

SARI

Lokasi penelitian yang berada di Gunung Kampak, Dukuh Koplak, Desa Krakitan, Kecamatan Bayat, Kabupaten Klaten, Provinsi Jawa Tengah pada koordinat 457779 E –457959 E dan 9143322 N – 9143537 N merupakan bagian dari Formasi Wonosari di Pegunungan Selatan. Singkapan di Gunung Kampak ini memiliki dimensi seluas 150x100 sehingga perubahan fasies secara lateral maupun vertikal terlihat dan dapat diamati. Penelitian dilakukan dengan pengukuran stratigrafi terukur dengan skala 1:10 di lapangan dan analisis laboratorium pada sampel paleontologi dan petrografi. Obyek yang diteliti berupa litofasies, umur dari litofasies, lingkungan pengendapan daerah penelitian, dan dinamika sedimentasi batuan karbonat daerah penelitian. Berdasarkan analisis litofasies, lokasi penelitian terdiri dari 6 fasies yaitu, Fasies *Benthic Foraminiferal Algal Rudstone*, Fasies *Foraminiferal Packstone Sisipan Grainstone*, Fasies *Algal Floatstone*, Fasies perulangan *Foraminiferal Packstone*, Fasies Perulangan *Foraminiferal Floatstone*, dan Fasies *Wackestone*. Berdasarkan kandungan foraminifera pada batuan di lokasi penelitian, umur dari lokasi penelitian berkisar antara N9-N11 dan diendapkan pada lingkungan laut dangkal di bagian *foreslope* zona paparan hingga zona batial. Dinamika sedimentasi pada daerah penelitian menunjukkan perubahan lingkungan pengendapan yang semakin mendalam akibat kenaikan muka air laut relatif sesuai dengan kurva perubahan muka air laut relatif global yang telah ada sebelumnya. Pada energi pengendapan yang sedang hingga tinggi, sedimen diendapkan dengan mekanisme arus traksi, sedangkan pada energi pengendapan yang rendah, sedimen diendapkan dengan mekanisme suspensi. Stratigrafi batugamping Kompleks Gunung Kampak tersusun oleh dua sekuen interpretatif lengkap dan satu sekuen interpretatif tidak lengkap di bagian atas.

Kata kunci: Gunung Kampak, Formasi Wonosari, Litofasies, Sekuen Stratigrafi, Dinamika Sedimentasi

ABSTRACT

The research is located in Mount Kampak, Dukuh Koplak, Krakitan Village, Bayat District, Klaten Regency, Central Java Province at coordinates 457779 E – 457959 E and 9143322 N - 9143537 N interpreted as part of the Wonosari Formation in the Southern Mountains. This outcrop in Gunung Kampak lays in 150x100 m width area so that lateral and vertical facies changes can be observed. The study was conducted with measured stratigraphic measurements with a scale of 1:10 in the field and laboratory analysis on paleontological and petrographic samples. The object under study was in the form of lithofacies, age of lithofacies, deposition environment, and sedimentation dynamics of the carbonate rocks of the study area. Based on the lithofacial analysis, the study location consisted of 7 facies, following, Benthic Foraminiferal Algal Rudstone facies, Foraminiferal Packstone facies, Grainstone facies, Algal Floatstone facies, Stacked Foraminiferal Packstone facies, Stacked Foraminiferal Floatstone facies, and Wackestone facies. Based on the foraminifera composition found in rocks at the study site, the ages of the study sites ranged from N9-N11 and were deposited in the shallow marine environment in the foreslope of the middle shelf to the lower bathyal zone. Sedimentation dynamics in the study area show changes in the deposition environment that are deeper-water upward due to sea level rise relative to the relative global sea level changes curves that have existed before. In moderate to high sedimentary energy, the sediment is deposited with a traction flow mechanism, whereas in low deposition energy, the sediment is deposited by a suspension mechanism. The Gunung Kampak Limestone Complex stratigraphy is composed of two complete interpretive sequences and an incomplete interpretative sequence at the top.

Keywords: Mount Kampak, Wonosari Formation, Lithofacies, Stratigraphic Sequences, Sedimentation Dynamics