

عنوان مقاله:

Experimental Investigation of the Effects of Nano-Particle and Surfactant on Interfacial Tension, Wettability Alteration and Recovery Factor in a Micromodel System

محل انتشار:

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خلاصه مقاله:

In this paper, the performance of chemical flooding of Silica Nanoparticles in association with CTAB surfactant has been investigated as an enhanced oil recovery method. This study was aimed to evaluate the effect of injecting different concentration of chemical solutions on interfacial tension and wettability alteration as two microscopic mechanisms influenced on oil production and recovery factor. In order to achieve this goal, after formation water flooding as the second stage, chemical flooding by CTAB surfactant and silica Nanoparticles as the third stage in enhanced oil recovery was done. Results demonstrated the effectiveness of chemical flooding on interfacial tension .reduction, wettability alteration and oil recovery factor promotion

کلمات کلیدی: Enhanced Oil Recovery, Surfactant, Nano particles, Micro Model

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