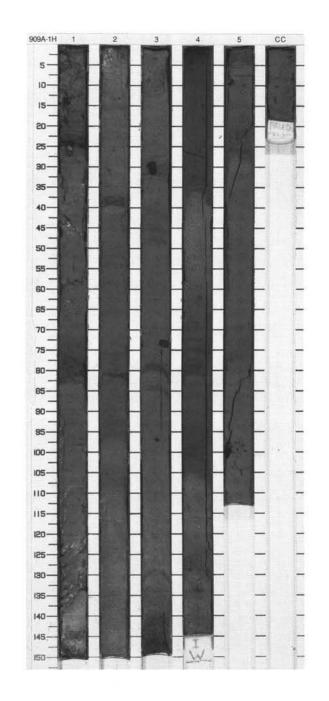
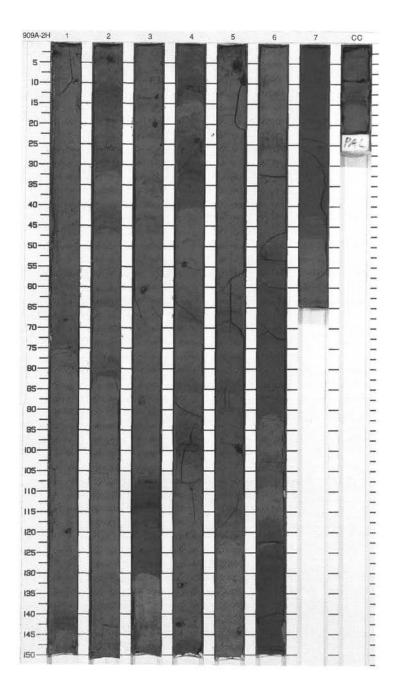
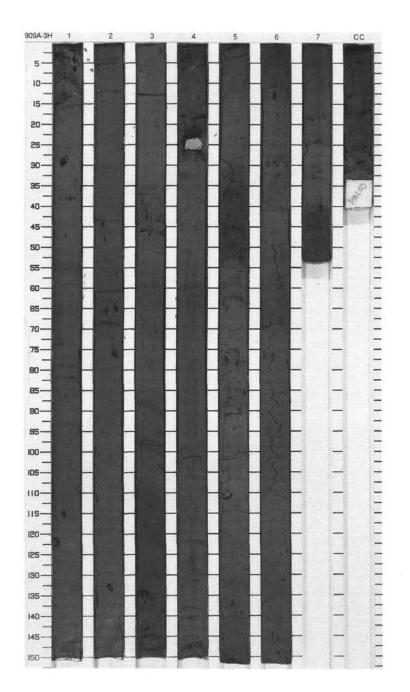
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
on Forthand		1		° : . • » : : : : :	wwwww	S P P	7.5YR 3/2 To 5Y 4/2	SILTY CLAY Major Lithology: SILTY CLAY, homogeneous, poorly sorted, colors vary between dark grayish brown (2.5Y 4.2), olive gray (5Y 4/2), olive (5Y 4/3), and black (5Y
2				<u>= = =</u>		Р		2.5/2). Color bands of brown to black are present. Gradational contacts are common, sharp contacts are rare.
3		2				Р	2.5Y 4/2 To	Minor Lithology: BIOCARBONATE-BEARING CLAYEY MUD, color varies between dark gray (5Y 4/1) to dark gray (5Y 4/2), poorly
and house		3	Quaternary	* 		Р	5Y 4/3	sorted, and slightly to moderately bioturbated. Occurs from Section 4, 100 cm, to Section 5, 25 cm.
4			Que			P S		General Description: Dropstones: Section 1, 24 cm, Ø 1.6 cm, angular
5		4				S <sub>P</sub> P		quartzite. Section 3, 30 cm, Ø 1.7 cm, coal, with additional pieces. Section 3, 73 cm, Ø 2.5 cm,
Part of the				*		s I	5Y 2.5/2 To 5Y	subangular gneiss (dark and light layers).
		5				Ρ	4/2	



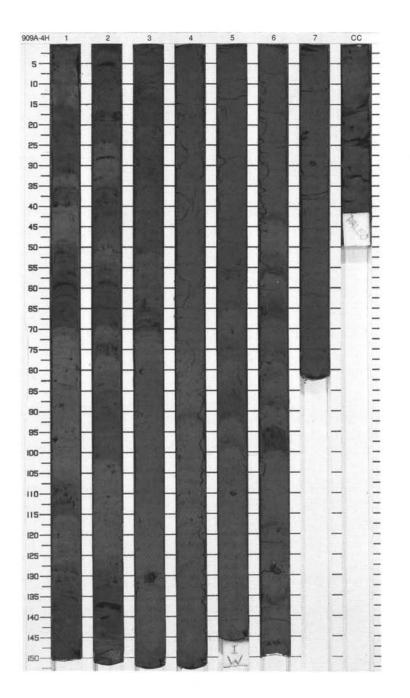
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The Lot		1		• _ ~		P	5Y 4/1	SILTY CLAY and SILTY MUD Major Lithologies: The sediment is characterized by common alternations between slightly to moderately bioturbated SILTY CLAY and massive SILTY MUD. Color varies from light brownish gray (2.5Y 6/2) to
2		2				S P	7.5YR N5/0	dark gray (10YR 5/1). Faint laminations and color bands are common. Thin color laminations cutting burrows in
L				*		S	2.5Y 5/2	Section 6, ~30 cm, indicate their diagenetic origin, although most of the thin color bands have gradational contacts due to bioturbation.
in lan		3		◆		Р	2.5Y	General Description: Dropstones: Section 1, 120 cm, Ø 1.0 cm, shale.
1 1111				<u></u> }			6/2 10YR 5/1	Section 3, 19.5 cm, Ø 1.0 cm, angular sandstone; 60 cm, Ø 1.0 cm, rounded sandstone; 88 cm, Ø 1.5 cm, black
1		4	Quaternary	•		Ρ	2.5Y 5/2	shale. Section 4, 24 cm, Ø 1.0 cm, rounded sandstone; 54 cm, Ø 1 cm, sandstone; 142 cm, Ø 1.0 cm, phyllite. Section 5, 100 cm, Ø 1.0 cm, shale.
				۰ •			5Y 5/1	
line line		5		° }		Ρ	10YR 4/1	
Lini internet		6		• <sup>3</sup> =		S P	5Y 4/1	
character 1		7				s	10YR 5/1	



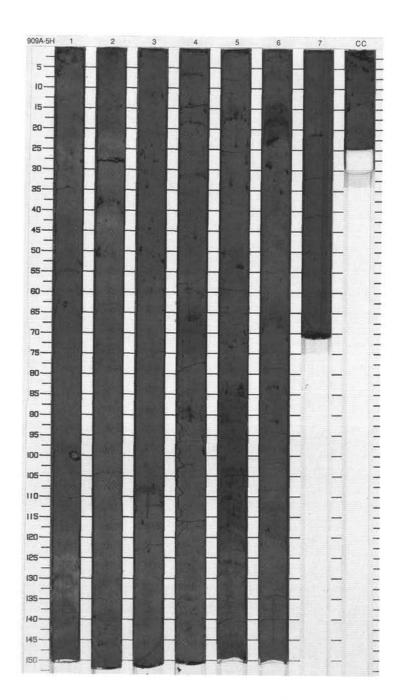
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		☆	1	Р		CLAYEY SILT Major Lithology: CLAYEY SILT, color varies between very dark gray (5Y 3/1), to dark olive gray (5Y 3/2), dark gray (5Y 4/1), olive gray (5Y 4/2), coal fragments and coal
2		2		00		S P	5Y	clusters are common (Ø up to 2 cm). Black to brown color bands are irregularly distributed throughout the core. Slight to heavy bioturbation is present. General Description:
4		3		400000 200000 200000 200000	*	s s <sub>P</sub>	3/1 To 5Y 4/2	Dropstones: Section 1, 27 cm, Ø 1.5 cm, siltstone; 118 cm, Ø 1.5 cm, shale. Section 2, 65 cm, Ø 1.0 cm, coal; 76 cm, Ø 1.5 cm, coal; 133 cm, Ø 1.4 cm, sandstone. Section 4, 30 cm, Ø 5.0 cm, siltstone. Section 5, 112 cm, Ø 2.0 cm,
1		4	Quaternary	♦		Ρ		quartzite. Section 6, 13 cm, Ø 2.0, coal.
		5		\$		Ρ		
		6		\$		P	5Y 3/1 To 5Y 5/1	
in the set		7				м		



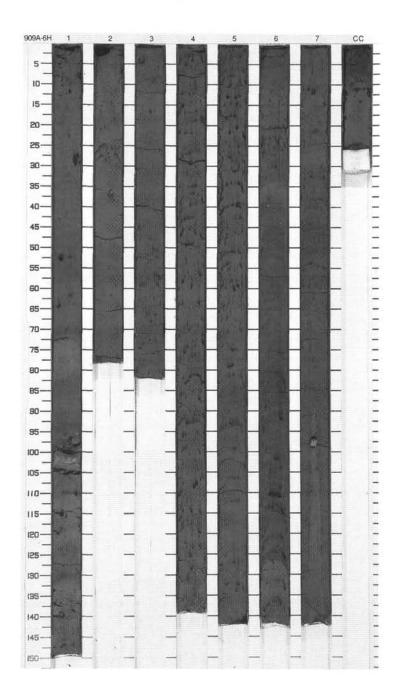
ITE 909 H	101	E	A CORE	= 4			CORED 26.5 - 36.0 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Image: Arrow of the second s	1 2 3 4	Quaternary Ag		Dist	SP SP SP SP SP SP SP P SP	50 4/1 50 5/1 3/1	SILTY CLAY AND CLAYEY SILT Major Lithology: SILTY CLAY and CLAYEY SILT, dark gray (5Y 4/1) and very dark gray (5Y 3/1), with some thin black (N3) bands. Minor Lithology: SILTY MUD, very dark gray (5Y 3/1), primarily in Sections 1–3, at the base of the cyclic color units, where the sharp contact is shown in the graphic display. CLAY, dark gray (5Y 4/1), in Section 6, 100–117 cm. General Description: From Section 1, 1 cm to Section 3, 50 cm, SILTY CLAY, CLAYEY SILT, and SILTY MUD form graded layers with coarser, darker sediment at the base. These intervals range in thickness from 22 to 60 cm in length, usually with a longer light, finer layer. Below Section 3, 50 cm, color changes do not correspond with grain-size changes. Bioturbation is usually more visible in the light layers. Black bands are dispersed throughout, but fade and disappear after exposure to air. Some contain concentrations of coarse clasts, others show no grain-size
	5		***		P		changes. Dropstones: Section 1, 96 cm, Ø 1 cm, coal. Section 2, 17 cm, Ø 1.7 cm, coal; 104, Ø 1.2 cm, quartzite; 104 cm, Ø 1.1 cm,
	6				P		quartzite. Section 3, 67 cm, $\emptyset$ 1.1 cm, coal; 129 cm, $\emptyset$ 1.6 cm, coal. Section 4, 115 cm, $\emptyset$ 1.0 cm, limestone; 115 cm, 1.0 cm, quartzite. Section 5, 110 cm, $\emptyset$ 1 cm, pink
9	7 CC		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	****	P		granite. Section 6, 64 cm, Ø 1 cm, siltstone; 127 cm, Ø 1.0 cm, limestone; 128 cm, Ø 1 cm, brown sandstone. Section 7, 22 cm, Ø 1.7 cm black metamorphic; 29 cm, Ø 1.6 cm, black metamorphic.



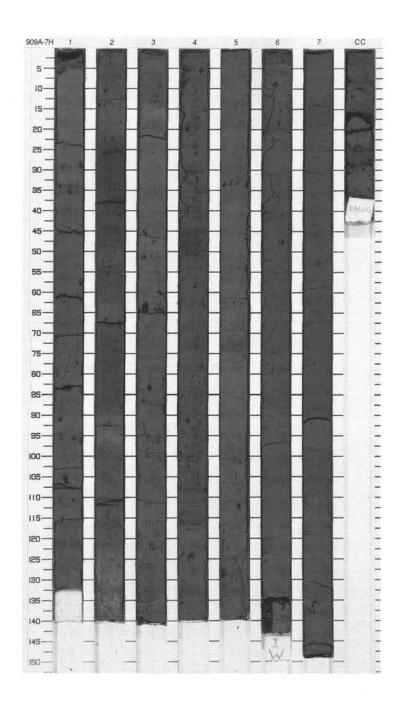
	TE 909 H	-	T -		_		-	CORED 36.0 - 45.5 mbs
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the Frederic		1			-	P S P		SILTY CLAY Major Lithology: SILTY CLAY, slightly bioturbated, color varies between olive gray (5Y 4/20) and very dark gray (5Y 3/1). Black and brown color bands are irregularly distributed over the entire core. Coal fragments (Ø 1.0 cm) are also
2		2				S P		scattered throughout. General Description: Dropstones: Section 1, 63 cm, Ø 1.0 cm, siltstone;
a martin		3		}		Ρ		104 cm; Ø 2.0 cm, quartzite. Section 5, 98 cm, Ø 3.0 cm, siltstone.
Turner P						Ρ	5Y 3/1 To 5Y 4/2	
		4	Quaternary	= =		Р	4/2	
		_		= = =		Р		
11111		5		÷ - =		Р		
						SP	5Y 3/1	
		6				Ρ	To 5Y 3/2	
		_		-		Р		
		7 ;C		3		P M	(	



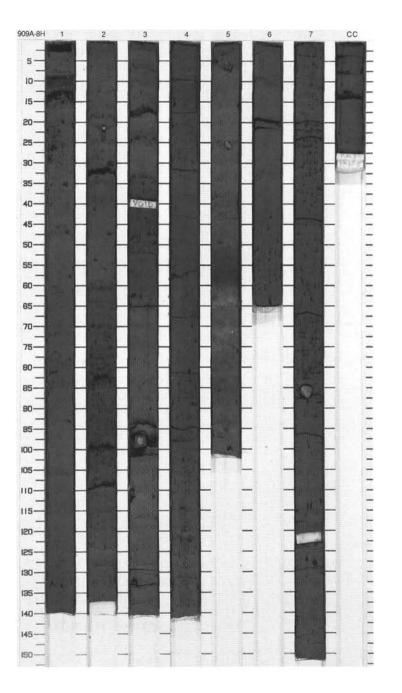
		E			1.6	0		
Meter	Graphic Lith.	Section	Age	Structur	Disturb	Sample	Color	Description
o lance		1		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1 2 2	Р Sр		SILTY CLAY Major Lithology: SILTY CLAY, dark gray (10Y 4/1) and
1						s		very dark gray (10Y 43/1), dominates Minor Lithologies:
2		2				s <sub>P</sub>		SILTY MUD, very dark gray (10Y 3/1 in Section 6, 130–150 cm and Sectic 7, 38–68 cm. CARBONATE-BEARIN SILTY CLAY, dark gray (10Y 4/1) is present in Section 1, 70–100 cm, above a layer which contains either a carbonate dropstone or is undergoin diagenesis. The layer is slightly light
True la su		3		~~~~	· · · · · · · · · · · · · · · · · · ·	Р	10Y 3/1 To	
Hereit				3			10Y 4/1	and browner than the surrounding sediment.
duran far		4	nary			S P		General Description: Distinct color cycles 15 to 70 cm long dark at base and light at top occur from Section 1, 1 cm, to Section 3, 30 cm. The darker layers tend to be
11111111111		5	Quaternary	~~~~~				slightly coarser. Section 3, 30 cm, to Section 5, 70 cm, contain abundant dark clasts. Section 6, 30–130 cm, contains six short fining-upward
the second second				~~~~		Р		cycles. Thin dark bands that fade on exposure to air are present throughou Carbonate in Section 1, 95–100 cm, interpreted to be a dropstone, but ma
and and		6		↑ F }		SP		be diagenetic. The sediment above it contains fine carbonate particles.
1 I		172		↑ F 3 ◆ 3 ↑ F 3		s P	10Y 4/2	Dropstones: Section 1, 51 cm, Ø 1.0 cm, coal; 95 cm, Ø 5.0 cm, limestone; 139 cm, Ø 1.5 cm, gray limestone.
11111				~~~~~		P 10Y 4/1	Section 2, 17 cm, Ø 1.7 cm, coal; 36 cm, Ø 1.0 cm, gray quartzite. Section 7, 97 cm, Ø 3.0 cm.	
to have		7		\$ \$		Р		
-		00		3		M		



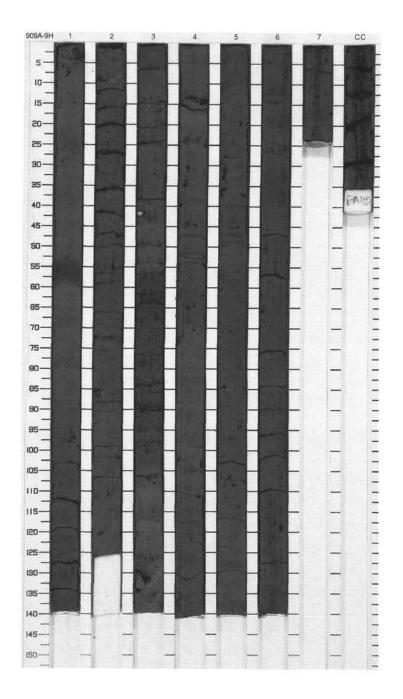
SI	FE 909 H	101	E	A CORE	7			CORED 55.5 - 65.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Colar	Description
The second second		1		• – • –	1	P S P	10Y 4/1 To 10Y 3/1	SILTY CLAY Major Lithology: Very dark gray (10Y 3/1) SILTY CLAY, strongly mottled due to disturbance related to gas expansion and presence of common small mud
Line Real		2		• -		P S P	10Y 3/1 To 5Y 3/1	clasts. Discrete mud clasts are commonly associated with thin black layers. SILTY CLAY' is more massive in Section 7, and contains fewer mud clasts. Minor Lithologies:
Trucher L		3		•		S P P	5GY 4/1 10Y 4/1	(Brown) very dark gray (5Y 3/1) CLAYEY MUD with ~15 % sand alternates in 10-20-cm-thick bands with dominant SILTY CLAY from Section 2, 22 to Section 3, 14 cm, and is found in Section 7, 100–114 cm. Dark greenish gray (5GY 4/1) SILTY
and and a status		4	Quaternary	•		P S P	10Y 4/1	CLAY occurs in Section 3, 14–46 cm. Black (5Y 2.5/1) SILTY CLAY occurs in Section 4, 42–58 cm. General Description: Voids related to drilling disturbance caused by gas expansion are present in each section from ~140 to 150 cm.
and the second se		5	o	• -		P	10Y 4/1	except Section 7. Dropstones: Section 4, 116 cm, Ø 1.6 cm. Section 7, 134 cm, Ø 1.0 cm. Section CC, 23 cm, Ø 1.0 cm.
		6		•		P P	10Y 4/1	
Trin Barren Lin		7		~		S P	5Y 3/1	



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1.1.1						SS		SILTY CLAY
Contractor Sector		1				Sp		Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), homogeneous but may exhibit faint color banding. Black (5Y 2.5/1) and dark gray (5Y 4/1) sandy pockets,
and frank		2		\$		P S		possibly after burrows, occur throughout the core. The black pockets are abundant in discontinuous layers in Section 2, 61–110 cm; Section 6, 42–65 cm; and Section 7, 0–93 cm.
1.1.1.						Р		Silt- and sand-sized grains include guartz (25%-30%), and minor amounts
ALL DALLA		3				Р		of feldspar, accessory minerals, and opaques.
in the second		3	v	0		Р		Minor Lithologies: CLAYEY CARBONATE, gray and dark gray (5Y 5/1, 5Y 4/1), occurs in Section 1, 9–12 cm; Section 5, 59–85 cm. In
a collars		4	Quaternary			Р	5Y 3/1	Section 1, the carbonate layer has a sharp top and grades into CARBONATE CLAYEY MUD. In
A A A A A A A A A A		4	Ø			Р		Section 5, the carbonate layer is mottled; this may be due to bioturbation or incipient concretions. Clay-sized calcite makes up 65%-70%
there in the		5		×		s <sup>P</sup>		of the constituents. CARBONATE CLAYEY MUD, black (5Y 2.5/1), underlies CLAYEY CARBONATE in Section 1 and has a bioturbated bottom contact. Major components
1111		6				Р		include opaques (44%), clay-sized carbonate (25%), and clay (20%).
Second to the						Ρ		General Description: Dropstones: Section 2, 21 cm, Ø 1.0 cm, dolostone. Section 3, 96 cm, Ø 3.0 cm, basalt.
and a new		7		\$		Р		Section 5, 25 cm, Ø 1.5 cm, quartzite. Section 7; 84 cm, Ø 3.5 cm, basalt.
i,		cc				м		



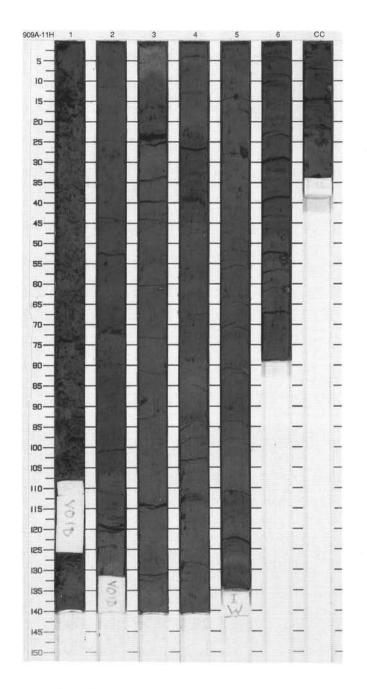
de:		C C				0	0	1.00	· · · · · · · · · · · · · · · · · · ·
Meter	Graphic Lith.	Section	Age	Stru	ucture	Disturb	Sample	Color	Description
10000						ł	Р	5Y 4/1	SILTY CLAY and CLAY Major Lithologies:
1		1				E	S P		SILTY CLAY, very dark gray (5Y 3/1) or dark gray (5Y 4/1), homogeneous to slightly bioturbated is present in the following intervals; Section 1, 0 cm to
2		2		0 0 0			P S P	5Y 3/1	Section 3, 143 cm and Section 5, 0 cm to bottom of Core Catcher. Numerous color bands, dark olive gray (5Y 3/2), dark gray (5Y 4/1) and black (5Y 2.5/1) are present in distinct intervals. Includes quartz, feldspar, volcanic
3		3		0			Р		glass, inorganic calcite, accessory minerals and opaque minerals. Pockets of black sediment, sometimes with sand-sized pyrite crystals, are common. Structureless CLAY, very
4			λ	à .		Ē	Р	5Y 4/1	dark gray (5Y 3/1) is present from Section 3, 143 cm to Section 4, 150 cm. Black and dark olive gray (5Y 3/2)
		4	Quaternary	3	_		Ρ		color bands are common. Coarse fraction includes quartz, feldspar, volcanic glass and opaque minerals.
dam			0	3	-	1	S P		Minor Lithology: One dark brownish gray (10YR 3/2) layer of CLAYEY CARBONATE
		5		33	******		Ρ		occurs in Section 6, 18–27 cm. General Description: Slightly fractured due to high
		5		3		1	S P	5Y 3/1	outgassing. Dropstones: Section 2, 86 cm, Ø1.2 cm, black siltstone.
or training	±5	6			_		SΡ		Section 3, 42 cm, Ø 1.2 cm, light gray claystone. Section 3, 108 cm, Ø 1.4 cm, sandstone.
11111		7				   P		Section 3, 132 cm, Ø 4.5 cm, schist.	
1		cc				1	м		

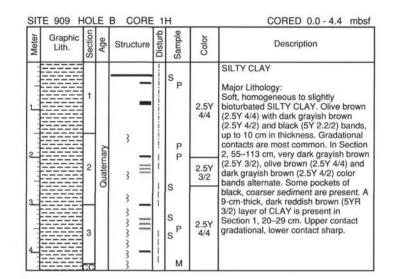


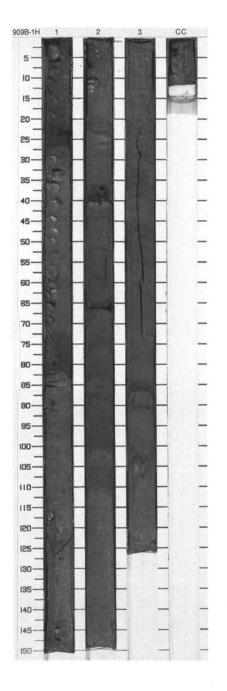
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
a familiar from		1	Quaternary	***	wwwwww	P M	5Y 3/1	SILTY CLAY Major Lithology: Slightly bioturbated very dark gray (5Y 3/1) SILTY CLAY. Section 1, 0–132 cm very disturbed. Pockets of black (5Y 2.5/1) coarser sediment are present.



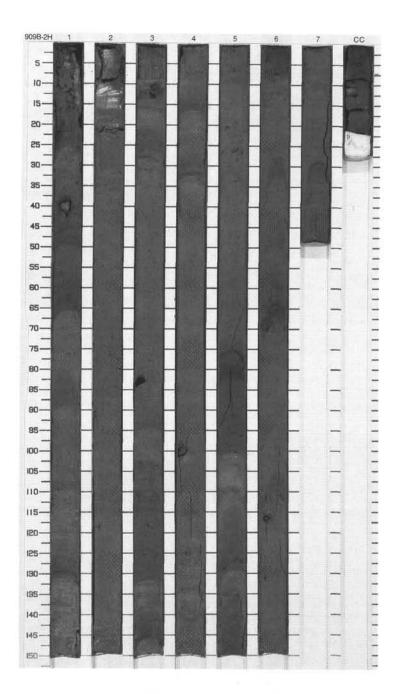
51	TE 909 H	_	-	A C	OHE			_	CORED 84.4 - 92.5 mbsf
Meter	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
1		1				wwwww	Ρ	5Y 3/1	SILTY CLAY and CLAYEY MUD Major Lithologies: SILTY CLAY, very dark gray (5Y 3/1, 10Y 3/1), is relatively homogeneous and contains black (5Y 2.5/1) sandy
-	Void								pockets, possibly after burrows,
2		2		~ -	× – –		P S P	5Y	scattered throughout the core. Locally, the black sediment occurs in discontinuous layers, notably in Section 4, 0–25 cm, 45–141 cm, and Section 5. White (quartz?) pods, mm- sized, occur in Sections 3 to CC. Silt- and sand-sized grains in SILTY CLAY
4		3	Quaternary	\$		s s <sub>P</sub>	3/1	include quartz (15%–25%), feldspar (5%–10%); and minor amounts of calcite, accessory minerals, and opaques. CLAYEY MUD, very dark gray (5Y 3/1, 10Y 3/1), may show color banding and discontinuous black (5Y 2.5/1) laminae.	
		4	a	::			P S P	5Y 3/1 To 10Y	Minor Lithologies: Homogeneous CLAYEY CARBONATE, dark gray (5Y 4/1), in Section 3, 0–7 cm. It contains clay- sized calcite (65%), clay (15%), quartz (17%), and minor accessory minerals and opaques. CARBONATE CLAYEY MUD in Section 4, 25–45 cm contains clay-sized (nonbiogenic) calcite, up to 30%.
Renthered Renth		6		◇ ◇			P I P M	3/1	General Description: Dropstones: Section 2, 71 cm, Ø 1.5 cm, siltstone. Section 3, 61 cm, Ø 1.0 cm, dolostone. Section 6, 53 cm, Ø 2.0 cm, sandstone; 60 cm, Ø 1.5 cm, quartzite. Section CC, 10 cm, Ø 1.5 cm, dolostone.



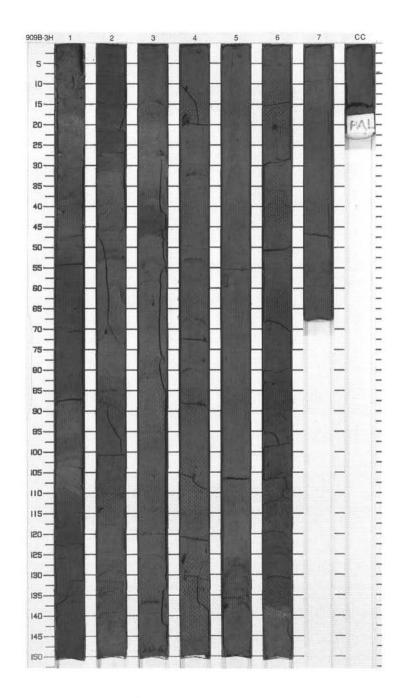




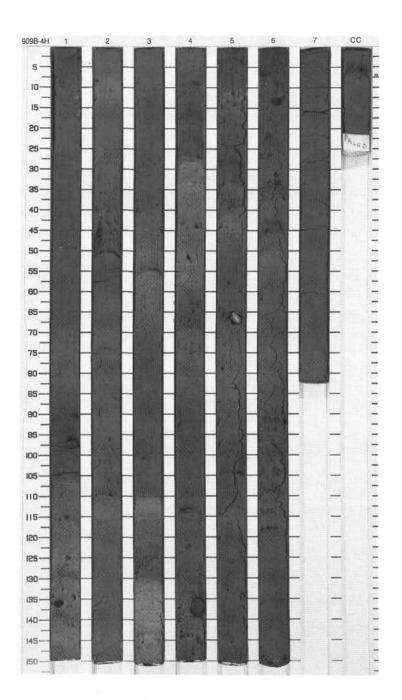
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
en Frederic		1			M	Ρ	5Y 4/1 To 5Y 4/2	CLAY Major Lithology: CLAY, dark gray (5Y 4/1) is homogeneous but may locally show thin color banding. Silt- and sand-sized grains are quartz and accessory
Level 11		2		\$		s <sub>P</sub>	5Y 4/1	minerals and minor feldspar, calcite, and opaques. CLAY, dark grayish brown (2.5Y 4/2) is homogeneous with thin layers of very dark gray sediment
and and				William State	3000007 3000007		5Y 4/2	(5Y 3/1) locally. Section 5, 57–61 cm contains scattered mollusk shells (<1 cm in size). Quartz is the dominant silt
. Lever							5Y 4/1	size component. Minor Lithologies: CLAYEY MUD, olive gray (5Y 4/2), is
		3	N	۰ ــــــ		Ρ	5Y 4/1 To 5Y 4/2	characteristically color banded and interbedded with dark gray (5Y 4/1) CLAY. Silt- and sand-sized grains include quartz (30%), feldspar (10%) and minor accessory minerals, and
		4	Quaternary			Ρ	P 2.5Y 4/2 4/2 4/2 4/2 CLA 3/1), shar	opaques. SILTY CLAY, olive gray (5Y 4/2), is homogeneous to faintly color banded and commonly interbedded with dark gray (5Y 4/1) CLAY in Sections 1 to 4. Silt-sized grains are quartz and minor feldspar, accessory minerals, calcite, and opaques.
		5		200005		s		CLAYEY MUD, very dark gray (5Y 3/1), is typically homogeneous and has sharp bottom contacts with dark gray (5Y 4/1) CLAY. Quartz predominates
and a second sec	L   			000005 000005 300005		S P		and feldspar, accessory minerals, opaques, and glauconite are minor components.
and a state of the second s		6		0000000 0000000 00000005 0000005		Ρ	5Y 4/1 To 5Y 4/2	General Description: Dropstones: Section 1, 39 cm, Ø 3.0 cm, sandstone. Section 2, 1 cm, Ø 8.0 cm, granodiorite. Section 3, 97 cm, Ø 3.0 cm, shale.
	1	7				м		Section 6, 116 cm, Ø 1.5 cm, slate.



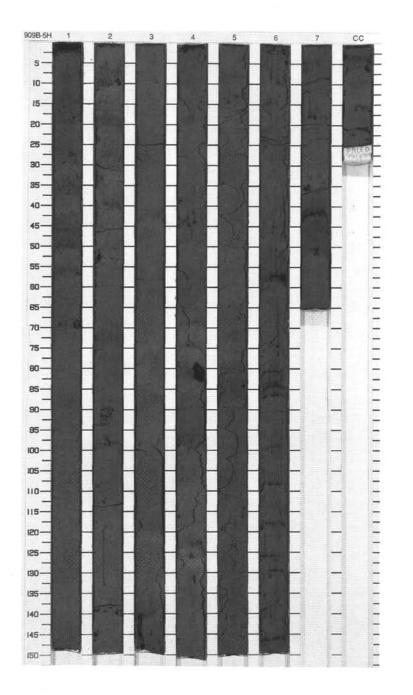
	FE 909 H	-			3			CORED 13.9 - 23.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
				- 5 -	!	s P	5Y 5/2	CLAY
100		1				s	5Y 3/1	Major Lithology: Gray (5Y 5/1), dark gray (2.5Y 4/0),
-				=			5Y 3/2	olive gray (5Y 5/2), dark olive gray (5Y 3/2), and very dark gray (5Y 3/1)
- desire				3		Р	5Y 3/1	CLAY. Clay content is nearly constant at 80%. Clay minerals and quartz grains are predominant, with minor
2		2		3		3	2.5Y 5/2	(<5%) presence of feldspar, volcanic glass, and inorganic calcite.
dan		-		3			5Y 3/1	General Description:
3						S	5Y 5/2	Core is characterized by color changes which, although contrasting sharply, are marked by gradational contacts.
dian				- 5 -		Р		These color variations are not apparent in compositional or textural differences
1		3			1		5Y 5/1	as determined by smear slides. Bioturbation is visible near the color
100		100101		_				contacts and may occur throughout the core. Sharp basal contacts and
1			nary	3		Р	2.5Y	contrasting sediments occur in Section 3, 50 cm and Section 6,140 cm. Color
1		4	Quaternary	3			2.51 N4/0 To	bands are visible in Sections 2 and 3.
- Post		7	ō	3			5Y 5/1	Dropstones: Section 5, 140 cm, Ø 1.0 cm, coal.
							2.14	Section 6, 53 cm, Ø 5.0 cm, quartz.
1.1.1		0.00				Р	5Y 5/1	
100		5		3			To 5Y	
Z -				33			5/2	
The second				◊ }			2.5Y	
8				3		sР	N3/0 To	
		6		0			5Y 3/1	
d and				3				
1					1	1.075		
in the second		7		_		Р	2.5Y N3/0	
100		CC		-	I M			



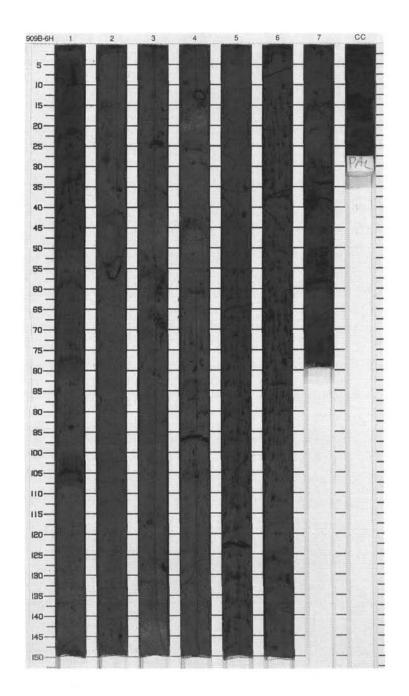
Je.	Graphic	5			6	ele		CORED 23.4 - 32.9 mbsf
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
ALC: NO.		1		•		SP	5Y 4/1	CLAY Major Lithology:
1				- <u>≈</u> ==		s P		CLAY, homogeneous, color varies from dark olive gray (5Y 3/2) to very dark gray (5Y 3/1) and to dark gray (5Y 4/1). Gradational contacts are more
2		2		•		Р		common with often a coarser layer (<0.5 cm thick) at base. Moderately to heavily bioturbated, sometimes mottled; black (5Y 2.5/1) color bands
1		4				Р	5Y 3/1 To 5Y	are present. Core contains scattered coal fragments (Ø <2 mm). Minor Lithology:
ert eres		3					3/2	CLAYEY MUD, homogenous and moderate bioturbated, color very dark gray (5Y 3/1) to dark olive gray (5Y
and the		5		₩		P P		3/2), in Section 4, 80 cm to Section 5, 25 cm. General Description:
5			Quaternary	-		P	5Y 4/1	Dropstones: Section 1, 98 cm, Ø 2.5 cm; 136 cm, Ø 4.0 cm, coal. Section 4, 135, Ø 5.0 cm, siltstone.
the state of the s		4	Qué	- % * * * * * * * * * * * * * * * *		Ρ	4/1 5Y 3/2 To 5Y	Section 5, 65 cm, Ø 3.0 cm, quartzite. Section 6, 14 cm, Ø 1.5 cm.
Terres				- * =		Р	3/1 5Y	
		5		• • •		s <sub>P</sub>	4/1 5Y	
and the							3/1 To 5Y 3/2	
1111		6		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		Ρ	5Y	
1				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P	4/1 To 5Y	
		7				P M	4/2	



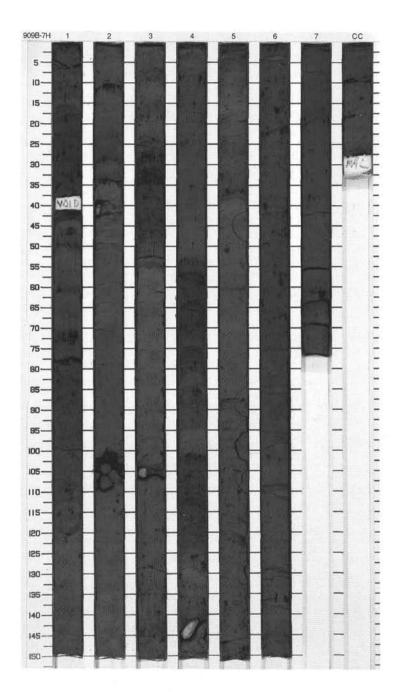
-	Questi	10	-		-	H 0		CORED 32.9 - 42.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1.11								CLAY
The state		1		<u>ه</u>	2 2 2	Р		Major Lithology: CLAY, homogeneous, slightly bioturbated; color varies from very dark
A to the total					***	s P		gray (5Y 3/1) to dark olive gray (5Y 3/2) to olive (5Y 4/2). Coal particles (<2 mm) are irregularly scattered over the
2		2			***	Р		core, black color bands are common. Gradational contacts are dominannt.
		4		۵ ۵		Р		General Description: Dropstones: Section 1, 70 cm, Ø 5.0 cm. Section 2, 92 cm, Ø 2.5 cm, siltstone;
		3				Р		<ul> <li>Section 2, 32 cm, Ø 2.5 cm, Sittstone;</li> <li>134 cm, Ø 2.5 cm.</li> <li>Section 3, 148 cm, Ø 2.5 cm.</li> <li>Section 6, 70 cm, Ø 1.0 cm sittstone.</li> <li>Section 7, 51 cm, Ø 2.5 cm sittstone.</li> </ul>
		0		\$		SP		Section 7, 51 cm, 6 2.5 cm sinstone.
		4	Quaternary	\$		Ρ	5Y 3/1 To 5Y 4/2	
-						Ρ		
		5				Ρ		
						Р		
						Ρ		
and the second		6		\$		Ρ		
T. T. T.		7		\$		Ρ		
1		c		~		м		

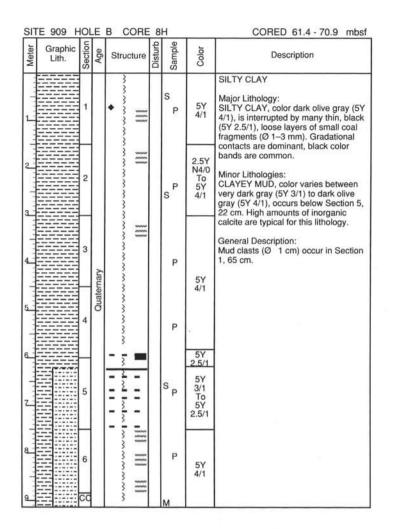


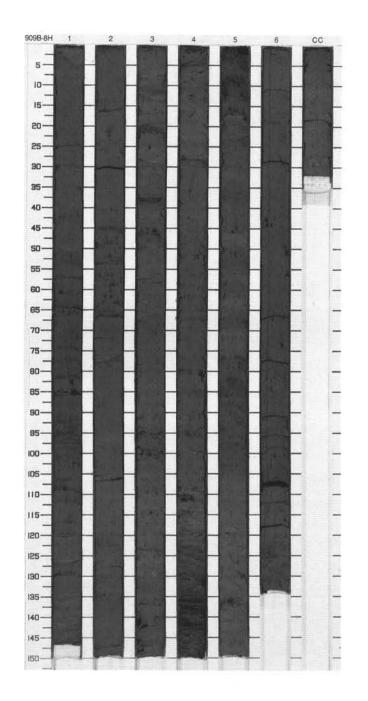
12	1 3 9 9	c				m		
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
10000		1		◇ 3		Ρ	10Y 4/2	CLAY and SILTY CLAY Major Lithologies: Dark gray (2.5Y 4/0) to dark olive gray
						Р	5Y 3/2	(5Y 3/2) CLAY and SILTY CLAY. The CLAY is characterized by 5% sand, 20% silt, and 75% clay content. It contains approximately 15% quartz and 10% feldspar grains, in addition to
		2					2.5Y N4/0	clay minerals. The SILTY CLAY is characterized by a similar composition and slightly higher concentrations of silt-sized particles and quartz grains (25% and 20%, respectively).
1111				٥		Р		Minor Lithology: An individual layer within Section 4,
4		3		} P P			5Y 4/1	10–20 cm, contains clay composed primarily of 1–2 µm carbonate grains. The remaining 3% consists of quartz and feldspar silt grains.
5			nary			SP	10Y 5/2 5Y	General Description: Gradual color variations from dark gray to very dark gray occur in the core. Compositional and textural
True		4	Quaternary				5/2 5Y	characteristics of the sediment do not co-vary with the color changes. A small
			0				4/1	lithologic change is apparent within the core, with SILTY CLAY common
Link in the second seco		5		3 3		Ρ		towards the top and CLAY common towards the bottom. Section 7 is also composed largely of SILTY CLAY. CARBONATE CLAY occurs as a layer readily identified by color and texture. The layer has gradational contacts
direction of the				ž				above and below, and displays no bedding. Minor bioturbation has
8		6		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S	2.5Y N4/0	resulted in a mottled appearance throughout much of the core.
the second se				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				Dropstones: Section 1, 10 cm, Ø 1.5 cm, coal. Section 2, 53 cm, Ø 5.0 cm. Section 3, 26 cm, Ø 2.0 cm, coal.
Li		7		3	Р		Section 3, 26 cm, Ø 2.0 cm, coal. Section 4, 16 cm, Ø 2.0 cm, siltstone.	
10		00		24	i	м		



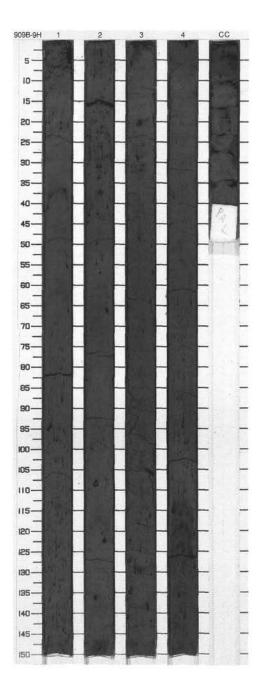
Fer	Graphic	ion			ę	H Be	د ۲	CORED 51.9 - 61.4 mbst
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
True level		1		-		Р Sp		SILTY CLAY Major Lithology: SILTY CLAY, homogeneous, color varies between very dark gray (5Y 4/1)
the second second		_		- 3 ===		- 1-		and dark olive gray (5Y 3/1). Gradational contacts are dominant, moderate amounts of inorganic calcite
2		2		×~~ • ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		sP	5Y	particles of clay/silt size are present, black color bands ( 1.0 cm) are common in Sections 1, 2, 3, and 4. Fine coal particles ( 2 mm) are found over the whole core, moderate bioturbation is typical for color-banded
3 -		-		3		5	3/1 To	areas.
True Les		3				Ρ	5Y 4/1	Minor Lithologies: CARBONATE-BEARING CLAY and CARBONATE CLAY, homogeneous, dark olive gray (5Y 4/1), high content of clay/sill size inorganic carbonate
Lucial Lines		4	Quaternary			Ρ		grains, slight bioturbation is typical. These layers include the lighter intervals in the core, for example, Section 3, 55–57 cm; Section 5, 14–20 and 37–42 cm. However, they are not
				> *****		Ρ		always visually obvious, for example Section 1, 91 cm.
a harren				-		S P P	5GY	General Description: Silt clasts are present in Section 6, 15 and 135 cm.
Line Line		5		1111 			4/1	Dropstones: Section 1, 46 cm, Ø 1.5 cm, siltstone; 72 cm, Ø 2.0 cm, siltstone.
Line Line		6		~ - • • •			5Y 3/1	Section 2, 42 cm, Ø 2.0 cm, siltstone; 101 cm, Ø 3.0 cm, siltstone. Section 3, 106 cm, Ø 3.0 cm, siltstone Section 4, 145 cm, Ø 3.5 cm, siltstone Section 7, 61 cm, Ø 1.5 cm, coal. Section CC, 17 cm, Ø 1.0 cm,
1111				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ρ	3/1	plutonic.
of non-		7		- <mark>~ -</mark> ~ ~		Ρ		
0		cc		◊ 3		м		



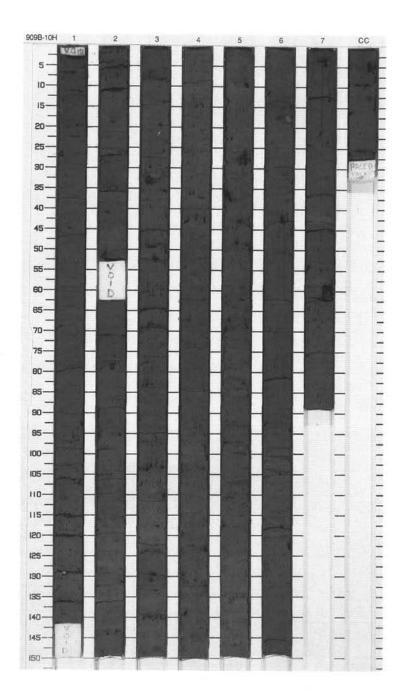




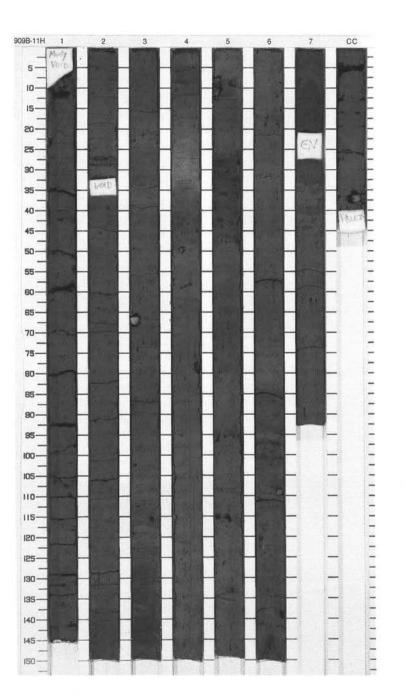
Graphic Lith.	Section	Structure	Disturb	Sample	Color	Description
	1 2 Conternary 2 4	I II II II III I I II II II III I I III I III I I III II		P S S P P S	5Y 3/1 To 5Y 4/1	SILTY MUD Major Lithology: SILTY MUD, homogeneous, slightly bioturbated, color varies between very dark gray (5Y 3/1) to dark olive gray (5Y 4/1). Irregularly distributed coal clasts are common in Section 1 0–150 cm; Section 2, 0–40 cm; Section 4, 40–150 cm; Section CC, 0–40 cm. Gradational contacts are dominant. General Description: Dropstones: Section 2, 111 cm, Ø 1.0 cm Section 3, 18 cm, Ø 1.5 cm, siltstone

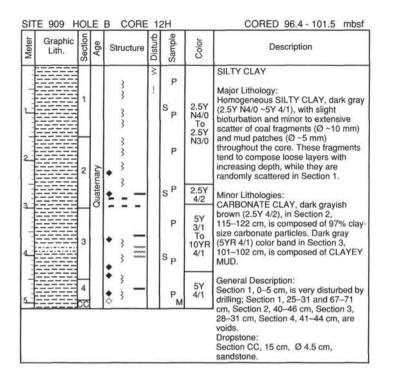


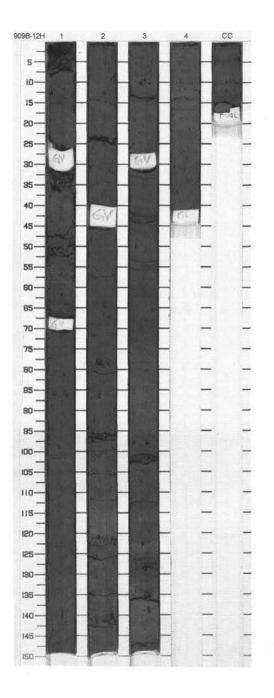
Meter	Graphic Lith.	Section	Age	s	tructure	Disturb	Sample	Color	CORED 77.4 - 86.9 mb
1		1		٥ ٥	**************************************		Р		SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (10Y 3/1 to 5Y 3/1), subtle variations in grain size, and changes in the concentration of clast abundances.
2	Void	2		<ul><li></li><li></li><li></li></ul>			SP		General Description: Dropstones: Section 1, 26 cm, Ø 1.0 cm, black limestone; 129 cm, Ø 1.2 cm, buff dolostone.
3					≈≈		S		Section 2, 34 cm, Ø 1.6 cm, coal; 78 cm, Ø 1.2 cm, coal.
and freedom		3		0	*******		Ρ		Section 3, 31 cm, Ø 1.6 cm, coal. Section 5, 27 cm, Ø 1.3 cm, black limestone. Section 7, 59 cm, Ø 3.0 cm, coal. Section CC, 5 cm, Ø 2 cm, shale.
and merilia		4	Quaternary		*****		Ρ	10Y 3/1 To 5Y 3/1	
in the second se		5		\$	***		S		
					**		P		
a Linin Linin		6			»»»»		Ρ		
111111111111		7		\$	»»»» –		SP		
9		c		0	\$\$ }}		м		



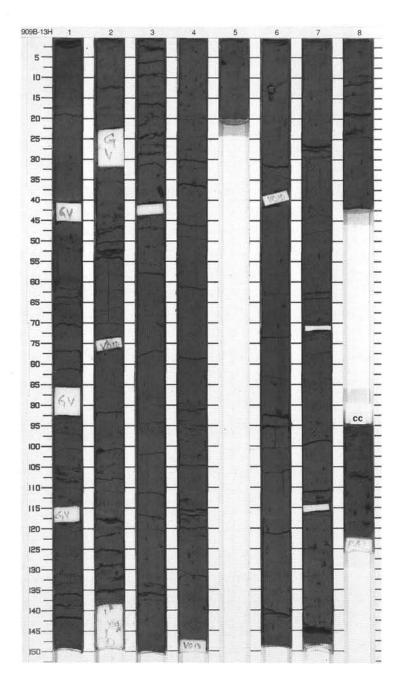
	TE 909 H	-		B CORE	-			CORED 86.9 - 96.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The last		1		3 III 33 33	W W	Ρ	10Y	SILTY CLAY Major Lithology: Dark gray (10Y 4/1) SILTY CLAY. Quartz content is between 15% and 20%. Feldspar content is between 10% and 15%. Opaques, inorganic
2	Void	2		~~~~ ****		Ρ	3/1	calcite, and accessory minerals are minor (<5%) constituents. Minor Lithologies: CARBONATE-BEARING CLAY and CARBONATE-BEARING SILTY CLAY. The CARBONATE-BEARING CLAY contains only clay and inorganic calcite
4		3		<u>^`</u>		P	10Y 3/1 To 10Y 5/1	(20%), and occurs in Section 4, 10 to 60 cm. The CARBONATE-BEARING SILTY CLAY is characterized by a slightly higher inorganic calcite content (25%) and minor amounts (1%–2%) of quartz, mica, and accessory minerals,
5		4	Quaternary			s S	10Y 4/1 To 10Y 5/2	and occurs in Section 7, 20 to 40 cm. General Description: The dominant lithology is fairly homogenous, with intervals of light bioturbation and very gradual color changes. Minor lithologies are
6		5	0	◆		Ρ	10Y	recognizable in the split core, occuring within the lighter layers of discrete 1- to 5-cm color bands. These bands have gradational contacts and are lightly to moderately bioturbated. Dropstones: Section 3, 65 cm, Ø 3.0, siltstone. Section 4, 50 cm, Ø 1.5.
8		6		} ** <b>***</b> @		Р	4/1	Section 4, 50 cm, Ø 3.0, carbonate. Section 5, 10 cm, Ø 3.0, carbonate. Section 5, 116 cm, Ø 1.0, shale. Section 6, 110 cm, Ø 2.0, pyritized shale. Section CC, 36 cm, Ø 2.0.
9	vi Void	7		3		s <sub>P</sub> s	5Y 3/1	
10		cc		\$	!	м	5Y 4/1	



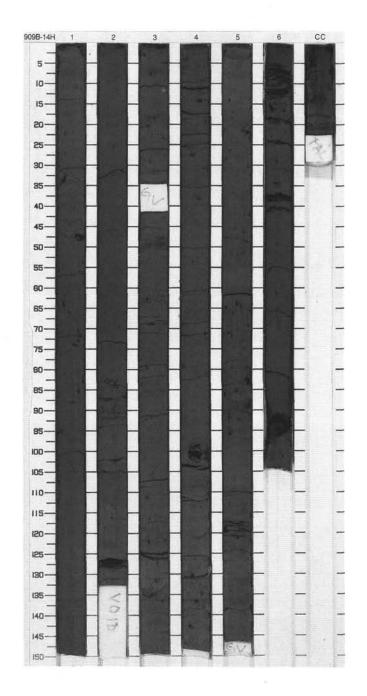


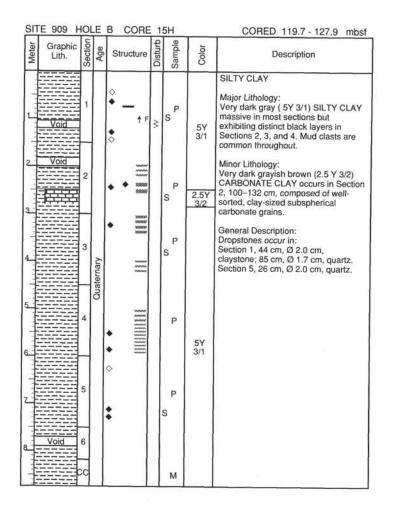


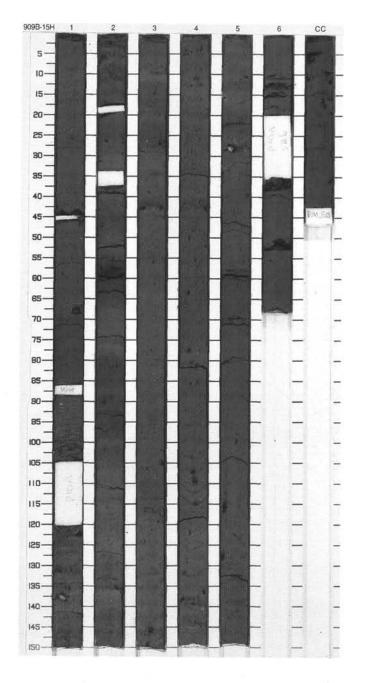
-	TE 909 H			B COH				CORED 101.5 - 111.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1				3	1	Р		SILTY CLAY
Lon Frontin		1		3		S P		Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY with diffuse reddish color bands (Section 1, 40–70 cm, Section 3, 80–100 cm). Pockets of dark brown coarse-sized grains (loose or
2		2		3		Ρ		cemented) are scattered throughout, with associated pyrite-cemented burrows. General Description: Dropstone: Section 6,15 cm, Ø 1.5 cm, sandstone
Part of the second		3		3	88	sP		coated with noncarbonate white mineral (sulfate?)
chant			ary	3	l			
5		4	Quaternary	3		Р	5Y 3/1	
6		5		\$		Р		
		6		3		P S		
				3				
nero hann		7		3		Ρ		
		8		3		P		



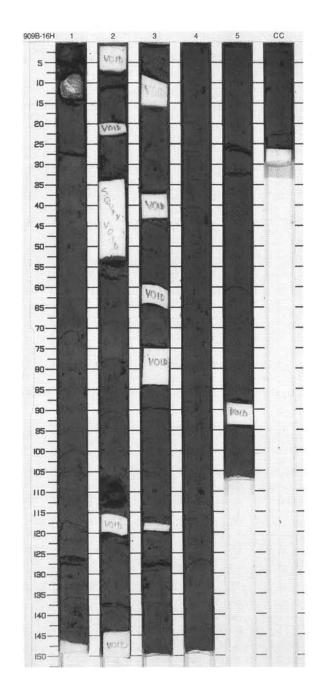
51	TE 909 H	-	-	B CORE	-			CORED 111.0 - 119.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		\$		S <sub>P</sub>	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray to dark greenish gray (5Y 3/1, 5GY 4/1), homogeneous to color banded; color bands more apparent in Sections 3 to 5 Sondy peoplet to black to user dork	
2	Void	2		<				<ol> <li>Sandy pockets of black to very dark gray (5Y 2.5/1, 5Y 3/1) and dark olive gray (5Y 3/2) and mm-size pods of white quartz(?) are present throughout the core. Section 3, 11 cm, and 134 cm contains cm-sized pockets of gray (5Y 6/1) sandy sediment. Silt- and sand- sized grains are predominantly quartz (25%), feldspar and accessory minerals (5%-10%).</li> <li>General Description: Dropstones: Section 1, 47 cm, Ø 1.0 cm, shale/slate.</li> </ol>
1 L	Void	3	Quaternary			SP	5Y 3/1 To 5GY 4/1	
to the second second		4	Quate	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		Ρ		Section 2, 83 cm, Ø 1.0 cm, shale. Section 4, 99 cm, Ø 4.0 cm, siltstone.
		5				Р		
8		6				s P	5Y 3/1	
1		cc				М		

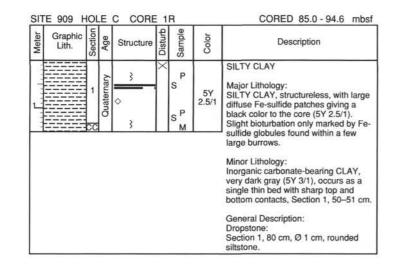






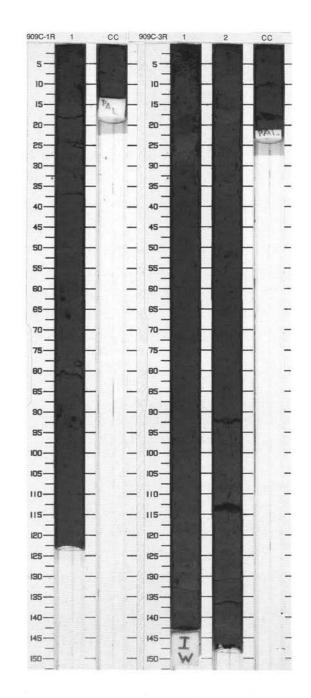
SIT	TE 909 H	IOL	E	B CORE	E 1	6H		CORED 127.9 - 135.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
La L		1		۵ 		s s <sup>P</sup>	5Y 3/1 To 5GY 4/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), is homogeneous but locally shows faint color banding. Mm- to cm-size pockets of black (5Y 2.5/1) sandy
Line Contract	Void	2				Ρ		sediment and mm-size white quartz(?) pods are present throughout the core. The dominant silt-size grains are quartz, feldspar, and minor amounts of accessory minerals, glauconite, and opaques.
4	Void	3	Quaternary			Р	5Y	General Description: Dropstone: Section 1, 8 cm, Ø 5.0 cm, solitary coral.
5		4				Р	5Y 3/1	
6		5				s <sub>Р</sub>		





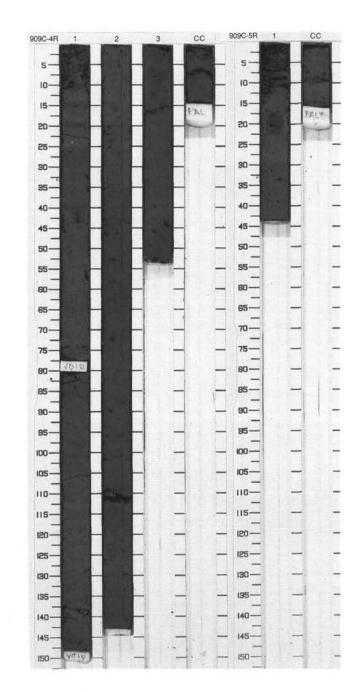
## 909C 2R NO RECOVERY

SIT	TE 909 H	IOL	E	C CORE	Ξ 3	R		CORED 104.3 - 113.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
To Carlo					×	sP	5Y 3/1	SILTY CLAY Major Lithology:
1		1	nary	3		s <sub>P1</sub>		SILTY CLAY, black (5Y 2.5/1) structureless and firm. Iron-sulfide patches more or less dispersed along the bedding. Scattered narrow and
2		2	Quaternary	3		P	5Y 2.5/1	elongated pyrite-cemented burrows. Minor Lithology: CLAYEY MUD, very dark gray (5Y 3/1), structureless with coarse sand grains
8		cc		3		P Mp		irregularly scattered, Section 1, 15–52 cm. Short gradational lower contact and upper part disturbed by coring.

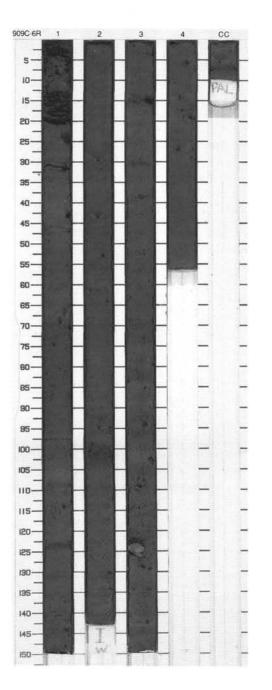


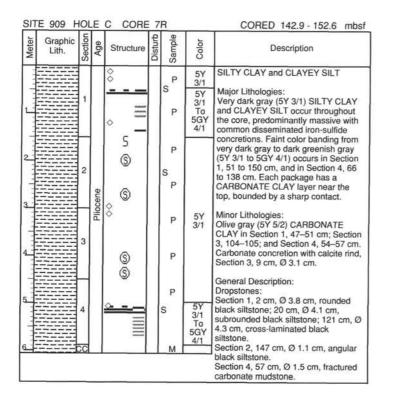
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
a free free free free free free		1 2 3 CC	Quaternary	*************************************		S P S P P M	5Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), firm and homogeneous except for local color banding which has layers that are slightly browner or lighter gray. Black pods, Ø <1 cm, of Fe sulphide are present throughout; they are less abundant in Sections 2 and 3. Thin slitly layers occur rarely in Sections 1 and 2. Distinct burrows are present in Section 1, 113 cm. Quartz and feldspar are the major silt- and sand-sized grains. General Description: Clay nodules (light gray): Section 1, 139 cm, Ø 1 cm. Dropstones: Section 1, 41 cm, Ø 2.6 cm, igneous? Section 2, 54 cm, Ø 2.8 cm, sandstone.

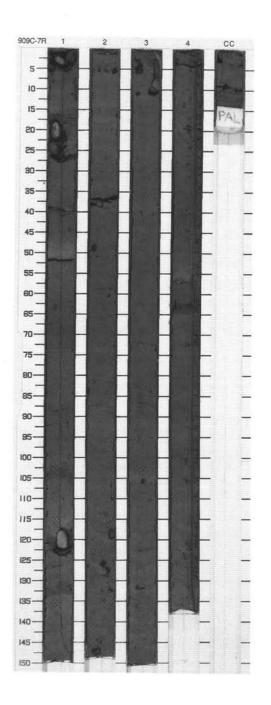
SIT	E 909 F	-	-	C CORE	: 5			CORED 123.6 - 133.2 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
11111		1 CC	Plio.	= }= =		s <sub>PM</sub>	5Y 3/1	SILTY CLAY Major Lithology:
								SILTY CLAY, very dark gray (5Y 3/1), homogeneous with scattered black pods of Fe sulphide. Quartz and feldspar are the major silt- and sand- sized grains; clay-sized inorganic calcite is a minor component.
								Minor Lithology: CLAYEY MUD, very dark gray (5Y 3/1) occurs in Section 1, 17–22 cm.



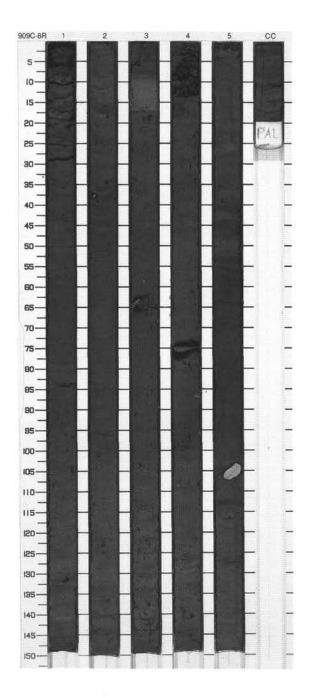
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2 3 4		1 2 3	Pliocene		~	P S P S P P S P S P M	5Y 3/1 To 5GY 4/1 5/Y 3/1	CLAYEY SILT and SILTY CLAY Major Lithologies: CLAYEY SILT interbedded with SILTY CLAY, very dark gray to dark greenish gray (5Y 3/1, 5GY 4/1), homogeneous but shows color banding in Sections 1 and 3. Black pods, Ø <1 cm, of Fe sulphide are scattered throughout the core. Gray to dark gray (5Y 5/1, 5Y 4/1) sandy pods are rare. Minor Lithology: CARBONATE-BEARING CLAY, dark gray (5Y 4/1), in Section 1, 103–108 cm and Section 3, 100–103 cm. Inorganic calcite comprises 20% of the sediment. General Description: Dropstone: Section 3, 123 cm, Ø 4 cm, partially sillicified dolostone.



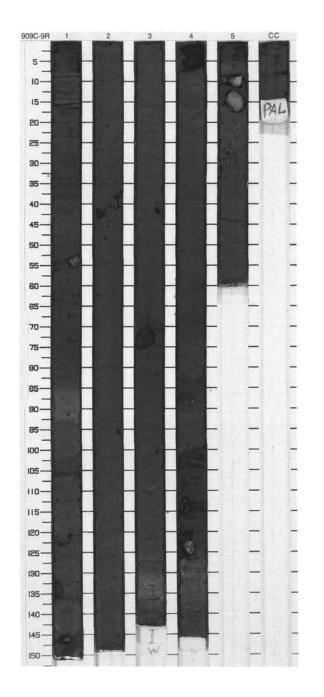




Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Let Met		1 2 3 4 4	Pliocene Ag	Structure 3 3 3 4 3 4 3 4 3 5 5 5 5 5 5 5 5 5	F F Distr	P P P P P P P P P P P P P P P P P P P	5Y 3/1 5Y	Description SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), very homogeneous. Slight bioturbation alternatively marked by white pods (quartz) and sandy pockets, Fe-sulfide cemented burrows, and pervasive indistinct black patches. Section 5 shows very faint color banding. Minor Lithologies: CLAYEY MUD, Section 5, 35–46 and 113–114 cm; CC, 1–2 cm, differs from silty clay only by a slight increase in sand-sized grains. The thicker bed has very indistinct bottom and top contacts, while the two thinner beds show sharper basal contact. CARBONATE CLAY, Section 3, 9–18 cm, is distinguished by a lighter color (dark gray, SY 4/1). The lower change in color is very sharp and the upper is gradational, but there are no obvious changes in texture or stiffness. Bioturbation is more apparent than in the silty clay. This layer contains up to 78% clay-sized carbonate grains. General Description: Dropstones:
the second se		5		::: °		S P		Section 3, 63 cm, Ø 3.5 cm, flat semi- angular siltstone. Section 4, 74 cm, Ø 6.0 cm, flat sandstone, dark. Section 5, 107, Ø 5.0 cm, rounded sandstone.
1		cc		= = =		м		1000/89-1550002051

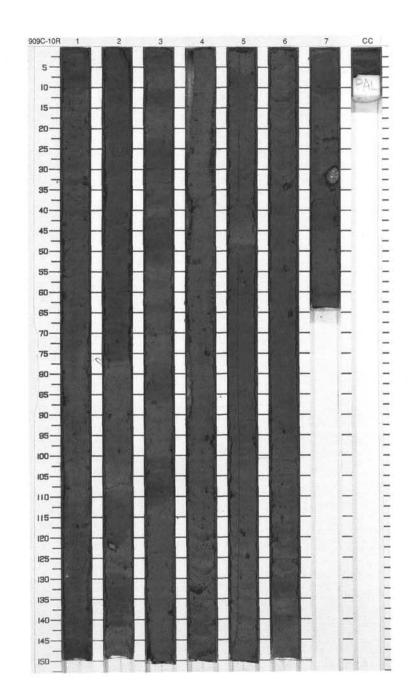


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The Frederic		1		*************************************		P S P		SILTY CLAY and CLAYEY SILT Major Lithologies: Massive very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT occur throughout core, exhibiting faint color banding in Section 1, 20–106 cm. Sediment becomes more firm in
3		2	9	****		P		Section 5. Minor Lithologies: CARBONATE-BEARING CLAY, slightly reddish very dark gray (5Y 3/1), in Section 1, 74–81 cm, dark gray (5Y 4/1) in Section 1, 85–93 cm and
A LILLING		3	Pliocer	Pliccene		P S P S I	5Y 3/1	Section 3, 135–140 cm. CLAYEY MUD, very dark gray (5Y 3/1) occurs in Section 4, 81–90 cm, accompanied by large mud clasts, Ø 2 and 4 cm, and from 100–126 cm, accompanied by dropstones. Sediment is soupy due to gas disturbance.
5 Summer		4		• • •	0	P P		General Description: Dropstones: Section 1, 54 cm, Ø 2.5 cm, gabbro (?); 67 cm, Ø 1.3 cm, subrounded black siltstone. Section 3, 72 cm, Ø 5.8 cm, iron-rich
6		5		◇		P M		sandstone. Section 4, 114 cm, Ø 3.4 cm, coal (?); 124 cm, Ø 3.6 cm, rounded sandstone. Section 5, 9 cm, Ø 3.3 cm, gray

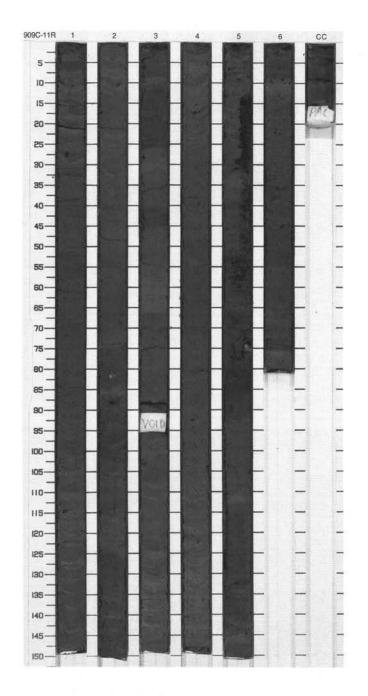


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	E 909 H	-		C CORE	-		1	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Colar	Description
the function of the second		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P P	EV.	SILTY CLAY Major Lithology: SILTY CLAY, dark gray (5Y 4/1; N/4), very dark gray (5Y 3/1; N/3), with a minor amount of dark greenish gray (5GY 4/1). Black, Fe-sulfide burrows,
1111111111		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S S	5Y 3/1	pods and layers are common in SILTY CLAY, but not in the minor lithologies. Grayish brown (2.5Y 5/2), silt-filled burrows are also present. Minor Lithologies: CARBONATE-BEARING CLAYEY MUD, dark olive gray (5Y 4.5/2), dark
				→ III I II →		S P	N3	
in Line		3		- <u>3</u> -		P S	To N4	gray (2.5 Y 4/1, 10YR 4/1), in Section 3, 56–59 and 113–116 cm, with sharp base and gradational top. The top is gradational into CLAYEY MUD. Also
1111		•				Р	5Y	present in smaller, less well defined, and probably more bioturbated intervals in Section 1, 30–33 cm;
			Pliocene	© »		s	4/1	Section 3, 33–35 cm; Section 5, 44–48 cm. CLAYEY MUD, very dark gray (5Y 3/1) in Section 1, 0–30 cm; Section 1, 127 cm to Section 2, 77
titlet.		4		\$ \$ *	E	Р		cm; Section 2, 108–121 and 129–141 cm, Section 3, 10–14, 42–56, and 100–113 cm; Section 6, 129–130 cm, Section 7, 10–11 and 31–34 cm. In
the latest		5		\$ 		Р		the thicker layers many grain-size variations are present, but not regular enough to be described as real beds.
-				°		Р	5Y 3/1	General Description: Dropstones: Section 2, 121 cm, Ø 2.2 cm,
8		6		3		Р	3/1	sandstone. Section 5, 96 cm, Ø 1.5 cm, siltstone. Section 6, 34 cm, Ø 1.2 cm, siltstone. Section 7, 31 cm, Ø 3.5 cm,
The Lot of		0		°		Р		metamorphic?.
9		7		مير ماملاس		P		

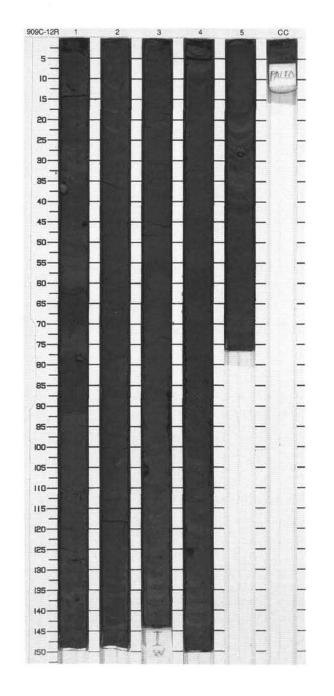


	FE 909 H	-				m		
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1T.		1		5		P S P	2.5Y 3/2 5Y 3/1	SILTY CLAY Major Lithology: Dark gray (5Y 4/1) to very dark gray (5Y 3/1) SILTY CLAY. Subtle color variations occur, but the lithology is relatively invariant in both texture and composition. Quartz (~20%), feldspar
2		2		5 5		5Y 4/1 P To 5Y P 3/1	4/1 To 5Y	composition. Quarz (~20%), feldspar (~6%), and inorganic calcite (4%–8%) are the important non-clay minerals. Minor Lithologies: Very dark grayish brown (2.5Y 3/2) CARBONATE-BEARING CLAYEY MUD occurs in ~10% of the core.
in the set		3		<u>»</u>	1	s P	5Y 4/1	Sand- and silt-sized quartz (30%) and feldspar (25%) are predominant. The surface texture is correspondingly rough. Dark gray (5Y 4/1)
4	Void		Pliocene	3		Р		CARBONATE CLAY occurs in Section 3, 59–66 cm, as the lightest layer in a series of medium color bands with mostly gradational contacts.
5		4		@ » IIII @ »		P S P	5Y 3/1	General Description: Core consists of interbedded layers of SILTY CLAY and CARBONATE- BEARING CLAYEY MUD. Bioturbation
6				5 » »				is evident throughout. Disseminated and nodular Fe sulfides are common. Pyrite concretions occur in Section 4, 17 and 92 cm.
2	н 1	5		- ≅ - 5 ≅ -		SP	5Y 2.5/2	Dropstones: Section 2, 83 cm, Ø 1.1 cm,
distant.	<b>1</b>					Ρ	5Y 3/1	metamorphic. Section 5, 74 cm, Ø 2.5 cm, siltstone.
8		6		\$*- _*-		Р	10Y 3/1	
1000		cc		\$		м	5Y 3/1	

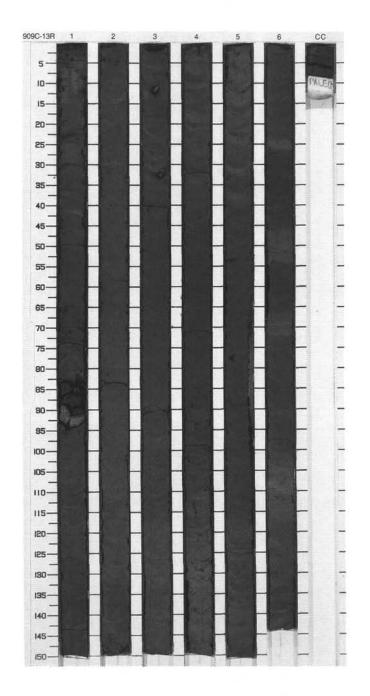


SITE 909

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3	Pliocene			S S P P P S P I P P	5Y 3/1 To 5Y 4/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1) and dark gray (5Y 4/1), slightly to moderately bioturbated. White sitty burrow fills are abundant. Contacts with coarser layer are gradational ( 1.0 cm thick). Minor Lithology: SILTY MUD and CARBONATE- BEARING SILTY CLAY, very dark gray (5Y 3/1) and dark gray (5Y 4/1), slightly bioturbated. CARBONATE- BEARING SILTY CLAY contains abundant inorganic calcite in Section 1, 0–50 cm. General Description: Dropstones: Section 1, 36 cm, Ø 2.5 cm, sandstone, 45 cm, Ø 1.0 cm, siltstone.
or here of		5				Ρ	5Y 3/1 To 2.5Y 3/2	

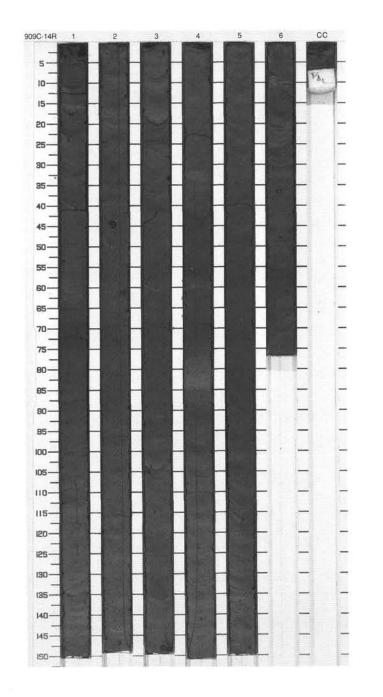


Meter	Graphic Lith.	Section	Age	Struc	cture	Disturb	Sample	Color	Description
G to a la		0				N D	s		SILTY CLAY Major Lithology:
True Fine		1		۵ ۰		1	Р		SILTY CLAY, very dark gray (5Y 3/1), homogeneous, slightly bioturbated, with disseminated Fe sulfide in Sections 4, 5, and 6. Minor inorganic calcite occurs in Section 6, 20–80 cm. Minor Lithology: SILTY MUD, very dark gray (5Y 3/1), occurs in Section 1, 30–60 cm. Top and bottom contacts are gradational.
		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	л Р Р S Р Р Р Р Р Р Р Р Р Р		s		
3		3		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		5Y 3/1	General Description: Dropstones: Section 1, 90 cm, Ø 6.0 cm, altered volcanic rock. Section 3, 11 cm, Ø 2.5 cm, shale. Section 3, 32 cm, Ø 1.0 cm,		
True true			Pliocene	~~~~~					sandstone.
district man		4		5 %			Ρ		
rection		5		5 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Ρ	5Y 3/1 To	
d'reaments				3	-		Ρ		
The second second		6					S S P	5Y 3/2	
1				Ĩţ	Ξ		Р		

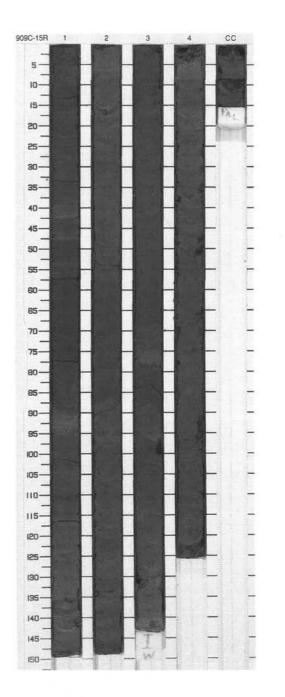


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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
∑ 		es 1 2 3 4 4	Pliocene	5 3 5 3 8 3 5 3 5 3 5 3 5 3 5 3 5 3 7 7 7 7 8	2 3	P P P P P P P P P P P	5 3/1	SILTY CLAY Major Lithology: SILTY CLAY, homogeneous, very dark gray (5Y 3/1), slightly bioturbated. White silt burrow fills are abundant; disseminated sulfides are common. Minor Lithology: CARBONATE-BEARING SILTY CLAY, olive gray (5Y 4/2), containing inorganic calcite up to 30% in Section 4, 80–85 cm.
2		5		©},		P P		
8		6		\$ \$ }		S P M		

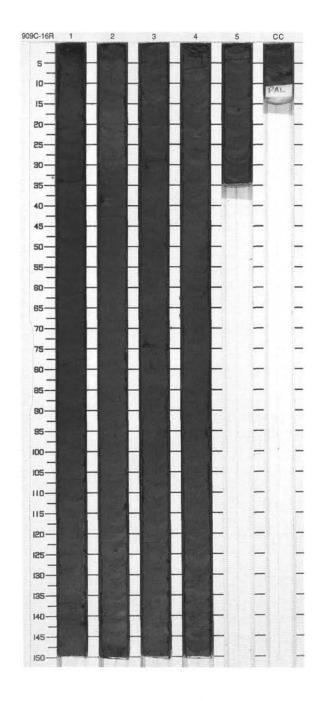


SIT	E 909 H	IOL	E	C CORI	E 1	5R		CORED 220.1 - 229.6 mbsf	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description	
Contract	4	1				P 3/1 To Major Lithology: 2.5Y SILTY CLAY, very dark 5/2 very dark olive gray (10	SILTY CLAY, very dark gray (5Y 3/1), very dark olive gray (10Y 3/1), and		
Production of the second		2	2		S     5Y       3/1     Minor Lithologies:       To     CARBONATE BEARING       SY     4/1       (2.5Y 5/2), Section 1, 91-       Section 3, 75–79 cm.	CARBONATE-BEARING CLAY AND CARBONATE CLAY, grayish brown (2.5Y 5/2), Section 1, 91–96 cm,			
E. F. L.			Pliocene	= = = = = = = = = = = = = = = = = = =		S P P		General Description: Dropstones: Section 1, 141 cm, Ø 1.8 cm, coated mudstone.	
I A	\$	3	3	3	-		= # = - k	SP SY SP ST SP ST St St St St St St St St St St St St St	Section 2, 17 cm, Ø 1.0 cm, sandstone; 134 cm, Ø 1.5 cm, siltstone.
5	4	4				P' P	625.08		
-		cc		3		м			

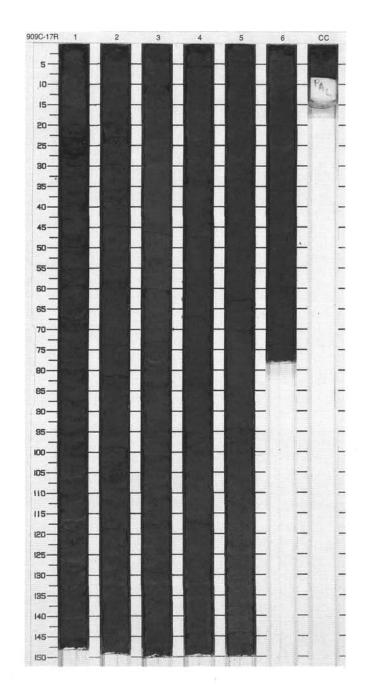


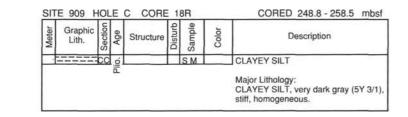
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Meter	Graphic Lith.	Section	Age	Structu	ıre	Disturb	Sample	Color	Description	
- the second		1		5 }		W	S P	5Y 3/1 To 10Y 3/2	SILTY CLAY, CLAYEY SILT Major Lithology: SILTY CLAY and CLAYEY SILT, very dark gray (5Y 3/1) and very dark olive	
								5Y 3/1 To 5Y 4/1	gray (10Ý 3/1), slightly bioturbated. White silt burrow fills are abundant. Minor Lithologies: CARBONATE BEARING CLAY, dark	
3		2	Pliocene	= 4 5 %	=				gray (5Y 4/1), slightly bioturbated, gradational contacts. General Description: Dropstone: Section 3, 73 cm, Ø 1.5 cm, coal fragment.	
A		3	Plioc	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1		S P P			
a frants		4			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Ρ	5Y 3/1	
P		5		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Ρ			



Sľ	TE 909 H	IOL	E	C CORE				CORED 239.2 - 248.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		2				S P P S		SILTY CLAY and CLAYEY SILT Major Lithologies: SILTY CLAY and CLAYEY SILT, very dark gray (5Y 3/1), very homogeneous except for local color bands with bluish green tint. Gray silt burrows, mm size, are rare throughout. Quartz and feldspar are the main silt- and sand-sized grains. Minor Lithology: SILTY MUD, very dark gray (5Y 3/1), in Section 4, 116–131 cm exhibits color banding.
4		3	Pliocene			P P	5Y 3/1	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4				S P S		
1		5				P		
8		6				P M		





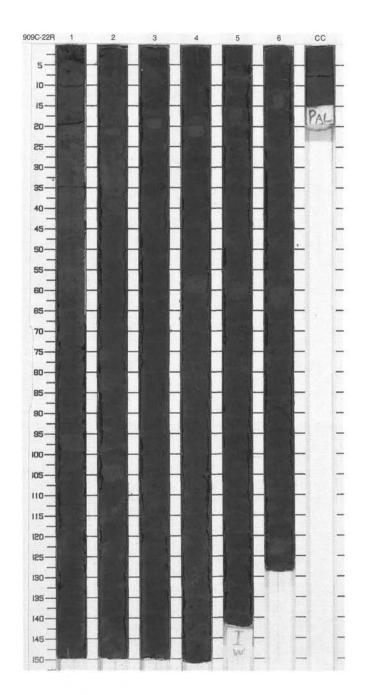
## 909C 19R NO RECOVERY

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		cc	.o			SM		SILTY CLAY and CARBONATE CLAY
								Major Lithologies: The core consists of an almost lithified, gray (5Y 5/1) and structureless fine-grained CARBONATE CLAY overlain by a homogeneous SILTY CLAY, very dark gray (5Y 3/1). The contact (Section CC,14 cm) is abrupt.

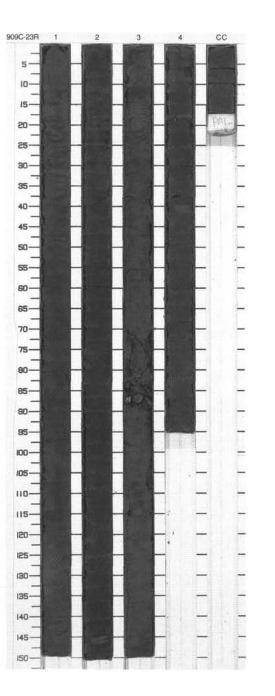
## 909C 21R NO RECOVERY



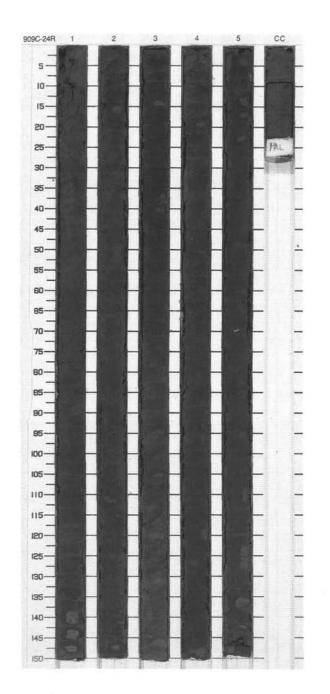
SIT	E 909 H	IOL	E	C CORE	2			CORED 287.5 - 297.1 mbsf				
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description				
		1		3	X	S P		SILTY CLAY, SILTY MUD and CLAYEY MUD Major Lithologies: SILTY CLAY, SILTY MUD, and				
1				3		Р		CLAYEY MUD, very dark gray (5Y 3/1), are fairly homogeneous in spite of variations in the sand content				
2		2		3 >>>		Р		(5%-40%). Evidence for bioturbation includes scattered small pits in the washed surface of split core, a few cemented burrows in relief, and				
3				3		Р		Planolites and Zoophycos which are marked by faint changes in color. Contacts between lithologies are gradational.				
A		3	Pliocene	33 33		S P	5Y					
Line Carl		4	Plio	Plic	3 >>>		Ρ	3/1				
6						Р						
L. C. L. L.		5		į	5	5	5	****		S P P		
En la		6		3								
1123		cc		3	1	м						



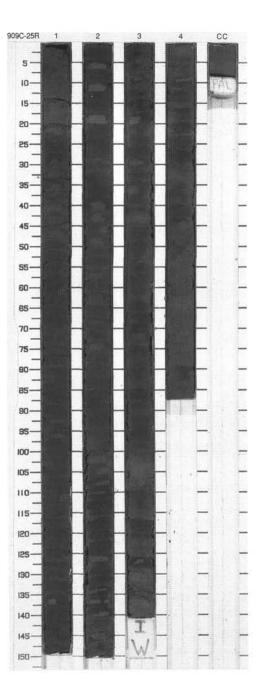
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
the factors		1		@ 33 2 111	P		SILTY CLAY and CLAYEY SILT Major Lithologies: Homogeneous, very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT, with common burrows filled with fine- grained pyrite. Washed surface of split core has mm-sized pits that may be	
L'autra l'an		2	Pliocene		S P	5Y 3/1	remnants of burrows. Minor Lithology: Very dark gray (5Y 3/1) CARBONATE CLAYEY SILT occurs in Section 3, 80–90 cm, with large clasts of carbonate, perhaps a concretion.	
and and and		3		ତ୍ତ୍ତ	0	P S P		General Description: Incipient drilling biscuits throughout core.
		4		@ @		SP		



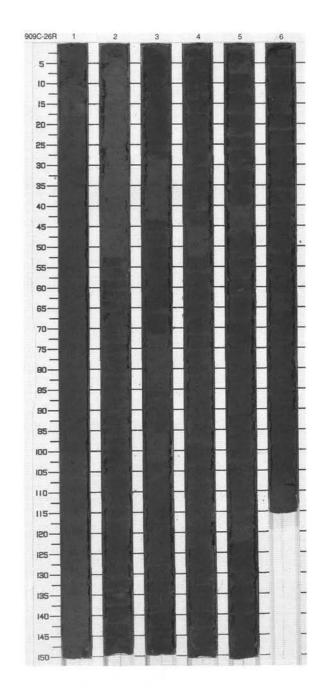
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description												
1		1		3	XX	Р		SILTY CLAY and CLAYEY SILT Major Lithologies: Very homogeneous, very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT. Changes in texture are very												
				3		s s	gradational. Bioturbation, predominantly slight, increases in Sections 3 and 4 where small pyrite- cemented burrows occur. A 1.5-cm-													
the second second		2		3		Р		large shell was found in Section 5, 70 cm.												
3			Pliocene	Pliocene	33		Ρ		Dropstone: Section 5, 146 cm, Ø 1.8 cm, flat and angular black siltstone.											
4		3			Pliocer	Pliocer	Plioce	Plioce	Plioce	Plioce	Plioce	Plioce	Plioce	Plioce	Plioce	33		Р	5Y 3/1	
to the second		4						33	S P											
				33		s <sub>P</sub>														
in the second		5	5		3															
- Level				0		P														



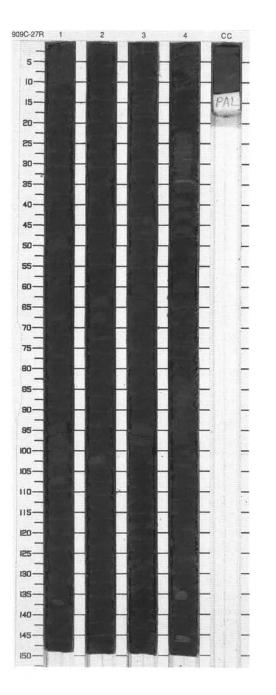
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		3	Pliocene			P S P S P S P S P M	5¥ 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), firm and homogeneous. Pyritized burrows, mm size, are scattered throughout the core. Black concretions of Fe sulphide, Ø <1.5 cm, are rare. Quartz and feldspar are the main silt- and sand-sized grains. Minor Lithology: CARBONATE CLAY, dark gray (5Y 4/1), occurs in Section 3, 43–44 and 103–106 cm. Inorganic calcite is a major clay- and silt-sized component.



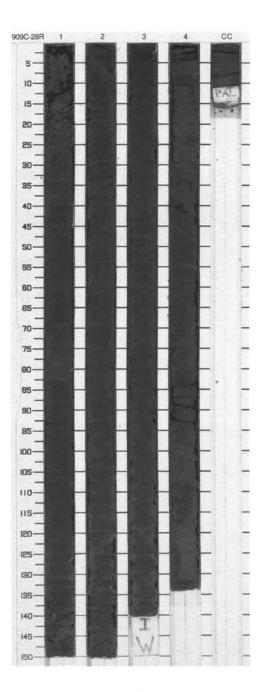
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			×	sP		SILTY CLAY and CLAYEY SILT Major Lithologies: Fairly homogeneous, stiff, and very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT. Bioturbation is slight; it
1011					Ì	Р		is marked by pyritized burrows and pits
100		1		3	I	s		that may be remnants of burrows.
2		2						
3				Pliocene &		Ρ		
4		3	ocene			P	5Y 3/1	
5		4	Ы			s	3/1	
a lot				3		Р		
6				3				
Lin Carl		5				Р		
8		6				SP		



SI	TE 909 H	IOL	_E	C CORE	2	7R		CORED 335.7 - 345.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2 3 4		1 2 3 4	Pliocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P SP P P SP S P M	5Y 3/1	SILTY CLAY and CLAY Major Lithologies: SILTY CLAY and CLAY, very dark gray (5Y 3/1), very homogeneous. Pyritized burrows, mm-sized, are sparsely scattered throughout the core but are locally concentrated in layers, <1 cm in thickness. Black incipient concretions, 0 <1 cm, are rare, as are burrows that are preserved as small pits when the sediment fill was washed out during splitting of the core. Quarz, feldspar, and inorganic calcite are the main silt- and sand-sized grains. Minor Lithology: CARBONATE CLAY, olive gray (5Y 5/2), occurs in four layers, <1 cm in thickness, interbedded with CLAY in Section 4, 27–35 cm. Top and bottom contacts of the lowermost, and thickest, layers are abrupt. Inorganic calcite comprises up to 50% of the lithology.

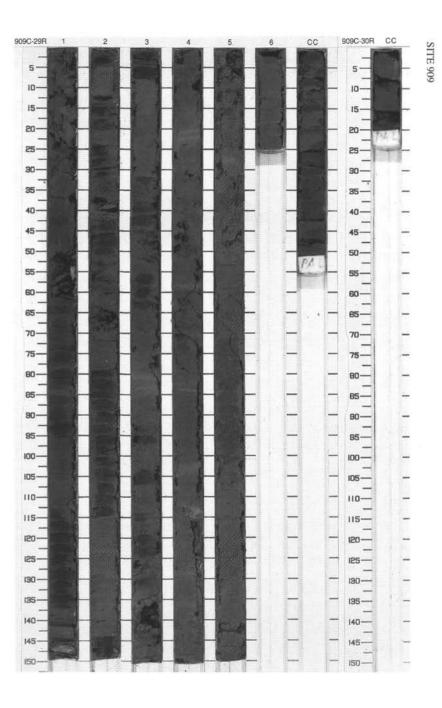


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
the Free trans		1		P 33	X 111111111	SP		SILTY CLAY and CLAYEY SILT Major Lithologies: SILTY CLAY and CLAYEY SILT, very dark gray (5Y 3/1), very firm, slightly bioturbated throughout the core. Relatively large, subhorizontal burrows (Zoophycos?) are present in Section 3
a la		2	Miocene-Pliocene	P	111111111111	Ρ	5Y	Pyritized small burrows (nm size) are common throughout the core. Large burrow in Section 4, 32–45 cm, is filled with coarser material. General Description: Section 1, 0–34 cm is filled with drilling
and and and		3	Miocene-	Р 3 Р 3	11111111111	P S	5Y 3/1	slurry. The remainder is slightly fractured into biscuits.
1 m Line		4		P 3 3	111111111111	P		

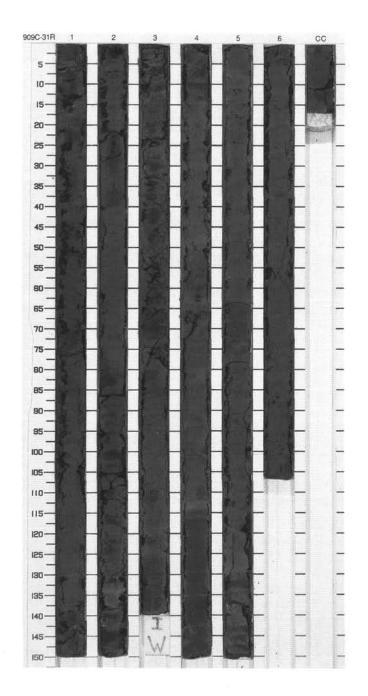


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and and and a start of the second		1 2 3	ene	© 3 @	M M M	s P P	5Y 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY. Quartz content is 15%, feldspar 5%, with trace amounts (2%) of mica, glauconite, opaques, and accessory minerals. Minor Lithology: Grayish brown (2.5Y 5/2) CARBONATE-BEARING CLAY occurs in Section 3, 75–85 cm, and within other sections as mm-scale complete or partial layers. Clay-sized carbonate grains constitute 25% of the lithology. Silt-sized quartz contitutes 10%, Feldspar, mica, volcaric glass, and
se had that have been and		4	Miocene-Pliocene		M	S P P	5/2 5Y 3/1	opaques occur in small amounts ( 2%). General Description: Major lithology occupies 90% of the core. Thin CARBONATE-BEARING CLAY layers are common in Sections 2, 4, and 5. Bioturbation ranges from none to extreme, and is manifest when present as motited and incomplete subhorizontal layers. Single carbonate and pyrite concretions occur in Section 1, 43 cm.
a second s		5 6 CC		,		P	3/1	

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		cc	<u>io</u>	3	!	SM		SILTY CLAY
			MioP					Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), homogeneous.



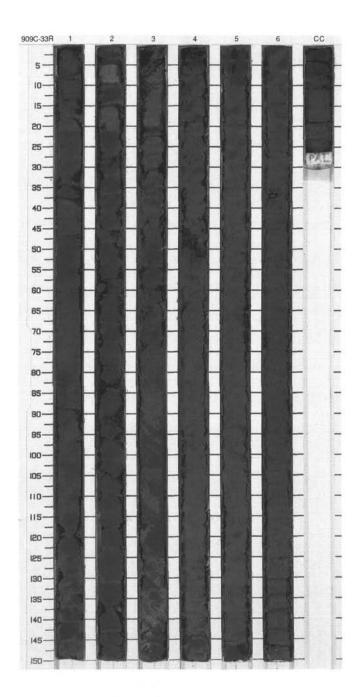
51	TE 909 H	-	E	C CORI	-			CORED 374.1 - 383.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The Part of the Pa		1		****		Р	5Y 3/1 To 5Y 3/2	SILTY CLAY Major Lithology: SILTY CLAY, homogeneous, very dark gray (5Y 3/1), moderately bioturbated. White silt burrow fills are abundant.
2		2				s S	5Y 3/1 To 2.5Y 5/2	Minor Lithologies: CARBONATE SILTY CLAY, homogeneous, grayish brown (2.5Y 5/1), moderately bioturbated in Section 2, 30–80 cm. Inorganic calcite is abundant. CARBONATE CLAY, homogeneous, grayish brown (2.5Y
Part of the second		3	Miocene-Pliocene	»»»»» 5 »» 5 »»		P	5Y 3/1	5/1), moderately bioturbated in Section 4, 112–115 cm.
5		4	Miocene	- ************************************		SP	5Y 3/1 To 2.5Y 5/2	
2		5				sP	5Y 3/1	
8		6		***		P	3/1	
+		cc		55	1	м		



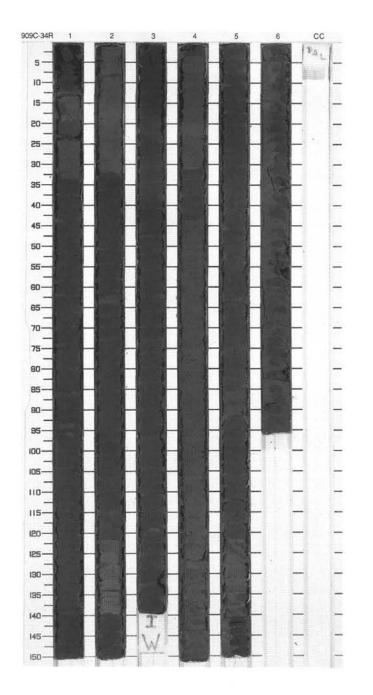
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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Landar		1		3	W11111111	s		SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY. Quartz (~15%) and feldspar (~4%) are relatively constant constituents. Opaque particles are a variable minor
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2		3 3	1111111111111	Ρ		(1%-4%) component. Inorganic calcite occurs in small amounts (2%-3%). General Description: The core consists of very firm, drilling biscuits. Bioturbation is evident in the form of mottled surfaces and faint subhorizontal burrows. Some burrows
The second second		3	Miocene-Pliocene	Р 8 8	111111111111	Ρ	5Y 3/1	are pyritized, others washed out during splitting.
in Linning		4	~	P } } }	11111111111	P S		
The second second		5		3 3 3	111111111111111	sP		

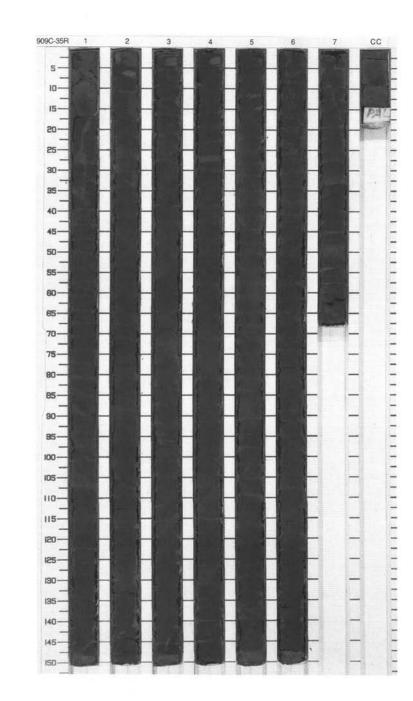
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			H + - /	s P		SILTY CLAY Major Lithology: Homogeneous SILTY CLAY, very dark gray (5Y 3/1), with slight to moderate bioturbation throughout the core. The sediment is composed of
2		2		@ @ @	11111114111	Ρ		-63%-68% clay,15%-20% quartz and ~6% feldspar grains. Fragmented diatoms (<1%) are observed in Section 5, 51-52 cm. Burrows, filled with pyritized material are common.
4		3	cene		1/1/1/ 1/	Ρ		
· · · · · · · · · · · · · · · · · · ·		4	Miocene-Pliocene	• ************************************	11111111111	Ρ	5Y 3/1	
3		5		(P)	11111111111	SP		
1		6			11111111111111	Ρ		
9		cc		@ %	11111	м		



Meter	Graphic Lith.		Age	Structure	Disturb	Sample	Color	Description
Tool and the other		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	X 11111111 X	SP		SILTY MUD and SILTY CLAY Major Lithologies: Homogeneous SILTY MUD to SILTY CLAY, very dark gray (5Y 3/1), slightly to moderately bioturbated throughout the core. White silty burrow fills are bunder. Burgeneous fills are
2		2		*****	111111111111	Ρ		abundant. Burrows are commonly filled with pyritized material. SILTY MUD is present in Section 1, 0–150 cm and Section 2, 0–20 cm. General Description: Section 1, 0–13 cm is highly disturbed and composed of drilling breccia and
the formation of		3	Miocene-Pliocene	A	111111111111	P	5Y 3/1	slurry. The remainder of the core is slightly disrupted into drilling biscuits.
the free free		4	Mioce		1111111111111	P		
The section of the se		5		**************************************	11111111111111	S P		
		6		***	1111111	мР		

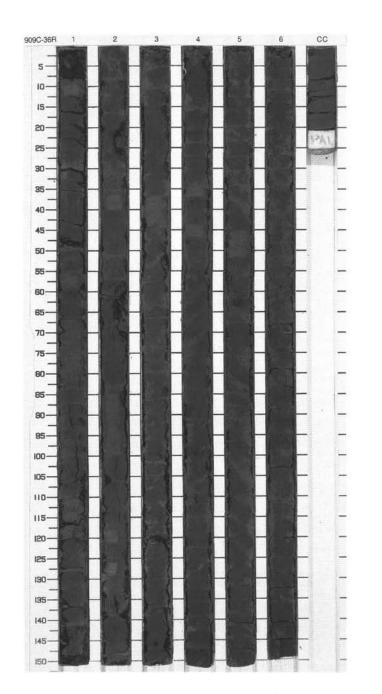


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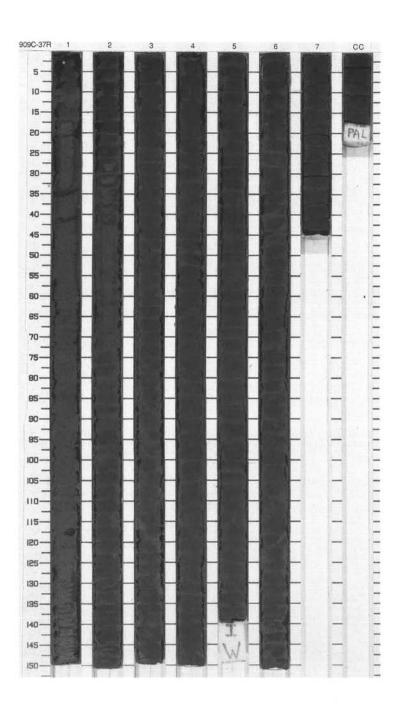


	0.11	S		C CORE	e	۵		
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Lass seed as a		1		3	X	S P		CLAYEY SILT and SILTY CLAY Major Lithologies: Structureless, stiff, CLAYEY SILT to SILTY CLAY, very dark gray (5Y 3/1). Bioturbation is marked by faint color changes visible only on wet split surfaces. The sand fraction in
the burning of the		2		3		Р		CLAYEY SILT is relatively high, and may exceed the 10% boundary for mud, but remains in the fine sand fraction. Bioturbation is more visible in the finer grained lower part of the core, Section 6, 50 cm to Section CC.
The Leaves		3		3		S		
Theory I.			ocene	3		Ρ		
in the second second		4	Miocene-Pliocene	3		Ρ	5Y 3/1	
A & A & A & A & A & A & A & A & A & A &		5		3		S P		
Lord Lord Lord		6		3 3		Ρ		
to the or		7		3		SP		

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1			W	P S P		CLAYEY SILT and SILTY CLAY Major Lithologies: CLAYEY SILT and SILTY CLAY, very dark gray (5Y 3/1), fissile and homogeneous. Sand content in CLAYEY SILT locally increases into
2		2				Ρ		clayey mud range. Rare burrows were seen in Section 3, 57–61 cm; Section 4, 9–10 cm; Section 5, 90 cm. Quartz is the major silt- and sand-sized component.
4		3	liocene	3		P S P		
5		4	Miocene -Pliocene	3		Ρ	5Y 3/1	
2		5		3		P S P		
8		6				P		



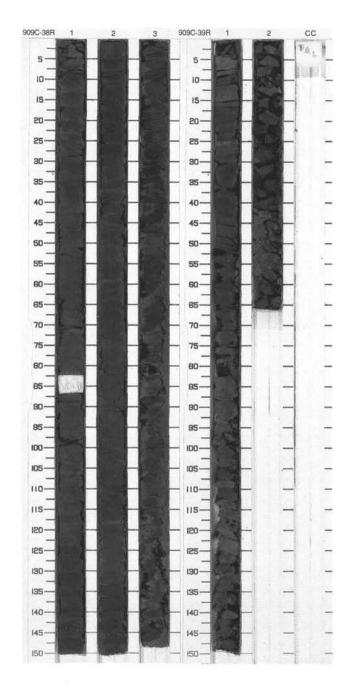
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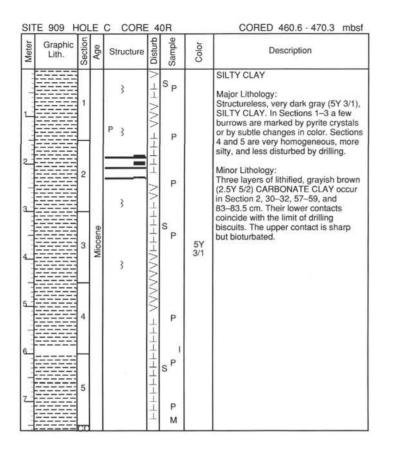


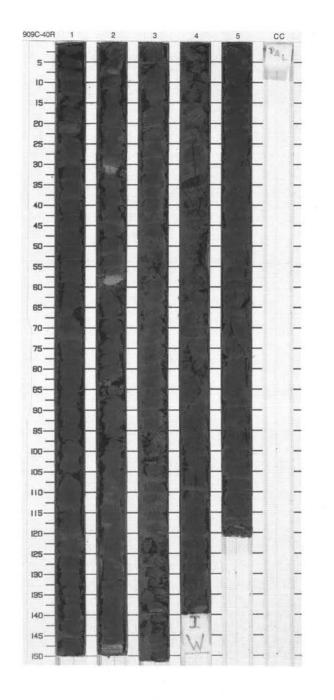
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1.000				***		Р		SILTY CLAY and CLAYEY SILT Major Lithologies:
I to La		1		• <u> </u>		P		Homogeneous very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT occur throughout the core. Entire core in biscuits related to drilling disturbance.
2				***		SP		General Description: Pyrite-filled burrows (1–10 mm scale). Small empty pockets (Ø 1–5 mm) are
in the		2		@		Р		common throughout the core, but larger subhorizontal burrows (1–5 mm width, 1–5 cm length) filled with dark
				@ ****		Ρ		gray (5Y 4/1) SILTY CLAY are found from Section 4, 108 cm to bottom of core.
1.1.1.1		3	Ð	@ ***		Р		
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		4	Miocene-Pliocene	@ ****		P	5Y 3/1	
1111			2	***		Ρ		2
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11 11		7		****		SP		
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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3	Miocene-Pliocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S P S S S S S M	5Y 3/1 To 5Y 5/2	SILTY CLAY and CARBONATE-BEARING CLAYEY SILT Major Lithologies: SILTY CLAY, very dark gray (5Y 3/1), fissile, occurs in Sections 1 to 3. Burrows occur throughout and are filled with CARBONATE SILT and CARBONATE CLAYEY SILT, olive gray (5Y 5/2). Identified burrows include Planolites and Teichichnus-likk structures. Concentrations of burrows are present in Section 1, 102–125 cm; Section 2, 42–61 cm. Black Fe- sulphide concretions occur in Section 2, 77 cm, 80 cm. Section 3 consists of very dark gray and olive gray laminae of CARBONATE-BEARING CLAYEY SILT and SILTY CLAY, which are planar and horizontal to subhorizontal. Obvious burrows are very rare.

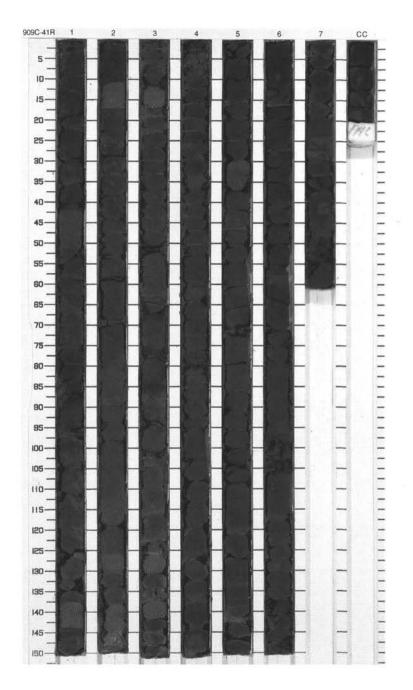
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Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2	1	Miocene	3 3 >>> 3	VVVVVV HHHH	S S P M	5Y 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY, fissile. Rather slight bioturbation marked by sparse <i>Planolites</i> and <i>Zoophycos</i> traces. Minor Lithology: A dark grayish brown (2.5Y 3/2) CARBONATE CLAY layer, 0.8 cm
							thick, occurs in Section 1, 25 cm. It is homogeneous and composed mainly of clay-sized carbonate grains that do not effervesce with cold 10% HCI. A similar layer, 1 mm thick, occurs in Section 1, 77 cm. General Description: The core is strongly disturbed by corino. Drilling biscuits may be



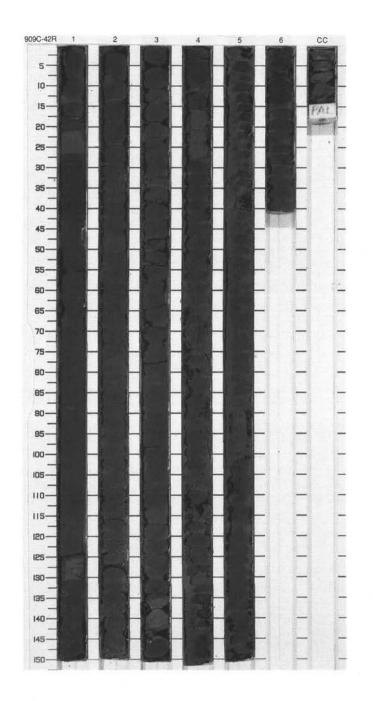




Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Subjection of the second secon		1		3 3 3 3	W 1111111111111	Ρ		SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY Lithology is very firm throughout. Quartz (~22%) and feldspar (~5%) are the important non-clay minerals. Inorganic calcite, mica, and glauconit occur in small amounts ( 3%). Rounded silt-sized opaques also
3		2		3 3 3	111111111111	Ρ		General Description: Dominant lithology occupies entire core. Bioturbation is light to moderate and silty material and pyrite grains ar concentrated in individual burrows.
Lind and		3	ane	33 P 3 3	1111111111	P		Sediment is otherwise homogeneous
6		4	Miocene	3 3 3	11111111111	P	5Y 3/1	
L' L		5		33 33 (P) 33	111111111111	sP		
8 1111		6		3 3 33	11111111111	Ρ		
9		7		3 33	111111	P M		



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	T	P S		SILTY CLAY Major Lithology: Homogeneous SILTY CLAY, very dark gray (5Y 3/1), with slight to moderate bioturbation. Burrows are commonly filled with pyritized material. In the undisturbed part of
2		2		nnmnnnnnnnnn B	1111111111111	Ρ		material. In the undisturbed part of Section 1 the silt content is ~20%. In Section 3, where the sediment is fractured into drilling biscuits, it reaches ~40%. Spherical opaques are present as a minor component (~1%).
4		3	Miocene	•••• •	1111111111111	SP	5Y 3/1	
5 1111		4		****	1111111111111	Ρ		
		5		***************************************	11111111111111	Ρ		
8		6 CC		***	1111	м		

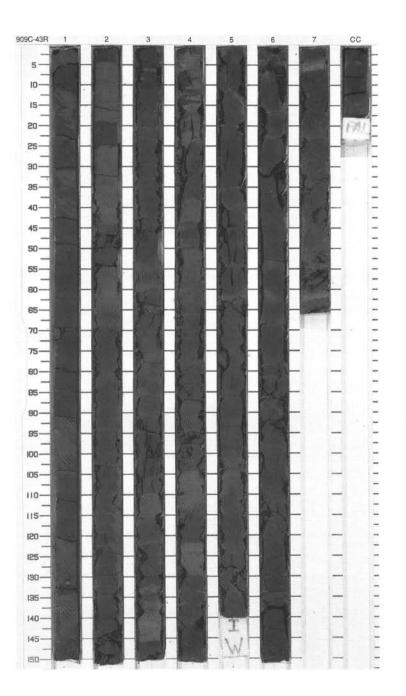


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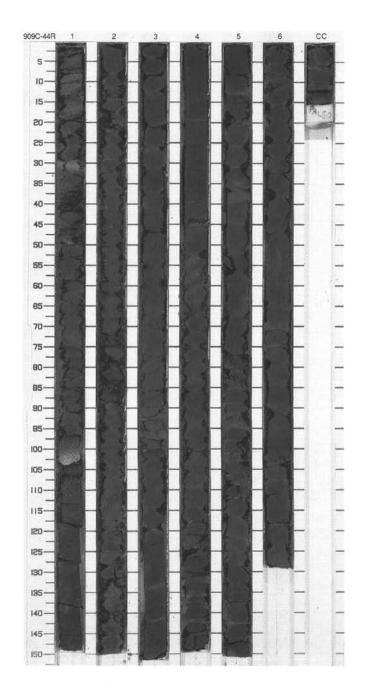
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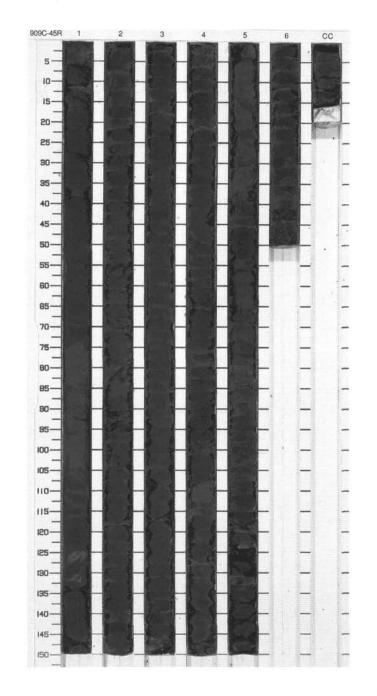
TE 909 H	101	E	C CORE	-			CORED 489.5 - 499.0 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1		р (Р Р Р Р М) м м м м м м м м м м м м м м м м м м м	$\sqrt{N}$	S P P		SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY, Quartz (20%) and feldspar (5%) are the major non-clay minerals. Inorganic calcite, mica, glauconite, and opaques are minor ( 2%) components. The lithology is very firm throughout. Minor Lithology: Gray (5Y 5/1) CARBONATE CLAY occurs in Section 7, 4 and 60 cm. Consists nearly exclusively of finely crystalline calcite. General Description:
	3	Miocene	* * * * *	////////	P	5Y 3/1	Major lithology occupies >95% of the core. Bioturbation is evident in the form of mottled surfaces and individual, commonly pyritized, burrows. A single mudstone pebble, Ø 1.0 cm, occurs in the drilling slurry in Section 7, 53 cm, and may be contamination.
	5		> @ % @ %	1111111111	Р		
	6		@ `` @ `` @ ``	11111111111	P		
	7		(®) (₽) ◊	11111	S <sub>P</sub> M		



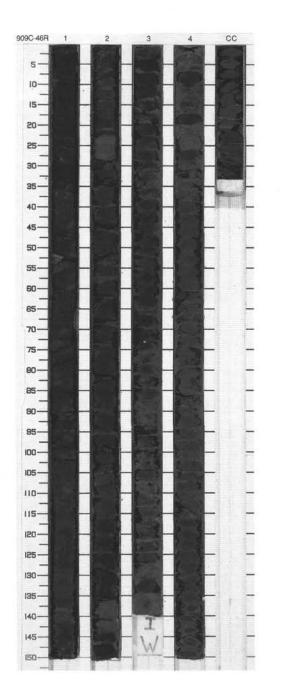
-		E			9	Ð	1.102	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 4 5 6	Miocene	P     I     I       P     P     P     P       P     P     P       P     P     P </td <td></td> <td>S P P P P S P</td> <td>5Y 3/1</td> <td>SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), with faint evidence of layering and moderate, but pervasive bioturbation, which may be disrupting the bedding. Minor Lithology: CARBONATE-BEARING CLAY, gray (5Y 5/1), occurs as thin layers in Section 1, 28–31, 50, and 101–104 cm. It is also common in burrows in Sections 1 and 2, and present in one burrow in Section 3, 105 cm. In Section 5, 35–39 cm, it is present in thin (&lt;1-mm-thick) layers above a scoured base, but is not the scour filling material. CARBONATE- BEARING CLAY burrows cut these layers. General Description: Small pyrite rhombs, &lt;1–2 mm, fill many of the carbonate-bearing clay burrows and are dispersed throughout the sediment.</td>		S P P P P S P	5Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), with faint evidence of layering and moderate, but pervasive bioturbation, which may be disrupting the bedding. Minor Lithology: CARBONATE-BEARING CLAY, gray (5Y 5/1), occurs as thin layers in Section 1, 28–31, 50, and 101–104 cm. It is also common in burrows in Sections 1 and 2, and present in one burrow in Section 3, 105 cm. In Section 5, 35–39 cm, it is present in thin (<1-mm-thick) layers above a scoured base, but is not the scour filling material. CARBONATE- BEARING CLAY burrows cut these layers. General Description: Small pyrite rhombs, <1–2 mm, fill many of the carbonate-bearing clay burrows and are dispersed throughout the sediment.



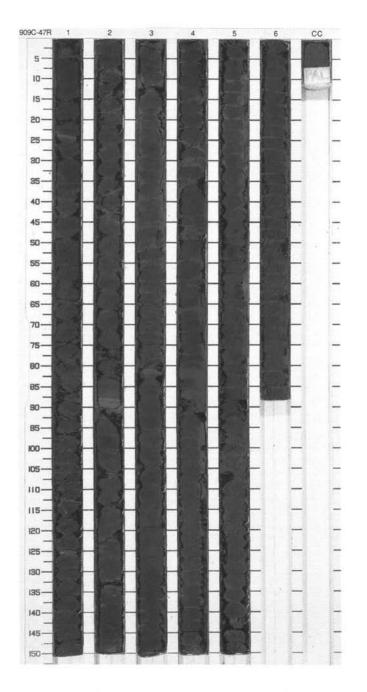
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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and not		1		33 33 33	111111	Sp		SILTY CLAY Major Lithology: SILTY CLAY, homogeneous, very
1				***************************************	1111111	96		dark gray (5Y 3/1) and moderately bioturbated. White silt burrow fills are abundant. Pyrite concretions (Ø 2–4 mm) are present in Sections 3, 4, 5,
2		2		***	111111	Ρ		and 6. Minor Lithologies: CARBONATE-BEARING SILTY CLAY, homogeneous and very dark
3				****	111111			gray, (5Y 3/1). Inorganic calcite particles (averaging 12%) are present in Section 4, 50–80 cm.
4		3	Miocene	@ @	111111	Ρ	5Y 3/1	
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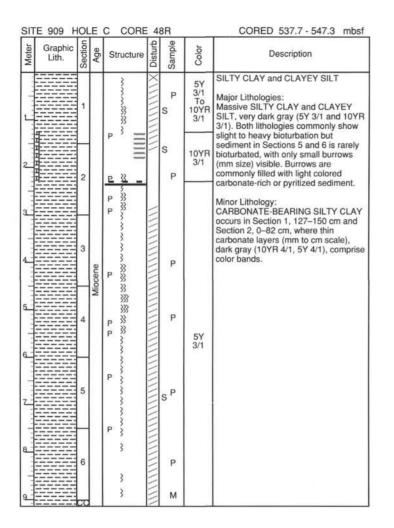


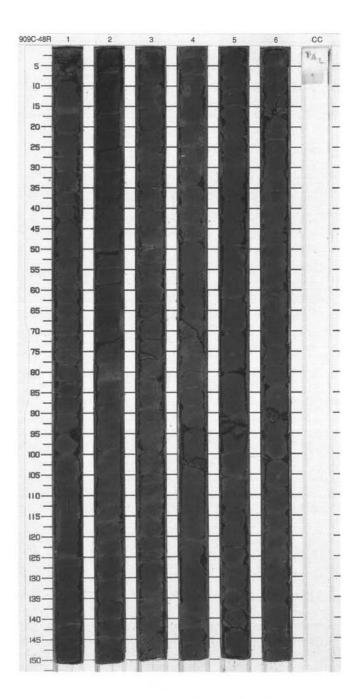
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
անունունու		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P	5Y 3/1 To 5Y 3/2	CARBONATE CLAY Major Lithology: CARBONATE CLAY, very dark gray (5Y 3/1), dark gray (5Y 3/2), and olive gray (5Y 4/2), finely laminated (1–3 mm thick) and slightly bioturbated. Inorganic calcite particles (averaging 30%) are present throughout. Peak
2		2	ene			s		values up to 90% occur in Section 2, 104–105 cm; Section 3, 34–36 and 80–93 cm; Section 4, 22–26 and 81–87 cm.
Production of the second		3	Miocene	= = 		P S	5Y 3/1 To 5Y 4/2	
Thur Party		4				S P	4/2	
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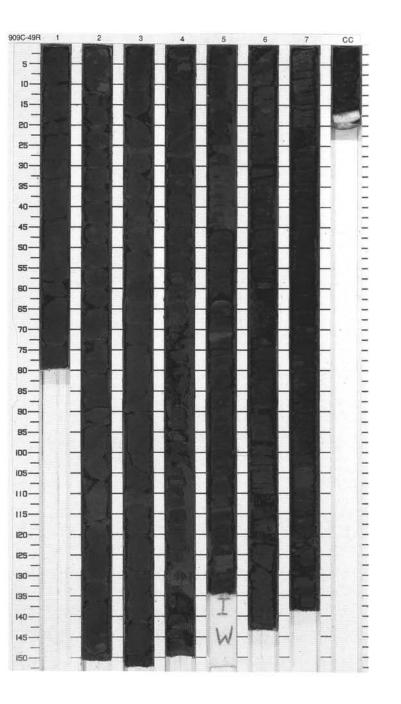


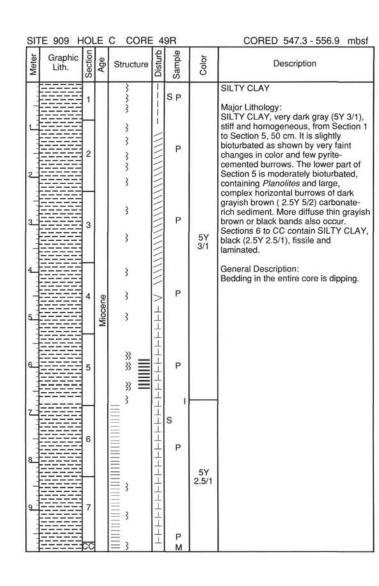
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
the Constant		1		→ P P P	V	P S		SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1) to dark olive gray (5Y 3/2), throughout core. Color changes help to identify layering and bioturbation.
" " " " " " " " " " " " " " " " " " "		2		♦ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽ ₽		S P		Minor Lithology: CARBONATE-BEARING SILTY CLA grayish brown (2.5Y 5/2) and olive gra (5Y 4/2) grading to dark olive gray (5 3/2) in thin layers in Section 1, 23.0–23.5 cm, Section 2, 88–91 cm, Section 3, 81–82 cm, and as burrow fillings, primarily in Sections 1 throug 3. The majority of burrows are flat an
Lind and		3	Miocene	P P P P P		Ρ	5Y 3/1 To 5Y 3/2	parallel to bedding. General Description: Small pyrite rhombs are common. Most are <1 mm thick, and almost half of them occur within CARBONATE-
5		4		***	HH VHHH	P S		BEARING SILTY CLAY rimmed burrows. Some lighter beds and burrows contain flat, black areas, which may be disseminated sulfides. Many biscuits are rotated.
L'		5		P 3 P 3 P 3		Ρ		Dropstone:? Section 1, 93 cm, Ø 1.3 cm, flat, striated, plutonic, at the top of a biscuit - in place?
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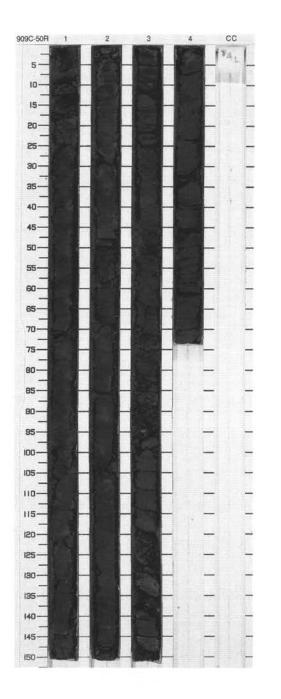








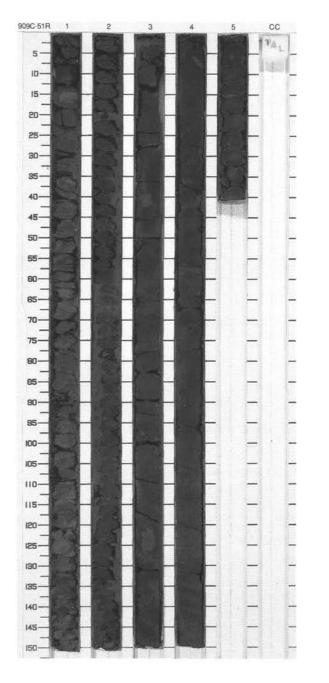
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 4	Miocene	× × × × ×	HHHH VVVHHHHHHHHHHHHHHHHHHHHH	P S P P S P M	5Y 2.5/1	SILTY CLAY Major Lithology: Very firm and fissile, black (5Y 2.5/1) SILTY CLAY. Mm-scale dark gray (5Y 4/1), parallel color bands occur throughout the core; in Section 3, the bands are up to 4 mm thick. There is no variation in texture or composition between the bands. In the bottom of Section 3, the bands are dipping. General Description: The sediment shows fissility which is parallel to the color bands.



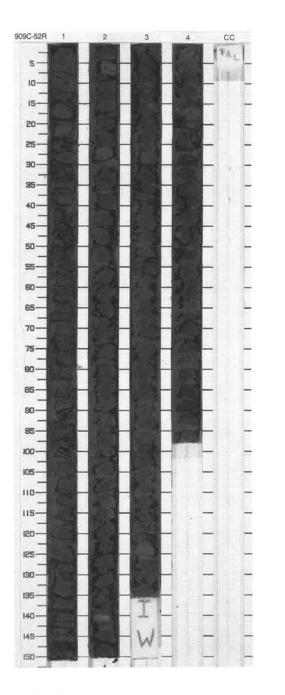
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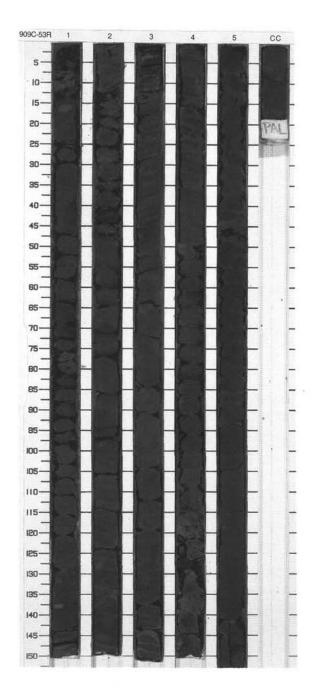
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1 2 3 4 5	Miocene	~~~~		P S P P P S P P P M	5¥ 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY occurs throughout core. Sediment has numerous small (1–5 mm) and some large (1–5 cm) burrows from Section 1, 0 cm to Section 3, 12 cm. Sediment becomes more massive and lacks burrows in Section 3, 12 cm to Section 4, 104 cm. Numerous burrows are again present from Section 4, 104 cm to Section CC, 46 cm. Minor Lithology: Dark gray (5Y 4/1) CARBONATE CLAY occurs in Section 1, 64 cm, with ~45% inorganic calcite. General Description: Core is broken into small drilling biscuits (2–5 cm) from top of core to Section 3, 12 cm; much larger drilling pieces (25–40 cm) from Section 3, 12 cm through Section 4; and again small biscuits in Section 2, 22 cm.



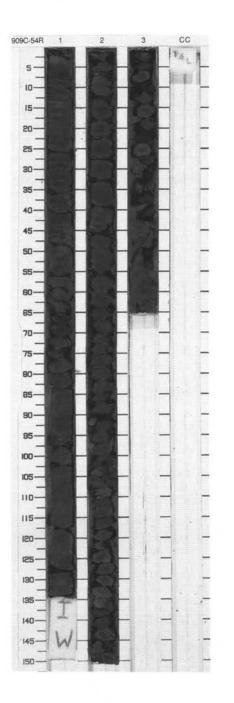
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1 2 3 4	Miocene	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		P P S I MP	5Y 3/1 To 5Y 2.5/2	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray to black (5Y 3/1 to 5Y 2.5/2), structureless. Bioturbation is very slight in Sections 1 to 3 where it is marked by mm-scale black patches and few thin pyrite concretions; small pits on the washed surface of split core may be remnants of burrows. Distinct burrows ( <i>Planolites</i> and <i>Teichichnus</i> ), filled with grayish brown carbonate clay, occur in Section 4 which is slightly more brown throughout. General Description: The core is moderately to strongly disturbed by coring; drilling biscuits comprise less than 50% of the core in Section 1.



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Lon Construction		1	Miocene	*	P		SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1), homogeneous, fissile. Faint, thin color banding occurs in Section 2, 0–97 cm and Section 4, 0–50 cm. Both fissility and section 4, 0–50 cm. Both fissility	
2		2			1///// HF	- I	5Y 0	and color banding show dips of approximately 15 degrees. Mm-sized black and very dark gray burrows are common in Section 1 and rare in Section 2. Olive gray (5Y 4/2) burrows, including <i>Planolites</i> and <i>Zoophycos</i> , occur in Section 2, 97–150 cm; Section 3, 120–150 cm; Sections 4 and 5. Washed surface of split core has mm- size pits that are probably remnants of burrows. Black Fe-sulphide concretions, Ø <0.5 cm, are present throughout the core; a pyrite concretion, Ø 3 mm, occurs in Section 3, 54 cm. Quartz and feldspar are the main sitt-size grains; inorganic calcite comprises up to 5% of the sediment.
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6					s			
2		5		→→→→→				



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 66	Miocene	***************************************		SP PI SP	5Y 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1), firm SILTY CLAY, slightly to moderately bioturbated. Cm-sized distinct burrows occur in Section 1, 0–55 cm and from Section 1, 85 cm to Section 2, 45 cm. These burrows are filled with dark gray (5Y 4/1) CARBONATE-BEARING SILTY CLAY. Zoophycos and Planolites are recognizable. In the rest of the core indistinct mm-sized burrows occur. General Description: Size of drilling biscuits varies with lithology. The slightly coarser grained areas (with distinct burrows) fracture into the largest biscuits.



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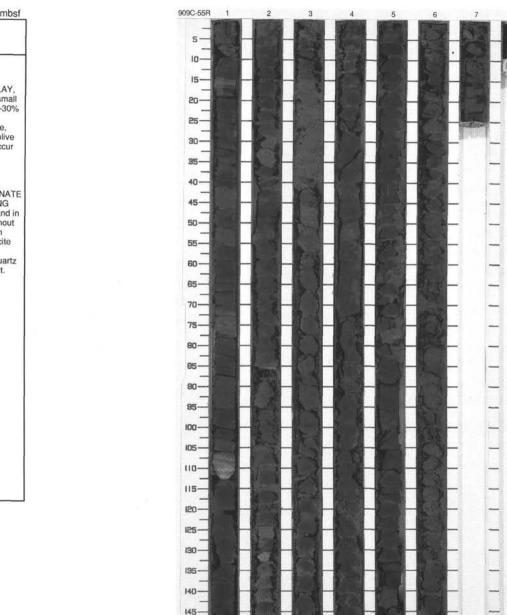
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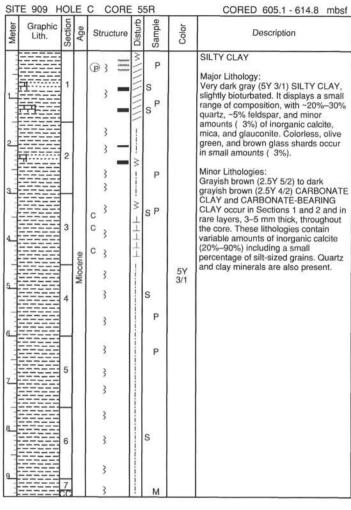
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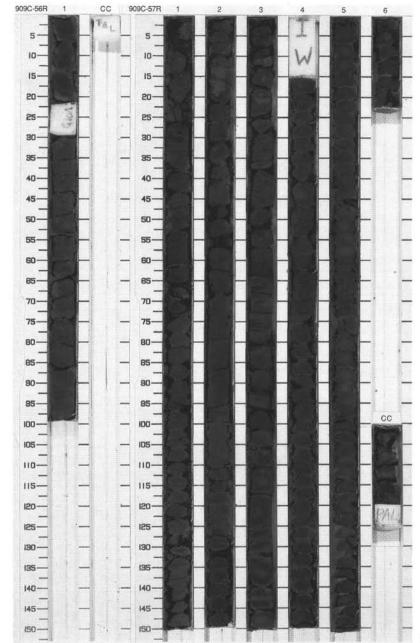


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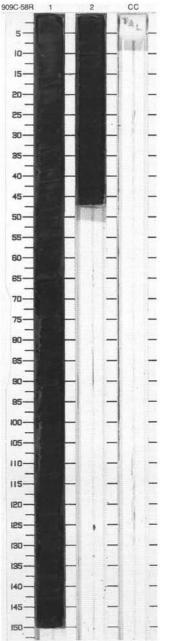


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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
transform.	סוסע	1	Mio.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\neg \neg \neg \neg \neg \neg$	s <sub>M</sub>	5Y 3/1	SILTY CLAY Major Lithology: Massive SILTY CLAY, very dark gray (5Y 3/1), with slight bioturbation.
								General Description: Sediment is moderately fractured by drilling. 22–29 cm is void space.

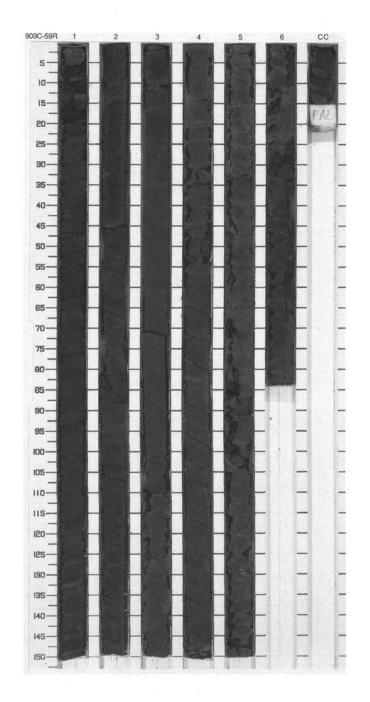
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
- Forthered		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11111111111	Ρ		SILTY CLAY, CLAYEY SILT Major Lithology: SILTY CLAY and CLAYEY SILT, very dark gray (5Y 3/1), laminated (1–3 mm thick; apparent dip of 10 <sup>-15</sup> ). Both lithologies are slightly bioturbated;
and and and and		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11111111111	Ρ		white silt-filled burrows are common.
		3	Miocene	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	1111111111111	Ρ	5Y 3/1	
		4		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1111111111111	I P S		
8 		5		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	111111111111	P		
and a		6 CC		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11111	P M		



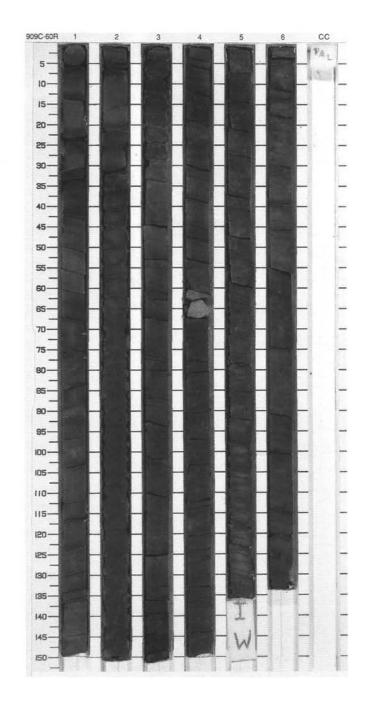
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the state of the state of		1 2 66	Miocene			S P P M	10YR 3/1 To 10YR 4/1	SILTY CLAY Major Lithology: Faintly laminated CARBONATE CLAY, composed of alternating very dark gray (10YR 3/1) layers, 0.5–2 cm thick, and dark gray (10YR 4/1) layers, 0.1–0.5 cm thick. The dark and light layers contain 35% and 65% inorganic calcite respectively. Slight bioturbation occurs throughout the core.



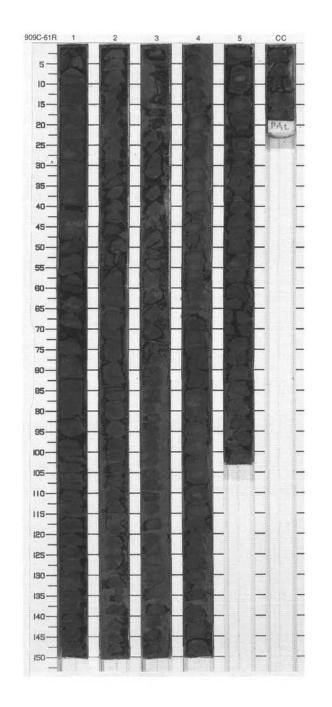
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and from the second		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	X11111111111111	S P	5Y 3/1 To 5Y 3/2	CARBONATE CLAY, CARBONATE-BEARING SILTY CLAY and SILTY CLAY Major Lithologies: CARBONATE CLAY and CARBONATE CLAY and CARBONATE-BEARING SILTY CLAY, in Section 1, 0 cm to Section 2, 44 cm, laminae of dark olive gray (5Y 3/2),
2 milius		2		P 33	1111111	S P		very dark gray (5Y 3/1) and black (5Y 2.5/1). Darker laminae are 2–6 mm thick; lighter laminae are 1–3 mm thick. All laminae are continuous; no bifurcations were observed. Lighter
Perton P		3	Miocene	P P P P S S S S S S S S S S S S S S S S		P S	5Y 3/2	laminae commonly have sharp tops and gradational bases. CARBONATE- BEARING SILTY CLAY and SILTY CLAY are present in Sections 2, 44 cm through Section CC, dark olive gray (SY 3/2) and very dark gray (SY 3/1). They lack laminae and show moderate to extensive bioturbation. Burrows in
and and and and		4		P 333 P 333 P 333 P 333		S P S		this section are grayish brown (2.5Y 5/2) carbonate clay. Pyrite rhombs are common in the burrows and disseminated throughout the sediment Minor Lithology: CLAYEY SILT, dark olive gray (5Y 3/2
6		5		P >>> >>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>		P S	5Y 3/1	and very dark greenish gray (5GY 3/1), in Section 2, 44–114 cm. General Description: Core contains boundary between laminated and moderately to heavily bioturbated sediment. Apparent dip of the sediments ranges from 0 to 25
- Harris		6		P 33 2	P M		degrees.	

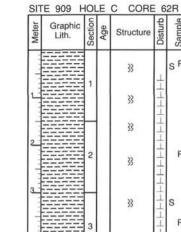


5	Graphic	uo	0		2	ole	2	
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	2				1			CARBONATE-BEARING SILTY CLAY
	H			3	1	Р		and CLAYEY SILT
7				33	1			and the second second second
-		1			2	S		Major Lithologies:
4	돠			P 3	2			Very dark gray (5Y 3/1) CARBONATE- BEARING SILTY CLAY and CLAYEY
-	H			Р 33	2			SILT, very firm and mottled.
_		_		P 33	1			CARBONATE-BEARING SILTY CLAY
				33	2			is variable in composition, with
,	H				2	P		inorganic calcite (10%-25%) as the
	4			Р	2	P		major non-clay mineral; guartz
-		2		33	1			(2%-20%), feldspar (<1%-8%), and
-	H			Р	/	1	1	accessory minerals (3%-8%) also
-				- 33				occur. CLAYEY SILT contains
-		-		"		s		approximately 20% quartz, 10%
	4			33	i	SP		feldspar, 10% accessory minerals, and
1	5			P	i.	P		7% opaque grains.
3	H	3		33	1			Conorol Department
3		3		11.545				General Description: Bedding has apparent dips up to 15
Ч	5		DB	33				degrees. Carbonate-rich sediments
-			S	P	i		5Y	dominate the upper sections whereas
4	4	-	Miocene		1		3/1	coarse siliciclastics are more common
-			-	33	1			in Section 6.
	2			@ ″		~		
		4				SP		
	H	1		@ "	i.	P		
	7			@ 33	i			
1	H			B	1			1
4	2	-			-			1
-	4			>>	i			
-	F			@ <sup>33</sup>	i	Р		
	H	5			i.	1		
,		Ĩ		@ 33	1			
-				55				
	H			@ "		10		
-		-		B 33	1	10		
-				0	t.	Р		
1				®		L.L.		
1		6		@ <sup>33</sup>		~		
						S		
				33	i			
1		ee	1			M		



Sľ	TE 909 H			C CORE				CORED 663.0 - 672.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ρ		SILTY CLAY Major Lithology:
1		1		***		Р		Nearly uniform, very dark gray (5Y 3/1) SILTY CLAY appears laminated due to abundant subhorizontal burrows. Numerous pockets, mm size, of white silt are probably burrows.
2		2		3		Р		General Description: Entire core is disrupted into drilling
3		4		@ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		S P		biscuits (2-5 cm thick).
Teres I			Miocene	(P)		Р	5Y	
4		3	Mic	· · · · · · · · · · · · · · · · · · ·		Ρ	5Y 3/1	
5				@ ```		Ρ		
		4		P		P S		
6   · · ·		5		\$		Р		
Z		CC		~ ~ ~		s M		





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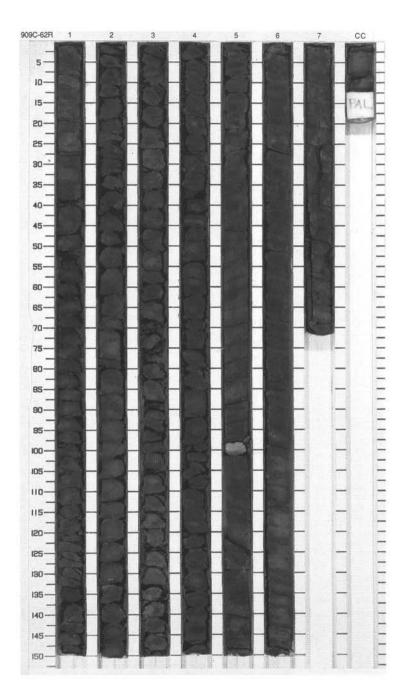
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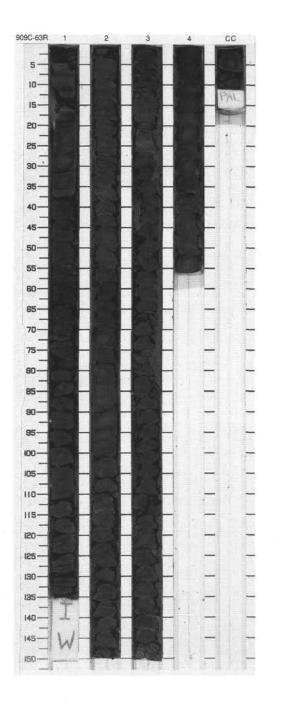
CC

М

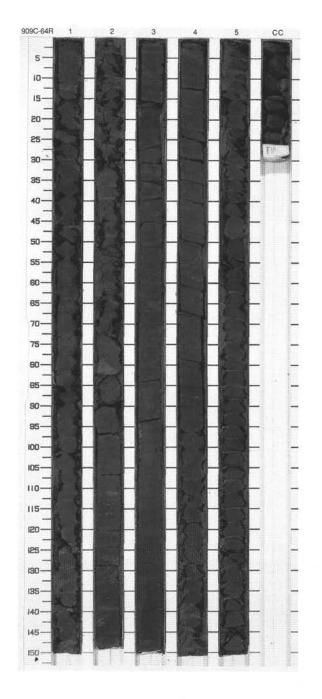
	C CORE	6			CORED 672.7 - 682.3 mbsf
- AC	Structure	Disturb	Sample	Color	Description
DI DODINI		HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH	SP P S P P S S P	5Y 3/1	SILTY CLAY Major Lithology: Homogeneous, very stiff to consolidated SILTY CLAY, very dark gray (5Y 3/1). Bioturbation is slight to moderate and irregularly spaced. It includes numerous small (<1 mm) white specks, several pyrite-cemented burrows (up to 1 cm Ø) in Section 6, and few brown carbonate-filled patches ( <i>Planolites</i> ). Sections 5 to CC, which are little disturbed by coring, contain fissile SILTY CLAY that has an apparent dip of 20–30 degrees. Minor Lithology: A single bed of lithified CARBONATE CLAY, light brownish gray (2.5Y 6/2), occurs in Section 5, 98–100 cm. It has a lumpy shape and may be a large burrow.
	>				



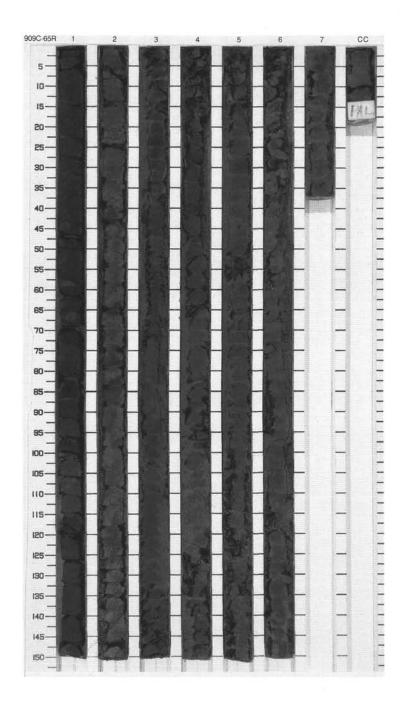
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Laufordras		1		***	+	s <sub>P</sub>		SILTY CLAY Major Lithology: Very firm, nearly uniform SILTY CLAY, very dark gray (5Y 3/1), fissile with an apparent dip throughout the core. Mm- sized burrows are parallel or
S S S S S S S S S S S S S S S S S S S		2	Miocene	****		P S	5Y 3/1	subparallel to lineation in all sections. Cm-sized burrows, including Zoophycos, are filled with dark grayish brown (10YR 3/2) SILTY CLAY in Section 2, 0–40 cm. General Description: Drilling biscuits occur throughout the
The section of the se		3		****		Ρ		core and are 2–5 cm in thickness, except in the tops of Sections 1 and 2 where biscuits are up to 8 cm in thickness.
11111		4		***	+	м		



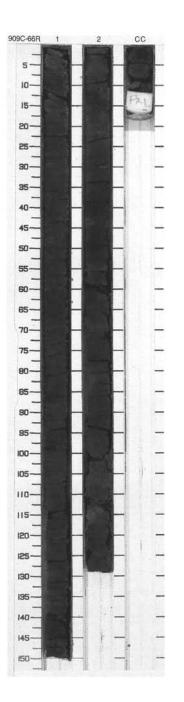
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Calor	Description
	1	Miocene	3 ≫ @ ≫ ≫ ≫ 3 3		P S P S S P S S P S P	5Y 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1), homogeneous SILTY CLAY with variable and irregularly spaced bioturbation features, including Zoophycos, Chondrites, carbonate- rich Planolites, and indistinct brownish gray patches and pyrite burrow fills. General Description: Bedding has a 10°–20° apparent dip throughout the core.



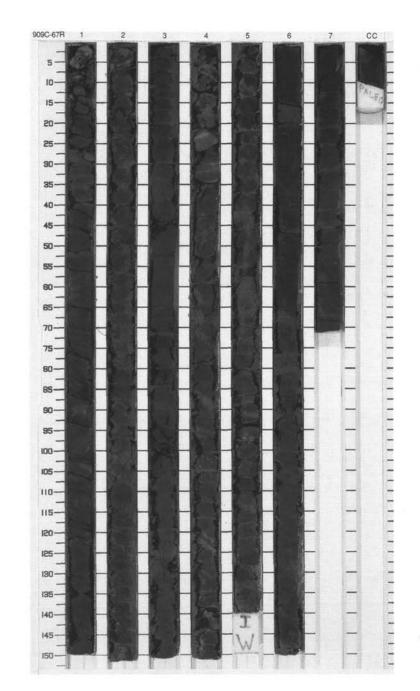
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Transform International		1		***************************************		P S		SILTY CLAY and CLAYEY SILT Major Lithologies: SILTY CLAY to locally CLAYEY SILT, very dark gray (5Y 3/1), homogeneous and fissile; fissility dips up to 15 degrees. Thin color banding is seen in Section 4, 17–64 cm. Mm-size
		2		~ ~ ~ ~ ~ ~ ~	1-	Р		burrows, dark gray to olive gray (5Y 4/1, 5Y 5/2) are present throughout the core. Section 6, 142 cm through Section CC contain abundant olive gray burrows, including <i>Chrondrites</i> . Black specks and very dark gray to black concretions of Fe sulphide, Ø
To a la start a la start		3	ne	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S		<0.5 cm, are present. Minor Lithology: CARBONATE CLAY, olive gray (5Y 5/2) occurs as layers in Section 6, 18–19 and 25–27 cm, and as burrow fills. The layers are irregularly laminated and bioturbated.
and the last		4	Miocene		44444444		5Y 3/1	General Description: Section 5 is severely disrupted by drilling and contains more slurry than biscuit.
The line line in		5		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S		
International and		6		Contract of the second	0000000000			
1111		7		•		P M		

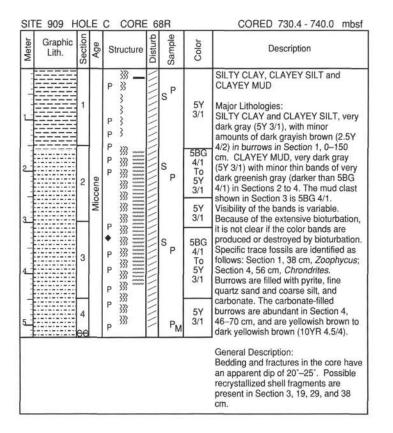


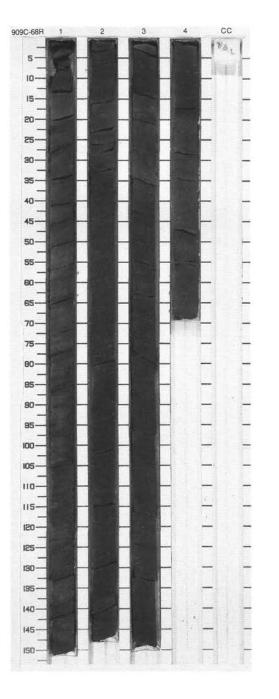
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 CC	Miocene	***************************************		P S S S P M	5Y 3/1 To 10YR 3/1	SILTY CLAY Major Lithology: Very firm and fissile SILTY CLAY, moderately bioturbated. Cm-sized burrows occur as brownish very dark gray (10YR 3/1) areas parallel to the fissility in an otherwise very dark gray (5Y 3/1) SILTY CLAY. Mm-sized burrows filled with lighter sediment arc present throughout. Several concretions of primarily opaque material occur in Section 1, Large concretions are present in Section 1, 116 cm, Ø 2.0 cm; 135 cm, Ø 1.0 cm.



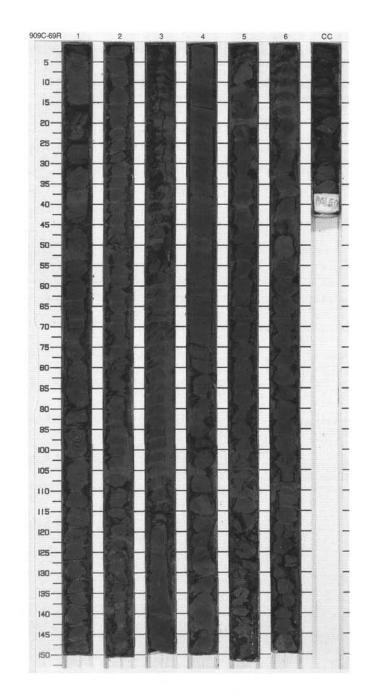
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		© *** *********************************	N⊢	Р		CLAYEY SILT and SILTY CLAY Major Lithologies: CLAYEY SILT and SILTY CLAY, very dark gray (5Y 3/1, 10YR 3/1), moderately bioturbated. Faint laminations (mm scale) with mottled surfaces occur in Sections 4, 5, 6, 7,
2		2		@@ ≫≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈	1111111111111	S P		and CC. Minor Lithology: CARBONATE-BEARING CLAY, brown to dark grayish brown (10YR 5/3, 2.5Y 4/2), occurs in concretions or as burrow fills in Section 1, 0–7 cm
1		3		****	11111 - 111	Ρ		and Section 4, 20–34 cm. It contains ~18% inorganic carbonate.
		4	Miocene	© ****	111111111111	Sp	5Y 3/1 To 10YR 3/1	
		5		****	111111111111	Ρ		
		6			111111	T S P		
to the second		7		×××	111111	P		



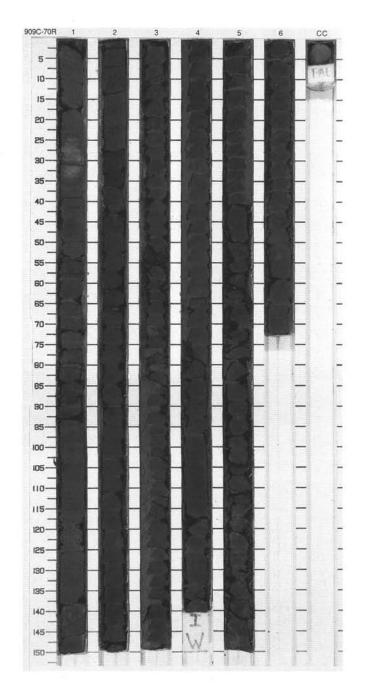




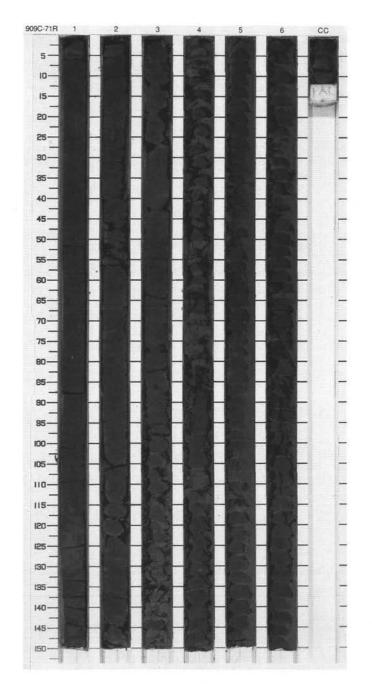
Meter	Graphic	Section	Age	Structure	Disturb	Sample	lor	Description
Me	Lith.	Sec	AG	Structure	Dis	San	Color	Description
L'and the co		1		@ @	11 / 11	Р		CARBONATE-BEARING SILTY CLAY Major Lithology: CARBONATE-BEARING SILTY CLAY, very dark gray (5Y 3/1 and
- Line				***	++++	s		10YR 3/1), firm, laminated, slightly to moderately bioturbated. Laminae
111 1111111111		2		(P)		Ρ		have an apparent dip of up to 15°. Burrows filled with white silt and/or pyrite and are abundant. Pyrite concretions are common in Sections 1, 3, and 4. Inorganic calcite comprises up to 20% of the sediment
in the second second		3		****	HHH VVF	Ρ		
			Miocene	@ ```	1		5Y 3/1 To	
in a sector		4	W	• • • • • • • • • • • • • • • • • • •	11/1	SP	10YR 3/1	
		5		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1/1/ + 1	Р		
					-11//-	P 		
telever Tree		6		***		Р		
		cc		***		м		



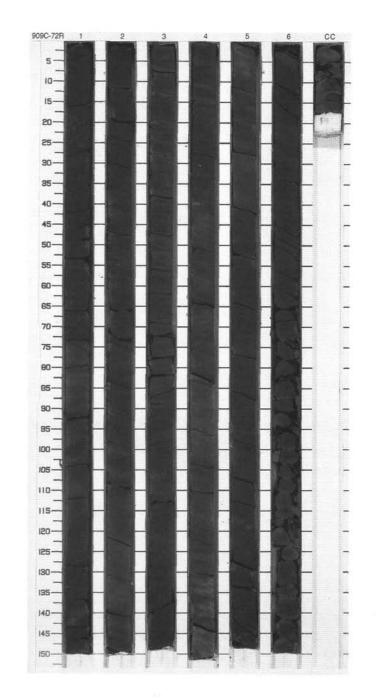
1       3	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
6 P 3	1 2 3 4		2 3 4 5	Miocene	P 3 11111	MMMMM	SP S P S P P	3/1 To 5BG	Major Lithologies: Very dark gray (5Y 3/1) CLAYEY SILT interbedded with dark greenish gray (slightly darker than 5BG 4/1) SILTY CLAY. Beds are discontinuous and moderately bioturbated. CLAYEY SILT contains approximately 40% clay minerals, 35% quartz, and 15% feldspar. SILTY CLAY contains a similar suite of minerals but the clay content is approximately 60%. Mica, inorganic calcite, opaques, and accessory minerals occur in minor amounts ( 3%). Minor Lithologies: CARBONATE SILTY CLAY occurs in a brownish layer in Section 1, 68 cm. The carbonate (30%) is primarily fine silt. A slide made from the drilling slurry in Section 4 contains SILTY MUD. It consists primarily of clay (40%), quartz (35%), and feldspar (18%). General Description: Sediment is very firm and fissile with



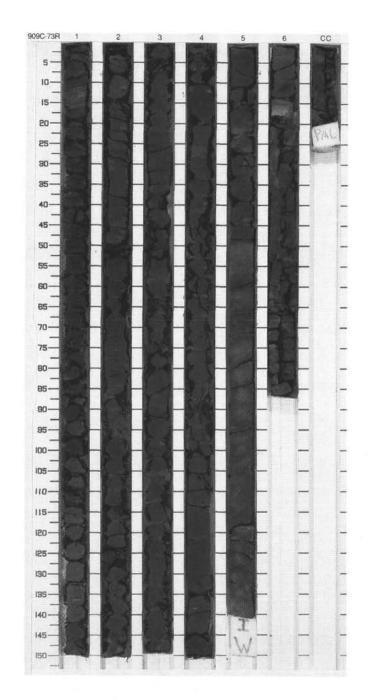
21	TE 909 H	_	E	C CORE			-	CORED 759.3 - 769.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
				@ } III		Р		SILTY CLAY and CLAYEY SILT
		1		(P)		s		Major Lithologies: Very firm, very dark gray (5Y 3/1) SILTY CLAY and CLAYEY SILT occur throughout core. Faint, green and brown, thin color bands and man (1.0 mm) with color bands and
2		2		· · · · · · · · · · · · · · · · · · ·	111111111	Ρ		small (1–10-mm) pyritized burrows are common. Numerous small pockets filled with white clay-sized material (zeolites?) are present throughout.
3				(h)	1111			General Description: Drilling disturbance is minimal in Section 1. Sediments are disrupted
4		3	в		111111	Sp		Section 1. Sediments are disrupted into large biscuits (5–20 cm size) in Section 2 through Section 3, 90 cm, and small biscuits (2–5 cm) in Section 3, 90 cm to Section CC. Apparent dip in Section 1 is ~25°.
- Here		_	Miocene	@	11		5Y 3/1	
5		4	~					
6		_		(     )     )      )      )      )      )      )      )      )      )      (     )      (     )      (     )      (     )      (     )      )      (     )      )      (     )      )	11			
dire					+++			
2		5		@		SP		
8					+			
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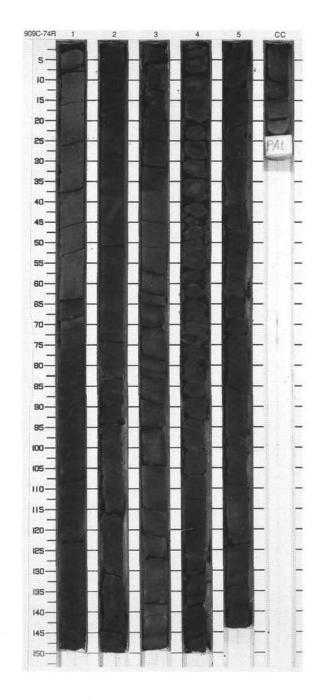
		F			0	D		
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
يتبيل من المنابين		1				s P		SILTY CLAY Major Lithology: Very stiff and massive SILTY CLAY is characterized by very dark gray (5Y 3/1) to dark greenish gray (5GY 4/1) and very dark grayish brown (5Y 3/2)
In the number of the		2				Ρ		color bands. These color bands, a few mm to 4 cm thick, are irregular and wavy; in places, they are due to bioturbation. Color banding is absent in Section 6 which is also much more disturbed. Burrows occur locally; some are rimmed or filled by quartz whereas
The second se		3	ne			s <sub>P</sub>	5Y	others are pyritized. General Description: Bedding in Sections 1 to 5 have an apparent dip of about 20°. In the upper part of Section 6, fractures between drilling biscuits have a greater dip than the bedding.
the state of the s		4	Miocene			Ρ	3/1 To 10YR 3/2	ine bedding.
		5				S P		
		6			TF	Ρ		
		-0		33 3	+	s M		



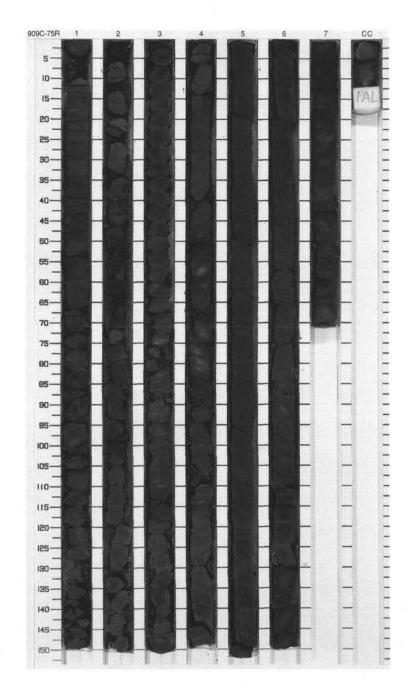
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Level Section		1		*****		S		SILTY CLAY and CLAYEY SILT Major Lithologies: SILTY CLAY and CLAYEY SILT, very dark gray (5Y 3/1), fissile (apparent dip of ~15 degrees) and bioturbated, Faint, thin color barde service Credition 0.570
2		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ρ		bands occur in Section 2, 53–78 cm; Section 4, 30–31 and 57–75 cm; Section 5, 0–128 cm. Black and dark gray (5Y 2.5/1, 5Y 4/1) burrows and Fe-sulphide concretions, both <1 mm in size, are present throughout.
The second se		3	Miocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S P	5Y 3/1	Minor Lithology: CARBONATE SILT, dark grayish brown (2.5Y 4/2), occurs in discontinuous laminae and burrows in Section 5, 132 cm to Section 6, 5 cm; Section 6, 18–23 cm. It also comprises a
5		4	~				0/1	laminated and bioturbated layer in Section 6, 12–18 cm; bottom contact has been destroyed by drilling and top contact is abrupt. <i>Chondrites</i> -like burrows occur in this layer.
		5		And Marshard I	HH //// H	S P		
Line Line		6				S P M		



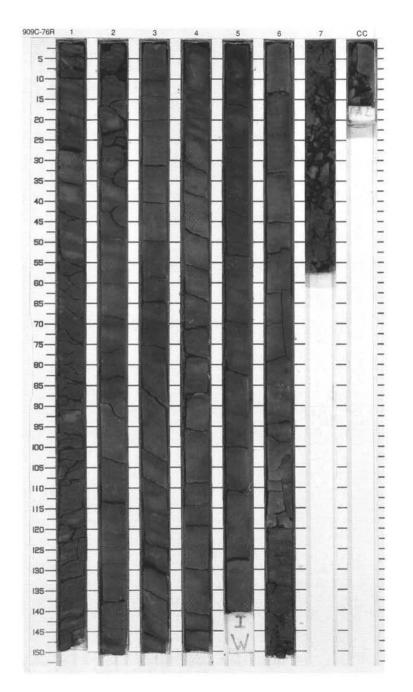
	FE 909 H	_		C CORE	-	-		CORED 788.3 - 798.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The Data taken		1		****	11111111111	P		SILTY CLAY Major Lithology: SILTY CLAY, firm and fissile, with an apparent dip of ~25 degrees. Faint, thin and discontinuous color bands alternate between very dark gray (5Y
2		2		ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж	1 11/1/1	Ρ		3/1) and more brownish very dark gray (10YR 3/1). Bioturbation is moderate. Disseminated pyrite occurs throughout the core, the highest concentration being in the lower part of Section 2 and in Section 3. Mm-sized, pyrite- cemented burrows are present
4		3	Miocene	жжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжжж	11111111	s P	5Y 3/1 To 10YR 3/1	throughout. Burrows, up to 0.5-cm size and filled with quartz silt, occur in Sections 2 to CC. General Description: The entire core, except Section 2, 25–70 cm, is disrupted into drilling biscuits 2–15 cm thick.
5		4		*****	111 HHHHH ///	Р		
6		5		****	11111 + 11	s		
ALC: NO.		cc		***	11/11	P M		



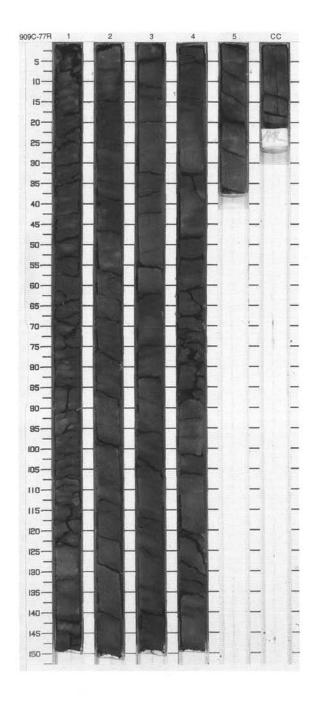
-	Graphic	5			6	e	-	
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
from Free from		1		@ @ @	VHHH VVV	Р		CLAYEY MUD, SILTY CLAY and CLAYEY SILT Major Lithologies: CLAYEY MUD, SILTY CLAY, and CLAYEY SILT, with moderate to heavy bioturbation and laminations (mm-cm scale). The laminations occur
a state of the sta		2		**************************************	VVVVVVV	Р		throughout the core with subhorizontal burrows (Zoophycos?) and are variably irregular, wavy, and discontinuous. Faint color banding of very dark gray (10YR 3/1, 5Y 3/1) and dark grayish brown (2.5Y 4/2) is present in the fine- grained beds. Burrows are commonly
The second second		3				P S		filled with pyrite. Section 3, 50–100 cm is extensively burrowed; <i>Zoophycos</i> , <i>Planolites</i> , and <i>Chondrites</i> are present. General Description: CLAYEY MUD in Sections 1 to 4 is
		4	Miocene	P ************************************	-1/1/1/1/1/	Р	5Y 3/1 To 10YR 3/1	slightly to highly fractured by drilling. Sections 5 to CC are undisturbed.
L'under Contraction		5		(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)		s P		
The Barrie		6		****		P S		
a contro		7		33 33 33 33		P S <sub>M</sub>		



SIT	FE 909 H	IOL	E	C CORE	7	6R		CORED 807.6 - 817.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		2				s <sup>p</sup> p S <sub>p</sub>	5Y 3/1	SILTY CLAY and CLAYEY MUD Major Lithologies: SILTY CLAY, very dark gray (5Y 3/1 and 10Y 3/1), and CLAYEY MUD, very dark gray (5Y 3/1), are relatively homogeneous. In Section 4, 0–65 cm, grayish brown (2.5Y 4/2) burrows are common and form an irregular layering. Burrows and clasts of fine quartz sand and coarse silt and pyrite are common in CLAYEY MUD. Minor Lithology: CARBONATE-BEARING CLAYEY MUD, grayish brown (2.5Y 4/2), occurs in some burrows in Section 5, 76–141 cm. General Description: There are distinct variations in
5		4	Miocene	***	1111111111	S P	5Y 3/1 To 2.5Y 4/2	abundance of quartz-filled burrows, which change over length scales of 30 to 100 cm. A possible carbonate concretion is present in Section 7, 21 cm. Maximum apparent dip on fractured surfaces is up to 45° but
6		5		*****	11111111111111111	s P S	5Y 3/1	averages around 25°.
8		6		***	111111 111	S P	5Y 3/1 To 10Y 3/1	
the second second		7 CC		3	XXXX	м	5Y 3/1	

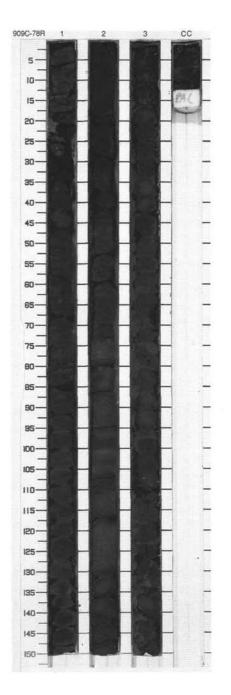


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Inter Landson		1		°₽ © ₽	XHHHHH/	Ρ		SILTY CLAY and CLAYEY MUD Major Lithologies: Interbedded very dark gray (5Y 3/1) SILTY CLAY and CLAYEY MUD. Slight color and textural variations delineate beds. Bioturbation is personic and all controls are
indianalian		2	9	P 3 P 8	» » » » » » »	sP	5Y 3/1 P	pervasive, and all contacts are gradational. Burrows are commonly pyritized but some are filled with quartz-dominated silt and sand. SILTY CLAY contains approximately 20% quartz, 8% feldspar, 6% accessory minerals, and 4% inorganic calcite. CLAYEY MUD contains approximately 26% quartz, 7% inorganic calcite, and 4% feldspar. General Description: Beds have an apparent dip of up to 15°.
area factorial and		3	Miocene	P 33		Ρ		
International Contract		4		₽ }}		Ρ		
		5		33		s		
-		CC		33	1	м	_	

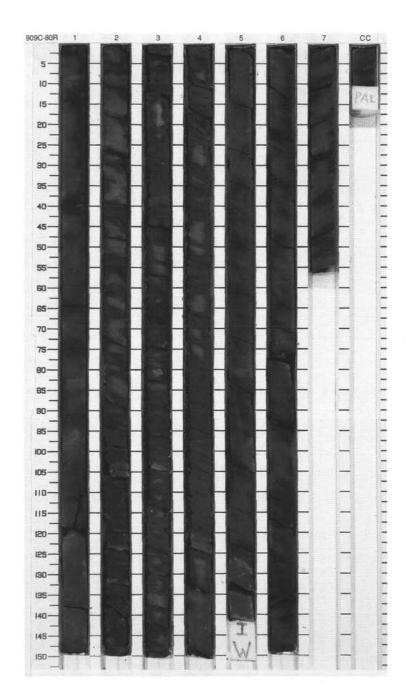


Meter	Graphic	Section	Age	Observations	Disturb	pie	or	Description
Me	Lith.	Sec	Ag	Structure	Dist	Sample	Color	Description
2		1 2 3	Miocene	****	Μ	S P P P S M	5Y 3/1 To 10Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (10Y 3/1, 5Y 3/1), firm, moderately bioturbated. Laminae (1–3 mm thick) occur throughout, and white (quartz?) silt- filled burrows and pyritized burrows are common.

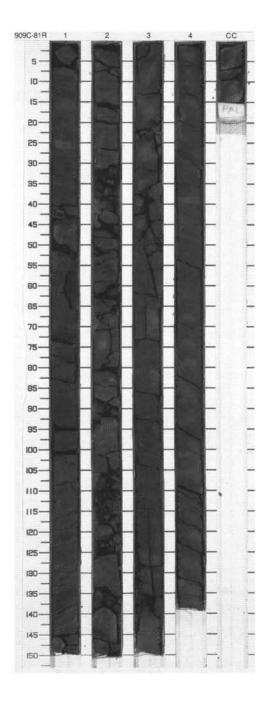
909C 79R NO RECOVERY



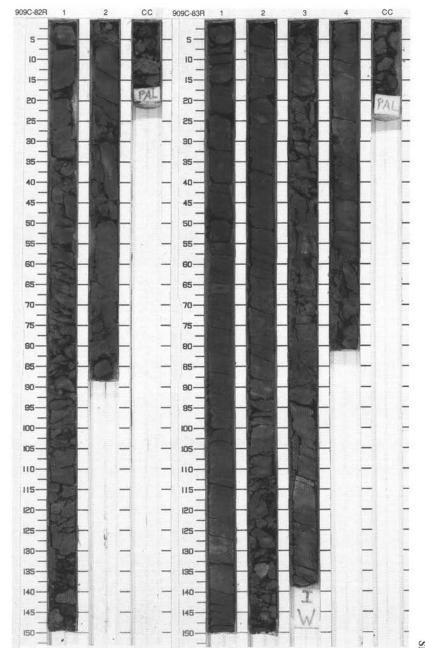
-	TE 909 H	-		C CORE	_			CORED 846.2 - 855.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
I will be down		1		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1111111111	P S		CLAYEY SILT, SILTY CLAY and CLAY Major Lithologies: CLAYEY SILT, SILTY CLAY and CLAY, very dark gray (5Y 3/1), homogeneous showing faint color bands. CLAY is more fissile and fractured by drilling than the coarser lithologies; fissility has an apparent dip of 10–15 degrees. Section 1, 136–137 cm has a gray, silty lamina, 2 mm in thickness; Sections 5 to CC appear to be faintly laminated. Dark gray and gray (5Y 4/1, 5Y 5/1) silty burrows, mm size, are common and include <i>Chondrites</i> -like burrows. Black pockets of Fe sulfide, Ø <2 mm, and pyritic concretions, Ø <8 mm, are scattered throughout the core. Agglutinated forams are rare in the CLAYEY SILT and SILTY CLAY. Minor Lithology: CARBONATE CLAY, dark grayish-brown (2.5Y 4/2), in Section 4, 55–57 cm is irregularly laminated and bioturbated.
2		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P		
4		3		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		P S		
Terra Level		4	Miocene			Ρ	5Y 3/1	
		5				P S		
8		6				P		
9		7		~ ~ ~	111111	P M		



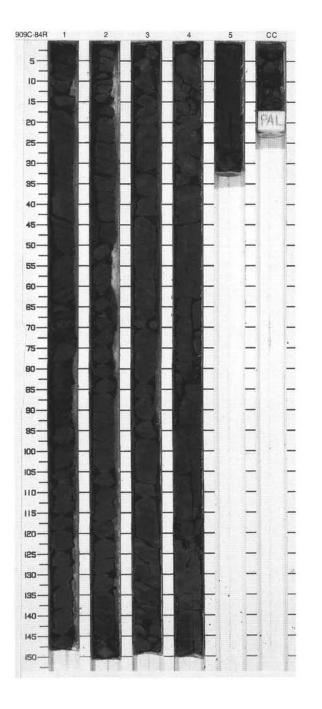
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1 2 3 4	Miocene	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P S P S	5Y 3/1 To 10YR 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1, 10 YR 3/1), homogeneous showing very faint wavy color bands. Bioturbation structures, predominantly pyrite-cemented burrows and clean coarse quartz pods, are relatively numerous but very thin and parallel the bedding. They are less numerous in Section 2, 30–140 cm, which is slightly more clayey and more disturbed by coring.



-	E			0	ø		CORED 865.5 - 875.1 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1	Miocene	****	<u> </u>	P S	5Y 3/1	SILTY CLAY and CLAYEY CARBONATE Major Lithologies: Very firm, very dark gray (5Y 3/1) and slightly fissile SILTY CLAY. Bioturbation varies throughout the
	2		333 33 33		SP		core. Concentrations of cm-sized burrows, filled with dark gravish brown (2.5Y 3/2) CLAYEY CARBONATE, are found in Section 1, 0–40, 80–100, and 140–145 cm and in Section 2, 0–20 cm. Mm-sized burrows, pods filled with
							silt-sized quartz and agglutinated foraminifers are present throughout.
	_	E	C CORE				CORED 875.1 - 884.8 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	2	Miocene	@ @ @		P S P P	5	SILTY CLAY and CLAY Major Lithologies: Very dark gray (5Y 3/1) SILTY CLAY occurs in Section 1, 0 cm to Section 2, 110 cm and in Section 3, 90 cm to Section CC. It is disrupted into drilling biscuits ranging from 2–40 cm, has thin color bands (1–5-mm-thick), small sediment-filled burrows (1–5 cm by 1–5 mm) and agglutinated benthic foraminifers. Massive, very dark gray (5Y 3/1) CLAY occurs in Section 2, 110 cm to Section 3, 90 cm. It is slightly fractured by drilling and contains
	3		·····································	P S P P		pyritized burrows.	
				///			



	FE 909 H	OL	_	C CORE	_			CORED 884.8 - 894.4 mbs
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2 3 4		1 2 3 4 5 0	Miocene			P S P P S P M	10YR 3/1 To 10Y 3/1	SILTY CLAY, SILTY MUD Major Lithology: SILTY CLAY and SILTY MUD, very dark gray (10YR 3/1, 5Y 3/1, 10Y 3/1) and firm. Both lithologies are laminated (laminae 1–3 mm thick) and moderately bioturbated. Small silt-filled burrows are abundant. The core is moderately fractured in Sections 3, 4, and 5.

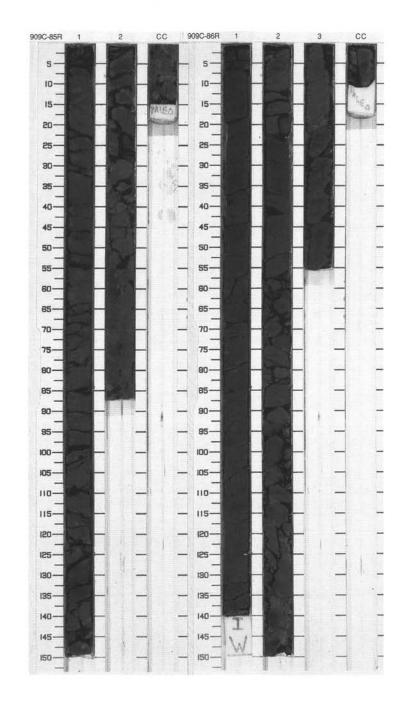


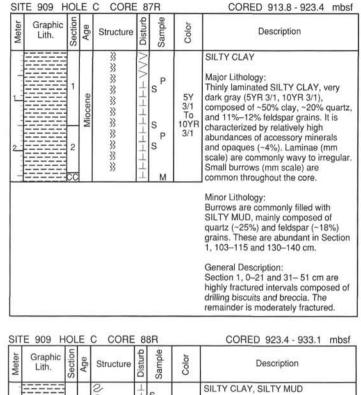
SIT	E 909 H	IOL	E	C CORE	8	5R		CORED 894.4 - 904.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Contraction Construction		1 2 CC	Miocene	₽ ₽ ₩ ₽	XXXXX V XXX +++ V	S <sub>P</sub> P M	5Y 3/1	SILTY CLAY Major Lithology: Very firm, very dark gray (5Y 3/1) SILTY CLAY. Quartz (~36%) and feldspar (~10%) are the important non- clay minerals. Glauconite (2%), mica (1%), and opaques (1%) were also present. Burrows and surface mottling are common throughout Section 1. Sections 2 and CC are highly disturbed by drilling and surface features are obscured.

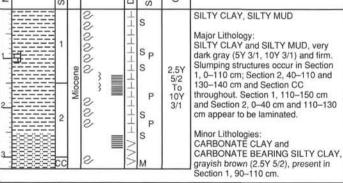
SITE 909 HOLE C CORE 86R

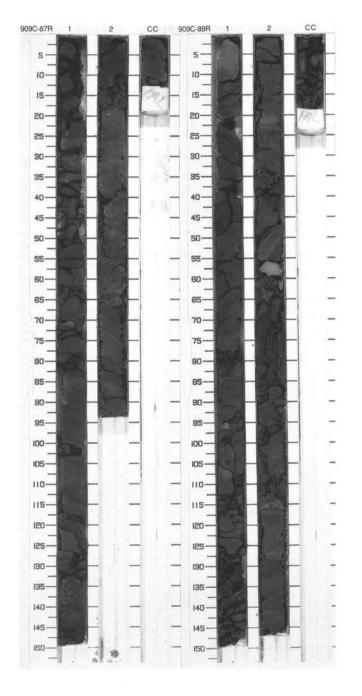
CORED 904.1 - 913.8 mbsf

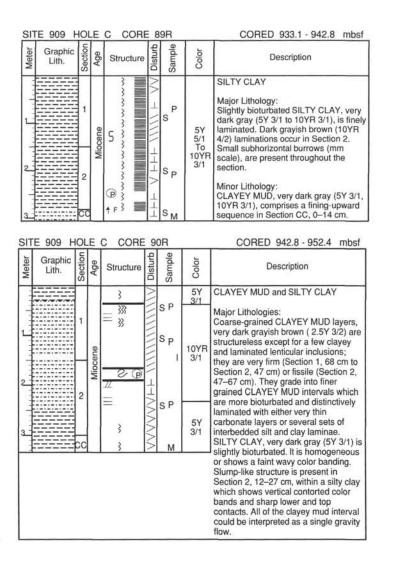
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
12		1	Miocene			S P I	5R 2.5/1 To 5Y 3/1	CLAYEY MUD Major Lithology: CLAYEY MUD, very dark gray (5Y 3/1) and black (5Y 2.5/1), with some minor areas of very dark greenish gray (5BG 3/1). Thin (<1-mm-thick) very dark brown clasts may be organic-rich material. There is a general parallel trend to the sediments, suggesting an original bedding, disrupted by bioturbation.
3		3			シンシンシンシン	S P M		Minor Lithology: SILTY MUD, interspersed in small areas throughout the bioturbated sediments. The very dark greenish gray (5BG 3/1) sediment tends to be coarser.
								General Description: Variable amounts of coarse silt and fine sand clasts. The biggest are up to 0.5 mm in diameter. Many appear to be burrows; others might be recrystallized shell fragments.

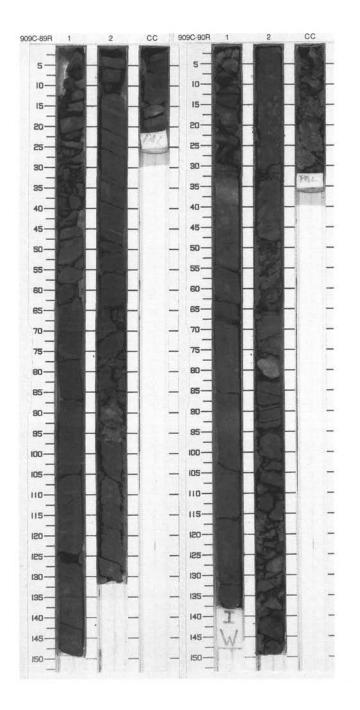










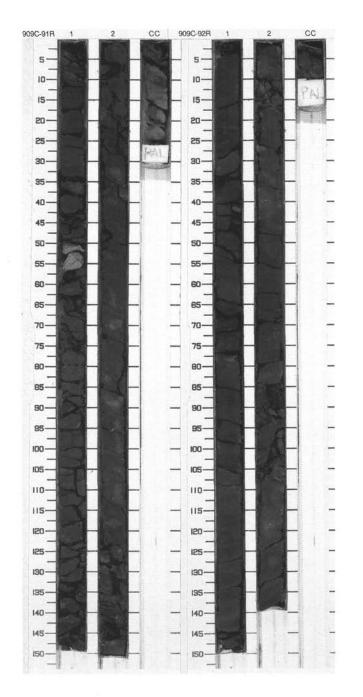


## SITE 909 HOLE C CORE 91R CORED 952.4 - 962.1 mbsf Section Disturb Sample Meter Graphic Color Age Description Structure Lith. 1 CLAYEY SILT and SILTY CLAY P LS Major Lithologies: @ }} CLAYEY SILT and SILTY CLAY, dark olive gray (5Y 3/2), homogeneous and 33 fissile (apparent dip of approximately Miocene 20 degrees), showing thin color bands that are more green in tint. Mm-sized gray burrows, filled with quartz sand 5Y 3/2 and silt, are present throughout. Very dark grayish brown burrows filled with 2 CARBONATE CLAYEY SILT, are S abundant in Section 1. Black pods Ρ (incipient concretions?), Ø <5 mm, are also present in Section 1. A carbonate concretion of dark grayish brown and M dark olive gray (2.5Y 4/2, 5Y 3/2) in Section 1, 49-57 cm shows slight bioturbation.

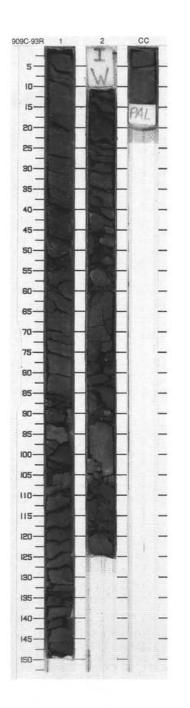
## SITE 909 HOLE C CORE 92R

CORED 962.1 - 971.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2 3		1 2 CC	Miocene			P SS S P M	5Y 3/1	SILTY CLAY Major Lithology: Fissile, very firm and very dark gray (5Y 3/1) SILTY CLAY. Greenish dark gray (10Y 4/1) and very dark brown (10YR 2/2) color bands are very common throughout. The color banding is mostly wavy and discontinuous, but a few well-defined color bands/laminae are present. The brownish layers include slightly more sand-sized material, but otherwise there is no correlation between color and texture. Elongated or circular burrows filled with light gray sediment (quartz or carbonate) are common in some intervals. Recrystallized calcereous benthic forams are present throughout.

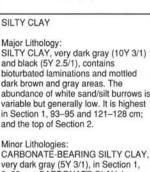


SIT	FE 909 H	101	E	C CORE	Ξ9	3R		CORED 971.7 - 981.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		1 2 CC	Miocene		//////-	SP PSI PSM	5Y 3/1	SILTY CLAY Major Lithology: Very dark gray (5Y 3/1) SILTY CLAY occurs throughout core, with faintly greenish to brownish very dark gray (5Y 3/1) color banding in Section 1, 12–74 cm. Minor Lithology: Dark grayish brown (10YR 4/2) CARBONATE CLAY occurs in a large burrow (4 cm) in Section 2, 104 cm. General Description: Drilling biscuits throughout core, with dipping bedding lineations.



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		1 2 3 CC	Miocene		XX HHHHH VV 1/1/1/1 H	S S P S S P S S P S S P S S P	5Y 2.5/1 To 10Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray and black (5Y 2.5/1), contain bioturbated laminations and dark brown and gray areas. abundance of white sand/sil variable but generally low. It in Section 1, 93–95 and 121 and the top of Section 2. Minor Lithologies: CARBONATE-BEARING SI very dark gray (5Y 3/1), in S 0–30 cm. CARBONATE CLU (10YR 5/3), is the dominant the slumps in Section 2. 108

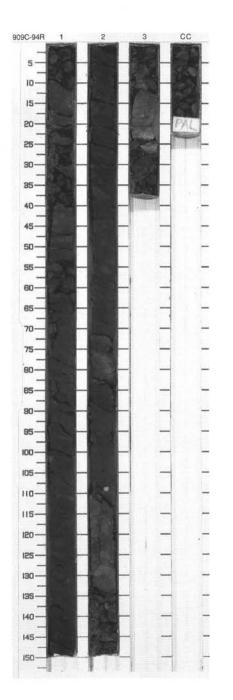
SITE 909 HOLE C CORE 94R



Section 1, AY, brown lithology in the slumps in Section 2, 108-144 cm, and Section 3, 11-27 cm. SILTY CLAY grades into brown CLAYEY SILT in Section 2, 100 cm, which lacks white burrows, and into OPAQUE-BEARING SILTY CLAY in Section 2, 58 cm, which contains both framboidal and irregularshaped, silt-sized, opaque grains of probably pyrite.

## General Description:

Three separate slumps are present in Section 2, 75-82 and 108-144 cm, and Section 3, 11-27 cm. Carbonate is an important component of the lower two slumps; it is not reactive with 10% HCI and may be siderite. Clasts within the slump include black silty clay, a single light colored plutonic clast, and many contorted carbonate clasts, suggesting redeposition of a previous slump. White silt/sand burrows are present both within clasts and at lithologic contacts, suggesting burrowing prior to and after slumping.



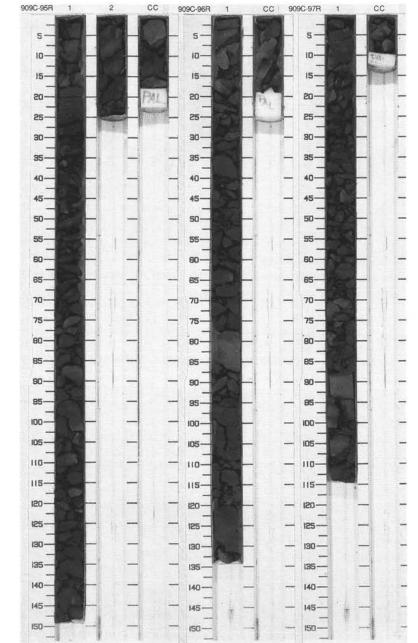
SIT	TE 909 H	IOL	.E	C CORE	9	5R		CORED 990.7 - 1000.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the first star		1 2 CC	Miocene			P S P M	5Y 3/1 To 10Y 3/1	CLAYEY SILT Major Lithology: CLAYEY SILT, very dark gray (5Y 3/1, 10Y 3/1), firm. Sediments appear to be laminated and slightly bioturbated. White silt burrow fills are common.

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Lon Contractor		1 CC	Miocene	**************************************	VVV + VVV	P SP S M	10YR 4/1 To 5Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, dark gray (10YR 4/1) to very dark gray (10YR 3/1, 5Y 3/1), laminated. Moderate bioturbation is present throughout the core. Burrows are commonly pyritized; <i>Skolithos</i> (?) burrow is filled with pyrite in Section 1
								95–102 cm. Minor Lithology: CARBONATE CLAY layer, dark gray (10YR 4/2), is present in Section 1, 77–84 cm.

SITE 909 HOLE C CORE 97R

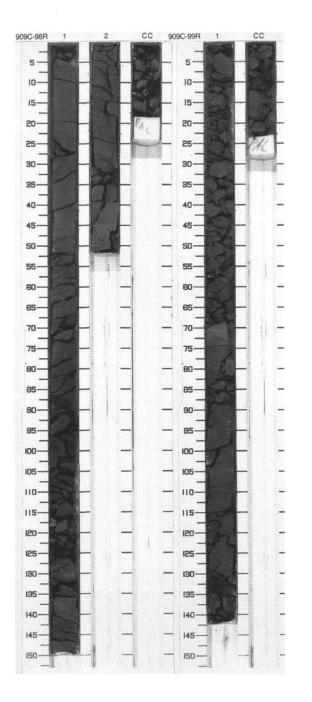
CORED 1010.0 - 1019.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Miocene	~~~~~	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	P S P M	5Y 3/1 To 10Y 3/1	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1, 10Y 3/1), laminated, slightly bioturbated. White silt-filled burrows are common.



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Contraction Contraction		1 2 CC	Miocene	(P) (P) (P) (P) (P) (P) (P) (P)	X V H VV H H VV	P S P M	P SILTY CLAY Major Lithology: SY Very dark gray (5Y 3/1) to d brown (2.5Y 4/2) SILTY CL/ Interbedded layers are disti 2.5Y by discontinuous color bour Bioturbation is moderate thr Quartz (~20%) is major non mineral. Feldspar (~8%), ac minerals (~7%), and inorgan	Major Lithology: Very dark gray (5Y 3/1) to dark grayish brown (2.5Y 4/2) SILTY CLAY. Interbedded layers are distinguished by discontinuous color boundaries. Bioturbation is moderate throughout. Quartz (~20%) is major non-clay mineral. Feldspar (~8%), accessory minerals (~7%), and inorganic calcite
								(~5) also occur. Sand grains are commonly rounded and altered. General Description: Core contains consolidated sediment which is moderately to highly fractured by drilling.

SIT	E 909 H	IOL	E	C CORE	9	9R		CORED 1029.2 - 1038.8 mbsf			
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description			
			Miocene	@	V 1/1/1 V	P S M	5Y 3/1	CARBONATE-BEARING SILTY CLAY Major Lithology: CARBONATE-BEARING SILTY CLAY, very dark gray (5Y 3/1), homogeneous and fissile. Subparallel laminae, commonly discontinuous, are present throughout the core. Gray silty burrows and pyrite concretions, mm size, are common; Section 1, 59 cm contains			
								several pyrite concretions, Ø 5 mm. Quartz, inorganic calcite, and feldspar are the main silt-sized components.			



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Calar	Description
		1 2 CO	Miocene	©	IVVXX VXVVV X	S P S P M	5Y 3/1 To 2.5Y 3/2	SILTY CLAY Major Lithology: SILTY CLAY, very dark gray (5Y 3/1) with elongated very dark grayish brown (2.5 Y3/2, 10 YR 3/2) patches. These patches are slightly to moderately bioturbated with distinct <i>Zoophycos</i> traces. Within the relatively well- preserved upper part of Section 2, the sediment contains deformed mud clasts which are either laminated or structureless and similar to the sitly clay matrix. This provides evidence of
SIT	E 909 F		.E	C CORE	: 1	018		gravity flow or very early, soft sediment deformation. CORED 1048.4 - 1052.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
-				0, 33	>			SILTY CLAY

P

SP

s MP

5Y 3/1 Major Lithology: Very dark gray (5Y 3/1), slightly to moderately bioturbated SILTY CLAY. In Section 1, 0 cm to Section 2, 27 cm slump folds and contorted slumps are

sediment is fissile and exhibits lamination or wavy color banding. The contact between the two zones is

sharp. Mm-sized burrows filled with lighter sediment occur throughout.

Two pyrite concretions (burrow fills) are present in Section 1, 70-72 cm.

common. Below this interval the

22

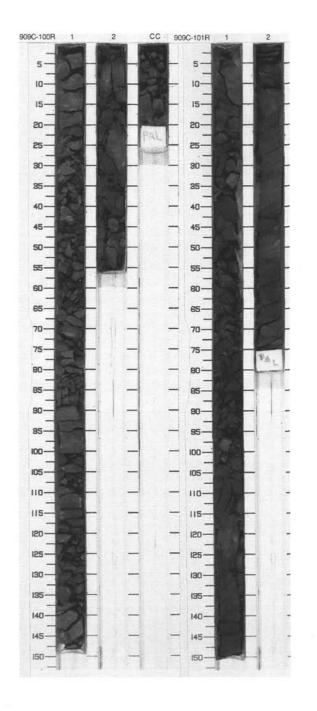
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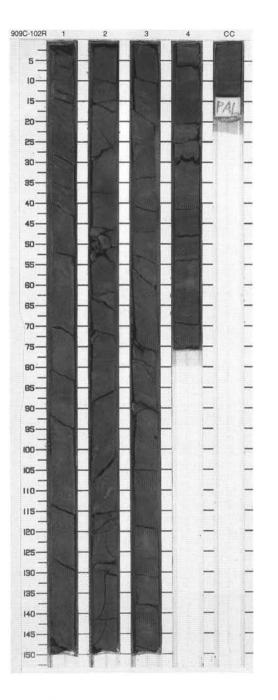
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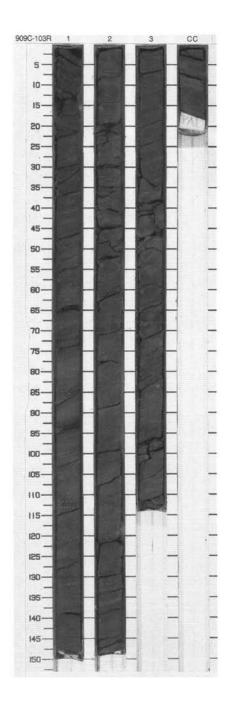
ate Oligocene-Mioc



Graphi Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	2 3	late Oligocene-Miocene	() () () () () () () () () () () () () (		P SP P S P S M	5Y 3/1 To 10YR 4/2	CARBONATE-BEARING CLAYEY MUD Major Lithology: Very dark to dark gray (5Y 3/1 to 10YR 4/2) CARBONATE-BEARING CLAYEY MUD, very hard, well lithified. Slump structures, convoluted bedding, and pyritized burrows are cocmron. A large slump structure occurs in Section 3, 46–75 cm; a largy mud clast occurs in Section 2, 10–13 cm. Convoluted, thin color bands and burrows are present in Section 2, 84–114 cm and Section 3, 116 cm to Section CC. General Description: The entire core is disrupted into drilling biscuits (2–20 cm thick) which have an apparent dip of ~30°.



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 CC	late Oligocene-Miocene	P 8 8 8 8 9 9 9 9 9 8 8 8 9 9 9 9 8 8 8 8 9 9 9 9 8 8 8 8 9		P S S P P S S	5Y 3/1 To 10Y 3/1	SILTY CLAY AND CLAYEY SILT Major Lithology: SILTY CLAY AND CLAYEY SILT, very dark gray (5Y 3/1, 10Y 3/1), laminated, moderately to extensively bioturbated. Discontinuous silty laminae appear to have been disrupted by bioturbation. Very dark grayish brown (10YR 3/2) and white silt burrows are present throughout. Glauconite is common; pyrite is present throughout, especially in burrows. Section CC contains fine- sand particles composed of worm tubes(?). Minor Lithology: CARBONATE-BEARING SILTY CLAY, very dark grayish brown (10YR 3/2), occurs as laminations (<1 mm thick).



SITE 909