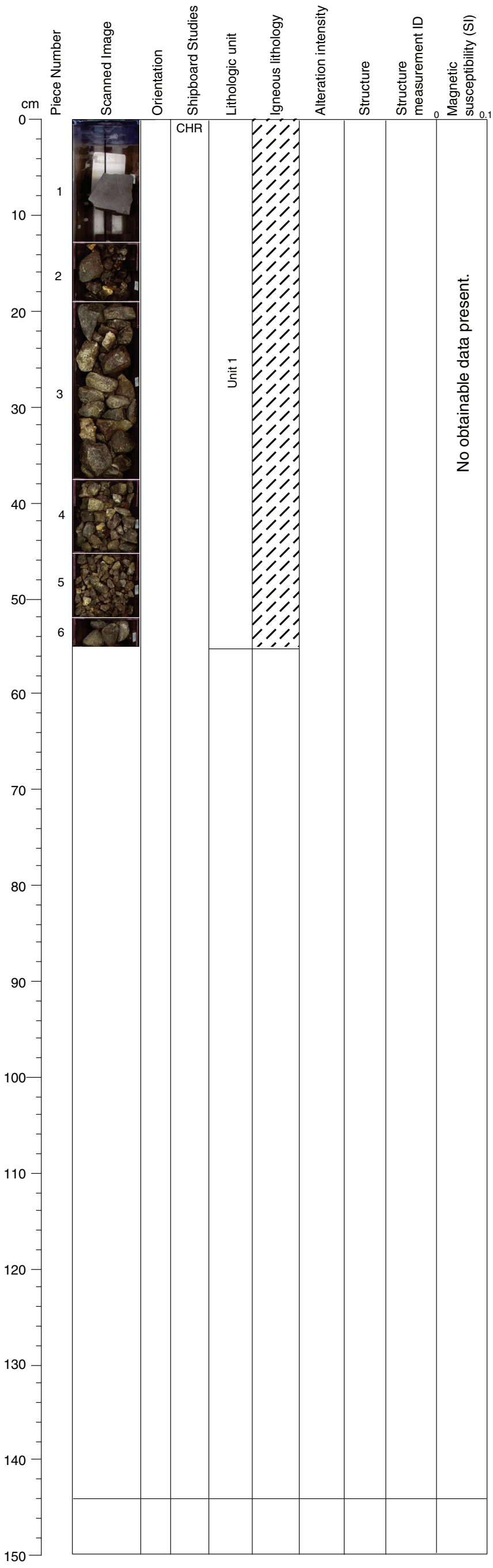
Core Photo



304-U1310A-1M-1 (Section top: 0.00 mbsf)

UNIT-I: Pillow basalt fragments

Pieces 1-6

COLOR: Gray to gray-brown

PRIMARY MINERALOGY:

Piece 1: Single fragment of sparsely plagioclase-phyric fine-grained pillow basalt. A spherulitic outer zone with exterior palagonitized glass is preserved (working half only).

Piece 2: Larger glass and glassy fragments

Piece 3: Larger basalt fragments. Drill-rounded. 2-5 cm. No glass.

Piece 4: Smaller basalt fragments. Drill-rounded. ~1 cm. No glass.

Piece 5: Small rock and glass fragments, including loose sediment and oxy-hydroxides.

Piece 6: Small basalt fragments up to 2 cm from a different drilling attempt. One piece is relatively unaltered gabbro of uncertain provenance.

COMMENTS: The material in this “core” consists of rock fragments retrieved from the hammer drill casing. Also included are pieces of welding slag, both metallic and siliceous. Sample of glass taken for geochemistry.

SECONDARY MINERALOGY: N/A

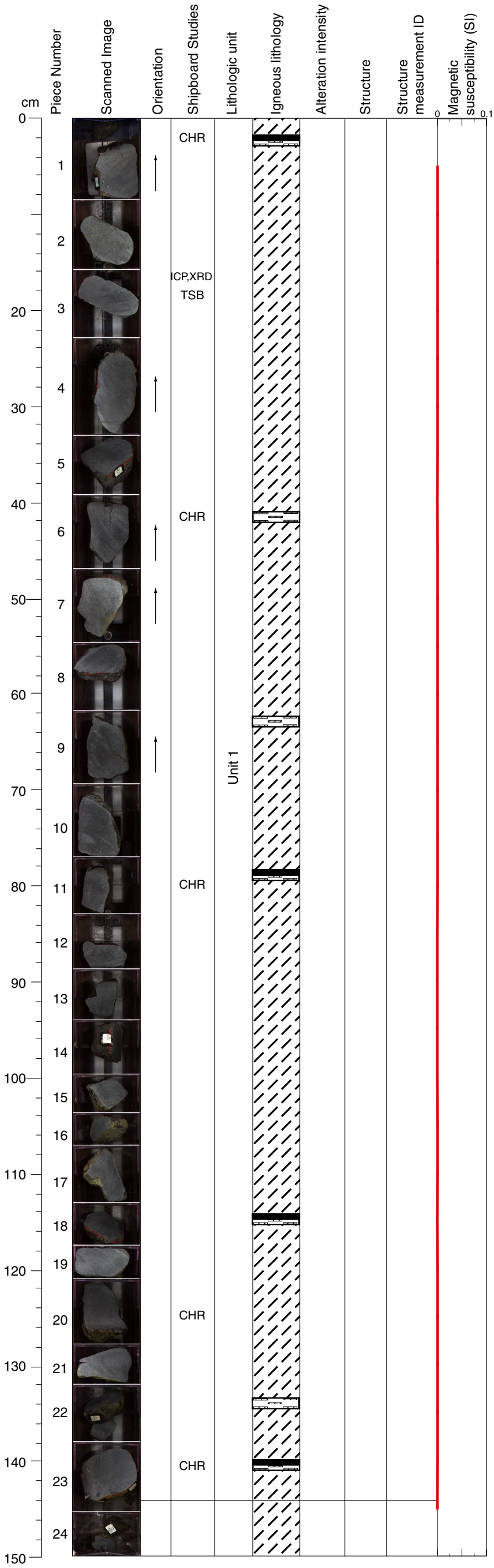
COMMENTS: N/A

VEIN ALTERATION: N/A

THIN SECTIONS: N/A

STRUCTURE: N/A

Core Photo



304-U1310B-1R-1 (Section top: 0.00 mbsf)

UNIT-1: PILLOW BASALT

Pieces 1-24

COLOR: Dark gray

PRIMARY MINERALOGY:

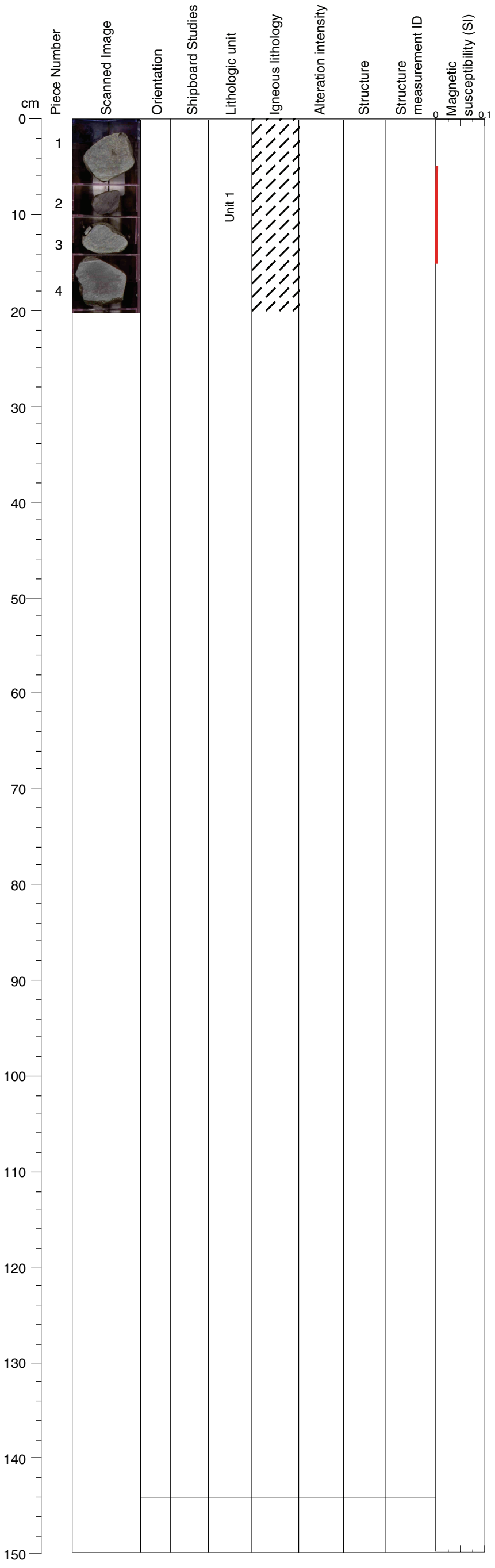
Plagioclase 5-10% as 0.2-0.5 mm clusters in groundmass.
Plagioclase as sparse microphenocrysts (0.5 mm)
Olivine as sparse microphenocrysts (0.5 mm)
Vesicles, 3-5%, round 0.1 mm to elongate <0.3 mm.
Basalt glass rims on some pieces

COMMENTS: Pillow basalt pieces, mostly broken, not cut by drill, but with minimally altered fracture surfaces, suggesting that they are derived from in situ pillows. Interiors minimally altered --- some light brown patches, white plagioclase in spherulitic zones.
Groundmass is microcrystalline in the interiors grading through typical spherulitic textures to pillow margins. Most glass has been lost in drilling leaving only glassy outer surfaces of spherulitic zones. Where present, glass is 1-3 mm thick and relatively fresh.
Sparse anhedral olivine and prismatic plagioclase microphenocrysts <0.5 mm, very rarely larger.

ALTERATION The basalt in this core is less than 1% altered. Some pieces show brown oxidation on the surface but most are unaltered in the interior. Oxidation extends inward 0.5 cm along one surface of Piece 7 and the walls of the vesicles in the center of Piece 2 are slightly brown. The interior of all other pieces is fresh. There are no veins

THIN SECTIONS:
304-U1310B-1R-1, 19-20 cm (#138)

Core Photo



304-U1310B-1R-2 (Section top: 1.5 mbsf)

UNIT-1: Pillow Basalt

Pieces 1-4

PRIMARY MINERALOGY:

ALTERATION: The basalts in this core are less than 1% altered. Piece 1 has brown in interior vesicles but, apart from that, interior portions are fresh. There are no veins.

COMMENTS: Continues from previous section.