

Introduction of stratiform-stratabound tungsten (copper-tin-zinc) mineral occurrences in Bovaki and Aghbolagh areas, northwest of Azna

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(Received: 8/12/2008, in revised form: 9/5/2009)

Abstract: Bovaki and Aghbolagh tungsten (copper-tin-zinc) ore occurrences are located 12 and 14 km northwest of Azna respectively. The region is located in Sanandaj-Sirjan structural zone of Iran, at the complex deformation sub-zone. There are alternative comsisty Upper Triassic carbonate, quartzite and meta-volcanic rocks (such as meta-tuff). In this area, tungsten-copper mineralization occurs as stratiform-stratabound in metamorphosed cherty, sandy, dolomitic limestone country rocks. In this sequence, the volumetric ratio of sedimentary rocks is more than that of volcanic rocks. Mineral paragenesis in the both areas consists of pyrite, scheelite, maghemite, lepidocrocite, Fe-oxide and hydroxide and occasionally chalcopyrite, chalcocite and malachite. Mineralization types are primary, diagenetic and stratabound veinlet. Ore textures are disseminated, lenticular, replacement and open space filling. Mineralization contaben place by diaganetic processes and regional (low grade facies) metamorphism events. Comparison of Bovaki and Aghbolagh mineralization with both typical proximal and distal mineralizations has shown that they are more similar to the distal mineral deposits.

Keywords: *tungsten-copper, stratiform, stratabound, volcano-sedimentary, Upper Triassic, Bovaki, Aghbolagh.*

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