



## Borehole Imaging Services

### Deep Water Reservoir Geometry

**Sand-facies analysis helps predict reservoir geometry and extend**

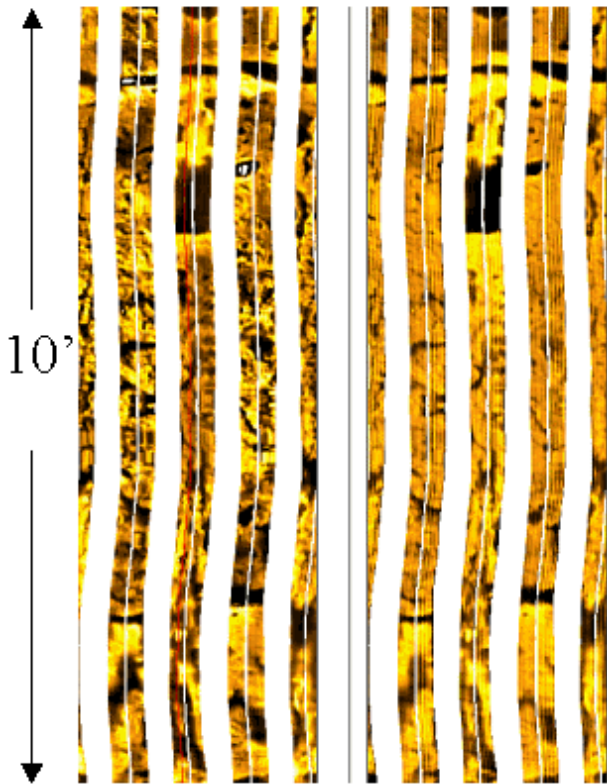


Image 1

*Image 1:* Massive sandstone with soft sediment deformation and sheared shale clasts.

Interpreted as a debris flow deposit with limited lateral extend.

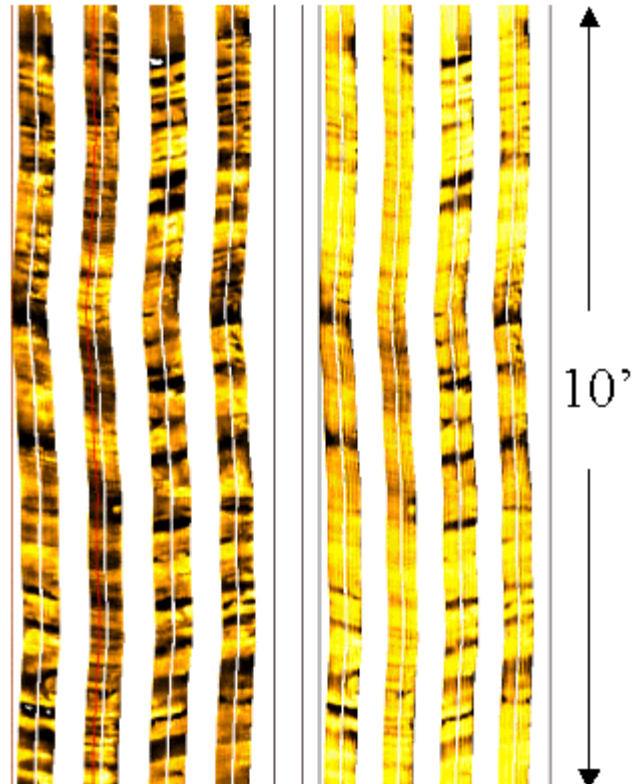


Image 2

*Image 2:* Laminated thin sands separated by thin shale breaks.

Interpreted as an overbank deposit with great lateral continuity.



## Borehole Imaging Services

### Reservoir Compartmentalization

**Fractures and faults can create permeability baffles that separate reservoir compartments**

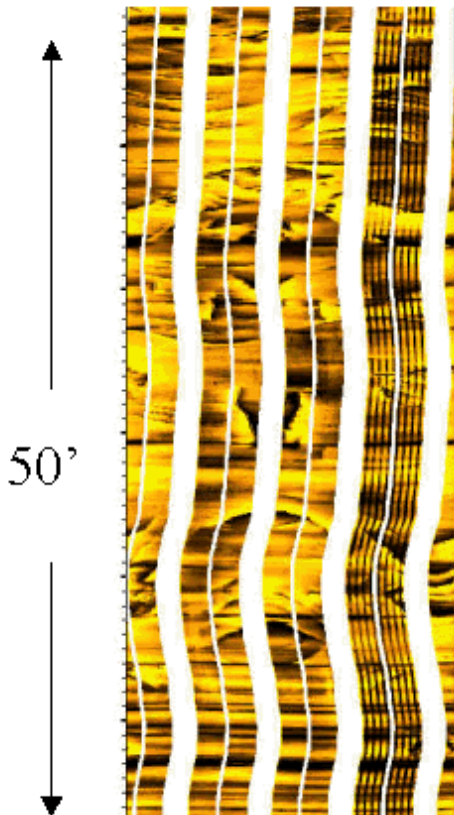


Image 1

*Image 1:* Limestone reservoir with a large number of fractures and small faults that based on their resistive character are filled with calcite cement.

This fracture swarm creates a barrier to horizontal flow, effectively breaking the reservoir up into numerous smaller compartments.

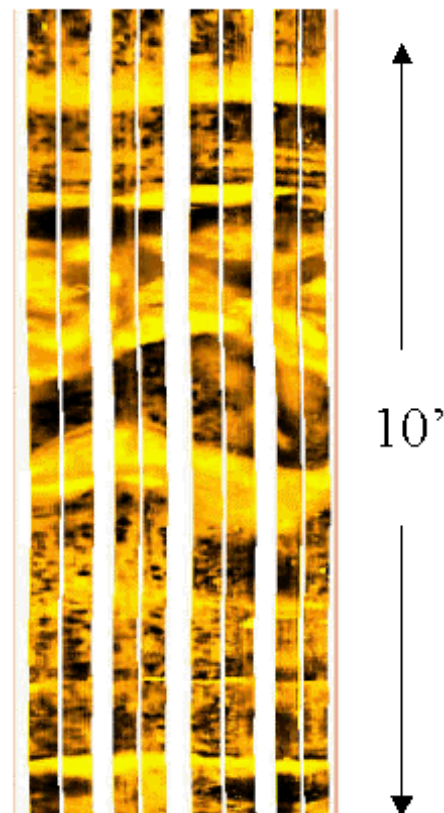


Image 2

*Image 2:* Deep water sands and shales contain a high angle, mixed resistive and conductive, fault zone.

In laminated reservoirs with a high shale volume, even small fault offsets may result in the development of a clay smear, which effectively seals the reservoir compartments.