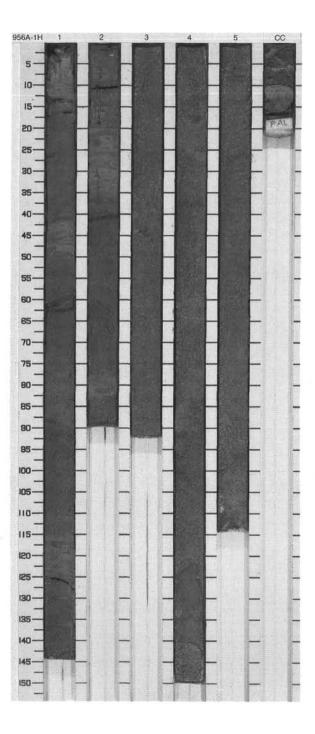
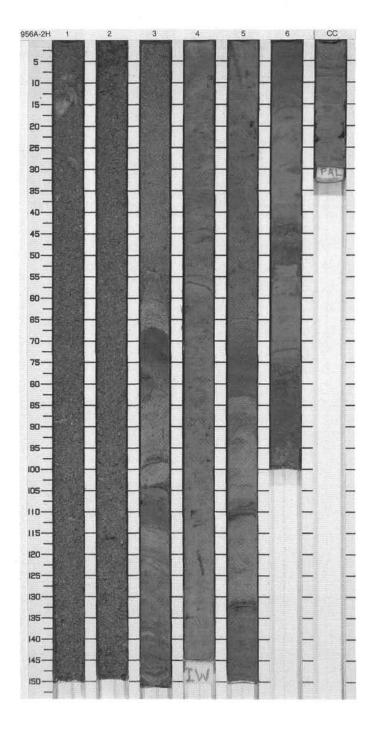
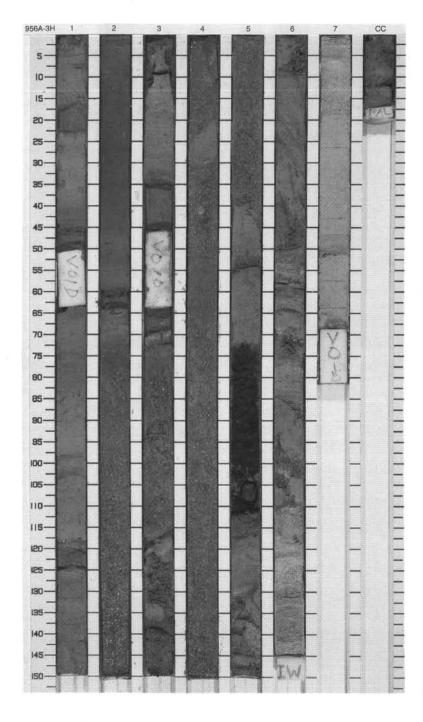
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
a. Emaleum		1		- 3 -		S	10YR 4/1 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS, BIOCLASTIC SAND, BIOCLASTIC SAND WITH LITHICS, and BIOCLASTIC LITHIC SAND
till ti				↑ F 33		ο¹		Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS
2	d <b></b> -	2			000			occurs as commonly, moderately bioturbated thin to medium thickness beds in Sections 1–2 and 4 and the
3		3	Pleistocene	& & &	0000000000000000	5Y 5/1 to 5Y 4/1	Core Catcher. It may show minor purple and green staining. BIOCLASTIC SAND occurs as a very thick, moderately sorted, structureless bed from Section 2, 47 cm, to Section 4, 123 cm. It contains abundant shell fragments. BIOCLASTIC SAND, grading into BIOCLASTIC SAND WITH LITHICS and BIOCLASTIC	
		4	Ple	K K				
Y.				Ø				LITHIC SAND, occurs as a very thick, poorly sorted, normally graded bed from Section 4, 141 cm, to the Core Catcher, 10 cm. The lithic content of the sand increases downcore.
6		5		† F		М		Minor Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENT occurs as thin green beds in Section 1, 11–16 and 49–63 cm.



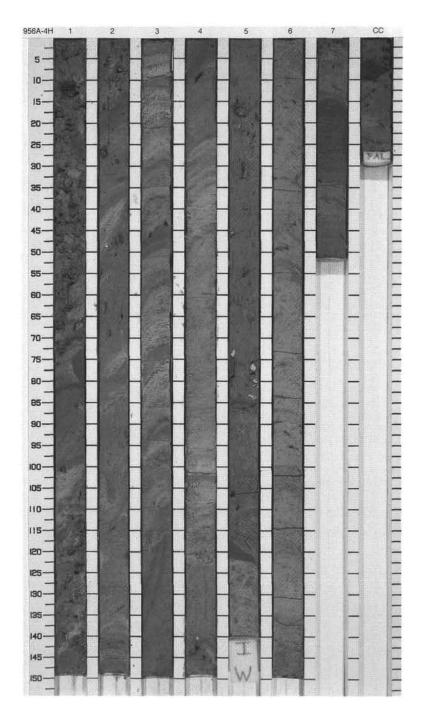
SIT	E 956 H	OL	E	A CORE	2			CORED 6.1 - 15.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		& & & & &				BIOCLASTIC SAND and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithologies: BIOCLASTIC SAND consists of coarse to very coarse bioclastic (98%—99%) and 1%—2% black lithic
2		2		& & &				fragments. Broken and minor whole shells of bivalves and gastropods, and coral fragments are abundant. NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS units are generally structureless and are folded in Section 3, 67–150 cm, and Section
4		3	Pleistocene	& & &	0000		2.5Y N2/0 to 5Y 4/2	4.
5		4	Pleisto	2				
6		5		3		ο¹		
7		,		33			10YR 4/1	
8		6		1 F	00000	м	2.5Y 4/1 to 5Y 3/2	



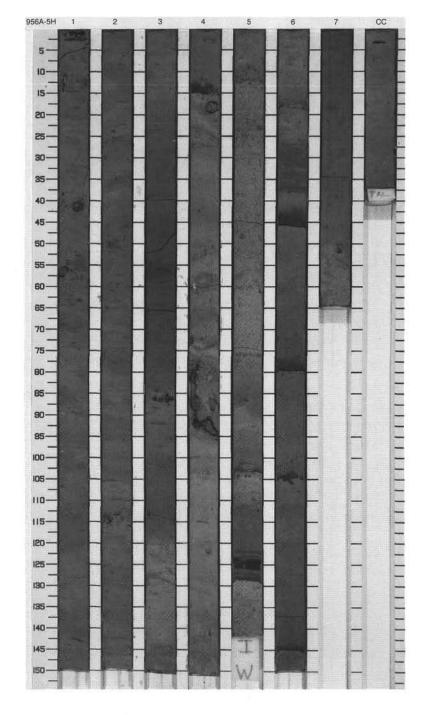
SIT	TE 956 H	OL	E	A CORE	3			CORED 15.6 - 25.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	Void	1		}			2.5Y N5/0	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS, NANNOFOSSIL OOZE WITH FORAMINIFERS, and BIOCLASTIC SAND Major Lithologies:
2		2		3			2.5Y N4/0	This core consists of intebedded CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS, NANNOFOSSIL OOZE WITH
3_		A		↑ F & &		т		FORAMINIFERS, and BIOCLASTIC SAND. CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and NANNOFOSSIL OOZE WITH FORAMINIFERS units
4	Void	3		*  †F <sub>Ø</sub>	000000	Т	10Y 5/1 to	are generally structureless. BIOCLASTIC SAND units consists of coarse to very coarse broken shells (90%) and black lithic fragments (10%).
5		4	Pleistocene	& & &			5Y N4/0	General Description: Void intervals were most likely fine calcareous or bioclastic sands.
6				8 8				
7		5		1 F			2.5Y N4/0 to 7.5YR 3/2	
8		6		S S			2.5Y N6/0	
9_		7		33 <b>1</b> F		o۱	to 5Y 4/1	
10	<b>3333</b>	CC				М		



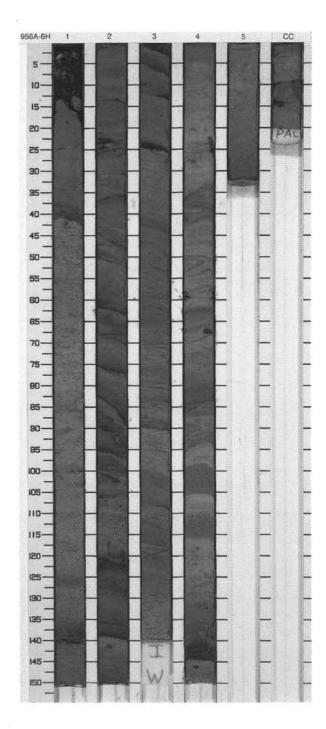
SI I	E 956 H			A CORE		Н		CORED 25.1 - 34.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		2 × 0 2 × 0	ww		5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS units are folded (soft sediment deformation) with isolated whole and broken bivalve shells and coral
Γ				2 ×				throughout. CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS are undeformed and moderately bioturbated.
Dept. Dept. 1915		3	ы	2 2 2			2.5Y N5/0	
STATES OF THE PARTY.		4	Pleistocene	& &			5Y 4/1	
		5		& &			to 5Y N5/0	
				× 33		10		
4 4 4 4 4 4 4		6		33 33			5Y 5/1	
1111111		7		33 338			5Y 5/1 to 5Y	
1		CC		333		М	5Y N3/0	



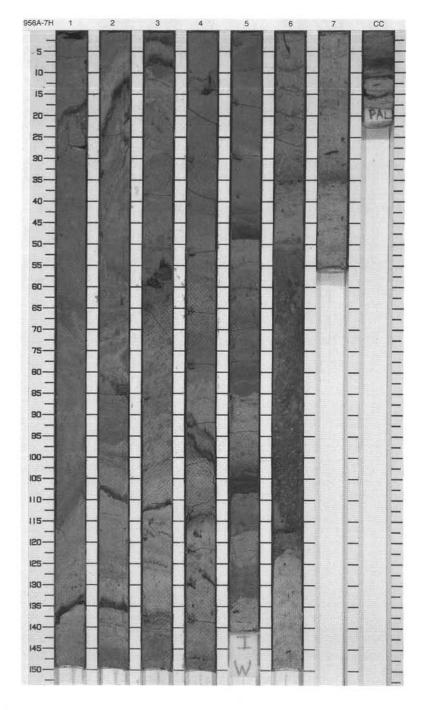
SIT	TE 956 H	IOL	E	A CORE	5			CORED 34.6 - 44.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1_		1		≥ 33 ⇒ 33 33			5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithology: This core consists mostly of CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. Isolated pumice, lava, and sedimentary clasts occur in Sections 1 and 4.  Minor Lithology: Minor interbeds of PUMICE LITHIC SAND occur in Section 4, 13–15 cm,
34		3	9	33 Pr 33			2.5Y N4/0 to 2.5Y N5/0	Section 5, 122–129 cm, Section 6, 37–38, 42–46, 78–80, and 105 cm.
5		4	Pleistocene	<b>*</b>			10YR 4/1 to 2.5Y N5/0	
7		5		33 33 4 F		1	5Y 5/1 to 10Y 4/1	
8 9		6 7		38 4 F 38 4 F 38 4 F 38 4 F 38 3 8		s s	10Y 4/1 to 5GY 4/1	



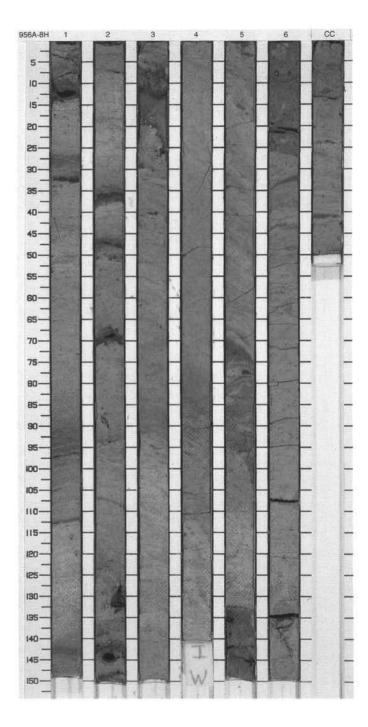
SIT	TE 956 H	OL	E	A CORE	6		CORED 44.1 - 53.6 mbsf				
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description			
111111111111111111111111111111111111111		1 (100 pt.) 1 (100		† F		T	5Y 5/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithology: This core consists mostly of CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. Contorted bedding in Sections 2 and 4.			
2		2	2	2 2			5Y 4/1 to 10Y 4/1	Minor Lithologies: Minor interbeds of BASALTIC LAPILLI, LITHIC FORAMINIFER SAND, CRYSTAL LITHIC SAND AND SILT, and PUMICE SAND AND SILT occur in Section 1, 0–13 and			
4		3	Pleistocene			ē	5Y 4/1	137–141 cm, Section 2, 22–24, 37, 47, 67, 76, 82, 90, 95, 100, 101, 120–123, 126–127, and 138–139 cm, Section 3, 0–2, 5, 12, 23–24, 89, and 115–117 cm, and Section 4, 140–145 cm.			
56		4		2 2 1 F		0	5Y 5/1 to 10Y 3/1				
		CC				М					



SIT	E 956 H			A CORE				CORED 53.6 - 63.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Line		1		<i>\$</i>		S		CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and CRYSTAL LITHIC VITRIC SAND Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS
2		2		3 34			2.5Y 4/2	forms the main lithology of this core. It shows minor to moderate mottling throughout and contains common disseminated pyrite and rare pyrite concretions. Some intervals are moderately bioturbated. In Sections 1–4, it shows common soft sediment
L. Caralle		3	Pleistocene	⊕ ≈		S		deformation features such as folded and deformed laminae and bedding. CRYSTAL LITHIC VITRIC SAND occurs as a poorly sorted normally graded bed in Section 6, 50–122 cm, that contains abundant pumice and feldspar.
5		4	Pleis	(p)			5Y 2/1 to 2.5Y 4/2	Minor Lithologies: CRYSTAL SAND WITH PUMICE, FORAMINIFER CRYSTAL SAND WITH PUMICE, FORAMINIFER PUMICE SILT, and FORAMINIFER FELDSPAR SILT occur as very thin to thin, generally brown massive
7		5		† F 33 † F		0	5Y 5/1 to 2.5Y 5/2	interbeds within the major lithology. In Sections 1–4, sand and silt interbeds are disturbed.  General Description: Color is rather uniform in this core.
8	(+2)	6		† F			5Y 4/1	
9		7	late Plio.	}} ↑ F		М	2.5Y 5/2	

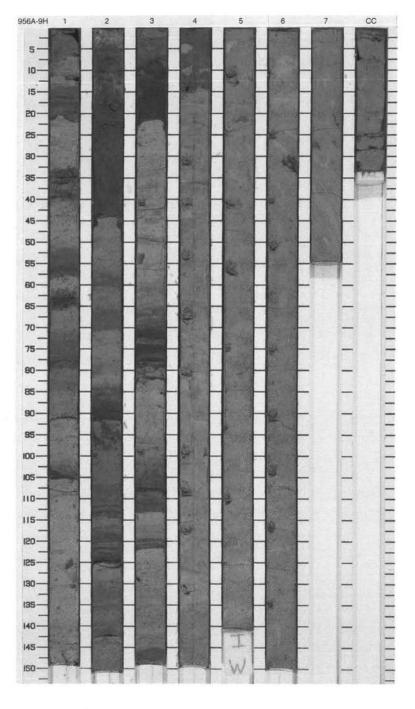


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
on Landan		1				5,	2.5Y 5/2 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENT Major Lithologies: CLAYEY NANNOFOSSIL MIXED
2		2		→			10Y 5/1 to 5Y 4/1	SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENT form the main lithologies in this core. They form medium to very thick mottled beds that may be slightly to strongly bioturbated or structureless. Some intervals show green and purple staining. Pyrite
		3	ene	***************************************			2.5Y 4/2	concretions are common in some intervals and disseminated pyrite is common throughout. CLAYEY NANNOFOSSIL MIXED SEDIMENT commonly and directly overlies thin sil or sand interbeds.
		4	late Pliocene				2.5Y 4/2 to 5Y 4/1	Minor Lithologies: CLAYEY BASALTIC SAND occurs as a washed out bed containing rounded pumice and abundant black lithic fragments in Section 3, 7–20 cm. LITHIC FORAMINIFER PUMICEOUS CLAYEY SILT occurs as a massive but normally graded bed in Section 6,
7		5		3 5 5		o <sup>1</sup>	10Y 4/1 to 5Y 4/1	0-27 cm. LITHIC SILTY SAND and FORAMINIFER PUMICEOUS SAND occur as very thin to medium thickness interbeds.
8.1.1.		6		<b>*</b>			5Y 4/1 to 2.5Y 4/2	
	<b>E</b>	cc			1	М		

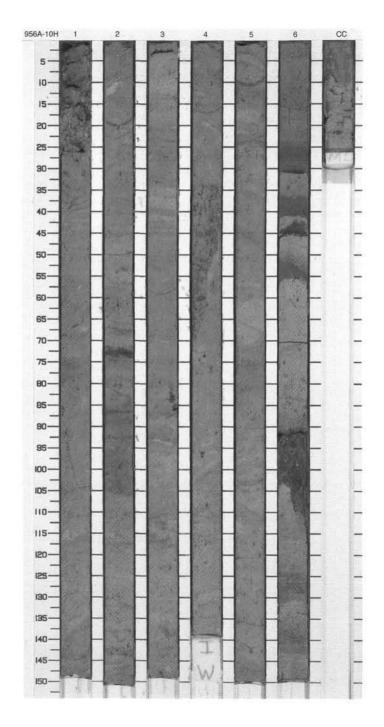


	<u>FE 956 F</u>			A JOHL	_			CORED 72.6 - 82.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		3 3 4 4 5 5 6 6 7 7 CCC	late Pliocene	A 3 A A A A A A A A A A		o¹	10Y 4/1 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithologies: Pale brown CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS form the main lithologies in this core. They form medium to very thick mottled beds that may be slightly to strongly bioturbated or structureless. Some intervals show green and purple staining. CLAYEY NANNOFOSSIL MIXED SEDIMENT commonly and directly overlies thin silt or sand interbeds.  Minor Lithologies: Greenish gray VITRIC, FORAMINIFERAL SAND occurs in Section 1, 32–40 cm; greenish gray PUMICEOUS SILT occurs in Section 1, 16, 175, 20, and 22 cm; green VITRIC SILT occurs in Section 1, 55–57, 77–78, 91, and 105–106 cm, in Section 2, 84–92, 112, 114, 119, 120, 121, 122, 123, 124–125, and 142 cm and in Section 3, 7–10 and 104–113 cm; dark gray PUMICEOUS SAND occurs in Section 1, 62–65 cm, in Section 2, 5–44 cm (normally graded at top and inversely graded at bottom), in Section 3, 10–22 cm (normally graded); dark gray LITHIC CRYSTAL SILT occurs in Section 3, 70–72, 74–76, 78–79, 81–82, and 120–122 cm; greenish gray FORAMINIFER SAND occurs in Section 3, 146–148 cm; and gray brown FORAMINIFER PUMICEOUS SAND occurs in Section 4, 0–15 cm.

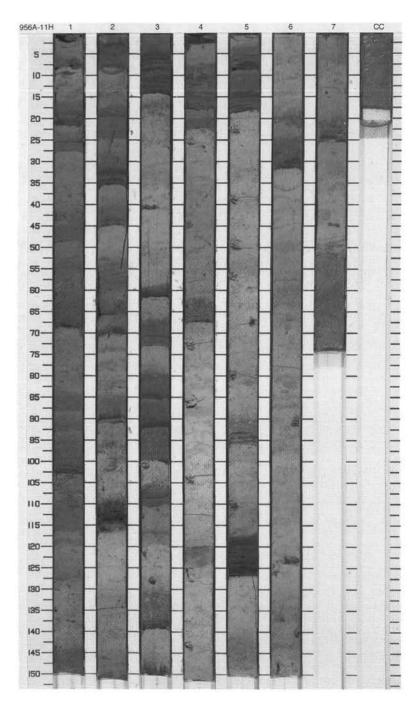
775



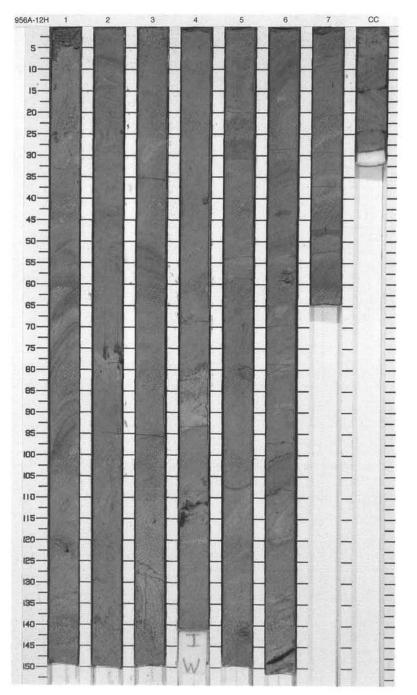
	TE 956 H	_	-					CORED 82.1 - 91.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure		Sample	Color	Description
aw 1 2 3 4 5 5	Lith	1 2 3	late Pliocene Ag	A* 33 -A A* 33	N Dist	Sam	2.57	CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithologies: Gray CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS form the main lithologies in this core. They form medium to very thick mottled beds tha may be moderately bioturbated or structureless. Some intervals show irregular and contorted mottled bands. CLAYEY NANNOFOSSIL MIXED SEDIMENT commonly and directly overlies thin silt or sand interbeds. Sediment in Sections 4 and 5 could represent a slump.  Minor Lithologies: VITRIC ASH WITH NANNOFOSSILS occurs in Section 1, 71–73 and 86.5 cm; dispersed PUMICE occurs in
6		4		A* 33 &				Section 2, 138–144 cm and in Section 5, 0–150 cm; black LITHIC CRYSTAL SILT occurs in Section 3, 2.5–3 cm; and CALCAREOUS QUARTZ SAND occurs in Section 6, 31, 43–45, and
	<del>注</del>			A. 5		0		91–103 cm.
7		5		A. 3 S				General Description: Color is very uniform in this core.
8		6		33				
9		cc		33		М		



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and Landson		1		1 F 33 1 F				CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS Major Lithologies: CLAYEY NANNOFOSSIL MIXED
2		2		†				SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS form the main lithologies in this core. They form medium to very thick beds that may be slightly to moderately bioturbated, Some intervals show green and purple staining. Pyrite concretions are preset
The state of the state of		3		† F-A † F (P)				in Section 3. Greenish gray CLAYEY NANNOFOSSIL MIXED SEDIMENT commonly and directly overlies thin sil or sand interbeds.  Minor Lithologies:
T. I.		4	late Pliocene	† F † F			2.5Y 4/2 to 5Y 4/1	QUARTZ SAND occurs in Section 1, 8–9, 19, 21.5, 27.5, 49, 69, 102.5–103 cm, in Section 2, 17–19,19–24, 32–33 4–35.5, 40–45, and 84–91 cm, in Section 3, 6, 6–14, 67–73, 85, 85–92, 100, 131–140, and 149–150 cm, in Section 4, 0–2.5, 67.5 cm, in Section 5, 6, 7–9, 13.5–15, 16, 16.5, 17–18.
,		5		33				93.5, 94–94.5, and 95–96 cm, in Section 6, 21, and 30–32 cm, and in Section 7, 25 cm. FORAMINIFER LITHIC SAND occurs in Section 2, 0–and 53–66 cm, in Section 5, 118–127 cm (parallel-lamination), in Section 7, 51–74 cm, and in Section CC, 0–18 cm. CALCAREOUS SAND occurs in
, L		6		3		О		Section 3, 49–61.5 and 105–108 cm, and in Section 4, 2.5–18 cm; VITRIC ASH occurs in Section 2, 69–70 cm; PUMICEOUS LAPILLI occurs in Section 2, 110–115 cm.
		7		⊕ <sup>33</sup>				General Description: The core consists mainly of CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS with very thin interbeds of the minor

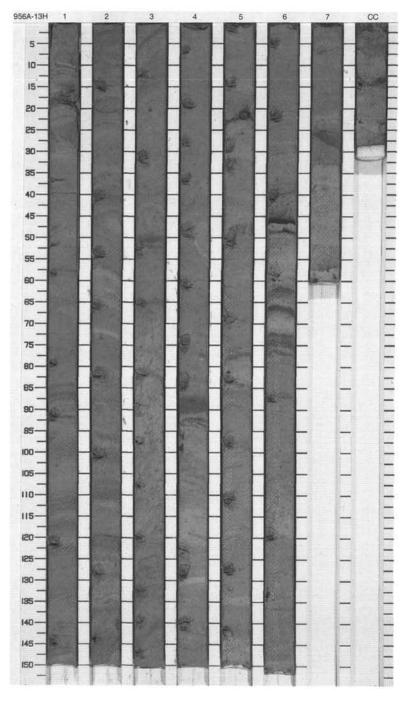


-					ORE			132	CORED 101.1 - 110.6 mbsf
Meter	Graphic Lith.	Section	Age	Struc	cture	Disturb	Sample	Color	Description
-	<b></b>				200				CLAYEY NANNOFOSSIL MIXED
-	÷:::::				2	i l			SEDIMENT
2	<u> </u>	1			_	H			Major Lithology:
1	<b>13</b>			3	5	1			The core consists of grayish green CLAYEY NANNOFOSSIL MIXED
4	***					i			SEDIMENT that is contorted and folded
	32				5				throughout. It may be structureless or show minor bioturbation and mottling.
2	<del>弦</del>				2	1			***************************************
4.4	<u> </u>	2		3		î l			Minor Lithologies: PYRITIC PUMICEOUS ASH occurs in
1.	조건				5	1			Section 6, 145–148 cm.
3	<del>-</del>				2	i l			General Description:
3	조구				N. Total				Color is rather uniform in this core.
1.1.1	<del>-</del>				2	1			
100	<del></del>	3	×		2	i l			
4	<u> </u>			3		1			
200	<u> </u>					1			
-	44		ate Pliocene		5	†			
5	<u> </u>		lioc			1		5Y	
7	<u> </u>	4	te F		5	i		5Y 4/1	
3	<u> </u>		<u>a</u>	_ 3	_	1			
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6		$\dashv$			2	î l	0		
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1		CC		3		11	м		

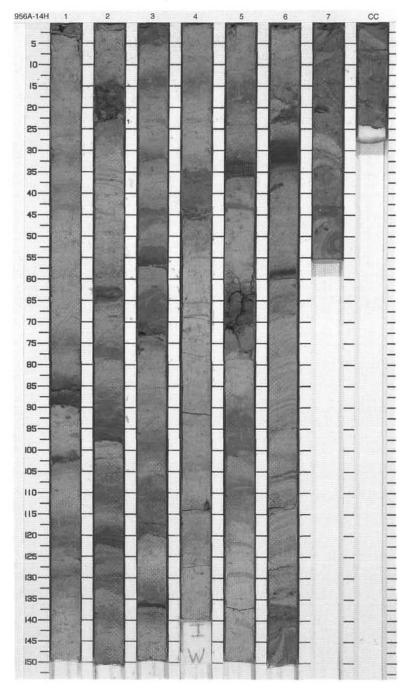


SI	E 956 H	101	E	Α	CORE	1			CORED 110.6 - 120.1 mbsf
Meter	Graphic Lith.	Section	Age	St	tructure	Disturb	Sample	Color	Description
1		1			2 %				CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS Major Lithologies: This core consists of gray to greenish
2		2			2 } 2				gray CLAYEY NANNŌFŌSSĨL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. The sediments are contorted and folded and are slightly bioturbated and mottled throughout.
		3	ө		2 } 2				Minor Lithologies: CRYSTAL CALCAREOUS SAND occurs in Section 4, 92–93 cm; CRYSTAL LITHIC VITRIC SILT WITH CALCAREOUS GRAINS occurs in Section 6, 45–46 cm; and LITHIC CRYSTAL SILT occurs in Section 6,
5		4	late Pliocene	P	2 33 2			5Y 2/1	48–49 cm, and in Section 7, 30 cm.  General Description: Color is rather uniform in this core.
7		5		P	2				
8		6			2 2				
9		7			3 2		0		
10		CC			33 5		М		

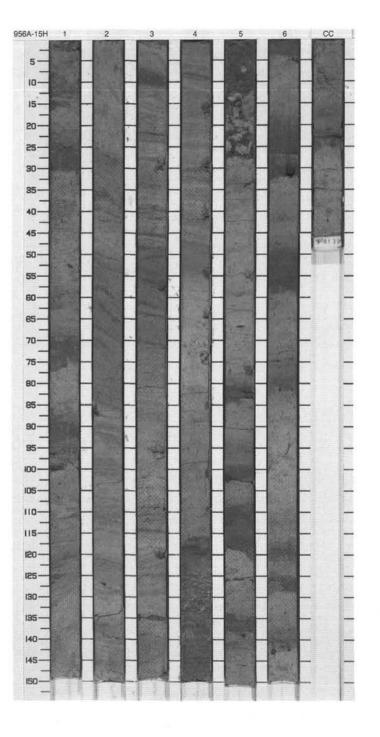
779



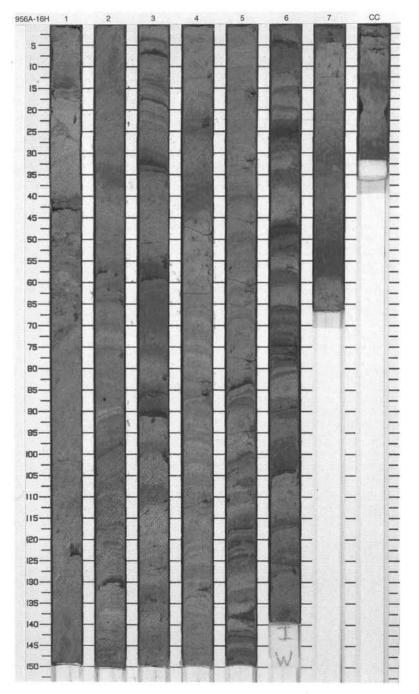
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
A Level Level		1		33 1 F 1 F F 5333				CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENT Major Lithologies: Light gray and greenish-gray CLAYEY
attended to the state of		2		†F †F <sup>33</sup>		s s		NĂNNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS form the main lithologies in this core. They form medium to very thick mottled beds that may be moderately to strongly bioturbated. Some intervals
Transfer or transfer		3	ane	<b>†</b> F }}				show green and purple staining. CLAYEY NANNOFOSSIL MIXED SEDIMENT commonly and directly overlies thin silt or sand interbeds. CLAYEY NANNOFOSSIL MIXED SEDIMENT beds (which are commonly siltier in the lower parts of beds) show slump structures in Sections 6 and 7.
THE STREET STREET		4	late Pliocene	33 P		ı	5Y 4/1	Minor Lithologies: NANNOFOSSIL CLAY occurs in Section 1, 84–87 and 87.5–88.5 cm, Section 5, 13–19, 28–36, 90–101, and 106–111 cm; QUARTZ SAND occurs in Section 1, 87–87.5, 88.5–91, and
4110 4110 11110		5		<b>†</b> F }}		s		102–104, Section 3, 4–5, 54–57, 117–120, and 136–137 cm, Section 5 35–36 cm, and Section 6, 19 cm; FORAMINIFER VOLCANIC SAND occurs in Section 2, 14.5, 14.5–23, 62–64, 93–98, and 118.5–122 cm, and in Section 3, 62–73 cm:
Liver Court		6		† F 33 2				FORAMINIFER SAND occurs in Section 4, 35–44, and in Section 5, 61–71 cm; QUARTZ SAND WITH FORAMINIFERS occurs in Section 6, 28–33 and 57–58 cm.
11.11		7		3 5				General Description: Color is rather uniform in this core.
4313		cc		2		М		



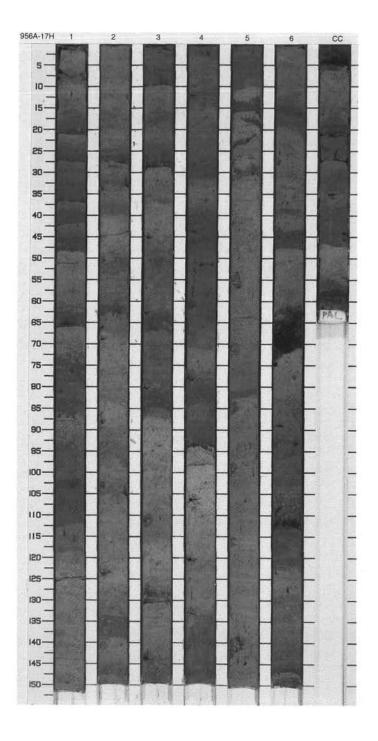
	E 956 H	_	-	A CORE	$\overline{}$			CORED 129.6 - 139.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		(P) 333 P				CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENT  Major Lithologies: CLAYEY NANNOFOSSIL MIXED
		2		2 2 <sup>33</sup>				SEDIMENT WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENT form the main lithologies in this core. They form medium to very thick mottled beds that may be slightly to strongly bioturbated. Pyrite concretions are common in some intervals. Section 1, 100 cm, to
The second second		3	ene	2 ?				Section 4, 118 cm, consist of convolute and contorted beds and this interval possibly represents a slumped unit.  Minor Lithologies: FORAMINIFER CRYSTAL SAND
designation of the second		4	late Pliocene	2 2			5Y 4/1	occurs in Section 1, 94–100 cm, (parallel laminated and fining upward), Section 3, 134–135 cm, and in Section 5, 108–109 cm; CRYSTAL PYRITIC SILT occurs in Section 6, 72 and 74 cm, FORAMINIFER SAND occurs in Section 4, 118–150 cm (
,		5		<b>↑</b> F				normally graded), in Section 5, 0–12 cm (with clay clasts measuring up to 1 cm across); and NANNOFOSSIL CLAY occurs in Section 5, 80–84, 94–102, 108–110, and 134–138 cm.  General Description:
		6		3		0		Color is rather uniform in this core.
9		cc		33		м		



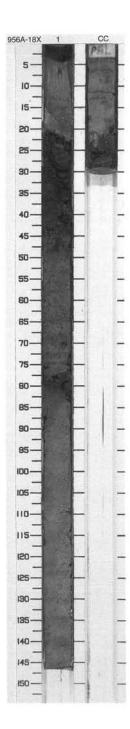
Meter	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
CANAL LANGE LANGE		1		& <b>(4</b> )	2				CLAYEY NANNOFOSSIL MIXED SEDIMENT  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENT forms the main lithology ir this core. It forms thin to very thick
A CALL THE SAME STATES OF		2			2				mottled beds that may be slightly to moderately bioturbated. Pyrite concretions are present in some intervals of Sections 5 and 7. Sections 1 and 2 show convolute, contorted beds, possibly representing a slumped unit.
A R. C. A. C.		3	late Pliocene	ine	3				Minor Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS occurs in Section 7, 4–25, 33–42, and 58–66 cm, and in Section CC, 0–11 and 16–28 cm; NANNOFOSSIL CLAY occurs in Section 5, 19–26 and 37–46 cm; FORAMINIFER SAND occurs in Section 1, 40–43 cm, and in Section 4, 138–139 cm; QUARTZ SILT occurs in Section 2, 58, 100, and 130–131 cm, in Section 3, 7, 18, 32–33, 59–60, 86, and 90–91 cm, and in Section 4, 83–84, 115–118, 119–121, and 123–125 cm; NANNOFOSSIL SILT
The state of the s		4						5Y 4/1	
and and the same		5		P }					occurs in Section 6, 22–24, 46, 74, 76–77 cm; QUARTZ SAND WITH FORAMINIFERS occurs in Section 6, 5–6, 24–28, 47–49, 74–75, 77, 78, and 104 cm.
The same and a		6		ı					General Description: Color is rather uniform in this core.
Trees to		7		(P 33			0		
0		cc		3		Т	м		



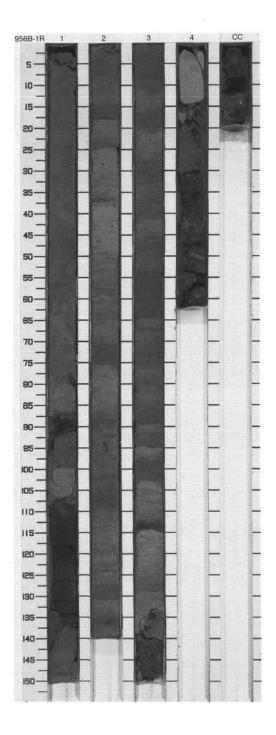
SIT	ΓE 956 H	IOL	E	A CORE	1	7H		CORED 148.6 - 158.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Land		1		***			2.5Y 4/2 to 5Y 3/2	CLAYEY NANNOFOSSIL MIXED SEDIMENT  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENT forms the main lithology in this core, with medium to very thick
2		2		3 3			5Y 4/1 to 2.5Y 4/2	mottled beds that may be slightly to moderately bioturbated. Disseminated pyrite is common in some intervals of Section 6. Convolute and contorted beds, possibly representing slumped units, occur in Sections 5 and 6.  Minor Lithologies:
J		3	ane	3			5Y 4/1	Thin interbeds of NANNOFOSSIL CLAY and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS occur. LITHIC QUARTZ SILT occurs as very thin to thin interbeds, some of which are disrupted through bioturbation. These
5		4	late Pliocene	3 2 3			2.5Y 4/2 to 5Y 4/1	commonly grade up into NANNOFOSSIL CLAY or clayey nannofossil mixed sediments.
7		5		2 3 3		0	5Y 4/1	-
8		6		** P		O M	5Y 4/1 to 10Y 4/1	



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1				0	5Y 2.5/1 to 2.5Y N2/0	CLAYEY NANNOFOSSIL MIXED SEDIMENT, BASALTIC LAPILLISTONE, and CLAYEY NANNOFOSSIL MIXED SEDIMENT MIXED WITH BASALTIC SAND  Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT occurs as medium to thick structureless beds. BASALTIC LAPILLISTONE occurs as a disturbed poorly sorted bed in Section 1, 20–49 and 77–81 cm, and in Section 2, 3–23 cm. The lapilli are mainly vesicular basalt and measure up to 2 cm in diameter. Some pieces are oxidized. In Section 2, the lapilli are very poorly sorted and are held in a glassy matrix that contains crystals of olivine and pyroxene. CLAYEY NANNOFOSSIL MIXED SEDIMENT MIXED WITH BASALTIC SAND occurs in Section 1, 49–77 cm. This interval is a very
								poorly sorted mixture and contains some small basalt clasts.



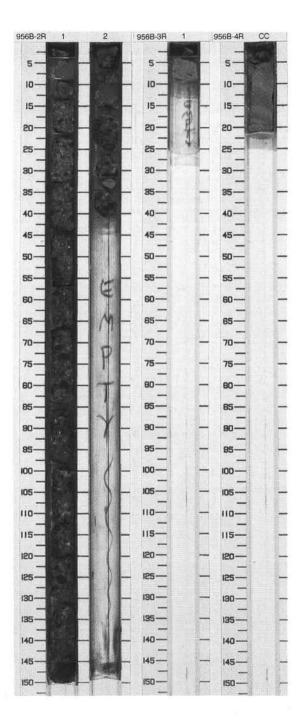
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3		2	late Pliocene	⊗		т о	5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT and BASALTIC CALCAREOUS BRECCIA  Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT represents the main lithology in this core and forms thin to very thick mottled beds, that may be slightly to moderately bioturbated. Pyrite concretions are common in some intervals of Section 2. BASALTIC CALCAREOUS BRECCIA occurs from the bottom of Section 3 to the bottom of the core.  Minor Lithologies: Dark gray LITHIC CRYSTAL SAND occurs in Section 1, 87-91 cm; black BASALTIC CALCAREOUS SANDSTONE WITH SHELL FRAGMENTS occurs in Section 1,
		4 CC			1	Т	5GY 2/1	107–137 cm; greenish gray NANNOFOSSIL CLAY occurs in Sections 2 and 3, as very thin beds overlying sand beds; and dark gray QUARTZ SAND occurs in Section 2,
								18, 37, 76, and 122–124 cm and in Section 3, 49, 65, 90, 95, 98.5, 113–115 (planar laminated), and 125–129 cm.



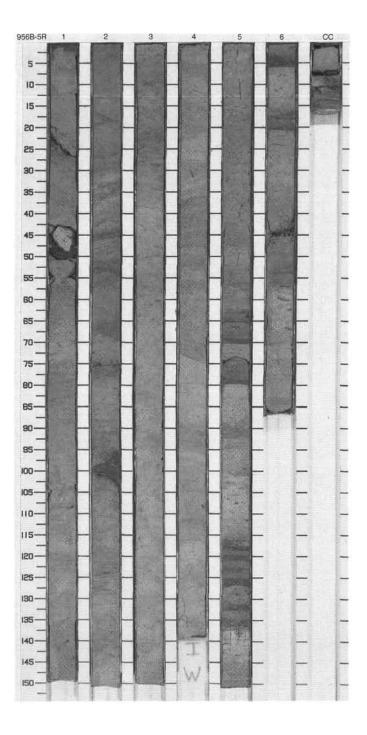
SIT	E 956 F	IOL	E	B CORE	2	R		CORED 166.6 - 176.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
order Land		1					5G 2/1	BASALTIC LAPILLISTONE  Major Lithology: This core consists of BASALTIC LAPILLISTONE. Clasts are composed of altered phonolite and altered vesicular basalt, supported in a greenish gray matrix containing occasional shell fragments.

SIT	E 956 H	IOL	E	B CORE	3	R		CORED 176.1 - 185.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
								BASALT and WELDED TUFF  General Description: This core consists of two clasts: phyric basalt with phenocrysts of olivine and pyroxene, and welded tuff with alkali feldspar.

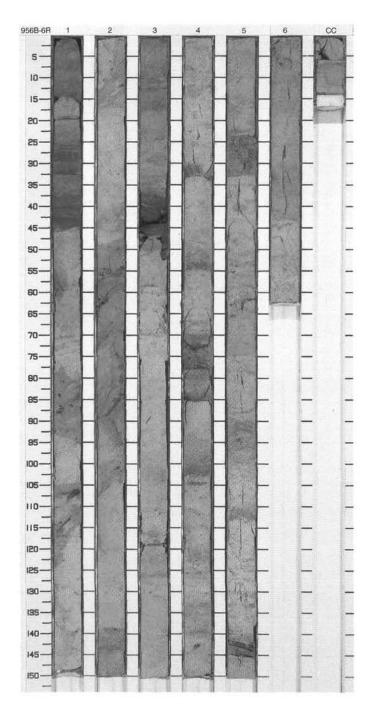
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
_1		<u> </u>						J CLAYEY NANNOFOSSIL MIXED SEDIMENT, WELDED TUFF, and BASALT  General Description: This core consists of two clasts of basalt and welded tuff (with fiamme) and 17 cm of gray CLAYEY NANNOFOSSIL MIXED SEDIMENT showing moderate bioturbation and mottling throughout.



SIT	TE 956 H	101	E	B CORE	5			CORED 195.4 - 205.1 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The second		1		-A 2 -A 33				CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS
Linne				2				Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY
2		2		2				NANNOFOSSIL OOZE WITH FORAMINIFERS form a slumped unit in Section 1 to top of Section 5, showing convolute, contorted
3				2,	-			lamination, slight to moderate bioturbation and mottling throughout; and medium to thin beds in Sections 5 to CC.
and have		3	ene	2	-			Minor Lithologies: Bluish gray to green NANNOFOSSIL
4			early Pliocene	2			5Y 4/1	CLAY occurs as thin beds in Section 5, 90.5–94, 115–120.5, 120.5–123, 123–125, 125–129, 132.5–134, 134–139.5, and 145–150 cm; greenish
5		4	9	2 }				gray WELDED TUFF occurs in Section 1, 43–50 cm; and ZEOLITIC ASH occurs in Section 1, 22 cm in Section 5, 75–76.5 cm (with
6				2		1 0		foraminifers), in Section 6, 44–45 cm, and in Section CC, 6–8 cm.
		5		ટ				General Description: Color is rather uniform in this core.
7		3		-A 33				
8		6		- <b>A</b> 3				
1000	표	CC		-A 33	!	М		

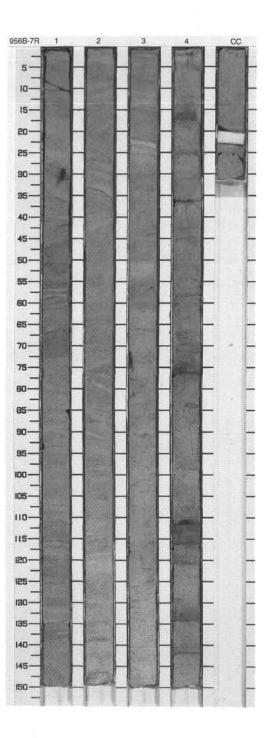


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Leave Thereses		1		233				CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL OOZE Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY
2		2		5 3				NANNOFOSSIL OOZE form the main lithologies in this core. They form medium to very thick mottled beds that may be slightly to moderately bioturbated. In Sections 1 and 2, the two lithologies are chaotically mixed possibly due to slumping.
Lead Bracking		3	early Pliocene	ℤ }			5Y 4/1	Minor Lithologies: Dark gray LITHIC CRYSTAL SILT occurs in Section 3, 36–47 cm (with cross-stratification) and in Section 4, 33 and 70–85 cm (with parallel lamination). FORAMINIFER SAND occurs in Section 3, 119–120 cm, and
5		4	6	=				in Section 5, 23–33 (parallel lamination), and 142–144 cm (parallel laminated).  General Description: Color is rather uniform in this core.
7		5		≡ **		0		
8		6		33	1	м		

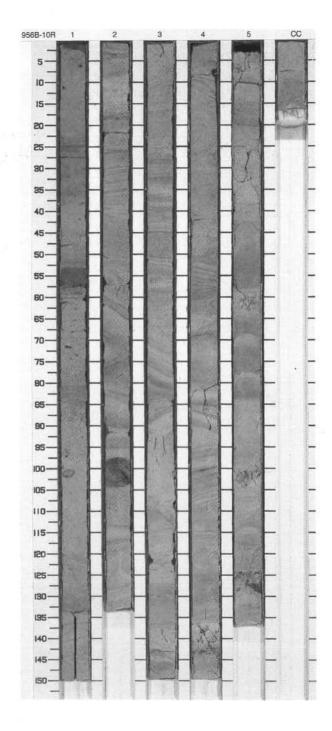


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	aarly Pliocene	2 3 2 3			5Y 5/1	CLAYEY NANNOFOSSIL OOZE  Major Lithology: CLAYEY NANNOFOSSIL OOZE forms a very thick slumped unit in Section 1 to top of Section 3, with contorted and banded lamination. Mottling and slight to moderate bioturbation is common throughout.  Minor Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT occurs in Section 4, 16–18, 67–77, 111–117, 119–121, 130–135, and 141–143 cm; and dark gray CALCAREOUS QUARTZ SANE occurs in Section 4, 37, 111, and 117
		3	68	33		0		cm.  General Description: Color is rather uniform in this core.
		4		33				

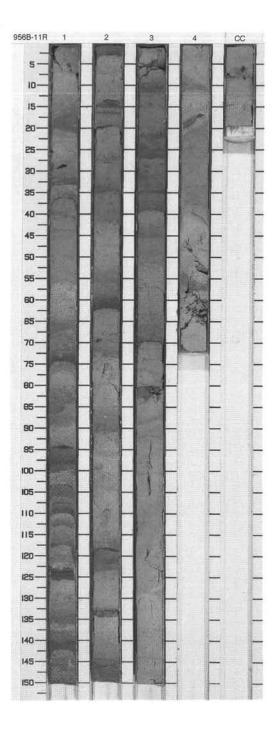
956B 8R NO RECOVERY 956B 9R NO RECOVERY



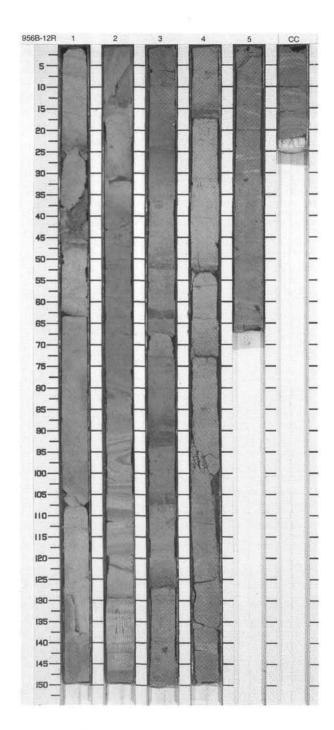
Graphic Lith.	Section	Structure	Disturb	Sample	Color	Description
3-	1 3 auszulld	※※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※ ※		S 0	2.5Y 6/2 to 5Y 4/1	CLAYEY NANNOFOSSIL CHALK  Major Lithology: CLAYEY NANNOFOSSIL CHALK occurs as medium to very thick beds that make up most of the core: In - Section 1, it is moderately bioturbated but in Sections 2–4, it contains pronounced slump folds, contorted bedding, rare mud clasts and black disseminated lithic grains and crystals Small normal microfaults are also common in this interval.  Minor Lithologies: PYRITIC SILT and LITHIC SILT occurs as very thin interbeds.  General Description: Color is generally rather uniform in this core.



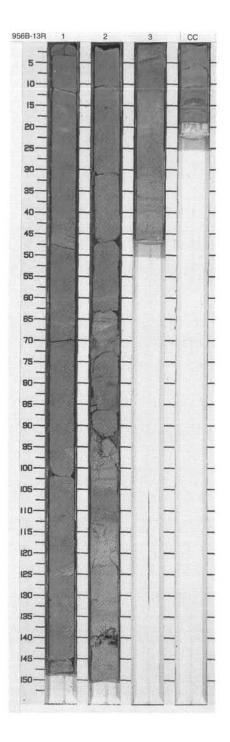
SI	E 956 H	OL	E	B CORE	1	1R		CORED 253.2 - 262.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3_		3 3	Pliocene-late Miocene			0	5Y 5/1 to 2.5Y N5/0	CLAYEY NANNOFOSSIL CHALK  Major Lithology: CLAYEY NANNOFOSSIL CHALK forms most of the core and is slightly to moderately bioturbated throughout. It shows minor green and purple staining. In Section 3 through to CC, it contains scattered black silt-sized lithic grains and crystals.  Minor Lithologies: FORAMINIFER SAND WITH LITHICS and QUARTZ SILT occur as very thin interbeds in Sections 1 and 2.  General Description: Color is generally rather uniform in this core.



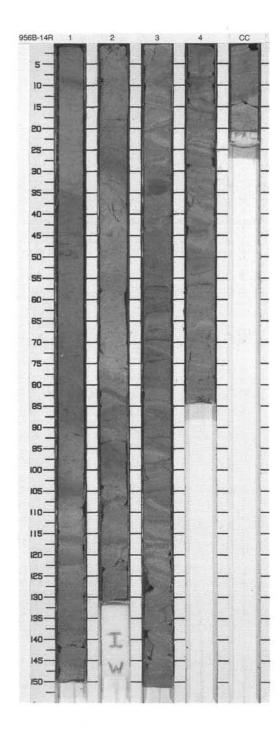
SIT	E 956 H	OL	E	B CORE	12	2R		CORED 262.8 - 272.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1 2 3	late Miocene	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		О.	2.5Y 5/2 to 5Y 5/1	CLAYEY NANNOFOSSIL CHALK  Major Lithology: CLAYEY NANNOFOSSIL CHALK makes up the entire core. In Section 1, 0 cm to Section 2, 129 cm, it is strongly folded and shows convolute laminations and contorted bedding. From Section 2, 129 cm to bottom of CC, it is generally slightly to moderately bioturbated, although some intervals may be structureless. In Sections 4–5 and the CC, it contains abundant scattered silt- to sand-sized black lithic grains and crystals.  General Description: Color is generally rather uniform in this core.



SIT	E 956 F	IOL	E	B CORE	1	3R		CORED 272.4 - 282.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1 2	late Miocene	♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦		О М	5Y 4/1 to 2.5Y 5/2	CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH LITHIC SAND and CLAYEY NANNOFOSSIL CHALK Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH LITHIC SAND occurs from Section 1, 0 cm to Section 2, 79 cm. It contains abundant scattered sand-sized black, red and green lithic grains, but is otherwise structureless. CLAYEY NANNOFOSSIL CHALK occurs from Section 2, 79 cm to CC, 19 cm. It is structureless or shows slight bioturbation and in the Core Catcher contains black volcanic lithics and crystals scattered throughout.
								Minor Lithologies: Very thin FORAMINIFER LITHIC SAND occurs in Section 2, 93 cm, and thin planar-laminated LITHIC FORAM SILT occurs in Section 3, 5 cm.  General Description: Color is rather uniform in this core.

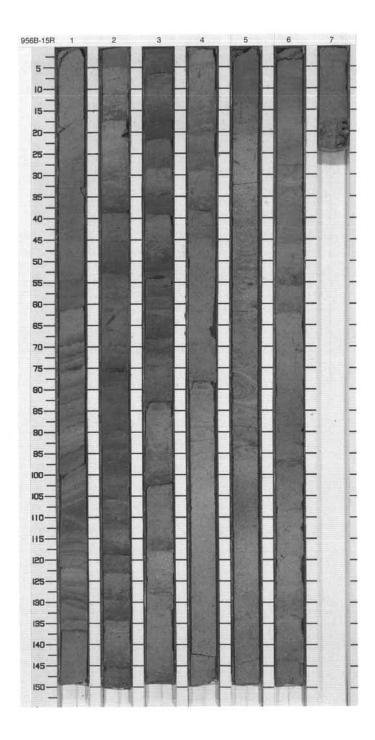


100		C			p	Φ	2478	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3		1 2 3 4	late Miocene	\rightarrow \text{\alpha} \te		o l	5Y 4/1 to 2.5Y 5/2	CLAYEY NANNOFOSSIL CHALK  Major Lithology: CLAYEY NANNOFOSSIL CHALK makes up the entire core. In Sections 1–2, it shows wispy, discontinuous laminations, folded laminae and beds. In Section 3, soft sediment deformation structures, such as folded bedding and convolute laminations, are very common. In Section 4, the sediment contains abundant black silt- sized volcanic grains scattered in a discontinuous band at 14 cm, and otherwise comprises a sequence of alternating thin bands of slightly different color shade. It contains numerous small faults and crenulations, and shows minor purple staining.  General Description: Color in this core is rather uniform.

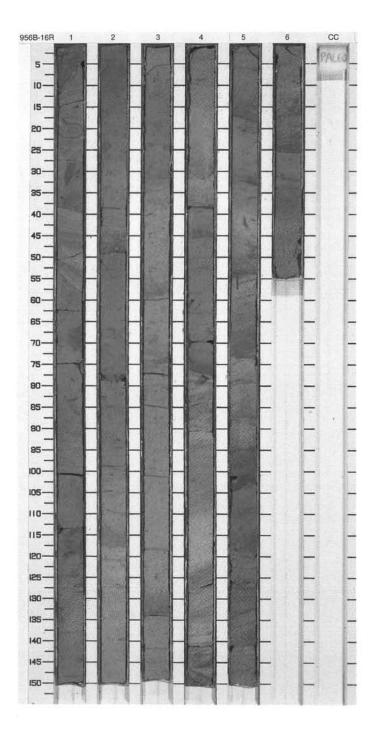


SI	E 956 H	IOL	E	B CORE	15	5R		CORED 291.7 - 301.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 2 3 4 5 5 F 7 8 9 9 9		3 3 5 5	late Miocene			s	5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL CHALK  Major Lithologies: This core consists of CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL CHALK. Convoluted and folded beds and laminations are common throughout.  General Description: Minor interbed of quartz silt. Color is uniform throughout.

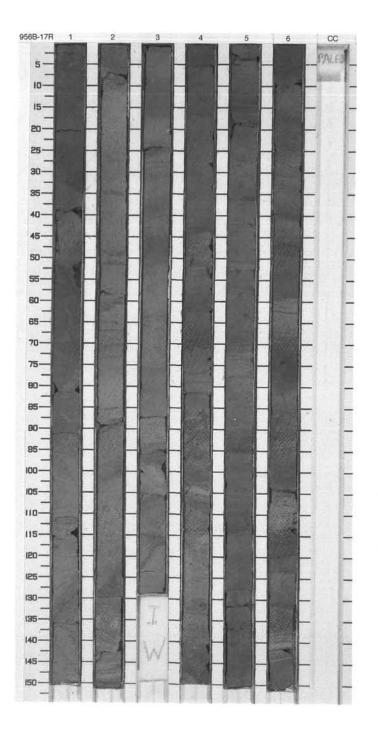
795



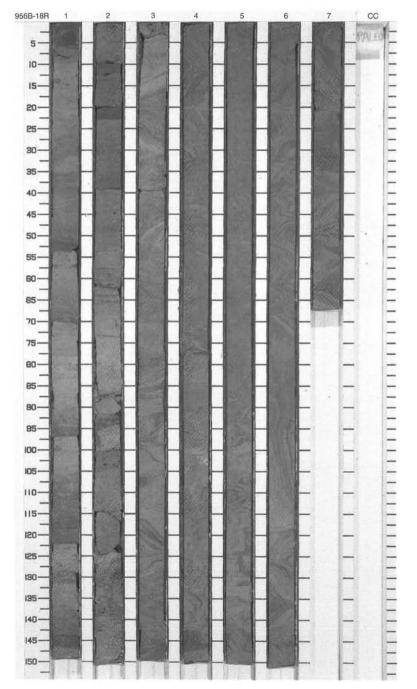
SIT	TE 956 H		E	B CORE				CORED 301.3 - 310.8 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			5Y 4/1	CLAYEY NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK Major Lithologies: This core consists of interbedded CLAYEY NANNOFOSSIL CHALK and
2		2		***************************************			5Y 4/1 to 5Y 5/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK. Soft sedimen folding and convolute laminae and beds common. Undeformed beds generally have sharp bases and bioturbated tops.
3		3	late Miocene	33			5Y 5/1	
Established Stored		4		* **		0	5Y 3/1	
L. C. L.		5		33		U	5Y 5/1 to 5Y 4/1	
3		6		-3		М		



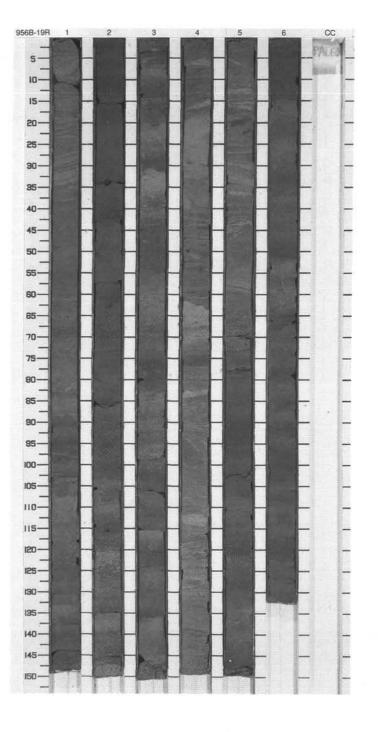
	E 956 H				_			CORED 310.8 - 320.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		1 2 3 4 5	late Miocene			о 1	2.5Y 4/1 2.5Y N4/0 to 5Y N4/0	CLAYEY NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithologies: This core consists of interbeds of CLAYEY NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK. Slump folds and convoluted beds and laminations are common.  Minor Lithologies: Minor interbeds of QUARTZ FORAMINIFER SILT, LITHIC FORAMINIFER SILT, and LITHIC SILT occur throughout the core.



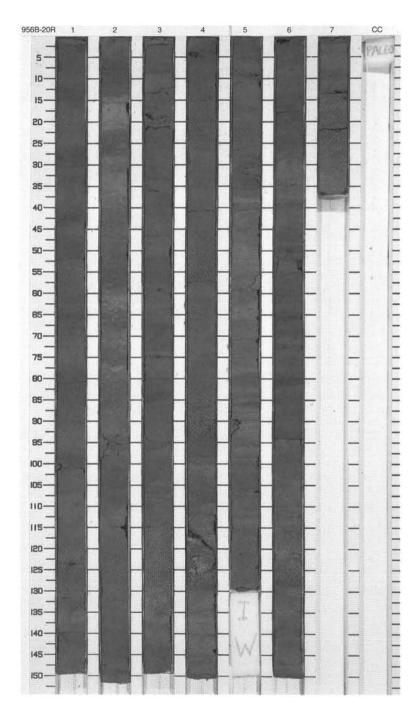
SIT	E 956 H	OL	E	B CORE	1			CORED 320.3 - 329.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
here. Errelene		1		3				CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and CLAYEY NANNOFOSSIL CHALK  Major Lithologies: This core consists of a slumped unit of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, showing
2		2		33				slump folds and convoluted beds, in Sections 2 to 7. In Sections 1 and top of 2, CLAYEY NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL MIXED
3_				2				SEDIMENTARY ROCK form thin to medium beds, with moderate bioturbation and mottling.
4		3		2 %				Minor Lithologies: Dark gray QUARTZ SILT occurs in Section 2, 12, 22, and 61–62 cm.
contant			ate Miocene	2			5Y 4/1	
5		4	late	2 %			4/1	
6				2				
7_		5		2		e-62		
8		6		2	0	Ą		
9		7 CC		2 %		М		



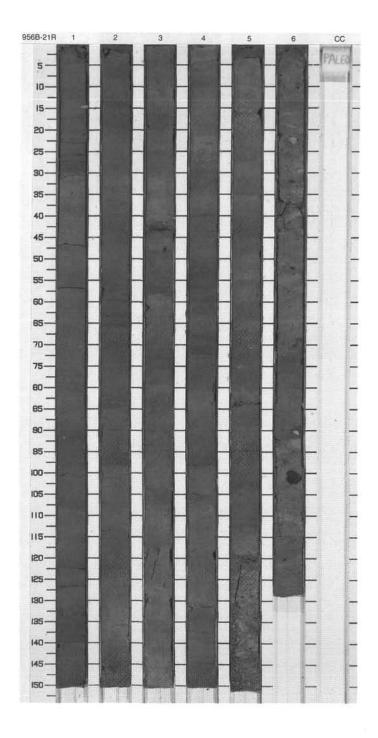
	E 956 H			B CORE				CORED 329.9 - 339.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Same Liver		1		2}				CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and CLAYEY NANNOFOSSIL CHALK Major Lithologies:
and the same								This core consists of gray and dark green, thin beds of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK showing sligh
111111		2		33				to moderate bioturbaton, and thick slumped units with folds and convoluted beds. CLAYEY NANNOFOSSIL CHALK appears in
1111111111				33				Section 1.
		3	eneo	33				
			late Miocene				5Y 5/1	
		4		e •				
				2 ♦		0		
		5		***				
		6						8
		cc		33		M		



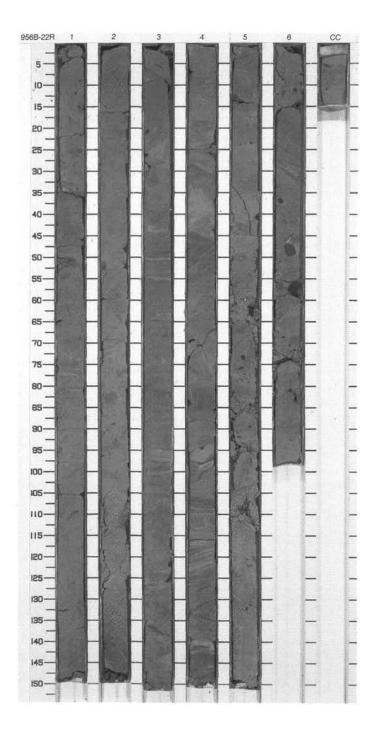
SITE	956 H			B CORE				CORED 339.5 - 349.2 mbsf
	iraphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3 4 5	late Miocene Age	Structure  3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Distur	Sampl	5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: This core consists of gray and olive gray beds of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, showing mottling and slight to extensive bioturbation throughout. Slump folds and convoluted beds are common in Sections 4 and 5.  Minor Lithologies: Dark gray QUARTZ SILT occurs in Section 3, 13.5 and 21.5 cm, in Section 4, 115–116 and 125–126 cm, in Section 6, 53–55 and 94 cm, and in Section 7, 13 cm. Greenish and brownish gray NANNOFOSSIL CLAYSTONE occurs as very thin beds (1 to 2 cm) in Section 6.
		6		33				
9 1111		7		**		М		



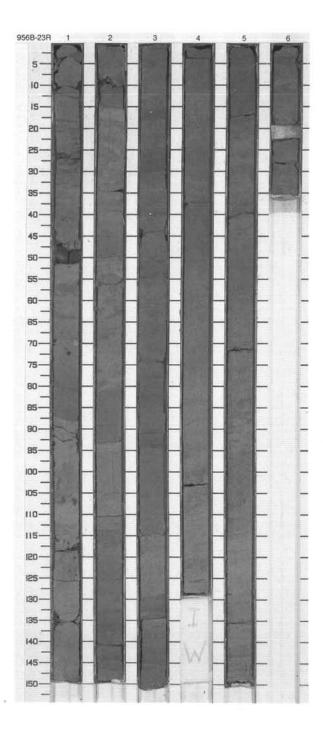
SIT	E 956 H	IOI	E	B CORE				CORED 349.2 - 358.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		**				CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: This core consists of alternating gray and olive green beds of CLAYEY NANNOFOSSIL MIXED
2		2		3				SEDIMENTARY ROCK, moderately bioturbated throughout. Slump folds and convoluted beds with disperse basaltic clasts are common in Section 6.  Minor Lithology:
4	3 3 SECULIA SE	3	ate Miocene	3			5Y	QUARTZ SILT with sharp lower contacts occurs in Section 4, 39–40, 67–68, 72, 98, 107–108, 131–132, and 137.5 cm; CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK with abundant lapilli-sized clasts of basalt and phonolite occurs in Section 5,
5		late	33		8	4/1	114–152 cm.	
7		5		3		0		
8		6		e 2		M		



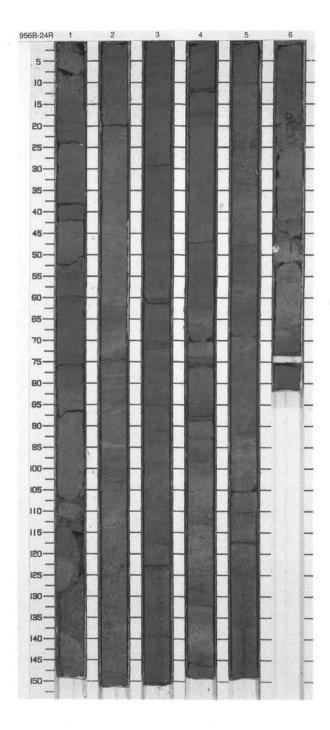
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and the same		1		2 }				CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK Major Lithology:
Trees a			2				This core consists of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK showing slu folds and convoluted beds; clasts of	
1111		2		2 }			5Y 5/1	basalt, carbonate, and black, lithic sand are common in Sections 5 and All the unit is slightly bioturbated and mottled throughout.
11.1				2				
The state		3	late Miocene	2 33				
11111111111				2		o		
1111111111		4		0				
The second		5		2				
Transition of				2				
ALL LAND		6		2	-			
1	<del>=====================================</del>	CC		55	1	М		



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The state of		1		} <u>_</u> A				CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: This core consists of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK showing
2		2		2				slump folds and convoluted beds; clasts of basalt, phonolite, and black, lithic sand are common in Sections 1, 2, 5, and 6. CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK also
2			е	**				occurs as alternating gray, olive green and bluish green, thin beds slightly bioturbated and mottled throughout (Section 3). These are occasionally overlain by thin units of the minor
THE PERSON		3	late Miocene	33			5Y 4/1	lithologies.  Minor Lithologies: Dark gray CRYSTAL, LITHIC SILTSTONE occurs in Section 1.
Carling County		4						25–27 cm, in Section 2, 8 and 49.5 cm, and dispersed in Section 4, 95–108 cm; WELDED TUFF (?) occurs in Section 1, 47–52 cm; gray CALCAREOUS SAND occurs in Section 5, 39 cm; and CALCAREOUS QUARTZ SAND occurs in Section 5,
The state of the s		5		<del>2</del> 33		0		71 cm.
,		6		2 2 3		м		

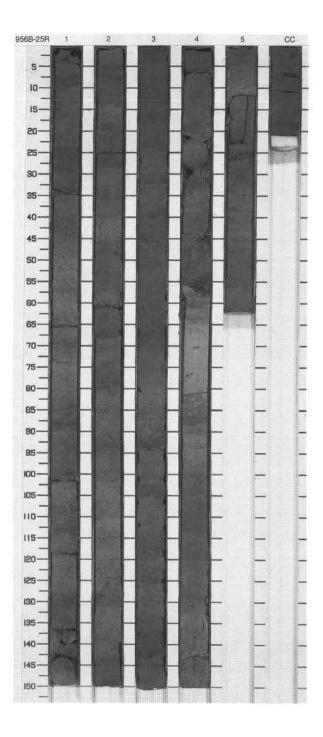


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Met		1 2 3 4	late Miocene Ag	Structure  33 C  33	Dist.	Sam	5R 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: This core consists of thin to medium beds of gray CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, occasionally underlain by very thin beds of the minor lithologies, which are moderately to extensively bioturbated and mottled throughout. In Sections 5 and CC, CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK shows slump folds, convoluted lamination, sandy folded beds, and a few clasts of phyric basalt.  Minor Lithologies: QUARTZ SILT occurs in Section 1, 23.5, 38, and 41 cm, in Section 3, 117–118 and 123–124 cm, and in Section 4, 7, 10, 16, and 88–89 cm; a chaotic mixture of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and poorly sorted LITHIC SAND WITH CARBONATE FRAGMENTS (debris
7		5		2 ¾ 2 <b>♦</b> ¾		О М		flow) occurs in Section 1, 106–150 cm; CRYSTAL, LITHIC SAND/SILTSTONE occurs in Section 2, 20–25, 47–49, 68.5–69, 105–106, and 117–118, in Section 3, 60–61 cm, in Section 5, 20 cm and in Section CC, 11–15 cm; CALCAREOUS SANDSTONE occurs in Section 4, 65–70 and 74–77 cm; and CLAYSTONE WITH NANNOFOSSILS occurs in Section CC, 70–82 cm.

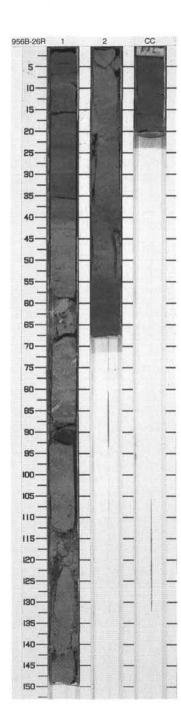


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
ΓΓ		1		***			2.5Y 4/2	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and CALCAREOUS ZEOLITIC TUFF Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK is the
2		2	ene	***		-	5Y 4/1	dominant lithology and makes up most of the core, occurring as thin to thick beds. It is slightly to strongly bioturbated and mottled throughout. CALCAREOUS ZEOLITIC TUFF occurs as a medium thickness bed in Section 4, 20–56 cm, that is partly parallel laminated.
4		3	late Miocene	3 3			5Y 4/1 to 10Y 4/1	Minor Lithologies: QUARTZ SILT occurs as very thin interbeds in Section 1, 33–34 cm, Section 2, 25 and 68 cm; Section 3, 94 cm, and at 7 cm in the Core Catcher; CALCAREOUS SILT occurs as a very
5		4		* = * * *	11	0	5Y 4/1	thin interbed in Section 1, 101–102 cm; CRYSTAL LITHIC SILT occurs as a very thin interbed in Section 1, 118–119 cm; ZEOLITIC CRYSTAL SILTSTONE occurs as a very thin interbed in Section 2, 61–62 cm, and in Section 5, 24–26 cm.
I work have		5 CC		3		М	10Y 4/1	

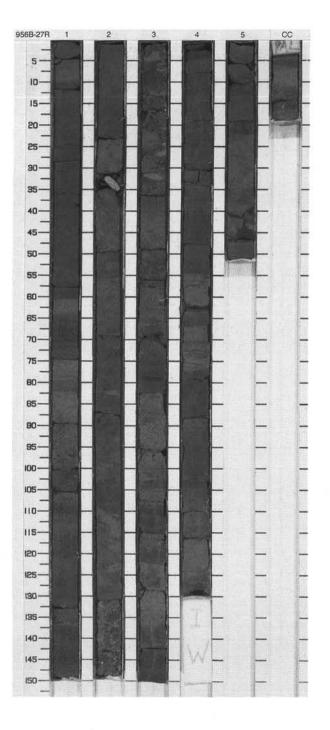
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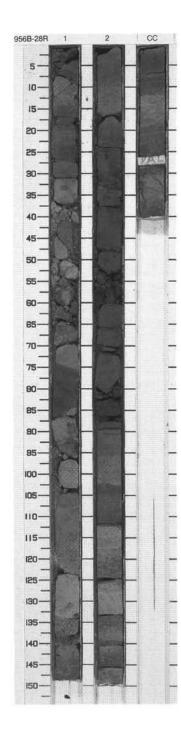
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1 2	late Miocene	\$ \$ * * * * * * * * * * * * * * * * * *	HH ////	O M	5Y 4/1 To 10Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK is the dominant lithology and occurs as thin to thick, moderately to strongly bioturbated beds.  Minor Lithologies: LITHIC MUD CLAST BRECCIA occurs
								as a very poorly sorted, medium thickness bed in Section 1, 59–76 cm. The mud clasts are composed of clayey nannofossil mixed sediment and measure up to 3 cm in length. The lithics consist of subangular to subrounded, dark green and black, aphyric, vesicular to nonvesicular basalt. BASALTIC CONGLOMERATE occurs as a thin bed in Section 1, 88–93 cm, and consists of subrounded to subangular, aphyric and phyric, nonvesicular to slightly vesicular basalt clasts in a clay matrix.



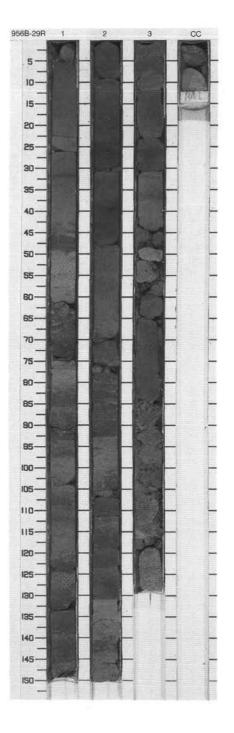
SI	TE 956 H	101	E	B CORE	2	7R		CORED 406.7 - 416.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1.00		1		***			10Y 4/1 to 5Y 3/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and MUD CLAST CONGLOMERATE WITH LITHICS Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK forms the
2		2	ene	≥ ≥ • •			5Y 3/1 to 10Y 3/1	dominant lithology and occurs as thin to medium bedded units that commonly have sharp silty bases (in Sections 1 and 2); as a medium bedded interval showing common soft sediment deformation features (deformed and folded laminae) and
5		3	late Miocene	***************************************			5Y 4/1 to 10Y 4/1	containing scattered mud clasts and volcanic lithics (in Section 2, 35–131 cm); or as thin to medium thickness, moderately to strongly bioturbated intervals that show minor greenish staining (in Sections 4 and 5). MUD CLAST CONGLOMERATE WITH LITHICS occurs as a clast-supported, very poorly sorted bed in Section 2, 131 cm, to Section 3, 36 cm. This bed is composed of about 75% pebblesize, subrounded clay clasts and 25% black or red, aphyric, vesicular and nonvesicular sand to pebbled-sized basalt clasts.
and the		5		*		м	5Y 4/1	Minor Lithologies: LITHIC QUARTZ SILTS occur as very thin massive or planar-laminated interbeds within the clayey nannofossil mixed sedimentary rocks in Sections 1 and 3. BASALTIC CONGLOMERATE occurs as a thin, matrix-supported washed out bed in Section 2, 31–35 cm, containing black and dark green subrounded basalt clasts and a rounded syenite clast. NANNOFOSSIL CLAY occurs as a thin bed grading into parallel- and cross-laminated siltstone in Section 4, 30–34 cm. CRYSTAL LITHIC SAND occurs as a very thin bed underlying clayey nannofossil mixed sedimentary rock in Section 4, 62–63 cm.



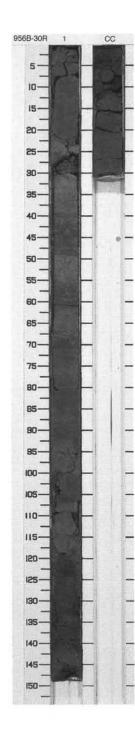
SIT	E 956 H	OL	E	B CORE				CORED 416.4 - 426.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	эпе	33	1/ N/ 1/ 1	19.1	10Y 4/1 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, NANNOFOSSIL CLAYSTONE, CLAYSTONE WITH NANNOFOSSILS, and MUD CLAST CONGLOMERATE WITH LITHICS
2		2	late Miocene	33		О М	2.5Y N2/0 to 5GY 3/1	Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and NANNOFOSSIL CLAYSTONE occurs as thin, generally, moderately bioturbated beds that have thin, sometimes planar-laminated silty bases in Sections 1 and 2. CLAYSTONE WITH NANNOFOSSILS occurs as thin moderately to strongly
								bioturbated beds that are commonly underlain by thin silts in Section 2 and in the Core Catcher. MUD-CLAST CONGLOMERATE WITH LITHICS occurs as a thick bed in Section 1, 37–70 cm, containing abundant black sand- to small pebble-size volcanic lithics scattered through a fine-grained clayey matrix.
								Minor Lithologies: SILTSTONE occurs as very thin, sometimes planar laminated, interbeds within clayey nannofossil mixed sedimentary rock, nannofossil claystone and claystone with nannofossils. LITHIC SANDSTONE WITH CRYSTALS occurs as thin interbeds in Section 2, 71–73 and 82–88 cm.



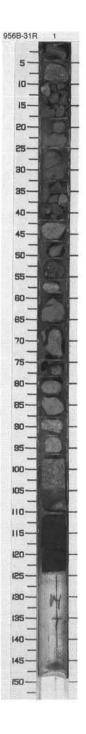
SIT	TE 956 H	IOL	E	B CORE	2			CORED 426.0 - 435.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 2		1 2	ate Miocene	***			10Y 4/1 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, NANNOFOSSIL CLAYSTONE, and CLAYSTONE WITH NANNOFOSSILS Major Lithologies: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, NANNOFOSSIL CLAYSTONE, and CLAYSTONE WITH NANNOFOSSILS occur as generally thin to medium
		3	late	3 33 33 33	1	0	5GY 3/1 to 10Y 3/1	thickness, slightly to strongly bioturbated beds that grade downward into siltstones that have sharp bases. They also occur as thin to medium thickness, slightly to moderately bioturbated intervals that lack silty bases.
4		CC		**	+	М		Minor Lithologies: MUD-CLAST CONGLOMERATE WITH LITHICS occurs as a very poorly sorted bed in Section 1, 61–75 cm,
								that contains pebble-sized, subrounded mud clasts (these comprise about 50% of total clasts) together with very coarse-grained, sand- to granule-sized black, dark green and red, angular to subangular volcanic lithics and crystal lithic sand. CRYSTAL LITHIC SILT and FORAMINIFER LITHIC SILT occurs as very thin interbeds within the clayey nannofossil mixed sedimentary rock, nannofossil claystone, and claystone with nannofossils.



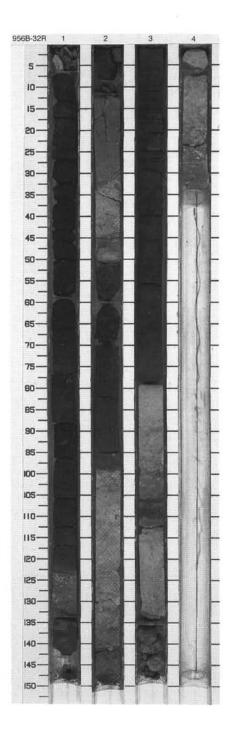
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1 CC	late Miomiddle Mio.	33 1 F	1 1111	Ом	10Y 4/1 to 5GY 3/1	NANNOFOSSIL CLAYSTONE and FORAMINIFER CRYSTAL LITHIC SAND  Major Lithologies: NANNOFOSSIL CLAYSTONE forms the dominant lithology and occurs as thin to medium thickness, moderately bioturbated beds, which have bioturbated tops and sharp, sometimes silty bases (In Section 1, 0–119 cm). In the Core Catcher, it occurs as a slightly bioturbated, otherwise structureless, bed (CC, 16–31 cm). FORAMINIFER CRYSTAL LITHIC SAND occurs as a poorly sorted, disturbed bed in Section 1, 142–149 cm.  Minor Lithology: SILTY CLAY occurs as a structureless disturbed bed containing black scattered lithics in Section 1, 119–142



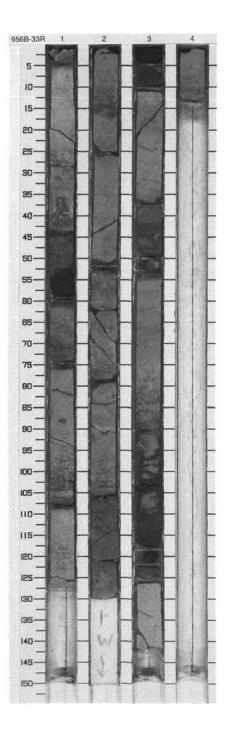
SIT	E 956	HOL	E	B CORE	3	1R		CORED 445.3 - 455.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
L	27.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	1	middle Mio.	333	^^^^^		5Y 2/1 to 5BG 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, VOLCANIC CLASTS, and CRYSTAL LITHIC SANDSTONE Major Lithologies: CLAYEY NANNOFOSSIL MIXED
								SEDIMENTARY ROCK occurs as a structureless to slightly bioturbated bed in Section 1, 0–41 cm. VOLCANIC CLASTS occur as a mixed collection in the interval 41–96 cm. They include welded tuff, phonolitic lava and vesicular basalt, and some sedimentary rocks, including chalk and bioclastic gravelly sandstone with volcanic lithics. CRYSTAL LITHIC SANDSTONE occurs as a finegrained, well-sorted bed containing black and dark green lithics and minor red rock fragments in Section 1, 105–124 cm.
								Minor Lithology: NANNOFOSSIL CLAYSTONE WITH LITHICS occurs as a thin, strongly bioturbated bed with a sharp base in Section 1, 96–105 cm.

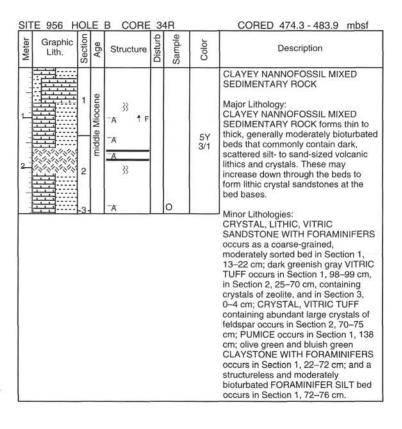


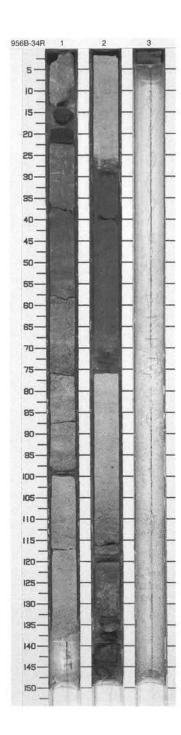
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Acres Courses		1					5BG 4/1	LITHIC CRYSTAL VITRIC TUFF, CLAYSTONE, NANNOFOSSIL CLAYSTONE, and SANDY CLAYSTONE
4			96			0		Major Lithologies: LITHIC CRYSTAL VITRIC TUFF
Transfer Land		2	middle Miocene	***	0	5Y 3/1 to 10Y 5/1	occurs as medium to very thick, black, well to moderately sorted, generally structureless beds in Section 1, 6–122 and 131–143 cm; Section 2, 0–11 and 44–97 cm; and Section 3, 0–78.5 and 133–150 cm. It contains small amounts of black, and minor amounts	
11000		3					5BG 4/1	of red, volcanic lithics, and green tuffaceous fragments. Some intervals show eroded bases and zeolitic cement. In Section 3, 0–78.5 cm, the
A Line of Line		4		* * * * * * * * * * * * * * * * * * *			10Y 5/1 to 10Y 3/1	tuff is well sorted and normally graded It is composed dominantly of dark green, well-sorted felsic clasts and glass shards and pumice, with abundant feldspar crystals and some amphiboles. It also contains about
								3%–5% reddish brown oxidized volcanic clasts. There is zeolitic cement and abundant zeolites in the pore spaces in the coarser grained tufi at the base of the interval. Strongly bioturbated CLAYSTONE occurs in Section 1, 122–131 cm, and in Sectior 2, 11–31 cm. NANNOFOSSIL CLAYSTONE occurs as a strongly bioturbated bed in Section 2, 31–44 and 97–139 cm, Section 3, 78.5–133 cm, and Section 4, 0–33 cm. SANDY CLAYSTONE occurs as a strongly bioturbated bed in Section 2, 139–152 cm. In this bed, the sand-sized particles are lithic vitric tuff.



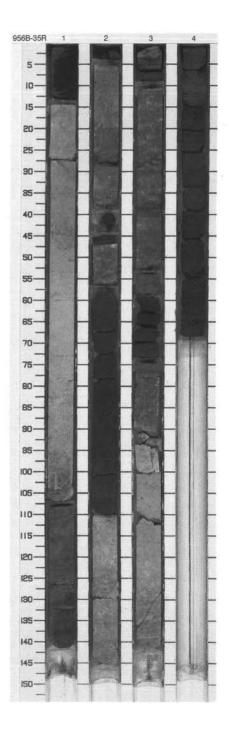
SIT	E 956	но	LE	B CORE	33			CORED 464.6 - 474.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	9	33 † F 222 † F 333			10Y 5/1 to 5BG 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin
		2	middle Miocene			10-	10Y 5/1 to 5Y 4/1	to thick, generally moderately bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.
C. Line to a Line		3		**			10Y 5/1 to 2.5G 2.5/0	Minor Lithologies: CRYSTAL LITHIC VITRIC TUFF occurs as thin, well-sorted, but generally structureless beds in Sec 1, 59–61 cm (this interval contains very abundant large feldspar crysta and in Section 3, 0–10 cm.
								CLAYSTONE occurs as a medium thickness, moderately bioturbated bed that contains dispersed silt-sized crystals and lithics in Section 2, 106–130 cm, and Section 3, 80–113 cm, where it contains nannofossils and foraminifers. SILTY CLAYSTONE occurs as thin interbeds in Section 1. Planar-laminated and vuggy ZEOLITIC CLAYSTONE occurs in Section 3, 37–50 cm. ZEOLITIC ASH containing crystals of amphibole, biotite, and feldspar and with a sharp base occur in Section 3, 50–55 cm. FORAMINIFER CRYSTAL VITRIC SILTSTONE occurs as thin interbeds in Section 1 and 2, and LITHIC CRYSTAL VITRIC SANDSTONE WITH FORAMINIFERS occurs as a fine- to medium-grained, zeolitic, structureless bed in Section 3, 113–126 cm.



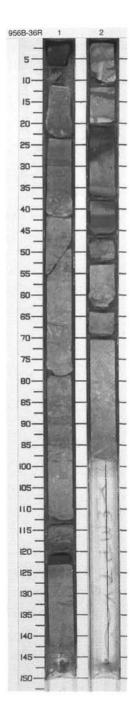




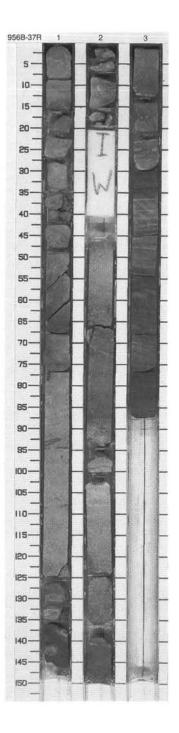
SI	TE 956 H		E	B CORE	_			CORED 483.9 - 493.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1 3	middle Miocene	-A		0	5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, generally moderately bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: Black and dark green gray VITRIC TUFF with slumped structures occurs in Section 1, 0–13 and 130–141 cm; VITRIC, CRYSTAL, LITHIC SANDSTONE occurs in Section 2, 0–3, 26–28, and 38 cm; CRYSTAL, LITHIC SANDSTONE occurs in Section 1, 14.5, 27, and 100–107 cm, in Section 2, 38–46 (parallel laminated), 56, 56–110 (showing
								parallel-lamination, inverse grading, but 1 cm coarser at bottom), 129–130, 146 cm, in Section 3, 0–9, 59–79 (parallel laminated), and 128–140 cm; dark gray CLAYSTONE WITH NANNOFOSSILS occurs in Section 3, 9–40 cm; and dark green to black CRYSTAL, LITHIC LAPILLISTONE with intervals of coarser grain occurs in Section 4, 0–68 cm.



SIT	TE 956 H	OL	E	B CORE	3	6R		CORED 493.6 - 503.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
12		1	middle Miocene	333 333 ≡ -A 33 ≡ -A 333	+++++++++	0	10Y 3/1 to 5GY 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, generally moderately bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: Dark green BASALTIC, PHONOLITIC LAPILLISTONE occurs in Section 1,
								0–6 cm; ZEOLITIZED VITRIC CRYSTAL TUFF occurs in Section 2, 10–47 (partially parallel laminated), 59–61, and 84–85 cm; green CLAYSTONE WITH NANNOFOSSILS occurs in Section 1, 6–9 cm; gray LITHIC, CRYSTAL SANDSTONE occurs in Section 1, 9–11 cm, and in Section 2, 47 and 51 cm; and green CLAYEY SILTSTONE occurs in Section 1, 11–38 cm.

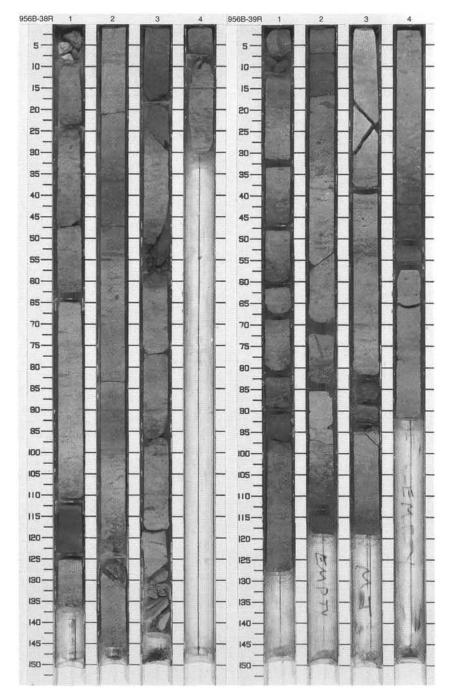


SI	TE 956 H	1OL	E	B CORE	3	7R		CORED 503.3 - 512.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		2	middle Miocene	A* 333	^^^^^^^^^^^^^^^^^^^^^^	0	5GY 4/1 to 5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, generally moderately bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: VITRIC TUFF occurs in Section 1, 14–16 and 125–146 cm (very poorly sorted with same pumice) and in Section 2, 0–15 cm; CRYSTAL, LITHIC SANDSTONE occurs in
								Section 1, 35–41, 65–68, 75–77, and 94–94.5 cm, in Section 2, 45–50, 62–66, and 140 cm, and as dispersed specks at 88–95, 96, 100.5, 123.5, and 136 cm, and in Section 3, 30–33 (parallel laminated) and 78–89 cm; ZEOLITIZED VITRIC TUFF occurs in Section 2, 140–147 cm, and in Section 3, 0–8 and 8–33 cm; and ZEOLITIZED CRYSTAL, LITHIC TUFF occurs in Section 3, 33–78 cm.

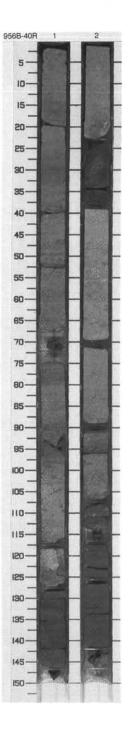


Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3.	2	middle Miocene	33 -A 33 -A -A 33 -A 33		0	5GY 4/1 to 10Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: Light, olive green and gray CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, generally moderately bioturbated beds that commonly contain dark, scattered silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: Gray LITHIC SILTSTONE occurs in Section 1, 125 cm, and in Section 4, 7–12 and 22–29 cm; CRYSTAL LITHIC SANDSTONE occurs in Section 2, 20–21, 46, 49, 123–129, and 146–150 cm; and VITRIC TUFF occurs in Section 3, 7–17 and 46–61, and disperse at 95–98 cm.

Graphic Lith.	Section	Structure	Disturb	Sample	Color	Description
	1 2 3 4	-A 333 1 F		0	5GY 4/1 to 10Y 3/2	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: Light, olive green and gray, CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, generally moderately bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: Brownish gray VITRIC TUFF occurs in Section 1, 40–46 cm, normally graded at 82–97 cm, in Section 2, 78–84 and 94–119 cm, in Section 3, 83–87 cm, and in Section 4, 28–53 cm; and dark green gray CRYSTAL SILT/SANDSTONE occurs in Section

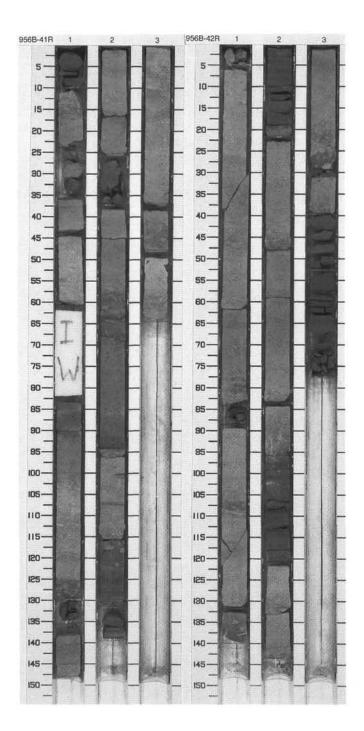


SIT	E 956 H	IOL	E	B CORE	4	0R		CORED 532.3 - 541.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2		1	middle Miocene	A* 333 -A = 3 -A = 780 -A 333		О	5GY 4/1 to 10Y 5/2	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: Light, olive green and gray, CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, extensively to slightly bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.
								Minor Lithologies: Light gray CRYSTAL TUFF occurs in Section 1, 51–52 cm (parallel laminated); dark green gray VITRIC TUFF occurs in Section 1, 123–146 cm (parallel laminated) and in Section 2, 107–147 cm; dark green VITRIC, CRYSTAL TUFF occurs in Section 2, 22–37 cm (convolute lamination); gray CRYSTAL LITHIC TUFF occurs in Section 2, 91–92 cm; brownish gray LITHIC SANDSTONE occurs in Section 1, 38 cm; and GRAVEL OF CRYSTAL, LITHIC TUFF occurs in Section 1, 146–150 cm.

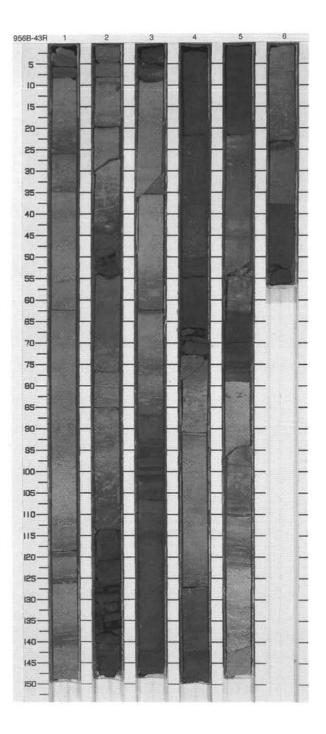


SIT	E 956	HO	LE	B CORE	4	1R		CORED 541.9 - 551.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3		2	E	-A 333 = = -A 33 = = -A 33 = = -A 33 = = -A 33	HHHHHHHHHHHHHHHHH	0	5GY 4/1 to 10Y 4/2	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithology: Light, olive green and bluish gray CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK occurs as thin to thick, moderately to extensively bioturbated beds that commonly contain dark, scattered, silt- to sand-sized volcanic lithics and crystals. These may increase down through the beds to form lithic crystal sandstones at the bed bases.  Minor Lithologies: Brownish green VITRIC TUFF occurs
								in Section 1, 0–5 cm (parallel laminated), 7–9, 125–135 cm, and in Section 2, 85–94 and 115–138 cm (partially parallel laminated); disperse LITHIC, VITRIC TUFF occurs in Section 2, 15–16 cm; and gray LITHIC, CRYSTAL SANDSTONE occurs in Section 1, 5–5.5 and 19–35 cm, and in Section 3, 58–64 and 41–47 cm.

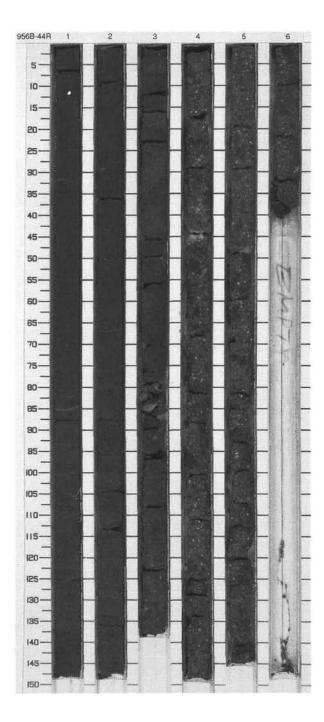
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
men freeze brosen		1	Miocene	₩ } ₩ <u></u> + F		0	5GY 4/1 to 5GY 5/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK and VITRIC TUFF  Major Lithologies: This core consists of thick interbeds o CLAYEY NANNOFOSSIL MIXED
2		2	middle Mi	= † F 33 = 33 33 33 33 33 34 35 36 37 38 38 38 38 38 38 38 38 38 38		ć	5GY 4/1 to 10Y 3/1	SEDIMENTARY ROCK and VITRIC TUFF. The CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK are slightly to moderately bioturbated. The VITRIC TUFF consist of thin-laminated, normally graded, fine vitric tuff with minor lithic fragments and foraminifers at the bases.
Trans.		3		' ≡ 1 F ≡ 1 F	1		5Y 2/1	General Description: Several 1-cm displacement, normal faults with slickensides occur in



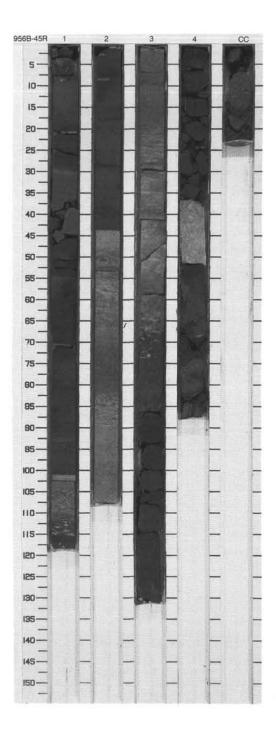
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Leave Landerson		1		33 333 333 333			10GY 3/0 to 5GY 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, VITRIC TUFF, and LITHIC CRYSTAL VITRIC TUFF Major Lithologies: This core consists of thick interbeds of CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK, VITRIC TUFF,
2		2		1 F 555			10GY 4/0 to 5GY 3/1	and LITHIC CRYSTAL VITRIC TUFF. The CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK is moderately to strongly bioturbated. VITRIC TUFF and LITHIC CRYSTAL VITRIC TUFF commonly fine upward and are thickly
T		3	middle Miocene	33 35 -		0	10GY 3/0 to 5GY 3/1	laminated to thin bedded.
		4		† F = = + F   1			10Y 4/1 to 5GY 3/1	
7		5		**************************************			10Y 5/1 to 5GY 3/1	



SIT	E 956 H	IOL	E	B CORE	4	4R		CORED 570.7 - 580.4 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Loca Brackers		1		1 F				HYALOCLASTITE TUFF and HYALOCLASTITE LAPILLISTONE  Major Lithologies: HYALOCLASTITE TUFF occurs as a dark green, normally graded bed in Section 1, 0–149 cm which grades into HYALOCLASTITE LAPILLISTONE
2		2		↑F ↑F		0	5BG 4/1	towards its base. It is composed of 95% vitric material and 5% dark green and red lithics. HYALOCLASTITE LAPILLISTONE occurs as a thick poorly to very poorly sorted bed from Section 2, 0 cm to Section 6, 41 cm. In Sections 2–3, it is normally graded
4		3	niddle Miocene	1 F		U		throughout and composed primarily of dark green to dark purple, subangular lapilli of nonvesicular (comprise about 60% of the clasts) and vesicular basalt (comprise about 40% of the clasts). Most of the basalt clasts are aphyric although minor pyroxene phyric clasts
5		4	midd				5G 3/1	also occur. Very rare clasts of clay and clayey nannofossil mixed sedimentary rock with foraminifers occur. In Sections 4–6, the lapillistone is structureless. It is clast-supported and the lapilli are subrounded to subangular and range from coarse
7		5		1			to 10GY 2.5/0	sand to large pebble in size. The deposit is composed of about 20% matrix and 80% clasts. Two main clast types are present: 1) About 30%–60% (depending on the interval) are subangular to subrounded dark purple to black basalt fragments. Most are nonvesicular and aphyric, but
								pyroxene- and plagioclase-phyric varieties are also present. This type also contains some reddish brown oxidized clasts and pillow basalt fragments with quenched rims. 2) About 40%–70% pale green to white, mainly subrounded, altered glass shards. Most are nonvesicular, but many larger fragments are moderately vesicular. Some are pyroxene-phyric. Dark, fine-grained, noncalcareous matrix, makes up 20% of the deposit, although a fine-grained calcareous band occurs in Section 4, 42–44 cm.

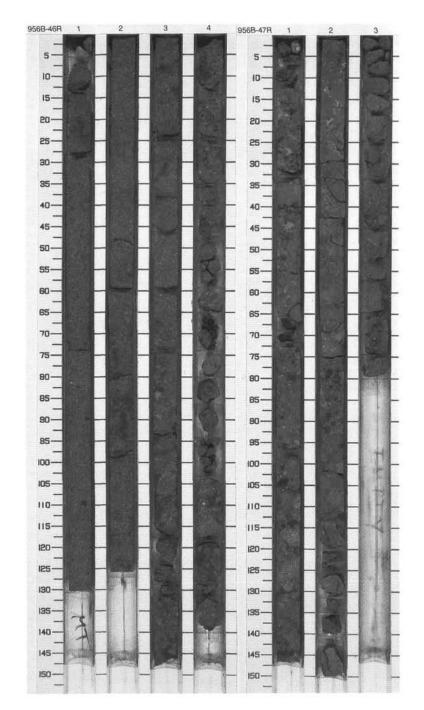


$\neg$	E 956 H			B CORE				
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 2 3	middle Miocene	### ##################################		E		VITRIC TUFF, NANNOFOSSIL CLAYSTONE WITH FORAMINIFERS, and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK  Major Lithologies: This core consists of interbeds of VITRIC TUFF, NANNOFOSSIL CLAYSTONE WITH FORAMINIFERS, and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK. VITRIC TUFF units are very fine to coarse, planar- to cross-laminated with sharp basal contacts. NANNOFOSSIL CLAYSTONE WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK are generally strongly to moderately bioturbated.  General Description: Color ranges from 3BG 2/1 to 9BG 3/1.

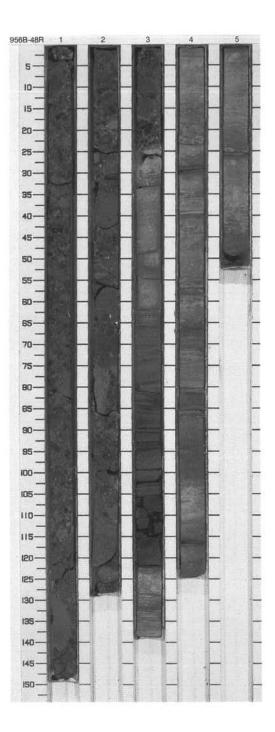


SIT	E 956 H	IOL	E	B CORE	4	6R		CORED 590.0 - 599.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Thursday	1	1		† F				BASALTIC LAPILLISTONE  Major Lithology: The core consists exclusively of BASALTIC LAPILLISTONE, with angular to subangular clasts of
2		2	middle Miocene	† F				vesiculated and phyric basalt, and is normally grading throughout the core. The size of clasts reaches up to 6.5 cm at the bottom of Section 4.
The later from		3	middle	† F			2.5G 3/0	
5		4		† F	^^^^^^^			

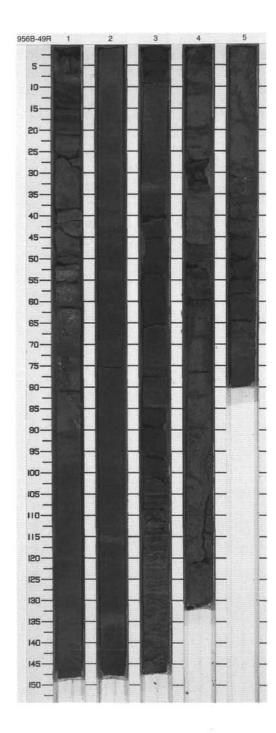
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		2	middle Miocene		FFFF F		5PB 3/2 to 5B 4/1	BASALTIC BRECCIA  Minor Lithologies: BASALTIC BRECCIA makes up the entire core. It is very poorly sorted and clast supported. It consists mainly of angular to subangular, dark purple basalt clasts (these form about 90% of the clasts), the remainder being reddish orange altered basalt, or small nonvesicular hyaloclastite fragments. Rare, small white clasts also occur tha may be altered, felsic pumice. Clast size ranges from 2 mm to more than 70 mm. Most clasts are nonvesicular and phyric containing altered olivine and pyroxene phenocrysts. However, many of the larger clasts are slightly
1 1 1					土			



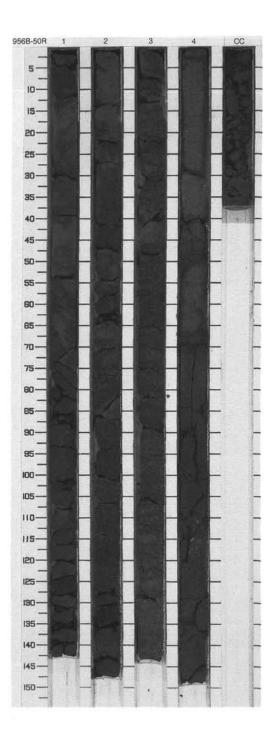
	Canabi-	E			9	9	_	
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Alen Lendhan		1					5GY 3/1 to 5B	BASALTIC BRECCIA, NANNOFOSSI CLAYSTONE WITH FORAMINIFERS and CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK WITH FORAMINIFERS Major Lithologies: BASALTIC BRECCIA consists of class
2		2	Miocene				4/1	supported, poorly sorted pebble to cobble-size basalt. Clasts are subround to subangular, 90% are nonvesicular, 50% have abundant olivine and pyroxene phenocrysts, 50% aphyric or have small
4	2°2°2°2°3°3°3°3°3°3°3°3°3°3°3°3°3°3°3°3	3	middle	†c = ==================================			7.5GY	
5		4		# = # = # = # = # = # = # = # = # = # =			2.5/1 to 5GY 4/1	part of the core and are strongly bioturbated with thick laminations of calcareous sandstone, foraminiferal sandstone, and minor crystal lithic sandstone.
	3	5		333				



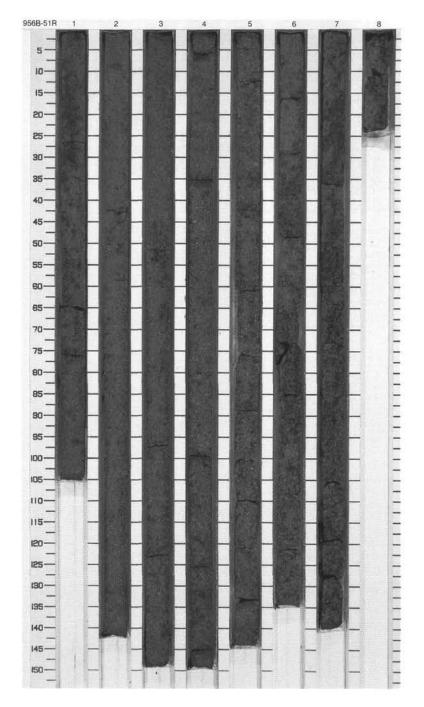
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	二:	1 2 3	middle Miocene	↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑			7.5GY 2.5/1 to 5GY 2/1	HYALOCLASTITE TUFF  Major Lithology: This core consists mostly of HYALOCLASTITE TUFF. One very thick, fining upward sequence occurs in Section 1, 49–148 cm, and throughout Sections 2, 3, 4, and 5. The HYALOCLASTITE TUFF are moderately sorted, very fine to coarse, composed of 60% green hyaloclastite and 40% basaltic lithic grains (some reddish). Dispersed pyroxene are also present.  Minor Lithology: CLAY CLAST BRECCIA occurs in Section 1, 25–49 cm, and consists of nannofossil claystone rip-ups in a matrix of coarse-grained foraminifer lithic vitric sand.  General Description: Color is uniform throughout.



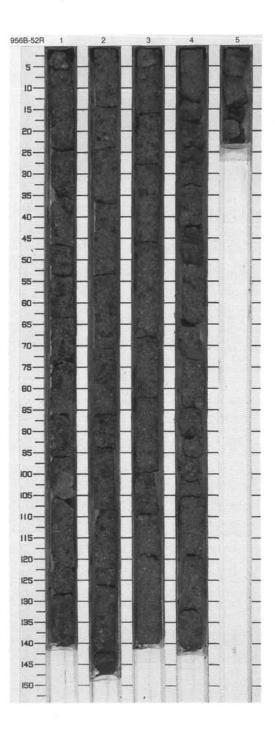
SIT	E 956 H	OL	E	B CORE	50	R		CORED 628.7 - 638.2 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Contractions of		1		at a				HYALOCLASTITE TUFF Major Lithology: This core consists of moderately sorted, medium- to coarse-grained HYALOCLASTITE TUFF. The sequence is composed of 70%
2		2	Miocene		++++++++++		7.5GY 2.5/1	hyaloclastite and 30% basaltic lithic grains (some reddesh and oxidized). Dispersed pyroxene crystals are also present. Color is uniform throughout.
4		3	middle	•			to 5GY N2.5/0	
5		4			444444			
6		CC			<u>+</u>			



SI	E 956 H	$\overline{}$	E	B CORE	5	1R		CORED 638.2 - 647.6 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1						HYALOCLASTITE TUFF Major Lithology: This core consists entirely of poorly to very poorly sorted, medium- to coarse-grained HYALOCLASTITE TUFF. The
2		2					5BG 4/1 to 7.5GY 2.5/1	sequence is composed of 50%–70% hyaloclastite (depending on the core interval) and 50%–30% basaltic lithic grains (of which about 2% are reddishorange and oxidized). Dispersed pyroxene crystals also occur. Color is
3		3						unitorm throughout.
1 F		Contract of the Contract of th	middle Miocene					
5		4	middle !					
1		5					5G	
7		6					2/1 to 5BG 4/1	
1111		7						
-		8						

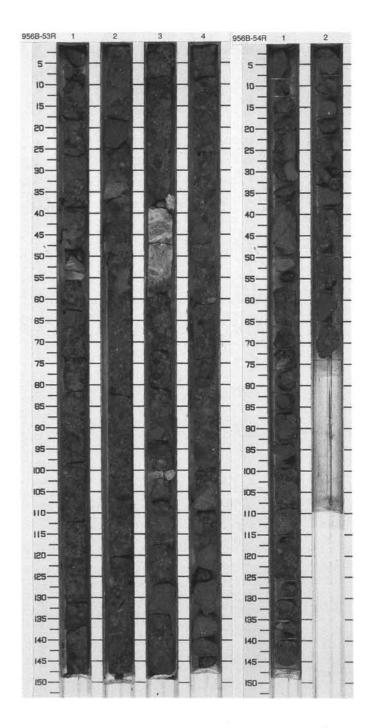


151		-		B CORE	_			CORED 647.6 - 657.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1					+			HYALOCLASTITE LAPILLISTONE
and Toursely		1						Major Lithology: This core consists entirely of poorly to very poorly sorted, medium- to coarsegrained HYALOCLASTITE TUFF. The sequence is composed of 40%–50%
The Line		2	niddle Miocene					hyaloclastite (depending on the core interval) and 50%-60% basaltic lithic grains (of which about 2% are reddishorange and oxidized). Dispersed pyroxene crystals also occur. Color is uniform throughout with a range between 0.5BG 2/0.3 and 8BG 2/0.5.
1		3	Ibbim	٠				
.1		4						

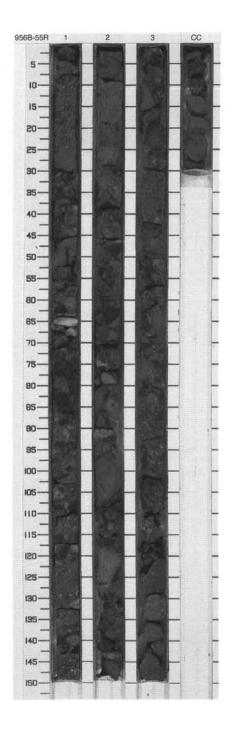


SIT	TE 956 H	101	E	B CORE	5	3R		CORED 657.3 - 666.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 2 3		3	middle Miocene	1 F 1 F 1 F			7.5GY 3/1 to 2.5G 2.5/0	BASALTIC LAPILLISTONE  General Description: The core consists of greenish black, poorly to moderately sorted BASALTIC LAPILLISTONE, with clasts of highly to poorly vesiculated basalt, pyroxene and olivine phyric and aphyric basalt and reddish altered basalt. Clasts of light green CLAYEY NANNOFOSSIL MIXED SEDIMENTARY ROCK showing amalgamated contacts occur in Section 1, 43–56 and 80–81 cm, in Section 2, 31–38, 54–60, and 128–130 cm, and in Section 3, 39–57 and 100–103 cm. The size of clasts ranges from millimeters to approximately 7 cm.

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
,		1	middle Miocene		HHHHHHHHH		5Y 2/1 to 5BG 4/1 7.5G 2.5/0	BASALTIC LAPILLISTONE AND BRECCIA  General Description: This core consists exclusively of purplish black, poorly sorted BASALTIC LAPILLISTONE and BRECCIA. Clasts composed of poorly to highly vesiculated basalt, plagicolase and olivine-phyric basalt.
				3	1		2.37	aphyric basalt, reddish altered basalt and light green clayey nannofossil mixed sedimentary rock are supported in a green, fine-grained matrix, which makes up 20%—30% of the deposit. The morphology of the clasts varies from angular to rounded, and shows low to high sphericity. Their size ranges from millimeters to 12 cm.



SIT	E 956 F	_	_	B CORE	_		_	CORED 676.6 - 686.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
NOTE TO SECURE		1		† F	111111111		7.5G 2.5/0 to 5GY 4/1	HYALOCLASTITE LAPILLISTONE AND BRECCIA  General Description: This core consists exclusively of green and purplish black, poorly sorted HYALOCLASTITE LAPILLISTONE
Contract Dates		2			+++++		5GY 2/1 to 7.5G 2.5/0	AND BRECCIA. Clasts composed of poorly to highly vesiculated basalt, phyric basalt, reddish altered basalt, and light green clayey nannofossil mixed sedimentary rock (showing amalgamated contacts) are supported in a green, fine-grained matrix, which
A Division I		3			1111111		5GY 3/1	makes up 40%—50% of the deposit. The morphology of the clasts varies from angular to rounded, and shows low to high sphericity. Their size ranges from millimeters to 13.5 cm.
		cc			1		7.5G 2.5/0	



SIT	E 956 H	OL	E	B CORE	56	6R		CORED 686.3 - 696.0 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
and boaten		1					5PB 3/2 to 5BG 4/1	BASALTIC LAPILLISTONE AND BRECCIA  General Description: This core consists exclusively of greenish gray, poorly sorted BASALTIC LAPILLISTONE and
Transferred Transferred		2					2.5G 2.5/0 to 5GY 2/1	BRECCIA. Clasts composed of poorly to highly vesiculated basalt, plagioclase and olivine phyric basalt, aphyric basalt, reddish altered basalt, pillow basalt fragments with quenched rims, and light green clayey nannofossil mixed sedimentary rock
3		3					5B 4/1	are supported in a green, fine-grained zeolitized matrix, which makes up 20%–30% of the deposit. The morphology of the clasts varies from angular to rounded, and shows low to high sphericity. Their size ranges from millimeters to 28 cm.

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1			\\\\\\		5GY 3/1	BASALTIC BRECCIA  General Description: This core consists exclusively of dark green, poorly sorted BASALTIC BRECCIA. Clasts composed of poorly
								to highly vesiculated basalt, plagioclase and olivine phyric basalt and aphyric basalt are supported in a green, fine-grained, zeolitized matrix, which makes up 20%–30% of the deposit. The morphology of the clasts varies from angular to rounded, and shows low to high sphericity. Their size ranges from millimeters to 9 cm.

