

based contaminants is often not reported in the drilling records and little other note is made of other potential sources of contamination (e.g. pipe dope on every joint of drill pipe, testing tools, etc.). While contamination from Middle East carbonate sources and Sumatran-derived diesels and petroleum products can be more easily documented, what of contamination from diesels of North West Shelf origin derived from a similar source facies to the expected

hydrocarbon product? Contamination from Bass Strait derived oil-based additive or diesel is also possible.

Uncritical use of geochemical data derived from such contaminated samples can lead to erroneous conclusions as to the actual source rocks, and to potentially costly mistakes being made in the siting of wells based on the false assumption of migration pathways, and timing of migration determined from basin modelling.

18th April - Dr John Gorter (Senior Explorationist, Hardy Petroleum Limited, Perth)

“Political Correctness, Orthodoxy and Blind Faith - Problems with the Identification of Source Rocks in the Timor Sea”

SO, you've bought a basin modelling package. You think you have a good understanding of the heat flow, conductivities, absolute ages, burial history, lithology mix etc., now what about the source rock? What geochemical information do you need to input? It's all there just waiting to be input into your new software.

BUT, if you believe the geochemical data, **UNCRITICALLY**, it may cost your company a lot of money (and possibly your job!).

Exploration for hydrocarbons in the Timor Sea is demanding enough without the complications derived from the use of organic mud additives and other down-hole contaminants. The deliberate introduction of additives to combat drilling problems can be accounted for if the fact of the addition is noted in the well completion reports and a geochemical analysis of the additive carried out. Major contamination can be expected in wells where there was a history of battling lost circulation or collapsing borehole. Any well with a 'A' or 'ST' (sidetrack) designation is suspect. However, the addition of petroleum-