

ABSTRACTS OF PAPERS

A Heat Flow Study in The Malay Basin

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A heat flow study in the Malay Basin has been carried out using data from 57 exploratory wells. Thermal conductivity of 686 cores were measured using the Quick Thermal Conductivity Meter (QTM) with temperature gradients of wells being calculated from well log data.

An average heat flow of up to 2.60 HFU has been determined in areas near the southern flank of the south and central parts of the basin. In the southeastern quadrant of the basin, heat flow decreases towards the northern flank. The entire northeastern flank of the basin has a lower heat flow of 1.60 HFU.

The Malay Basin has been subjected to extensional and compressional forces during its development, resulting in faults, grabens and half-grabens being formed. It has also been affected by massive uplift in the southeastern portion. The Tertiary magmatic activities took place in the vicinity of the southern parts of the basin. The magnitude and distribution pattern of heat flow in the basin are believed to be related to the above tectonic activities.
