Apparent Transmissibility

The value of transmissibility in constant properties homogeneous 2D radial pressure diffusion model with the same drawdown pressure response as the actual drawdown.

Motivation

Reservoir properties around and between the wells are varying and may lead to substantial variation of transmissibility.

Using equivalent constant properties homogeneous 2D radial pressure diffusion model helps characterising the massive volume of varying properties reservoir with a single number.

This type of apparent estimations helps pressure modelling, production forecasts and 3D model calibration.

The important example of apparent transmissibility are: Apparent well drainage transmissibility and Apparent cross-well transmissibility