

PROSPECT DATA SHEET

GRINDSTONE

CATEGORY	Strong Lead		
LOCATION	Seismic line S92A-119 Sp 620 (Middle <i>M.diversus</i> and Palaeocene)		
DESCRIPTION OF TRAP	Tilted fault block on the upthrown side of a northwest trending fault southwest of Pelican Field.		
PRIMARY OBJECTIVES	EVCM	-	Middle <i>M.diversus</i>
		-	Palaeocene
MAXIMUM CLOSURE	EVCM	-	Middle <i>M.diversus</i> 9.9 square kilometres
		-	Palaeocene 11.7 square kilometres
SECONDARY OBJECTIVES	None		
DEPTH TO RESERVOIR	EVCM	-	Middle <i>M.diversus</i> 2290 mSS
		-	Palaeocene 2626 mSS

DESCRIPTION OF RISK ELEMENTS

SOURCE

Grindstone is located directly above the mature source kitchen for the Pelican Field gas and condensate accumulation and therefore is ideally located to receive vertical hydrocarbon charge. At Grindstone the middle *M.diversus* is early mature for oil generation increasing to mid mature at the top Palaeocene and late gas generation at basement.

Migration to Grindstone is also possible from proximal mature source rocks downdip and along strike from the structure. Source risk is evaluated to be low for gas, high for oil at the Palaeocene and moderate to high for oil at the middle *M.diversus*.

RESERVOIR

Regional porosity versus depth profiles predict that the middle *M.diversus* will have an average porosity of 20% declining to 19% at the top of the Palaeocene. The porosity predictions reflect the fact that Grindstone although updip of Eddystone may have more "Flinders-like" reservoir.

Reservoir risk is evaluated to be high for the Palaeocene and moderate for the middle *M.diversus*.

SEAL

Vertical sealing is considered low risk and dependent on intraformational seals. All mapped closure is dependent on fault plane sealing. Seal risk is moderate to high for the middle *M.diversus* and moderate for the Palaeocene.