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through Existing Reservoir Simulator

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## Abstract

Complex heterogeneous reservoir exhibits special characteristics, such as multiple storage types, wide range of storage sizes, complicated storage combinations, and various flow behaviors. Multi-continuum model is needed to rigorously simulate this type of reservoir. However most reservoir simulators use dual porous media model, and the theory of the models is mainly focused on matrix-fracture system. Therefore when porous media is more complex than matrix-fracture system, such software cannot be utilized to simulate these reservoirs directly. Some studies have been proposed to solve the problem, but most of them are either at the theoretical level or cannot be used widely in the simulation softwares.

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