عنوان مقاله:

Estimation of In-Situ Rock Stresses in Hydraulic Fracturing Operation

محل انتشار:

دومین کنفرانس بین المللی نفت، گاز و پتروشیمی (سال: 1393)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Reza Masoomi - *Ph.D. Student, Petroleum Engineering, Kuban State University of Technology, Krasnodar, Russia*

Dolgow Sergei Viktorovich - *Professor, Petroleum Engineering, Kuban State University of Technology, Krasnodar, Russia*

خلاصه مقاله:

Nowadays hydraulic fracturing uses as the main method of stimulating production wells all over the world. Hydraulic fracturing decreases skin effect or increases effective wellbore radius like other well stimulation methods. Fracture geometry depends on stresses and rock properties in hydraulic fracturing operation. The goal of this paper is estimation of In-Situ rock stresses that is deemed necessary to select value of breakdown pressure in hydraulic fracturing operation. In this paper a mathematical model has coded with using MATLAB software to prediction of stresses in the various layers.This designed program is able to present both digital and graphical output results for different values of Poisson's ratio.At the end, stresses exerted on the different layers of the several real oil reservoirs have simulated and breakdown pressures have determined

کلمات کلیدی:

Well stimulation, Breakdown pressure, Hydraulic fracturing, In-situ stress

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/394049