Geology and Mineral Resources of Chiatura District

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AsChiatura district is located in the Dzirula subzone of the Central uplift zone of the Transcaucasian Intermountain Area, which is built up by Precambrian schists, gneisses, amphibolites, migmatites, Lower and Middle Paleozoic slates, phyllites, Paleozoic (Variscian) granitoids, Paleozoic basic and ultrabasic rocks, and Upper Paleozoic volcanogenic-sedimentary rock strata. Lower Jurassic carbonate sediments, Bajocian volcanogenic rocks, Cretaceous carbonate, Paleogene and Neogene sandy-clayey sediments transgressively lay on the substrate erosional surface.

Both, plicative (folds) and disjunctive (faults) dislocations are developed in the study area, which developed at different stages of tectonogenesis. The major tectonic dislocation of the Chiatura deposit is the “Main Normal Fault”, which decreases on the left bank of the Kvirila River and transits into a flexural fold. Manganese mineralization is associated with the hanging wall of the fault; there is no mineralization in the footwall of the fault and therefore it is an ore-confining fault.

G. Dzotsenidze's opinion that manganese could have been introduced into the Oligocene basin of the Chiatura volcanogenic-sedimentary deposit as a result of the subsequent hydrothermal and fumarole-sulfate activity of the Eocene volcanism of the Adjara-Trialeti fold-and-thrust belt is well-argued and convincing.

Since, in addition to Chiatura, manganese accumulations of various sizes are known in Chkhar-Ajameti, Kvirila depressions, Shkmeri, and etc. We believe that the Chiatura area is a prospective in terms of manganese extraction.
Salieti marble, being a valuable facing material, is also important in terms of the economic development of the region.