

Paper 11**Relationship of structural timing and hydrocarbon migration in the Malay Basin****MOHD TAHIR ISMAIL**

ESSO Production Malaysia Inc.

One of the key elements controlling hydrocarbon migration and distribution in the Malay Basin is structural timing. When integrated with timing of oil and gas generation, structural timing will determine whether a particular trap contains oil and gas or gas only.

The compressional structural analysis of the discovered fields in the basin shows that the primary structural events occur at different times throughout the basin. Structuring began in the eastern part of the basin and became progressively younger to the west.

The onset of hydrocarbon generation and migration is temperature dependant and varies across the basin. Integrating the relationship of structural timing and complexity with the onset of hydrocarbon generation explains the current distribution of oil and gas fields. Oil fields are largely in the southeast portion of the basin where structuring is earlier than the onset of

oil maturation. In the northeast portion of the basin structuring occurred when the primary source rocks were in the gas generative window.