Thin sections Site U1495

THIN SECTION LABEL ID: 366-U1495A-3G-CC-W 13/15-TSB-TS_63

Thin Section Summary Description

Foliated serpentinite composed of serpentine blades with interpenetrating textures. The rock is crossed by veins of magnetite associated with thinly recrystallized minerals. A lot of bastite are observed suggesting that the protolith was an harzburgite.





TS no.: 63

Observer(s): BD/JS

LIMS image no.:

39730431

Plane-polarized. Slide width 27mm

BD/JS

Intrusive Mantle

Lithology: serpentinite Observer:

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Serpentine	NA	100	NA	NA			interpenetrating	
Orthopyroxene	30				NA		bastite	abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

THIN SECTION LABEL ID: 366-U1495A-3G-CC-W 18/20-TSB-TS_64

Thin Section Summary Description

Foliated serpentinite composed of serpentine blades with interpenetrating textures. Some orthopyroxene seems to be preserved The rock is crossed by veins of magnetite associated with thinly recrystallized minerals. A lot of bastite are observed suggesting that the protolith was an harzburgite or pyroxenite. Rare Cpx exsolution lamellae preserved in some bastite. Pale green alteration with modest Bf common, may be anthophyllite.





TS no.: 64

Observer(s): BD/JS

LIMS image no .:

39730471

Plane-polarized. Slide width 27mm

LIMS image no.:

39730491

Cross-polarized. Slide width 27mm

Intrusive Mantle

Domain/Rock Abundant bastite, often with anthophyllite; rock may derived from pyroxenite. Comment:

serpentinite Lithology: Observer: BD/JS

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Serpentine	NA	100	NA	NA			interpenetrating	
Orthopyroxene	30				NA		bastite	abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

THIN SECTION LABEL ID: 366-U1495A-4F-1-W 86/89-TSB-TS_65

Thin Section Summary Description

Foliated serpentinite composed of serpentine blades with interpenetrating textures. Some orthopyroxene seems to be preserved The rock is crossed by veins of magnetite associated with thinly recrystallized minerals. A lot of bastite are observed suggesting that the protolith was an harzburgite.





TS no.: 65 Observer(s): BD

LIMS image no.:

39730511

Plane-polarized. Slide width 27mm

LIMS image no.:

39730531

Cross-polarized. Slide width 27mm

Intrusive Mantle

Lithology: serpentinite Observer: BD

Texture: nonpseudomorphic

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Serpentine	NA	100	NA	NA			interpenetrating	
Orthopyroxene	30				NA		bastite	abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

Thin sections Site U1495

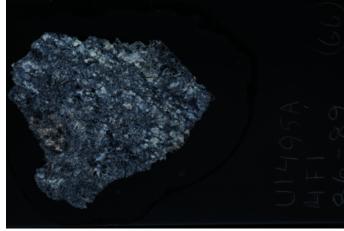
THIN SECTION LABEL ID: 366-U1495A-4F-1-W 86/89-TSB-TS_66

Thin Section Summary Description

Foliated serpentinite composed of serpentine blades with interpenetrating textures. The rock is crossed by veins of magnetite associated with thinly recrystallized minerals. A lot of bastite are observed suggesting that the protolith was an harzburgite.







TS no.: 66

Observer(s): BD

LIMS image no.: 39734531 Cross-polarized. Slide width 27mm

Intrusive Mantle

Lithology: serpentinite Observer: BD

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Serpentine	NA	100	NA	NA			interpenetrating	
Orthopyroxene	30				NA		bastite	abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

THIN SECTION LABEL ID: 366-U1495A-4F-1-W 88/90-TSB-TS_67

Thin Section Summary Description

Foliated serpentinite composed of serpentine blades with interpenetrating textures. The rock is crossed by veins of magnetite associated with thinly recrystallized minerals. A lot of bastite are observed suggesting that the protolith was an harzburgite. Those are associated with chlorite.





TS no.: 67 Observer(s): BD

LIMS image no.:

39734551

Plane-polarized. Slide width 27mm

LIMS image no.:

39734571

Cross-polarized. Slide width 27mm

Intrusive Mantle

Lithology: serpentinite Observer: BD

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Serpentine	NA	100	NA	NA			interpenetrating	
Orthopyroxene	30				NA		bastite	abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

THIN SECTION LABEL ID: 366-U1495A-5G-CC-W 21/24-TSB-TS_69

Thin Section Summary Description

Serpentinized harzburgite. Bastites recognizable but olivine replaced nonpseudomorphically. Bastite to 3.6 mm across. Kinked, Probable PC primary texture. Yellowish mineral with hig relief crystallizing in veins crosscut the sample. Samll spinels have been observed

TS no.: 69

Observer(s): JS/BD

Intrusive Mantle

Serpentinized harzburgite. Bastites recognizable but olivine replaced nonpseudomorphically. Bastite to 3.6 mm across. Kinked, Probable PC primary texture. Domain/Rock

Comment:

Lithology: serpentinized harzburgite Observer: JS

Texture: nonpseudomorphic

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Orthopyroxene	25			2.5	NA			abundant bastite, highly deformed and recrytsallized into interpenetrating blades of serpentine

THIN SECTION LABEL ID: 366-U1495B-3G-CC-W 28/30-TSB-TS_68

Thin Section Summary Description

Highly Serpentinized dunite (about 80% serpentinization), the olivine is preserved in the center of pseudomorphic hourglass textures. Olivine highly elongate, primary rock likely had strong foliation. Rare areas with same extinction show grains 6 mm long by 2 mm wide; another grain is 8 mm long by 1.2 mm wide. Spinel subhedral, equant. Thinly recrystallized zoned veins of magnetite and talc-like phases crossed the sample. Cut by at least 3 generations of veins after mesh micro veins.





TS no.: 68

Observer(s): BD/JP/JS

LIMS image no .:

39734591

Plane-polarized. Slide width 27mm

LIMS image no.:

BD/JS

Intrusive Mantle

Domain/Rock Highly serpentinized dunite, mostly mesh texture. Cut by at least 3 generations of veins after mesh micro veins. Olivine highly elongate, primary rock likely had strong foliation. Comment:

serpentinized dunite Lithology: Observer:

Texture:

pseudomorphic

Mineral	Estimated Original (%)	Present (%)	Altered (%)	Size Avg. (mm)	Shape	Habit	Texture	Comments/Special Features
Olivine	99	15	80	5	elongate			Olivine is preserved in the center of hourglass textures
Serpentine	NA	85	NA	NA		hourglass	pseudomorphic	
Spinel	1			0.2	NA	subhedral		NA