Abstract

Nowadays the main challenge is to obtain a method for the estimation of key reservoir parameters with the lowest possible estimation error. Accurate reservoir characterization requires the integration of core and log data to understand the variation in hydraulic properties such as porosity, permeability and capillary pressure. Time-lapse seismic can be used as an important tool in reservoir characterization, monitoring and management. Reservoir parameters are converted to seismic parameters by using the rock physics models. This paper presents an analysis and explanation of an approach of developing rock physics model, and explains how the input data can be obtained to the model. And also this study presents an intelligence approach for the oil reservoir characterization by using seismic elastic properties and rock physics model together with minimum estimation error.

References

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