

- 5) Sandstones and hence reservoirs within the Bass Basin belong to one of four facies associations:
 - a Shoreface/Backshore/Lagoon
 - b Beach/Fluvial Channel Interface
 - c Simple or Stacked Fluvial Channel
 - d ?Tidal Channel/Beach
- 6) There are clear relationships between reservoir properties and facies.
- 7) The facies association containing shoreface/backshore and lagoonal sandstones contains reservoirs with the best reservoir properties, exemplified by Dondu 1, core 1.
- 8) Correlation of core facies logs with wireline logs is generally good and extrapolation of facies to uncored neighbouring wells can be performed with reasonable confidence. For example the excellent quality reservoirs encountered in Dondu 1, core 1 have a characteristic response on wireline logs with uncored good to excellent deliverability gas/condensate bearing sandstones in Yolla 1.
- 9) Analysis of the cores in the Pelican Field area suggests a predictive potential for sand body geometry and elongation. The fluvial channels would be dip oriented to the northwest, while the beach-barrier systems would be strike-oriented southwest to northeast.
- 10) There is marked contrast between the sedimentary facies of the *M.diversus* palynological zone found in the Cormorant and Pelican Troughs. In the Cormorant Trough, low energy lacustrine and lagoonal mudrock facies dominate, whilst in the Pelican Trough the facies are sandier and comprise fluvial, interdistributary and shoreface facies.
- 11) The core facies data alone represent only a small part of the section penetrated in the Bass Basin and further studies are required to interpret facies distributions using wireline log cross-sections, seismic data, regional isopach data, and structural models.
- 12) The relatively low well density in the Bass Basin means that it is likely that many facies variations are present which have not yet been identified or even drilled. Allowance for these variations should be considered when predicting