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Výskyty hydrotermálnej Sb-Au mineralizácie na lokalitách Lomnistá, Husárka a Suchá dolina pri Jasení (Nízke Tatry)

Occurrences of hydrothermal Sb–Au mineralization at Lomnistá, Husárka and Suchá dolina near Jasenie (Nízke Tatry Mts.)

Štefan Čík[1)], Martin Chovan[1)] a Juraj Majzlan[2)]*

[1)]*Katedra mineralógie a petrológie Prírodovedeckej fakulty Univerzity Komenského Bratislava, Ilkovičova 6, 842 15 Bratislava, Slovensko*
[2)]*Institut für Geowissenschaften, Friedrich-Schiller-Universität Jena, Burgweg 11, 07749 Jena, Německo;*
**e-mail: Juraj.Majzlan@uni-jena.de*

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Abstract

Ore mineralization in small Sb-Au occurrences Lomnistá, Husárka and Suchá dolina (Nízke Tatry Mts., Western Carpathians) was investigated by reflected-light microscopy, electron microprobe, fluid inclusion measurements, identification of host rock alteration and secondary minerals. Hydrothermal Sb-Au mineralization was formed during the arsenopyrite-pyrite-gold and stibnite-Pb-Sb-sulfosalts stages. The first stage of mineralization consists of arsenopyrite, pyrite, and quartz, but gold, typical for this stage in the Nízke Tatry Mts., is missing. Stibnite and zinkenite are dominant in the following stage in Lomnistá and Husárka. Berthierite and jamesonite are frequent in Suchá dolina. Other ore minerals identified here are sphalerite, chalcostibite, chalcopyrite, cinnabar, tetrahedrite-(Hg) at Lomnistá and Husárka and pyrrhotite, chalcostibite, tetrahedrite-(Fe), chalcopyrite, antimony, and gold in Suchá dolina. Identified secondary minerals are valentinite and stibiconite. Stibnite, gold, and other ore minerals were found in heavy-mineral fractions from alluvial sediments, pointing to short transport from the primary sources. Two quartz samples, thought to be related to stibnite or berthierite, contained two-phase fluid inclusions with salinity of 10 - 20 wt.% NaCl eq. The total homogenization temperatures are 230 - 330 °C in Lomnistá and 200 - 260 °C in Suchá dolina.

Key words: *Sb-Au mineralization, Lomnistá, Husárka, Suchá dolina, Nízke Tatry Mts.*

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