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Mineralization, alteration and fluid inclusion studies of Kaviro laed prospect area, northwest of Boshruyeh, South Khorasan Province

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Abstract: Kariro Pb prospect area, which is located in northwest of Boshruyeh, occurs as vein-veinlets, open space filling, and cement of fault breccia in Middle Jurassic metamorphosed shale (slate) unit of Baghamshah Formation. Mineralization zones contain dolomite (70-85%) and galena (0.5-2.5%) with small amounts of pyrite, quartz, and calcite. Dolomitization and silicification of host rock are the most important alteration prosesses in Kaviro area. Microthermometric measurement in two phase (liquid and vapour) fluids show that dolomite, quartz and ores are originated from a fluid with medium temperture (168°C to 250°C) and medium to low salinity (5 to 12.5 wt. %NaCl equivalent). From the comparison of Kaviro area with other Lut block vein-type deposits, and based on the dolomitization of host rock, without having relationship with igneous activity, open space filling texture, mineralogy, and flaid incusion considerations, the mineralization is probably of epithermal type.

Keywords: *Mineralization; Alteration; fluid inclusion; Kaviro prospect area; Lut block.*

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