

SARI

Indikasi terjadinya peristiwa tsunami purba (paleotsunami) tampak pada stratigrafi kuartar dari lubang bor tangan yang diambil di sebuah *swale* dekat pesisir pantai di daerah Malingping dan Wanasalam, Kabupaten Lebak, Provinsi Banten. Endapan tsunami (*tsunamite*) terpreservasi pada morfologi *swale* tergenang air yang berjarak sekitar 1.500 meter dari garis pantai dan tampak jelas terletak di antara endapan gambut. Endapan paleotsunami mempunyai kontak tegas pada bagian bawah dengan endapan gambut. Endapan dapat dibedakan berdasarkan karakteristik fisik seperti warna, ukuran butir, dan komposisi. Analisis laboratorium kemudian dilakukan pada endapan paleotsunami untuk mengetahui karakteristik endapan secara sedimentologi dan paleontologi. Analisis laboratorium yang dilakukan meliputi analisis granulometri, analisis *Loss on Ignition* (LOI), analisis foraminifera, dan analisis mineralogi. Hasil analisis granulometri menunjukkan bahwa endapan paleotsunami mempunyai nilai *mean* ukuran butir *very fine sand* dengan sortasi berupa *very poorly sorted*. Nilai *skewness* berada pada kisaran *symmetrical – very fine skewed* dengan *kurtosis* berupa *platykurtic*. Hasil analisis LOI memberikan nilai kandungan material karbonat rendah (5%). Rendahnya kandungan material karbonat disebabkan oleh adanya variasi sumber sedimen yang berasal dari darat dan laut. Selain itu, adanya pengaruh pelarutan karbonat oleh air rawa juga menjadi salah satu penyebab rendahnya material karbonat. Hasil analisis foraminifera mengidentifikasi kehadiran foraminifera bentonik dengan jenis *Bathysiphon filiformis*, *Bulimina marginata*, *Cibicides lobatus*, *Cibicides sp.*, *Cibicides wuellerstorfi*, *Glonulina gibba*, *Hemicristellaria sumatrica*, *Florilus elongatus*, dan *Nodosaria longiscata*. Berdasarkan kehadiran fosil foraminifera bentonik, diperkirakan endapan paleotsunami berasal dari kedalaman 310-588 meter. Endapan paleotsunami mempunyai komposisi mineral kuarsa, feldspar, glaukonit, fosil foraminifera, kalsit, litik sedimen, dan mineral berat.

Kata kunci : Paleotsunami; Lebak; Sedimentologi; Paleontologi

ABSTRACT

The ancient tsunami (paleotsunami) is indicated by the appearance of quaternary stratigraphy that was taken by hand drill in a swale near Malingping and Wanasalam coast, Lebak, Banten Province. The preservation of paleotsunami deposit (tsunamite) is located on swale morphology which is submerged 1.500 meters from the coastline and clearly lied between peat deposit. The bottom of paleotsunami deposit is in distinct contact with the peat deposit. Physical characteristics can be distinguished by its colors, grain size, and the compositions. Laboratorial analysis on paleotsunami deposit is conducted in order to know the sedimentology and paleontology characteristics of the deposit. Granulometri analysis, Loss on Ignition (LOI) analysis, foraminifera analysis, and mineralogical analysis were the types of laboratorial analysis used in this research. The finding of granulometri analysis show that there are four value of grain size parameter. They are mean value of grain size of very fine sand, sorting value in which very poorly sorted of grain size, skewness value in estimated of symmetrical – very fine skewed, and kurtosis value in which platykurtic. The result of the LOI analysis presents a low carbonate material (5%) which is caused by the variations of the sediment sources deriving from land and sea. The influence of carbonate dissolution by swale water also caused the lowness of carbonate material. The foraminifera analysis identifies the presence of bentonic foraminifera such as Bathysiphon filiformis, Bulimina marginata, Cibicides lobatus, Cibicides sp., Cibicides wuellerstorfi, Glonulina gibba, Hemicristellaria sumatrica, Florilus elongatus. And Nodosaria longiscata. Thus, it is approximated that the paleotsunami deposit came from 310-588 meters depth. The quartz mineral, feldspar, glauconite, foraminifera fossils, calcite, sediment lithic, and heavy mineral are the composition having by paleotsunami deposit.

Keywords : *Paleotsunami; Lebak; Sedimentology; Paleontology*