

024

fine fracture; other layered sequences commence at irregular siltstone beds. The layers are interpreted to be analogous to Liesegang Rings, formed by fluids diffusing out from a pipe-like conduit, or from a fracture, or through permeable siltstone, and replacing adjacent limestone. The origin of the layering is discussed in more detail below.

C. MINERALOGY:

Some thin sections have been examined by the author, and some by Fander (1976). The wriggelite is fine grained and mineralogically complex, and no rigorous mineralogical study has yet been completed. An honours student, T. Waite, of Latrobe University is currently carrying out more detailed studies.

The main constituents are magnetite and fluorite and one or more different silicate minerals. The most abundant silicate minerals are feldspar, sericite, ferrohastingsite, green biotite, and idocrase. The sericite appears to be a replacement of the feldspar.

Haphazard particles of coarser grained material include intergrowths of ferrohastingsite-fluorite-garnet-magnetite-diopside. In places pyrite is abundant partly as ragged particles replacing prior minerals.

Minor minerals include fine cassiterite (5 - 50 μm), very fine scheelite which fluoresces lime yellow under UV light, fine bismuthinite (20 μm), and patches of sphalerite.

Veinlets of quartz-fluorite, adularia-fluorite, andesine-fluorite and muscovite-quartz-fluorite-oligoclase are common in places. Scheelite is present in these veinlets as grains up to 2 mm - this scheelite fluoresces bluish white under UV light and probably has a lower Mo content than the finer disseminated scheelite. Molybdenite sometimes occurs as thin veneers at the edge of these veinlets.

No magnesium bearing fluoride (sellaite) nor fluorosilicates like humite, clinohumite, chondrodite, norbergitte have been identified. The implication is that the replaced limestone is poor in magnesium and that magnesium in significant quantities has not been introduced during metasomatism.

Fluorite is the only identified mineral species which has essential fluorine. No sellaite (MgF_2) or cuspidine