

**A STUDY ON EROSION AND THE ASSOCIATED GRAIN-SIZE  
DISTRIBUTION AT KEMASIK AND KUALA ABANG BEACH, TERENGGANU**

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**FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU**

**2012**



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**DEPARTMENT OF MARINE SCIENCE  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU**

**DECLARATION AND VERIFICATION FORM**

**FINAL YEAR RESEARCH PROJECT**

It is hereby declared and verified that this research report entitled:

**A STUDY ON EROSION AND THE ASSOCIATED GRAIN-SIZE  
DISTRIBUTION AT KEMASIK AND KUALA ABANG BEACH,  
TERENGGANU** by **Muhammad Haziq bin Zainol**, Matric No. **UK20276** has been  
examined and all errors identified have been corrected. This report is submitted to the  
Department of Marine Science as partial fulfillment towards obtaining the Degree of  
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## LIST OF ABBREVIATIONS/SYMBOLS

### SYMBOLS

km (kilometer)

° (Degree)

m (meter)

cm (centimeter)

mm (millimeter)

g (gram)

% (percentage)

Φ (Phi)

N (north)

E (east)



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## **ABSTRACT**

A study on erosion on beach morphology and sediment characteristics has been done along the Kuala Abang and Kemasik beach. Each beach was divided into 6 stations with interval for Kuala Abang is 300m and Kemasik is 500 meter from a station to another station. Sampling at each study site conducted in twice which was in May 2011 and January 2012. Sampling of beach profile data was carried out from first vegetation at berm area until low tide area. Sediment analysis was done by collecting about more than 100g of sediment at high, mid and low tide. The beach morphology for both study area change dynamically with time. In this study, each of the study sites shows different result such as mean and beach slope. This shows that which beach has more undergo process erosion and deposition.

## **ABSTRAK**

Kajian hakisan pantai terhadap profil pantai dan taburan saiz sedimen telah dijalankan di pantai Kuala Abang dan Kemasik. Setiap pantai kajian dibahagikan kepada 6 station. Jarak antara setiap stesen di Kuala Abang seluas 300m dan di Kemasik seluas 500m. Penyampelan di setiap kawasan kajian dijalankan sebanyak 2 kali iaitu pada Mei 2011 dan Januari 2012. Penyampelan terhadap profil pantai dijalankan bermula pada tumbuhan pertama yang tumbuh di gumuk (berm) pantai sehingga kawasan rendah pasang surut. Analisis sedimen telah dilakukan dengan mengambil sampel sedimen seberat lebih 100g di kawasan tinggi, tengah dan rendah pasang surut. Bentuk pantai telah berubah mengikut masa. Dalam kajian ini, keputusan telah menunjukkan yang setiap kawasan pantai kajian mempunyai keputusan yang berlainan seperti min dan kecerunan pantai. Ini dapat menunjukkan pantai mana didominasi dengan proses hakisan atau proses mendapan.