عنوان مقاله:

A Thorough Study of Triple Porosity: Interpretation and Well Test Analysis of Various Models

محل انتشار:

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نویسنده:

Sadra Rostami - *Department of Petroleum Engineering, Amir Kabir University of Technology, Tehran, Iran*

خلاصه مقاله:

Naturally fracture reservoirs (NFRs) are among frequent carbonate mediums containing petroleum. Conventional dual porosity models have defined homogenous properties for matrices and fractures, which in some cases can deviate from actual condition. Consequently, dual porositymodels sometimes cannot capture reservoir properties well and triple porosity models would be the best solution. In this study, the concentration is on introducing various triple porosity models: 1- models with different matrices properties 2- vuggy triple porosity 3- micro and macro fracturecrossing matrices. Also, well test analysis of model 1 done by investigating different submodels created by E100 and SAPHIR software, interpreting their sensitivity plots, and finally ecaluating different methods of calculating triple porosity properties including synthetic methods withouttype curve matching. The comparison between these calculation techniques done by using triple porosity data from SAPHIR software external triple porosity model. Like the first model, vuggy triple porosity were simulated by the same two software, and then the sensitivity runs andcomparison done for further analyzing and interpreting.

کلمات کلیدی:

Triple Porosity; Fractured Reservoir; Well Test Analysis; Model

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