

## **Eustatic changes during the formation of Early-Middle Jurassic petroleum deposits in West Siberia**

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Comparative analysis of eustatic cyclic pattern of the Lower-Middle Jurassic in West Siberia and eustatic curves of the Earth Northern hemisphere (Vial P.R., Hallam A., Exxon company, etc.) testifies that stages in various aquatorium level changes in Boreal belt coincide rather accurately. In Early-Middle Jurassic the West Siberian sedimentary basin represented a depression with the northern part being constantly flood by sea. Eustatic periodicity of transgressions and regressions motivated alternation in the section of argillaceous and sandy-silty-argillaceous strata. During the formation of the former at the ocean level rise (beginning of Late Pliensbachian, beginning of Early Toarcian, Aalenian, end of Early Bajocian-beginning of Late Bajocian) the basin exhibited similar geochemical conditions. These strata are characterized by vanadylporphyrin presence, lower pristane to phytane ratio, enhanced content of bituminous components. The complex of geochemical evidences shows the argillaceous strata to be petroleum producing. Sandy-silty-argillaceous strata were being formed during sea level fall (Hettangian-Sinemurian-beginning of Early Pliensbachian, end of Late Pliensbachian, end of Early-Late Pliensbachian, end of Late Aalenian-beginning of Early Bajocian, end of Late Bathonian). As compared to argillaceous strata the latter display inverse trend of geochemical parameters and their wide scatter pointing to facies heterogeneity, more shallow water and continental genesis of sediments. Different sandy facies create the variety of hydrocarbon trap types.