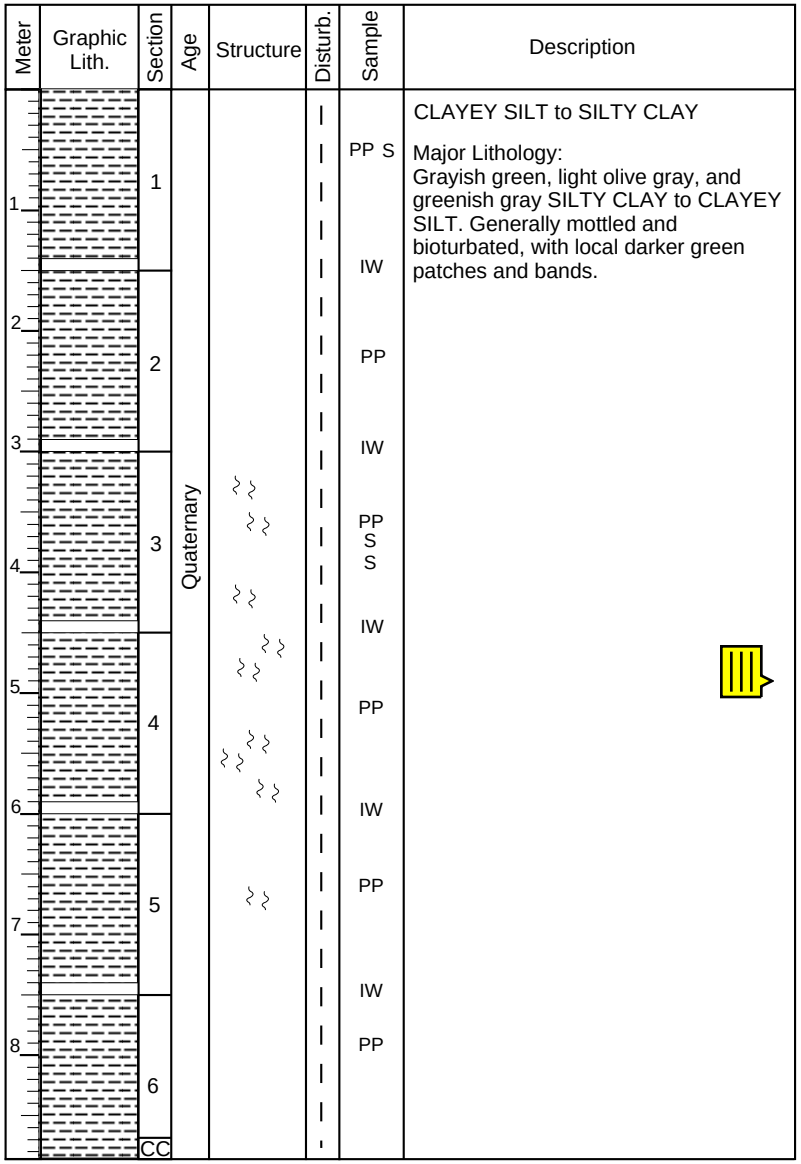
SITE 1031 HOLE A CORE 1H CORED 0.0 - 8.8 mbsf



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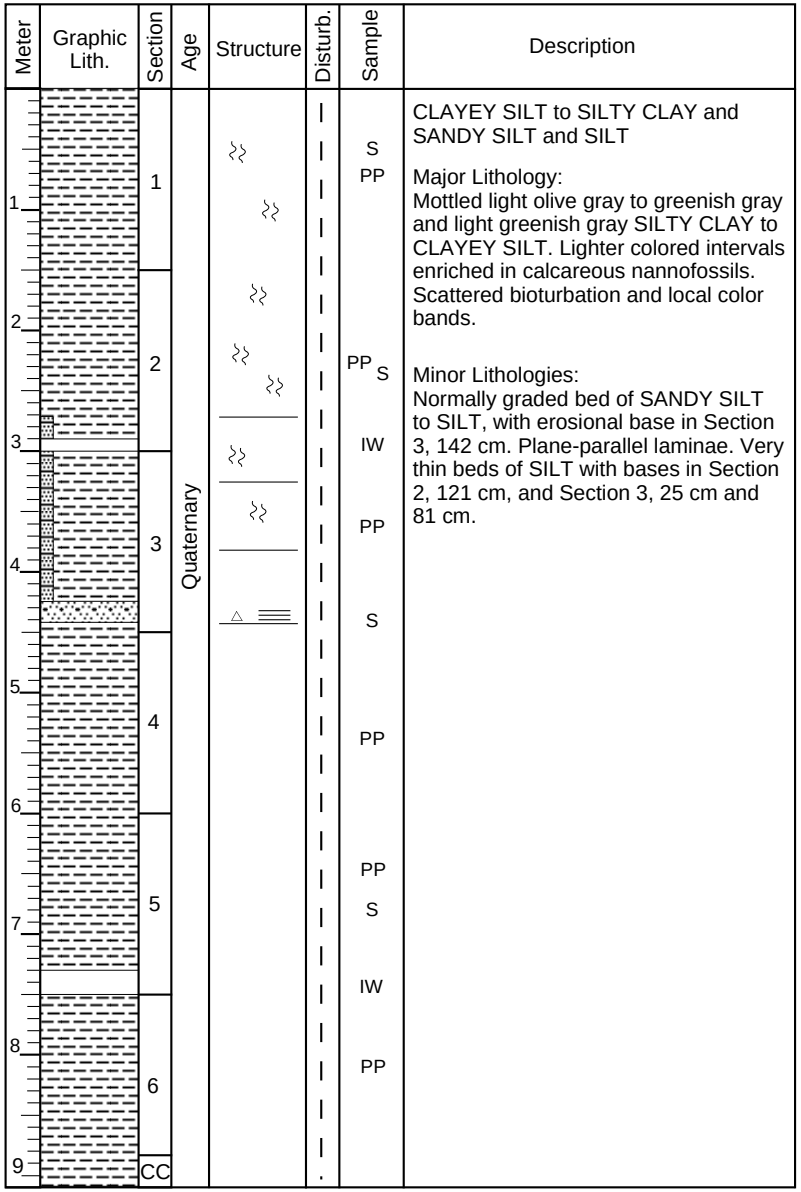
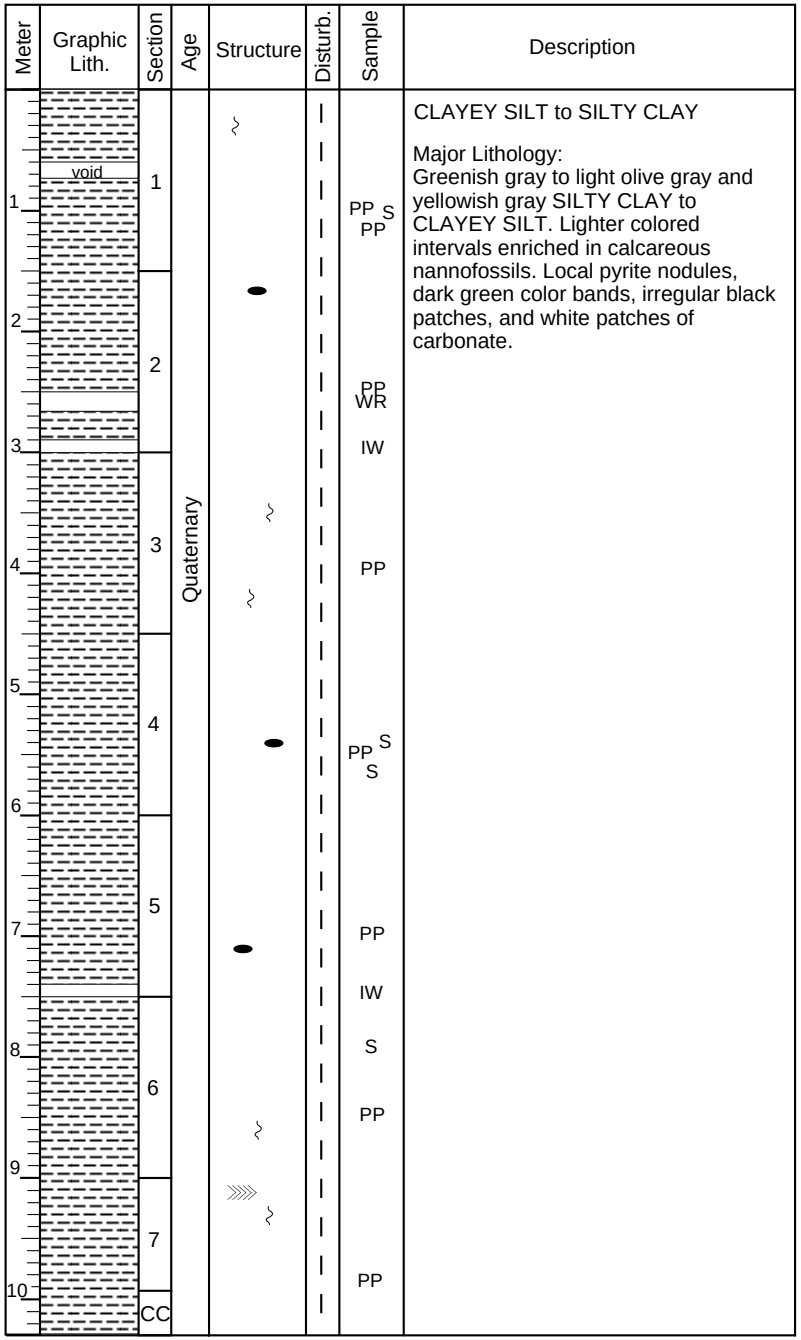
SITE 1031 HOLE A CORE 2H CORED 8.8 - 18.3 mbsf



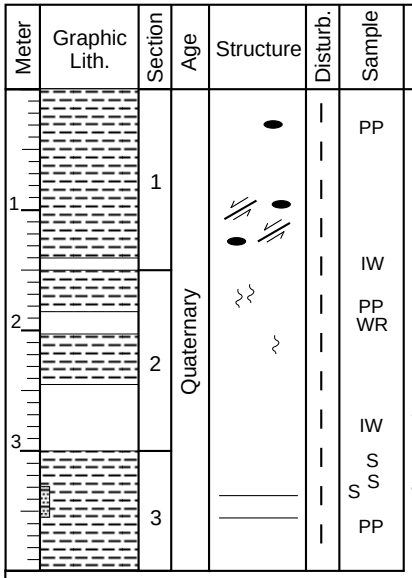
SITE 1031 HOLE A CORE 3H CORED 18.3 - 27.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb.	Sample	Description
1–9		1	Quaternary			PP	CLAYEY SILT to SILTY CLAY Major Lithology: Light olive gray to greenish gray CLAYEY SILT to SILTY CLAY. Local color variations due to inconsistent amounts of calcium carbonate. Mostly structureless with local bioturbation and dark green color bands. White patches of calcium carbonate in Section 4, 120 cm to 150 cm.
		2				PP S	
		3				PP S S	
		4				PP WR	
		5				PP IW	
		6				PP	
		7				PP	
		CC					

SITE 1031 HOLE A CORE 4H CORED 27.8 - 37.3 mbsf



SITE 1031 HOLE A CORE 5H CORED 37.3 - 41.3 mbsf

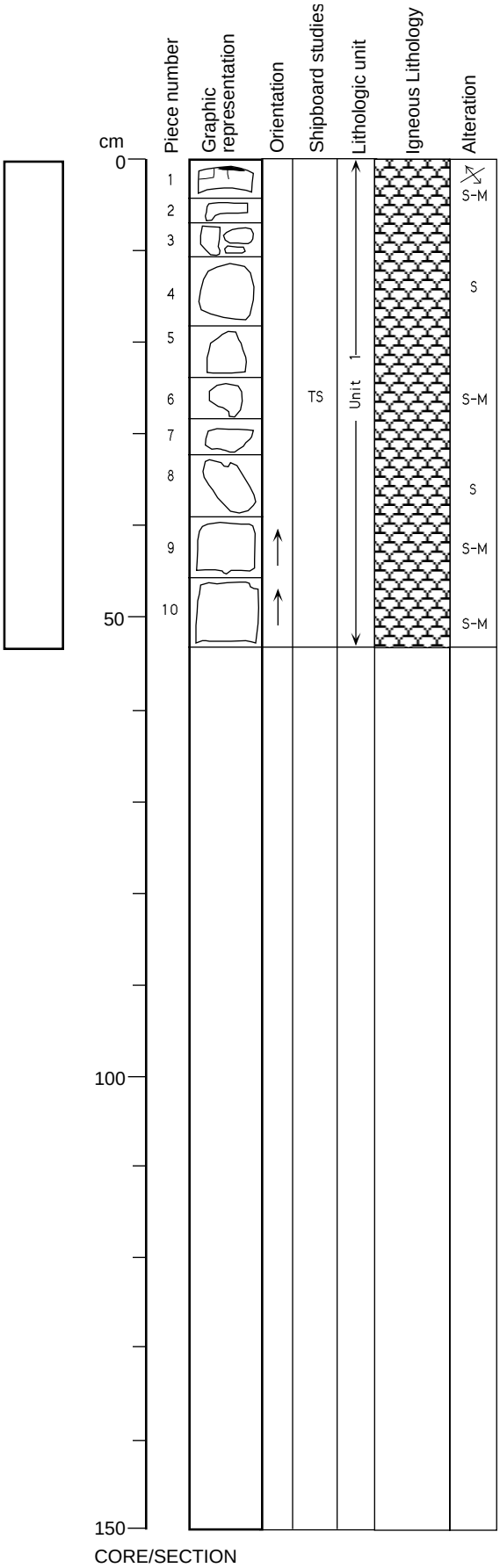


CLAYEY SILT to SILTY CLAY and SILT to SANDY SILT

Major Lithology:
Variegated SILTY CLAY to CLAYEY SILT. Generally greenish gray with thin black layers, pyrite nodules, and local bioturbation. Dramatic color variations in Section 3 range from light bluish gray to light olive gray, yellowish gray, pale olive, and grayish yellow green.

Minor Lithology:
Thin beds of dusky yellowish green SILT to SANDY SILT with bases in Section 3, 37 cm and 55 cm. Mixed with green clay. Appears to be highly altered.

General Description:
Small faults in Section 1, 100 cm and 120 cm. Sense of offset uncertain.



168-1031A-6X-01

UNIT 1: APHYRIC BASALT

PIECES: 1-10

CONTACTS: None.
PHENOCRYSTS: <1% plagioclase glomerocrysts (≤2mm, ave. 1mm) and subhedral plagioclase phenocrysts.
GROUNDMASS: Aphanitic cryptocrystalline to microcrystalline. Intersertal, with visible plagioclase microlites. Subvariolitic in piece 1.
VESICLES: 1-2%, ≤0.5mm diameter. Mostly empty. Cavities in piece 1 are ≤6mm.
COLOR: Pale-medium gray; 1.3PB 2.1/0.2 to 1.9PB 2.6/0.2
STRUCTURE: Pillow basalt, inferred on the basis of a glassy margin on piece 1.
ALTERATION: Slight to locally moderate, preferentially located in haloes. Alteration haloes in pieces 1 (8mm wide), 2 (2mm), 3 (4mm), 4 (≤11mm), 5 (2-3mm), 6 (≤5mm), 8 (≤8mm), 9 (6mm green and 3mm gray) and 10 (5-6mm green and 3-4mm gray). The latter two pieces have double haloes, with green outside and gray inside. Single haloes are green (saponite?-bearing) to green-yellow (iddingsite-bearing). Disseminated sulfide grains are located at the front of the alteration halo (between the fresh core and the halo itself); concentrations of sulfides occur in the double haloes in the inner gray halo, immediately adjacent to the outer green halo.
VEINS/FRACTURES: Scarce planar outer surfaces of core coated with iddingsite ± green clay (veins surface). Veinlet in piece 1 is dark green clay, which continues onto an outer surface as a pale blue clay coating with thin white circular plates of a zeolite, clear botryoidal zeolite, and associated with black botryoidal goethite-like material filling a vesicle.
ADDITIONAL COMMENTS: Chilled margin with palagonitized glassy margin (1-2mm-thick) and possibly fresh glass remnants.

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