

Reservoir Engineering based Hydraulic Fracturing Optimization (Chalk Bluff)



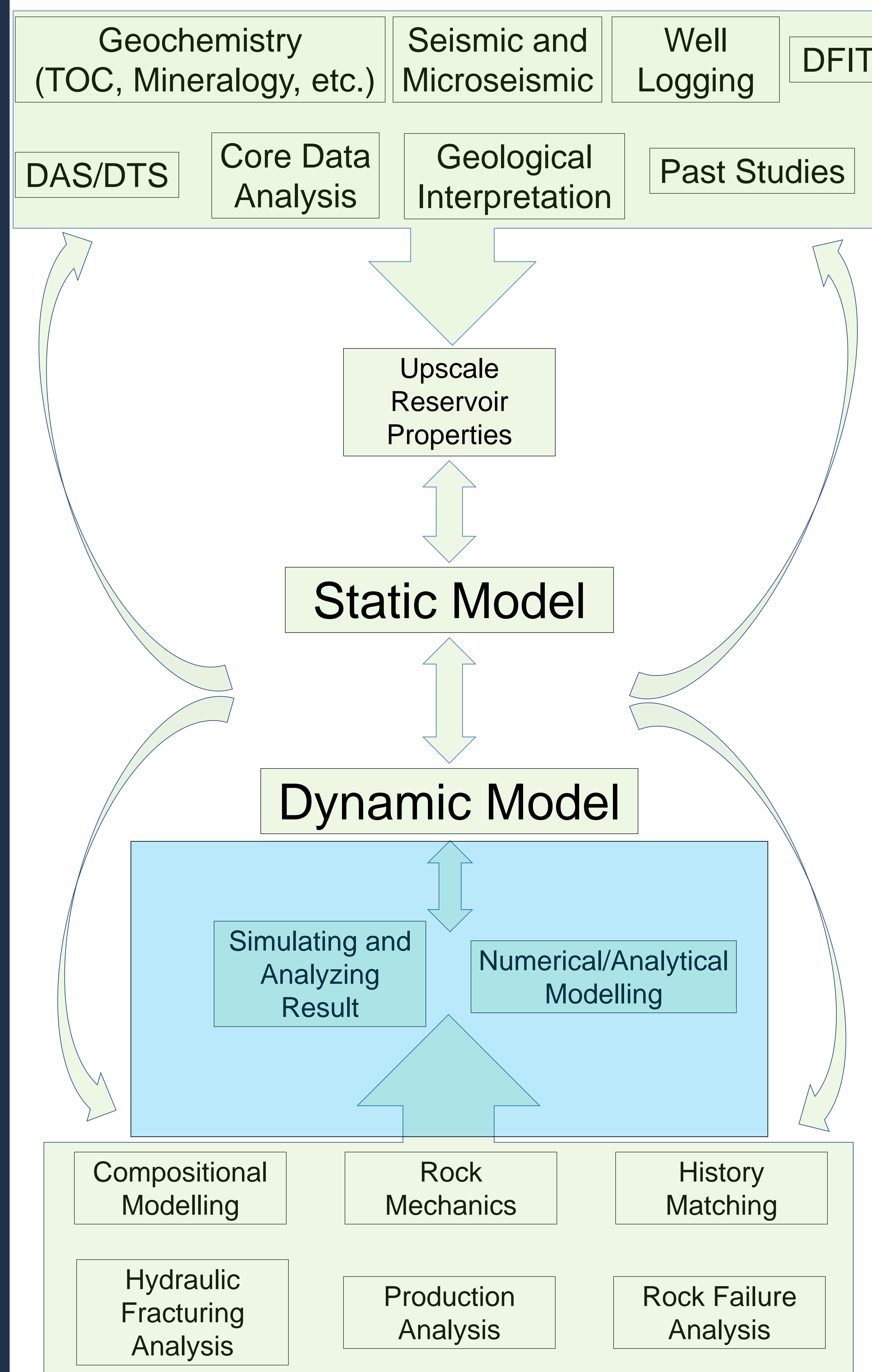
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Objectives

Chalk Bluff Integrated Project:

- Understand the main drivers behind horizontal connectivity
- Incorporate the influence of legacy wells on current wells
- Model and optimize stage/cluster and well spacing
- Determine potential of EOR methods for the future of the project

Proposed General Workflow



Data (1st Stage)

PVT/Geochemistry:

- Analyze fluids and reservoir properties

DFIT:

- Analyze pressure fall-off and fracturing Job

Pumping Schedule/Flow-back:

- Evaluate the effects of different completion methods on fracturing
- Work closely with geophysics team to gain more insight and exchange information

Future Work

- Determine productive zone thicknesses and reservoir properties as accurate as possible
- Get more insight about the flow of fluids in the units of interest
- Perform mathematical analysis to optimize wells/stage and cluster spacing
- Determine the effect of different hydraulic fracturing on the fracture geometry
- Evaluate the effect of regional stresses on fracturing jobs

Planned Study Area

Some DFIT data is available outside and inside the boundaries.

