

for the Bass Basin to sustain further exploration effort.

## 7.2 Important Factors To Consider

- (a) Vertical migration to structural closures under the Demons Bluff Formation seal has either:
  - a) occurred, but structural closure was ineffective,
  - b) not occurred, and migration was laterally confined within the generative interval.
- (b) Normal faulting has been an effective seal confining both overpressure and hydrocarbon accumulations at Pelican Field.
- (c) Interval sand percentages probably play a key role in the sealing effectiveness of faults. Sand percentage values in the 20-40 range are generally considered as effective in a marine shale/delta front sand environment. In the sand and silt dominated fluvial-lacustrine environment represented in the Bass Basin, this percentage range may be different. However, sand percentages of about 40 percent are associated with effective seals at Pelican Field.

## 7.3. Overpressure: Implications for Sealing

Overpressure below 9800 ft (subsea) in the Pelican Field indicates that undercompaction relative to depth of burial exists in these sediments. The overpressure is interpreted as being related to compression along the basin axis associated with