

Fe-pigmentation. Green biotite flakes are disseminated throughout marginal zones, with sporadic muscovite flakes, sub- to euhedral beryl crystals (to 1.2 mm), patches of fluorite (to 750 μ) and disseminations of scheelite developing as a semi-pseudomorphous replacement of euhedral wolframite (200 μ to 2.8 x 8 mm). Marginal to this vein, the altered host rock is relatively talcose, with a phlogopitic assemblage in distal areas. The vein has a distinct pneumatolytic character.

Polished section examination confirms the presence of thinly disseminated, single flakes (mean 50 μ) and clusters (to 200 μ) of molybdenite throughout marginal areas of the vein and adjacent micaceous altered host rock. Molybdenite may be spatially associated with wolframite and, here, is corroded by scheelite, which then trends towards powellite on the basis of fluorescence effects.

00008

SMD,6

11.6m

Sn 250 ppm ; W 4650 ppm ; Cu ~~50 ppm~~ ; Au 0.65 ppm
(T.S., P.S. 32443) K-stain positive.

This is a finely banded garnet-diopside skarn with accessory vesuvianite, fine intergranular and included magnetite and relatively conspicuous fluorite. As with the associated skarns, the rock is fine- to medium-grained, but with a rather wide variation in sizing, which makes sizing data rather meaningless.

Sub- to millimetric scale banding reflects an alternation of garnetiferous and granular diopsidic bands with abundant fluorite, and is enhanced by the distribution of magnetite which is typically associated with garnet. Banding is considered as (metasomatized) relict sedimentary, although the original facies is obscure (conceivably a B.I.F.).

Banding is intersected generally at a high angle by frequent veins ranging up to 4 mm in width. At least two generations of veining are evident, but relationships are complex and not easily resolved, since few vein intersections are seen.

Crosscutting veins of grossular-andradite, with subordinate diopside and fluorite, reflect the initial pyrometamorphic/metasomatic phase. These grade into, and may be mildly altered by, sparse veinlets with hastingsite-fluorite (+ magnetite, argillised ?tremolite) assemblages. These are, in turn, intersected by a typical, crudely comb-structured vein of sanidine, with disseminated clots and films of fluorite and extremely rare scheelite (to 100 μ). This feature shows thin marginal selvages of poorly twinned albite and thin phlogopitic replacement selvages with ultrafine secondary magnetite. There is minor development of later chloritic microfractures.