https://doi.org/10.46861/bmp.29.351 PŮVODNÍ PRÁCE/ORIGINAL PAPER

Měděná mineralizace z Horní Halže u Měděnce v Krušných horách (Česká republika)

Copper mineralization from Horní Halže near Měděnec in the Krušné hory Mts. (Czech Republic)

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Sejkora J, Pauliš P, Gramblička R, Dolníček Z, Ulmanová J, Pour O (2021) Měděná mineralizace z Horní Halže u Měděnce v Krušných horách (Česká republika). Bull Mineral Petrolog 29(2): 351-368 ISSN 2570-7337

Abstract

An interesting copper mineralization has been discovered in fragments of hydrothermal quartz gangue found in dump material of the abandoned unnamed gallery 1.5 km S from Horní Halže (now part of the Měděnec village), the Krušné hory Mts., Czech Republic. The primary mineralization represented by fine-grained quartz, hematite, pyrite and probably also djurleite was intensively affected by supergene processes. Djurleite and pyrite are partly replaced by Cu sulphides - roxbyite, anilite, spionkopite and covellite. The origin of association bornite/*half-bornite*/anilite found in some samples can be analogous, although in this case it cannot be ruled out that it may be the result of decomposition of the original solid solution (against the ideal bornite clearly enriched in Cu) formed in the hydrothermal stage. The formation of other Cu minerals (malachite, brochantite, libethenite and pseudomalachite) and goethite is already clearly bound to supergene conditions, part of malachite and brochantite was then formed by (sub)recent weathering of Cu-sulphides in the mine dump material. The detailed descriptions, X-ray powder diffraction data, refined unit-cell parameters and quantitative chemical composition of individual studied mineral phases are presented.

Key words: *copper mineralization, powder X-ray diffraction data, unit-cell parameters, chemical composition, Horní Halže near Měděnec, Czech Republic*

Obdrženo 25. 10. 2021; přijato 14. 12. 2021