

GEOLOGY AND HYDROCARBON SYSTEMS OF THE NORTHERN EAST SIBERIA: A REGIONAL STUDY REPORT

This Report provides data on geology of a vast region of the northern East Siberia including the east part of the Yenisei-Khatanga Basin, Anabar-Khatanga Saddle and the Anabar-Lena Basin and adjacent parts of the Olenek Fold Belt, Verkhoyansk Fold and Thrust Belt, and East Siberian Craton. This region is known by the first oil discovery in Siberia in 1940s, but commercial reserves remain to be found.

The main data sources used in this study were publically accessible Soviet-era geological reports and publications. In addition, we provide new proprietary analytical results of U-Pb detrital zircon geochronology (14 samples), whole-rock Sm-Nd isotope geochemistry (16 samples), whole-rock geochemistry (95 samples), detrital garnet chemistry (10 samples), Apatite Fission Track study (10 samples) and RockEval study (42 samples) acquired using state-of-art technologies. The new analytical data helped to constrain geological interpretations.

The Report consists of 187 pages including 59 illustrations. It is accompanied by 26 attachments and an ArGIS database that includes geological and tectonic maps of the studied region, paleogeographic and organic matter composition and maturity maps, locations of the cross-sections, sampled sites etc.

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