Mineralo - Geochemical investigation on Kohe-zar Gold mineralization area, Torbate-Heydarie

Abedi, A
Mining department, Engineering faculty, Birjand University
Abedi@birjand.ac.ir

Key words: Ore mineralization, Gold, Electron Microprobe, fluid Inclusion.

Abstract: Gold - Polymetal mineralization of Kohe-zar area is located about 35 kilometers southwest of Torbat - Heydarieh in Khorasan province. Mineralization was occurred in quartz - specularite ± pyrite ± chalcopyrite veins and veinlets. The main ore minerals are specularite, chalcopyrite, pyrite, avinite (Bi - bearing tetraedrite), acanthite, native bismuth (occurred intergrowth with barite), native gold, electrum, covellite - digenite and weathered minerals such as geothite, hydrogeothite, cu-fe oxides, malachite. Ore minetalization of Kohe - zar is related to low - sulfide, quartz - hematite type of hydrothermal ore deposits.

On the basis of thermobarogeochemical investigation on quartz, medium temperature fluid with low potential mineralization is responsible for mineralization in this area.