

COMMENTS

Most rocks in this batch are derived from basalt, cumulus gabbro and pyroxenite, and dunite. The basalt shows quench textures typically developed in magnesian tholeiites which are typical associates of ophiolitic cumulus rocks.

Alteration is of a low grade type with various types of serpentine, antigorite + carbonate or serpentine + talc + tremolite alteration. The metabasalts are now actinolite-plagioclase rocks with retrograde epidote and, in places, prehnite. In the pyroxenite the main alteration is the serpentine-amphibole replacement of orthopyroxene. Minor muscovite occurs as coarse flakes in plagioclase and some of the plagioclase is pseudomorphed by fine grained epidote. Chlorite is rare in those rocks.

The quartz tourmaline rocks appear to completely (?metasomatically) replace former porphyritic-dacite or micro-granodiorite with phenocrysts of quartz, plagioclase and of hornblende, pyroxene and/or biotite (T8636). Phenocrysts of quartz and/or plagioclase with a groundmass of feldspar, biotite and/or hornblende appears to have formed the pre quartz-tourmaline replacement of T8637.

It is noted however that the identification of the minerals now replaced by tourmaline aggregates is difficult as the outlines are somewhat obscured by the replacement.