

wrigglite-magnetite skarn, garnet-magnetite skarn, garnet skarn, pyroxene (diopside) skarn (in the Transition zone) and quartzite in the Moina Sandstone. Thin section descriptions of the various rock types are included in Appendix 2.

The wrigglite (laminar skarn) consists generally of fine to ultra fine (<5 - 100 micron) granular to subhedral and locally fibrous magnetite, fluorite and vesuvianite with less common phlogopite, hedenbergite or garnet substituting for vesuvianite. These are present in near-equant proportions, with sub - to fine millimetric scale compositional banding. Magnetite stains the vesuvianite/phlogopite bands and grades into semi-to near-massive laminae. Fluorite bands are relatively massive. Banding is of crudely crustiform to nodular in character. The wrigglite is often extensively retrogressively altered. The magnetite is martitised, amphiboles are altered to chlorite and garnet to ankerite. The characteristic texture of the rocks is thought to be caused by F rich metasomatic fluids in a mechanism similar to that which produces Liesegang rings. However, at low fluorine values (<9% F) a granular magnetite-hedenbergite (phlogopite)-fluorite rock is produced.

The pyroxene skarn consists mainly of fine grained diopside-hedenbergite with very minor amounts of fluorite and garnet. In the garnet(vesuvianite-fluorite) skarn, the garnet is andradite-grossularite. The pyroxene interstitial to and occurring as inclusions throughout garnet is diopside-hedenbergite with Fe-rich hornblende amphibole and epidote. Interstitial fluorite and adularia also occur, occasionally with the epidote and calcite.

Another skarn type, of limited extent, is a wollastonite skarn which is useful in places as a local marker. This skarn is possibly a sandy facies of the limestone and it consists mainly of wollastonite with lesser amounts of garnet, pyroxene, vesuvianite and fluorite.