

gas pay could extend beyond the arbitrary limit assigned on the pay maps.

2.4.3 Porosity, Gas Saturations, and Permeabilities

The available logs are inadequate to run a valid quantitative log analysis, hence, porosities and water saturations can only be roughly calculated. In general, the values tabled in the 1980 BMR report were used. The assumed error associated with these estimates varies for different sands depending on whether core data was available or not. In some cases, core data was available and in the absence of BMR estimates these were used.

BMR estimates of water saturation were generally used as they appeared to be reasonable values ie. in the 50 to 75 percent range. When a BMR estimate was not available, a conservative 50 to 65 percent value was assigned based on a rough estimate of the logs.

Porosities in cores range from measured values of 4 to 29 percent with the average over the more prospective sand zones being 19 to 21 percent. It is probable that under reservoir conditions this would actually be reduced to approximately 17 to 19 percent.

Some permeabilities from core analysis are quite high, in the 400 md range, and average values are in the tens of millidarcies. Although RFT results suggest lower permeabilities (1 to 2 md range), formation damage caused during drilling may be responsible for misleading RFT pressures and recoveries.