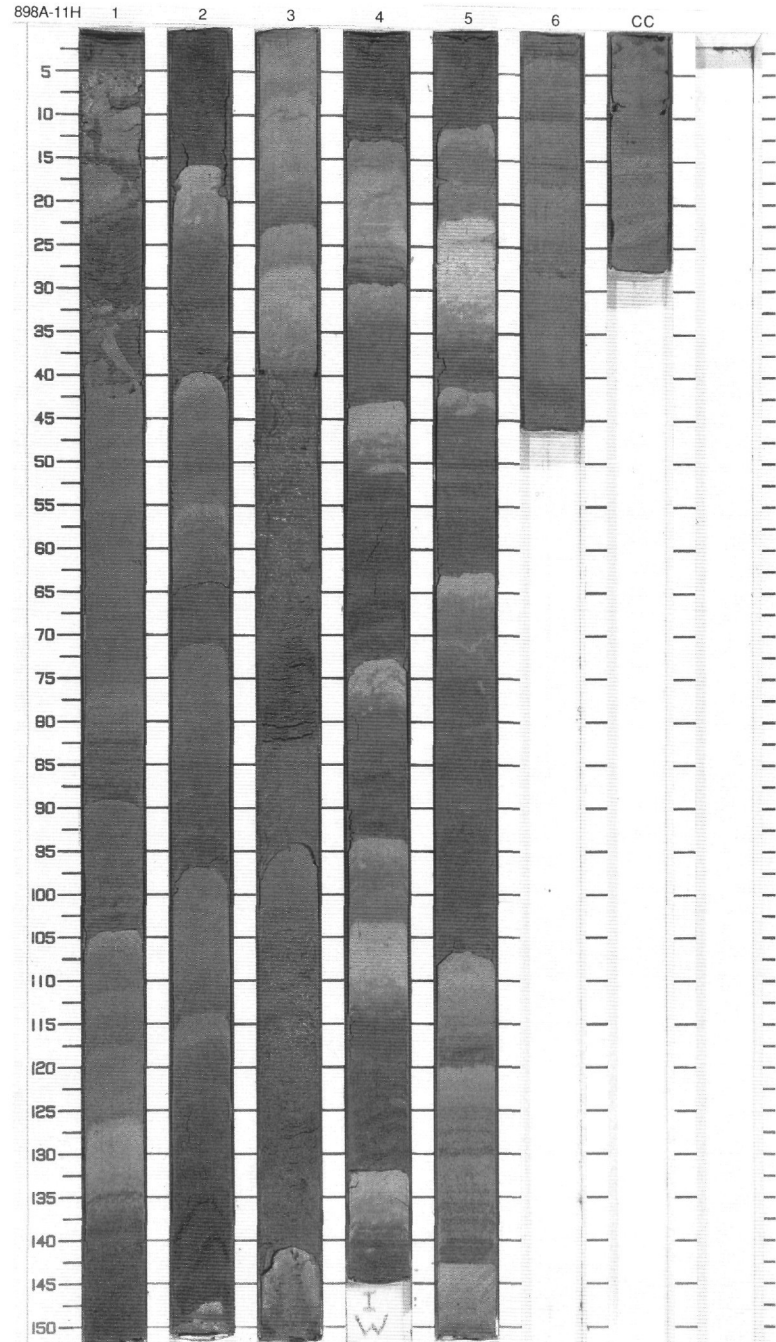


SITE 898 HOLE A CORE 11H

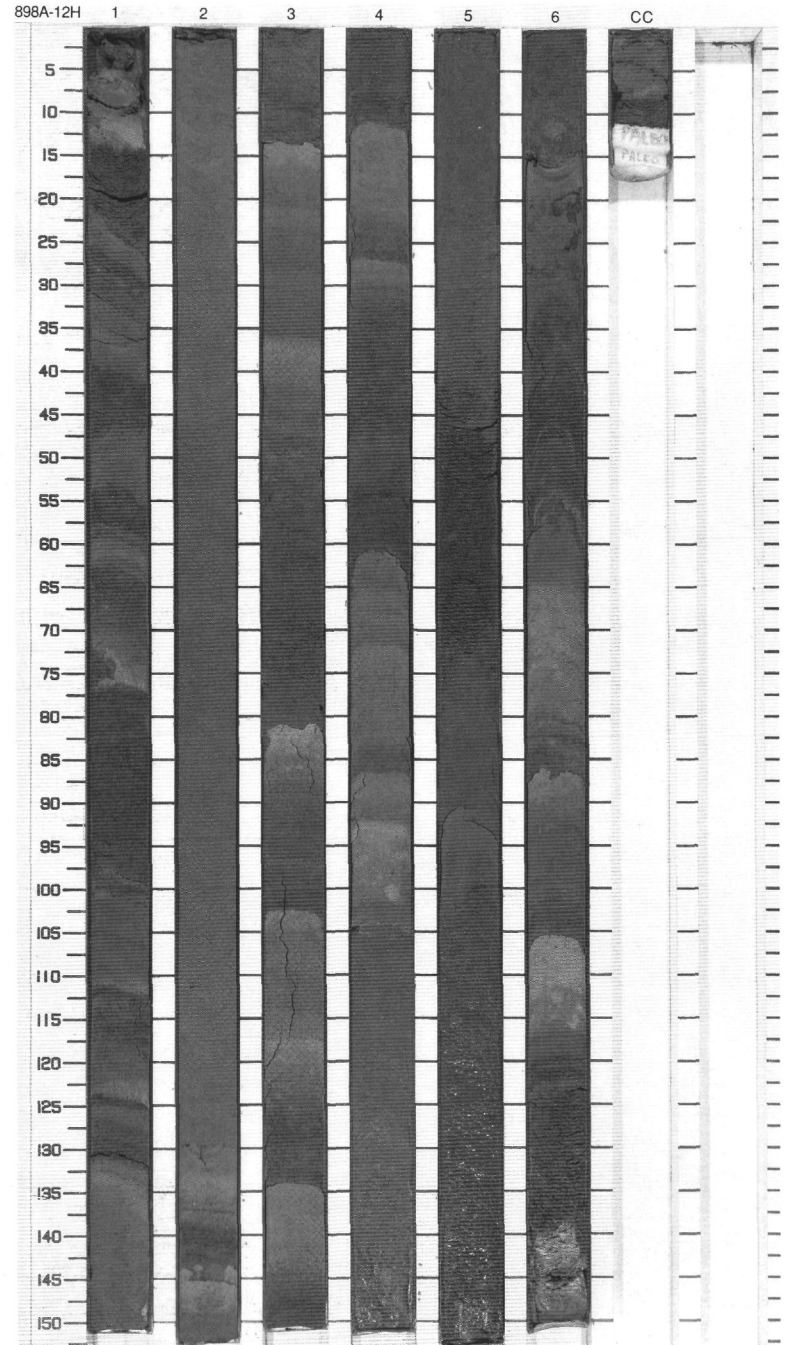
CORED 94.7 - 104.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	Pleistocene	P	⌘	⌘	S P	5GY 4/1 To 5Y 4/1	<p>SAND, SILTY CLAY and CLAY</p> <p>Major Lithologies: Dark greenish gray (4GY 4/1) to olive gray (5Y 4/1) SAND comprises about 46% of the core, and is mostly fine-grained, although medium-grained SAND also occurs. Olive gray (5Y 4/1) SILTY CLAY or CLAYEY SILT makes up about the 27% of total lithologies.</p> <p>Minor Lithologies: Olive gray (5Y 4/1) CLAY represents less than 16% of the core and the greenish gray (5GY 6/1) NANNOFOSSIL OOZE about 11% of the core lithologies and is moderately bioturbated.</p> <p>General Description: The core consists of several sharp-based sequences that grade from medium thick intervals (maximum 60 cm) of fine-grained SAND at the base, to SILTY CLAY or CLAY at the top. Numerous sequences are capped by light colored, bioturbated NANNOFOSSIL OOZE or CLAYEY NANNOFOSSIL OOZE. Disseminated or concretionary pyrite is frequent throughout the core. Darker SAND is commonly pyrite-rich and contains abundant organic matter.</p>
2	[Dotted pattern]							
3	[Dotted pattern]							
4	[Dotted pattern]							
5	[Dotted pattern]							
6	[Dotted pattern]							
7	[Dotted pattern]	P	I	⌘	⌘	5GY 4/1 To 5Y 4/1		
8	[Dotted pattern]	P				5GY 4/1 To 5G 6/1		
								CC



SITE 898 HOLE A CORE 12H CORED 104.2 - 113.7 mbsf

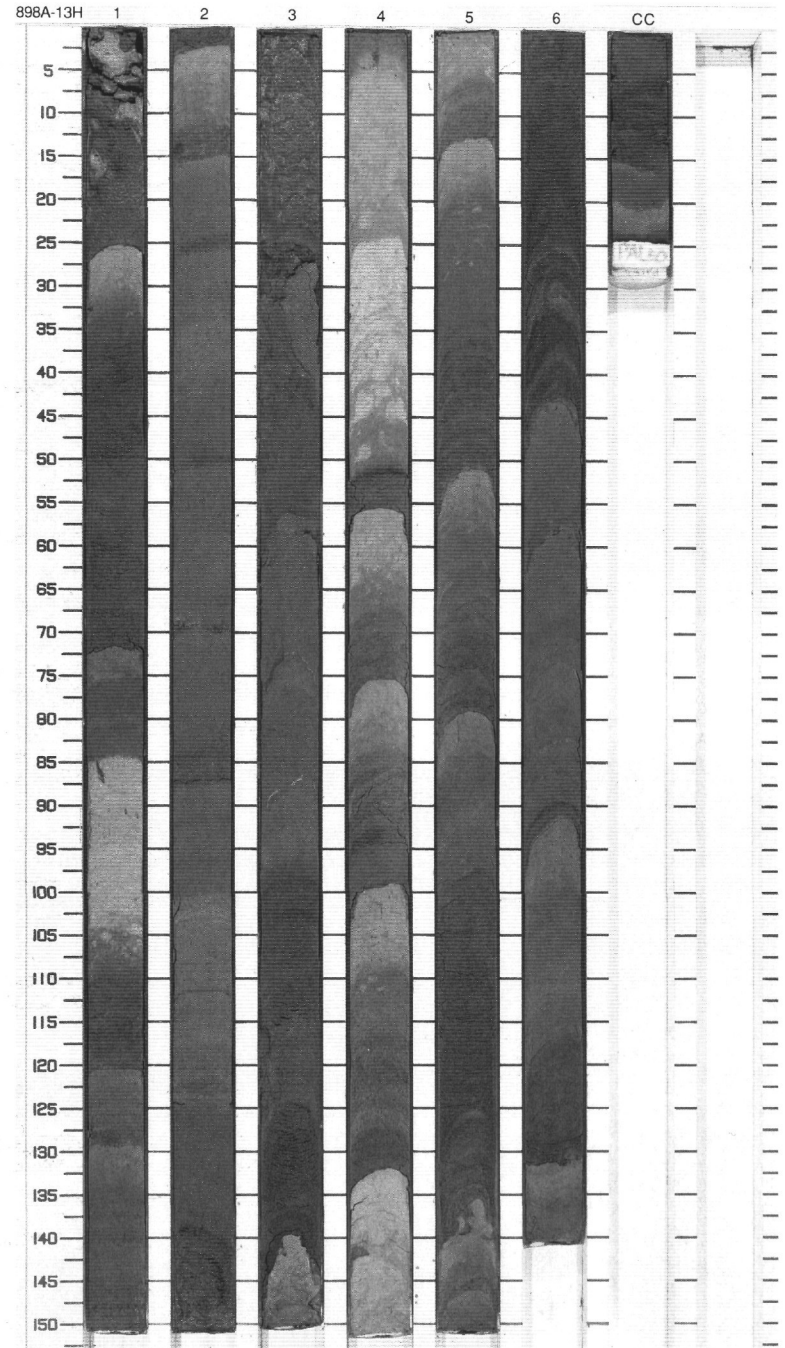
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		...		P	5GY 4/1 To 5Y 4/1	<p>SAND, CLAY and SILTY CLAY</p> <p>Major Lithologies: The dark greenish gray (4GY 4/1) to olive gray (5Y 4/1) SAND comprises about 55% of the core, and is mostly fine-grained, although medium-grained SAND occurs. The olive gray (5Y 4/1) and brownish gray (5YR 4/1) CLAY makes up about 25% and the SILTY CLAY about 20% of total lithologies.</p> <p>Minor Lithologies: A few layers of greenish gray (4GY 4/1) foraminifer-rich fine-grained SAND represents less than 5% of the core.</p> <p>General Description: The core consists of several sharp-based sequences that grade from very to medium thick intervals (maximum 160 cm) of fine-grained SAND to SILTY CLAY or CLAY at the top. Within some levels, several layers or laminae, of foraminifer-rich SAND occur. Section 2 is formed essentially by homogeneous mottled CLAY, while Section 5 is dominated by SAND. Disseminated pyrite and manganese are common.</p>
2	[Pattern]	2				S	5YR 4/1 To 5G 4/1	
3	[Pattern]	3		...}}		S		
4	[Pattern]	4	Pleistocene	...}}		S		
5	[Pattern]	5		...		P	5GY 4/1 To 5Y 4/1	
6	[Pattern]	6		...}}		P	5GY 4/1 To 5Y 6/1	
CC	[Pattern]	CC		...}}		M		



SITE 898 HOLE A CORE 13H

CORED 113.7 - 123.2 mbsf

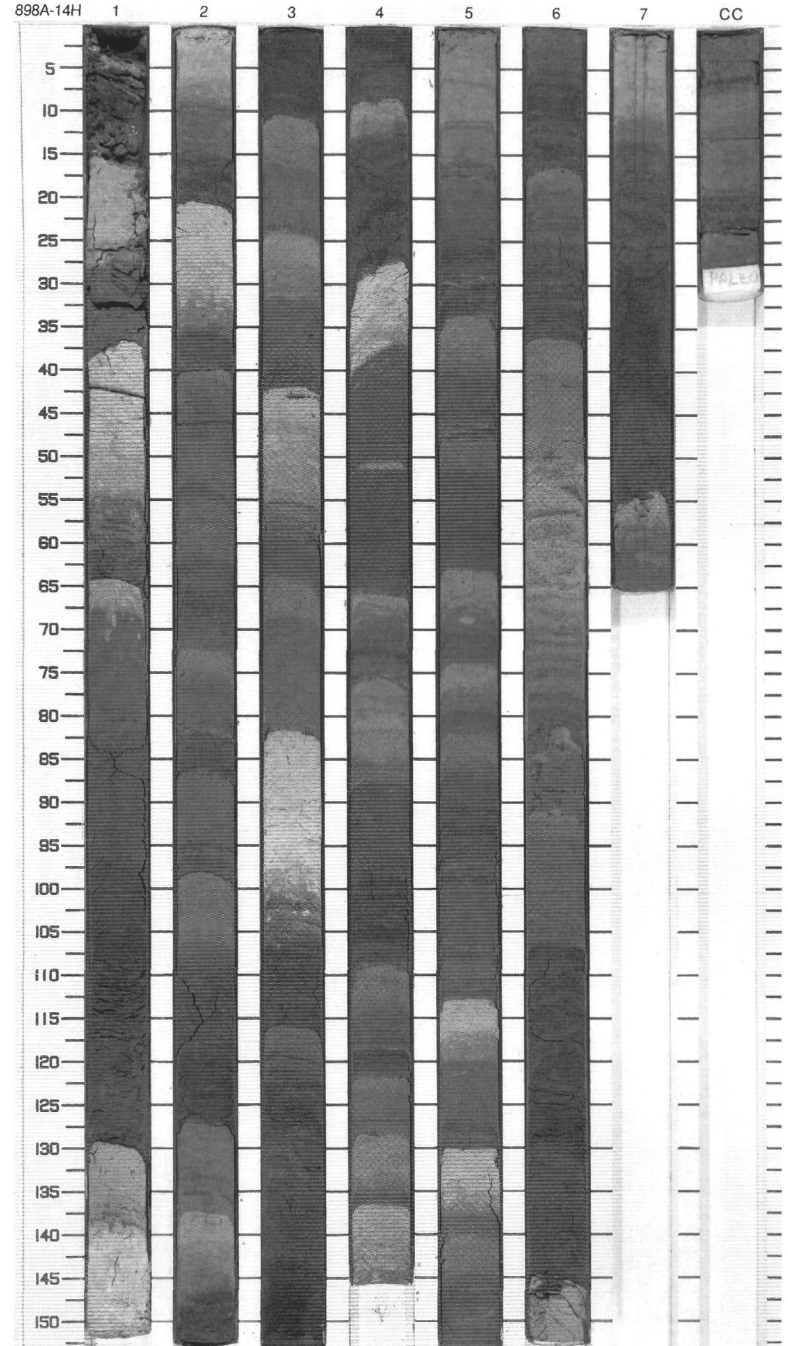
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description	
1	[Pattern]	1	Pleistocene	...	W	P	5G 2/1 To 5G 4/1	<p>SAND and SILTY CLAY</p> <p>Major Lithologies: The dark greenish gray (5GY 4/1) SAND comprises 35% of the core and the greenish black (5G 2/1) to dark greenish gray (5G 4/1) SILTY CLAY 45%.</p> <p>Minor Lithology: The NANNOFOSSIL CLAY varies from medium gray (N5) to medium dark gray (N6) and it forms about 16% of the core. NANNOFOSSIL OOZE is medium dark gray and forms about 4% of the core.</p> <p>General Description: Graded sequences, ranging in thickness from 5 to 50 cm, occur throughout the core and consist of varying lithologies. Typically, the sequences consist of a basal sand which is overlain by a SILTY CLAY. In places, a NANNOFOSSIL CLAY or NANNOFOSSIL OOZE overlies the SILTY CLAY. SAND and SILTY CLAY sequences dominate in the first two sections. NANNOFOSSIL CLAY is common in sequences occurring in Section 4. Bioturbation is common in the tops of the sequences.</p>	
2	[Pattern]	2		...					
3	[Pattern]	3		...					
4	[Pattern]	4		...					
5	[Pattern]	5		...					
6	[Pattern]	6		...					
7	[Pattern]	7		...					
8	[Pattern]	8		...					
9	[Pattern]	9		...					
		CC							
									M



SITE 898 HOLE A CORE 14H

CORED 123.2 - 132.7 mbsf

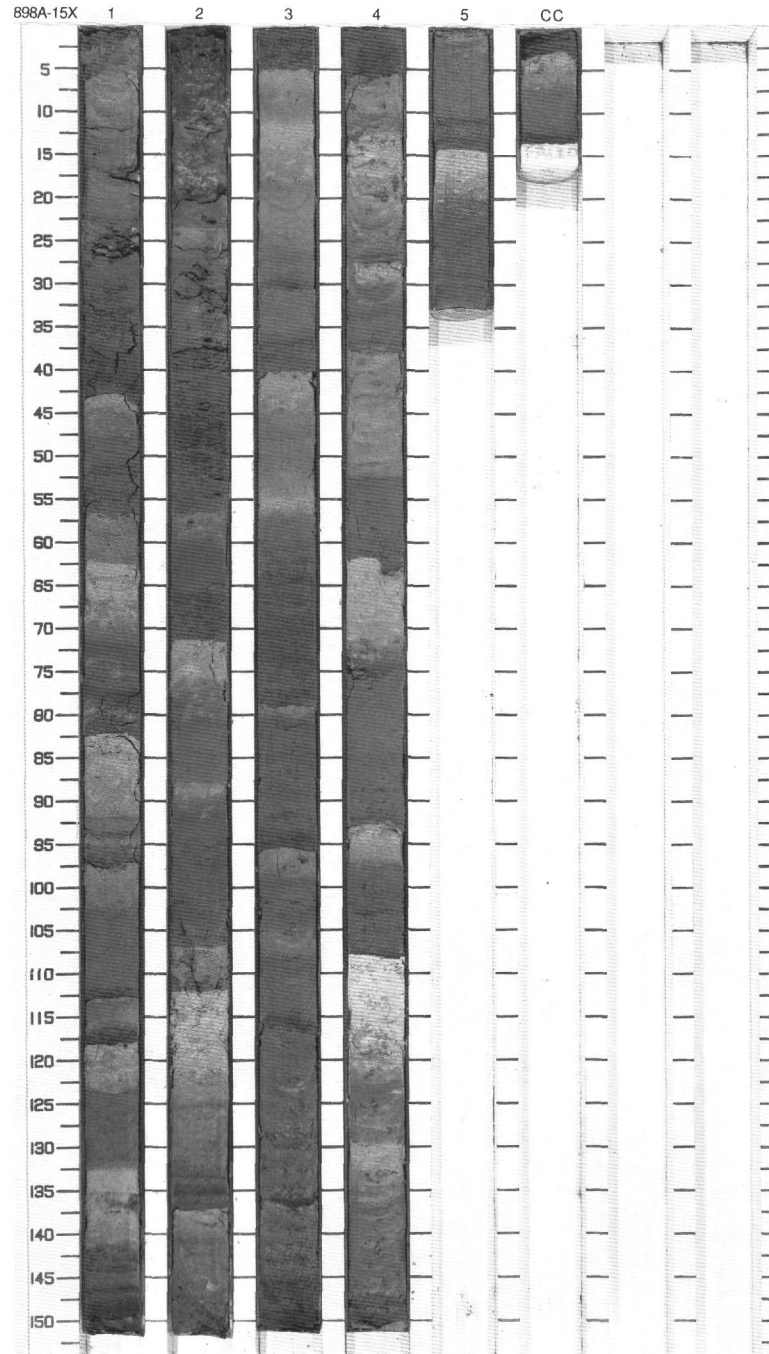
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	Pleistocene	[Symbol]	W	P	5GY 4/1 To N6	<p>SAND, SILTY CLAY and CALCAREOUS CLAY</p> <p>Major Lithologies:                      Dark greenish gray (5GY 4/1) SAND comprises 30% to 40% of the core and an olive gray (5Y 4/1) to medium dark gray (N3) SILTY CLAY comprises 35%. Medium to gray (N5/N7) CALCAREOUS CLAY makes up the rest of the core together (20% to 25%) with the minor lithology.</p> <p>Minor Lithology:                      The NANNOFOSSIL CLAY has a medium to light gray color (N6/N7), ranging in thickness from 5 to 10 cm. It occurs throughout the core as the uppermost units of some of the graded sequences and comprises about 5% of the core.</p> <p>General Description:                      Graded sequences, ranging in thickness from 2 to 60 cm, occur throughout the core and consist of varying lithologies. Typically, the sequences consist of a basal SAND which is overlain by SILTY CLAY. This is usually followed by a calcareous CLAY. SAND and SILTY CLAY dominate Sections 1, 2, 6, and 7. NANNOFOSSIL CLAY is present in Sections 1 and 3. A FORAMINIFERAL SAND is present in one sand unit in Section 6, 52-82 cm.</p>
2	[Pattern]	2		[Symbol]		S		
3	[Pattern]	3		[Symbol]		P		
4	[Pattern]	4		[Symbol]		I		
5	[Pattern]	5		[Symbol]		P		
6	[Pattern]	6		[Symbol]		S		
7	[Pattern]	7		[Symbol]		P		
8	[Pattern]	8		[Symbol]		I		
9	[Pattern]	9		[Symbol]		P		
	[Pattern]	CC		[Symbol]		M		



SITE 898 HOLE A CORE 15X

CORED 132.7 - 138.8 mbsf

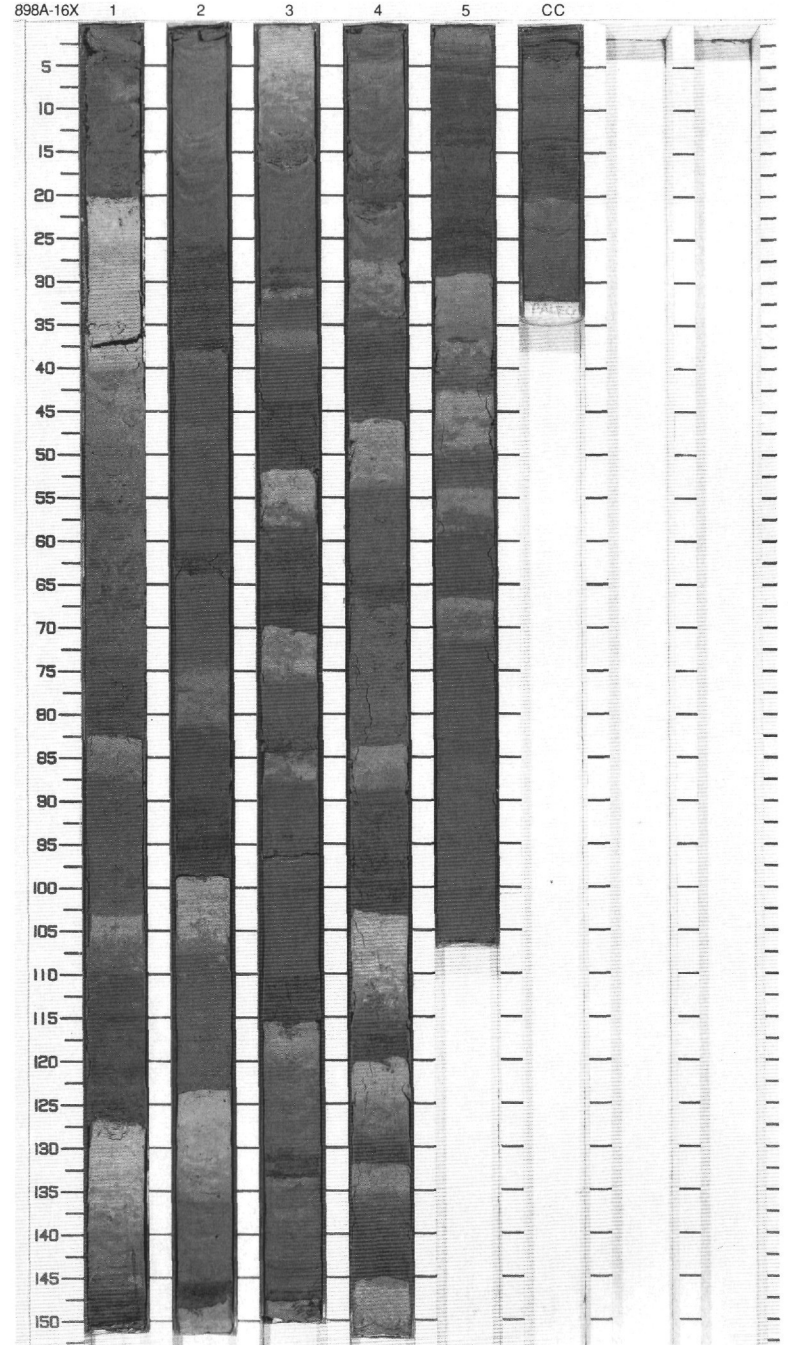
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Pleistocene	...		S S P	5GY 4/1 To 5G 2/1	<p>SILTY CLAY and SANDY SILT</p> <p>Major Lithologies: Dark greenish gray (5GY 4/1) SILTY CLAY comprises about 60% of the core, and the greenish black (5G 2/1) SANDY SILT 20%.</p> <p>Minor Lithologies: Olive gray (5Y 4/1) CLAY and medium gray (N5) to light gray (N7) CALCAREOUS CLAY each form 10% of the core. Light gray (N7) NANNOFOSSIL OOZE makes up about 1% of the core, and is only present in Section 4.</p> <p>General Description: Graded sequences occur throughout the core, ranging from 10 to 40 cm in thickness. They generally consist of a basal SANDY SILT overlain by a SILTY CLAY. CLAY, and when present, CALCAREOUS CLAY and NANNOFOSSIL OOZE successively overlie the SILTY CLAY. Bioturbation is concentrated in the CLAY, CALCAREOUS CLAY, and NANNOFOSSIL OOZE. The graded sequences appear to be thinner than in previous cores.</p>
2		2		...		S P		
3		3		...		P		
4		4		...		P		
5		5		...		S		
6		CC			M			



SITE 898 HOLE A CORE 16X

CORED 138.8 - 148.5 mbsf

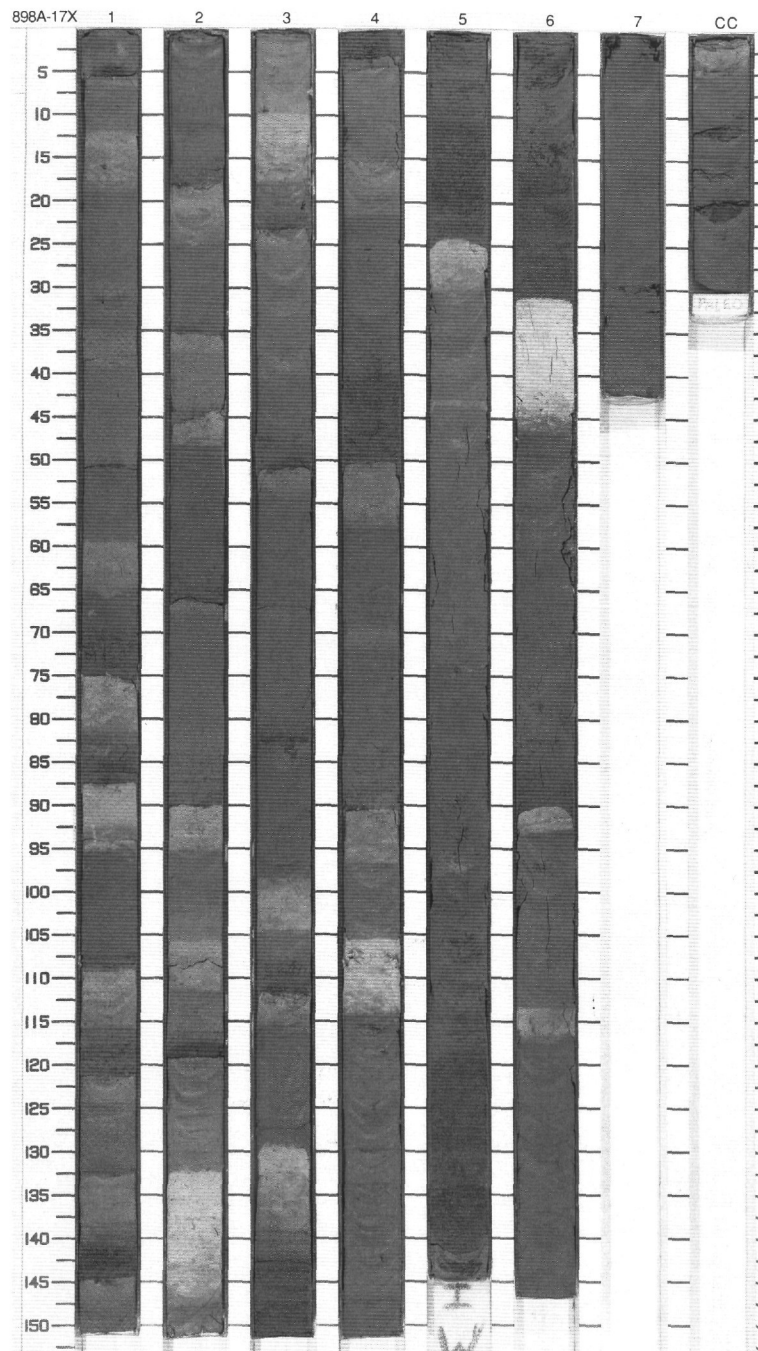
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	Pleistocene	[Symbol]	O	S	5GY 4/1 To 5G 4/1	<p><b>SILTY CLAY</b></p> <p>Major Lithology: Dark greenish gray (5GY 4/1) SILTY CLAY comprises about 40% of the core.</p> <p>Minor Lithologies: Dark greenish gray (5GY 4/1) SAND and dark greenish gray (5GY 4/1) CLAY each form 20% of the core. Greenish gray (5GY 6/1) or medium light gray (N6) CALCAREOUS CLAY also forms 20% of the core. Olive gray (5Y 5/1) FORAMINIFER SAND occurs in Section 1, 42-75 cm, and comprises &lt;1% of the core.</p> <p>General Description: The core contains over 30 normal graded sequences which commence with SAND overlain by SILTY CLAY which often shows parallel lamination near the base. Above the SILTY CLAY occurs CLAY, usually with a planar but gradational contact spanning a few millimeters. The tops of the sequences are composed of CALCAREOUS CLAY which is burrow mottled with the underlying CLAY. The sequences range in thickness between 15 and 35 cm. A few lack the SANDS or CALCAREOUS CLAYS.</p>
1	[Pattern]	1		[Symbol]		S		
2	[Pattern]	2		[Symbol]	P			
2	[Pattern]	2		[Symbol]	[Symbol]			
3	[Pattern]	3		[Symbol]	S			
3	[Pattern]	3		[Symbol]	S			
3	[Pattern]	3		[Symbol]	S			
4	[Pattern]	4	[Symbol]	P				
4	[Pattern]	4	[Symbol]	[Symbol]				
5	[Pattern]	5	[Symbol]	P				
6	[Pattern]	6	[Symbol]	[Symbol]				
6	[Pattern]	6	[Symbol]	P				
7	[Pattern]	7	[Symbol]	P				
7	[Pattern]	7	[Symbol]	M				
		CC						



SITE 898 HOLE A CORE 17X

CORED 148.5 - 158.1 mbsf

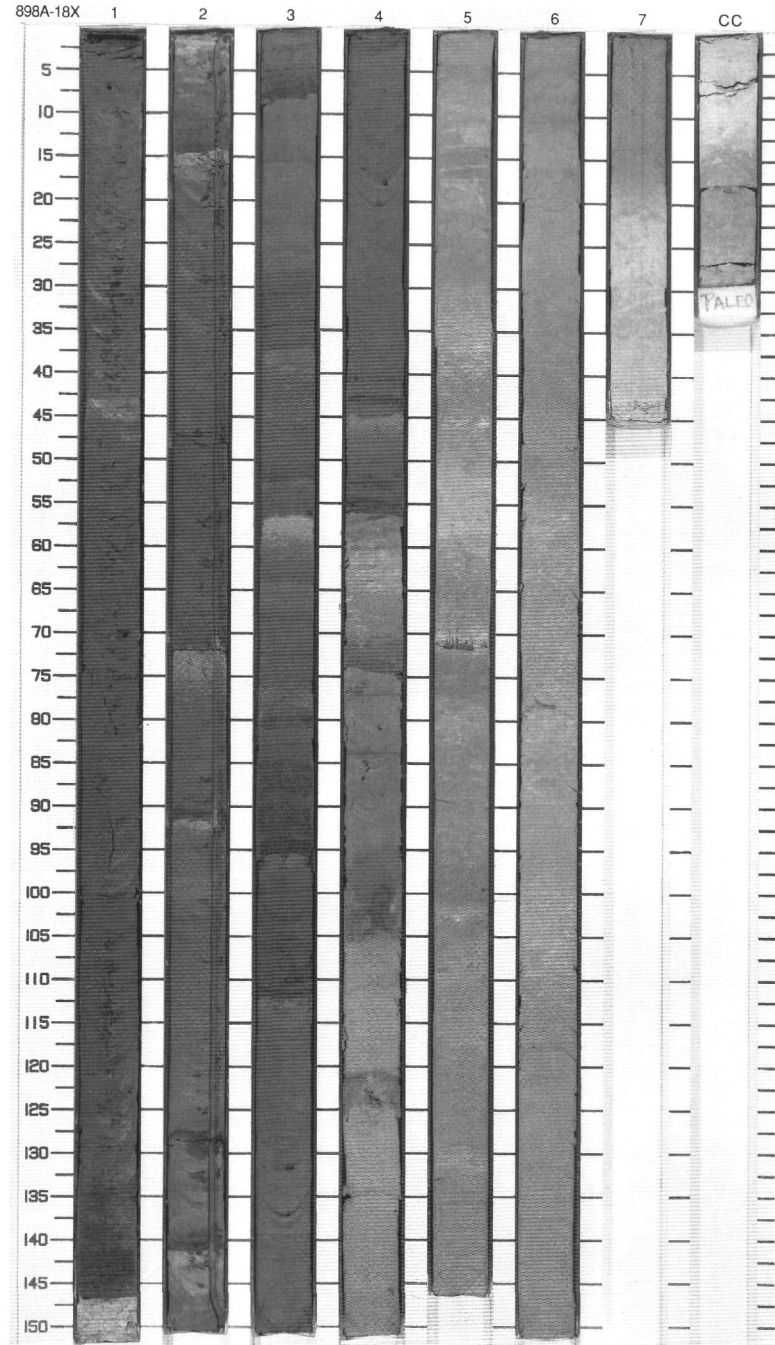
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1		...		P		<p>SILTY CLAY</p> <p>Major Lithology: The dark greenish gray (5GY 4/1) SILTY CLAY comprises about 70% of the core.</p> <p>Minor Lithologies: The colors and proportions of the minor lithologies in the core include greenish black (5G 2/1) SANDY SILT, 15%; medium light gray (N6) CALCAREOUS CLAY, 10%; dark greenish gray (5G 4/1) CLAY, 4%, and light gray (N7) NANNOFOSSIL OOZE, 1%.</p> <p>General Description: As in previous cores (e.g. 16X), several graded sequences occur in this core. The sequences range up to 50 cm in thickness and consist of a basal SANDY SILT which is successively overlain by SILTY CLAY, CLAY, CALCAREOUS CLAY, and NANNOFOSSIL OOZE. The latter three lithologies are not always represented in the sequence. NANNOFOSSIL OOZE only occurs in Section 6.</p>
2	[Pattern]	2		...		P		
3	[Pattern]	3		...		P		
4	[Pattern]	4	late Pliocene	...		P	5GY 4/1 To 5G 2/1	
5	[Pattern]	5		...		P		
6	[Pattern]	6		...		P		
7	[Pattern]	7		...		I		
8	[Pattern]	8		...		P		
9	[Pattern]	9		...		P		
	[Pattern]	CC				M		



SITE 898 HOLE A CORE 18X

CORED 158.1 - 167.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description		
1		1	late Pliocene	Ⓟ	-	P	5GY 4/1 To N8	CLAYSTONE, SILTY CLAYSTONE and NANNOFOSSIL CHALK Major Lithologies: Section 1-4 (up to 74 cm): dark greenish gray (5GY 4/1) or greenish gray (5G 6/1) CLAYSTONE (27% of core) and dark greenish gray (5GY 4/1) SILTY CLAYSTONE (46% of core). Section 4 (at 74 cm to CC): dark yellowish brown (10YR 4/2) CLAY mottled with very pale orange (10YR 8/2) NANNOFOSSIL CHALK (>95% of core).		
2									P	5Y 2/1
3										
4		P		5Y 2/1						
5										
6		S P		Mn		Ⓟ	-	S P	10YR 4/2 To 10YR 8/2	General Description: In this core the general change between different lithologies with the occurrence of several sharp-based single sequences, that grade from a thin bed of FINE SANDSTONE to SILTY CLAYSTONE and CLAY up to 74 cm in Section 4 and a homogeneous, variegated CLAY to NANNOFOSSIL CHALK, intensively mottled unit below is visible.
7										
8		S		-		Ⓟ	-	S	-	
9										
CC	P	-	Ⓟ	-	P	N9				

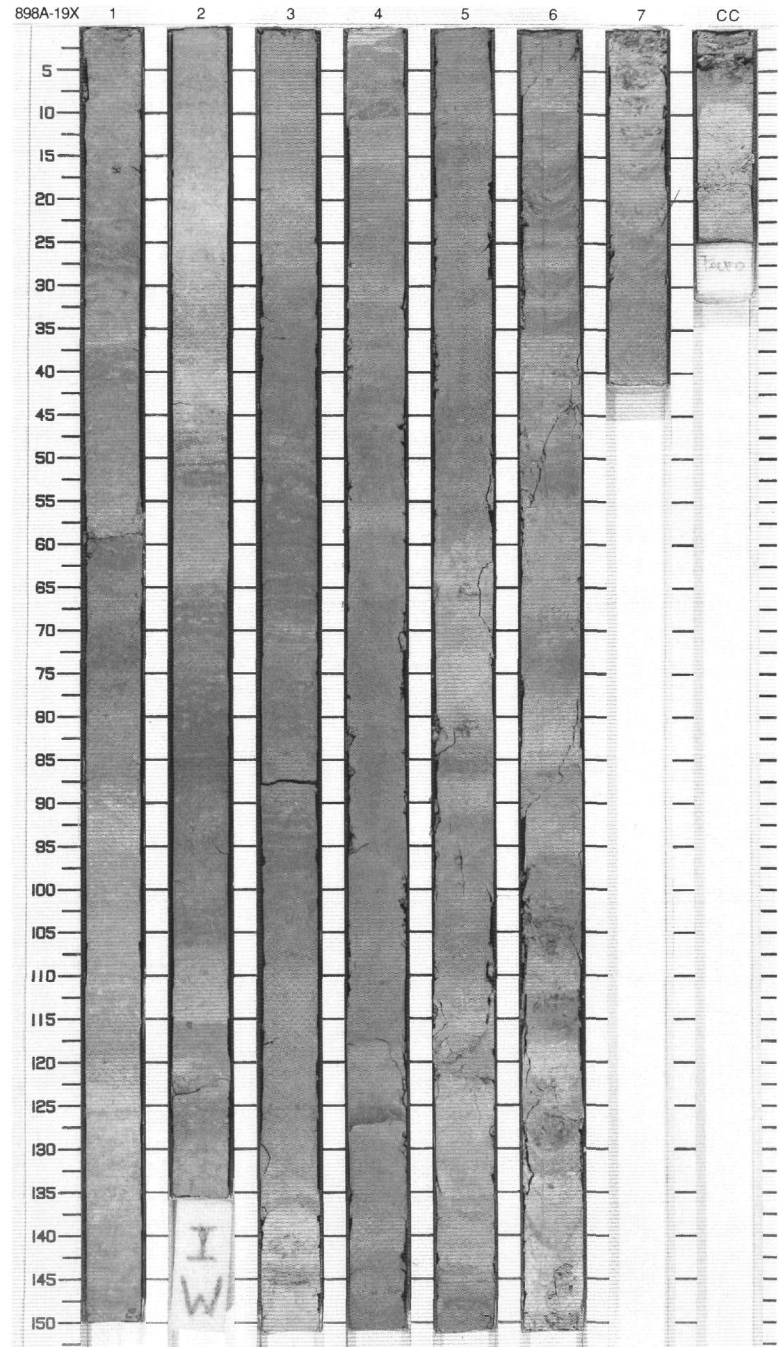




SITE 898 HOLE A CORE 19X

CORED 167.8 - 177.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Cross-hatched pattern]	1		}}		S		<p>CLAYEY NANNOFOSSIL CHALK and CALCAREOUS NANNOFOSSIL CLAYSTONE</p> <p>Major Lithologies: Uniform, mottled dark yellowish brown (10YR 4/2) and pale orange (10YR 8/2) CLAYEY NANNOFOSSIL CHALK occurs in Sections 1 to 3 (at 140 cm), comprising nearly 100% of the core in Sections 1 to 3). In Sections 4 to 6 (at 110 cm) light gray (N7) SILTY DIATOM RADIOLARIAN CHALK and greenish gray (5G 6/1) NANNOFOSSIL CLAYSTONE become major lithology.</p> <p>Minor Lithology: Greenish gray (5G 6/1) CALCAREOUS SILTY FINE SANDSTONE (less than 1 cm thick) comprises less than 10% of this core.</p> <p>General Description: The sediment is intensively bioturbated, but a distinct ichnofauna is not visible.</p>
2	[Cross-hatched pattern]	2		}}		P	10YR 8/2 To 10YR 4/2	
3	[Cross-hatched pattern]	3		}}		I		
4	[Cross-hatched pattern]	4		}}		P		
5	[Cross-hatched pattern]	4	middle Miocene	...		S		
6	[Cross-hatched pattern]	5		...		P	10YR 5/2 To 5G 6/1	
7	[Cross-hatched pattern]	6				P		
8	[Cross-hatched pattern]	6				S	5G 8/1	
9	[Cross-hatched pattern]	7				P		
	[Cross-hatched pattern]	CC				M		



SITE 898 HOLE A CORE 20X

CORED 177.4 - 187.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	Mn	[Symbol]	[Symbol]	P	5G 8/1 To 5B 7/1	<p><b>SILTY CLAYSTONE, CLAYSTONE and NANNOFOSSIL CHALK</b></p> <p>Major Lithologies: Mottled light greenish gray (5GY 8/1) SILTY CLAYSTONE to greenish gray (5Y 6/1) CLAYSTONE containing nannofossil and siliceous biogenic components (sponge spicules, diatoms, and radiolarians) forms 60% of this core and light greenish gray (5Y 8/1) NANNOFOSSIL CHALK also containing biogenic siliceous components makes up 30%.</p> <p>Minor Lithologies: Light greenish gray (5GY 8/1) very fine FORAMINIFER SANDSTONE and medium dark gray (N4) FORAMINIFER SILTSTONE (5%-10%) build together the minor lithology.</p> <p>General Description: Repetitive sequences (5 to 15 cm thick) of SILTY CLAYSTONE or CLAYSTONE grade to NANNOFOSSIL CHALK on the top, with occasional thin foraminifer-rich fine-grained SAND intervals at the base (less than 5 cm thick). The SAND interval is usually parallel laminated or presents faint cross-lamination. All lithologies are rich (more than 10%) in biogenic components. Bioturbation is pervasive, including the top of the basal sandy layer.</p>
2	[Pattern]	2	Mn	[Symbol]	[Symbol]	S	5G 8/1 To 5GY 8/1	
3	[Pattern]	3	Mn	[Symbol]	[Symbol]	S		
4	[Pattern]	4	Mn	[Symbol]	[Symbol]	S		
5	[Pattern]	5	Mn	[Symbol]	[Symbol]	P		
6	[Pattern]	5	Mn	[Symbol]	[Symbol]	P		
		CC				M		

