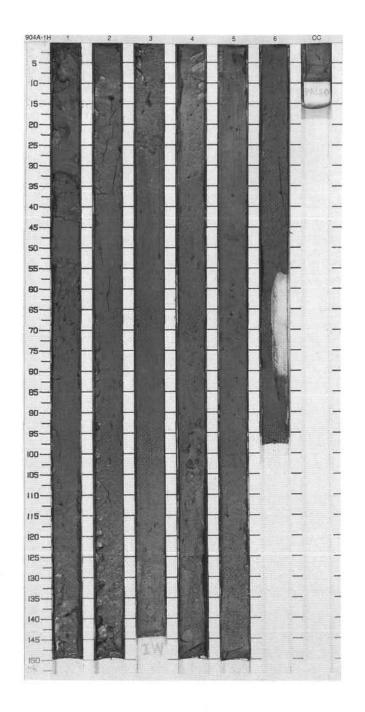
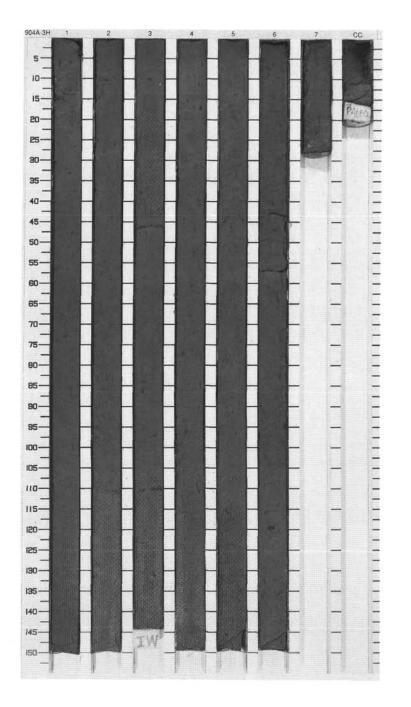
SI	TE 904 H	OL	E	A CORE	-			CORED 0.0 - 9.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		2	Holocene	\$- \$-	00000 00000	S S P	5Y 4/1	SILTY CLAY Major Lithology: The whole core consists of slightly to moderately bioturbated, mottled SILTY CLAY with occasional mm-scale shell fragments and rare cm-scale shell. The main striking feature is the occurrence of a sharp contact in Section 3, 126 cm between slightly bioturbated, greenish gray SILTY CLAY above and pinkish gray, moderately to heavily bioturbated SILTY CLAY below. Burrows are filled with iron sulfide-rich very fine sand and silt. Plant debris, foraminifers, and nannofossils occur at the top of
4		3		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S		NOTE: Core liner is deformed in Section 7, 55–85 cm.
5		4	е	\$\$\$\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$		s D ^P		
		5	late Pleistocene	× ↔ ↔		S	5R 4/1	
8		6 CC		33 33 33 33 33		S M		



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SI	FE 904 H	101	E	A CORE	2			CORED 9.0 - 18.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
ter Constant		1		****		S P		SILTY CLAY Major Lithology: The whole core consists of gray and pinkish gray, slightly to heavily bioturbated SILTY CLAY. Burrows are filled with iron sulfide-rich very fine to
1		2		33 33 33 33 33 33		S	5R	fine sand. The color changes from gray to pinkish gray are generally sharp. Shell fragments occur from the base of Section 4 to the base of the core, together with rare gastropods (<1 cm). A thin sandy layer (5 mm of fine to medium sand) occurs in Section 6, 8
9		3	ate Pleistocene	****		S	4/1	cm. A mm-scale pyrite concretion occurs in Section 7, 23 cm.
5		4	middle Pleistocene-late Pleistocene	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		I S PD		
6			mid	3		s	N4	
Z		5		1.8 				
8		6		× × * F		S	5R 4/1 To N4	
9		7 CC		» »		м		

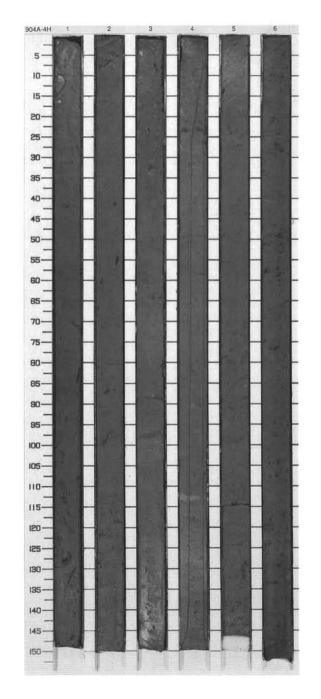
	FE 904 H		-	A CORE	-	12.12.		CORED 18.5 - 28.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Lon Contract		1		××××××××××××××××××××××××××××××××××××××		S	5R 4/1 N3 To N4	SILTY CLAY Major Lithology: The whole core consists of gray and pinkish gray SILTY CLAY. Common burrows are filled with iron sulfide-rich fine sand and silt. Color changes from pinkish gray to gray SILTY CLAY are
E		2		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		S P	5R 4/1 To N4	sharp in Sections 1 and 2, more gradational and subtle in other sections. Shell fragments are common in Sections 1 to 3. Two thin layers (5 mm) of micaceous, fine to medium sand occur in Section 3, 47 and 110 cm. Brownish red spots (5 mm in
A LINE		3	middle Pleistocene	~~~~~ Ø		S	N4 To N5	diameter) occur in Section 3, a brownish red burrow (1–2 cm in diameter) occurs in Section 4.
5 11111111		4	middle PI	······································		S P D	N4 To 5R 4/1	
La		5		****		S	N3	
		6		**************************************		S P	To N4	



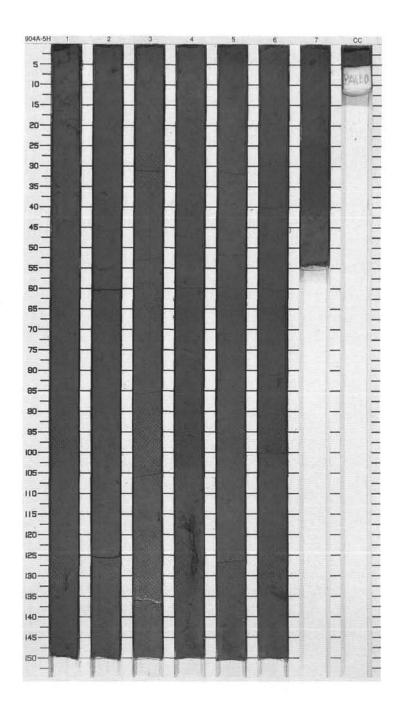
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4H	CORED	28.0 - 37.5	mbsf

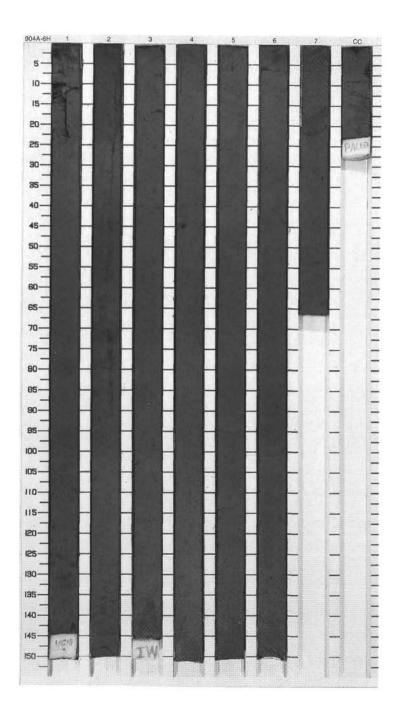
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
True Constants		1		0		S P		SILTY CLAY Major Lithology: The whole core consists of homogeneous gray, slightly to moderately bioturbated, weakly micaceous SILTY CLAY. Iron sulfide- rich fine to medium sand fills burrows.
6		2		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		S		Tiny shell fragments throughout. Thin layers (5 mm) of micaceous fine sand occur in Section 3, 88 and 98 cm and in Section 4, 23 cm.
4		3	istocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S P D	N3 To	
5		4	middle Pleistocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S	N4	
6		5		> >> >> >> >> >>		S		
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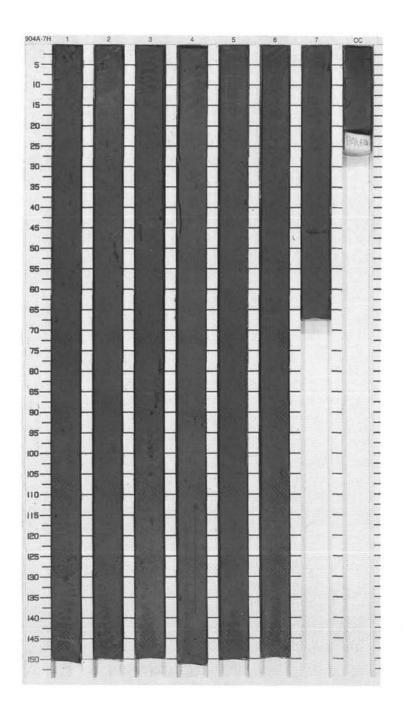
SI	TE 904 H	_	E	A CORE	_	-		CORED 37.5 - 47.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Don Freedom		1		~ ~ ~ ~ ~ ~ ~ ~ ~		S P	N4	SILTY CLAY and DIATOMACEOUS SILTY CLAY Major Lithologies: This core comprises two distinct parts. The first one, from Section 1 to Section 5 consists mainly of greenish gray, slightly bioturbated SILTY CLAY with
2		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S	N4 To N5	occasional shell fragments. Very fine sand fills burrows. At the top of Sectior 4, a diatom-rich interval characterized by a more pronounced green color occurs up to 53 cm. The second part is composed of greenish gray, DIATOMACEOUS SILTY CLAY (about
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3	cene			S P D		20% of diatoms). Diatoms are particularly abundant in Section 7. Three large burrows (1–2 cm in diameter) filled with fine sand occur in Section 6. Sand is stained black.
		4	middle Pleistocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0	S	10Y 5/2	
		5		**************************************		S P	5/1 To 5Y 4/1	
		6		***		S	10Y 4/1	
	×××××	7		333		S S MS	10Y 5/2	

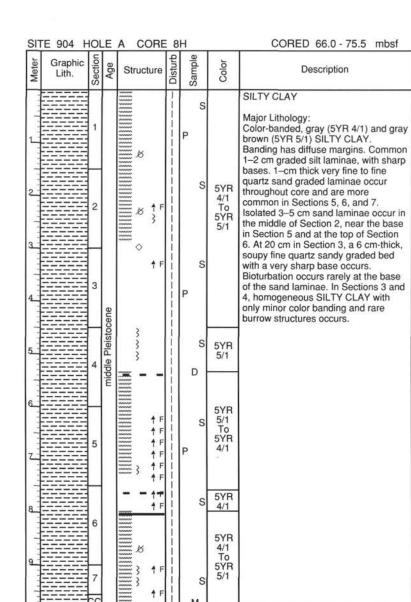


SI	TE 904 H	101	E	A CORE	6			CORED 47.0 - 56.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		S	10Y 4/1	SILTY CLAY Major Lithology: The whole core consists of greenish gray, slightly to rarely bioturbated SILTY CLAY. Burrows are filled with fine sand. Irregular pinkish zones occur in Section 3, 110–125 cm, in Section 4, 00 05 cmd 110 100 cm in Section 4,
2		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S	10Y 4/2 To 10Y 4/1	90–95 and 110–122 cm, in Section 4, 90–95 and 110–122 cm, in Section 5, 40–46 cm and in Section 6. Less than 10% of diatoms throughout the core.
4		3	ne	3		S		
1		4	middle Pleistocene	3		s	10Y 4/1	
2		5		3		S D	10Y 4/1 To 10Y 5/1	
1		6		3		S	10Y 4/1	
9		7		3		s	10Y 5/1 To 10Y 4/1	



-	Crachie	E			P	Ð	1	CORED 56.5 - 66.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		× ×		S	10Y 4/1	SILTY CLAY Major Lithology: Greenish gray to dark gray (10Y 4/1 to 10Y 5/1), slightly bioturbated to homogeneous (possibly heavily bioturbated) SILTY CLAY, from Sections 1 to 5. Small burrows filled
2		2				S P		with fine-grained sand or pyrite occur. In Section 6 and below, the lithology changes to dark gray to very dark gray (N4 to N5) SILTY CLAY with thin (1 mm to 1 cm thick) color laminations. The color is graded into pinkish dark gray (5YR 4/1).
The second second		3	ene	* * * * * *		S D	10Y 4/1 To	
111111111111		4	middle Pleistocene			S P	10Y 5/1	
		5				S		
Lind and and and and and and and and and a		6				S P	N5 To N4	
		7				S		





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To 5YR

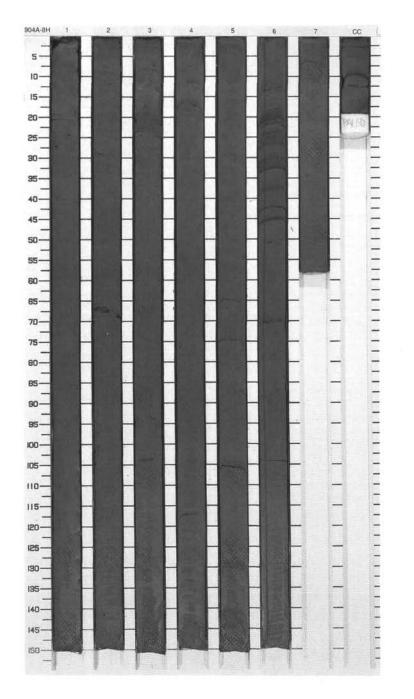
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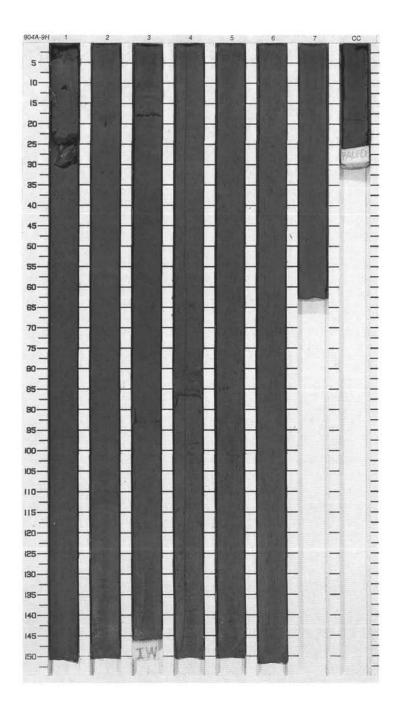
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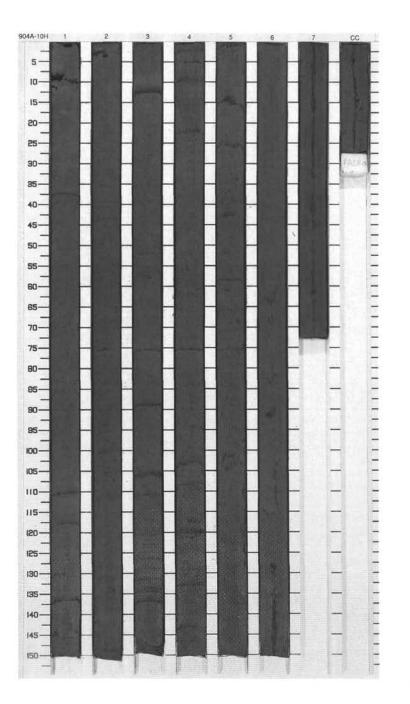
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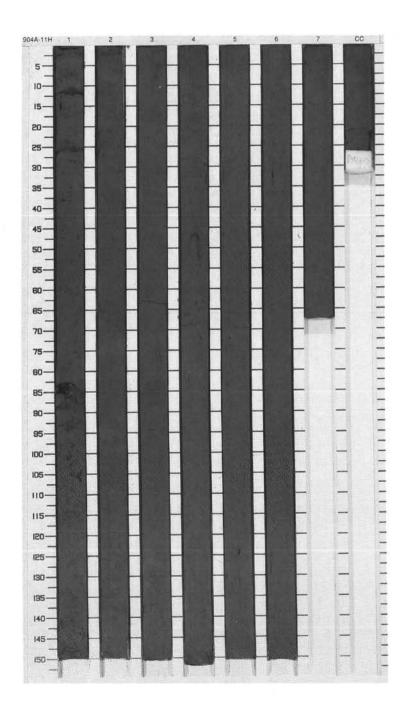
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Σ	Litti.	Se	A		ö	Sa	Ō	
		1				s		SILTY CLAY Major Lithology: From top of this core to 83 cm in Section 4, dark gray to dark reddish gray (5YR 4/1 to 5/2), slightly bioturbated SILTY CLAY. Dark gray to very dark reddish gray, thin
		2				S P	5YR 4/1 To 5YR 5/2	(ranging from less than 1 to 5 cm thick), color bands occur throughout this interval. White, quartz-dominated thin (5 mm thick), graded, silt to very fine sand layers are also intercalated. Very dark gray, graded, thin (3 cm thick), silt to very fine sand bed is
The second second		3	ene			s D	5/2	intercalated at the base of this lithologic interval with sharp contact. Below the base of this sand bed (83 cm in Section 4) to base of this core, dark gray (10Y 4/1 to 2.5Y N4/0), moderately bioturbated SILTY CLAY. Small burrows (3 to 5 mm in
		4	middle Pleistocene			s P		diameter) filled with black material (pyrite?) occur commonly throughout this core. General Description: Note: Flow-in from 40 cm in Section 6 to base of this core.
True true true		5		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		S P	10Y 4/1	
		6		****	wwwwwwwww		To 2.5Y N4/0	
A LOCK		7		33 33 22	WWW			
1		CC		"	E	м		



	Graphic				-6	e	5	
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Total terms		1		∱ F ∱ F		S		SILTY CLAY Major Lithology: Weakly color-banded SILTY CLAY, with red-gray (2.5YR 4/2) laminae. Abundant thin, graded, very fine to fine quartz and mica sand laminae,
ALC: NO				† F		s		quartz and mica sand laminae, typically <5 mm with sharp basal contacts.
2		2		¶ F ¶ F		PD		General Description: Note: "Flow-in" below 76 cm in Section 5.
3				↑ F		s		
4		3	le	↑ F ↑ F ↑ F				
		4	middle Pleistocene	↑ F ↑ F ↑ F	والمراسية المراجع	S P	N4	
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		5		↑F} ↑F} ┾ F	MM	S P	÷	
and and					wwww	s		
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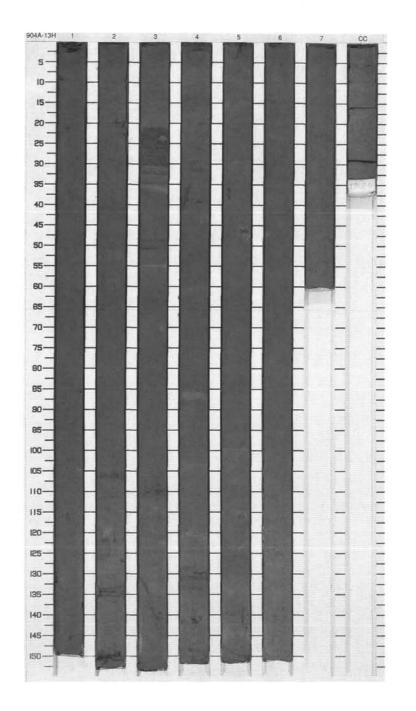
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Meter	Graphic Lith.	Section	Age	S	tructure	Disturb	Sample	Color	Description
The Part of the Pa		1		*****	↑F ↑F		S P		SILTY CLAY Major Lithology: Dark gray (10/R4/1 to N4), moderately bioturbated SILTY CLAY with undisturbed, graded, very fine to fine sand layers, from top of Section 1 to 2 cm in Section 2. Small burrows
2		2		33	1 F U U U U U		s P _D	10YR 4/1 To	filled with very fine to fine sand-sized, mica and quartz dominated sand commonly occur. Slumped unit of SILTY CLAY occurs from below 2 cm in Section 2 to 32 cm in Section 4. Minor Lithologies:
the Date Level		3	ene		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S	N4	Dark gray (N4) CLAY with color bands, from 137 to 150 cm in Section 2. General Description: Note: "Flow-in" from 32 cm in Section 4 to base of the core.
5		4	middle Pleistocene		5	wwwwww	PS		
_		5				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
8		6				wwwwwww		N4	
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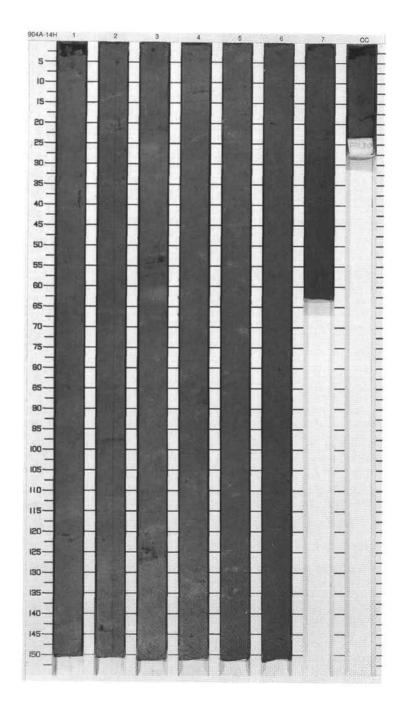
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Meler	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
1				33	G		s	N4	DIATOMACEOUS SILTY CLAY,
1 1 1 1		1	Pleistocene	\$ \$	C		5	5G 4/2	GLAUCONITIC SAND and GLAUCONITIC SILTY SAND
1.1.1.1.1					<u>୭୭୭୭୭</u> ୭		SP	5G 3/2	Major Lithologies: Dark gray (5Y 4/1, 4/2), moderately to heavily bioturbated DIATOMACEOUS
i contra			middle		000		s ^P	5G 3/1	SILTY CLAY with fine to coarse sand- sized quartz and mica, from 66 cm in Section 2 to base of this core. The
Lini	***	2		*** *** ***			S P		DIATOMACEOUS SILTY CLAY contains about 15%–20% of diatoms. Silt to very fine sand-sized, graded,
	×			333			D		thin (<1 cm thick), quartz-dominated sand layer occurs at 56 cm in Section
Lucia	×××××		cene	33			s		3. Greenish black gray to greenish black (5G 3/1, 3/2, N1, and 5GY 2/1) glauconite-dominated interval overlies
CITE LITE	2222222 111111111111111111111111111111	3		Miocene	****				5Y 4/1
TTTT TTTT	2222222222	4	late Mioc	333		WM	Sp	P	(from 16 cm in Section 1 to 72 cm in Section 1), (2) GLAUCONITIC SAND, from 72 cm in Section 1 to 134 cm in Section 1, consists mainly of fine to very coarse sand-sized glauconite
1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$					vwwv			with granule to pebble clasts, and (3) GLAUCONITIC SILTY SAND, from 134 cm in Section 1 to 66 cm in Section 2, composed of fine to
la	×××××	5				wwwwwwwwwww	s	5Y	granule-sized glauconite with granule clasts.
-	×	6				NNN	MP	4/2	

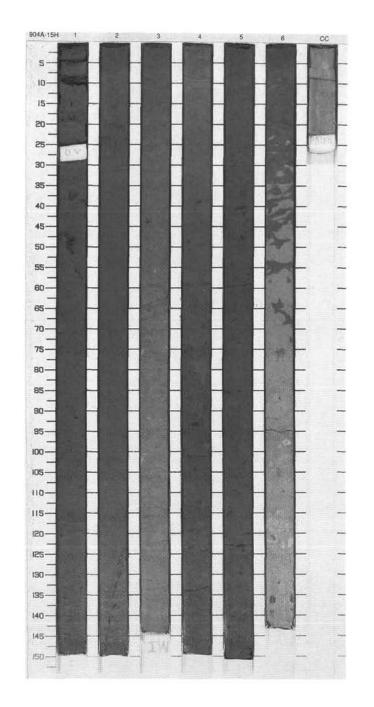
er	Graphic	ion	e		urb	ple	ъ	Description
Meter	Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1.1.1				333		s		CLAY, SILTY CLAY and SAND
I Land		1		***		P		Major Lithologies: CLAY: heavily bioturbated, slightly color mottled (N4), minor mica, quartz and silt. Burrows are filled with light gray and black micaceous silt, and with iron sulfide-rich fine sand.
Line Contraction		2			S		10Y 5/1	Unlithified cream-colored nodules (2 to 3 cm in diameter) and occasional cream-colored bands (5Y 5/2) with diffuse boundaries occur throughout the core.
3	==18888			} ↑ F } ↑ F @				SILTY CLAY: common quartz and mica, heavily bioturbated, faintly color mottled (N/7), rare burrows.
A A A A A A A A A A A A A A A A A A A		3			† F © Р	S P		SAND: thinly laminated (0.5 cm), graded laminae, very fine-grained quartz sand, sharp base, often disturbed by burrowing.
I I		4	ate Miocene	***		s D		
				\$ \$ \$				
L'ILLING		5		**************************************		S P	10Y 5/1 To 10Y	
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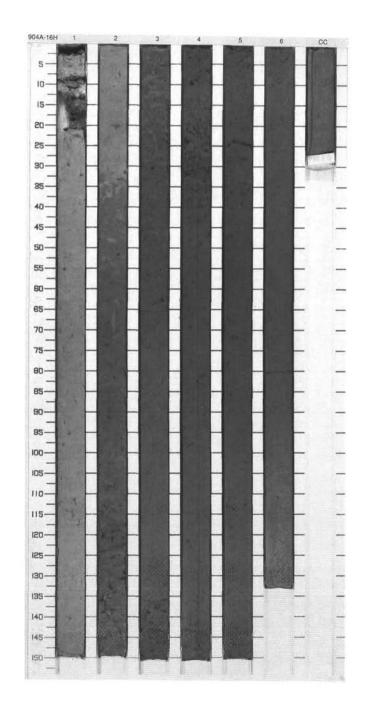
5	Granhi	5			e	ø		CORED 120.5 - 130.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the state		1		@ @		S P		CLAY Major Lithology: CLAY: greenish gray, moderately bioturbated, slightly micaceous, wood fragments, burrows filled with micaceous black silt and fine-grained
L		2		»		S		sand. Occasional pyrite concretion (mm to cm scale). Cream-colored bands with diffuse boundaries and unlithified carbonate nodules (1 to 2 cm).
		_		33 33 33				General Description: NOTE: Core is flow-in from Section 7 (20 cm) to the base of the Core
· · · · · · · · · · · · · · · · ·		3				S P		Catcher.
hin hin his		4	late Miocene			s D	10Y 4/1 To 10Y 5/1	
		5		**************************************		S P		
		6		**************************************		S		
		7		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		s		



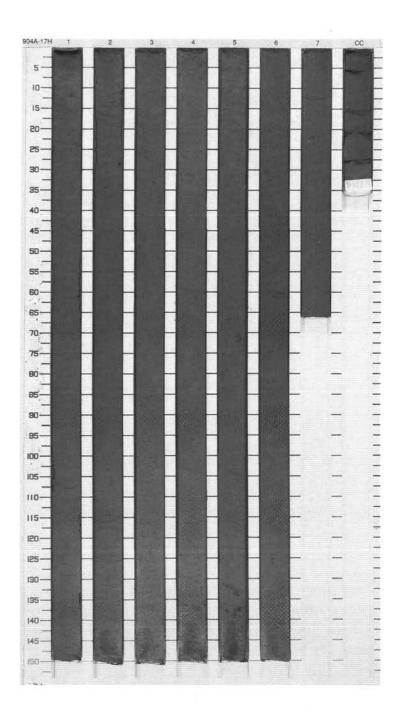
SIT	FE 904 H	OL	E	A CORE				CORED 130.0 - 139.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		****		S P	10Y 3/1	SILTY CLAY and CLAY Major Lithologies: SILTY CLAY: Dark greenish gray, micaceous, rare glauconite, and moderately bioturbated. Burrows (mm- scale) filled with black, very fine-
2		2		*****		S	10Y 3/1 To 10Y 3/1	grained sand. CLAY: light gray, moderate bioturbation, occasional wood fragments (mm-scale). Cream-colored carbonate concretions with diffuse boundaries (Section 3, 58, 75, and 102 cm). Zoophycos with sprieten structure up to 8 cm long (Section 6, 30 to 70
4		3	ene	**************************************		S P	10Y 5/1	cm).
5		4	late Miocene	****		I S D	10Y 5/1 To 10Y 3/1	
P		5		www.www.www.www.www.www.www.www.www.ww		S P	10Y 3/1	
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6		cc		∞∞∞≈ 0 0		м	10Y 5/1	



	IX	- 1			2	0	1000	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	late Miocene	© ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	м	S S S S P D S S S P S S	10Y 5/1 10Y 5/1 10Y 4/1	CLAY and SILTY CLAY Major Lithologies: Section 1 and Section 2 up to 30 cm consists of light gray moderately burrowed CLAY with occasional shell fragments and mm-to cm-sized pyrite concretions. Burrows are filled with pyrite and often stained black. From Section 2, 30 cm to the base of the core, sediment consists of gray to dark gray, slightly to heavily bioturbated, micaceous SILTY CLAY. A gradational color change from light gray CLAY to gray SILTY CLAY occurs in Section 2 (30–120 cm). A fining upward sequence is well expressed in this interval. Glauconite is common in Sections 3 and 4. Silt to fine sand-sized grains are disseminated in the sediment and concentrated in burrows. Small (<2 mm) burrows are filled with light gray silt. Rare woody fragments occur in Section 3. General Description: NOTE: Flow-in from Section 6, 95 cm and CC.



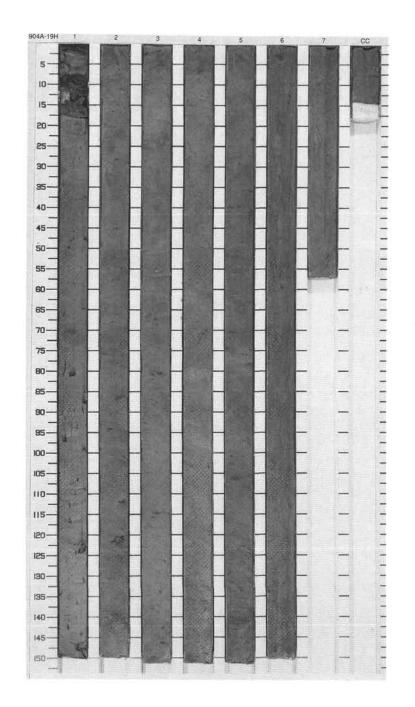
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
True True true		1				S P		SILTY CLAY Major Lithology: Greenish gray, moderately to heavily bioturbated SILTY CLAY. Mica flakes are common and occur together with comminuted woody debris. Burrows are filled with glauconitic fine sand.
3		2		****				Glauconite grains are common in Section 6. Occasional occurrence of shell fragments.
time to the second second		3		*****		S P D		
in the second second		4	late Miocene	888888 8888888 88888888			5Y 4/1	
True Line		5		××××××××××××××××××××××××××××××××××××××		S P		
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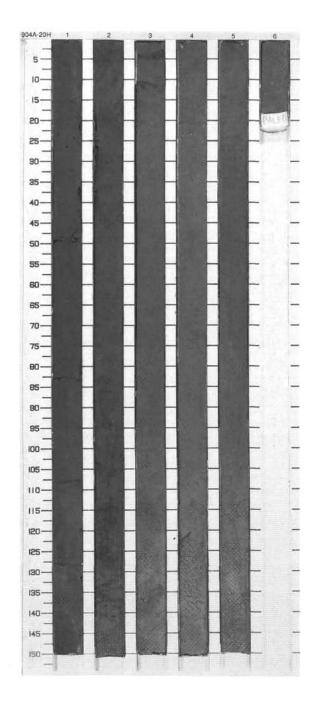
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SI	ΓE 904 H	IOL	_E	A CORE	1	6 C C C C C C C C C C C C C C C C C C C		CORED 158.5 - 168.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		**************************************		S P		SILTY CLAY and SAND Major Lithologies: The core comprises two distinct units. The first one, from Section 1 to Section 4, is composed of greenish gray, slightly micaceous, moderately bioturbated SILTY CLAY. Burrows are
2		2		*		Ρ	5¥	bioturbated SILTY CLAY. Burrows are filled with micaceous silt. The abundance of sand grains increases from the top to the base of the unit. Large burrows filled with medium sand from bed below occur in Section 4, below 90 cm. The second unit consists of medium to very coarse SAND with a
4		3	ene	****		I S PD	5Y 4/1	soupy aspect and showing a fining- upward sequence. The SAND is poorly sorted and is mainly composed of subangular to well-rounded quartz grains, minor glauconite, and pyrite and shell fragments. This slightly graded sand unit with coarser sand
5	Void	4	late Miocene	****		Ρ		downward and clasts suggest sandy mass flow.
5	Volu	5		() ↑ F ↑ F ↑ F ↑ F ↑ F	000000000000000000000000000000000000000	P P P	N3 To	
8		6		↑ F ↑ F ↑ F ↑ F ↑ F	000000000	P P	N4	
9		7 CC		↑ F ↑ F	00000	Р М		

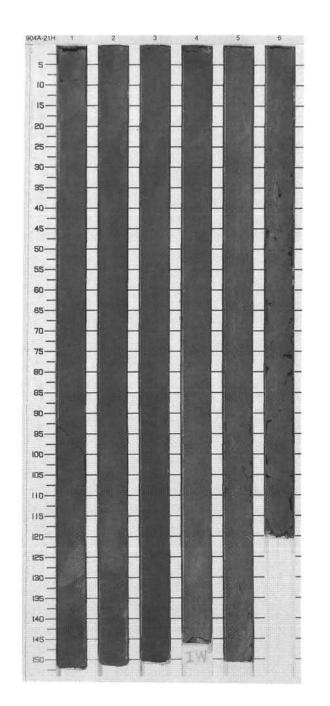
51	TE 904 H	-		<u> </u>	CORE	-	2011-11-14		CORED 168.0 - 177.5 mbsf
Meter	Graphic Lith.	Section	Age	s	tructure	Disturb	Sample	Color	Description
1		1		3	P	0	S P		SILTY CLAY Major Lithology: The whole core consists of light greenish gray, rarely burrowed SILTY CLAY. Pyrite nodules (1 to 2 cm in
2		2		3	P		Р		diameter) occur in Sections 1 and 2. Many smaller concretions are developed in burrows throughout the core. Faint, lighter cream-colored halos developed around some burrows in Section 4.
3				3	P		S		General Description: NOTE: Flow-in from Section 6, 5 cm to the base.
4		3		3			Ρ		
5		4	late Miocene	3			Ρ	10Y 6/1	
6			101	3			s		
7		5		3			Ρ		
Participant.		6				wwwwwwwww			
9		7				wwwww	м		



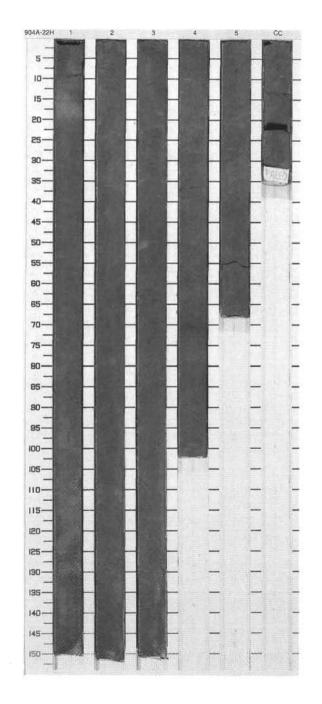
SIT	SITE 904 HOLE A CORE 20H							CORED 177.5 - 187.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		3 3		S P	5Y 3/1 To 10Y 3/1	SILTY CLAY and GLAUCONITIC SANDY CLAY Major Lithologies: The core consists mainly of greenish gray, rarely burrowed SILTY CLAY. Silt to fine sand-sized glauconite
2		2		@ @ @ @ @		Ρ		grains are disseminated throughout. The main striking feature of the core is the occurrence of moderately burrowed GLAUCONITIC SANDY CLAY in Section 2, 80–129 cm. Large burrows (Planolites) filled with glauconite occur below this interval
3 4		3	middle Miocene	* @ * @ *		s P _D		between 129 and 142 cm. General Description: NOTE: Flow-in from Section 5, 40 cm to the base of the core.
5		4		3 @ 3		Р	5Y 4/1	
6 1 1 1 1 1 1 1 1 1		5		3 3	wwwww	S		
. 1		6			~~~	м		



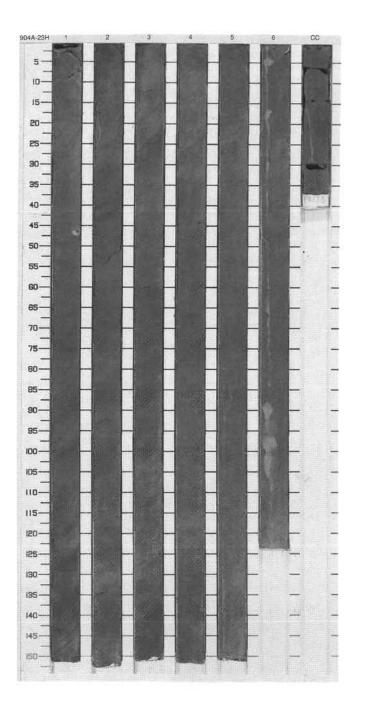
Sľ	TE 904 H	_		A COR				CORED 187.0 - 196.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		~~~~~@		S P		SILTY CLAY Major Lithology: The whole core consists of greenish gray, slightly bioturbated and slightly glauconitic SILTY CLAY. Disseminated glauconite is silt-sized, rare burrows infilled with very fine
2		2				Ρ		sand-sized glauconite.
A A A A A A A A A A A A A A A A A A A		3	fiocene			S P D	5Y 3/2	
1 1 1 1 1 1 1 1 1 1 0		4	middle Miocene		w	Ρ	3/2	
T		5		6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1		
		6		0	wwwwww	м		



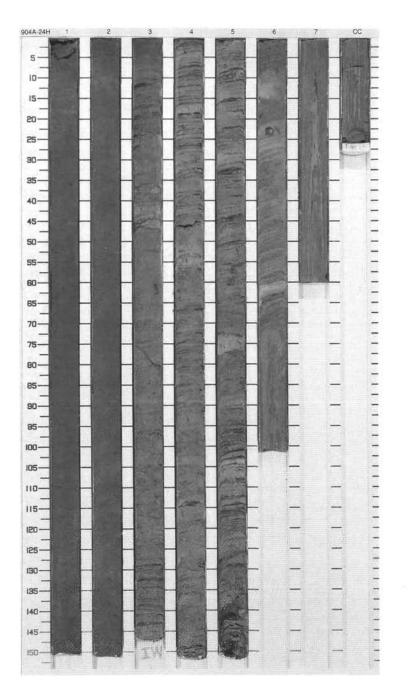
Meter	Graphic Lith.	Section	Age	Struct	ure	Disturb	Sample	Color	Description
Total Total of the second		1		© 3 P		SILTY CLAY Major Lithology: Homogeneous, slightly bioturbated greenish gray SILTY CLAY with common silt-sized glauconite grains. Cream-colored siderite nodules with diffuse margins occur in the base of			
in hinder		2	iocene	یی سیمیسیی ان ان ا			S P	5Y 5/1	Section 2 and in the top of Section 3.
Transferration of the second sec		3	middle Miocene		\odot		s D _P		
1		4					S P		
6		5		· · · · · · · · · · · · · · · · · · ·		м			



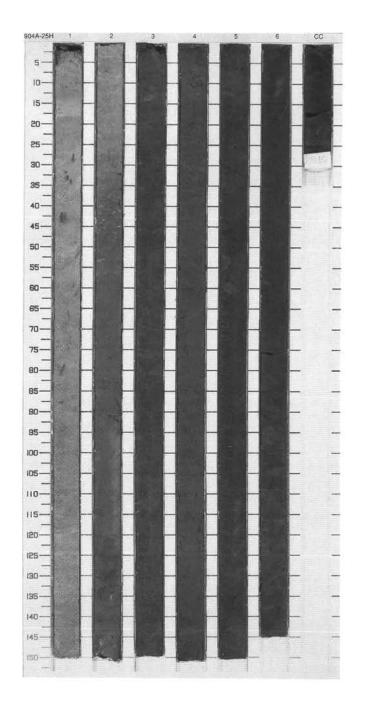
SI	TE 904 H	10	LE	A	COR	E 2			CORED 203.0 - 212.5 mbsf				
Meter	Graphic Lith.	Section	Age	Str	ructure	Disturb	Sample	Color	Description				
1		1		**************************************	• 6)	S	5Y 3/2	SILTY CLAY Major Lithology: Dark olive gray to dark gray (5Y 4/1 to 5Y 3/2), moderately to heavily bioturbated SILTY CLAY with very fine to fine sand-grained glauconite and quartz. Glauconite content gradually				
2		2	ene .	ene	ene	*****	Р (С Р		S P	5/2	increases downward in this core. Buff colored, olive gray (5Y 4/2) bands of diagenetic origin commonly occur. Burrows filled with disseminated pyrite are also observable. General Description:		
4		3				ene	ene	ne	ene	ene		P G	
5		4	middle Miocene		ø		S P						
Turning and		5		***	G	www	S P	5Y 3/1 To 5Y 4/1					
Linden Contraction		6			•	wwwwwwwwww	м						



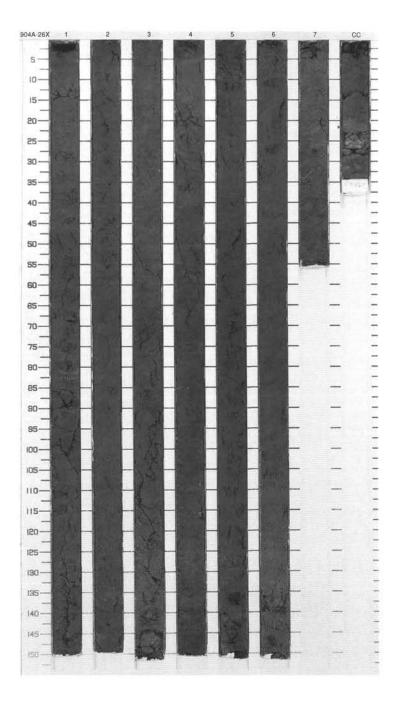
SIT	TE 904 H	IOL	E	A CORE	2			CORED 212.5 - 222.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		1		C C		Ρ	5Y 4/1 To 5Y 4/2	INTERBEDDED SAND AND SILT and SILTY CLAY Major Lithologies: Thinly INTERBEDDED SAND AND SILT. The sand laminae have sharp, undulose, scoured bases and consist of very fine, clean quartz and mica sand, with common 1–2 mm thick laminae of flaky plant debris. These sand laminae are rarely crosscut by silt-filled burrows. The silt laminae are greenish gray with very minor very fine sand. Siderite (5Y 6/3) commonly replace the silty laminae. Rare zones
and and		3		#3 ∭™		Pp	5Y of moderate bioturbation in Sections and 5. Heavily bioturbated, dark gra olive gray, SILTY CLAY with commo very fine to fine sand-sized glauconi	of moderate bioturbation in Sections 4 and 5. Heavily bioturbated, dark gray- olive gray, SILTY CLAY with common very fine to fine sand-sized glauconite
5		4	middle Miocene	× ₹₹₹₹₹	>	P D I	10Y 5/1	and very rare plant debris in Sections 1 and 2. Becoming sandier towards the base of Section 2. Minor Lithology: Moderately to heavily bioturbated SANDY SILT thin laminations disturbed by biotubation, common very fine and fine quartz and mica sand with common glauconite and minor organics.
		5		» ≈ ≈ ≈		Ρ		General Description: Note: "Flow-in" below 70 cm in Section 6.
8		6		₩ 7/ P	WM	Р		
9		7 CC			wwwww	м		



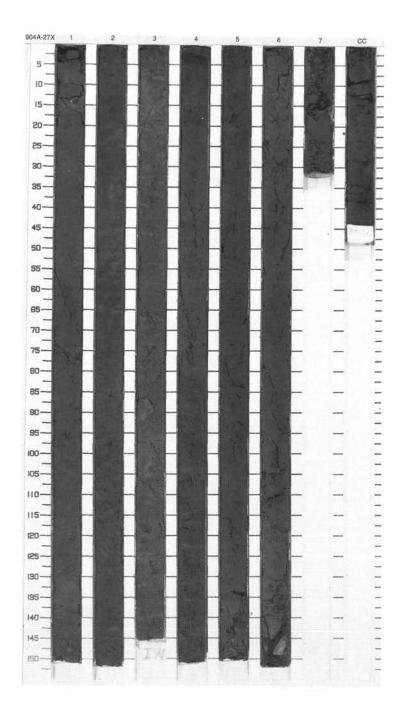
SI	ΓE 904 H	IOL	E	A CORE	-			CORED 222.0 - 231.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		P 33 0 P 33 7 P 33 7 P 33 7 7		s P s	5GY 5/1	SILTY CLAY, GLAUCONITIC SILT and GLAUCONITIC SANDY SILT Major Lithologies: Greenish gray, SILTY CLAY, moderately to heavily bioturbated, down to 110 cm in Section 2. GLAUCONITIC SILT and
2		2		» (C) (C)		s s	5Y 4/2	GLAUCONITIC SANDY SILT, moderately to heavily bioturbated occurs down to the base. Chondrites, Thalassinoides, and Terebellina occur in Section 2. Zoophycos occurs in Section 3.
3 111 111 111		3				S P D	5Y 4/1 To 5Y 3/2	
11115 Internet		4	middle Miocene	0 0 - 0		S	5Y 4/2 To 5Y 3/2	
P		5				S P		
		6		G S S S S S S S S S S S S S S S S S S S		S	N1	
9-		cc		@ <u>}</u>		м		



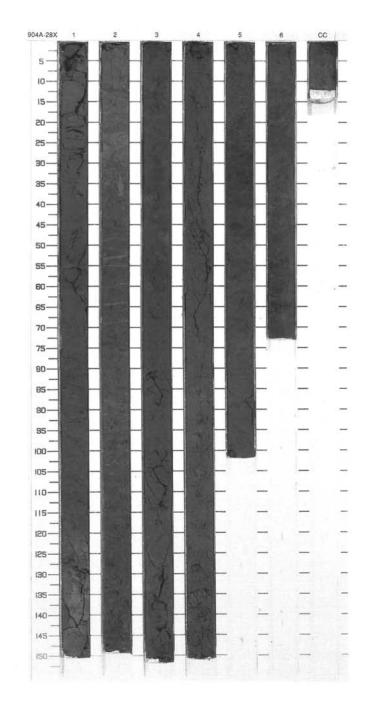
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
True from the second		1		0 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		S P	5Y 4/1 To	GLAUCONITIC SILT and GLAUCONITIC SILTY CLAY Major Lithologies: Dark to olive gray, heavily bioturbated GLAUCONITIC SILT down to 36 cm in Section 5 and below 100 cm in Section
and and and		2		(G) (G) (S) (S) (S) (S) (S) (S) (S) (S	© ∦ s © ∣	5Y 4/2	6. Heavily bioturbated, dark gray GLAUCONITIC SILTY CLAY, silty clay occurs at the base of Section 5 and the top of Section 6. Zoophycos is the common trace fossil.	
Line and and		3				S P	5Y 4/1 To	
indian hini		4	middle Miocene	**************************************		S	To 5Y 3/2	
7		5		_ @ _		S F		
and the second second		6		- ~ @ %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%		s	5Y 3/1	
and		7				S	5Y 4/1 To 5Y 4/2	-



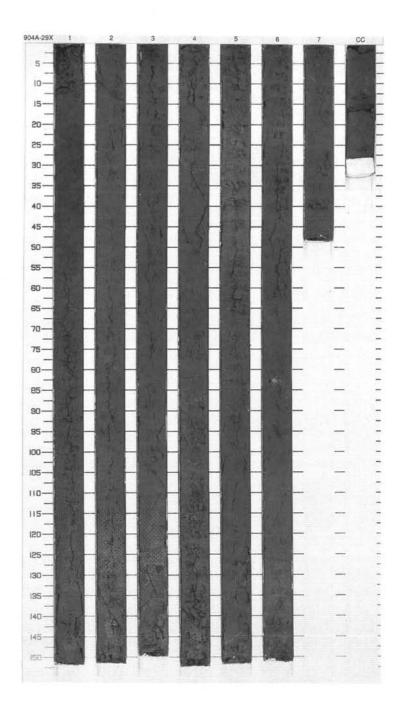
SI	TE 904 H	101	E	A COR	E 2			CORED 240.9 - 250.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		() () () () () () () () () () () () () (S		GLAUCONITIC SANDY SILT, GLAUCONITIC SILT and SILTY CLAY Major Lithologies:
to the second				0 %% @		s	5Y 3/1 To 5Y 3/2	Very dark, olive gray, heavily bioturbated GLAUCONITIC SANDY SILT occurs in Sections 1, 2, and 3. In Section 3, it is interbedded with dark
2		2	middle Miocene			P	0/2	gray GLAUCONITIC SILT. In Sections 4 and 5, GLAUCONITIC SANDY SILT is interbedded with dark yellowish brown, moderately bioturbated SILTY
3			middle N			S	5Y 5/2 To	CLAY. Section 6 to the base comprises heavily bioturbated very dark gray-brown SILTY CLAY alone. Zoophycos occurs in Sections 4 and
4		3		· · · · · · · · · · · · · · · · · · ·			5Y 4/1 5Y 3/2	5.
5						I B D	To 5Y 3/1	
l.		4		333 G		S	10YR 4/2 To 10YR	
6		5		0 0 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		S	3/2	
2		D	early Miocene	38 G			10YR 3/2 To	
8		6	early	333 333 333		s	10YR 3/1	
9		7				Ρ	5Y 4/1 To 5Y	
-		cc		333	-	м	3/1	

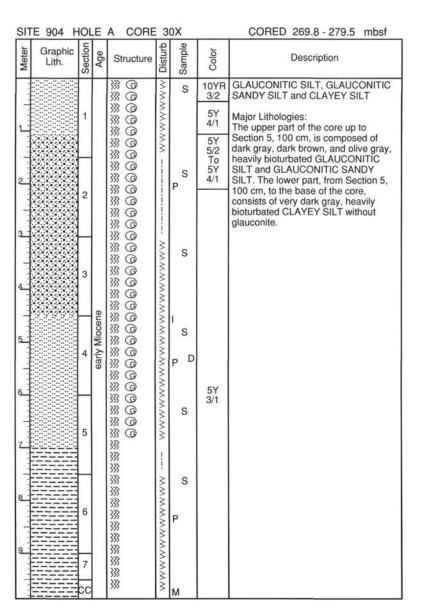


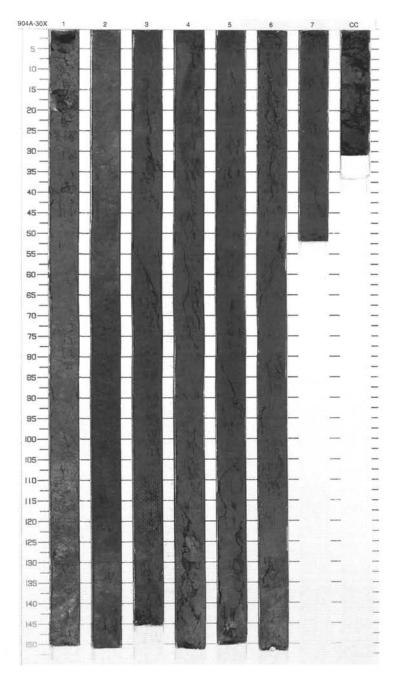
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Limber.		1			1	S	5Y 3/1 To 5Y 3/2	GLAUCONITIC SILT, SILTY CLAY and GLAUCONITIC SANDY SILT Major Lithologies: Dark gray and very dark gray GLAUCONITIC SILT interbedded with
Line Contraction		2				S P	5Y 4/1 To 5Y	GLAUCONITIC SANDY SILT. Dark gray SILTY CLAY occurs at the base of Section 1. An excellent example of Zoophycos occurs in Section 2 from 30–70 cm.
Line Con			ene	38 38 38 38 38 38 38 38 39 39 39 39 39 39 39 39 39 39 39 39 39		s	3/2	
4		3	early Miocene	(0)	1		10YR 3/1	
11111		4	ee			S	10YR 4/1 To	
6						PD	10YR 4/2	
		5		»» »» »» «		s	10YR 4/2	
2		6		© © ©		S P	To 10YR 3/1	



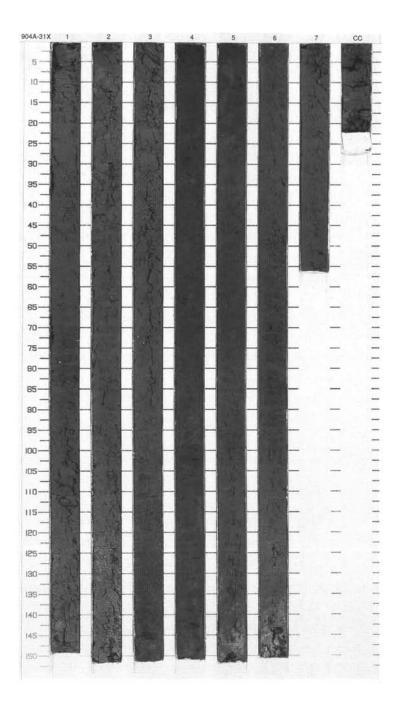
SIT	E 904 H	101	E	A CORE	2	12 A C L A L		CORED 260.1 - 269.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
the for the second		1		**************************************	M	РS	5Y 3/1 To 5Y 4/1	GLAUCONITIC SANDY SILT, GLAUCONITIC SILT and SILT Major Lithologies: Dark gray to very dark gray, heavily bioturbated GLAUCONITIC SANDY SILT occur from Sections 1 to 3, from
Structure of the struct		2		**************************************		S		Section 5, 55 cm to Section 6, 103 cm and in the CC. Glauconite decreases at the base of Section 3. Dark gray to olive gray, heavily bioturbated SILT occurs in Section 4 and at the top of Section 5 up to 12 cm, GLAUCONITIC SILT occurs in Section 6, 103 cm and Section 7.
		3	ne	ଝଞ୍ଚଞ୍ଚ୍ଚ୍ଚ୍ଚ୍ଚ୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର୍ର	MM	s P _D	5Y 4/1 To	Minor Lithologies: A 43-cm-thick interval of dark gray to gray heavily bioturbated, CLAYEY SILT with rare glauconite occurs in Section 5. GLAUCONITIC SILTY SAND occurs in Section 6, 70–103 cm.
P		4	early Miocene	90 \$\$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	S	5Y 3/2	<u>un.</u>
Contraction of the second s		5		**************************************	vwwwwww	S P		
8		6		******	WWWW	s		
		7) • •	wwwwwww	м	5Y 3/1 To 5Y 4/1	



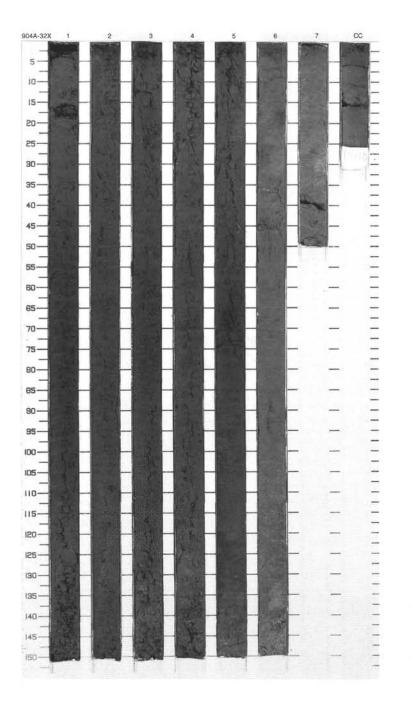




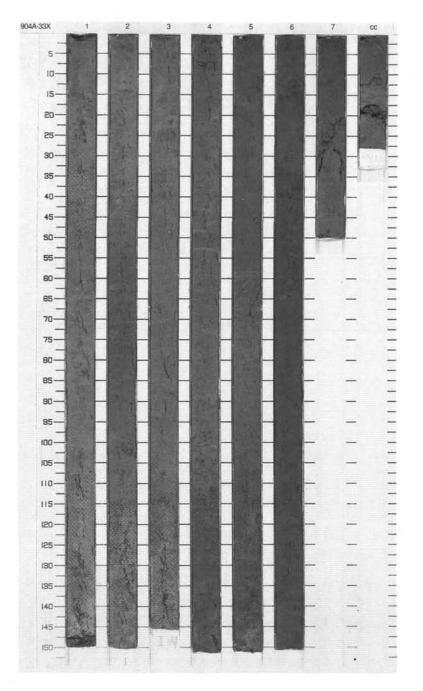
		-	E	A CORE			1	CORED 279.5 - 289.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		ଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେଞ୍ଚଳେ	MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	S	5Y 3/1	SILTY CLAY and GLAUCONITIC SILTY SAND Major Lithologies: The core consists of three lithologic units. The first one (Section 1 to Section 3, 115 cm, is composed of dark gray to olive-gray, heavily
2		2		***	MMMMMMM	S P	5Y 4/1 To 5Y 4/2	bioturbated SILTY CLAY. Glauconite occurs, and grain size increases at the base of this unit (Section 3, 65–115 cm). The second unit corresponds to very dark gray to black, heavily bioturbated GLAUCONITIC SILTY SAND (fine to medium sand). The
and the second		3		e e	wwww	S	57	third unit is mainly composed of SILTY CLAY which is also heavily bioturbated.
4			ne	000	NMMN		5Y 4/1	Minor Lithology: The top of Unit 3 is characterized by the occurrence of glauconitic CLAYEY SILT and SILT. The gradational
		4	early Miocene	୲ଞ୍ଚଞ୍ଚଞ୍ଚଞ୍ଚ ୭୭୭୭୭୭୭୭୭୭୭୭୭୭	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	s P ^D	5Y 3/1 To N1	change from CLAYEY SILT and SILT to SILTY CLAY occurs at the top of Section 6.
and march		5		\$\$\$\$\$	WWWW	s		
Lin				***	NWWN			
B I I I I I I I I I I I I I I I I I I I		6		- 0-	wwwwww	S P	5Y 3/1	
		7		33 33 33	wwww	S		



-	Craphia	E				e	e				
Meter	Graphic Lith.	Section	Age	Str	ucture	Disturb	Sample	Color	Description		
Loca Food con		1					S P	10YR 3/1 To 10YR 3/2	SILTY CLAY, GLAUCONITIC SAND and CLAYEY SILT Major Lithologies: Brownish green to very dark brown SILTY CLAY without distinct structure in Sections 1 to 4, except glauconitic patches. In Section 5, SILTY CLAY is		
3		2								S	
The second se		3	e				S P	10YR 3/1	large (cm-scale) burrows filled with glauconitic silt.		
and the second second		4	early Miocene)	G		S				
		5		& }	G		s				
4		5		₩ 33 10 10 10 10 10 10 10 10 10 10 10 10 10	000 A		Ρ	5Y 3/1			
3		6		222	Ø		S D	5Y 3/2			
		7		33 33 33			р S M	5Y 5/2	9.		

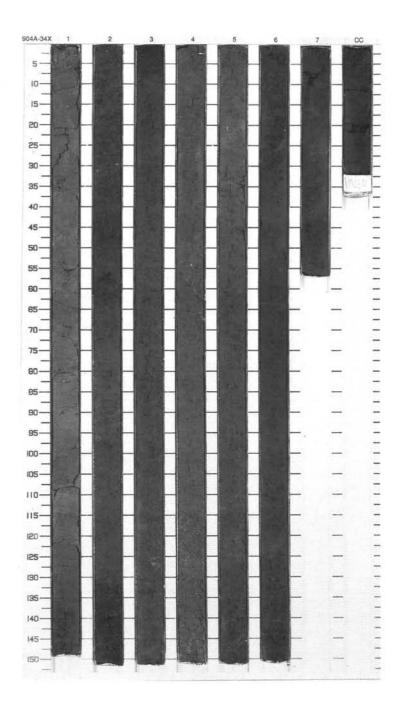


	FE 904 H	-	T		-	_		CORED 298.8 - 308.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Red Line		1		۲		S P S	5Y 5/2	CLAYEY SILT and GLAUCONITIC CLAYEY SILT Major Lithologies: Slightly to heavily bioturbated, light olive gray to olive gray, weakly glauconitic CLAYEY SILT. Planolites are common, some scattered glauconite grains fill burrows. Zoophycos also occur in Sections 4 and 5 in slightly darker zones. Numerous shell fragments occur
Line Burn				3 &		S		Interous shell ragments occur throughout. GLAUCONITIC CLAYEY SILT occurs from Section 4, 110 cm to Section 5, 64 cm, to the base of Section 6. Large burrows (cm-scale) occur in this interval. Biogenic remains consist of nannofossils (20% to 35%)
4 international		3	sene	****** ******		P I	5Y 4/3	and diatoms (5% to 15%). Minor Lithology: GLAUCONITIC SILT with large burrows (Planolites, cm-scale) occurs
5		4	early Miocene	≈≈≈≈≈≈≈ • ∞ ∞ • •		S	5Y 4/2	in Section 7. Less glauconite than above. A darker band occurs in Section 2, 60–90 cm.
6		_		G			4/2	
L. L. L.		5		≈≈r≈≈≈m≈ ∞ 1 ^à % 11 0 0		S P	5Y 3/2 To	
8		6		\$\$\$\$\$\$\$\$\$ \$ 000000		S	5Y 4/2	
A LILLI		7		* * @		P M	5Y 5/2	



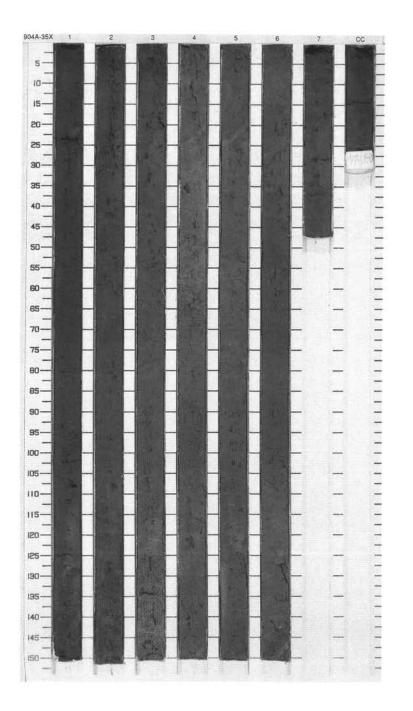
Section Disturb Sample Meter Graphic Color Age Description Structure Lith. * - 3 CLAYEY SILT, GLAUCONITIC -S CLAYEY SILT, SILTY CLAY and 33 33 @ 33 5Y 5/2 GLAUCONITIC SILTY CLAY D Major Lithologies: 33 Section 1 consists of brownish gray, 000 moderately bioturbated CLAYEY SILT wih scattered foraminifers and 5Y glauconite grains throughout. 3/2 -S Glauconite is concentrated in burrows To 3 (Planolites), GLAUCONITIC CLAYEY 5Y early Miocene 2 4/2 P SILT occurs at the base of the Section. the contact being gradational. Section 2 is composed of moderately 0 5Y bioturbated SILTY CLAY (55-132 cm), 3/1 GLAUCONITIC SILTY CLAY (23-55 -S and 132-150 cm) and GLAUCONITIC 33 5Y CLAYEY SILT with sand-sized quartz 3/1 To 33 3 grains at base (0-23 cm). These 33 P lithologies are separated by 5Y 33 gradational contacts. Small Skolithos 4/2 33 burrows occur between 20 and 55 cm. 33 Sections 3, 5, and 6 consist of G 33 GLAUCONITIC CLAYEY SILT with S O 33 scattered foraminifers. Planolites are recognizable throughout Section 6. 33 G P 33 Minor Lithology: Section 4 and Section 7 are composed 33 5Y 4/2 33 G of moderately bioturbated GLAUCONITIC SILT. Glauconite 33 33 S decreases from the top to the base of 33 G Section 4 which contain also scattered 33 5 foraminifers. Skolithos occurs in late Oligocene ଝଝଝଝଝଝଝଝଙ୍କ ହରିଚିତିରିରିଭିରିଭି Section 4, 140-150 cm. S 6 P 5Y 3/2 33 G » @ S 33 @ 33 G M 25

CORED 308.4 - 317.8 mbsf



SITE 904 HOLE A CORE 34X

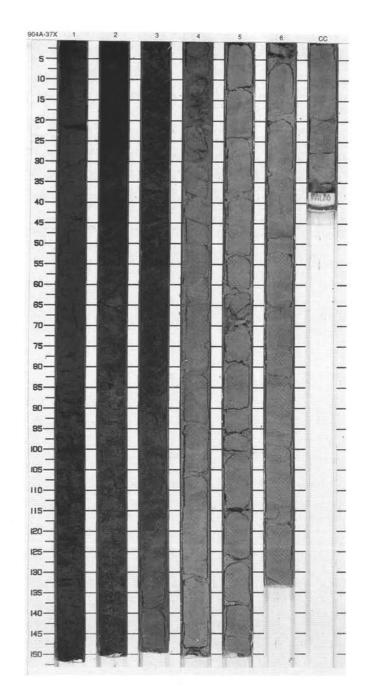
SIT	FE 904 H	IOL	E	A CORE	_			CORED 317.8 - 327.2 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
8		1		«««««««««««««««««««««««««««««««««««««		S P S	5Y 3/2	GLAUCONITIC SILTY CLAY and GLAUCONITIC CLAYEY SILT Major Lithologies: The whole core consists of dark greenish gray to olive-gray, moderately bioturbated GLAUCONITIC SILTY CLAY and GLAUCONITIC CLAYEY SILT. Glauconite (silt-sized grains) is particularly abundant in Sections 1, 2, 7, and CC.
A		3	le	ଝଝଝଝଝ ଭର୍ଭର୍ଭର୍ଭ	111111111111	S PD	5Y 3/1	
5		4	late Oligocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1111111111111	S		
1		5		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11111111111111	S P	5Y 4/2	
Period Period		6		ଝଝଝଝଝଝ ଭେଭରିଭରିଭିର	1111111111111	S		
erlere.		7 CC		**** 000	11111	Р ^S M	5Y 3/1	



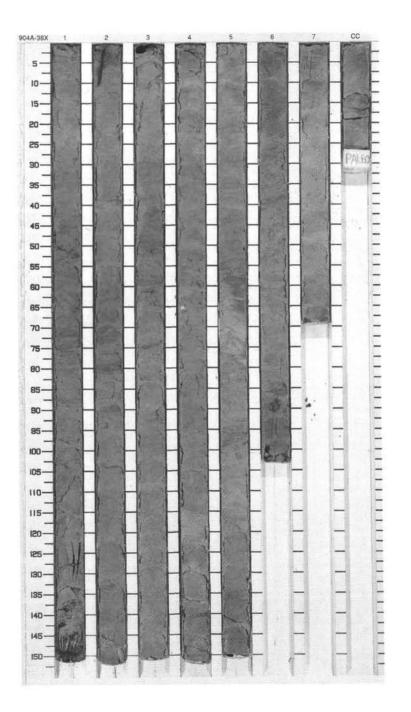
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110-2-				Sec.	-	-	-	-
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120-0-0-	0	1-1-		1	-		-	1-1
125-		1			-	_	_	7
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SITE 904 HOLE A CORE 36X								CORED 327.2 - 336.5 mbsf		
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description		
The second s		1		**************************************	111111111111	S		SILTY CLAY and CLAYEY SILT Major Lithologies: The whole core consists of dark olive gray, moderately burrowed SILTY CLAY and CLAYEY SILT with abundant silt-sized glauconite grains.		
3		2		**************************************	111111111111	S P		Zone (5Y 4/2) at the top of Section 1 is lighter colored because of low disseminated glauconite. A light blue irregular glauconitic concretion occurs in Section 1, 51–58 cm. Smear slides show diatoms, 5%–10% and a few percent of radiolarians.		
Trin Print Intern		3	ЭГ		111111111111	S				
5		4	late Oligocene	**************************************	111111111111	I S P	5Y 3/2			
δ		5		**************************************	1111111111111	S				
8		6		******	11111111	S _D P				
6 1111 (1111)		7 CC			111111111	S M				

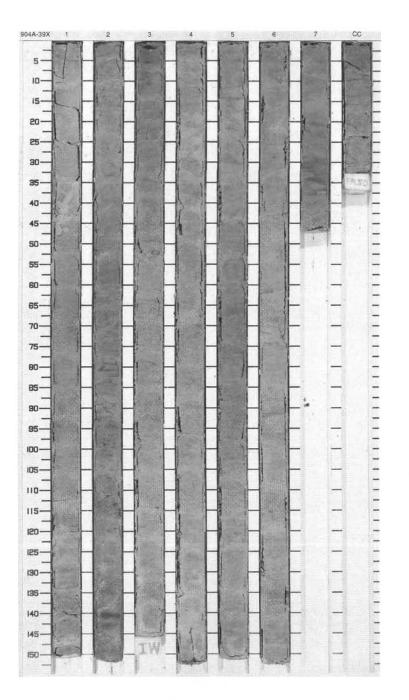
SIT	TE 904 H	101	E	A CORE	Ξ3	127.17.14.1		CORED 336.5 - 345.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
of the set		1		ء ۵۵۵		P S C	5Y 4/1	GLAUCONITIC SANDY SILTY CLAY and NANNOFOSSIL CLAYEY CHALK
1				%% @@@@			5Y 3/2	Major Lithologies: Olive green gray GLAUCONITIC SANDY SILTY CLAY, slightly to heavily bioturbated. Common silt and
		2	late Oligocene	∞		РS	5Y 4/2	sand-sized glauconite disseminated in sediment, becoming very abundant below 75 cm in Section 1 and decreasing in abundance in the basal part of Section 3. Glauconite is very common in burrows in same interval. Below 130 cm in Section 3, sediment is lighter in color (5Y 5/2) with
Part Part		3				РS	5Y 4/2 To 5Y 5/2	scattered glauconite. Down to 21 cm in Section 4, disturbed, light olive green (5Y 6/1) with common glauconite sand. Unconformable contact with the NANNOFOSSIL CLAYEY CHALK at 21 cm in Section 4. Moderated to heavily bioturbated
1		4	++	©©©©©©©©©©©© ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈	- M	ΡS		NANNOFOSSIL CLAYEY CHALK, with rare, small shell fragments and disseminated silt-sized glauconite, slightly concentrated in burrows.
L. L. L.		5	late Eocene	****		ΡS	10Y 6/2	
		6		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		ΡS		
9		cc	++	33	1	м		

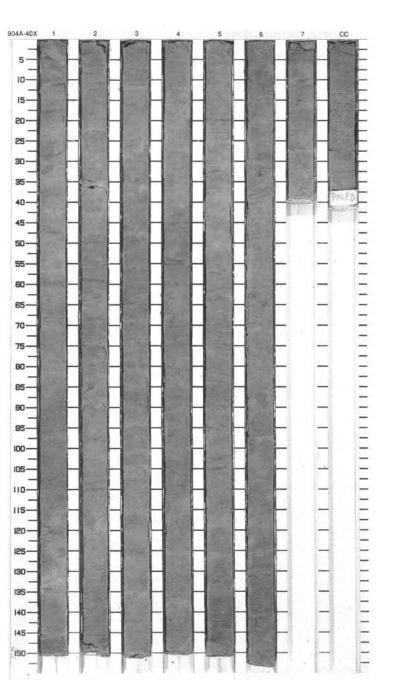


SIT	TE 904 H	IOL	E	A CORE	3	8X		CORED 345.8 - 355.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		****		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, moderately to heavily bioturbated NANNOFOSSIL CLAYEY CHALK with very minor silt- sized glauconite disseminated
2		2		***************************************		Ρ		throughout.
4		3	Je	*****		S P	10Y	
5		4	late Eocene	% % % % %		PD	6/2 To 10Y 6/1	
6		5		*****		S		
8		6		77		Ρ		
9		7 CC		3 3 3	1	S M		



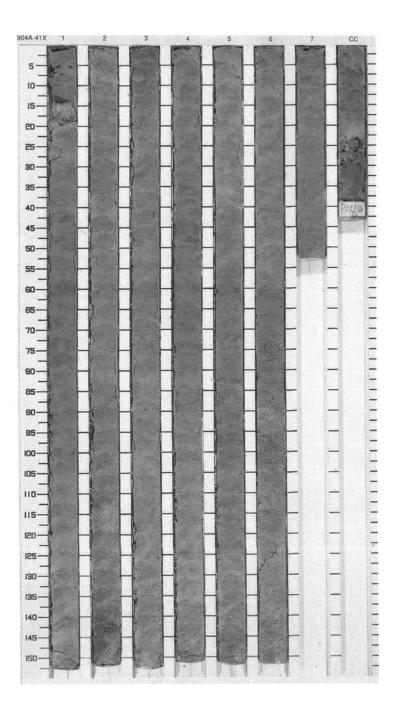
SIT	E 904 H	101	.E	A CORE	3			CORED 355.5 - 365.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		3 3 3 3 3 3 3 3 3 3 3 3 3		s P _D		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, slightly to heavily bioturbated NANNOFOSSIL CLAYEY CHALK.
Revenue Reve Revenue Revenue Reve		2		****				
4		3		****		S P		
5		4	late Eocene	*****		E	5GY 6/1	
		5		****		S P		
6		6		*************				
		7		\$\$ \$} \$}		S M		



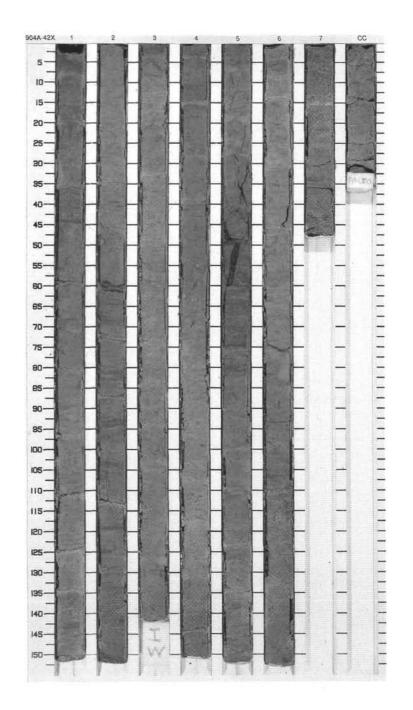


SIT	FE 904 H	HOL	_E	A CORE				CORED 365.1 - 374.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
hard front on the		1		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, slightly to moderately bioturbated NANNOFOSSIL CLAYEY CHALK.
2		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
4		3		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		D P		
		4	late Eocene	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S	5GY 6/1	
Lin Printing		5		****		Ρ	Ţ.	
8		6		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
rid min		7 CC		***		м		

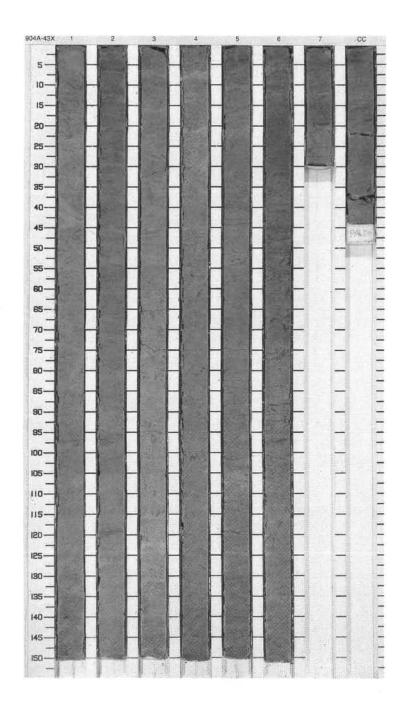
SIT	E 904 H	IOL	E	A CORE	4	1X		CORED 374.8 - 384.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		****		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, heavily bioturbated NANNOFOSSIL CLAYEY CHALK, with many well-preserved burrows including Chondrites, Planolites, Thalassinoides, Zoophycos
S		2						and Skolithos. Minor zones of olive gray (10Y 5/2) NANNOFOSSIL CLAYEY CHALK.
4		3		****		PD		
5 111111		4	late Eocene	****		S	5GY 6/1	
T. T. T. T. T. T.		5		**************************************		Ρ		
8		6		**************************************				
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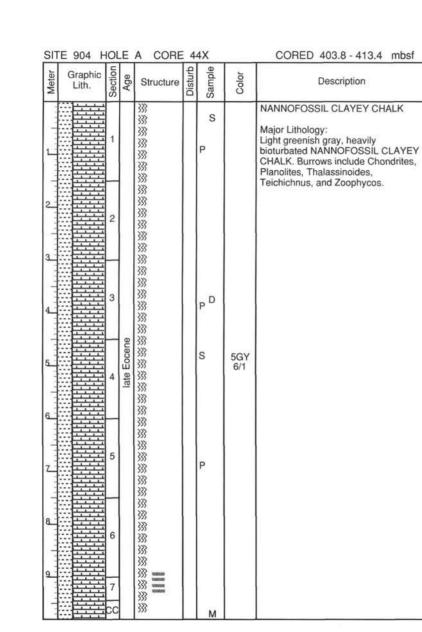
SI	E 904 H	_	E	A CORE	-			CORED 384.4 - 394.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and from the second		1		* * *		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, heavily biotubated, NANNOFOSSIL CLAYEY CHALK. Traces include: Chondrites, Planolites, Thalassinoides,
2		2		**************************************				Teichichnus, and Zoophycos; burrow fills are olive gray. Sand-sized pyrite filling burrows? occurs in Section 5, 50–60 cm.
3		_		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
4		3				PD		
Trial Press		4	late Eocene	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		s S	5GY 6/1	
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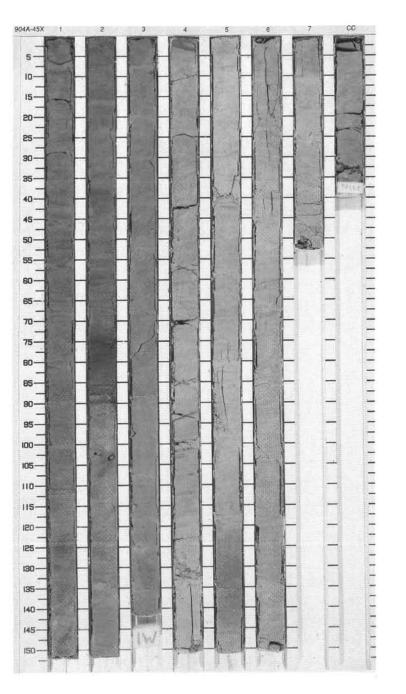
SIT	E 904 H	-	E	A CORE	4			CORED 394.1 - 403.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the factor of the second		2		* *		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, heavily bioturbated, NANNOFOSSIL CLAYEY CHALK. Burrows include Chondrites, Planolites, Thalassinoides, Teichichnus, and Zoophycos; burrow fills are olive gray.
		3	ane			ΡD		
Firster First		4	late Eocene			S	5GY 6/1	
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		6 7 CC		**		М		



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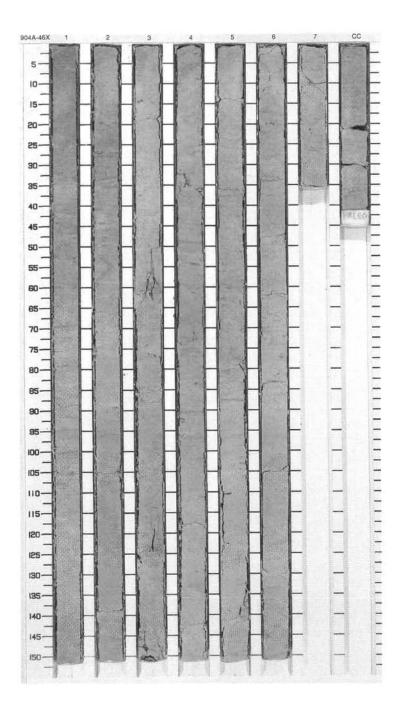
SIT	TE 904 H	_	E	A CORE	-			CORED 413.4 - 423.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2 3 3 3 4 4		1 2 3	late Eocene	5 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7		S P S P D I	5GY 6/1	NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray NANNOFOSSIL CLAYEY CHALK, moderately to heavily bioturbated in Sections 1, 2, 5, 6, and 7, slightly to moderately bioturbated in lower half of Section 2 and Sections 3 and 4. Burrows include Chondrites, Planolites, Thalassinoides, and Zoophycos. An early formed, burrowed carbonate nodule occurs at 135 cm in Section 2. NANNOFOSSIL CLAYEY CHALK in Sections 3 and 4 deformed by slump folds and normal faults with slickensides. In Section 2, between 74 and 90 cm, a series of thin-graded beds containing microtektites occurs. The basal laminae fines up from granule-sized clasts. This is overlain by a fining-up laminae with coarse sand at the base. The final graded
		4		>>d=			5GY 7/1	laminae has very fine sand at its base. The sands are heterogeneous with abundant, spherical, coarse sand grains with shiny luster. These sands have an abundant microflora and fauna of diatoms, sponge spicules, radiolarians, foraminifers, and nannofossils. Above the sand laminae are dark gray laminated and cross- laminated silts. Chondrites well developed between 80 and 85 cm. In the NANNOFOSSIL CLAYEY CHALK at 100 cm, two small pebbles and
and		6 7 CC	middle Eocene			P	5GY 6/1	scattered granules occur.



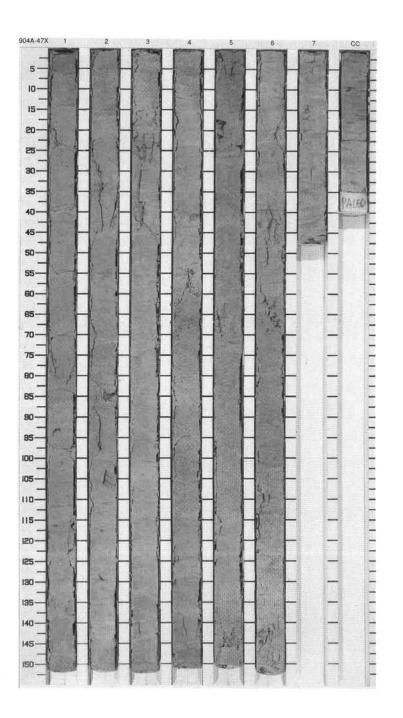
SITE 904 HOLE A CORE 46X

CORED 423.0 - 432.5 mbsf

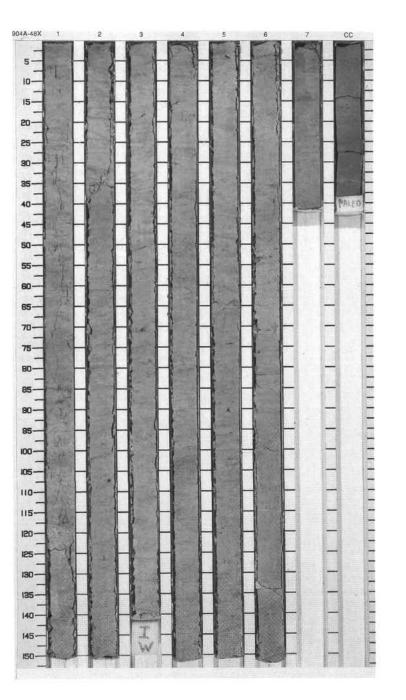
211	E 904 F		-	A CORE	- *	DV.		CORED 423.0 - 432.5 MDSI
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		**************************************		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray (5GY 6/1 to 7/1), moderately to heavily bioturbated NANNOFOSSIL CLAYEY CHALK. Well-preserved trace fossils, which are usually filled with gray to olive gray
2		2		****				sediments, abundantly occur and include Chondrites, Planolites, Thalassinoides, Teichichnus, and Zoophycos. Diplocraterion-like burrow is observable at 135 to 145 cm in Section 3 and was cut by the
4		3	e	******		Ρ		Zoophycos-spreite.
5		4	middle Eocene	******		S D	5GY 6/1	
		5		***************************************		Р		
8		6		* * *				
		7 CC		» ≫ ≈ ≈		м		



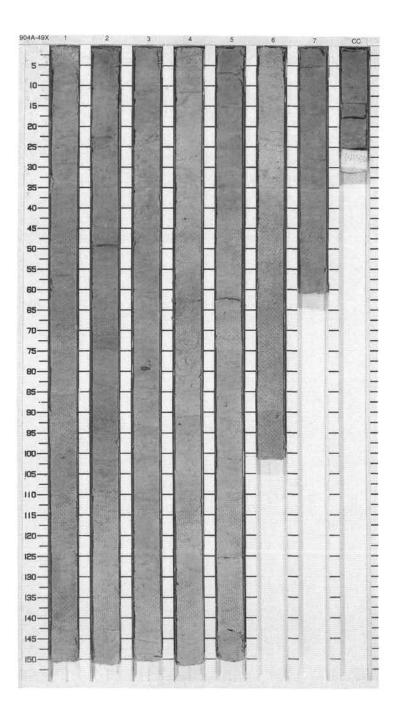
SIT	E 904 H	101	E	A COR	-			CORED 432.5 - 442.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		P (P)		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, moderatley to heavily bioturbated NANNOFOSSIL CLAYEY CHALK, with minor flakes of organic material. Pyrite occurs as disseminated grains, fracture fills,
S		2		****				burrow fills, and small nodules.
4		3	ne	****		PD		
5		4	middle Eocene	****		S	10GY 7/0	
Letter Letter		5		**************************************		Ρ		
9		6		1997				
multin		7 CC		>>> >>> >>>>		м		



SIT	FE 904 H	101	E	A CORE	4	8X		CORED 442.0 - 451.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The second second		1		**************************************		S P		NANNOFOSSIL CLAYEY CHALK Major Lithology: Moderately bioturbated, light greenish gray NANNOFOSSIL CLAYEY CHALK. Trace fossils include abundant Chondrites, Planolites, and Zoophycos.
Sector Sector		2		****				Chondrites, Planolites, and Zoophycos. Scattered pyrite specks throughout Sections 1 and 2. Occasional cm-scale pyrite nodules in Sections 5 and 6.
9		3	8	****		Ρ		
11115 11111 G		4	middle Eocene	**************************************		I S	5GY 7/1	
ΓΓ.		5		₽ ≫ ≫ ₽ ≫ ₽ ≫ ₽ ≫ ₽		Ρ	Ð	
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and the second		7 CC		» ≫ ≫		м		



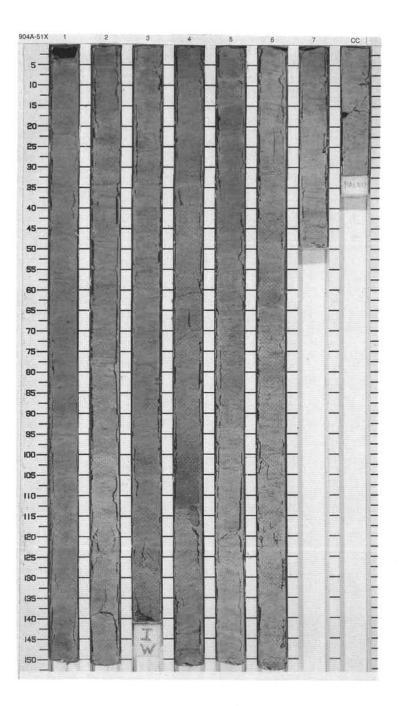
SIT	E 904 H	-		A CORE	E 4	1.		CORED 451.5 - 461.2 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		₩ ₽»>> ₩ ₩ ₩ ₩		S P	5GY 7/1	NANNOFOSSILS CLAYEY CHALK Major Lithology: Moderately to heavily bioturbated, light greenish gray NANNOFOSSILS CLAYEY CHALK with occasional cm- scale pyrite nodules from Section 3 downward. Trace fossils include
21111111		2						Chondrites, Planolites, Thalassinoides, Teichichnus, and Zoophycos.
		3	ocene	**************************************		Ρ	5GY 7/1 To 5GY 6/1	
5		4	middle Eocene	**** ********************************		S	ur	
		5		**************************************		РD	5GY	
1B		6		**************************************			5GY 7/1 5GY 7/1 To	
9		7		333 333 333		м	5GY 6/1	



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SIT	E 904 H	-	E	A CORE	-			CORED 461.2 - 470.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
L		1		> >		Ρ		NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, heavily bioturbated NANNOFOSSIL CLAYEY CHALK. Scattered, mm-scale pyrite concretions occur throughout. Chondrites, Planolites, and Zoophycos
Sur Survivi		2		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				are common.
3		3		****		Р		
4 ···· · · · · · · · · · · · · · · · ·			middle Eocene	(P) (P) (N) (N) (N) (N) (N) (N) (N) (N) (N) (N		F	5GY 6/1	
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1111 6		7		?‱® ≫ ≫		м		

	CORED 470.9 - 480.5 mbsf
Meter Age cotion Color Colo	Description
2 3 3 3 3 3 3 3 3 3 3 3 3 3	NNOFOSSIL CLAYEY CHALK or Lithology: wily bioturbated, light greenish gray NNOFOSSIL CLAYEY CHALK. Indrites, Planolites, and Zoophycos abundant throughout. lassinoides and Teichichnus occur ection 5. Pyrite nodules (mm- e) are common. A large and thick I fragment occurs at the base of tion 3. The most striking feature of core is the occurrence in Section 4, -112 cm of a darker interval (5Y to 5GY 5/1), slightly bioturbated at base, moderately bioturbated in middle part and heavily bioturbated the top. This interval displays a p contact at the base and shows a g-upward structure.



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60-65-70-75--80--85-- 90 -95--100-105-110-115-120-125--130--135--140-1 145--150-....

SITE 904 H	HOL	E	A CORE	5			CORED 480.5 - 490.2 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1 2 3 4 5 6 7 0 0	middle Eocene		WM	S P D P M	5GY 7/1	NANNOFOSSIL CLAYEY CHALK Major Lithology: Heavily bioturbated, light greenish gray NANNOFOSSIL CLAYEY CHALK with occasional mm-scale pyrite nodules. Trace fossils consist mainly of abundant Planolites, Chondrites, and Zoophycos. General Description: Note: Void in Section 7 between 15 and 30 cm. This section is very disturbed.

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904A-53X 1

5-10-15-20-

25-30-35-

40-

50-55-60-

65--70-

75-90-85-

90-

100-105-110-

115-

130-135-140-145-150-

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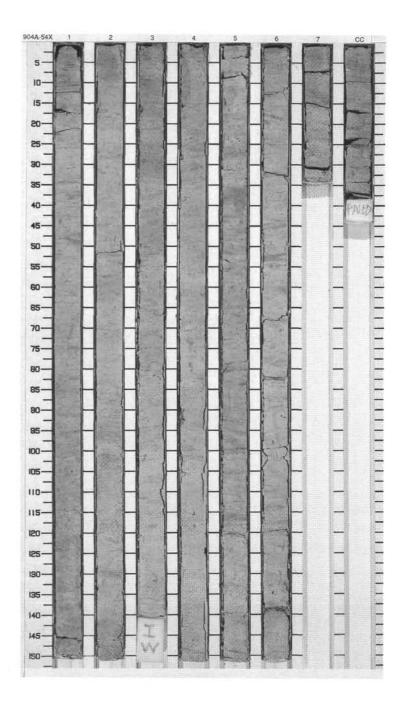
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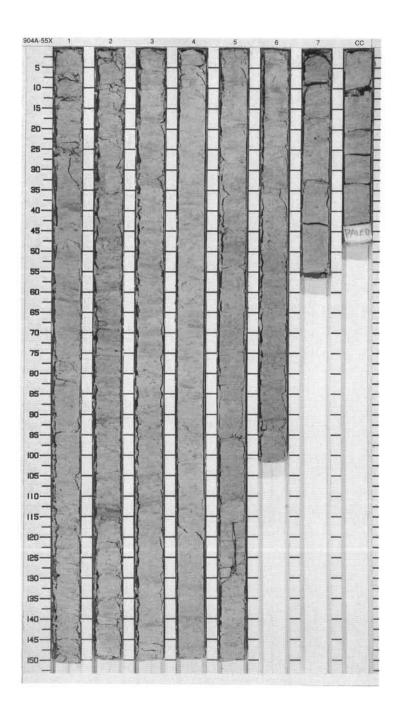
6 7 CC

INIEIEL	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
-				333	1			NANNOFOSSIL CLAYEY CHALK
-				333	ĽĿ.	S		Major Libbala and
-		1		SSS >>>	li.			Major Lithology: The core consists of light greenish
1		'		333	1	Р		gray, heavily bioturbated
	· · · · · · · ·			333	1	F.		NANNOFOSSIL CLAYEY CHALK.
1				333	H			Trace fossils include Chondrites,
-		_		333 >>>	l i l			Zoophycos, and Planolites.
3				333	i.			
-				333	1			
1		2		555 >>>				
1		2		555				
3				555	i.			
1				555	1			
	·····			333 >>>	H			
1				555				1
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1		3		333 >>>				
4				555	H	Р		
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1		4	middle Eocene	5 85 533	Ť.	-		
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Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The Providence		1		© © © © © © © © © © © © © ©		S		NANNOFOSSIL CLAYEY CHALK Major Lithology: The whole core consists of light greenish gray, heavily bioturbated NANNOFOSSIL CLAYEY CHALK. Planolites, Chondrites, and Zoophycos are the most common
2		2		****		Р		burrows.
		3	le	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		D		
		4	middle Eocene			I S P	5GY 7/1	
Lin Lin Lin Lin		5		****				
1		6		**************************************		Ρ		
		7 CC		33 33 33				

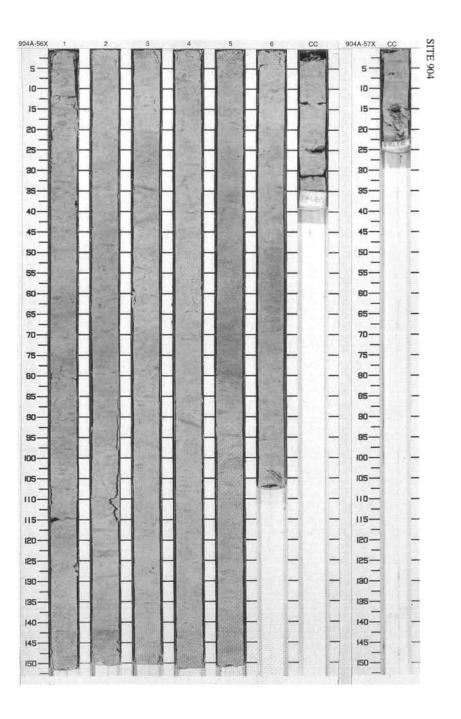


S	ITE	904 H	IOL	E	A CORE	-			CORED 509.5 - 518.8 mbsf
Motor	MCICI	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 2 3 4 5 6 7 8 9			1 2 3 4 5 6 7 CC	middle Eocene			S P P D P	5GY 7/1	NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray, heavily bioturbated NANNOFOSSIL CLAYEY CHALK. Planolites, Chondrites, and Zoophycos are the most common burrows.

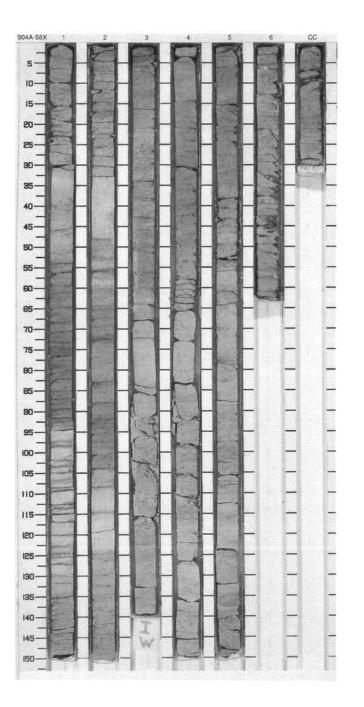


SIT	TE 904 H	IOL	E	A CORE	5			CORED 518.8 - 528.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
B C C C C C C C C C C C C C C C C C C C		1 2 3 4 5 6 CC	middle Eocene	MAXAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		S P T P D S	5GY 7/1	NANNOFOSSIL CLAYEY CHALK Major Lithology: Light greenish gray NANNOFOSSIL CLAYEY CHALK, heavily bioturbated. Burrow types include Zoophycus, Planolites, and Chondrites.

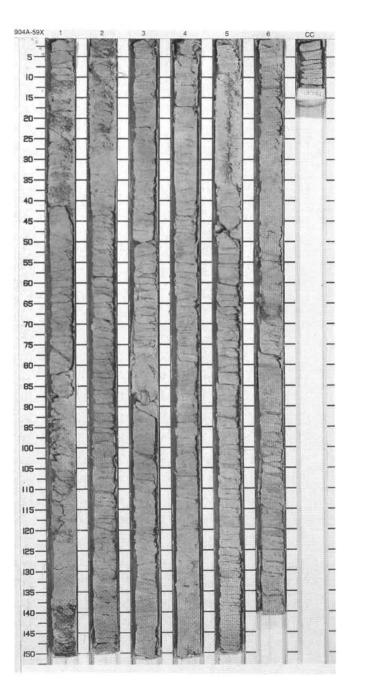
SIT	E 904 H	OL	E	A CORE	57	7X		CORED 528.4 - 529.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		cc		333	Τ	М		NANNOFOSSIL CLAYEY CHALK
								Major Lithology: Light greenish gray (5GY 7/1), heavily bioturbated NANNOFOSSIL CLAYEY CHALK.



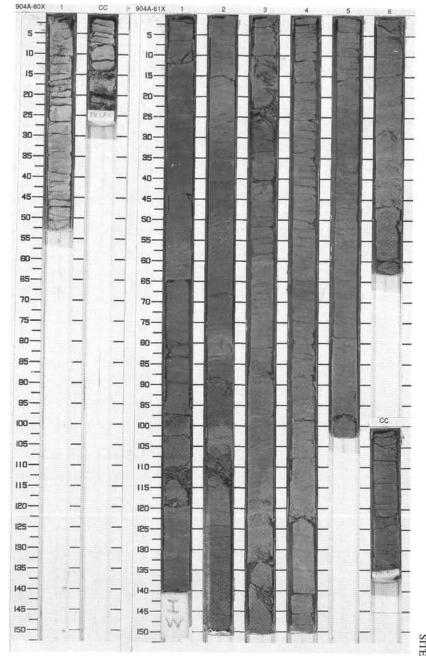
SIT	1922 - 1922 (¹	C			0	Ø	1	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 4 5 6 CC	middle Eocene	*************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Р D Т Г Т	5Y 7/1	PORCELLANITIC NANNOFOSSIL CHALK Major Lithology: Very light greenish gray, moderately to heavily bioturbated PORCELLANITIC NANNOFOSSIL CHALK.



SITE 904 H	IOL	E	A CORE		723.334		CORED 538.0 - 547.7 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1 2 3 4 5 6 CC	middle Eocene	*******************		P T D	5Y 7/1	PORCELLANITIC NANNOFOSSIL CHALK Major Lithology: Light greenish gray, moderately to highly fractured PORCELLANITIC NANNOFOSSIL CHALK. Less porcellanitic in Section 1. Common fracturing due to drilling deformation.



SIT	E 904 H	10	LE	A CORE	Ξ 6			CORED 547.7 - 557.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	middle Eoc.	33 33 33		Р М	5Y 7/1	PORCELLANITIC NANNOFOSSIL CHALK
			1 pin			1.141		Major Lithology: Light greenish gray, moderately bioturbated PORCELLANITIC NANNOFOSSIL CHALK.
SIT	E 904 ⊦	101	E	A CORE	E 6			CORED 557.3 - 567.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		**************************************		Р	5Y 5/2	NANNOFOSSIL CLAYEY CHALK Major Lithology: Light olive greenish gray, moderately to heavily bioturbated NANNOFOSSIL CLAYEY CHALK. Color laminated, well defined in Section 2 between 30 and 110 cm.
		2	middle Miocene		>		5Y 5/2 To 5Y 6/2	
1		3	E	***************************************	A	DT		
5		4	early Eocene			Ρ	5Y 6/2	
N		5						
		6 CC		\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		м		



SIT	E 904 H	IOL	E	A CORE	6	2X		CORED 567.0 - 576.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
clere		1 CC	y Eoc.	***		Р М	5Y 6/2	NANNOFOSSIL CLAYEY CHALK Major Lithology:
			earl					Light olive greenish gray, heavily bioturbated NANNOFOSSIL CLAYEY CHALK.

