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Garnet genesis in altered conglomerate of Sangestan Formation, Damak Aliabad (west of Taft, Yazd Province)

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Abstract: The conglomerates of Sangestan Formation (Lower Cretaceous) have been metamorphosed in the vicinity of the leucogranitoid rocks of the Shir-Kuh batholith and have created the mineral assemblage of garnet-epidote-quartz-calcite-pyrite in the contact halo. Following the contact metamorphism, hydrothermal alteration (pyrite formation and silicification) has likely occurred. Based on the trace element contents of the garnets , the skarn in the contact halo is Cu-Pb-Zn bearing calcic skarn type. The above mentioned minerals, apparently, indicate that there is a genetic relationship between intrusion related Cu-mineralization and the skarnification in the study area.

Keywords: *Garnet, Skarn, Sangestan Formation, Damak.*