## ILLITE

## K<sub>0.65</sub>Al<sub>2.0</sub> Al<sub>0.65</sub>Si<sub>3.35</sub>O<sub>10</sub>(OH)<sub>2</sub>

A clay-like mica sometimes called "hydromica" or "hydromuscovite." Illite may be either hydrothermal or sedimentary in origin. It is found in metasomatically altered wall rocks of ore deposits, and is a common constituent of marine shales. Illite is doubtless present in some Michigan shales but not specifically identified in any. Northern and Southern Peninsulas.

**Baraga County:** Some 13 localities in Baraga, Houghton, and Ontonagon Counties. Illite is found in glacial moraine, outwash, and lacustrine deposits. The most recent of these deposits contain an interlayered illite-chlorite (50-50), whereas the older deposits have in addition either montmorillonite or degraded illite (Ruotsala et al., 1966).

**Houghton County:** Same type of occurrence as in Baraga County (q.v.).

**Iron County:** The clay-size mica mineral in all iron ore samples is identified as iron-rich illite by James et al. (1968).

**Marquette County:** Marquette District: Found in sheared unmetamorphosed Mesnard Quartzite, variety "leverrierite." Not verified by X-ray diffraction. (Corbett, 1925).

**Ontonagon County: 1.** White Pine: Veinlets in the Nonesuch shale (Ensign et al., 1968). **2.** Same type occurrence as in Baraga County (q.v.).

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