

**CORE DESCRIPTIONS**  
**VISUAL CORE DESCRIPTIONS, SITE 1101**

1

**Core Image**

Site 1101 Hole A Core 1H					Cored 0.0-8.7 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	DISTURB.	SAMPLE	DESCRIPTION
1						SS	MUDDY DIATOM OOZE and CLAYEY SILT
1-2						SS	Section 1, 0-20 cm: Muddy diatom ooze with large burrows. Color is brown (10YR 5/4).
2						SS	20-26 cm: Bioturbated dark brown (10YR 4/2) clayey silt.
2-3						SS	26-50 cm: Gray brown (10YR 6/2) clayey silt with large burrows.
3						SS	50-113 cm: Brownish gray (10YR 6/3) clayey silt.
3-4						SS	113-150 cm: Pronounced color change to gray (10YR 6/1) diatom-bearing silty clay.
4						SS	Section 2, 0-150 cm: Gray colored (10YR 6/1) silty clay with weak silt laminations at 1-15, 72, and 95 cm. Drilling disturbance at 70 cm. Very fine lamination is apparent in remainder of core.
4-5						SS	Section 3-4: Gray colored (10YR 6/1) clayey silt.
5						SS	Section 3 at 10, 27, 37, and 102 cm: Prominent silt laminations. Drilling disturbance at Section 3, 113-116 cm.
5-6						SS	Section 5-6 and Core Catcher: Massive homogenous unlaminated silty clay. Color is brownish gray (5YR 6/3).
6						SS	Section 6 and Core Catcher: Clayey silt with foraminifers scattered throughout.
7						SS	
8						SS	

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**Core Image**

Site 1101 Hole A Core 2H					Cored 8.7-18.2 mbsf	
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	SAMPLE	DESCRIPTION
			STRUCTURE	DISTURB.		
1					SS	CLAYEY SILT and DIATOM-BEARING FORAMINIFERAL CLAYEY SILT
1-1					SS	Section 1, 0-80 cm: diatom-bearing foraminiferal clayey silt, soupy to moderately disturbed by coring, dark grayish brown and dark gray (2.5Y 4/2, 5Y 4/1). Foraminifers decrease downwards to about 35 cm.
2					SS	Section 1, 80 cm to Section 2, 28 cm: Clayey silt, dark grayish brown (2.5Y 4/2). Burrow mottled and faintly laminated with scattered sand grains. Section 1, 112-115 cm: vitric ash, very dark grayish brown (10YR 3/1), sharp base, graded. Thin laminae of dark brown silty clay rich in manganese micronodules just below.
3					SS	Section 2, 28 cm to Section 4, 50 cm: Clayey silt, dark gray (5Y 4/1). Very faint lamination, local minor bioturbation. 1-2 mm silt laminae (sharp-based, graded) in Section 2, 46, 85, 117, 123, and 137 cm; Section 3, 30, 58-83 cm, 105, 121, 131, 140, 145 cm; Section 4, 13, 23 cm.
4					SS	Section 2, 103-108 cm: fine sand, very dark gray (5Y 3/1), sharp base, graded. Section 3, 51 cm: 8 mm graded silt lamina. Section 4, 35-37 cm: silt, sharp base, graded.
5					SS	Section 4, 50 cm to base of core: Clayey silt, dark gray (5Y 4/1), faint color banding and burrow mottling (minor to moderate).
6						Section 4, 109 cm: 5 mm silt, gray (5Y 5/1), sharp top and base, slightly burrowed. Section 5, 27-38 cm: 5 very thin (1-3 mm) silt laminae.
7						Section 6, 10-65 cm: Scattered sand grains and granules.
8					SS	
9						
7						

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**Core Image**

Site 1101 Hole A Core 3H					Cored 18.2-27.7 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	DISTURB.	SAMPLE	DESCRIPTION
1						SS	CLAYEY SILT, DIATOM-BEARING CLAYEY SILT and SILTY CLAY  Section 1, 0-150 cm: clayey silt, dark gray (5Y 4/1), soupy to very disturbed in top 80 cm. Massive and bioturbated in lower part with a few scattered sand grains. Clast of brown (?palagonitic) diatom-bearing clayey silt at 27 cm.
2						SS	Section 2, 0-50 cm: Diatom-bearing clayey silt, dark gray to olive gray (5Y 4/1 to 5Y 4/2), burrow mottled. Few foraminifera visible on surface. <i>Hemidiscus karstenii</i> (Stage 7) at 20 cm. Angular clast of well-sorted sand, 2 cm in diameter, at 44 cm; grains are mostly iron oxide-stained quartz.
3						SS	Section 2, 50 cm to Section 4, 30 cm: Clayey silt, olive gray (5Y 4/2) to grayish brown (2.5Y 5/2) to dark gray (5Y 4/1), all color transitions are very gradual, strongly bioturbated. Scattered sand grains and granules from Section 3, 0 cm to Section 4, 40 cm.  Subangular basalt pebble, 2 cm in diameter, at Section 3, 142 cm.
4						SS	Section 4, 30-100 cm: Diatom-bearing clayey silt, olive gray (5Y 4/2), structureless/ burrow mottled.
5						SS	Section 4, 100 cm to Section 6, 63 cm: Silty clay, dark gray (5Y 4/1), structureless/burrow mottled. 1-2 mm silt laminae (sharp-based, graded) in Section 5 at 33, 41, 83, 99, 115, 122, and 138 cm; Section 6 at 11, and 38 cm. Bioturbated 6 mm silt lamina in Section 6, 50 cm.
6						SS	Section 6, 63-120 cm and Section 7, 20 cm to base of core: Clayey silt, dark gray (5Y 4/1), scattered sand grains and granules. Burrow mottled.
7						SS	Section 6, 120 cm to Section 7, 20 cm: interval of dark gray (5Y 4/1) silty clay.

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**Core Image**

Site 1101 Hole A Core 4H					Cored 27.7-37.2 mbsf		
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1							CLAYEY SILT and DIATOM-BEARING CLAYEY SILT Sections 1 and 2: Gray (N6) clayey silt, structureless. Section 1, 0-96 cm: Severely disturbed core. Section 1, 96-150 cm: Core disturbed by flow-in structure, silty mud lamina approximately 1 cm thick at 104 cm.
2						SS	Section 2, 111 cm: Ice rafted pebble.
3						SS	Section 3, 0-55 cm: Clayey silt, structureless, with scattered sand and granule-sized ice rafted debris. 55-57 cm: Parallel laminated silt and sandy mud. 57-150 cm: Finely laminated clayey silt, gray (N6) throughout.
4						SS	Section 4, 0-30 cm: Laminated silt and silty clay. 30-63 cm: Massive silty clay. 63-73 cm: Laminated silt and clayey silt. 73-150 cm: Massive silty clay with sand and granule sized ice rafted debris.
5						SS	Section 5-6: Massive greenish gray (5Y 4/1) clayey silt with dispersed sand and granule sized ice rafted debris.
6						SS	Section 6, 0-57 cm: Broken core liner and saw marks.
7						SS	Section 7, 0-90 cm: Massive bioturbated diatom-bearing clayey silt, greenish gray (N6) to brown (2.5Y 6/0).
8							
9							
10						SS	

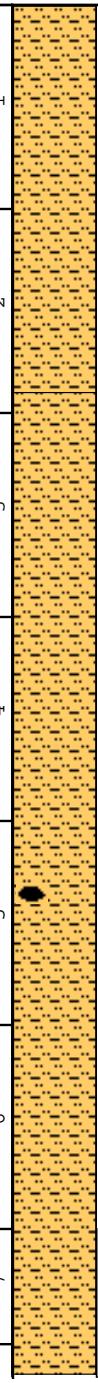
**Core Image**

Site 1101 Hole A Core 5H						Cored 37.2-38.2 mbsf		
METERS	SECTION	GRAPHIC	LITH.	Bioturb.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1						SS	SS	DIATOM-BEARING CLAYEY SILT 0-47 cm: Greenish gray (5Y 5/1) clayey silt, completely soupy due to drilling disturbance.

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**Core Image**

Site 1101 Hole A Core 6H					Cored 38.2-47.7 mbsf
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	STRUCTURE DISTURB. SAMPLE DESCRIPTION
1					 <p>CLAYEY SILT</p> <p>Section 1, 0-116 cm: Heavily disturbed by coring. 116-150 cm: Clayey silt weakly laminated and disturbed by drilling. Greenish gray (5Y 5/1) throughout.</p> <p>SS</p> <p>Section 2, 0-144 cm: Clayey silt deformed by drilling, scattered sand grains at 65-120 cm. Pebble 0.5 cm in diameter at 51 cm. 82-93 cm: Void.</p> <p>SS</p> <p>Sections 3-4: Massive clayey silt, with 2-5% silt by thickness. Deformed by drilling.</p> <p>SS</p> <p>Section 4, 91-94 cm: Silt laminae, color banded from 95-180 cm.</p> <p>SS</p> <p>Sections 5-6: Deformed, weakly laminated clayey silt. Section 5, 12-17 cm: group of 6 laminae, each 2 mm thick. Silt laminae (&lt;1 cm) at 18 cm. 2% silt by thickness. Section 5, 50-90 cm: Silty interval with sand and pebbles. Pebbles located at 37 cm, basalt, 1 cm in diameter; at 53 cm, plutonic igneous, 1.5 cm in diameter; at 70 cm, plutonic igneous, 2 cm in diameter; at 93 cm, volcanic, 2 cm in diameter. 1 mm silt lamina at Section 5, 123 cm.</p> <p>SS</p> <p>Section 7 and Core Catcher: Weakly laminated clayey silt, mottled by bioturbation.</p> <p>SS</p>

# Core Image

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	CORED 47.7-57.2 mbsf
							DESCRIPTION
1							SILTY CLAY and FORAMINIFER-BEARING SILTY CLAY Section 1, 0-150 cm: Silty clay, greenish gray (5Y 5/1), without any visible structure.
2						— SS	Section 2, 0-77 cm: Silty clay without visible structure. 77-150 cm: Weakly laminated, bioturbated silty clay with large Planolites burrows at 90-100 cm. Silt laminae at 122 cm.
3						— SS	Section 3, 0-150 cm: Laminated silty clay disturbed by coring. Silt laminae at 8 and 23 cm.
4						— SS	Section 4, 0-150 cm: Weakly laminated, bioturbated silty clay. 110-150 cm: Foraminifer-bearing silty clay.
5						— SS	Section 5, 0-30 cm: Bioturbated foraminifer-bearing silty clay, greenish gray (5Y 5/1) in color. Bioturbated massive silty clay at 30-80 cm, bioturbated foraminifer-bearing silty clay at 80-150 cm. Ice rafted pebble at 114 cm.
6						— SS	Section 6, 0-5 cm: Bioturbated, massive, foraminifer-bearing silty clay. 5-120 cm: Weakly laminated and faintly bioturbated silty clay with 9 laminae of sharp-based silt, 2 mm thick. Silt laminae are about 2% of the section. Disturbed by coring. 120-150 cm: Massive, bioturbated, silty clay with scattered foraminifers, increasing foraminifer content down section.
7						— SS	Section 7, 0-40 cm: Bioturbated, massive foraminifer-bearing sandy mud. 40-72 cm: Faintly laminated silty clay with minor bioturbation.

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Site 1101 Hole A Core 8H					Cored 57.2-66.7 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOBUR.	DISTURB.	SAMPLE	DESCRIPTION
1							SILTY CLAY Section 1, 0-150 cm: Disturbed by coring. Silty clay with sand lumps
2						SS	Section 2, 0-123 cm: Clay, dark greenish gray (5GY 4/1), slightly variegated (5GY 4/2). Intensively bioturbated (mottled) to moderately bioturbated. Local concentrations of sand particles dispersed in the muddy matrix. Pebble at 87 cm (2-3 cm in diameter) and starved ripple at 104 cm. Section 2, 103 cm to Section 3, 12 cm: Silty clay with dispersed sand particles, dark greenish gray (5GY 4/1). Massive, with fining-upward sequence.
3						SS	Section 3, 0-62 cm: Massive, bioturbated with scattered sand and granules. Section 3, 62 cm to Section 4, 15 cm: Laminated silty clay with silt and sandy silt laminae (0.5-3 mm thick; 1% silt laminae of total thickness). The silty clay is dark greenish gray (5GY 4/1 and minor 5GY 4/2), and variegated. The silts are gray (5Y 6/1). Silt beds are continuous laminae or starved ripples, sharp based. Intensive bioturbation (Zoophycos facies). Pebbles are located at Section 3, 50 cm (1 cm diameter), and at 56 cm (1.5 cm diameter).
4						SS	Section 4, 14-113 cm: Silty clay. Intensively bioturbated.
5						SS	Section 4, 113 cm to Section , 5, 150 cm: Laminated silty clay with silt and sandy silt laminae (0.5-3 mm thick; 1% silt laminae of total thickness). The silty clay is dark greenish gray, variegated (5GY 4/1 and minor 5GY 4/2) and the silt are gray (5Y 6/1) and black (10YR 2/1). Silt beds are continuous laminae or starved ripples, sharp based.
6						SS	Section 6, 0-107 cm: Laminated silty clay. Moderate bioturbation. No silt laminae. Pebble (1.4 cm in diameter) at 87 cm. Section 6, 107-121 cm: Laminated silty clay with silt laminae. Section 6, 121 cm to Section 7, 53 cm: Silty clay, variegated, intensively bioturbated, with scattered sand grains at Section 6, 135-140 cm.
7						SS	Section 7, 9-12 cm: Pebbles and granules.

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**Core Image**

Site 1101 Hole A Core 9H					Cored 66.7-76.2 mbsf		
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1					◇		SILTY CLAY, CLAYEY SILT and FORAMINIFER-BEARING CLAYEY SILT  Section 1, 0 cm to Section 2, 24 cm: Silty clay, dark gray (N4), very disturbed in Section 1, 27-77 cm. Homogeneous, very faintly burrow mottled. Very thin (1-2 mm) silt laminae in Section 1, 85, 90, 95, and 149 cm; sharp tops and bases, burrowed.
2					▽	SS	Section 2, 24 cm to Section 3, 44 cm: Clayey silt, dark gray to dark greenish gray, mostly intensely burrowed with loss of any original structure. Foraminifer-bearing in Section 2, 24-70 cm. Very thin (1-3 mm) silt laminae with sharp bases and graded tops in Section 2, 118, 121, 122, 144, and 147 cm, and Section 3, 6, 17 and 24 cm. The non-bioturbated mud directly overlying these silts is 2-3 cm thick.
3						SS	
4						SS	Section 3, 44 cm to Section 4, 127 cm: Foraminifer-bearing clayey silt, dark gray to dark greenish gray (N4 to 5GY 4/1). Structureless to burrow mottled, few scattered sand grains. Section 4, 75-115 cm is silty foraminiferal ooze. Section 4, 8cm: Dark gray phyllite pebble, angular, 5x2x2 cm. Section 4, 80 cm: Basalt pebble, subrounded, 2 cm.
5						SS	
6						SS	Section 4, 127 cm to base of core: Silty clay, dark greenish gray to dark gray (5GY 4/1 to N4/0), burrow mottled. 8 mm silt lamina in Section 4, 131 cm, sharp base, graded top, parallel laminated, dark gray (5Y 4/1). Faint, diffuse lamination in Section 5, 8-123 cm and Section 6, 90-106 cm. Very thin (1-3 mm) silt laminae in Section 5, 9-30 cm, 82-129 cm, 146 cm; Section 6, 10 cm and 135 cm; Section 7, 30 cm. Laminae are burrowed. Section 6, 53 cm: Basalt pebble, subangular, 1.5 cm.
7						SS	
8							
9							

## Core Image

Site 1101 Hole A Core 10H					Cored 76.2-85.7 mbsf	
METERS	SECTION	GRAPHIC	LITH.	Bioturb.	SAMPLE	DESCRIPTION
			STRUCTURE	DISTURB.		
1					SS	SILTY CLAY and FORAMINIFER-BEARING SILTY CLAY.  Section 1, 0-53 cm: Silty clay to sandy, silty clay at the top with dispersed sand particles, dark greenish gray (5GY 4/1). Massive and enriched with foraminifers.
2					SS	Section 1, 53 to Section 3, 60 cm: Silty clay, dark greenish gray (5GY 4/1), slightly variegated (5G 4/1 and 5Y 4/1). Intensively bioturbated (mottled) to moderately bioturbated (Zoophycos). Silt laminae of <1 mm to 2 mm thick, accounts for less than 1% of the total interval.
3					SS	Section 3, 60 cm to Section 4, 76 cm: Silty clay and sandy with foraminifers, silty clay dark greenish gray (5G 4/1), massive and intensively bioturbated. The interval shows an upward coarsening sequence, followed by an upward-fining sequence.
4					SS	Section 4, 78-110 cm: Laminated with silt.
5					SS	Section 4, 110 cm to Section , 5, 60 cm: Laminated silty clay with silt and sandy silt laminae (<0.5-1 mm thick; <1% silt laminae of total thickness). The silty clay is dark greenish gray, variegated (5GY 4/1 and minor 5GY 4/2) and the silts are gray (5Y 6/1) and black (10YR 2/1). Most silt laminae are continuous. Starved ripples. Abundant normal microfaulting at Section 6, 20-60 cm. Intense bioturbation with escape burrows. Zoophycos burrows.
6					SS	Section 6, 60 cm to bottom Core Catcher: Foraminifer-bearing silty clay, grading downward into sandy, silty clay. Upward fining sequence.

## Core Image

Site 1101 Hole A Core 11H					Cored 85.7-95.2 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	DISTURB.	SAMPLE	DESCRIPTION
1						SS	SILTY CLAY  Section 1, 1-75 cm: Soupy and disturbed by coring, dark greenish gray (5GY 4/1) silty clay. 77-106 cm: Dark gray (5Y 4/1) silty clay, bioturbated with dark mottling, contains granules and sand, pebble 1 cm in diameter at 79 cm, silt lamina 1 cm thick with sharp lower contact and gradational upper contact at 110 cm. Section 1, 106 cm to Section 3, 110 cm: Dark greenish gray (5GY 4/1) silty clay thinly laminated, silt laminae range from 3 mm to < 1mm in thickness. In Section 2, massive dark gray (5Y 4/1) silty sand bed 4 cm thick at 42 cm, from 70-122 cm thinly laminated silt, tilted 15 degrees.
2						SS	
3						SS	
4						SS	Section 3, 110-150 cm: Dark gray (5Y 4/1) massive silty clay, mottled and bioturbated.  Section 4, 0-150 cm: Foraminifer-bearing silty clay, dark greenish gray (5GY 4/1), massive and bioturbated throughout, with pebbles, granules, and sand. Foraminifers appear to increase down the section. Pebbles occur at 30 cm, dark, subangular, 0.75 cm in diameter, at 37 cm, basalt, 1.5 cm in diameter, at 36 cm, 0.5 cm in diameter, at 63 cm, 0.5 cm in diameter, at 112 cm, plutonic igneous, 1 cm in diameter.
5						SS	Section 5, 7 - 120 cm: Thinly laminated silty clay, dark greenish gray (5GY 4/1). Section 5, 120 cm to Section 6, 53 cm: Dark gray (5Y 4/1) silty clay bioturbated. Section 6, 53 cm to Core Catcher: Massive bioturbated foraminifer-bearing silty clay, greenish gray (5GY 5/1), void along the side of the core from 73-90 cm.
6						SS	
7						SS	
8						SS	

## Core Image

Site 1101 Hole A Core 12H					Cored 95.2-104.7 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	DISTURB.	SAMPLE	DESCRIPTION
1						— SS	SILTY CLAY, CLAYEY SILT, FORAMINIFERAL and FORAMINIFER-BEARING CLAYEY SILT  Section 1, 0 cm to Section 2, 30 cm: Silty clay, massive, bioturbated, dark greenish gray to dark gray (5GY 4/1 to N4). Thin (1-2 mm) silt laminae in Section 1, 25, 29, 30, 31, 54, and 63 cm. Laminae have sharp micro-burrowed bases and graded tops. Section 2, 22 cm: Basalt pebble, 2 cm, subrounded.
2						— SS	Section 2, 30-75 cm: Muddy foraminiferal ooze, greenish gray (5GY 5/1), becoming darker downwards. Massive, bioturbated.
3						— SS	Section 2, 75 cm to Section 3, 50 cm: Clayey silt, dark greenish gray to dark gray, (5GY 4/1 to N4), structureless, bioturbated.
4						— SS	Section 3, 50-100 cm: Foraminiferal clayey silt, dark greenish gray (5GY 4/1), faint burrow mottling.
5						— SS	Section 3, 100 cm to Section 4, 20 cm: Clayey silt, massive, bioturbated, dark greenish gray (5GY 4/1)
6						— SS	Section 4, 20 cm to Section 5, 8 cm: Silty clay, dark greenish gray to dark gray (5GY 4/1 to 5Y4/1), very faint color banding at top. Section 4, 9 cm: 3 mm silt lamina, graded, sharp burrowed base, gray (5Y 5/1).
7						— SS	Section 5, 9-145 cm: Foraminifer-bearing clayey silt, dark gray to dark greenish gray (N4 to 5GY 4/1). Massive, burrowed; mica flakes conspicuous on surface. 121 cm: Diorite pebble, subangular, 1 cm. 145 cm: Silt lamina, 8mm thick, gray (5Y 5/1), bioturbated.
8						— SS	Section 5, 145 cm to Section 7, 30 cm: Silty clay, mainly dark greenish gray (5GY 4/1). Variable bioturbation as shown. Section 6, 11 cm: silt lamina (6 mm), sharp base, graded top, faint parallel lamination. Faintly color banded in Section 6, 48-92 cm, color bands are 3-6 cm thick. Section 5, 148 cm: Slate pebble, subangular, 1.5 cm.
9					///	— SS	Section 7, 30-55 cm: Foraminifer-bearing clayey silt, dark gray (5Y 4/1).



## Core Image

Site 1101 Hole A Core 14H						Cored 114.2-123.7 mbsf		
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1								SILTY CLAY and FORAMINIFER-BEARING CLAY  Section 1, 0-140 cm: Variegated mud with sandy lumps and very contorted bedding. Probably due to coring disturbance. Silty clay, dark greenish gray (5GY 4/1). At 75 cm, 2 cm pebble. 140-150 cm: Sandy clay, schist pebble at 145 cm, 3 cm in diameter.
2							SS	Section 2, 0-40 cm: Distorted bedding due to coring disturbance. 40-150 cm: Laminated thin-bedded silty clay (5GY 4/1) with gray (5Y 6/1) silt beds. 87 cm: 2 mm silt lamina; at 106 cm: silt bed 3 cm thick, with sharp lower contact (erosional?) and fairly sharp upper contact with faintly laminated mud above. Silt bed is rippled.
3							SS	Section 3, 0-131 cm: Laminated mud with ice rafted debris concentrated between 80-95 cm. Silt laminae at 60 cm, 1 cm diameter pebble at 81 cm. 131-150 cm: Massive silty clay with sandy particles.
4							SS	Section 4, 0-40 cm: Alternating massive sandy beds and silty clay beds (5GY 5-4/1) greenish gray to dark greenish gray, pebble at 20 cm, 1 cm in diameter: 40-87 cm: Foraminifer-bearing clayey silt. 87-150 cm: Clay with very thin beds of silt that are bioturbated, interval is greenish gray (5G 6/2).
5							SS	Section 5, 0-80 cm: Variegated green (5G) clay without silt. 80-110 cm: Massive, foraminifer-bearing silty clay with sandy particles. 110-150 cm: Green clay.
6							SS	Section 6, 0-150 cm: Laminated clay, grayish green (5G 6/2), thin bedded. At 87 cm pebble, 1.5 cm in diameter; 106 cm, thin silt lamina; 107-109 cm: Light colored quartz-rich very fine sand bed with mud laminae and current ripples.
7							SS	Section 7, 0-10 cm: Laminated mud as above. 10-57 cm: Massive, sandy mud, dark greenish gray (5G 4/1)
							SS	Core Catcher: Massive mud.

## Core Image

Site 1101 Hole A Core 15H					Cored 123.7-133.2 mbsf		
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1							CLAYEY SILT and SILTY CLAY
1.1							Section 1, 0 cm to Section 2, 22 cm: clayey silt, dark greenish gray (5GY 4/1), massive and bioturbated. Soupy to very disturbed in upper 80 cm.
2						SS	Section 2, 22-135 cm: Silty clay, dark greenish gray (5GY 4/1). 4 mm silt lamina at 24 cm, parallel laminated and burrowed; 1 mm silt laminae at 43, 51, and 78 cm. Section 2, 135 cm to Section 3, 25 cm: Clayey silt, massive and burrowed, greenish gray (5GY 4/1). Section 2, 148 cm: 2 cm, subangular volcanic pebble.
3						SS	Section 3, 25-125 cm: Silty clay, dark greenish gray (5G 4/1). Very thin (1-2 mm) silt laminae at 39, 41, and 95 cm, sharp tops and bases, burrowed.
4						SS	Section 3, 125 cm to base of core: Clayey silt, dark greenish gray (5GY 4/1) massive and burrow mottled. Scattered sand grains from Section 5, 120 cm to Section 6, 145 cm. Faint color banding in Section 7.
5						SS	
6						SS	
7						SS	
8						SS	
9							
8							

## Core Image

Site 1101 Hole A Core 16H					Cored 133.2-142.7 mbsf	
METERS	SECTION	GRAPHIC	LITH.	Bioturb.	SAMPLE	DESCRIPTION
			STRUCTURE	DISTURB.		
1					SS	CLAYEY SILT and SILTY CLAY  Section 1, 0-50 cm: Drilling disturbance. 50-89 cm: Muddy foraminiferal ooze, foraminifers disappear at the base of Section 1, massive throughout, color is greenish gray (5G 5/1).
2					SS	Section 2, 0-90 cm: Massive clayey silt. 90-150 cm: Weakly laminated silty clay with strong color alternations between brown (10YR 6/2) and grass green (1.8 G 5/1). Silty clay lamina at 138 cm.
3					SS	Section 3, 0-64 cm: Weakly laminated silty clay. Pyrite flakes at 31 cm. Pyritized sandy mud lamina at 42 cm. 61-65 cm: Carbonate cemented silt layer. 65-100 cm: Core disturbance.
4					SS	Section 4, 0-61 cm: Weakly laminated silty clay increasing core disturbance to 61 cm. Cut across core from split liner, 23-30 cm.
5					SS	Section 5, 0-60 cm: Silty clay disturbed by crushed liner.
6					SS	Section 6, 0-150 cm: Silty clay, greenish gray (5Y 5/1) deformed and broken into stringers and biscuit structures due to a split core liner. Appears to be bioturbated throughout. Pyrite scattered between 100-150 cm. Thin (mm) layers of silt 130-135 cm.
7						Section 7, 0-85 cm: Silty clay, appears to be slightly coarser from 56 cm to base. Section appears to be bioturbated. This section is disturbed by crushed liner.

## Core Image

Site 1101 Hole A Core 17X					Cored 142.7-150.5 mbsf
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	STRUCTURE DISTURB. SAMPLE DESCRIPTION
1					SILTY CLAY and CLAYEY SILT Sections 1 and 2: Green (5BG 4/1) massive silty clay disturbed by drilling and core splitter. Subtle changes in color. A 4 mm silt lamina in Section 2 at 46 cm. Burrow mottling occurs throughout.
2					SS
3					SS Section 3, 0-150 cm: Weakly laminated clayey silt, partially blurred by bioturbation.
4					SS
5					SS Section 4, 0-150 cm: Weakly laminated silty clay with turbidites at 58 and 39 cm, sandy mud with 25 % pyrite. Thin silt laminae at 50 and 105 cm. Section shows very subtle changes from green (5BG) to brown-green (5Y). Pebble at 91 cm (1 cm in diameter).
6					SS Section 5, 0-53 cm: Clayey silt with surface smeared by core splitting. 53-150 cm: Silty clay with thin (3 mm) silt laminae and weak laminations at 65 and 88 cm.
7					SS Sections 6-7 and Core Catcher: Massive clayey silt with no structure. Section 6, 132 cm: Pebble, 1 cm in diameter.
8					
9					
7					SS

## Core Image

Site 1101 Hole A Core 18X					Cored 150.5-160.1 mbsf
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	STRUCTURE DISTURB. SAMPLE DESCRIPTION
1					
1					CLAYEY SILT Section 1, 0-150 cm: Mottled bioturbated greenish gray (5GY 6/1) clayey silt, disturbed by drilling.
2					SS Section 2, 0-150 cm: Weakly laminated clayey silt with burrow mottling at 0-50, 75-97, and 134-150 cm; alternating with brown (structureless silty clay intervals at 50-75 and 97-134 cm). Color is predominantly dark greenish gray (5G 4/1).
3					SS Section 3, 0-97 cm: Disturbed by drilling. 97-145 cm: Clayey silt, structureless, mottled and bioturbated with a brown-colored interval at 110-117 cm. Color is predominantly dark greenish gray (5GY 5/1).
4					SS Section 4, 0-23 cm: Clayey silt, massive and structureless. 23-102 and 139-150 cm: Disturbed by drilling. 102-139 cm: Weakly laminated clayey silt.
5					SS Section 5, 0-150 cm: Massive silty clay; no structure or lamination. Brown (10 YR) interval at 26-31 cm. Silt lamina at 96 cm.
6					SS Section 6, 0-150 cm: Massive clayey silt with brown (10 YR) intervals at 40-80 and 122-127 cm.
7					SS Section 7 and Core catcher: Massive clayey silt without structure, greenish gray (5GY 5/1).

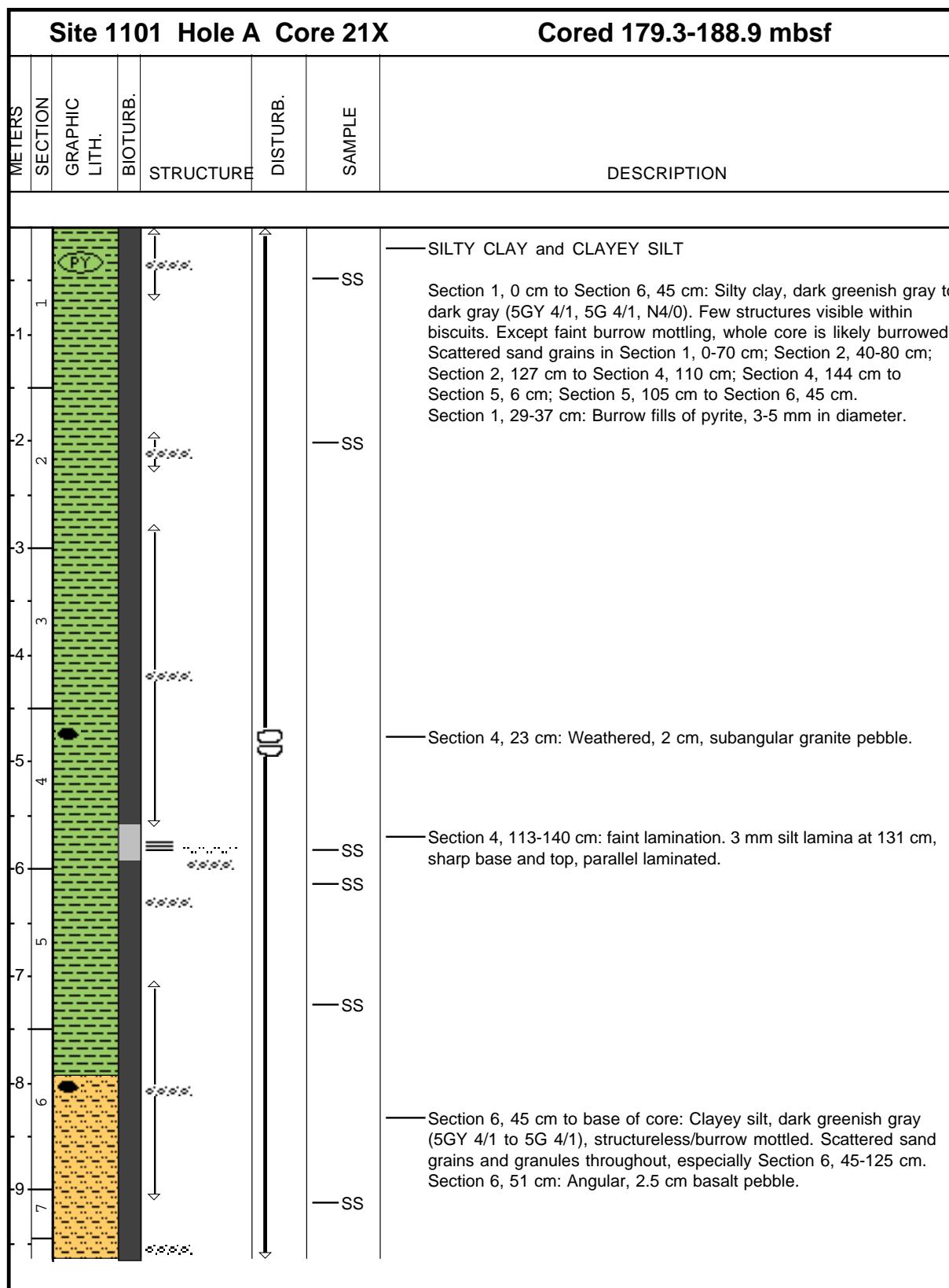
## Core Image

Site 1101 Hole A Core 19X					Cored 160.1-169.7 mbsf
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	DISTURB.	SAMPLE
					DESCRIPTION
1					CLAYEY SILT Section 1, 0-91 cm: Clayey silt highly disturbed by drilling. 91-125 cm: Weakly laminated silty clay, greenish gray (5GY 5/1). A 2 mm silt bed at 100 cm. 125-150 cm: Clayey silt disturbed by drilling.
2					— SS Section 2, 0-150 cm: Massive clayey silt disturbed by drilling. A bed of clay and silt sized carbonate (aragonite) at 110-126 cm.
3					— SS Sections 3-5 and Core Catcher: Clayey silt, massive and structureless, greenish gray (5Y 5/1) throughout.
4					— SS
5					— SS
6					— SS

# Core Image

Site 1101 Hole A Core 20X					Cored 169.7-179.3 mbsf		
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1							CLAYEY SILT Section 1, 0-150 cm: Clayey silt, massive and structureless. Greenish gray (5Y 5/1) throughout. 40-100 cm: Interval appears to be siltier. 100 cm: Pebble, 1 cm in diameter.
2						SS	Sections 2-5: Clayey silt, massive and structureless, greenish gray (5Y 5/1). Section 2, 75-85 cm: Slightly darker and siltier interval.
3						SS	Section 3, 23 and 27 cm: Sandy mud beds, 5 mm thick, mottled and sharp-based. 60-80 cm: Darker and siltier interval. 82 cm: Ice rafted pebble.
4						SS	Section 4, 96-124 cm: 5 Sharp-based silt beds, graded and 1 cm thick.
5						SS	Section 5, 20, 74 and 122 cm: Ice rafted pebbles. 78 cm, 100 cm: Sharp-based 1 cm thick silt bed, graded.
6						SS	Section 6, 0-133 cm: Very finely laminated silty clay with weak bioturbation. Section 6, 133 to Core Catcher: Change to brown (5GY 5/1) at 133 with common ice rafted debris.
7						SS	
8						SS	
9						SS	

## Core Image



## Core Image

Site 1101 Hole A Core 22X					Cored 188.9-198.5 mbsf
METERS	SECTION	GRAPHIC	LITH.	Bioturb.	STRUCTURE DISTURB. SAMPLE DESCRIPTION
1					CLAYEY SILT and DIAMICT Section 1, 0 cm to Section 2, 5 cm: Laminated clayey silt, dark greenish gray (5GY 4/1). Interbedded silt laminae 1-3 mm thick, sharp base and gradational tops into laminated mud. Silt laminae <1% total thickness. The silt laminae contain pyrite and also pyritized burrow infill. Section 1, 105-130 cm: Diamict, clast poor, granules and sand.
2					SS Section 2, 5-20 cm: Diamict, dark greenish gray (5GY 4/1). Section 2, 20-130 cm: Laminated clayey silt, dark greenish gray (5GY 4/1). Interbedded silt laminae 1-3 mm thick, sharp base and gradational tops into laminated mud. Silt laminae <1% total thickness. Section 2, 130-150 cm: Diamict, dark greenish gray (5GY 4/1).
3					SS Section 3, 0-150 cm: Laminated clayey silt, dark greenish gray (5GY 4/1). Interbedded silt laminae 1-3 mm thick, sharp bases and gradational tops into laminated mud. Silt laminae <1% total thickness.
4					SS Section 4, 0-34 cm: Diamict, dark greenish gray (5GY 4/1). Section 4, 34-72 cm: Laminated silty clay, grayish green (5Y 4/2). Interbedded thin horizons with wavy lamination. Section 4, 72-121 cm: Laminated silty clay, dark greenish gray (5GY 4/1). Intense burrowing. Section 4, 121 cm to Section 5, 5 cm: Diamict, dark greenish gray (5GY 4/1).
5					SS Section 5, 5-48 cm: Laminated silty clay, dark greenish gray (5GY 4/1). Section 5, 48-106 cm: Diamict, dark greenish gray (5GY 4/1). Section 4, 106 cm to Section 6, 52 cm: Laminated silty clay, dark greenish gray (5GY 4/1).
6					SS Section 5, 5-48 cm: Laminated silty clay, dark greenish gray (5GY 4/1). Section 6, 52-105 cm: Diamict, matrix is diatom-bearing silty clay, dark greenish gray (5GY 4/1). Section 6, 105 cm to Section 7, 25 cm: Laminated silty clay, dark greenish gray (5GY 4/1). Interbedded silt laminae 3 mm thick, sharp base and gradational top.
7					SS Section 7, 25 cm to bottom Core Catcher: Diamict, dark greenish gray (5GY 4/1).

## Core Image

Site 1101 Hole A Core 23X					Cored 198.5-208.1 mbsf			
METERS	SECTION	GRAPHIC	LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1								DIATOM-BEARING SILTY CLAY
1-1.5								Section 1, 0-150 cm: diatom-bearing silty clay, massive with scattered pebbles granules and sand, at 24 cm basalt pebble 0.5 cm in diameter, at 34 cm basalt pebble 0.5 cm in diameter, dark greenish gray (5GY 4/1) from 0-135 cm, slight color change to 5G 4/1 from 135-140 cm.
1.5-2							SS	Section 2, 0-100 cm, diatom-bearing silty clay, scattered granules and sand throughout, dark gray (5Y 4/1), moderate bioturbation with mottling and burrows. 2 mm thick silt laminae at 40-45 cm.
2-3							SS	Section 2, 100-140 cm: Dark greenish gray (5GY 4/1) diatom-bearing silty clay, from 131-134 cm there are 3 "green" laminae, 3 mm thick containing 15% glauconite. From Section 2, 140 cm to Section 3, 45 cm, diatom-bearing silty clay, dark gray (5Y 4/1). In Section 3, tan mud clast at 3 cm and subangular pebble 2 cm in diameter at 31 cm.
3-4							SS	Section 3, 46-60 cm: Dark gray (5Y 4/1) clast-poor diamict with stratified appearance due to segregation of clasts.
4			(FY)				SS	60-102 cm, dark greenish gray (5GY 4/1) diatom-bearing silty clay. Silt bed 2.5 cm thick with sharp lower contacts and gradational upper contact at 84 cm. Bioturbated silt laminae from 94-97 cm, green (5BG 4/1) layer from 97-102 cm with small pyrite crystals.
4-5							SS	Section 3, 102 cm to Section 6, 10 cm dark gray (5Y 4/1) massive diatom-bearing silty clay. Pebbles, granules and sand scattered throughout.
5-6							SS	
6-7							SS	
7-8							SS	Section 6, 10 cm to end of core: Weakly laminated silty clay with thin silt, dark greenish gray (5GY 4/1) in Section 6, 51-59 cm fine sand bed with sharp upper and lower contacts.
8-9							SS	
9-10							SS	Section 7: Weakly laminated. Scattered granules and sand. Void from 11-17 cm.

# Core Image

**Site 1101 Hole A Core 24X**      **Cored 208.1-217.7 mbsf**

METERS	SECTION	LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1							DIATOM-BEARING SILTY CLAY
-1						SS	Section 1, 0-79 cm: Diatom-bearing silty clay, dark greenish gray (5GY 4/1), parallel lamination clearly seen in biscuits. 73 cm: 1 mm pyritized silt lamina with tiny burrow fills of pyrite just above.
-2						SS	Section 1, 79 cm to Section 4, 60 cm: diatom-bearing silty clay, dark greenish gray to dark gray (5GY 4/1 to N4/0). Abundant scattered sand grains and granules, massive, probably bioturbated.
-3						SS	
-4						SS	Section 3, 117 cm: 1 cm silt lamina, burrowed, disturbed by drilling.
-5						SS	Section 3, 134-137 cm: Diatom silty clay lamina, very dark greenish gray (5G 3/1).
-6						SS	Section 4, 0-50 cm: Four fuzzy laminae of diatom silty clay, very dark greenish gray (5G 3/1).
-7						SS	Section 4, 60 cm to base of core: Diatom silty clay, dark greenish gray (5GY 4/1). Scattered sand grains in Section 4, 104 cm to Section 5, 15 cm; Section 6, 48-80 cm, Section 7, 6-20 cm. Mainly structureless and burrow mottled.
-8						SS	Section 5, 88 to 125 cm: Five diffuse laminae of dark greenish gray diatom-bearing silty clay, 5-7 mm thick. Minor bioturbation.
-9							
-7							





**CORE DESCRIPTIONS**  
**SMEAR SLIDES, SITE 1101**

Leg	Site	Note: 0.5 equal to tr.				Section	Interval (cm)	Depth (mbst)	Depth (mcd)	Described by	Major lithology (1)	Minor lithology (2)	Size		Composition - Siliciclastic										Composition - Biogenic										Sediment or Rock Name
		Hole	Core	Type	Sand	Silt	sum {sand+silt}	Clay	sum {sand+silt+clay}	Quartz	Feldspar	Clay (too fine to identify)	Mica	Glaucite	Rock Fragments	Volcanic Glass	Acc. Minerals	Carbonate	Opaque	Frambooids/micronodules	Other	Terrigenous (tot silicic-clay counts)	Total clay + siliciclastic	Nanofossils	Foraminifers	Diatoms	Radialarians	Coccolith	Silicoflagellates	Sponge Spicules	Shell debris	unidentified/other	Total Biogenic		
178	1101	A	20	X	3	24	172.9			wlf	1	2	70	20	10	30.0	5.0	9.0	5.0	30.0	2.0	2.0	1.0	5.0		90	7.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	sandy mud
178	1101	A	20	X	4	112	175.3			wlf	1	2	50	48		30.0	10.0	10.0	1.0	30.0		2.0	10.0			90	2.0	2.0		1.0	5.0	1.0			clayey silt
178	1101	A	20	X	7	20	178.9			wlf	1	5	60	35		25.0	10.0	10.0	3.0	25.0		2.0	10.0	3.0	5.0	90	3.0	2.0		1.0	4.0	1.0			clayey silt
178	1101	A	21	X	1	46	179.8			eac	1	0	40	60		60.0	29.0	2.0							97	2.0	0.5		1.0					silty clay	
178	1101	A	21	X	2	50	181.3			eac	1	2	60	40		75.0	10.0		2.0						95	5.0			0.5					clayey silt	
178	1101	A	21	X	5	12	185.4			eac	1	0	40	60		15.0	10.0	60.0	5.0						99	1.0			0.5					silty clay	
178	1101	A	21	X	5	125	186.6			eac	1	0	30	70		15.0	6.0	70.0	6.0						98	2.0			0.5					silty clay	
178	1101	A	21	X	7	10	188.4			eac	1	2	70	38		30.0	8.0	30.0	5.0						98	2.0			0.5					clayey silt	
178	1101	A	22	X	1	104	189.9			ce	2	0	75	25		35.0	5.0	30.0	5.0						97	3.0			0.5					clayey silt	
178	1101	A	22	X	2	54	190.9			ce	1	0	55	45		30.0	5.0	46.0	5.0						94	5.0			1.0					clayey silt	
178	1101	A	22	X	3	38	192.3			ce	1	15	45	40		25.0	10.0	58.0	2.0						94	5.0			1.0					silty mud	
178	1101	A	22	X	4	63	194			ce	1	0	25	75		20.0	5.0	67.0	2.0						96	3.0			1.0					silty clay	
178	1101	A	22	X	5	58	195.5			ce	1	3	20	17		15.0	3.0	69.0						87	10.0			0.5	3.0				silty clay		
178	1101	A	22	X	6	133	197.7			ce	2	5	95	0		60.0	10.0		5.0					100				0					silt		
178	1101	A	22	X	7	11	198			ce	1	0	25	75		20.0	5.0	73.0	2.0						96	3.0			1.0					silty clay	
178	1101	A	23	X	1	70	199.2			eac	1	0	40	60		60.0	32.0		2.0					76	20.0	1.0		3.0					Diatom-bearing silty clay		
178	1101	A	23	X	2	133	201.3			eac	2	3	30	67		40.0	20.0		20.0					77	20.0	0.5		3.0					Diatom-bearing silty clay		
178	1101	A	23	X	3	40	201.9			eac	1	0	30	70		10.0	5.0	60.0	1.0						81	15.0			0.5					Diatom-bearing silty clay	
178	1101	A	23	X	5	82	205.3			eac	1	0	24	76		8.0	3.0	70.0	2.0						88	8.0			4.0					silty clay	
178	1101	A	23	X	6	55	206.6			eac	2	90	10	0		40.0	30.0		30.0					100				0					sand		
178	1101	A	23	X	6	105	207.1			eac	1	0	30	70		10.0	6.0	60.0						76	20.0	0.5		4.0					Diatom-bearing silty clay		
178	1101	A	24	X	1	52	208.6			eac	1	0	40	60		18.0	60.0						80	0.5	20.0		0.5					Diatom-bearing silty clay			
178	1101	A	24	X	2	78	210.4			cjp	1	1	40	59		15.0	5.0	50.0		8.0	1.0	1.0			80	20.0	0.5							Diatom-bearing silty clay	
178	1101	A	24	X	3	116	212.3			cjp	2	10	90	0		40.0	10.0		1.0	33.0	3.0	2.0			89	10.0	0.5		1.0					Diatomaceous silty clay	
178	1101	A	24	X	3	135	212.5			cjp	2	0	40	60		18.0		50.0						70	30.0	0.5		0.5					Diatomaceous silty clay		
178	1101	A	24	X	4	83	213.4			cjp	1	1	40	60		18.0				50.0	1.0	1.0			70	30.0			0.5					Diatomaceous silty clay	
178	1101	A	24	X	6	37	216			cjp	1	0	50	50		20.0	3.0	40.0		5.0	1.0	1.0			70	30.0			0.5					Diatomaceous silty clay	