

MOLYBDENITE



The only common ore mineral of molybdenum. Molybdenite occurs as an accessory mineral in some granitic pegmatites, greisen and skarn deposits, high-temperature hydrothermal quartz veins and porphyry-type molybdenum deposits. Northern Peninsula.

Dickinson County: Groveland mine, near Randville (Hawke, 1976).

Gogebic County: Newport mine, 28th level: Centimeter-sized tabular hexagonal crystals in an 8 cm wide quartz-microcline pegmatite.

Iron County: *Crystal Falls:* As rich, platy-to-radial crystal aggregates to 3 cm associated with pale gray quartz and white feldspar, reportedly from an unspecified locality near Crystal Falls (specimen DM 2028, A. E. Seaman Mineral Museum collection, Michigan Technological University).

Marquette County: **1.** Near Republic: In quartz veins, some cutting iron formation (Poindexter et al., 1939; Dorr and Eschman, 1970), and at the Republic mine (Hawke, 1976). Also approximately 5 km south of the Baron mine in pegmatite. **2.** Northeast of Champion: Disseminated in a wide quartz vein (Snelgrove et al., 1944). **3.** Lake Michigan area section 28, T48N, R29W: In a pegmatite of pre-Ajibik age (Snelgrove et al., 1944). **4.** Section 8, T46N, R29W: In pegmatite with apatite and beryl, and disseminated in a beryl-bearing quartz vein in the SW ¼ of the same section (Snelgrove et al., 1944). **5.** Crockley pegmatite, section 22, T47N, R29W (Heinrich, 1962a). **6.** *Michigan gold mine*, NE ¼ section 35, T48N, R28W: As rich granular masses in quartz; reported concentration at east end of 250 level (Snelgrove et al., 1944; Broderick, 1945). **7.** *Ropes gold mine:* In quartz-tetrahedrite veins with smoky quartz, and as rich slickensided masses on the 1,020 level at the 1,020 to 1,152 vent raise (Broderick, 1945; Mortenson, 1953; R. Procnier, personal communication, 1987). **8.** Beacon iron mine (Dorr and Eschman, 1970). **9.** *Champion iron mine*, 36th level, approximately 60 meters east of Number 7 Shaft station in the footwall stope: In a quartz vein cutting granular magnetite ore with chalcopyrite, bornite, tourmaline, and muscovite

(Babcock, 1966a, b). **10.** Humboldt mine: With actinolite, specular hematite, and quartz in schist (Hawke, 1976).

Ontonagon County: White Pine mine: Occurs in the pyritic zone as thin coatings on slickensided fractures, and as microscopic grains in calcite veinlets next to the fracture (Brown, 1968). A second, more extensive occurrence, also as coatings along slickensided fractures, was encountered in 1976. (R. W. Seasor, written communication, 1977).

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