CHAMOSITE

$(\text{Fe}^{2+}, \text{Mg}, \text{Fe}^{3+})_5\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH}, \text{O})_8$

An iron-rich species of the chlorite group generally occurring in sedimentary iron formations (Laberge, 1964), and certain hydrothermal deposits. Chamosite forms a solid solution series with clinochlore, which is its magnesium analog. “Aphrosiderite” is an obsolete name for intermediate members of the series. “Thuringite” is an obsolete name for ferrian chamosite. Northern Peninsula.

**Baraga County:** Spurr mine: Chamosite occurs as partial to nearly complete pseudomorphs after almandine crystals several centimeters across in chloritic schist.

**Houghton and Keweenaw Counties:** Identified by Moore and Beger (1963) in altered copper lode rocks.

**Gogebic County:** Ironwood Formation of the Gogebic range. Mann (1953) reports “aphrosiderite” in altered siderite-chert rocks of the Ironwood Formation in the eastern part of the range.


**Marquette County:** 1. Eastern part of the Marquette iron range, in altered siderite-chert rocks of the Negaunee Iron Formation (Mann, 1953). 2. Republic, SW ¼ section 8, T46N, R29W: Found as dark green to black, fine-grained aggregates in sheared, “sericitized” Republic Granite (Conrad, 1952). Reported as the obsolete name “brunsvigite.” 3. Analyses given by Penfield and Sperry (1886) show the chlorite pseudomorphs after almandine garnet common in the iron mines of the Michigamme area to be a magnesian aluminiun chamosite. Fine examples are known from the Beacon (Mandarino, 1950), Champion, and Michigamme mines. 4. In and along margins of some Clarksburg mafic dikes, especially where they cut iron formation and are strongly meta-morphosed (Snelgrove et al., 1944).

**Ontonagon County:** White Pine mine: Carpenter (1963) found a brown monoclinic chlorite (probably chamosite) with a cation composition $(\text{Fe}^{2+}_{2.60}, \text{Mg}_{2.50}, \text{Al}_{0.90})(\text{Si}_{3.06}, \text{Al}_{0.94})$ in addition to green orthochamosite (q.v.) in veinlets in Nonesuch Shale.