

GWF9107.009-RJS

- DST 4      3142.0 - 3163.0m (10,308.0 - 10,378.8')  
GTS at 0.75 MMCFD with trace condensate  
 after 9½ hours on a ½" choke.  
GTS at 0.433 MMCFD on a 2" choke with 0.5 barrel  
 condensate from the separator.
- DST 5      2869.0 - 2883.0m (9412.6 - 9458.5')  
 REC: Small quantity of condensate  
 (waxy and paraffinic; 51° API at 60°F),  
 and flowed at 0-23 psi.
- DST 5A     2855.0 - 2860.5m (9366.6 - 9384.7')  
 REC: 85 barrels of GCM and WCM.
- DST 6      2786.0 - 27900m (9140.0 - 9153.5')  
GTS @ 3.5 MMCFD with 450 BCPD on a ¾" choke.  
GTS @ 5.6 MMCFD with 302-441 BCPD and 662-705  
 BWPD on a ¾" choke.

**SHOWS:**

Pelican 5 recorded a similar distribution of gas shows and shows of fluorescence through the lower and middle *M.diversus* zones to that encountered in Pelican 1, 2 and 4. Below the top of the Palaeocene the gas and fluorescence shows continued to total depth in the Late Cretaceous. Increased concentrations of the heavy hydrocarbons (Butane to Pentane) are observed on the gas chromatograph with increased depth.

**RESERVOIR:**

The lower to middle *M.diversus* sequence contained similar quality reservoirs to those encountered in the earlier Pelican wells. In the Palaeocene and Late Cretaceous sequence similar deltaic and fluvial sandstone reservoirs were encountered to those in the lower to middle *M.diversus* zones. Log analysis by the operator prior to testing indicated the potential for 62m of net pay using cut off of SW <50%, Vsh <50% and porosity >10%. Despite these promising results production testing failed to meet the initial enthusiasm and many of the apparent pay zones proved to be tight with low permeability. Only two zones flowed hydrocarbons, at the top of the Palaeocene, a sandstone between 3142 - 3163m flowed gas at 0.75 MMCFD, and a test of a sand in the "E" unit of the middle *M.diversus* zone flowed at a more encouraging rate of 5.6 MMCFD with 302-441 BCPD and 662-705 BWPD. The water in the second test is interpreted to be from a deeper interval via communication behind casing as there was no water recovery during an earlier flow period.

**MATURITY:**

Pelican 5 provides the most complete maturity profile for the central part of the Pelican half graben. The profile down to the top *L.balmei* zone matches that recorded in other Pelican wells. Peak oil maturity (vitrinite reflectance 1.1%) is reached at a depth of approximately 3,600m and the wet gas window (vitrinite reflectance 1.3%) starts at approximately 3800m. The maximum mean vitrinite reflectance of 1.67% was measured in the deepest sample near to total depth.