

## PHLOGOPITE



A magnesium-rich mica occurring in a few ultramafic igneous rocks and in dolomitic marbles. Phlogopite occurs in nearly all Michigan kimberlites (S. M. Carlson, personal communication, 1995), and only the more notable occurrences will be listed. Whether tetraferriphlogopite or kinoshitalite, common in kimberlites worldwide, also are present is unknown, since confirming chemical and structural studies have not been undertaken. Northern Peninsula.

**Dickinson County:** 1. Metronite quarry, 4 km east-northeast of Felch: Found in the Randville Dolomite (marble). Books as large as 12 mm are reported (Pratt, 1954; Heinrich, 1962b). 2. Rian's quarry southeast of Felch: Similar occurrence (Pratt, 1954). 3. Site 70 kimberlite, near Felch: As coarse crystals (presumably xenocrysts).

**Iron County:** Lake Ellen kimberlite, SW  $\frac{1}{4}$  section 27, T44N, R31W: As xenocrysts.

**Marquette County:** Palmer area: In Kona Dolomite (marble) near its contact with the Republic Granite intrusion (Lamey, 1934).

**Menominee County:** Site 73 kimberlite, north of Hermansville: An interesting occurrence of small (< 1mm) euhedral phlogopite crystals associated with olivine (probably forsterite). The olivine forms gemmy, pale yellow crystals which are strongly resorbed, and have phlogopite crystals imbedded in surficial depressions. The phlogopite appears to occur only at the surface of the olivine, and is not found as inclusions.

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