

PROSPECT DATA SHEET

WARREGO

CATEGORY	Lead		
LOCATION	Seismic line SB94A-157 Sp 265 (middle <i>M.diversus</i>) Seismic line SB94A-157 Sp 270 (Palaeocene)		
DESCRIPTION OF TRAP	Complex tilted fault block		
PRIMARY OBJECTIVES	EVCM	-	Middle <i>M.diversus</i>
		-	Palaeocene
MAXIMUM CLOSURE	EVCM	-	Middle <i>M.diversus</i> 30.05 square kilometres
		-	Palaeocene 23.04 square kilometres
SECONDARY OBJECTIVES	None		
DEPTH TO RESERVOIR	EVCM	-	Middle <i>M.diversus</i> 2208 mSS
		-	Palaeocene 2215 mSS

DESCRIPTION OF RISK ELEMENTS**SOURCE**

Warrego is located at the southern end of the Pelican 3 high, at the south western end of the Poonboon Platform, and updip of the Actaeon lead. For this reason the prospect is dependent on sourcing either from spillage from Actaeon, vertical migration up faults, or from migration from probable but unproven mature areas to the northeast of the lead. At Warrego the middle *M.diversus* is early-mature for oil generation grading to early-middle mature at Palaeocene and is in the late gas generation window at basement. Source risk for gas at Warrego is rated as low to moderate whilst oil charge is ranked as moderate.

RESERVOIR

At Warrego a similar stratigraphic sequence is predicted to that encountered in Pelican 3, that is a condensed Eocene sedimentary section overlying the Palaeocene. Therefore the middle *M.diversus* objective will be thin, but this will be partly compensated for by good reservoir preservation with average porosity of at least 25%. Similarly the Palaeocene has not been buried as deeply as in the Pelican Trough and average porosities of approximately 20% are predicted. With the exception of Pelican 3 to the north, well control is poor and there is scope for significant facies variations to occur at Warrego. For example Baillie *et al* (1991) postulated that upper delta plain stacked point-bar sequences might provide better reservoir targets in this southern part of the basin. Reservoir quality and distribution at Warrego is therefore considered low to moderate risk in the middle *M.diversus* and moderate risk in the Palaeocene.

SEAL

Closure at Warrego is dependent on proven intraformational top sealing units in the middle *M.diversus* and Palaeocene which have low risk, and fault plane seals or juxtaposition with shale units on at least two orthogonal faults which have high risk. The Palaeocene reservoir