

Intisari

Formasi Lemat merupakan formasi tertua yang berada di Cekungan Sumatera Selatan. Oleh karena itu jarang dilakukan eksplorasi di formasi tersebut karena letaknya yang sangat dalam. Tapi setelah dilakukan beberapa penelitian di beberapa sumur (PW-A4, PW-B1 dan PW-E3) yang berada di Lapangan Togaten, Sumatera Selatan ditemukan potensi hidrokarbon yang cukup bagus. Tapi penelitian yang lebih lanjut belum dilakukan. Pada penelitian ini akan membahas pola persebaran dan orientasi batupasir yang berada pada Formasi Lemat di Lapangan Togaten menggunakan *Cross-corellation* antara atribut seismik dengan data petrofisika (porositas efektif, saturasi air, dan *volume shale*) dari ketiga sumur. Berdasarkan penelitian yang telah dibuat menghasilkan kesimpulan Pola persebaran batupasir pada Formasi Lemat di Lapangan Togaten terletak dibagian barat hingga selatan, dikarenakan perkembangan cekungan berada di barat daya lapangan. Pola persebaran batupasir pada Formasi Lemat di Lapangan Togaten berupa sungai *meandering*. Pola persebaran batupasir pada Formasi Lemat di Lapangan Togaten berorientasi relatif utara selatan. Lokasi eksplorasi atau pengembangan lanjut berada dibagian barat daya-selatan dan timur-laut Lapangan Togaten, berdasarkan porositas yang paling besar.

Kata kunci : Formasi Lemat, atribut amplitudo, persebaran batupasir

Abstract

Lemat Formation is the oldest formation located in the South Sumatra Basin. So very rare exploration in these formation because it is very deep. But having done some research on some of the wells (PW-A4, B1-PW and PW-E3) in Togaten Field, South Sumatra found a pretty good hydrocarbon potential. But further study has not been conducted. This research will discuss the distribution pattern and orientation of sandstones on Lemat Formation in the Field Togaten using Cross-corellation between seismic attribute vs petrophysical data (effective porosity, water saturation and shale volume) of three wells. After obtained the distribution of sandstones can be used to determine the location of further drilling. Based on research that has been made to the conclusion distribution of sandstone on Lemat Formation in Togaten Field is located at the west to the south, due to the development of the basin is located in the southwest field. Distribution of sandstone on Lemat Formation is meandering river. Distribution of sandstone on Lemat Formation in Togaten Field oriented relative north-south. Location further exploration or development at the southwest, south and northeast Togaten Field, based on the greatest porosity

Key word : Lemat Formation, amplitude attribute, sandstone distribution