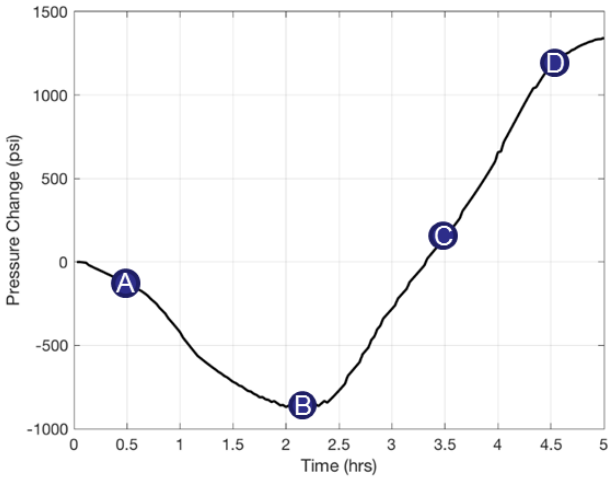
PIT Pressure Interference Testing

PIT

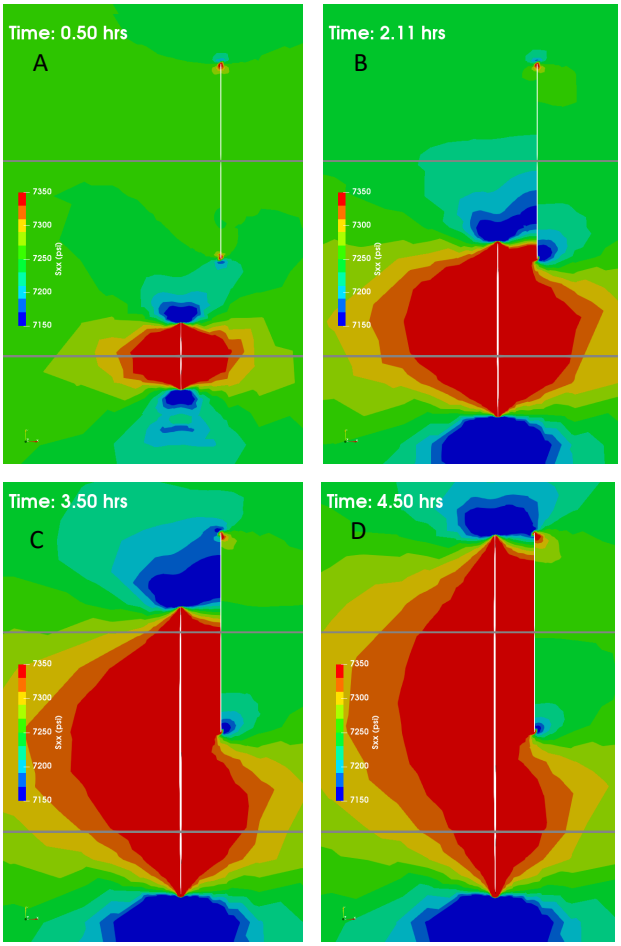
What is PIT?

Pressure Interference Testing (PIT) is a simulator designed to diagnose fracture geometry and estimate reservoir permeability. PIT provides an estimate of fracture dimensions by analyzing the pressure response at the monitoring well, due to fracture propagation at the treatment (source) well.



Motivation behind PIT

Understanding the connectivity between fractured horizontal wells is important in case of infill well drilling as well as parent-child well pairs. Pressure interference tests involve two or more fractured horizontal wells (source and monitor wells) and provide information about hydraulic fracture connectivity (or lack thereof) between the wells. PIT allows operators to make quantitative estimates of fracture geometry relatively inexpensively.



Unique Capabilities

- ◊ Hydraulic fractures are modeled as open and compliant discontinuities in the reservoir.
- ◊ Dynamic Fracture Propagation is simulated at the treatment well.
- ◊ Pressure response is observed inside a propped fracture at the monitor well.
- ◊ Stress shadow effects of the propagating fracture on the propped monitor fracture are accurately captured.

About us

PIT has been developed by Puneet Seth, Ashish Kumar, Ajeetha Kamilla, and Prof. Mukul M. Sharma.

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