

Exocontact metamorphism of the Klich gabbro-diorite intrusive (summary)

The Klich gabbro-dioritic intrusive participates in the make-up of the crystalline core of the Greater Caucasus and is exposed in the limits of the Pass subzone of the Main Range zone. The exposure of the intrusive is fixed in the eastern part of mountainous Apkhazeti, in headwaters of the river Kodori, covering about 10km².

In the contact zone of the Klich intrusive and the enclosing metapelitic crystalline schist the products of contact metamorphism, massive metamorphic rocks-felses are spread. 10-30m wide stripe of felses is spread around the intrusive, into the gorges of the river Klich and its right tributary the Achapara river. As a result of thermic metamorphism, in the exocontact of the intrusive are developed following parageneses: $Cor+Grt\pm Sill(Andl)\pm Spi$, $Sill+Bt\pm Spi\pm Qtz$, $Cor+Spi\pm Qtz$, there are established reactions: $St+Qtz-Cor+Grt\pm Andl(Sill)\pm Spi+H_2O$, $Ms+St+Qtz-Sill+Bt+H_2O$, $St-Cor+Spi$, $St-Andl(Sill)+Spi$ and is fixed $Andl-Sill$ inversion in them.

Felse has an exotic mineral composition, as there are fixed both relicts (stavrolite, muscovite, quartz, andalusite) and newly originated minerals (cordierite, garnet, sillimanite, spinel, biotite). These rocks are very nice: black-yellowish-pinky inclusion make harmonious pattern against the grey background. Physical-chemical characteristic of these rocks; completely meet the requirement of facing stone raw material, they correspond to the (A d) I class of quality of ornamentality. Felse belongs to the most stable group of rocks and can be used for interior and exterior lining.