عنوان مقاله:

Novel Multiscale Model to Simulate Oil Reservoir Production Rate Considering Geo-Mechanical Effects

محل انتشار:

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خلاصه مقاله:

Simulation of oil reservoirs is an important step in the management of mature oil fields and development of new fields. To the best knowledge of the authors, this multistate mixed geo-mechnical model has been developed for the first time in our previous work namely; Multiscale Multiphysic Mixed Geomechanical Model (M3GM). This new method is one of the advance models to simulate this reservoirs. In the present paper though, not only is explained the M3GM briefly, but also its extension to incorporate surrounded rock is well defined. The result shows that neglecting rock deformation will lead to underestimating of oil production rate especially at earlier stages.

کلمات کلیدی:

Oil reservoir, Multiscale, Production rate, Geo-Mechanical, Rock