

THERMOBAROMETRY OF MINERAL EQUILIBRIUMS IN METASOMATITES AND META-PORPHYRITES FROM THE BEREZITOVOE ORE DEPOSIT (UPPER PRIAMURYE)

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Thermobarometry of mineral equilibria in metasomatites and meta-porphyrates of the Berezitovoe ore deposit (Upper Priamurye) was performed using the new published equations. P-T estimates vary insignificantly and show average pressure 4 ± 0.31 kbar and temperature $566 \pm 12^\circ\text{C}$ (for zoned garnet cores) and $4,4 \pm 0,24$ kbar and $624 \pm 9^\circ\text{C}$ (for zoned garnet edges). In addition, P-T estimates for metasomatites and meta-porphyrates practically do not differ. The refined thermodynamic data for metasomatites and meta-porphyrates confirm our hypothesis concerning the thermal metamorphism of the earlier formed berezite assemblages. In terms of formation theory, the obtained data suggest that these metasomatic rocks cannot be attributed to the classical berezite or greisen.

Keywords: thermobarometry, mineral equilibria, metasomatites, meta-porphyrates, Berezitovoe ore deposit.