

## PROSPECT DATA SHEET

## CAPE BARREN

<b>CATEGORY</b>	Weak Lead		
<b>LOCATION</b>	Seismic line TNK4-71 Sp 550 (middle <i>M. diversus</i> ) Lead extends approximately one quarter into T/18P		
<b>DESCRIPTION OF TRAP</b>	Low relief tilted fault block on upthrown side of northwest trending fault		
<b>PRIMARY OBJECTIVES</b>	EVCM - Middle <i>M. diversus</i>		
<b>MAXIMUM CLOSURE</b>	EVCM - Middle <i>M. diversus</i>	28.7 square kilometres	
	Upper <i>M. diversus</i>	13.4 square kilometres	
<b>SECONDARY OBJECTIVES</b>	EVCM - Upper <i>M. diversus</i>		
<b>DEPTH TO TOP RESERVOIR</b>	EVCM - Middle <i>M. diversus</i>	2505 mSS	

**DESCRIPTION OF RISK ELEMENTS****SOURCE**

Cape Barren is located on the western edge of the Poonboon Platform near the north eastern margin of the Pelican Trough a proven gas and condensate source kitchen. At the location the middle *M. diversus* is early to mid-mature for oil generation passing through to middle mature for oil generation at the top Palaeocene and is nearly overmature for all hydrocarbon generation at basement. Source risk is for gas is considered low to moderate, whilst oil risk is considered moderate to high.

Migration is possible from either vertical migration from mature Palaeocene and Late Cretaceous source material or from cross fault face loading by Late Cretaceous source beds with Palaeocene reservoirs and Palaeocene source beds with middle *M. diversus* reservoirs.

**RESERVOIR**

Regional porosity verses depth profiles predict that in the middle *M. diversus* the average porosity will be 22% and in the secondary objective upper *M. diversus* it will be 24%. However improved reservoir development in Poonboon 1 and Nangkero 1 suggest the Poonboon Platform reservoirs, including those at Adamson, may have better porosity and permeability development than exist in the adjacent Pelican Trough. Reservoir risk at Cape Barren is considered to be low for the upper *M. diversus* and low to moderate for the middle *M. diversus*.