

SARI

Di daerah Krakitan, Desa Semin, Gunungkidul, DIY ditemukan kenampakan morfologi kerucut dengan litologi berupa batuan vulkanik. Batuan vulkanik yang ada di daerah ini memiliki kenampakan yang berbeda dibandingkan dengan batuan vulkanik di daerah lainnya. Perbedaannya terletak pada kandungan cangkang fosil karbonat yang cukup banyak di antara material vulkanik. Pengukuran stratigrafi skala 1:10 beserta analisa paleontologi dan petrografi dilakukan untuk mengetahui fasies, umur, lingkungan pengendapan dan dinamika sedimentasi dari batuan vulkanik – karbonat di daerah ini. Fasies yang berkembang sejumlah 11 fasies. Mekanisme pengendapannya berupa jatuhnya piroklastik, aliran piroklastik dan *resedimented (syn-eruptive) vulcaniclastic*. Fasies – fasies tersebut diendapkan pada lingkungan pengendapan lereng vulkanik *medial – proximal* dengan paleobathymetri zona transisi laut ke darat hingga zona neritik dalam. Umur yang didapat dari kandungan foraminifera planktonik dan foraminifera benthik besar berada pada Miosen Atas (N15? – N16 / *Lower part of TF3? – Middle part of TF3*). Umur ini jauh lebih muda dibandingkan batuan vulkanik lainnya yang tersingkap di Pegunungan Selatan.

Kata Kunci : Stratigrafi, Dinamika Sedimentasi, Vulkanik, Pegunungan Selatan

ABSTRACT

Conical morphology with vulcaniclastic rocks has been found in Krakitan area, Semin Village, Gunungkidul, DIY. These vulcaniclastic rocks is different from the other within Southern Mountain Range. In this area, there are foraminifera fossils that exist in some layer of vulcaniclastic rocks. This research was conducted by making volcanic lithofacies based on measured stratigraphy, paleontology analytic and petrography observation. The purpose of this research are to differentiate the stratigraphic record into some volcanic lithofacies, to determinate the age of sedimentation, to predict the depositional environment and then from those data, the sedimentation dynamic will be known. Based on this research, there are 11 lithofacies in this area that has been sedimented with pyroclastic fall, pyroclastic flow and resedimented (syn-eruptive) vulcaniclastic mechanism. Depositional environment from these facies are medial – proximal volcanic slope with inner neritic to lithoral paleobathymetri. Paleontological analysis from planktonic foraminifera and larger benthic foraminifera indicates the age of these volcanic – carbonate rocks at Upper Miocene (N15? – N16 / Lower part of TF3? – Middle part of TF3). The age of these vulcaniclastic rocks is younger than the average age of the other vulcanicalstic rocks in Southern Mountain Range.

Keyword: Stratigraphy, Sedimentation Dynamic, Volcanic, Southern Mountain