

Reservoir Characterization of the Pre-Cenomanian Sandstone: Central Sinai, Egypt

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Abstract : Fifty-one sandstone core samples were obtained from the wadi Saal area. They belong to the Pre-Cenomanian age. These samples were subjected to various laboratory measurements such as density, porosity, permeability, electrical resistivity, grain size analysis and ultrasonic wave velocity. The parameters describing reservoir properties are outlined. The packing index, reservoir quality index, flow zone indicator and pore throat radius (R35 and R36) were calculated. The obtained interrelationships among these parameters allow improving petrophysical knowledge about the Pre-Cenomanian reservoir information. The obtained rock physics models could be employed with some precautions to the subsurface existences of the Pre-Cenomanian sandstone reservoirs, especially in the surrounding areas.

Keywords : resevoir sandstone, Egypt, Sinai, permeability

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