

عنوان مقاله:

Effect of Pressure on Gel Polymer Properties Prepared with Polyacrylamide

محل انتشار:

اولین کنگره و نمایشگاه بین المللی علوم و تکنولوژی های نوین (سال: 1397)

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خلاصه مقاله:

The effect of pressure on the gelation time and the strength of gel polymer is one of the important parameters to design the gel polymer using in temporary well plugging. In this paper, bottles, rheology tests and oil-well laboratory system are used for investigating of the gel formation which consisting of polyacrylamide and chromium crosslinker. The effect of temperature and pressure of 3000 psi (typical Iranian oil well condition) was investigated on gelation time and the strength of gel polymer. The results showed that the pressure did not have any significant effect on gelation time. Also the sweep test showed that the elastic modulus of gel polymer under pressure is approximately 5 times more than the elastic modulus of gel polymer under ambient pressure

کلمات کلیدی:

Polymer gel, Gelation time, Rheology, Pressure, Sweep test

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