Mineralogical, textural, structural and geochemical aspects of the of ChahSorb Lead mine, Tabas

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Abstract: Chah Sorb deposit is located about 66 Km north of Tabas and 16 Km north-west of Shirgesht village. The mineralogy is simple; galena is the main primary mineral and cerussite is the main secondary mineral. Sphalerite, pyrite, chalcopyrite, tetrahedrite are other main minerals. Secondary minerals are anglesite, malachite, fluorite, wulfenite, minium, azurite and Fe-hydroxids. Some important alterations occurred in Chah Sorb area, including silicification, dolomitization and hematitization, which are slightly related to mineralization. Dolomitization is the main alteration in host rock. Lead mineralization is a vein type with east-west strike. Open space filling is the important texture. The average assyes from Chah Sorb samples are 6.9 wt % Pb, 6.3 wt % Zn and 14 ppm Ag. The Middle Jurassic carbonate host rocks and their dolomitization, the stratabound and epigenetic mineralization, the open space filling texture, the simple mineralogy and geochemistry all point to the Mississippi valley type model for the Chah Sorb Pb deposit.

Keywords: Chah Sorb, galena, dolomitization, carbonate, Mississippi valley type.

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