HYDROTHERMAL HALO DETECTION AT THE EPIGENETIC GOLD DEPOSITS USING LOW-PRECISION SPECTROMETRY DATA

MALYUK, B.I. Institute of Geology & Geochemistry, UNAS, Lviv, Ukraine

Commonly hydrothermal gold deposit prospecting works are accompanied by numerous spectrometry data that come from core sampling. Precision of the different spectrometry methods still preclude these data direct usage for gold resources estimation. However, these data could be used rather successfully just with respect to further prospecting. Generally speaking regardless their precision such the data reflect the overall metal distribution patterns and indicate its elevated values. Eliminating the latter we can get the background patterns and then use them for prospecting works correction. In the case of epigenetic lode gold deposits such the data can be used with respect to the spatial patterns of the hydrothermal halo overprinted onto the host rocks. These works can be easily performed using modern geostatistical methods. In this case not only kriging of the spectrometry data is possible but sometimes also co-kriging can be done involving more precise analytical results like gold chemical extraction data.