

*Irving, A., Breton, P., & Guillon. 2007.*

Reservoir fault properties estimated using seismic shale gouge ratio.

*EAGE Conference, London, 11-14 June.*

#### ABSTRACT

Fault properties estimated using lithoseismic Vclay are compared to those derived from a classical geomodelling approach with reservoir NTG. Throw and Shale Gouge Ratio (SGR) calculation at the seismic scale can provide a significant improvement in resolution and accuracy over the geomodelling approach. Fault properties included in numerical reservoir simulations give a qualitative match to observed production and time-lapse seismic effects in an offshore turbidite field. Errors introduced during upscaling of seismic properties into 'stairstep' faulted grids can be overcome using a virtual deformation of the grid geometry. This method could be extended to upscaling fault permeability estimated from seismic SGR.