			SIT	E 1013	HC	)LE	A COR	E ·	1H		CORED 0.0 - 5.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			3		1 2 3	Quaternary		MMMMM	<i>s s</i> – M	2.5Y 3/2 5Y 4/2 2.5Y 3/2 5Y 3/2	SILTY CLAY WITH FORAMINIFERS AND NANNOFOSSILS  Major Lithology: This core consists of very dark grayish brown (2.5Y 3/2) to olive gray (5Y 4/2) SILTY CLAY WITH FORAMINIFERS AND NANNOFOSSILS. Traces of dolomite, diatoms, pyrite, sponge spicules, and organic matter are also present.  Minor Lithology: Three thin laminations of dark brown QUARTZ FELDSPAR SAND WITH FORAMINIFERS occur in Section 2.  General Description: The core is homogeneous within broad color bands. No distinct burrows are evident. The sediment emits a strong sulfurous odor.

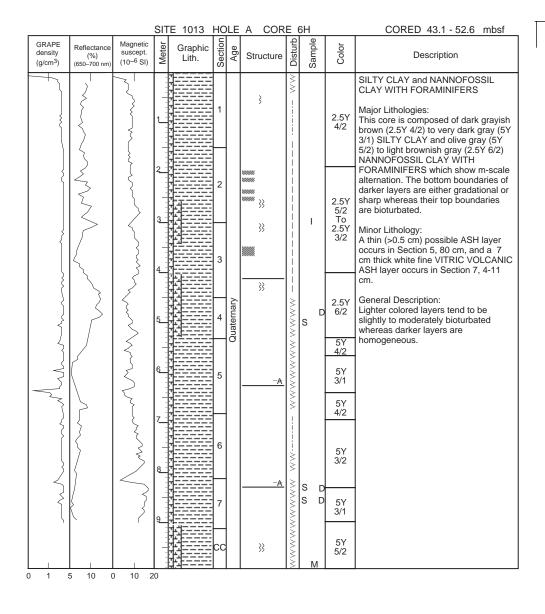


			SIT	E 1013			A COR				CORED 5.1 - 14.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	{	$\rightarrow$		·						5Y 3/1	SILTY CLAY and CLAY NANNOFOSSIL MIXED SEDIMENT
			1_		1					5Y 4/2	Major Lithologies: This core is composed of thick, irregular alternations between very dark grayish brown (2.5Y 3/1) to dark
			2 2 3		2					5Y 3/2	olive gray (5Y 3/2) SILTY CLAY and medium dark gray (10Y 5/1) CLAY NANNOFOSSIL MIXED SEDIMENT. Small amounts of sponge spicules, glass, pyrite, diatoms, and organic matter are detected in most samples.  General Description: The core is mostly homogeneous, but
{		}	4_		3	Quaternary				5Y 3/1	locally includes discrete burrows, including Chondrites.
			5		4		>>		I S	2.5Y 3/2	
}	{						» » «		S	5Y 4/2	
}	{	}	6				}			5Y 3/1	
			7_		5		3			2.5Y 4/2	
	}	}			6		3		S	10Y 5/1	
1 1.5	0 10 5	15	25								

			SIT	E 1013		LE	A COR		3H		CORED 14.6 - 24.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			111111111		1			~~~~~		10Y 4/1	SILTY CLAY and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS
{		}	1_							5Y 4/2	Major Lithologies: This core consists of uneven 20-100 cm alternations between very dark grayish
}		}	2							5Y 3/2	brown (2.5Y 3/2) to dark olive gray (5Y 3/2) SILTY CLAY and olive gray (5Y 5/2) CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS.
}		}			2		}			5Y 4/1 5Y	Color transitions are gradational.
}	$\left  \frac{1}{2} \right $	}	3_					i		3/2 5Y 5/3	Minor Lithology: A thin lamination of QUARTZ FELDSPAR SAND WITH
}	{	}			3		,	Ì	S	2.5Y 3/2	FORAMINIFERS occurs near the top of Section 3.
			5		4	Quaternary	<b>&gt;</b> >>		I	5Y 3/1 To 5Y 5/2	General Description: Cm-scale laminations occur near the base of Section 5. Chondrites trace fossils are present at the top of Section 4. The sulfurous odor is replaced by a petroliferous odor in this core.
{		}			١		3	Ì		5Y 3/1	
}	$  \rangle  $	{	7		5		<b>3</b>	Ì		5Y 5/2	
}			8		6					5Y 3/1 To 5Y 4/2	
	}	{	9_						S	5Y 5/2	
{		}			7					5Y 3/1	
1 1.5	5 10 0	) 10 2	10 20		СС				М	5Y 2.5/2	

			SIT	E 1013		LE	A COR				CORED 24.1 - 33.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
}	}	}								2.5Y N2/0	SILTY CLAY and NANNOFOSSIL OOZE WITH CLAY
			1		1			wwwww.		5Y 3/1	Major Lithologies: This core consists of thick, 100-200 cm-scale alternations between black (2.5Y N2/0) to very dark gray (5Y 3/1) SILTY CLAY and light olive gray (5Y 5/2) NANNOFOSSIL OOZE WITH
}			3_		2		<u>•••</u>	WWWWWWWWWW		5Y 5/2	CLAY. Transitions are gradual. Darker colored sediments contain a few percent organic matter.  Minor Lithology: Two thin, fine to medium-grained, graded beds of dark olive gray (5Y)
		}	4_		3	ıary	<b>**</b> <b>**</b>	\	S	5Y 3/2	graded beds of dark other gray (ST) 3/2) FORAMINIFER SILTY SAND occur at the top of Section 3.  General Description: The core is moderately burrowed to homogeneous. A large vertical burrow
}		}	5		4	Quaternary	% % %		S	5Y 3/1	extends from Section 6, 34 cm to 56 cm. Chondrites is present at the top of Section 4.
}	$\left  \left\{ \right  \right $	}	6				}} }}	,		5Y 4/2 5Y	
}		}	-				>>>	wwwwww	S	3/1 5Y 4/2	
}		}	7		5		}} }} }}	\ \ \		5Y 5/2	
	>	}	-				}			5/2	
			8		7		} }} }}			5Y 4/1	
) 1 (	<u> </u>	10 2	20								

			SIT	E 1013		LE	A COR	E			CORED 33.6 - 43.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2		1			MMMMMM	S	5Y 5/1 2.5Y 3/2 5Y 3/1	SILTY CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT  Major Lithologies: This core is composed of very dark gray (5Y 3/2) SILTY CLAY and olive gray (2.5Y 4/2) NANNOFOSSIL CLAY MIXED SEDIMENT which show decimeter- to meter-scale irregular alternations. The basal boundaries of darker layers are sharp whereas their upper boundaries are bioturbated.  Minor Lithology: Small pod of FORAMINIFER SAND occurs in Section 7. 8 cm.
			4		3	Quaternary	- - ***		1	2.5Y 4/2 10Y 3/1 5Y 3/1	General Description: This core is slightly to moderately bioturbated in the middle part and homogeneous in the upper and lower parts.
			6		5		**************************************		S	To 2.5Y 4/2 2.5Y 4/2 2.5Y 3/2 5Y	
			9		7		S		S	2.5/2 5Y 4/1 2.5Y 3/2	
0 1	1 1 5 10 C	) 10 2	20		СС			≷	M		



			SIT	E 1013	НС	LE	A COR	E 7	7H		CORED 52.6 - 62.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		} }	///		5Y 4/1 To 5Y 4/2	CLAY and NANNOFOSSIL OOZE WITH CLAY  Major Lithologies: This core is composed of m-scale alternations of dark grayish brown (2.5Y 4/2) to very dark gray (5Y 3/1)
}			2		2		<b>-</b>			2.5Y 3/2 To 2.5Y 5/2	CLAY and light olive gray (5Y 6/2) to olive gray (5Y 5/2) NANNOFOSSIL OOZE WITH CLAY. The boundaries are gradational.  General Description: The core is slightly to moderately
		{	3_				33 33 33 A•			5Y 3/1 5Y 6/3	bioturbated.  Note: Gas expansion of sediments beyond core liner occured in Sections
}		}	4		3		}} }} }}	MM		5Y 5/2	4 and 5. Expanded material (150-153 cm) is stored separately.
		}	5_		4	Quaternary		\ \		4/2 5Y	
}		}	6		_		<b>-</b> 33	W.W.		4/1 5Y 3/2 5Y	
	}	}	7_		5					3/1 5Y 4/1	
		}	8 -					*		5Y 3/1 5Y 4/1	
		\{\}			6		}} }} }}		S	5Y 3/2 5Y 6/2	
{		{	9	- Linguinia	7		** ** ** ** **		S	2.5Y 4/2 5Y	
0 1	0 10 0	) 10 2	20		СС			Ш	M	3/1	

GRAPE (density) Reflectance (%) (sport) (sport
ANNOFOSSIL OOZE WITH SILT AND FORAMINIFERS  3 /1

CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and CARBONATE CLAY  SY Major Lithologies: This core consists of olive (5Y 5/3) CLAYEY NANNOFOSSIL OOZE WITH				SIT	E 1013	HC	LE	A COR				CORED 71.6 - 81.1 mbsf
FORAMINIFERS and CARBONATE CLAY  Major Lithologies: This core consists of olive (5Y 5/3) CLAYEY NANNOFOSSIL OZZE WITH FORAMINIFERS and dark olive gray to olive gray (5Y 3/2 to 5Y 4/2)  S S S S S S S S S S S S S S S S S S S	density	(%)	suscept.	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
S S S S S S S S S S S S S S S S S S S				1		1		<b>♦</b>	M			FORAMINIFERS and CARBONATE CLAY  Major Lithologies: This core consists of olive (5Y 5/3) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and dark olive gray to olive gray (5Y 3/2 to 5Y 4/2)
A large (4 cm) rounded cobble of CARBONATE RUDSTONE (shell fragments?) occurs in Section 1, 110 cm. In Section 2, 116-120 cm, is a layer with similar composition to the carbonate rudstone cobble but with a sharp basal contact. It unclear whether it is a bed, concretion, or cobble.  General Description: The lower portion of the core is homogeneous and shows lineations parallel to the wall of the core suggesting probable sediment flow during drilling.	\\			3		2		&@				content is about 10%-15% in the upper portion of the core. Sections 3 through 7 are homogeneous and show flow structures indicative of coring
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4		5	Quaternary		MMMMMMMMMMMMM	1	3/2 To 5Y	Minor Lithology: A large (4 cm) rounded cobble of CARBONATE RUDSTONE (shell fragments?) occurs in Section 1, 110 cm. In Section 2, 116-120 cm, is a layer with similar compostion to the carbonate rudstone cobble but with a sharp basal contact. It unclear whether it is a bed, concretion, or cobble.  General Description: The lower portion of the core is homogeneous and shows lineations parallel to the wall of the core suggesting probable sediment flow

			SIT	E 1013		<u>LE</u>	A COR		10H		CORED 81.1 - 90.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
}	\		1111					>		5Y 3/2	NANNOFOSSIL OOZE WITH CLAY and SILTY CLAY
		}	1		1			WWWW	S	5Y 4/2 To 5Y 5/2	Major Lithologies: This core consists of olive gray (5Y 4/2 to 5Y 5/2) NANNOFOSSIL OOZE WITH CLAY, dark olive gray to very dark gray (5Y 3/2 to 5Y 3/1) SILTY CLAY. Color changes to black (5Y
}		}	2		2		******		S	5Y 3/1	2.5/1) near the base of the core as the content of organic matter increases to about 5%. Sponge spicules are
}			3_				}		0	5Y 5/3	abundantly disseminated in the lower portion of the core.  Minor Lithology: A graded FORAMINIFER QUARTZ
}		}	4_		3	ک	3			5Y 3/1	SAND occurs in Section 2, 107-109 cm.  General Description:
}	$\left  \begin{array}{c} \\ \\ \end{array} \right $	{	5		4	Quaternary				5Y 4/3	The sediment is slightly bioturbated. Section 1, 100 cm, to Section 2, 20 cn shows vertical structures indicating it has been disturbed by sediment flow.
			6 7 7		5		3 			5Y 3/2	
}			8		6 CC				S <sub>MD</sub>	5Y 2.5/1	

			SIT	E 1013	HC	LE	A COR	E '	11X		CORED 90.6 - 98.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
(g/cm²)	(650-700 nm)	(10 55)	2 - 3		1 2	late Pliocene	3	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	š.	5Y 3/1  5Y 4/1  5Y 3/1  5Y 4/1  5Y 4/1  5Y 4/1	CLAYEY NANNOFOSSIL MIXED SEDIMENT  Major Lithology: This core consists of dark gray to very dark gray (5Y 4/1 to 5Y 3/1) CLAYEY NANNOFOSSIL MIXED SEDIMENT containing about 30%-40% clay, 30%-40% nannofossils, and minor amounts of foraminifers, quartz, and sponge spicules.  General Description: The sediments are slightly bioturbated, however, XCB coring disturbance may have masked bioturbation.
1 1.5	0 5 0	10 2	20		CC			$ \hat{\leq} $	M	5Y 3/1	

			SIT	E 1013	HC	DLE	A COR	Ε	12X		CORED 98.1 - 107.7 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	\ \ \	3	1111					>	s	10Y 3/1	CLAY WITH SILT, CLAY and NANNOFOSSIL OOZE WITH CLAY
}			1 -		1		<del></del>			2.5Y 4/2	Major Lithologies: This core consists of irregular
}		{	]						S	5Y 6/3	alternations between very dark olive gray (10Y 3/1) CLAY WITH SILT, dark olive gray (5Y 3/2) CLAY, and olive
}		3	2_	7-1-1-1		eue				5Y 3/1	(5Y 5/3) to light yellowish brown (5Y 6/3) NANNOFOSSIL OOZE WITH
}	}	}	-		2	Pliocene	<b>-</b> }			5Y 5/3	CLAY. All lithologies contain 5% to 10% foraminifers. Thin dark color bands are indicated in the Structure
\	{	}	3_			late	<b>3</b>	! 	,	2.5Y 4/2	column.
}	}	}	-				, i	ļ			Minor Lithology: A thick lamination of light gray (N7)
}	}	{			3		— -A	l		5Y 4/2	VITRIC ASH occurs in Section 3.
\ \		}	4_					ĺ	s	5Y 3/2	General Description: The core is mostly homogeneous within color bands, with distinct
/		/	-		4 CC			1	М	5Y 5/2	burrows only rarely visible.
1 1.5	0 10 (	0 10 2	0						,		·

GRAPE density (gcm3) (g				SIT	E 1013		LE	A COR		13X		CORED 107.7 - 117.3 mbsf
S	density	(%)	suscept.	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	}	-	}	-						s	5Y 5/2	OOZE WITH CLAY AND
2 2 3/2 CLAY WITH SILT and olive (5Y 5/3) to olive gray (5Y 5/2) NANOFOSSIL OOZE WITH CLAY AND FORAMINIFERS. The boundaries are gradational. General Description: Bioturbation is not evident in Sections 1 and 2, whereas Sections 3 to 6 are slightly to moderately bioturbated.  5 5 5/5/3  5 5/7 5 5/3  8 6 6 8 8 6 6 8 8 8 8 6 6 8 8 8 8 8 8		}		1		1						Major Lithologies: This core is composed of m-scale alternation of dark grayish brown (2.5Y
S S SY S/3 S SY S/3 S S SY S/3 S S S S SY S/3 S S S SY S/3 S S S S S S S S S S S S S S S S S S			}	2_		2					2.5Y 3/2	3/2) CLAY WITH SILT and olive (5Y 5/3) to olive gray (5Y 5/2) NANNOFOSSIL OOZE WITH CLAY AND FORAMINIFERS. The
5 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	}			3_				}} }} }}			5/2	General Description: Bioturbation is not evident in Sections 1 and 2, whereas Sections 3 to 6 are
5 7 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	-	}	\$	4 -		3	4	33	i	S		
5 7 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	}			-			liocene	}} }} }} }			5Y	
5 7 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\ \{		}	5			late F	₩ ₩ ₩				
5 7 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			}			4		» » » »		S		
N 5Y 5Y 5/2				7				3	www	S		
	(		>	-				3	- ///		5Y	
			1	Li		СC			>	М	5/2	

			SIT	E 1013		LE	A COR	E			CORED 117.3 - 126.9 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
5		\ }	1111				,,			5Y 5/3	NANNOFOSSIL OOZE WITH CLAY AND FORAMINIFERS and SILTY
		}	-	7] 7	1		33			5Y	CLAY WITH FORAMINIFERS
		}	1_	7						3/2	Major Lithologies: This core is composed of indistinct m-
		}	-		Н		}			5Y 4/2	scale alternations of olive (5Y 5/4 to 5Y 5/3) NANNOFOSSIL OOZE WITH CLAY AND FORAMINIFERS and olive
}		{	2				}			5Y	gray (5Y 4/2) to dark olive gray (5Y 3/2) SILTY CLAY WITH
}		}	-		2		33			4/1	FORAMINIFERS. The latter lithology sometimes contains over 10% sponge
}	}	}	3		Ц		<b>-</b> 3			5Y 5/2 To	spicules.
			-				,			5Y 4/3	General Description: The core is slightly to moderately bioturbated in lighter colored layers
{		{	4		3						whereas darker colored layers are either slightly bioturbated or
1 }		}	-			ene			S	5Y 4/2	homogeneous.
}	$  \{   \}  $	{	-			Pliocene				4/2	
}		\$			4	late	}				
		}	-				•			5Y 5/3	
{	}		6		Н		,				
		\{ }	-	· · · · · · · ·	5		3			5Y 4/3	
		$\stackrel{\checkmark}{=}$	7				}				
			-							5Y 5/4	
}	\ \	}	8				}} }		S		
		3			6		}	>		5Y	
		$\leq$	9							5/2 5Y	
		$\rangle$		T-1	7 CC		}		s	3/2 5Y 4/3	
0 1	0 10 0	10 2	<u>L</u> -1	т.1	РЧ			ш	M	4/3	l

			SIT	E 1013		LE	A COR	E	15X		CORED 126.9 - 136.5 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			Met		1 2 3 4 5 6	late Pliocene Ag	Structure	\\ \\	Samı	50 2.5Y 4/2 5Y 4/2 2.5Y 3/2 5Y 4/2 5Y 3/1 5Y 7/2 2.5Y 5/2 5Y 4/1 5Y 3/2 2.5Y 5/2 5Y 4/2	Description  SILTY CLAY WITH NANNOFOSSILS and NANNOFOSSIL OOZE  Major Lithologies: This core consists of gradual alternations between light gray to olive gray (5Y 7/2 to 5Y 4/2)  NANNOFOSSIL OOZE and very dark grayish brown to dark gray (2.5Y 3/2 to 5Y 4/1) SILTY CLAY WITH NANNOFOSSILS.  General Description: The sediments are slightly bioturbated.
1 1.5	0 10 (	0 10 2	20	11	CU				M		

			SIT	E 1013			A COR		16X		CORED 136.5 - 146.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
*		{	1111					≯			CLAYEY NANNOFOSSIL OOZE and NANNOFOSSIL OOZE
	}	}	1		1					5Y 4/2	Major Lithologies: This core is composed of dark olive gray (5Y 3/2) CLAYEY NANNOFOSSIL OOZE alternating with
}			2				}		S	5Y 3/2	olive to olive gray (5Y 5/3 to 5Y 4/2) NANNOFOSSIL OOZE. Color changes are gradual.
		}	3		2		*****			5Y	Minor Lithology: Section 3, 101 cm, contains a small pod composed of prismatic GYPSUM crystals.
		\ \ \	4_		3	ene	•			4/2	General Description: The sediments are slightly bioturbated.
	}	{				late Pliocene	} }}		S	5Y 5/3	
			5		4	3		×		5Y 4/2	
}		}	٦							5Y 3/2 5Y	
		}	7		5					4/2 5Y 3/2	
	}		8		6					5Y 4/2	
1 1.5	0 20 0	) 10 :	20		СС		3000005 3000005		М	5Y 3/2	

			SIT	E 1013	НΟ	LE	B COR	Ε´			CORED 0.0 - 8.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
\	Ž	3	-					wwwww		5Y 3/1	SILTY CLAY WITH NANNOFOSSILS AND FORAMINIFERS
1 1.5	5 10		2		1 2 3 4 5 6 CC	Quaternary	3	WWW	M	5Y 3/2	Major Lithology: This core consists of very dark gray (5Y 3/1) to dark olive gray (5Y 3/2) SILTY CLAY WITH FORAMINIFERS AND NANNOFOSSILS. Foraminifers are abundantly dispersed throughout Sections 4 through 6.  Minor Lithologies: Thin laminations of dark brown QUARTZ FELDSPAR SAND WITH FORAMINIFERS occur in Section 1, 139 cm, and Section 2, 139 cm.  General Description: The core is slightly bioturbated or homogeneous within the broad color bands. Burrows in Section 2 and 3 are filled with FORAMINIFER SAND.

			SIT	E 1013	HC	LE	B COR				CORED 8.6 - 18.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			-		1					5Y 3/2	SILTY CLAY and CLAYEY NANNOFOSSIL MIXED SEDIMENT Major Lithologies:
	}	<b>\{</b>					}			5Y 3/1	This core consists of dark gray to very dark gray (5Y 4/1 to 5Y 3/1) to olive gray (5Y 4/2) SILTY CLAY and light olive gray to olive gray (5Y 6/2 to 5Y 4/2) CLAYEY NANNOFOSSIL MIXED
}	}	{	2		2		}			5Y 4/2	SEDIMENT. Color changes are gradational.
			3_				***			5Y 4/1	Minor Lithology: Thin laminations of dark brown QUARTZ FELDSPAR SAND WITH FORAMINIFERS occur in Section 1 and 4.
		<b>{</b>	4		3	,	<u>.010</u>			5Y 6/2	General Description: The sediment is slightly bioturbated.
	}	}	5		4	Quaternary	<u></u>			5Y 4/2	
		}	6		5		<pre>3 3 3 3</pre>			5Y 5/2	
}	}		8_				3			5Y 3/2	
}	}				6					5Y 4/2	
\ \ \		{	10		7		}		М	5Y 3/2	

			SIT	E 1013	НО	LE	B COR				CORED 18.1 - 27.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	(%)		Met		109S 1 2 3 4 5 6 7	Quaternary Age	Structure  3 3 3 3 3 4 3 3 4 3 4 3 4 4 4 4 4 4 4	Distr	Sami	5Y 3/1 10Y 5/2 5Y 3/2 10Y 5/2 10Y 5/2 10Y 3/1 10Y 5/2 5Y 3/1 10Y 5/2 5Y 3/2 10Y 5/2 10Y 3/1 10Y 6/2	SILTY CLAY and CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithologies: This core consists of very dark gray to dark grayish olive (5Y 3/1 to 10Y 4/2) SILTY CLAY gradationally alternating with olive gray to light olive gray (5Y 5/2 to 5Y 6/2) CLAYEY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS.  Minor Lithologies: Section 7, 25-39 cm, contains an interval of QUARTZ FELDSPAR SAND WITH FORAMINIFERS.  General Description: The core is slightly bioturbated within broad color bands.
1 1.5	0 10 0	10 2	20						M	4/2	1

			SIT	E 1013	HC	LE	B COR				CORED 27.6 - 37.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
5		1						≷		5Y	SILTY CLAY and NANNOFOSSIL OOZE WITH CLAY
}		{	1		1		3			3/2	Major Lithologies: This core consists of gradual alternations between very dark gray
		{					33			5Y 3/1	(5Y 3/1) SILTY CLAY and dark gray to dark olive gray (5Y 4/1 to 5Y 3/2) NANNOFOSSIL OOZE WITH CLAY.
		}	2		2		3			5Y 3/2	General Description: The sediments are slightly bioturbated.
}		}	3								
WWW. Warmer Commencer of the Commencer o		}	4		3		**************************************				
3	{	}				ک	3			5Y	
3	{	}	5		4	Quaternary				4/3 To 5Y 4/2	
}		}	6			Ø	3				
7		}	1								
3		\ \ \	7		5		3			5Y	
\$		\$					} } }			3/2 5Y	
		{	8				3			3/1	
		{			6					5Y	
1		}	9 - -							3/2 To 5Y	
5		\$	10		7					4/1	
.4 1.6	1   1 0 10 0	) 10 2	10 20		CC			Ш	M		

			SIT	E 1013	_	LE	B COR				CORED 37.1 - 46.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
}	3	}	-	Ų.			}			5Y 4/1	SILTY CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT
		}	1_		1		, ,			5Y 3/1	Major Lithologies: This core consists of dark olive gray to very dark gray (5Y 3/2 to 5Y 3/1) SILTY CLAY gradationally alternating with olive gray to dark gray (5Y 4/2 to 5Y 4/1) NANNOFOSSIL CLAY MIXED
		3	2		2		\$ \$ \$ \$	/		5Y 4/2 5Y	SEDIMENT. Foraminifers are abundantly disseminated throughout the core.
		}	3_				33	/		3/2 5Y 4/2	Minor Lithologies: Section 2, 50-52 cm, contains an isolated fragment of limestone,
			567		3	Quaternary	} ; ;		S	5Y 3/1	possibly broken from a thin LIMESTONE bed during coring. A thin interval of FORAMINIFER QUARTZ SAND occurs in Section 4, 75 cm.  General Description: The sediments are slightly to moderately bioturbated.  Note: Core liners for Sections 2 through 6 were shattered during coring.
			9 10		6 7 CC		> >> >>	~^^	M	5Y 3/2	

Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Cturatura	Disturb	ple	or	CORED 46.6 - 56.1 mbsf
	-	-	7			Structure	Dist	Sample	Color	Description
	3								5Y 3/1	SILTY CLAY and NANNOFOSSIL CLAY WITH FORAMINIFERS
\ \{\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2		2		••• } }			5Y 4/2	Major Lithologies: This core consists of gradual alternations between very dark grayish brown to dark olive gray (2.5Y 3/2 to 5Y 3/2) SILTY CLAY and olive to olive gray (5Y 4/3 to 5Y 4/2) NANNOFOSSIL CLAY WITH FORAMINIFERS.
	\$	3				} -A			5Y 3/1	Minor Lithologies: Section 1, 75 cm, contains a QUARTZ FORAMINIFER SAND layer. A thin (>0.5 cm) VITRIC ASH interval (layer?) occurs in Section 2. Section 4 contains
		4		3					5Y 3/2	a 7 cm thick white fine VITRIC ASH layer.  General Description: The sediment shows slight bioturbation
	<b>}</b>	5		4	Quaternary	-A			2.5Y 3/2	in the upper portion of the core. The lower interval is moderately bioturbated.
		6 - - 7		5		} } } }			5Y 4/3	
	}	8-				`			5Y 3/2	
		9		7		<pre>3 33 33 33</pre>			5Y 4/1 To 5Y 4/2	
			7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		5 7 7 10 10 10 10 10 10 10 10 10 10 10 10 10	5 5 7 7 10 7 CC	5 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 5 5 7 4/3 3/2 3/2 3/2 3/2 3/2 3/2 3/2 3/2 3/2 3

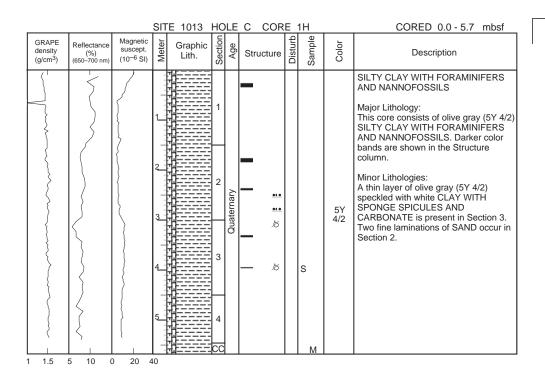
			SIT	E 1013	НС	LE	B COR	E 7	7H		CORED 56.1 - 65.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2		1 2		<pre>33 3 3 3 3</pre>	/		10Y 4/1 To 5Y 4/2	CLAY WITH NANNOFOSSILS and NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithologies: This core consists of dark olive gray (5Y 3/2) CLAY WITH NANNOFOSSILS gradationally alternating with olive gray to dark olive gray (5Y 4/2 to 5Y 4/1) NANNOFOSSIL OOZE WITH FORAMINIFERS.  General Description:
			3		3	rnary	}			5Y 3/2	The sediment is slightly to moderately bioturbated. Zoophycos are found in Section 4.
		}	9		4	Quaternary	} } }>>>			10Y 5/1	
		5	9				33 >>> 33			5Y 3/1	
		}	7		5		3}			5Y 4/2	
							}			5Y 3/1	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		}	8_		6					5Y 4/2	
		(	9				} }}			5Y 3/2	
{					7 CC		}		М	5Y 3/1	
1 1.5	5 10 0	10 2	20								

			SIT	E 1013	HC	LE	B COR		ВН		CORED 65.6 - 75.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
\{\  \	\	\{\}								5Y 3/1	CLAY WITH NANNOFOSSILS and NANNOFOSSIL OOZE WITH SILT
			1 -		1		<pre></pre>			5Y 4/2	AND FORAMINIFERS  Major Lithologies: This core consists of gradual alternations between very dark gray (5Y 3/1) CLAY WITH NANNOFOSSILS and olive gray (5Y 4/2) NANNOFOSSIL OOZE WITH
		}	1		2		33	$\geq$		5Y 3/2	SILT AND FORAMINIFERS. Color transitions are gradual.
	}		3				}			5Y 4/2	Minor Lithology: A thin graded bed of QUARTZ FORAMINIFER SAND occurs near the base of Section 3.
		}	4		3		*** ***			5Y 3/2	General Description: This core is moderately bioturbated and locally contains abundant gas- expansion cracks. Section 7 contains badly disturbed sediments with flow-in
		}	5_			nary	}			5Y 3/1	structures parallel to the core.
			6		4	Quaternary	3 3 3 3 3			5Y 4/2	
		3			5			///////		5Y 3/2	
			8		6			>>		5Y 4/3	
			10		7		<b>&gt;</b>	WWW		5Y 4/2	
0 2	0 10 0	) 10 2			CC				M		

S D SY 3/2 CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and CARBONATE CLAY  Major Lithologies: This core is composed of pale olive gray (10y 5/1) CLAYEY  NANNOFOSSIL OOZE WITH FORAMINIFERS and very dark gray (3/1) 10 olive (5/1) 10 ol			SIT	E 1013	HO	LΕ	B COR				CORED 75.1 - 84.6 mbsf
FORAMINIFERS and CARBONATE CLAY  Major Lithologies: This core is composed of pale olive gray (10Y 5/1) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and very dark gray (5Y 3/1) to olive (5Y 4/3) CARBONATE CLAY.  Minor Lithologies: A well lithified, dark olive gray (5Y 3/2) LIMESTONE or CARBONATE CONCRETION occurs at the top of the core in Section 1. A 6 cm-thick, graded bed of FORAMINIFER QUARTZ SAND occurs below the concretion in Section 1. An isolated 6X3 cm cobble of BASALT is present at Section 4, 110 cm.  General Description: The core is moderately bioturbated and is extensively disturbed by sediment flow-in from the top of Section 6 to the Core Catcher.	density	suscept.	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
Minor Lithologies: A well lithified, dark olive gray (5Y 3/2) LIMESTONE or CARBONATE CONCRETION occurs at the top of the core in Section 1. A 6 cm-thick, graded bed of FORAMINIFER QUARTZ SAND occurs below the concretion in Section 1. An isolated 6X3 cm cobble of BASALT is present at Section 4, 110 cm.  General Description: The core is moderately bioturbated and is extensively disturbed by sediment flow-in from the top of Section 6 to the Core Catcher.	\ \ \		2 -				<del>_</del>			5Y 4/1	CLAY  Major Lithologies: This core is composed of pale olive gray (10Y 5/1) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and very dark gray (5Y 3/1) to olive (5Y 4/3) CARBONATE
					3 4 5	Quaternary	* * * * * * * * * * * * * * * * * * *	$\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}\mathcal{M}$	M	5Y 4/2  5Y 3/1  10Y 5/1  5Y 4/3  5Y 3/1  5Y 4/3  5Y 3/1  5Y 4/3  5Y 3/1  5Y 5/1	CLAY.  Minor Lithologies: A well lithified, dark olive gray (5Y 3/2) LIMESTONE or CARBONATE CONCRETION occurs at the top of the core in Section 1. A 6 cm-thick, graded bed of FORAMINIFER QUARTZ SAND occurs below the concretion in Section 1. An isolated 6X3 cm cobble of BASALT is present at Section 4, 110 cm.  General Description: The core is moderately bioturbated and is extensively disturbed by sediment flow-in from the top of Section 6 to the

			SIT	E 1013	НС	LE	B COR	E			CORED 84.6 - 94.1 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5	0 10 0		2		1 2 3 5 CC	late Pliocene Quaternary	» » » » » » » » » » » » » » » » » » »	WW W	М	5Y 3/1  5Y 4/2  2.5Y 3/2  2.5Y 4/2  2.5Y 3/2  7 5Y 3/1  5Y 3/1  5Y 3/1  5Y 3/1  5Y 3/2  2.5Y 3/2  2.5Y 3/2	NANNOFOSSIL OOZE WITH CLAY and SILTY CLAY  Major Lithologies: This core consists of alternating olive gray (5Y 4/2 to 5Y 5/2) NANNOFOSSIL OOZE WITH CLAY and very dark gray (5Y 3/1) to very dark grayish brown (2.5Y 3/2) SILTY CLAY.  Minor Lithology: A 5 cm thick, planar laminated, medium-grained dark grayish brown (2.5Y 4/2) to light gray (5Y 7/1) FORAMINIFER QUARTZ FELDSPAR SAND occurs at the top of Section 5.  General Description: The core is mostly homogeneous with only rare distinct burrows. White, mmscale aggregates of sponge spicules are scattered throughout the core.

2.5Y SIDMENT and CLAYEY NANNOFOSSIL MIXED SEDIMENT and CLAYEY NANNOFOSSIL OZE  Major Lithologies: This core consists of very dark grayish frown (2.5 Y 3/2) to olive gray (2.5 Y 4/2 4/2 (LAYEY NANNOFOSSIL MIXED SEDIMENT and olive gray (5.5 Y 5/2) to olive (5Y 5/3) CLAYEY NANNOFOSSIL MIXED SEDIMENT and olive gray (5Y 5/2) to olive (5Y 5/3) CLAYEY NANNOFOSSIL OZE Color transitions are gradational.  A*  A*  A*  A*  A*  A*  A*  A*  A*  A				SIT	E 1013		LE	B COR		11X		CORED 94.1 - 103.8 mbsf
4/2 A/2) CLAYEY NANNOFOSSIL MIXED SEDIMENT and olive gray (5Y 5/2) to olive (5Y 5/3) CLAYEY NANNOFOSSIL OZE. Color transitions are gradational.  2.5Y NANNOFOSSIL OZE. Color transitions are gradational.  2.5Y A/2  3.2  4.3  4.4  4.5  5.5  4.5  5.5  6.5  7.5  6.5  7.5  6.5  7.5  7	density	Reflectance (%) (650–700 nm)	suscept.	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
4/2 A/2) CLAYEY NANNOFOSSIL MIXED SEDIMENT and olive gray (5Y 5/2) to olive (5Y 5/3) CLAYEY NANNOFOSSIL OZE. Color transitions are gradational.  2.5Y NANNOFOSSIL OZE. Color transitions are gradational.  2.5Y A/2  3.2  4.3  4.4  4.5  5.5  4.5  5.5  6.5  7.5  6.5  7.5  6.5  7.5  7	*					1			wwww			SEDIMENT and CLAYEY
A A NANNOFOSSIL OOZE. Color transitions are gradational.  Minor Lithologies: A small pod of VITRIC ASH occurs near the top of Section 4 and a thin bed of SILTY CLAY near the base of Section 5.  S S 2.5Y 3/2 5Y 3/2				1				_	\W\W\\			This core consists of very dark grayish brown (2.5Y 3/2) to olive gray (2.5Y 4/2) CLAYEY NANNOFOSSIL MIXED SEDIMENT and olive gray (5Y 5/2) to
A small pod of VITRIC ASH occurs near the top of Section 4 and a thin bed of SILTY CLAY near the base of Section 3. Thin, banded layer of fibrous CARBONATE occurs near the top of Section 5.  S S D Section 5.  S S S D Section 5.  S S S D Section 5.  S S S D Section 5.  S S S D Section 5.  S S D S S S S S S S S S S S S S S S S	}		}	2		2						NANNOFOSSIL OOZE. Color
3 3 4 4 4 8 Section 3. Thin, banded layer of fibrous CARBONATE occurs near the top of Section 5.  S S S S S S S S S S S S S S S S S S S	{		{	3							4/2	A small pod of VITRIC ASH occurs
Section 5.  General Description: This core is mostly homogeneous and only very slightly burrowed.  Sylvariant	}		}	-							5/1 2.5Y	bed of SILTY CLAY near the base of Section 3. Thin, banded layer of fibrous
5			>	4		3	ne	}			5Y	Section 5.
5 7 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3	{		}	-			e Plioce	A•	\\\\\	S		This core is mostly homogeneous and
5 7 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3	}	$  \  \   $	}	5		4	lat		\ \ \ \		4/2	
5 7 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3 5Y 5/3	}	}	}	6					\ \ \ \		5/2	
7 5/3 5Y 4/2 5Y 5/3 5Y 5/3 5Y 4/2	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		}	-				_	>	s <sub>D</sub>	4/1	
4/2 4/2 5Y 5/3 5Y 5/3 5Y 4/2	{	5	{	7		5					5/3	
5 Y 5/3	}		>	- -				_				
CC   M 4/2				8				_				
1 1.5 0 10 0 10 20	1 1.5	0 10 0	) 10 2	- a_	<u> </u>	CC				М		



GRAPE Committee (1) Secretary				SIT	TE 1013		LE	C COR	Ε :			CORED 5.7 - 15.2 mbsf
Major Lithologies: The core is composed mostly of thick alternations between very dark gray (5Y 3/1) to very dark gray ish brown (2.5Y 3/2) SILTY CLAY and dark gray (10Y 5/1) CLAYEY NANDFOSSI.  Minor Lithologies: The core is composed mostly of thick alternations between very dark gray (1SY 3/2) silt Y CLAY and dark gray (10Y 5/1) CLAYEY NANDFOSSI.  Minor Lithologies: The core is composed mostly of thick alternations between very dark gray (1SY 3/2) silt Y CLAY and dark gray (10Y 5/1) CLAYEY NANDFOSSI.  Minor Lithologies: The core is composed mostly of thick alternations between very dark gray (1SY 3/2) silt Y CLAYEY And dark gray (1OY 5/1) cLAYEY NANDFOSSI.  Minor Lithologies: The core is composed mostly of thick alternations between very dark gray is different properties.  SY 3/2  SY 3/	density		suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The core is composed mostly of thick alternations between very dark grayish brown (2.5Y 3/2) to dark gray (10Y 5/1) CLAYEV NANNOFOSSIL Mixed Section (3.5Y Mixed Section (3.	}		\						<b>*</b>		5Y 4/2	
grayish brown (2.5Y 4/2) to dark gray (rays) homographic properties of the control of the contro			3	1_		1					5Y 5/1	The core is composed mostly of thick alternations between very dark gray (5Y 3/1) to very dark gravish brown
September 2 Septem				3		2						grayish brown (2.5Y 4/2) to dark gray (10Y 5/1) CLAYEY NANNOFOSSIL MIXED SEDIMENT. Color transitions are gradational.  Minor Lithology: A thin (0.5 cm) lamination of quartzofeldspathic SAND occurs at
2.5Y 4/2 at Section 3, 52 cm.  2.5Y 3/2  5Y 3/2  5Y 3/2  5Y 5/2  To 2.5Y 4/2  10Y 5/2  To 2.5Y 4/2  10Y 5/2  To 2.5Y 4/2	1			4		3		<b>♦</b>				The core is mostly homogeneous with
3/2 5Y 3/2 10Y 5/2 To 2.5Y 4/2 10Y 5/2 To 2.5Y 4/2							nary	}			4/2	3X1.5 cm sandstone pebble is located
5Y 3/2  10Y 5/2  7	}		$ $ $\leq$	5		,	uater	}				
5Y 5/2 To 2.5Y 4/2			}			4	Ø	,				
5Y 5/2 To 2.5Y 4/2				7		5		} } }				
5/1 5Y				8		6		***************************************			5/2 To 2.5Y	
				9		7		} }				
		,	,	-		CC			≷	М		

			SIT	E 1013	НС	LE	C COR				CORED 15.2 - 24.7 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			_		1		_	M		5Y 4/1	SILTY CLAY and CLAYEY NANNOFOSSIL MIXED SEDIMENT  Major Lithologies: This core is composed of irregular alternations between dark olive gray
			2	· · · · · · · · · · · · · · · · · · ·	2					5Y 3/2	(5Y 3/2) to very dark grayish brown (2.5Y 3/2) SILTY CLAY and gray (5Y 5/1) CLAYEY NANNOFOSSIL MIXED SEDIMENT.
}			3		_					5Y 4/1	Minor Lithology: A small pod of QUARTZ FELDSPAR SAND occurs at Section 5, 51 cm. A thin lamination and pod of concentrated
1		}					}			5Y 3/2	foraminifers occur at Section 5, 134 cm and 47 cm, respectively.
		}	4_		3		}			5Y 5/1	General Description: This core is moderately burrowed where not entirely homogeneous.
}		}	5			Quaternary	}} }}			5Y 3/1 5Y	
		}			4	Qua	** ** ** ** **			5/1 5Y	
{		}	6_	\. \.			33			2.5/1	
		{	7_		5		0			2.5Y 4/1	
		}					— ※			5Y 5/2	
\$		}	8_	, 1 <u>, 1</u> ,	6		>>> >>> >>> >>>			4/1 2.5Y 3/2	
\{		{	9_							5Y 3/2	
	}	}			7					5Y 3/1	
1.4 1.6	1 1 5 10 0	10 2	<u> </u>	<u>-</u>	υU	<u> </u>			M		

			SIT	E 1013	HC	)LE	C COR	Ε	‡Η		CORED 24.7 - 34.2 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3	)	{								2.5Y 3/2	SILTY CLAY and NANNOFOSSIL OOZE WITH CLAY
		}	1_		1		3			5Y 3/2	Major Lithologies: This core consists of thick alternations between very dark gray (2.5Y 3/2) to
}	}	}	2				******			5Y 5/2	dark olive gray (5Y 3/2) SILTY CLAY and olive gray (5Y 5/2) NANNOFOSSIL OOZE WITH CLAY. Minor Lithology:
			3_		2		<b>-</b> * •••				A two-layer, graded bed of dark gray (5Y 4/1) FORAMINIFER SILTY SAND occurs at Section 2, 80-90 cm. The base is burrowed and sand is piped 5 cm below.
			4		3	Quaternary	***			5Y 3/2	General Description: The core is mostly homogeneous and slightly burrowed. White sponge spicule aggregates are scattered through Section 6.
}		}	J		4	ð	}				
		}	6		5		3			5Y 4/2	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		}	7				}				
			8		6					5Y 4/2 To 5Y 5/2	
1 1.5	5 10 0	)	9		7 CC				М		
. 1.0	5 10 (	, 20 -	.0								

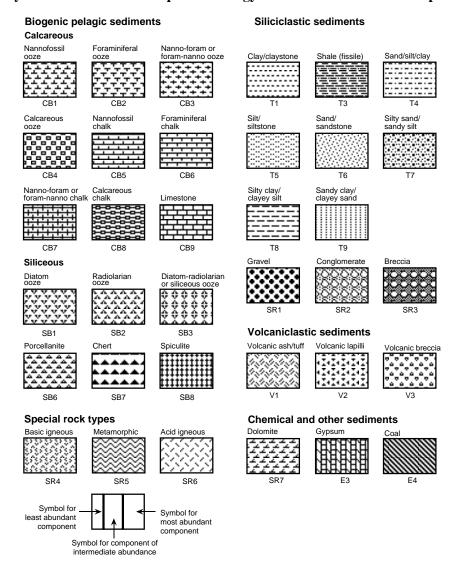
			SIT	E 1013		LE	C COR	E 5			CORED 34.2 - 43.7 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	(%)		15W 2 3 3 5 5 6 6 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Lith.	1 2 3 4 5 6 7 CC	Quaternary Age	Structure	Distr	Sami	5Y 4/1 5Y 2.5/1 5Y 4/1 5Y 3/1 5Y 3/1	Description  SILTY CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT  Major Lithologies: This core is composed of very dark gray (57 3/2) to black (5Y 2.5/1) SILTY CLAY and olive gray (5Y 4/2) to gray (5Y 5/1) NANNOFOSSIL CLAY MIXED SEDIMENT which show meter scale alternations. The basal boundaries of darker layers are sharp whereas their upper boundaries are bioturbated.  Minor Lithology: Small pockets of FORAMINIFER SAND occur in Section 5, 78 cm, and Section 6, 103 cm.  General Description: The core is moderately bioturbatred in the middle part whereas no burrows are observable in the upper and lower parts.
1 1.5	5 10 0	) 10 2	20								

	SIT	E 1013 HC		C COR		H.		CORED 43.7 - 53.2 mbsf
density (%) sus	gnetic scept. –6 SI)	Graphic Lith.	Age	Structure	Disturb	Sample	Color	Description
		1 2 2 3 3 3 4 4 4 5 5 5 CC	Quaternary	<b>-</b>	W.W.W.W W.W.W.W.W W.W.W.W.	Σ.	2.5Y 4/2 2.5Y 3/2 10Y 4/1 2.5Y 3/2 2.5Y N3/0 5Y 4/2 5Y 6/1 2.5Y 3/2 2.5Y N3/0 5Y 4/2 5Y 6/1 2.5Y N3/0 5Y 4/1 2.5Y N3/0 5Y 4/1 2.5Y N3/0 5Y 4/1 2.5Y N3/0 5Y 4/1 2.5Y N3/0 5Y 4/1 2.5Y N3/2 2.5Y N3/2 2.5Y N3/2 2.5Y N3/2 10 10 10 10 10 10 10 10 10 10 10 10 10	SILTY CLAY and NANNOFOSSIL CLAY WITH FORAMINIFERS  Major Lithologies: This core is composed of very dark gray (5Y 3/2 to 2.5 Y 3/0) SILTY CLAY and gray (5Y 6/1) to dark grayish olive (10Y 4/1) NANNOFOSSIL OOZE WITH FORAMINIFERS showing decimeter- to meter-scale alternations. The basal boundaries of the darker layers are either gradational or sharp whereas their upper boundaries are bioturbated.  Minor Lithologies: An 8 cm thick VITRIC VOLCANIC ASH layer, olive brown (2.5Y 4/4) and sandy in its upper part and white (2.5Y 8/0) and purely vitric in its lower part, occurs in Section 5, 47-55 cm. Pockets of FORAMINIFER SAND occur in Section 1, 37 cm, and Section 2, 105 cm.  General Description: The core is slightly to heavily bioturbated.

			SIT	E 1013	HO	LE	C COR		′H		CORED 53.2 - 62.7 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	0 10 0		3 3 1 4 1 6 7 7 8 8		3 3 4 5 6	Quaternary	Ø	M MM	D M	2 5Y	CLAY and NANNOFOSSIL OOZE WITH CLAY  Major Lithologies: This core is composed of dark gray (5Y 4/1) to very dark gray (5Y 3/1) CLAY and dark grayish brown (2.5Y 4/2) to light olive gray (5Y 6/2) NANNOFOSSIL OOZE WITH CLAY which show m-scale alternations. The boundaries are gradational.  Minor Lithology: A thin white carbonate layer of possible shell fragment occurs in Section 1, 28 cm. General Description: The core is slightly to moderately bioturbated.

			SIT	E 1013		LE	C COR	$\overline{}$			CORED 62.7 - 72.2 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
\ \{\}		{			1			WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW		5Y 3/2	CLAY WITH NANNOFOSSILS and NANNOFOSSIL OOZE WITH SILT AND FORAMINIFERS
}		}	1_					\ \ \ \ \		10Y 5/1 5Y	Major Lithologies: This core consists of dark olive gray to very dark grayish brown (5Y 3/2 to
}		}	2				33			3/2 10Y 5/1	2.5Y 3/2) CLAY WITH NANNOFOSSILS and medium dark gray to olive (10Y 5/1 to 5Y 5/3)
					2			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		5Y 4/3	NANNOFOSSIL OOZE WITH SILT AND FORAMINIFERS. Color transitions are gradational and occur
}		}	3					\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2.5Y 3/2	on a scale of 10-50 cm.  Minor Lithology:
{	\ \ \ \ \	}	-		3		}} }}	\ \ \ \		5Y 4/2	FORAMINIFER SAND containing nearly 100% foraminifers occurs in Section 4, 30-38 cm.
}		}	4 <u> </u>			ary	2000000	\ \ \ \ \ \		5Y 6/1	General Description: The sediments are slightly bioturbated, but coring disturbance masks most
		\$	5_			Quaternary	*****	\ \ \ \		>.	sedimentary features.
7	$\leq$	}			4	G		\ \ \ \ \		2.5Y 3/2	
}	\ \{ \		6		-			\ \ \ \ \ \		5Y	
}		}	7 -		5			\ \ \ \ \		5/3	
		}						\ \ \ \		2.5Y 4/2	
}	5	}	8_		6			\ \ \ \		5Y 3/1	
	4	}						\ \ \ \		40)/	
}		\$	9		7			\ \ \ \ \		10Y 5/1	
0 1	5 10 0	) 10 2	 20		CC			>	M		

## Key to symbols used in the "Graphic Lithology" column on the core description sheets.



## Key to symbols used in the "Structures" column on the core description sheets.

	rilling disturbance rmbols	Sec	dimentary structures cont	•	
	Soft sediments				
	Slightly disturbed	∱F	Fining-upward sequence	<b>♦</b>	Isolated pebbles/cobbles
ļ	Madaratah, diaturkad	<b>↑</b>	Interval over which primary sedimentary structure occur	•	Isolated mud clasts
<u> </u>	Moderately disturbed		Planar laminae		Slump blocks or slump folds
<b>&gt;</b>	Highly disturbed	$\leq$	Wedge-planar laminae/beds	2	Contorted slump
0		•••	Graded bedding (normal)	X	Probable compaction
00	Soupy	•••	Graded bedding (reversed)	<b></b>	fracture
	Hard sediments		Sharp contact	<b> </b>	Microfault (normal)
2	Slightly fractured		Gradational contact	1/2	Microfault (thrust)
	3 7	w	Scoured, sharp contact	_	,
土	Moderately fractured	•••	Scoured contact with graded bed	<del>-</del>	Macrofault
$\geq$	Highly fragmented		Thick color bands (sharp contact)	<b>                   </b>	Fracture
$\times$	Drilling breccia	****	Thick color bands (gradational contact)	×	Totally fractured
$\stackrel{\sim}{\times}$	Drilling breccia		Medium color bands (sharp contact)	X	Vein structures
Sec	limentary structures	3000000 3000000	Medium color bands (gradational contact)	₹3	Color mottles
3	Burrows, rare (<30% surface area)	$\equiv$	Thin color bands (sharp contact)	<u>-</u>	Dolomite nodule/concretion
33	Burrows, common (30%–60% surface area)	******	Thin color bands (gradational contact)	D	Disseminated dolomite
333	Burrows, abundant (>60% surface area)		Laminations (mm scale)	P	Pyrite nodule/concretion
>>>	Discrete Zoophycos trace fossil		Individual thick color band	Р	Disseminated pyrite
6	Discrete Chondrites trace fossil		Individual medium color band Individual thin color band	G	Glauconite
9	Sagarites sponge		Individual lamination		Concretions/nodules
1	Gastropods	<b>***</b>	Wavy lamination		
) \( \frac{1}{\sqrt{2}} \)	Other bivalves	-11	Cross laminae	(Ba)	Barite nodule/concretion
		$\mathbb{Z}$	Cross stratification	Ва	Disseminated barite
8	Shell fragments	₩ 777	Cross bedding Convoluted/contorted bedding	(Ca)	Calcite nodule/concretion
#	Wood framents	ی	Flaser bedding	(c)	Carbonate nodule/concretion
δ	Fish debris	Δ	Graded interval, normal		
			Veins	(Ch)	Chert nodule/concretion
		R	Water escape structure	A∙	Ash/pumice pods
		$\bigcirc$	Scour	- <b>A</b>	Ashlayer