Eocene volcanic series of the joint zone of island are-riftogenous systems the Lesser Caucasus, Azerbaijan

MUSTAFAYEV M.A. AHMEDOVA T.H., SAMEDOVA P.A., SHAFIYEV H. I. Ceology institute of Azerbaijan Academy Scinces, Baku, Azerbaijan.

In the central part of the Lesser Caucasus Paleogene superimposed troughs are confined to the joint zone of island arc-riftogenous structures, where volcanism develops autonomously and inherits traits of surrounding it magmatism of various geodynamic conditions. One of such zones with north-west orientation is Paleogene paleo-basin embracing Shahdagh, Kelbejer and Geoycha-Shirak troughs forming on the boundary of the Locsco-Agdam island arc and the Lesser Caucasus ophiolite belt (Geoycha-Hekeri rift), where clear linearity, concordant with orientation of major structural elements of the volcanism precuding to the Jurassic stage, and rhythmic alternation of basic rocks in the lower part, and intermediate and acid ones in the upper part of the section are characteristic of the volcanogenous series. Predominant occurrence of rocks grouped in four series, basalt-andesite-rhyolite, shoshonite-latite-trachyte, trachybasalt-trachyandesite-trachyt-rhyolite, and alkaline trachydacite-pantellerite-comendite, have been established.

Petrological features of these series rocks attest their formation in frontal zone of the Jurassic basin in island arc conditions. Thereby it may be stated that subduction initiated as early as in Mesozoic stage, was active in early Cenozoic, as well. At the same time presence of pantellerite, comendite and high-titanium basalt rocks makes them closer to the rocks of continental rifts. Therefore, it is not inconceivable that the Eocene volcanism in the considered joint zone took part in complicated geodynamic conditions as a result of combination of two basic geodynamic settings-island arc and continental rifting settings.