CALCURMOLITE Ca(UO₂)₃₋₄(MoO₄)₃(OH)₂₋₅•7-12H₂O

A rare secondary uranium mineral found in very few localities worldwide. This is the first reported occurrence in the United States. Northern Peninsula.

Gogebic County: Uranium prospect a short distance from the "Paulding Lights" north of Watersmeet: During an SEM/EDS investigation of altered uraninite and associated minerals from this prospect, a phase giving U, Mo, and O as its major elements was noted and subsequently analyzed by wavelength dispersion electron microprobe, which gave the following: SiO₂ 0.13, MoO₃ 22.88, CaO 3.33, UO₂ 64.19, PbO 0.33, sum 90.86 wt. %. Subsequent analyses by X-ray diffraction and Raman spectroscopy have confirmed its identity as calcurmolite. (T. Olds, personal communication, 2011).

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.