

## SARI

### STUDI GEOLOGI KARAKTERISTIK SEDIMEN LAUT DALAM PADA KALA PLEISTOSEN-HOLOSEN DI PERAIRAN SELAT SUMBA, NUSA TENGGARA TIMUR

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Daerah Penelitian berada di perairan Selat Sumba, tepatnya pada koordinat 09°03'175" LS dan 120°13'673" BT. Pulau Sumba juga termasuk daerah dengan kondisi geologi yang kompleks, sehingga perlu adanya penelitian untuk menggambarkan karakteristik, sebaran dan jenis sedimen dasar laut disekitar Pulau Sumba. Karakteristik dan proses pengendapan sedimen dapat diidentifikasi dengan beberapa analisis, yaitu analisis *grainsize*, foraminifera, dan XRF (*X-Ray Fluorescence*). Dari hasil analisis *grainsize* ditemukan ukuran yang bervariasi dengan nilai mean 3,725  $\phi$  - 6,364  $\phi$  (*coarse silt - very coarse silt*), nilai sortasi 1,755  $\phi$  - 2,917  $\phi$  (*poorly sorted - very poorly sorted*), nilai skewness -0,199  $\phi$  - 0,300  $\phi$  (*fine skewed - coarse skewed*), dan nilai kurtosis 0,708  $\phi$  - 1,130  $\phi$  (*platykurtic - mesokurtic*). Kandungan foraminifera menunjukkan bahwa sampel *core* ST12 memiliki umur Kala Pleistosen-Kala Holosen ditandai dengan adanya *last appearance* dari *Globorotalia flexuosa* (KOCH, 1923) dan *first appearance* dari *Globigerinella calida* (PARKER, 1962). Sedangkan kandungan unsur kimia terdapat unsur Sr, Rb, Fe, Ti, Sc, Ca, dan K.

**Kata Kunci** : Sumba, sedimen laut dalam, *grainsize*, foraminifera, XRF.

## **ABSTRACT**

### **STUDY OF GEOLOGICAL CHARACTERISTICS OF THE PLEISTOCENE-HOLOCENE DEEP SEA SEDIMENTS IN THE SUMBA STRAIT, EAST NUSA TENGGARA**

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*The research area located in Sumba Strait at coordinate 09°03'175" LS and 120°13'673". Sumba island also includes areas with complex geological conditions, so it is necessary to do research to see the characteristics, distribution and type of seabed sediments around the island of Sumba. Characteristic and depositional sediment can be identified by grainsize analysis, foraminifera, and XRF (X-Ray Fluorescence). From the results of grainsize analysis found that size varies with the value of mean 3,725  $\phi$  - 6,364  $\phi$  (coarse silt - very coarse silt), value of sorting 1,755  $\phi$  - 2,917  $\phi$  (poorly sorted – very poorly sorted), value of skewness -0,199  $\phi$  – 0,300  $\phi$  (fine skewed – coarse skewed), and value of kurtosis 0,708  $\phi$  - 1,130  $\phi$  (platykurtic – mesokurtic). The content of foraminifera shows that ST12 sample have a Pleistocene-Holocene epoch with the last appearance of *Globorotalia flexuosa* (KOCH, 1923) and the first appearance of *Globigerinella calida* (PARKER, 1962). Chemical element contents are Sr, Rb, Fe, Ti, Sc, Ca, and K.*

**Key Word :** *Sumba, deep sea sediments, grainsize, foraminifera, XRF.*

