

Geology and granite petrology of the Besar Island, Johore

AZMAN A. GHANI¹ & MOHD FARID ABU BAKAR²

¹Department of Geology, University of Malaya, 50603 Kuala Lumpur

²Minerals and Geoscience Department Malaysia, P.O. Box 560, 93658 Kuching, Sarawak

The Besar Island, located about 13 km off the east coast of Johore is one of the nearest islands off the coast of Johore. The island consists of metasediments, granite and intruded mafic dykes. The granitic rocks in the Besar Island is homogeneous, medium to coarse grained and mostly equigranular. Geochemical data of the granitic rocks show that the rock has a very high SiO₂ content more than 76%. The geochemical data suggest that the granite magma originated from anatexis of a homogenous source rock composition (or minimum melt).