

SULPHIDE OCCURRENCES IN THE SERPENTINITES-CHROMITITES OF THE ERETRIA AREA

E. Dimou

IGME, 70 Mesoghion St., 11527 Athens

Sulphide occurrences located in three chromite-bearing localities (Mavros Mine, Kastraki 3 and Eretria village) in the Eretria area, are described and compared in this paper.

The most important sulphide mineralization occurs in the Mavros Mine, located in the outer part of the chromite ore bodies, as well as, in the sliding planes of serpentinite. The mineralization is characterized by high Cu content and consists mainly of pyrrhotite and chalcopyrite. Pentlandite (Co), vallerite, ilvaite are found in minor amounts, while sphalerite, cubenite, mackinawite, pyrite, millerite are quite rare.

In Kastraki 3 and Eretria village, where ore drilling was carried out by IGME, sulphide mineralization compared with that of Mavros, is less developed, showing different mineralogical composition. The absence of Cu minerals and the presence of Sb and As minerals is quite characteristic. The sulphide mineralization is located in strike slip-mylonite zones of the chromite ore, as well as in the serpentinites. Its metallic paragenesis consists of pentlandite (\pm Co), millerite, heazlewoodite, niccolite, breithauptite, vallerite, marcasite, orcelite, Ni-cobaltite, while pyrrhotite and chalcopyrite are absent. The similarities between the sulphide concentrations occurring in the Kastraki and Eretria localities, support the opinion that in these two cases, they belong to an extension of the same chromite-bearing formation. Serpentinization solutions are responsible for the mineralization.

In the Mavros locality, the mineralization composition (high Cu/Cu + Ni ratio, incompatible with ultrabasic rocks) requires an intense meta-magmatic hydrothermal activity. The responsible solutions could be the same with those related to serpentinization, mixed with seawater. These solutions could have been helped by the intense thrusting tectonics. Alternatively, hydrothermal activity may be related to later magmatic processes (i.e. mafic dikes or igneous intrusion) into the already serpentinized peridotite.

NEOGENE AND QUATERNARY PYROCLASTICS ON THE TERRITORY OF BULGARIA - A REVIEW AND NEW DATA

A.V. Harkovska*, M.Y. Zlatkova**, S.D. Chochov*, Z.I. Vergilova*

*Geological Institute of Bulg. Acad. of Sci., 1113 Sofia, Bulgaria

**«Georedmet» - Bouhovo, 1830 Sofia, Bulgaria

A number of occurrences of Neogene and Quaternary pyroclastics of unknown origin are established in Bulgaria.