PŮVODNÍ PRÁCE/ORIGINAL PAPER

Dachiardit-Ca a doprovodná mineralizace z Doubice - Vápenky u Krásné Lípy (Česká republika)

Dachiardite-Ca and associated mineralization from Doubice - Vápenka near Krásná Lípa (Czech Republic)

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Abstract

An interesting zeolite association has been found in the abandoned quarry Doubice - Vápenka, northern Bohemia (Czech Republic). Dachiardite-Ca is the most interesting zeolite at this occurrence, it forms colorless to milk or greyish white translucent crystals up to 2 mm in size and their aggregates. It is monoclinic, space group *C2/m* with following unit-cell parameters refined from X-ray powder diffraction data: *a* 18.617(6), *b* 7.507(2), *c* 10.248(3) Å; *β* 108.07(2)° and *V* 1361.6(7) Å^3. Its chemical analyses correspond to the empirical formula $Ca_{1.48}K_{1.02}Na_{0.08}(Si_{20.08}Al_{3.87})O_{48}\cdot 13H_2O$. Erionite-K, clinoptilolite-Ca, natrolite, phillipsite-Ca and thomsonite-Ca were found in the association, their X-ray powder diffraction data, unit-cell parameters and chemical composition are given in the paper. The find of dachiardite-Ca is the third one in the Czech Republic and its first occurrence in granites or Cenozoic basalts. The zeolite (+ Pb, Zn) mineralization is connected with the intensive tectonic setting along the regionally prominent Lusatian fault where five geological formations - granitoids of the Lusatian Pluton, Permian, Jurassic and Cretaceous sediments and Tertiary basaltic volcanics - occur together.

Key words: *dachiardite-Ca, clinoptilolite-Ca, erionite-K, thomsonite-Ca, phillipsite-Ca, chabazite-Ca, natrolite, powder X-ray diffraction data, unit-cell parameters, chemical composition, Doubice - Vápenka near Krásná Lípa, Czech Republic.*

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