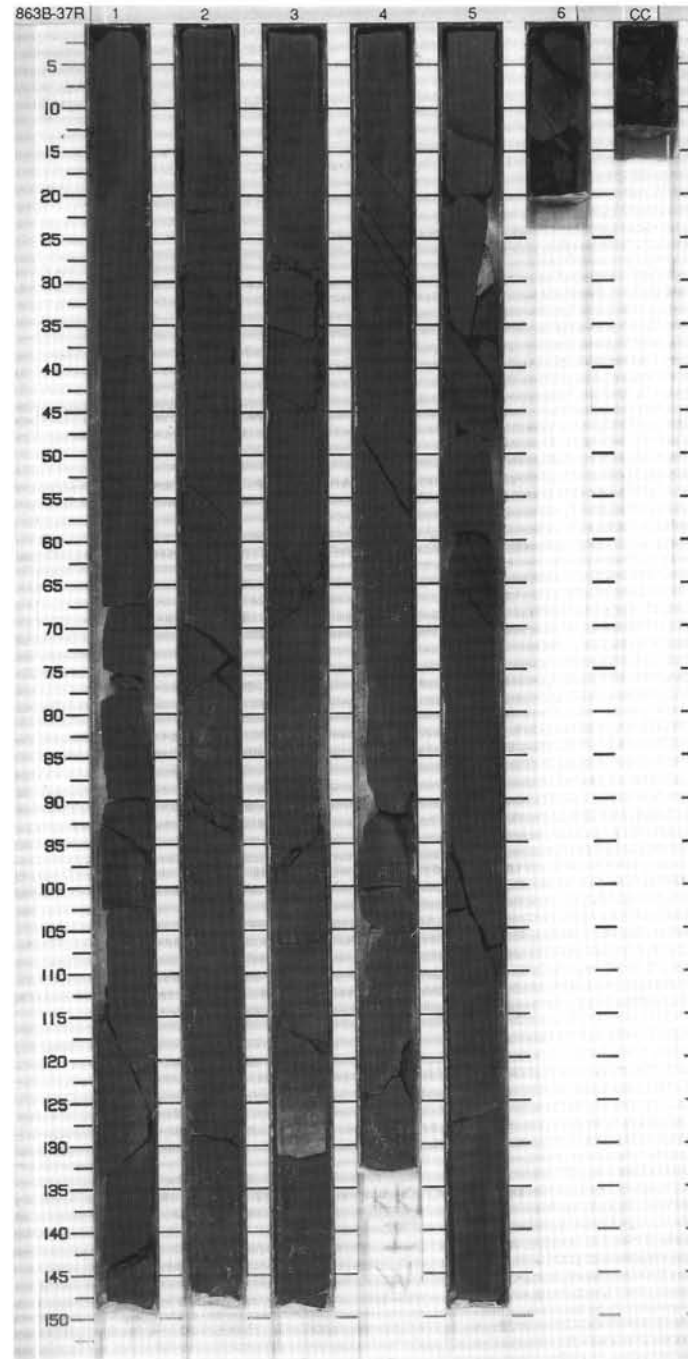
SITE 863 HOLE B CORE 36R

CORED 617.4 - 627.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	~	+	S	5Y 3/2 to 5Y 2/1	<p>SANDY SILTY CLAYSTONE</p> <p>Major Lithology: The core predominantly consists of olive gray (5Y 3/2) to olive black (5Y 2/1), bioturbated SANDY SILTY CLAYSTONE. Burrow-fills within SANDY SILTY CLAYSTONE are commonly better sorted, sand-rich, and carbonate-cemented.</p> <p>Minor Lithology: Interbeds of medium- to fine-grained SANDSTONE occur in Sections 1 and 2. These are locally carbonate-cemented.</p> <p>General Description: Rind burrows are rare. Bedding is near-horizontal. Numerous faults with an indeterminant sense of displacement occur within Sections 1, 2, and 3. These faults often juxtapose SANDY SILTY CLAYSTONE and SANDSTONE beds, and obscure stratigraphic relationships. Fining-upward sequence in Section 1, 105-140 cm, indicates younging to the left.</p>
1.0								
1.5								
2.0								
2.5								
3.0								
3.5								
4.0								
4.5								
5.0								
5.5								
6.0								
6.5								
7.0								
7.5								



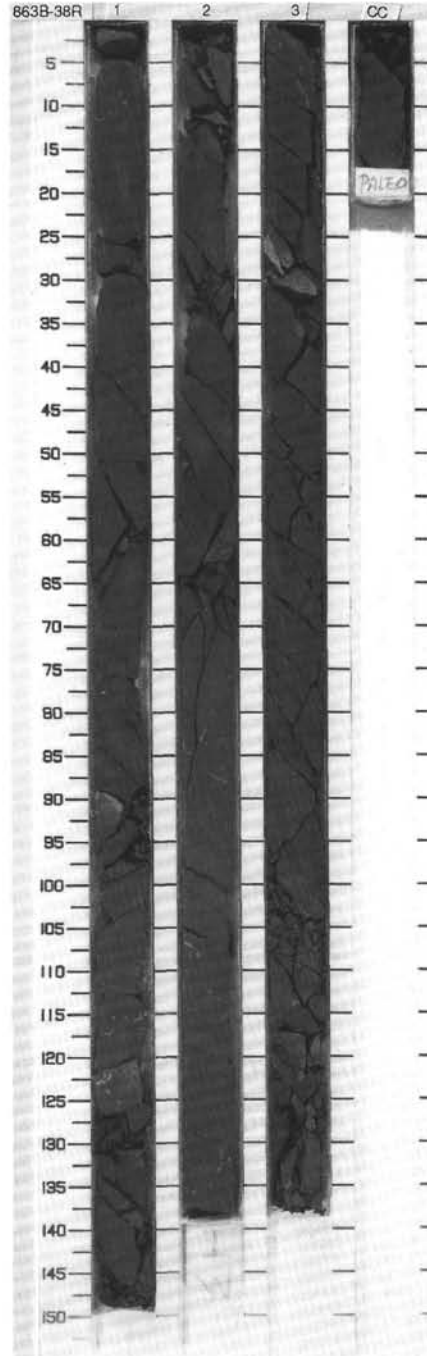
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S	5Y 3/2	<p>SANDY SILTY CLAYSTONE and SANDSTONE</p> <p>Major Lithologies: This core consists predominantly of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE interbedded with fine- to medium-grained SANDSTONE. Sandstone shows a scoured lower contact and is massive to cross-laminated and fining upward.</p> <p>General Description: Bedding is near-vertical. Small amount of pyrite occurs as fracture-fill in Section 2, 65-70 cm and as cement in sandy silty claystone in Section 2, 131-132 cm. Section 3, 120-121 cm shows a burrow filled with secondary pyrite. Sandy silty claystone is generally slightly to heavily bioturbated by burrowing. Fine-grained sandstone interbed in Section 1, 25-105 cm, is 2-3 cm thick. It is cut by several minor reverse faults and youngs towards the right-hand side of the archive half. The contacts of sandstones with claystone are irregular and disturbed by bioturbation. In Section 5, 75-145 cm, one thin sandstone interbed is totally disturbed due to burrowing. Overlying medium-grained sandstone is less disturbed.</p>
		2				S		
		3				S		
		4				S		
		5				S		
		6				M		



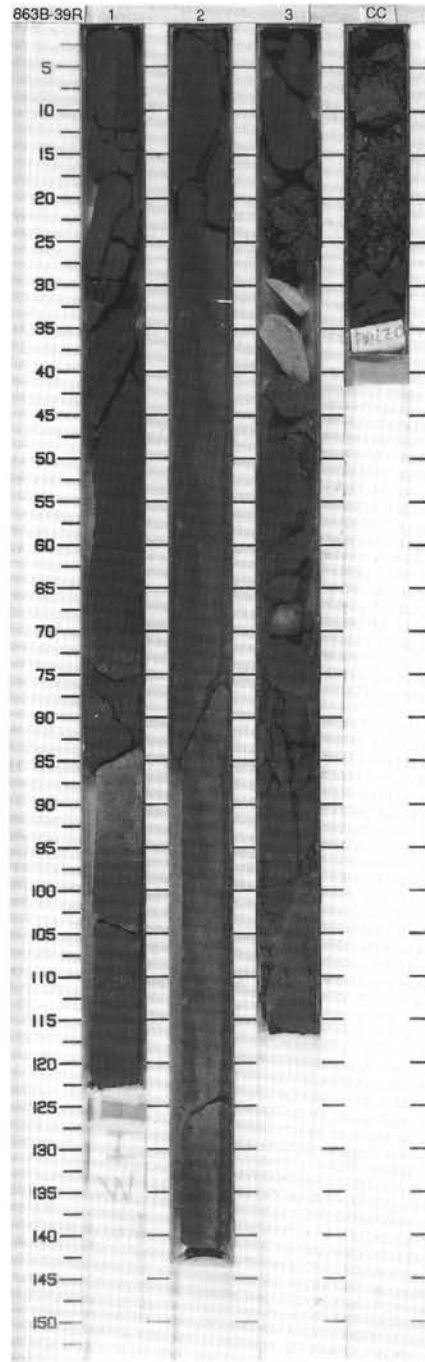
SITE 863 HOLE B CORE 38R

CORED 636.6 - 646.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S I	5Y 3/2	<p>SILTSTONE WITH NANNOFOSSILS and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE WITH NANNOFOSSILS, and SANDSTONE. Nannofossils constitute about 30% of the siltstone. Bioturbation is slight to heavy, producing mixed sand and silt. Many burrows are lined or filled with sandstone. Concentration of sponge spicules occur in all sections. Scoured contacts between SANDSTONE and SILTSTONE are observed in Section 1, 15-25 cm, and Section 2, 0-15 cm.</p> <p>General Description: Bedding is steeply inclined to vertical. Section 3, 36-46 cm has a small block of sandstone with a faulted base. Fracture surfaces in the drilling breccia are polished and coated with clay.</p>
		2						
		3						
		CC				M		



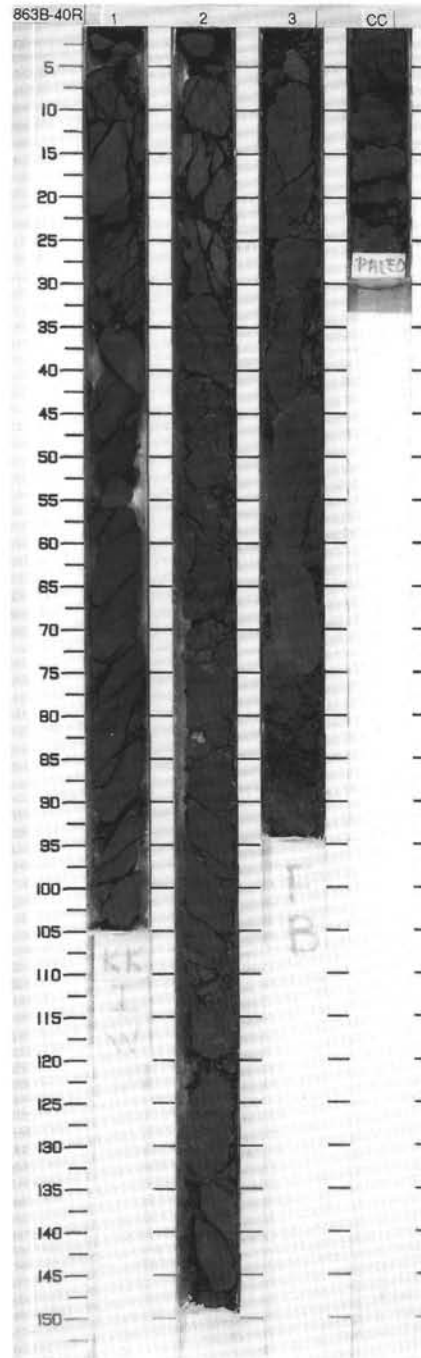
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S	5Y 3/2	<p>SANDY SILTSTONE WITH NANNOFOSSILS and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTSTONE WITH NANNOFOSSILS (nannofossils 15%) and SANDSTONE, slightly to heavily bioturbated. Section 2, 0-140 cm contains a single vertical bed of graded SANDSTONE to SANDY SILTSTONE. The lower sandstone contact is scoured with load casts and escape burrows. The upper contact exhibits flame structures.</p> <p>General Description: Concentrations of sponge spicules occur throughout the core. The vertical sandstone/siltstone contact in Section 1, 25-37 cm, is cut off along a normal fault; normal slip is indicated by stepped slickenlines on the fault plane.</p>
		2				I		
		3				S		
		CC				M		



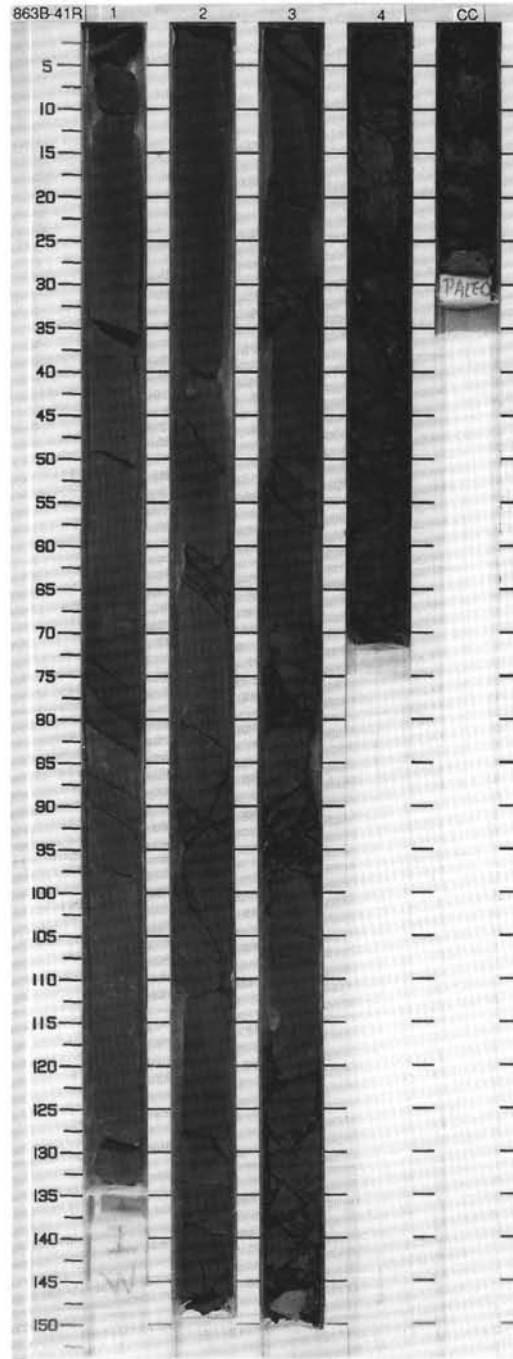
SITE 863 HOLE B CORE 40R

CORED 655.9 - 665.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Diagonal hatching pattern]	1	upper Pleistocene	[Wavy lines]	[Vertical lines]	S	5Y 3/2	<p>SILTSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE and SANDSTONE, very similar to Core 141-863B-39R. SILTSTONE includes from 5% to 15% nannofossils.</p> <p>General Description: Bioturbation ranges from slight to intense, and has produced mixing of sand and silt sized grains. Sponges are disseminated throughout the core. The core is highly fractured: fracture surfaces are polished and have slickenlines, but this could be a drilling artifact. Bedding is steep to vertical. A vertical, scoured contact of SILTSTONE and SANDSTONE occurs in Section 2, 0-30 cm.</p>
1.0		I W						
		S						
		2						
		3						
		CC				W		
						M		



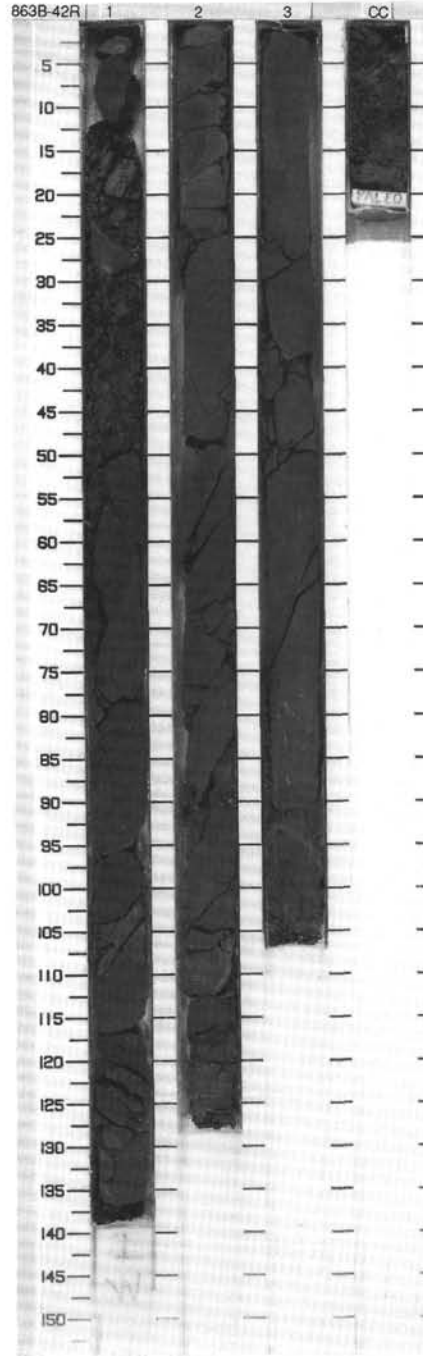
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S	5Y 3/2	<p>SILTSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE and SANDSTONE. The SILTSTONE has up to 20% nannofossils. The SANDSTONE typically shows graded bedding, scoured bases, flame structures, fine laminations and cross bedding. Section 3, 80-130 cm has a Bouma sequence preserved in separate pieces of broken core.</p> <p>General Description: Concentrations of sponge spicules occur throughout the core, and the rock is slightly bioturbated. Bedding is vertical to slightly overturned. Thin irregular veins filled with white calcareous material occur in massive siltstone at Section 1, 30-45 cm. At Section 2, 100-120 cm white calcareous veins in sandstone are localized along an early fault zone; later subhorizontal faults at 120-126 cm are filled with mud. Possible mud-filled dewatering veins occur in the sandstone between the two fault zones. A single isolated deformation band occurs at Section 1, 58-59 cm. In Section 1, 74-94 cm five parallel fractures exhibit polished surfaces with slickenlines; steps on these surfaces indicate normal oblique slip.</p>
		2				I		
		3				S		
		4				M		
		CC						



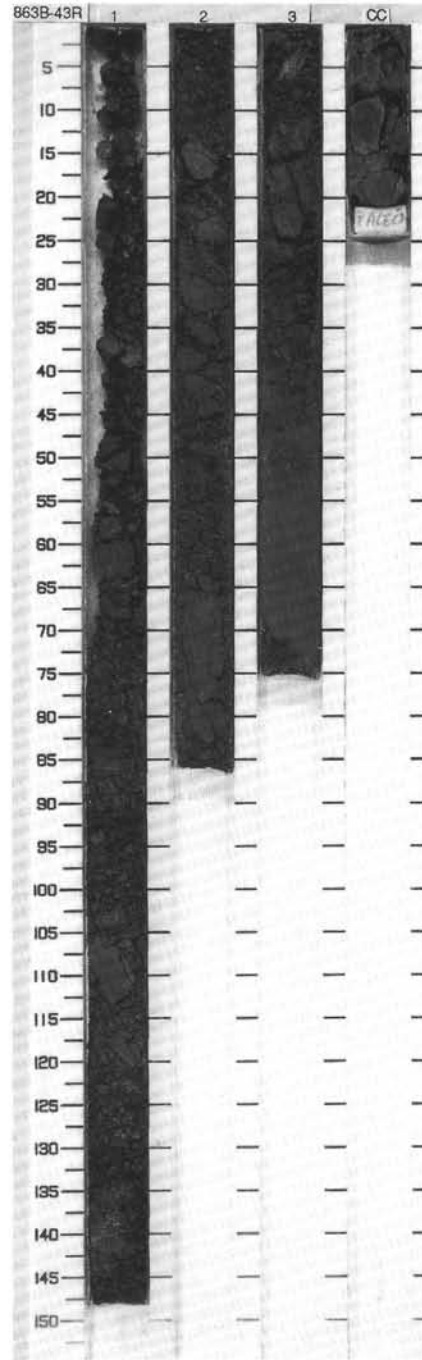
SITE 863 HOLE B CORE 42R

CORED 675.2 - 684.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	Ca	XX	S S 1	5Y 3/2	<p>SANDY SILTY CLAYSTONE TO SILTY SANDSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SANDY SILTY CLAYSTONE TO SILTY SANDSTONE moderately interbedded with fine-grained SANDSTONE. Sandstone interbeds show scoured lower contacts.</p> <p>General Description: Bedding is steeply inclined and overturned, as revealed by the inverted orientation of originally fining-upwards trends in Section 1, 95-96 cm and 115-116 cm. Some disseminated calcite with slight fluorescence is present in Section 1, 25-27 cm. Pyrite-filled burrows occur in Section 1, 134-135 cm. Small fractures in Section 3, 85-92 cm are filled by calcite.</p>
1.0		2						
1.5		3						
	CC				XX	M		



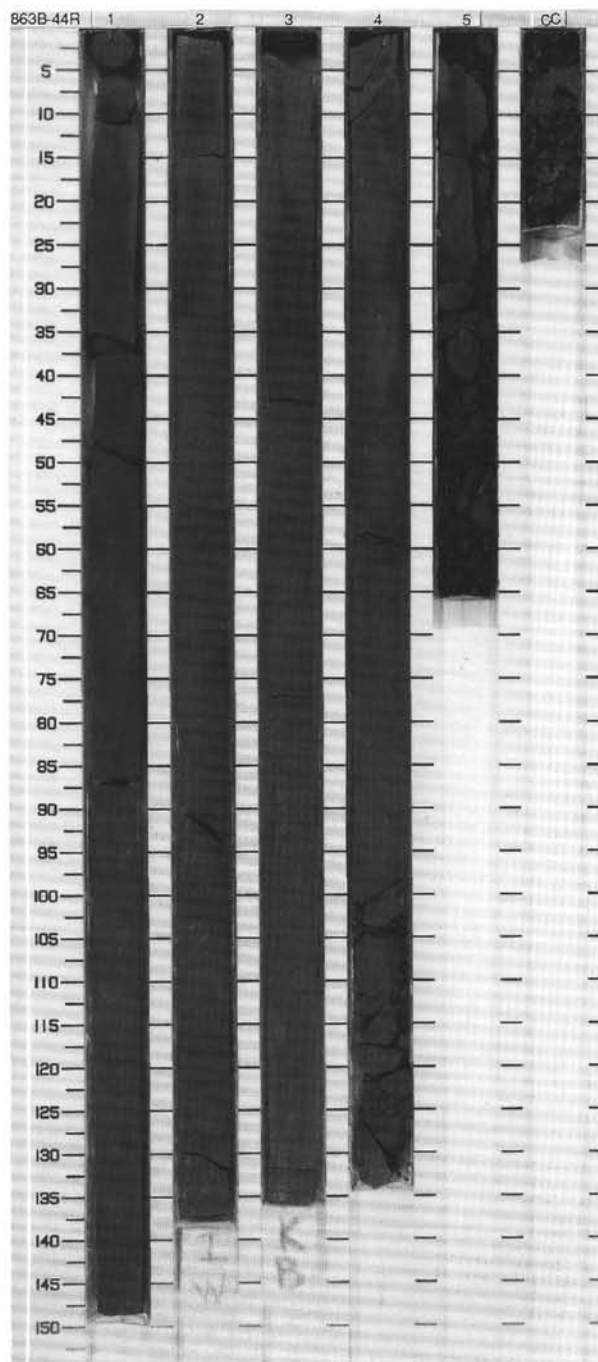
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene	N	XXXX	S	5Y 2/1	<p>SILTY CLAYSTONE TO CLAYEY SILTSTONE</p> <p>Major Lithology: The core consists predominantly of olive black (5Y 2/1) SILTY CLAYSTONE TO CLAYEY SILTSTONE.</p> <p>Minor Lithologies: Minor lithologies include SANDSTONE and SANDY SILTY CLAYSTONE. Both SILTY CLAYSTONE TO CLAYEY SILTSTONE and SANDY SILTY CLAYSTONE contain around 8% nannofossils.</p> <p>General Description: The core has been intensely sheared and brecciated; this deformation has severely obscured sedimentary structures. Younging directions are indeterminant. Locally, SANDSTONE beds are near-vertical, and are severely disjointed and offset by fracture systems. These beds exhibit diagenetic zoning, in that they are partially cemented by carbonate (lighter gray inner zone) and zeolite (dark outer green zone). Drilling deformation is a function of degree of structural deformation.</p>
1.0		2			XXXXXX	S S		
		3			VVVV	I W		
		CC			VVVV	S M		



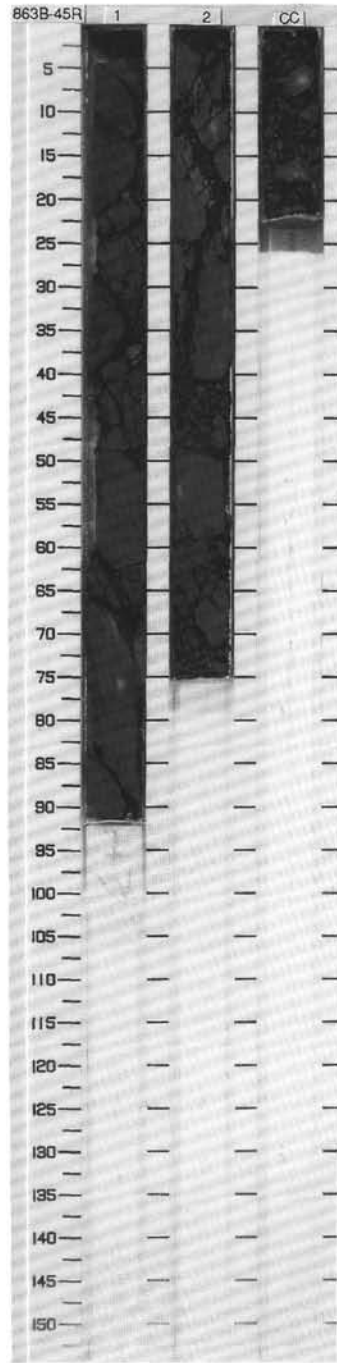
SITE 863 HOLE B CORE 44R

CORED 694.5 - 704.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1	upper Pleistocene			S	5Y 3/2 To 5GY 4/1	<p>SANDY SILTY CLAYSTONE TO CLAYEY SANDSTONE and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) slightly bioturbated SANDY SILTY CLAYSTONE TO CLAYEY SANDSTONE and dark greenish gray (5GY 4/1) SANDSTONE. Sandstone is massive to cross-laminated.</p> <p>General Description: The core shows near vertical bedding. Lower parts of the sandstones have disseminated carbonate as cement in many places above the scoured contacts; Section 1, 110-113 cm, 120-126 cm, and Section 3, 110-112 cm, 120-122 cm, 129-132 cm. Small pyrite concentrations occur in Section 2, 25-26 cm, 68-69 cm and 134-135 cm. Some sponge spicules concretions are present in Section 4. Younging directions are towards right-hand side of the archive-half, except in Section 4 where younging is towards right due to rotation of this part of the core during the drilling process. In Section 3 the vertical sandstone bed has a relatively deeply scoured lower contact, massive to crude bedding and small scale trough cross-bedding on its right-hand side. At 40 cm the horizontal contact against fine-grained sediments is a possible scour- or channel-wall, now associated with some faulting.</p>
		2				I		
		3				S S		
		4				W		
		5				M		
		CC						

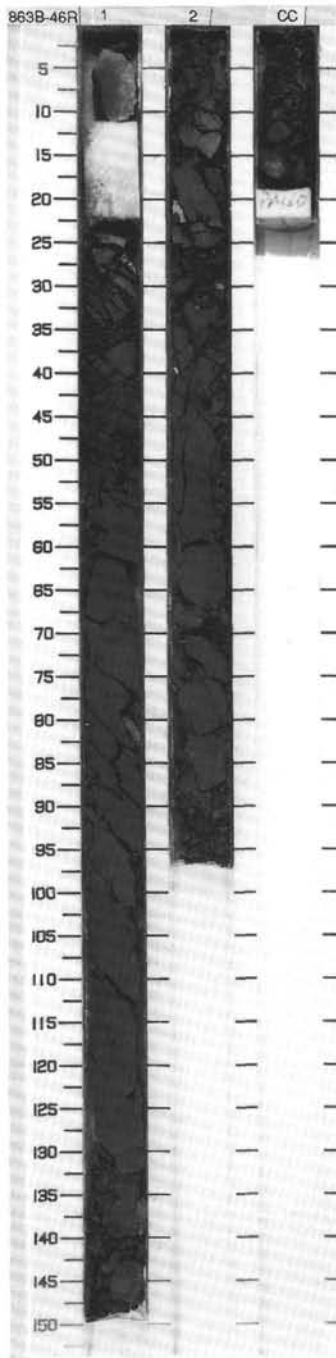


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Pattern]	1	upper Pleistocene	[Symbol]	[Symbol]	S	5Y 3/2	<p>SANDY SILTY CLAYSTONE, SANDSTONE and SILTY CLAYSTONE</p> <p>Major Lithologies: The core predominantly consists of three interbedded lithologies: olive gray (5Y 3/2) SANDY SILTY CLAYSTONE, SANDSTONE and SILTY CLAYSTONE.</p> <p>General Description: Core is somewhat fragmented, and cross-cut by faults with indeterminant sense of displacement. Bedding is near vertical, and cannot be reliably traced for more than 50 cm along the core. Beds young to the left. Pyrite concretions are primarily associated with carbonate-cemented sandstones at depositional contacts.</p>
1.0	[Pattern]	2		[Symbol]	[Symbol]	S		
	[Pattern]	CC	[Symbol]	[Symbol]	S			
	[Pattern]		[Symbol]	[Symbol]	M			

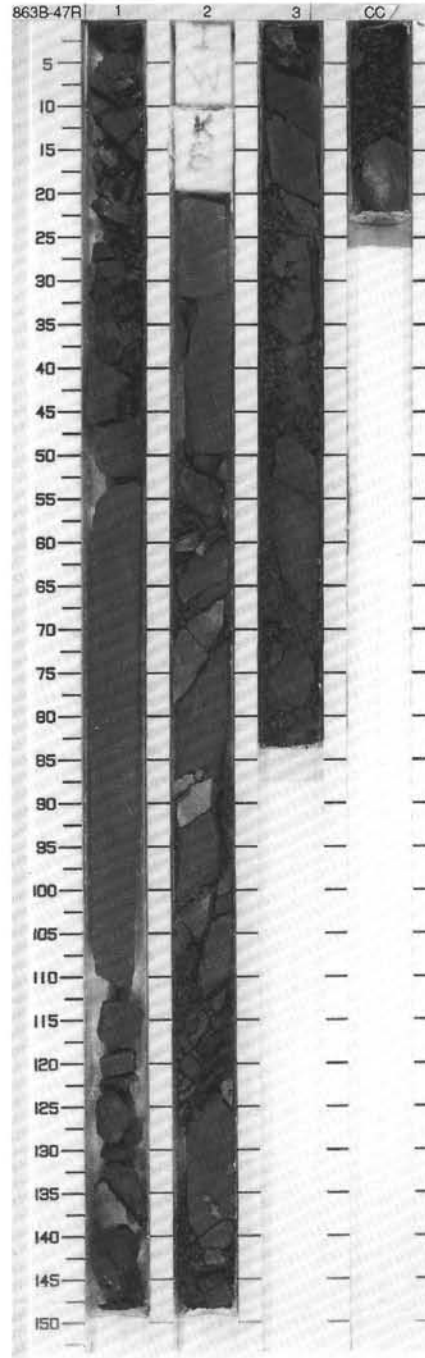


SITE 863 HOLE B CORE 46R CORED 706.8 - 713.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5 1.0		1 2 CC	upper Pleistocene	~ ⊙ ~ F ~ F	XX - - - V - - - X	I S M	5Y 3/2	<p>SILTY CLAYSTONE WITH NANNOFOSSILS and SANDSTONE</p> <p>Major Lithologies: The core consists predominantly of olive gray (5Y 3/2) slightly bioturbated SILTY CLAYSTONE WITH NANNOFOSSILS.</p> <p>Minor Lithologies: Ripple-laminated SILTSTONE to fine-grained SANDSTONE occur in the right-hand side of Section 1, 115-126 cm. Medium dark gray (N4) SANDSTONE in Section 2, 40-70 cm grades from medium-grained to fine-grained and shows ripple-lamination in its upper part. Some carbonate concretions occur as burrow fills in Section 1, 56-58 cm.</p> <p>General Description: The core youngs towards the right of the archive-half and bedding is near-vertical. The core is fractured and in places brecciated by drilling.</p>



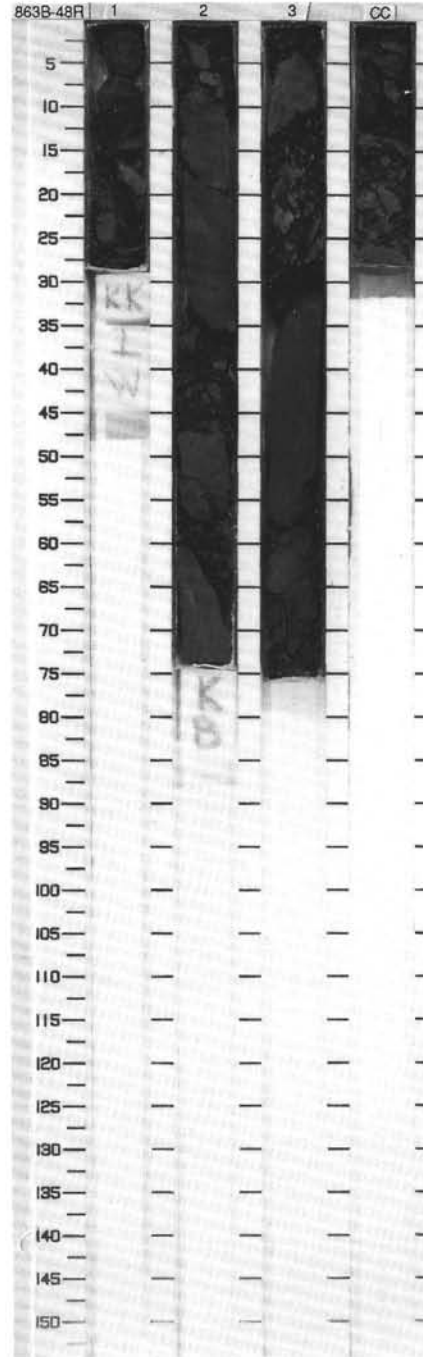
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Graphic Lithology: Sandstone/Siltstone patterns]	1	upper Pleistocene	[Structural symbols: horizontal lines, wavy lines, etc.]	[Disturbance symbols: V, X, etc.]	S	5Y 3/2 To N	SILTY CLAYSTONE TO CLAYEY SILTSTONE, SANDSTONE and SILTSTONE
1.0								
2								
3	[Graphic Lithology: Sandstone/Siltstone patterns]	2	upper Pleistocene	[Structural symbols: horizontal lines, wavy lines, etc.]	[Disturbance symbols: V, X, etc.]	S	5Y 3/2 To N	Major Lithologies: Core predominantly consists of medium dark gray (N4) SANDSTONE to SILTSTONE to olive gray (5Y 3/2) SILTY CLAYSTONE TO CLAYEY SILTSTONE in fining-upward sequences. The SANDSTONE is medium to fine-grained, and is locally cemented by pyrite and carbonate. Isolated sand-rich burrows in the SILTY CLAYSTONE TO CLAYEY SILTSTONE intervals are also carbonate-cemented.
3								
CC								
<p>General Description: Bedding is near vertical, and contacts extend for up to 40 cm along the length of the core in Section 1. Some core intervals are cut at oblique angles to bedding, which distorts sedimentary structures. Sedimentary relationships are obscured in Sections 2 and 3 by faulting and brecciation.</p>								



SITE 863 HOLE B CORE 48R

CORED 723.5 - 733.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5		1	upper Pleistocene		X	I	W	SILTY CLAYSTONE and SANDSTONE TO SILTSTONE Major Lithologies: The core consists of olive gray (5Y 3/2) SILTY CLAYSTONE and interbeds of medium gray (N4) SANDSTONE TO SILTSTONE. Minor Lithologies: Fine-grained to medium-grained SANDSTONE in Section 2, 18-36 cm contains syn-sedimentary folds and convolution structures. SANDSTONE in Section 2, 65-74 cm and in Section 3, 55-57 cm has a carbonate-rich cement which gives it a slightly lighter color. SANDSTONE has pyrite-rich cement in Section 3, 45-47 cm.
1.0		2				W	5Y 3/2	
		3				S		
		CC				M		
<p>General Description: Bedding is sub-vertical. Section 3 shows a 13-cm-thick sequence of massive to ripple-laminated fine-grained sandstone (3 cm), to convolute-laminated (2 cm) and horizontally laminated (1 cm) very fine-grained sandstones and siltstone, and then to massive siltstone and silty claystone (7 cm). The lower contact of this sequence is slightly scoured against silty claystone. Younging direction is towards the left of the archive-half. The core is brecciated by drilling except over several well preserved intervals which show the primary sedimentary structures.</p>								



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0.5	[Graphic Lithology: Dotted pattern]	1	upper Pleistocene	[Structure: wavy lines]	[Disturb: V-shaped symbols]	S	5Y 3/2	<p>SILTSTONE WITH NANNOFOSSILS and SANDSTONE</p> <p>Major Lithologies: The core consists of olive gray (5Y 3/2) SILTSTONE WITH NANNOFOSSILS (up to 40%) and SANDSTONE. The beds of SANDSTONE and SILTSTONE have scoured bases, graded bedding, and flame structures.</p> <p>General Description: Bioturbation ranges from slight to heavy. Concentrations of sponge spicules occur. Bedding is moderately inclined to vertical. The rock is highly fractured, with polished and slickensided surfaces, but the origin of fractures within the drilling breccia is not clear. Section 1, 99-104 cm in the working half has veins 1-2 mm thick filled with white material (calcite + zeolites?) on polished fracture surfaces, suggesting at least some fractures are not drilling artifacts. Filled veins occur at Section 4, 56-58 cm and 85-87 cm in the archive half.</p>
1.0								
1.5								
2.0								
2.5	[Graphic Lithology: Dotted pattern]	2	upper Pleistocene	[Structure: wavy lines]	[Disturb: V-shaped symbols]	S	5Y 3/2	
3.0								
3.5	[Graphic Lithology: Dotted pattern]	3	upper Pleistocene	[Structure: wavy lines]	[Disturb: V-shaped symbols]	S	5Y 3/2	
4.0								
4.5	[Graphic Lithology: Dotted pattern]	4	upper Pleistocene	[Structure: wavy lines]	[Disturb: V-shaped symbols]	I	5Y 3/2	
5.0								
5.5	CC				X	M		

