Mathematical Modeling of Pressure and Temperature Behavior in Acidification

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Most carbonate reservoirs are naturally fractured and the fractures exist at all scales, from microscopic fissures to kilometer sized structures called fracture swarms or corridors, creating complex flow networks in the reservoir. Acid treatments, specially carbonate acid stimulation, are one of the most important processes and consist of acid injection into the formation at a designed flowrate and below the fracturing pressure to improve the production or injection flow capacity of the well. The main objective of this work is the mathematical modeling of non-isothermal acid injection in oil reservoirs.

Palavras-chave:Flow in porous media