عنوان مقاله:

The Simulation Study Of Pressure And Temperature Effects On Scale Formation In One Of Iranian Oil Reservoir During Water Injection

محل انتشار:

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خلاصه مقاله:

Scale deposition is one of the most important and serious problems which water injectionsystems are generally engaged in Scale sometimes limits or blocks oil and gas production byplugging the oil-producing formation matrix or fractures and perforated intervals. Scale alsodeposited in down-hole pumps¸ tubing, casing flow-lines, heater treaters, tanks and otherproduction equipment and facilities. Scale cam occur at /or downstream of any point in theproduction system, at which super-saturation is generated. Super-saturation can be generated insingle water by changing the pressure and temperature conditions or by mixing two incompatiblewaters. This paper describes overview formation damage, scale formation along the injectionwaterpath in water-food operations¸ scaling problems encountered in oil fields, oilfield Scaletypes and investigations of pressure and temperature variations effects on scale deposition duringwater injection in Gachsaran oil field (Iran) are presented. The results are shown that scaleformation, it most depend on temperature however pressure variations effect haven't anyconsiderable effect on this process.

کلمات کلیدی:

formation damage, scale deposition mechanisms, water injection, solubility of scale