

Pore space formation experimental study in result of oil shale thermal heating.

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Currently, researchers and oil companies are paying special attention to unconventional oil and gas reservoirs, such as the Bazhenov and the Domanic formations. This is due to a reduction of traditional oil reserves during oil production. At the same time, unlike traditional reservoirs for non-traditional reservoirs the regularities of field distribution are not known at present. Therefore, researchers are facing with finding these regularities and predicting the most productive areas.

In this work attention is paid to the structure of the Dominican horizon rocks and characteristics that control the pore space formation in rock samples that were formed under different conditions and ways of sedimentation, in result of organic matter maturation modeling.

As a result of experiment, it was revealed that different samples characterized with different kind of sedimentation can react on heating differently. Texture of rock samples mostly effects the transformation of the rock pore space. Also, the degree of change in the pore space volume depends on the maturity of the organic matter and its amount in the rock. Mineral composition of the rock does not take part in the process of pore formation in the rocks.