Investigation of petrography, alteration zones and geochemical Dehsalm Mahour 2 lead deposit, East of Lut block, Central Iran.

F. Mohammadpour*, H. Biabangard1, H. Mirnejad2, R. Mirzaei Rayeni1, Sh. Niroumand2

1. Department of Geology, Faculty of Sciences, University of Sistan and Baluchestan, Zahedan, Iran.
2. School of Geology, College of Sciences, University of Tehran, Tehran, Iran

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Abstract: Mahour 2 lead deposit is located in the east of Lut block and 145Km west of Nehbandan and about 2 km north west of Mahour copper deposit. Altered andesitic rocks are the main host of lead deposit. Plagioclase, quartz, hornblende and biotite are major minerals of andesitic rocks. Plagioclase, the most abundant mineral, had mostly replaced by secondary minerals such as sericite, chlorite and carbonates, as the result of alteration process. Argillic, sericitic, silicic, chloritic and carbonatic are main alteration types in the region, which are also supported by XRD graphs. S/Se ratios of the Galena samples indicate their igneous origin. Rare earth element graphs indicate an almost uniform, parallel and decreasing pattern from LREE to HREE. Based on graphs of the relevant behavior of La-Nb and La-Ba elements in cross indicates, the host rock of this deposit is relevant to orogenic region andesite tectonomagmatic environment. Spider graphs indicate depleted elements in Galena bearing samples in comparison with samples of host rock.

Keywords: geochemistry, Mahour lead deposit, Lut block, alteration.

* Corresponding author, Tel: 09156732470 Email: f.mohammadpour2012@yahoo.com