

Core Photo

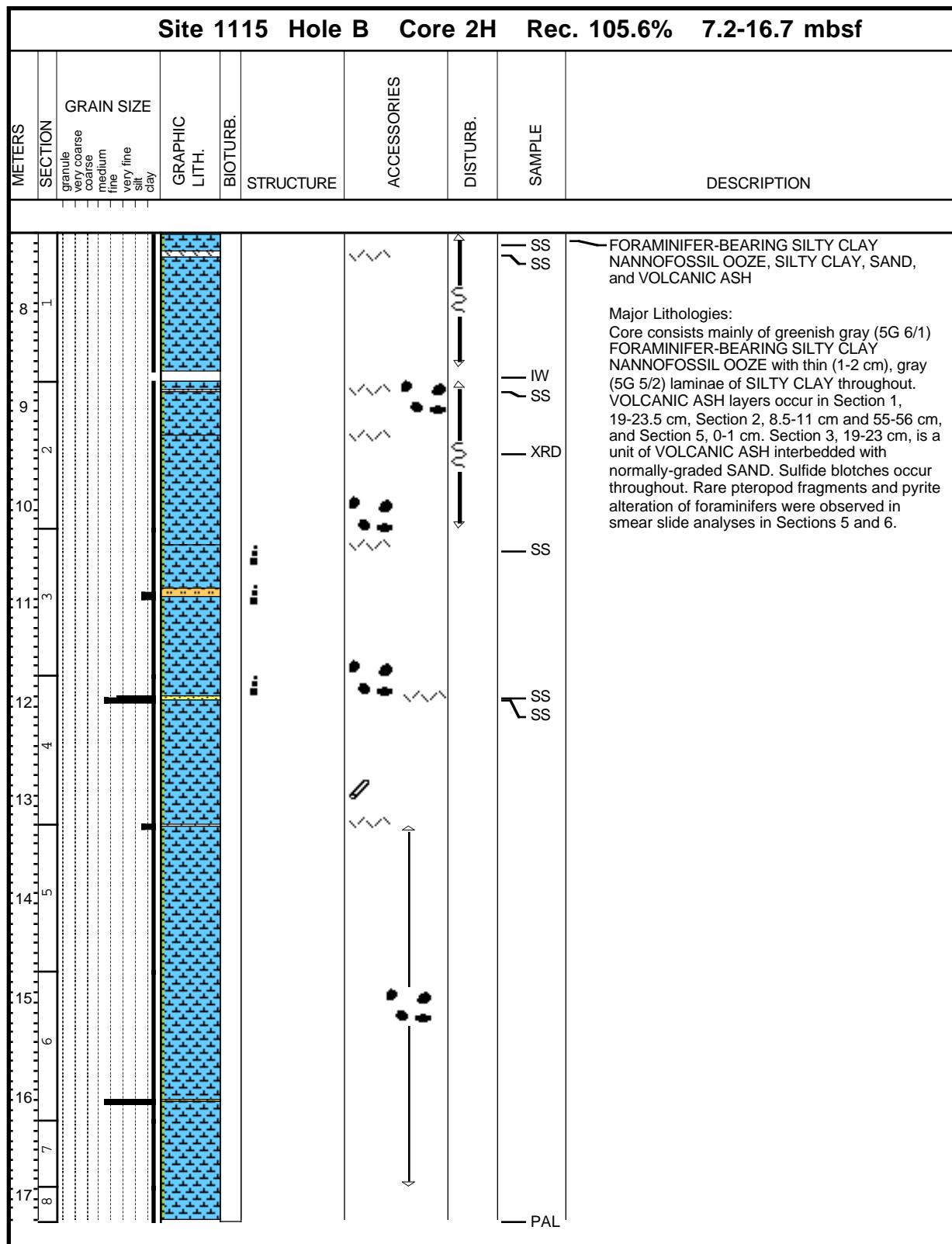


Core Photo

CORE DESCRIPTIONS
VISUAL CORE DESCRIPTIONS, SITE 1115

3

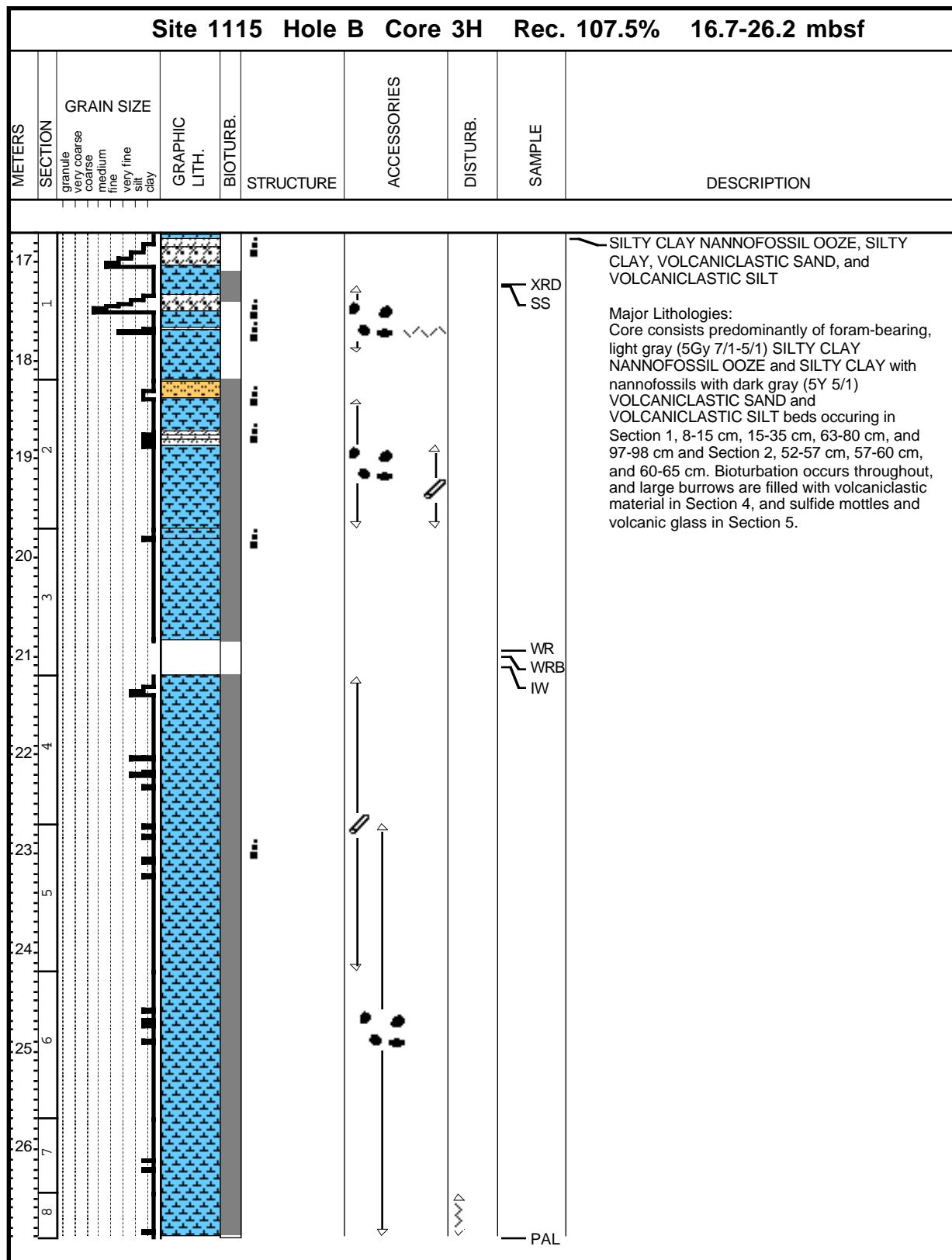
Core Photo



CORE DESCRIPTIONS
VISUAL CORE DESCRIPTIONS, SITE 1115

4

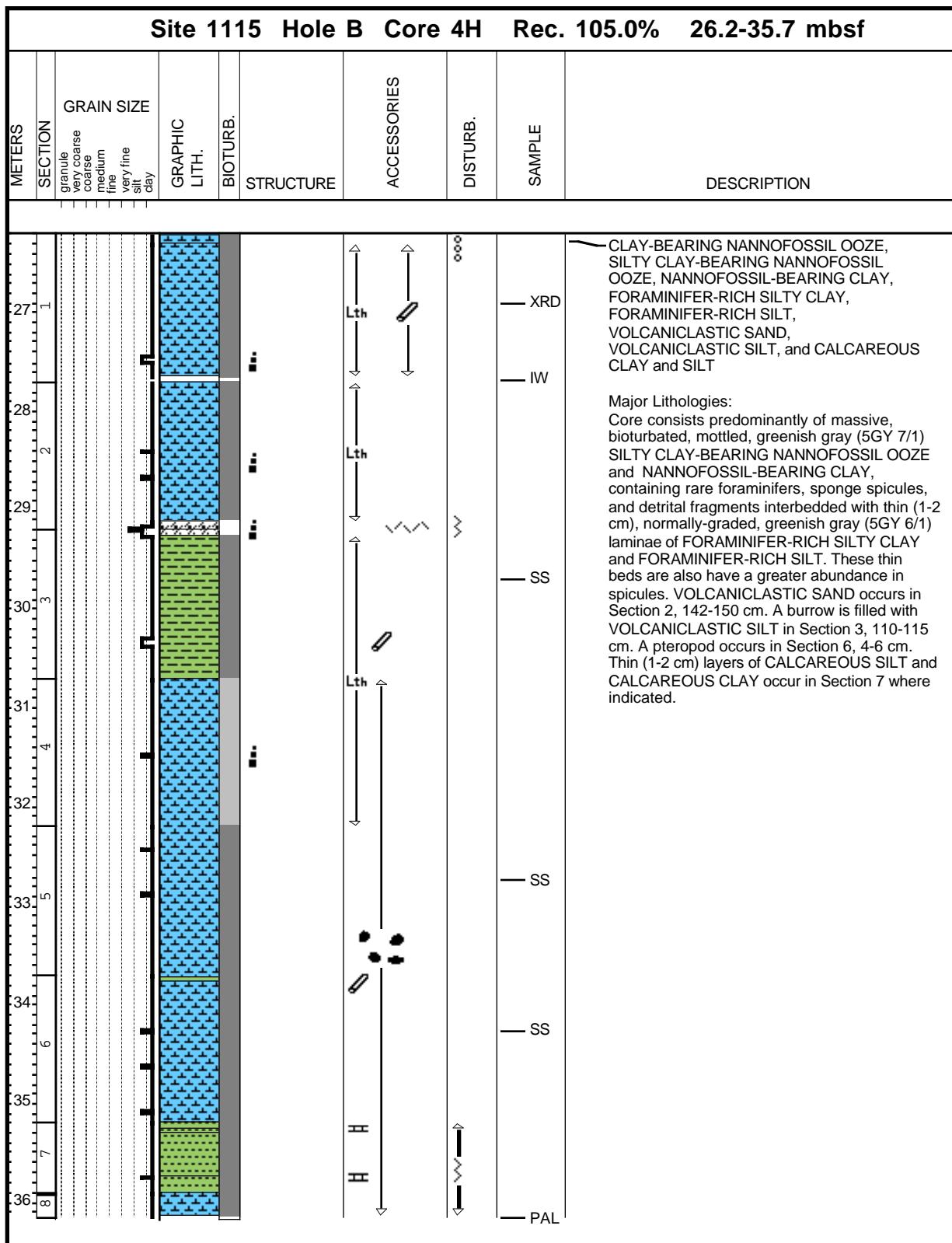
Core Photo



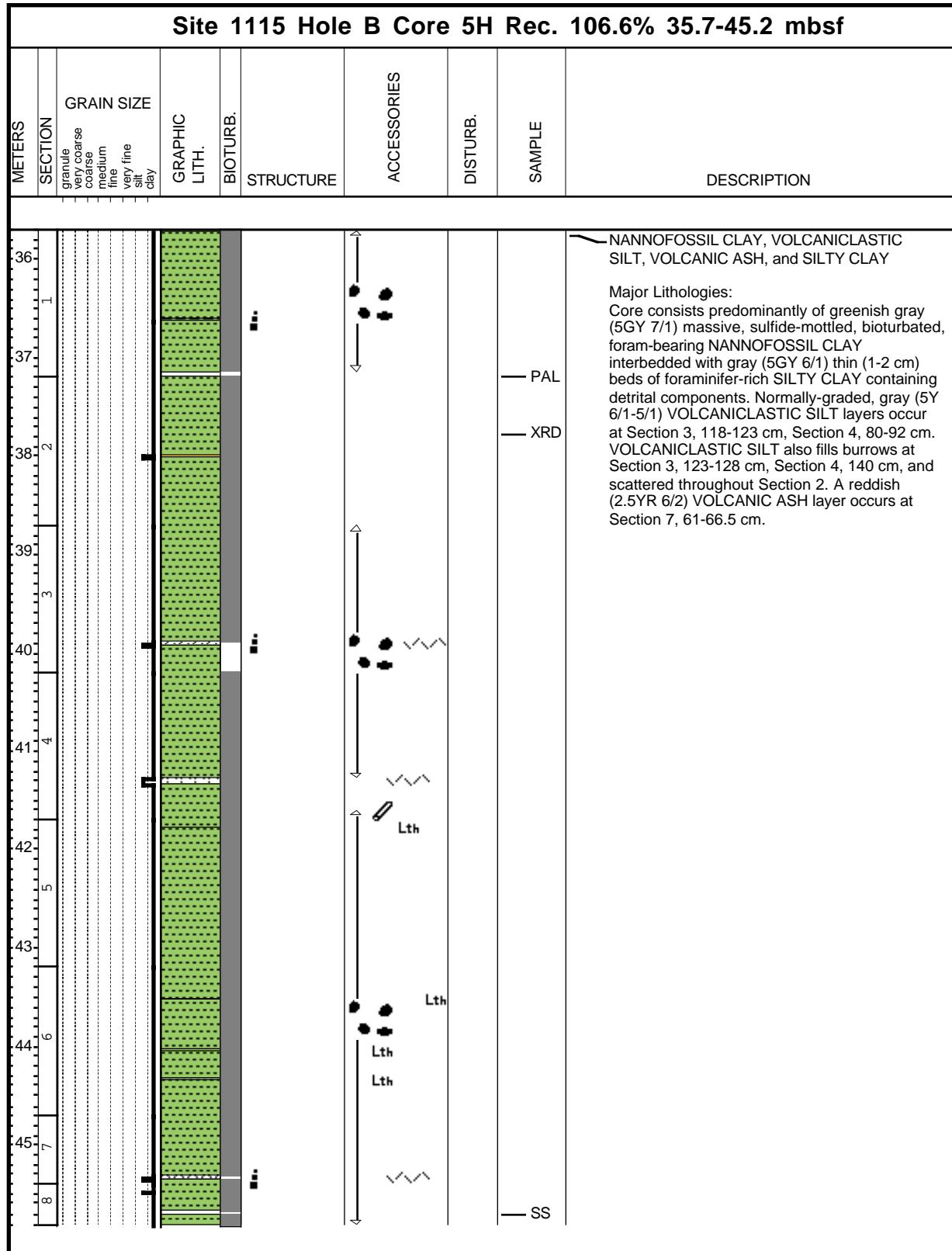
CORE DESCRIPTIONS
VISUAL CORE DESCRIPTIONS, SITE 1115

5

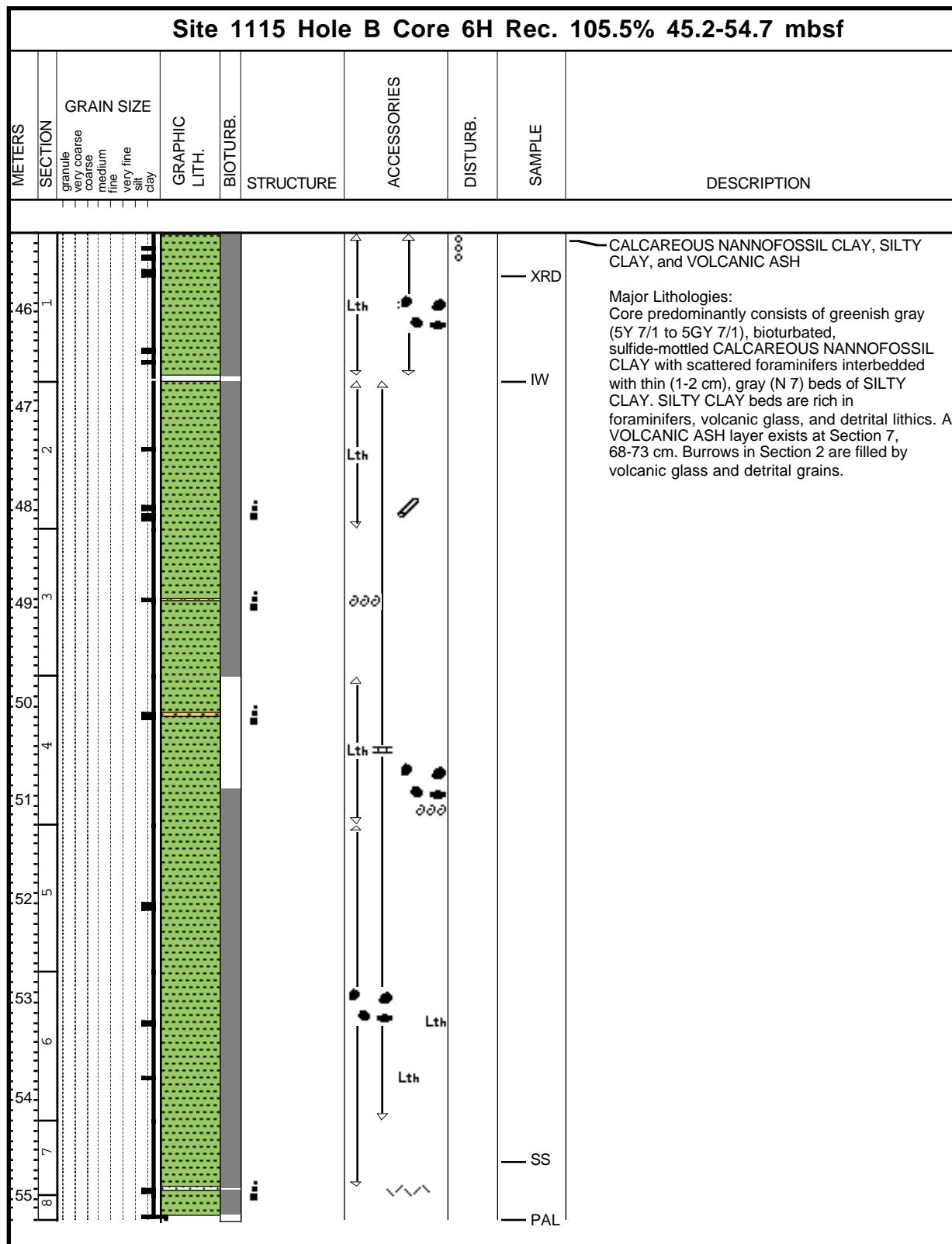
Core Photo



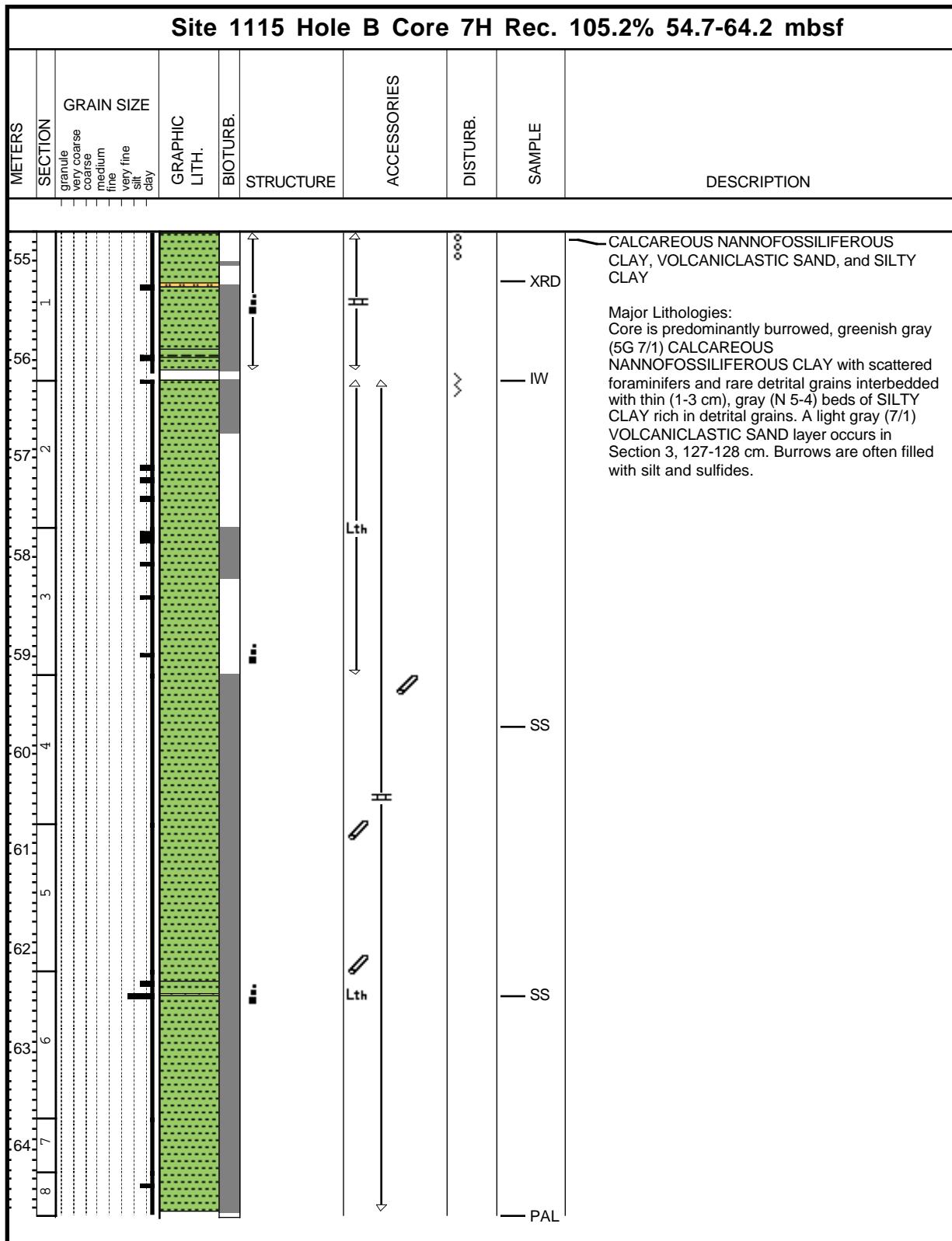
Core Photo



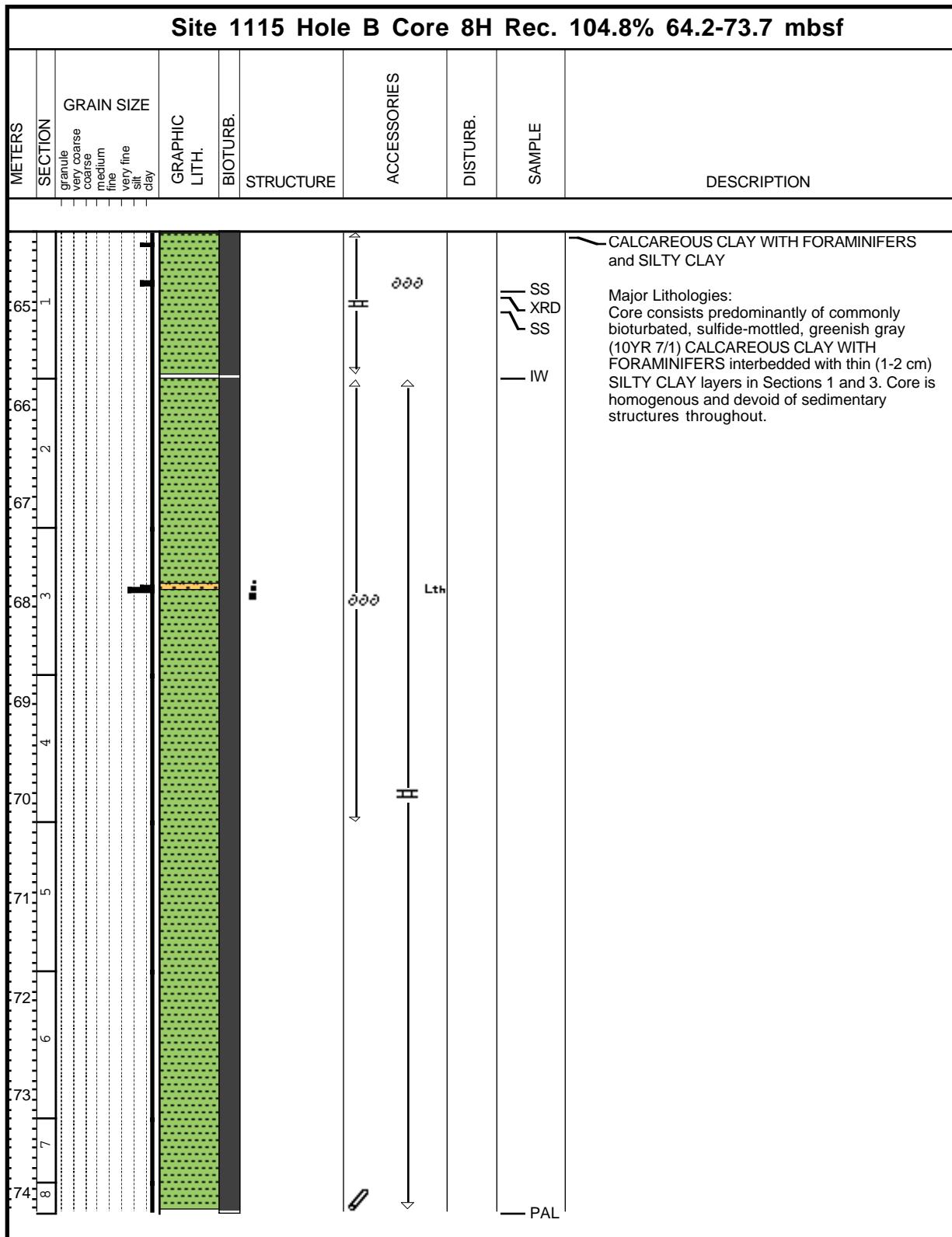
Core Photo



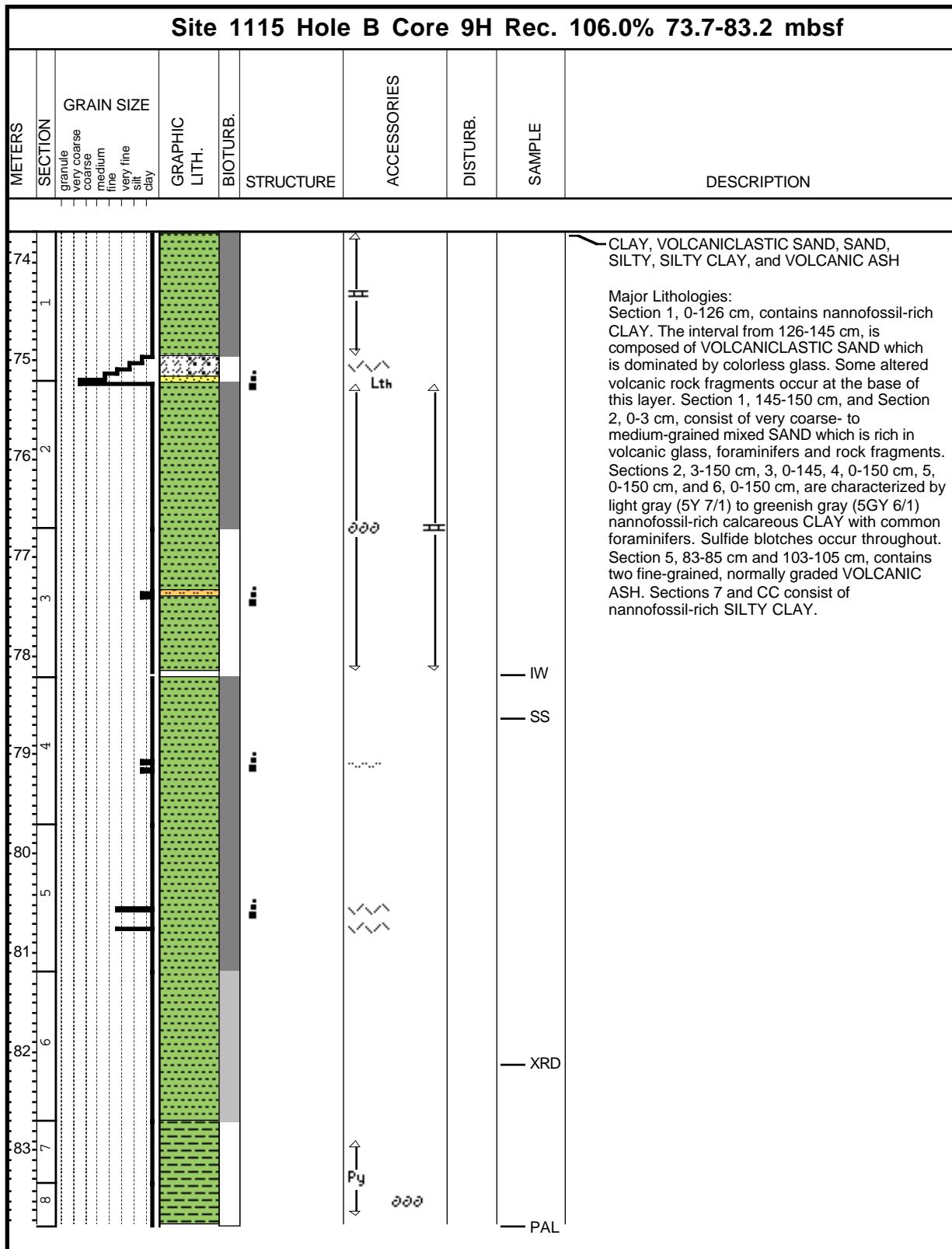
Core Photo



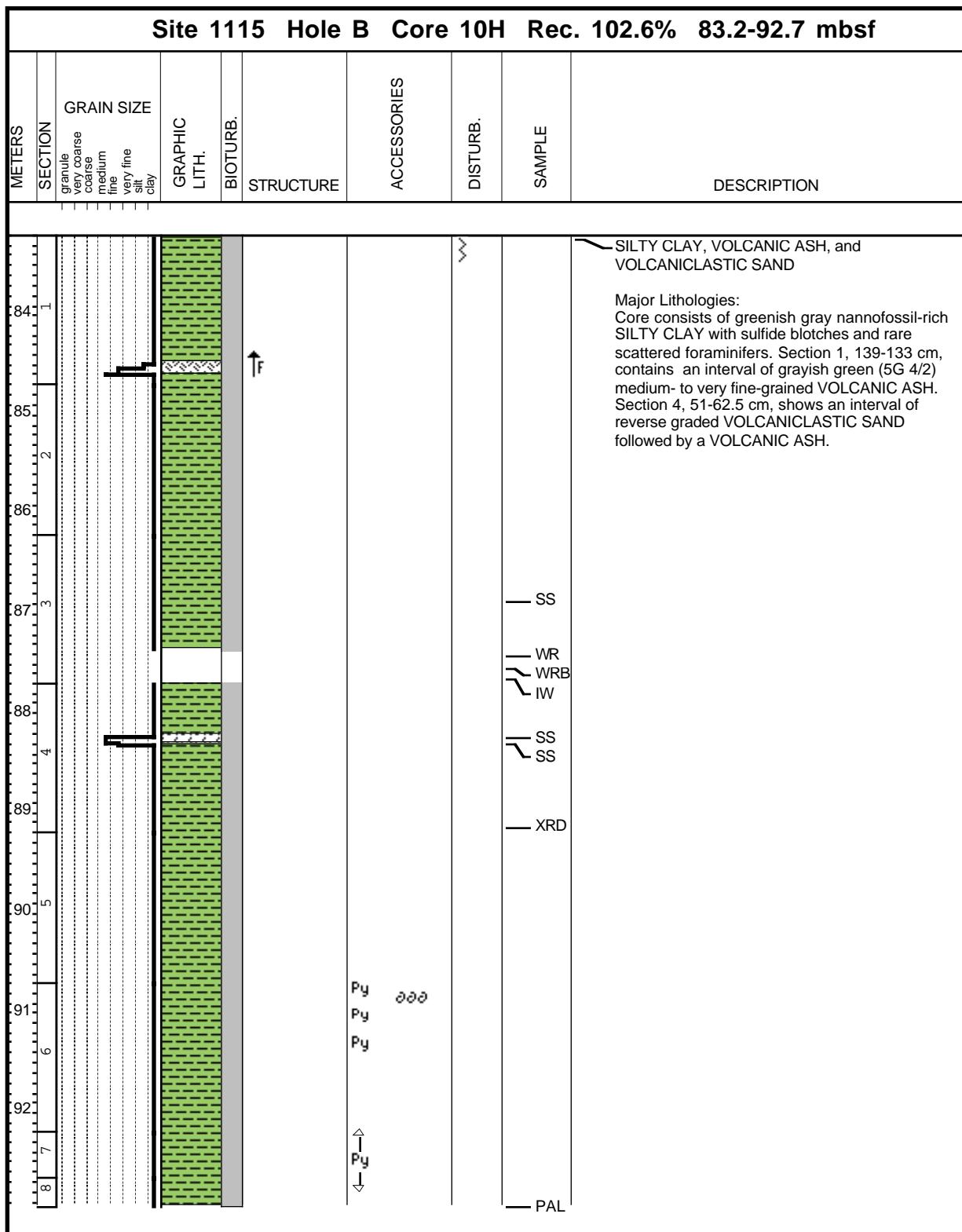
Core Photo



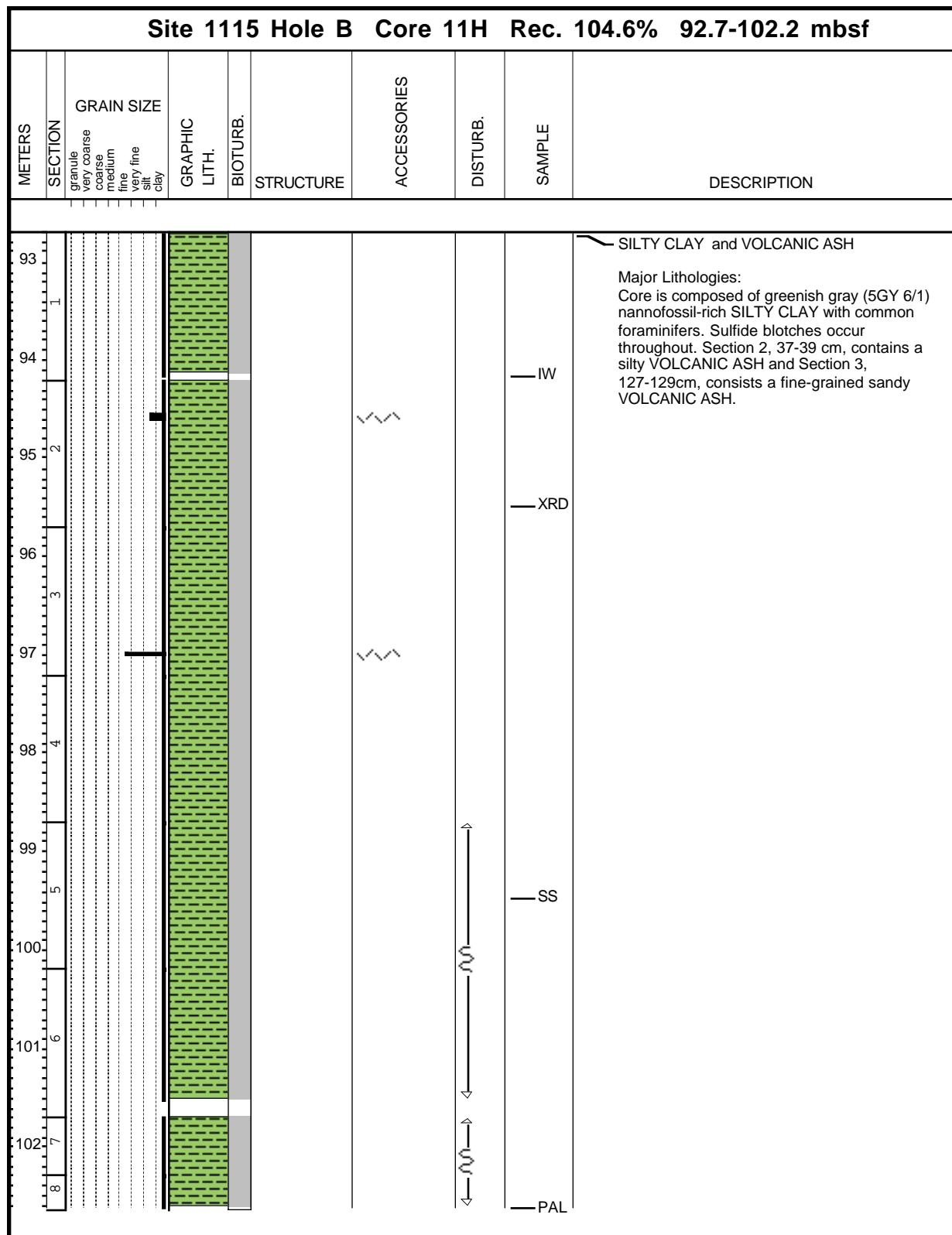
Core Photo



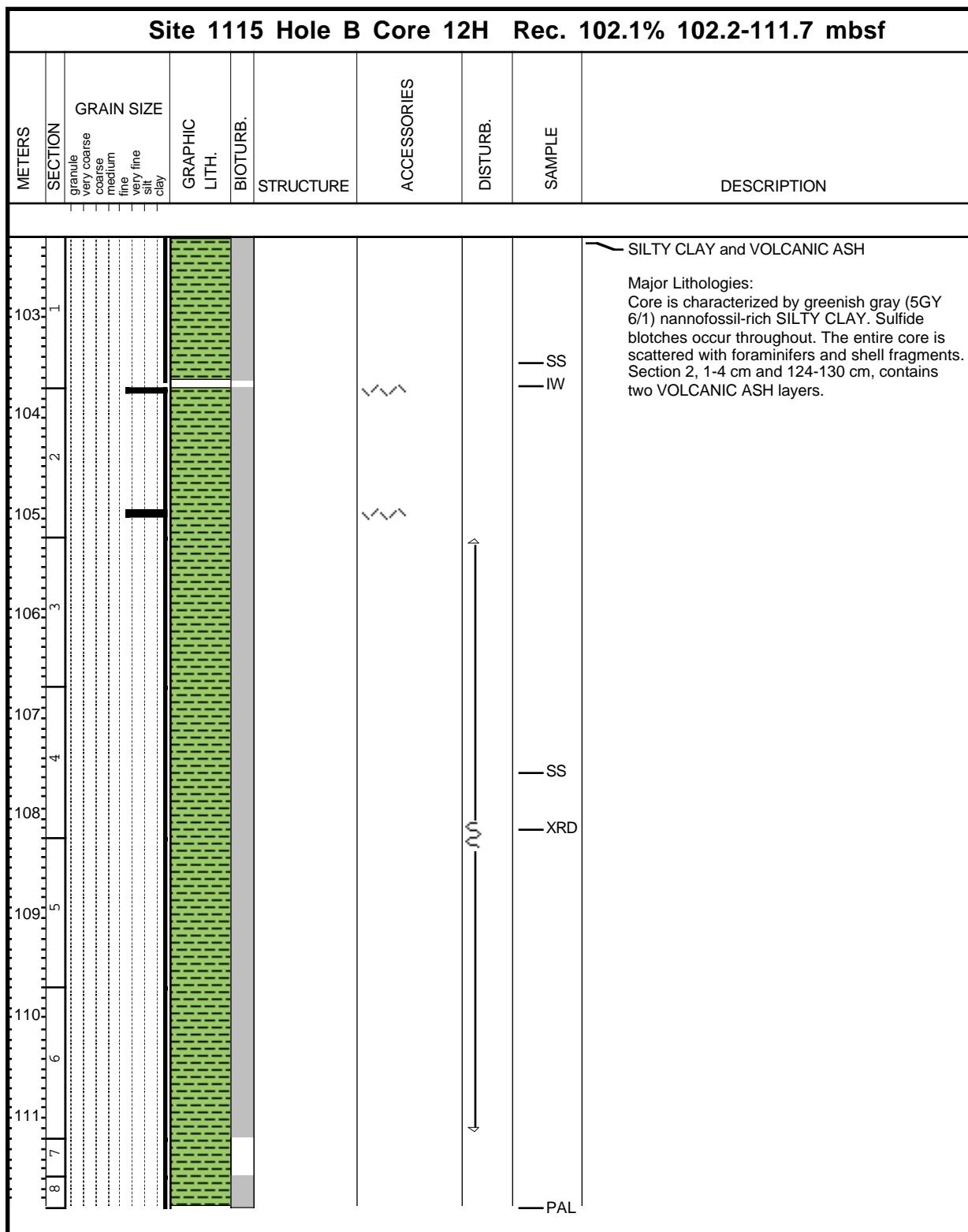
Core Photo



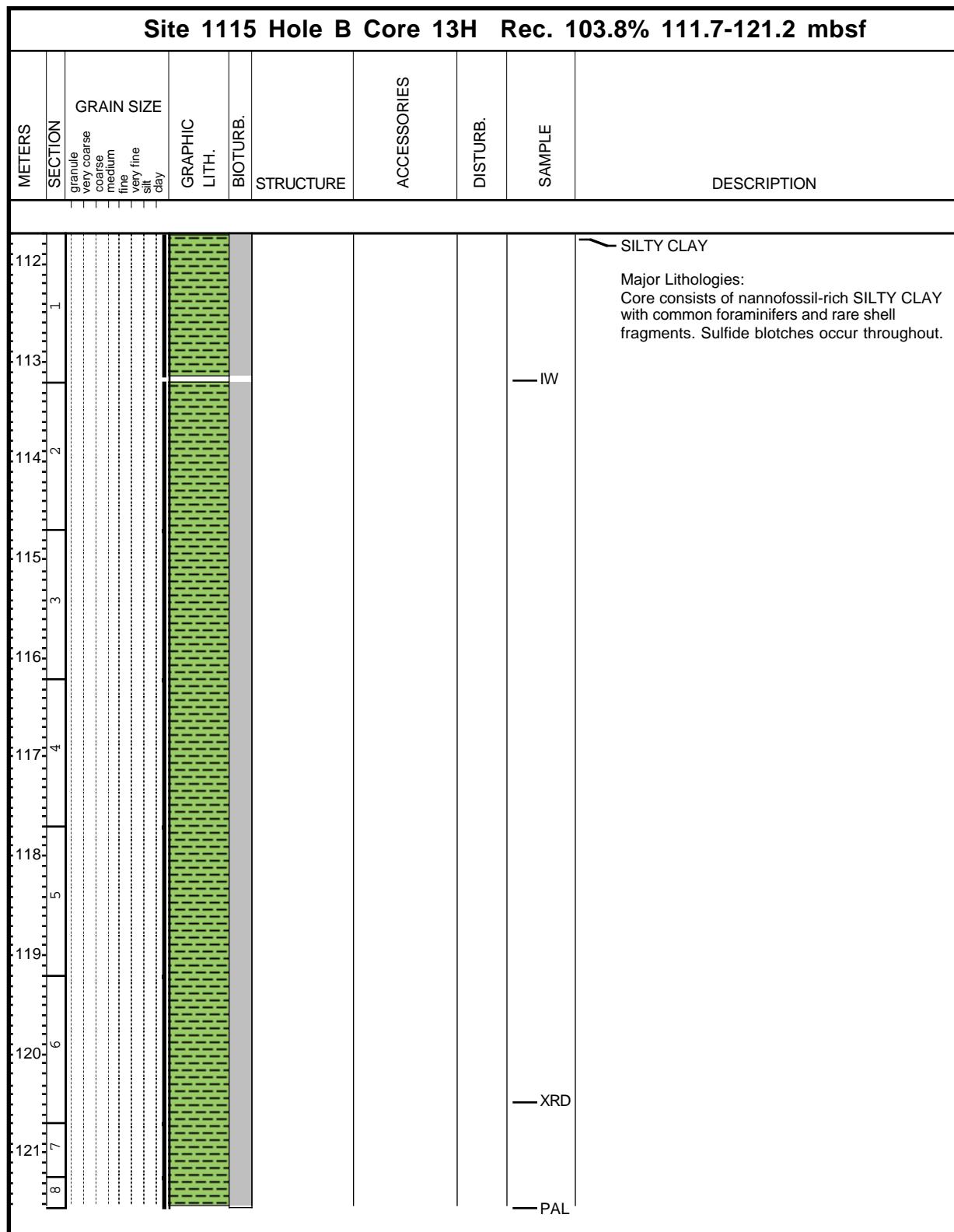
Core Photo



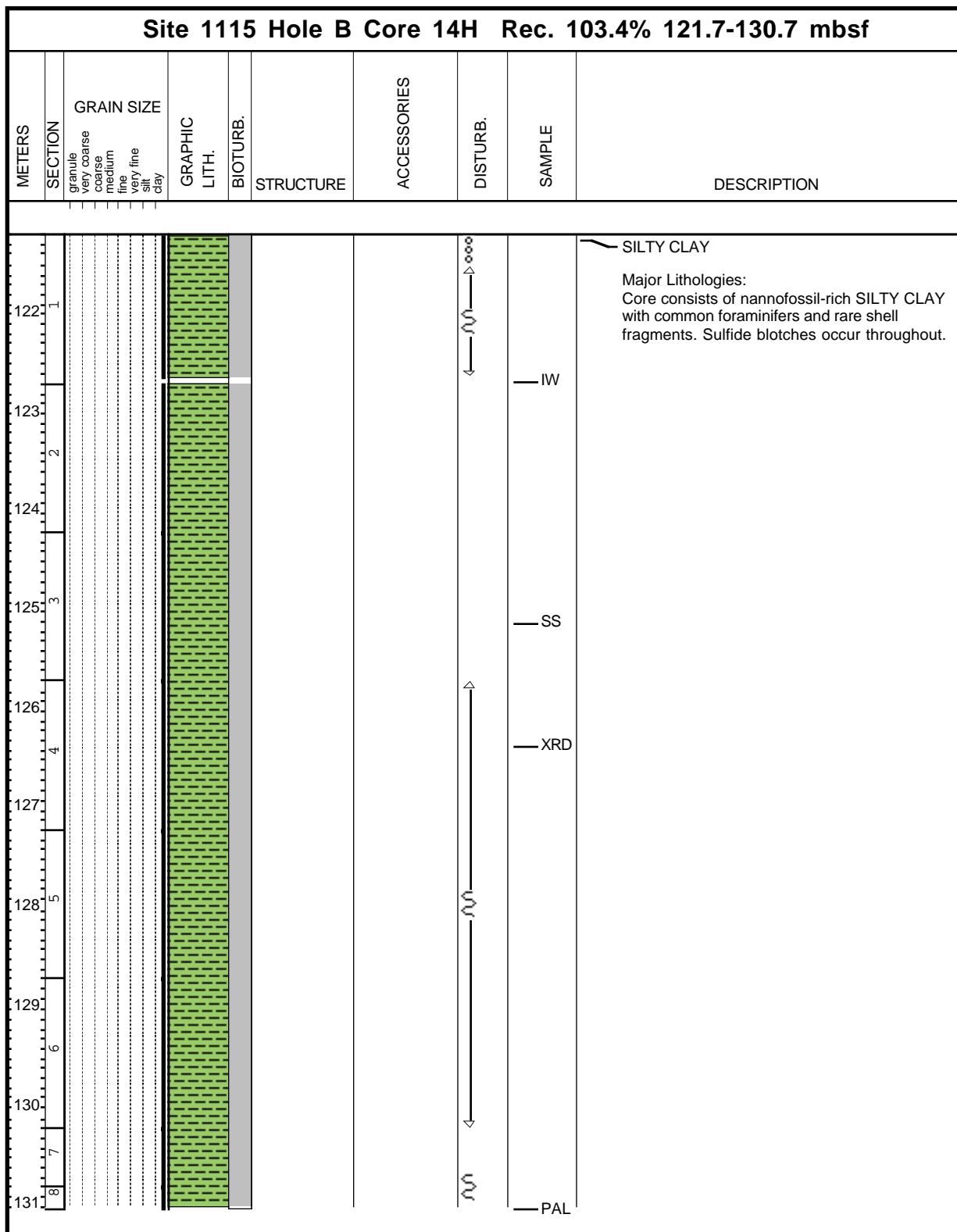
Core Photo



Core Photo



Core Photo

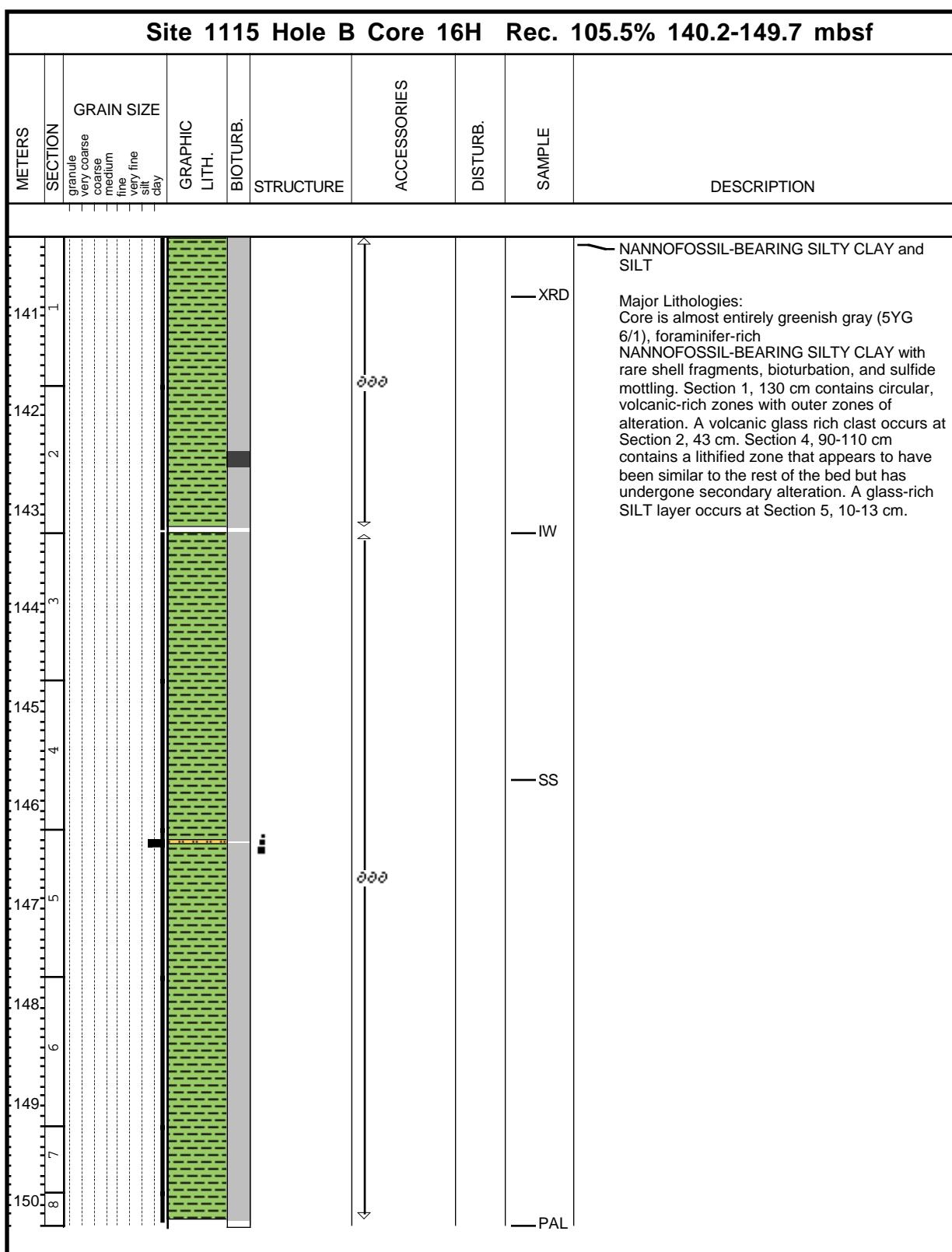


Core Photo

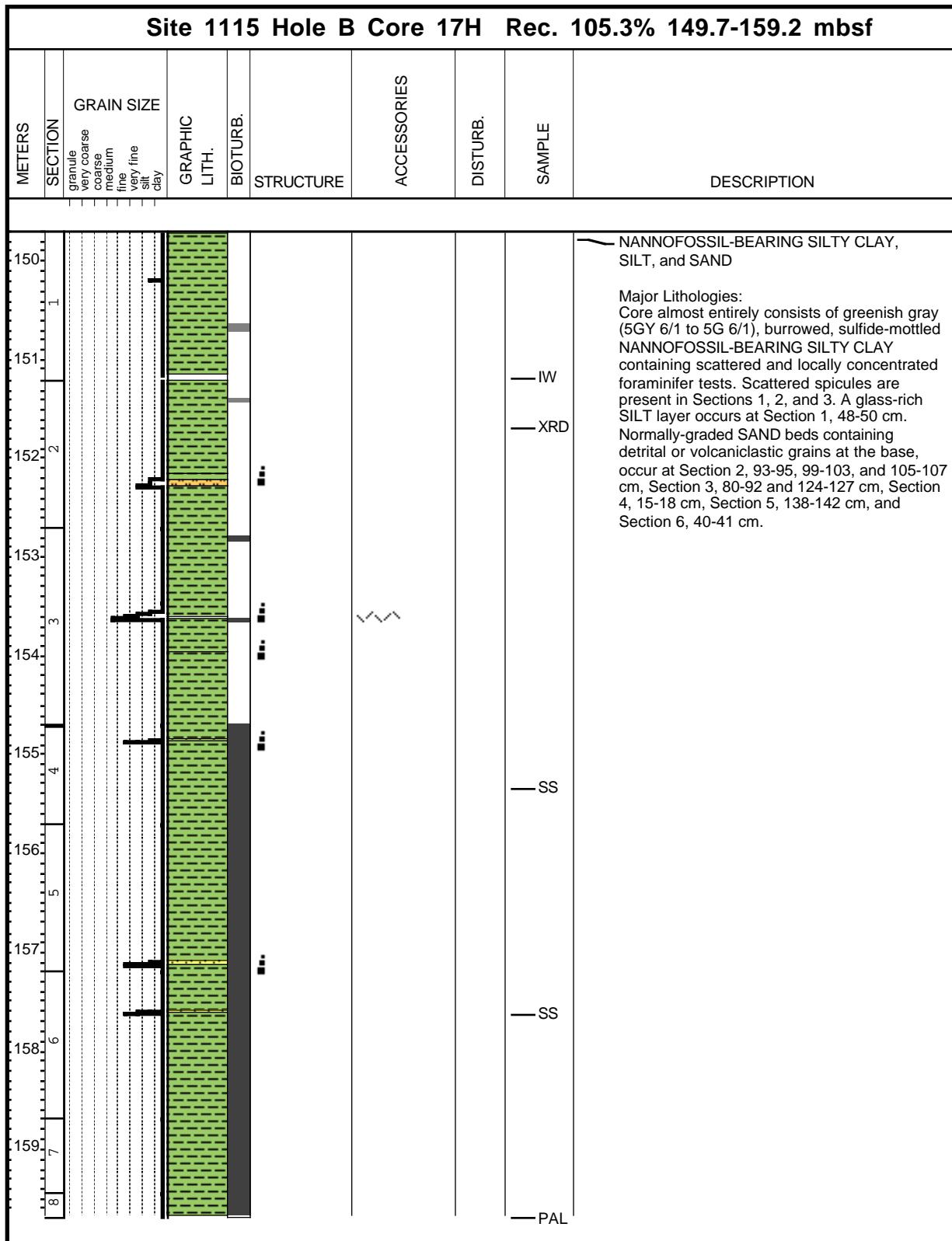
Site 1115 Hole B Core 15H Rec. 103.7% 130.7-140.2 mbsf

METERS	SECTION	GRAIN SIZE		STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		granule	very coarse coarse medium fine silt clay					
131	1							SILTY CLAY and VOLCANIC ASH
132	2							Major Lithologies: Core consists of nannofossil-rich SILTY CLAY with common foraminifers and rare to common shell fragments. Sulfide blotches occur throughout. Section 4, 142-142.5 cm, contains a silty VOLCANIC ASH layer with sharp base and a disturbed top caused by drilling and bioturbation. Section 5, 86-89 cm, shows a highly disrupted VOLCANIC ASH. At Section 1, 62 cm, and Section 6, 23-25 cm, pumice fragments (0.5-1 cm) are present. The core is slightly more indurated than previous cores.
133	3							
134	4							
135	5							
136	6							
137	7							
138	8							
139								
140								

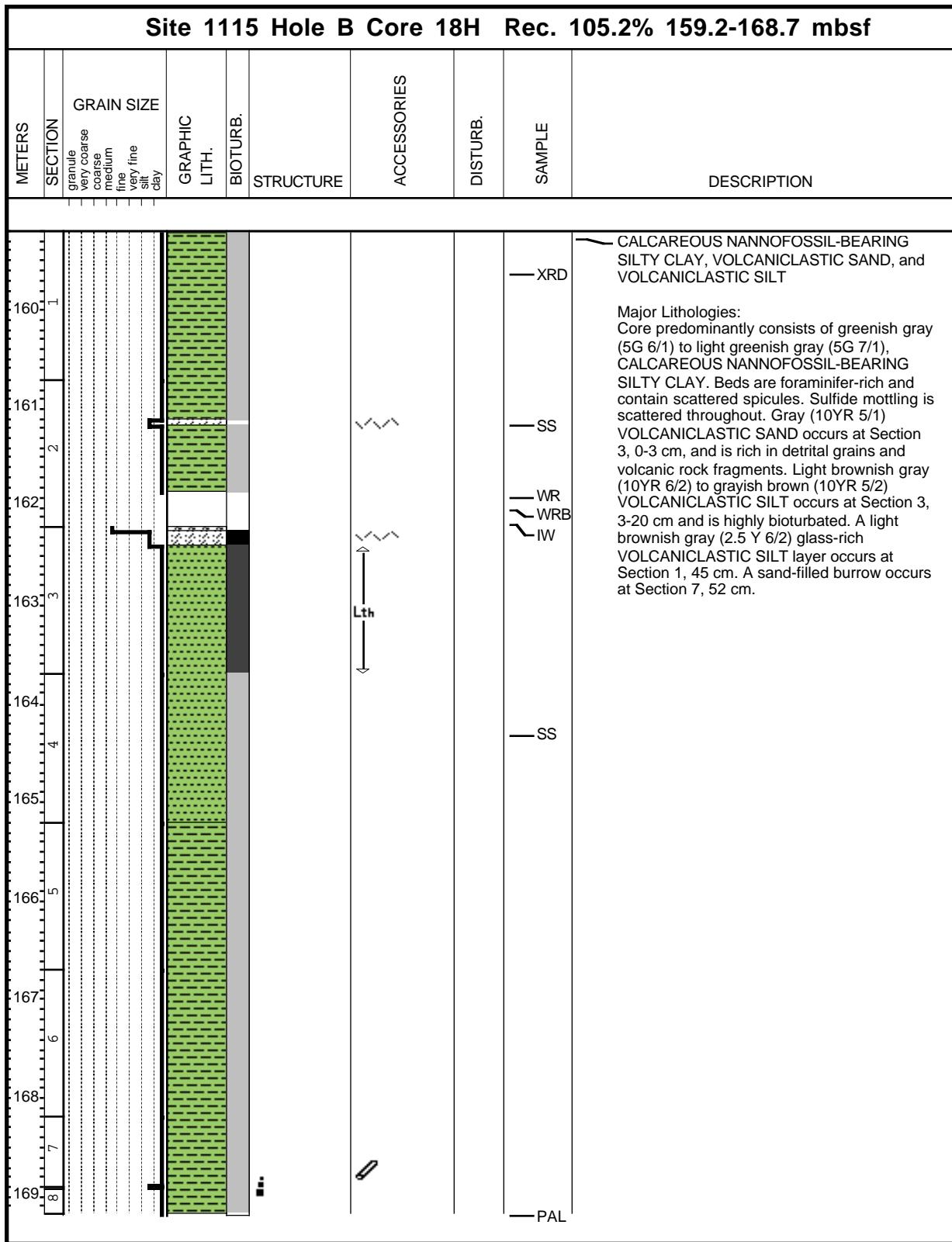
Core Photo



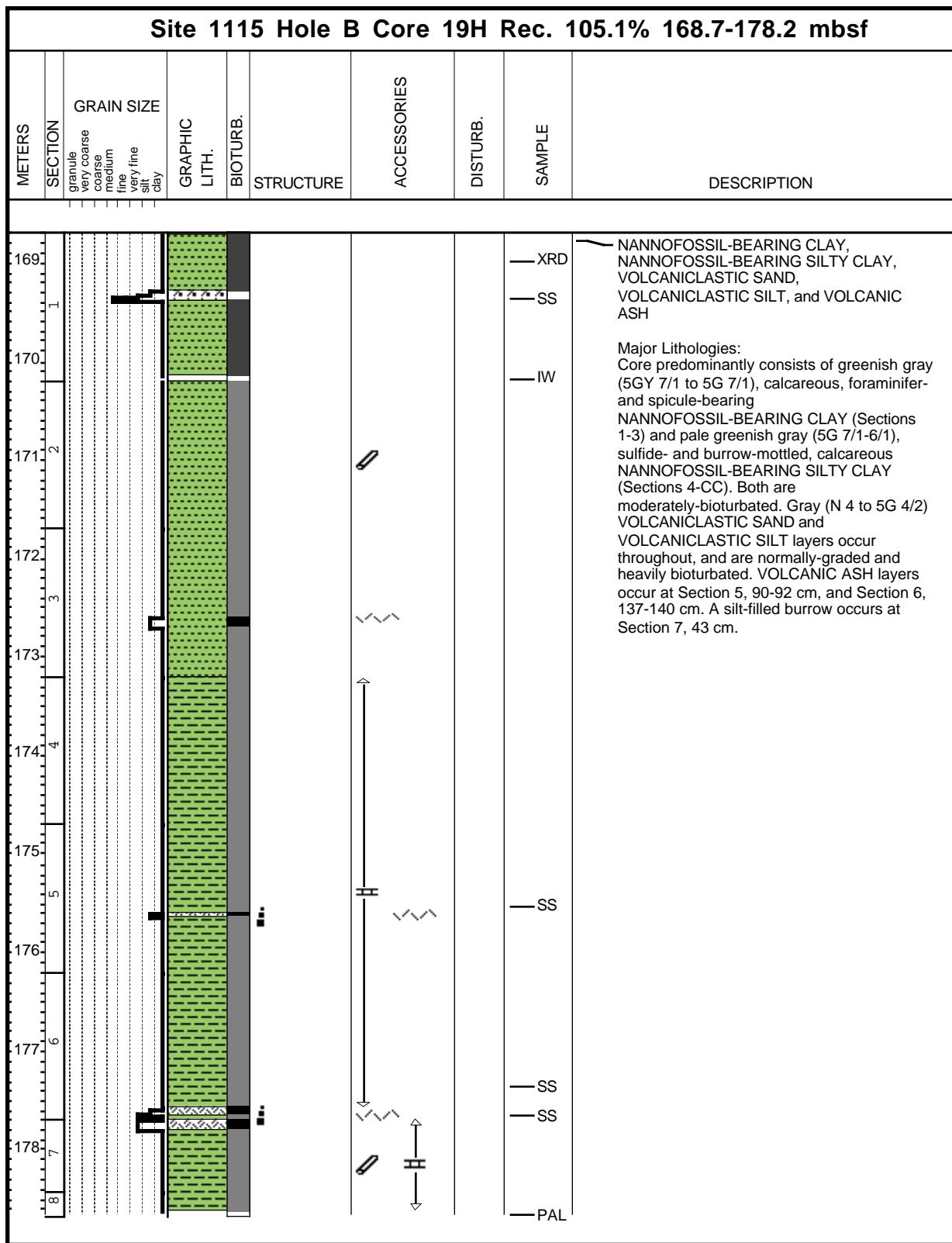
Core Photo



Core Photo



Core Photo

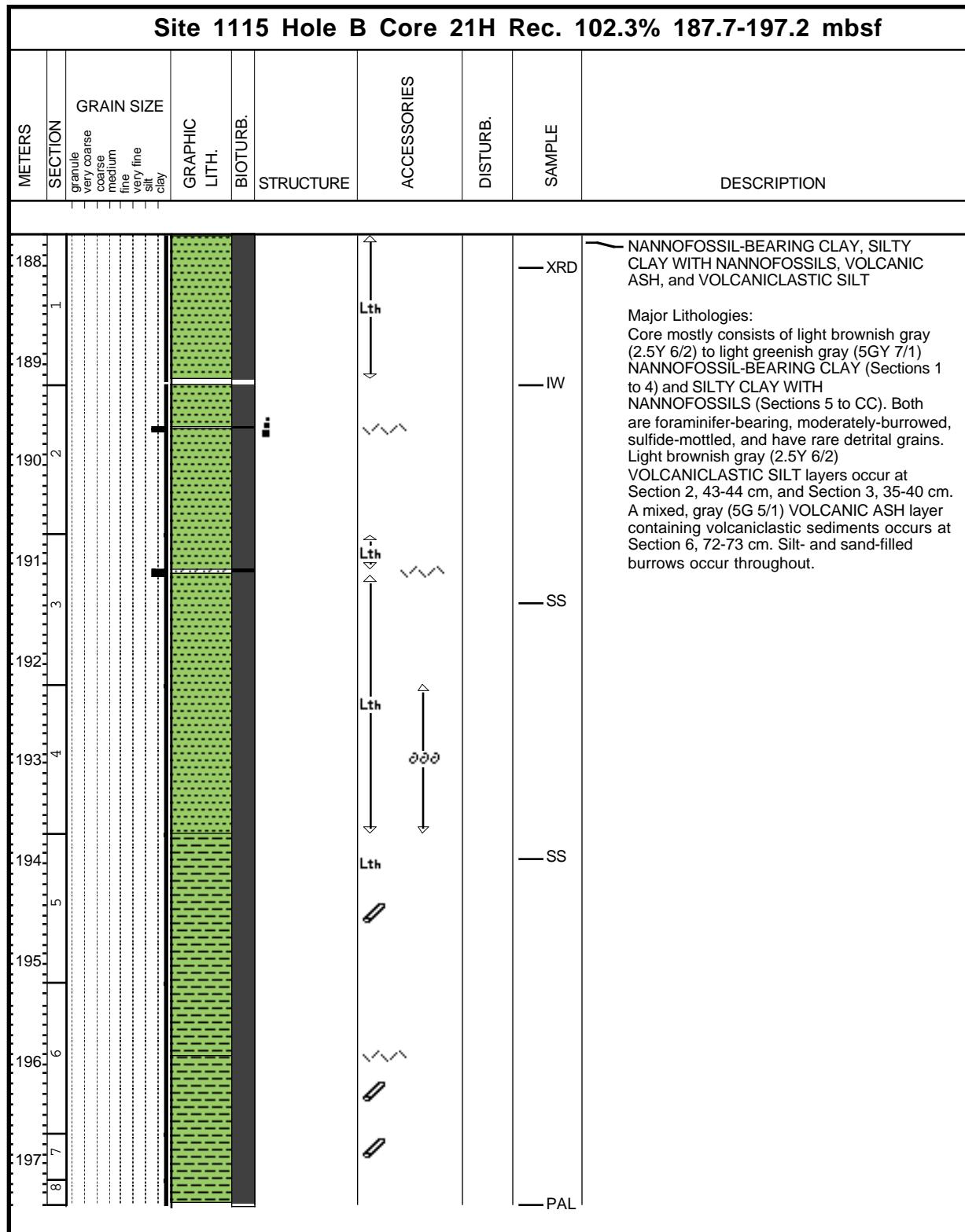


Core Photo

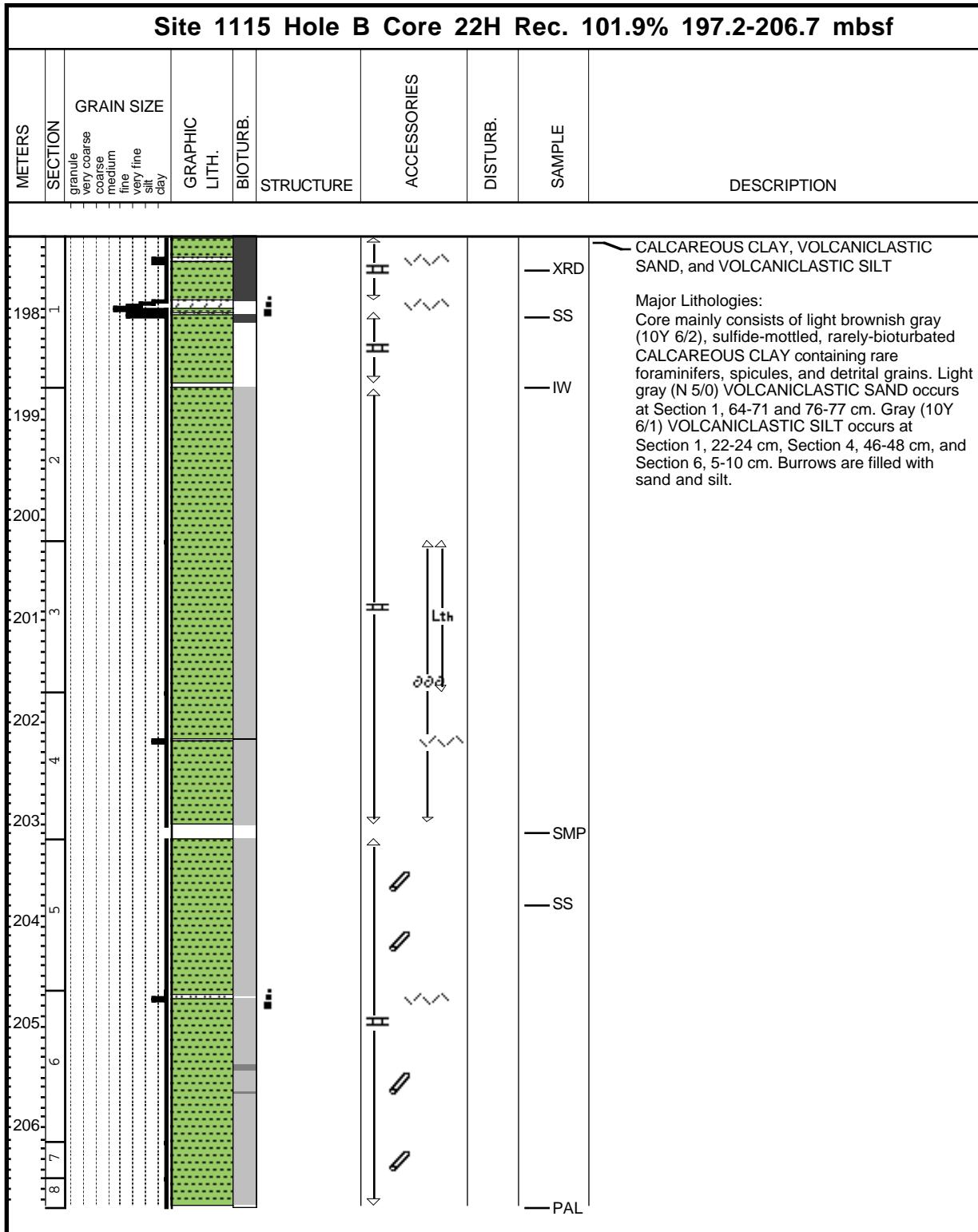
Site 1115 Hole B Core 20H Rec. 105.1% 178.2-187.7 mbsf

METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	Bioturb.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		granule very coarse coarse medium fine very fine silt clay							
179.1	1								SILTY NANNOFOSSIL-BEARING CLAY, VOLCANICLASTIC SAND, and VOLCANICLASTIC SILT
179.2	2								Major Lithologies: Core mostly consists of light gray (5Y 7/1) to light brownish gray (2.5Y 6/2), moderately- to heavily-burrowed SILTY NANNOFOSSIL-BEARING CLAY with common foraminifer fragments and tests, common spicules, and rare detrital grains. Thin beds of brown (10YR 5/3) VOLCANICLASTIC SILT occur at Section 3, 143-145 cm, Section 5, 16-21 and 118-120 cm. Prominent silt-filled burrows occur at Section 6, 32-33, 40-41, and 120-122 cm, and Section 7, 48-50 and 67-68 cm. Beds of VOLCANICLASTIC SAND occur at Section 2, 129-134 cm, Section 3, 145-150 cm, and Section 4, 126-127 cm.
180.1	3								
181.1	4								
182.1	5								
183.1	6								
184.1	7								
185.1	8								
186.1									
187.1									
188.1									

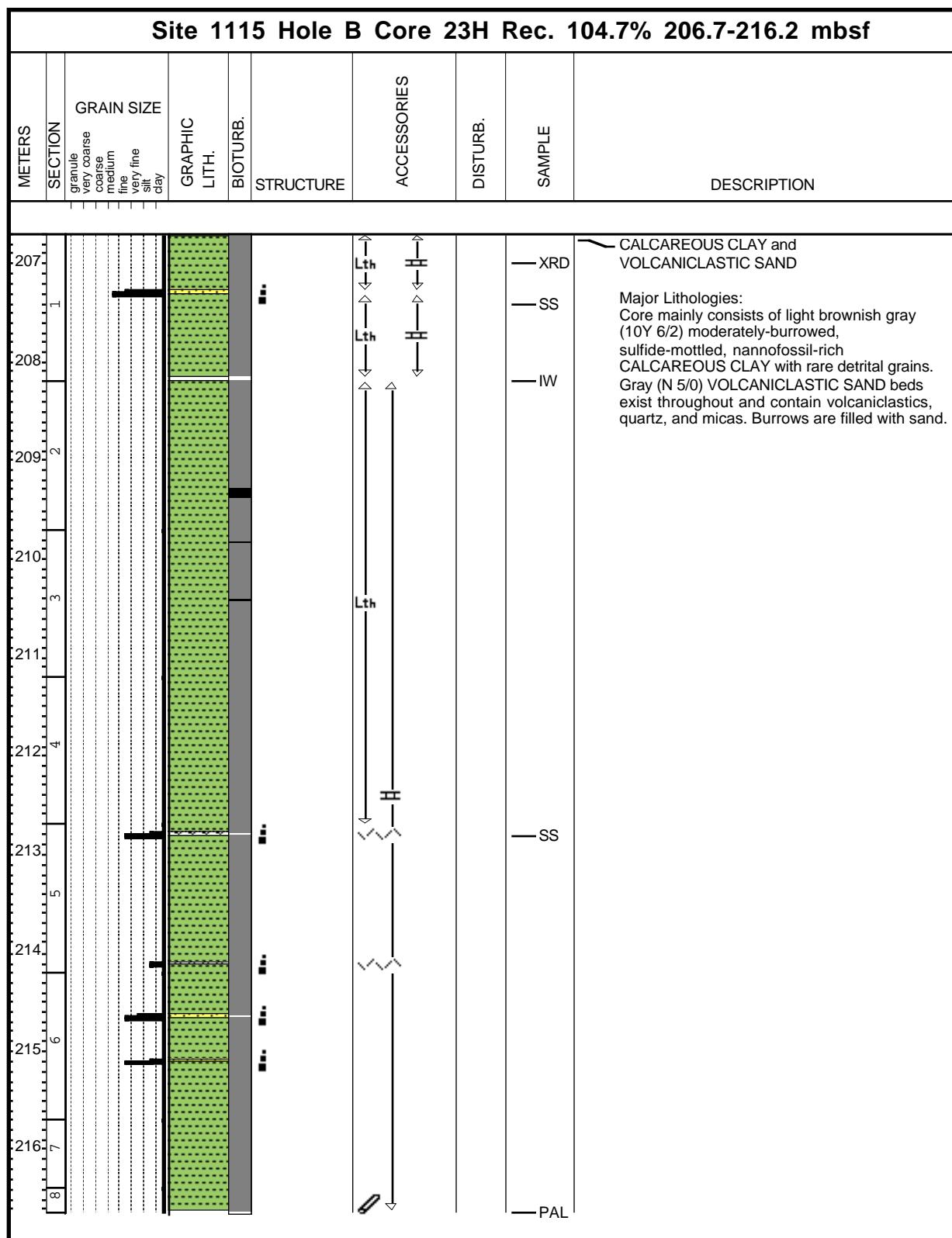
Core Photo



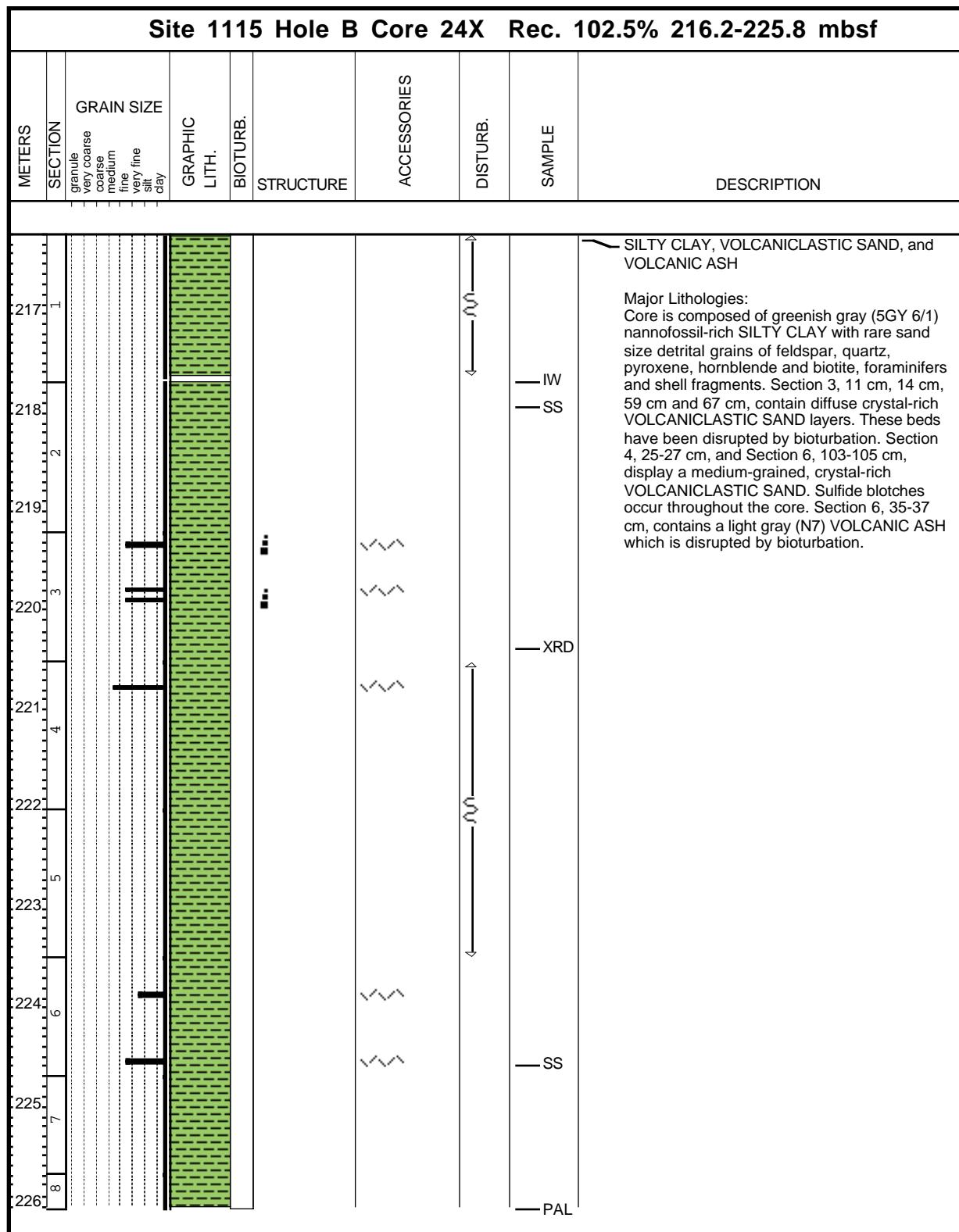
Core Photo



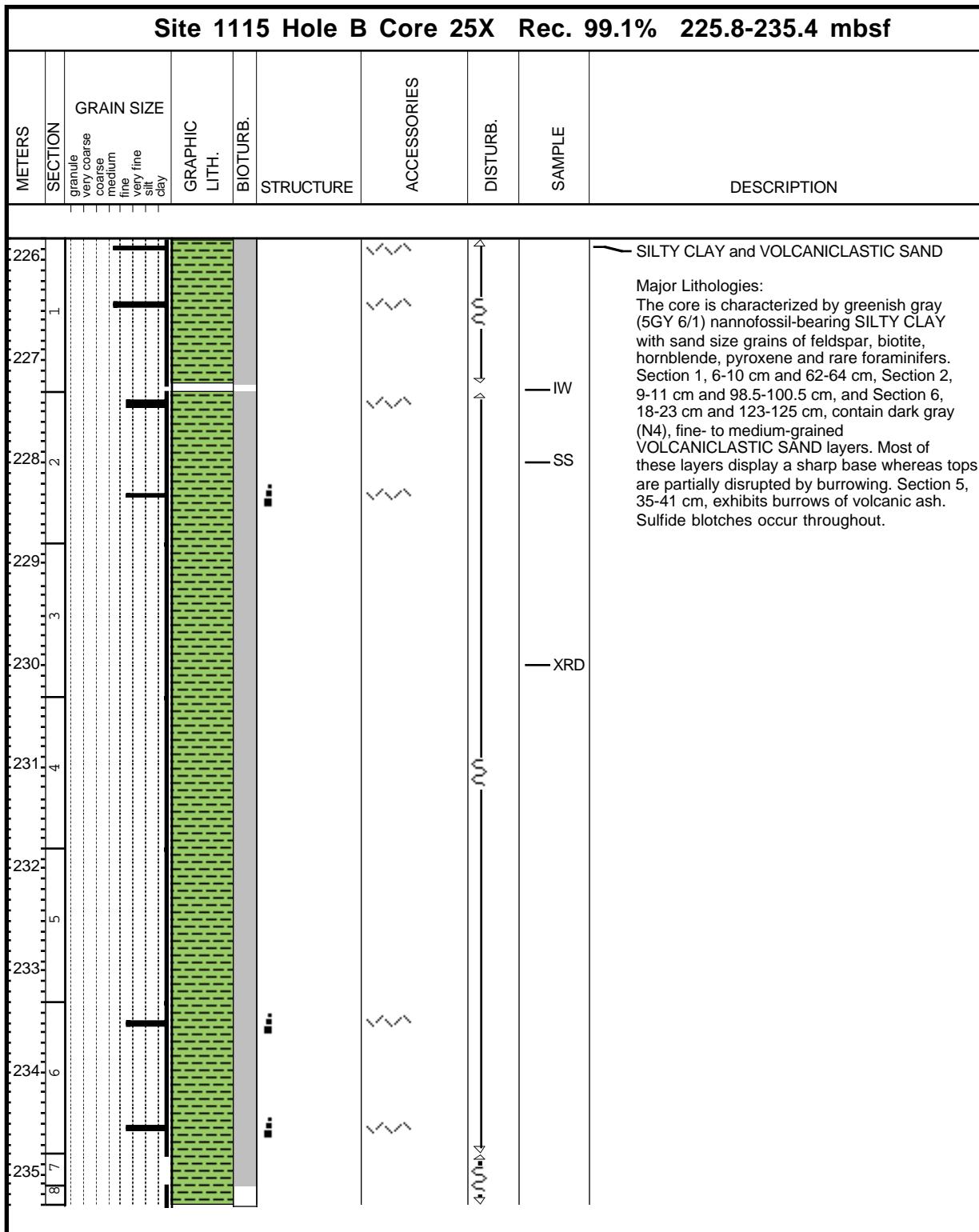
Core Photo



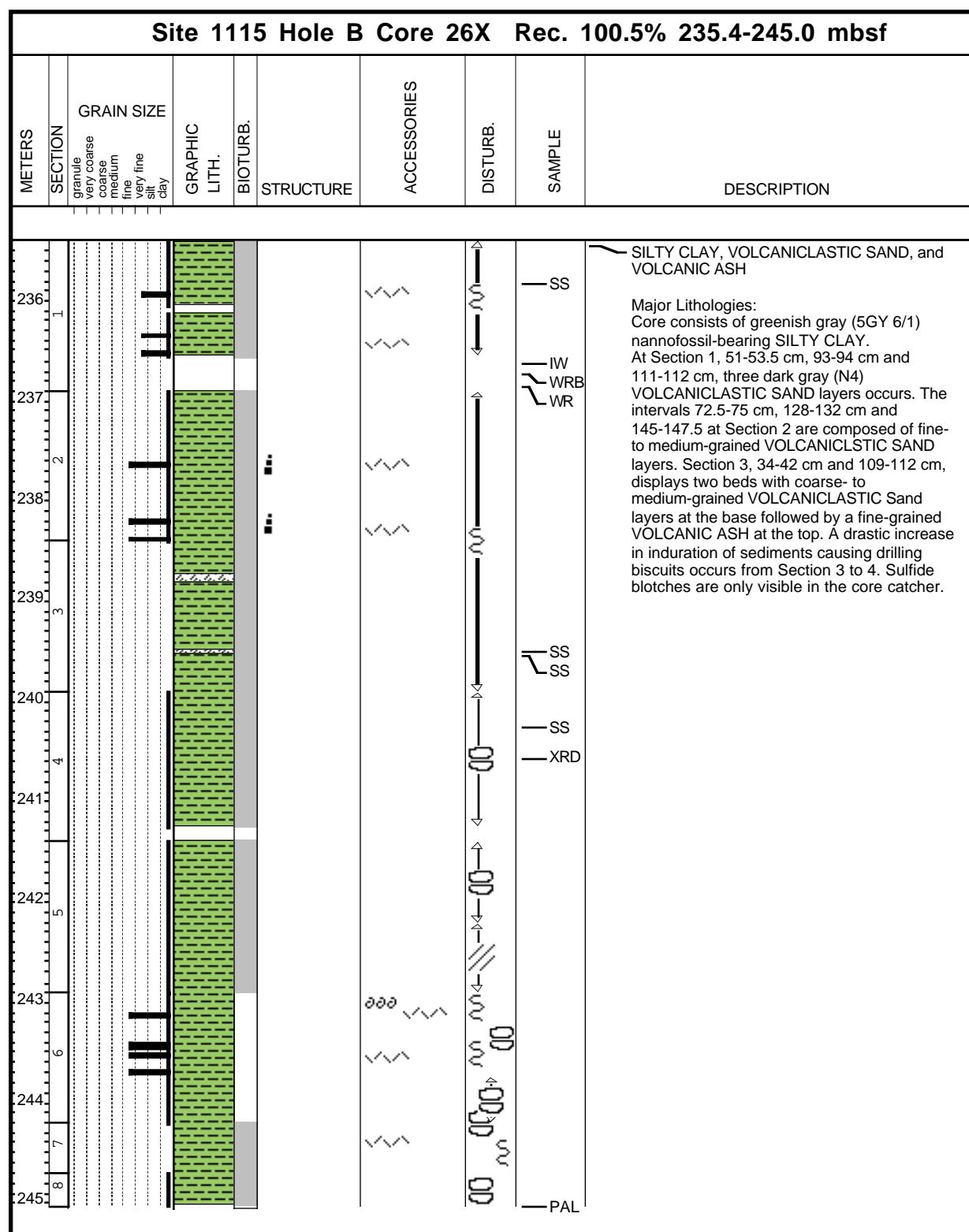
Core Photo



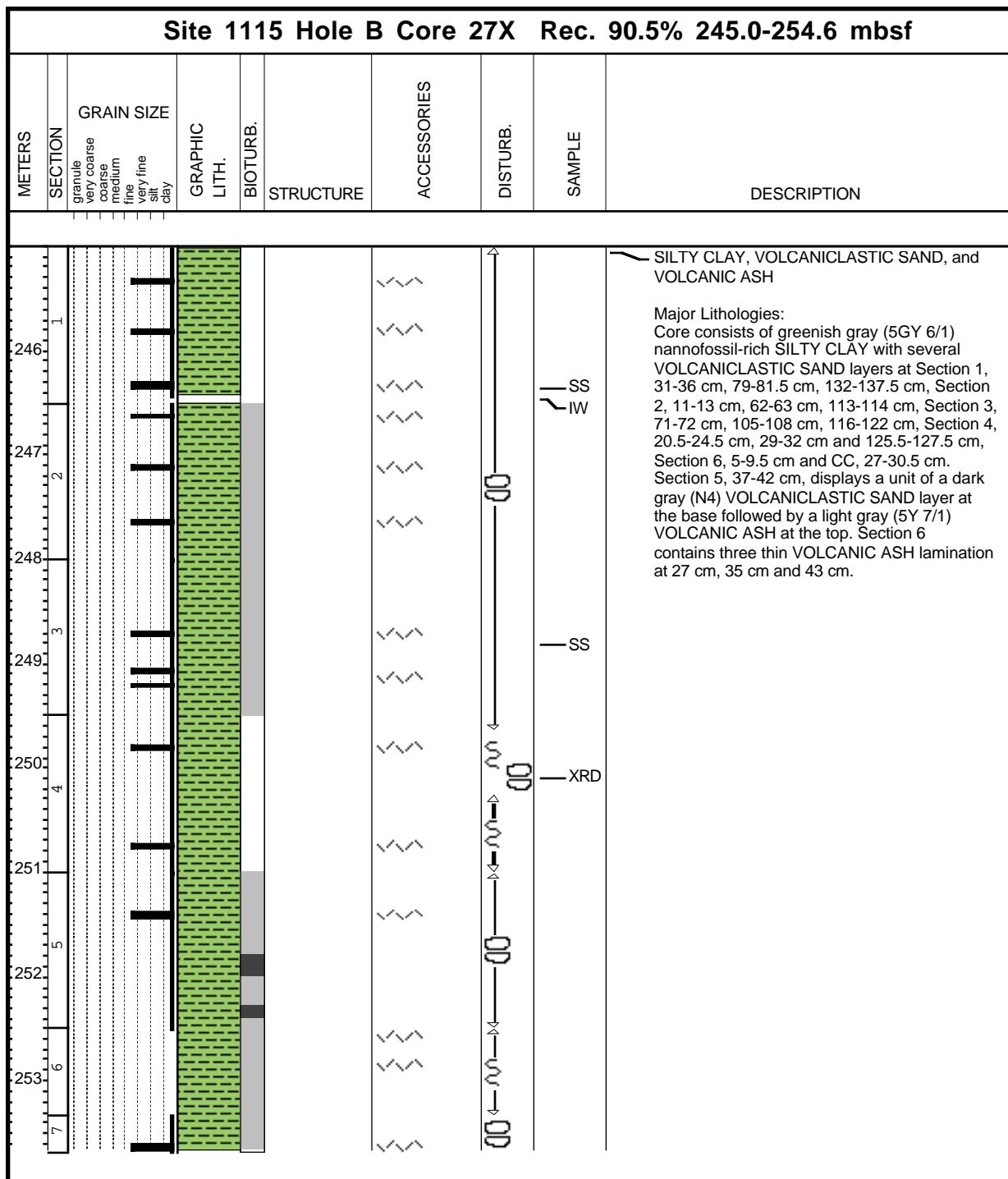
Core Photo



Core Photo

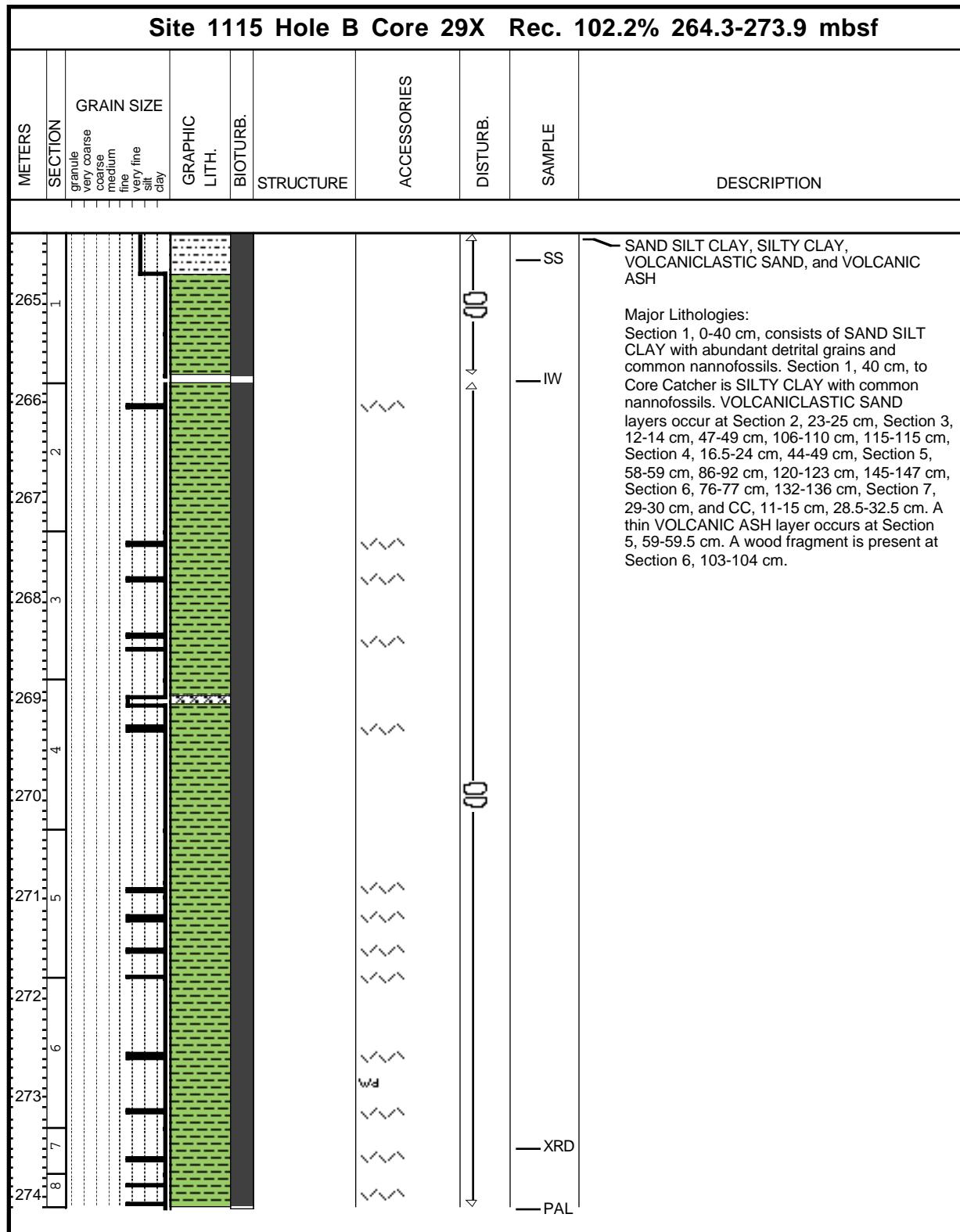


Core Photo



Core Photo

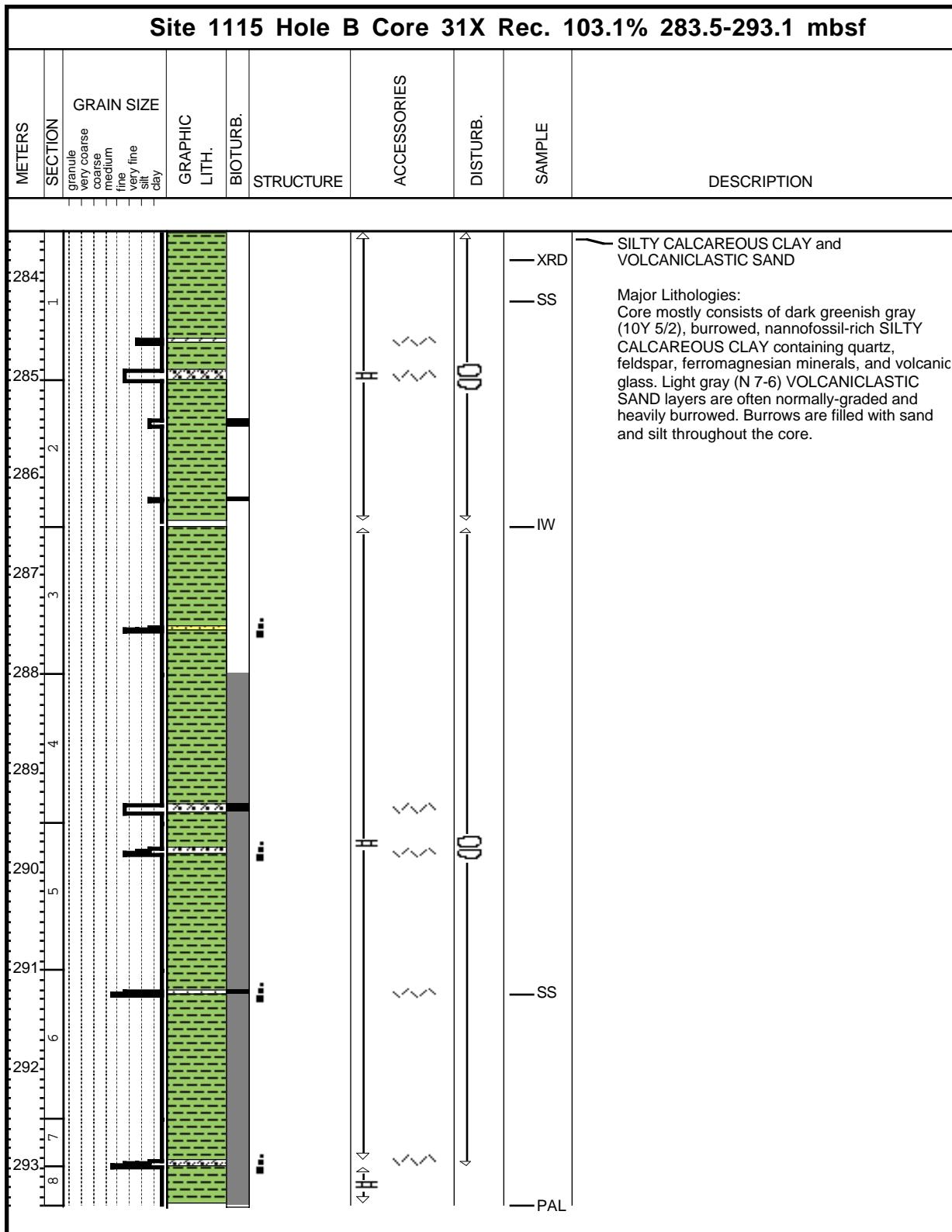
Core Photo



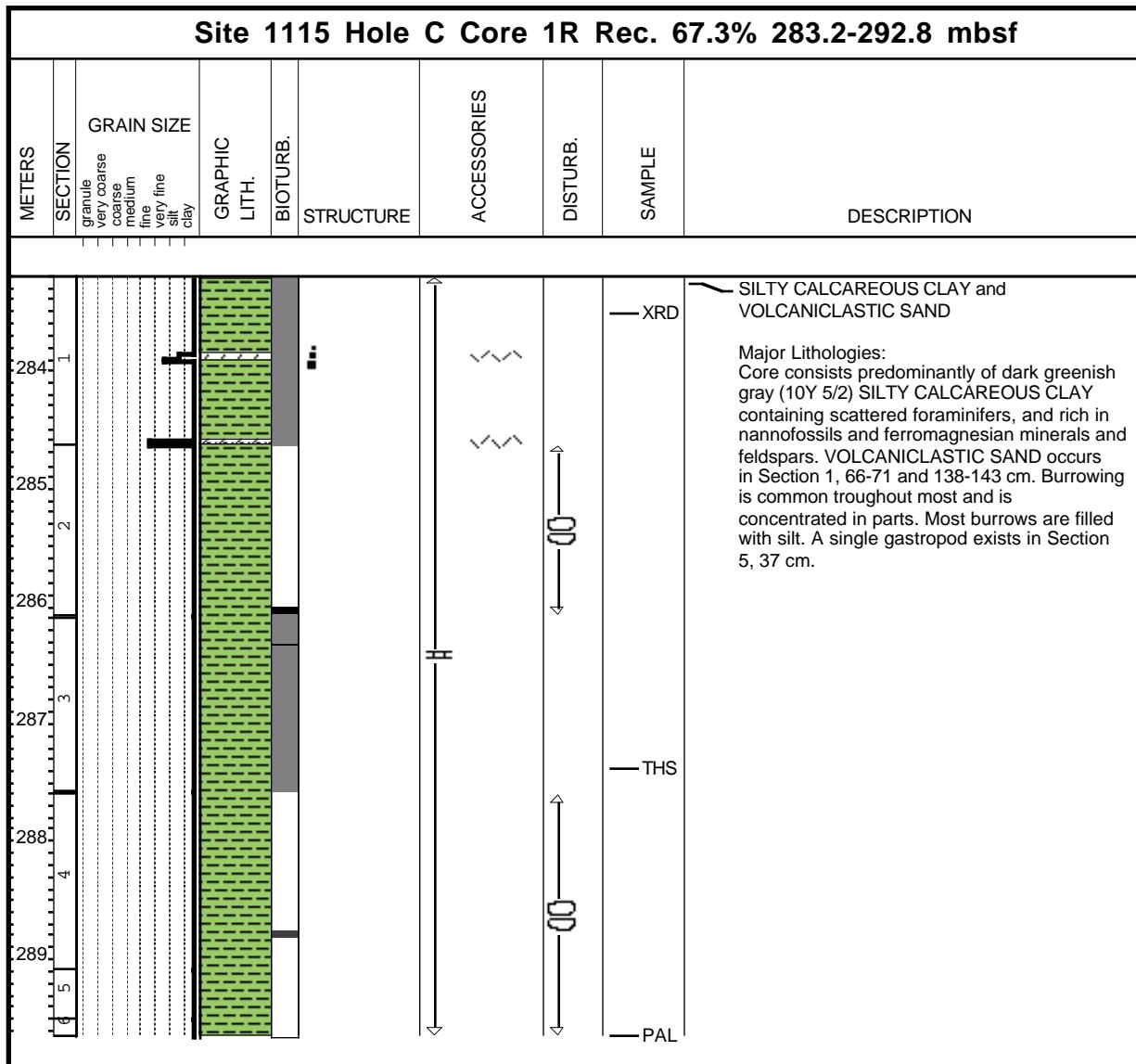
Core Photo

Site 1115 Hole B Core 30X Rec. 15.9% 273.9-283.5 mbsf								
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	SAMPLE	DESCRIPTION
274	1	granule very coarse coarse medium fine very fine silt clay	111	111	<<>>	000 ← → 000	IW	SILTY CLAY/CLAYSTONE, VOLCANICLASTIC SAND, and VOLCANIC ASH
275	2						THS PAL	Major Lithologies: Core is characterized by greenish gray (5GY 6/1) SILTY CLAY with common nannofossils. VOLCANICLASTIC SAND layers occur at Section 1, 9-12 cm, 31-37 cm and 92-93 cm. A thin, silty laminae of VOLCANIC ASH is present at 33 cm in Core Catcher.

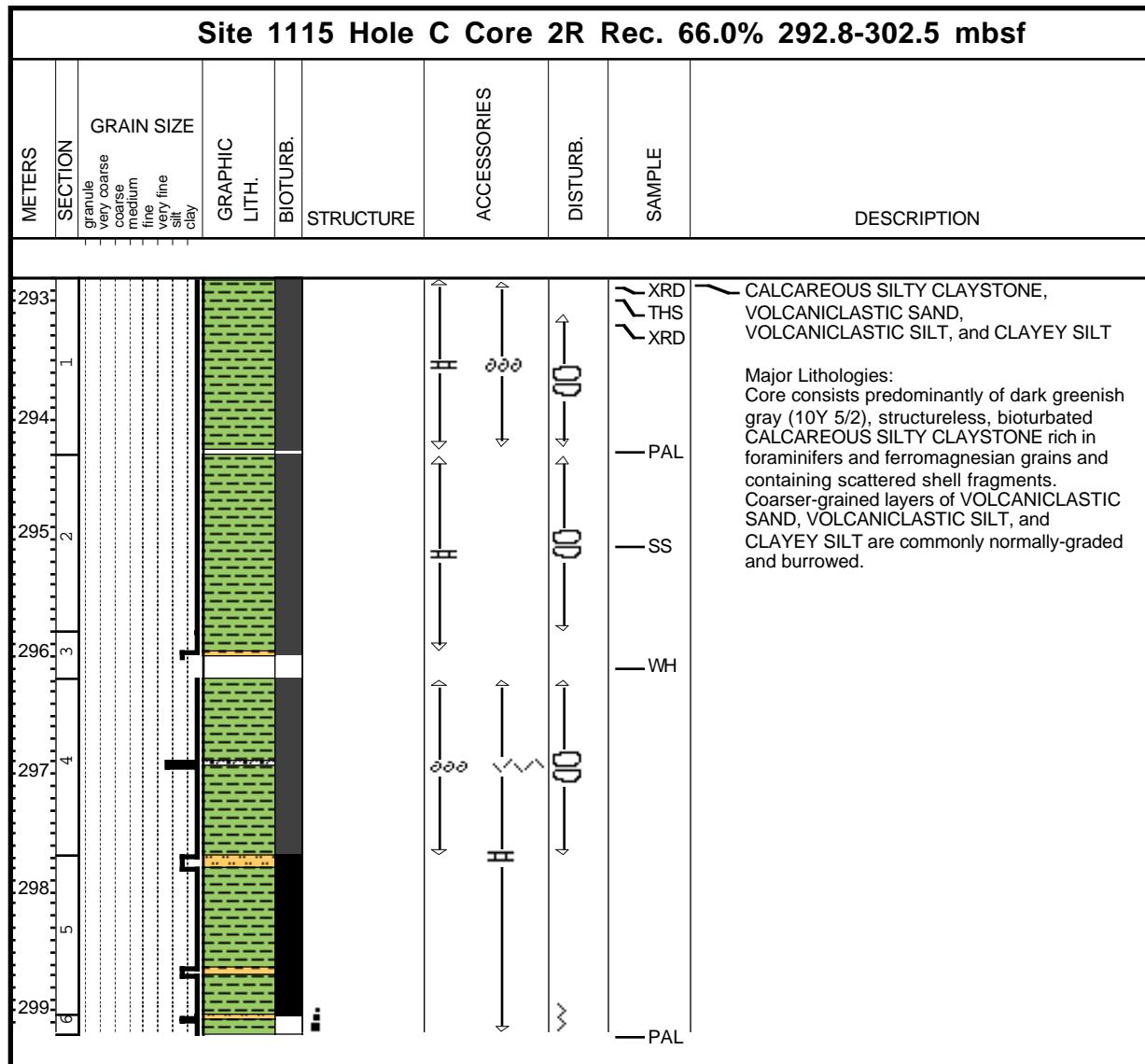
Core Photo



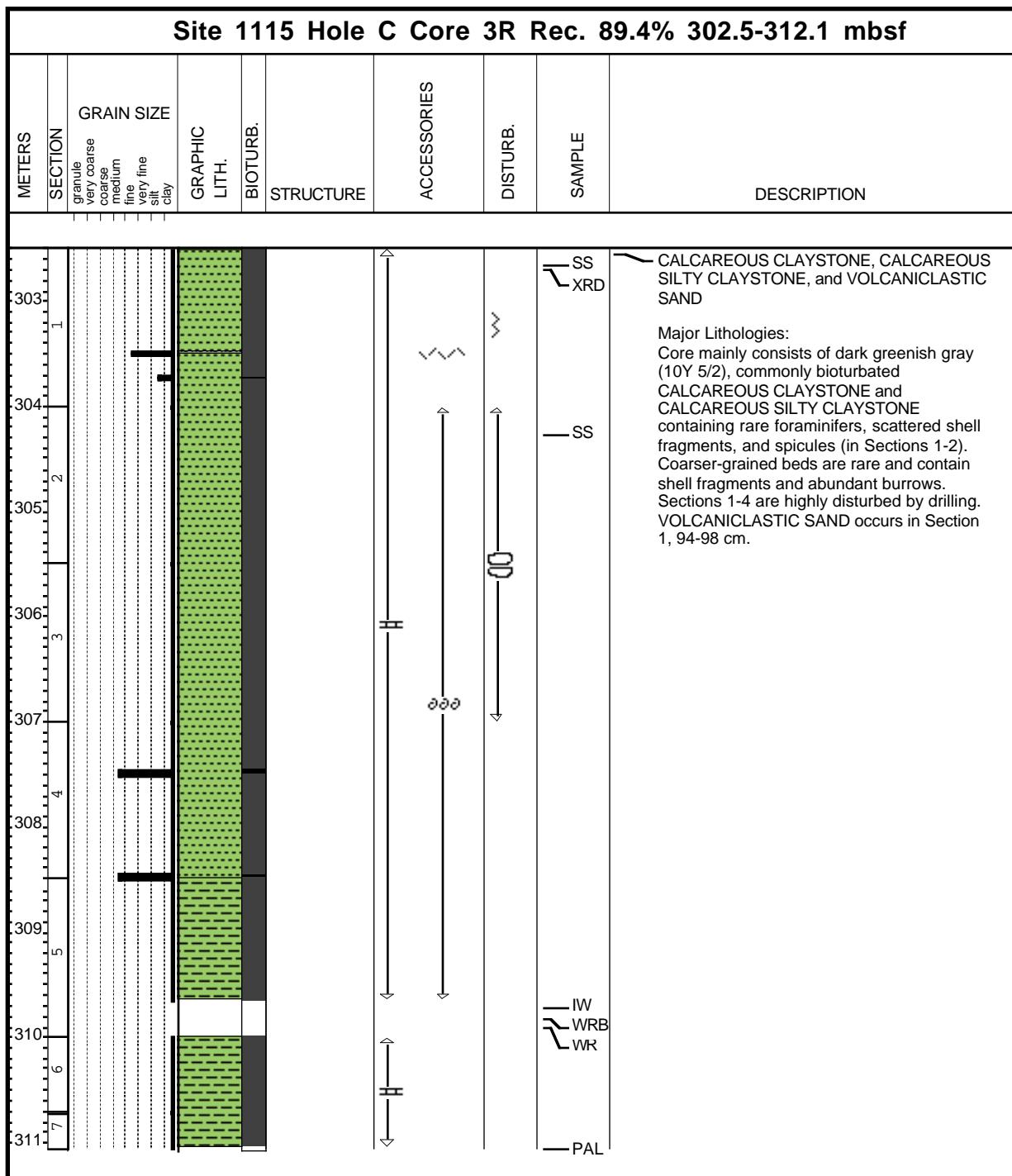
Core Photo



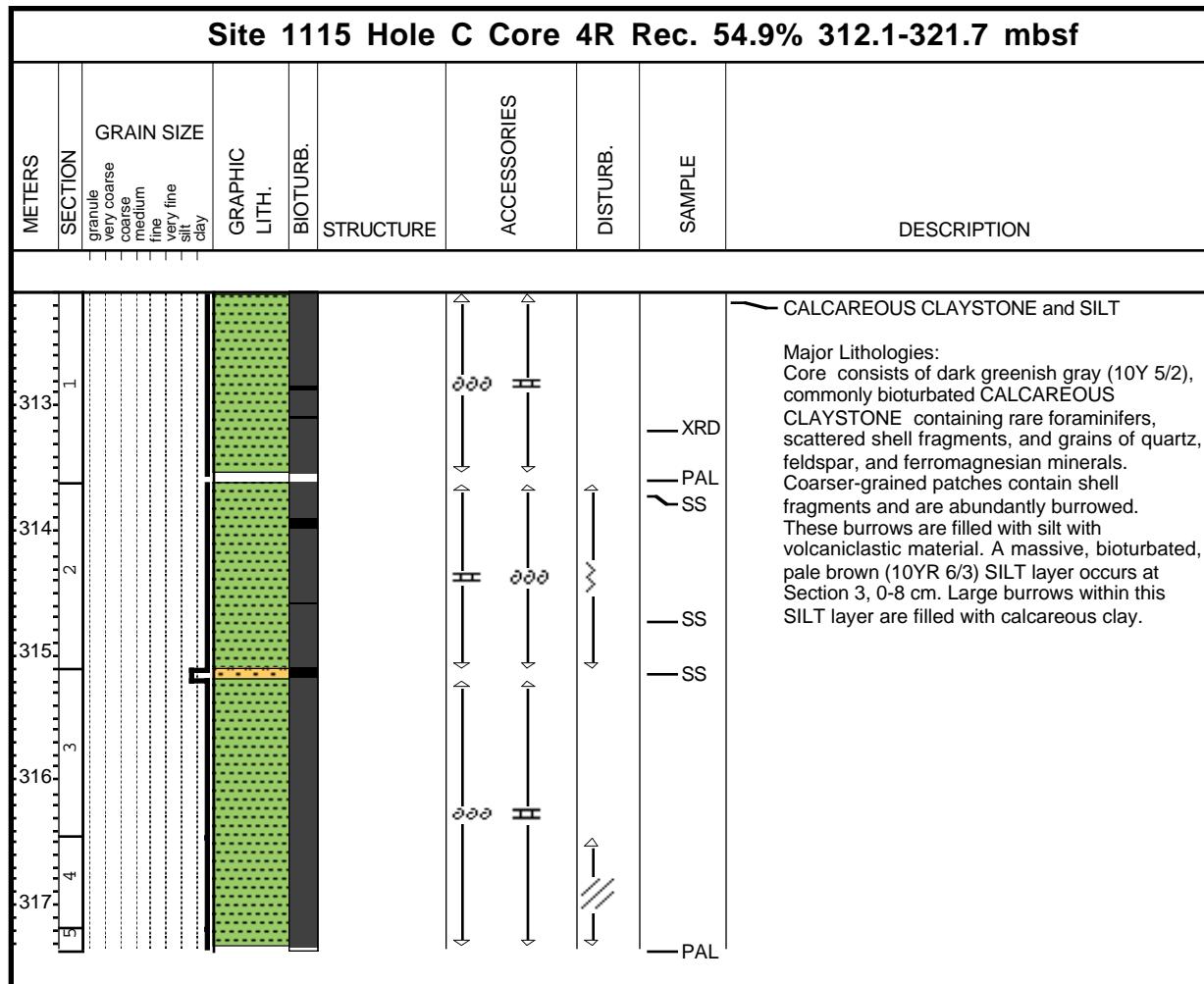
Core Photo



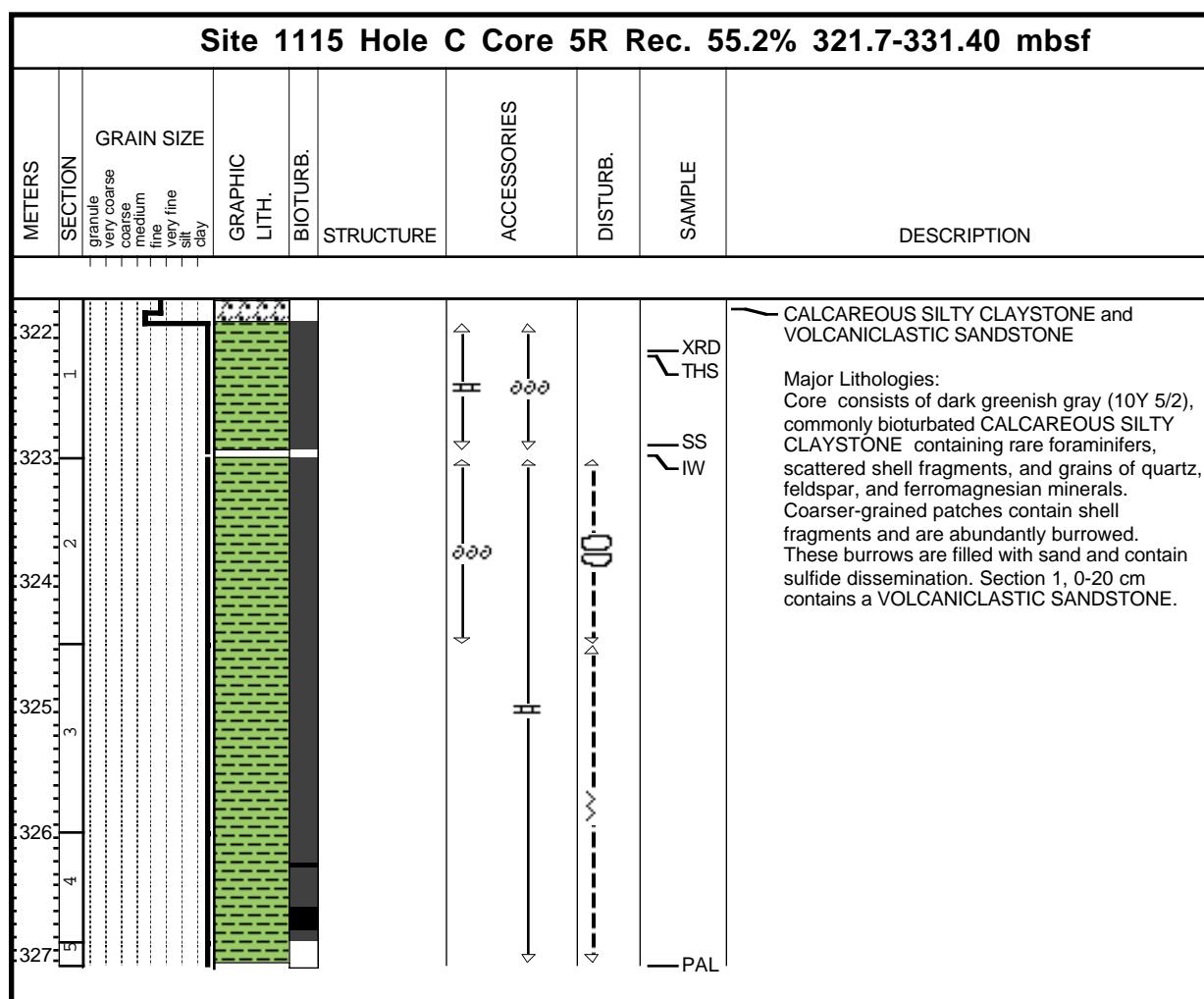
Core Photo



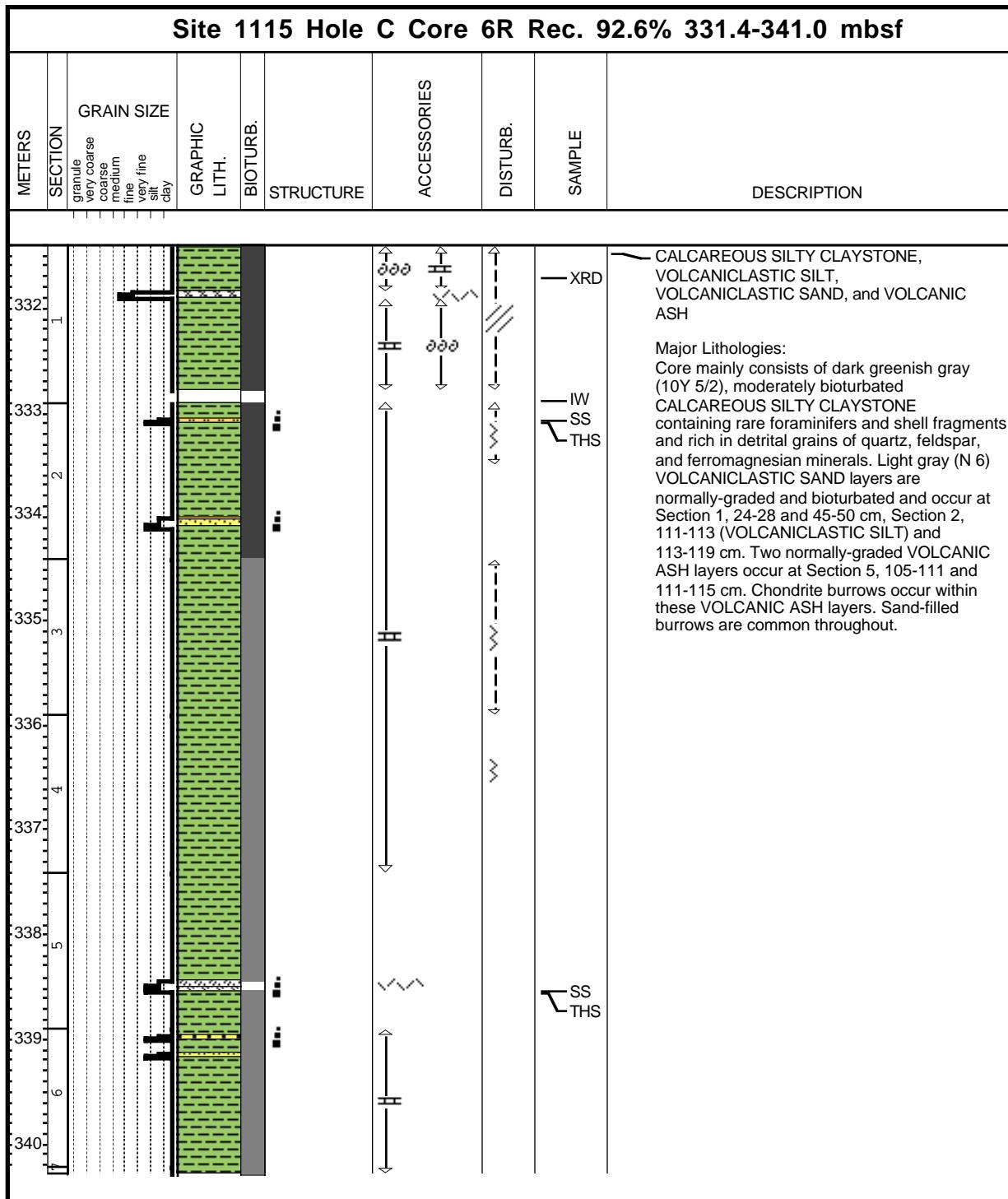
Core Photo



Core Photo



Core Photo

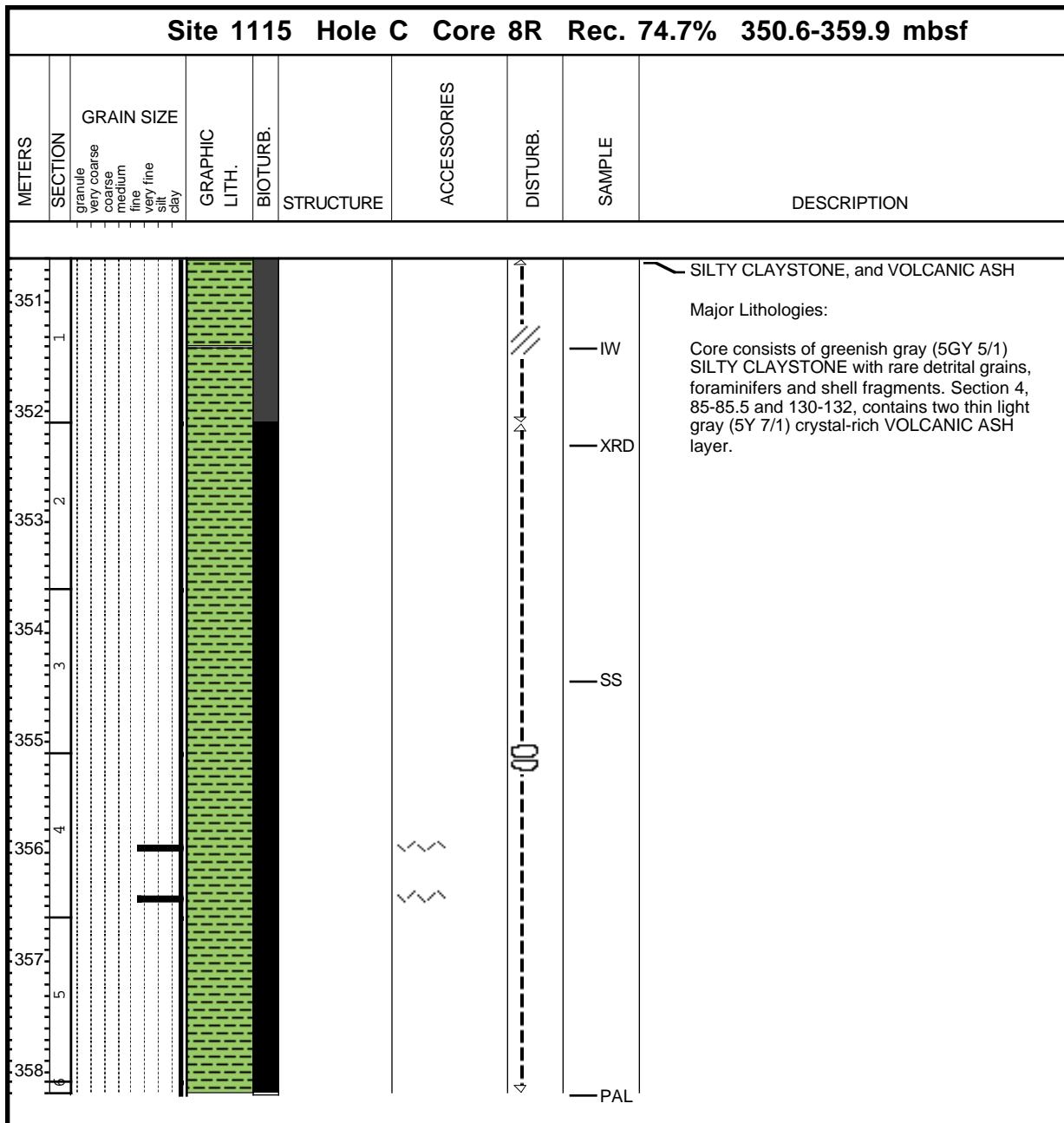


Core Photo

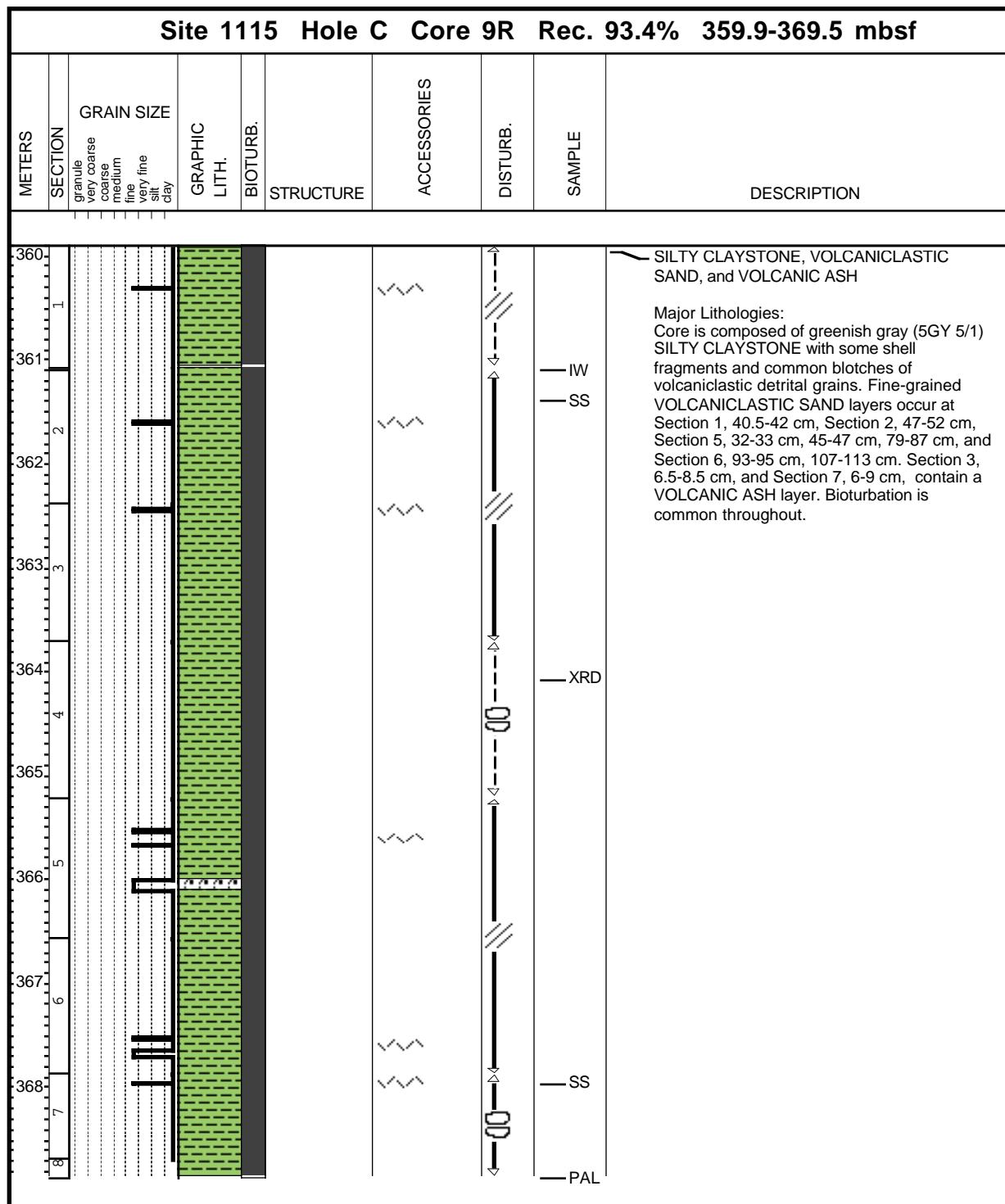
Site 1115 Hole C Core 7R Rec. 74.4% 341.0-350.6 mbsf

METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		granule very coarse coarse medium fine very fine silt clay							
342.00	1					ooo	↔	00	SILTY CLAYSTONE
343.00	2					ooo	↔	00	Major Lithologies: Core is composed of greenish gray (5GY 5/1) SILTY CLAYSTONE with common detrital grains of feldspar, quartz, biotite, pyroxene and amphibole. The whole core displays common to abundant bioturbation. Burrows are often filled with coarse detrital grains. Some shell fragments occurs throughout.
344.00	3					ooo	↔	00	XRD
345.00	4					ooo	↔	00	IW
346.00	5					ooo	↔	00	THS
347.00	6					ooo	↔	00	SS
348.00						ooo	↔	00	PAL

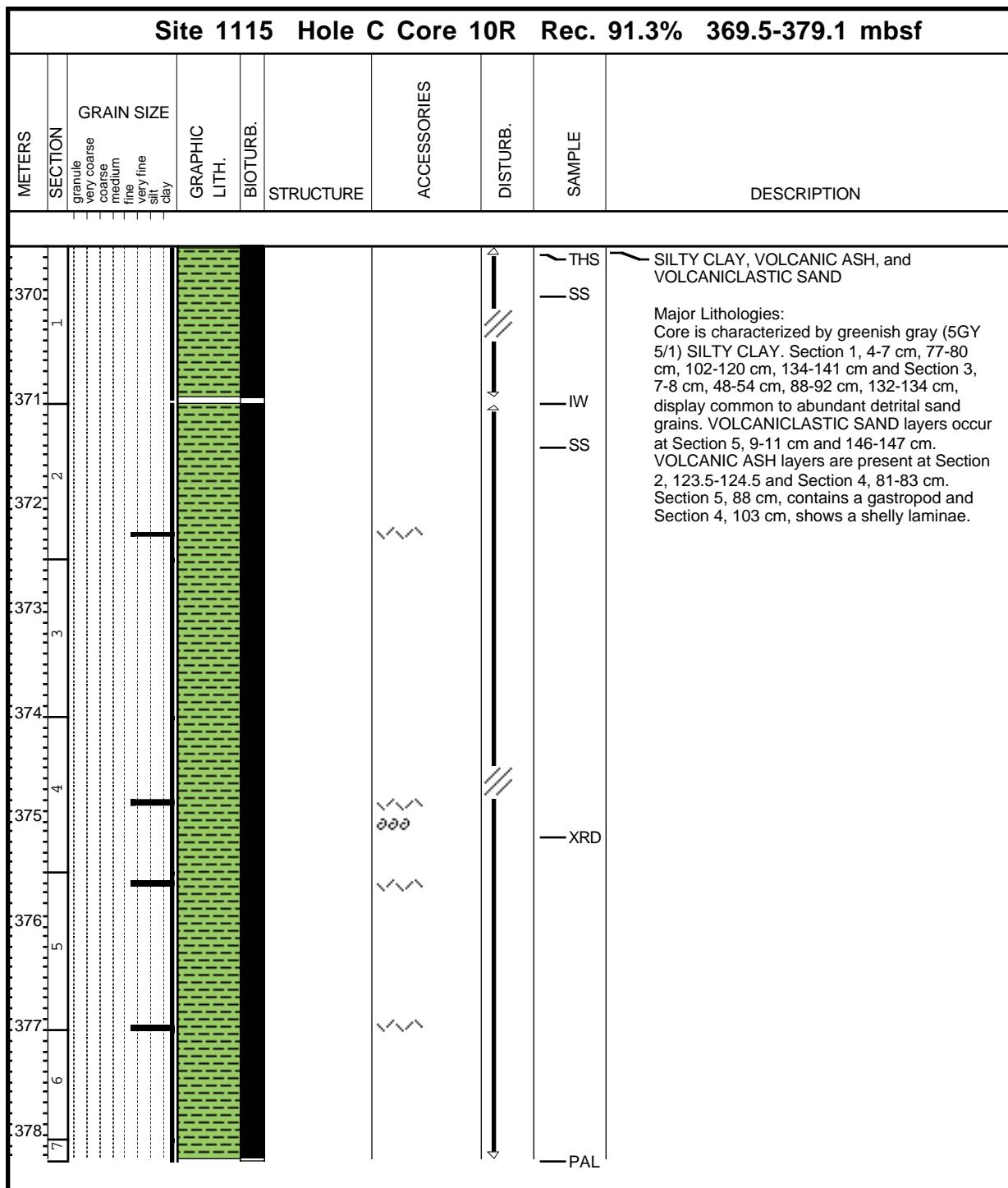
Core Photo



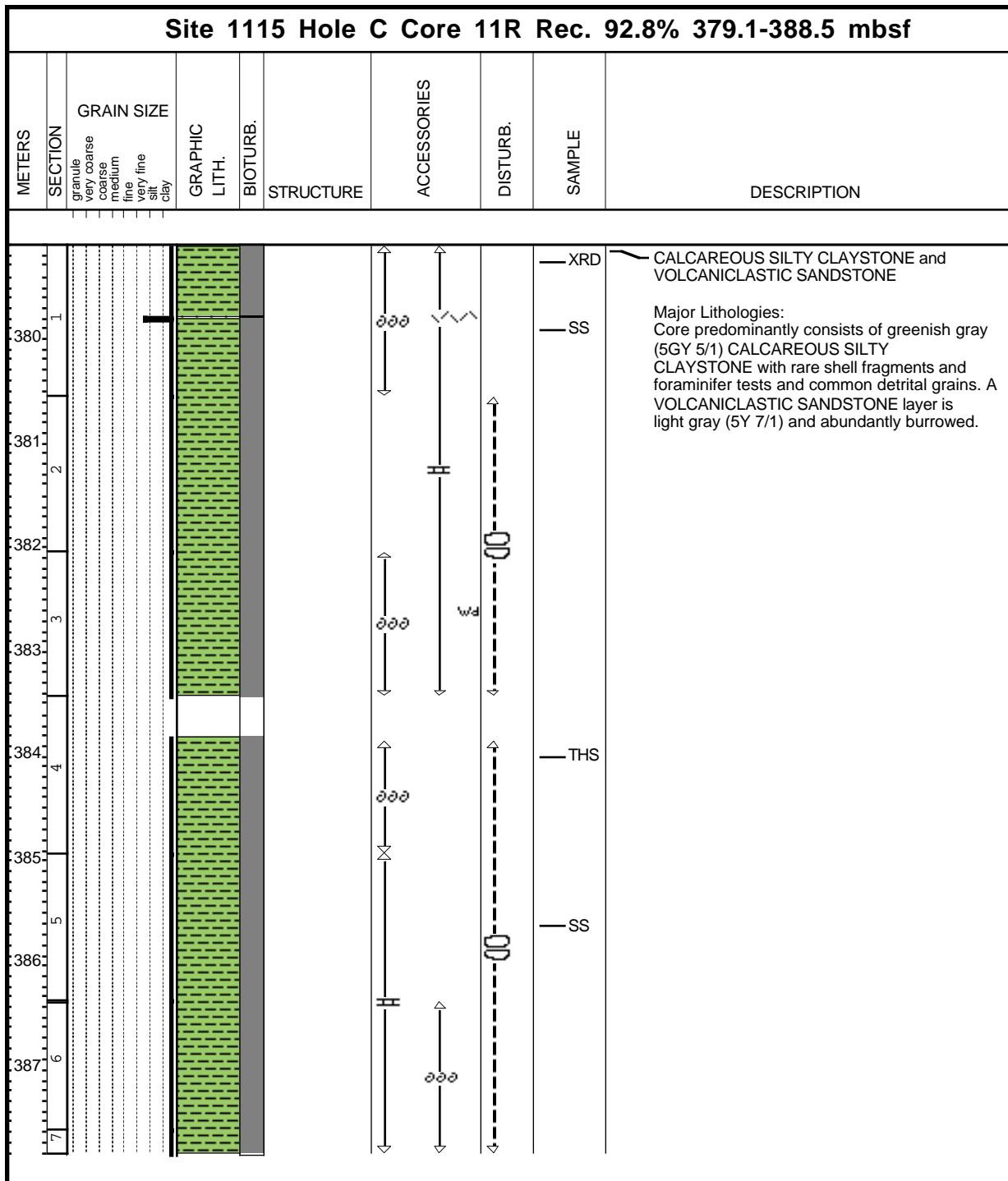
Core Photo



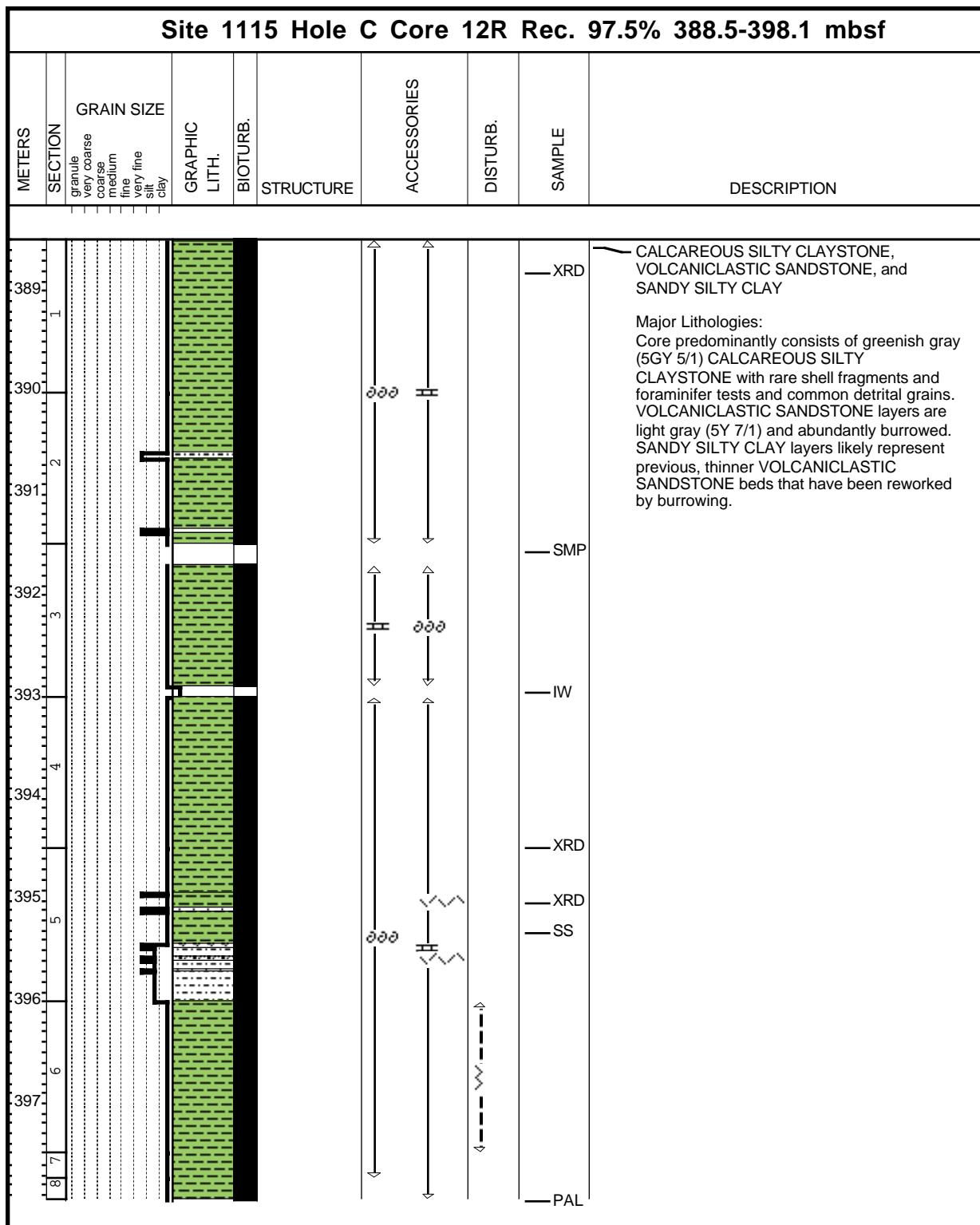
Core Photo



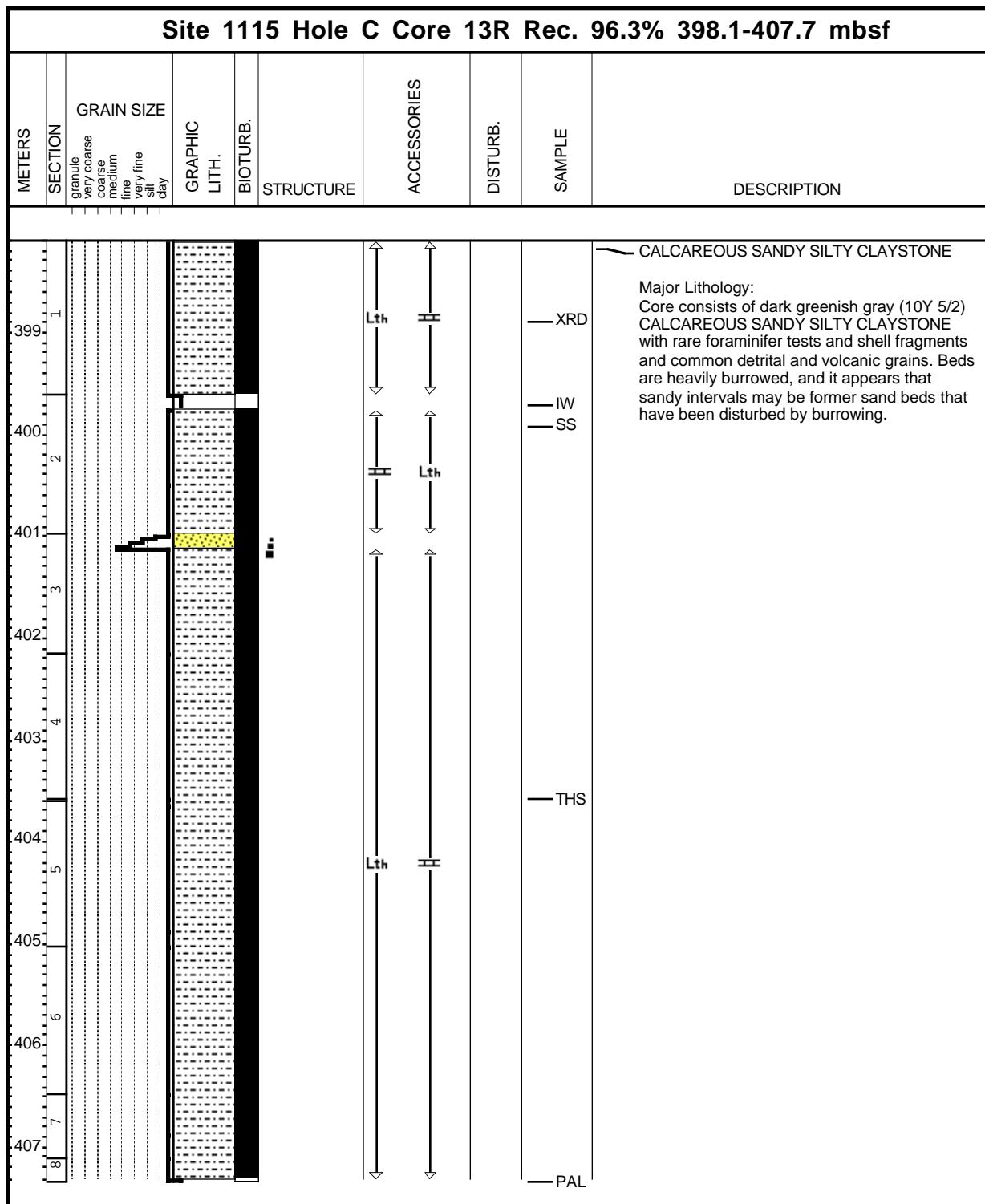
Core Photo



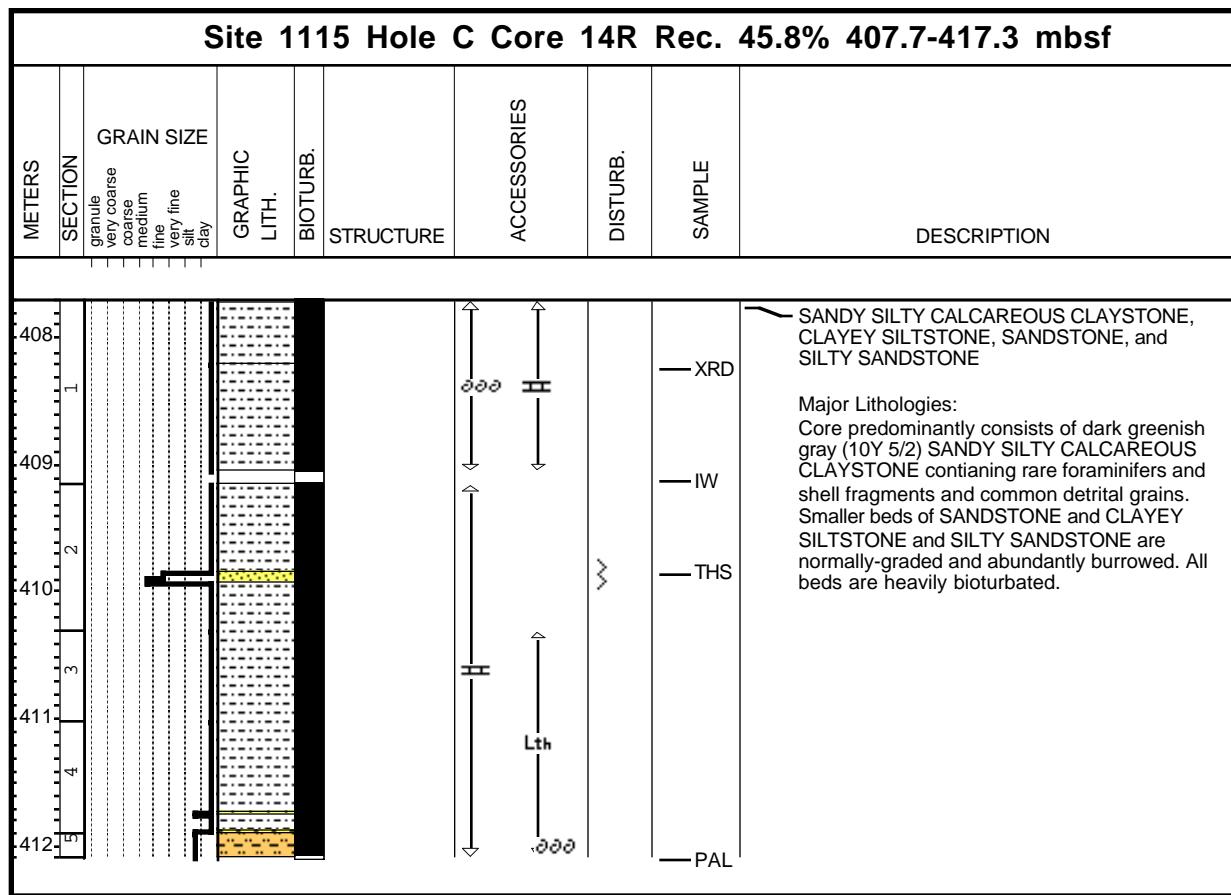
Core Photo



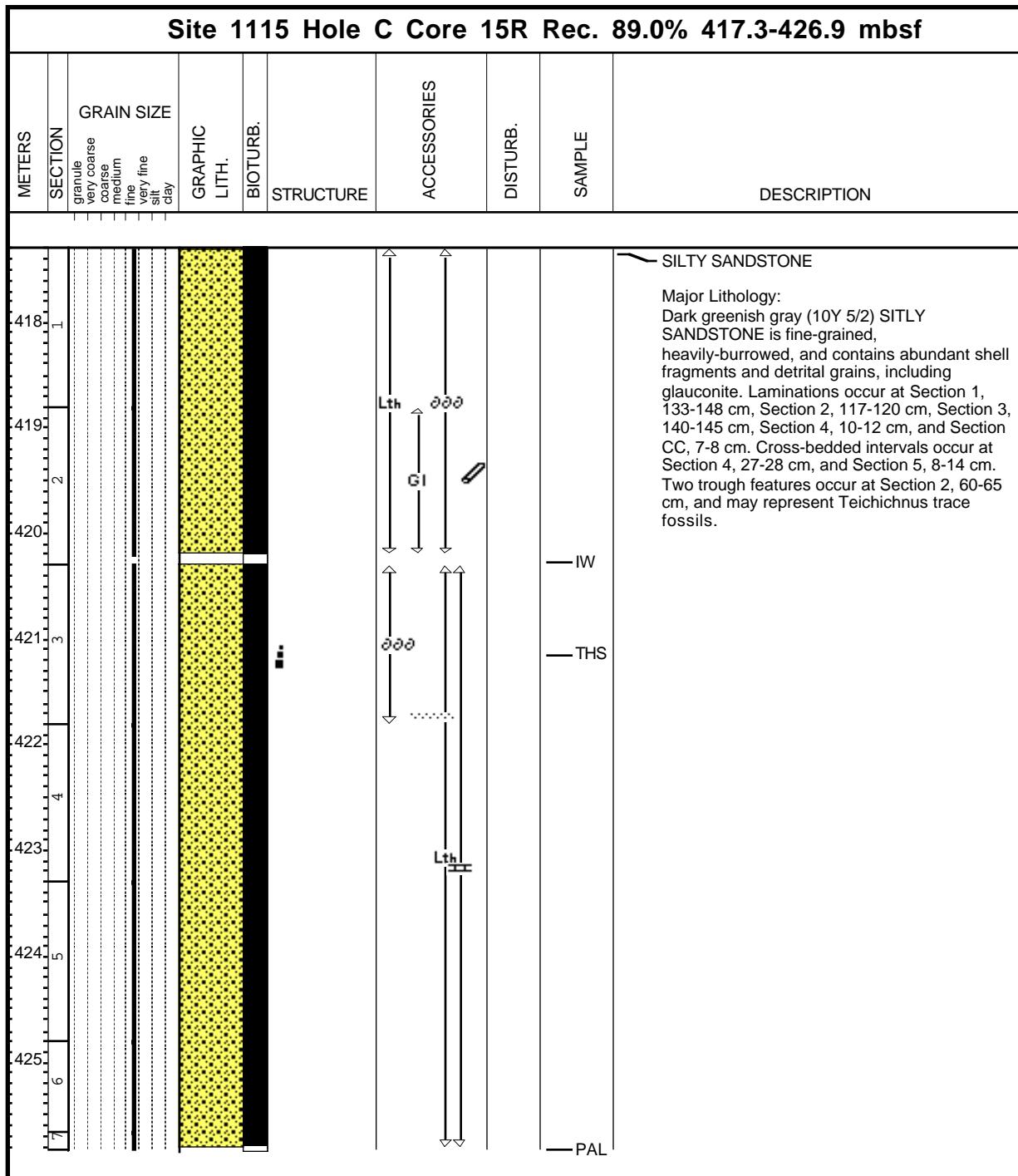
Core Photo



Core Photo



Core Photo



Core Photo

Site 1115 Hole C Core 16R Rec. 18.5% 426.9-436.5 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
427	1	granule very coarse coarse medium fine very fine silt clay							SANDSTONE
428	2								Major Lithology: Core contains dark greenish gray (10Y 5/2) SANDSTONE that is fine- to medium-grained, abundantly burrowed, and contains common shell fragments (in Section 1) and detrital grains. Parallel laminations occur throughout Section 2, 0-55 cm.

Core Photo

Core Photo

Site 1115 Hole C Core 18R Rec. 27.9% 446.1-455.6 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		grainule very coarse coarse medium fine very fine silt clay							SILTY SANDSTONE Major Lithology: Dark greenish gray (10Y 5/2) SILTY SANDSTONE is fine-grained, mixed, and poorly-sorted. Beds have parallel and cross-laminations throughout. A Teichichnus trace fossil occurs at Section 1, 42-45 cm.

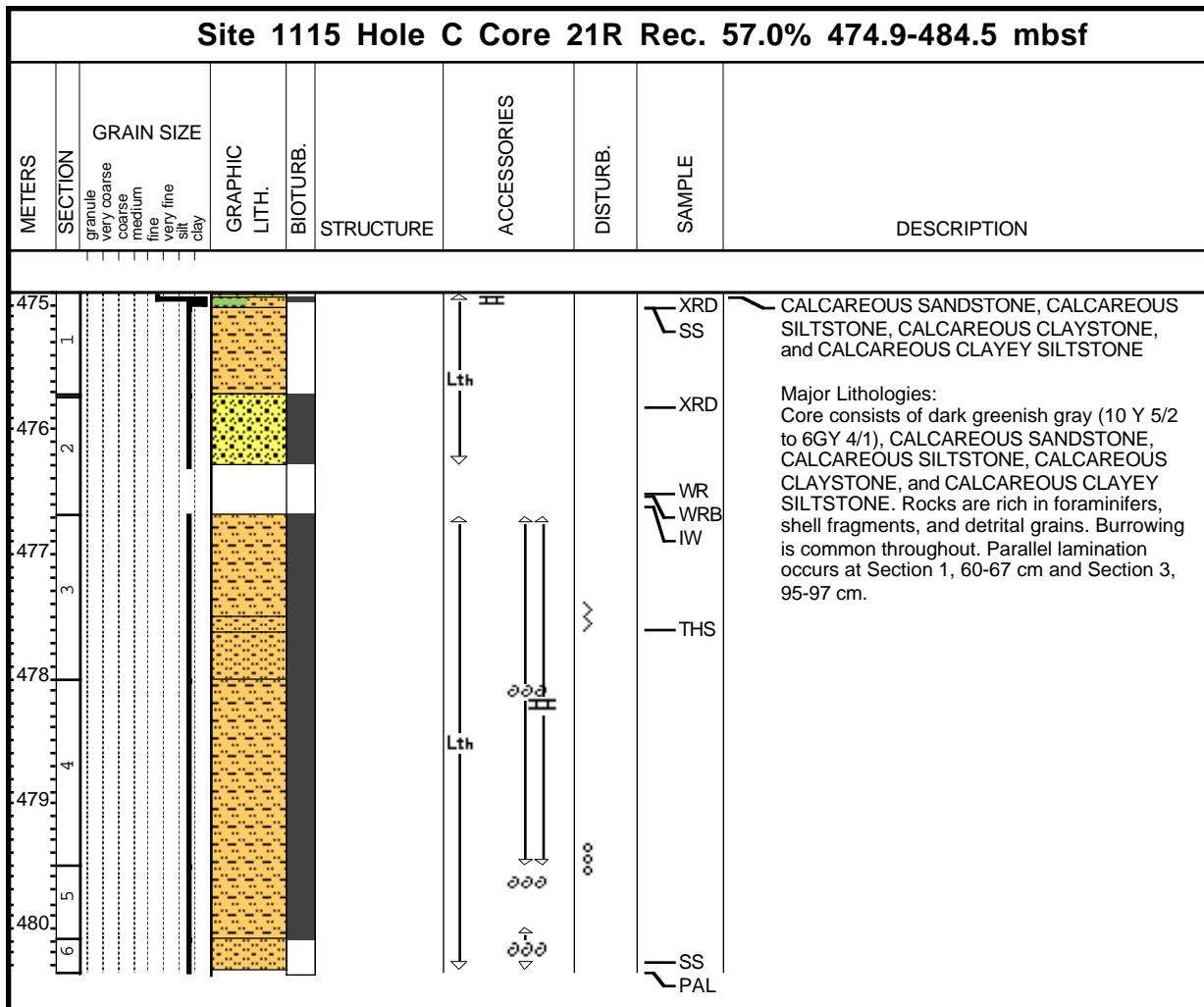
Core Photo

Site 1115 Hole C Core 19R Rec. 5.7% 455.6-465.2 mbsf							
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	Bioturb.	STRUCTURE	ACCESSORIES	SAMPLE
456	1	granule very coarse coarse medium fine very fine silt clay			H	XRD PAL THS	SANDSTONE Major Lithology: Core contains dark greenish gray (10Y 5/2), fine-grained, calcareous SANDSTONE containing detrital grains. Section 1 has parallel lamination throughout. SANDSTONE of the Core Catcher is structureless but burrowed throughout.

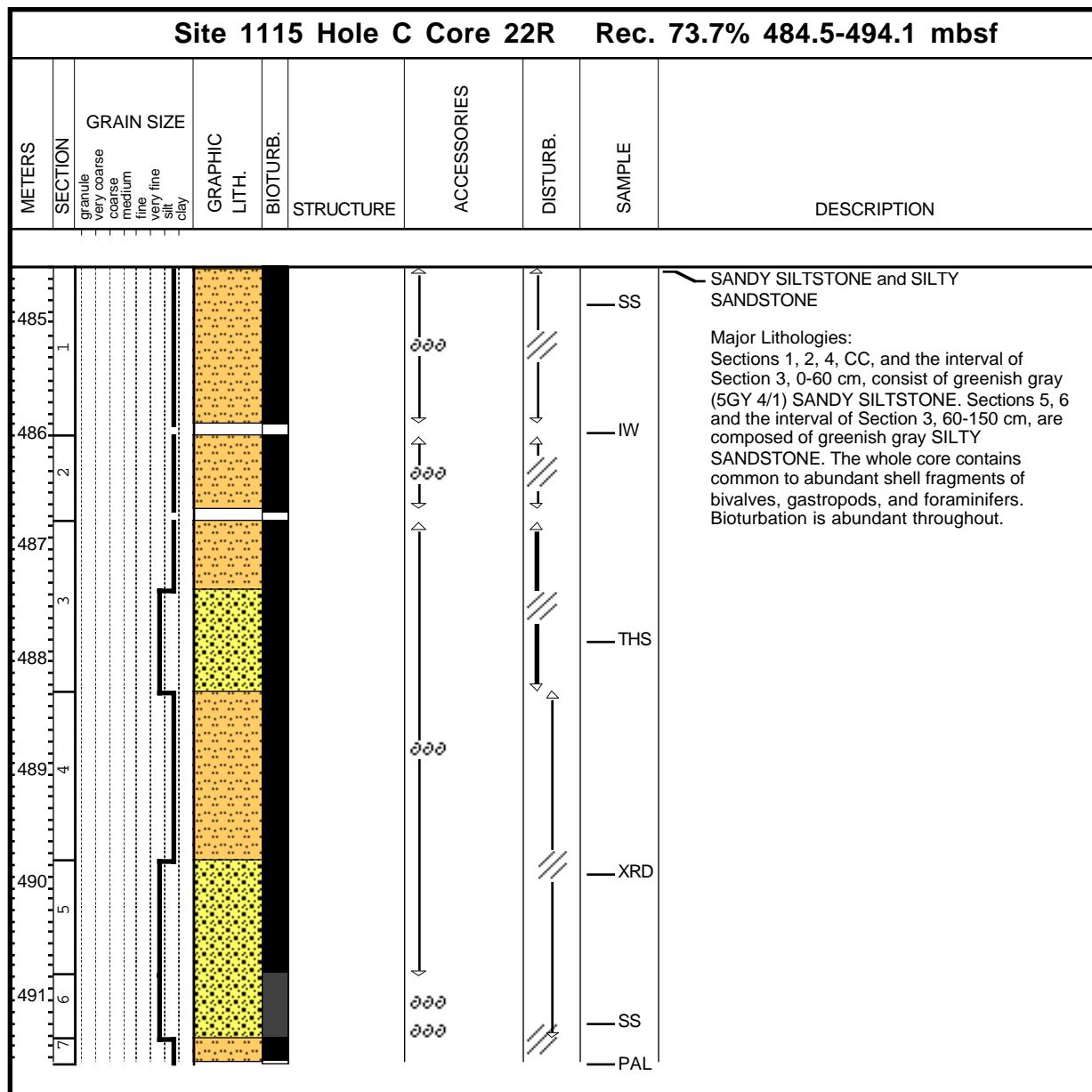
Core Photo

Site 1115 Hole C Core 20R Rec. 7.6% 465.2-474.9 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	Bioturb.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
1	2	granule very coarse coarse medium fine very fine silt clay	[Yellow dotted pattern]			↑ ↓	H	↓	CALCAREOUS SANDSTONE Major Lithology: Core contains dark greenish gray (10Y 4/1), fine-grained CALCAREOUS SANDSTONE with cross-laminations present at Section 1, 6-17 cm, and Section 2, 5-10 cm. Shell fragments are abundant in Section 1. Core Catcher is highly disturbed by drilling.

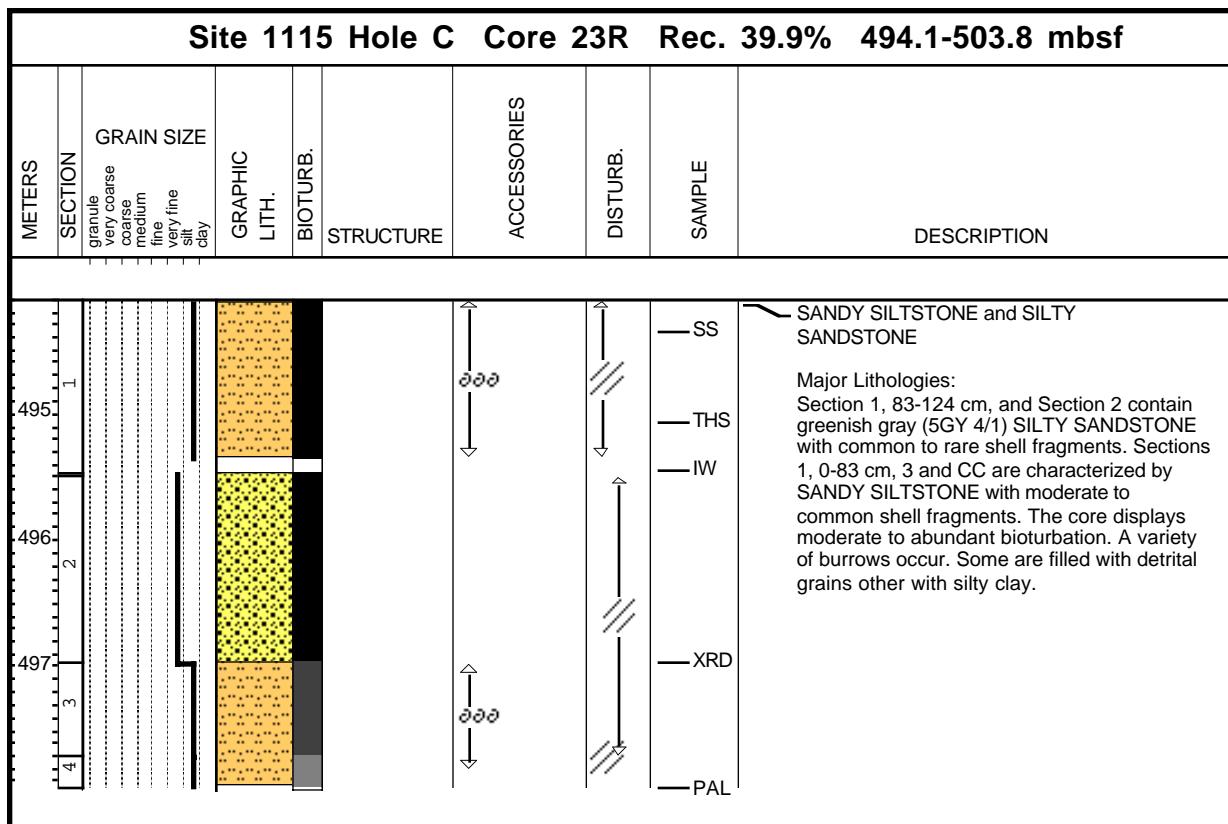
Core Photo



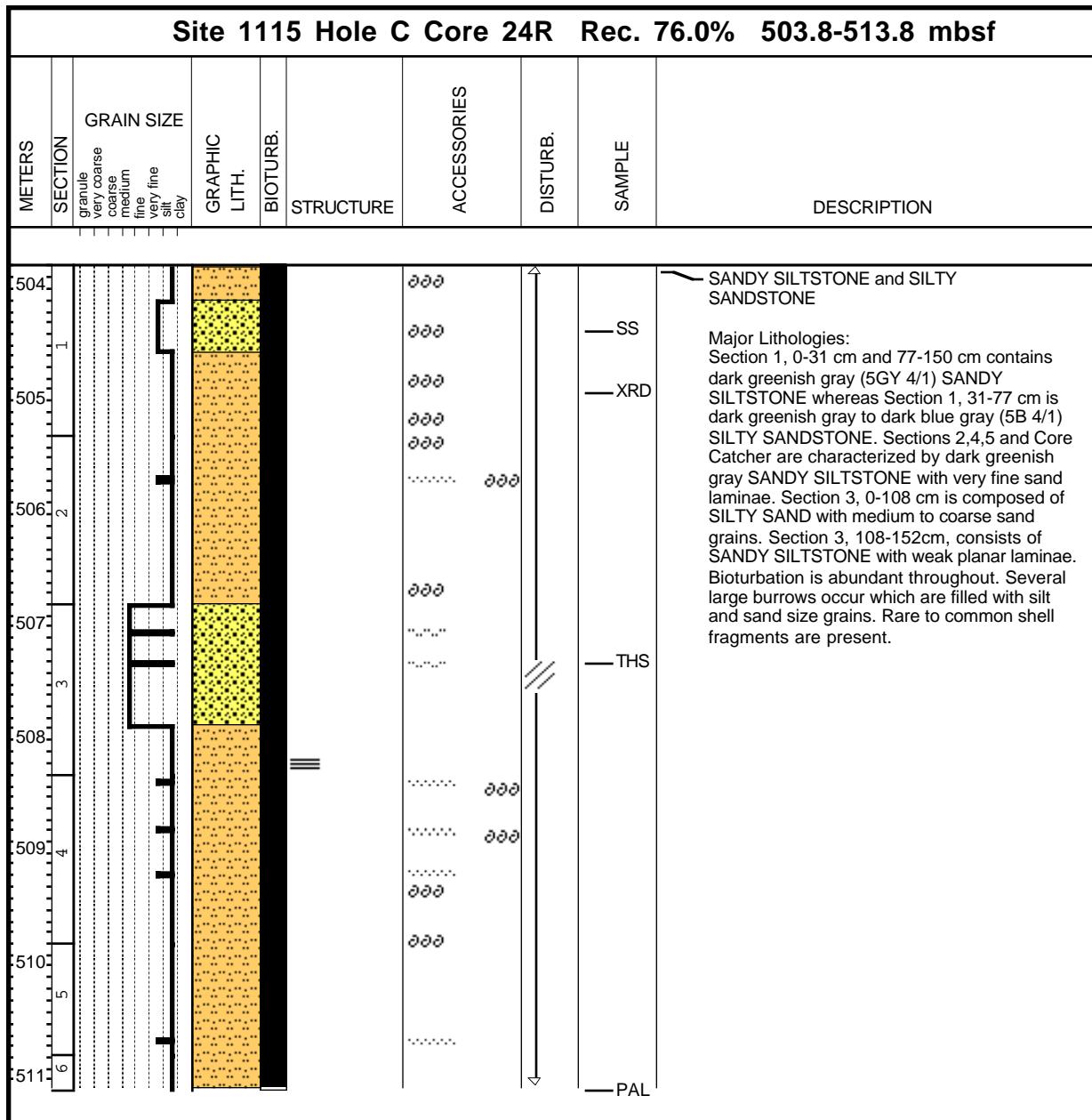
Core Photo



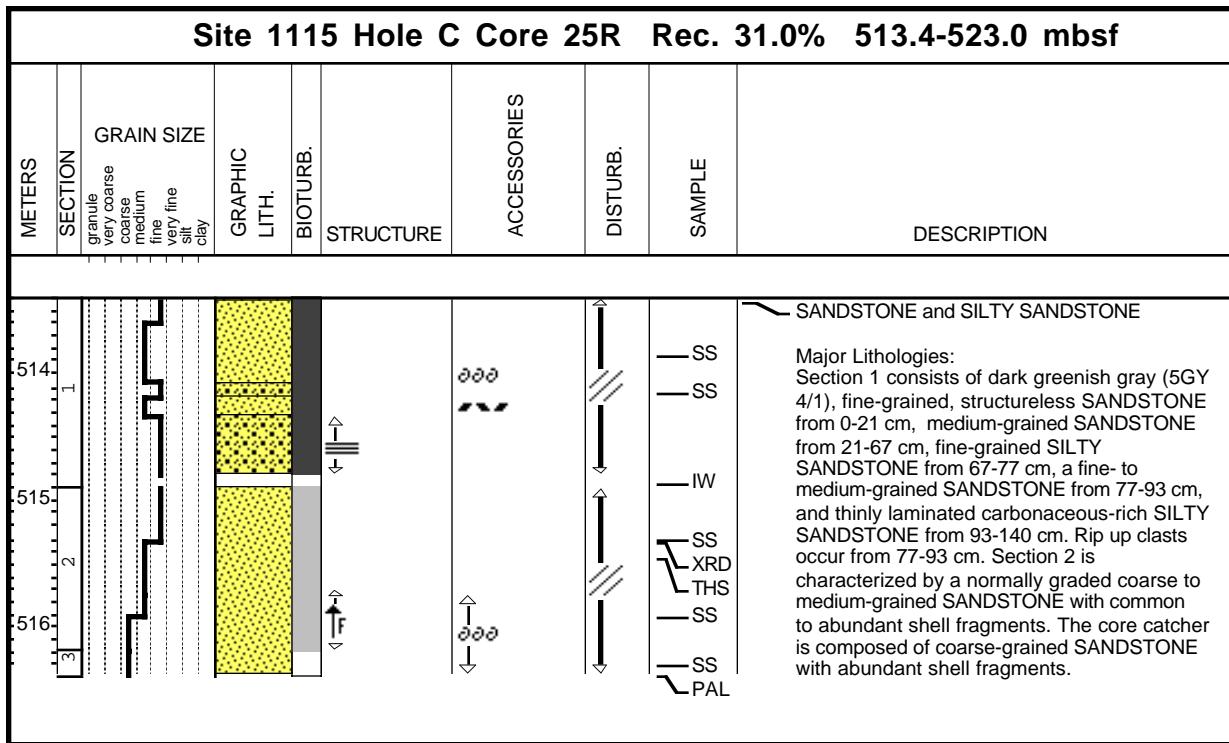
Core Photo



Core Photo

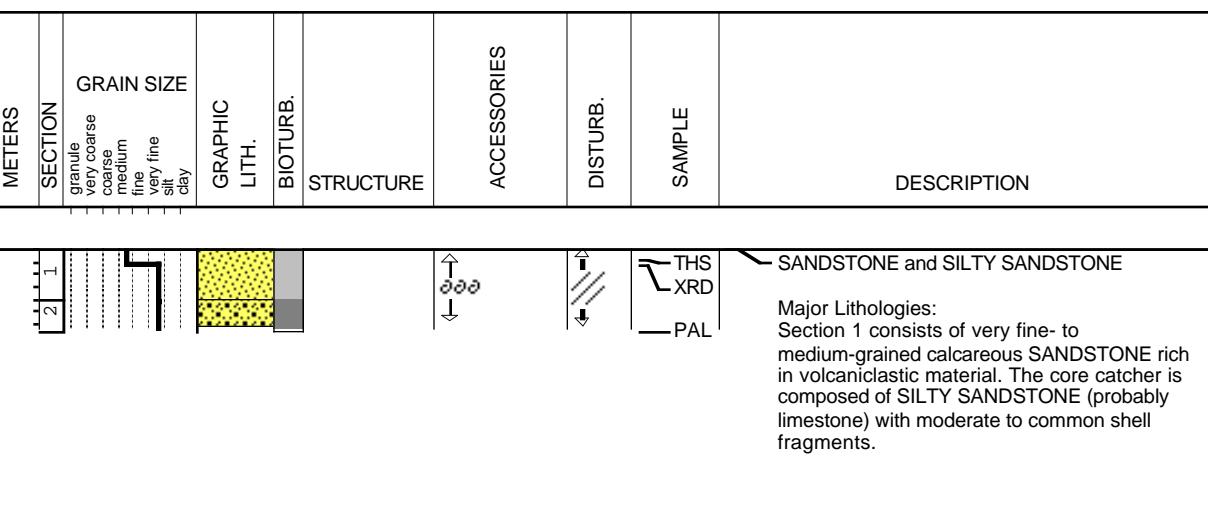


Core Photo



Core Photo

Site 1115 Hole C Core 26R Rec. 6.8% 523.0-532.6 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		granule very coarse coarse medium fine very fine silt clay							SANDSTONE and SILTY SANDSTONE Major Lithologies: Section 1 consists of very fine- to medium-grained calcareous SANDSTONE rich in volcanioclastic material. The core catcher is composed of SILTY SANDSTONE (probably limestone) with moderate to common shell fragments.



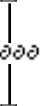
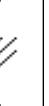
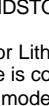
The stratigraphic column shows two main sections labeled 1 and 2. Section 1 (top) is a thick, greyish band representing a core catcher. Section 2 (bottom) is a thin, yellowish band representing sandstone. A legend on the right defines symbols: a vertical line with horizontal dashes for 'THS', a wavy line for 'XRD', and a solid line for 'PAL'. A note states: 'Major Lithologies: Section 1 consists of very fine- to medium-grained calcareous SANDSTONE rich in volcanioclastic material. The core catcher is composed of SILTY SANDSTONE (probably limestone) with moderate to common shell fragments.'

Core Photo

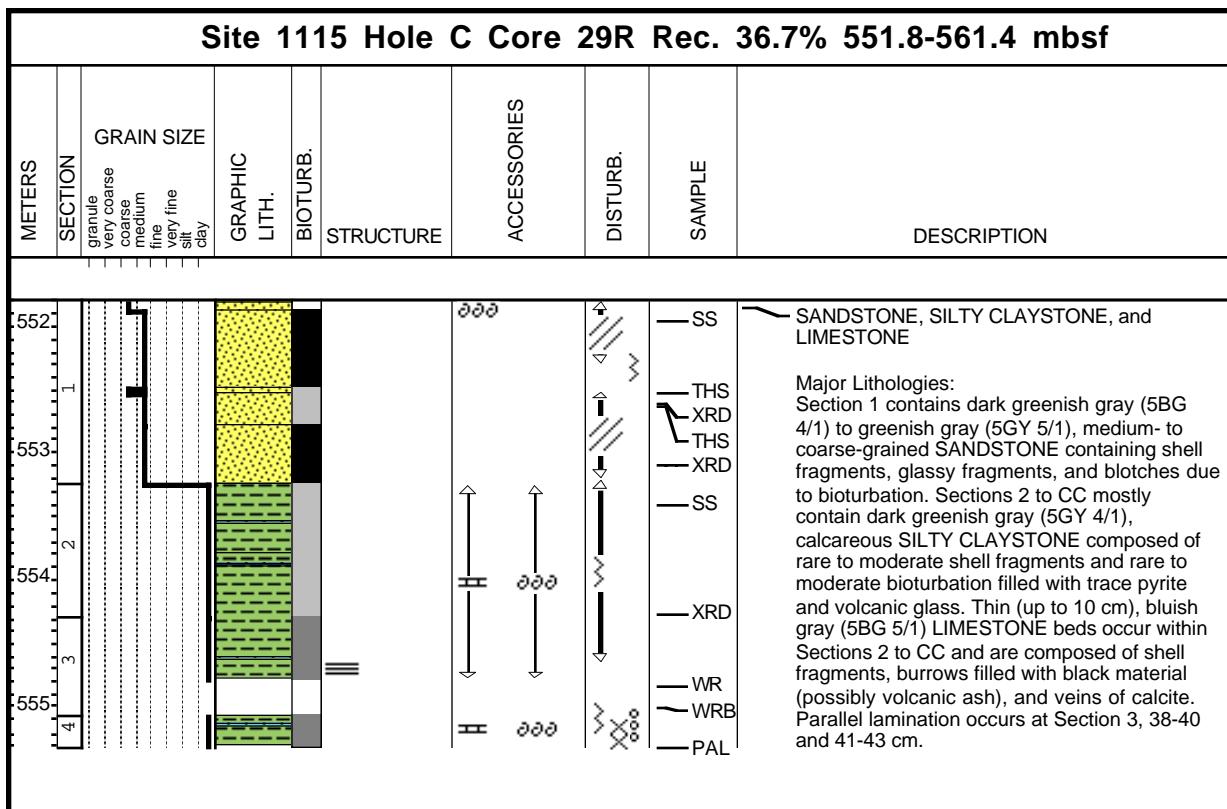
Site 1115 Hole C Core 27R Rec. 6.6% 532.6-542.2 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	Bioturb.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
533	1	granule very coarse coarse medium fine very fine silt clay					XRD SS PAL		SILTY SAND

Major Lithologies:
Dark greenish gray (5GY 4/1), partly calcareous SILTY SAND rich in volcanioclastic material. Abundant shell fragments occur throughout.

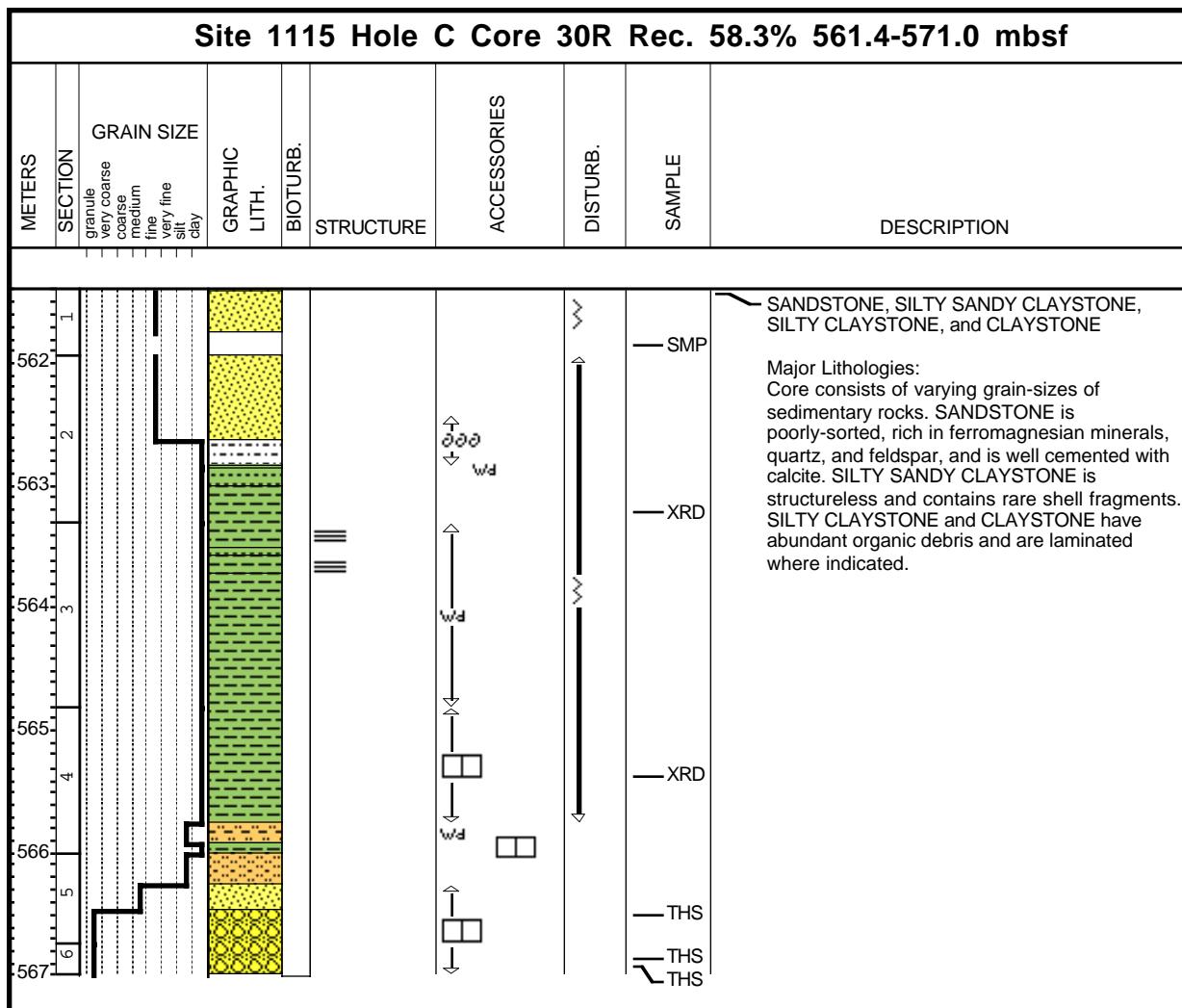
Core Photo

Site 1115 Hole C Core 28R Rec. 9.9% 542.2-551.8 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	Bioturb.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
543	1	granule very coarse coarse medium fine very fine clay							SANDSTONE, SAND and PACKSTONE? Major Lithologies: Core is composed of dark greenish gray (5GY 4/1) moderately indurated SANDSTONE and SAND. Detrital grains are mainly quartz and feldspar. Rare lithified angular fragments of medium- to fine-grained SANDSTONE are present as clasts between 55-66 cm. Section 1, 66-81 cm is a well lithified, highly calcareous SANDSTONE (PACKSTONE?). Common to abundant shell fragments to complete valves occur throughout.

Core Photo



Core Photo

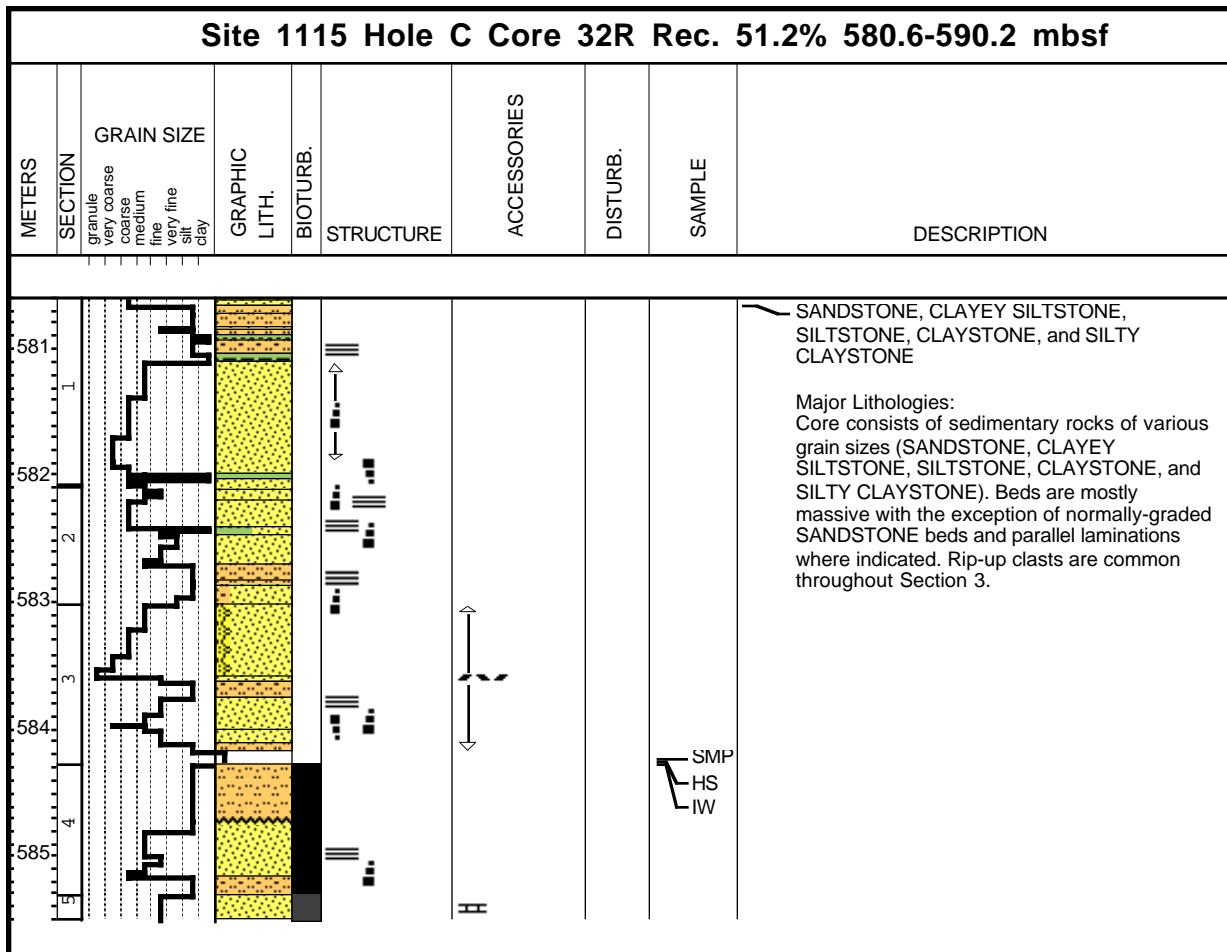


Core Photo

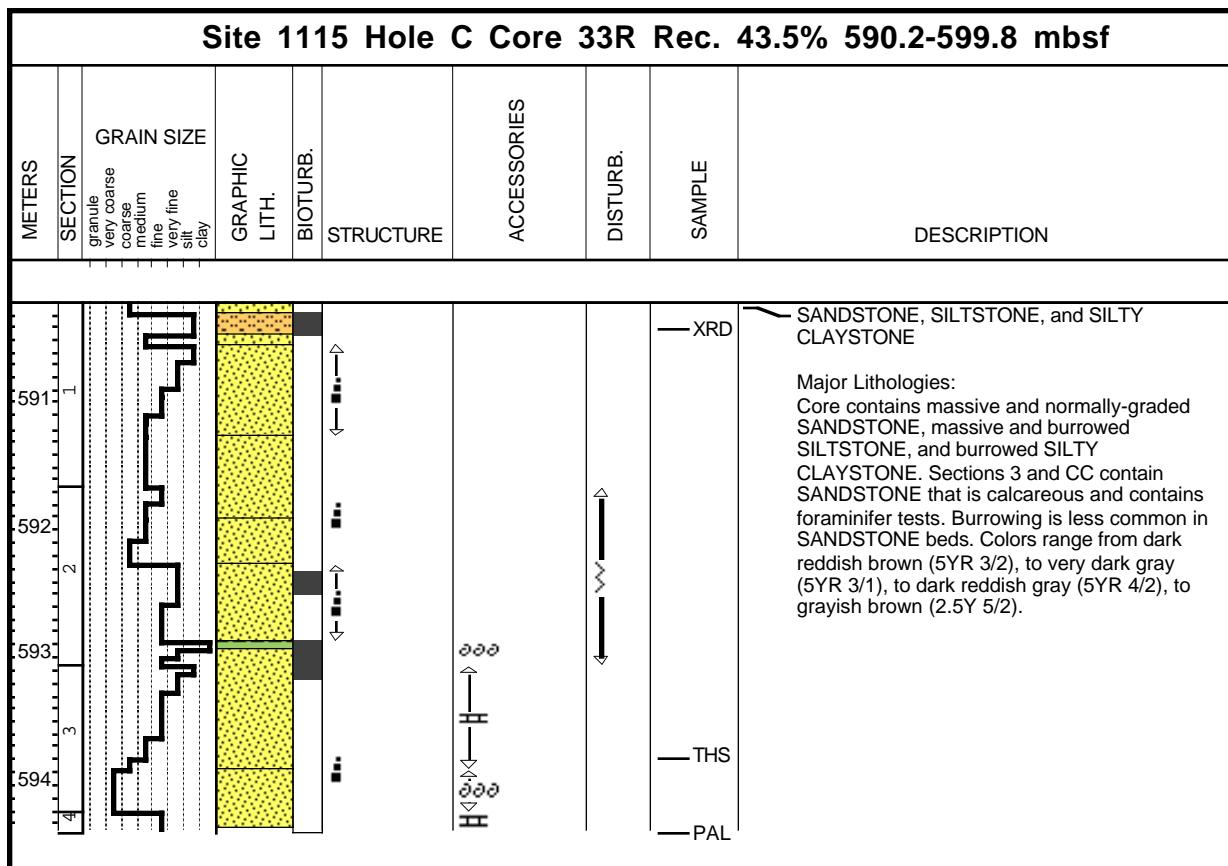
Site 1115 Hole C Core 31R Rec. 13.3% 571.0-580.6 mbsf									
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
		granule very coarse coarse medium fine very fine silt clay							CALCAREOUS SILTSTONE, CONGLOMERATE, and CALCAREOUS SANDSTONE

Major Lithologies:
Core consists of various lithologies that are calcite cemented and poorly sorted.
CONGLOMERATE is matrix-supported and contains 2X4 cm clasts of igneous basalt or dolerite and sedimentary rocks within a fine-grained calcareous matrix. Colors are: CALCAREOUS SILTSTONE-light gray (10YR 7/1), CALCAREOUS SANDSTONE-dark greenish gray (5BG 5/1-4/1), and CONGLOMERATE-light to dark gray.

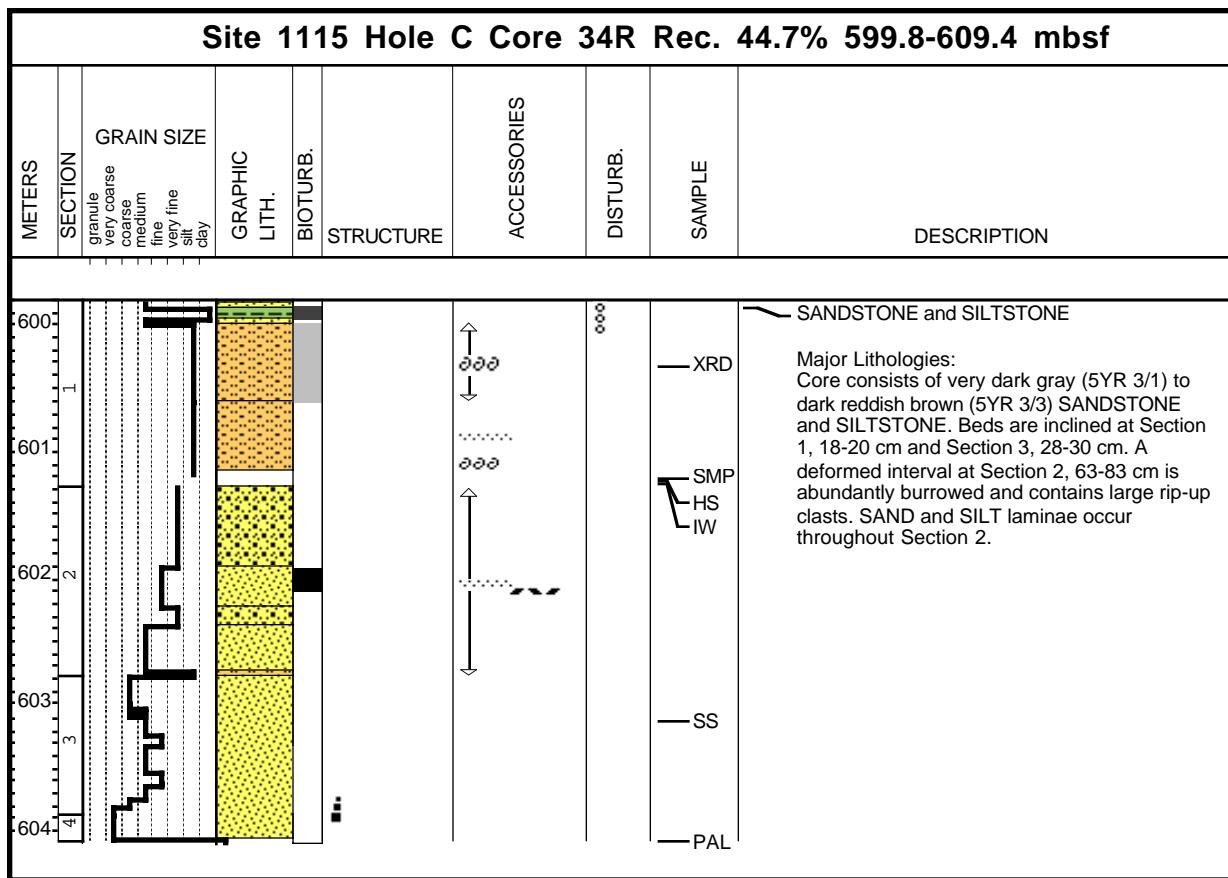
Core Photo



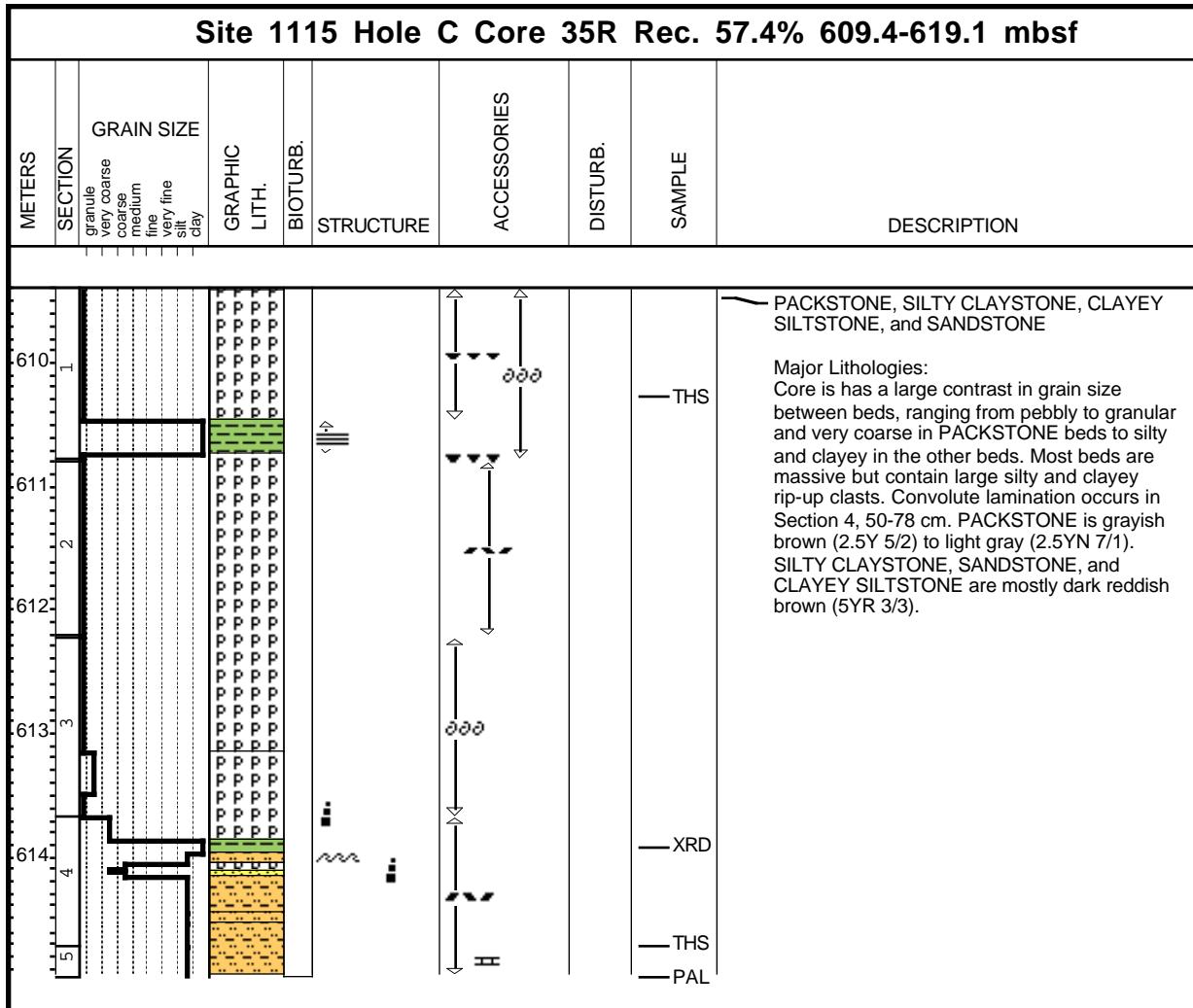
Core Photo



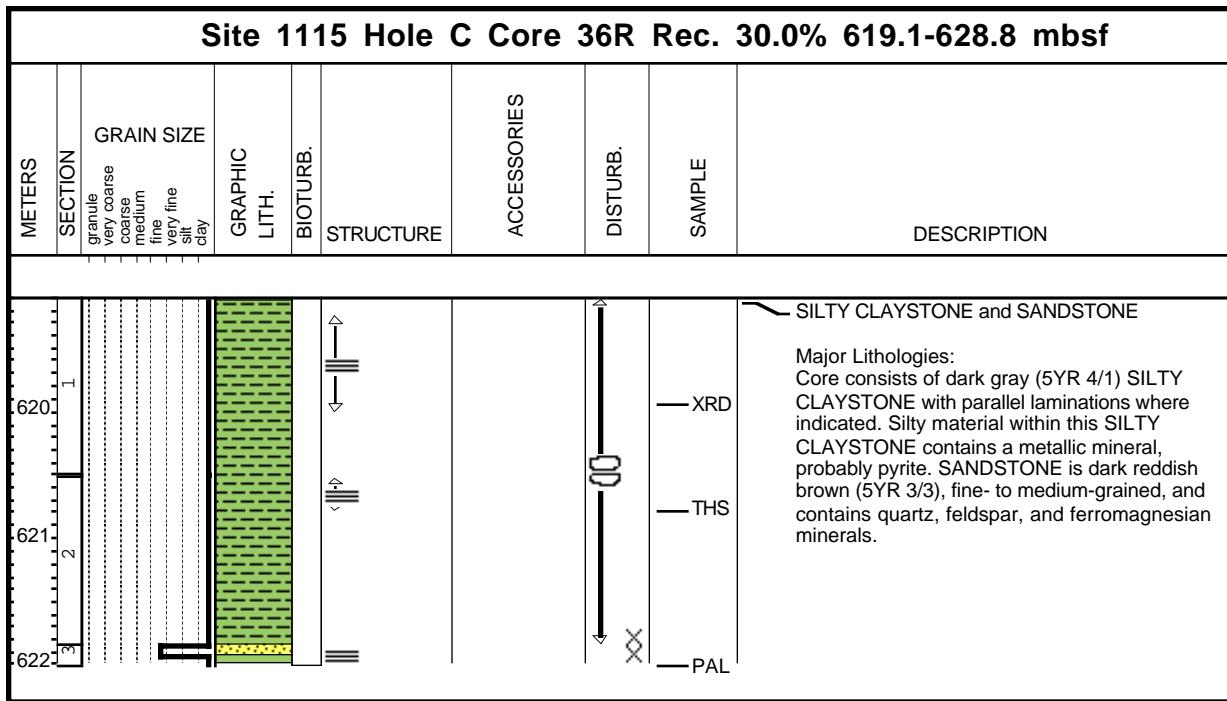
Core Photo



Core Photo



Core Photo



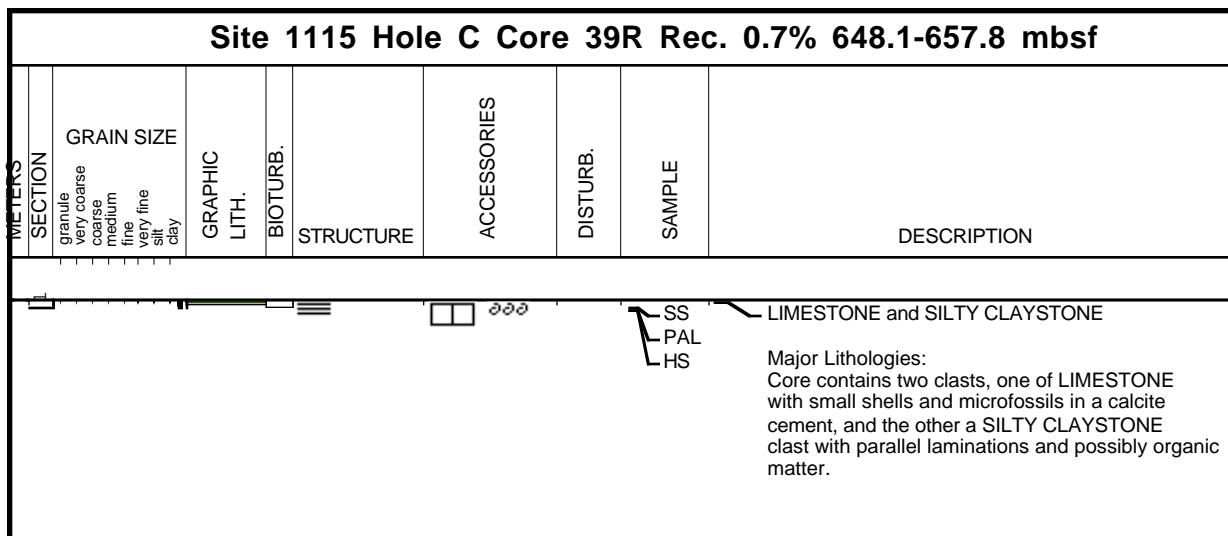
Core Photo

Site 1115 Hole C Core 37R Rec. 2.1% 628.8-638.4 mbsf								
METERS	SECTION	GRAIN SIZE	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	SAMPLE	DESCRIPTION
629.1		granule very coarse coarse medium fine very fine clay				X	SS PAL	SILTSTONE, CONGLOMERATE, LIMESTONE, and SILTY CLAYSTONE

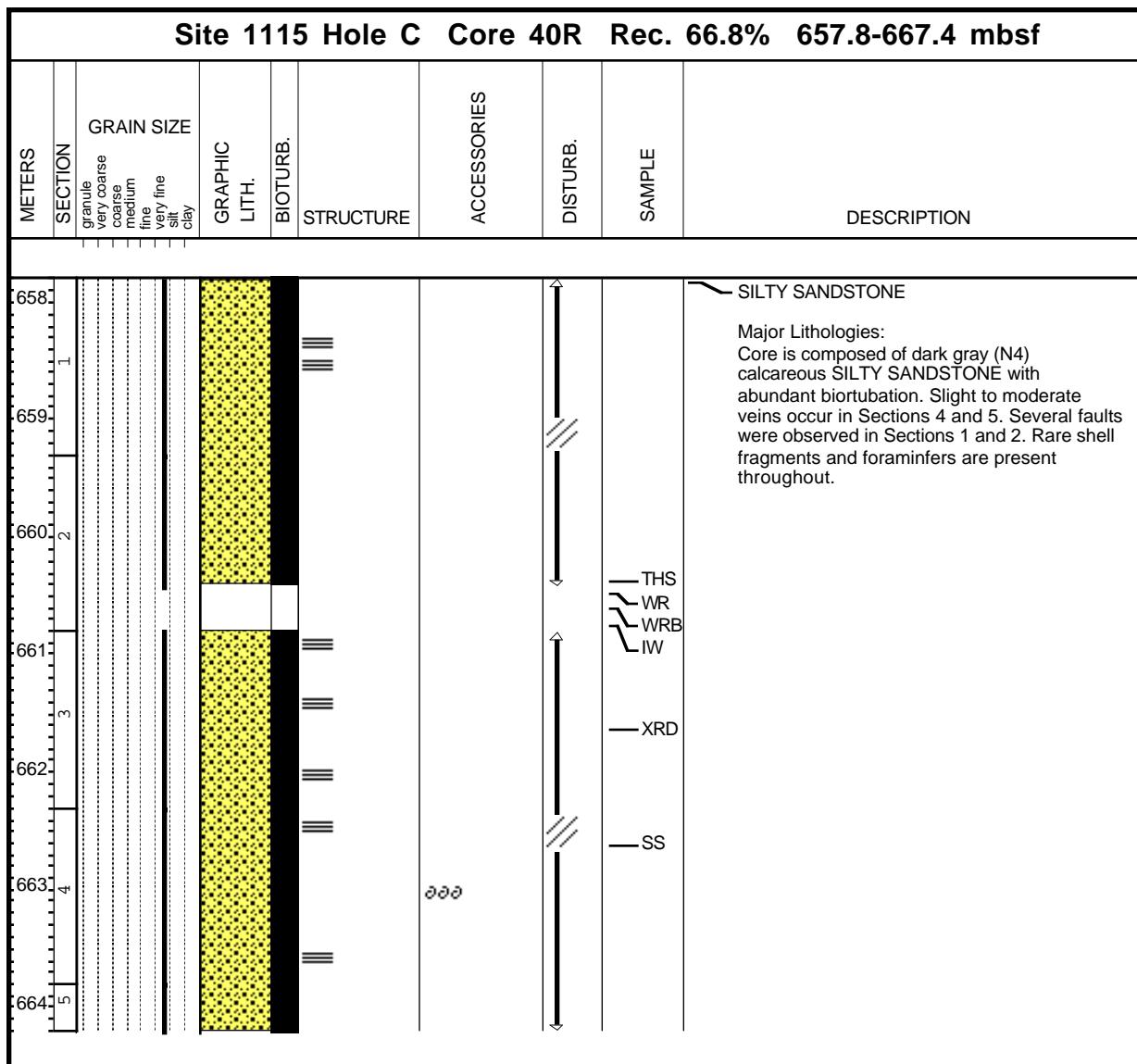
Major Lithology:
Core Catcher consists of poorly-sorted
SILTSTONE at 0-3 cm, a CONGLOMERATE
clast containing angular and rounded (most)
clasts of SILTSTONE and LIMESTONE at 3-6
cm, and SILTY CLAYSTONE drilling breccia
from 6-17 cm.

1115C-38R NO RECOVERY

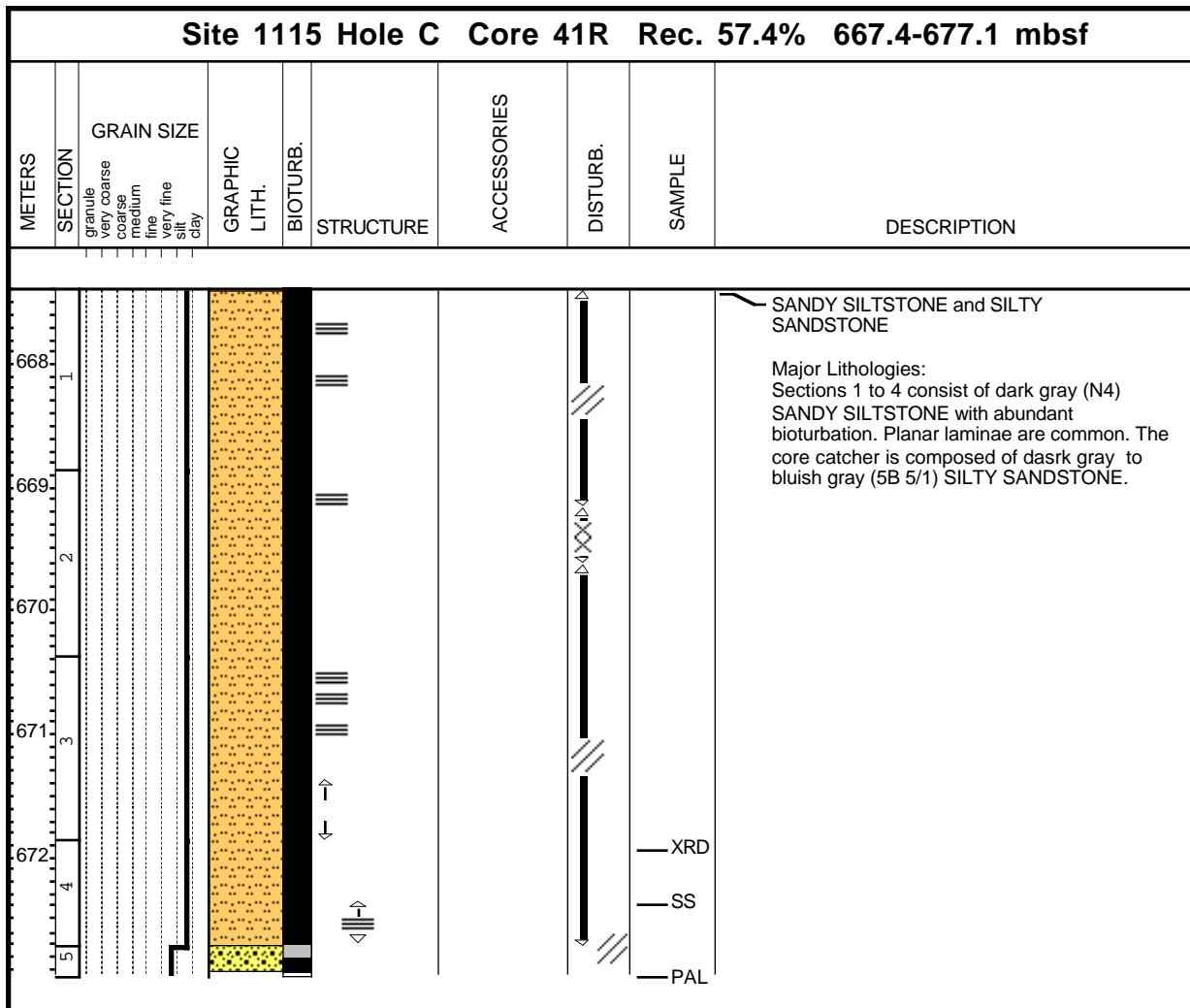
Core Photo



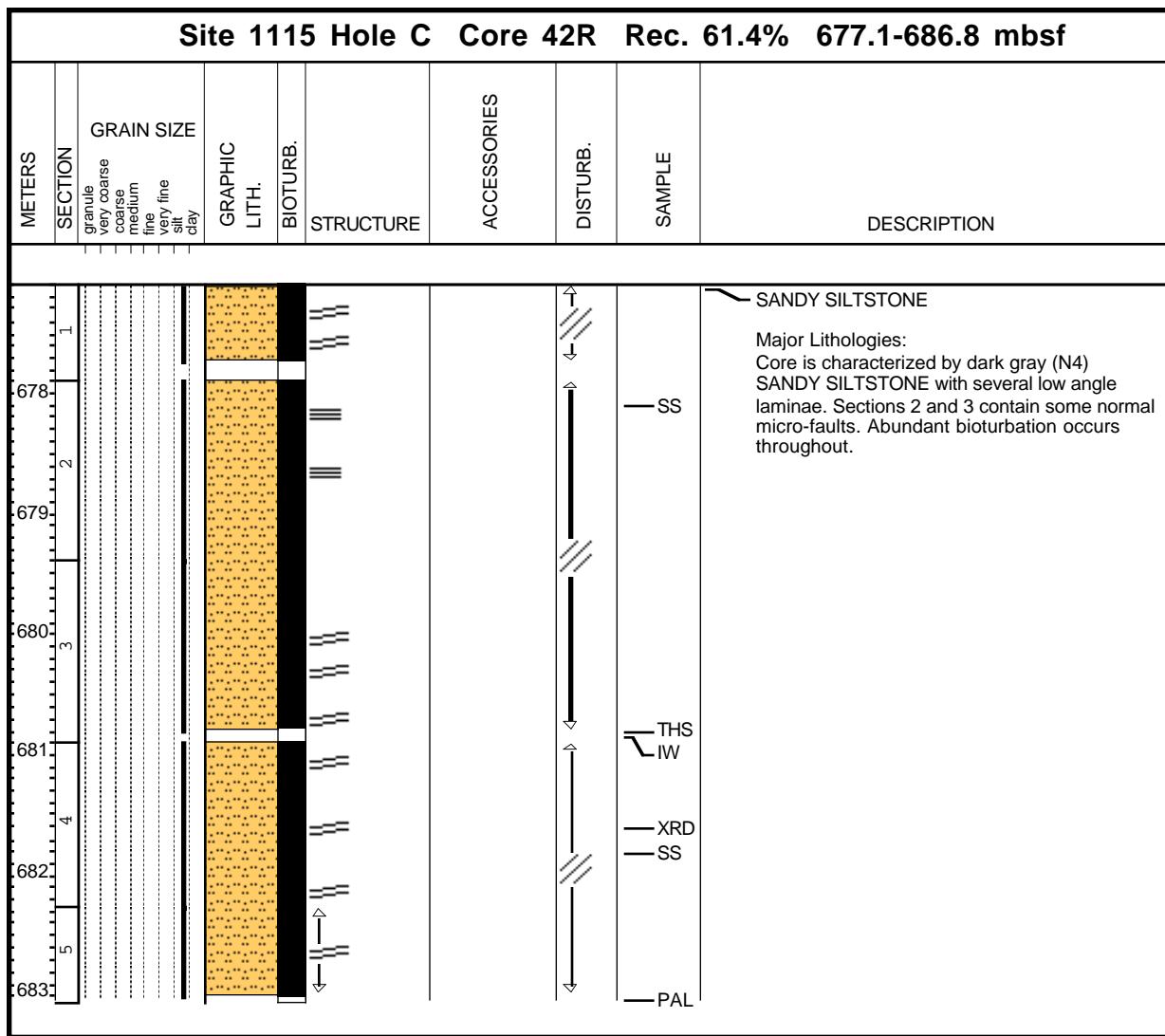
Core Photo



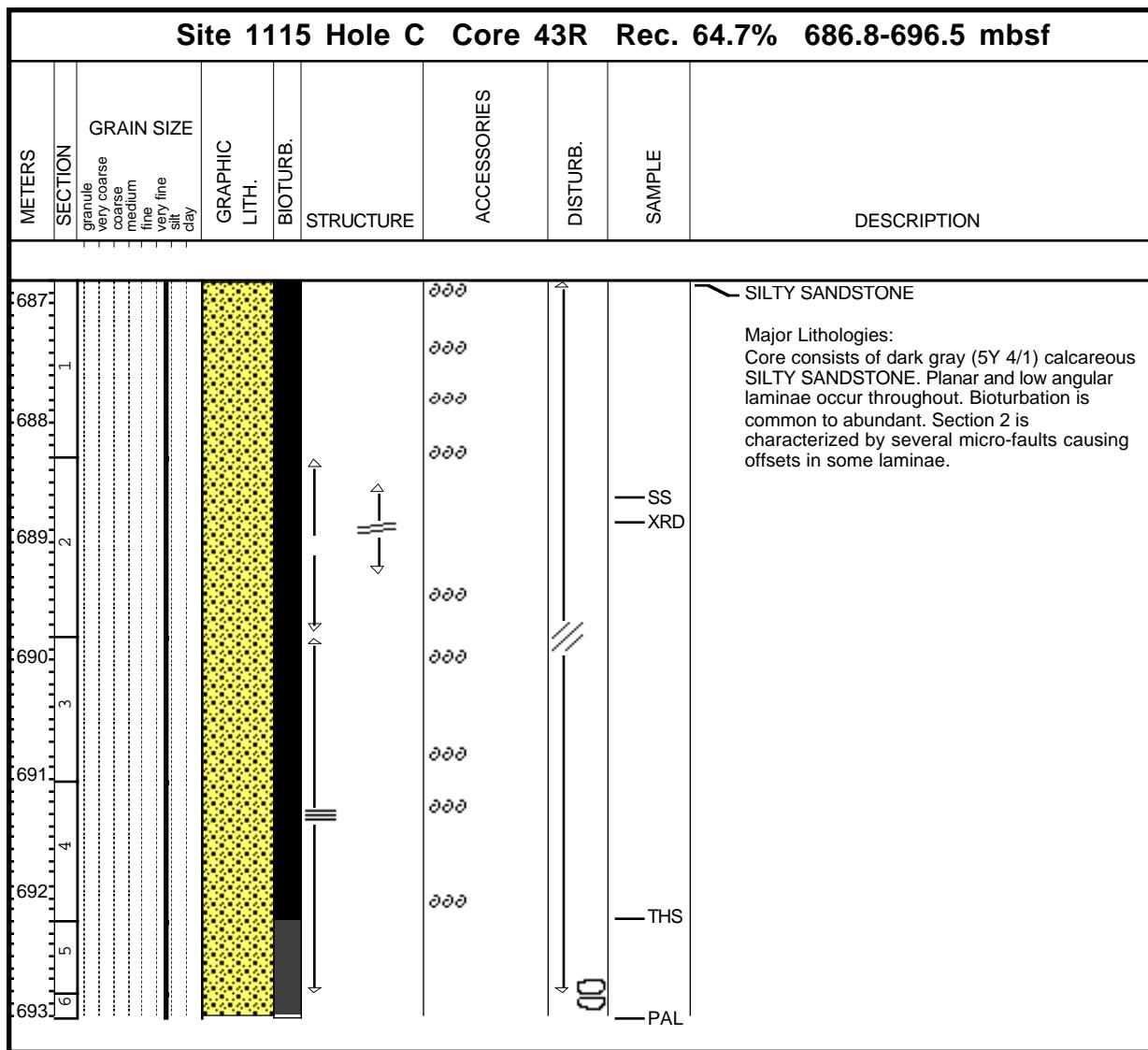
Core Photo



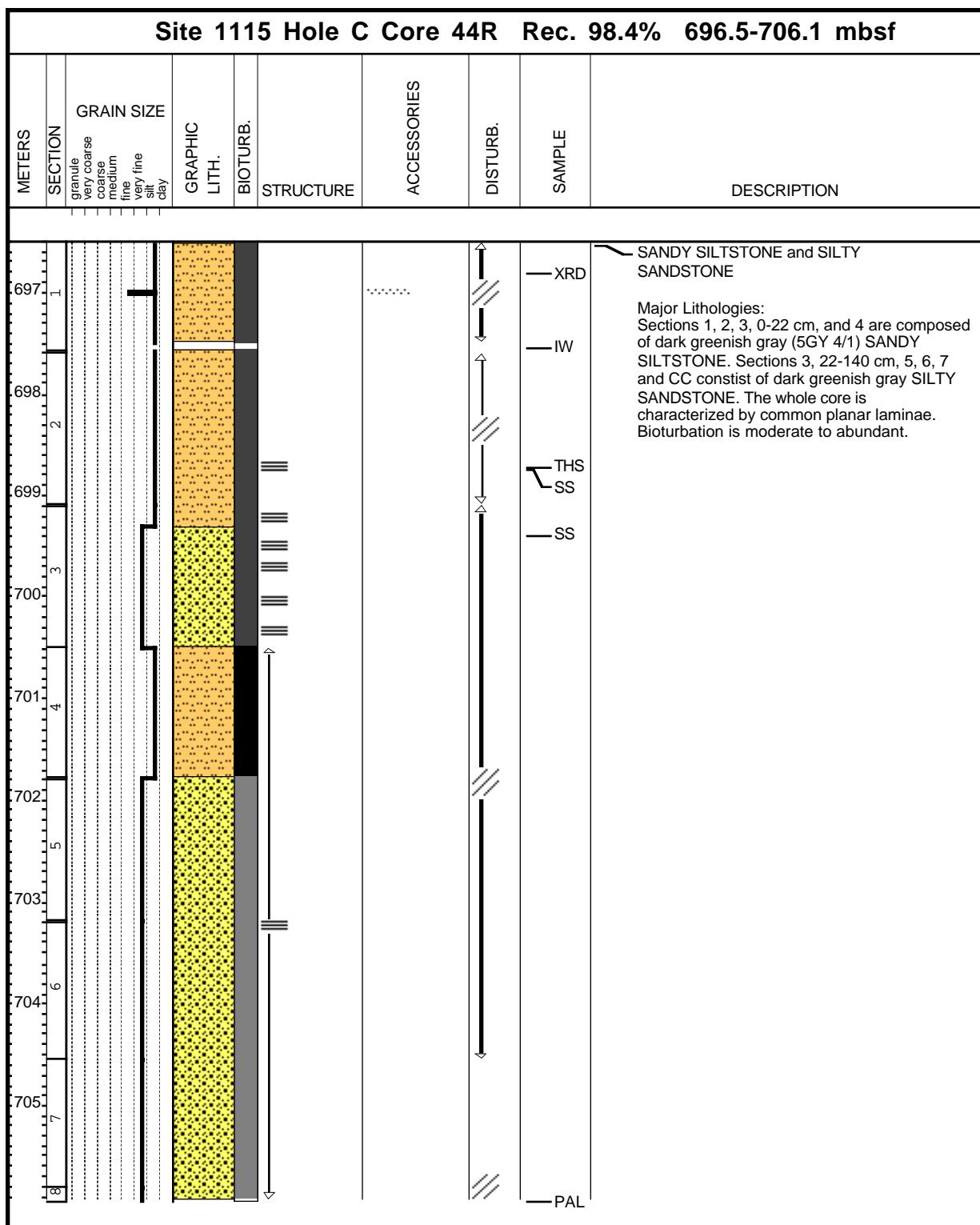
Core Photo



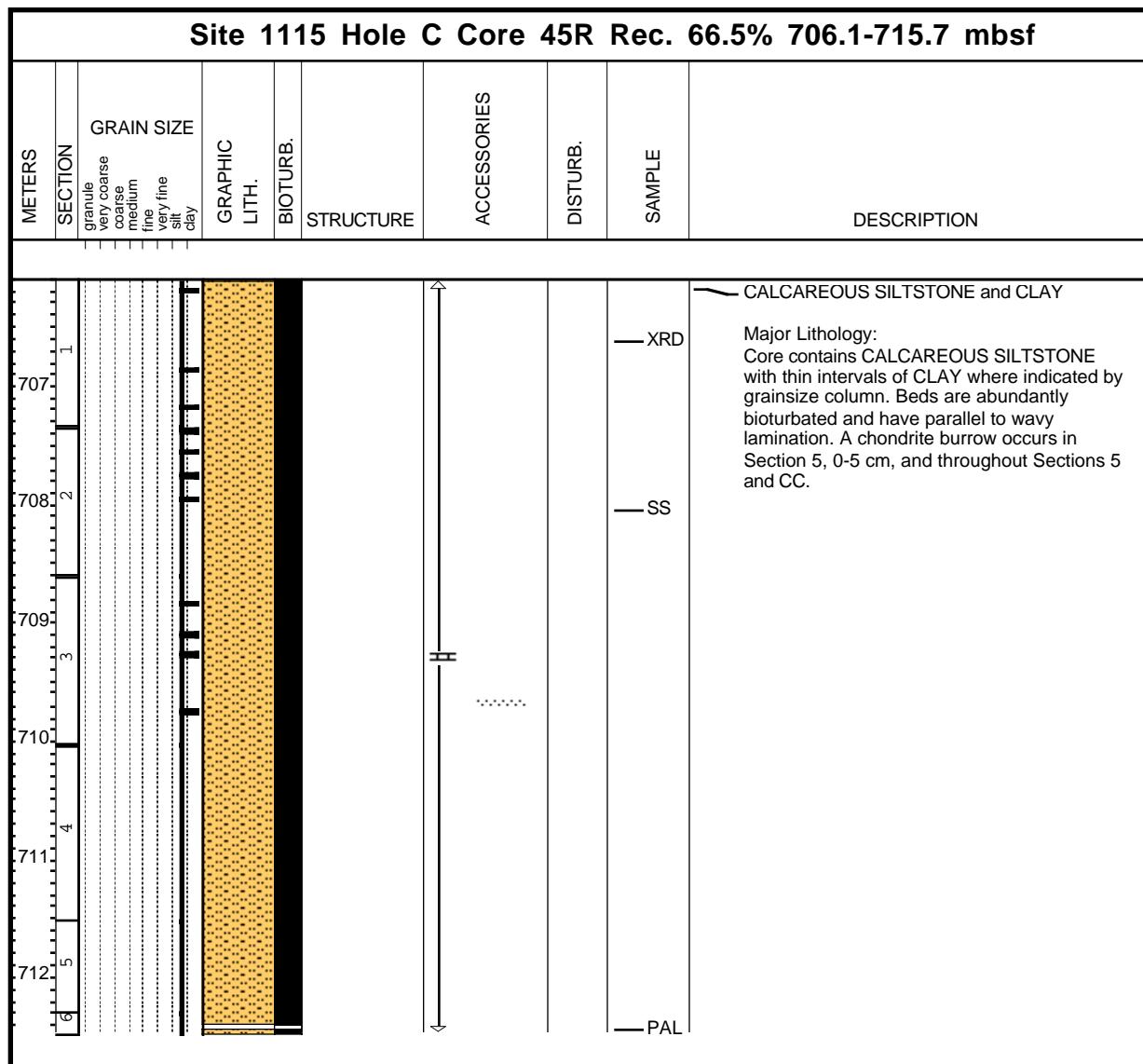
Core Photo



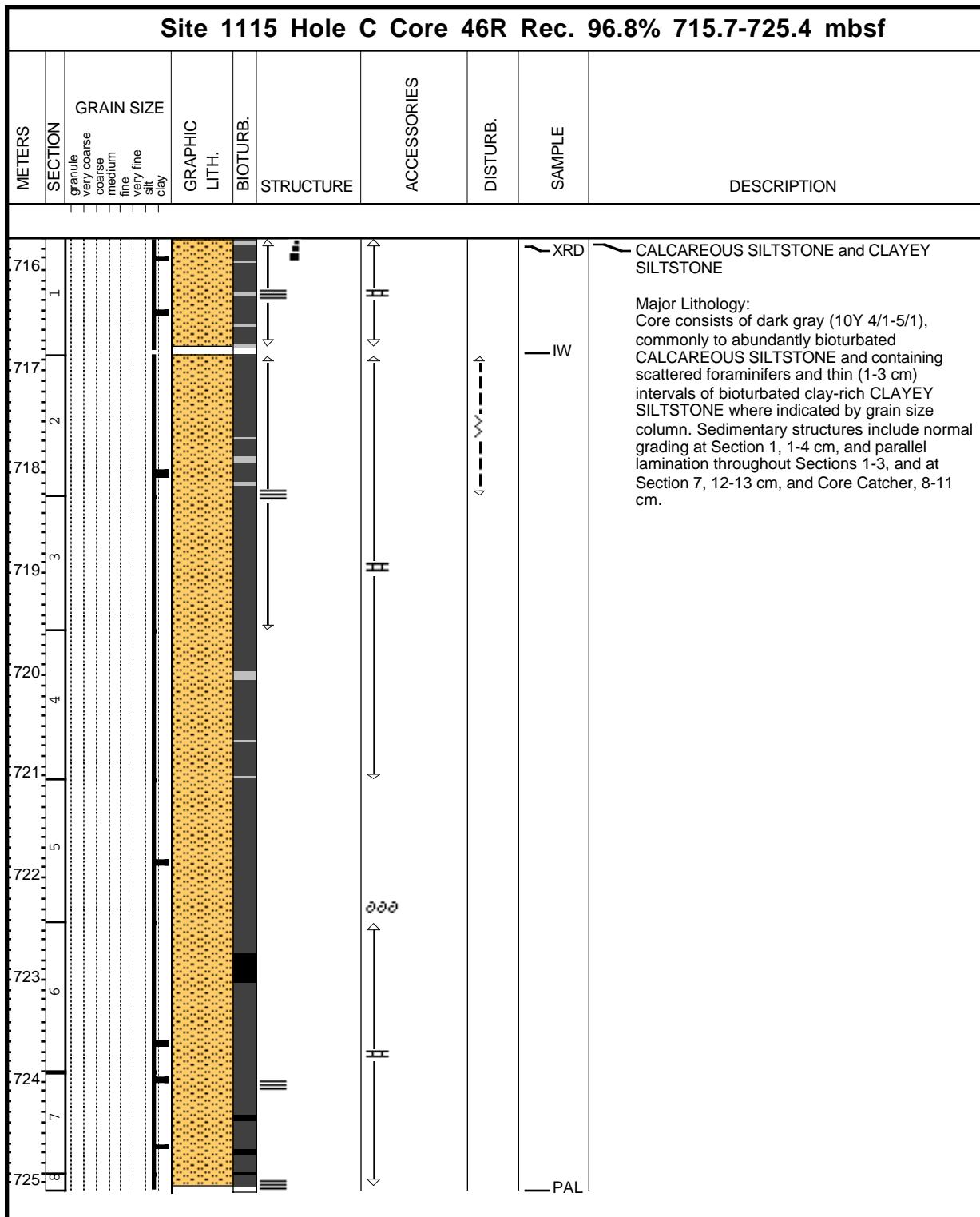
Core Photo



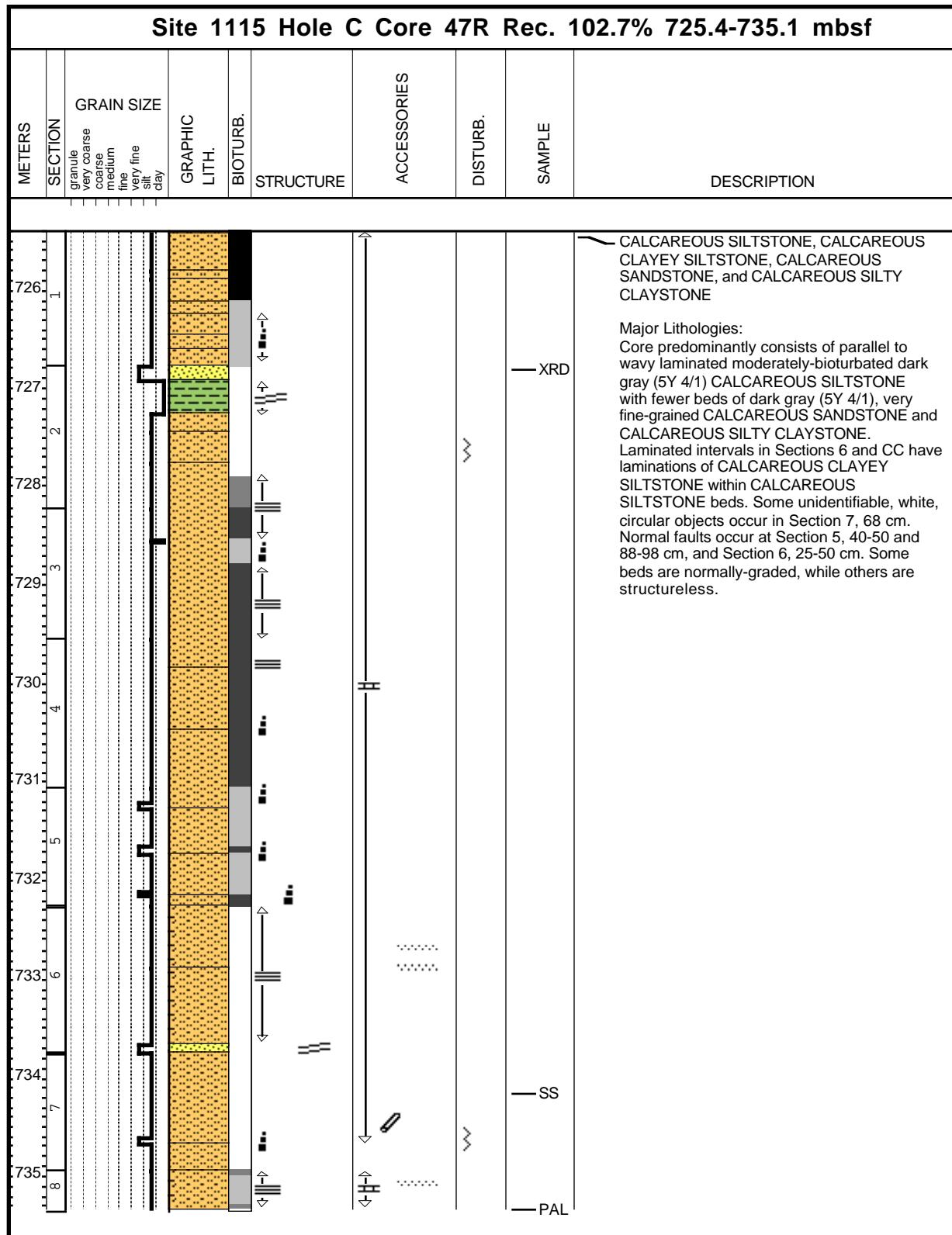
Core Photo



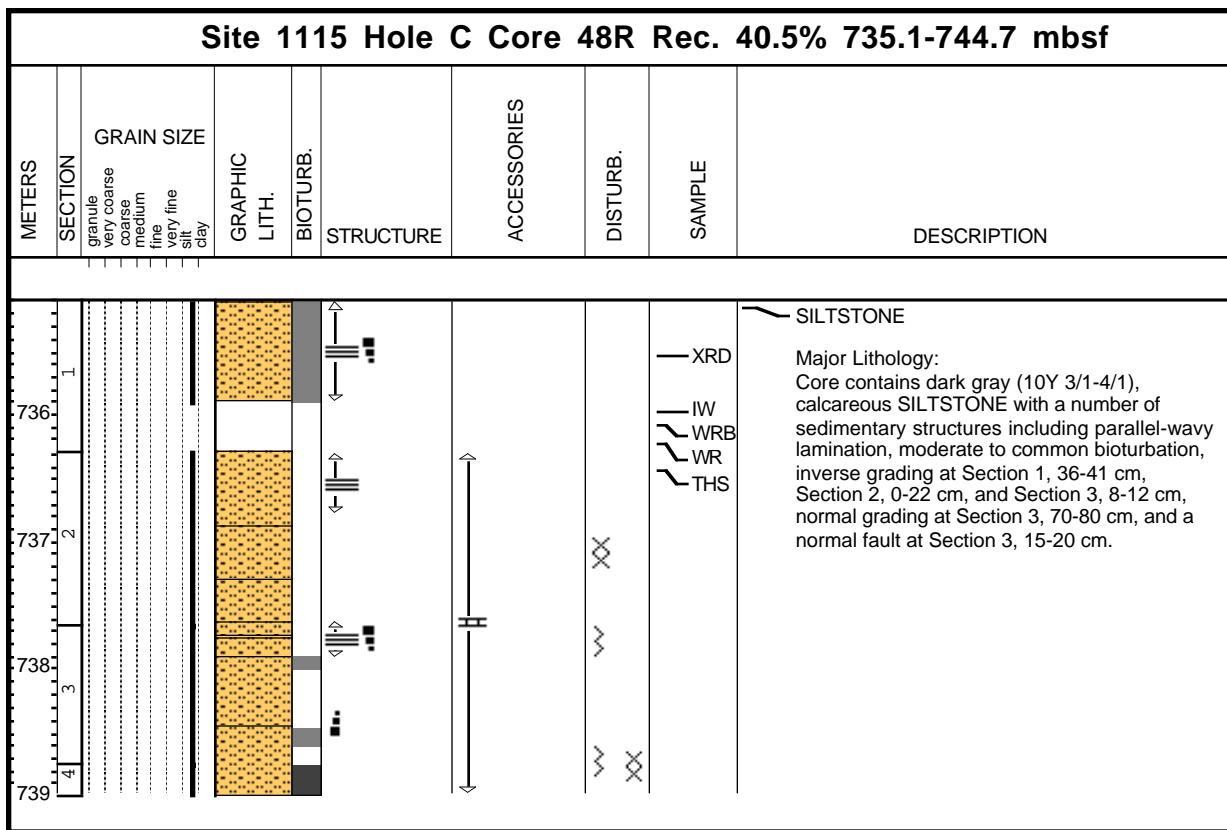
Core Photo



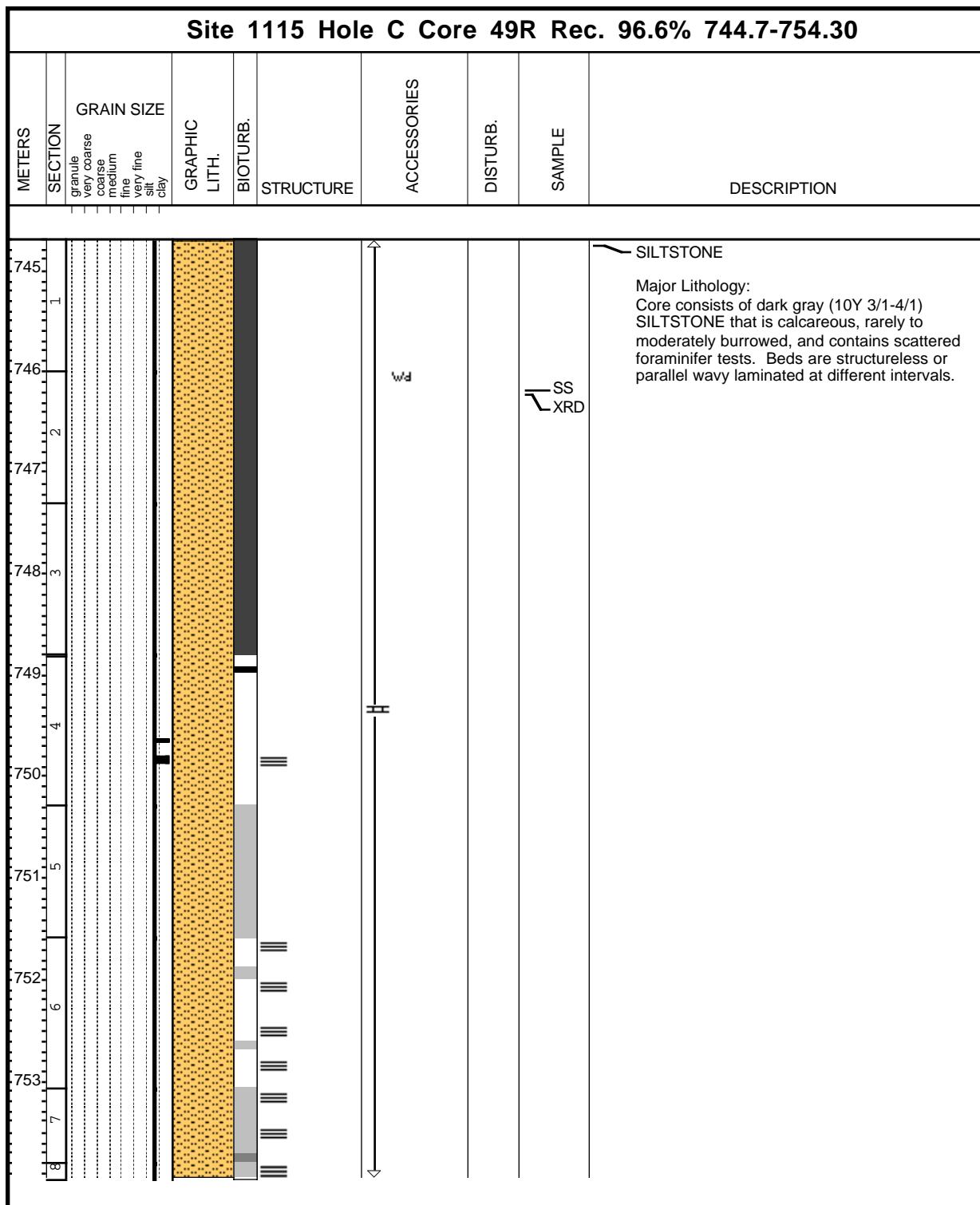
Core Photo



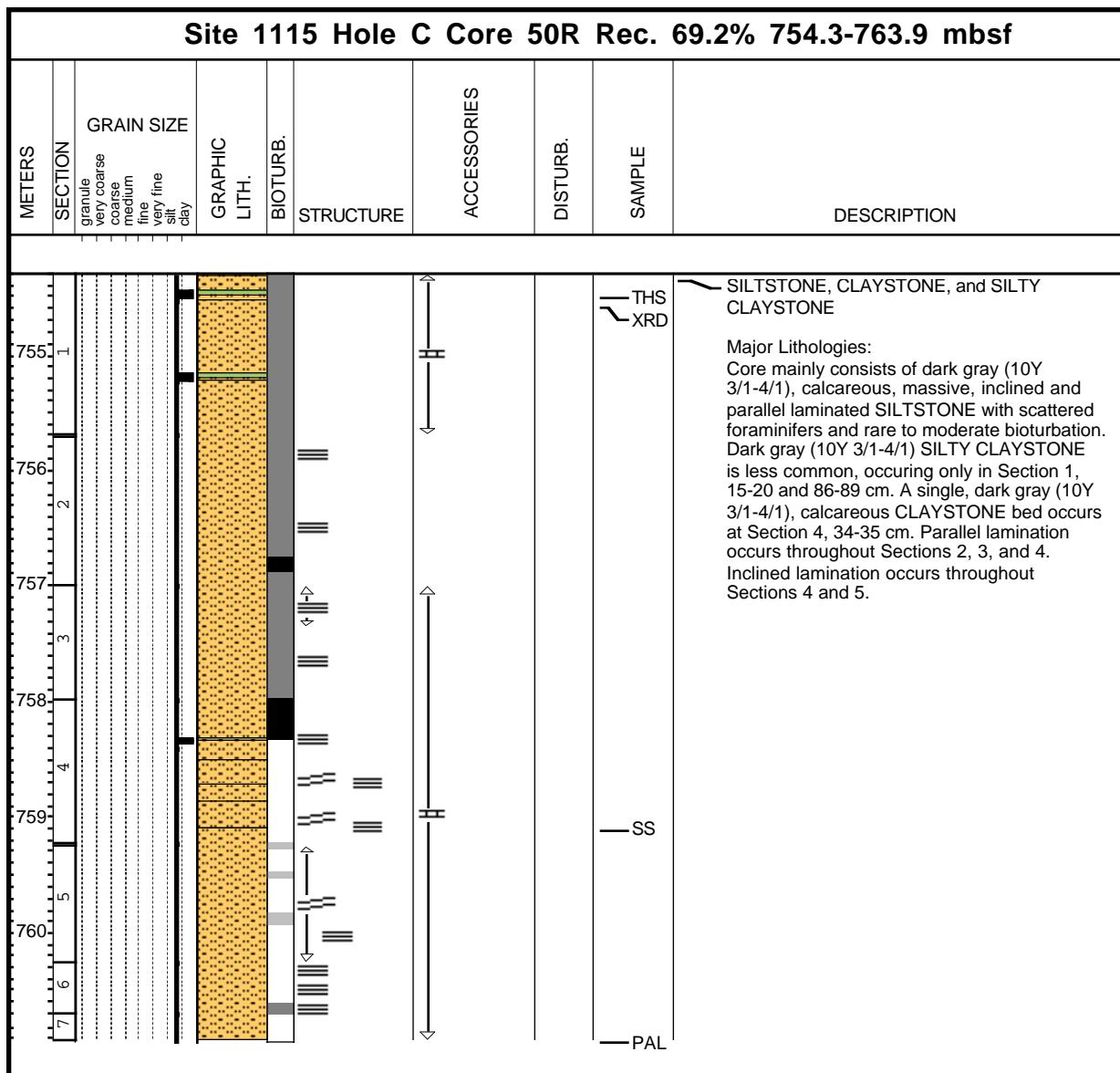
Core Photo



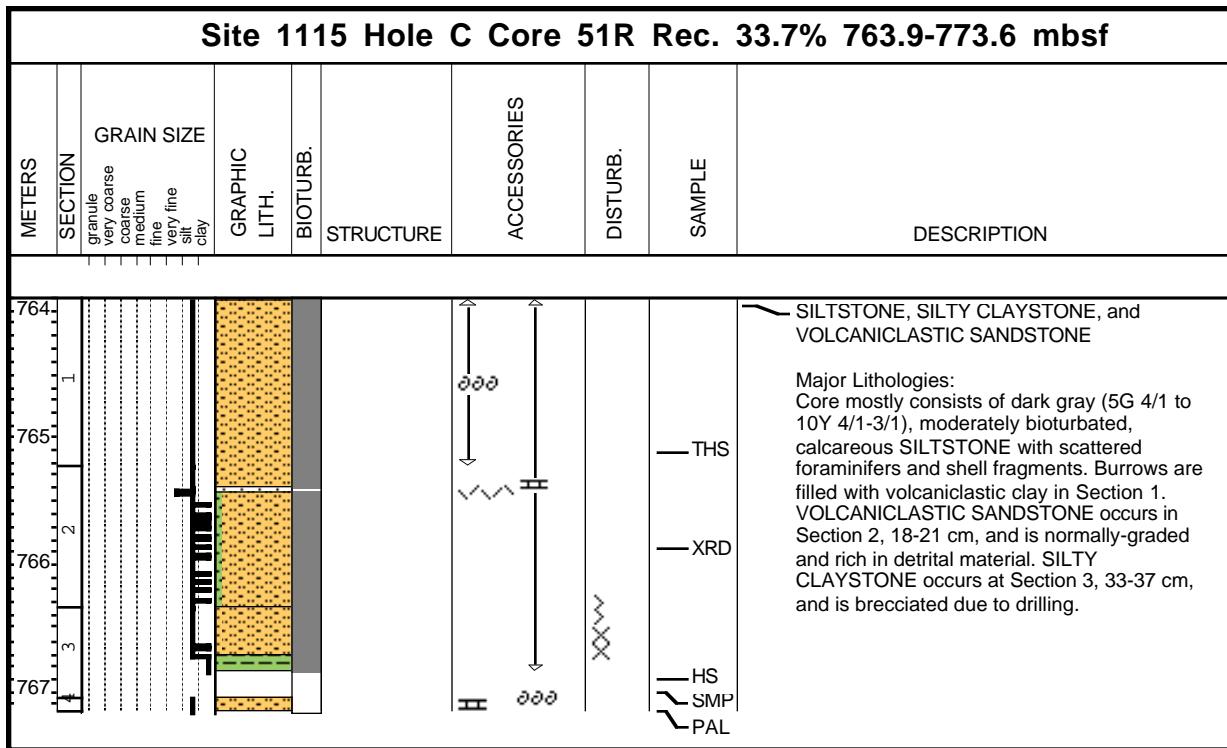
Core Photo



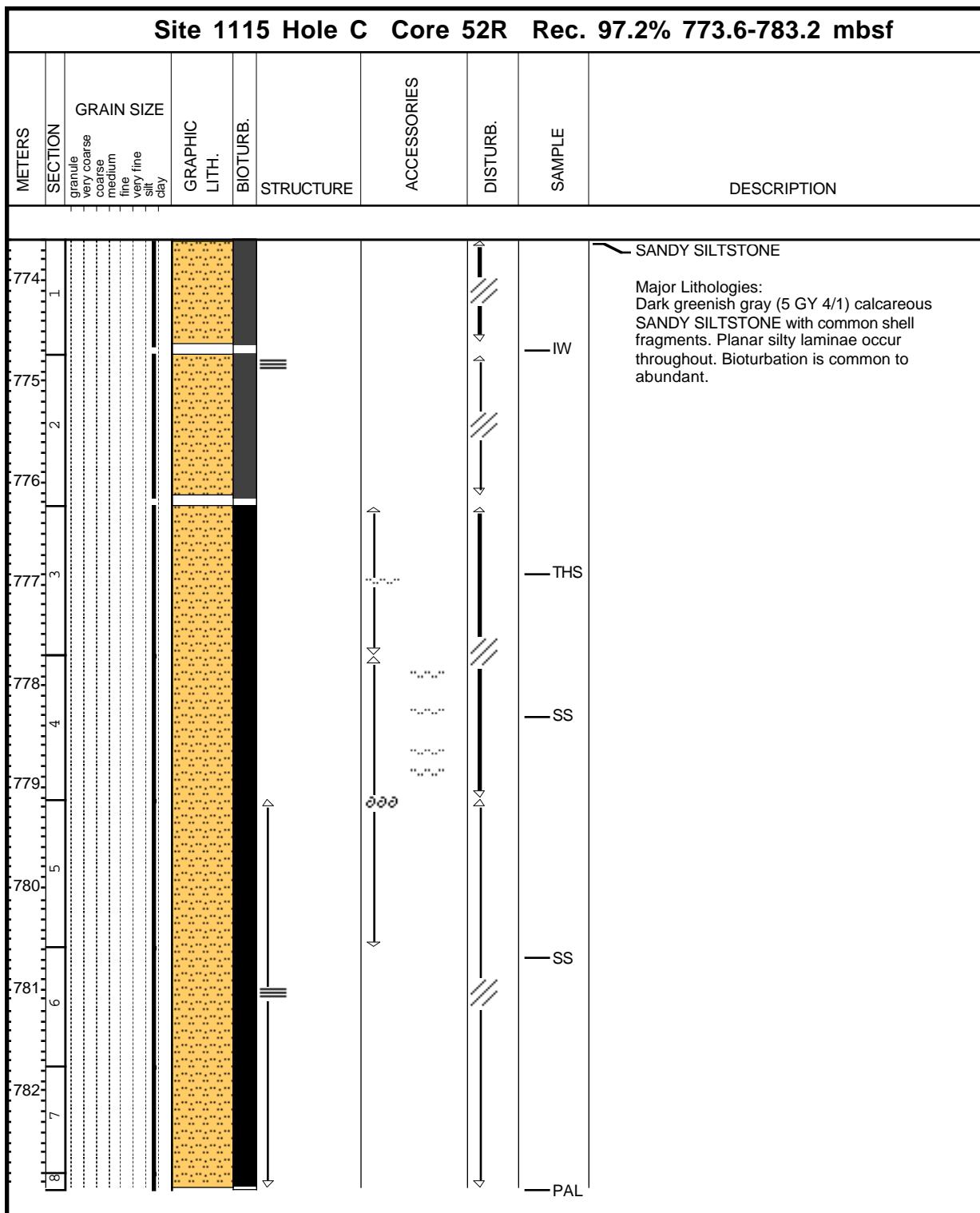
Core Photo



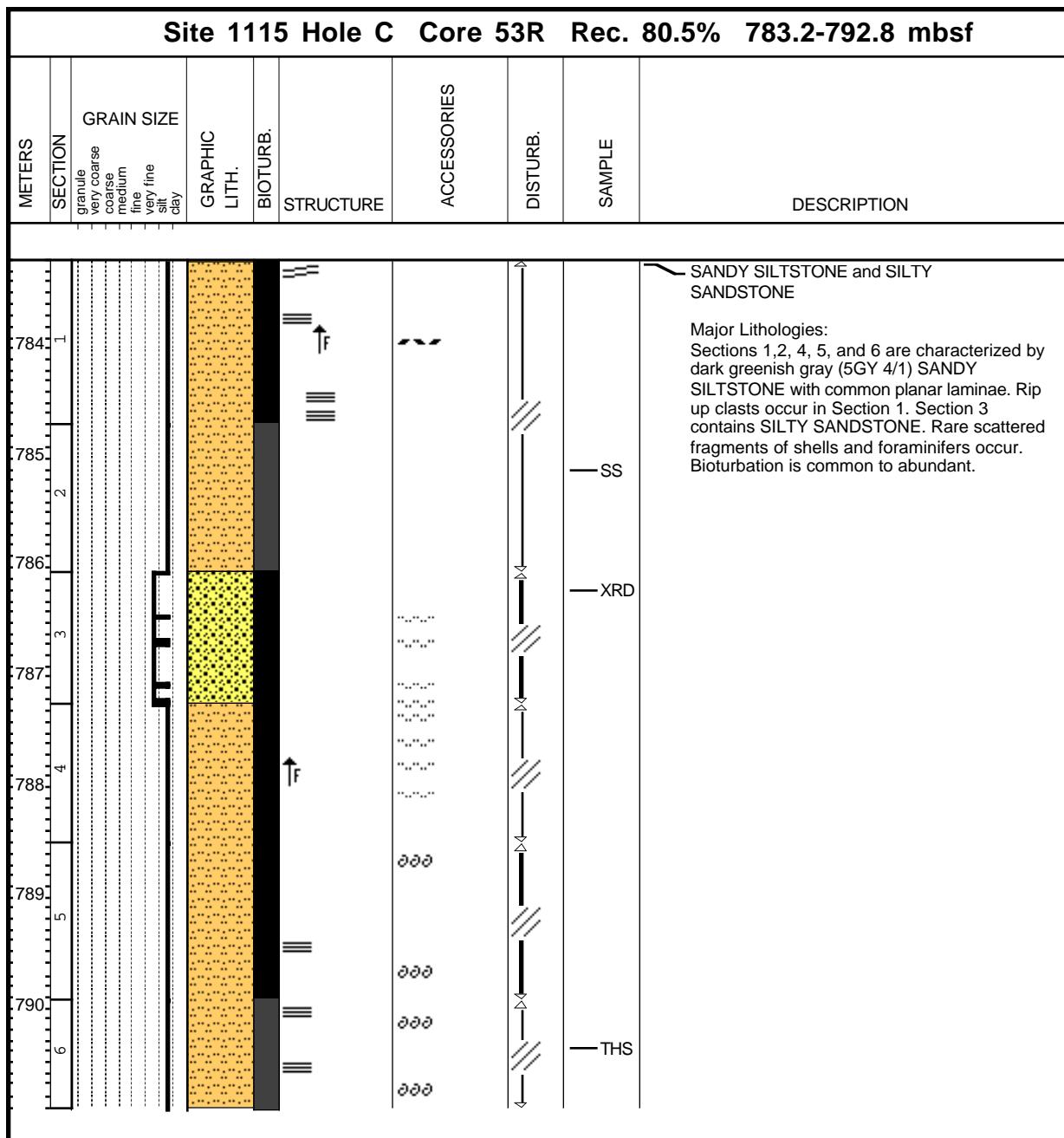
Core Photo



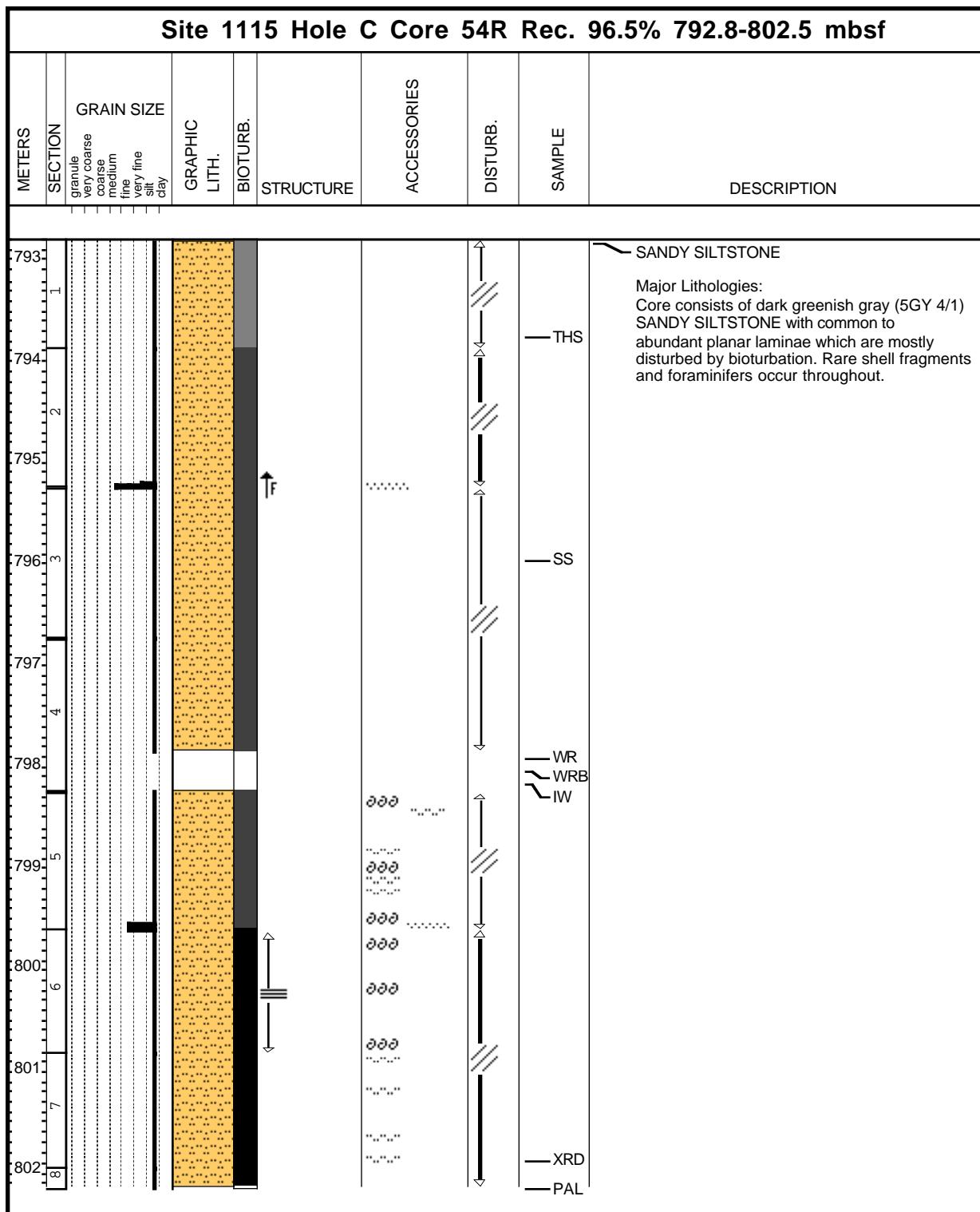
Core Photo



Core Photo



Core Photo



CORE DESCRIPTIONS SMEAR SLIDES, SITE 1115

Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Siliciclastic and volcaniclastic composition												Biogenic composition	Comments																
					Sand	Silt	Clay	Quartz	Feldspar	Plagioclase	Muscovite	Biotite	Glaucite	Amphibole	Pyroxene	Rock fragments (sedimentary)	Rock fragments (metamorphic)	Rock fragments (basaltic)	Volcanic glass (brown)	Volcanic glass (colorless)	Accessory minerals	Calcite	Dolomite	Opaque (oxide)	Fe-oxides	Clinoptilolite	Philipsite	Other	Clay	Nannofossils	Foraminifers	Diatoms	Radiolarians	Sponge spicules
180-1115A-																																		
1H-1, 10	0.10	LAC	D	c r a	r r											c r												a c	r r			c	Bioclast-bearing nannofossil ooze	
1H-3, 40	1.90	LAC	D	c c a	r r r											r											a c	r			c	Nannofossil ooze		
1H-4, 92	3.92	AR	M	c a r	c r											r a											c r					Volcanic ash		
1H-4, 95.5	3.955	AR	M	a c r	c r											r a											c r					Glass-rich fine-grained sand		
1H-4, 97.5	3.975	LAC	M	a c	r r											a r											r					Volcanic ash		
1H-4, 100.5	4.005	LAC	M	c c	r r r											a											r					Volcanic ash		
1H-4, 102	4.02	TS	M	a c	r r											a											c					Volcanic ash		
1H-4, 103	4.03	TS	M	a c	r r											a											a r					Volcanic ash		
1H-4, 105	4.05	LAC	M	a a	r r											a											r					Volcanic ash		
1H-CC, 3	4.23	LAC	D	c c a	r r											c											a c	r			r	Nannofossil ooze		
1H-CC, 10	4.30	TS	D	c c c	r r											r	r										c a c	r				Foraminifer-rich silty clay, nannofossil ooze		
180-1115B-																																		
1H-1, 123	1.23	TS	D	r c c	r r											r	r										c	r	r			Nannofossil ooze		
1H-3, 128	4.28	AR	M	c a c	r r r											r	c	r									a r	r				Calcareous silt		
1H-4, 18	4.68	AR	M	c a c	c r											r a	r										r r					Volcanic ash		
2H-1, 10	7.30	AR	D	c c a	r r											a	r										a a c	c				Nannofossil ooze, silt bearing		
2H-1, 20	7.40	AR	M	a c r	r r											r	a										a r r	r				Volcanic ash		
2H-2, 10	8.80	TS	M	c c r	r r											a	r										a r r	r				Volcanic ash		
2H-3, 21	10.41	AR	M	c a r	r r											r	a										r r					Volcanic ash		
2H-4, 19	11.89	TS	M	c c r	r r											a											a r r	r				Volcanic ash		
2H-4, 22	11.92	TS	M	a c r	r r											a	r										r r					Volcanic ash		
3H-1, 54	17.24	AR	D	r c a	r											r	r										a a c	r r				Calcareous silty clay		
4H-3, 48	29.68	AR	M	r c a	r											r	r										a a c	r r				Silty clay		
4H-5, 54	32.74	AR	M	c c a	r											r	r r										c c	r r				Silt		
4H-6, 54	34.24	AR	M	c a	c r r											r c	r		r								r r					Silt with glass		
4H-6, 55	34.25	AR	M	a c	r r r											a											r c	r				Volcanic ash		
6H-7, 40	54.60	AR	M	r a c	r r											a											a					Calcareous silt, glass rich		
7H-4, 51	59.71	TS	M	r c a	r r											r	a		r								c a c	r				Nannofossil-rich silty clay		
7H-6, 22.5	62425	AR	M	r a c	r r											r	a	r									r r					Glass-rich silt		
8H-1, 59	64.79	TS	M	r c a	r r											r	r	r									c c r					Calcareous clay		
8H-1, 79	64.99	TS	M	c a	r r											r	r	r									c a c	r				Clay-rich nannofossil ooze		
9H-4, 40	78.60	AR	M	c c c	r r											r	r	r									c c c	r				Foraminifer-bearing nannofossil-rich silty clay		
10H-3, 66	86.86	TS	D	r c c	r r											r	r	c									c a r	r				Nannofossil-rich silty clay		
10H-4, 52	88.22	AR	M	a c	c r											r	c c										c a r	r				Fine sand with glass		
10H-4, 61	88.31	AR	M	r c a	c r											a	r		r								c a c	r				Volcanic ash		
11H-5, 75	99.45	TS	D	r c c	r r r											r	r	c									c a c	r				Nannofossil-rich silty clay		
12H-1, 124	103.44	TS	M	r c c	r r											r		a									c					Nannofossil-rich silty clay		
12H-4, 83	107.53	TS	D	c c c	r r											r	c										c a c	r				Nannofossil-rich silty clay		
14H-3, 90	125.10	TS	D	r c a	r r											r	r	r									c a r	r				Nannofossil-rich silty clay		
15H-4, 70	135.90	TS	D	r c a	r r											r	r	r									c a c	r				Nannofossil-rich silty clay		
16H-4, 100	145.70	AR	D	r c a	r											r	r	r									a a r	r				Nannofossil silty clay		
17H-4, 62	154.82	AR	D	r c a	r r											r	r	r									a r	r				Nannofossil silty clay		
17H-6, 42	157.62	AR	M	c a r	r r											a	r	r									r r					Volcanic ash		
18H-2, 46	161.16	AR	M	c c r	r r r											r r	r	r									r r					Volcaniclastic silt		
18H-4, 60	164.30	AR	D	r a	r r																						a a r					Calcareous clay		
19H-1, 65	169.35	AR	M	c r a	r r r												c										a a r					Nannofossil clay		
19H-5, 80	175.50	AR	D	c r a	r r r												r		r								a a c					Nannofossil silty clay		
19H-6, 115	177.35	AR	M	c a r	c r c	c										a	r	r									r r					Glass-rich volcanioclastic silt		
20H-5, 20	184.40	LAC	M	c r c	r c r	r r										r											r r					Volcaniclastic sand		
21H-3, 67	191.37	LAC	D	r c a	r r														r	r									a a r	r			r	Silty clay
21H-5, 24	193.94	LAC	D	c r c	r r r	r r													r										a a r	r			r	Volcaniclastic sand
22H-1, 77	197.97	LAC	M	a r c	r c r	r r r										r a			r									a a r	r				Nannofossil-rich silty clay	
22H-5, 67	203.81	TS	D	r c a	r r r	r r										r	r	r	r									c a r	r				Calcareous Clay	
23H-1, 70	207.40	TS	D	r c a	r r r	r r										a			r									c a r	r				Volcaniclastic sand	
23H-5, 10	212.80	LAC	M	a c r	r r r	r r										a												c r					Nannofossil-rich silty clay	

CORE DESCRIPTIONS SMEAR SLIDES, SITE 1115

Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Siliciclastic and volcaniclastic composition												Biogenic composition					Comments												
					Sand	Silt	Clay	Quartz	Feldspar	Plagioclase	Muscovite	Biotite	Glaucite	Amphibole	Pyroxene	Rock fragments (sedimentary)	Rock fragments (metamorphic)	Rock fragments (basaltic)	Volcanic glass (brown)	Volcanic glass (colorless)	Accessory minerals	Calcite	Dolomite	Opaque (oxide)	Opaque (sulfide)	Fe-oxides	Clinoptilolite	Philipsite	Other	Clay	Nannofossils	Foraminifers	Diatoms	Radiolarians
24X-2, 40	218.10	LAC	D	r c a	r r	r										r	r	r											a r	r		r		Nannofossil-rich silty clay
24X-6, 105	224.55	LAC	M	m a r c	r c	c c	c c									r													c					Volcaniclastic sand
25X-2, 67	227.97	TS	D	r c a	r r	r										r	r	r											c a r	r				Nannofossil-rich silty clay
26X-1, 43	235.83	TS	D	r c a	r r	r										r	r	c											c a r	r				Calcareous nannofossil-rich silty clay
26X-3, 109	239.49	TS	M	r a c	r r	r										a	r												c	r				Volcanic ash
26X-3, 112	239.52	TS	M	m a c r	c a	r										r	c	r											c	r				Medium-grained volcaniclastic sandstone
26X-4, 36	240.26	TS	D	r c c	r r	r										r	r	c											c a r	r				Calcareous nannofossil-rich silty clay
27X-1, 134	246.34	TS	M	r c c	r r	r										a	r	r											c r					Volcanic ash
27X-3, 80	248.80	TS	D	r c c	r r	r										r	r												c a r					Nannofossil-rich calcareous silty clay
28X-1, 80	255.40	TS	D	r c a	r r	r										r	r	c											c a r	r				Nannofossil-rich calcareous silty clay
29X-1, 26	264.56	AR	M	c c a	r r	r										r	r												a a r					Volcaniclastic silty clay
31X-1, 70	284.20	AR	D	r a c	r r	r										r	r	r											a r					Clay-rich silt
31X-6, 23	291.23	AR	M	c a c	r r	r										r	c												c r					Volcaniclastic sandy silt
180-1115C-																																		
2R-2, 75	295.05	AR	D	r a c	r r	r										r													a a r	r		r		Clay-rich silt
3R-1, 15	302.65	AR	D	r c a	r r	r										r													a a c	r				Silty clay
3R-2, 25	304.25	AR	D	c a c	r r	r										r r													r c c	r r				Volcaniclastic silt
4R-2, 10	313.71	AR	D	r a c	r r	r										c	r												a r r	r				Clay-rich silt
4R-2, 110	314.71	AR	D	r c a	r r	r										r	r												a c r	r				Silty claystone
4R-3, 5	315.16	AR	M	r a	r r	r										r a		c											a a r					Volcanic ash
5R-1, 112	322.82	AR	D	r c a	r r	r										r													a a r					Silty claystone
6R-2, 17	333.07	TS	M	r a c	r r	r										r	a												c r r					Calcareous silt
6R-5, 112	338.52	TS	M	r a c	r r	r										r	r	a											c r					Calcareous siltstone
7R-2, 40	342.86	TS	D	r c a	r r	r										r	r	r											c a r	r				Calcareous silty clay
8R-3, 83	353.77	TS	D	r c a	r r	r										r	r	r											c a r	r				Calcareous silty clay
9R-2, 30	361.39	TS	D	r c a	r r	r										r	r	r											c a r	r				Calcareous silty clay
9R-7, 7	367.94	TS	M	r c c	c c	r										a	r												c r					Volcanic ash
10R-1, 47	369.97	AR	D	r c a	r r	r										r	r												a a c	r		r	r	Silty clay
10R-2, 41	371.41	TS	D	r c c	r r	r										r	r	r											c a c	r		r	r	Calcareous silty clay
11R-1, 80	379.90	AR	D	r c a	r r											r	r	r											a a r	r		r	r	Silty clay with nannofossils
11R-5, 70	385.62	AR	M	c a c	r c	r										a	r												r r	r				Volcanic ash
12R-5, 80	395.20	AR	D	c a	c c											c	r	r											r r	r				Sandy silt
13R-2, 30	399.90	AR	D	a c	r r	r										r	r												a a r					Clay-rich silt
15R-6, 65	425.45	AR	D	a c r	c c	r r										r c	c	r											r c c					Fine-grained sand
21R-1, 10	476.00	AR	M	a c r	c r	c										r	r	c											a c					Calcareous fine-grained sand
21R-CC, 18	480.26	AR	D	a c r	c r	c										r r		r											a c c					Calcareous fine-grained sand
22R-1, 32	484.82	TS	D	c c c	c c	r										r	r	r											r r r					Silty sandstone
22R-6, 42	491.18	TS	D	c c r	r c	c										r	r	c											r r r					Calcareous silty sandstone
23R-1, 23	494.33	TS	D	r a r	r r	r										r	r	c											r r r	r				Calcareous siltstone
24R-1, 57	504.37	TS	D	a c	r c	c										r	r	r											r r					Fine-grained volcaniclastic sandstone
25R-1, 44	513.84	TS	M	a c r	c c	r										r	r	r											r					Fine- to medium-grained sandstone
25R-1, 74	514.14	TS	M	c c c	c c	r										r	c												c					Fine-grained sandstone
25R-2, 40	515.30	TS	D	c c r	r r	r										c c	r												r r r					Fine-grained sandstone
25R-2, 100	515.90	TS	D	a c r	c c	r										c	r	r	r									r r r					Medium-grained sandstone	
25R-CC, 10	516.29	TS	M	a c r	c c	r										r	r	r	r									c					Coarse-grained sandstone	
27R-1, 30	532.90	TS	D	c c c	c c	r										r	r	r	r									c					Silty sandstone	
28R-1, 60	542.80	TS	D	a r	c c c	r										c	r	r	r									r	r				Medium-grained sandstone	
29R-1, 14.5	551.945	TS	M	a c r	r c	r										a a	r												r r					Fine- to medium-grained sandstone
29R-2, 14.5	553.395	TS	M	c c c	r r	r										a	r												r					Fine-grained sandstone
34R-3, 33	603.11	AR	D	a c r	c r											r	r	c											r					Volcaniclastic sand
37R-CC, 14	628.94	LAC	D	c a r	c c											r	r	r	r									c r					Sandy siltstone	

CORE DESCRIPTIONS SMEAR SLIDES, SITE 1115

Core, section, interval (cm)	Depth (mbst)	Described by	Lithology (dominant/minor)	Size	Siliciclastic and volcaniclastic composition												Biogenic composition	Comments																
					Quartz	Feldspar	Plagioclase	Muscovite	Biotite	Glaucite	Amphibole	Pyroxene	Rock fragments (sedimentary)	Rock fragments (metamorphic)	Rock fragments (basaltic)	Volcanic glass (brown)	Volcanic glass (colorless)	Accessory minerals	Carbonate	Calcite	Dolomite	Opaque (oxide)	Opaque (sulfide)	Fe-oxides	Clinoptilolite	Philipsite	Other	Clay	Nannofossils	Foraminifers	Diatoms	Radiolarians	Sponge spicules	Shell debris
39R-CC, 5	648.15	LAC	D	c c r	c c r								r	r	r							r r											Silty sandstone	
40R-4, 30	662.60	TS	D	c c c	c c c	r							r	r	r							c c											Silty sandstone	
41R-4, 50	672.36	TS	D	c c c	c c	r							r	r	r							c r r											Sandy siltstone	
42R-2, 20	678.09	LAC	M	r a c	c c								r									c r											Clayey siltstone	
42R-4, 91	681.80	LAC	D	c a r	c c	r							r	r	r	r	r					c r											Sandy siltstone	
43R-2, 32	688.62	TS	D	c c c	c c	r							r	r	r	r	r					c a r											Sandy siltstone	
44R-2, 114	698.72	LAC	D	c a r	c c				r																									Calcareous sandy siltstone
44R-3, 30	699.38	LAC	D	c a r	c r	r							r	r	r							c c r											Calcareous sandy siltstone	
45R-2, 65	707.99	TS	D	r c c	c c	r							r		r	r	r					c c r											Siltstone	
47R-7, 40	734.15	TS	D	r c c	c c	r							r	r	r	r	r					c a											Siltstone	
49R-2, 20	746.19	TS	D	r a c	c c	r							r	r	r	r	r					c c											Siltstone	
50R-4, 110	759.09	TS	D	r c c	r r	r							r	r	r	r	r					c r r											Siltstone	
52R-4, 60	778.25	TS	D	c c c	c c	r																c c											Sandy siltstone	
52R-6, 10	780.63	TS	D	r a c	c c								c	r	r	r	r					c c r											Calcareous siltstone	
53R-2, 40	785.10	TS	D	r c c	r r								r	r	r	r	r					c a r	r										Sandy siltstone	
54R-3, 70	795.94	TS	D	r a c	c c								c	r	r	r	r					c c r											Calcareous siltstone	

Note: a = abundant (51%–100%); c = common (11%–50%); r = rare (1%–10%).

SEDIMENTARY THIN SECTIONS, SITE 115

Thin-section number	Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Minerals												Rock fragments (%)	Bioclasts	Sedimentary rock name	Comments	
						Minerals (%)			Rock fragments						Matrix/cement (%)	Bioclasts (%)						
						Sand	Silt	Clay	Quartz	Strained Feldspar	Multiple twins	Single/untwinned Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques		
158	180-1115B-28X-CC, 20-23	256.75	TS/AR D	R C A	10 R a C c c C a c C R R a R	1	A	a											88 1 A a		Calcareous siltstone	Subrounded porphyritic basalt fragments containing plagioclase and rare hornblende phenocrysts, micritic claystone matrix
159	30X-CC, 39-40	275.36	TS/AR D	R C A	15 R a C c c C a C R R a	1	A c r c												83 1 A a		Calcareous silty claystone	Subrounded grains of porphyritic basalt with angular plagioclase and hornblende phenocrysts, fresh glass, burrows, micritic matrix
161	180-1115C-2R-1, 17-19	292.97	TS/AR D	R C A	15 R a C c c C a C R R r a	1	A r c c												80 4 A a		Calcareous silty claystone	Porphyritic basalt and dacite with plagioclase and hornblende phenocrysts, pumice (hornblende phenocrysts), burrows, pyrite-filled foraminifer tests, micritic matrix, shells partly replaced by calcite spar
162	5R-1, 40-42	322.13	TS/AR D	R C A	25 R a C c c A a c C R R a	10	A	a c	R	a									61 4 A a		Calcareous silty claystone	Common angular to subrounded basalt and pumice fragments, burrows, highly recrystallized and pyrite-filled foraminifer tests, micritic matrix, abundant mica
163	6R-2, 17-19	333.07	TS/AR M	C A C	30 C a C c c C a r C R C a	40	A	a											30		Fine-grained sandstone	Abundant subangular to angular fresh vesicular colorless glass shards, burrows, matrix is micro spar sized implying some recrystallization of micritic matrix, common chloritized basalt fragments
164	6R-5, 114-116	338.54	TS/AR D	C C C	39 C a C c c C a r C R R a	15	A c c												45 1 A a	R	Calcareous silty claystone	Fine-grained sandstone at base, calcareous claystone matrix, calcite rhombs, pyrite in foraminifers
165	7R-2, 33-34	342.79	TS/AR D	R C A	20 R a C c c C a r R R R a R	20	A r a r												58 2 A a		Calcareous silty claystone	Angular common fresh glass shards, pyrite-filled foraminifers
166	10R-1, 5-7	369.55	TS/AR D	C C C	20 R a A a c C a R R r a R	20	A a r												59 1 A a		Calcareous silty claystone	Fresh angular detrital mineral grains, zoned plagioclase some of which is altered, rare sand-size and abundant silt-sized biotite grains, pumice fragments with hornblende phenocrysts and common silt-sized glass shards

**CORE DESCRIPTIONS
SEDIMENTARY THIN SECTIONS, SITE 1115**

Thin-section number	Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Minerals										Rock fragments										Bioclasts										Comments					
						Sand	Silt	Clay	Minerals (%)	Quartz	Strained	Feldspar	Multiple twins	Single/untwinned	Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques	Rock fragments (%)	Plutonic	Volcanic	Rhyolitic/dacitic	Vitric	Andesitic/basaltic	Dolerite	Sedimentary	Limestone	Siltstone	Metamorphic	Schist	Polycrystalline quartz of uncertain origin	Matrix/cement (%)	Bioclasts (%)	Foraminifers	Benthic	Planktonic
167	11R-4, 57-58	383.99	TS/AR	D	C C A	20	R	a	A a c c C a	R	R	a	R	20	A	a	r																							Calcareous silty claystone	Fresh angular detrital mineral grains, zoned plagioclase, rare sand-size and abundant silt-size biotite grains, pumice fragments with hornblende phenocrysts, silt-size glass shards
168	12R-4, 144-148	394.34	TS/AR	D	C C A	30	R	a	A a c c C a	R	R	a	R	10	A	r	a	c																					Claystone	Angular zoned plagioclase, subrounded pumice, acidic volcanics (phenocrysts of plagioclase and hornblende), single amphibolite clast present, silt-size glass shards, pyrite-filled foraminifers, silty claystone matrix with common biotite, green chloritized glass	
169	12R-5, 50-53	394.90	TS/AR	D	C C A	20	R	a	A a c c C a	R	R	a	R	10	A	r	a																						Silty claystone	Common sand-size grains, zoned plagioclase, subrounded pumice and acidic volcanics with phenocrysts of plagioclase and hornblende, silt-size glass shards, pyrite-filled foraminifers, silty clay matrix with common biotite	
170	13R-4, 140-143	403.55	TS/AR	D	C C A	15	R	a	A a c c C a	R	R	a	R	5	A	r	a	r																						Silty claystone	Common detrital sand-size grains, zoned plagioclase, subrounded pumice and acidic volcanics with phenocrysts (plagioclase and hornblende), silt-size glass shards, pyrite-filled foraminifers, silty claystone matrix with common biotite, possible intrusive rock fragments
171	14R-2, 68-70	409.82	TS/AR	D	C C A	20	R	a	A a c c C a	R	R	a	R	40	A	r	a	r																						Sandy silty claystone	Common sand-size grains, zoned plagioclase, common subrounded pumice and rare basalt and acidic volcanics (both contain phenocrysts of plagioclase and hornblende), silt-size glass shards, pyrite-filled foraminifers, silty claystone matrix with common biotite

SEDIMENTARY THIN SECTIONS, SITE 1115

Thin-section number	Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Minerals												Rock fragments										Bioclasts										Sedimentary rock name	Comments	
						Sand	Silt	Clay	Minerals (%)	Quartz	Strained	Feldspar	Multiple twins	Single/untwinned	Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques	Rock fragments (%)	Plutonic	Volcanic	Rhyolitic/dacitic	Vitric	Andesitic/basaltic	Doleric	Sedimentary	Limestone	Siltstone	Metamorphic	Schist	Polycrystalline quartz of uncertain origin	Matrix/cement (%)	Bioclasts (%)	Foraminifers	Benthic
172	15R-3, 79-83	421.09	TS/AR M	A R R	10 R a A a c R a	10	R	a	10	R	a	A	a	c	R	a	A	R	a	R	a	R	20	A	a	r	r	R	a	R	a	10 60 A a a R R R	Foraminifer packstone	Abundant bioclasts, rounded to well-rounded porphyritic acidic volcanic fragments containing phenocrysts of feldspar and rare hornblende, rare basalt clasts, angular to subangular mineral grains, sparry calcite cement, aphyric basalts						
173	16R-2, 4-7	427.73	TS/AR M	A R R	15 R a A a c R a	15	R	a	15	R	a	A	a	c	R	a	A	R	a	R	a	R	25	A	a	r	r	R	a	R	a	10 50 A a a R R R	Mixed siltstone	Abundant bioclasts, rounded to well-rounded porphyritic acidic volcanic fragments containing phenocrysts of feldspar and rare hornblende, rare basalt clasts, angular to subangular mineral grains, microspar calcite cement, minor palagonite						
174	21R-3, 91-93	477.59	TS/AR D	C A C	30 R a A a c R a	30	R	a	30	R	a	A	a	c	R	a	A	R	a	R	a	R	10	A	c	a	R	a	30 30 A a r C	Mixed sandy silty claystone	Common bioclasts, rare rounded to well-rounded basalt clasts, angular to subangular mineral grains, micritic calcite cement, high benthic/planktonic foraminifer ratio implies shallow water									
175	19R-CC, 8-10	456.10	TS/AR M	A C C	25 R a A a c C a	25	R	a	25	R	a	A	a	c	C	a	A	R	R	a	R	a	15	A	c	c	R	a	20 40 A a r	Mixed fine-grained sandstone	Common bioclasts, rare rounded to well-rounded basalt clasts, angular to subangular detrital mineral grains, micritic calcite cement, pyrite cubes and pyrite-filled foraminifers, common angular acidic volcanic grains, rare green chloritic grains									
176	22R-3, 104-105	487.80	TS/AR D	R C C	30 R a A a c C a	30	R	a	30	R	a	A	a	c	C	a	A	R	a	R	a	R	10	A	a	a	R	a	45 15 A c c C R	Sandy silty claystone	Common bioclasts, rare rounded to well-rounded chloritized basalt clasts, fresh brown glass, angular to subangular detrital mineral grains, micritic calcite cement, pyrite cubes and pyrite-filled foraminifers									
177	23R-1, 93-94	495.03	TS/AR D	R C C	30 R a A a c A a	30	R	a	30	R	a	A	a	c	A	a	R	R	R	a	R	a	10	A	a	a	R	a	50 10 A c c R R	Sandy silty claystone	Rare bioclasts, rare rounded to well-rounded chloritized basalt clasts, fresh brown glass, angular to subangular detrital mineral grains									

CORE DESCRIPTIONS
SEDIMENTARY THIN SECTIONS, SITE 1115

Thin-section number	Core, section, interval (cm)	Depth (mbst)	Described by	Lithology (dominant/minor)	Size	Minerals										Rock fragments										Bioclasts										Sedimentary rock name	Comments
						Sand	Silt	Clay	Minerals (%)										Rock fragments (%)										Matrix/cement (%)								
178	24R-3, 49-50	507.29	TS/AR D	C C R	50	C a A c c C a	R R	a	2	R	a	c	A	a	47	1	A r a R R	Fine-grained sandstone	Angular to subangular detrital mineral grains, rare rounded siltstone, chloritized basalt fragments, fresh brown glass mafic and chloritic grains, rare microcline																		
179	25R-2, 56-57	515.46	TS/AR D	C C A	40	R a A c c C a	R R	a	15	R A	c	c			45			Sandy silty claystone	Angular to subangular detrital mineral grains, rounded chloritized basalt fragments and angular fresh brown glass, rare microcline, large altered plagioclase																		
180	26R-1, 8-9	523.08	TS/AR M	C R A	30	R a A c c R a	R R r a R		15	R A a	c		R c		54	1	A r a	Fine-grained sandstone	Angular to subangular detrital mineral grains, subrounded to rounded rock fragments, porphyritic acidic volcanics containing plagioclase and hornblende phenocrysts, palagonite, coarse quartz and feldspar intergrowths																		
181	29R-1, 72-73	552.52	TS/AR M	A R R	50	R a A c c R a	R R c c		20	R A a	r		R	a	30			Medium-grained sandstone	Angular to subangular detrital mineral grains, rounded to well-rounded rock fragments porphyritic acidic volcanic grains containing plagioclase and hornblende phenocrysts sparry cement, altered basalts, microcline, blue chlorite, trachytic textures																		
182	29R-1, 82-83	552.62	TS/AR D	C C C	30	C a A c c R a	R R	a	15	R A c	c				55	1	A a R	Calcareous fine-grained sandstone	Angular to subangular detrital mineral grains, rounded to well-rounded rock fragments, chloritized basalt and acidic volcanic fragments																		
183	30R-CC, 10-12	566.83	TS/AR M	A C	20	R a A c c	R C a r		60	R A c c a r			R a		19	1		Granule to pebble conglomerate	Very well rounded lithoclasts, subangular to subrounded detrital grains, zoned plagioclase, sparry calcite cement, spherulitic glass shards, brown palagonite, glauconite/chlorite, variolitic basalt fragments																		

CORE DESCRIPTIONS
SEDIMENTARY THIN SECTIONS, SITE 1115

Thin-section number	Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Minerals										Rock fragments										Bioclasts										Sedimentary rock name	Comments				
						Granule	Sand	Silt	Clay	Minerals (%)	Quartz	Strained	Feldspar	Multiple twins	Single/untwinned	Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques	Rock fragments (%)	Plutonic	Volcanic	Rhyolitic/dacitic	Vitric	Andesitic/basaltic	Dolerite	Sedimentary	Limestone	Siltstone	Metamorphic	Schist	Polycrystalline quartz of uncertain origin	Matrix/cement (%)	Bioclasts (%)	Foraminifers	Benthic
184	30R-CC, 16-19	566.89	TS/AR D	C C R	30 R a A c c					C r a															20 R A c r c												50		Granule sandstone	Myrmekitic or perthitic fragments, glass spherulites of chalcedony, angular to rounded rock fragments, angular microcline, porphyritic dacites with phenocrysts of plagioclase, hornblende and rarely clinopyroxene, feldspathic rich siltstone matrix, sparry calcite cement	
185	30R-5, 45-48	566.46	TS/AR M	A R R	25 R a A a c					R R R r c															15 A a c c												60		Fine-grained sandstone	Subangular to angular detrital mineral grains, subrounded rock fragments, micritic cement, chloritic altered volcanic grains	
186	31R-1, 94-96	571.94	TS/AR M	R A A	20 R a C c c					C r a															2 A r a												77 1 A a		Calcareous siltstone	Micritic limestone	
187	32R-1, 138-140	581.98	TS/AR M	A R R	30 R a					A a															40 A r a												30		Coarse-grained sandstone	Silty claystone, rounded rock fragments, subrounded to subangular mineral grains, chloritized basalt fragments with zoned plagioclase phenocrysts in a devitrified glass matrix, zoned clinopyroxene, sparry calcite cement, minor chalcedony	
188	32R-3, 52-55	583.53	TS/AR D	A R	30 R a c R a					R A a															40 A r a												30		Coarse-grained sandstone	Silty claystone matrix, detrital minerals dominantly clinopyroxene, rounded rock fragments, subrounded to subangular detrital minerals, zoned plagioclase and clinopyroxene grains, palagonite, pyroxene phryic basalt	
189	33R-3, 68-71	593.74	TS/AR M	A C C	5 R a R c c					A a r															5 A c a R a c R												60 30 A a r R R R		Boundstone	Micritic cement, recrystallized foraminifer tests, subangular to subrounded rock fragments, angular to subangular mineral grains	
190	35R-1, 85-88	610.25	TS/AR D	A R	8 R a R c c					C a r r															8 A c c C a R a												14 70 A a c R R R R		Packstone	Rounded to well-rounded rock fragments, angular to subangular detrital mineral grains, micritic cement, porphyritic basalt with clinopyroxene and rarely olivine, zoned clinopyroxene	

CORE DESCRIPTIONS
SEDIMENTARY THIN SECTIONS, SITE 1115

Thin-section number	Core, section, interval (cm)	Depth (mbsf)	Described by	Lithology (dominant/minor)	Size	Minerals										Rock fragments						Bioclasts						Sedimentary rock name	Comments											
						Sand	Silt	Clay	Minerals (%)	Quartz	Strained	Feldspar	Multiple twins	Single/untwinned	Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques	Rock fragments (%)	Plutonic	Volcanic	Rhyolitic/dacitic	Vitrific	Andesitic/basaltic	Dolerite	Sedimentary	Limestone	Siltstone	Metamorphic	Schist	Polycrystalline quartz of uncertain origin	Matrix/cement (%)	Bioclasts (%)	Foraminifers	Benthic
191	35R-4, 102-105	614.69	TS/AR	M	R C A	10	R a	C c c																	10	A c r a											Limestone (silty claystone)	Calcareous silty claystone matrix, laminae defined by more sand-rich layers		
192	36R-2, 25-27	620.75	TS/AR	D	C A A	40	C a	C c c	R a r R	C a c															10	A c c c	R a	50										Siltstone	Clay- and silt-size material define a weak laminae, clayey matrix, iron oxide, sparry calcite, rare calcite/muscovite schists	
193	40R-2, 105-107	660.35	TS/AR	D	A C C	50	C a	C a c C a	R R R a c C																20	C c c c	R a	25	5 R	a	A	Silty sandstone	Silty clay matrix, aligned carbonaceous detritus indicates laminae, bioturbation indicated by clay-silt-rich lenses, foraminifers filled with pyrite, rare calcite/mica schist grains							
194	42R-3, 138-141	680.77	TS/AR	D	R C A	30	R a	A a c C a	R R R a															10	C c c	R a	55	5 C	a	A	Silty claystone	Silty clay matrix, aligned carbonaceous detritus indicates laminae, bioturbation indicated by clay- and silt-rich lenses								
195	43R-4, 111-115	692.14	TS/AR	D	A C C	50	C a	C a c C a	R R R R a R															20	A c c c	R a	25	5 R	a	A	Silty sandstone	Silty clay matrix, aligned carbonaceous detritus defines laminae, bioturbation indicated by clayey siltstone lenses, high ratio of mineral grains to lithics								
196	44R-2, 113-115	698.71	TS/AR	D	C C C	50	C a	A c c C a	R c c R															10	A c c		39	1 A	a		Fine-grained sandstone	Normally graded sandstone interlaminated with more silty rich sandstone, angular to subangular detrital feldspars and quartz grains, abundant biotite in the more silt-rich layers, subrounded rock fragments								
197	48R-2, 13-17	736.41	TS/AR	D	R C A	30	C a	A c a C a	R c	R	5	A	c	c												55	10 R	a	A	Silty claystone	Subangular to angular mineral grains, subrounded rock fragments, silty clay matrix, aligned carbonaceous detritus defines laminae, bioturbation indicated by clayey siltstone lenses									

CORE DESCRIPTIONS
SEDIMENTARY THIN SECTIONS, SITE 1115

Thin-section number	Core, section, interval (cm)	Depth (mbst)	Described by	Lithology (dominant/minor)	Size	Minerals												Rock fragments						Bioclasts						Sedimentary rock name	Comments						
						Sand	Silt	Clay	Minerals (%)			Rock fragments (%)			Matrix/cement (%)																						
198	50R-1, 18-21	754.48	TS/AR D	R C A	40 C a A c c C a	40	C	a	Quartz	Strained	Feldspar	Multiple twins	Single/untwinned	Mica	Biotite	Muscovite	Carbonate	Chlorite	Accessory minerals	Clinopyroxene	Amphibole	Opaques	Plutonic	Volcanic	Rhyolitic/dacitic	Vitric	Andesitic/basaltic	Dolerite	Sedimentary	Limestone	Siltstone	Metamorphic	Schist	Polycrystalline quartz of uncertain origin	40 10 R a A	Silty claystone	Subangular to angular mineral grains, subrounded chloritic basalt fragments, silty clay matrix, aligned carbonaceous detritus defines laminae, bioturbation indicated by clayey siltstone lenses
199	51R-1, 119-120	765.09	TS/AR D	R C A	45 C a A c c C a	45	C	a	R c	R	5	A	c	c	R c	R	5	A	c	c	R c	R	5	A	c	c	45 5 C a C	45 5 C a C	Silty claystone	Subangular to angular mineral grains, subrounded rock fragments, silty clay matrix, weakly aligned carbonaceous detritus, bioturbation indicated by clayey siltstone lenses							
200	52R-3, 61-71	776.76	TS/AR D	R C A	45 C a A c c C a	45	C	a	R c	R	5	A	c	c	R c	R	5	A	c	c	R c	R	5	A	c	c	45 5 C a C	45 5 C a C	Silty claystone	Subangular to angular mineral grains, subrounded rock fragments, silty clay matrix, weakly aligned carbonaceous detritus, bioturbation indicated by clayey siltstone lenses							
201	53R-6, 42-45	790.35	TS/AR D	R C A	45 C a A c c C a	45	C	a	R c	R	5	A	c	c	R c	R	5	A	c	c	R c	R	5	A	c	c	45 5 C a C	45 5 C a C	Silty claystone	Subangular to angular mineral grains, subrounded rock fragments, silty clay matrix, weakly aligned carbonaceous detritus, bioturbation indicated by clayey siltstone lenses							
202	54R-1, 94-98	793.74	TS/AR D	R C A	45 C a A c c C a	45	C	a	R c	R	5	A	c	c	R c	R	5	A	c	c	R c	R	5	A	c	c	45 5 R a A	45 5 R a A	Silty claystone	Subangular to angular mineral grains, subrounded rock fragments, silty clay matrix, weakly aligned carbonaceous detritus, bioturbation indicated by clayey siltstone lenses							

Note: A = abundant (51%–100%); C = common (11%–50%); R = rare (1%–10%); lower case letters indicate subcategories of the major constituents.