

# RESEARCH OF IMPROVING TECHNOLOGIES OF PRODUCTIVE LAYERS OPENING

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The paper, by theoretical and experimental research addressed, brings a modest contribution to the more exact knowledge of the causes which lead to unwanted phenomena that influence the onset of the productive layer and removal methodologies of resulted inconveniences. Although it involved a large volume of tests performed not all the possibilities of course, were exhausted for productive recording layers and treatments suitable for release. New guidelines regarding modern perspective were opened by simulating investigation of the deposit, the factors that cause properties of porous - permeable layers because of the contamination and new directions were created for the expansion of practice concerns and other chemical treatment stimulation.

Research undertaken to find ways to increase efficiency operating mode of the probe has shown that it is necessary to start from the predicted behavior of the reaction layer exploited by vertical, deviated or horizontal wells and then to establish their operating parameters. As a result, the paper was designed to address problems in reservoir fluid flow and behavior problems in borehole equipment.

The doctoral paper was thought as divided into two fundamental part:

- The first part (Chapter I, Chapter II, Chapter III) is a theoretical approach to general considerations on:
  1. Methods to open the productive layers, efficiency and comparative analysis focusing the parameters that affect the completion of wells, the main types of drilling fluids and completion columns.
  2. The technologies of influx fluid are presented in chapter II.
  3. Chapter III relates to the factors influencing the choice of completion technologies as well as productive property damage (contamination).
- The second part (Chapter IV), the research study itself, fruit of a large number of analyses and tests performed with a numerical simulation aimed at analyzing the fluid flow of a group of wells.

The conclusions drawn from the research within the paper, as well as the author's contributions are shown in the end of the doctoral paper.