

## Seranjic skarn geothermometry (SW Ghorveh, Kordestan Province)

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**Abstract:** Intrusion of granodioritic bodies into the lime stones of Ghorveh area led to the formation of calc-silicate marbles and various types of skarns. These skarns consist essentially of calcite, clinopyroxene, garnet, wolastonite, vesuvianite and epidote. Based on geochemical studies, garnets were identified as grossular and andradite. The clinopyroxene found in the skarns is diopside. With respect to mineral assemblages identified in the skarns and using various calibrations of garnet-clinopyroxene geothermometry, the temperature of skarns is estimated to be in the range of 450 to 587°C corresponding to hornblende hornfels to lower field of pyroxene hornfels facies.

**Keywords:** Skarn; Geothermometry; Seranjic; Ghorveh.

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