

myriads of schorl and mica inclusions). Thin veinlets of clear to mauve fluorite and ankerite occur sporadically. Accessories include sparsely disseminated pyrite (in part after pyrrhotite), rare quartz, and minor sideritic carbonate which tends to mantle ankerite.

Sporadic carbonate-schorl aggregates (to 1 mm) have regular shapes suggestive of pseudomorphed prismatic feldspar. There is no relict phenocrystal quartz and the bulk of the rock is featureless in terms of relict features. However, it can be tentatively identified as a pneumatolytically altered ("autometasomatised") porphyry. There is no detectable cassiterite.

98089

MBD 15  
60.2m

(T.S. 32142)

This is a banded muscovite-fluorite-topaz-carbonate rock of metasomatic character. There are affinities with 98009 (and, by inference, 98072 etc.), but the relict banding in this case suggests an altered sediment mode of origin. The area sectioned includes a band of marginally altered (ankeritised) dolomite rock with the appearance of a microcrystalline marble.

The bulk of the rock comprises aggregates of very fine random, pale green hydromuscovite pervasively stained with microscopic fluorite granules with a weakly banded distribution. Marginal to the dolomite there is a 2-4 mm wide zone of crypto- to microcrystalline topaz rock, with the topaz partly altered to sericite-fluorite-sellaite aggregates. This zone has a semi-planar to weakly contorted relict "pelitic" banding with some evidence of grading, but is devoid of relict clastic features. The contact comprises a thin zone of poikilitic fluorite clouded with mica and carbonate inclusions.

Dark red to opaque (high Fe-) sphalerite is a relatively conspicuous accessory component, locally accompanied by fine-grained pyrite, typically in spongy lenses (and in part after pyrrhotite). The dolomitic marble is weakly stained with talc flakes of metamorphic character and is veined and marginally replaced by coarse ankerite. Minor traces of carbonaceous matter persist as "bedded" relics.

Sparse cassiterite occurs as discrete to weakly clustered, 5-75  $\mu$  (mean 30-40  $\mu$ ), cloudy particles within the mica-fluorite bands. Distribution is distinctly banded, with the cassiterite comprising 5-10 % of a single 2 mm wide zone and virtually absent elsewhere.