

EVIDENCE OF GENERATION AND EVOLUTION OF METALLIFEROUS FLUIDS WITHIN VOLCANIC GLASSES (SOUTH TIEN SHAN, UZBEKISTAN)

KUSTARNIKOVA A.A., USMANOV A.I.

Several stages in generation and evolution of metalliferous fluids revealed within volcanic glasses of the basic content from an eruptive breccia of perivental facies in the Nuratau range (South Tien-Shan) are distinguished. Two of them were stipulated by appearance of heterogeneity of irregular and spheroloidal forms in homogenous magma. The third stage shows the development of zonation as Mg-Fe, Si-Al-alkali, Ca-Ti selective concentration. The fourth stage presents itself silica, alkali and ferro-titanium concentrations isolated in the center of spheruloids. The fifth stage is the transformation of a core part of spheruloid into amygdule consisted of quartz-chlorite-carbonate and a metalliferous matter. All the stages proceeded spontaneously like a boiling process. Kinematics of the process has been examined using microanalyzer JXA-88000R Jeol (Japan)