
Tight Gas and Low Resistivity Reservoir Sand Characteristics and Properties in the Burgos Basin, Mexico

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ABSTRACT

Burgos Basin covers an area of 50,000 km², is located in the west side of Gulf of Mexico and the north east of Republica Mexicana, mainly in Tamaulipas and Nuevo León states. In the past years, Burgos Basin has become one the most important non associated gas producers. The objective of this paper shows tight gas and low resistivity reservoirs sands characteristic and properties in the Burgos Basin. These reservoirs are different from conventional reservoirs, and is complicated to estimate the set of petrophysical properties (porosity, water saturation, etc.) on a regular basis. Over 100 reservoirs have been studied and only the most representative have been selected, considering their porosity, permeability, low resistivity, thickness, productivity, etc. The petrophysical properties, sedimentary environment, rock quality, and mineralogy of these producer sands, are described in the present paper, based in the study of some plug cores, cross-plots, petrography images, and scanning electronic microscope (SEM) images.