عنوان مقاله:

Simulation of Two-phase Flow of Oil and Water in Hydrocarbon Reservoirs with Improved IMPES Method

محل انتشار:

پنجمین کنفرانس بین المللی مطالعات جهانی در علوم تکنولوژی و مهندسی (سال: 1400)

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خلاصه مقاله:

Nowadays, many methods are used to enhance oil recovery from reservoirs. The most ancient and most usable among them is water injection from injection wells to reservoirs and extracting the oil from them .therefore, water and oil flow studying and checking in reservoirs are very important. In this project, two-phase flow simulation, water and oil in porous media using software Fortran, will be discussed. An improved IMPES method is used in this study to accomplish this simulation. Also, the pressure equations using the implicit method and saturation equations using the explicit method are discretized. In the end, the results are compared with the results of business software CMG.

کلمات کلیدی:

Enhanced oil recovery, two-phase flow, simulation, IMPES

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