Poster# 2

IPA96 - 1.0 - 153

PROCEEDINGS, INDONESIAN PETROLEUM ASSOCIATION Twenty-Fifth Silver Anniversary Convention, October 1996

RECENT RESEARCH IN WESTERN INDONESIA: A CRITICAL LOOK AT SOME MAJOR EVENTS IN THE TERTIARY

I.R. Cloke*
R. Hall*

N. Harbury*

R. Holt*

C. Howells*

A. McCarthy*

J. Milsom*

S.J. Moss*

A. Ngakan*

J. Noad*

M.J. Wilson*

ABSTRACT

We illustrate some of the key periods in the Tertiary tectonic and basin evolution of western Indonesia. Previous workers have suggested events recorded as unconformities, for example, can be correlated and traced across the whole of the SE Asian region. The events during these periods are reviewed using a variety of geological and geophysical data from western Indonesia. Tertiary basins within western Indonesia, such as the Sumatran forearc, Kutei Basin and SW Sulawesi, and major Tertiary structures, such as a Sumatran Fault Zone, are areas of both considerable hydrocarbon potential and importance for recording of these tectonic events.

Events of both regional and local importance are recorded by stratigraphic signatures, facies changes and fault, joint and fold patterns within these areas. The separation of events of regional importance from those with only local significance is of prime importance to the study of plate tectonics and basin evolution. However, it should be realised that the structural and stratigraphic response to a 'regional tectonic event' may vary considerably laterally, whilst other 'events' may be diachronous.

We review the validity of widespread markers representing a single, major tectonic events. However it may just that in several instances there have been too many smaller, localised, tectonic events which are contemporaneous or overlap in time, making the recognition of regional tectonic events difficult and perhaps impossible. In short, can even stratigraphy be applied to extremely tectonically active areas such as SE Asia?

University of London