

Lessons Learned

- **Reservoir simulation does not need to take several months or years to add value. Simple models can generate significant value with a few days of technical work.**
- **P/Z volumetric analysis applied to a compartmentalized gas reservoir cannot accurately predict pre-drill reserve potential, especially in low-permeability gas reservoirs.**
- **Flowing pressure data is readily available as commercial data and can be used to determine drainage areas in gas wells, when accurate static pressure data is unavailable.**
- **Simple numerical simulation models:**
 - **Work well in an environment where there is sparse reservoir and temporal data.**
 - **Can be used routinely in daily reservoir engineering tasks and problem solving by ALL reservoir engineers.**
 - **Work nicely in an environment where rig moves take place every two to three weeks.**
- **Inflection points on seismic events can sometimes indicate faulting, even if no offset is observed.**
- **Sealing faults can be breached by fracture stimulations.**

Best Practices

- **Start simple – add complexity over time only if necessary. Simple models work.**
- **Sparse data does not need to inhibit the use of reservoir simulation.**
- **Flowing tubing pressure (converted to bottom hole flowing pressure) can be used for the pressure match when other reservoir pressure measurements are unavailable.**