

KAOLINITE



A common clay mineral formed by weathering of feldspars and other aluminosilicate minerals. Kaolinite is one of the chief clay species in shales. It is also formed hydrothermally in wallrock of various metalliferous ore deposits. Northern and Southern Peninsulas.

Gogebic County: Gogebic iron range: Two verified occurrences in iron ore and two in altered mafic dikes have been reported (Mann, 1953; Bailey and Tyler, 1960).

Houghton County: 1. Isle Royale mine: Coating on laumontite (Butler and Burbank, 1929). 2. Kearsarge lode: Crust on red feldspar (Butler and Burbank, 1929). 3. Wolverine mine (Morris, 1983).

Iron County: 1. Iron River district: Kaolinite occurrences in iron ore, oxidized iron formation, and other miscellaneous sources have been verified by Bailey and Tyler (1960). 2. Hiawatha mine (Morris, 1983).

Keweenaw County: Copper Falls mine (Spiroff, 1938).

Marquette County: 1. Marquette iron range: General occurrences in iron ore, oxidized iron formation, altered dikes, and other sources were verified by Bailey and Tyler (1960). Kaolinite occurred as snow white masses in Negaunee Iron Formation where it was referred to as "magnesia" by the miners, and is a major component of the so-called "soapstone" in the ores in the Negaunee area (Rominger, 1881). Poindexter and Newcombe (1928) note its presence adjacent to feldspar pegmatites. 2. Marquette mine: Lumps as large as hen's eggs found in oxidized ore (Brooks, 1873). 3. Lake Superior mine, Ishpeming: Seams of kaolinite and limonite (Brooks, 1873). 4. Jackson mine: Found in altered mafic rocks (Mann, 1953) and in thin seams between ore masses (Rominger, 1881). See talc. 5. Lucy mine. 6. Lake shaft. 7. Salisbury mine. 8. Tracy mine (7, 8, Morris, 1983). 9. East of Boston mine: White-brown speckled kaolinite forms pseudomorphs after plagioclase and augite in diabase (Rominger, 1895).

FROM: Robinson, G.W., 2004 Mineralogy of Michigan by E.W. Heinrich updated and revised: published by A.E. Seaman Mineral Museum, Houghton, MI, 252p.