

DICKITE
 $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$

(see also clay)

Dickite is a clay mineral, mainly of hydrothermal origin, found in various types of ores and their altered wall rocks. Some may be supergene. Exact identification usually requires a combination of optical, X-ray, and differential thermal analysis data. Northern Peninsula.

Gogebic County: In the Gogebic iron range: Bailey and Tyler (1960) verified four occurrences, two in iron ore and two in altered dikes.

Iron County: In the Iron River range: Bailey and Tyler (1960) verified four occurrences, three of which are in oxidized iron formations.

Marquette County: 1. Mather iron mine. 2. Cambria-Jackson iron mine: Both reported by Gruner (1946) as white, silky, massive, micro-fibrous material cementing earthy hematite breccia. 3. Marquette iron range: Bailey and Tyler (1960) determined 12 occurrences: three in ore and nine in oxidized iron formation. 4. Tracy mine, Negaunee (Morris, 1983). 5. Greens Creek slate trench, NE ¼ SE ¼ section 24, T46N, R27W: Dickite (or kaolinite?) has been reported by Kalliokoski (1976) as occurring in layers of quartzite associated with metatorbernite (q.v.), bassetite (q.v.), pyrite, and malachite. Unverified.

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.

UPDATE

Baraga County: Huron River uranium prospect, NW ¼ NW ¼ section 1, T51N, R30W: As soft, white masses and infillings in fractured Michigamme Slate. Confirmed by X-ray diffraction and optics (Carlson et al., 2007a).

Marquette County: Lake Superior, South Jackson and Lucy mines, Ishpeming: slickensided, white, massive, clay-like minerals originally misidentified as “steatite” or “kaolinite” from these mines have been shown to be dickite by X-ray diffraction.

UPDATE FROM: Robinson, G.W., and Carlson, S.M., 2013, Mineralogy of Michigan Update: published online by A.E. Seaman Mineral Museum, Houghton, MI, 46p.