

ANTIGORITE



(see also *serpentine*)

One of several serpentine polymorphs of the kaolinite-serpentine group, best distinguished by X-ray diffraction or transmission electron microscopy. Antigorite occurs as a constituent of the rock serpentinite, which forms by the alteration of peridotites. It also occurs in some magnesian marbles and serpentine schists. “Williamsite,” “picrolite,” and “precious serpentine” are varietal names. Localities listed below are those for which supporting data indicate the serpentine mineral is definitely or probably antigorite. For localities from which the serpentine mineral has not been specifically defined, see serpentine. Northern Peninsula.

Dickinson County: 1. Metronite quarry, 4 km east-northeast of Felch: Along contact between Randville dolomitic marble and an aplite dike in minute flakes, fibers, and coarse blades as much as 5 cm long (Conrad, 1952; Heinrich, 1962b). **2.** Rian’s quarry, Felch: With diopside, tremolite, hornblende, pyrite, dolomite, and quartz (Morris, 1983).

Marquette County: 1. *Ropes gold mine*, NW $\frac{1}{4}$ section 29, T48N, R27W: Green, massive non-fibrous serpentine is mainly antigorite (Broderick, 1945). The varieties “williamsite” and “precious serpentine” are reported by Dana (1892). “Picrolite” also is present in the serpentinite in seams with columnar structure (Snelgrove et al., 1944). Specimens 40 cm in length have been obtained. **2.** Presque Isle: In a serpentinitized augite-“hypersthene”-olivine peridotite along with “chrysotile” (Creveling, 1926). **3.** North side Carp River, sections 21 and 29, T48N, R27W: “Picrolite” with serpentine (“marmolite”), magnetite, and probably chromite (Rominger, 1881). **4.** *Verde Antique quarry*, section 29, T48N, R27W: Variety “picrolite,” with “chrysotile,” talc, and carbonates.

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