Contribution ID: **523** Type: **Poster (+) Presentation**

Experimental Study on Long Core of Fractured Vuggy Metamorphic Rock Rich in Condensate Gas Reservoir with Different Development Methods

Thursday, 3 June 2021 20:00 (1 hour)

BZ oilfield in Bohai Bay is a fractured porous metamorphic reservoir, which shows the characteristics of double porosity and double permeability. The mechanism of condensate reverse evaporation is also different from that of general sandstone condensate gas reservoir. In this paper, firstly, the metamorphic core without fracture was obtained for porosity and permeability test (average porosity 5.6%, average permeability 1.5md), and then the fracture (fracture permeability 5-10md) combination long core 108.6cm was carried out. Then, the depletion, gas injection, huff and puff and pulse gas injection experiments were carried out in this long core with condensate gas (condensate oil content 689g / m3) fluid to optimize and enhance condensate oil recovery The best way to develop. The experimental results show that the condensate recovery of depletion development is lower, the top depletion is lower than that of horizontal depletion, the condensate recovery of direct gas injection above dew point pressure is the highest, followed by direct gas injection or pulse gas injection under the maximum condensate saturation, which is different from the conventional low permeability sandstone condensate gas reservoir, and the effect of gas injection huff and puff is the worst. This experiment has a very good guiding significance for the reasonable development of high condensate oil-bearing condensate gas reservoirs in fractured vuggy reservoirs.

Time Block Preference

Time Block C (18:00-21:00 CET)

References

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