

Structural styles in Western Sabah Offshore: A.J. Bol, Sabah Shell Bhd.

Sabah Shell's exploration activities have revealed that two structural provinces, differentiated by the age of the main phase of deformation, can be recognized in the Neogene basin west of the Sabah main land.

In south and central Sabah, between Labuan and Mangalum, the main tectonic phase occurred during Upper Miocene times. It led to the formation of steep, upthrust, rather narrow anticlinal trends separated by broad, deep, gently folded synclines. The anticlines, which have been referred to as ridges, are thought to be related to basement-induced faulting.

The Upper Miocene fold-belt is separated by important fault zones from a province in which similar structural movements took place during the Pliocene. This tectonic phase primarily affected the area between Mangalum and Kudat where upthrust anticlinal trends were formed, separated further basinwards by large normal faults from gentle anticlinal uplifts with crestal faults. The intensity of deformation is greatest in the Mantanani area where the E-W oriented Sulu trend bends into the SW-NE Borneo trend. It decreases towards the southwest (Mangalum) and is only mildly expressed in the area west of the Upper Miocene Fold belt (Samarang).
