**BARITE**

**BaSO\(_4\)**

A common and widespread mineral of a variety of parageneses. Occurs in veins with copper sulfides cutting the native copper lodes. It is also found in the amygdaloids and the Calumet and Hecla Conglomerate (especially in iron-rich, chloritized felsite pebbles replaced by copper), and as a vein mineral in the White Pine copper sulfide deposits. Barite occurs as a vug mineral in both sedimentary iron and limestone deposits in Michigan. Mainly Northern Peninsula, but also found in the Southern Peninsula.

**Alpena County:** LaFarge Corporation, Great Lakes Region (formerly National Gypsum Company quarry, formerly Huron-Portland Cement Company) quarry at Alpena with calcite, dolomite, and rare chalcopyrite, marcasite, pyrite, sphalerite, and strontianite (Morris, 1983).

**Baraga County:** 1. Point Abbaye: Veins and concretions (up to 15 cm) in red Jacobsville Sandstone. 2. Taylor mine, Alberta: With Mn-minerals, goethite, and graphite (Morris, 1983).

**Delta County:** Stonington Rock quarry, near Stonington: As opaque, white, divergent crystal sprays with calcite on fracture surfaces in dolostone (M. J. Elder, personal communication, 2003).

**Dickinson County:** 1. Chapin mine, Iron Mountain (T. M. Bee, personal communication, 1999).

**Eaton County:** Cheney quarry near Bellevue: Fine bladed crystals to 5 cm in cavities in limestone (D. Slaughter, written communication, 1996); pink, bladed crystals and spherical crystal aggregates to 5 cm (T. M. Bee, personal communication, 1999).

**Gogebic County:** Ironwood: Found at a number of the mines in iron formation, sometimes in fine crystals (Newport, Geneva, Ashland, Penokee, Norrie, Townsite, Yale, Plymouth). One specimen (DM 751) from the Yale mine in the collection of the A. E. Seaman Mineral Museum, Michigan Technological University, consists of a group of hematite-stained blue crystals to 6 cm over half a meter across.

**Houghton County:** 1. Centennial mine: As tabular, colorless to bluish crystals on epidote crystals (Moore and Beger, 1963). 2. Calumet and Hecla Number 6, 36th level: Rare (Lane, 1911). 3. Isle Royale mine Numbers 4, 5 and 6: As hematite-stained tabular white crystals over 2.5 cm across, with calcite and quartz (Lane, 1911; Spiroff, 1938, 1964). 4. Huron mine. 5. East side Slate Harbor: In a 1.2 meter-wide vein. 6. Baltic mine: Rare except in fissures.

**Iron County:** 1. Hiawatha Number 2 mine, 16th level: Zoned, white to flesh colored crystals up to 2.5 cm in diameter as post-ore vug fillings associated with pyrite, chalcopyrite, quartz, and calcite (James et al., 1968). 2. Buck mine, Gaastra: With sulfides and uranium minerals. 3. Homer-Waasea mine, Iron River (2, 3, Morris, 1983). 4. Bristol mine, Crystal Falls district (T. M. Bee, personal communication, 1999).

Marquette County: 1. Lucy iron mine, South Jackson pit (formerly the McComber mine), SW ¼ section 6, T47N, R26W: This locality has produced remarkable specimens. Markert (1960) waxes ecstatic, describing them as “the most unusual and beautiful crested barite on manganite that ever grace a collection.” Hobbs (1895a) describes this barite as forming fairly well-developed tabular crystals arranged radially and averaging 1 to 2 cm in length with a superficial pink color. Associated are manganite and gypsum (Mann, 1953). Some crystals are pale yellowish green. In the A. E. Seaman Mineral Museum collection, Michigan Technological University, is an extraordinary mass of botryoidal aggregates, each composed of thin platy crystals, the whole measuring about half a meter across (specimen DM 676). A specimen from “Marquette County,” and very likely from the Lucy mine locality, contains 3.3% SrO (Heinrich and Vian, 1967). 2. Beacon mine (Dorr and Eschman, 1970). 3. Blueberry mine, Snowville near Diorite. 4. Pendill mine. In masses of 10 cm rosettes of flesh-colored plates penetrated by tubes of goethite. 5. Barron mine near Humboldt (Hawke, 1976). 6. Parsons mine: Veinlets in iron ore contained barite, quartz, specular hematite, and kaolinite (Rominger, 1881).
7. Republic mine at Republic: Etched tabular beige-white crystals to 5 cm on quartz in pockets in brecciated iron formation. 8. National mine, Ishpeming: In globular botryoidal aggregates. 9. Ishpeming: Bladed white barite crystals up to 5 cm have been found in iron formation excavated during construction for the Jubilee I. G. A. store on the north side of highway 41 in the village of Ishpeming (M. P. Basal, personal communication, 1999). 10. Section 16 mine, Ishpeming: As pale pink-to-white hemispheres to 1 cm in diameter with quartz on fracture surfaces in iron formation. 11. Lighthouse Point, Marquette: As bladed, pinkish white crystals to 1 cm with minor calcite and “adularia,” in thin veins in rock.

**Monroe County:** Ida quarry along with calcite, celestine, and strontianite (Morris, 1983).

**Ontonagon County:** 1. National mine at Rockland: In tabular white crystal aggregates. 2. White Pine mine. As veinlets in the Nonesuch Formation (Ensign et al., 1968) and as minor disseminated grains in the chloritic facies of the Copper Harbor Conglomerate (Hamilton, 1967). In the southwest orebody, perfectly formed water-clear crystals up to 6 cm were found; some with inclusions of native copper and hematite (Rosemeyer, 1999). 3. Cranberry Creek area: Amber barite and water-clear barite with white calcite (fluoresces red) in veins with spectacular cockade structures in Freda Sandstone (L. L. Babcock, personal communication). 4. Cunningham Creek area: White to dark, fine-grained vein 9 meters long in Nonesuch Shale with chalcopyrite.