SOME ASPECTS CONCERNING THE FORMATION OF CLAYEY SEDIMENTS OF THE URZHUMIAN STAGE BY THE GEOCHEMICAL DATA ON THE REFERENCE SECTION


Abstract

This paper considers the genesis of clayey sediments of the Urzhumian stage (the Middle Permian) by the XRF data on samples from the reference section. It was revealed that clayey sediments were formed as a result of the low temperature transformation of smectite into other phyllosilicates, which occurred during the Urzhumian stage due to the arid climate, specific composition of provenance rocks, sharp and rapid changes in the hydrochemical composition of the sedimentation basin (variation in Mg$^{2+}$), and terrigenous flows containing feldspars in the amount sufficient for enrichment of the sediments with Al$^{3+}$ and K$^+$ through the bioinert processes at the stage of diagenesis.

Keywords: Permian system, XRF analysis, genesis of clayey sediments.

References


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