Integration of Conventional Petrophysical Interpretation and Borehole Images

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Abstract/Excerpt

Crocker Data Processing has worked on improving net to gross and volumetric computations in thin bed reservoirs and has an innovative approach that combines borehole image data and conventional openhole data. A particular problem with openhole image data is the imposition of its character on conventional resolution data produces an answer that whilst close, does not honour the resolution of the conventional data. The approach adopted by Crocker Data Processing involves independent computation of the resistivity, total or effective porosity and Vclay directly from image data, calibrating these results against openhole data. The results produce both independent Imagelog based petrophysical volumes as well as input that is high resolution and can be used in a deterministic petrophysical model. This resolution improvement allows heterogeneous thin bed reservoirs to have better volumetric parameters produced for incorporation in reservoir modelling and reserves calculation.