Logging Evaluation for Source Rock in Rakhine Basin

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Abstract

The Rakhine basin is located in the northwest of the Bengal bay. Affected by subduction collision between the India plate and Eurasian plate, the structural deformations are more and more intense from sea to land. The research area is located in the central flat structure belt. Through years of petroleum exploration, the gas fields Shwe and Mya have been discovered, which confirmed that the geological conditions for hydrocarbon is good. However, the quality, the abundance and the development layers of hydrocarbon source rock do not have a unanimous view, and it seriously restricts the petroleum exploration. Hydrocarbon source rocks controls the distribution of oil and gas, how to rapidly and accurately identify hydrocarbon source rock has been a research hot spot. Although core sample analysis can provide accurate geochemical indicators for hydrocarbon source rock, limited core samples and the analyzing funds constrained the exploration, and it is difficult to obtain continuous analysis data by single well. Logging evaluation for source rock is an economic and efficient method especially when the core data is short. Logging data is continuous and accurate and has high vertical resolution. Through well logging curves, which are sensitive for source rock, the vertical continuous data can be obtained from the analysis data after calibration. Logging data can remedy the short of core samples and it is economic and efficient.