VELIYEV R.M.

THE NUMERICAL MODELLING OF THE ONE DIMENSIONAL FILTRATION FOR THE GASCONDENSATE MIXTURE WITH PHASE TRANSFORMATIONS

Abstract

Filtration of gas condensate mixture in differ from poor gas goes with continuous change of the composition of phases caused by retrogreade phenomena. Real gas condensate mixture is many component and many phase. Its filtration is a complex non-linear differential equations with the variable coefficients of the second order.

Here the isometric flow of the gas condensate mixture to the gallery, i.e. the one dimensional flow problem of the gas condensate mixture is considered in the gas regime with the phase transformations taking into account the real properties of the fluids and the medium on the binary model. The problem has been solved numerically. The numerical calculations have been carried out for the data taken for the concrete deposit. On the, base of the results of calculations the conclusions have been made.