

Table 1S- Sample location, macroscopic description, mineralogical quantification

Samples	Coordinates	Minerals (vol%)	Macroscopic description	Lithotypes
BMI2	X : 6.69522 W Y : 30.49287N	Atg (11.7%) Lz (9.1%) Hy (79.4%)	Dark, fine- to medium-grained rock displaying a compact structure. The mineral assemblage is dominated by pyroxene (shiny crystals) constituting massive lenses.	Meta-ortho- pyroxenite
BMAA5b	X : 6.93861 W Y : 30.52527 N	Atg (63.2%) Lz (12.1%) ClIt (24.6%)	Dark yellow-green to blackish massive serpentinite, a color due to the dominance of antigorite. Characterized by a "bastitic" microstructure (i.e. shiny pseudomorphs).	Meta- harzburgite
BMAA35	X : 6.58849 W Y : 30.47474 N	Atg (39.7%) Lz (12.5%) ClIt (16.6%) Clc (9.7%) Tlc (21.6%)	Rock with a distinct soapy touch. The matrix is dark, and the talc alteration gives it a heterogeneous appearance compared to the typical dark yellow-green facies.	Meta- dunite
SA	X : 6.58122 W Y : 30.47289 N	Atg (58.9%) Lz (7.8%) ClIt (29.1%) Tlc (4.2%)	Dark yellow-green to blackish serpentinite with a mottled appearance. The dark hue reflects the abundance of antigorite, locally sheared.	Meta- wehrlite
BMAA52	X : 6.58849 W Y : 30.47474 N	Atg (43.4%) Lz (6.5%) ClIt (39.7%) Clc (8%) Mag(2.4%)	Massive rock with visible « bastite » recrystallization. The matrix is dark; the sample is crosscut by veins with a paler hue, due to the significant chrysotile content	Meta- harzburgite
ST1	X : 6.58314 W Y : 30.47340 N	Atg (34.1%) Lz (7.4%) ClIt (36%) Clc (8.6%) Tlc(7.9%) Bru(6.1%)	Fine-grained serpentinite. The high content of chrysotile tends to give the rock a paler hue in fractured zones, contrasting with the dark antigorite matrix.	Meta- dunite
ST2	X : 6.68959 W Y : 30.49606 N	Atg (58.4%) Lz (5%) ClIt (28.2%) Clc (8.4%)	Dark yellow-green to blackish homogeneous rock. This represents the most common color facies, due to the prevalence of antigorite and lizardite.	Meta- dunite

I3	X : 6.69542 W Y : 30.49267 N	Lz (4.6%) Di (59.3%) En (20.5%) Clc (15.9%)	Dark, fine- to medium-grained rock with a compact microstructure. The assemblage is dominated by pyroxene.	Meta- clino-pyroxenite
JO9	X : 6.58122 W Y : 30.47289 N	Atg (48.4%) Lz (25%) Clt (18.2%) Clc (8.4%)	Dark yellow-green to blackish compact serpentinite. The dark hue indicates a composition rich in antigorite and lizardite, with a tight mesh texture.	Meta- dunite
BA11	X : 6.58679 W Y : 30.47454 N	Atg (36.8%) Lz (12.4%) Clt (49.5%) Mag (1.3%)	Intensely fractured rock displaying a paler hue overall. This is attributed to the high proportion of chrysotile (~50%) forming abundant white fibrous veinlets.	Meta- dunite
BMAA14	X : 6.58354 W Y : 30.47320 N	Atg (44.6%) Lz (15 %) Clt (40.4%)	Sheared serpentinite. The dark yellow-green matrix is heavily crosscut by fibrous minerals, resulting in a paler hue on slickensided surfaces due to chrysotile.	Meta- harzburgite

Rietveld analysis complemented by bulk-rock geochemical compositions and normativ calculations for the main lithotypes in the study area.

Abbreviations: Atg : antigorite; Lz : lizardite; Clt : chrysotile; En : enstatite; Di : diopside; Hy : Hypersthene; Tlc : talc; Clc : clinocllore; Mag : magnetite; Bru : brucite.