OCCURRENCE OF TERTIARY DEPOSIT IN THE LENGGONG AREA, PERAK — ITS IMPLICATIONS

G.H. TEH & RUSHDAN ABDUL LATIF

Department of Geology, University of Malaya, 59100 Kuala Lumpur

The Lenggong area is situated in the district of Hulu Perak, Perak. The geology of the area is made up of rocks of the Baling Group, Tertiary sediments and granite of the Bintang Range to the west and the Main Range to the east.

The Baling Group rocks make up half of the study area and comprises two formations, namely the Grik Tuff and Kroh Formation. The Grik Tuff was first studied by Jones (1970) and later dated Late Cambrian to Early Ordovician by Burton (1986). The Grik Tuff is believed to have been deposited in a shallow marine environment. It can be found interbedded with minor argillaceous and calcareous facies.

The Kroh Formation (Early Ordovician to Early Devonian) consists of argillaceous and calcareous facies. The argillaceous facies is made up of black to grey slate while the calcareous facies is made up of crystalline limestone and associated calc-silicate hornfels resulting from contact metamorphism with the granite.

The granite forms the mountainous portions of the area. The Bintang Range granite and the Main Range granite fuse together just north of Lenggong town. The granite is essentially a porphyritic biotite granite with phenocrysts of K-feldspar while biotite is the only mafic mineral. The granite has been dated Late Triassic to Early Jurassic by Bignell & Snelling (1977).

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There is a complex of aplite veins in the granite. There appear to be three main sets of aplite veins (or dykes) in the area. There is also the presence of gneissic granite especially in the vicinity of Kampung Kuala Kenering to Kampung Ayer Jada along Sungai Kenering. There is significant alignment of the K-feldspars and biotite in this gneissic textured rock.

The Tertiary sediments at Lenggong are exposed along the new Lenggong-Selama road where it overlies the Kroh Formation along an angular unconformity. This is the first reported occurrence of Tertiary sediments in the Lenggong area. Nearby, at Lawin, the Tertiary sediments are separated by an angular unconformity from the underlying Grik Tuff which interfingers with the Kroh Formation. The semi-consolidated Tertiary sediments are in places highly indurated and contain clasts of Papulut Quartzite, Grik Tuff and Kroh Formation. The formation of the Tertiary basins at Lawin and Lenggong are related to extensive faulting in the region.