

The upper cretaceous volcanic of river Tedzami valley agate-chalcedony mineralization

Nino Kobakhidze

Email: nino.kobakhidze988@ens.tsu.edu.ge

*Geology, Faculty of Exact and Natural Sciences, Ivane Javakhishvili Tbilisi State University, University str. N 13,
Tbilisi, Georgia*

The study region is situated from Tbilisi to the north-west about 80 km and administratively belongs to the Caspian municipality.

According by E. Gamkrelidze's tectonic zoning of the territory of Georgia of the latest scheme (2000), the district is located in the East part of central subzone(axial) of Ajara - Trialeti fold zone and it is built Cretaceous and Tertiary deposits. Lower Cretaceous represented only with albian floor, which composed: tuffbreccias, tuffconglomerates, tuffsandstones and there are in sequence porphyrites of augite and augite-labradorite.

Upper Cretaceous is represented igneous and carbonate facies. Volcanic formations are built: basaltic and dacitic tuffs, tuff-breccias, they are in sequence with lava layers, their total capacity varies several hundred meters to 2000 meters.

Based on field observation shows, that processes of mineralization of agate and chalcedony are controlled by two main factors in the study area:

- 1 Tectonic - mineralization of agate and chalcedony is associated with interrupted dislocations.
- 2 Lithological - deposit of agate and chalcedony is localized in rocks (tuffbreccias, tuffsandstones, lava layers and Breccia zones in rocks), whose physical properties and textural particularities are favorable for the formation of these minerals.

In the work is discussed the problem of the origin of the agate-chalcedony and their accompanying minerals and role of cretaceous effusions in the formation of deposit.