

ABSTRAK

Formasi Talang Akar, Lapangan “H”, termasuk dalam Sub-Cekungan Palembang Selatan, Cekungan Sumatra Selatan yang berada pada Blok Pasemah. Cekungan Sumatra Selatan ini merupakan salah satu cekungan yang cukup prospek dalam proses eksplorasi hidrokarbon yang berupa minyak maupun gas. Berdasarkan hal tersebut, dilakukan suatu penelitian pada Formasi Talang Akar, Lapangan “H”, untuk mengetahui sikuen stratigrafi pada area penelitian dan melakukan pemodelan dari lingkungan pengendapan pada lokasi penelitian. Penelitian dilakukan dengan melakukan analisis persebaran fasies dan interpretasi lingkungan pengendapan dengan menggunakan data sumur yang meliputi data *mud log* dan data log sumur untuk mengetahui kondisi paleogeografi pada daerah penelitian. Berdasarkan analisis dan pengolahan data yang dilakukan, diketahui bahwa formasi pada daerah penelitian tersusun atas batupasir, *shale*, batubara, dan *organic shale* yang terbentuk pada umur Oligosen Akhir sampai Miosen Awal. Daerah penelitian ini terdiri atas 2 sikuen yang meliputi *Maximum flooding surface 1* (MFS 1), *Sequence boundary 1* (SB 1), *Transgressive surface 1* (TS 1), *Maximum flooding surface 2* (MFS 2), *Sequence boundary 3* (SB 3), *Transgressive surface 2* (TS 2), *Maximum flooding surface 3* (MFS 3), dan *Sequence boundary 3* (SB 3). Berdasarkan interpretasi yang dilakukan, fasies pengendapan daerah penelitian adalah *tidal channel*, *tidal meander channel*, *tidal sand bar*, *sand flat*, *mixed flat*, *mud flat*, *sandsheet core*, *sand sheet front* dan *sandsheet margin* yang termasuk ke dalam lingkungan pengendapan estuari. Pada daerah penelitian, berkembang struktur geologi berupa sesar naik berarah relatif barat laut-tenggara yang terbentuk saat fase kompresi pada megasikuen *syn-orogenic/inversion* yang terjadi pada Pliosen–Pleistosen dan sesar normal yang berarah relatif barat laut-tenggara yang terbentuk pada saat fase ekstensional pada megasikuen *syn-rift* yang terjadi pada Oligosen Akhir-Miosen Awal.

Kata Kunci: Cekungan Sumatra Selatan, Fasies Pengendapan, Formasi Talang Akar, Paleogeografi, Sikuen Stratigrafi

ABSTRACT

The Talang Akar Formation, Field "H", is included in the South Palembang Sub-Basin, South Sumatra Basin which is in the Pasemah Block. The South Sumatra Basin is one of the basins that is quite promising in the process of exploring hydrocarbons in the form of oil and gas. Based on this, research was carried out on the Talang Akar Formation, Field "H", to determine the stratigraphic sequence in the research area and to carry out modeling of the depositional environment at the research location. The research was carried out by analyzing the distribution of facies and interpreting the depositional environment using well data which includes mud log data and well log data to determine the paleogeographic conditions in the research area. Based on the analysis and data processing carried out, it is known that the formations in the research area are composed of sandstone, shale, coal and organic shale which were formed in the Late Oligocene to Early Miocene age. This research area consists of 2 sequences which include Maximum flooding surface 1 (MFS 1), Sequence boundary 1 (SB 1), Transgressive surface 1 (TS 1), Maximum flooding surface 2 (MFS 2), Sequence boundary 3 (SB 3), Transgressive surface 2 (TS 2), Maximum flooding surface 3 (MFS 3), and Sequence boundary 3 (SB 3). Based on the interpretation carried out, the depositional facies of the research area are tidal channel, tidal meander channel, tidal sand bar, sand flat, mixed flat, mud flat, sandsheet core, sand sheet front and sandsheet margin which are included in the estuarine depositional environment. In the research area, geological structures have developed in the form of thrust faults trending relatively northwest-southeast which were formed during the compression phase of the syn-orogenic/inversion megasystem that occurred in the Pliocene–Pleistocene and normal faults trending relatively northwest-southeast which were formed during the extensional phase in the syn-rift megasequence that occurred in the Late Oligocene-Early Miocene.

Keywords: *South Sumatra Basin, Depositional Facies, Talang Akar Formation, Paleogeography, Stratigraphic Sequence*