

minerals; this probably also applies to some of the plagioclase. Both types of feldspar also constitute late-stage, cross-cutting veins and patches; they are rather lacking in the distinctive characteristics usually associated with them, and in consequence are easily confused with each other and with quartz. Quartz is in fact a very minor mineral only.

The importance of the feldspar veins, especially the plagioclase (andesine) veins, is that they contain most (perhaps almost all) the scheelite which is virtually the entire source of the tungsten. The scheelite occurs as irregular and anhedral grains, sporadically distributed and ranging from  $20\mu$  to  $300\mu$  in size.

Cassiterite is also sporadic in its distribution, as irregular patches up to  $100\mu$  across, intergrown with fluorite, quartz, and feldspars. No other Sn-bearing phases were detected, though traces of "stannospinel" may be present (extremely fine-grained). Spinel is absent, in contrast to Mt. Garnet, with the exception of magnetite.

Magnetite occurs as individual crystals  $2\mu$  to  $100\mu$  (mostly  $< 20\mu$ ), forming thin bands and larger aggregates. There are also patches of magnetite with "colloform" microtexture, and thin films (shells) of magnetite on other minerals; these shells are often  $5\mu$  or less thick. Traces of bismuthinite were detected, as  $< 20\mu$  grains, embedded in non-opaque minerals.

M4 This sample is very similar to M3, especially in regard to the fabric and also in general composition. In addition to the finely-banded magnetite-fluorite types, some carry green biotite. A few massive garnet and garnet-ferrohastingsite rocks occur, and muscovite is fairly widespread. It seems to be equivalent to adularia, constituting a late stage of greisenization. There are relatively coarsely crystalline assemblages of quartz-topaz-fluorite-muscovite-feldspar representing a distinctly different phase younger than the main metasomatism.

Veins and patches of medium- to coarse-grained crystal-mosaics have formed, consisting of quartz-fluorite, adularia-fluorite, and andesine-fluorite. Scheelite is present in fluorite-andesine veins, as anhedral grains  $20 - 250\mu$  and larger patches up to  $700\mu$  with minute magnetite inclusions.

Cassiterite was detected as  $3 - 18\mu$  grains, and small aggregates up to  $30\mu$ , in fluorite.

The polished section shows that the magnetite is very similar to