

INTISARI

Anggota Cikarang Formasi Jampang merupakan salah satu formasi penyusun Cekungan Bogor yang memiliki karakteristik endapan aliran gravitasi dan terpreservasi dengan baik. Penelitian terdahulu mengenai anggota ini sangat terbatas dan hanya berfokus pada litologi breksi vulkanik, tuf, dan batupasir tufan. Kenyataannya, terdapat variasi litologi lain dengan kelimpahan karbonat cukup melimpah yang ditemukan di Sungai Tonjong Desa Bojongkalong yang mengindikasikan perbedaan fasies dan mekanisme sedimentasi. Oleh karena itu, dibutuhkan penelitian yang bertujuan untuk mengetahui fasies sedimentasi, lingkungan pengendapan, dan mekanisme sedimentasi. Metode yang digunakan berupa pengukuran stratigrafi yang didukung dengan analisis petrografi untuk mengetahui komposisi mineral secara mikroskopis dan analisis paleontologi untuk mengetahui umur batuan dan paleobatimetri. Penelitian ini menggunakan aspek geometri, litologi, struktur sedimen, dan fosil sebagai parameter pembagian litofasies. Daerah penelitian tersusun oleh 11 litofasies, yaitu *graded gravel* (g₁G), *massive gravel* (m₁G), *massive gravelly sand* (mGyS), *plane-stratified laminated sand-mud couplets* (slSM), *massive gravel-sand couplets* (mGS), *plane-stratified laminated to graded mud-sand couplets* (slgMS), *massive sand* (mS), *plane-stratified gravel-sand couplets* (sGS), *plane-stratified laminated muddy interval sand-mud couplets* (slsSM), *plane-stratified laminated muddy interval mud-sand couplets* (slsMS), dan *slump and slide deposits gravel* (sdG). Lingkungan pengendapan berada pada *inner-middle fan* dengan sub lingkungan pengendapan channel pada umur N7, kemudian mengalami perubahan menjadi *sandy lobes*, dan berubah kembali menjadi *channel* dengan adanya peningkatan muka air laut, kemudian berubah menjadi *silty-sandy distal lobes* dengan adanya fluktuasi kenaikan dan penurunan muka air laut, dan pada N8 berubah menjadi *proximal levee* dengan paleobatimetri yang konstan pada batial tengah-bawah. Lokasi penelitian terendapkan secara umum pada mekanisme pengendapan turbidit akibat dari suatu arus turbulen dengan variasi *cohesive debris flows* (*mudflows*) dan *turbidity currents* yang tersebar pada tiap-tiap asosiasi fasies.

Kata Kunci: Litofasies, Lingkungan Pengendapan, Mekanisme Sedimentasi, Endapan Aliran Gravitasi, Anggota Cikarang Formasi Jampang

ABSTRACT

The Cikarang Member of the Jampang Formation is one of the constituent formations of the Bogor Basin that is characterized by well-preserved gravity flow deposits. Previous research on this member is very limited and only focuses on the lithologies of volcanic breccia, tuff, and tuffaceous sandstone. Even though, there are other lithological variations with high carbonate abundance found in Tonjong River, Bojongkalong Village, indicating different facies and sedimentation mechanisms. Therefore, research is needed that aims to determine the sedimentation facies, depositional environment, and sedimentation mechanism. The method used is stratigraphic measurements supported by petrographic analysis to determine microscopic mineral composition and paleontological analysis to determine the age of rocks and paleobathymetry. This research uses aspects of geometry, lithology, sedimentary structure, and fossils as parameters for the division of lithofacies. The study area is composed by 11 facies, namely graded gravel (g₁G), massive gravel (m₁G), massive gravelly sand (mGyS), plane-stratified laminated sand-mud couplets (slSM), massive gravel-sand couplets (mGS), plane-stratified laminated to graded mud-sand couplets (slgMS), massive sand (mS), plane-stratified gravel-sand couplets (sGS), plane-stratified laminated muddy interval sand-mud couplets (sleSM), plane-stratified laminated muddy interval mud-sand couplets (sleMS), dan slump and slide deposits gravel (sdG). The depositional environment was in the inner-middle fan with a channel sub-environment at the age of N7, then changed to sandy lobes, and changed back to channels with an increase in sea level, then changed to silty-sandy distal lobes with fluctuations in the rise and fall of sea level, and at N8 changed to proximal levee with constant paleobathymetry in the middle-lower bathymetry. The study site was deposited generally on a turbidite deposition mechanism due to a turbulent current with a variety of cohesive debris flows (mudflows) and turbidity currents scattered in each facies association.

Keywords: Lithofacies, Depositional Environment, Sedimentation Mechanism, Gravity Flow Deposition, Cikarang Member of Jampang Formation