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Application of sequence stratigraphic techniques on the non-marine sequences: An example from the Balingian Province, Sarawak

ISMAIL CHE MAT ZIN & JAAFAR SIPAN
PETRONAS Carigali Sdn. Bhd.
Wisma Peladang, Jalan Bukit Bintang
P.O. Box 12407
50776 Kuala Lumpur

The Oligocene to Early Miocene sediments penetrated by several wells in the onshore Balingian and also outcropping in the area were deposited in predominantly lower coastal plain environment of deposition. Based on the present stratigraphic framework, whereby the Tertiary sediments in the Sarawak Basin were subdivided into seven (7) sedimentary cycles, these sediments are of age equivalent to the Cycle I and II.

By applying the sequence stratigraphic techniques, the Cycle I sediments in the area, could be subdivided into several sequences. In brief, the sequence stratigraphic technique subdivides the sedimentary succession into the smallest unit of *lamina* to the highest hierarchy called *sequence*. The sequence is defined as a relatively conformable succession of genetically related strata bounded by the unconformities or their correlative conformities. Further, the sequence can be subdivided into system tracts based on objective criteria including types of bounding surfaces and the position within the sequence.

The established sequence boundaries which provide the basis for the regional mapping and well correlation, help in the understanding the depositional setting and reservoir distribution for the non-marine sequences.
