

عنوان مقاله:

The Effect of Temperature, Pressure, and Mixing Ratio of the Injection Water With Formation Water on Calcium Carbonate and Barium Sulfate Scales Formation in the Siri Oilfield

محل انتشار:

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خلاصه مقاله:

Enhanced oil recovery methods are used to recover the percents of oil that are not naturally recoverable from reservoirs. Water injection as a secondary recovery is used to maintain the pressure in water-drive reservoirs. An important point for having a successful injection is the compatibility of injection and formation waters. In this study, using the Scale soft pitzer software and Persian Gulf water and formation water chemical analysis has been measured in the laboratory. Scaling index calcium carbonate (calcite) and barium sulfate (barite) at different temperatures (08-018 °F), pressures (11 - 0888 Psia) and the mixing of water injection with formation water in different ratios is predicted in Iran Siri oilfield. The results show that calcite scale of sediments is a major oil field intensity and the amount of calcium carbonate scale with increasing temperature and reducing pressure will be raised. Although the formation of barium sulfate in Siri oilfield is low but increasing the temperature & pressure cause .formation of more solubility and reduction of barite scale

کلمات کلیدی:

injection water, siri oilfield, scaling index, calcium carbonate, barium sulfate

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