

Oil saturation of low permeable rocks of Minnibaev area of Romashkinskoe oil field (illustrated by well 20355)

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Abstract

Oil saturation of low permeable rocks of the Upper Devonian Minnibaev area of Romashkinskoye field in the depth interval of 1486-1522 m, accounting on average 0.13% has been revealed. It is shown that the composition of the extracts, determined by the methods of infrared spectroscopy, gas-liquid chromatography, electron paramagnetic resonance and thermal analysis, is a mixture of high molecular naphthenic and polycyclic aromatic hydrocarbons with a small fraction of normal alkanes and isoprenoids that have been exposed to supergene impact. It is established that the mineral matrix of the samples is an association of carbonate rocks, and the presence of bitumen is due to the migration of oil from the lower strata of Devonian.