149-897D-13R-6

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 12

COLOR: Moderate brown (5YR 4/4) to light brown (5YR 5/6).

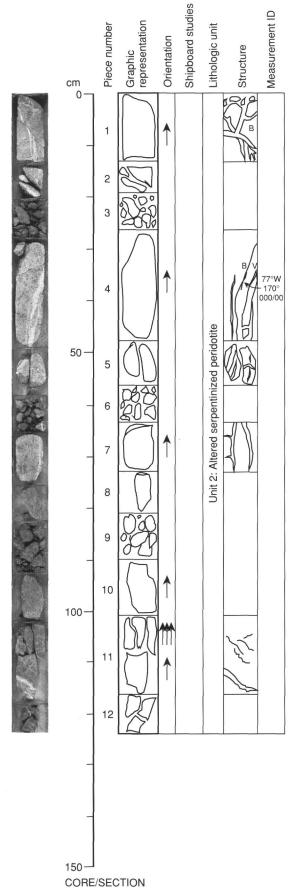
LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Late brittle deformation expressed as calcite-

filled fractures.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.



Shipboard studies Measurement ID Graphic representation Piece number Lithologic unit Orientation Structure cm 2 3 4 36 5A 37 5B 50 Unit 2: Altered serpentinized peridotite 38 5C 5D 100-5E 5F PMAG 150-CORE/SECTION

149-897D-14R-1

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 5F

COLOR: Moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: Late brittle deformation expressed as calcite-filled fractures.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.

149-897D-14R-2

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1A to 2

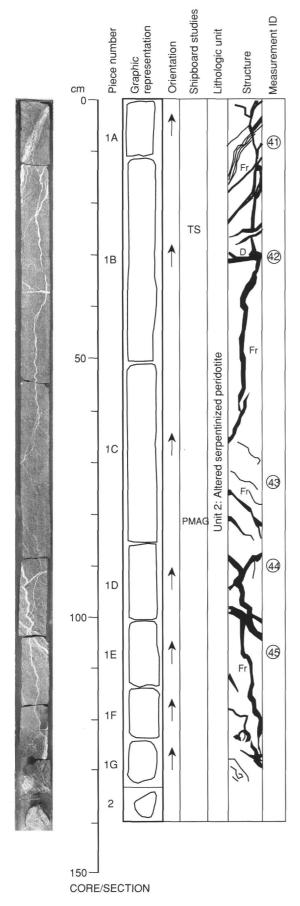
COLOR: Moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: Late brittle deformation with reticulate pattern of calcite-filled fractures.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.



Shipboard studies Measurement ID Graphic representation Piece number Lithologic unit Orientation Structure cm 0 2A 10°E 54°S 2B 3 50 Unit 2: Altered serpentinized peridotite 4 5 6A 6B 7 100-88 PMAG 46 8B 60°E 10°S

47) 10°W

149-897D-14R-3

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 9

COLOR: Moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Reticulate pattern of calcite-filled fractures

make up about 20% of the rock.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.

CORE/SECTION

149-897D-14R-4

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 13

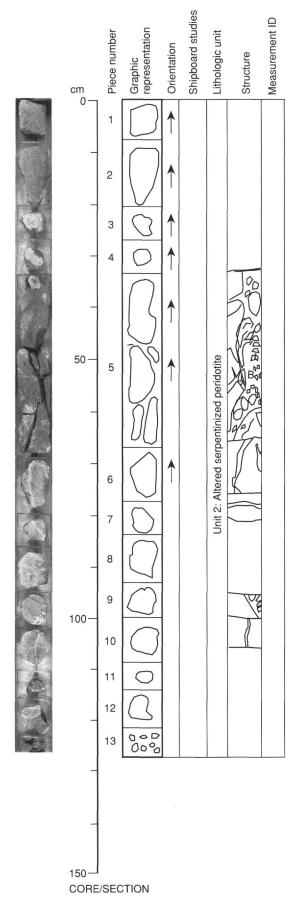
COLOR: Mottled, moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Complex pattern of calcite-filled fractures make up about 15% of the rock.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.



Shipboard studies Measurement ID Graphic representation Piece number Lithologic unit Orientation Structure cm 0 2 Unit 2 3 TS 4 50 100

149-897D-14R-5

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 4

COLOR: Mottled, moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Complex pattern of calcite-filled fractures

make up about 15% of the rock.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.

CORE/SECTION

149-897D-15R-1

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1 to 19

COLOR: Mottled, moderate brown (5YR 4/4) to light brown (5YR 5/6).

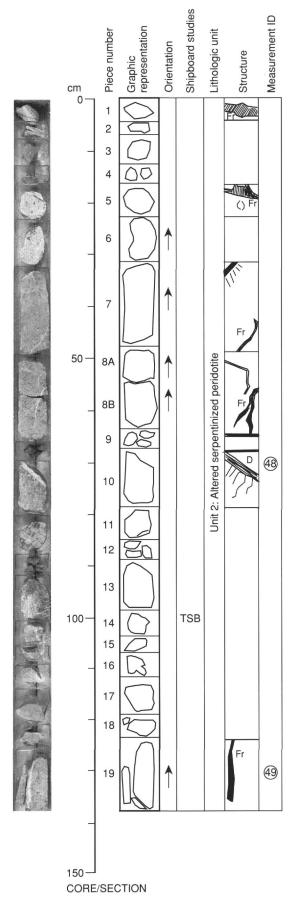
LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Complex pattern of calcite-filled fractures

make up about 10%–15% of the rock.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of the primary and secondary mineralogy. Unit continues to Section 149-897D-15R-2. This is a zone of alteration at the top of the basement.



149-897D-15R-2

UNIT 2: ALTERED SERPENTINIZED PERIDOTITE

Pieces 1-6

COLOR: Mottled, moderate brown (5YR 4/4) to light brown (5YR 5/6).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Complex pattern of calcite-filled fractures

make up about 15% of the rock.

SECONDARY MINERALOGY: Yellow limonite(?) alteration superimposed on serpentinization.

ADDITIONAL COMMENTS: Unit continues from Section 149-897D-11R-1. Refer to the description of that section for details of primary and secondary mineralogy. Unit ends with Piece 6. Contact with underlying greenish layer was not recovered.

UNIT 3: SERPENTINIZED PERIDOTITE

Piece 7 only

COLOR: Dark yellowish brown (10YR 4/2) and dusky green (5G 3/2).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Late brittle deformation expressed by reticulate pattern of coloite filled frontings

late pattern of calcite-filled fractures.

PRIMARY MINERALOGY: Olivine - Mode: 78%.

Percent replacement: 100%.

Pyroxene - Mode: 20%.

Percent replacement: 100%.

Spinel - Mode: 2%.

Percent replacement: 0%.

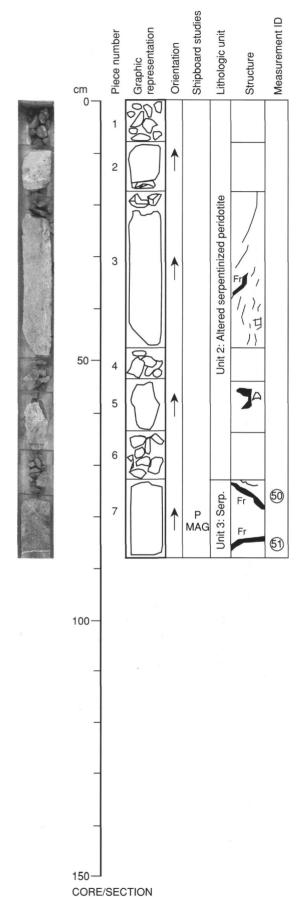
SECONDARY MINERALOGY: The primary mineralogy is extensively destroyed by serpentini-

zation and later calcite veining. Total percent: 98%.

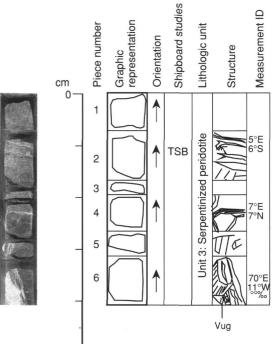
Texture: Mesh serpentinite.

ADDITIONAL COMMENTS: Unit 3 is a mixed unit of predominantly green serpentinite within a larger limonite(?)-altered zone at the top of the basement. Unit continues Section 149-

897D-16R-1.



149-897D-16R-1



UNIT 3: SERPENTINIZED PERIDOTITE

Pieces 1 to 6

COLOR: Dusky green (5G 3/2) to dark greenish gray (5GY 4/1).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Late brittle deformation expressed by reticu-

late pattern calcite-filled fractures.

PRIMARY MINERALOGY: Olivine - Mode: 78%.

Percent replacement: 100%.

Pyroxene - Mode: 20%.

Percent replacement: 100%.

Spinel - Mode: 2%.

Percent replacement: 0%.

SECONDARY MINERALOGY: The primary mineralogy is extensively destroyed by serpentini-

zation and later calcite veining.

Total percent: 98%. Texture: Mesh serpentinite

Vein material: Dark serpentine pseudomorphs delineate the margins of a pyroxene-rich

vein, associated with veins of sulfide.

ADDITIONAL COMMENTS: Unit continues into Section 149-897D-16R-2 and starts in Section 149-897D-15R-2, Piece 7.

149-897D-16R-2

UNIT 3: SERPENTINIZED PERIDOTITE

Pieces 1A-1G

COLOR: Dusky green (5G 3/2) to greenish black (5GY 2/1).

LAYERING: No obvious layering.

DEFORMATION: No obvious ductile deformation. Late brittle deformation expressed by calcite-

filled, and less commonly serpentine-filled fractures.

ADDITIONAL COMMENTS: Primary veinlets of pyroxenite (1–2 cm thick), largely calcified and serpentinized at 38, 58, and 69 cm. They display a zonation with dark serpentinite borders, and lighter serpentinite in the centers. Unit continues from Section 149-897D-16R-1. Refer to the description of that section for details of primary and secondary mineralogy.

