FELDSPATHIZATION IN THE LOKET MONZOGRANITE — POSSIBLE INFLUENCE OF GRANITES OF THE YOUNGER INTRUSIVE COMPLEX (KARLOVY VARY INTRUSION)

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Feldspathized zones derived from the porphyritic Loket monzogranite, passing from nearby Loket under the Cenozoic Sokolov Basin, are described. This monzogranite from the drillhole JE–83 (Karlovy Vary–Dvory) contains fracture-controlled feldspathite zones in the depth of 125.0–130.0 m. The change from monzogranite to epigenetic feldspathite is accompanied by enrichment in Rb, Sn, Nb and F, and by depletion in such elements as Si, Ca, Ba, Sr, and Pb.

The modal and whole-rock chemical compositions show an increase of alkali feldspar proportion relative to quartz (owing to perthitization of orthoclase and albite pseudomorphs after oligoclase–andesine) compared to the unaltered Loket monzogranite. The porphyritic texture remains preserved, although effects of progressive metasomatism and slight deformation can be observed under the microscope. Microprobe analyses demonstrate variations in mineral chemistry of potassium feldspar phenocrysts, albite overgrowths, muscovite, altered biotite and chlorite. We have examined these altered rocks as a part of a continuing effort to explain petrogenesis and intrusive history of the Krušné hory Batholith.

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