

Neftyanoe khozyaystvo - Oil Industry 2014 N10, pages 60-63

Simulation of heat treating the oil collector using acid exposure on near-Wellbore zone

Zakirov T., Nikiforov A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The study deals with the problem of thermal exposure on the oil reservoir using acidizing of near-wellbore zone. There is a comparison of the oil recovery factor in cases of conventional water flooding, water flooding with the injection of coolant, water flooding with acid exposure and mixed technology. The obtained results show that the joint exposure of heat and acid treatment is the most effective mode of the oil recovery.

Keywords

Acid, Function distribution, Mathematic modeling, Thermal conductivity