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ABSTRACT

El Sheikh Soliman area in southwestern Sinai is covered by Late Proterozoic monzo- and syenogranites, Paleozoic-Mesozoic sedimentary rocks. In the present study, first recorded important minerals bearing Ag and Au namely uytenbogaardtite and furutobeite are recorded in the lower member of Um Bogma Formation and laforetite (Ag-bearing) in monzogranites and syenogranites shear zone. Ag-Au mineralization in the lower member of Um Bogma Formation is associated with mineral assemblage hosting uranium and some others base metals namely; xenotime, yttrobetafite-Y, cochromite, wakefieldite-(Y) and bafertisite. The mineral assemblage in the monzo- and syenogranite shear zone includes; clinobehoite and xenotime. The mineralized zones in this area in part have features of hydrothermal origin in both the monzo- and syenogranites shear zone and in Um Bogma Formation, while, in the other member of Um Bogma Formation they are sedimentary as weathering products of the earlier assemblage detrital paleoplacer deposits.