

# Stream Sediment Geochemical Exploration for Cu in North of Moghestan, Yazd, Iran

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The study area is part of Chapdoni Complex in central of Iran. Five lithological units of micaschist, gneiss, skarn, andesite and limestone are present in the area. Cu mineralization occurred in the skarn unit. The aim of this study is to identify high potential area for copper using stream sediment geochemical data. Stream sediment geochemical data analysis has been used for preliminary copper exploration in study area. In these studies, 60 stream sediments geochemical samples were analyzed by ICP-MS method for 44 elements. After applying the necessary pre-processing comprise elimination of censored data, separation of rocky communities and correction and normalization of outliers, multivariate statistical processing was performed on the data. The results indicated the presence of copper anomaly in the study area. Moreover, there is no highly correlation between Cu and other elements.

**Key words:** Central Iran, Chapdoni complex, Metamorphic Core Complex, Cu, Geochemistry, stream sediment

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