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Mineralogy of the Au-Ag mineralization from the Finsterort and Anton vein system, Štiavnické vrchy Mts. (Slovakia)

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Abstract

The Finsterort and Anton vein system is located in the central zone of the Middle Miocene Štiavnica Stratovolcano between Vyhne and Hodruša-Hámre villages. The vein system contains several partial veins and veinlets and has generally NNE - SSW strike with moderate to steep eastward dip. Kinematics of the veins is characterised by older dextral strike-slip movement replaced by younger normal faulting. The mineralization is associated with the normal faults and the veins contain interesting paragenesis of Au-Ag bearing minerals. Minerals of precious metals are represented by argentotetrahedrite-(Zn) and rozhdestvenskayaite-(Zn), Au-Ag alloys, members of polybasite-pearceite and pyrargyrite-proustite solid solutions, acanthite and uytenbogaardtite. Au-Ag mineralization is accompanied by older paragenesis comprising mainly pyrite, galena, sphalerite and chalcopyrite. Besides quartz, carbonates (calcite, siderite and dolomite) are the main gangue minerals.

Key words: *Western Carpathians, Neogene Štiavnica Stratovolcano, normal faults, Ag bearing phases, rozhdestvenskayaite-(Zn)*

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