

عنوان مقاله:

Using mutual solvents in removing water block

محل انتشار:

اولین کنگره ملی مخازن شکافدار و چالش های پیش رو، با نگاه ویژه به مخازن بزرگ کشور (سال: 1387)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

The entrapment of Aqueous phase within porous media Can occur in a number of different situations during drilling, completion, work over and production operations. Removing the entrapped aqueous phase (water block) can increase the impaired hydrocarbon relative permeability. In this study, the efficiency of using alcohols in removing water block for increasing hydrocarbon relative permeability and improving oil recovery is examined and the results of laboratory tests are presented. The experimental setup consisted of a stainless steel core holder for cylindrical cores, a displacement pump and a pressure transducer. Outcrop sandstone plug was used in this experiment and we used methanol, ethanol and isopropanol as water block removing agents. The results obtained showed that using methanol and specially ethanol can effectively remove water block and increase oil relative permeability but in the case of .isopropanol, not only the oil relative permeability did not increased but it caused a reduction in it

کلمات کلیدی:

phase trapwater blockmutual solventsalcohol relative permeability

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