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PŮVODNÍ PRÁCE/ORIGINAL PAPER

Výskyt antimonitu v pelosideritu z Otavovic u Kralup nad Vltavou (Česká republika)

The stibnite occurrence in pelosiderite from Otavovice near Kralupy nad Vltavou (Czech Republic)

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Abstract

Unusual occurrence of stibnite in pelosiderite was discovered at the mine dump of the abandoned coal mine Jan, Otavovice near Kralupy nad Vltavou (Czech Republic). The steel-gray needle-shaped stibnite crystals up to 22 mm in length form a fan-shaped aggregate about 2.2 × 2.5 cm in size in crack of a pelosiderite concretion. It was identified by PXRD and its refined unit-cell parameters (for orthorhombic space group *Pnma*) are: *a* 11.3126(6), *b* 3.8376(3), *c* 11.2286(6) Å and *V* 487.46(6) Å³. Stibnite crystals are zonal in BSE images due to slight non-stoichiometry of their chemical composition - from Sb_{2.04}S_{2.95} to Sb_{2.00}S_{2.99}. The position of this occurrence among the known stibnite finds in the northern vicinity of Prague is discussed.

Key words: stibnite, pelosiderite, chemical composition, X-ray powder diffraction data, Otavovice, central Bohemia, Czech Republic

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