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PŮVODNÍ PRÁCE/ORIGINAL PAPER

New data on sulphosalts from the hydrothermal siderite-type veins in the Spišsko-gemerské rudohorie Mts. (eastern Slovakia): 2. Jaskólskiite and associated sulphosalts from the Aurélia II vein near Rožňava

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Abstract

New samples of jaskólskiite were recently collected at the Aurélia II siderite-type hydrothermal vein with sulphides near Rožňava, Spišsko-gemerské rudohorie Mts., Rožňava Co., Košice Region, Slovakia. It forms lead-gray, irregular aggregates up to 1.5 × 1 cm in size, which are enclosed in quartz-siderite gangue. Aggregates of jaskólskiite are consisting of individual, subhedral acicular crystals to 2 mm long, strongly replaced by younger bournonite and associated with Bi-rich jamesonite, tetrahedrite-(Fe), tintinaite, native bismuth and ullmannite. Significant variation of Cu (from 0.04 to 0.23 *apfu*) and Bi contents (from 0.32 to 0.77 *apfu*) was observed in studied sample. The average (n = 69 analyses) empirical formula of jaskólskiite from Rožňava-Aurélia vein based on Pb+Bi+Sb = 4 *apfu* is corresponding to $Pb_{2.11}Cu_{0.13}(Sb_{1.42}Bi_{0.47})_{1.89}S_{5.14}$. Bi-rich jamesonite is the most common sulphosalt at the studied locality and it forms prismatic crystals up to 2 cm or irregular aggregates to 3 cm in size. The Bi content in jamesonite is ranging between 0.49 to 1.69 *apfu*. Bournonite is also common and two compositional types were distinguished. The first, dominant type is represented by Bi-rich bournonite (containing up to 0.14 *apfu* Bi). The second type of bournonite, represented by thin ribbons shows significant enrichment in As (reaching up to 0.49 *apfu*), but has only minor content of Bi (up to 0.08 *apfu*). Tintinaite is rare and its average (n = 9) empirical formula based on sum of all atoms = 63 *apfu* is corresponding to $(Pb_{9.67}Ag_{0.06}Zn_{9.73})(Cu_{2.55}Fe_{0.40}Zn_{0.07})_{3.02}(Sb_{10.19}Bi_{5.37})_{15.56}S_{34.59}Cl_{0.10}$.

Key words: jaskólskiite, jamesonite, bournonite-seligmannite series, tintinaite, sulphosalts, chemical composition, Aurélia vein, Rožňava, Spišsko-gemerské rudohorie Mts., Slovak Republic

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