

GWF9107.009-RJS

FIT 20	2633.5m (8640')
	REC: 2200 cc Mud Filtrate
	FSIP = 3855 psi
	FP = 2818 psi
	HP = 4616 psi
FIT 21	2550.3m (8367')
	REC: = <u>139 cubic feet Gas</u>
	+ 6000 cc Condensate
	FSIP = 3684 psi
	FP = 3647 psi
	HP = 4450 psi

SHOWS: Background gas (methane, ethane and minor propane) were recorded through the Eastern View Coal Measures to approximately 2470m with peaks associated with coals. Below 2470m gas peaks (up to pentane) are recorded from sandstones belonging to the middle and lower M. diversus palynological zones. Also reported from these sandstones are numerous shows of good fluorescence and good cut.

RESERVOIR: Excellent quality sandstone reservoirs occur in the upper EVCN above the middle M. diversus palynological zone. Sandstones belonging to the lower to middle M. diversus palynological zones have log derived average effective porosities of 17-23% (Amoco report: Pelican Field Reserves). Core analysis data supports the log derived porosities and shows a wide variation in permeabilities which range from 1-400 md.

Facies analyses of core conclude that the sandstones of the lower to middle M. diversus zones were deposited in deltaic, fluvial and lacustrine environments and typically comprise fluvial channel fills and shoreface sandstones.

MATURITY: The maximum mean vitrinite reflectance of 0.86% recorded in Pelican 1 was near total depth at 3167.5m in the upper L. balmei sediments which are therefore near peak maturity for oil. The start of the oil window occurs at approximately 2600m (0.7% vitrinite reflectance), near the top of the middle M. diversus zone reservoir section.

SOURCE ROCK: A sequence of eight samples between 1783.3m and 3074.2m (upper EVCN to lower M. diversus) yielded total organic carbon contents of 0.63% for a light brown silty clay to 58.40% for a coal. Detailed analyses were undertaken on three samples, 1783.3m light brown silty clay, 2170.8m a very dark coaly shale or shaly coal, and at 2825.2m a dark laminated shale.

The light brown silty clay (1783.3m) has poor genetic potential (0.8mg/g) a low hydrogen index of 73 and a T max. of 405 (immature). The very dark coaly shale (2170.8m) had a high generic potential of 67.28 mg/g, a hydrogen index of 225 and was marginally to moderately mature. The dark laminated shale has a moderate source rock potential and a hydrogen index indicative of gas and some oil generation.

Total extracts yielded are fair for sample 1783.3, very high for 2170.8m and good for 2825.2m. The coaly sample at 2170.8m is believed to contain migrated hydrocarbons as indicated by the high amount of total extract at a relatively moderate level of maturity.

Samples from 1783.3m and 2170.3m are rich in aromatics indicative of a coaly source and both have a high pristane/phytane ratio indicating a land plant origin for the kerogen.