

**Previous Chapter** 

**Table of Contents** 

**Next Chapter** 

			SIT	E 1016	НС	LE	A COR	E	2H		CORED 7.6 - 17.1 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
	Manus		3		3	Quaternary	<u> —</u>	Μ	o o - o	5GY 6/1 To 5GY 5/1	DIATOM OOZE WITH CLAY and SILTY CLAY WITH DIATOMS  Major Lithologies: This core consists of light olive gray (5GY 6/1) to olive gray (5Y 4/2) DIATOM OOZE WITH CLAY to SILTY CLAY WITH DIATOMS. The core is slightly mottled throughout, but preserves a few thin darker green color bands and no distinct bedding. Quartz, feldspar, mica, and glass make up the minor silt fraction.  General Description: There is a subtle and gradual color transition from the top to the bottom of the core. The marked color boundary is somewhat arbitrarily placed. The core shows increased bioturbation in the lower half and includes Chondrites in Section 7.
1.25 1.5	5 10	15:	8		6 7 CC		**************************************		S	5GY 4/1 To 5Y 4/2	

			SIT	E 1016		LE	A COR	E (	BH		CORED 17.1 - 26.6 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
		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1_		1		-** ***	w		5Y 5/1 2.5Y 4/2	NANNOFOSSIL OOZE WITH DIATOMS AND CLAY and DIATOM OOZE WITH CLAY Major Lithologies:
			2		2		> > > > > > > > > > > > > > > > > > >			5Y 5/1	This core consists of gray to dark greenish gray (5Y 5/1 to 5GY 4/1) DIATOM OOZE WITH CLAY and pale olive (10Y 5/2 to 10Y 5/1) NANNOFOSSIL OOZE WITH DIATOMS AND CLAY. Color and compositional changes are gradual. Disseminated throughout this core are small (few micrometers in diameter) black manganese(?) grains.
}		}	4_		3				S S D	10Y 5/2	General Description: The sediments are slightly to moderately bioturbated.
}		}					33 33		S	10Y 5/1	
			6		5		** ** ** **			5GY 5/1	
			8 8 - - - 9		6		- ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		S	2.5Y 4/2 5GY 5/1	
5 1.75	0 10 0	) 10 2	20		, CC				М	5GY 4/1	

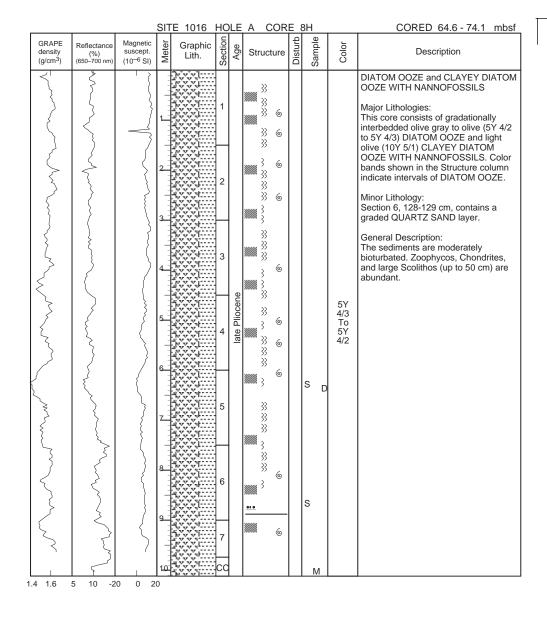
			SIT	E 1016		LE	A COR				CORED 26.6 - 36.1 mbsf
density	lectance (%) –700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5 5			1 1 2 1 3 1 4 1 5 1 6 1 7 8 1 9 1 9	**************************************	1 2 2 2 3 3 3 3 5 5 6 6 6 6 7 7 CCC	Quaternary	**************************************	00	<i>∞</i> −	10Y 5/2  5Y 5/1  10Y 5/1  5Y 7/1  10Y 5/1	CLAY WITH SILT and DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of light olive (10Y 5/2 to 10Y 5/1) CLAY WITH SILT and olive gray to gray (5Y 5/2 to 5Y 5/1) DIATOM OOZE WITH CLAY containing about 90% diatoms. Color and compositional changes are gradual.  Minor Lithologies: Section 4, 107-118 cm, contains a graded sequence that fines upwards from QUARTZ FELDSPAR FINE SAND to SILTY CLAY. Section 6, 20 cm, contains white VITRIC ASH.  General Description: The sediments are heavily bioturbated and mottled throughout.

			SIT	E 1016	HC	LE	A COF	RE				CORED 36.1 - 45.6 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	olamo	oallipie	Color	Description
	}			**************************************	1		}				5Y 4/2	NANNOFOSSIL OOZE WITH FORAMINIFERS, CLAY WITH SILT and CLAY WITH DIATOMS AND SILT
{	}	$\langle$	1—	ž Ž			33				10Y 5/2	Major Lithologies: This core consists of alternating lithologies containing varying amounts
}		55		Ž,			} } 6 **				5Y 5/2	of nannofossils, clay, and diatoms. The upper portion of the core is dominated
}	}	3	2	vv vv	2		}} }}				10Y 5/2	by light olive (10Y 5/2) CLAY WITH SILT and olive gray (5Y 5/2 to 5Y 4/2) CLAY WITH DIATOMS AND SILT. In
}	}	}	-	Ŋ.			_					the lower portion of the core, light greenish gray to light olive gray (10Y
}	\ \	{	3	Ž			» 6 » » »				5Y 4/3	7/2 to 5Y 6/2) NANNOFOSSIL OOZE WITH FORAMINIFERS is interbedded
}	\ \	Ş	-	-1'-4 	3		} } **					with the sediments above. Color and compositional changes are gradational throughout the core.
}		}	4_	××			" 33 6		s		10Y 5/2	General Description:
}		}		V.V.		nary	}} }}		'		5/2	The sediments are moderately bioturbated. Chondrites and Zoophycos are abundant.
			5_	Ĭ,	4	Quaternary	>> }				5Y 5/2	200phycos are abundant.
}	الحرح	\ \ \	-		4		33 >>>				10Y 7/2	
			6_	annan Annan			}} >>> }			D		
}		>		Д М			} }} 6		S	٦	5Y 4/2	
\		{	7_		5		<b>***</b>		s			
{	\ \{\ \}	}					} } }				10Y 5/2	
		3	8		6		3					
{	\ \	$\mathcal{A}$	-		٥		<b>****</b>				5) (	
]	}	3	9		7		<b>****</b> }		s	D	5Y 5/2	
{					<u> </u>		****					
1.4 1.6	5 10 5	5 10 1	  5	TV F	UU			_	1 1	M_		

SITE 1016

			SIT	E 1016	HC	LE	A COR	Е			CORED 45.6 - 55.1 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
}		\ \ \	-				}} }}			10Y 5/2	CLAY DIATOM MIXED SEDIMENT, CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and CLAY
	$ \{\  $	{	1_	**************************************			}} }		S	5Y 5/2	WITH DIATOMS  Major Lithologies:
}		}	2				33 33			10Y 6/2	This core consists of gradual alternations between olive gray to light olive (5Y 5/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT, pale
		}	-		2		<u>****</u>			10Y 5/2	olive (10Y 6/2) CLAYEY NANNOFOSSIL OOZE WITH
		{	3_	!"-[			}} }}			10Y 6/2	FORAMINIFERS, and olive gray to olive (5Y 5/2 to 5Y 5/4) CLAY WITH DIATOMS.
		}	4_		3		» »			To 10Y 5/2	Minor Lithology: Section 2, 92-94 cm, Section 4, 82-83 cm, and Section 5, 128-132 cm, contains graded intervals of fine
}	{	{				_	_ 3		S I	5Y 5/2	QUARTZ SAND.
		}	5_			Quaternary	33			10Y 5/2	General Description: The sediments are moderately bioturbated.
}	}	<b>\</b>	-	VVV VVV	4	Quat	<u>•••</u>			5Y 4/2	
			6		5		**************************************			10Y 6/2	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5 10	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	8		6 7 CC		***************************************		S M	10Y 6/2 To 10Y 5/2	

			SIT	E 1016	HC	LE	A COR	Ε :			CORED 55.1 - 64.6 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 3 4 4 8		1 2 2 3 3 4 4 5 5 6 6 7 7 CCC	Quaternary		W	S D S M	10Y 5/2 5Y 5/2 10Y 5/2 5Y 5/2 10Y 5/2 10Y 7/1 10Y 6/2 10Y 4/2 10Y 6/2 10Y 5/2 10Y 5/2 10Y 6/2 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 10Y 5/2 5/2 5/2 5/2 10Y 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2	DIATOM NANNOFOSSIL OOZE WITH CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY  Major Lithologies: This core consists of interbedded light greenish yellow to light olive gray (10Y 7/1 to 5Y 6/2) DIATOM NANNOFOSSIL OOZE WITH CLAY, light grayish olive (10Y 4/2 to 10Y 5/2) NANNOFOSSIL CLAY MIXED SEDIMENT, and olive gray (5Y 5/2) DIATOM CLAY. Color and compositional changes are gradational.  Minor Lithology: Section 2, 49-50 cm, contains a graded fine QUARTZ SAND.  General Description: The sediments are moderately bioturbated. Planolites and Chondrites are abundant.



			SIT	ΓΕ 1016	HC	LE	A	COR				CORED 74.1 - 83.6 mbs
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Stru	ucture	Disturb	Sample	Color	Description
5	ξ'	5	-	골 ※					>		10Y 4/2	DIATOM CLAY, DIATOM NANNOFOSSIL OOZE and
}	}		1_		1		'	} }		s <sub>D</sub>	10Y 6/2	FORAMINIFER DIATOM OOZE WITH NANNOFOSSILS Major Lithologies:
{			2					;; ;;			10Y 4/1	This core consists grayish olive (10Y 4/2) DIATOM CLAY, olive to olive gray (5Y 5/3 to 5Y 4/2) FORAMINIFER DIATOM OOZE
}	$\left  \begin{array}{c} \\ \end{array} \right $	7			2			?≥			10Y 5/2	WITH NANNOFOSSILS, and light olive (10Y 6/2 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE. Color and composition changes are gradational.
	}	}	3		3			3			5Y 4/3	General Description: The sediments are variably bioturbated. Heavily bioturbated intervals commonly show Chondrites
	}	}	4			Pliocene	;	§§ 6		I	10Y 5/2	and Zoophycos.
{		}	5		4	late Plio		} }}}			5Y 4/2 10Y	
{			6				]	6 }}		s <sub>D</sub>	6/2 5Y 5/3	
}	}	}			5			}			10Y 5/2	
	}	{	7								5Y 5/2	
}	}	}	8					}} }} }}			10Y 6/2 5Y	
}		}			6			;;			4/3 10Y	
{		}	<u>9 -</u>		7			3		S	4/2	
{	}	}	10		CC			}} }		М	10Y 5/2	

			SIT	E 1016 I	<u> </u>	<u>LE</u>	A COR	E_			CORED 83.6 - 93.1 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
}	7	>	-	<b>XXX</b>			}			10Y 5/2	FORAMINIFER NANNOFOSSIL OOZE
\		}	-		1		}			5Y 4/2	WITH DIATOMS, CLAY DIATOM MIXED SEDIMENT, DIATOM OOZE
}		}	1_		1		}} >>> }}			10Y	and DIATOM NANNOFOSSIL OOZE
}		>	-		$\Box$		}} >>>			5/2	Major Lithologies: This core consists light olive (10Y 5/2)
{	{	}	1				33 >>> 33 >>>			5Y 4/2	FORAMINIFER NANNOFOSSIL OOZE WITH DIATOMS, olive gray (5Y
\ \{\}		>	-		2		}			10Y	5/2 to 5Y 4/2) CLAY DIATOM MIXED SEDIMENT, grayish olive (10Y 4/1)
}		}	-				}} >>> }			5/1	DIATOM OOZE, and light olive (5Y 6/2 to 5Y 6/1) DIATOM NANNOFOSSIL
}	$  \rangle  $	}	3				}			5Y 5/2	OOZE. Color and composition changes are gradational and occur on a 30-50
{	\  \	}			3		33			5Y 4/2	cm scale.  General Description:
\	~	{	4_				}} }}		S	5Y	The sediments are extensively bioturbated. Zoophycos and
}		7	-		_	e	}		S	6/2 10Y	Chondrites are abundant.
5	}	3	5	***************************************		Pliocene	}} } } }			4/2 5Y	
}		1	-		4	ate P	\$			5/2 10Y	
		{	-				6			5/1	
			6				}			5Y 5/2	
\$		}	] =				71/				
}	{	}			5		>>> >>> >>>		S	10Y	
}	$  \ \  $	}	-	XX			}			4/1	
\	\ \	>	-								
}		}	8		6					5Y 5/2	
}		}	-	200 FT			}				
1	{	}	9	*****			·			5Y	
$ \xi $		{	-	XX 144	7		}}			5/3	
>	}	ζ	-				}			10Y	
.4 1.6	0 10 0	) 10 2	1 <u>0</u> 20		cq				М	5/2	

			SIT	E 1016	HC	LE	A COR	E ·	11X		CORED 93.1 - 96.3 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
}	}	MAN		********* *********			3 6 33			5Y 5/2	DIATOM OOZE and NANNOFOSSIL DIATOM OOZE
			1		1	ate Pliocene	3		S	5Y 4/2 To 5Y 5/2	Major Lithologies: This core consists of olive gray to light olive (5Y 5/2 to 10Y 5/2) DIATOM OOZE and olive (5Y 5/3) NANNOFOSSIL DIATOM OOZE.
	}	3	2	~~~~~~ ~~~~~~~~	2	<u> </u>	33			10Y 5/2	Minor Lithologies: Small, mm-scale pods of sponge
3	<u> </u>		1		CC		<b>-</b> <sup>∞</sup> ⊗	$\wedge$	SM	5Y 5/3	spicules occur in Section 1, 127 cm, and Section 2, 44 cm.
1 1.5 (	) 10 (	) 5 1	0								General Description: The sediments are moderately bioturbated.

			SIT	E 1016	НС	LE	A COR	E '	12X		CORED 96.3 - 106.0 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			`			10Y 5/2	NANNOFOSSIL DIATOM OOZE and CLAY DIATOM MIXED SEDIMENT
		}	1_		1		} }} >>>			5Y 6/2	Major Lithologies: This core consists of alternations between light olive to pale olive (10Y
}			2		2					5Y 4/2 To 10Y 5/2	5/1 to 5Y 6/3) NANNOFOSSIL DIATOM OOZE and dark olive gray to olive gray (5Y 3/2 to 5Y 4/2) CLAY DIATOM MIXED SEDIMENT. Color and compostional changes are gradational.
		}	3	4 (**** f 1/*** l 1/*** l (**** f 1/*** l 1/***			}			10Y 5/1 To 10Y 5/2	General Description: The sediments are slightly to moderately bioturbated.
{		}	4_	#	3	Pliocene	33		s.	5Y	
			-	( <u>*</u>		Plio			١	6/3	
{	}	>	5_	)		late	3 >>>			10Y 5/1	
{		{		r ivyyy 1 kyyyy	4		33		s	5Y 3/2	
}	}	5	6_	(***** 1 (*****			}			10Y 5/2	
{	}	{	-							5Y 5/2	
}		}		r VVVV L kvvv	5		,		S	10Y 5/1	
{		}	-	4 (VVV) 1 (VVV)			3			5Y 5/2	
			8		6		<u> </u>			10Y 5/1	
		· 	9_		СС		3 ///		М	10Y 4/2	
1 1.5	0 20 0	10 2	20								

			SIT	E 1016	HC	LE	A C	OR		13X		CORED 106.0 - 115.6 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Struct	ure	Disturb	Sample	Color	Description
3		}	-				}} }}				5Y 5/1	NANNOFOSSIL OOZE WITH DIATOMS and CLAY WITH DIATOMS AND
{		}	1_	V. V. 4	1		3			S D	5Y 3/1	NANNOFOSSILS  Major Lithologies: This core consists of 50-100 cm
{	\	}	2								10Y 4/2	alternations between light olive gray (5Y 6/2) to light greenish gray (10Y 7/1) NANNOFOSSIL OOZE WITH
~~~		}			2		* * * * * * * * * * * * * * * * * * *	>>> >>>>			10Y 4/1	DIATOMS and grayish olive (10Y 4/2) to very dark gray (5Y 3/1) CLAY WITH DIATOMS AND NANNOFOSSILS.
<b>\</b>		}	3				3	///			10Y 5/2	Color and compositional changes are gradational.  General Description:
3		}	4_		3		» » » »	>>> >>>>			10Y 6/1 10Y 5/2	This core is moderately bioturbated. Discrete Zoophycos are common and Chondrites are rare.
}	\	}				late Pliocene	» 3	>>>			10Y 4/2	
~ ~	}	}	5		4	late Pli	}	>>>			5Y 6/2	
	5	}	6				3 3 3	>>> >>>>		S	10Y 5/2 5Y	
\{ \{ \}	}				5		33				6/2 10Y	
}	}		7		o		*	>>>		D	6/1	
		}	8				\$ } }	>>>	1		5Y 6/2	
}		}			6					S	10Y 7/1	
{		{	9		7		33 33 33	6 >>>			5Y	
.4 1.6	0 20 (	) 20 4	10 10	HMETTE	CC		>>	>>>	_	М	6/2	

GRAPE (density) (10-6 St)   Suscept, (10-6 St)   Su				SIT	E 1016	НС	DLE	A COF	RE			CORED 115.6 - 125.2 mbsf
S DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithology: This core consists of light greenish gray (1077/1) to gray (57 5/1)  DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  General Description: The core is moderately bioturbated throughout. Zoophycos are common. Abundant 1-2 mp thick, hollow pyritized burrows are common and attributed to Chondrites.  S 107 5/1  S 5 6/6/2  A 107 5/1  S 5/6/1	density	(%)	suscept.	П	Graphic				Disturb	Sample	Color	Description
A gradual variation in color with rather subtle changes in composition.  S Major Lithology: This core consists of light greenish gray (10Y 7/1) to gray (5Y 5/1) DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  General Description: The core is moderately bioturbated throughout. Zoophycos are common. Abundant 1-2 mm thick, hollow pryntized burnows are common and attributed to Chondrites.  S 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  General Description: The core is moderately bioturbated throughout. Zoophycos are common. Abundant 1-2 mm thick, hollow pryntized burnows are common and attributed to Chondrites.  S 5 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 6 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 6 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 7 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 7 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 8 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 9 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 9 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 9 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 9 10Y FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.  S 9 10Y FORAMINIFERS. There is a broad, gradual variation in colo	-	1	,	-				}} >>> }}	H			
General Description: The core is moderately bioturbated throughout. Zoophycos are common. Abdundant 1-2 mm thick, follow porticed burrows are common and attributed to Chondrites.    10Y				1_				- ************************************	Li	S		This core consists of light greenish gray (10Y 7/1) to gray (5Y 5/1) DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. There is a broad, gradual variation in color with rather
3 3 0 10 10 7 7/1 S 10 10 7 7/1 S 10 10 7 5/1 S 10 10 10 7 5/1 S 10 10 10 7 5/1 S 10 10 10 10 10 10 10 10 10 10 10 10 10				3		_						The core is moderately bioturbated throughout. Zoophycos are common. Abundant 1-2 mm thick, hollow pyritized burrows are common and
5				4_		3	liocene	% 6 % % %		S		
5	}			5		4	late P					
5	{		}	6-							5/1	
8	}			- - 7		5		) } 				
7 33 5 M 57 57 5/1	}			8-		6		% 6 % 8 % 8 % 6		S		
			{	9_				**************************************	.—— »»		0,2	
			1	=		СС		\$\$ }} >>>	Ś	М	5Y 5/1	

			SIT	E 1016		LE	A COR				CORED 125.2 - 134.8 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
[ ]	[ ]	}	-				}}		S	10Y 6/1	DIATOM OOZE WITH NANNOFOSSILS and NANNOFOSSIL
}		}	_ 		1		}} }} }}			10Y 5/1	OOZE WITH DIATOMS  Major Lithologies:
}		{					}}			5GY 7/1	This core displays meter-scale compositional and color variation
	\{ \ \	}	2		2		**************************************			10Y 6/1	between olive gray (5Y 5/2) to light gray (5Y 7/1) DIATOM OOZE WITH NANNOFOSSILS and NANNOFOSSIL OOZE WITH DIATOMS. Color transitions are gradational over 3-20
}	}	}	-				}} }}				cm. Foraminifers and clay each form ~5% of most lithologies.
}			3				}} }} }}			10Y 7/1	Minor Lithology: Two thin beds of light gray (N6)
		>	-		3				S		VITRIC ASH occur in Sections 5 and 6.  General Description:
}			-			late Pliocene	** ** ** **	i	S	5Y 7/1	The core is visibly bioturbated throughout. Zoophycos and Planolites(?) are present in addition to some nondiscript pyritized burrows.
		<b>\}</b>	5		4	late F	» » » »	 		5Y 7/2 To 10Y	The core is moderately disturbed by XCB coring. Some intervals are starting to display biscuits.
}		}	-				}} /// }}			5/1	
\ \ \		}	-				}} }}			10Y 5/1	
			7		5		**************************************			5Y 5/2	
			8		6		» » »		S	5Y 7/2	
		<b>\</b>	9		7		— ※ ¬A		М	10Y 6/1	
1.4 1.6 1	0 20 0	) 10 2	0					_		•	

			SIT	E 1016	HC	LE	Α	COR	E			CORED 134.8 - 144.4 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age		cture	Disturb	Sample	Color	Description
		>	-	##W				} _A	\\\		10Y 5/1	NANNOFOSSIL OOZE and NANNOFOSSIL DIATOM OOZE
		}	1_		1		3		/www.w	S	10Y 6/1	Major Lithologies: This core consists of thick, irregular alternations between light gray (5Y 6/1)
	}	}	2_				3	} } } } >>>>	/www.v	0	10Y 6/2	to greenish gray (5GY 5/1) NANNOFOSSIL DIATOM OOZE and light greenish gray (10Y 6/1) to light gray (5Y 7/2) NANNOFOSSIL OOZE.
{		}			2		33	) /// }	\\\\\	S	5GY 5/1	Color transitions are gradational, but coring disturbance obscures the original fabric.
			4		3	late Pliocene	-	%	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	S	10Y 6/1	Minor Lithology: Two thin beds and one pod of gray (N6) VITRIC ASH occur in Section 1, between Sections 3 and 4, and in Section 6.  General Description: The core is moderately to heavily bioturbated and burrow mottled. Zoophycos and Chondrites are present. A 0.5 cm pyrite nodule occurs at Section 3, 134 cm, above the VITRIC ASH. This core is strongly disturbed with drilling biscuits throughout.
		<b>}</b>	6_		5		\$! 3! 3! 3!		/wwwww		5Y 6/2	
]		}	7_				\$! }!		\ \ \	S	5Y 7/2	
\ \ \ \ \		}	-				3		× ×		10Y 7/1	
\ \{		}	8		6		3		\ \ \		10Y 6/1	
\ \tag{\}			<b>9</b>		7 CC		A* 3	» » »	wwwwwww	М	5Y 7/1	
1.4 1.6	0 20 0	10 2	0							141		!

			SIT	E 1016	HC	LE	A CO	RE	17X		CORED 144.4 - 154.0 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
[ {	~	>	-				}} }} }} }} }	>		5GY 7/1	DIATOM OOZE WITH NANNOFOSSILS, CLAY, OR FORAMINIFERS
{		}	1_		1		;; 6 ;; 6	×		10Y 7/1	Major Lithology: This core consists of alternations in
			2		2			>  <u> </u>		10Y 6/1	color that correspond to minor compositional variations of pale olive (10Y 7/1) DIATOM OOZE WITH NANNOFOSSILS, CLAY, OR FORAMINIFERS.
			3_				33 33 33 33 33 33 33 33 34 35 35	>   3	s	10Y 7/1	General Description: The core is moderately to strongly bioturbated throughout. Zoophycos and Chondrites are abundant. The core is disturbed and biscuited by XCB
{		}	=		3		33 7/ 33 35 33 35	\  \{ \} \	S	5Y 6/2	coring.
		}	4			ene	33 33 33 34	\ \ \ \		10Y 7/1	
}		{	5_			late Pliocene	) }} 			5Y 7/1	
}		}	-		4	la	}} >>> }} >>> }} &> 6	>  \{ >  \{ \}		5GY 6/1 5Y	
}		{	6_				» »			5/2	
		{	-		5			>		5Y 6/1	
\	{	}	7_				) 		S		
}		}	8				;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;		S	10Y 5/1	
}	$  \rangle  $	}	-		6		» » 6 »	\$   \$   \$		10Y	
}			9_				_	\ \ \ \		6/1	
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			7 CC		» » »	×   ×   ×	S M	5Y 4/2	
.5 1.75 (	0 20 (	0 10 2	20								

			SIT	E 1016		LE	A COR	E			CORED 154.0 - 163.6 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
density	(%)	suscept.	$\Box$	Graphic	HC section Section 1 2 3 4 5 6				18X Sample S	5Y 7/11 5Y 5/2 10Y 4/1 10Y 5/1 5Y 6/1 5Y 7/11 TO 5Y 4/1 5Y 4/1 5Y 4/1 5Y 8/2 5Y 4/1 10Y 6/1 10Y 6/1 5GY 4/2	
1.4 1.6	0 20 0	2 10 2	9		7 CC		**	^	М	10Y 5/1 5Y 6/2	

			SIT	TE 1016		LE	A COR				CORED 163.6 - 173.2 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
7		1					}}} >>>	>		5Y 7/3	DIATOMACEOUS OOZE WITH CLAY and NANNOFOSSIL OOZE WITH
		}	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		;;; 6 ;;; >>> ;;;	wwwwww		5Y 5/2	CLAY AND DIATOMS  Major Lithologies: This core consists of alternating layers
}		{						\M		5Y 7/2	of dark gray (5Y 4/1) and dark gray with olive (10Y 4/1) DIATOMACEOUS OOZE WITH CLAY and light gray (5Y
	\ \{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	}	<u>2</u>  -  -		2		>>> >>> >>>		S	10Y 5/1	7/2) to light olive (10Y 5/2) NANNOFOSSIL OOZE WITH CLAY AND DIATOMS. Contacts are
		}	3_				>>> >>> >>> >>> >>>	i		10Y 4/1	gradational over a few centimeters.  General Description: The sediment is extensively
		}	-		3		\$\$\$ \$\$\$ >>> \$\$\$ >>>		S	5Y 4/1	bioturbated. Zoophycos and Chondrites are abundant.
}	$  \ \rangle$	}	4			early -	333 >>> 333 >>> 333 (6)	i		5Y 5/1	
}		}	5_			late Miocene - early	Pliocene % % % % % % % % % % % % % % % % % %	>			
}	{	}			4	late M	3	× ×		5Y 4/1	
}	$  \rangle  $	{	6				} }} }}			5Y 5/2	
}		}	-		5			-wwwwwww		5Y 5/1 5G	
}		}	7				}}} 6 }}}	\		5/2 10Y	
}		}	8				333	^	S	4/1 5GY	
		{	-		6		>>> >>> >>> >>> >>>	- /// /// -		5/1 5GY 3/1	
		}	9		7		3			5GY 4/1	
1.4 1.6	0 20 0	) 10 2	20		СС			į	М	10Y 5/2	

			SIT	E 1016	HC	LE	A COR	E 2			CORED 173.2 - 182.8 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		{	-				» » » »			10Y 4/1	DIATOM OOZE and NANNOFOSSIL OOZE WITH DIATOMS
}		}	1_		1		<i>" 112</i>	\\ \\	D	10Y 5/2	Major Lithologies: This core consists of light grayish olive to olive gray (10Y 4/1 to 5Y 4/2)
			2		2		» » » » » »	WWWW		10Y 5/1 To 5Y 4/1	DIATOM OOZE and pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL OOZE WITH DIATOMS. Radiolarians and clay comprise about 10% of each lithology. Contacts and color changes are gradational.
1		}	3_				} } ** >>>			5GY	General Description: The sediments are heavily bioturbated. Zoophycos and Chondrites are
	$  \ \rangle  $	}			3	ene	» » »	/// //	S	4/1 5Y 5/2	abundant. Many burrows show well developed reduction haloes.
	}	}	4_			- early Pliocene	» » » » « « « «	W			
			5		4	ate Miocene - ear	\$ } } >>>>	/// // // // // // // // // // //		5Y 4/2	
			6_			lat	** ** ** 6 ** **	<b>∧</b>		10Y 5/1	
			7		5		*	.www.w	S	10Y 4/1	
	$  \ \ \rangle \  $	}	8				} } 6			".	
}		}	-		6		<i>&gt;&gt;&gt;</i>		D S	10Y 6/1	
1	}	\$	9_		7		>> >> >> >> >> >> >> >> >>>			10Y 4/1	
1.4 1.6	0 10 0	) 10 2	20	**********	CC				М		

			SIT	E 1016	HC	LE	A C	OR	E 2			CORED 182.8 - 192.5 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Struct	ure	Disturb	Sample	Color	Description
	(%) (650-700 nm)		1 2 3 3 5 5 5 6 6 8 8 8 9 9		1 2 3 3 4 4 5 5 6 6 7	late Miocene -early Pliocene   Agr	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	©	www.www.www.www.www.www.ww.ww.ww.ww.ww.	Sam	10Y 4/1 10Y 5/1 10Y 4/1 10Y 5/1 10Y 5/1 10Y 6/1 10Y 6/1	NANNOFOSSIL OOZE and CLAY DIATOM MIXED SEDIMENT WITH NANNOFOSSILS  Major Lithologies: This core consists of alternations between grayish olive (10Y 4/2 to 10Y 4/1) CLAY DIATOM MIXED SEDIMENT WITH NANNOFOSSILS and light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL OOZE. Color and compositional changes are gradational.  General Description: The sediments are slightly to moderately bioturbated but extensive fracturing makes observation of surface features difficult. Zoophycos are abundant.
1 1.5	0 20 0	) 10 :	 20		ICC					M		<u> </u>

			SIT	E 1016	HC	LE	A COR	Е	22X		CORED 192.5 - 202.1 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
1/2		1		. V.V.V.V.V.V.V.V.V.V.V.V.V.V.V.V.V.V.V						5Y 5/3	DIATOM NANNOFOSSIL OOZE WITH CLAY and DIATOM OOZE WITH CLAY
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		}	1		1		} } } >>>>		S	10Y 6/2	Major Lithologies: This core consists of gradual alternations between pale olive to light grayish olive (10Y 6/2 to 10Y 4/2) DIATOM NANNOFOSSIL OOZE WITH CLAY and dark olive gray to olive (5Y
			3		2		3 *** 33 3			5Y 3/2	3/2 to 5Y 5/3) DIATOM OOZE WITH CLAY. Clay content is about 10%-15% in each lithology.  General Description: The sediments are moderately bioturbated. XCB coring has disturbed
			4_		3	Pliocene	3			10Y 4/2	sediments making observation of surface features difficult.
			5		4	-early	3		S	5Y 4/2 To 5Y 3/2	
			6		5	late Miocene	} } \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			5Y 4/3 To 5Y 4/2	
			8		6		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			10Y 4/1	
1.2 1.4	5 10 -10	0 0 1	9		7 CC		<pre>33 33 33 33 33 33 33 33 33 33 33 33 33</pre>		М	5Y 4/2	

			SIT	E 1016			A CO	RE	2			CORED 202.1 - 211.7 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structur	e l	DISINID	Sample	Color	Description
}	5	}	-		1		;; ;;				10Y 7/2	DIATOM OOZE and DIATOM NANNOFOSSIL OOZE Major Lithologies:
			2		2	•	» «			SD	10Y 4/1 To 5Y 4/2	This core consists of gradual alternations between grayish olive to dark grayish brown (10Y 4/1 to 2.5Y 4/2) DIATOM OOZE and light grayish olive to pale olive (10Y 5/1 to 10Y 7/2) DIATOM NANNOFOSSIL OOZE. Near the base of the core is olive
}		}	3				>>> >>> >>> >>>			s <sub>D</sub>	10Y 7/2	brown (2.5Y 4/4) DIATOM OOZE composed of nearly 100% diatoms. Color changes are gradual.  Minor Lithology:
		}	4_		3	ate Miocene -early Pliocene	}} }} }}	۲   i			5Y 5/3	Section 5, 130-135 cm, contains a gray (N4) fine VITRIC ASH.  General Description: The sediment is slightly to moderately bioturbated and moderately disturbed
}		}	5_			ene -early	» » » » «				5Y 4/4	by coring operations.
}		}	-		4	Mioce	) } }				10Y 4/2	
}	}	1	6	~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		late	}				2.5Y 4/2	
			7		5		**		**	S	10Y 4/2	
		}	8		6		* (e			SD	2.5Y 4/4	
1 1.5	0 10 -1	0 0 1	0		7 CC		} } }			М	5Y 5/3	

			SIT	E 1016		LE	A COR				CORED 211.7 - 221.3 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		3 3	M		5Y 4/2	NANNOFOSSIL DIATOM OOZE, DIATOM OOZE WITH CLAY and DIATOM CLAY  Major Lithologies: This core consists light grayish olive (10Y 5/2) NANNOFOSSIL DIATOM OOZE, grayish olive (10Y 4/2) DIATOM OOZE WITH CLAY, and dark
}		}	2		2		3		S	10Y 5/2	grayish olive to olive gray (10Y 4/1 to 5Y 4/2) DIATOM CLAY. Color and compositional changes are gradual.
\{\{\}	{	}	3				3		s	5Y 4/2	General Description: The sediments show slight bioturbation but extensive fracturing makes observation of surface features
\	}	}	4_		3	Pliocene	} } }	·	3	10Y 5/2	difficult.
{		}		*****		arly Plic	ĺ	1	ı	5Y 4/2	
}		}	5_	**** ****	4	ate Miocene -early	3 >>>			10Y 4/1	
		}			7	late Mio	3 3 3 3 3			10Y 5/2	
		<b>}</b>	7		5		} } }			5Y 4/2	
			8		6		33			10Y 4/2	
1.2 1.4	5 10 0	0 10 2	20	-Fv7v7v7v7	7 CC		}} }} }}		S M	10Y 4/1	

			SIT	E 1016	НО	LE	A COR		25X		CORED 221.3 - 230.9 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
					2	ane	``````````````````````````````````````	$\overline{(VVVVVVVVVVVVVVVVVVVVVVVVV)}$	00	10Y 4/1	CLAYEY DIATOM OOZE and DIATOM NANNOFOSSIL OOZE  Major Lithologies: This core consists of pale olive to light olive gray (10Y 6/2 to 5Y 6/2) DIATOM NANNOFOSSIL OOZE and grayish olive to dark olive gray (10Y 4/1 to 5Y 3/2) CLAYEY DIATOM OOZE. Clay content varies from 15% to 40%. Color and compositional changes are gradual.  General Description: The sediments show moderate bioturbation but extensive fracturing makes observation of surface features difficult.
}		}	4			-early Pliocene	3		S	5Y 6/2	
		}	5		4	ate Miocene -earl	} }} }	$\wedge \wedge \wedge \wedge \wedge$	S	5Y 3/2	
			6		5	late	}	$\wedge \wedge \wedge \wedge \wedge \wedge \wedge \wedge$		10Y 4/1	
	}	{					}} }} }} }	$\leq$		10Y 6/2	
			8		6		> >> >> >> >> >> >> >> >> >> >> >> >> >	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		5Y 4/2 To 5Y 3/2	
'		`	-		CC		}		М	5Y 4/2	
1 1.5	0 10 (	) 10 2	20								

			SIT	E 1016	HOL	E_	A COR				CORED 230.9 - 240.6 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
}			1		1		***************************************	VVVVVVV	S	5Y 4/2	DIATOMITE and CLAYEY DIATOMITE  Major Lithologies: This core consists of olive to olive gray (5Y 4/3 to 5Y 4/2) DIATOMITE gradationally alternating with grayish olive (10Y 4/1) CLAYEY DIATOMITE
			3		3		<pre></pre>	-1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +	S <sub>D</sub>	10Y 4/1	containing about 35% clay.  General Description: The sediment is moderately bioturbated but extensive fracturing makes observation of surface features difficult.
$\left\langle \cdot \right\rangle$		}				-dally	}} }}	HHHH		5Y 4/3	
}		}	5		4	MIOCELIA		$\langle 1 \rangle \langle 1 \rangle \langle 1 \rangle$		10Y 4/1 5Y	
}		}	6		2	late				4/3 10Y 4/1	
{		{			5		» » » »		s <sub>D</sub>	5Y 4/3	
	{	{	7				» }}			10Y 4/1	
		1	8		6		<pre>33 33 33 33 34 35</pre>			5Y 4/2	
}		}	9		7		} }} } >>>			10Y 4/1	
1 1	6 8 -10	) 0 0 1	10	*******	CC		, ;;; ;; ;;;		М	5Y 4/2	

			SIT	E 1016	HC	LE	A COR	E 2	27X		CORED 240.6 - 250.2 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		1		} } }	HHHHHHHH		5Y 4/3 10Y 4/1	DIATOMITE and DIATOM NANNOFOSSIL CHALK  Major Lithologies: This core consists of olive to olive brown (5Y 4/3 to 10Y 4/4) DIATOMITE gradationally alternating with light grayish olive to grayish olive
			3		3	Pliocene	**************************************	<u>                                     </u>	S	5Y 4/3	(10Y 5/1 to 10Y 4/1) DIATOM NANNOFOSSIL CHALK.  General Description: The sediments are moderately to heavily bioturbed but extensive fracturing and biscuiting makes observation of surface features difficult.
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		}	5		4	late Miocene -early	** * * *	HHHHHHH		10Y 4/1 5Y 5/2	
}			-		5		} ;;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;	44444		10Y 5/1 10Y 3/1	
		}	7_				33 33 33	444444	S	2.5Y 4/4	
			8		6		>>> >>> >>> >>>	1111111	S	10Y 5/1	
		{	9		7 CC		>>> >>> >>>	1	M	5Y 4/2	
1 1.5	5 10 -2	0 0 2	20				<u> </u>		M		l

			SIT	E 1016	HC	LE	A COR	E 2			CORED 250.2 - 259.8 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		} } }			10Y 4/1	DIATOM NANNOFOSSIL CHALK, DIATOMITE and CLAYEY DIATOMITE  Major Lithologica
}		{	1				>>> >>>	444444	S	5Y 6/3	Major Lithologies: This core consists of pale olive to light olive gray (5Y 6/3 to 5Y 6/2) DIATOM NANNOFOSSIL CHALK, dark grayish brown to olive (2.5Y 4/2 to 5Y 4/4)
}		{	2		2			1111111	S	5Y 4/2	DIATOMITE, and grayish olive to olive gray (10Y 4/2 to 5Y 4/2) CLAYEY DIATOMITE. Color and compositional changes are gradational.
}	$\left  \begin{array}{c} \\ \end{array} \right $	{	3_				» » » » » » » »	14444	Ü	2.5Y 4/2	Minor Lithologies: Thin white (N8) ASH layers occur in Section 4, 118-119 cm, and Section 6,
		}	4_		3	cene	\$ \$ \$		S	10Y 4/1	7-8 cm. General Description:
	$\left  \begin{array}{c} \\ \\ \end{array} \right $					ate Miocene -early Pliocene	\$ } }	ㅗ		5Y 4/2	The sediments show slight bioturbation but extensive fracturing makes observation of surface features difficult. Chondrites are abundant.
}	$  \ \rangle \  $	}	5		4	iocene -e	» } }	++++		10Y 6/2	difficult. Chondines are abundant.
		}	6 <u> </u>			late M	→ _A	4444		10Y 4/2 2.5Y	
}		}					3	土		4/2	
{	$  \ \rangle  $	}	- - 7		5		» »	4444		5Y 4/3	
{	}	}					> >> >> >> >> >> >> >> >> >> >> >> >> >	$\perp$		10Y 5/2	
		}	- 8-				3	$\perp$		10Y 4/2	
{	$ $	<b>\{</b>		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6		3	+		5Y 4/4	
}	$  \rangle  $		9		7		» » » « «			10Y 4/2	
	, , , , , , , , , , , , , , , , , , ,		-	V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-V-	CC		3 9	<u>+</u> + +	I	5Y 4/2	
1.5	0 10 -1	0 0 1	10								

3 S S S S S S S S S S S S S S S S S S S				SI	ΓΕ 1016	HC	LE	A COR		29X		CORED 259.8 - 269.5 mbsf
WITH DIATOMS, greenish gray (5GY yr) to Sqy 4/10 LQAY DIATOMIXES SDIMENT, and olive (SY 4/3) to dark olive gray (SY 3/2) DIATOMITE. Color transitions are gradational where preserved.    Solid A   Solid A	density	(%)	suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	density (g/cm <sup>3</sup> )	(%)	suscept.	3	Graphic Lith.	1 2 3 5 6	-early Pliocene	**************************************		s s	10Y 4/1 10Y 5/1 5Y 2/1 10Y 5/1 10Y 4/3 5GY 5/1 5GY 5/1 To 5GY 4/1 5Y 4/2 10Y 4/1 10Y 3/1	CLAYEY NANNOFOSSIL CHALK WITH DIATOMS, DIATOMITE and CLAY DIATOM MIXED SEDIMENT  Major Lithologies: This core consists of light olive (10Y 5/1) CLAYEY NANNOFOSSIL CHALK WITH DIATOMS, greenish gray (5GY 5/1 to 5GY 4/1) CLAY DIATOM MIXED SEDIMENT, and olive (5Y 4/3) to dark olive gray (5Y 3/2) DIATOMITE. Color transitions are gradational where preserved.  General Description: This core is moderately bioturbated and contains Zoophycos and Chondrites trace fossils. The core is badly fractured and biscuited

			SIT	E 1016	HC	LE	A COR				CORED 269.5 - 279.2 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		33 6 33			5Y 4/1	DIATOMITE WITH NANNOFOSSILS OR CLAY and DIATOMITE  Major Lithologies:
3	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		1_				}	<u>+</u> +	S	5Y 5/1	This core consists of color and compositional variation between dark gray (5Y 4/1) to grayish brown (2.5Y
		}	2		2			1////////	S	5Y 4/1	gray (ST 4/1) to grayish blown (2.51 5/2) DIATOMITE and greenish gray (5GY 4/1) to olive gray (5Y 5/2) DIATOMITE WITH NANNOFOSSILS OR CLAY. Color transitions are gradational and bioturbated.
{			3_		_		**				General Description: This core is moderately bioturbated through most of its length. It is moderately to highly fractured, and
}					3	ocene	}} }}			5Y 5/1	several sections display biscuits and interbiscuit slurries.
{		{	4_			arly Plic	33 6 33 33>			5Y 5/2	
>			5_			ene -eg	;; 6 ;; »	$\vdash$		5Y 5/1	
3		{			4	ate Miocene -early Pliocene	>>		S	5Y 4/1	
}			6_			_	) 6 3 6 3 ,			5Y 6/2	
			7		5		% 6 % 6 % 6 % 8 % % % % % %	HH /////	S	5GY 4/1	
			8		6		3 6	HHHH \\\		10Y 4/1 To 10Y 5/1	
1 1.25	0 10 -10	00 0 10	9		7 CC		} 6	/	М	5GY 5/1	

			SIT	E 1016	HC	LE	A COR	E :	31X		CORED 279.2 - 288.8 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 2 3 4 4 5 5 5 5 5 0 5 0 5 0 5 0 5 0 5 0 5 0		1 2 2 3 3 5 6 6 7 7 CCC	late Miocene -early Pliocene	- ************************************	<u>                                      </u>		5 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	DIATOMITE and DIATOMITE WITH CLAY and DIATOMITE WITH NANNOFOSSILS  Major Lithologies: This core consists of dark gray (5Y 4/1) to olive gray (5Y 5/2) DIATOMITE and DIATOMITE WITH CLAY and DIATOMITE WITH NANNOFOSSILS. The lithologies alternate and grade into each other over centimeters to decimeters.  Minor Lithologies: A thin bed of VITRIC ASH occurs at Section 2, 133-135. A single drilling biscuit of CHERT occurs in Section 4 immediately overlying a nannofossilrich layer. The chert has the same bioturbated fabric as the host rock. The mineralogy appears to be primarily opal-CT. A 1x4 cm, black (N1) lens or bleb of solid bitumen occurs at Section 1, 81 cm.  General Description: This core is badly fractured and biscuited by XCB coring, making it difficult to observe primary sedimentary features and trace fossils.

			SIT	E 1016	HO	LE	A COR	Ε ;			CORED 288.8 - 298.4 mbsf
density	eflectance (%) 50-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		The state of the s	1 3 5 6 7 7 8		3 4 5	late Miocene -early Pliocene	<b>—</b>	- \\\\\\\ FFFF \V\ FFF\\\\\\\\\\\\\\\\\\		5Y 5/1 5GY 5/2 10Y 4/1 2.5Y 3/2 5Y 4/1 10Y 4/1 5/1 5/1 5/1 5/1 5/1 5/1 10Y 4/1 10Y 4/1	DIATOMITE and DIATOMITE WITH CLAY  Major Lithologies: This core consists primarily of dark gray (5Y 4/1) to very dark grayish brown (2.5Y 3/2) DIATOMITE and gray (5Y 5/1) to greenish gray (5GY 5/2) DIATOMITE WITH CLAY. Radiolarians, foraminifers, silicoflagellates, and sponge spicules are present in persistent trace amounts. Color and compositional changes are gradational and bioturbated.  Minor Lithologies: Four thin beds of dark gray CHERT and PORCELLANITE occur in Sections 5, 6, and CC. The diagenetic siliceous rocks are highly brecciated by coring. An 8-cm thick dark gray VITRIC ASH is present at the base of Section 1. A pale olive (10Y 6/2) bed of DOLOMITE CLAY WITH NANNOFOSSILS is present near the base of the core in Section 6.  General Description: The core is badly fractured by coring. Where not obscured by coring disturbance, bioturbation is prevalent through the core. Chondrites and Zoophycos are present.

SITE 1016 HOLE A CORE 33X											
Graphic Lith.	Age	Structure	Disturb	Sample	Color	Description					
C C	late Miocene -early Pliocene			SM		CLAYEY DOLOSTONE, PORCELLANITE and CHERT  Major Lithologies: This core consists of highly fractured pieces of light greenish gray (10Y 6/1) CLAYEY DOLOSTONE, light brownish gray (2.5Y 6/2) PORCELLANITE, and black (2.5Y 2/0) CHERT. No original stratigraphic contacts are revealed.  General Description: This core recovered only ~3% of the advance. Less indurated lithologies that likely existed between the hard chert, porcellanite, and dolostone were probably disintegrated during coring.					

## 1016A-34X NO RECOVERY

SIT	E 1016	НО	LE	A COR	Ε ;	35X		CORED 311.0 - 315.5 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
-		1 CC			$\times$	М	2.5Y 3/1	PORCELLANITE and CHERT
			late Miocene -early Pliocene —					Major Lithologies: This core consists of small (<2-3 cm), loose, brecciated fragments of very dark grayish brown (2.5Y 3/1) PORCELLANITE and black (2.5Y 2/0) CHERT. No original stratigraphic relationships are preserved. The silica phase is apparently opal-CT.

SITE 1016 H	OLE A C	ORE	36N		CORED 315.5 - 316.5 mbsf
Graphic Lith.	Structi	ne Disturb	Sample	Color	Description
**************************************	33	x 🔀	D		PORCELLANITE and CHERT
					Major Lithologies: This core consists entirely of light gray (2.5Y 7/2) to very dark gray (2.5Y 3/0) PORCELLANITE and CHERT. The recovery is highly fragmented. Compacted bioturbation produces a wispy discontinuous type of lamination fabric in some fragments. The silica phase is apparently opal-CT.  General Description: Age of this core is late Miocene-early Pliocene.

			SIT	E 1016	HC	DLE	B COR	E	1H		CORED 0.0 - 1.8 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 2	Quaternary	~ ~ ~ ~		S	10Y 4/1	CLAY WITH DIATOMS  Major Lithology: This core consists of homogeneous olive gray (10Y 4/1) CLAY WITH DIATOMS. Large (1.5 cm diameter), open burrows with slightly pelleted walls occur down to Section 2, 43 cm.
1 1.5	5 10 -5	0 0 5	0								

			SIT	E 1016	HO	LE	B COR				CORED 1.8 - 11.3 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
		†W	1		1		}	00000		10Y 4/1	DIATOM OOZE WITH CLAY and DIATOM CLAY  Major Lithologies: This core consists of dark olive gray
1 1.5	5 10		3 3 4 7 7 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9		2 3 4 5 CC	Quaternary	**************************************		<i>SS S S S</i>	10Y 5/1	This core consists of dark olive gray (10Y 4/1 to 10Y 5/1) DIATOM OOZE WITH CLAY and DIATOM CLAY. Compositional variation occurs without significant color change. Small amounts of foraminifers, radiolarians, silicoflagellates, and coccoliths are also present.  Minor Lithology: A 1-cm lamination of gray (N4) QUARTZ FELDSPAR SAND occurs in Section 2.  General Description: The sediments are moderately bioturbated throughout. Small, mmscale spots of black (Mn?) precipitate are distributed through the core.

			SIT	E 1016	НО	LE	B COR		3H		CORED 11.3 - 20.8 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/cm <sup>3</sup> )	(650-700 nm)		3 3		3 4 5	Quaternary	**************************************	0 /	88	10Y 5/1 5Y 5/2 10Y 5/1 10Y 4/1 5/1 10Y 6/1	DIATOM CLAY and CLAY WITH SILT  Major Lithologies: This core consists of thick bands with gradual transitions between dark olive gray (10Y 5/1) DIATOM CLAY and gray (5Y 5/1) CLAY WITH SILT. Color variation is minor and indistinct.  Minor Lithology: A layer of dark greenish yellow (10Y 6/1) CLAYEY NANNOFOSSIL OOZE WITH DIATOMS occurs in Section 6. A thin bed of very fine-grained SAND is present at the base of Section 3. Two laminations of green CLAY occur in Section 1.  General Description: This core is moderately bioturbated throughout, with several horizons dominated by Zoophycos and one with Chondrites.
}	}	}	9	Š	7		3 >>> 3 3 3	— ww		10Y 4/1	
1 1.5	0 10 0	) 10 2	20	v	υŲ			>	M		<u> </u>

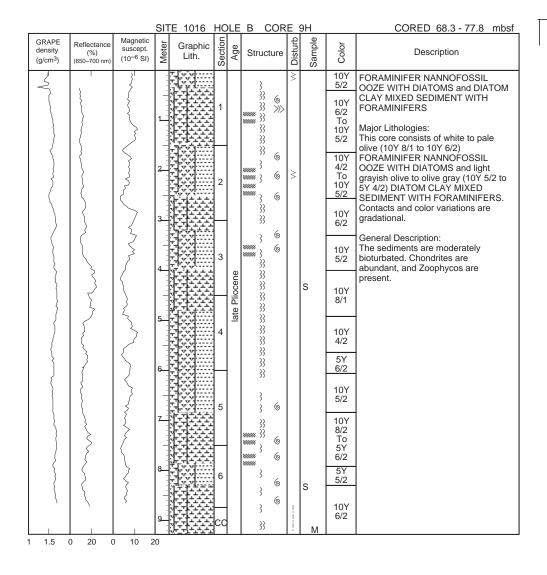
			SIT	E 1016	HC	LE	B COR	E 4			CORED 20.8 - 30.3 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
}			-	Ž				,0000			CLAY WITH DIATOMS AND SILT and CLAY WITH SLIT AND DIATOMS
	}	\hat{\}	1_		1		}	۸۸		10Y 4/1	Major Lithologies: This core consists of grayish olive (10Y 4/1) CLAY WITH DIATOMS AND SILT and CLAY WITH SILT AND DIATOMS
		}	2		2					10Y 5/1	interspersed with thin beds or laminations of minor lithologies. Quartz, feldspar, biotite, and opaque minerals comprise the silt fraction. Foraminifers, radiolarians,
	2	{		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				Ì	s s		silicoflagelates, and sponge spicules are present in small amounts.
}	}	}	3	,	3		} }	1	3	10Y 4/1	Minor Lithology: Gray to light olive (10Y 5/1 to 10Y 5/2) SILTY CLAY WITH DIATOMS occurs in sections 2 and 3. A lamination of
	}	{	4	)- 			}		S	10Y 5/2	dark green (10Y 3/1) QUARTZ FELDSPAR SAND occurs at Section 2,
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		5		4 5 CC	Quaternary	» »» » —		S S S	10Y 4/1	148 cm, and small, cm-scale pods of sand also are present in Sections 3 and 5. A 1-cm thick layer of pyritized organic debris (wood?) occurs at Section 5, 21-22 cm. Several green CLAY laminations in the upper part of Section 5.  General Description: The core is slightly mottled throughout, but distinct burrows are rare. Sagarites sponge spicule aggregates are disseminated through Sections 4-6. Specks and discontinuous thin laminations of black (Mn oxides?) are scattered in the sediments.

GRAPE (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)				SIT	E 1016	HO	LE	B COR	Ε:	5H		CORED 30.3 - 39.8 mbsf
4/1 WITH CLAY  Major Lithologies: This core consists of dark gray (5Y 4/1) to olive (10Y 5/1) DIATOM CLAY to DIATOM OOZE WITH CLAY. Transitions are gradual.  Minor Lithology: Light olive gray (10Y 6/1) CLAYEY NANNOFOSSIL OOZE WITH DIATOMS forms several medium-thick interbeds.  General Description: The core is only slightly disturbed by coring. It is slightly to moderately bioturbated with frequent Zoophycos and one occurence of Chondries. Sagarites sponge spicule aggregates are scattered throughout the lower half of the core.  5 y 4/1  10Y 6/1  5 y 4/1  10Y 6/1  10Y 6/1  10Y 6/1	density	(%)	suscept.		Graphic	Section				Sample	Color	
	density (g/cm <sup>3</sup> )	(%)	suscept.	1 2 3 4 5 7 7 8 8		1 2 3 4 5 6				SSS	5Y 4/1 10Y 5/1 10Y 4/1 10Y 6/1 5Y 4/1 2.5Y 4/2	DIATOM CLAY and DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of dark gray (5Y 4/1) to olive (10Y 5/1) DIATOM CLAY to DIATOM OOZE WITH CLAY. Transitions are gradual.  Minor Lithology: Light olive gray (10Y 6/1) CLAYEY NANNOFOSSIL OOZE WITH DIATOMS forms several medium-thick interbeds.  General Description: The core is only slightly disturbed by coring. It is slightly to moderately bioturbated with frequent Zoophycos and one occurence of Chondrites. Sagarites sponge spicule aggregates are scattered throughout the lower half
טו ט ט. ט. ט. ט. ט. ט. ט. ט.	1.5 1.6	0 10 5	5 10 1	 5		UU			_	<u>i</u> M		<u> </u>

	.8 - 49.3 mbsf
GRAPE density (g/cm³) (850-700 nm) (10-6 SI) Descripti	ion
DIATOM OOZE WITH Major Lithology: This core consists of lit (107 5/1) DIATOM COC containing varibable at (up to 20%) and minor nanofossils and forar and compositional charand compositional charand gradual.  3	ight grayish olive DZE WITH CLAY mounts of clay r amounts of minifers. Color anges are subtle n, contains 4 thin rish brown (2.5Y 118-122 cm, of fine SAND.

			SIT	E 1016	<u>HC</u>	<u> DLE</u>	B COR	<u>E</u>	7H		CORED 49.3 - 58.8 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section		Structure	Disturb	Sample	Color	Description
			1 2 3		2		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		S	5Y 4/2	DIATOM OOZE WITH CLAY, NANNOFOSSIL OOZE WITH FORAMINIFERS AND CLAY and DIATOM OOZE WITH NANNOFOSSILS, CLAY, AND FORAMINIFERS  Major Lithologies: This core consists of interbedded light greenish yellow to olive gray (10Y 7/1 to 5Y 5/2) DIATOM OOZE WITH CLAY, light olive gray (5Y 4/2 to 5Y 6/2) NANNOFOSSIL OOZE WITH FORAMINIFERS AND CLAY and light greenish yellow (10Y 7/1) DIATOM OOZE WITH NANNOFOSSILS, CLAY, AND FORAMINIFERS. Color and compositional changes are
			8		4 5	Quaternary	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		S S S	10Y 7/1 To 5Y 5/2	and compositional changes are gradational.  Minor Lithology: A thin SAND layer occurs in Section 5, 77-78 cm.  General Description: The sediments are moderately bioturbated. Zoophycos and Chondrites are abundant.
		}	9	1 / / / / / / / / / / / / / / / / / / /	6		% 6 % 6 % 6			10Y 6/1	
}		}	9	1	7		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;			10Y 4/1	
) 1	0 10 0	) 10 2	20	1 /VVV 4 /VVV	CC		;; ;; 6		М	5Y 5/1	

			SI	E 1016	HC	LE	В	COR	E			CORED 58.8 - 68.3 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Stru	ucture	Disturb	Sample	Color	Description
7	>'	{		<b>X</b>			-	8} 6	}		5Y 4/1	CLAYEY DIATOM OOZE and SILTY CLAY
			1		1		_		/		5GY 5/1	Major Lithologies: This core consists of gradual alternations between very dark grayish brown to grayish olive (2.5Y 3/2 to 5Y 4/2) SILTY CLAY and gray to greenish gray (5GY 5/1 to 5Y 5/1) CLAYEY
3		}	2		2	_		}} }} }}			10Y 5/1	DIATOM OOZE. Silt components are composed mainly of quartz, feldspar and minor amounts of rock fragments,
}	\	{	3_			Quaternary		}} }} 6		S	2.5Y 3/2 10Y	glass, and pyrite.  General Description:
[		{		<b>***</b>		ď		33	li		5/1	The sediments are moderately bioturbated. Chondrites, Zoophycos,
}	$  \ \rangle \  $	}		///	3			} }	H		5Y 4/1	and Planolites are common to abundant.
		}	4								10Y 5/1	
			5_		4		_			s	5GY 6/1	
	\$	{	6					55 }}	l i		5Y 5/2	
}	{	}	-					% 6 % 6	li		10Y 5/1	
}		{	7_	*** **********************************	5			) }} >>			5Y 4/2	
}	}	}		VV=		Pliocene	l		li		10Y 5/1	
\ \	}	\	-			Plioc	<b>-</b>	} } \$ } }	H		5GY 5/1	
}			8		6	late		}} }}	l		5Y	
3	\ \{ \		-					6	li	S	4/2	
	/	<i></i>	9					6 }} >>>			5GY 5/1	
>	\ \	Ę	-		7			33	H		5Y 4/2	
1.4 1.6	1 1 5 10 0	10 2	20	Y.V	CC					M		



GRAPE density							B COR		10H		CORED 77.8 - 87.3 mbsf
(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
	(%)	suscept.	1 2 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		1 2 2 3 3 4 4 5 5 6 6 7 7			ą	Sample	5Y 4/2 10Y 7/2 5Y 5/3 10Y 4/2 10Y 6/2 10Y 6/2 5Y 5/2 10Y 6/2 5Y 5/2 10Y 5/2 5Y 5/2 10Y 5/2 5Y 5/2 5Y 5/2 5Y 5/3	
	0 10 0	0 10 2	20	7000	CC		\$ >>> \$ >>>		М	10Y 6/2	

			SIT	E 1016		LE	B COR				CORED 87.3 - 96.8 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
7	7		-	, , , , , , , , , , , , , , , , , , ,			, 6			10Y 5/2	NANNOFOSSIL DIATOM OOZE WITH FORAMINIFERS, CLAYEY
}	7		_		1		% »»			10Y 6/2	DIATOM OOZE and DIATOM CLAY
		}	2	**************************************	2		** >>> ** >>> ** >> ** >>			10Y 5/2 To 10Y 4/2	Major Lithologies: This core consists of gradationally interbedded pale olive to very light gray (10Y 7/2 to 10Y 6/2) NANNOFOSSIL DIATOM OOZE WITH FORAMINIFERS and light grayish olive to olive gray (10Y 5/2 to 5Y 4/2) CLAYEY DIATOM OOZE and
	}		3_				% }} }} >>>			10Y 6/2	DIATOM CLAY. Composition is variable in each lithology.
	}		4		3		**			10Y 5/2 To 5Y 5/3	General Description: The sediments are moderately to heavily bioturbated. Zoophycos and Chondrites are common.
			5	****** ****** *****		Pliocene	» » »		S	5Y 6/3	
>			-	VVV\	4	late F	-A			10Y 4/1	
}		1	6				***			10Y 7/2	
{		)	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			» »			10Y 4/2	
	]		_ 	, , , , , , , , , , , , , , , , , , ,	5		***			5Y 6/2	
	}		8	**************************************			<del></del>		s s	5Y 4/2 To 5Y 5/2	
\		)			6		} }}			10Y 6/2	
			9	(A) A) 4 (A) A) 4 (A) A) A	Ц					5Y 5/2	
		J		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7		3 6			5Y 6/2	
] ,		l	10	,,,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CC		}}		М	5Y 4/2	
1.4 1.6	0 10 0	50 1	00								

			SIT	E 1016	НО	LE	B COR	E ·			CORED 96.8 - 106.3 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
4.1.6			3 3 5 5 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		1 2 2 3 3 4 4 5 5 6 6 7 7 CCC	late Pliocene			s M	5Y 7/2 5Y 7/2 5Y 6/3 10Y 5/2 10Y 6/2 10Y 5/2 5Y 6/2 10Y 5/2 5Y 4/2 5Y 4/2 5Y 5/3 10Y 5/2 10Y 5/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 6/2 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y	CLAY DIATOM MIXED SEDIMENT and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithologies: This core consists of olive to light grayish olive (5Y 4/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT and light gray to pale olive (5Y 7/2 to 10Y 6/2) DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. Color and compositional changes are gradual.  General Description: The sediments are moderately bioturbated. Chondrites, Skolithos, and Zoophycos are abundant.

			SIT	E 1016	HC	LE	B COR	E.	13H		CORED 106.3 - 115.8 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	∣≅	Sample	Color	Description
				**************************************	1			WW		5Y 4/2	NANNOFOSSIL OOZE WITH DIATOMS and DIATOM CLAY  Major Lithologies: This core consists of gradual alternations between grayish olive to olive gray (10Y 4/1 to 5Y 4/2)
			2	V V V V V V V V V V V V V V V V V V V	2		<pre>3 3 3</pre>		S	10Y 4/1	DIATOM CLAY and very light gray (10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS. Minor Lithology: Section 7, 27-32 cm, contains a VITRIC ASH layer.
}	{	{	<b>]</b>	*** ***			} >>> >>>			10Y 5/1	General Description: The sediments are moderately bioturbated. Zoophycos are
		}	4	**************************************	3	ne	>>> >>> >>> >>>			10Y 4/1	abundant.
\ \ \ \		}	5—	AAA AAA AAA AAA AAA	4	late Pliocene	} } } }} }}			10Y 5/1	
	}		6—		5		3		S	10Y 7/1	
		}					} } } } }			5Y 5/2	
		}	8		6		<b>-</b>			10Y 7/1	
>			9		7 CC				М	10Y 6/2	

			SIT	E 1016	НО	LE	B COR				CORED 115.8 - 125.3 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
	my many many many		3		2 3	sene	3 —A 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	W	S	10Y 6/2 To 10Y 7/1	NANNOFOSSIL OOZE WITH DIATOMS and DIATOM NANNOFOSSIL OOZE WITH CLAY  Major Lithologies: This core consists of light olive (10Y 5/1 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE WITH CLAY and pale olive to very light gray (10Y 6/2 to 10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS. Color transitions are gradational.  Minor Lithology: Section 1, 120-124 cm, contains a VITRIC ASH. A dark pod at Section 6, 80 cm, is enriched in disseminated and microfossil-coating pyrite or other opaque minerals.  General Description: The sediments are slightly to moderately bioturbated and include
			5		4	late Pliocene	<ul><li>33</li><li>33</li><li>33</li><li>3</li></ul>			10Y 5/2	Zoophycos trace fossils.
			7		5		33 33 33		S	10Y 7/1	
}			8				}		S	10Y 5/1	
}			9		6		Р		S	10Y 6/1	
1.4 1.6 1	0 20 0	) 200 4	.00		7 CC		} }} }		М	10Y 5/1	

			SITI	∃ 1016	НС	LE	в со	RE	15H			CORED 125.3 - 134.8 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	e :	Sample	-	Color	Description
	(650-700 nm)	(10-6 SI)	2 3 3 3 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Lith.	9S 1 2 3 4 5 6	late Pliocene	A* >>> >>> >>> >>> >>> >>> >>> >>> >>> >		US		5 10Y 6/1 5 5 7 7/1 5 5 6/1 10Y 7/1 5 5 6/1 10Y 7/1 10Y 5 5 7 7/1 10Y 7/1 10Y 7/1 10Y 7/1	DIATOM OOZE and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithologies: This core consists of pale olive to gray (10Y 6/1 to 5Y 6/1) DIATOM OOZE and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. Radiolarians and sponge spicules each make up a few percent of most samples. Color transitions are gradational.  Minor Lithology: A dark gray pumice fragment occurs at Section 2, 67 cm. A light gray (5GY 4/1) VITRIC ASH layer occurs at Section 5, 19-22 cm and 119-129 cm.  General Description: The core is moderately bioturbated with abundant Zoophycos and Chondrites.
1.5	10 20 0	20 4	40		7 CC		6		M	ı	6/1	

			<u>SI</u>	ΓΕ 1016		LE	в со	RE	16H		CORED 134.8 - 144.3 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structur	Disturb	Sample	Color	Description
5 1.75	20 -1		3 3 4 4 8 8		1 2 2 3 3 3 3 3 5 5 5 6 6 6 6 CCC	late Pilocene			S S S	10Y 5/1 10Y 6/1 10Y 6/1 10Y 6/1 5Y 7/1 5Y 7/2 5Y 6/2 5Y 7/2 5Y 7/1 10Y 6/1	NANNOFOSSIL OOZE WITH FORAMINIFERS AND DIATOMS  Major Lithology: This core consists of light olive gray (5Y 6/2) to very pale olive (10Y 7/1) NANNOFOSSIL OOZE WITH FORAMINIFERS AND DIATOMS. Colors change subtly and gradationally with only minor compositional change.  Minor Lithology: A disturbed lamination of dark gray VITRIC ASH WITH OPAQUE MINERALS (probably pyrite) occurs at Section 4, 85 cm. The opaque mineral coat otherwise pristine glass shards.  General Description: The core is moderately to heavily bioturbated throughout. Zoophycos, Chondrites, and Planolites(?) are especially abundant.

			SIT	E 1016	HO	LE	B COR	E			CORED 144.3 - 153.8 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
density	(%)	suscept.	Meter		1 2 Section 4	late Pliocene Age	*************************************		Sample	5Y 6/1  5Y 7/1  5Y 6/2  5Y 6/2  5Y 6/1  10Y 7/1  5Y 4/2  5Y 6/1	NANNOFOSSIL OOZE WITH DIATOMS, DIATOM CLAY MIXED SEDIMENT, and CLAY FORAMINIFER AND NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS Major Lithologies: This core consists of light gray (5Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS, dark gray (5Y 4/1) DIATOM CLAY MIXED SEDIMENT, and gray to olive gray (5Y 6/1 to 5Y 5/2) CLAY FORAMINIFER AND NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS. In general, nannofossil concentration decreases downwards as diatom and clay abundances increase.  General Description: The core is moderately to heavily bioturbated and includes abundant Zoophycos and Chondrites trace fossils. Bedding is folded in the lower part of Section 3.
1 1.5	0 20 0	) 10 2	8 20		5 6 7		**		S	5Y 4/1 5Y 6/1 5Y 6/1 10Y 6/1 5GY 6/1 5TY 4/1 5TY 6/1 5TY 4/1 5TY 7/2 5Y 5/1	

			SIT	TE 1016			В	COR				CORED 153.8 - 163.3 mbsf
GRAPE density (g/cm <sup>3</sup> )	Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Stru	cture	Disturb	Sample	Color	Description
	(%)		3-3-4-4-5-5-5-6-6-7-7-8-8-8-1-8-1-8-1-8-1-8-1-8-1-8-1-8-1		1 2 3 5	early Pliocene   Age		6 % 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7	u)si()	Samp	5Y 7/3 To 5G 5/1 10Y 7/1 To 5G 5/1 5G 5/1 5GY 4/1 10Y 4/1 5Y 6/1 10Y 5/1 To 5G 5/1 5/2 5/2 5/2 5/2 5/2 5/2 5/1 5/2 5/2 5/2 5/1 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2	Description  DIATOM OOZE WITH CLAY and CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS  Major Lithologies: This core consists of dark olive gray (10Y 4/1) to gray (5G 5/1) DIATOM OOZE WITH CLAY to pale olive (10Y 7/2) to pale yellow (5Y 7/3) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS. Lithologies are interbedded on a decimeter scale and show gradational contacts over several cm.  Minor Lithology: Several thin beds of unusual bluish gray (5BG 6/1) to greenish gray (5G 5/1) color are enriched in discoasters forming NANNOFOSSIL CLAYEY DIATOM OOZE WITH DISCOASTERS.  General Description: The core is moderately bioturbated throughout. Zoophycos and Chondrites trace fossils are well preserved and displayed by color contrasts.
	}	}	9		7		33 33 33 33 33	6 6 6		s	4/1 5Y 6/2 10Y 7/4	
6 1.8	0 20 0	) 10 2	20		CC		}}	: "	≷	M		

			SIT	E 1016	НО	LE	B COR	E ·			CORED 163.3 - 172.8 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
1.4 1.6	0 10		3_3_3_5		1 2 3 4 5 6 7 CC	late Miocene - early Pliocene		//////////////////////////////////////	S S	5Y 5/2 5/2 5/2 5/2 5/2 5/2 5/3 3/2 5/2 5/2 5/2 5/2 5/2 5/2 5/4 4/1 5/3 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2 5/2	DIATOM OOZE WITH CLAY and NANNOFOSSIL OOZE WITH DIATOMS  Major Lithologies: This core is composed of dark gray (5Y 4/1) to very dark grayish brown (2.5Y 3/2) DIATOM OOZE WITH CLAY and pale olive (10Y 7/1) to light olive gray (5Y 6/2) NANNOFOSSIL OOZE WITH DIATOMS. Color and compositional variation occurs on a decimeter scale.  General Description: This core is extensively bioturbated. Zoophycos and Chondrites are abundant.

			SIT	E 1016	HC	LE	B COR				CORED 172.8 - 182.3 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
The state of the s			1 2 3 4 1 6 7 8 9 9		3 3 4 4 5 5 6 6 CCC	late Miocene - early			s s	5Y 4/1 To 5GY 5/1 5Y 5/2 5Y 4/1 5Y 5/1 5Y 4/2 5Y 6/1 To 5GY 5/1 5Y 4/2 5Y 5/1 5Y 4/2 5/1 5Y 5/1 5/1 5/2 5/1 5/2 5/1 5/2 5/1 5/1 5/1 5/2 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1	DIATOM OOZE and CLAYEY DIATOM OOZE  Major Lithologies: This core consists of dark gray (5Y 4/1) to greenish gray (5GY 5/1) DIATOM OOZE to CLAYEY DIATOM OOZE. Subtle variation in the primary components result in 30-150 cm gradational alternations in color. Radiolarians, silicoflagellates, and sponge spicules are present in small amounts.  General Description: The sediments are heavily bioturbated and include abundant Zoophycos and Chondrites trace fossils.
1.4 1.6	0 10 0	10 :	20								

Solve the second section 5.    Solve the section 5   Solve the sec				SIT	E 1016	НО	LE	B COR	E 2			CORED 182.3 - 191.8 mbsf
A MANNOFOSSIL DIATOM OOZE WITH CLAY and greenish gray (SY 4/1) DIATOM OOZE WITH CLAY and greenish gray (SY 5/1) to pale olive (10° 6°1) NANNOFOSSIL DIATOM OOZE WITH CLAY and greenish gray (SY 6/1) by a look of the company of the co	density	(%)	suscept.	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
3 general Description:  This core consists of dark gray (5Y 4/1) DIATOM OOZE WITH CLAY and greenish gray (69Y 67) to pale olive (10Y 6/1) NANNOFOSSIL DIATOM OOZE WITH CLAY. Compositional and color alternation occurs on 30-200 cm scale.  Minor Lithology:  A thick bed of very pale olive (5GY 7/1) NANNOFOSSIL DIATOM OOZE is present in Section 1 and 2.  General Description: This core is moderately to heavily bioturbated with abundant Zoophycos and Chondrites trace fossils. Bedding contacts are indistinct, but burrows are cut by normal and reverse faults in Section 5.  5GY 6/1  5GY 7/1) NANNOFOSSIL DIATOM OOZE is present in Section 1 and 2.  General Description: This core consists of dark gray (5Y 4/1) DIATOM OOZE WITH CLAY. Compositional and color alternation occurs on 30-200 cm scale.  Minor Lithology: A thick bed of very pale olive (5GY 7/1) NANNOFOSSIL DIATOM OOZE is present in Section 1 and 2.  General Description: This core consists of dark gray (5Y 4/1) DIATOM OOZE WITH CLAY. Compositional and color alternation occurs on 30-200 cm scale.  Minor Lithology: A thick bed of very pale olive (5GY 7/1) NANNOFOSSIL DIATOM OOZE is present in Section 1 and 2.  General Description: This core is moderately to heavily bioturbated with abundant Zoophycos and Chondrines trace fossils. Bedding contacts are indistinct, but burrows are cut by normal and reverse faults in Section 5.  5GY 6/1	4		5	-								
2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	{	$  \rangle  $	}	-	- (	1		33 6 33 6				
2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	}		}	1_					i		3/1	This core consists of dark gray (5Y
3 e e e e e e e e e e e e e e e e e e e				2		2		3				greenish gray (5GY 5/1) to pale olive (10Y 6/1) NANNOFOSSIL DIATOM OOZE WITH CLAY. Compositional and color alternation occurs on 30-200
3 e e e e e e e e e e e e e e e e e e e	}		{	2 -				33 >>> 33				
6	{		}	-				3 11>				7/1) NANNOFOSSIL DIATOM OOZE
6	}		}	-		3	eue					
6	}	}	}	-			Plioce	); ;;		S		bioturbated with abundant Zoophycos
6	}		}			П	early	); }; >>>>>			5Y	contacts are indistinct, but burrows are
6	}		}	5			eue -		i			
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		$\left  \begin{array}{c} \left\langle \right\rangle \end{array} \right $	{	6		-	late Mioc					
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	{							₹2 }} >>>	i			
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	{		}	-		5		/ <sub>1</sub>				
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		$  \ \rangle \  $	\	-	经淡				Ì		5GY	
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	}		{	-	.+,+,+,v,v, -,v,v,v,v	П		33 <i>///</i> 33 >>>				
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	{	{	{	8		6			H	S		
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			{	-	- V V V V V V V V V V V V V V V V V V V			33 <i>&gt;&gt;&gt;</i>			40)/	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				9	. *********	ert		}}   }}   ;;				
	{		}			7				0	5V	
	1 1.5		· 	L	- 1000000000000000000000000000000000000	cc		\$ 6	!			

		SIT	E 1016	HC	LE	В (	COR	E :			CORED 191.8 - 201.3 mbs
Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
{	{					3			S	2.5Y 3/2	DIATOM OOZE and NANNOFOSSIL OOZE WITH DIATOMS AND CLAY
	7	1_		1		3				5Y 4/1	Major Lithologies: This core consists of very dark grayish brown to olive gray (2.5Y 3/2
						} }	6				to 5Y 4/2) DIATOM OOZE containing minor amounts of clay and up to 10% silicoflagellates. Interbedded with this
}	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2		2		3 3				5GY 5/1	in the lower portion of the core is pale olive to light gray (10Y 6/1 to 5Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS AND CLAY. Color changes are gradational.
		3_				3				5Y 4/1	General Description: The sediment is slightly bioturbated. Zoophcos and Chondrites are
{	*	4		3	<u>~</u>	}				5Y 3/1	common.
	\	-			ne - ear	ane				10Y 5/1	
	3	5		4	Miocer	Plioce			S	5GY 5/1	
	Z.	-			late					5Y 4/2	
	}	6				}	6			7/1	
	}	7		5			>>> >>>			10Y 6/1	
	{					}	<i>&gt;</i> >>			5Y 5/2	
		8_		6		<b>-</b>				5GY 5/1	
		9_		7		- 3 - 3 - 3	>>> >>>			5GY 6/1	
	<					3	6		S M		
	(%)	(%) suscept.	Reflectance (%) (650–700 nm) (10–6 SI) W	Reflectance (%) (650-700 nm) (10-6 SI) W Graphic Lith.	Reflectance (%) (650-700 nm) (10-6 SI) W Graphic Lith. (900 00)	Reflectance (%) (650-700 nm) (10-6 SI) W Graphic Lith. 22	Reflectance (%) (650-700 nm) (10-6 SI) W Graphic Lith. (90 graphic Suscept. (10-6 SI) W Lith. (10-6 SI	Reflectance (%) (10-6 SI) Jagon Graphic (10-6 SI) Jago	Reflectance (%) (10-6 SI) Japan Graphic Lith. (10-6 SI) All Lith.	Reflectance (%) (10-6 SI) W Graphic Lith. (10-6 SI) W Structure Quality of the suscept. (10-6 SI) W Graphic Lith. (10-6 SI	Reflectance (%) (10-6 SI)

			SIT	E 1016		LE	B COR				CORED 201.3 - 210.8 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		}	<u></u>		5Y 4/1	DIATOM CLAY, NANNOFOSSIL OOZE WITH DIATOMS and DIATOM OOZE
}	}	}	1		1		} }		s	5GY 5/1	Major Lithologies: This core consists of gradationally interbedded greenish gray (5GY 5/1)
	}	}	2				3			5Y 6/1	NANNOFOSSIL OOZE WITH DIATOMS, dark greenish gray (5GY 4/1) DIATOM CLAY, and olive gray to
{		}			2		3			5Y	dark grayish brown (5Y 4/2 to 2.5Y 4/2) DIATOM OOZE.
}		{	3				\$ } }	1 1 1		4/2	Minor Lithology: Section 4, 10-15 cm, contains a VITRIC ASH layer consisting of about 90% glass and 10% opaque minerals.
		}	4		3	Pliocene	3			5Y	General Description: The sediment is slightly bioturbated and Chondrites is common.
	}		-		Н	-early Pli			s	4/1 5Y	and chandines is common.
		}	5		4	ate Miocene -	3	<u> </u>	s	2.5Y 4/2	
			6			late M	3			5Y	
}	}	}	-		5		3	1 1 1		5/2	
	}	}	7		Ŭ		3			5Y 4/1	
}	{	}	8		П		\$ 6 \$		S	5GY 4/1	
{	}	{			6		3	i 		5Y 4/2	
}		}	9 -		7		3			5Y 5/1	
}	}		-		cc		}	İ	М	10Y 4/1	
1 1.5	0 10 -1	0 0 1	10								

		SI	ΓΕ 1016	HC	LE	C COR				CORED 0.0 - 9.2
GRAPE density (g/cm <sup>3</sup> )	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	mbsf Description
		1		1		% % % %			5Y 4/2	CLAYEY DIATOM OOZE and DIATOM CLAY  Major Lithologies: This core consists of interbedded light olive gray to olive gray (5GY 5/1 to 5Y 4/2) CLAYEY DIATOM OOZE and DIATOM CLAY.  General Description: The core is moderately bioturbated with multiple burrows and Mn-oxide haloes. Burrows range from open, to partially filled, to completely filled. There is a thin discontinuous dark
		4_		3	Quaternary	33 33 33	!		5Y 4/2 To 5Y 2.5/1	green layer in Section 5, 72 cm, and a greenish sandy layer in Section 6, 78 cm.
		5_		4	Quat	<ul><li>33</li><li>33</li><li>33</li><li>34</li><li>35</li><li>36</li><li>37</li><li>38</li><li>39</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30</li><li>30&lt;</li></ul>	!		5Y 5/2 To 5Y 3/1	
		_ 		5		- <u>*</u> - *			5GY 5/1	
		8		6 7		% % % %		M	5Y 5/2 To 5GY 5/2	

1.2 1.4 1.6 20 40

GRAPE density suscept, (10-6 SI) and suscept,			SIT	ΓΕ 1016	НС	LE	C COR	Ε:	2H		CORED 9.2 - 18.7
DIATOM CLAY  SGY 4/1  Major Lithologies: This core consists of interbedded light olive gray to dark gray (SGY 4/1 to 5Y 4/1) CLAYEY DIATOM OOZE and DIATOM CLAY.  General Description: The core is lightly mottled throughout, with burrows showing Mn-oxide halos. Zoophycos trace fossils occur in Section 6.	density	suscept.	$\overline{}$	Graphic				Disturb	Sample	Color	mbsf
General Description: The core is lightly mottled throughout, with burrows showing Mn-oxide haloes. Zoophycos trace fossils occur in Section 6.  SGY 5/1  SGY 5/1  SGY 4/1  SGY 5/1  SGY 4/1	¥ \		1		1		33	:		5GY 4/1	DIATOM CLAY  Major Lithologies: This core consists of interbedded light olive gray to dark gray (5GY 4/1 to 5Y 4/1) CLAYEY DIATOM OOZE and
5			2		2					5GY 5/1	General Description: The core is lightly mottled throughout, with burrows showing Mn-oxide haloes. Zoophycos trace fossils occur
5 3 3 5 7 4/1 To 5GY 4/1 To 5GY 4/1 A/1 A/1 Sign at the second of the se						Quaternary				5GY 4/1	
			-		6		» »» »»		M	4/1 To 5GY	

		SIT	E 1016		LE	D COR	E			CORED 0.0 - 8.0 mbsf
GRAPE density (g/cm <sup>3</sup> )	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		3		2 3	Quaternary	3	$\wedge \wedge \wedge \wedge \wedge \wedge \wedge \wedge$		10Y 4/2	CLAYEY DIATOM OOZE and DIATOM CLAY  Major Lithologies: This core consists of grayish olive (10Y 4/2 to 10Y 4/1) CLAYEY DIATOM OOZE and DIATOM CLAY. Color and compositional changes are subtle and gradual.  Minor Lithologies: Section 4, 117-119 cm, contains a graded QUARTZ SAND layer.  General Description: The sediments are homogeneous or slightly bioturbated.
1 1.5	0 20 4	6		5 6 CC		3 3 3 33 >>>		M	10Y 4/1	

GRAPE density (g/cm³) (10-6 SI)    Graphic Lith.    Graphic (10-6 SI)    Graphic Lith.    Graphic (10-6 SI)    The second of the		_	SIT	E 1016	HC	)LE	D COR	E 2	2H		CORED 8.0 - 17.5 mbsf
SILTY CLAY WITH DIATOMS and DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of grayish olive (10Y 4/1) SILTY CLAY WITH DIATOMS and DIATOM OOZE WITH CLAY. Compositional changes are gradual and color changes are indistinct.  General Description: The sediment is slightly bioturbated. Chondrites and Zoophycos are present. A 4-5 cm pyritized burrow occurs in Section 6, 15 cm.	density	suscept.		Graphic	Section			Disturb	Sample	Color	
1120 110 0 10 20	1.25 1.5	0 10 2	5		2 3 5 6	Quaternary	***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **	000			DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of grayish olive (10Y 4/1) SILTY CLAY WITH DIATOMS and DIATOM OOZE WITH CLAY. Compositional changes are gradual and color changes are indistinct.  General Description: The sediment is slightly bioturbated. Chondrites and Zoophycos are present. A 4-5 cm pyritized burrow

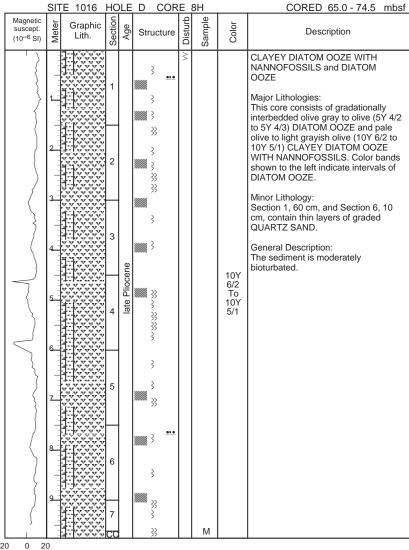
Graphic density suscept. (10-6 St)      Part			SIT	TE 1016	HC	LE	D COR				CORED 17.5 - 27.0 mbsf
DIATOMS AND CLAY and DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of gradual alternations between pale olive (10Y 6/2) NANNOFOSSIL OOZE WITH DIATOMS AND CLAY and light grayish olive (107 5/1) DIATOM OOZE WITH CLAY.  10Y 6/2  3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	density	suscept.	Meter		Section	Age	Structure		Sample	Color	Description
Section 6, 30 cm, contains a thin bed of graded QUARTZ SAND.  General Description: The sediment is slightly bioturbated. Zoophycos are common.			1				}	00		10Y 5/1	DIATOMS AND CLAY and DIATOM OOZE WITH CLAY  Major Lithologies: This core consists of gradual alternations between pale olive (10Y 6/2) NANNOFOSSIL OOZE WITH DIATOMS AND CLAY and light grayish olive (10Y 5/1) DIATOM
General Description: The sediment is slightly bioturbated. Zoophycos are common.			3_							10Y 6/2	Section 6, 30 cm, contains a thin bed
5 10Y 6 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			4_		3	у	33 »» 33 »»			10Y 5/1	The sediment is slightly bioturbated.
10Y 5/1			5_		4	Quaternar	3			10Y 6/2	
1.5 1.75 0 10 20			7		5		}		M	10Y 5/1	

	SI	TE 1016	HC	)LE	D COR	E	4H		CORED 27.0 - 36.5 mbsf
GRAPE Magnetic suscept. (g/cm³) (10-6 SI)	Meter		Section	Age	Structure	Disturb	Sample	Color	Description
25 1.5 0 10	1 - 2 - 3 - 4 - 5 - 7 - 8 - 9 - 20		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Quaternary	@ 	www.	M	10Y 5/2 To 5Y 5/2 5Y 5/2 10Y 5/2 5Y 5/2	CLAY WITH SILT and DIATOM OOZE WITH CLAY  Major Lithologies: This core alternates between light grayish olive to olive gray (10Y 5/2 to 5Y 5/2) CLAY WITH SILT and olive gray (5Y 5/2) DIATOM OOZE WITH CLAY. Color and compositional changes are subtle and gradational.  General Description: The sediment is moderately bioturbated.

_			SIT	TE 1016			D C	OR	E :			CORED 36.5 - 46.0 mbsi
	GRAPE density (g/cm <sup>3</sup> )	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
	~~			**************************************	,		}	>>>	*		10Y 4/2	NANNOFOSSIL OOZE WITH FORAMINIFERS, CLAY WITH SILT AND DIATOMS, and CLAY WITH SILT
	}	}	1_	XX XX	1		}				10Y 5/2	Major Lithologies: This core consists of alternating
		{	2_				33				5Y 4/2	lithologies containing varying amounts of nannofossils, clay, and diatoms. The sediment is dominated by light grayish olive (10Y 4/2 to 10Y 5/2) CLAY WITH
			3		2		3 33 33 33 34				10Y 5/2	SILT and olive gray (5Y 5/2 to 5Y 4/2) CLAY WITH DIATOMS AND SILT. Sections 3 and 4 contain light greenish gray to pale olive (10Y 6/2) NANNOFOSSIL OOZE WITH FORAMINIFERS interbedded with the sediments above. Color and compositional changes are
	{		4_		3	ary	3	6				gradational.  General Description: The sediment is moderately
			5		4	Quaternary	3				5Y 4/2	bioturbated. Zoophycos are common and Chondrites are also present.
	}	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	9	**************************************	5		3 3				10Y 5/2	
			7				33				10Y 4/2	
		3	8		6		> > > > > > > > > > > > > > > > > > >	<i>&gt;</i> >>			10Y 5/2	
	<i>&gt;</i>		9_	γ <u>ν</u> Ε γν γν γν	7 CC		3	>>> >>>>		М	5Y 5/2	
1.	4 1.6	5 10 1	5									

	SIT	E 1016	HC	LE	D	COR				CORED 46.0 - 55.5 mbsf
Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Str	ucture	Disturb	Sample	Color	Description
		`^`^\ `^\\\ ``				33	≷		10Y 5/2	CLAY DIATOM MIXED SEDIMENT, CLAYEY NANNOFOSSIL OOZE WITH
	1_	**************************************	1			<pre>33 &gt;&gt;&gt; &gt;&gt;&gt;</pre>			5Y 4/3	FORAMINIFERS and CLAY WITH DIATOMS
	2					%			10Y 5/2	Major Lithologies: This core consists of gradual alternations between olive gray to light olive (5Y 5/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT, pale olive (10Y 6/2) CLAYEY
}		VVVI	2						5Y 5/2	NANNOFOSSIL OOZE WITH
	3	***** ******				<pre>33 &gt;&gt;&gt; 33 33 33 33 33 34 35 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38</pre>			10Y 5/2	FORAMINIFERS, and olive gray to olive (5Y 5/2 to 5Y 4/3) CLAY WITH DIATOMS.
{	-	ŽŽŽ	3		•••	33			5Y 4/3	Minor Lithologies: Section 2, 92-94 cm, Section 3, 67-69
	4_		ľ			}}			4/0	cm, and Section 4, 109-113 cm,
}						\$\$ }}			10Y	contains graded intervals of fine QUARTZ SAND.
{	_	- T		Quaternary		<pre>33 33 33 33 33 33 33 33 33 33 33 33 33</pre>			6/2	General Description:
}	5		4	Quate		}} }}			5Y	The sediments are moderately bioturbated. Zoophycos, Chondrites, and Skolithos are common.
	-				<u></u>	<i>&gt;&gt;</i>			4/3	and Skolitnos are common.
	6					33				
{	-					\$\$ }}				
\ \{	-	4	5			}} }} }} }				
{	7_					33 >>>> 24 >>>>>			10Y 6/2	
	-		_			33				
}	8					33				
}	-	-	6			% % % % % % % % % % % % % % % % % % %				
	=	V.V.				}}			5Y	
	9	v.v.	7			} } 6			6/3	
	=	V.V	Ľ			3			10Y 5/4	
0 10 2	20	\[\frac{1}{2}\]	CC	<u> </u>			Ш	M		

DIATOM NANNOFOSSIL COZE WITH CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY  SGY Major Lithologies: This core consists of light grayish olive to pale olive (10Y 6/2 to 10Y 5/2) DIATOM NANNOFOSSIL COZE WITH CLAY, grayish olive (10Y 4/1) NANNOFOSSIL CLAY MIXED SEDIMENT, and olive gray to dark greenish gray (5Y 4/2 to 56Y 4/1) DIATOM CLAY. Color and compositional changes are gradational.  10Y 5/1 Minor Lithology: Section 2, 20 cm, and 60 cm, contain thin graded QUARTZ SAND layers.  10Y 5/2  10Y 5/2  5 Y 4/2  10Y 5/2  10Y 5/2  10Y 5/2  10Y 6/2  10Y 6	_		SI	TE 1016	НС	LE	D COR	Ε			CORED 55.5 - 65.0 mbsf
CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY  SEDIMENT and DIATOM CLAY  Major Lithologies: 4/1 This core consists of light grayish olive to pale olive (107 6/2 to 107 5/2) DIATOM NANNOFOSSIL CLAY MIXED  SEDIMENT, and olive gray to dark greenish gray (5Y 4/2 to 5GY 4/1) DIATOM CLAY. Color and compositional changes are gradational.  10Y 5/1 Section 2, 20 cm, and 60 cm, contain thin graded QUARTZ SAND layers.  10Y 5/2  5/4  10Y 5/2  10Y 6/2  1		suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
SEDIMENT, and olive gray to dark greenish gray (57 4/2 to 5GY 4/1) DIATOM CLAY. Color and compositional changes are gradational.  Minor Lithology: Section 2, 20 cm, and 60 cm, contain thin graded QUARTZ SAND layers.  The sediments are slightly to moderately bioturbated.  SY 4/2  10Y 5/2  5 4 4/2  10Y 5/2  5 7 4/2  10Y 5/2  10Y 4/1  10Y 5/2		}	1	V V V V V V V V V V V V V V V V V V V	1		} }} >>>	<b>*</b>			CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY Major Lithologies: This core consists of light grayish olive to pale olive (10Y 6/2 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE WITH CLAY, grayish olive (10Y 4/1)
compositional changes are gradational.  Minor Lithology: Section 2, 20 cm, and 60 cm, contain thin graded QUARTZ SAND layers.  10Y 5/2  The sediments are slightly to moderately bioturbated.  5Y 4/2  10Y 5/2  10Y 5/2  10Y 5/2  10Y 5/2  10Y 4/2  10Y 4/2  10Y 4/2  10Y 4/1		\$			2		***				SEDIMENT, and olive gray to dark greenish gray (5Y 4/2 to 5GY 4/1)
General Description: The sediments are slightly to moderately bioturbated.  5  4  7  7  10Y  5Y  4/2  10Y  5Y  4/2  10Y  4/1  M  M			3				33			10Y 5/1	compositional changes are gradational.  Minor Lithology: Section 2, 20 cm, and 60 cm, contain
5		}	4_		3	ary	}} }				General Description: The sediments are slightly to
5		3	5_		4	Quatern					
5Y 4/2 8 W 6 3 3 6 3 3 4 4/2 4/2 4/1 10Y 4/1			6_				> > >				
8			7		5		3				
7 3 10Y 4/1		}	8	VVV VVV VVV	6		3				
			9		7						
0 30 20		10 2	10		cc				М		



-20

	SIT	TE 1016	HC	LE	D COR	E 9	9H		CORED 74.5 - 84.0 mbsf
Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	1		1		} }	W		10Y 5/2 10Y 4/2 10Y 5/2	DIATOM CLAY and DIATOM NANNOFOSSIL OOZE  Major Lithologies: This core consists of grayish olive to olive (10Y 4/2 to 5Y 4/4) DIATOM CLAY gradually interbedded with pale olive (10Y 6/2 to 10Y 5/2) DIATOM
}	2		2		} »> }}			10Y 4/2	NANNOFOSSIL OOZE.  Minor Lithologies: Several small ASH pods occur near
	3				} }} A*			10Y 6/2	the top of Section 3, and Section 6, 59-61 cm, contains a thin ASH layer.
	4_		3	0	% 6 % 6 			5Y 4/3	
	5_			late Pliocene	}   			10Y 6/1 5Y 4/4	
	6		4		} } }			10Y 6/2 5Y	
}			5		,			4/3 10Y 6/2	
}	7				> >>> >>> >>> >>> >>>			5Y 4/3	
	8		6		} } } } }			5Y 4/2	
<b>\</b>	9		7		} }			5Y 5/3	
20 0	20	LAZONIVI		1	<u> </u>		M		l

-20 0 20

	SI	TE 1016	HC	LE	D COR				CORED 84.0 - 93.5 mbsf
Reflectance (%) (650–700 nm) Magne susce (10 <sup>-6</sup> s	pt.   a	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	SS) \( \Sigma \)		2 2 2 5 5 6 6	late Pliocene A	**************************************		N	5Y 4/2 10Y 5/2 5Y 4/3 10Y 5/2 5Y 6/2 5Y 6/3 10Y 5/3 10Y 6/3 10Y 7/2 5Y 6/3 10Y 7/2 5Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/2 5Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 6/3 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y 10Y	FORAMINIFER NANNOFOSSIL OOZE WITH DIATOMS, CLAY DIATOM MIXED SEDIMENT and NANNOFOSSIL DIATOM OOZE Major Lithologies: This core consists of sediments containing variable amounts of diatoms, nannofossils, clay, and foraminifers. The dominant lithologies are very light gray (10 Y 7/2) FORAMINIFER NANNOFOSSIL OOZE WITH DIATOMS, pale olive to olive gray (5Y 6/4 to 5Y 4/3) CLAY DIATOM MIXED SEDIMENT, and light grayish olive (10 Y 5/2) NANNOFOSSIL DIATOM OOZE. Color and compositional changes are gradational. Minor Lithologies: A 5 cm diameter, rounded lithic rock fragment is found in Section 4, 120 cm. General Description: The sediment is moderately bioturbated. Zoophycos are abundant, and Chondrites are common.

		SI	ΓΕ 1016		LE	D CO	RE	11H		CORED 93.5 - 103.0 mbsf
Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	\	-				₩.	*		5Y 6/3	DIATOM OOZE and DIATOM NANNOFOSSIL OOZE
		1		1		33 6 33 6 33 6 33 6			10Y 5/2	Major Lithologies: This core consists of interbedded very light gray to pale olive (10Y 7/2 to 5Y 6/3) DIATOM NANNOFOSSIL OOZE and olive gray to grayish olive (5Y 5/2
	\{\{\}	2		2		3			5Y 4/3	to 10Y 4/2) DIATOM OOZE. Color and composition changes gradually.  General Description:
	}	3_				}			10Y 5/2	The sediments are moderately to highly bioturbated. Chondrites and Zoophycos are abundant.
}	{	-				}}}			5Y 5/2 5Y	
		4		3	e e	}}} >:	>		7/2 10Y 5/2 5Y	
	<b>)</b>	5			Pliocene	% }}			6/3 5Y 7/2	
	}			4	late	333 >3			10Y 7/2	
	}	6				333 ×3			5Y 7/3	
	7	7		5		3			40)/	
	{					3			10Y 4/2	
		8		6		3 >>:	>		10Y 5/2	
	}					} >>: } >>: } >>:	>		5Y 5/2 5Y	
	\{\bar{\}_{.}	9		7			!	М	6/2 5Y 5/2	
0 20 (	0 10 2	20	r.+.4.2.2.2.3	CC	_	·		į (VI	J/2	l

		SIT	E 1016	HC	LE	D COF				CORED 103.0 - 112.5 mbsf
Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0 20 -2		2 3 3 5 7 7 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		1 2 3 4 5 CCC	late Pliocene	**************************************	1 1	М	10Y 4/1  5Y 4/2  10Y 5/2  5Y 6/2  10Y 4/1  10Y 7/1  10Y 7/1	NANNOFOSSIL DIATOM OOZE and CLAY DIATOM MIXED SEDIMENT  Major Lithologies: This core is composed of light grayish olive to pale olive (10Y 5/1 to 10Y 7/1) NANNOFOSSIL DIATOM OOZE and grayish olive to olive gray (10Y 4/1 to 5Y 4/2) CLAY DIATOM MIXED SEDIMENT. Color and composition change gradually except in Section 4, 50 cm, where a sharp transition occurs.  General Description: The sediments are slightly to moderately bioturbated. Chondrites and Zoophycos are common.

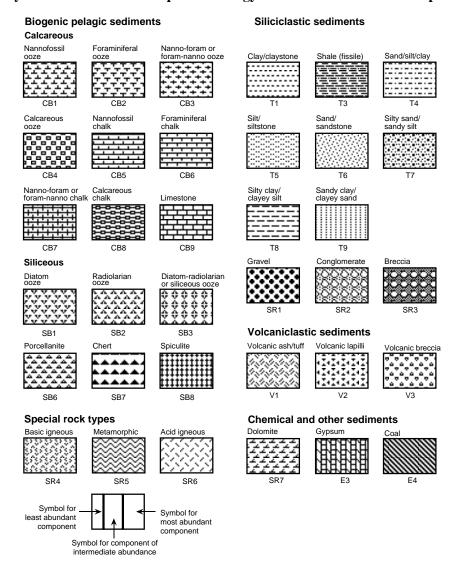
		SI	E 1016	HC	LE	D COR				CORED 112.5 - 122.0 mbsf
Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		1		*** *** *** ***			10Y 8/2	NANNOFOSSIL OOZE WITH DIATOMS  Major Lithology: This core consists of pale olive to very light gray (10Y 6/2 to 10Y 8/2) NANNOFOSSIL OOZE WITH DIATOMS. Color banding is subtle and gradational.
		3_		2		> > > > > > > > > > > > > > > > > > >			5Y 6/2	Minor Lithology: Two pods of VITRIC ASH occur in Sections 3 and 4. They are dark with encrusted and disseminated pyrite.
$  \rangle  $			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						5Y	General Description: The core was recovered without significant disturbance. The core is
		=	*****	3		333 A* 333 A*			7/2	moderately to heavily bioturbated and includes discernible Zoophycos trace
					ın.	}} }}			10Y 6/2	fossils.
		_			ate Pliocene	*** *** *** *** *** *** *** *** *** *** ***			10Y 8/2	
	}	_		4	late P	¾ »» ¾			10Y 7/2	
		6_		_		}} }}} }}} A•			10Y 8/2	
	{			5		>>> >>> >>> >>>			10Y 6/2	
	(					}}} }} }} }}			10Y 8/2	
		8_				\$\$\$ \$\$\$ \$\$			10Y 7/2	
	)	9		7		** ** ** ** ** ** **			10Y 8/2 To 10Y 6/2	
0 20 0	) 100 2	00	r v k a a a .	UU	_	1 555	Ш	M		<u> </u>

		SIT	TE 1016	HC	LE	D COR	Ε			CORED 122.0 - 131.5 mbsf
Reflectance (%) (650–700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	}	-					000 -		10Y 5/2	NANNOFOSSIL OOZE WITH DIATOMS and DIATOM OOZE
		1		1		} »»			10Y 6/1	Major Lithologies: This core consists of grayish olive (10Y 4/1) to pale olive (10Y 6/1) DIATOM OOZE and NANNOFOSSIL OOZE WITH DIATOMS. Meter-scale color
	}	2		2		///			10Y 5/1	and compositional banding has gradational, bioturbated contacts.  Minor Lithology:
<b>\</b>		3_				**************************************			10Y 4/1	Thin beds of grayish olive (10Y 4/1 to 5GY 5/1) VITRIC ASH occur in Sections 5, 7, and CC. A 1 cm X 5 cm piece of wood is present in Section 4.
		4_		3		<i>&gt;</i> >>			5GY 5/1	General Description: This core is slightly to moderately disturbed by coring. It is mottled
	{	-			Pliocene	**************************************				throughout, but displays few distinct burrows. Zoophycos are present in some sections.
	}	-		4	late				10Y 6/1	
	{	6				» »				
		7		5		}} <b></b> <u>***</u> - <sub>A</sub>			10Y 4/1	
\ \		8				} } }			4/1	
				6		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			10Y 6/1	
/		9		7				M	5GY	
10 20 (	<u> </u>	0	<u>FPoYoltatata</u>	JUU	<u> </u>		<u> </u>	M	5/1	<u> </u>

		SI	TE 1016	HC	LE	D COR	Ε	15H		CORED 131.5 - 141.0 mbsf
Reflectance (%) (650-700 nm)	Magnetic suscept. (10 <sup>-6</sup> SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1		1		}			10Y 6/1 To 10Y 5/1	DIATOM NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS  Major Lithology: This core consists of light grayish olive (10Y 5/1) to pale olive (10Y 6/1) DIATOM NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. Color and compositional variations are subtle and gradual.
		3		3			WWWWWW		10Y 6/1	Minor Lithology: Thin beds of light gray (5GY 4/1) VITRIC ASH are present in Sections 3 and 7.  General Description: This core is moderately to highly disturbed, producing a vertical fabric in Sections 3 and 6. The core is slightly mottled throughout, with rare distinct burrows.
		5		4	late Pliocene					Suriows.
	{	6-				} }			10Y 5/1	
	}	7_		5					10Y 6/1	
		8		6		3	WWWWWW		10Y 5/2	
0 20 0	10 10 2	10		7 CC		} } -A		M	10Y 6/1	

	SI	ΓΕ 1016	HC	LE	D COR	E	16H		CORED 141.0 - 150.5 mbsf
Reflectance (%) (650–700 nm) Magnetic suscept. (10 <sup>-6</sup> SI)	1 #	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		}			10Y 7/1	NANNOFOSSIL OOZE WITH DIATOMS AND FORAMINIFERS Major Lithology:
	1_				<pre>33 &gt;&gt;&gt; 33 &gt;&gt;&gt; 33 &gt;&gt;&gt; 34 &gt;&gt;&gt; 34 &gt;&gt;&gt; 35 &gt;&gt;&gt; 36 &gt;&gt;&gt; 36 &gt;&gt;&gt; 37 &gt;&gt;&gt; 38 &gt;&gt;&gt;&gt; 38 &gt;&gt;&gt; 38 &gt;&gt; 38 &gt;&gt;&gt; 38 &gt;&gt; 38 &gt;&gt;&gt; 38 &gt;&gt; 38 &gt;&gt;&gt; 38 &gt;&gt; 38</pre>			10Y 6/1 To 10Y	This core is composed of light grayish olive (10Y 5/1) to very light gray (10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS AND FORAMINIFERS.
	2_				3			7/1	General Description:
			2		3				The sediments are slightly bioturbated and mottled. Zoophycos and Chondrites are locally visible
	3_		_		3			10Y 6/1	
			3		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			10Y	
	4-			ne	/1/			7/1 10Y	
	5_			e Pliocene	3 3			6/1 10Y 5/1	
	-		4	late	» » » » » » » » » »			10Y 6/1	
	6_				3			10Y	
	7		5		<b>—</b> }			7/1	
					} } }			5GY 6/1	
	8_		6					10Y 5/2	
			ľ		33 >>> 6				
	9_		7		}} >>>			10Y 5/1	
0 20 0 10	20		CC		33 >>>	>	М		

## 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.

Drilling disturbance symbols			Sedimentary 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)	Х	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}{}	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	