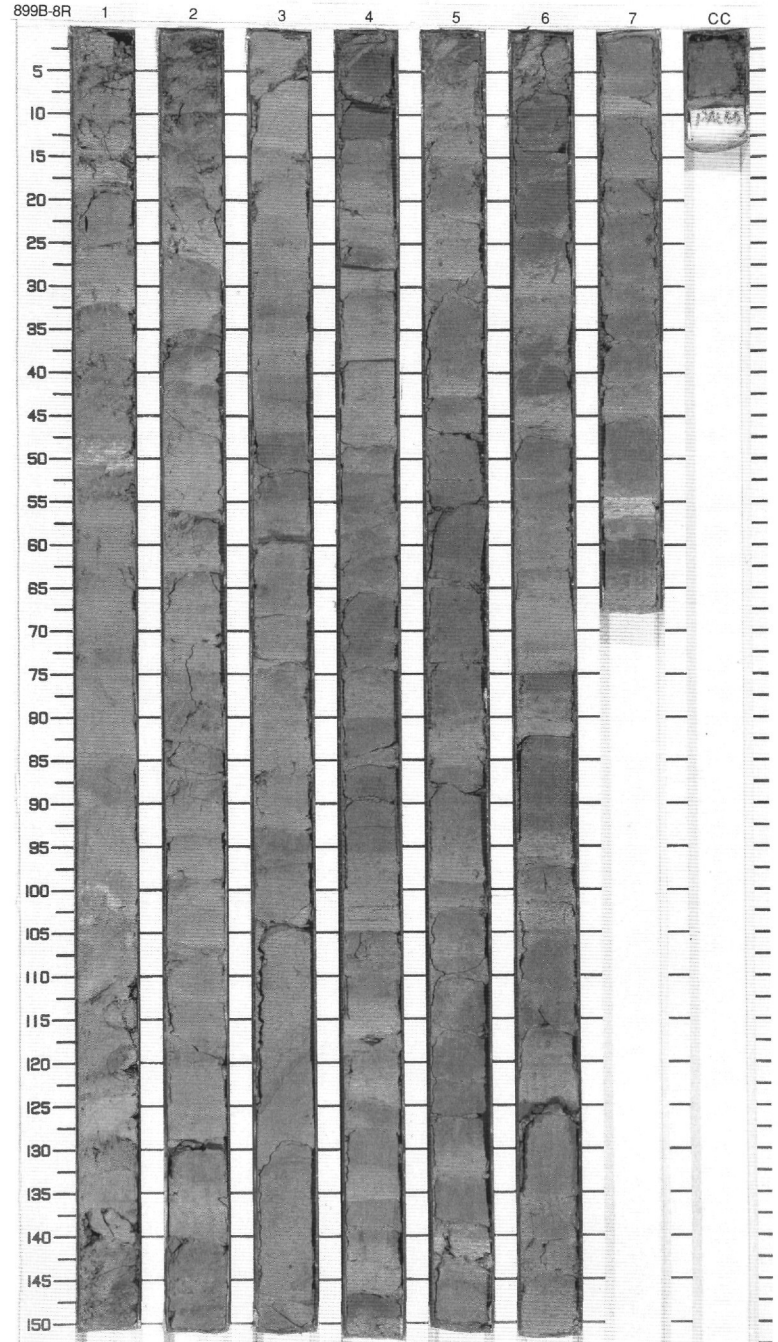


SITE 899 HOLE B CORE 8R

CORED 292.6 - 302.3 mbsf

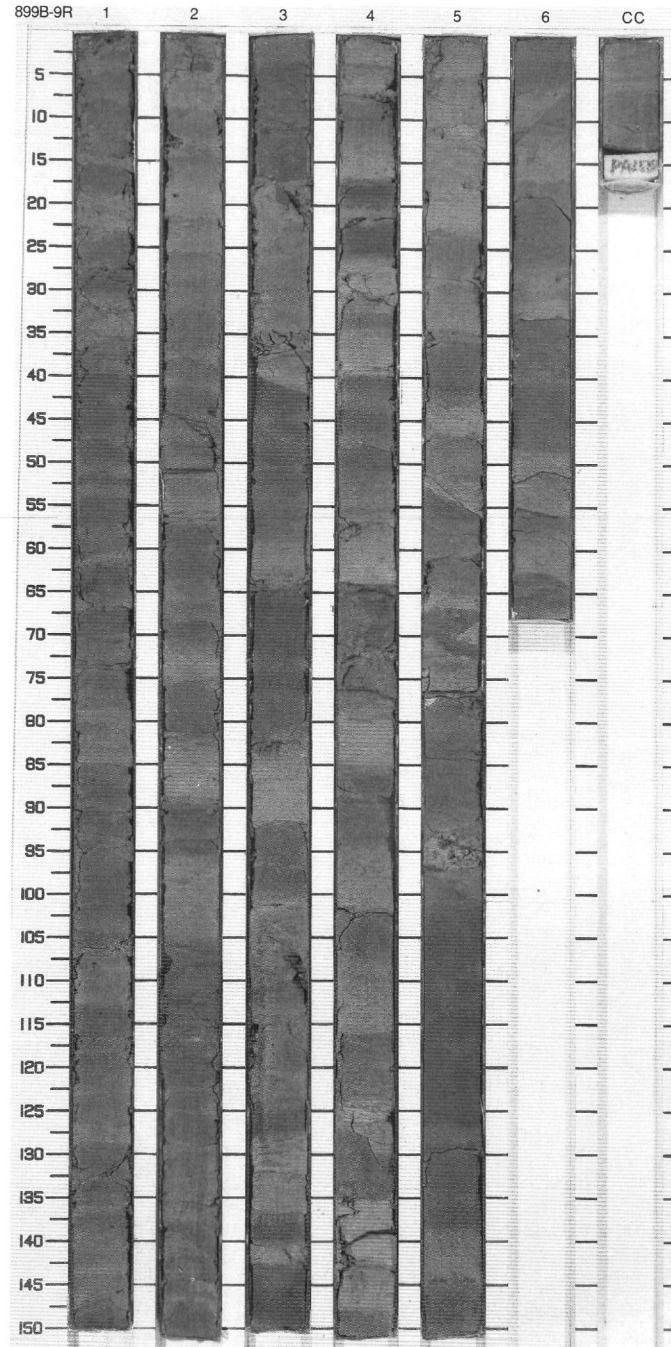
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	late Oligocene	[Symbol]	[Symbol]	P	5GY 6/1 To 5GY 5/2	<p>NANNOFOSSIL CLAYSTONE and CLAYSTONE WITH SILT</p> <p>Major Lithologies: Greenish gray (5GY 6/1) NANNOFOSSIL CLAYSTONE comprises about 50% of the core, and grayish green (5GY 5/2) CLAYSTONE WITH SILT about 47%.</p> <p>Minor Lithology: Light greenish gray (5GY 6/1) very fine FORAMINIFERAL SANDY SILTSTONE forms 3% of the core.</p> <p>General Description: Thin- to medium-bedded (5 to 13 cm), upwards-darkening sequences occur throughout the core. They consist of pervasively bioturbated greenish gray NANNOFOSSIL CLAYSTONE that grades up to grayish green CLAYSTONE WITH SILT. Occasionally, a very thin (0.5 to 2 cm) FORAMINIFERAL SANDY SILTSTONE occurs at the base. Slumps are present at Section 1, 60-30 cm, and Section 3, 95-135 cm. The top of the darker CLAYSTONE WITH SILT intervals are marked by a dark purple color probably caused by manganese enrichment.</p>
2	[Pattern]	2		[Symbol]	[Symbol]	P		
3	[Pattern]	3		[Symbol]	[Symbol]	P		
4	[Pattern]	4		[Symbol]	[Symbol]	S		
5	[Pattern]	5		[Symbol]	[Symbol]	S		
6	[Pattern]	6		[Symbol]	[Symbol]	P		
7	[Pattern]	7		[Symbol]	[Symbol]	P		
8	[Pattern]	8		[Symbol]	[Symbol]	S		
9	[Pattern]	9		[Symbol]	[Symbol]	P		
CC	[Pattern]	CC				M ^P		



SITE 899 HOLE B CORE 9R

CORED 302.3 - 312.0 mbsf

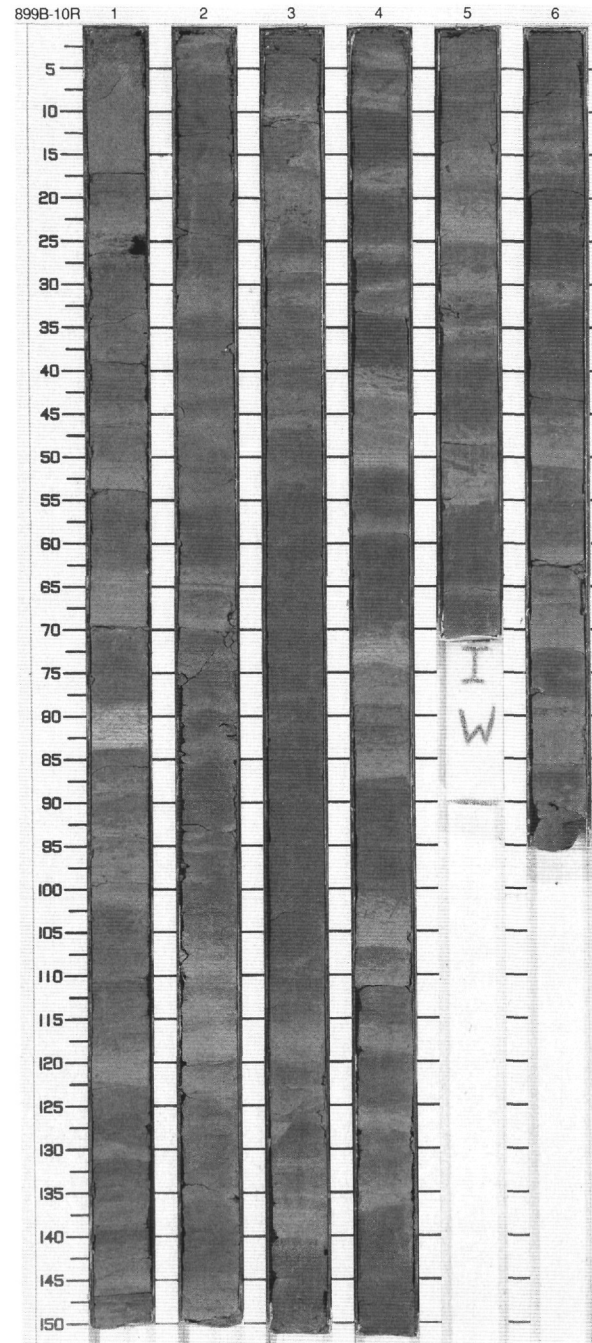
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	late Oligocene	⋈		P	5GY 6/1 To 5G 2/1	CLAYSTONE WITH SILT and NANNOFOSSIL CLAYSTONE
2	[Hatched pattern]	2		⋈		P		Major Lithologies: Grayish green (5G 5/2) CLAYSTONE WITH SILT forms 66% of the core, and greenish gray (5G 6/1) NANNOFOSSIL CLAYSTONE 27%.
3	[Hatched pattern]	3		⋈		S		Minor Lithology: Olive gray (5Y 4/1) SANDY SILTSTONE occurs as thin laminae and comprises 7% of the core.
4	[Hatched pattern]	4		⋈		S		General Description: Upwards-darkening sequences occur throughout the core. They consist of pervasively bioturbated NANNOFOSSIL CLAYSTONE overlain by mottled CLAYSTONE WITH SILT. Many show basal laminae of SANDY SILTSTONE. Slumps occur in Sections 2 and 5.
5	[Hatched pattern]	5		⋈		P		
6	[Hatched pattern]	6		⋈		S		
7	[Hatched pattern]	7		⋈		P		
8	[Hatched pattern]	8		⋈		S P		
	[Hatched pattern]	CC		⋈		P		
	[Hatched pattern]			⋈		M		



SITE 899 HOLE B CORE 10R

CORED 312.0 - 321.6 mbsf

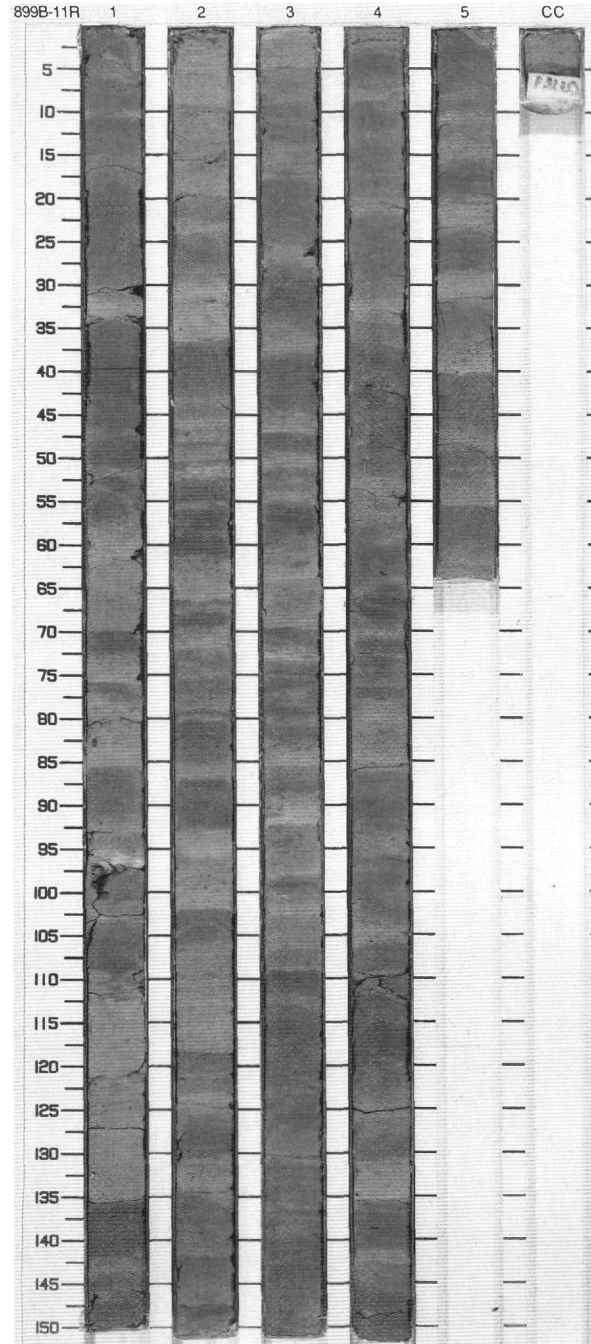
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	late Oligocene		}}	S	5GY 6/1 To 5Y 7/1	CLAYSTONE WITH SILT and NANNOFOSSIL CLAYSTONE
2	[Hatched pattern]	2			}}	P		Major Lithologies: Greenish gray (5GY 6/1) to light olive (5Y 7/1) CLAYSTONE WITH SILT forms 80% of the core, and greenish gray NANNOFOSSIL CLAYSTONE (5G 6/1) 17%.
3	[Hatched pattern]	3			}}	P	Minor Lithologies: Light greenish gray (5G 7/1) SILTSTONE occurs as fine discontinuous laminae, and in Section 4 several thin intervals (1-2 mm thick) of greenish gray (5GY 6/1) FORAMINIFERAL SILTSTONE are present; together these lithologies form 3% of the core.	
4	[Hatched pattern]	4			}}	S	5Y 6/1 To 10YR 4/2	General Description: Upwards-darkening sequences, 10-30 cm thick, occur through most of the core. They consist of NANNOFOSSIL CLAYSTONE succeeded by pervasively bioturbated CLAYSTONE WITH SILT, and often contain a basal interval of SILTSTONE, or FORAMINIFERAL SILTSTONE in Section 4 at 34, 87, and 119 cm.
5	[Hatched pattern]	5			}}	P	5GY 6/1 To 5Y 7/1	Yellowish brown colors appear for the first time in Hole B in Sections 3 and 4.
6	[Hatched pattern]	6			}}	P		
7	[Hatched pattern]	6			}}	M		



SITE 899 HOLE B CORE 11R

CORED 321.6 - 331.2 mbsf

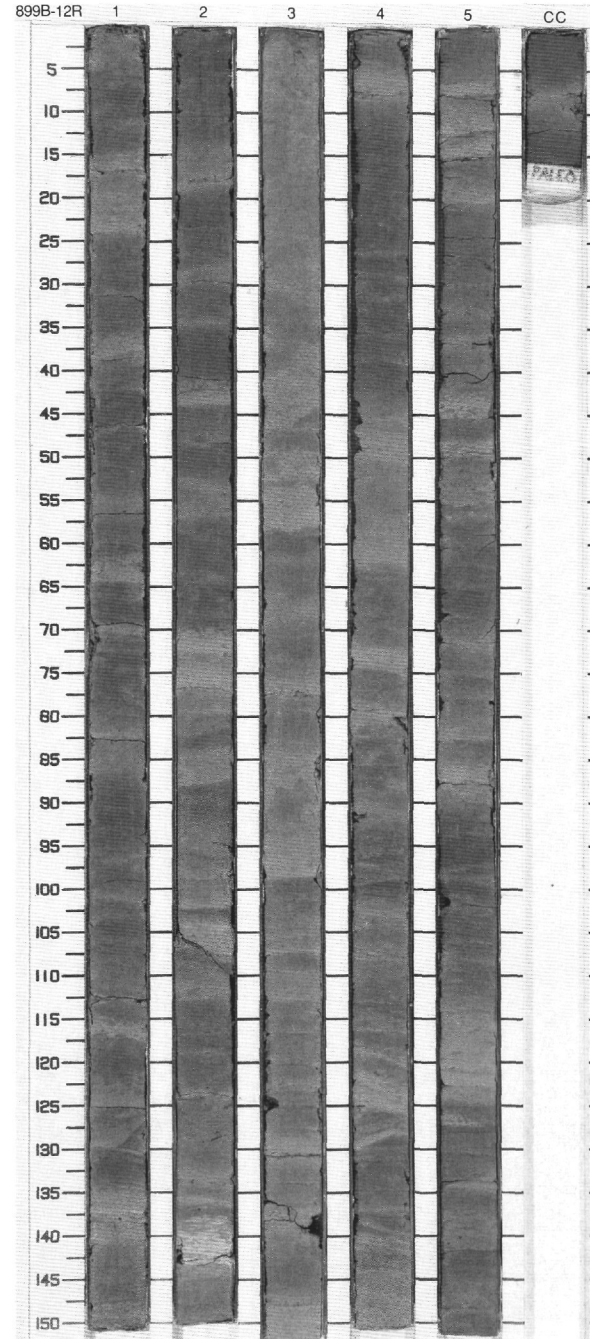
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Pattern]	1	early Oligocene-late Oligocene	[Symbol]	[Symbol]	P	5GY 6/1 To 5Y 4/1	<p>SILTY CLAYSTONE and NANNOFOSSIL CLAYSTONE</p> <p>Major Lithologies: SILTY CLAYSTONE forms 75% of the core, and occurs in two colors. Olive gray (5Y 4/1) to dark yellowish brown (10YR 4/2) SILTY CLAYSTONE comprises 50% of the core, and the dark greenish gray variety 25%. Light gray (N7) to greenish gray (5GY 6/1) NANNOFOSSIL CLAYSTONE makes up 25% of the core.</p> <p>Minor Lithology: Medium dark gray SILTSTONE totals <1% of the lithologies in the core. It rarely exceeds more than 3 mm in thickness.</p> <p>General Description: Upwards-darkening sequences, 5–15 cm thick, occur throughout the core. They consist of lighter colored NANNOFOSSIL CLAYSTONE overlain by a darker SILTY CLAYSTONE. In places a continuous to discontinuous SILTSTONE underlies the NANNOFOSSIL CLAYSTONE and forms lenticular or wispy laminae.</p>
2	[Pattern]	2				S		
3	[Pattern]	3				S		
4	[Pattern]	4				P		
5	[Pattern]	5				P		
6	[Pattern]	6				M		



SITE 899 HOLE B CORE 12R

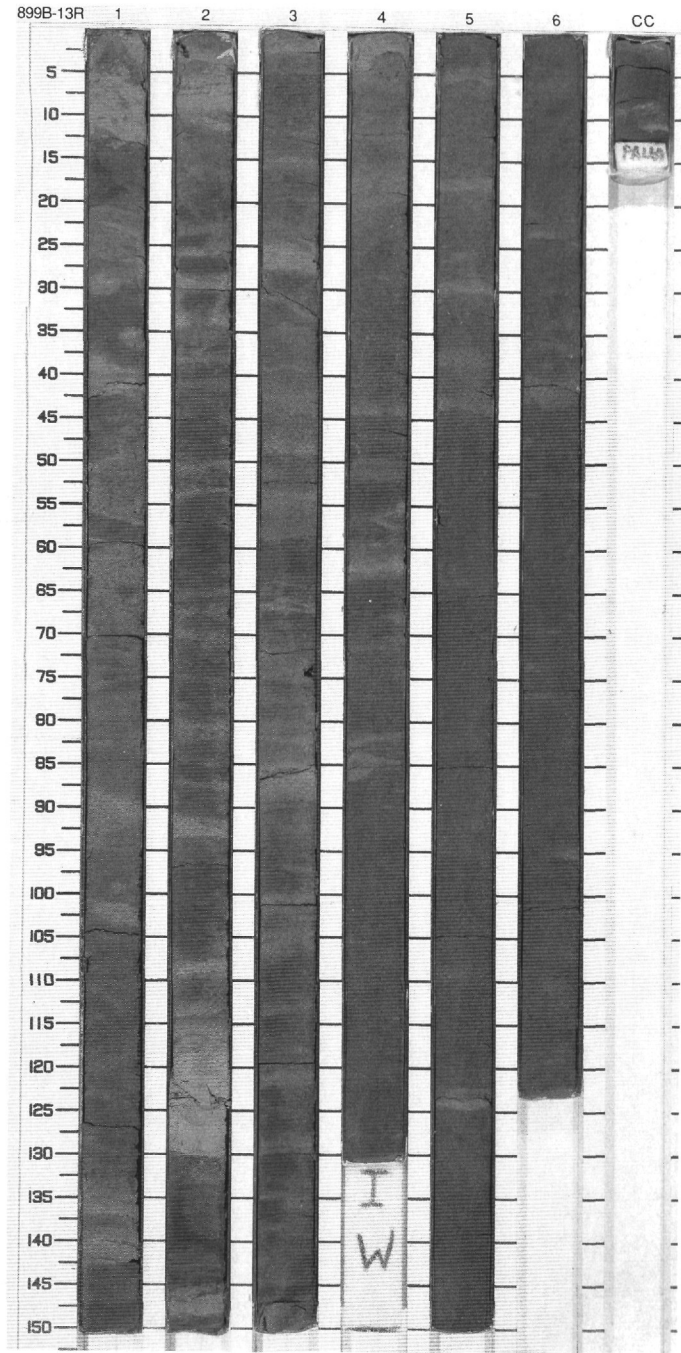
CORED 331.2 - 340.9 mbsf

Meter	Graphic Lith.	Section Age	Structure	Disturb	Sample	Color	Description
1		1	}}		P		<p>SILTY CLAYSTONE and NANNOFOSSIL CLAYSTONE</p> <p>Major Lithologies: SILTY CLAYSTONE forms about 80% of the core: a dark yellowish brown (10YR 4/2) to olive gray (5Y 4/1) variety dominates and forms 62%, with the remainder being dark greenish gray (5GY 4/1). Light olive gray (5GY 6/1) NANNOFOSSIL CLAYSTONE forms 20% of the core; a light gray (N7) variety occurs at Section 2, 140-143 cm.</p> <p>Minor Lithologies: Medium dark gray (N4) SILTSTONE comprises less than 1% of the core.</p> <p>General Description: Banded sequences, ranging from 4-12 cm in thickness, occur in this core, and they consist of a NANNOFOSSIL CLAYSTONE overlain by a SILTY CLAYSTONE. A thin (usually <2 mm thick) discontinuous to continuous SILTSTONE occasionally underlies the NANNOFOSSIL CLAYSTONE. Bioturbation is common in the claystones. Ichnofauna identified include Planolites, Chondrites, and Zoophycos.</p>
2		2	}}		S		
3		3	}}		S		
4		3	}}		P	10YR 4/2 To 5GY 6/1	
5		4	}}		P		
6		4	}}		P		
7		5	}}		P		
		CC	}}		M		



SITE 899 HOLE B CORE 13R CORED 340.9 - 350.6 mbsf

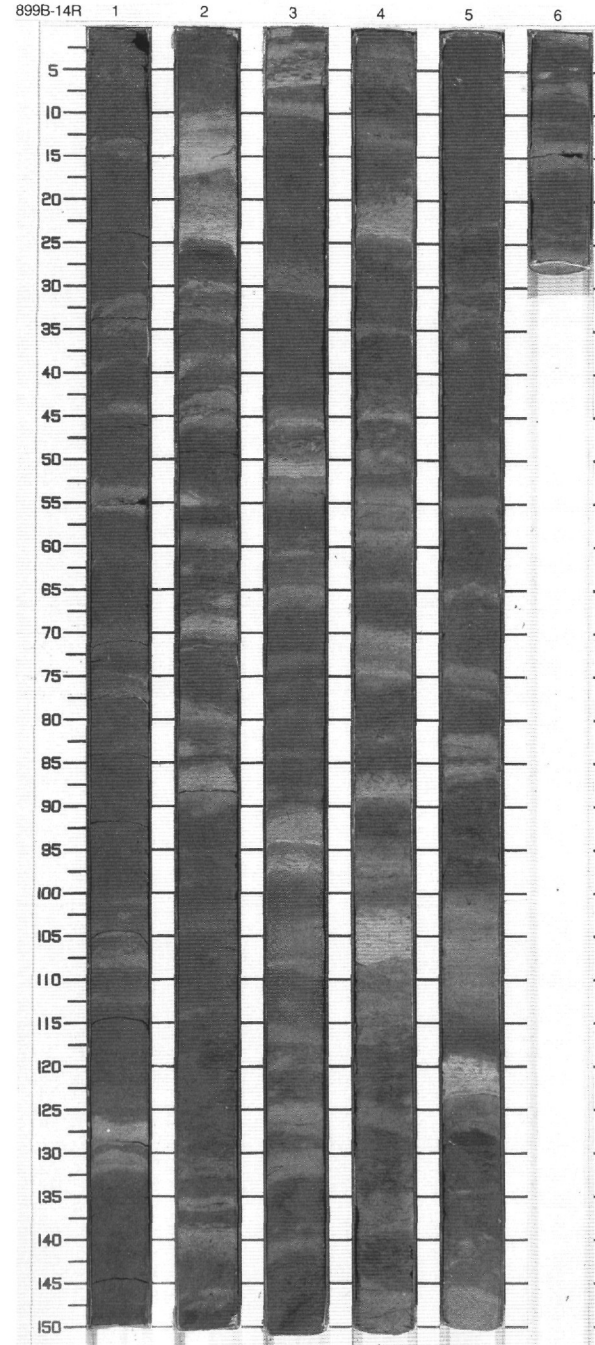
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	late Oligocene-Eocene	}}	-	S	5GY 5/1 To 5Y 4/1	<p>CLAYSTONE WITH SILT</p> <p>Major Lithology: CLAYSTONE WITH SILT forms almost 100% of the core from Section 3 down (where it is mainly olive gray (5Y 4/1), greenish gray (5Y 5/2, 5Y 6/1) and dark yellowish brown (10YR 4/2), and about 80% in Sections 1 and 2 (where it is reddish gray (5YR 4/2).</p> <p>Minor Lithologies: NANNOFOSSIL CLAYSTONE is greenish gray (5GY 6/1, 5/1) and light olive gray (5Y 6/1) in color and forms 5%-15% of the lithologies in Sections 1-3. CLAYEY SILTSTONE is medium dark gray (N4) in color, and only occurs in Sections 1-3, where it forms <1% of the lithologies.</p> <p>General Description: The core shows a downward increase in brown coloration which corresponds to a progressive decrease in carbonate content. Upwards-darkening sequences occur in Sections 1 and 2; they consist of lighter colored NANNOFOSSIL CLAYSTONE and darker CLAYSTONE WITH SILT which show bioturbation at their boundaries. Some sequences contain thin (1-2 mm) basal silt layers. The reddish gray CLAYSTONE WITH SILT in Sections 2 and 4 contain irregular intervals (1-3 cm thick) of greenish/bluish gray color.</p>
2		2		P				
3		3		P		Mn		
4		4		P				
5		5		S		Mn		
6		6		P				
7	7	S	Mn					
8	8	P						
		CC				M		



SITE 899 HOLE B CORE 14R

CORED 350.6 - 360.2 mbsf

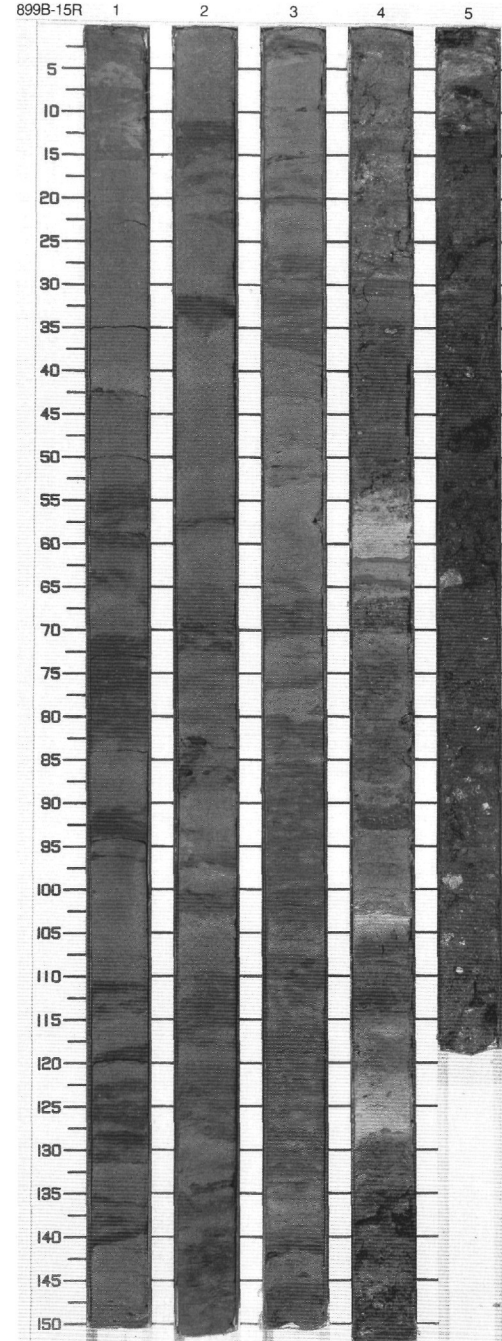
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	Eocene	≡ ≡		S P	5YR 4/2 To 5GY 5/1	<p>SILTY CLAYSTONE</p> <p>Major Lithology: SILTY CLAYSTONE forms 90% of the core. The bulk of it is reddish gray (5YR 4/2) to moderate brown (5YR 4/4), but color mottling and bands up to 5 cm thick occur that are greenish gray (5YR 4/1, 5/1).</p> <p>Minor Lithologies: NANNOFOSSIL CLAYSTONE ranges in color from light olive gray (5Y 6/1) to grayish orange (10YR 7/4), and forms about 10% of the core. CLAYEY SILTSTONE is greenish gray and shows lighter and darker (5GY4/1, 6/1) blebs and laminations.</p> <p>General Description: Brown colored SILTY CLAYSTONE dominates the core, but in places upwards-darkening sequences occur containing relatively light colored NANNOFOSSIL CLAYSTONE that grades up into darker, usually greenish gray, SILTY CLAYSTONE. The transition between the two lithologies is bioturbated, and in places Zoophycos, Planolites, and Chondrites are visible. A few of the sequences contain thin (1-2 mm) CLAYEY SILTSTONE laminae at their bases. One sequence at Section 5, 120-125 cm has a basal laminated layer of silty NANNOFOSSIL CLAYSTONE with a sharp base and top.</p>
2	[Hatched pattern]	2		≡ ≡		P		
3	[Hatched pattern]	3		≡ ≡		P		
4	[Hatched pattern]	4		≡ ≡		S P		
5	[Hatched pattern]	5		≡ ≡		P P		
6	[Hatched pattern]	6		≡ ≡		S		
7	[Hatched pattern]	6			M			



SITE 899 HOLE B CORE 15R

CORED 360.2 - 369.8 mbsf

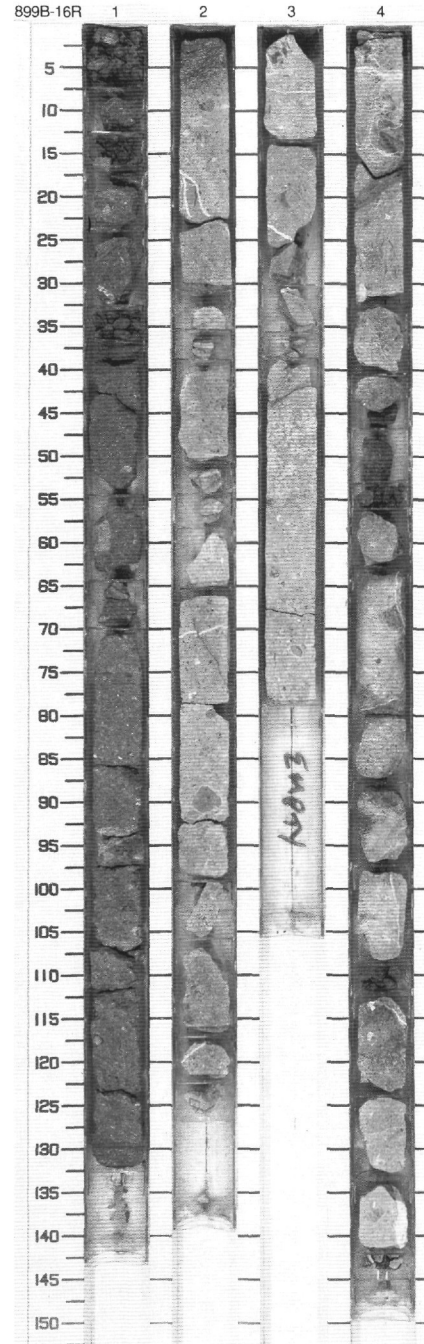
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		Mn			5YR 3/4 To 5YR 2/1	<p>SILTY CLAYSTONE, SILTSTONE</p> <p>Major Lithology: Mottled, bioturbated, moderate brown (5YR 3/4), greenish gray (5G 6/1) SILTY CLAYSTONE, light olive brown (5Y 5/6) NANNOFOSSIL CLAYSTONE, and mottled moderate brown (5YR 3/4) to pale yellowish brown (10YR 6/2) SILTSTONE form the major lithologies in Sections 1 to 3.</p> <p>Minor Lithologies: Several bands (2 to 10 cm thick) and concretions (diameter around 1 cm) of brownish black (5YR 2/1) probable manganese concretions occur in Sections 1 and 2. The claystone in Section 3 shows disseminated manganese. Poorly cemented and sorted, occasionally parallel-laminated, grayish orange (10YR 7/4, in Section 1) and yellowish brown (10YR 5/4, in Section 2) SANDSTONE is interbedded with CLAYSTONE. A normal graded sequence of dusky yellow (5Y 6/4), yellowish gray (5Y 7/2) and light brown (5YR 5/6) medium-grained, cross- and parallel-laminated SANDSTONE with fragments of limestones and highly altered claystone occur at the bottom of Section 3 and the top of Section 4.</p> <p>Medium- to coarse-grained SANDSTONE of moderate brown (5YR 3/4) color, with ferruginous coated, well-rounded grains occurs in Section 4. Beginning at Section 4, 129 cm and throughout Section 5 a poorly cemented, polymictic, matrix-rich CONGLOMERATE occurs.</p> <p>General Description: The core is highly variegated in color and shows small scale lithological changes between CLAYSTONE, SANDSTONE, and CONGLOMERATE, which cannot be shown in detail. Slightly bioturbated, very compacted, CLAYSTONE "hardgrounds" of dusky yellow (5Y 6/4) and yellowish gray (5Y 7/2) color occur in Section 4.</p>
2		2		Mn			10YR 4/2 To 10YR 6/2	
3		3		Mn			10YR 2/2 To 10YR 4/2	
4		4		Mn			10YR 4/2 To 5Y 7/2	
5		5					N7 To 10R 6/6	
6		5						
		CC				M		



SITE 899 HOLE B CORE 16R

CORED 369.8 - 379.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Cretaceous					<p>BRECCIA</p> <p>Major Lithology: Matrix-supported, polymictic, and weakly cemented BRECCIA of a variegated color forms all of this core. Angular to subangular clasts in the BRECCIA consist mostly of altered igneous rocks, i.e. peridotite, or serpentinite. Clasts range up to 15 cm with an average of about 1 to 2 cm.</p> <p>Minor Lithologies: The matrix is formed by clay-rich, poorly sorted coarse sand composed of mostly altered serpentinite and some green fragments (smectite?).</p> <p>General Description: The conglomerate is cut by thin calcite veins, which bound clasts and cut across the matrix. Clay cement is probably the primary cement of the BRECCIA.</p>
2		2					10YR 4/2 To 10YR 5/4	
3		3						
4		4						



SITE 899 HOLE B CORE 17R

CORED 379.4 - 389.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Cretaceous	K-I	S	S	5GY 8/1	<p>Breccia</p> <p>Major Lithology: Matrix-supported BRECCIA forms all of the core with the exception of Section 1, Pieces 1-6. The matrix of the BRECCIA is composed of light brownish gray (10YR 6/2) coarse sandstone with subrounded to angular grains in various shades of gray green, orange, and yellow. Some calcite cement is visible. Most of the clasts in the BRECCIA are altered serpentine, but a few may be ultramafics. The largest clast is 5 cm across.</p> <p>Minor Lithologies: COARSE SANDSTONE occurs only in Section 1, Pieces 7-12 (40-76 cm) and it is similar of the matrix of the BRECCIA. ALTERED SERPENTINE occurs in Section 1, 15-39 cm. Pieces 1 and 2 in Section 1 could not be identified. Piece 1 is grayish orange (10YR 7/4), very fine-grained, lacks carbonate, and can be scratched by steel. Piece 2 is finely crystalline, very light gray (N8) when dry, and consists of 75% feldspar and 20% quartz, plus a dark mineral (possibly mica); the rock may be a metasediment.</p>
2	[Dotted pattern]	2					10YR 6/2	
3	[Dotted pattern]	3						
4	[Dotted pattern]	4						

