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EFFECTIVE SYSTEM OF SMALL ANTICLINE DEPOSITS DEVELOPMENT WITH HORIZONTAL WELLS

Background
One of the main geological features of the anticline deposits is deterioration of filtration properties from the center to the periphery. In the central area of crest the formation permeability and porosity have higher values than on the plunges, where they are generally thinner. Efficient development and water flooding system of such deposits should take into account these features.

Aims and Objectives
The paper is devoted to a problem of various simplified arrangement of horizontal wellbores depending on laterally changing filtration properties of reservoir.

Results
For smaller deposits developed by water drive in order to increase the rate of inflow and efficiency of the development it is recommended to have horizontal wellbores from the center of deposit with higher filtration properties to the periphery with lower parameters.

It is shown that the main parameters of low permeable reservoir area do not significantly affect the findings.

Key words: horizontal well, productivity index, permeability of layer, anisotropy of layer, inflow of liquid to a well

References


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