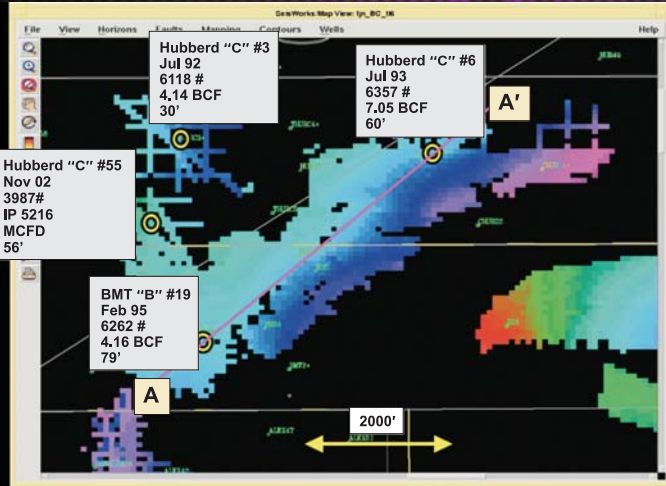


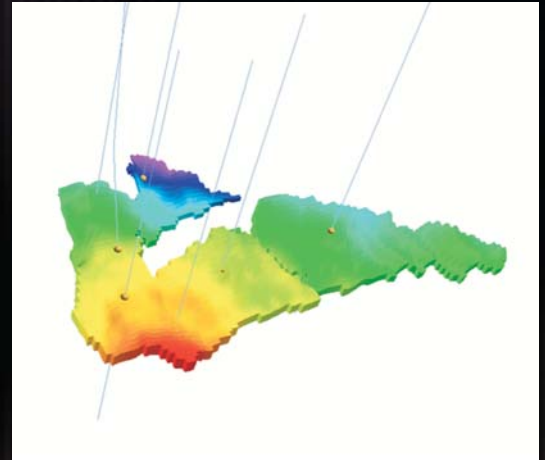
Case Study #1

A 3-D seismic interpretation of the fault block described on the previous panel was converted to a GOCAD model and assigned reservoir properties. A 3-D cellular model was then constructed. History matching of the actual well performance to the numerical simulation indicated that internal boundaries were required to adequately explain the pressure and rate performance of the wells. This caused the seismic interpreter to revise the 3-D model.

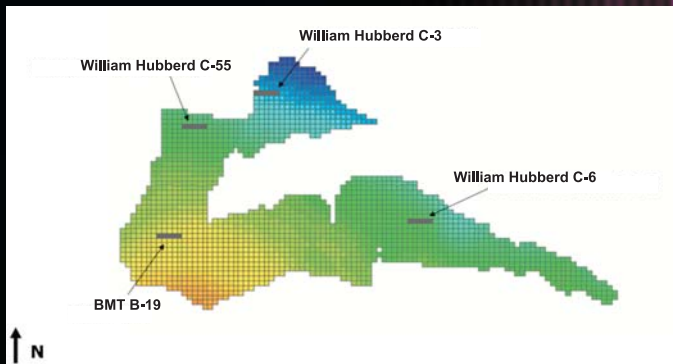
1 Initial Structural Interpretation



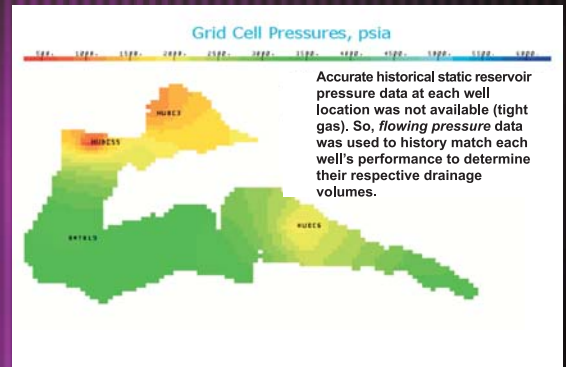
2 3-D Earth Model Created from Seismic Interpretation; Populate Model with Reservoir Parameters (h , ϕ , S_w , k)



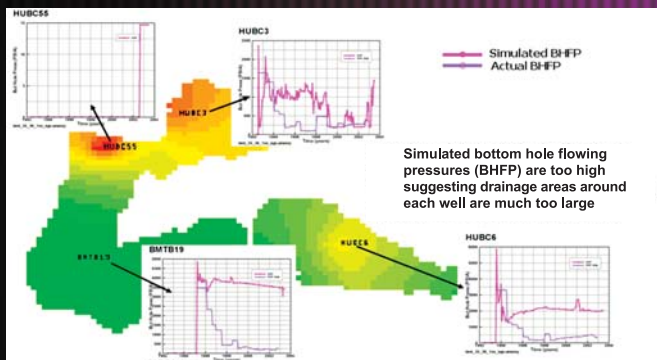
3 Simple Numerical Simulation Model Grid



4 Numerical Simulation History Match



5 Numerical Simulation "First Pass" Results: No Faulting



6 Revised Structural Interpretation After History Matching (new faults added)

