

## SMITHSONITE



Smithsonite is a relatively common secondary mineral that forms in oxidized zones of ore deposits bearing primary zinc minerals, such as sphalerite, from which it is derived. Northern Peninsula.

**Marquette County:** Dead River Storage Basin: As sparse cream-white-to-beige coatings on fracture surfaces in quartz-dolomite veins carrying sphalerite and galena exposed in a small prospect in section 25, T49N, R28W. This smithsonite is somewhat unusual, in that it fluoresces a rose-red color in shortwave ultraviolet light. Confirmed by X-ray diffraction and energy dispersion X-ray spectrometry.

**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

**Marquette County:** Holyoke mine, NE ¼ section 2, T48N, R27W: As cream-white to beige coatings with hydrozincite on fracture surfaces in rock, very similar to the nearby lead-zinc prospect in section 25, T49N, R28W (M. Heilman, personal communication, 2008). Interestingly, the smithsonite from both these occurrences fluoresces a bright rose-pink color in shortwave ultraviolet light. Verified by energy dispersion X-ray spectrometry.

**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.