

Chemistry and Technology of Fuels and Oils 2015 vol.50 N6, pages 555-560

Effect of catalytic aquathermolysis on high-molecular-weight components of heavy oil in the ashal'cha field

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Abstract

© 2015 Springer Science+Business Media New York. We have studied the effect of catalytic aquathermolysis on the high-molecular-weight components of crude oil in the Ashal'cha field (Republic of Tatarstan). We used an iron(III) tris(acetylacetonate) complex as the catalyst. The change in the structure and composition of the resins and asphaltenes in aquathermolysis was studied by PMR and IR spectroscopy.

<http://dx.doi.org/10.1007/s10553-015-0563-3>

Keywords

asphaltenes, catalytic aquathermolysis, high-viscosity crude oil, NMR spectroscopy