

SARI

Formasi Talang Akar (TAF) merupakan salah satu reservoir potensial di Sub-cekungan Palembang Selatan. Formasi ini terendapkan pada kisaran lingkungan pengendapan yang cukup luas mulai dari lingkungan fluvial (darat), lingkungan transisi hingga laut dangkal. Oleh karena itu fasies yang berkembang pada Formasi ini cukup bervariasi. Formasi Talang Akar terbentuk selama fase transgresi sehingga perkembangan paleogeografinya sangat dipengaruhi oleh muka air laut.

Salah satu metode penentuan fasies ialah analisa elektrofases yang didasarkan pada pola dari log *gamma ray* yang menunjukkan produk dari lingkungan pengendapan tertentu. Dalam penentuan litologi digunakan data pendukung seperti log *density* dan log *neutron* serta data *cutting* dan data *side wall core*. Identifikasi lingkungan pengendapan didasarkan pada asosiasi fasies dan data biostratigrafi. Untuk mengetahui perkembangan paleogeografi tiap bidang kesamaan waktu dilakukan analisa stratigrafi sikuen. Peta paleogeografi dibuat tiap bidang kesamaan waktu *sequence boundary* dan *maximum flooding surface*. Integrasi antara interpretasi lingkungan pengendapan dan distribusi batupasir dijadikan dasar untuk pembuatan peta paleogeografi. Arah pengendapan sedimen ditentukan berdasarkan peta distribusi batupasir.

Fasies yang berkembang pada daerah penelitian ialah *braided channel facies*, *meandering point bar facies*, *crevasse splay facies*, *flood plain facies*, *distributary channel facies*, *interdistributary channel facies*, *marsh facies*, *mouth bar facies*, *delta front facies*, *prodelta facies* dan *inner shelf facies*. Fasies-fasies tersebut berkembang pada lingkungan fluvial (darat), delta hingga *inner shelf*. Formasi Talang Akar pada daerah penelitian terdiri atas 4 sikuen yaitu sikuen A, sikuen B, sikuen C dan sikuen D. Paleogeografi pada Formasi Talang Akar bagian bawah secara umum berupa lingkungan fluvial (darat) yang semakin ke arah Barat semakin mendalam menjadi lingkungan transisi yaitu delta. Pada Formasi Talang Akar bagian atas, perkembangan paleogeografi menjadi lingkungan *delta plain* yang berangsur-angsur berkembang menjadi *delta front*, *prodelta* hingga *inner shelf*. Arah pengendapan dari Sikuen A berasal dari Tenggara dan Timur Laut. Sikuen C memiliki arah pengendapan sedimen berasal dari Utara dan Timur Laut. Sementara Sikuen B dan sikuen D memiliki arah pengendapan Timur Laut.

Kata kunci : Formasi Talang Akar, fasies, lingkungan pengendapan, paleogeografi, stratigrafi sikuen.

ABSTRACT

Talang Akar Formation (TAF) is potential reservoir in South Palembang sub-basin. This Formation is deposited in various sedimentary environment, from fluvial environment (terrestrial), transition environment until shallow marine environment. Because of various environment, Talang Akar Formation has variation in development of its facies. Talang Akar Formation is deposited during transgression phase, so that its paleogeography development is affected by sea level.

One of facies determination methods is electrofacies analysis, based on gamma ray log curve that indicated product of certain sedimentary environment. Lithology determination use supporting datas such as density log, neutron log, cutting data and side wall core data. Sedimentary environment identification is based on facies association and biostratigraphy data. Paleogeography development each stratigraphic surface is known by sequence stratigraphy analysis. The paleogeographic map is made on each stratigraphic surface such as sequence boundary and maximum flooding surface. Integration between sedimentary environment interpretation and sandstone distribution are used to make paleogeography map. The direction of sedimentation is determined by sandstone distribution map.

Facies that develop in study area are braided channel facies, meandering point bar facies, crevasse splay facies, flood plain facies, distributary channel facies, interdistributary channel facies, marsh facies mouth bar facies, delta front facies, prodelta facies and inner shelf facies. The facies is deposited in fluvial environment (terrestrial), delta until inner shelf. Based on sequence stratigraphic analysis, Talang Akar Formation in this area consist of 4 sequence, sequence A, sequence B, sequence C and sequence D. Paleogeography of lower TAF consist of fluvial environment (terrestrial) in East area and become transition environment (delta) in West area. Paleogeography of upper TAF consist of delta plain, delta front, prodelta, inner shelf. The sedimentation sequence A is from NE and E. Sequence C has direction of sedimentation from N and NE. Sedimentation of sequence B and sequence D arise from NE.

Key Words : *Talang Akar Formation, facies, sedimentary environment, paleogeography, sequence stratigraphy.*