

NEUTRAL COMPOSITIONS OF KIMBERLITE BODIES OF VILYUISK PROVINCE (YAKUTIA) AS A BASIS FOR FORMATION IDENTIFICATION OF KIMBERLITES

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Petrochemistry of kimberlites appears to be highly informing instrument to carry out an information analysis of kimberlite associations providing the alien (allogenic) inclusions are eliminated from the analyzed samples. The studied mistakes in kimberlite lumps sampling appeared in the course of x-ray fluorescence analysis are within the accuracy of the analysis. The paper demonstrates the obtained neutral compositions of 93 kimberlite bodies from Duldynsky, Alakit-Markhinsky, Nakynsky, Mirninsky and Verkhnemynsky fields of Vilyuisk sub province (Yakutia). The coefficient of variation of neutral compositions of the studied kimberlite bodies has been used as a criterion to compare the variance of kimberlite compositions. They have been correlated with similar indexes of 25 magmatic formations. It is found that kimberlites are fallen between dunite-pyroxenite-gabbro and alkaline-ultramafic formations according to the coefficients of CaO variation, therefore kimberlites are assumed to be a magmatic formation.