BABINGTONITE

\[ \text{Ca}_2(\text{Fe}^{2+}, \text{Mn})\text{Fe}^{3+}\text{Si}_5\text{O}_{14}(\text{OH}) \]

A relatively uncommon hydrothermal mineral associated with prehnite, datolite, and zeolites in cavities in flood basalts. Reportedly first discovered in Michigan as microcrystals in altered Copper Country basaltic rocks by the late Professor R. M. Denning. Northern Peninsula.

Keweenaw County: 1. Phoenix mine, Phoenix: Lustrous, black microcrystals associated with prehnite and calcite were collected from the dump of the Phoenix mine in May, 1964 by Tom Rosemeyer (personal communication, 1999) and identified as babingtonite by S. A. Williams. 2. Cliff mine: Similar black microcrystals associated with prehnite and calcite from the Cliff mine have been reported by T. M. Bee (written communication, 1985) and Wilson and Dyl (1992). 3. Mandan mine: Black microcrystals similar to other occurrences (D. Behnke, personal communication, 1994).

Figure 38: A 0.8 mm crystal of babingtonite from the Cliff mine, Keweenaw County. Dan Behnke specimen and photograph.


UPDATE

Ontonagon County: Belt mine: As black, lustrous crystals to 4 mm associated with quartz, calcite, and native copper. Verified by energy dispersion X-ray and Raman spectroscopy.