

КОВАЛЕНКО и др.

PRELIMINARY RESULTS FROM PALEOMAGNETIC INVESTIGATION OF PALEOZOIC ROCKS IN WESTERN MONGOLIA

D.V. Kovalenko¹, O.A. Ageyeva¹, A.A. Mongush², O.O. Stavrova¹, V.P. Mokrushnikov³

¹*Institute of Ore Deposits, Petrography, Mineralogy and Geochemistry of the Russian Academy of Sciences (IGEM RAS)*

²*Tuva Institute of Complex Development of Natural Recourses SB RAS*

³*Novosibirsk State University*

The paleomagnetic investigations of the early Paleozoic rocks in western Mongolia have been carried out. The investigation showed that a natural magnetization of the early Cambrian rocks from the Dariby massif includes high-temperature components of both normal and reverse polarity. A fold inclination is being tested. The authors suppose that the early Cambrian strata were deposited in the oceanic basin of marginal-sea type at 10-17° south latitude. The formation of the Dariby Ridge was accompanied by shift dislocations. The magnetization of the early Devonian strata includes three components. The low-temperature component «A» was formed during a remagnetization of rocks in Mesozoic and Cenozoic eras. The high-temperature component «B» is of pre-folding origin, but apparently it is secondary and had been formed during the period of the late Carbonian - Permian superchrone of reverse polarity. The high-temperature component «C» is probably close to primary. Paleolatitudes that were calculated by directions of «C» component, correspond to 10-17° presumably north latitude.

Silurian and early Carboniferous strata were probably remagnetized in Mesozoic or Cenozoic eras.

Keywords: magnetization, paleolatitude, tectonic emplacement, declination, inclination.