

Paper Number: 3336

Russian Arctic Shelf Oil&Gas: present and future

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In 2012 the quantitative assessment of oil, gas and gas condensate resources stored in Russian mainland and continental shelf was accomplished on the base of geological and geophysical data collected up to 01.01.2009. It was confirmed that hydrocarbon resources of the Arctic shelf constitute the main reserve of the Russian oil and gas industry in XXI century. Their total amount exceeds 100 Billion tons of Oil Equivalent (BOE) and main peculiarities are the predominance of gas over oil (84%) and concentration of the main part of resources in the Russian Western Arctic seas - the Barents, Pechora and Kara. According to the draft Russia's Energy Strategy until 2035, Arctic shelf deposits should provide oil production up to 33 mln tons/year.

Meanwhile at present time the only the Pirazlomnoe field in the eastern part of the Pechora sea is in production since the December of 2013. In 2014, 263 thousand tons of oil were produced there. Another oil (predominantly oil) fields on the Russian Arctic shelf, prepared for production, are absent. Taking into account a huge gas potential of the northern territories of the West Siberia, development of even unique marine gas fields (such as Shtokmanovskoe in the Barents Sea, Rusanovskoe and Leningradskoe in the Kara Sea) is not actual in nearest decades. It is confirmed by sad fate of the Shtokman Development Ltd. consortium.

The problem of finding of predominantly petroliferous regions beyond the Pechora Sea is rising today on the foreground. It's decision is blocked now by low level of geological and geophysical exploration of huge area of the Russian Arctic shelf, including all eastern seas (Laptev, East-Siberian and western part of Chukchi) and northern parts of the Barents and Kara seas. No a single deep well was drilled there. Therefore realization of a program for deep stratigraphic well drilling is the primary task for these seas. First step should be a drilling on Arctic islands and in shallow water areas with using of existed domestic drilling equipment. Subsequently it is proposed a transition to the delineation of the oil regions, and their progressive exploration.

