GEODYNAMIC CONDITIONS OF FORMATION AND SOURSES OF LATE CAMBRIAN SILLS AND DYKES OF THE NORTHERN PART OF THE DARIBY RIDGE, WESTERN MONGOLIA

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The authors collected new isotopic and geochemical data on sills and dykes of the Northern part of the Dabiry ridge which is a part of Caledonian complex of the Central Asian fold belt (CAFB). Magmatic rocks of the sill-dyke complex resulted from mixing of low potassium picritic and tholeiitic melts. A melting of garnet lherzolites of the mantle wedge resulted in formation of low potassium picritic melts with $\varepsilon_{Nd}(T)=+6$ - $+8$. Tonalitic melts with $\varepsilon_{Nd}(T)= -2$ were possibly generated by partial melting of oceanic mafic rocks of an arc base or a subduction slab. Cambrian massifs of tonalites and plagiogranites associating with a Vendian-Cambrian sodium-rich volcanogenic series are widespread in other regions of the Western Mongolia as well. Apparently the formation of sodic melts is one of common processes of the Vendian-Cambrian per-subduction systems of CAFB.

Keywords: isotopic composition, magmatic source, mixing of melts, tonalites.