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PENECONTEMPORANEOUS DEFORMATION IN THE NYALAU FORMATION (OLIGO-MIOCENE), CENTRAL SARAWAK

Mazlan Madon[1] & Abdul Hadi Abd Rahman[2]

[1]Petronas Research & Technology Division, Bangi Research Centre, Kawasan Institusi Bangi, 43000 Kajang, Malaysia
[2]Petroleum Geoscience Research, Geophysics Group, School of Physics, Universiti Sains Malaysia, 11800 Penang, Malaysia

ABSTRACT

Abstract—Penecontemporaneous deformation of sediments is an indication of active tectonic deformation during sedimentation in a convergent margin, such as in a foreland basin. In the Nyalau Formation (Late Oligocene to Early Miocene in age) exposed near Tg. Similajau and Bintulu areas, structural features indicative of penecotemporaneous deformation are common. These features include (1) "disharmonic" thrusts and associated folding within shaly intervals, (2) detached normal and reverse faults within mud-dominated intervals, (3) subtle stratal termination and onlap patterns associated with faulting, folding and (probably subaquaeous) erosion of the sedimentary layers, (4) slump and load structures within lower shoreface to offshore-transition successions. These features may be a common feature in deforming foreland basins, and indicates the importance of tectonic over eustatic controls on sedimentation and sequence development in the Tertiary NW Borneo basins.