Mineralization and fluid evolution during mineralization of Sefidkouh Fluorite deposit, north west of Torbate Jam

L. Pazhkhzade1, Kh. Ebrahimi Nasrabadi2, H. Vatanpour3, J. Darvishi Khatooni4

1- Department of Geology, Faculty of Sciences, Ferdowsi University of Mashhad
2- Farhangian University of Mashhad
3- Geological Survey of Iran, Abadan, Iran

Abstract: KuhSefid Fluorite deposit is located about 110 km south east of Mashhad. Geological units of the region related to Kashafroud Formation with Jurassic age. Most of fluorite mineralization can be seen along the faults with direction of north west-south east. Fluorite veins are different in diameter of 2 to 2.5 m and length of 50 m. Hydrothermal solutions with maximum and minimum temperatures of 181°C and 125°C with the average temperature of 152°C in protraction of faults, cracks and fragments, have created mineral substance. Geological evidences, petrography, mineralization and homogeneous temperature of fluids inclusion, are the evidences that concluded the Fluorite mineralization as Epithermal.

Keywords: Fluorite; fluid inclusion; mineralization; Sefidkouh; Torbat jam.

*Corresponding author, Tel.: 09153152784, Fax: 05138805488, E-mail: khebrahimi@um.ac.ir