

Inclusions of deep rocks in the late cretaceous volcanites in the vandamian zone the greater caucasus

MUSTAFAEV M.A. Geology institute of Azerbaijan Academy Sciences,
Baku, Azerbaijan.

The Vandamian zone is confined to the north margine of the Trans-Caucasian volcanic belt and characterized by a wide speard in its structure of the Upper Cretaceous volcanic formations both of the normal and the subalkaline rows. Before out studies the inclusions of the deep rocks in the Upper Cretaceous volcanites in the Vandamian zone have not beeb known. The rocks containing inclusions of deep rocks in the studied zone are not widely spread. As a result of our studies in the areal of Upper Cretaceous volcanogenic series only in the one paleovolcanic construction (Gurban-Efendi), in the trachybasalt lavobreccia of the vent facies there have been determined inclusions of pyroxenites lately, the main minerals of which are clinopyroxenes and amphiboles. This allows to classify them as the amphibolized pyroxenites. It was determined that clinopyroxens according to their chemical composition in the inclusions and in the enclosing rocks are related to the salite-diopside-hedenbergite series and amphiboles in both cases according to the classification of Sindius-to the hornblende. Petrological peculiarities of the enclosing rocks and inclusions show that the inclusions in the Upper Cretaceous volcanites in the Vandamian zone are not the detached masses of deep substratum of the earth crust but have genetic proximity the enclosing lavas. That is why they should be called homeogenous.

Basing on the results of our studies on the Upper Cretaceous volcanites in Azerbaijan and on the new petrological data on homeogenous inclusions one can make a conclusion that in the Later Cretaceous period the Vandamian zone existed as an active continental margin. It is possible that its location in the initial stage of this region evolution was in the crust of the oceanic type.