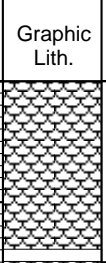

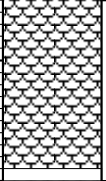

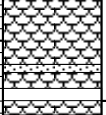
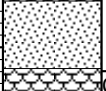



SITE 1026 HOLE A CORE 1H CORED 0.0 - 5.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			S	<p>CLAYEY SILT to SILTY CLAY and SAND</p> <p>Major Lithology: SILTY CLAY to CLAYEY SILT with distinctive color banding. Color varies from greenish gray to moderate olive brown. Irregular patches of silt occur locally.</p> <p>Minor Lithology: Olive gray SAND, with bases in Section 3, 126 cm, and Section 4, 68 cm. Internally structureless due to coring disruption.</p>
2		2				IW	
3		3				IW S	
4		4				IW	
5		4					
		CC					



SITE 1026 HOLE A CORE 2H CORED 5.4 - 14.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary				<p>CLAYEY SILT to SILTY CLAY, SILT, and SAND</p> <p>Major Lithologies: Greenish gray to light olive gray CLAYEY SILT to SILTY CLAY with color bands, silt laminae. Local mottling and bioturbation. Medium dark gray SAND, with sharp bases in Section 1, 47 cm, Section 2, 104 cm, Section 4, 109 cm and 134 cm, and Core Catcher, 4 cm. Normally graded, internally structureless, sharp tops.</p> <p>Minor Lithology: Thin beds of SILT, with bases in Section 3, 24 cm, Section 4, 70 cm, Section 6, 99 cm.</p> <p>General Description: Thick intervals of sand are soupy.</p>
1		1					
2		2				PP	
3		3				IW	
4		4				S	
5		5				IW	
6		6					
7		7					
8		8			IW		
9		9			S		
		CC					

SITE 1026 HOLE A CORE 3H CORED 14.9 - 24.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			S	CLAYEY SILT to SILTY CLAY, SILT, SILTY SAND, SAND, and DEBRIS-FLOW DEPOSITS
2		2				PP	Major Lithology: Light gray to medium gray CLAYEY SILT to SILTY CLAY with prominent color bands and local rip-up clasts of mud. Olive gray, fine-grained SAND and SILTY SAND, with sharp bases in Section 1, 64 cm, 76 cm, 102 cm, and 145 cm, Section 2, 91 cm, and 110 cm, Section 3, 9 cm, Section 4, 28 cm, Section 5, 89 cm, Section 6, 23 cm, 78 cm, 101 cm, and 122 cm, Section 7, 28 cm, and Core Catcher, 4 cm and 23 cm. Normal size grading, gradational tops.
3		3					
4		3					Minor Lithologies: DEBRIS-FLOW DEPOSITS, in Section 2, 0 to 67 cm, and Section 3, 15 to 72 cm. Matrix composed of either contorted mud with color bands or muddy sand. Clasts are variable in shape and composed of mud with variable degrees of induration. Poorly sorted, olive gray MUDDY SAND, with bases in Section 3, 94 cm and 135 cm, Section 4, 72 cm, 98 cm, and 119 cm. Internally structureless. These intervals are probably sandy debris-flow deposits. Thin beds of gray SILT, with bases in Section 2, 124 cm, 134 cm and 144 cm, Section 6, 45 cm, 137 cm, and 142 cm.
5		4				PP	
6		4					General Description: Interbedded lithologies probably include sand and silt turbidites, debris-flow deposits, and hemipelagic mud deposits.
7		5					
8		6			IW		
9		6					
		7					
		CC					

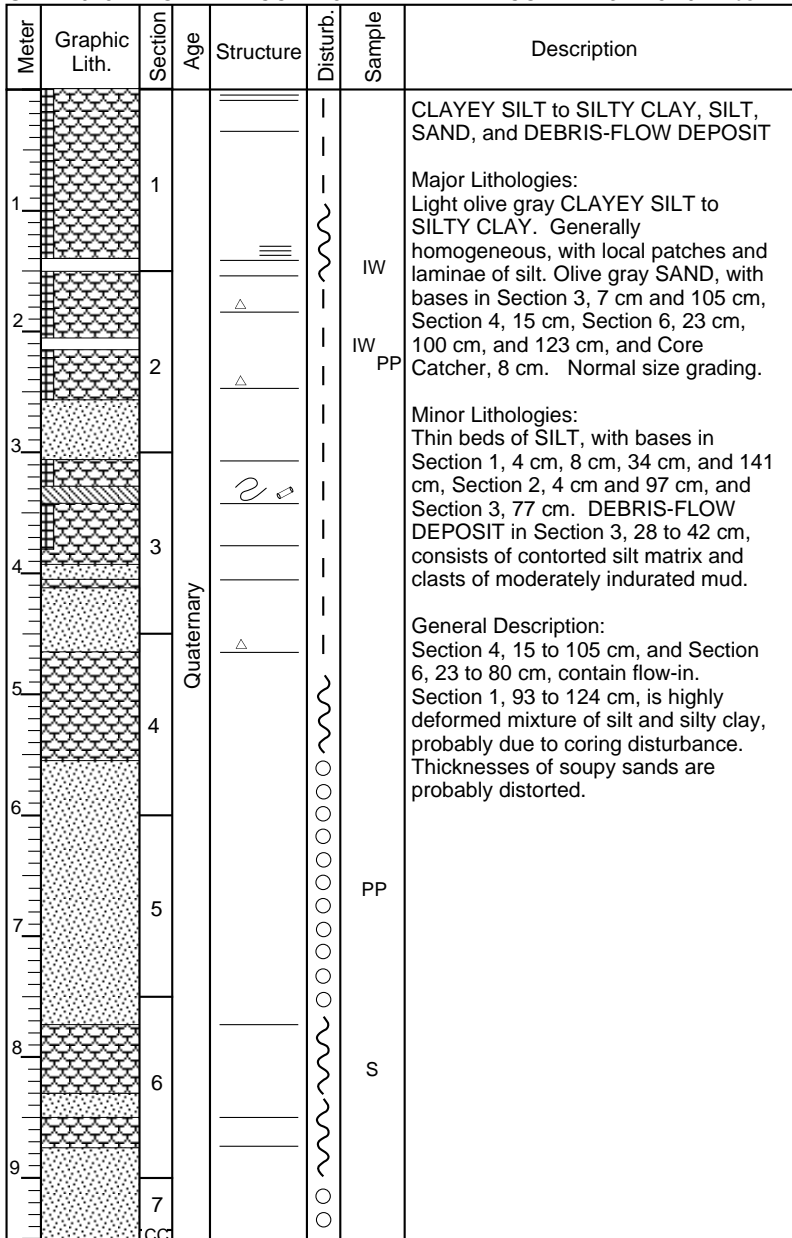
SITE 1026 HOLE A CORE 4H CORED 24.4 - 33.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			S	CLAYEY SILT to SILTY CLAY, SILT, SANDY SILT, SAND, MUDDY SAND, and DEBRIS- FLOW DEPOSIT
2		2				S	Major Lithologies: Light olive gray CLAYEY SILT to SILTY CLAY with local patches of dark gray. Section 6 contains numerous very thin interbeds of sand. Olive gray SAND, with bases in Section 1, 19 cm and 61 cm, Section 2, 98 cm, Section 3, 100 cm, Section 4, 54 cm, Section 5, 18 cm, 41 cm, and 123 cm, and Section 6, 15 cm. Some beds are normally graded; thicker beds are internally structureless.
3		3				PP	
4		3				PP	Minor Lithologies: SILT and SANDY SILT, with bases in Section 4, 59 cm, Section 6, 53 cm, 87 cm, and 147 cm, Section 7, 9 cm, 24 cm, 34 cm, and 63 cm, and Core Catcher, 16 cm. Poorly sorted, internally structureless MUDDY SAND in Section 4, 67 to 80 cm. DEBRIS-FLOW DEPOSIT in Section 4, 100 to 145 cm. Matrix of sand with clasts of moderately indurated mud.
5		4				IW	
6		4				PP	General Description: Parts of this core are highly disturbed, with vertical flow-in. Sand-layer thickness may be distorted. Interbedded lithologies probably represent turbidites, debris-flow deposits, and hemipelagic mud deposits.
7		5				IW	
8		6			S		
9		7			S		
		CC					

SITE 1026 HOLE A CORE 5H CORED 33.9 - 43.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description	
1		1	Quaternary		○		<p>CLAYEY SILT to SILTY CLAY, SILT, and SAND</p> <p>Major Lithologies: Light olive gray CLAYEY SILT to SILTY CLAY with local patches and bands of dark gray. Sections 5 and 7 contain numerous very thin interlayers of silt. Greenish gray SAND, with sharp to erosional bases in Section 2, 12 cm, Section 3, 61 cm, Section 4, 44 cm, 64 cm, and 138 cm, Section 5, 7 cm, 18 cm, 92 cm, 114 cm, 126 cm, and 137 cm, and Section 6, 15 cm, 66 cm, and 127 cm. Normal size grading, gradational tops, local planar laminae.</p> <p>Minor Lithology: Thin beds of SILT in Section 2, 56 cm, Section 3, 119 cm, Section 5, 31 cm, 39 cm, 57 cm, and 77 cm, Section 5, 94 cm, Section 7, 4 cm, 10 cm, 17 cm, 26 cm, 39 cm, 46 cm, and 53 cm, and Core Catcher, 3 cm, 9 cm, and 18 cm. Sharp bases, normal size grading.</p> <p>General Description: Thick sand beds are soupy and thicknesses probably are distorted. Interbedded lithologies probably represent turbidites and hemipelagic mud deposits.</p>	
2		2			△	●		PP
3						○		
4		3			△	●		S
5					△	●		WR <sup>PP</sup>
6		4			△	●		
7		5			△	●		IW
8		6		△	○			
9		7		△	○			
		CC		△	●			

SITE 1026 HOLE A CORE 6H CORED 43.4 - 52.9 mbsf



Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP S	<p>CLAYEY SILT to SILTY CLAY, SILT, SAND, and DEBRIS-FLOW DEPOSITS</p> <p>Major Lithologies: Light olive gray CLAYEY SILT to SILTY CLAY. Olive gray to greenish gray SAND, with sharp to erosional bases in Section 1, 64 cm, 73 cm, and 147 cm, Section 2, 75 cm, 98 cm, 119 cm, 136 cm, and 145 cm, Section 3, 16 cm, 39 cm, 48 cm, 62 cm, 104 cm, and 135 cm, Section 4, 18 cm, 43 cm, 84 cm, and 120 cm, Section 5, 3 cm, 67 cm, and 133 cm, Section 6, 61 cm and 92 cm, and Core Catcher, 25 cm. Normal size grading, gradational tops.</p>
2		2					
3		3					
4		4					
5		5					
6		6					
7		7					
8		6			IW		
9		7					
		CC					

Minor Lithologies:  
Thin beds of SILT in Section 1, 118 cm, Section 4, 54 cm, 69 cm, and 132 cm, and Section 5, 82 cm, 88 cm, 108 cm. Probable DEBRIS-FLOW DEPOSITS in Section 1, 125 to 145 cm, and Section 2, 7 to 43 cm, with matrix of contorted silt or sandy silt and clasts of moderately indurated mud.

General Description:  
Section 1, 0 to 40 cm, is highly deformed and probably filled in with drilling debris. Parts of Sections 5 and 6 are highly disturbed by coring with obvious flow-in structure. Scattered wood fragments in Sections 2 and 6.

SITE 1026 HOLE A CORE 8H CORED 62.4 - 71.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary		○	S	CLAYEY SILT to SILTY CLAY, SILT, and SAND  Major Lithology: Light olive gray to brownish gray CLAYEY SILT to SILTY CLAY with numerous very thin interbeds and laminae of silt.
2		2			●	S	Minor Lithologies: Greenish gray SAND, with sharp to erosional bases in Section 2, 21 cm and 78 cm, Section 3, 34 cm, Section 4, 71 cm, and Section 5, 112 cm.
3		3			●	PP	Normal size grading. Thin beds of medium light gray SILT in Section 2, 94 cm, 102 cm, 123 cm, and 144 cm, Section 3, 64 cm, 69 cm, 89 cm, and 133 cm, Section 4, 33 cm, 39 cm, 49 cm, 56 cm, 75 cm, 82 cm, 94 cm, 122 cm, 133 cm, and 139 cm, Section 5, 6 cm, 15 cm, 25 cm, 39 cm, and 45 cm, Section 6, 113 cm and 124 cm, Section 7, 27 cm and 32 cm, and Core Catcher, 20 cm. Normal size grading, gradational tops.
4		4			●	S	
5		5			●	S	
6		6			●		
7		7			○		
8		8			○	PP	
9		9			○	PP	
		CC			○	IW	
					○	PP	

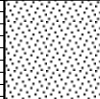

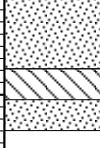
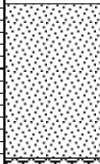
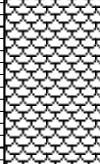
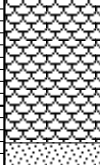
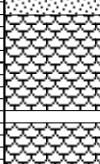
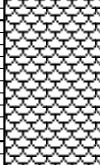
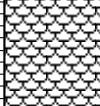


SITE 1026 HOLE A CORE 9H CORED 71.9 - 81.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP	<p>CLAYEY SILT to SILTY CLAY, SILT, MUDDY SAND, SAND, and DEBRIS-FLOW DEPOSIT</p> <p>Major Lithologies: Light olive gray CLAYEY SILT to SILTY CLAY, with sporadic very thin beds and laminae of silt and dark gray color bands. Dark greenish gray to light olive gray SAND, with bases in Section 3, 135 cm, Section 4, 106 cm, and Section 5, 28 cm.</p> <p>Minor Lithologies: Thin beds of SILT in Section 3, 29 cm, 32 cm, and 44 cm, and Section 4, 119 cm. Probable DEBRIS-FLOW DEPOSIT in Section 3, 140 cm to Section 4, 67 cm. Contains matrix of muddy sand and clasts of moderately indurated mud, but also disrupted by core flow-in. Beds of poorly sorted, structureless MUDDY SAND, with bases in Section 5, 36 cm and 55 cm.</p> <p>General Description: Parts of this core are highly disturbed. Thicknesses may be distorted, especially in soupy sand.</p>
2		2				PP	
3		3				PP	
4		4				WR	
5		5				S	
6		6				IW	
7		7				S	
8		8					
9		9					
		CC					



SITE 1026 HOLE A CORE 11H CORED 90.9 - 100.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description	
1		1	Quaternary		○	S	<p>SILTY CLAY to CLAYEY SILT, MUDDY SAND, and SAND</p> <p>Major Lithologies: Medium dark gray to light olive gray SAND with bases in Section 2, 28 cm, Section 3, 74 and 127 cm, and Section 5, 112 cm. Structureless and soupy due to coring disturbance. Medium gray to light olive gray SILTY CLAY to CLAYEY SILT. Laminae and thin interbeds of silt highly distorted by coring disturbance.</p> <p>Minor Lithology: MUDDY SAND with base in Section 2, 54 cm. Structureless, poorly sorted.</p> <p>General Description: Most of this core is highly disrupted and affected by severe down-bowing and vertical flow-in of sediment. Thicknesses are not reliable.</p>	
2		2				●		WR <sub>PP</sub>
3		3				●		
4		4				●		
5		5				●		
6		6				●		S
7		7				●		PP
8		8			●	IW		
9		9			●			
		CC						

SITE 1026 HOLE A CORE 12H CORED 100.4 - 101.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1 CC	Quaternary		— — —	S	CLAYEY SILT, SILT, and SAND  Major Lithologies: Medium light gray CLAYEY SILT with thin interbeds of SILT and SAND.

SITE 1026 HOLE C CORE 1R CORED 84.6 - 94.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
		1 CC	Quaternary		— ●— ●—	PP S S	CLAYEY SILT to SILTY CLAY and SAND  General Description: Light olive gray CLAYEY SILT to SILTY CLAY with very thin silt laminae and thin interbeds of SAND.

SITE 1026 HOLE C CORE 2R CORED 94.2 - 103.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
		CC	Quaternary			S	CLAYEY SILT to SILTY CLAY and SAND  General Description: Core Catcher contains thin interbeds of light olive gray SILTY CLAY to CLAYEY SILT and fine SAND.

SITE 1026 HOLE C CORE 3R CORED 103.8 - 113.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
		1	Quaternary			PP	CLAYEY SILT to SILTY CLAY and SAND  General Description: Interbeds of greenish gray SILTY CLAY to CLAYEY SILT with silt laminae and SAND. Bedding in Section 1 may be out of stratigraphic order.
		CC				PP	

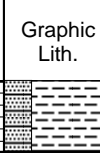
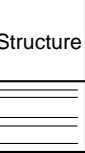
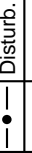
SITE 1026 HOLE C CORE 4R CORED 113.5 - 123.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			S	CLAYEY SILT to SILTY CLAY, SILT, and MUDDY SAND  General Description: Light olive gray CLAYEY SILT to SILTY CLAY with thin interbeds and laminae of SILT. Coarse, poorly sorted MUDDY SAND, Section 1, 4-8 cm, contains rock fragments up to 2 mm.
		CC				PP	

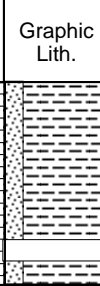
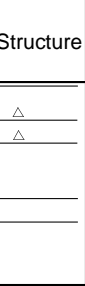
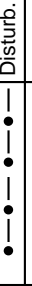
SITE 1026 HOLE C CORE 5R CORED 123.1 - 132.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary		~	PP	CLAYEY SILT to SILTY CLAY and SILT  Major Lithology: Dark greenish gray CLAYEY SILT to SILTY CLAY with color bands, silt laminae, variable induration.  Minor Lithology: Thin beds of light olive gray SILT in Section 1, 76 cm, 96 cm, and 118 cm, Section 2, 7 cm, and Core Catcher, 11 cm.
		CC				PP	

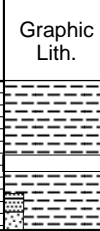


SITE 1026 HOLE C CORE 6R CORED 132.7 - 142.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
		1	Quaternary			PP S S	CLAYEY SILT to SILTY CLAY and SILT
							<p>General Description: Greenish gray to light olive gray SILTY CLAY to CLAYEY SILT with thin interbeds of light olive gray SILT.</p>

SITE 1026 HOLE C CORE 7R CORED 142.3 - 152.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP S S IW	<p>SILTY CLAY to CLAYEY SILT and SAND to SILTY SAND</p> <p>Major Lithology: Greenish gray SILTY CLAY to CLAYEY SILT.</p> <p>Minor Lithology: Thin beds of fine SAND to SILTY SAND in Section 1, 2 cm, 31 cm, 50 cm, 96 cm, 115 cm, and 130 cm, and Core Catcher, 20 cm. Sharp bases, normal size grading, gradational tops.</p>

SITE 1026 HOLE C CORE 8R CORED 152.0 - 161.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP S IW S	<p>CLAYEY SILT to SILTY CLAY, SILT, and SAND</p> <p>Major Lithology: Greenish gray to light olive gray SILTY CLAY to CLAYEY SILT with local increases in calcium carbonate. Carbonate-rich intervals are lighter in color. Bioturbation and <i>Zoophycos</i>.</p> <p>Minor Lithologies: Thin interbeds of SILT and fine SAND in Section 1, 100 cm, and Core Catcher, 4 cm and 14 cm.</p>



Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary		XXXX	S S PP IW	<p>CLAYEY SILT to SILTY CLAY and SANDY SILT to SILT</p> <p>Major Lithology: Greenish gray to medium light gray CLAYEY SILT to SILTY CLAY. Local light color bands, bioturbation, <i>Zoophycos</i>, increases in calcium carbonate.</p>
2		2			XXXX		
		CC			XX	PP	<p>Minor Lithology: Thin interbeds of medium gray SANDY SILT to SILT in Section 1, 62 cm, 83 cm, 105 cm, and 135 cm, Section 2, 20 cm, 50 cm, and 75 cm, and Section 3, 24 cm. Sharp bases, planar laminae, some normal grading. Some beds difficult to recognize because of drill slurry.</p>

SITE 1026 HOLE C CORE 10R CORED 171.2 - 180.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP	<p>CLAYEY SILT to SILTY CLAY and SANDY SILT to SILT</p> <p>Major Lithology: Greenish gray CLAYEY SILT to SILTY CLAY. Intervals with higher contents of calcium carbonate are lighter gray. Common silt laminae, bioturbation.</p> <p>Minor Lithology: Thin interbeds of greenish gray SANDY SILT to SILT in Section 1, 116 cm, 135 cm, 138 cm, and 140 cm, Section 2, 7 cm, 104 cm, and 131 cm, Section 3, 42 cm, 59 cm, 67 cm, 115 cm, and 129 cm, Section 4, 11 cm, 66 cm, 85 cm, 101 cm, and 128 cm, Section 5, 18 cm, 54 cm, 107 cm, and 112 cm, Section 6, 23 cm, 45 cm, and 54 cm, and Core Catcher, 12 cm. Plane-parallel laminae and subtle normal size grading.</p> <p>General Description: Large lithoclast in Section 1, 107 to 112 cm. Pyrite nodules scattered in Sections 1, 2, and 3. Section 3 also contains rubble with green friable clasts, 125 to 132 cm and 142 to 150 cm. Interbedded lithologies probably represent thin, fine-grained turbidites and hemipelagic mud deposits.</p>
2		2				S	
3		3				PP	
4		4				IW	
5		5				S	
6		6				S S	
7		7			PP		
8		8			PP		
		CC				PP	



SITE 1026 HOLE C CORE 11R CORED 180.8 - 190.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
		1	Quaternary			S S PP	CLAYEY SILT to SILTY CLAY and SILT  General Description: Medium gray SILTY CLAY to CLAYEY SILT with thin interbeds of SILT in Section 1, 20 cm, 59 cm, and 63 cm. Bioturbation, <i>Zoophycos</i> , silt laminae.

SITE 1026 HOLE C CORE 12R CORED 190.5 - 200.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP S IW	CLAYEY SILT to SILTY CLAY and SILT  Major Lithology: Greenish gray to medium gray CLAYEY SILT to SILTY CLAY with local bioturbation, pyrite nodules.
2		2					PP

SITE 1026 HOLE C CORE 13R CORED 200.1 - 209.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary		XX	PP	<p>CLAYEY SILT to SILTY CLAY and SILT</p> <p>Major Lithology: Medium gray to light medium gray and olive gray CLAYEY SILT to SILTY CLAY. Local increases in content of calcium carbonate, dark color bands, bioturbation, scattered foraminifers, <i>Zoophycos</i>.</p> <p>Minor Lithology: Thin beds of SILT in Section 1, 15 cm, 77 cm, 108 cm, and 135 cm, Section 2, 9 cm, 14 cm, 25 cm, 38 cm, and 51 cm, Section 3, 22 cm, 98 cm, and 143 cm, Section 4, 31 cm, 52 cm, 66 cm, 72 cm, and Section 5, 56 cm. Planar laminae and low-angle wavy laminae; some beds with sharp bases and normal size grading.</p> <p>General Description: Pyrite nodules in Section 2, 101 cm, and Core Catcher, 18 cm. Increases in CaCO<sub>3</sub> coincide with lighter color.</p>
2		2		PP			
3		3		PP			
4		4		PP			
5		5		PP			
6		6		IW			
7		5	PP	S	PP		
8		6	CC				

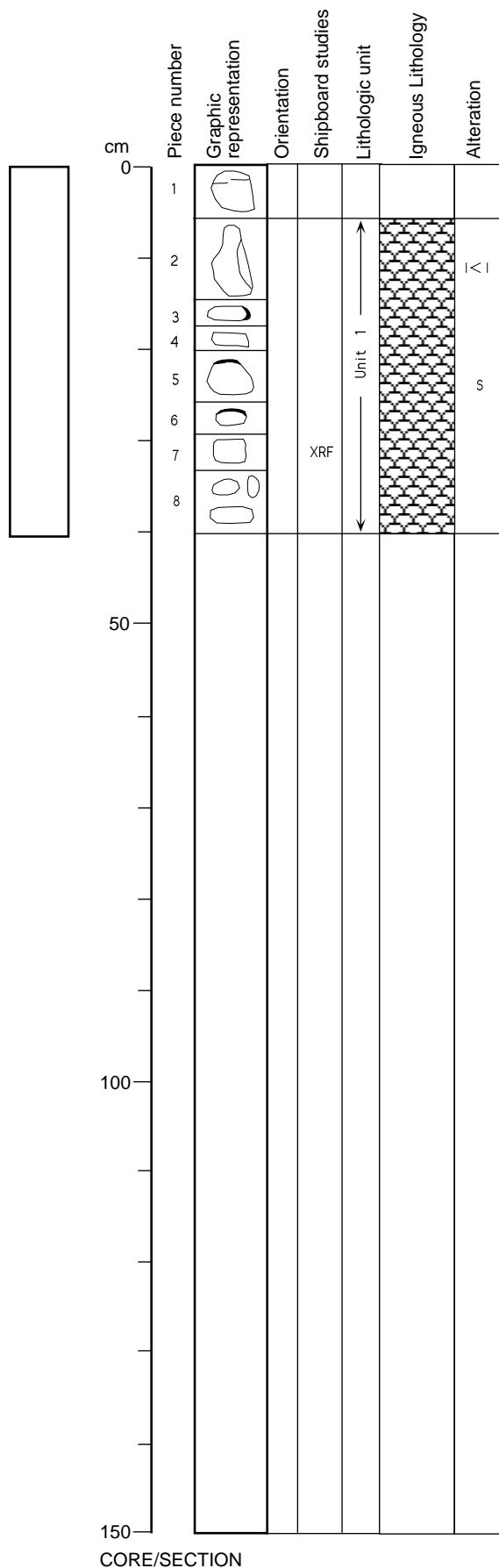


Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP	<p>CLAYEY SILT to SILTY CLAY and SILT</p> <p>Major Lithology: Medium gray to olive gray CLAYEY SILT to SILTY CLAY with local bioturbation, dark color bands, silt laminae, and <i>Zoophycos</i>. Variable content of calcium carbonate.</p> <p>Minor Lithology: Thin interbeds of SILT in Section 2, 36 cm, 98 cm, and 104 cm, Section 3, 67 cm, and Section 5, 44 cm. Planar laminae.</p> <p>General Description: Cluster of pyrite nodules in Section 3, 108 to 110 cm. Small fault with normal offset of silt laminae in Section 1, 102 to 110 cm. High-angle fault with dip-slip slickenlines in Section 4, 54 to 71 cm.</p>
2		2				PP	
3		3				S	
4		4				PP	
5		5				PP	
6		6				IW	
7		5			PP		
8		6			PP		
		CC					

SITE 1026 HOLE C CORE 15R CORED 219.3 - 228.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1		1	Quaternary			PP	<p>CLAYEY SILT to SILTY CLAY</p> <p>Major Lithology: Medium gray to light gray and greenish gray SILTY CLAY to CLAYEY SILT. Local black discoloration and yellowish gray bands with higher contents of calcium carbonate. Bioturbation and <i>Zoophycos</i> common.</p> <p>General Description: Color bands and trace fossils display apparent dips of 15-20° throughout core. Color bands in Section 7, 45 to 63 cm, dip approximately 60°, but top of this interval was removed for IW sample. Small normal faults in Section 1, 117 to 120 cm, and Section 6, 75 to 80 cm.</p>
1		1		IW			
2		2		PP			
2		2		IW			
3		3		PP			
4		3		IW			
5		4		S			
5		4		PP			
6		6		IW			
7		5		IW			
8		7		PP			
8		6		IW			
9		6		PP			
9		7		PP			
		7	IW				
		CC					

168-1026B-01R-01



**UNIT 1: APHYRIC BASALT**

**PIECES 2-8**

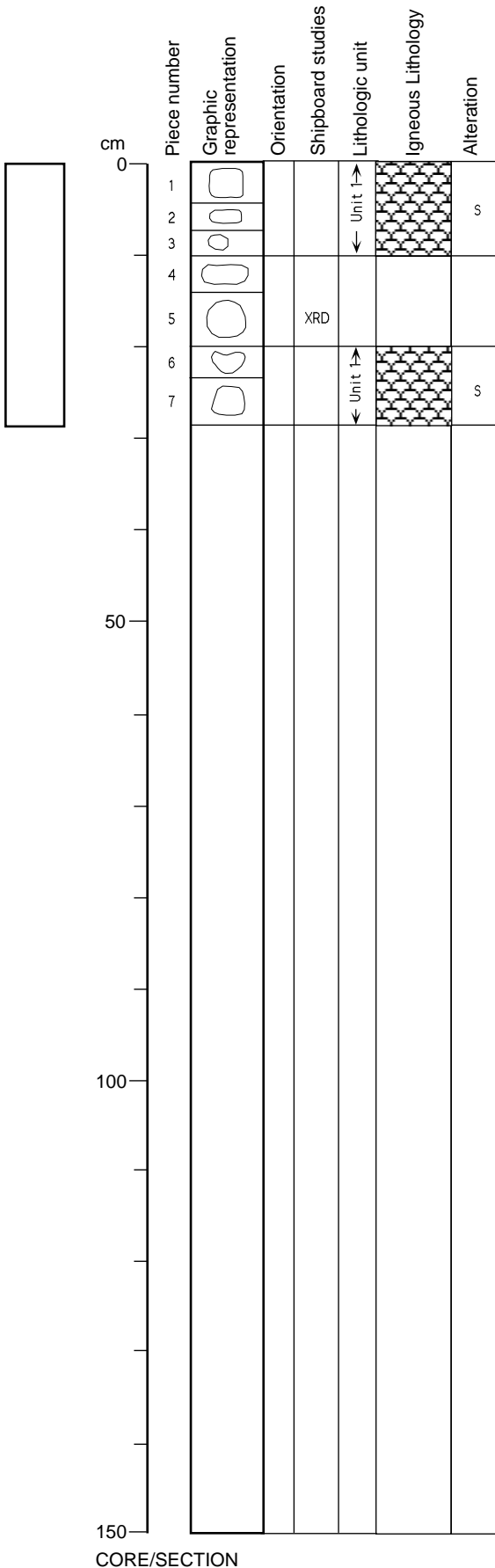
**CONTACTS:** None.  
**PHENOCRYSTS:** None.  
**GROUNDMASS:** Cryptocrystalline; glass rims on pieces 3, 5 and 6.  
**VESICLES:** <1%; maximum diameter approximately 0.1mm.  
**COLOR:** Gray; 5.5PB 2.1/0.2  
**STRUCTURE:** Fragmented basalts, possibly pillows.  
**ALTERATION:** Dark haloes at rock edges typically up to 10mm wide. Vesicles are filled by dark green clay, varying to light green, orange or yellow clay within the dark haloes. Vari-colored clays and traces of pyrite occur on the fractured outer rock surfaces.  
**VEINS/FRACTURES:** Thin (<0.1mm) clay veins common: the vein in piece 2 has a 2mm bleached halo on either side. Rock surfaces bear thin coatings of vari-colored clays (brown, rusty red, bright green, dark green), typically arranged in bands. Trace pyrite with rusty red oxidation.  
**ADDITIONAL COMMENTS:** Glassy margin in pieces 3, 5 and 6.

**PIECE 1: Anthropogenic cement**

**CONTACTS:** None.  
**LITHOLOGY:** Silt to fine sand.  
**COLOR:** Olive brown; 5.5Y 2.4/0.9  
**STRUCTURE:** Discontinuous stringers of white grains.  
**ALTERATION:** None.  
**ADDITIONAL COMMENTS:** Homogeneous, except for the white stringers and a 2mm basalt fragment.

CORE/SECTION

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**UNIT 1: APHYRIC BASALT**

**PIECES 1-3, 6, 7.**

**CONTACTS:** None.

**PHENOCRYSTS:** Sparse plagioclase (to 1.5mm) and clinopyroxene (green vitreous, cleaved) (to 1mm).

**GROUNDMASS:** Cryptocrystalline.

**VESICLES:** <1%; maximum diameter approximately 0.1mm. Piece 7 has a single additional vesicle, oval, 1-2mm across.

**COLOR:** Gray; 5.5PB 2.1/0.2

**STRUCTURE:** Fragmented basalts, possibly pillows.

**ALTERATION:** Dark haloes at the rocks' edges typically up to 10mm wide. Vesicles are filled by dark green clay, varying to light green or orange or yellow clay within the dark haloes. Vari-colored clays occur on the fractured outer rock surfaces.

**VEINS/FRACTURES:** Thin (<0.1mm) clay veins common. Rock surfaces bear thin coatings of vari-colored clays (brown, rusty red, bright green, dark green), typically arranged in bands.

**ADDITIONAL COMMENTS:**

**PIECES 4, 5:** Anthropogenic cement

**CONTACTS:** None.

**LITHOLOGY:** Silt to fine sand.

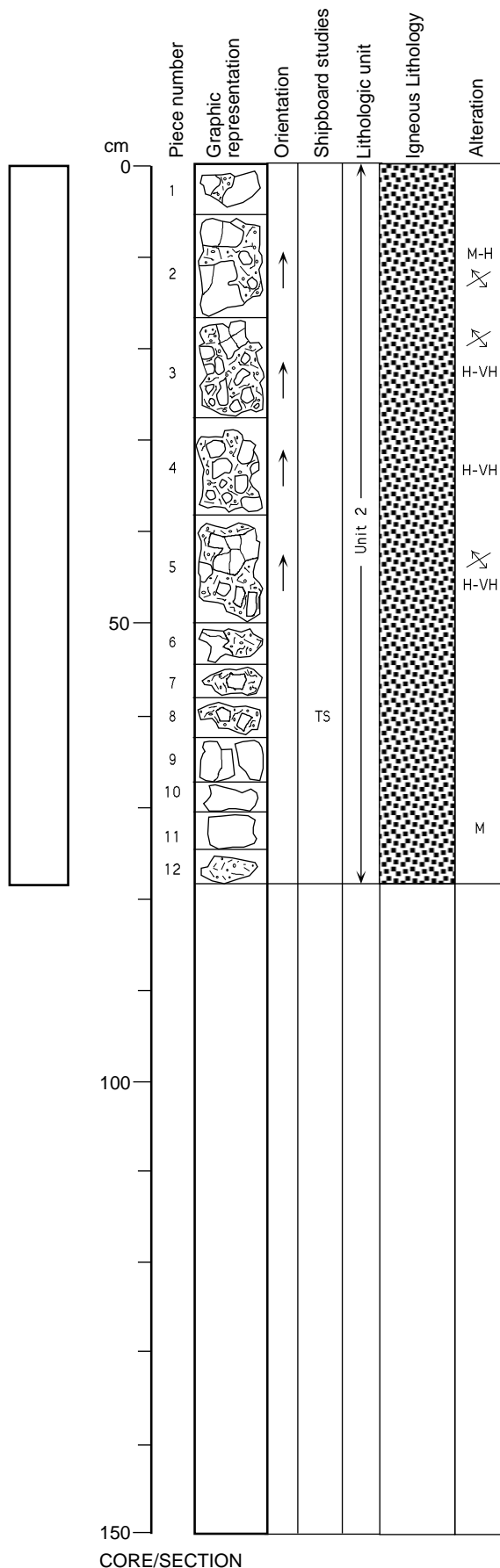
**COLOR:** Olive brown; 5.5Y 2.4/0.9

**STRUCTURE:** None.

**ALTERATION:** None.

**ADDITIONAL COMMENTS:** Obviously out of place; chiefly composed of portlandite (XRD analysis).

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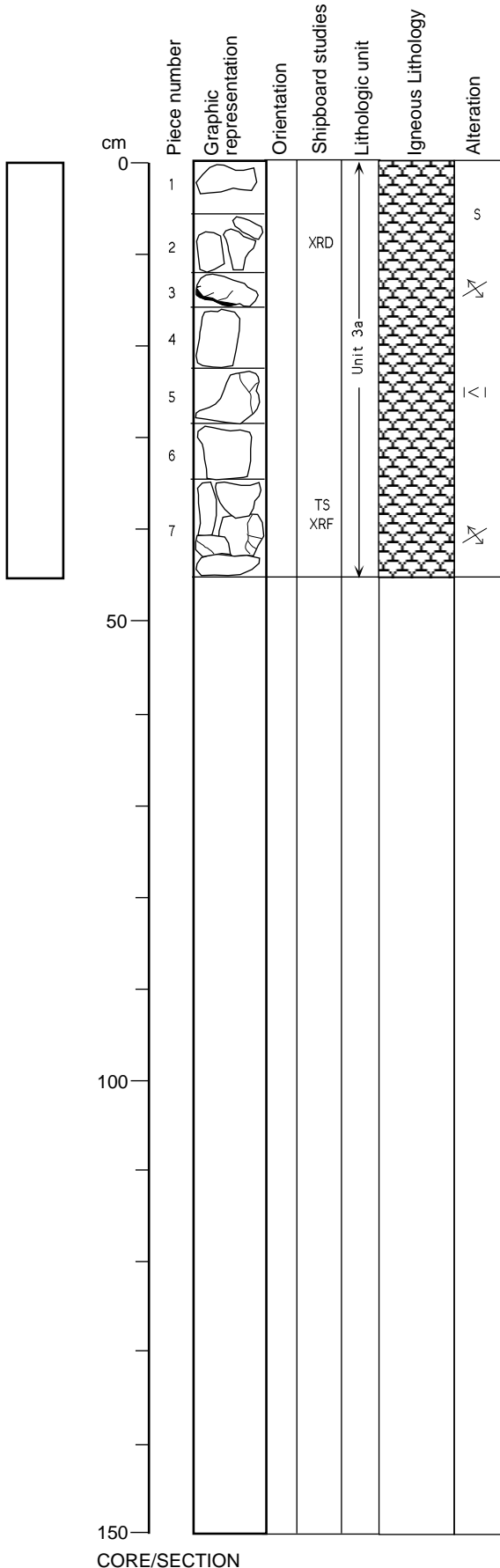


**UNIT 2: BASALT-HYALOCLASTITE BRECCIA**

**PIECES 1-12**

**CONTACTS:** None.  
**PHENOCRYSTS:** None in basalt clasts.  
**GROUNDMASS:** Cryptocrystalline in basalt clasts.  
**VESICLES:** None.  
**COLOR:** Basalt fragments: 2.2PB 2.2/0.1 to 9.9B 1.3/0.2; Breccia matrix: 5.2B 1.6/0.1 to 5.7G 2.1/0.4  
**STRUCTURE:** Angular basalt clasts and glass shards (partly to completely altered to various clays ± carbonate) set in a consolidated clay matrix.  
**ALTERATION:** Basalt clasts are preferentially altered along glassy/variolitic rims (≤3mm) into white-green clay (≤0.25mm thick). In both glass and basalt clasts, the degree of alteration varies concentrically from pale altered rim (massive green clay ± white carbonate to various intermediate bands of granular white-green or grey-blue clays) to fresh core (dark gray to black). Smaller basalt fragments and glass shards are partially to completely altered.  
**VEINS/FRACTURES:** Fractures and veins crossing some larger basalt clasts are infilled by blue-green clay, similar to the matrix material.  
**ADDITIONAL COMMENTS:** All basalt clasts and glass shards are angular, and range from 10mm up to 60mm in length. The rock texture varies from matrix- to clast-supported (abundance of clast from 10-60%, average 40%). The matrix consists of dark green-blue clay. Pieces 9-11 are basalt clasts similar to those in the breccia, leached to a pale brown-gray color.

CORE/SECTION



**UNIT 3a: APHYRIC BASALT**

**PIECES 1-3 and 7**

**CONTACTS:** None.

**PHENOCRYSTS:** Trace amounts of plagioclase ± altered olivine, (replaced by dark green and orange-brown clay) ± pyroxene; all crystals are ≤0.25mm, sub/euhedral.

**GROUNDMASS:** Cryptocrystalline.

**VESICLES:** None to trace amount.

**COLOR:** Medium gray-green; 6.9B 1.6/0.2 to 3.8G 2.0/0.2

**STRUCTURE:** Pillow fragments.

**ALTERATION:** Alteration haloes are generally 3-5mm wide (piece 3 has a halo ≤23mm wide, with an irregular leached zone in the centre). Outer surfaces are partially coated with granular white-green clay ± patches of brown and green clay. Total extent of alteration is slight to fresh. Piece 2 has a 1mm encrustation of phillipsite (by XRD).

**VEINS/FRACTURES:** Minor fractures, either fresh or very finely lined by dark green clay ± orange-brown clay.

**ADDITIONAL COMMENTS:** Piece 3 has a ≤0.1mm glass rim, with a 1mm thick subvolcanic/hypocrystalline rim below.

**PIECES 4-6**

**CONTACTS:** None.

**PHENOCRYSTS:** Trace amounts of fresh plagioclase + altered olivine (replaced by dark green clay), both ≤1.5mm.

**GROUNDMASS:** Microcrystalline; plagioclase + olivine ± pyroxene(?)

**VESICLES:** Varies from 0-2%, infilled by dark green clay or orange-brown clay.

**COLOR:** Greenish-brown; 3.7G 2.2/0.2

**STRUCTURE:** Pillow fragments.

**ALTERATION:** All pieces have a green alteration halo ≤7mm wide around the margin ± irregular pale brown leached patches associated with small fractures. Outer surfaces are partially coated with blue-green, green ± orange-brown clay.

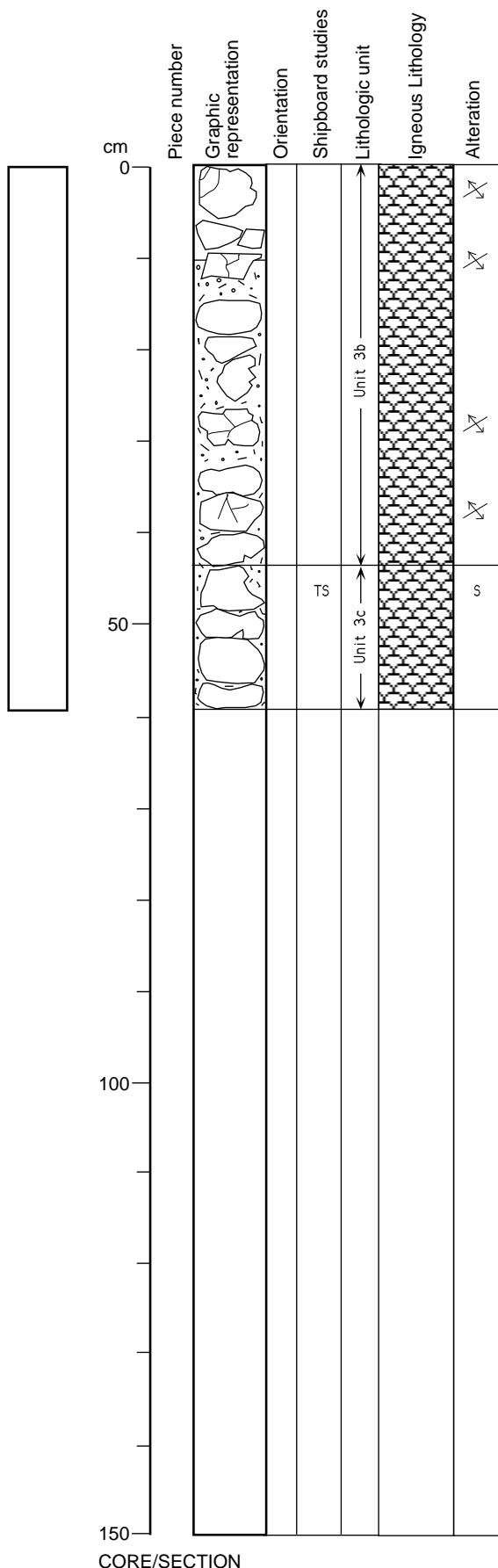
**VEINS/FRACTURES:** Fractures are infilled by dark green clay (saponite), with 1mm leached haloes. Piece 5 has a 0.5mm vein lined by dark green clay + orange-brown clay and infilled by granular white-green clay.

**ADDITIONAL COMMENTS:** Altered glass rim (?) on piece 5.

CORE/SECTION



168-1026B-05R-01



**UNIT 3b: APHYRIC BASALT**

**CONTACTS:** None.  
**PHENOCRYSTS:** None to small trace amount of olivine + plagioclase.  
**GROUNDMASS:** Hypocrystalline to microcrystalline; vesicular. Contains fresh, euhedral plagioclase laths ( $\leq 0.05\text{mm}$ ) + altered olivine crystals (replaced by dark green and emerald green clay) + pyroxene.  
**VESICLES:** Most are  $\leq 0.1\text{mm}$  (a few are  $\leq 0.5\text{mm}$  and empty);  $\leq 2\%$ . Majority are infilled by a variety of clays ranging in color. Vesicles at the rock margin are filled with black, dark green or orange-brown clay. Vesicles within the center of the rock are filled by dark green clay with an orange interior or yellow-green clay.  
**COLOR:** Medium green-gray; 1.0GY 2.6/0.1 to 2.6GY 2.6/0.1  
**STRUCTURE:** Basaltic fragments + drill cuttings ( $< 1\text{cm}$ ).  
**ALTERATION:** Black alteration haloes, 4-11mm wide (pieces 1-5cm, 14-17cm, 32-35cm, 41-43cm), around the margins of the rocks, plus 5-10mm alteration haloes associated with fractures. Orange oxidation spots around pyrite grains.  
**VEINS/FRACTURES:** Fractures are either clean or partially lined by dark green clay  $\pm$  orange brown iddingsite. Some have a  $\leq 1.5\text{mm}$  leached halo on either side of fracture.

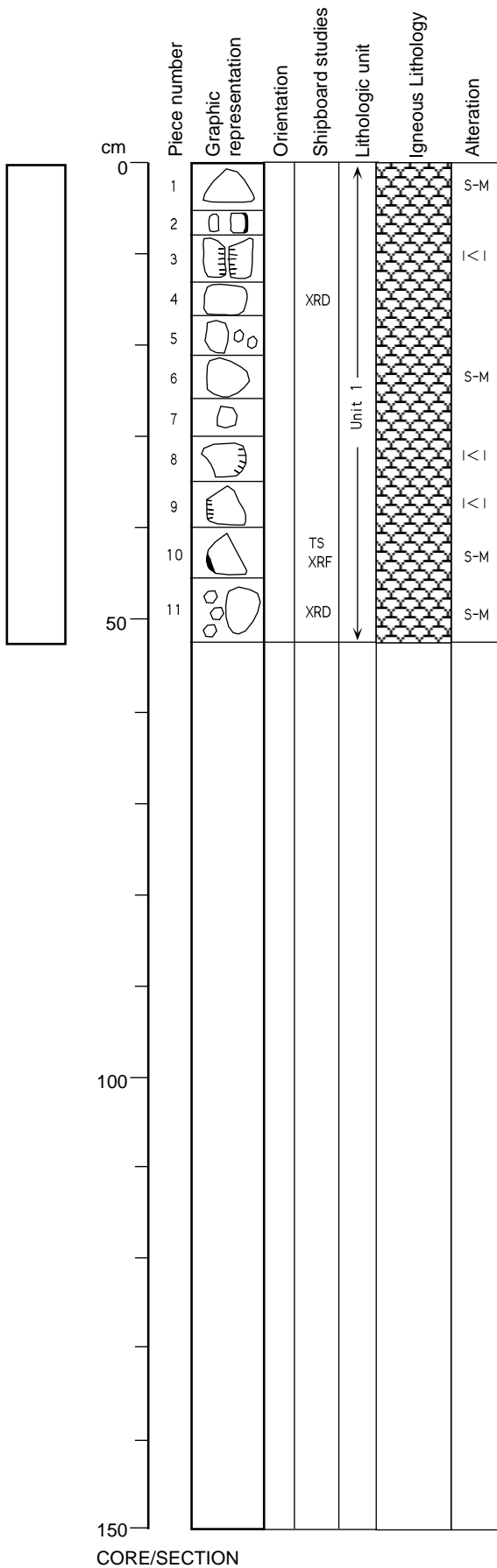
**ADDITIONAL COMMENTS:**

**UNIT 3c: MODERATELY PHYRIC PYROXENE + PLAGIOCLASE + OLIVINE BASALT**

**CONTACTS:** None.  
**PHENOCRYSTS:**  $\leq 2\text{mm}$  bright green, pristine euhedral pyroxene occurring as single crystals or with intergrown plag laths;  $\leq 2\text{mm}$  plagioclase lath clusters;  $\leq 1.5\text{mm}$  sub/euhedral altered olivine (replaced by dark green or white clay  $\pm$  iddingsite  $\pm$  blue clay).  
**GROUNDMASS:** Microcrystalline to cryptocrystalline plagioclase + altered olivine (dark green clay) + pyroxene.  
**VESICLES:**  $\leq 1\%$  (locally  $\leq 5\%$ ). Round to irregular shape, lined by pale blue clay.  
**COLOR:** Medium green-gray; 1.0GY 2.6/0.1 to 2.6GY 2.6/0.1  
**STRUCTURE:** Basaltic fragments + drill cuttings ( $< 1\text{cm}$ ).  
**ALTERATION:** Well developed green haloes (pieces 44-47cm, 51-55cm & 55-59cm); brown halo (piece 47-51cm).  
**VEINS/FRACTURES:** None.  
**ADDITIONAL COMMENTS:** In the alteration haloes the vesicles are infilled by iddingsite  $\pm$  yellow-green clay, whilst olivine is replaced by iddingsite + dark green clay.

CORE/SECTION

168-1026C-16R-01



UNIT 1: APHYRIC BASALT

PIECES 1-11

**CONTACTS:** None.

**PHENOCRYSTS:** Scant plagioclase ( $\leq 1\text{mm}$ ), olivine (replaced by clay).

**GROUNDMASS:** Microcrystalline, to intersertal.

**VESICLES:**  $< 1\%$ ,  $\leq 1\text{mm}$ .

**COLOR:** Gray; 7.3B 2.1/0.2

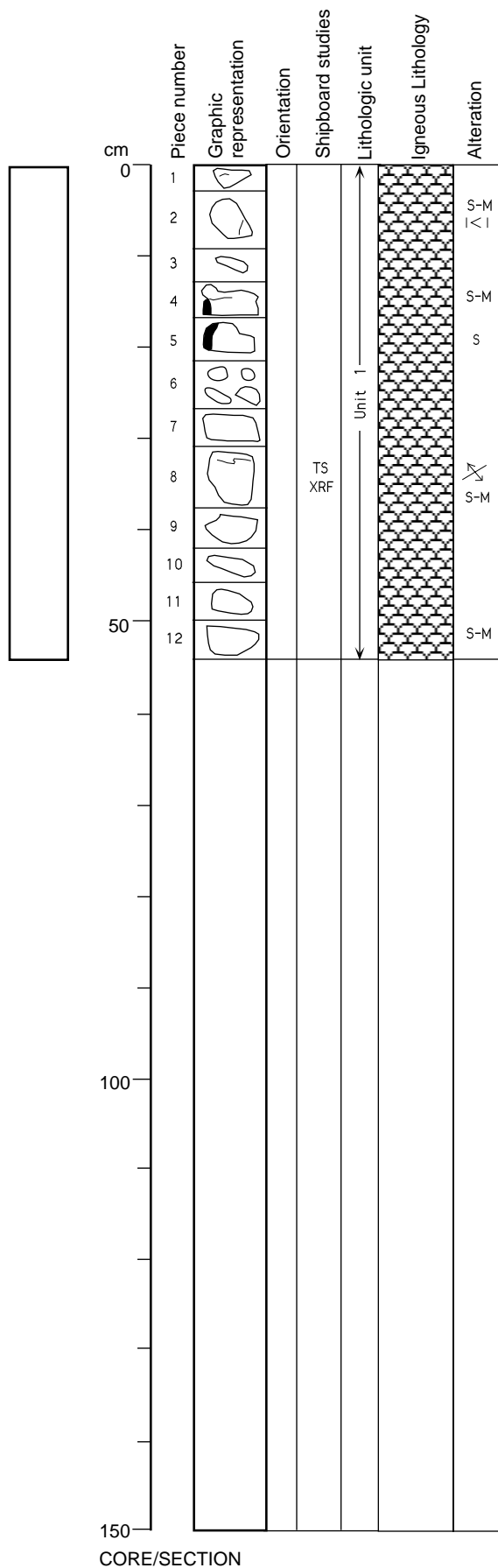
**STRUCTURE:** Pillow basalt. Inferred from incurved glass-bearing external face of piece 8.

**ALTERATION:** Vesicles are filled by dark green clay, or orange clay in the alteration haloes. Some have compound fillings, with green clay followed by orange. Alteration haloes dark green  $\pm$  orange tint (3-7mm wide) present in pieces 1, 2, 3, 4, 5, 8, 9, 10 and 11. Bright red clay? coating on external surfaces of pieces 3, 4, 8, 9 and 10. A bleached patch, 6mm across, occurs in piece 4.

**VEINS/FRACTURES:** Orange clay vein (0.25 mm) in piece 8 has a 3mm halo with orange vesicle fillings on each side. Piece 3 has a 1.5mm wide clay vein with red and green clay. Drusy carbonate veins (aragonite?) occur on pieces 8, 9 and 11; maximum width is 2mm, the carbonate druse projects into open vugs, and there is some green clay.

**ADDITIONAL COMMENTS:** Glass present on pieces 2, 7, 8 and 10.

168-1026C-17R-01



**UNIT 1: APHYRIC BASALT**

**PIECES 1-12**

**CONTACTS:** None.

**PHENOCRYSTS:** Rare plagioclase ( $\leq 0.5\text{mm}$ ).

**GROUNDMASS:** Aphanitic, cryptocrystalline to microcrystalline.

**VESICLES:**  $< 1\%$ ; rounded,  $< 1\text{mm}$ .

**COLOR:** Gray

**STRUCTURE:** Pillow basalt; inferred from curved glassy margin (1.5cm thick) on piece 5.

**ALTERATION:** Alteration haloes or bands of dark green  $\pm$  orange ( $\approx 5\text{mm}$  thick) are present in all pieces. Haloes are located on the external surfaces, where the core is relatively fresh and well preserved.

**VEINS/FRACTURES:** Small veins with orange clay in pieces 1, 2, 4 and 8.

**ADDITIONAL COMMENTS:** Glass present on pieces 4 and 5.