EFFECTIVE SOLUTION OF CASING CENTERING IN COMPLEX WELL PROFILE

Background
High quality centering of the casing in the drilled wells plays a decisive role in ensuring the high efficiency of the process, as it promotes isolation from neighboring productive horizons of the geological section penetrated by the well. Motion cessation of cylindrically shaped pistons (locking the working) usually occur in the areas of wellbore deviation, caused by bending deformations of the cylindrical casing of the centralizer, which leads to decrease of its inner diameter. In these circumstances, solution of this problem is highly relevant.

Aims and Objectives
To suggest a solution to improve the reliability of the centering levers operation in the wells of complex profile.

Methods
The hydromechanical centralizer is described, which represents a stand-alone unit mounted on the casing.

Results
The advantage of the proposed design is that the hydromechanical centralizer for casing in oil and gas wells is made as a set of separate blocks (modules) installed on a separate pipe section having connectivity with the casing in any amount and at any regularity, depending on the diameter of the casing and the inclination of the wellbore trajectory. Moreover, each block operates independently and is not affected by the state of other blocks.

Key words: casing, hydro drive, centering unit, cylinder, piston

References


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