

PROSPECT DATA SHEET

HILLIARD

CATEGORY	Strong Lead		
LOCATION	Seismic line TNK4-83 Sp 405 (middle <i>M.diversus</i>) Seismic line HB77A-339 between HB77A-350 and HB77A-352 (Palaeocene)		
DESCRIPTION OF TRAP	Tilted fault block on the upthrown side of a northwest trending fault.		
PRIMARY OBJECTIVES	EVCM - Middle <i>M.diversus</i> Palaeocene		
MAXIMUM CLOSURE	EVCM - Middle <i>M.diversus</i>	4.5 and 4.5 square kilometres	
	Palaeocene	17.6 square kilometres	
SECONDARY OBJECTIVES	None		
DEPTH TO TOP RESERVOIR	EVCM - Middle <i>M.diversus</i>	2485 and 2577 mSS	
	Palaeocene	3125 mSS	

DESCRIPTION OF RISK ELEMENTS

SOURCE

Hilliard is located adjacent to the mature source kitchen for the Pelican Field gas and condensate accumulation and therefore is ideally located to receive hydrocarbon charge. At Hilliard the middle *M.diversus* is early mature for oil generation increasing to mid-late mature at the top Palaeocene and to the main-late gas generation phase at basement.

Migration to Hilliard is possible by vertical migration or from face loading configurations of, Early Cretaceous source to Palaeocene reservoirs, Palaeocene source to lower *M.diversus* reservoirs and lower *M.diversus* source to middle *M.diversus* reservoirs. Overall source risk is considered to be low particularly for Hilliard East because of known gas at Pelican 1 and 5.

RESERVOIR

Regional porosity verses depth profiles predict that middle *M.diversus* reservoirs will have average porosities of 23% declining to 15% at the top of the Palaeocene. Therefore the middle *M.diversus* is considered low risk for reservoir development (similar to Pelican Field), whilst the Palaeocene is considered high risk.