# Karakteristik Reservoir pada Formasi Tomori, Blok "X", Cekungan Banggai, Sulawesi Tengah = Reservoir Characteristics in The Tomori Formation, Block "X", Banggai Basin, Central Sulawesi

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Abstrak

Daerah penelitian terletak di Formasi Tomori Blok “X” Cekungan Banggai yang berada di wilayah Kabupaten Banggai, Provinsi Sulawesi Tengah. Formasi Tomori terendapkan pada masa Miosen Awal hingga Miosen Tengah dan diinterpretasikan dapat menjadi reservoir hidrokarbon di Cekungan Banggai. Formasi ini disusun oleh dominan batugamping bioklastik, terbentuk saat terjadinya proses syn-rift ketika aktivitas tektonik relatif tenang. Penelitian ini bertujuan untuk mengetahui karakteristik reservoir dengan mengevaluasi sifat-sifat petrofisika batuan yang terdapat di Formasi Tomori, Cekungan Banggai berdasarkan data log sumur R3 dan R2ST. Sifat-sifat petrofisika yang dihasilkan dari perhitungan ketiga log sumur, seperti nilai volume shale, porositas, dan saturasi air digunakan untuk rekomendasi reservoir yang didukung oleh data petrografi, serta data mudlog guna mengetahui jenis litologi di zona reservoir. Berdasarkan hasil yang diperoleh, Formasi Tomori tersusun atas batugamping mudstone, batugamping wackestone, dan batugamping packstone yang di beberapa interval ditemukan sisipan batubara dan batulempung. Hasil perhitungan petrofisika pada zona reservoir Formasi Tomori didapatkan nilai volume shale berkisar 38%-40%, porositas efektif 7%-0%, dan saturasi air 23%-34%.
.....The research area is located in the Tomori Formation Block "X" of the Banggai Basin in the Banggai Regency, Central Sulawesi Province. The Tomori Formation was deposited during the Early Miocene to Middle Miocene and is interpreted to be a hydrocarbon reservoir in the Banggai Basin. This formation is composed of predominantly bioclastic limestones, formed during syn-rift processes when tectonic activity is relatively calm. This study aims to determine the characteristics of the reservoir by evaluating the petrophysical properties of the rocks in the Tomori Formation, Banggai Basin based on well log data R3 and R2ST. Petrophysical properties resulting from the calculation of the three well logs, such as shale volume, porosity, and water saturation values are used for reservoir recommendations supported by petrographic data, as well as mudlog data to determine the type of lithology in the reservoir zone. Based on the results obtained, the Tomori Formation is composed of mudstone limestone, wackestone limestone, and packstone limestone which at some intervals was found intercalated with coal and claystone. The results of petrophysics calculations in the reservoir zone of the Tomori Formation obtained shale volume values ranging from 38%-40%, effective porosity 7%-10%, and water saturation 23%-34%.