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New data on sulphosalts from the hydrothermal siderite-type veins in the Spišsko-gemerské rudohorie Mts. (eastern Slovakia): 4. Tennantite-(Hg) from the Vyšný Klátov ore occurrence

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Abstract

A new occurrence of tennantite-(Hg) was recently confirmed at the Vyšný Klátov ore occurrence, Spišsko-gemerské rudohorie Mts., Košice-okolie Co., Košice Region, Slovakia. Tennantite-(Hg) occurs as lead-gray to black grains and aggregates up to 1 cm in size, associated with cinnabar, chalcopyrite, pyrite and hematite. Reflectance data of tennantite-(Hg) are given in this paper. The refined unit-cell parameters of tennantite-(Hg) from the Vyšný Klátov (for the cubic space group *I*-43*m*) are: *a* 22.523(7) Å and *V* 3105.4(1) Å^3. Empirical chemical formulae of the two studied samples of tennantite-(Hg) from the Vyšný Klátov ore occurrence, recalculated on the basis of ΣMe = 16 *apfu* are: $(Cu_{5.97}Ag_{0.03})_{\Sigma 6.00}[Cu_{3.99}(Hg_{1.95}Fe_{0.10})_{\Sigma 2.05}](As_{3.57}Sb_{0.39})_{\Sigma 3.96}S_{13.21}$ (sample VK1, n = 21) and $(Cu_{5.99}Ag_{0.01})_{\Sigma 6.00}[Cu_{4.05}(Hg_{1.91}Fe_{0.08})_{\Sigma 1.99}](As_{3.79}Sb_{0.15})_{\Sigma 3.94}S_{13.26}$ (sample VK3, n = 29).

Key words: *tennantite-(Hg), cinnabar, tennantite series, tetrahedrite group, sulphosalts, chemical composition, siderite veins, Vyšný Klátov, Spišsko-gemerské rudohorie Mts., Slovak Republic*

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