

A Geophysical Case History of the Irong Barat Field

Lye Yue Hong, Esso Production Malaysia Inc., Kuala Lumpur

The Irong Barat field is located at the western downfaulted end of the Tapis-Irong anticlinal trend. Faulting is extremely complicated with probably basement-involved wrenching and subsequent north-south compression.

Eleven exploration and delineation wells were drilled on the Irong Barat structure based on conventional 2D seismic. Because of structural and stratigraphic complexity encountered in these 12 wells, a 3D seismic survey was carried out over the whole field in 1984.

The 3D seismic data were interpreted using EPMI's ISIS 3D interpretation system. The interpreted 3D data show the Irong Barat structure to be even more complicated than previously mapped. However, it has shown a lot more of the structural configuration as well as yielding other geophysically significant information relating to lithofacies, hydrocarbon occurrence and the remaining potential of the field.
