Structural development at the west-central margin of the Malay Basin (basement of Blocks PM 2 and PM 7)

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The regional elements in the west-central margin of the Malay Basin largely comprise a platform area and a hingeline zone which runs parallel (NW-SE) to the basin margin. The majority of the basement faults within PM 7 (southern portion of the study area) runs NW-SE downthrowing to the northeast. Two grabens run NNW-SSE through the central portion of PM 7. The basement of the grabens comprise northwest-southeast regional trending faults interconnected by north-south oblique faults. The northern portion of PM 7 is more intensely faulted and is an area of variable basement topography. Towards PM 2 (northern portion of the study area), the faults progressively trend north-south downthrowing to the west. Within the southwest flank of the

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platform area in PM 2, basement highs and their associated faults trend NW-SE. To the west of this area (inner platform area), similar features trend NNE-SSW.

The grabens in PM 7 were probably formed during Eocene-Oligocene as evidenced by the onlap of Oligocene lacustrine sediments on ?Cretaceous basement. Within the platform area, basement faults were active since Jura-Cretaceous. Jura-Cretaceous conglomeratic sediments as well as Oligocene alluvial plain and braided channel sediments overlie Permo-Carboniferous sediments with an angular unconformity. The probable causative stress system will be presented.