

## **FLUID INCLUSION STUDY OF THE GOLD- ANTIMONY DEPOSIT IN THE DASHKASAN AREA WESTERN IRAN.**

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DASHKASAN gold-antimony deposit is located in Sanandaj-Sirjan metamorphic-magmatic belt. This area is composed of Jurassic slate and dolomitized limestone and Eocene volcanics and younger volcano-plutonic rocks respectively. Three types of mineralized veins cut the mentioned units: 1. Pyrite-quartz-gold-stibnite-realgar-orpiment. 2. Pyrite-quartz-stibnite-realgar-orpiment. 3. Pyrite-quartz-galena-sphalerite. In general, gold content in the first type is high (28 ppm). Fluid inclusion study only has been carried out on gold veins. All inclusions display two phases, and no daughter mineral was found in primary and secondary ones. The greater size of inclusions and frequency of fluid inclusions indicate activities of fluid in mineralization system. Small differences between lower and higher homogenization temperatures (183°C-225°C) and salinities reveal a relevant harmony in precipitation of ore minerals. Direction of veins and joints are controlled by faults and other tectonic elements.