

PROSPECT DATA SHEET

GRINDSTONE

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| CATEGORY | Strong Lead | | |
| LOCATION | Seismic line S92A-119 Sp 620 (middle <i>M.diversus</i>) Seismic line HB77A-342 at intersection with HB77A-349 (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> Palaeocene | 4.7 square kilometres 8.3 square kilometres | |
| SECONDARY OBJECTIVES | None | | |
| DEPTH TO TOP RESERVOIR | EVCM - Middle <i>M.diversus</i> Palaeocene | 2378 mSS 2775 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 verses depth profiles predict that the middle *M.diversus* will have an average porosity of 24% declining to 19% at the top of the Palaeocene. The porosity predictions reflect the fact that Grindstone is updip of Eddystone and in turn Pelican Field. This improvement in porosity is also likely to be reflected in better permeability preservation.

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