DIGENITE

Cu_9S_5

Resembles chalcocite, from which it can be distinguished by optical and X-ray means. A widespread minor mineral of copper sulfide veins and lodes. Northern Peninsula.

Gratiot County: Near Ithaca, T10N, R2W in Michigan Basin Deep Drill Hole in the altered upper basaltic gabbroic unit. An accessory with bornite and native copper in albite-chlorite-calciteepidote rock. Analysis by McCallister et al. (1978)

Keweenaw County: 1. Cliff mine area, NW ¹/₄ section 36, T58N, R32W: In amygdaloid of the Greenstone flow in minute vesicles with chalcocite (q.v.), hematite, covellite, and chalcopyrite (Cornwall, 1951a, b). **2.** Mount Bohemia: In copper sulfide veins with chalcocite, covellite, bornite, pyrite, and iron oxide minerals (Robertson, 1972, 1975).

Marquette County: Chocolay Hill: As small, black, cleavable segregations in chalcocite stringers in Mesnard Slate. Verified by X-ray diffraction.

Ontonagon County: White Pine: Digenite is the "blue chalcocite" of Wiese (1960) and Carpenter (1963). Found as disseminated microscopic grains in the copper-iron transitional zone of the White Pine copper ore body in the Nonesuch Shale with chalcocite and bornite and less commonly with covellite, chalcopyrite, and pyrite. Some lamellar intergrowths with covellite. It replaces pyrite, and usually a chalcopyrite zone forms between the pyritic core and the digenite rim (Brown, 1966, 1968).

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