

## عنوان مقاله:

Geochemical and mineralogical characteristic of the VHMS alteration pipe, major elements variations and peraluminous ratio, in high grade metamorphosed rocks

## محل انتشار:

مجله معدن و محیط زیست, دوره 1, شماره 2 (سال: 1389)

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## خلاصه مقاله:

The massive sulphide deposit at Kantienpan Cu-Zn mine is hosted by volcano sedimentary succession known as the Areachap Group, in the eastern part of Namaqua Metamorphic Province, South Africa. The deposits were affected by a complex deformation and metamorphic history and represent examples of upper amphibolite to granulite grade metamorphosed volcanic-hosted massive sulphide (VHMS) deposits. The principal purpose of this research is to characterise the primary geochemical halo's related to VHMS deposits in this mine. Litho-geochemical characterization of the primary haloes is based on borehole samples of the footwall, ore zone and hanging wall successions. Geochemically, the ore zone and alteration zones at Kantienpan VHMS ore deposit display a high peraluminous ratio confirming the peraluminous nature of these zones as indicated mineralogically and lithologically. The intervals identified in sampled borehole core with low CaO and Na<sub>2</sub>O and with high MgO and K<sub>2</sub>O contents represent the alteration zone in the original footwall rocks of the deposit.

## کلمات کلیدی:

VHMS, peraluminous ratio, probability plot, litho-geochemistry

## لینک ثابت مقاله در پایگاه سیویلیکا:

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