

TYROLITE



A rare supergene arsenate of copper and calcium formed on veins which contain primary copper and arsenic minerals. Northern Peninsula.

Keweenaw County: Mohawk mine: Williams (1963b) mentions tyrolite (“trichalcite”) as occurring here, together with other supergene arsenates, as alteration products of the copper arsenide vein minerals. Data by D. H. Garske (personal communication) indicate some of this material may be the copper analogue of vivianite. Specimens of domeykite and etched calcite (specific mine locality unknown, but presumed to be the Mohawk mine) in the collection of the A. E. Seaman Mineral Museum (Michigan Technological University), contain bright blue, velvety spheres of a Ca-Cu arsenate mineral that somewhat resembles aurichalcite. Based on energy dispersion X-ray spectra, this mineral is most likely tyrolite. The largest spheres reach 1 mm in diameter, and are associated with calcite, chrysocolla, olivenite, cuprite, and azurite.

FROM: Robinson, G.W., 2004 Mineralogy of Michigan by E.W. Heinrich updated and revised: published by A.E. Seaman Mineral Museum, Houghton, MI, 252p.