NATROLITE
Na₂[Al₂Si₃O₁₀] • 2 H₂O

While natrolite is one of the most common zeolites globally, it occurs rather sparingly in Michigan, in a few native copper deposits, chiefly in Keweenaw County. Natrolite, together with thomsonite, is primarily restricted to amygdules and interstitial matrix in flow tops of beds overlying the Ashbed lode in both the Portage Lake Volcanics and the

Copper Harbor Conglomerate (Livnat, 1983). Northern Peninsula.

Houghton County: 1. General: In veins with copper sulfides (chalocite), analcime, and “adularia” (Lane, 1911). 2. Oceola mine: As colorless, transparent prismatic crystals to 1 cm long with etched, opaque white analcime. 3. Isle Royale mine, Houghton: As flattened, radiating white to reddish crystal aggregates to 1.5 cm on fracture surfaces of basalt. Originally identified as thomsonite, but verified as natrolite by energy dispersion X-ray spectra and X-ray diffraction analyses.


A polished natrolite amygdale with chlorite from Big Bay, Keweenaw County; 13 x 25 mm. Alan Cook specimen, George Robinson photograph.

Keweenaw County: Some very attractive multicolored natrolite amygdales suitable for gemstones have been collected from basalt flow tops exposed along the shore of Lake Superior near the west end of Big Bay (A. Cook, personal communication, 2007). Many of these greatly resemble the more familiar “thomsonite” amygdales found near Grand Marais, Minnesota, and elsewhere in the Portage Lake Volcanics, but X-ray diffraction and energy dispersion X-ray spectrometry analyses show the predominant mineral present is natrolite, with lesser and variable amounts of mesolite, thomsonite, prehnite, and chlorite present in some samples.