

ZONE D

An upper sand can be correlated in all three wells, a middle sand in Pelican 1 and 5 and a lower sand package in Pelican 1 only.

The upper sand in Pelican 5 extends from approximately 2734-2751m. For both  $R_w$  selections, ie. 5200ppm and 10400ppm equivalent NaCl, this sand has calculated  $S_w$  values of greater than 90%. This sand was not tested or cored.

In Pelican 4 the top sand over the interval 2731 - 2740m displays porosity and resistivity separation. FIT 1 at 2739.6m recovered 47.7 cubic feet of gas and 1500cc of condensate with 1300cc of filtrate/water. An analysis of the FIT result over this interval showed the gas to be rich and permeabilities up to 20 md. Log analysis calculated porosities in the 5 - 19% range, average 16%. With an  $R_w$  equivalent to 5200ppm NaCl,  $S_w$ 's ranged from 50% in the cleaner basal section to 95% in the upper more argillaceous sand. With the more optimistic  $R_w$  equivalent to 10400 ppm the  $S_w$  range is 37% - 90%.

The upper sand in Pelican 1 was not tested or cored. Visual inspection of the logs over the interval from approximately 2717-2719.5m indicates porosity and resistivity separation. The gamma ray indicates the sand is more argillaceous than the productive region of the same sand in Pelican 4. All log derived porosities for Pelican 1 were obtained by use of the Hunt-Rayner transform and indicated values around 16%. As this sand appears to have a significantly high shale content, some doubt exists as to the accuracy of the derived porosity and  $S_w$  values. With an  $R_w$  of 5200ppm equivalent NaCl,  $S_w$ 's range from 70% - 80%. With  $R_w$  equivalent to 10400 ppm,  $S_w$  values indicate the sand could be productive with values ranging from 50% - 60%. In the absence of test data, it is difficult to conclude whether this sand could be productive.

A middle sand package is present in Pelican 1 and 5, but sand was not tested or cored in either well. For Pelican 5, log analysis on this sand interval from 2756.5 - 2760m gave porosities from 9%-12% and  $S_w$ 's in the range 90% - 100% for both  $R_w$  values. The equivalent sand in Pelican 1 from 2727 - 2732m has resistivity separation and porosity development. Log calculated porosities range from 12% - 21%, average 19% and  $S_w$ 's 60% - 80% with an  $R_w$  equivalent to 5200 ppm NaCl and 50% - 70% for an  $R_w$  equivalent to 10400 ppm NaCl.

The lowest sand from 2734 - 2742m is present in Pelican 1 only. An FIT test, No. 19 at 2738.6m recovered 69.8 cubic feet of gas, 1000cc of condensate and 1750cc of mud filtrate. This sand is certainly the cleanest of all the zone D sands in Pelican 1, 4 or 5. Analysis of the FIT data shows that this sand is of low permeability with rich gas and no water. A permeability of 8.1md was calculated at 2738m.