

**Gravity modeling of a mafic, ultramafic association,
Darvel Bay, East Sabah, N. Borneo**

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The association of tertiary age mafic, ultramafic and sedimentary rocks exposed at Darvel Bay, East Sabah, Malaysia is believed to be the best exposure of an apparently continuous arcuate line of ophiolite running along the Sulu archipelago and Palawan Island (Philippines). The exposures at Darvel Bay are interpreted by Huchison (1975) to be part of a large flake of upthrust oceanic or marginal basin lithosphere.

This area was the site of a gravity survey in 1975 conducted by Dr. P.J.C. Ryall. The results of the survey are summarized in a Bouguer contour map of the area which shows a positive

gravity anomaly of 70 mgal associated with the mafic-ultramafic suite.

Based on preliminary results, subsurface interpretations by Huchison (1975) need to be modified in order to result in the production of a satisfactory structural model which can accommodate both the available geological and geophysical data.

Models produced to date indicate subsurface geometry of the mafic and ultramafic bodies consistent with post emplacement tectonic (folding and faulting) activity rather than thrusting associated with a Miocene emplacement.