عنوان مقاله:

Effect of Surfactant on Wettability Alteration by Sol-gel Process in Gas Reservoirs Using

محل انتشار:

کنفرانس بین المللی فرآورش پلیمرها (سال: 1390)

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خلاصه مقاله:

In gas condensate reservoirs considerable productivity loss occurs after the reservoirs pressure drops below the dew point. Altering the wettability of reservoir rock from liquid wetness to neutral wet condition, using fluorochemical treatments has proved to be a very important method for the enhancement of gas-well deliverability. The objective of this work is to study the effects of wettability alteration by sol-gel process using tetraethoxysilane and perfluorosilane in three different solvents. Imbibition, capillary rise, contact angle tests are used to characterize wettability changes. Laboratory results demonstrated that the prepared polymeric network was more effective when we use methanol as a .solvent

کلمات کلیدی:

Wettability, Surfactant, Sol-gel, Contact Angle, Perfluoroalkylsilane