Hooman Fallah et al., J Comput Sci Syst Biol 2015, 8:3
http://dx.doi.org/10.4172/0974-7230.S1.012

OMICS International
conferenceseries.com

International Conference on
Big Data Analysis and Data Mining
May 04-05, 2015 Kentucky, USA

Low salinity water injection with purpose of wettability alteration for EOR operations

Hooman Fallah, Abdolreza Dabiri and Saeed Surani
Islamic Azad University, Iran

Low salinity water (LSW) has been proved to be efficacious because of low cost and ability to change properties of reservoir rock and fluids and their interactions toward desired condition. These include change in capillary pressure, interfacial tension, wettability tendency, permeability and pore sizing. This enhanced oil recovery (EOR) method has been studied so far for evaluating capability of inducing recent mentioned parameters and the mechanisms of its operation and applicability in different fields. This study investigates the effect of three types of salts (including Ca2+, Mg2+, and SO42-) on wettability and final oil recovery in laboratory.

Biography

Hooman Fallah is a Lecturer of Islamic Azad University with Master's degree in Petroleum Engineering. His research area is mathematical modeling of petroleum processes, numerical simulation and mathematical analysis. He has made a mathematical simulation for particulate flow in porous media. He also proposed a mathematical approach for transition time, numerical simulation for transition time. He also investigated the size exclusion in filtration process mathematically and formation damages due to mud filtration.

hooman.fallah2@gmail.com

Notes: