

PROSPECT DATA SHEET

ACTAEON

CATEGORY	Strong Lead		
LOCATION	Seismic line TNK4-95 Sp 165 (Middle <i>M.diversus</i> and Palaeocene)		
DESCRIPTION OF TRAP	Tilted fault block against complex northwesterly and easterly trending fault system.		
PRIMARY OBJECTIVES	EVCM	-	Middle <i>M.diversus</i>
		-	Palaeocene
MAXIMUM CLOSURE	EVCM	-	Middle <i>M.diversus</i> 21.9 square kilometres
		-	Palaeocene 7.0 square kilometres (55.8 square kilometres with Tourville)
SECONDARY OBJECTIVES	None		
DEPTH TO RESERVOIR	EVCM	-	Middle <i>M.diversus</i> 2210 mSS
		-	Palaeocene 2528 mSS

DESCRIPTION OF RISK ELEMENTS

SOURCE

Actaeon overlies the proven gas-condensate source kitchen of the Pelican Trough. At the location the middle *M.diversus* is predicted to be early mature to mid mature for oil generation, whilst the Palaeocene is mid mature for oil generation through to later mature for gas at basement.

Migration of hydrocarbons into Actaeon is most likely to be a result of vertical migration from mature source rocks up fault conduits or from short distance migration from mature source material downdip, particularly from areas along strike to the northwest and southeast of the prospect. Actaeon also provides an opportunity to test the possibility of face loading by Early to Late Cretaceous source rocks underlying the extension of the Pelican 3 high directly into reservoir units of the Palaeocene and middle *M.diversus*. The source risk at Actaeon for gas is considered to be low and for oil moderate.

RESERVOIR

Porosity versus depth profiles predict that the average porosity at Actaeon will be 21% on the middle *M.diversus* and 18% in the Palaeocene. Actaeon is approximately 100 metres updip of Pelican Field and therefore on this basis a slight improvement in permeability might be expected. However as Actaeon is located adjacent to the Pelican 3 basement high it is possible that reservoirs representing so far untested sequences such as alluvial fans shedding from the basement high or a localisation of fluvial channel facies may be present. The reservoir risk for Actaeon is considered to be very low for the middle *M.diversus*, and moderate to high for the Palaeocene.