

Recognizing the Structural Control of Sedimentation in Clastic Sequences; From Correlation Problem to Geological Solution

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Abstract/Excerpt

Understanding that the sedimentation has been structurally controlled can be vital in establishing a reliable geological model, estimating the reserves properly or choosing the best drilling locations. This presentation will detail a series of methods to outline sedimentary patterns linked to tectonic control of sedimentation in clastic sequences. Tools and rules will be described that deal with differentiating syn-sedimentary control of sedimentation from post sedimentation tectonic overprint. The first task is to recognize structural alteration post sedimentation using wireline logs (Fig.1) or making use of other observations (thicknesses, facies, sedimentary patterns...).

Field examples from Europe, South America and Asia will show that unconformities and other structural elements can be overlooked if a reference well is used to establish the stratigraphy (Fig.2), an otherwise excellent and recommended practice.