

Information in this section, for all sites, represents field notes taken aboard ship. Some of this information has been refined in accord with post-cruise findings, but production schedules prohibit definitive correlation of these forms with subsequent findings. Thus, the reader should be alerted to ambiguities or discrepancies in this unedited material.

163-988A-1R-1

UNIT I: ROCK DEBRIS

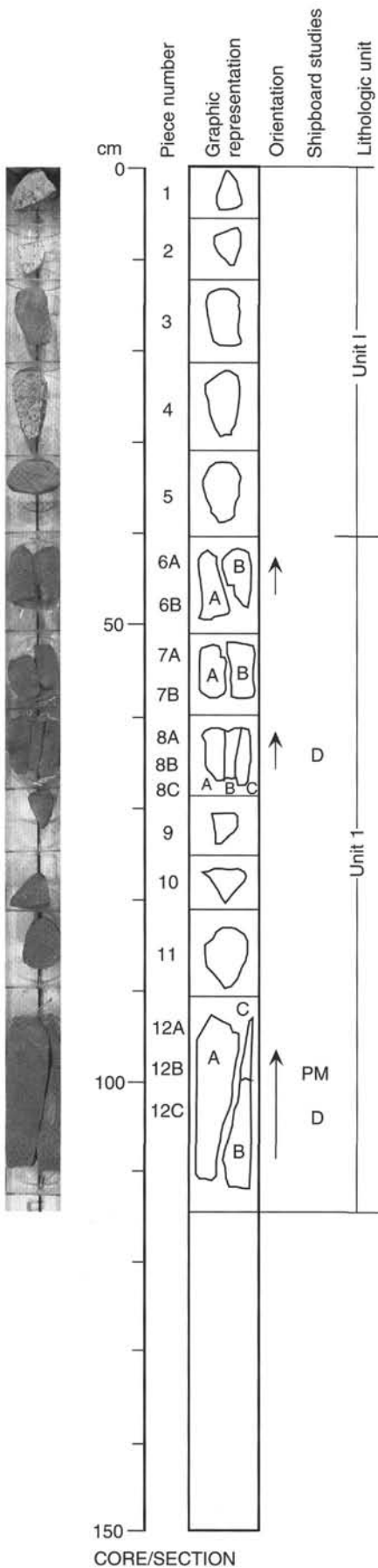
Pieces 1-5

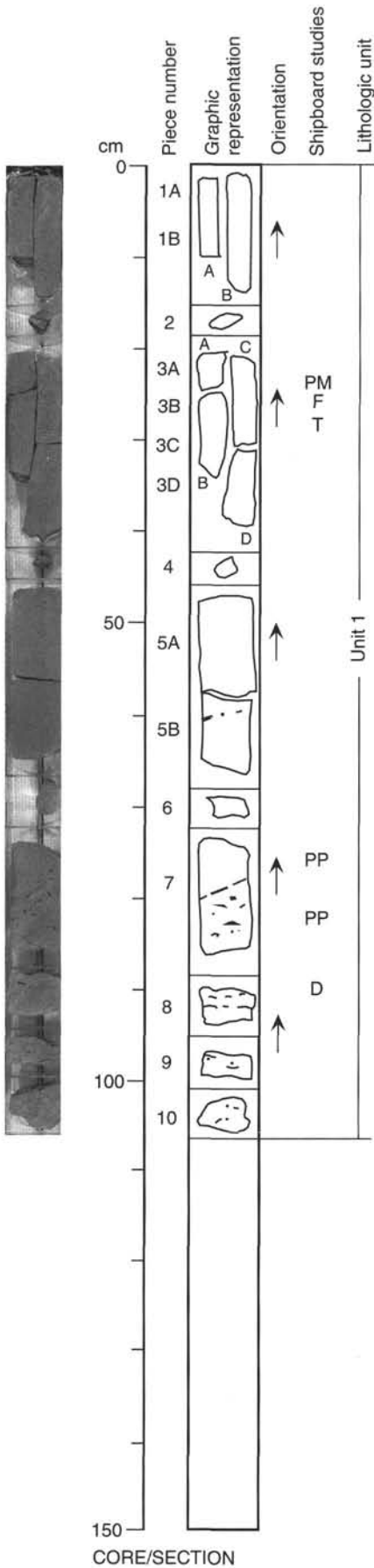
CONTACTS: Resting on Unit 1.
PHENOCRYSTS:
VESICLES:
ADDITIONAL COMMENTS: Cobbles of gabbro (Piece 1), granite (Piece 2), fine-grained aphyric basalt (Pieces 3 and 5), and gneiss (Piece 4).

UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 6A-12C

CONTACTS: None.
PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.
 Plagioclase - 5%; up to 5 mm; tabular.
 Pyroxene - <1%; up to 2 mm; subhedral.
 Olivine - <1%; up to 2 mm; subhedral, equant or platy, altered to clay.
GROUNDMASS: Fine-grained.
VESICLES: 0-10%; 1-10 mm; variable shape; irregular distribution; filled with gray-green clays.
COLOR: Dark greenish gray.
ALTERATION: Moderate.
VEINS/FRACTURES: <1%; 0.2 mm; sub-vertical; filled with carbonate and gray-green clays. Horizontal microfractures in Piece 12.





UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 1A-10

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 2%; up to 5 mm; tabular.

Pyroxene - <1%; up to 2 mm; subhedral.

Olivine - <1%; up to 2 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

VESICLES: 2-10%; 0.5-5 mm; spherical to irregular shape; patchy distribution; filled with gray-green clays in Pieces 1 to 6; lined with zeolite crystals in Pieces 7 to 10.

COLOR: Dark greenish gray.

ALTERATION: Moderate.

VEINS/FRACTURES: <1%; 0.2 mm; sub-vertical; filled with carbonate and gray-green clays.

163-988A-2R-1

**UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE-PHYRIC
BASALT**

Pieces 1-13

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase, olivine and augite.

Plagioclase - 5%; up to 4 mm; tabular.

Pyroxene - 1%; up to 2 mm; subhedral.

Olivine - <1%; up to 2 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

VESICLES: 2%; up to 5 mm; irregular shape; filled with gray-green clays.

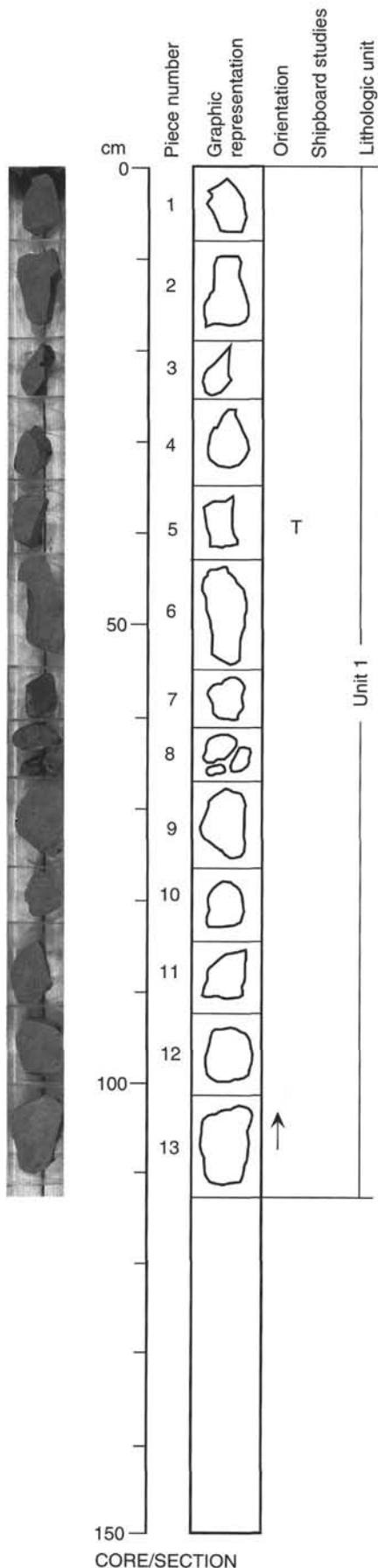
COLOR: Dark gray.

ALTERATION: Moderate.

VEINS/FRACTURES: None.

ADDITIONAL COMMENTS: Pieces 2-12 fell out of the drill-bit throat onto the rig floor and are therefore unorientated and unsorted. Piece 13 was recovered from the entrance to the bit and is orientated.

Phenocryst content varies from around 4% in Piece 1 to around 1% in Piece 9.



UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 3-10D

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; up to 4 mm; tabular.

Pyroxene - 1%; up to 2 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

VESICLES: 0-5%; 1-5 mm; mostly spherical; filled with green clays.

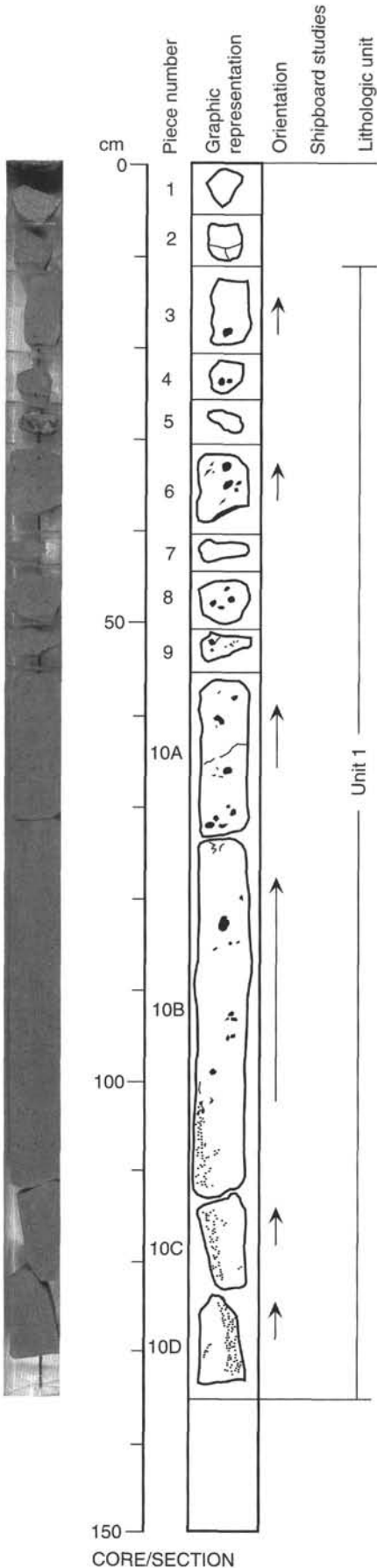
COLOR: Dark gray.

ALTERATION: Slight.

VEINS/FRACTURES: <1%; <1 mm; subhorizontal; filled with green clay and zeolite.

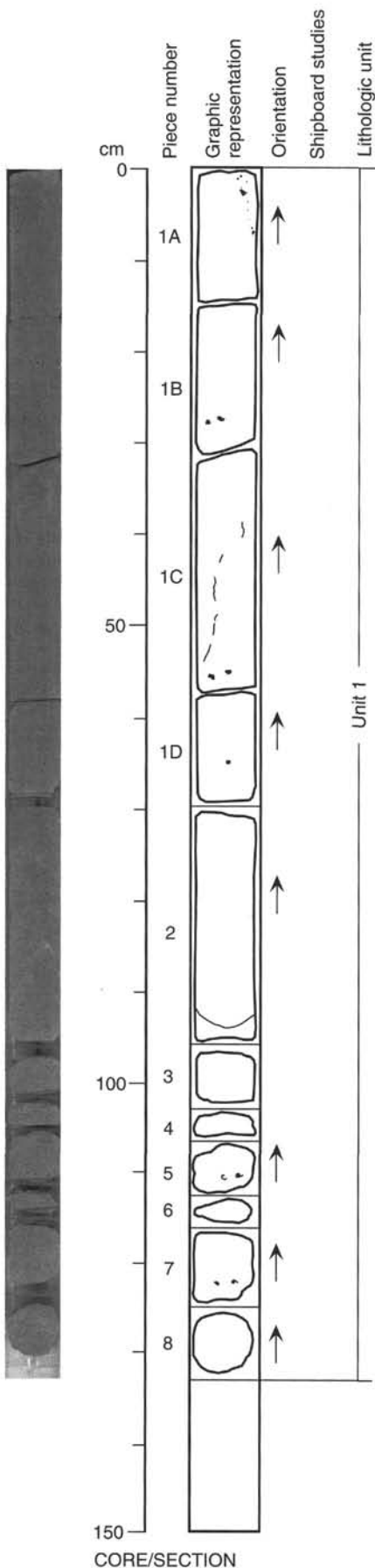
ADDITIONAL COMMENTS: Vertical segregations of coarser material in Pieces 10B-10D (102-132 cm).

Pieces 1 and 2 are dolerite fragments believed to be drilling debris introduced from above during a bit change.



163-988A-3R-2

UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT



Pieces 1A-8

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; 1-4 mm; tabular.

Pyroxene - 2%; up to 2 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

VESICLES: 0-1%; 2-3 mm; spherical to irregular; filled with green clays.

COLOR: Dark gray.

ALTERATION: Slight.

VEINS/FRACTURES: <1%; 0.1 mm; dipping 70 degrees; Piece 1C contains one irregular vein filled with green clay.

ADDITIONAL COMMENTS: Segregation vein in Piece 1A.

UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 1-3C

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; 1-4 mm; tabular.

Pyroxene - 2%; up to 1 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

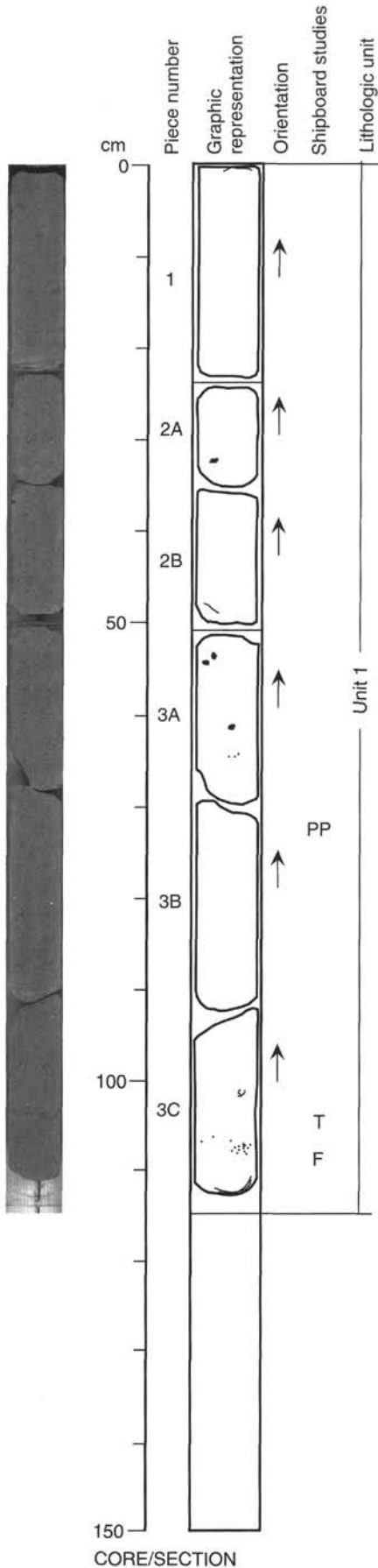
VESICLES: <1%; up to 5 mm; mostly spherical; filled with green clays.

COLOR: Dark gray.

ALTERATION: Slight.

VEINS/FRACTURES: None.

ADDITIONAL COMMENTS: 1 x 2 cm patch of small vesicles in Piece 3C at 107-108 cm.



CORE/SECTION

163-988A-3R-4

UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 1-6

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; 1-4 mm; tabular.

Pyroxene - 2%; up to 1 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

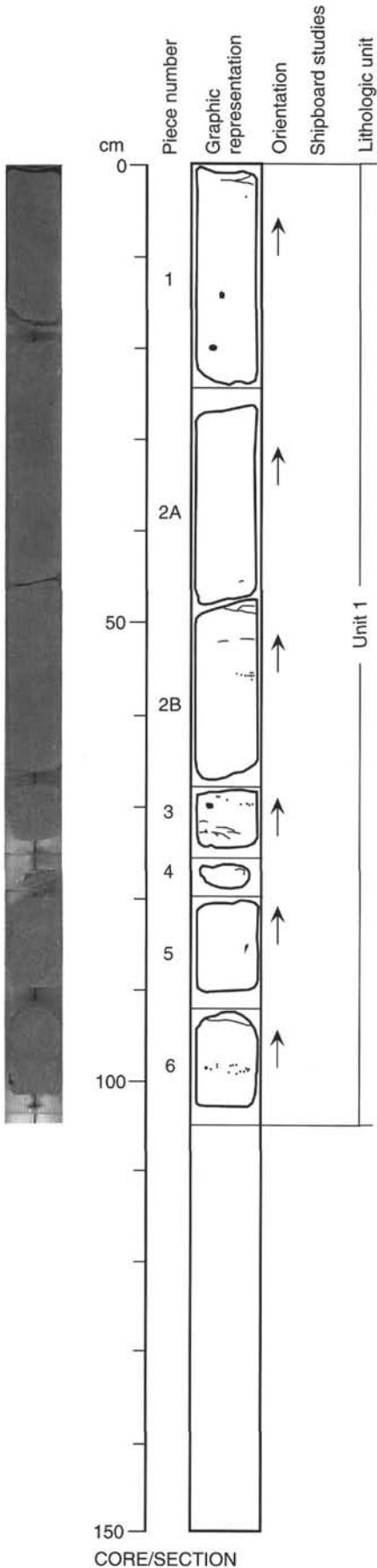
GROUNDMASS: Fine-grained.

VESICLES: <1%; up to 5 mm; mostly spherical; filled with green clay.

COLOR: Dark gray.

ALTERATION: Slight.

VEINS/FRACTURES: None.



UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT

Pieces 1-16

CONTACTS: None.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; 1-4 mm; tabular.

Pyroxene - 2%; 1 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine-grained.

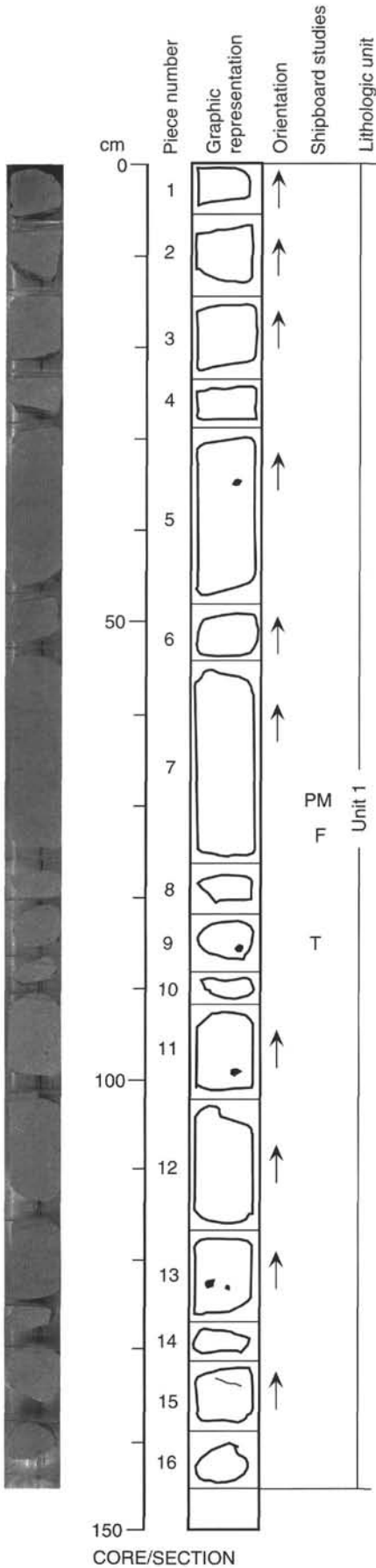
VESICLES: <1%; up to 5 mm; mostly spherical; filled with green clay.

COLOR: Dark gray.

ALTERATION: Slight.

VEINS/FRACTURES: Small subhorizontal fracture in Piece 15.

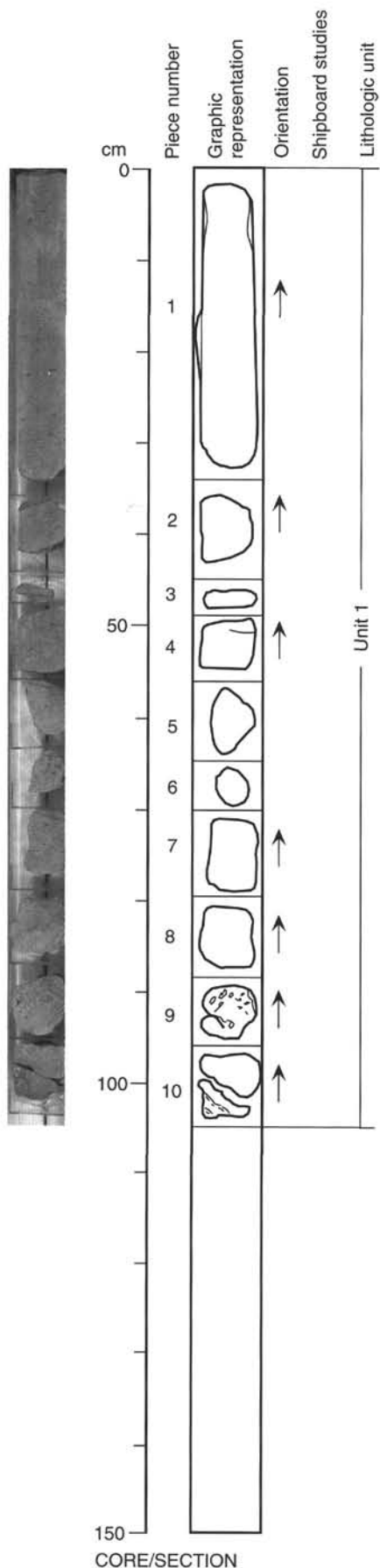
ADDITIONAL COMMENTS: Flow-banding visible in Piece 5 (32-33 cm; 38-39 cm; 43-46 cm), Piece 7 (61-62 cm; 69-70 cm), and Piece 13 (121-125 cm).



CORE/SECTION

163-988A-5R-1

UNIT 1: MODERATELY PLAGIOCLASE-PYROXENE-OLIVINE PHYRIC BASALT



Pieces 1-10

CONTACTS: Base of Unit 1 seen in Piece 10.

PHENOCRYSTS: Glomerocrysts of plagioclase and pyroxene.

Plagioclase - 3%; up to 3 mm; tabular.

Pyroxene - <1%; 1 mm; subhedral.

Olivine - <1%; up to 5 mm; subhedral, equant or platy, altered to clay.

GROUNDMASS: Fine- to very-fine-grained.

VESICLES: 1-50%; 1-5 mm; spherical to irregular shape; patchy distribution; sparse above 60 cm, more abundant below; 2x2 cm patch with 50% vesicles in Piece 9 (90-92 cm).

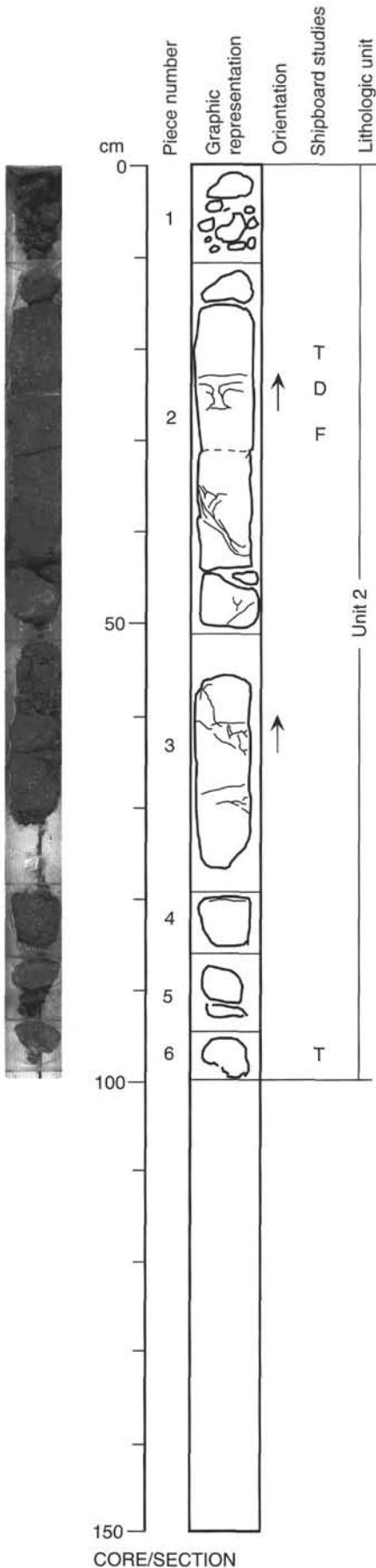
COLOR: Gray-green to gray-blue, stained brown at base.

ALTERATION: Slight in most of section, moderate at base.

VEINS/FRACTURES: <<1%; 0.1-1 mm; subhorizontal; filled with white mineral in Piece 2, and with green clay in Piece 4.

ADDITIONAL COMMENTS: Grain size decreases towards 6 cm-thick chilled zone at base of section (Piece 10).

**UNIT 2: MODERATELY PLAGIOCLASE-OLIVINE-PYROXENE PHYRIC
BASALTIC SCORIA**



Pieces 1-6

CONTACTS: Upper contact at top of section.

PHENOCRYSTS:

Plagioclase - 0-10%; 2 mm; tabular.

Olivine - 1%; up to 2 mm; subhedral.

Pyroxene - <1%; up to 1 mm; subhedral.

GROUNDMASS: Very fine-grained.

VESICLES: 0-50%; 0.1-4 mm; spherical; irregular distribution; most fragments are highly vesicular with vesicles filled with chalcedony and clay.

COLOR: Brown with ocher to reddish veins and patches.

STRUCTURE: Scoria with irregular fragments 2 to >30 mm, mostly 5-10 mm in size.

ALTERATION: Complete.

VEINS/FRACTURES: 5%; 1-10 mm; variable orientation; irregular veins lined with clay and filled with zeolite.

ADDITIONAL COMMENTS: Probably represents a scoriaceous flow top, >80% fragments in clay matrix.