

RKY9005041-ARW

IMPLICATIONS

Figure 4 contains part of seismic line TNK4-79 that was reprocessed internally by Shell Company of Australia. It is a zero phase, DMO migrated section. The feature to note is the presence of a flat event at the base of the anomaly that occurs in a position corresponding to a possible hydrocarbon/water contact as predicted by the model of Figure 2. This provides evidence that a 300 metre gross hydrocarbon column could be present at the mid Pelican Zone level.

CONCLUSIONS

- . A synthetic time section can be produced showing all the seismic attributes of the anomaly as seen on real data, by using the Pelican 5 well logs as control for lithology distribution in the Pelican Zone and by introducing a gas charged sandy sequence coincident with the anomaly.
- . A model using a high velocity igneous intrusive shows only some features of the real data.
- . Reprocessed data produced a flat spot corresponding to a modelled gas/water contact.
- . The preferred interpretation is that the observed amplitude anomaly represents the presence of a 300 metre hydrocarbon column. The hydrocarbon being either gas, or oil associated with porosity improvement of reservoirs updip of the Pelican Trough.