عنوان مقاله:

Investigation of Revaporization of Retrograde Condensate in a Synthetic model

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

One of the problems currently in the oil and Gas industry is the difficulty for reaching a high condensate recovery in gas condensate reservoirs. Liquid dropout usually occurs in gas condensatereservoirs, when pressure decreases below the dew point, especially around the well bore. Theliquid that is formed during the condensation is trapped by capillary forces or is left behind due to the low liquid relative permeability. Since saturation of this liquid is lower than critical saturation,so the liquid which is economically valuable cannot move in the reservoir and be produced.Gas cycling/injection is a common practice used in the oil and gas fields to alleviate this problemand enhance condensate recovery by preventing condensate liquid loss and to help re-vaporizingretrograde liquid. The main goal of this work is to investigate the lean gas recycling into the PVT cell and theSynthetic model to enhance condensate recovery. In this work, these subjects were studied: the effect of CO2, Separator gas and N2 on Condensate recovery enhancement.In the Synthetic model, Deduction of condensed liquid during the different injection volumes related to N2 is more than Separator gas and separator gas Scenario is more than CO2. In other words N2 is the most effective and Co2 is the least effective scenarios in reduction of condensatein the Synthetic model that the decreasing condensate being due to the direct effect of gas injection on the fluid properties in pourus media, while, this result may with injection of the three gas in PVT Cell be different because Diffusion effects and also influence of porous media on the increasing pressure process

کلمات کلیدی:

,Condensate Recovery, Gas injection, CVD, Synthetic Model, gas condensate