عنوان مقاله:

RESEARCH ON CO۲ FLOODING FOR IMPROVED OIL RECOVERY IN WATER FLOODING ABANDONED RESERVOIRS

محل انتشار:

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خلاصه مقاله:

CO۲ injection is an effective technique for improved oil recovery in light oil reservoirs, especially for water flooding abandoned reservoirs. In this study, the lower part of Es۱ reservoirs in Pucheng oilfield was introduced as the target reservoir. By studying the minimum miscible pressure in CO۲ flooding, the reservoir could achieve miscible flooding. Long core displacement experiments proved that water alternating CO۲ flooding could significantly improve the recovery. For the reservoir characteristics, anti-corrosion technology in the process of injection was researched, and the H-۲۰ inhibitor was screened. A channeling blocking agent in combination with the delayed expansion of gel particles and cross-linked copolymer was used to control the gas fluidity. The Pu ۱-۱ well groups were optimized to conduct a field trial. The cumulative injected liquid CO۲ was ۱۹۲۱۹.۹۵ ton, ۰.۲۴۸ PV and the cumulative increasing oil

was ۴۵۲۰.۹ t. The predicted recovery will increase by ۸.۳%. The successful implementation of the project can provide technical attempt for completion of energy to succeed and energy-saving emission reduction targets.

کلمات کلیدی:
Gas Injection, IOR, Water Alternating CO۲ Injection, CO۲ Corrosion, CO۲ Foam