INTISARI

Lapangan “RA” berada di wilayah Cekungan Asri, lepas pantai Sumatra Tenggara yang menjadi salah satu target pengembangan eksplorasi bawah permukaan. Penelitian dilakukan dengan tujuan untuk mengetahui fasies dan lingkungan pengendapan dan mengidentifikasi persebaran lingkungan pengendapan tiap sikuensial waktu dengan menggunakan data log sumur meliputi *wireline log* (*gamma ray, resistivity, density,* dan *neutron*) dan *mud log,* serta data pendukung (deskripsi *side wall core* dan palinologi). Metode yang digunakan adalah analisis elektrofasies untuk mengetahui fasies dan lingkungan pengendapan serta analisis sikuen stratigrafi untuk mengetahui perkembangan fasies secara vertikal dan lateral yang disajikan dalam peta persebaran lingkungan pengendapan. Berdasarkan analisis elektrofasies, interval penelitian terdiri atas lima fasies, yaitu fasies batupasir, serpih, perselingan batupasir dan serpih, perselingan batupasir dan batubara, dan batubara. Fasies pada daerah penelitian membentuk asosiasi fasies meliputi *fluvial channel, floodplain, swamp, distributary channel*, *interdistributary bay, mouth bar,* dan *delta front mud.* Asosiasi fasies yang hadir terendapkan pada lingkungan pengendapan fluvial dan delta meliputi fluvial, *upper delta plain, lower delta plain,* dan *delta front.* Berdasarkan analisis sikuen stratigrafi, berkembang tujuh *marker* stratigrafi dan interval berkembang pada *lowstand systems tract* dan *transgressive systems tract.* Persebaran lingkungan pengendapan di daerah penelitian diawali oleh hadirnya asosiasi fasies meliputi *fluvial channel, floodplain,* dan *swamp* yang mencirikan lingkungan pengendapan fluvial dan secara gradual asosiasi fasies yang mencirikan pengendapan di lingkungan transisi meliputi *distributary channel*, *interdistributary bay*, *mouth bar*, dan *delta front mud* hadir mencirikan lingkungan pengendapan delta.

Kata kunci: Anggota Gita, Cekungan Asri, Elektrofasies, Sikuen Stratigrafi, Talang Akar

ABSTRACT

The "RA" Field, located in the Asri Basin, offshore Southeast Sumatra, is one of the targets for subsurface exploration. This study aims to identify facies and depositional environments in the "RA" field using well log data consisting of wireline logs (gamma ray, resistivity, density, and neutron) and mud log, supported by side wall core descriptions and palynology data. The method used for this study includes electrofacies analysis to interpret facies and depositional environments and sequence stratigraphy analysis to identify the vertical and lateral facies development, presented as depositional environment maps. Based on the electrofacies analysis, the study interval is made up of five facies, sandstone, shale, interbedded sandstone and shale, interbedded sandstone and coal, and coal. These facies form facies associations including fluvial channel, floodplain, swamp, distributary channel, interdistributary bay, mouth bar, and delta front mud. These facies associations are deposited in fluvial and delta environments including fluvial, upper delta plain, lower delta plain, dan delta front. Based on sequence stratigraphy analysis, there are seven stratigraphic markers and the study interval is developed in lowstand systems tract and transgressive systems tract. The depositional environment began with fluvial facies associations including fluvial channel, floodplain, and swamp, indicating fluvial depositional environment. The depositional environment gradually changed into transitional facies associations such as distributary channel, interdistributary bay, mouth bar, and delta front mud that indicates delta environment.

Keywords: Asri basin, Electrofacies, Gita Member, Sequence Stratigraphy, Talang Akar