

## ABSTRAK

### STUDI PALEO GEOGRAFI PADA FORMASI TALANG AKAR DAN FORMASI BATURAJA BLOK ANGGURSI, CEKUNGAN JAWA BARAT UTARA

**Marcelinus Febbi Arismara**

Daerah penelitian termasuk ke dalam Blok Anggursi, Cekungan Jawa Barat Utara. Tujuan dari penelitian ini adalah untuk menentukan litofasies dan stratigrafi sikuen pada Formasi Talang Akar dan Formasi Baturaja dan untuk menentukan kondisi paleogeografi daerah penelitian melalui metode ABC. Metode ABC merupakan metode penentuan paleogeografi menggunakan data seismik berdasarkan atas 3 komponen, yaitu A (batas atas seismik), B (batas bawah seismik), dan C (pola internal refleksi). Data utama yang digunakan dalam penelitian adalah data *wireline log*, *mudlog*, *conventional core*, *sidewall core*, dan seismik 2D. Data *wireline log*, *mudlog*, *conventional core*, dan *sidewall core* digunakan dalam analisis litofasies dan stratigrafi sikuen daerah penelitian, sedangkan data seismik 2D digunakan dalam analisis kondisi paleogeografi daerah penelitian. Berdasarkan analisis data didapatkan sebanyak 20 litofasies dan 7 fasies pengendapan yang berkembang pada daerah penelitian dan dihasilkan peta paleogeografi daerah penelitian pada tiap *sequence boundary* yang merepresentasikan sikuen pengendapan di bawahnya. Formasi Talang Akar pada daerah penelitian terdiri atas fasies *tidal platform*, *lagoon – mud mounds*, *sand shoal – foreslope*, dan *toe of slope – open shelf*. Fasies – fasies tersebut menunjukkan bahwa Formasi Talang Akar terendapkan pada lingkungan laut dangkal (*shoal – rimmed platform*). Formasi Baturaja pada daerah penelitian terdiri atas fasies *restricted platform*, *open platform*, *winnowed platform sand edge – foreslope*, dan *toe of slope – open shelf* yang menunjukkan bahwa Formasi Baturaja terendapkan pada lingkungan laut dangkal (*carbonate platform*).

Kata kunci : Kondisi Paleogeografi, Metode ABC, Stratigrafi Sikuen, Litofasies, Formasi Talang Akar, Formasi Baturaja, Cekungan Jawa Barat Utara

## **ABSTRACT**

### ***THE STUDY OF PALEOGRAPHY IN THE TALANG AKAR FORMATION AND THE BATURAJA FORMATION BLOK ANGGURSI, OFFSHORE NORTHWEST JAVA BASIN***

*by Marcelinus Febbi Arismara*

*The research area is located in Blok Anggursi, Offshore Northwest Java Basin. The purpose of this research is to identify lithofacies and sedimentary sequence of Talang Akar Formation and Baturaja Formation and to determine the paleogeographic condition of the research area using ABC method. ABC method is used to identify paleogeographic condition using seismic 2D based on 3 components, A (upper boundary character), B (lower boundary character), and C (internal reflection pattern). The data is consisted of wireline log, mudlog, conventional core, sidewall core, and seismic 2D. Wireline log data, mudlog, conventional core, and sidewall core are used to analyze lithofacies and sequence stratigraphy of the research area, whilst seismic 2D is used to get the paleogeographic condition of the research area. Based on data analysis, 20 lithofacies and 7 depositional facies are identified and paleogeographic maps in each sequence boundary representating depositional sequence below it are also produced. Talang Akar Formation in this research area is occupied by several depositional facies, which are tidal platform, lagoon – mud mounds, sand shoal – foreslope, and toe of slope – open shelf facies. Those depositional facies show that Talang Akar Formation is deposited in a shallow marine environment (shoal – rimmed platform). Baturaja Formation in this research area is consist of restricted platform, open platform, winnowed platform sand edge – foreslope, dan toe of slope – open shelf facies. Those depositional facies show that Baturaja Formation is deposited in a shallow marine condition (carbonate platform).*

*Keyword : Paleogeographic Condition, ABC Method, Sequence Stratigraphy, Lithofacies, Talang Akar Formation, Baturaja Formation, Offshore Northwest Java Basin*