

## BISMUTH

Bi

An uncommon constituent of certain hydrothermal veins. Northern Peninsula.

**Marquette County:** Republic area: Hoffman (1987) identified native bismuth as tiny inclusions in quartz in two samples of Bell Creek Granite based on energy dispersion X-ray spectra. Unverified.

**Ontonagon County:** White Pine mine: Native bismuth occurs as blebs and inclusions in domeykite from late veins, and as rims on grains of chalcocite from Unit #93 (Bornhorst et al., 1995).

**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.**

### UPDATE

**Dickinson County:** Unnamed prospect near Channing, section 29, T44N, R29W: Microscopic grains. Verified by qualitative energy dispersion X-ray spectrometry.

**Marquette County:** Crockley pegmatite, section 22, T47N, R29W: As 2-5 mm cleavage plates in gray quartz with bismuthinite. Verified by X-ray diffraction and energy dispersion X-ray spectrometry.

**UPDATE FROM: Robinson, G.W., and Carlson, S.M., 2013, Mineralogy of Michigan Update: published online by A.E. Seaman Mineral Museum, Houghton, MI, 46p.**