

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		}}	W W	S		<p>CLAYEY SILT WITH FORAMINIFERS</p> <p>Major Lithology: This core consists primarily of homogeneous, dark olive gray (5Y 3/2) CLAYEY SILT WITH FORAMINIFERS. Quartz, feldspar, and mica make up the nonbiogenic silt-size fraction. Diatoms, radiolarians, and sponge spicules are also present in small amounts.</p> <p>Minor Lithology: Numerous thin, 1-3 cm thick, beds of graded, dark grayish olive (10Y 3/1) QUARTZ FELDSPAR SAND are intercalated with the fine-grained sediment.</p> <p>General Description: This core is moderately disturbed by coring. Open, sub-cm scale burrows are present in the uppermost 2 sections, but no sediment-filled trace fossils are distinguishable.</p>
2		2		}}	---	S		
3		3	Quaternary	}}	---	S		
4		4		}}	---	S		
5		5		}}	---	I	5Y 3/2 To 10Y 3/1	
6		6		}}	---			
7		7		}}	---			
8		8		}}	---			
9		9		}}	---	S		
CC						M		



Previous Chapter

Table of Contents

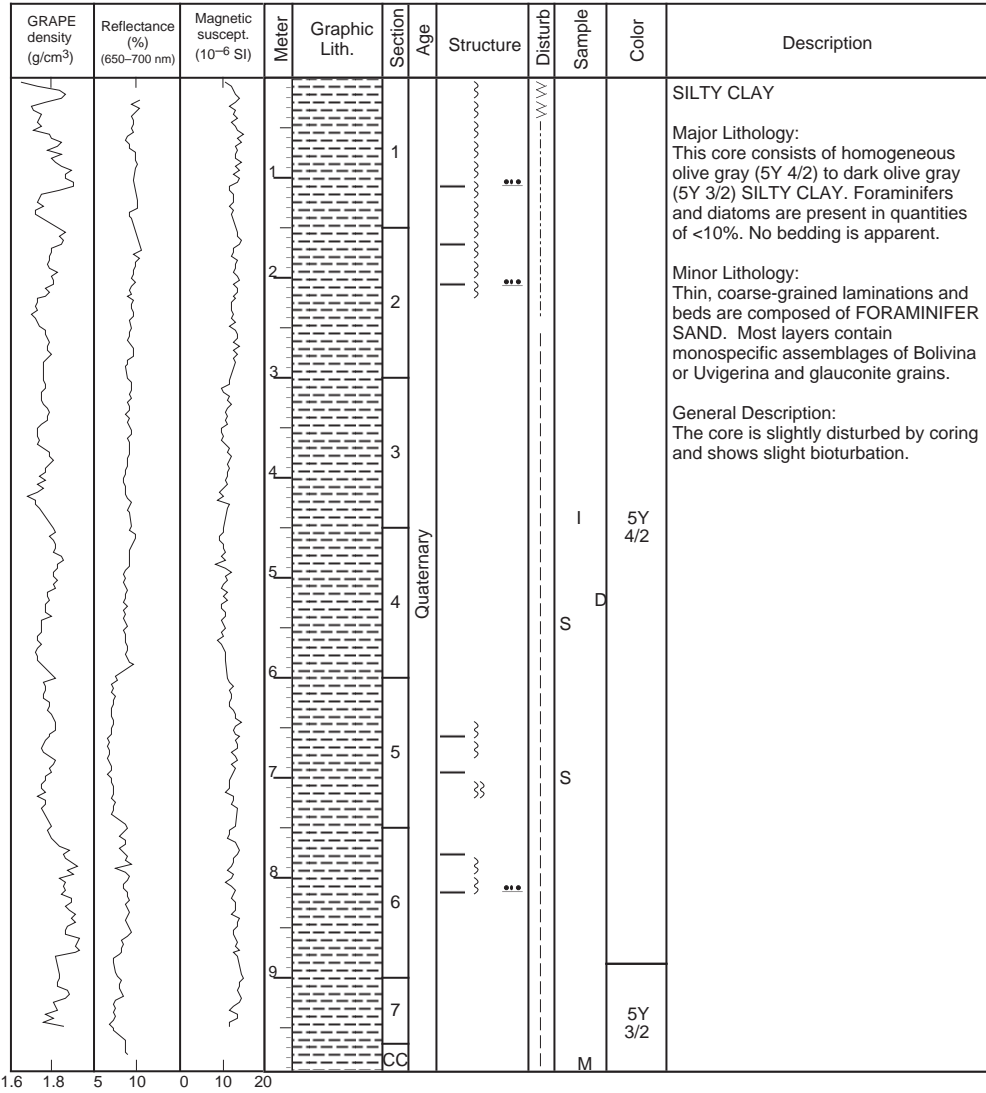
Next Chapter

SITE 1017 HOLE B CORE 1H CORED 0.0 - 5.3 mbsf

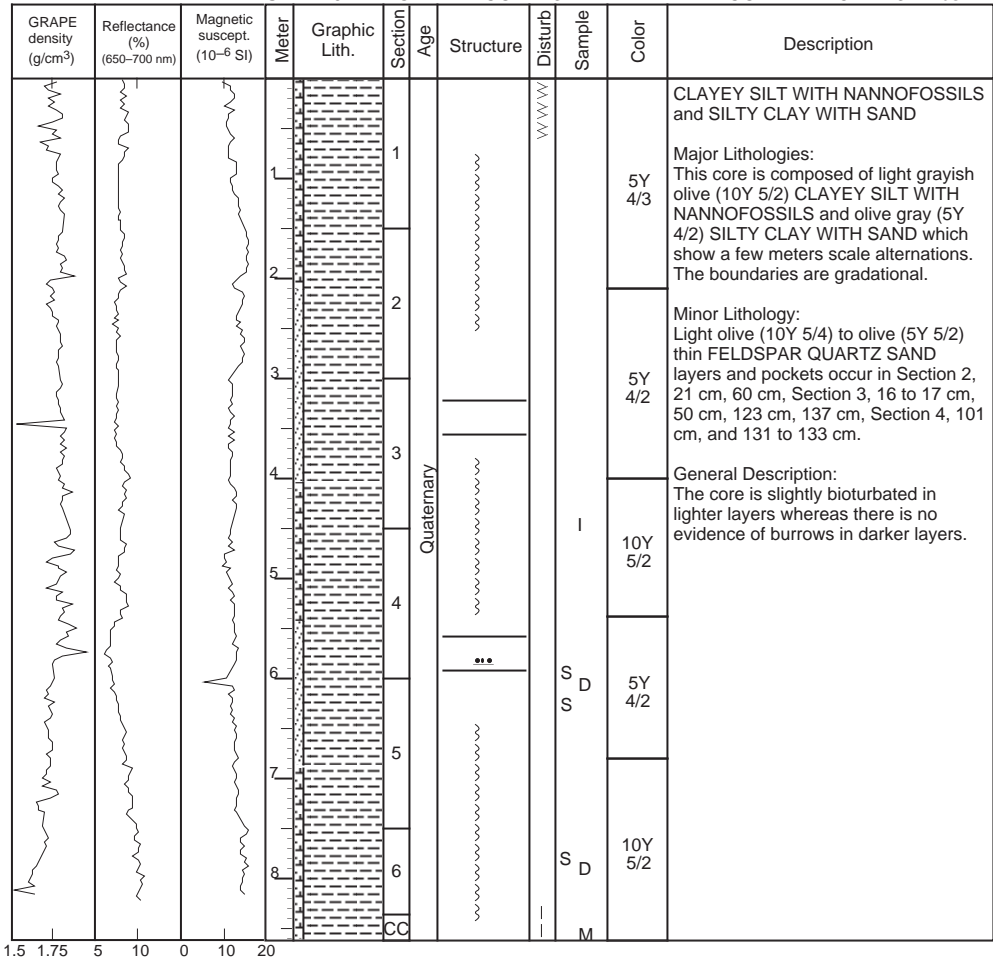
GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1	Quaternary				2.5Y 3/2	<p>CLAYEY SILT WITH FORAMINIFERS</p> <p>Major Lithology: This core consists primarily of homogeneous, grayish olive (10Y 4/1 to 10Y 4/2) to very dark grayish brown (2.5Y 3/2) CLAYEY SILT WITH FORAMINIFERS. Quartz, feldspar, and mica compose the nonbiogenic silt-fraction. Diatoms, radiolarians, and sponge spicules are also present.</p> <p>Minor Lithologies: Numerous thin beds and laminations of graded, dark gray (N3) to dark grayish olive (10Y 3/1) QUARTZ FELDSPAR SAND are intercalated through the core. At Section 3, 45 cm, two thin laminations of dusky red (10R 3/3) ZIRCON QUARTZ FELDSPAR SAND WITH OPAQUES are present.</p> <p>General Description: This core is soupy at the top and contains modern, open burrows down to ~3 mbsf. Otherwise, it is homogeneous and displays no sediment filled trace fossils.</p>
			10Y 4/2								
			10Y 4/1								
1	2	5	10	0	20	40					

SITE 1017 HOLE B CORE 2H

CORED 5.3 - 14.8 mbsf

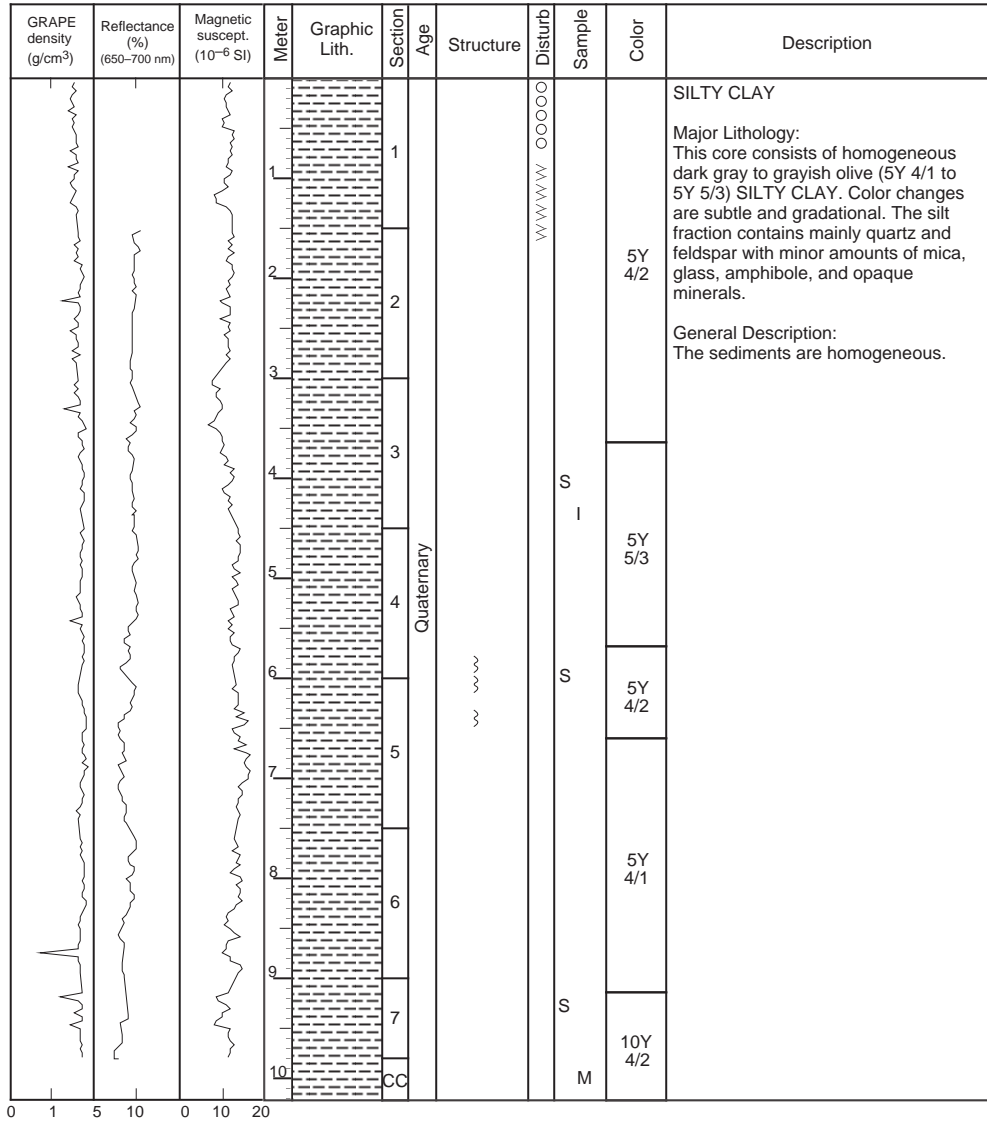


SITE 1017 HOLE B CORE 3H CORED 14.8 - 24.3 mbsf

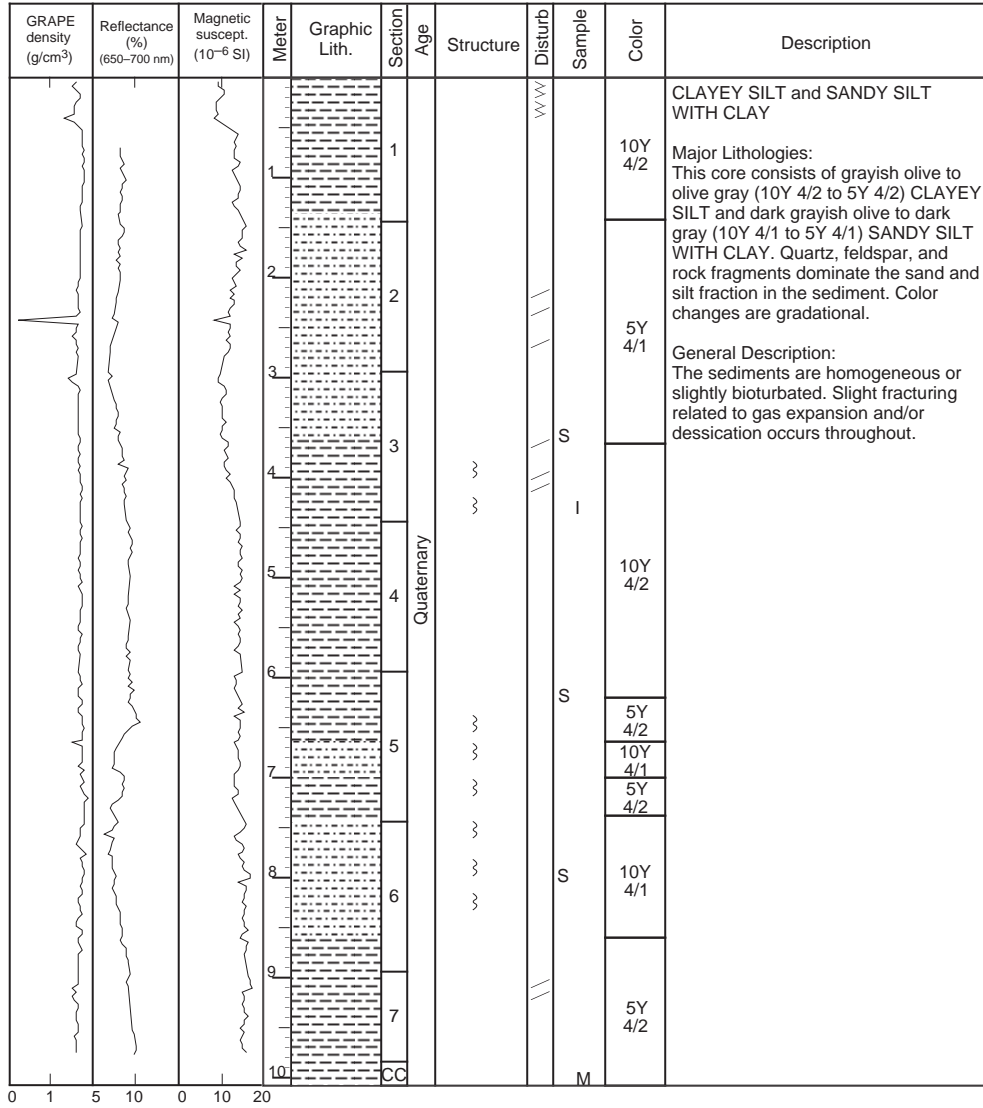


SITE 1017 HOLE B CORE 4H

CORED 24.3 - 33.8 mbsf

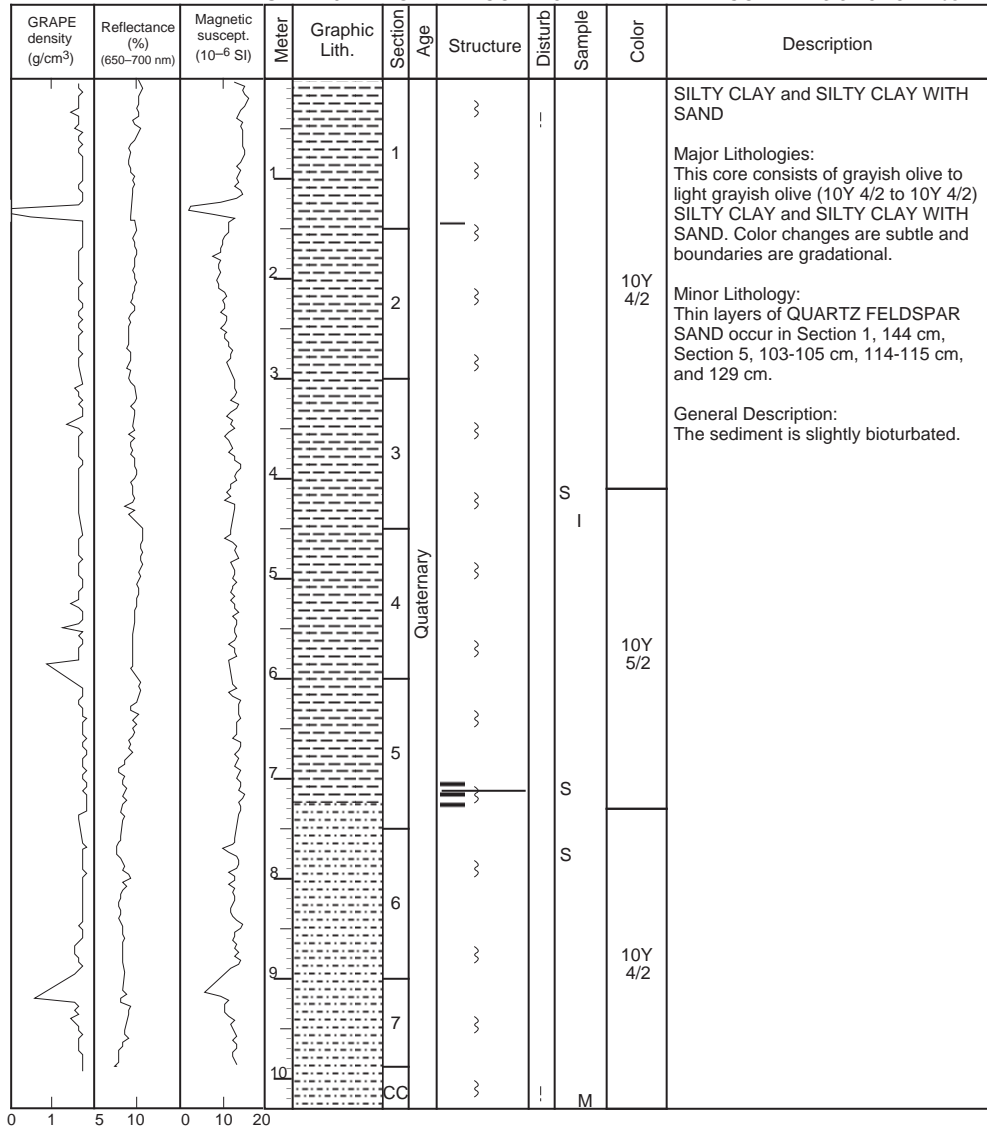


SITE 1017 HOLE B CORE 5H CORED 33.8 - 43.3 mbsf



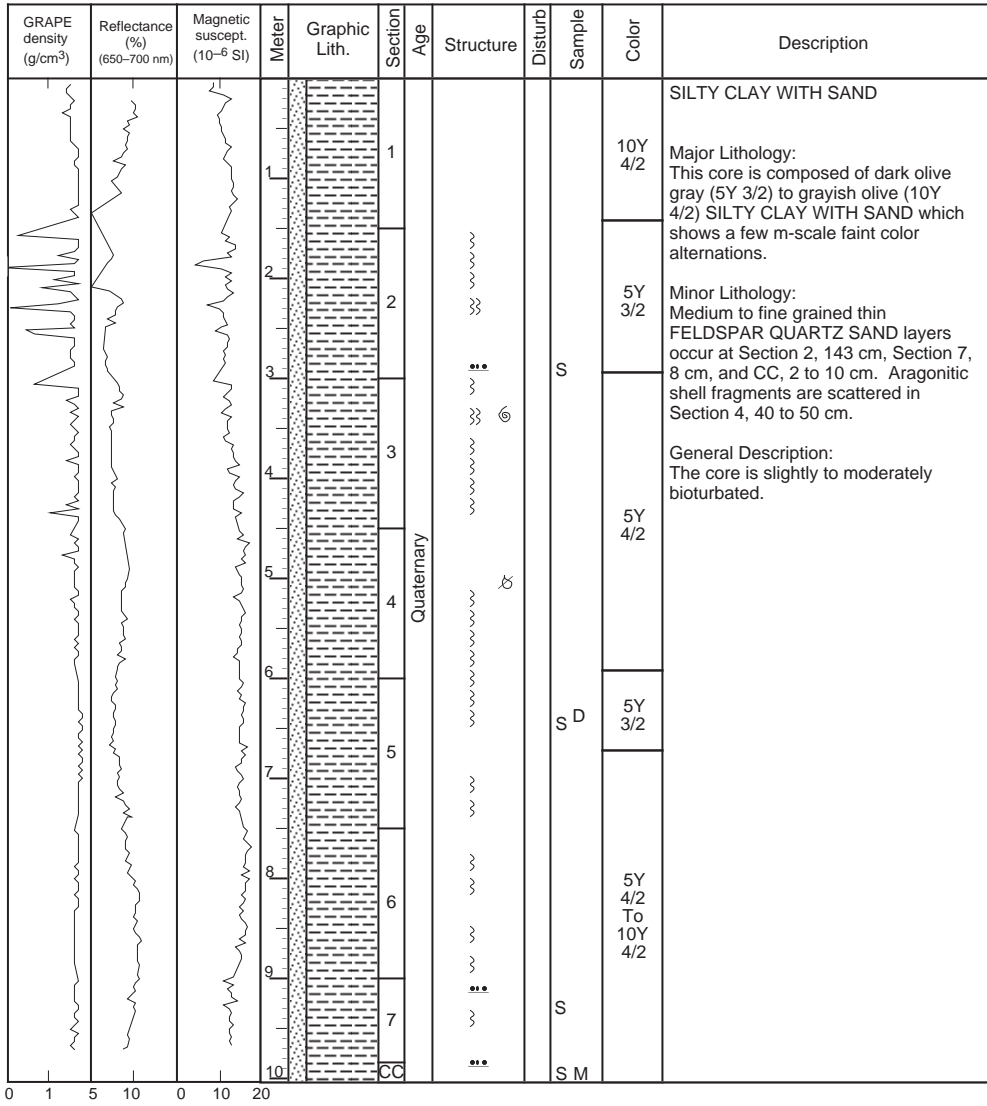
SITE 1017 HOLE B CORE 6H

CORED 43.3 - 52.8 mbsf



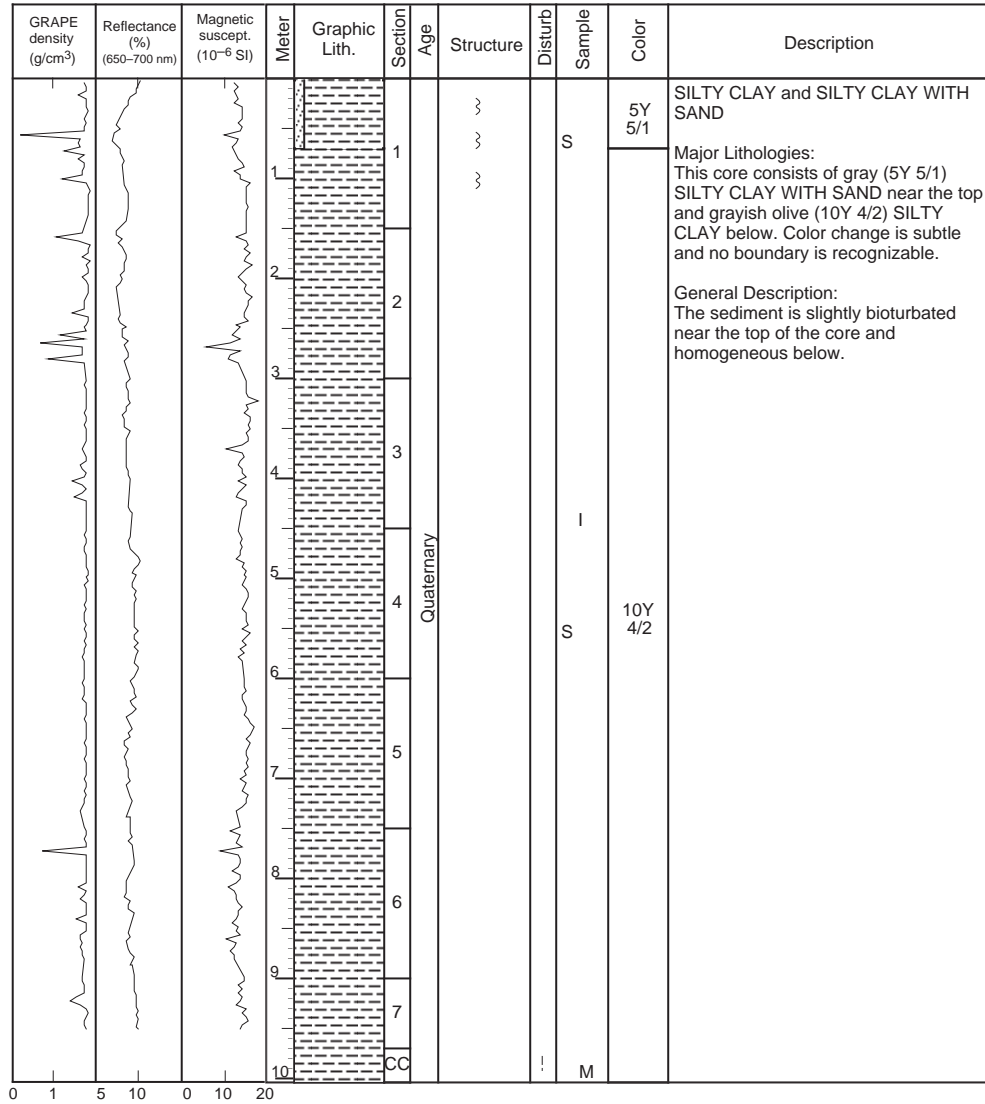
SITE 1017 HOLE B CORE 7H

CORED 52.8 - 62.3 mbsf



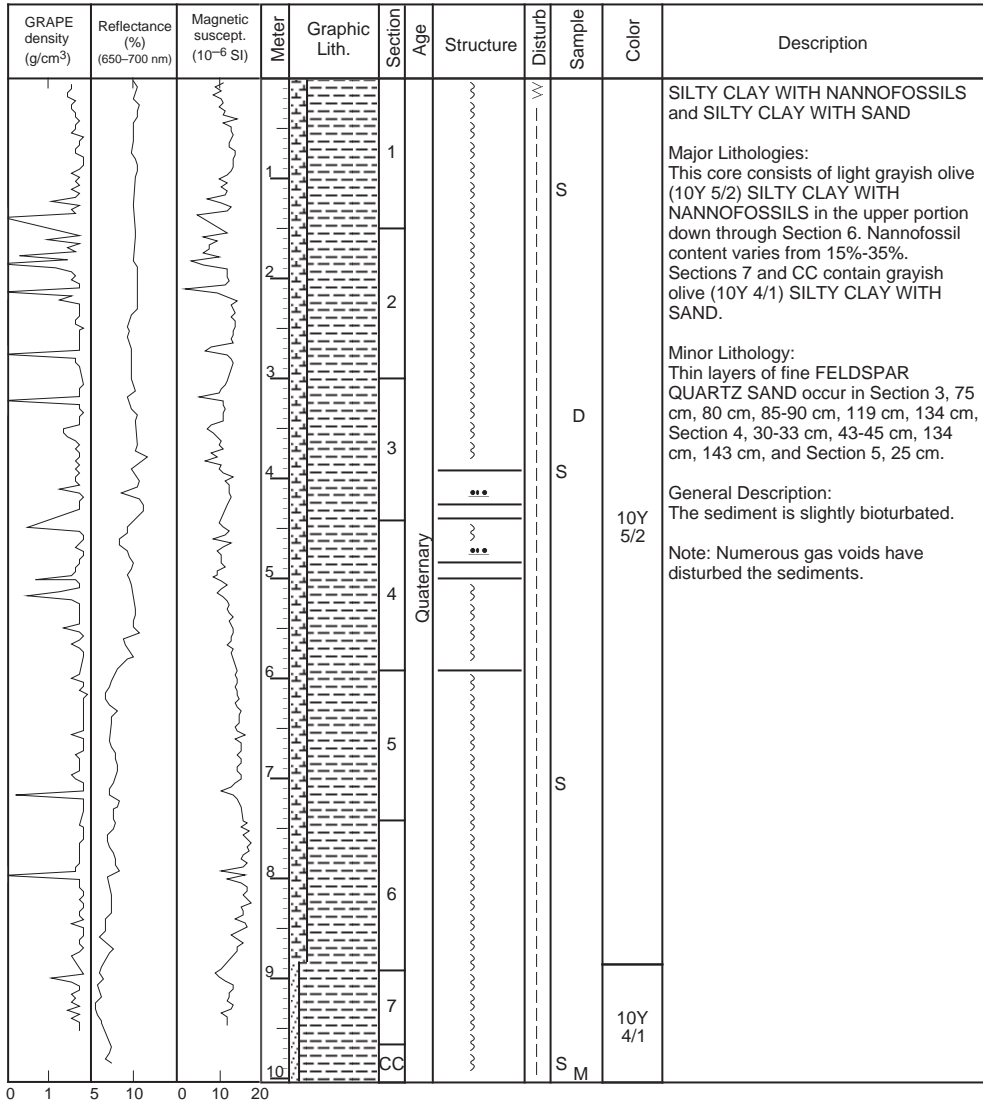
SITE 1017 HOLE B CORE 9H

CORED 71.8 - 81.3 mbsf



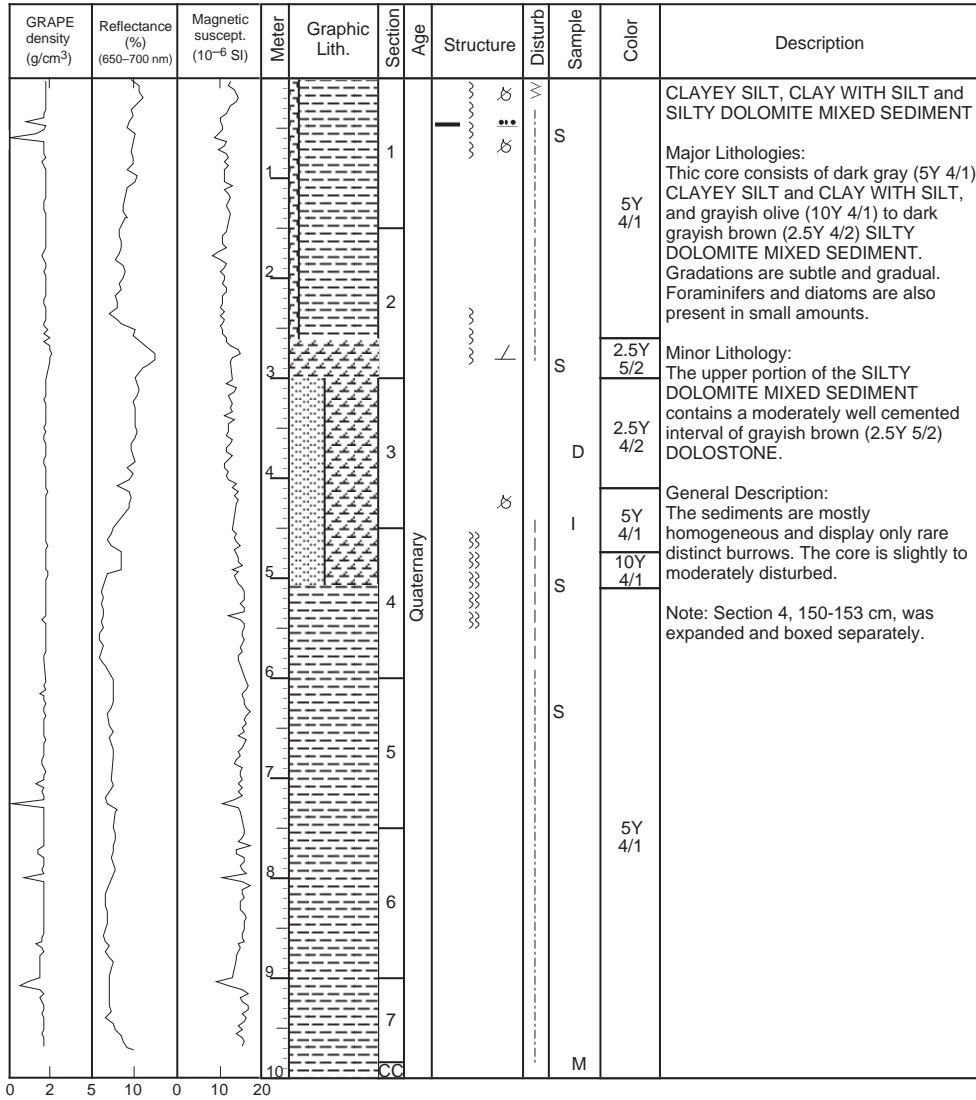
SITE 1017 HOLE B CORE 10H

CORED 81.3 - 90.8 mbsf




SITE 1017 HOLE B CORE 12H

CORED 100.3 - 109.8 mbsf



SITE 1017 HOLE B CORE 13H CORED 109.8 - 119.1 mbsf

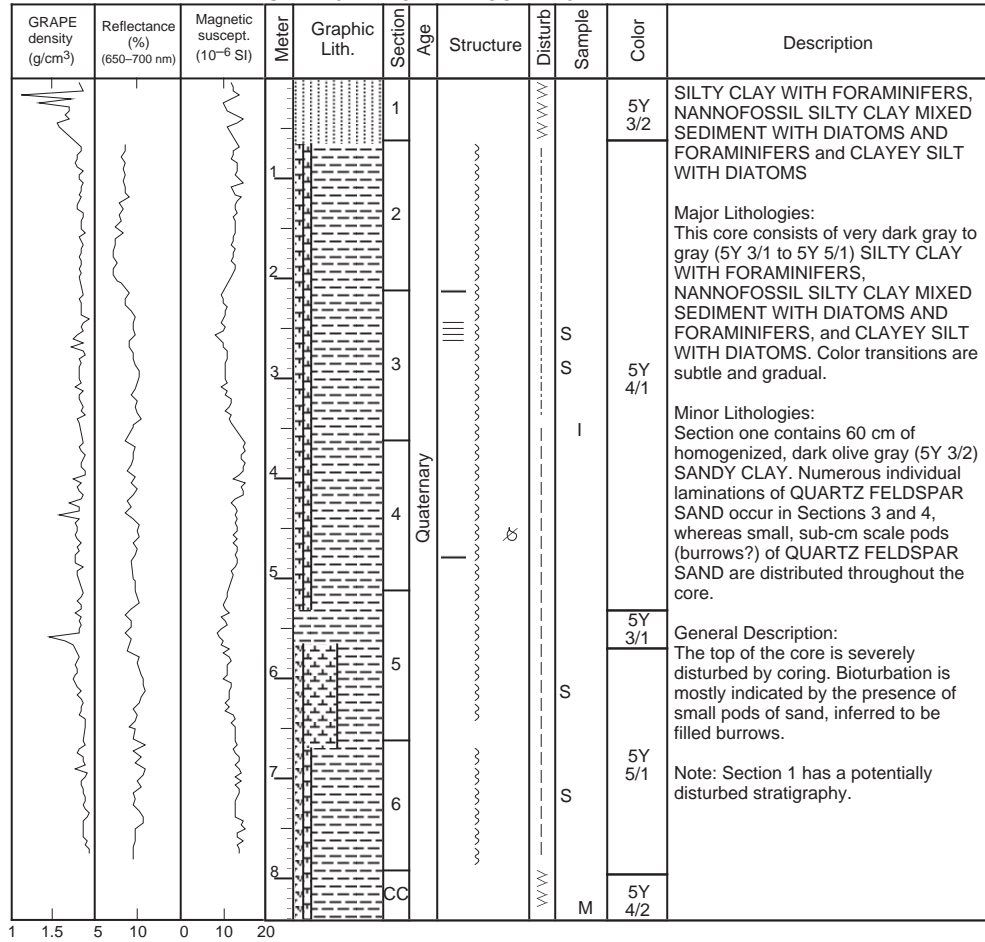
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC			W	S M		CLAY WITH SILT
			Quaternary	<p>Major Lithology: This core consists entirely of dark gray (5Y 4/1) CLAY WITH SILT with a well-developed gas-expansion fissility.</p> <p>General Description: This core exploded on the catwalk and only the Core Catcher remained.</p>				

SITE 1017 HOLE B CORE 14X CORED 119.1 - 119.3 mbsf

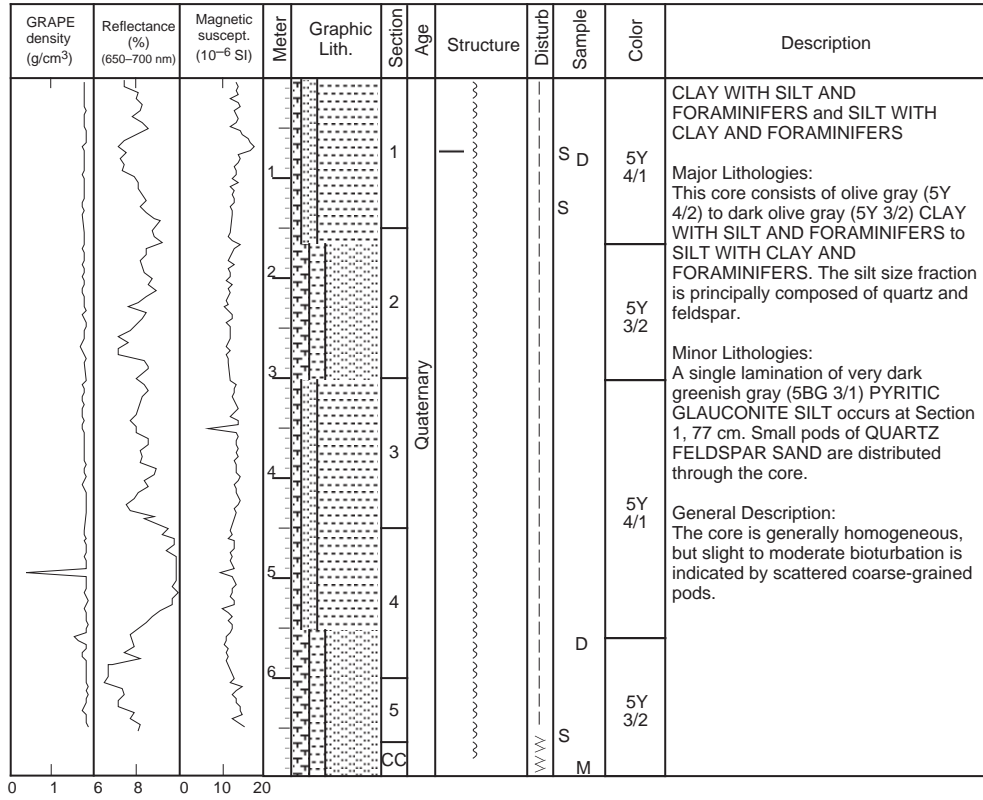
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC						DOLOSTONE
			Quaternary	<p>Major Lithology: This core consists of approximately 15 cm of grayish olive (10Y 4/1) DOLOSTONE.</p> <p>General Description: Recovered 17 cm in core catcher.</p> <p>An XRD sample was taken at the bottom of the core.</p>				

SITE 1017 HOLE B CORE 15X

CORED 119.3 - 127.3 mbsf

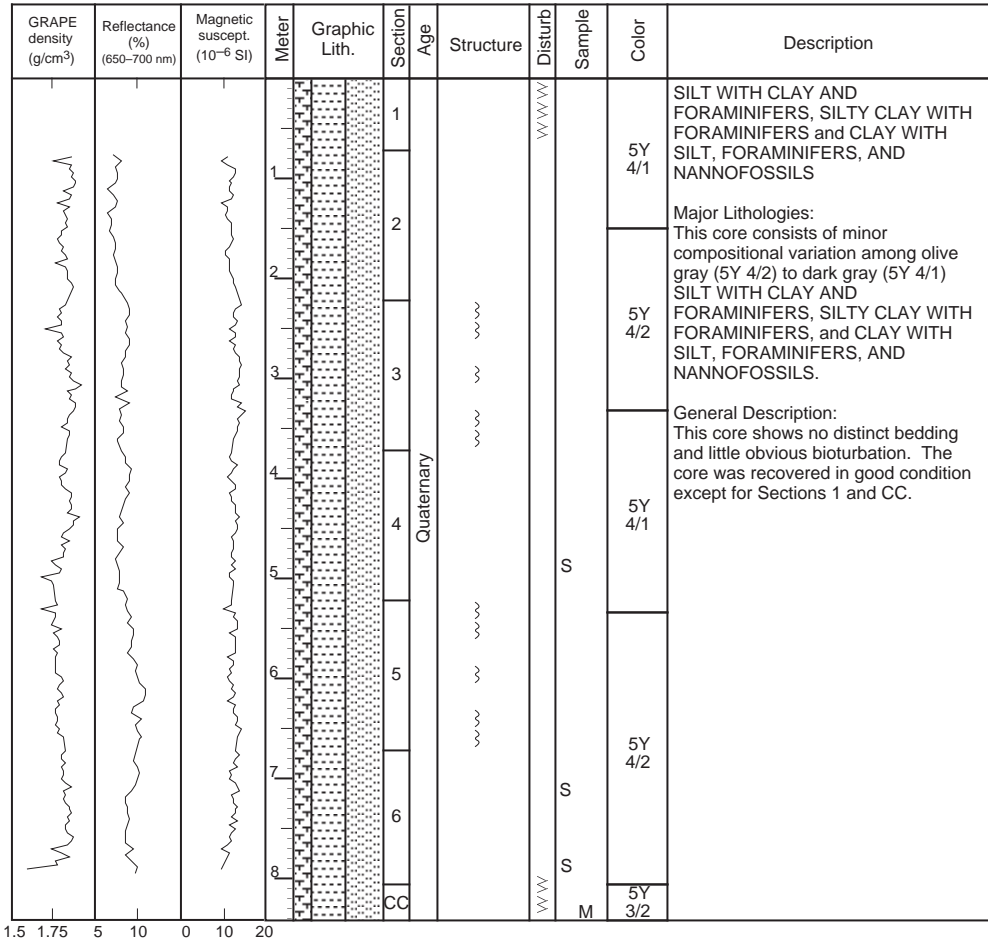


SITE 1017 HOLE B CORE 16X CORED 127.3 - 136.8 mbsf

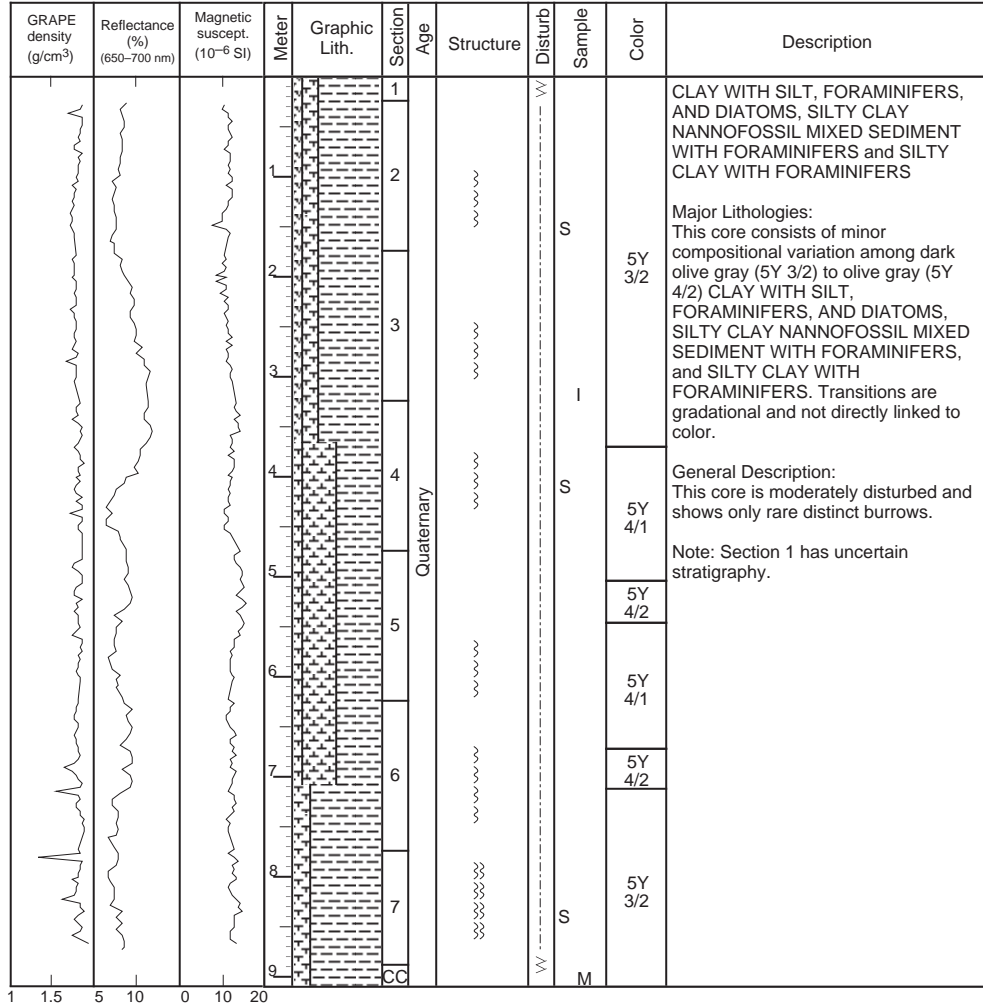


SITE 1017 HOLE B CORE 17X

CORED 136.8 - 146.5 mbsf

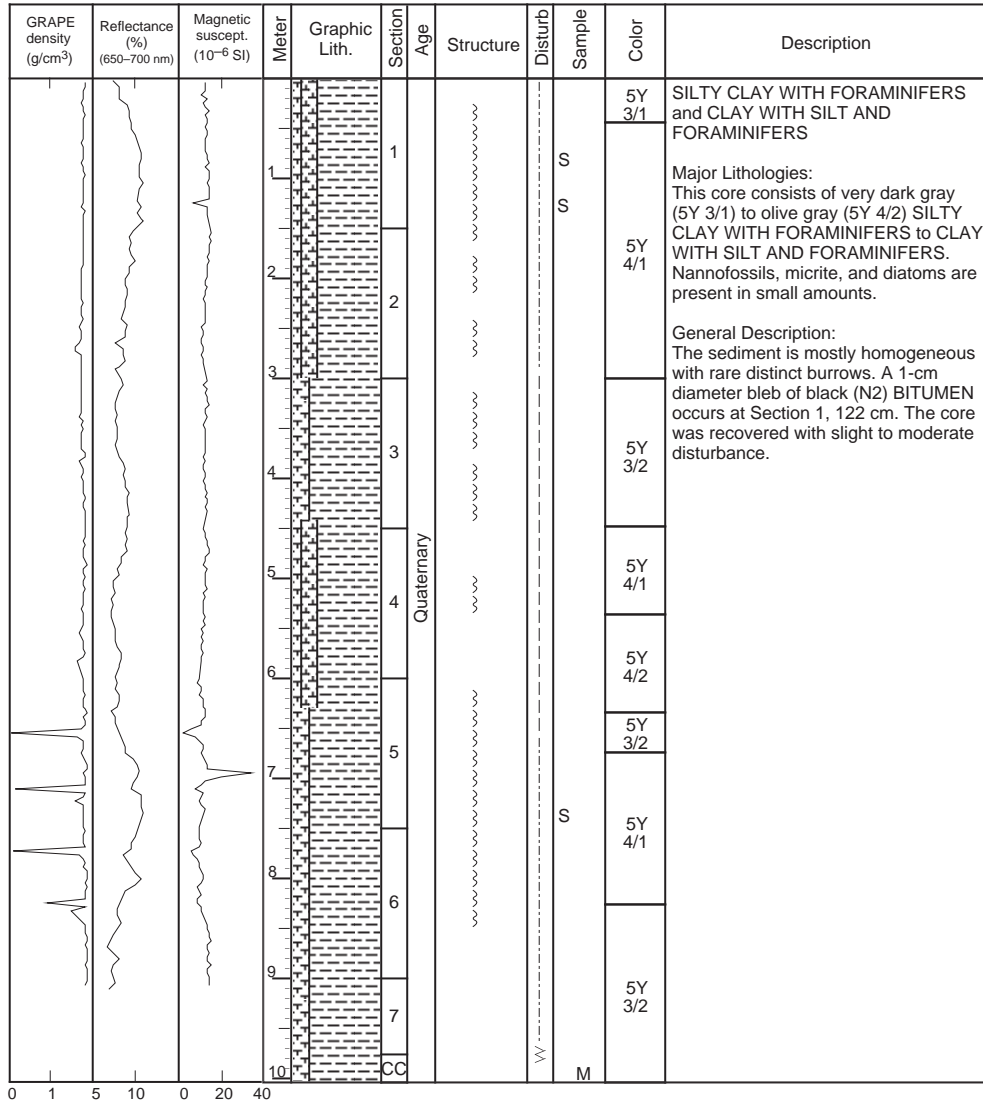


SITE 1017 HOLE B CORE 18X CORED 146.5 - 156.1 mbsf



SITE 1017 HOLE B CORE 19X

CORED 156.1 - 165.8 mbsf

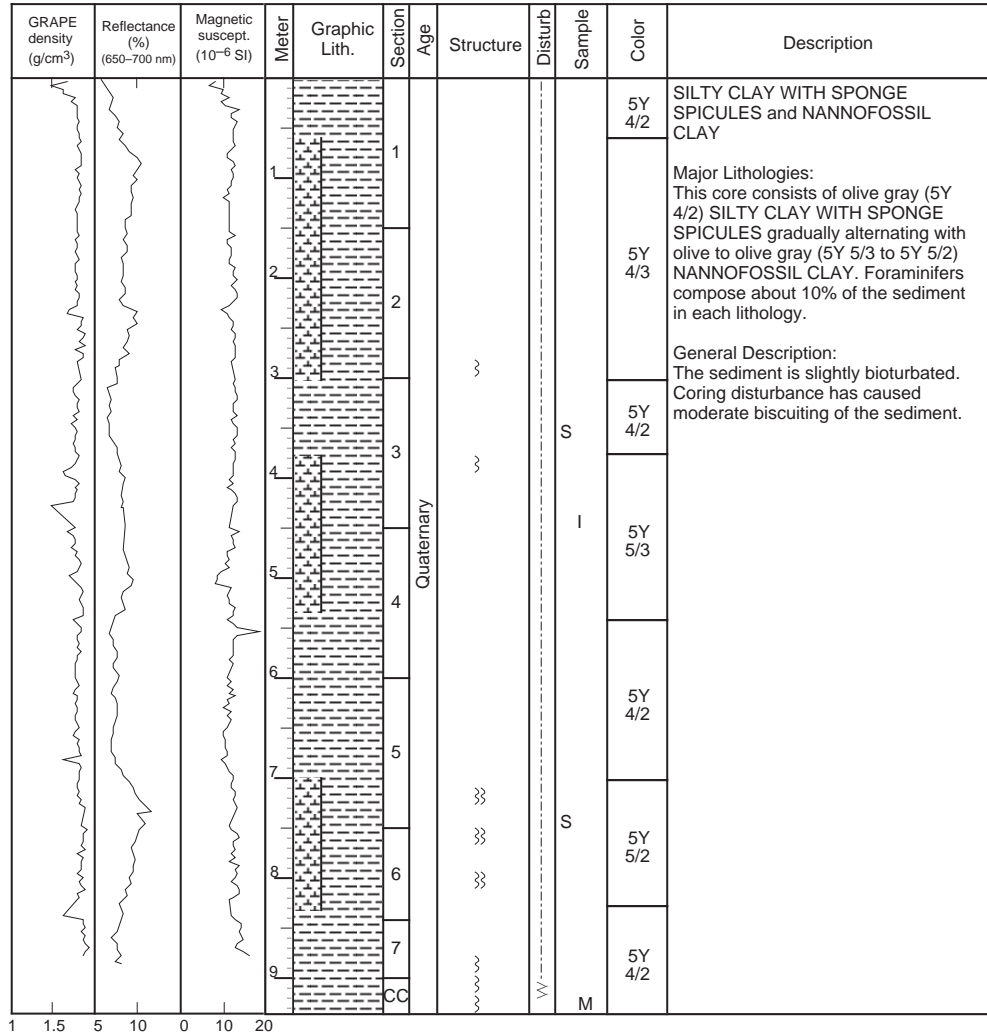


SITE 1017 HOLE B CORE 20X CORED 165.8 - 175.4 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1	Quaternary		-		5Y 3/2	<p>CLAYEY SILT WITH FORAMINIFERS</p> <p>Major Lithology: This core consists of homogeneous dark olive gray to olive (5Y 3/2 to 5Y 4/2) CLAYEY SILT WITH FORAMINIFERS. The sediments also contain up to 10% nannofossils.</p> <p>Minor Lithologies: A small pod of QUARTZ FELDSPAR SAND is present in Section 6, 45 cm.</p> <p>General Description: The sediment is homogeneous except for thin intervals that are slightly bioturbated.</p>
			2		2						
			3		3						
			4		3						
			5		4						
			6		4						
			7		5						
			8		6						
			9		6						
					CC						

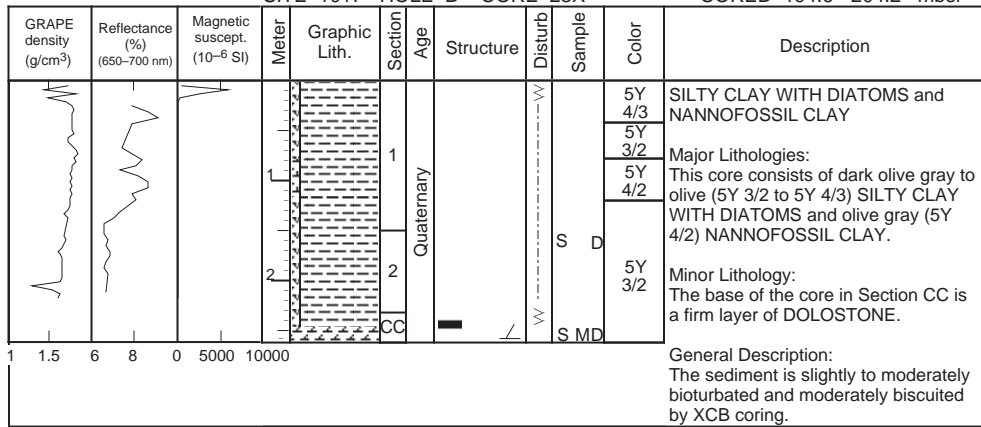
SITE 1017 HOLE B CORE 21X

CORED 175.4 - 185.0 mbsf



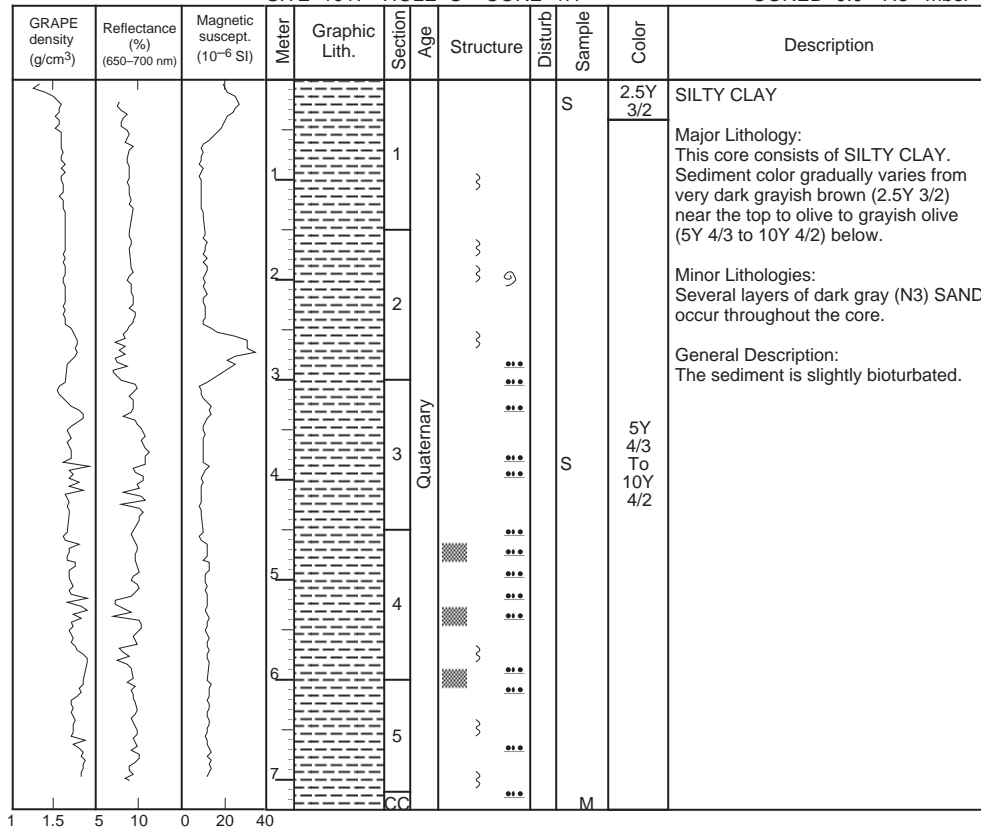
SITE 1017 HOLE B CORE 23X

CORED 194.6 - 204.2 mbsf

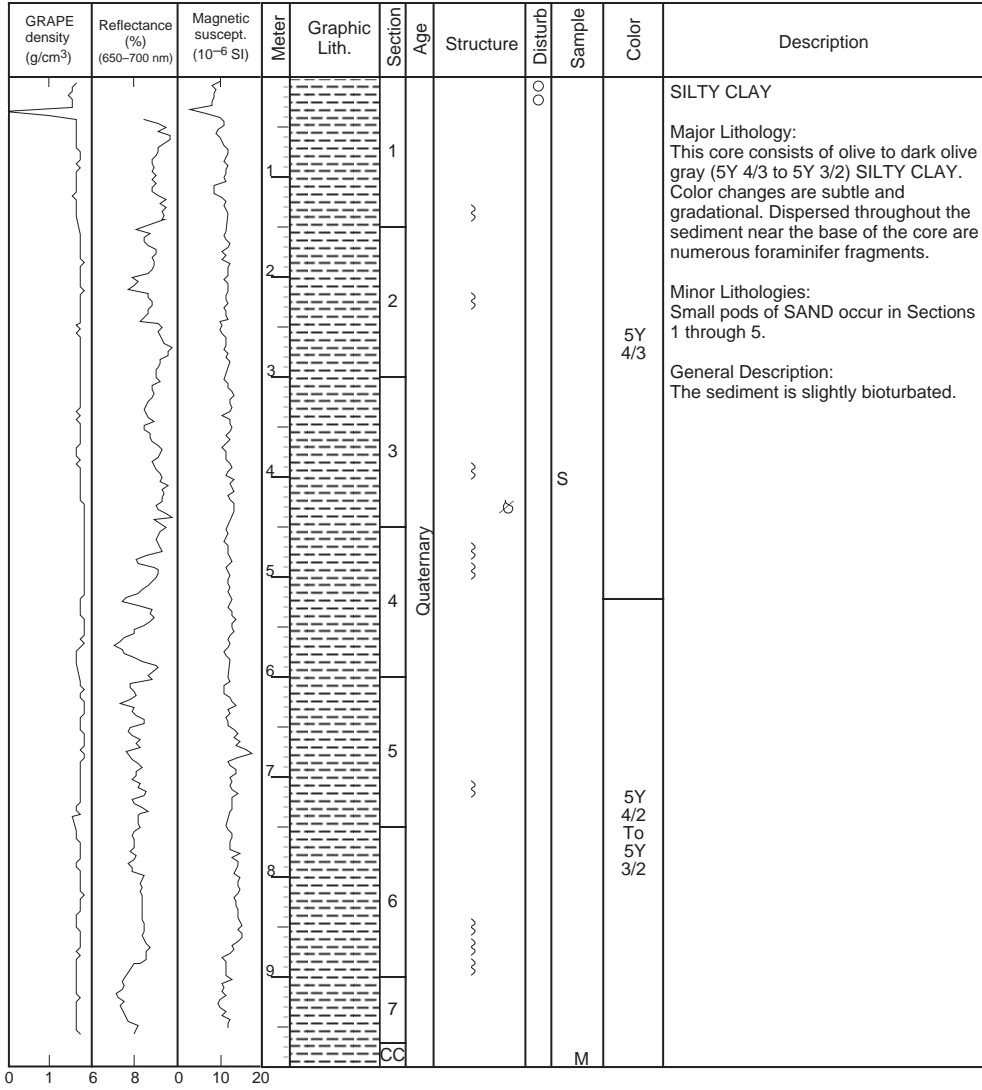


SITE 1017 HOLE C CORE 1H

CORED 0.0 - 7.3 mbsf

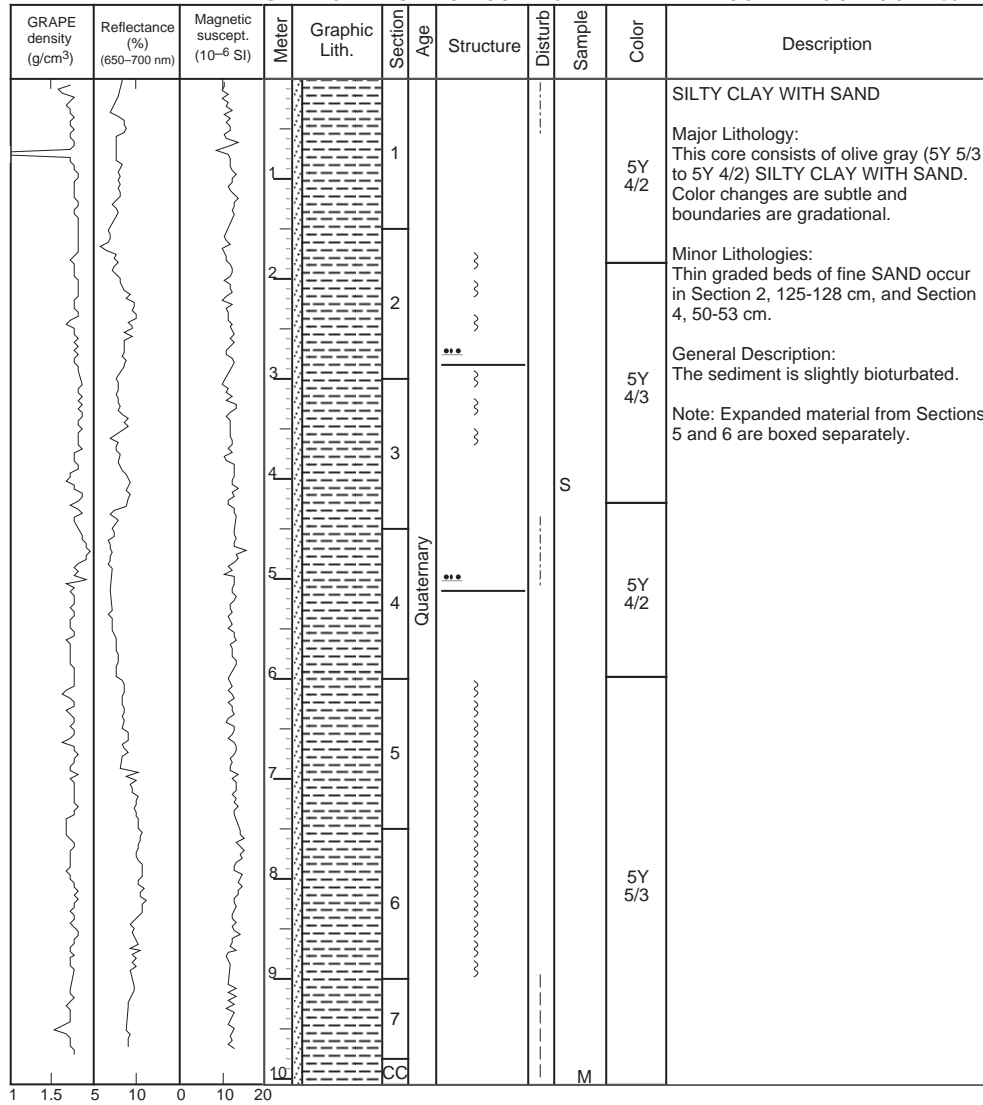


SITE 1017 HOLE C CORE 2H CORED 7.3 - 16.8 mbsf



SITE 1017 HOLE C CORE 3H

CORED 16.8 - 26.3 mbsf

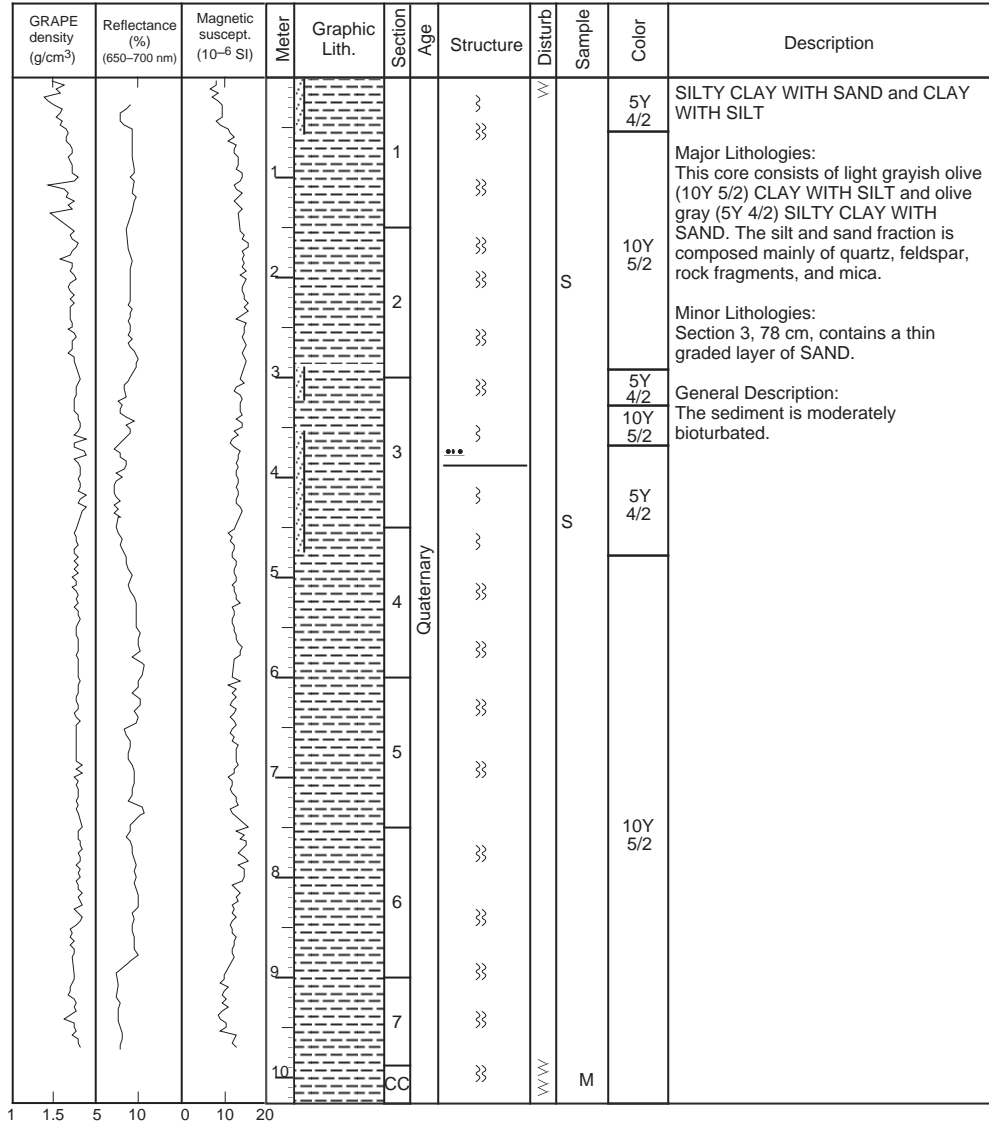


SITE 1017 HOLE C CORE 4H CORED 26.3 - 35.8 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		~	○		10Y 4/1	<p>SILTY CLAY</p> <p>Major Lithology: This core is composed of grayish olive (10Y 4/1) to dark olive gray (5Y 3/2) SILTY CLAY which shows a few meter scale faint color cycles.</p> <p>General Description: The core is slightly to moderately bioturbated.</p> <p>Note: Expanded material from Section 6 is boxed separately.</p>
			2		2	~		5Y 4/2			
			3		3	~					
			4		3	~		10Y 4/1			
			5		4	~	Quaternary		S		
			6		4	~					
			7		5	~			S	5Y 3/2	
			8		6	~				5Y 4/2	
			9		7	~				5Y 3/2	
			10		CC					M	

SITE 1017 HOLE C CORE 5H

CORED 35.8 - 45.3 mbsf

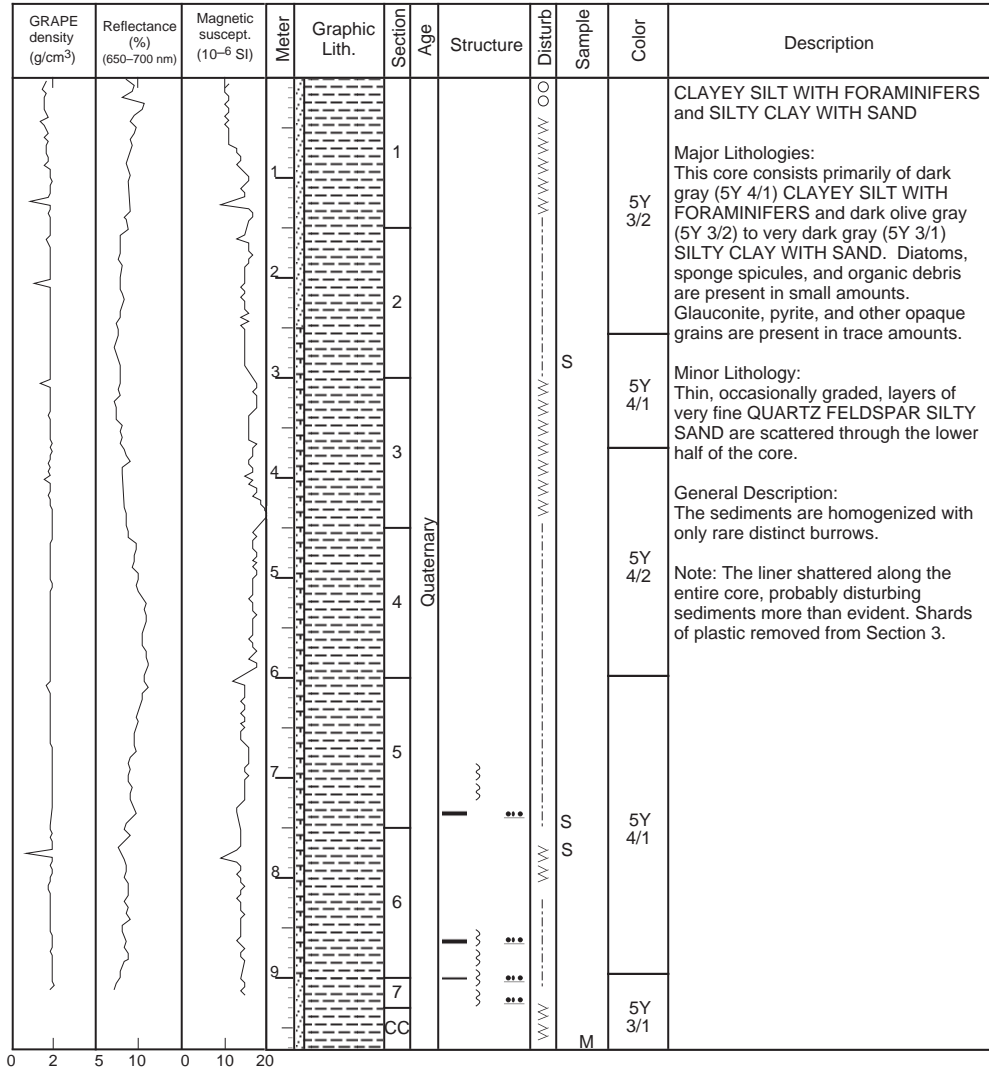


SITE 1017 HOLE C CORE 6H CORED 45.3 - 54.8 mbsf

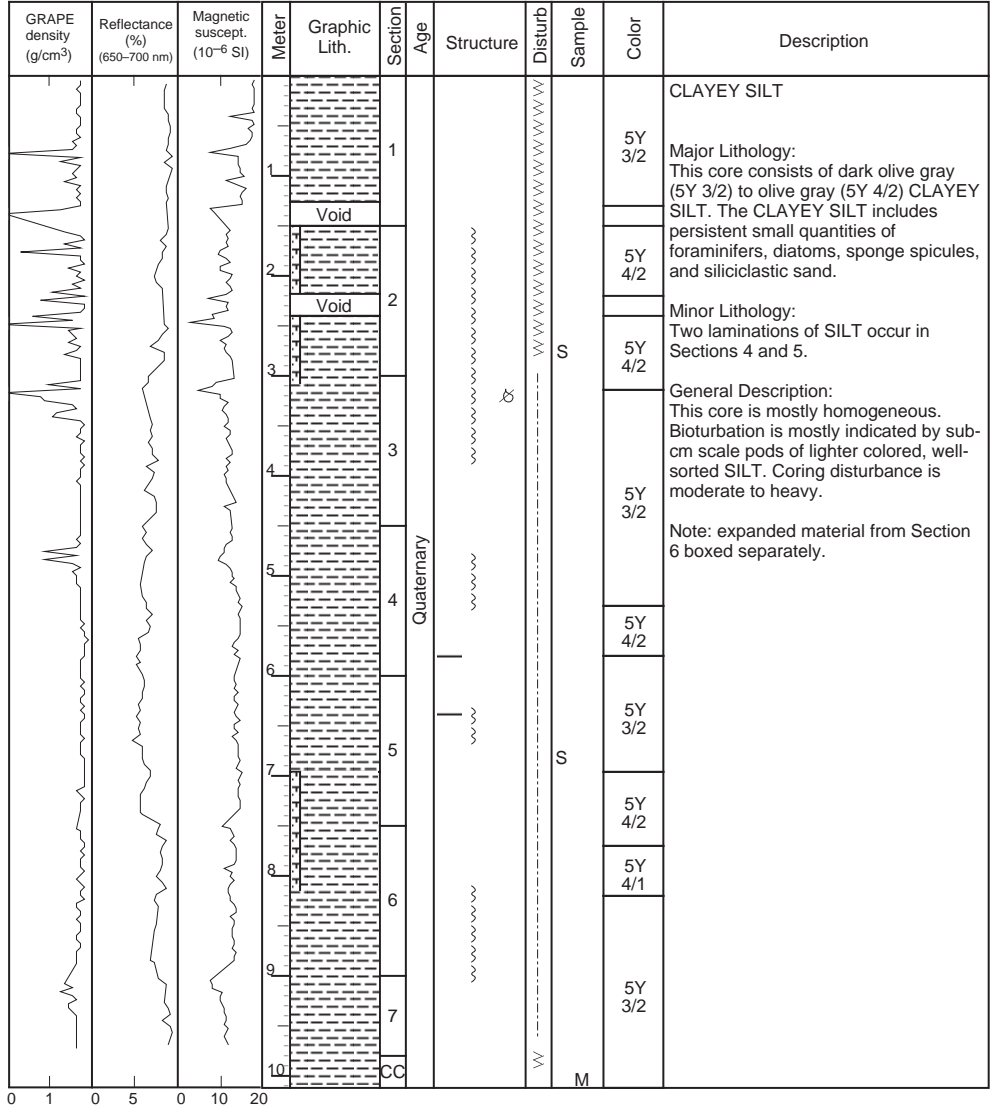
GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			0								
			1		1		}}	...			SILTY CLAY Major Lithology: This core consists of olive gray to dark olive gray (5Y 4/2 to 5Y 3/2) SILTY CLAY. Color changes are subtle and boundaries are gradational.
			2		2		}}			5Y 4/2	Minor Lithology: Thin graded beds of FELDSPAR QUARTZ SAND occur in Section 1, 30 cm, Section 5, 74 cm, and 140 cm. Small pods of SAND also fill burrows near graded intervals.
			3		3		}}				General Description: The sediment is slightly to moderately bioturbated.
			4		3		}}			5Y 3/2	Note: Gas expansion voids occur in Section 1, 138-150 cm, Section 2, 60-70 cm, and Section 3, 82-97 cm.
			5		4		}}			5Y 4/2	
			6		4	Quaternary				5Y 3/2	
			7		5		}}	...			
			8		6		}}	...		5Y 4/2 To 5Y 3/2	
			9		6		}}				
			10		7		}}				
			10		CC		}}	...			

SITE 1017 HOLE C CORE 7H

CORED 54.8 - 64.3 mbsf



SITE 1017 HOLE C CORE 8H CORED 64.3 - 73.8 mbsf



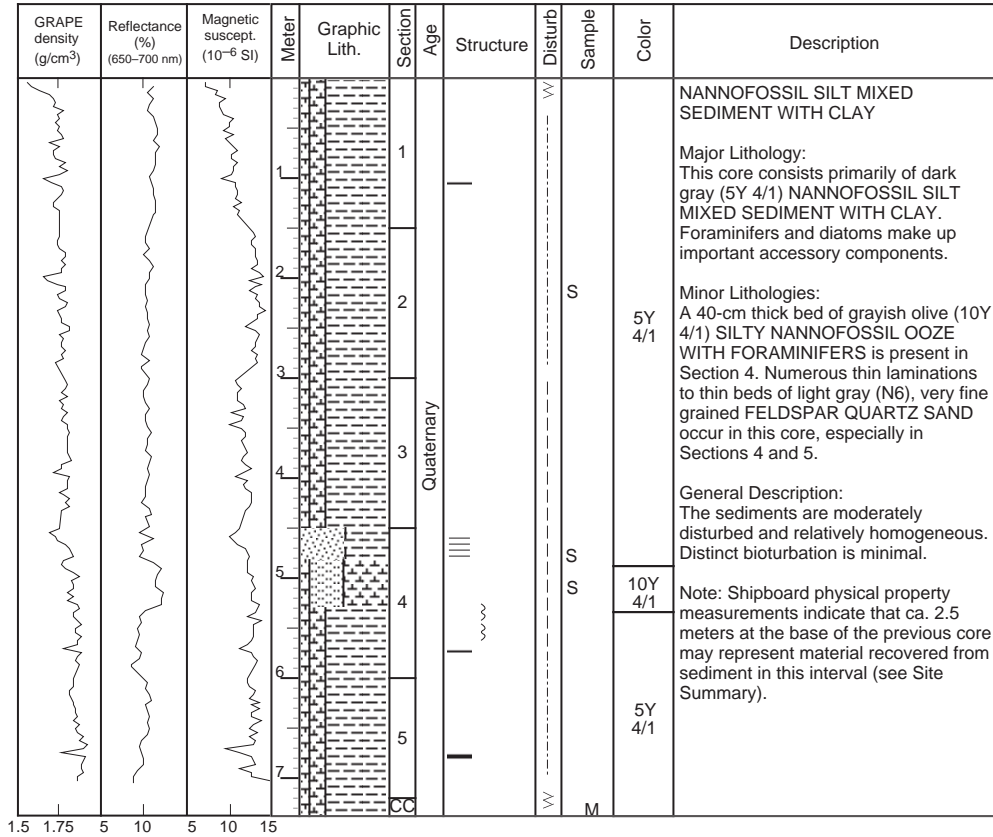
SITE 1017 HOLE C CORE 9X

CORED 73.8 - 78.3 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		~	W S S M	5Y 4/1 5Y 4/2	<p>NANNOFOSSIL OOZE WITH SILT AND FORAMINIFERS and CLAYEY SILT WITH FORAMINIFERS</p> <p>Major Lithologies: This core consists of olive gray (5Y 4/2) to dark gray (5Y 4/1) CLAYEY SILT WITH FORAMINIFERS and NANNOFOSSIL OOZE WITH SILT AND FORAMINIFERS. The calcareous lithology occurs without any detectable associated change in color.</p> <p>Minor Lithologies: Sharply bounded, 1-cm thick lamination of gray SILT occurs near the base of Section 5.</p> <p>General Description: The core is mostly homogeneous without distinct burrows.</p> <p>Note: Shipboard physical property measurements indicate that ca. 2.5 meters at the base of the core was recovered beyond the recorded sub-bottom depth interval.</p>	
			2		2	~					
			3		3	~					
			4		Quaternary	~					
			5		4	~					
			6		4	~					
			7		5	~					

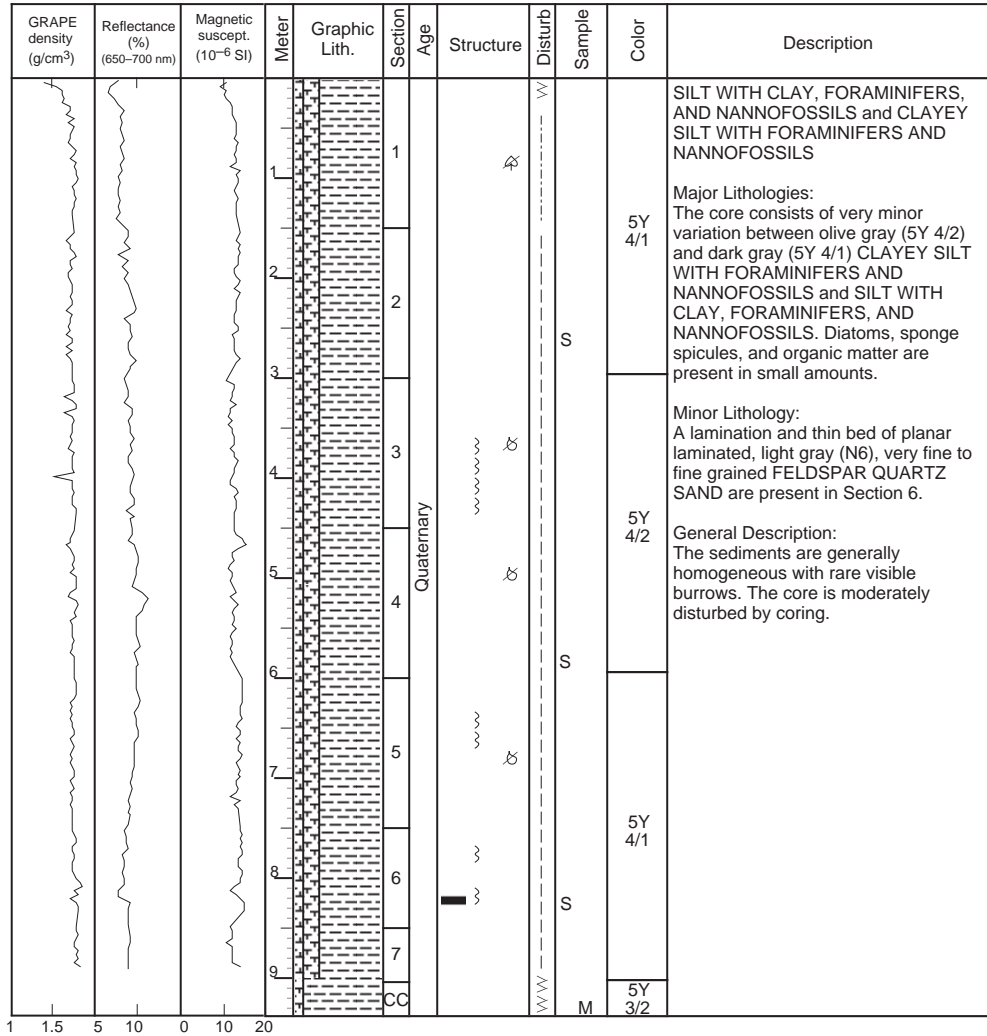
1.6 1.8 5 10 0 10 20

SITE 1017 HOLE C CORE 10X CORED 78.3 - 87.9 mbsf

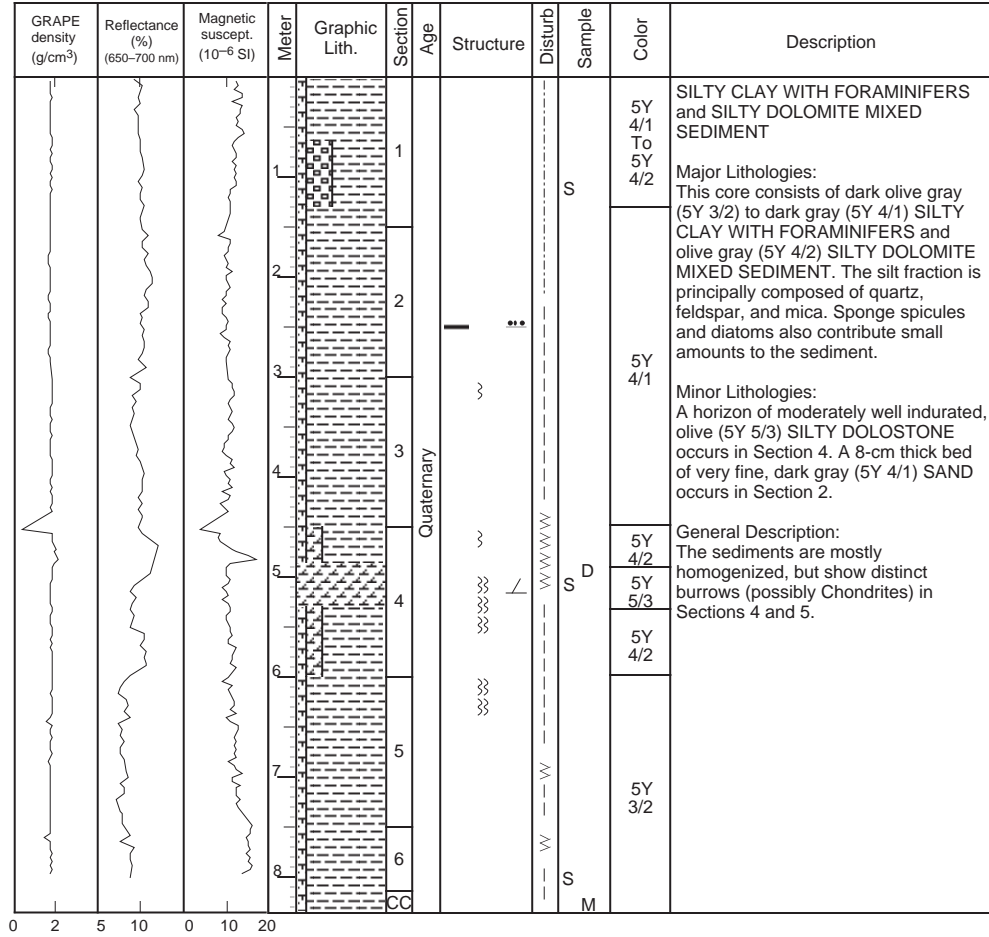


SITE 1017 HOLE C CORE 11X

CORED 87.9 - 97.5 mbsf

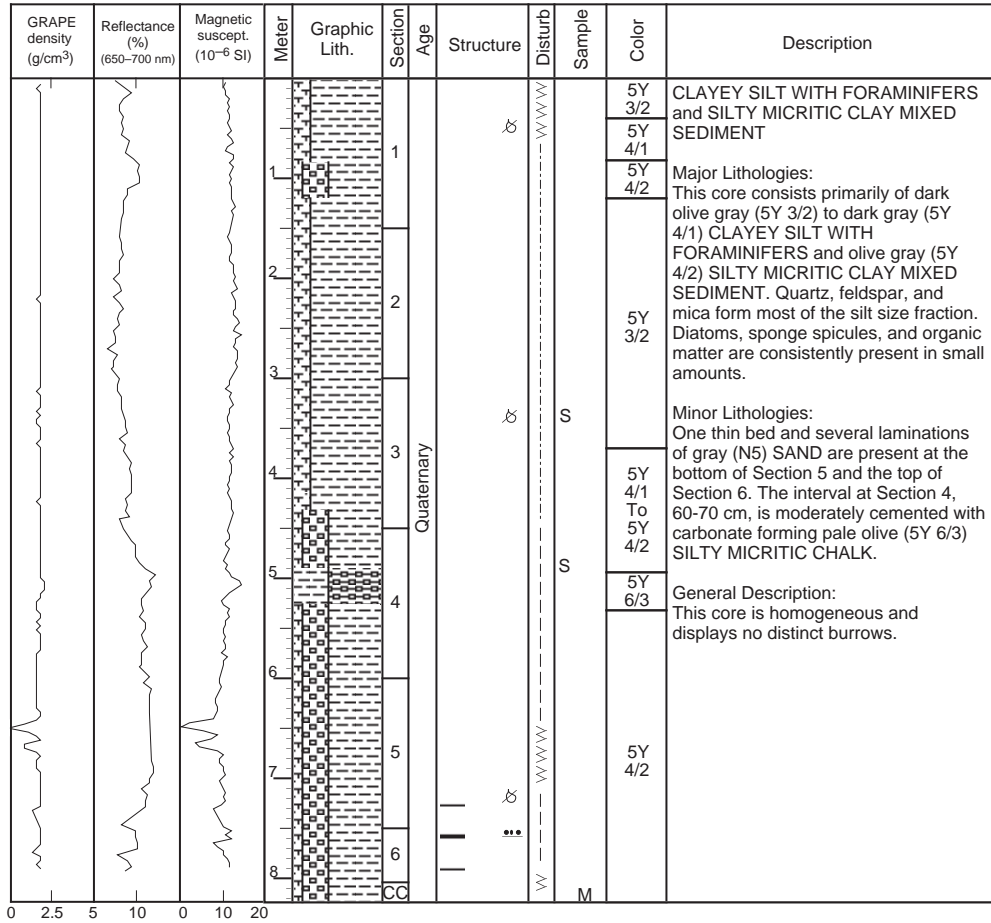


SITE 1017 HOLE C CORE 12X CORED 97.5 - 107.1 mbsf

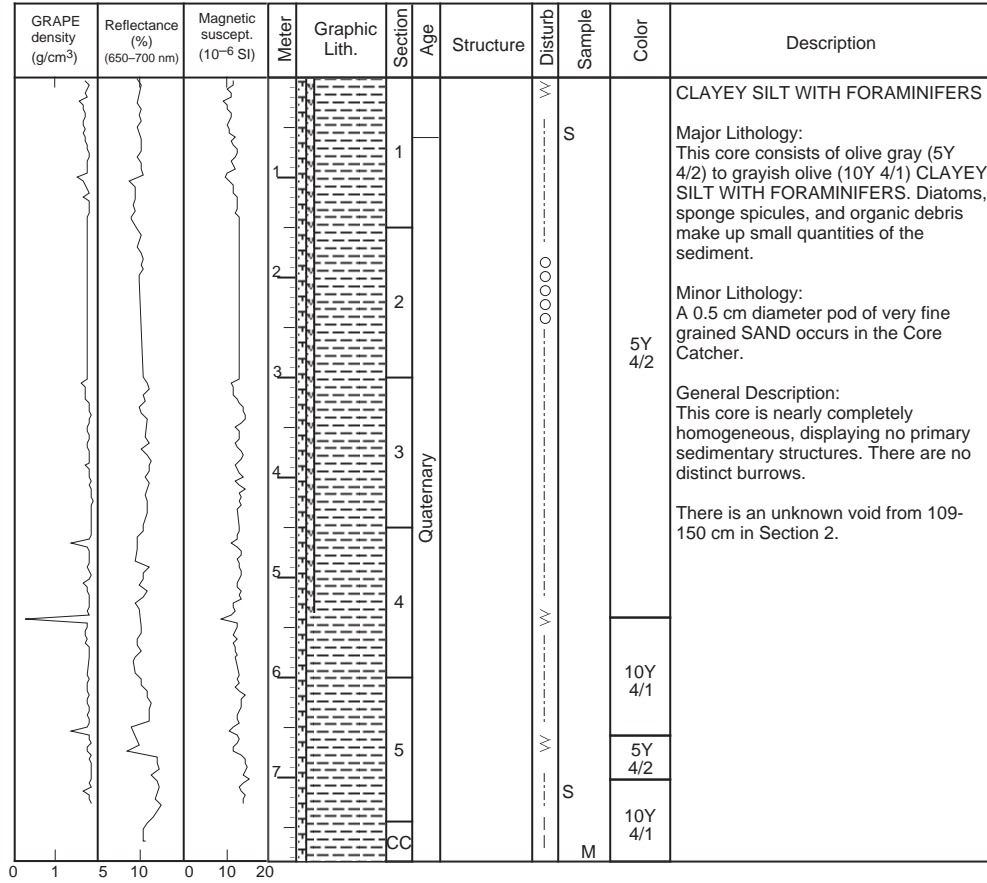


SITE 1017 HOLE C CORE 13X

CORED 107.1 - 116.8 mbsf

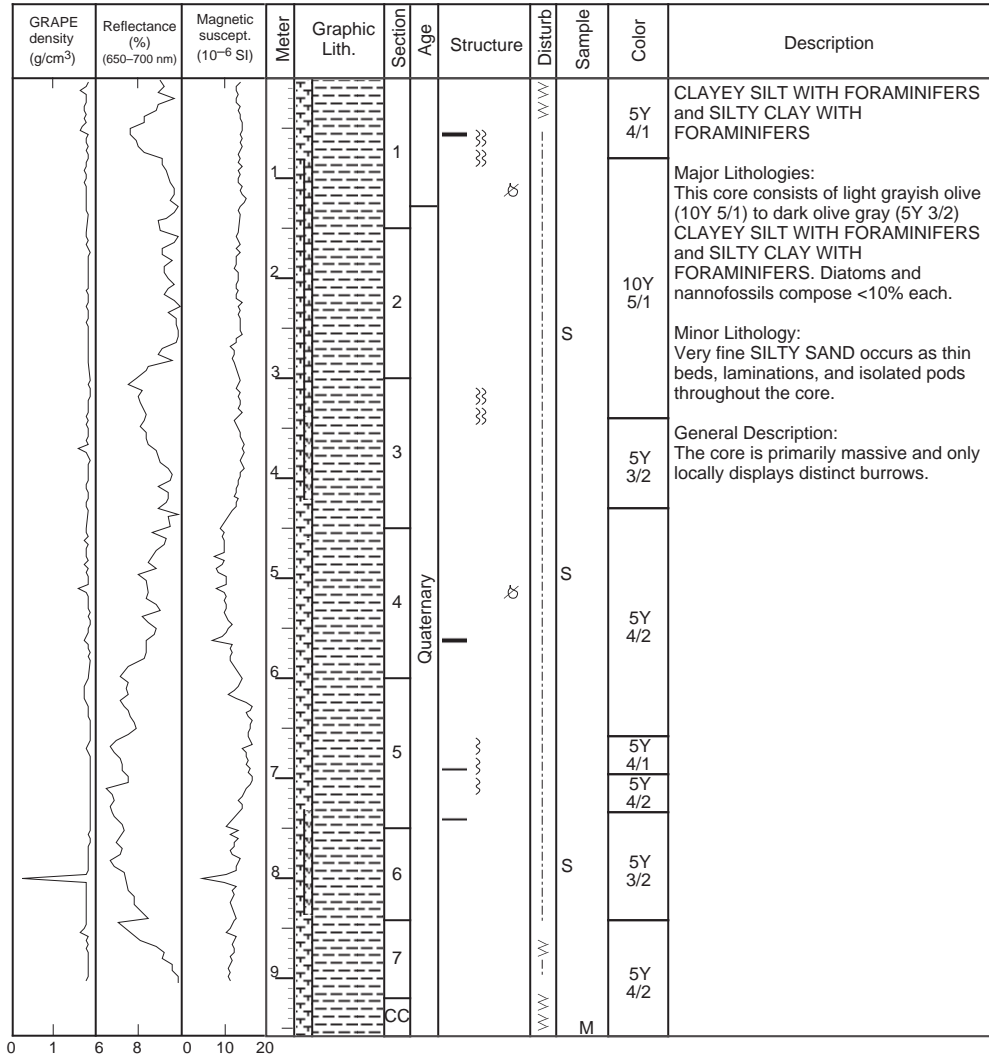


SITE 1017 HOLE C CORE 14X CORED 116.8 - 126.4 mbsf



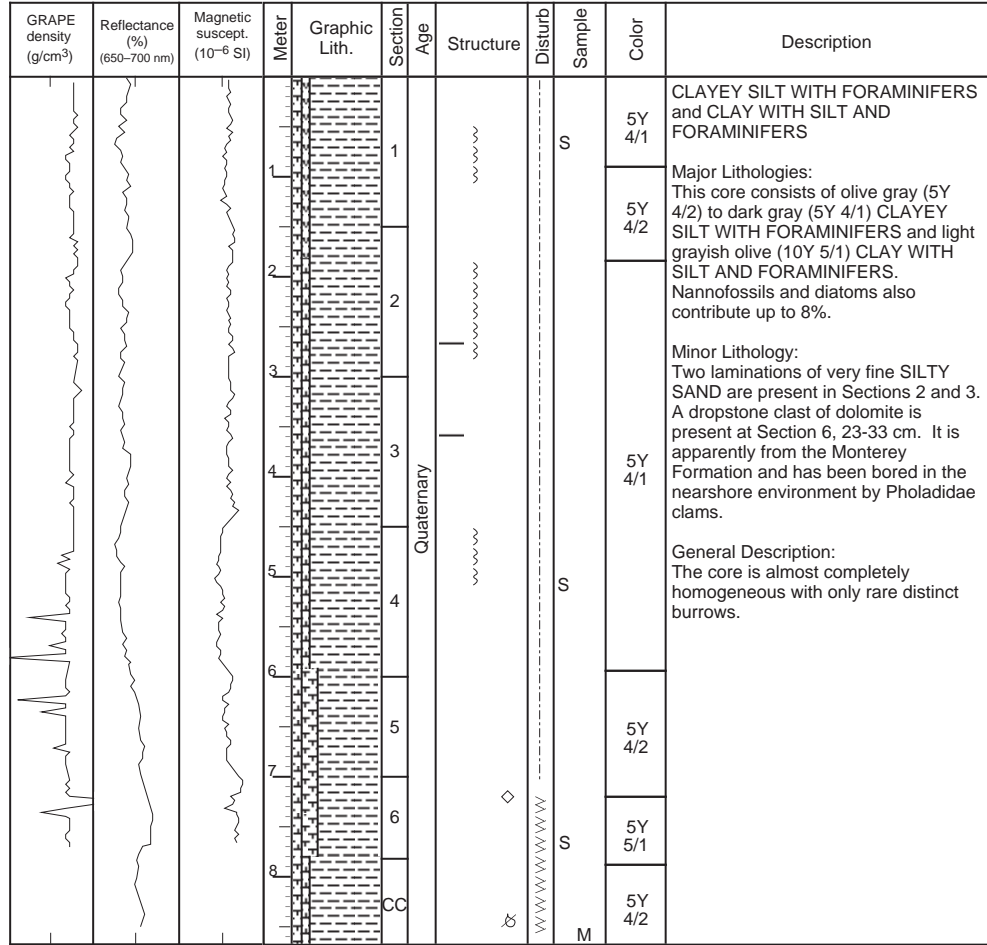
SITE 1017 HOLE C CORE 15X

CORED 126.4 - 135.9 mbsf



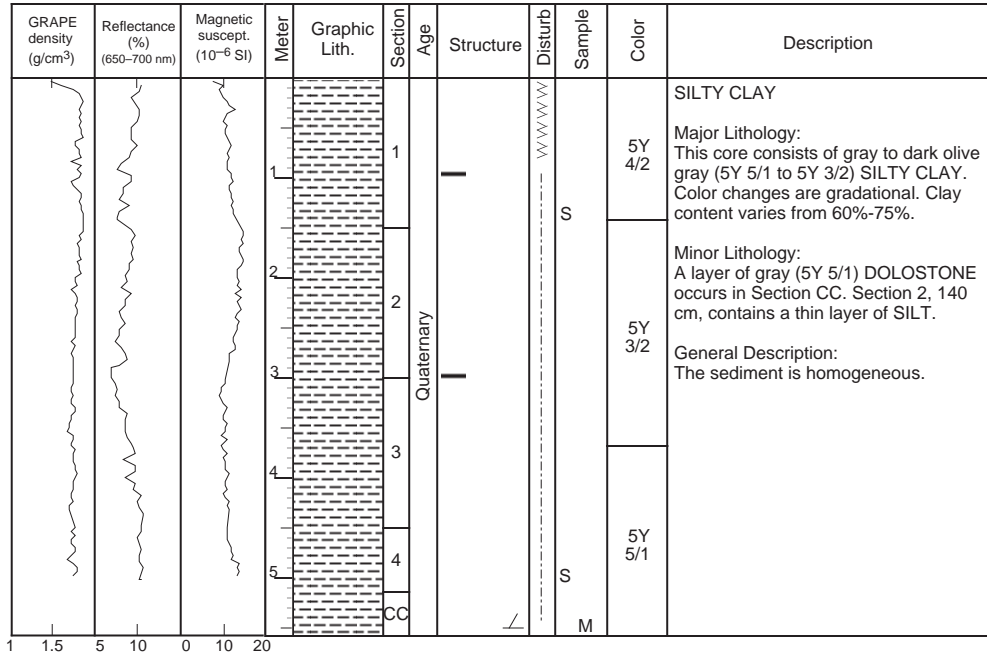
SITE 1017 HOLE C CORE 16X

CORED 135.9 - 145.5 mbsf

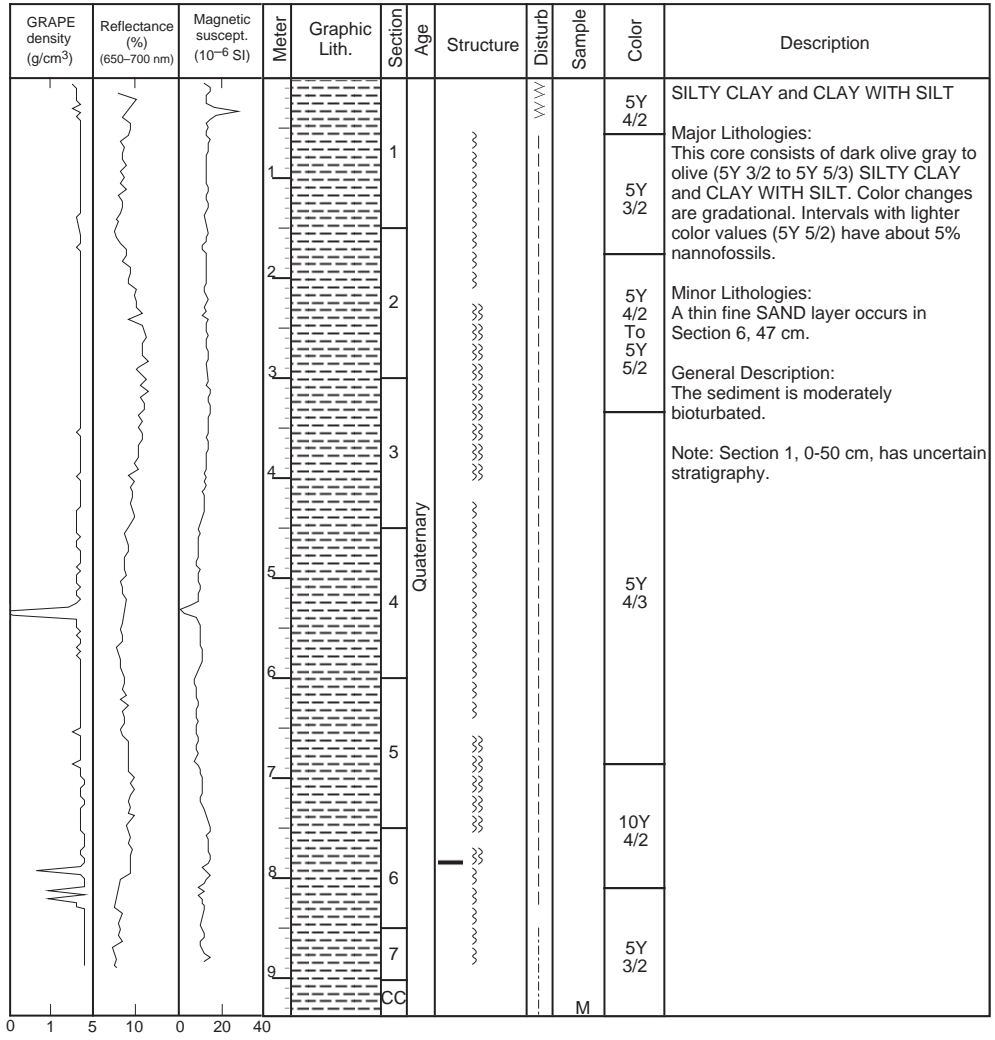


SITE 1017 HOLE C CORE 17X

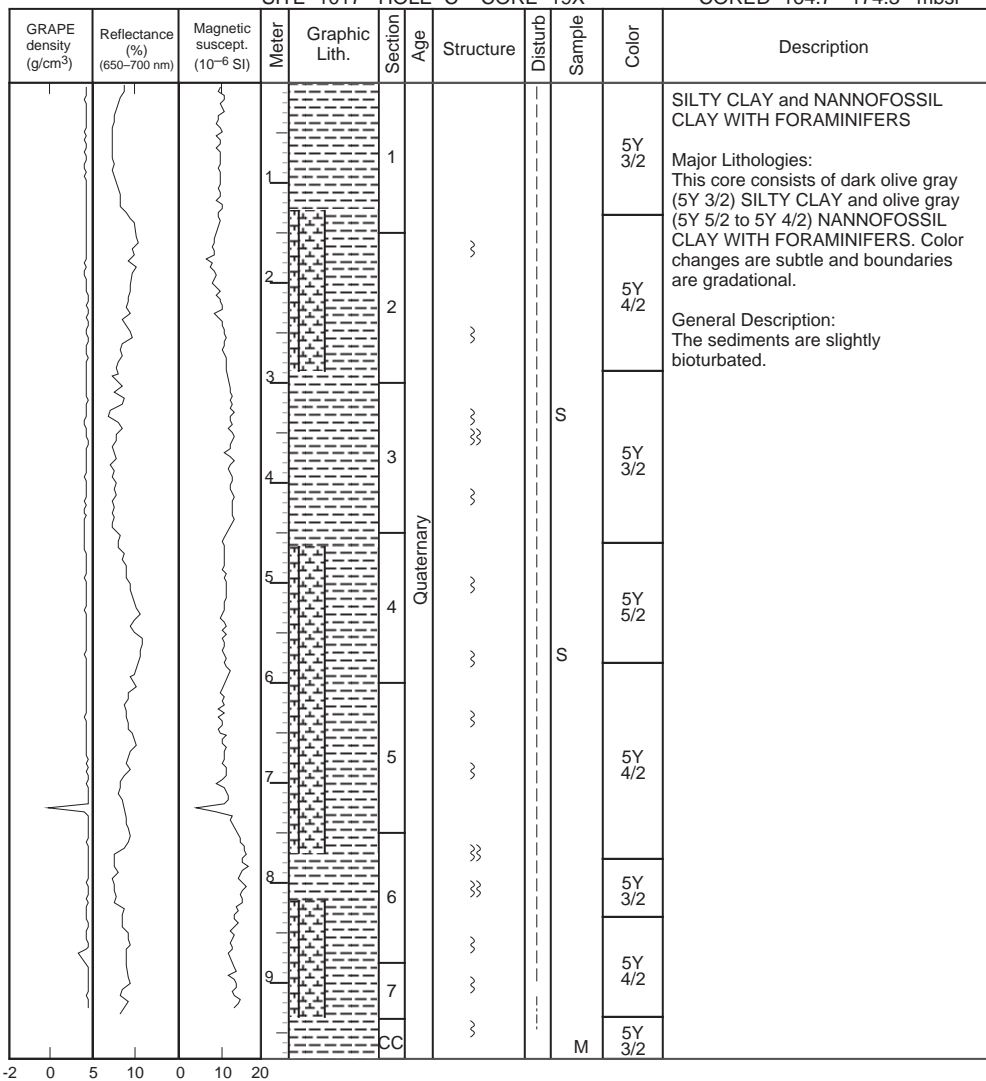
CORED 145.5 - 155.1 mbsf



SITE 1017 HOLE C CORE 18X CORED 155.1 - 164.7 mbsf

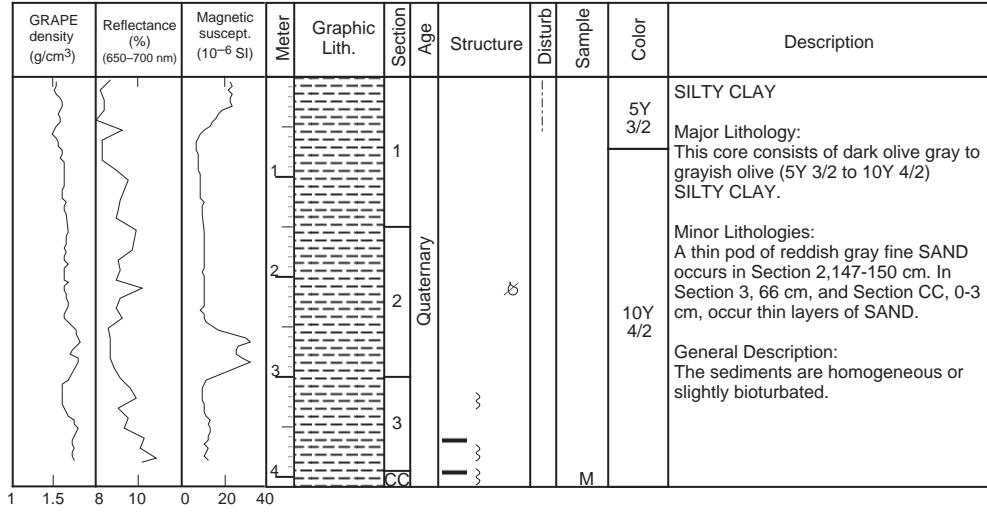


SITE 1017 HOLE C CORE 19X CORED 164.7 - 174.3 mbsf



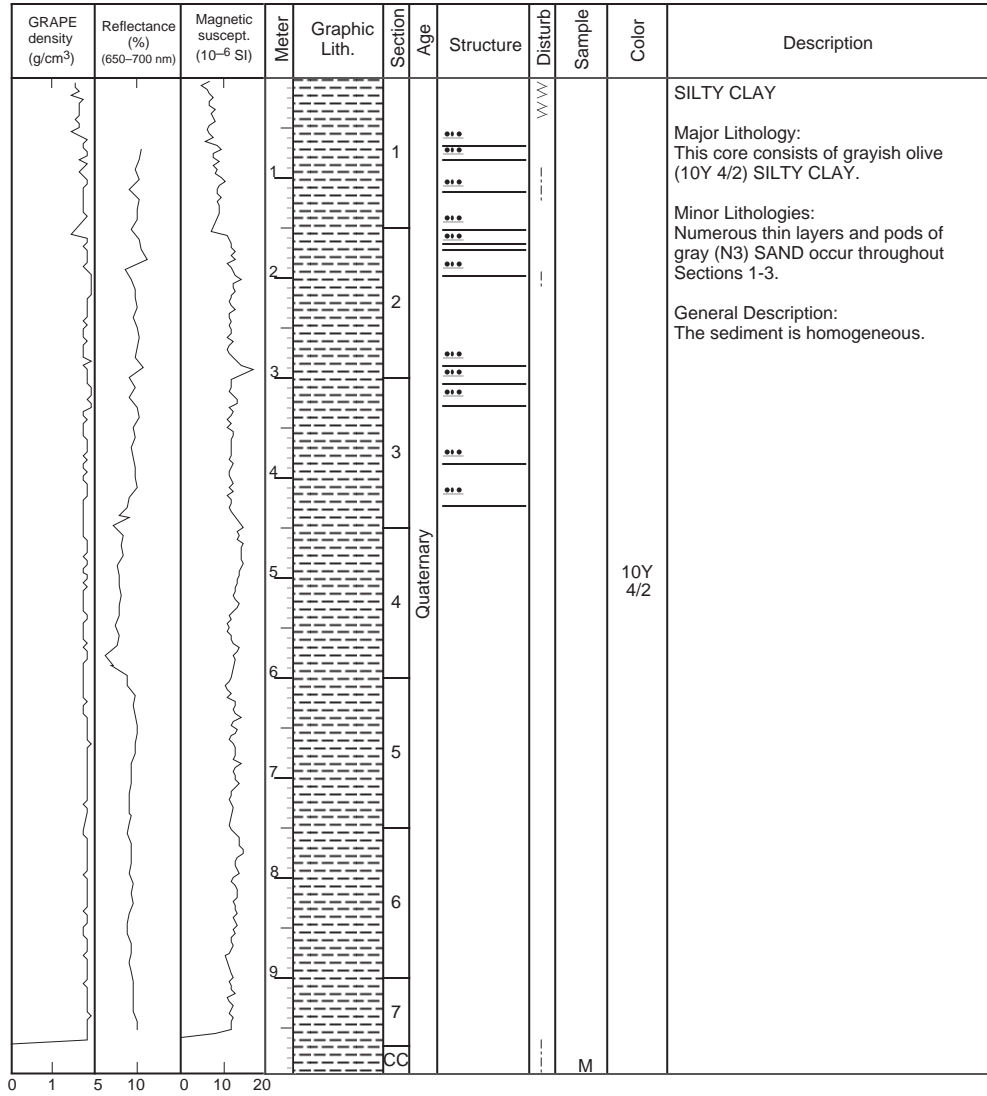
SITE 1017 HOLE D CORE 1H

CORED 0.0 - 4.1 mbsf



SITE 1017 HOLE D CORE 2H

CORED 4.1 - 13.6 mbsf



SITE 1017 HOLE D CORE 3H CORED 13.6 - 23.1 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			0								<p>SILTY CLAY</p> <p>Major Lithology: This core consists of grayish olive(10Y 4/2) to dark olive gray (5Y 3/2) SILTY CLAY. Color changes are subtle and boundaries are gradational.</p> <p>Minor Lithology: Numerous thin gray (N3) SAND layers occur throughout the core.</p> <p>General Description: The sediment is homogeneous or slightly bioturbated.</p>
			1		1					10Y 4/2	
			2		2		***				
			3		3		}				
			4		3		***				
			5		4	Quaternary	***			5Y 3/2	
			6		4		}				
			7		5		***			10Y 4/2	
			8		6		}				
			9		6		}				
					7					5Y 3/2	
					CC						
									M		

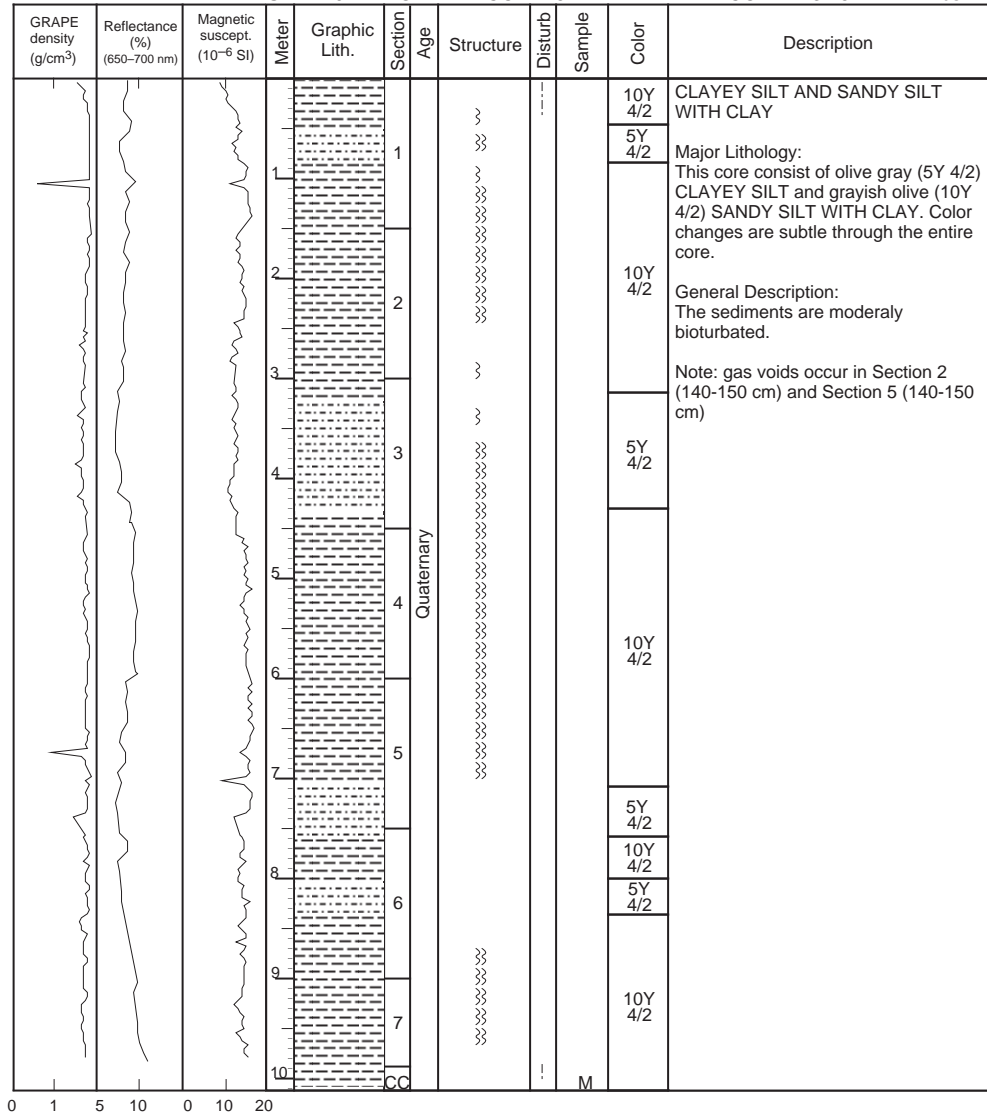
SITE 1017 HOLE D CORE 4H

CORED 23.1 - 32.6 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		}}			5Y 4/2	<p>SILTY CLAY</p> <p>Major Lithology: This core consists of grayish olive to olive (10Y 5/2 to 5Y 5/3) SILTY CLAY. Color changes are subtle and boundaries are gradational.</p> <p>General Description: The sediment is slightly bioturbated.</p> <p>Note: A gas expansion void occurs in Section 7, 70-80 cm.</p>
			2		2		}}				
			3		3		}}				
			4		3		}}				
			5		4	Quaternary	}}			5Y 5/3 To 5Y 4/2	
			6		4		}}				
			7		5		}}				
			8		6		}}				
			9		6		}}				
			10		7		}}				
					CC		}}		M		

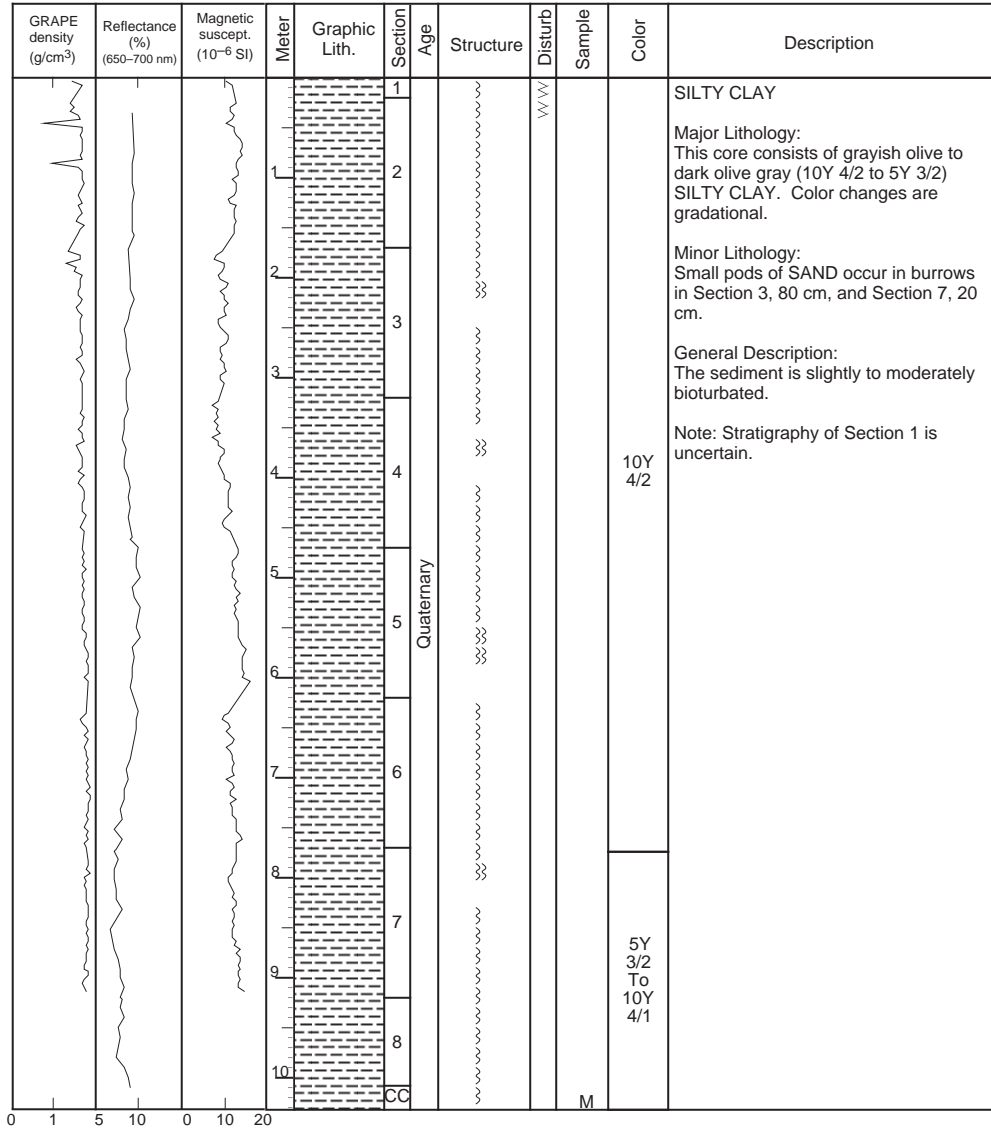
1 1.5 5 10 0 10 20

SITE 1017 HOLE D CORE 5H CORED 32.6 - 42.1 mbsf



SITE 1017 HOLE D CORE 6H

CORED 42.1 - 51.6 mbsf

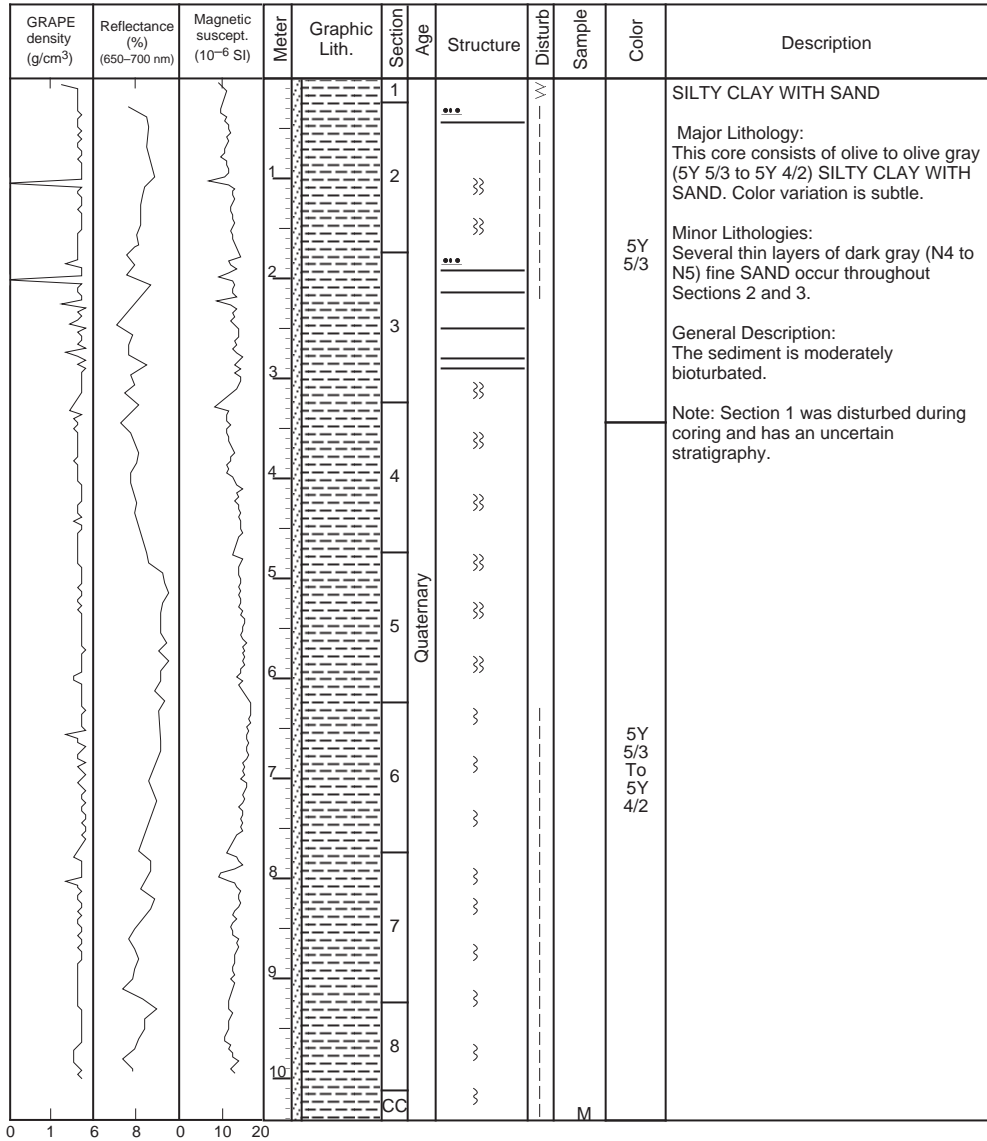


SITE 1017 HOLE D CORE 7H CORED 51.6 - 61.1 mbsf

GRAPE density (g/cm ³)	Reflectance (%) (650-700 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		***				<p>SILTY CLAY WITH SAND</p> <p>Major Lithology: This core consists of dark olive gray to olive gray (5Y 3/2 to 5Y 4/2) SILTY CLAY WITH SAND. Color changes are subtle and gradual.</p> <p>Minor Lithologies: Several thin layers of graded fine SAND occur in this core.</p> <p>General Description: The sediment is slightly to moderately bioturbated.</p>
			2		2	}}	}}	5Y 4/2			
			3		3	}}	}}	5Y 3/2			
			4		4	}}	}}	5Y 4/2			
			5		5	}}	}}	5Y 3/2			
			6		6	}}	}}	5Y 4/2 To 10Y 4/2			
			7		7	}}	}}				
			8		8	}}	}}				
			9		9	}}	}}				
			CC		CC	}}	}}				
								M			

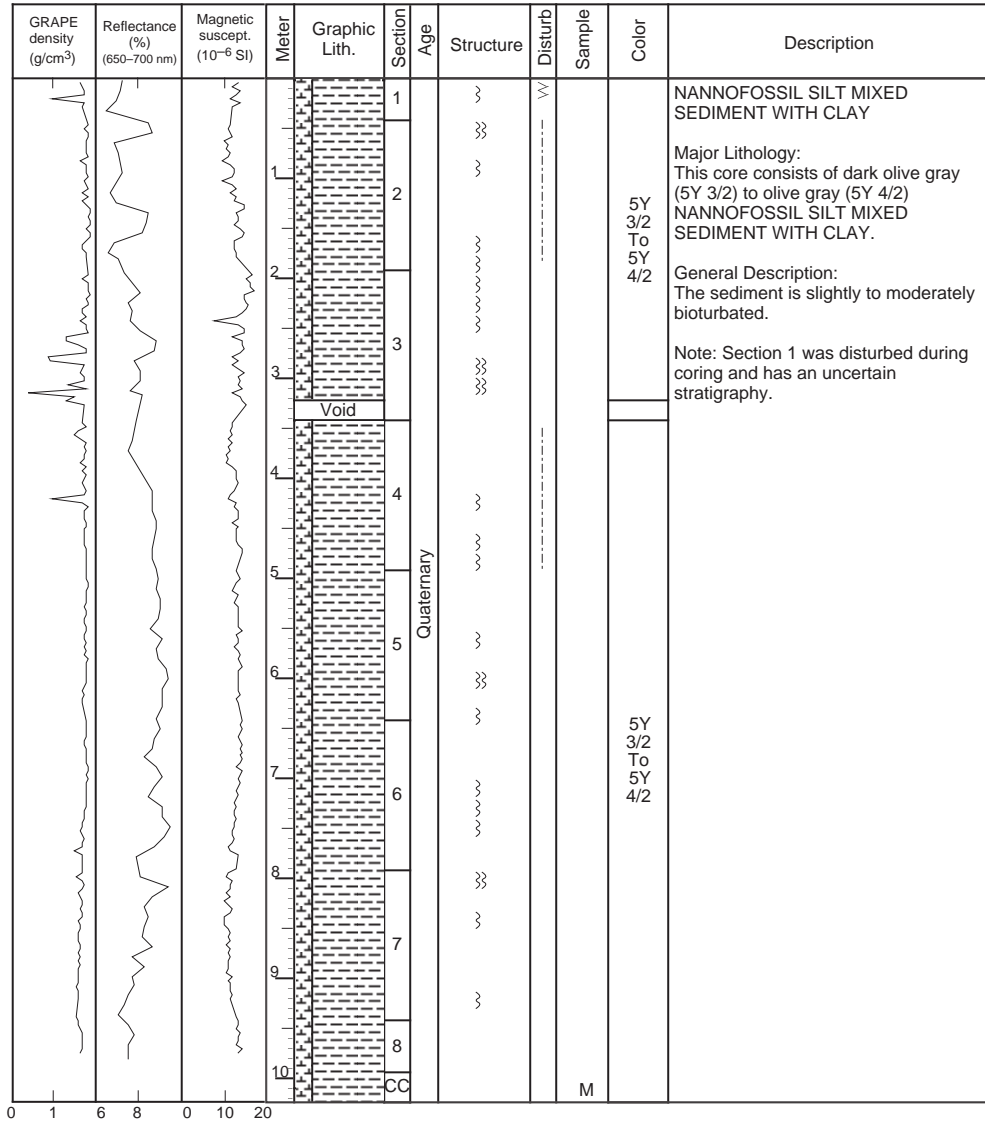
SITE 1017 HOLE D CORE 8H

CORED 61.1 - 70.6 mbsf



SITE 1017 HOLE D CORE 9H

CORED 70.6 - 80.1 mbsf



SITE 1017 HOLE E CORE 2H CORED 5.9 - 15.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		}}				<p>SILTY CLAY</p> <p>Major Lithology: This core consists of olive gray (5Y 4/2) SILTY CLAY.</p> <p>Minor Lithology: Thin beds and laminations of coarse-grained black (5Y 2.5/2) FORAMINIFER SAND occur throughout the core. These generally have sharp bases and are graded.</p> <p>General Description: The core is moderately bioturbated. Shell fragments occur in Sections 4, 5, and 6.</p>
2		2		}}				
3		3		}}				
4		3		}}				
5		4	Quaternary	}} ..			5Y 4/2	
6		4		}} ♂				
7		5		}} ♂				
8		5		}} ♂				
9		6		}} ♂				
10		7		}} ..				
		CC		}} !		M		



SITE 1017 HOLE E CORE 3H

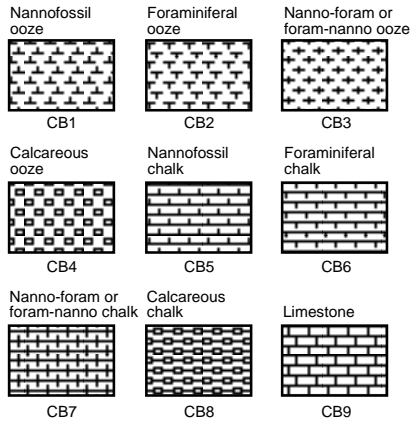
CORED 15.4 - 24.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Quaternary	}}			5Y 4/2 To 5Y 3/2	<p>SILTY CLAY and SILTY CLAY WITH NANNOFOSSILS</p> <p>Major Lithology: This core consists of interbedded dark olive (5Y 4/2 to 5Y 3/2) SILTY CLAY and SILTY CLAY WITH NANNOFOSSILS. Boundaries are gradational.</p> <p>Minor Lithology: Thin beds and laminations of black (5Y 2.5/2) FELDSPAR QUARTZ SAND occur in Sections 2 and 3.</p> <p>General Description: The sediment is bioturbated. The core appears mottled with light and dark colored areas. Sponges occur in Section 1, 90 cm, and Sections 6 and 7. Small shell fragments occur throughout Sections 2 and 7. Wide cracks occur in Section 2 at 88, 110, and 120 cm, horizontal cracks occur in Section 2 at 30-60, 80-90, and 105-150 cm, and some horizontal cracking occurs along the outer margin of the core in Section 6. Expanded material from Sections 1 to 6 is boxed separately.</p>
2		}}		}}			5Y 3/2	
3		}}		}}			5Y 4/2	
4		}}		}}				
5		}}		}}				
6		}}		}}			5Y 3/2	
7		}}		}}			5Y 3/1	
8		}}		}}				
9		}}		}}				
				}}			5Y 3/2	

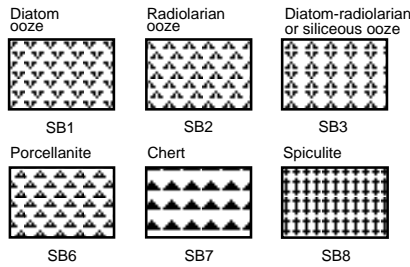
Key to symbols used in the “Graphic Lithology” column on the core description sheets.

Biogenic pelagic sediments

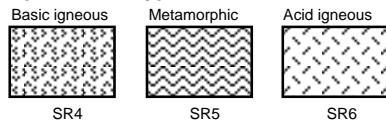
Calcareous



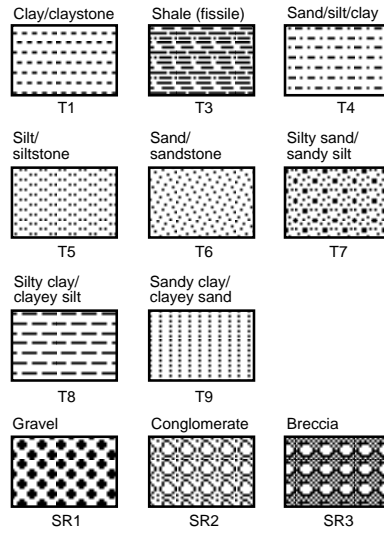
Siliceous



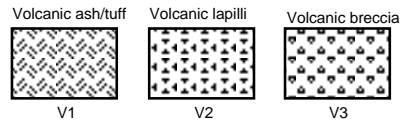
Special rock types



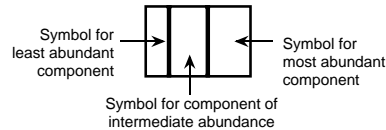
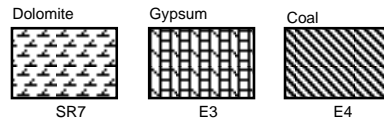
Siliciclastic sediments



Volcaniclastic sediments



Chemical and other sediments



Key to symbols used in the “Structures” column on the core description sheets.

Drilling disturbance symbols	Sedimentary structures cont.	
Soft sediments		
- - - - -	↑ F	Fining-upward sequence
- · - · - · -	↑	Interval over which primary sedimentary structure occur
~ ~ ~ ~ ~		Planar laminae
o o o o o	/ / / / /	Wedge-planar laminae/beds
Hard sediments		
/ / / / /	· · · · ·	Graded bedding (normal)
	· · · · ·	Graded bedding (reversed)
+ + + + +	— — — — —	Sharp contact
~ ~ ~ ~ ~	- - - - -	Gradational contact
+ + + + +	~ ~ ~ ~ ~	Scoured, sharp contact
~ ~ ~ ~ ~	~ ~ ~ ~ ~	Scoured contact with graded bed
x x x x x	■	Thick color bands (sharp contact)
	■	Thick color bands (gradational contact)
	■	Medium color bands (sharp contact)
	■	Medium color bands (gradational contact)
	■	Thin color bands (sharp contact)
	■	Thin color bands (gradational contact)
		Laminations (mm scale)
	■	Individual thick color band
	■	Individual medium color band
	■	Individual thin color band
	— — — — —	Individual lamination
	~ ~ ~ ~ ~	Wavy lamination
	/ / / / /	Cross laminae
	/ / / / /	Cross stratification
	/ / / / /	Cross bedding
	~ ~ ~ ~ ~	Convoluted/contorted bedding
	~ ~ ~ ~ ~	Flaser bedding
	△	Graded interval, normal
	<	Veins
	~ ~ ~ ~ ~	Water escape structure
	∪	Scour
	◇	Isolated pebbles/cobbles
	◆	Isolated mud clasts
	~ ~ ~ ~ ~	Slump blocks or slump folds
	~ ~ ~ ~ ~	Contorted slump
	X X X X X	Probable compaction fracture
	/ / / / /	Microfault (normal)
	/ / / / /	Microfault (thrust)
	/ / / / /	Macrofault
	X X X X X	Fracture
	X X X X X	Totally fractured
	~ ~ ~ ~ ~	Vein structures
	~ ~ ~ ~ ~	Color mottles
	~ ~ ~ ~ ~	Dolomite nodule/concretion
	D	Disseminated dolomite
	(P)	Pyrite nodule/concretion
	P	Disseminated pyrite
	(G)	Glauconite
	●	Concretions/nodules
	(Ba)	Barite nodule/concretion
	Ba	Disseminated barite
	(Ca)	Calcite nodule/concretion
	(C)	Carbonate nodule/concretion
	(Ch)	Chert nodule/concretion
	A●	Ash/pumice pods
	-A	Ash layer

Drilling disturbance symbols

Soft sediments

Slightly disturbed

Moderately disturbed

Highly disturbed

Soupy

Hard sediments

Slightly fractured

Moderately fractured

Highly fragmented

Drilling breccia

Sedimentary structures

Burrows, rare (<30% surface area)

Burrows, common (30%–60% surface area)

Burrows, abundant (>60% surface area)

Discrete *Zoophycos* trace fossil

Discrete *Chondrites* trace fossil

Sagarites sponge

Gastropods

Other bivalves

Shell fragments

Wood fragments

Fish debris