

T8636 : quartz-tourmaline rock
(?completely replacing a
porphyritic rock)

This sample consists of quartz and blue tourmaline (40%). The quartz occurs as large grains and aggregates of grains about 1.5 mm set in a fine granular mosaic; and as quartz veins to 10 mm across. These veins are composed largely of euhedral columnar ('dog tooth') crystals of quartz to about 5 mm long by 0.5 - 2 mm wide, and very minor fragmented blue tourmaline.

The tourmaline occurs as aggregates of prisms about 2 mm across, and as spongy porphyroblasts 1 mm across with small quartz inclusions. Rare patches of brown tourmaline with zircon inclusions are also present. Some tourmaline aggregates enclose euhedral quartz crystals 0.5 mm across.

The tourmaline appears to be replacing phenocrysts in an originally ?porphyritic dyke-rock, or lava flow. The nature of the phenocrysts is not certain but relict textures suggest that pyroxene, biotite and plagioclase are possible. Several single quartz grains are also interpreted as former phenocrysts. The spongy porphyroblasts are probably plagioclase replacement.