

## PYROLUSITE

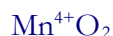


Figure 111: Pyrolusite crystals on quartzite from the Taylor mine, Alberta, Baraga County. 4.5 x 6 cm. A. E. Seaman Mineral Museum specimen No. GBR 2639, Jeffrey Scovil photograph.

One of the most common manganese minerals. It occurs in bog and lake manganese ores as well as in marine deposits, including some iron formations. It is also formed by weathering of manganese oxides and other manganese minerals. “Wad” is a general term used to describe undifferentiated mixtures of massive pyrolusite with various other manganese oxide minerals, all of which require X-ray and/or chemical data for positive identification. Northern and Southern Peninsulas.

**Baraga County:** 1. L’Anse iron range, NW ¼ section 9, T47N, R33W. A manganiferous quartzite was reported by Brooks (1873) to contain pyrolusite. Not verified. 2. Taylor mine 3.2 km north of Alberta just off old U.S. 41, NE ¼ NW ¼ section 9, T49N, R33W: In fine crystals several centimeters in length, with manganite, pyrite, quartz, and goethite. Some of the pyrolusite is pseudomorphous after manganite. Some ore contained up to 44% MnO<sub>2</sub>. Pyrolusite is also found in road cuts in this area (Pumpelly, 1873; Mihelcic, 1954; Dorr and Eschman, 1970). Manganite (q.v.) also occurs abundantly at the

Taylor mine, and the best way to differentiate the two is by X-ray diffraction, although, when pure, the charcoal gray-black streak of pyrolusite may be sufficient to distinguish it from manganite, which has a brownish-black streak. 3. Old iron mine on Ford Dam trail, 0.4 km east of Alberta and U.S. Highway 41 (Hawke, 1976).

**Calhoun County:** 16 km north of Battle Creek on west side of Battle Creek River. With psilomelane and calcite crystals (*Rocks and Minerals*, 28, 248, 1953).

**Gogebic County:** 1. Gogebic iron range, in general: In oxidized iron formation (Mann, 1953). 2. Mikado mine at Wakefield: Stalactitic with hematite, and as lustrous microcrystals coating botryoidal “psilomelane.” 3. Newport mine at Ironwood: In large, radiating aggregates of prismatic crystals. 4. Plymouth mine, Wakefield: As well-formed acicular crystals lining cavities in hematite ore.

**Iron County:** 1. Cannon (Bengal) mine at Iron River: Thin, colloform bands in Young’s iron ore body of the Riverton Iron Formation (Kustra, 1961). 2. Hiawatha Number 2 mine. 3. Homer-Wauseca mine. 4. Chicagon mine: with manganite and seamanite (2-4, Hawke, 1976).

**Keweenaw County:** 1. Clark mine: In native copper ore. 2. Manganese mine, near Copper Harbor: Blebs in calcite veins with braunite and orientite in basalt (Butler and Burbank, 1929; Heinrich, 1974; P. B. Moore, personal communication).

**Marquette County:** 1. Negaunee area, in general: In altered or oxidized Negaunee Iron Formation as “concretionary masses of pure pyrolusite in brightly shining fibrous clusters” with hematite, goethite, and rhodochrosite (Rominger, 1881). 2. South Jackson mine: Massive or fibrous specimens in iron formation. Locally, it is found with barite and gypsum (Spiroff, 1940; Mann, 1953). 3. McComber (Lucy) mine: Beautiful clusters of semi-radial masses of needles 5 cm long, some in barite. Also as velvety, charcoal gray pseudomorphs after manganite crystals. 4. NE corner of section 12, T47N, R27W: Scales, films, and mamillary masses of radiating needles up to 7 cm in diameter in hematite ore (Brooks, 1873).

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