

POINT TORMENT GASFIELD

RETENTION LEASE R1

Introduction

The Point Torment Gasfield is situated in Retention Lease R1 in the Fitzroy Sub-basin, onshore Canning Basin, Western Australia (Figure 1). The gasfield is located about 1800 kms north of Perth, and is 20 kms northeast of the town of Derby. The eastern border of the permit is 50-80 kms from the Sundown and Blina oilfields. The sealed, all weather Great Northern Highway runs 30-100 kms to the south of the permit.

Exploration Permit EP-104 (R5) was renewed for the fifth time on 4th April, 2005 for a further five years. The permit consists of 9 graticular blocks covering an area of 740 sq km (185,000 acres). Retention Lease R1 was awarded for an initial five year term on 29th August, 2003. The lease consists of 3 graticular blocks covering an area of 250 sq km (60,000 acres). The application L98-1 adjoins R1 to the west and consists of 2 graticular blocks covering an area of 160 sq km (40,000 acres). Both tenements cover the Valentine Prospect with 70% in R 1 and 30% in L98-1. Gulliver Productions Pty Ltd, a wholly owned subsidiary of Empire Oil & Gas NL, is the Operator.

Terms

The R1 Joint Venture intends to drill the Stokes Bay-1 appraisal well around September-October, 2005. The dry hole cost of this well is estimated to be A\$2.4 million. The predicted section for the well is shown in Figure 3. The deal is the farmines earn 75% interest in EP-104 and R1 with the option to earn a 75% interest in the West Kora production licence application L98-1 by contributing 100% to the dry hole costs of Stokes Bay-1.

Point Torment Gasfield

The generalised stratigraphy of the Fitzroy Sub-basin is shown in Figure 4. This gas discovery is located along the Pinnacle Fault System to the northwest of West Kora-1. The trap is a three way dip closed structure bounded to the north by the Pinnacle Fault. The Unit "A", "B" and "C" Sands are downthrown against marine and prodelta shales in the lower part of the Anderson Formation (Figures 5 & 6).

Point Torment-1 intersected a thin sand at 2092-95 metres (Unit "A") in the Anderson Formation. This sand had excellent gas shows and showed good crossover on the density-neutron log. Open Hole DST#1 over the interval 2085.8-2096.5 metres flowed gas at a rate of 4.3 MMcfg/d. Based on log analyses, the Unit "A" Sand has 3 metres net pay with 13% porosity. The estimated potential recoverable reserves of the Unit "A" Sand which are 33.5 BCF (Table 1).

Point Torment-1 also intersected two sands at 2027-34 metres (Unit “C”) and 2041-56 metres (Unit “B”) in the Anderson Formation. These sands had excellent gas shows and showed some crossover on the density-neutron log. They were not tested in the original well.

In December, 1996, the well was re-entered and worked over. Oil (49° API) was recovered in the tubing during the pressure gradient survey. Oil was flowed to surface but the well gradually died. This oil is interpreted to have come from the Unit “B” Sand which has no density-neutron crossover in the best porosity.

Based on log analyses, the Unit “C” Sand has 4 metres net pay with 10% porosity while the Unit “B” Sand has 4 metres net sand with 11% porosity. Estimated potential recoverable reserves are 47.4 BCF gas for the Unit “C” Sand and 6.0 million barrels oil for the Unit “B” Sand (Table 1).

At the top of the Deltaic Member, there were excellent oil & gas shows from 1884-94 metres with a possible transition zone over the same interval. Estimated potential recoverable reserves up-dip from Point Torment-1 are 4.3 million barrels oil (Table 1).

During 1994, Point Torment-1 was deepened and intersected more gas bearing sands in the lower part of the Anderson Formation. These extended from 2101 metres down to 2161 metres. A cased hole DST (DST#6) from 2145.5 - 2163.5 metres flowed gas at a rate too small to measure and these sands were interpreted to be tight. However, this test was below the main sand from 2101 to 2130 metres. Based on the mud log, gamma ray and density-neutron logs, there are 30 metres of net gas sands with average porosity of 8%. Estimated potential gas-in-place reserves for this sand are of the order of 86 BCF (Table 1).

A seismic line and geological cross section is shown in Figures 7 & 8.

Economics

By drilling the Stokes Bay-1 well, the EP-104/R1 Joint Venture intends to prove up between 40-80 BCF recoverable gas reserves. If these reserves can be established, then the joint venture would sell 6.0 MMcfg/d from the Point Torment gas field into an LNG plant near Derby and ship LNG to the various power stations at Derby, Fitzroy Crossing, Halls Creek plus other mining projects in the area to generate electricity. The LNG technology has been well established and the economics for the EP-104/R1 joint venture are very attractive as described below.

Based on the above gas sales scenario (Table 2), recoverable reserves of 44 BCF gas generate gross revenue of A\$168 million and net cash flow of A\$105 million. The project has a net present value of A\$27 million (Table 3). The Point Torment gas is also rich in condensate and LPG which could also add a further \$21 million to the NPV of the field (Table 4).

TABLE 1

Potential Reserve Estimates

Point Torment Gasfield

Unit "A" Sand

Area	29 sq km	2,900 hectares
Average Net Pay	3 metres	
Volume	8,700 hectare-metres	
Reservoir	Porosity = 13%, Sw = 30%, Depth = 2,100 metres	
Gas-in-Place	156,000 cu. m/hm 1.357 billion cu.m	48.0 BCF
Recovery Factor	70%	
Recoverable Gas Reserves	33.5 BCF	

Unit "B" Sand

Area	40 sq km	4,000 hectares
Average Net Pay	4 metres	
Volume	16,000 hectare-metres	
Reservoir	Porosity = 10%, Sw = 40%, FVF = 1.5	
Oil-in-Place	2,500 barrels/hm 40.0 million barrels	
Recovery Factor	15%	
Recoverable Oil Reserves	6.0 million barrels	

Unit "C" Sand

Reservoir	Porosity = 10%, Sw = 30%, Depth = 2,030 metres	
Gas-in-Place	120,000 cu m/hm 1.92 billion cu m	67.8 BCF
Recovery Factor	70%	
Recoverable Gas Reserves	47.4 BCF	

Tight Gas Sands - Marine Member

Area	29 sq km	2,900 hectares
Gross Pay	60 metres	
Net Pay	30 metres	
Average Net Pay	12 metres	
Volume	34,800 hectare-metres	
Reservoir	Porosity = 8%, Sw = 50%, Depth = 2,160 metres	
Gas-in-Place	70,000 cu. m/hm 2.4 billion cu.m	86.0 BCF

Top Deltaic Member

Area	4.5 sq km	450 hectares
Average Net Pay	16 metres	
Volume	7,200 hectare-metres	
Reservoir	Porosity = 12%, Sw = 40%, FVF = 1.5	
Oil-in-Place	3,000 barrels/hm 21.6 million barrels	
Recovery Factor	20%	
Recoverable Oil Reserves	4.3 million barrels	

TABLE 2

ECONOMIC ASSUMPTIONS FOR THE POINT TORMENT GASFIELD

1. Gas Price	\$2-70 / Mcf at wellhead escalating @ 2.4% per year (80% CPI)	
2. Appraisal	Drill Point Torment-2	A\$2.5 million (completed)
3. Development	Redrill Point Torment-1	A\$2.5 million (completed)
	Drill Point Torment-3 to 5	A\$7.5 million (completed)
	Fracking Costs	A\$2.5 million
	Field Infrastructure	A\$2.0 million
	Gas Plant	A\$3.0 million
	Total Development Costs	A\$20.0 million
4. Operating Costs	A\$1.0 million per year	
5. Transport	Nil	
	Gas delivered to Plant at site	
6. Royalty	10% (to State Government)	
7. Inflation	3%	
8. Discount Rate	10%	
9. Depreciation	Exploration & appraisal costs 100%	
	Development costs 10% per year	
10. Company Tax	30%	
11. Reserves	33 BCF recoverable gas in "A" Sand	
	Probable 47 BCF recoverable gas in "C" Sand	
12. Production	Four wells capable of 1-2 MMcfg/d each. One well as backup. Production commences in 2005 @ 6.0 MMcfg/d with 20 year contract.	

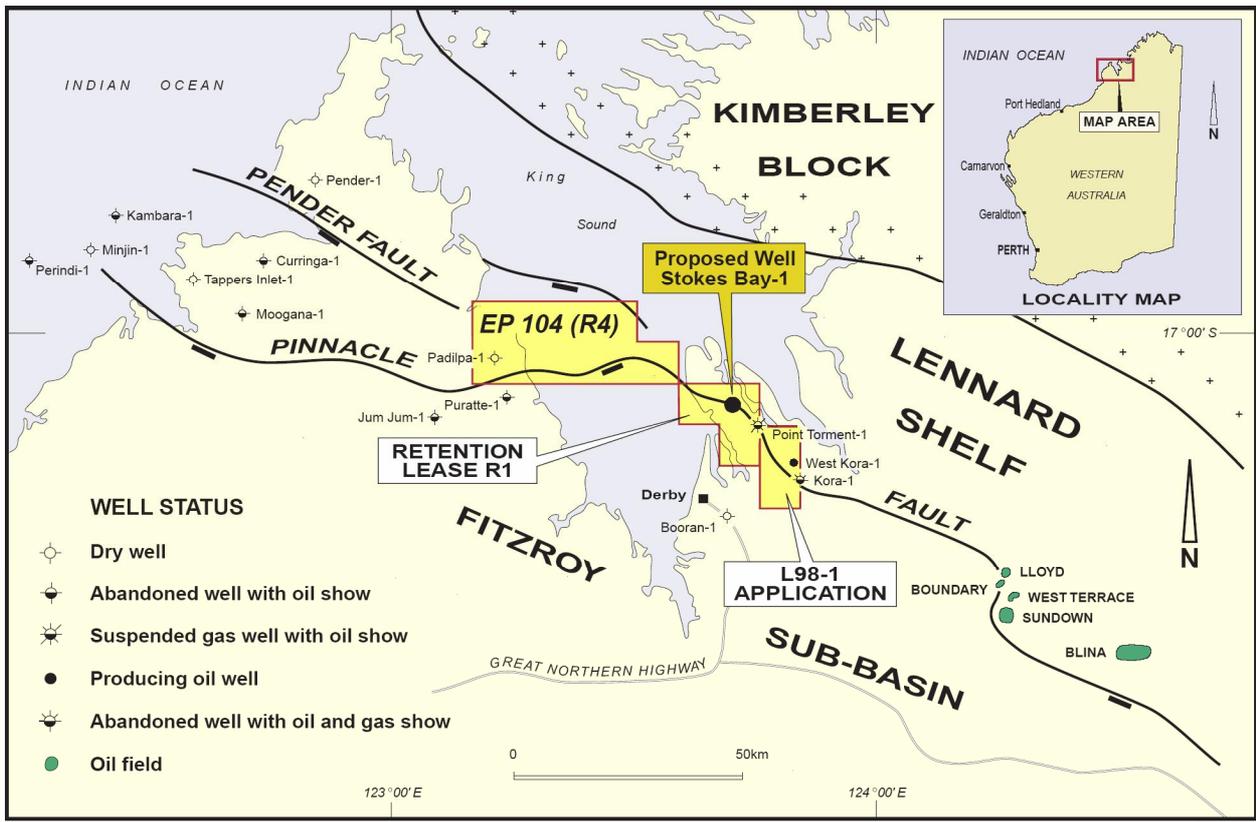
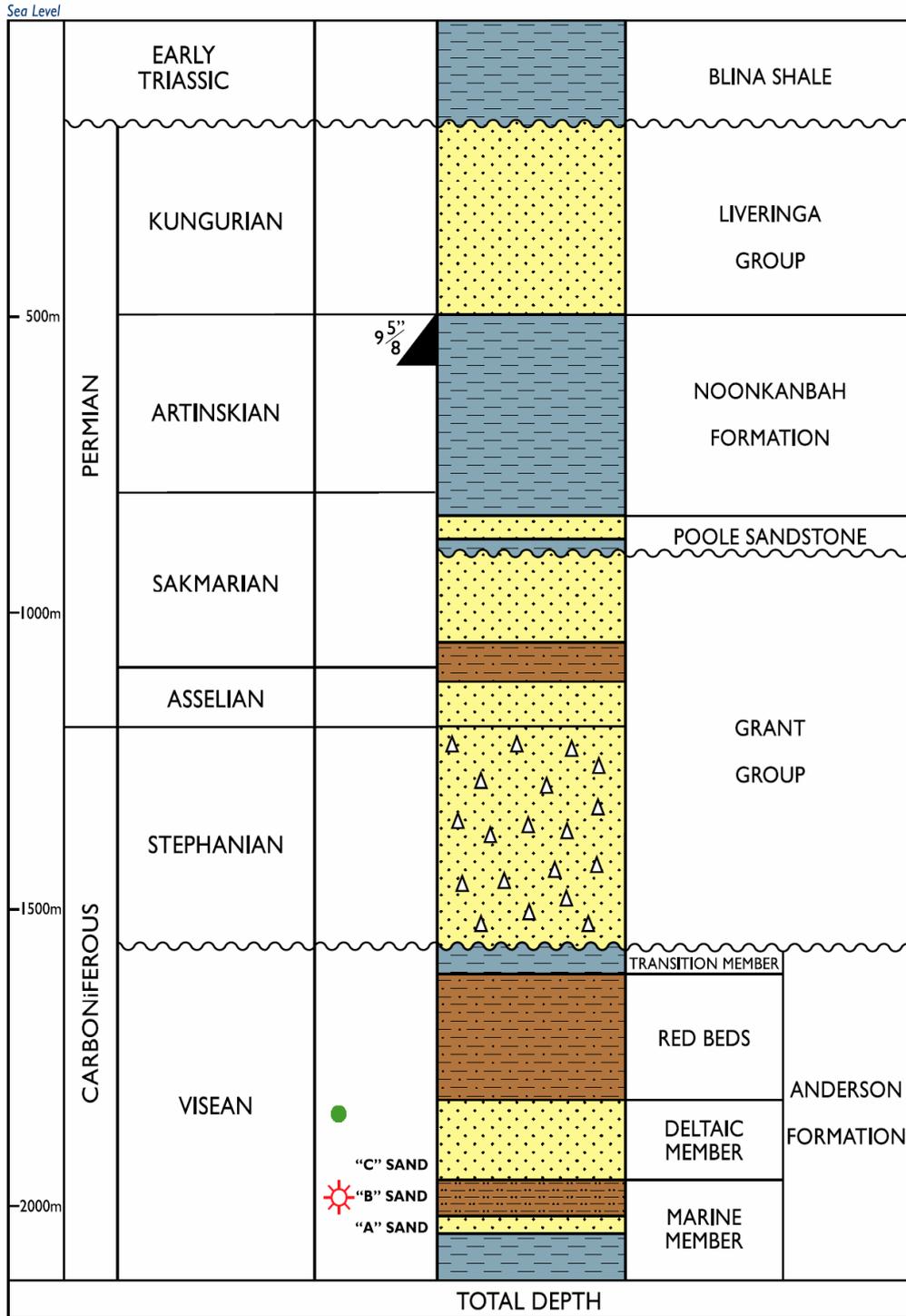


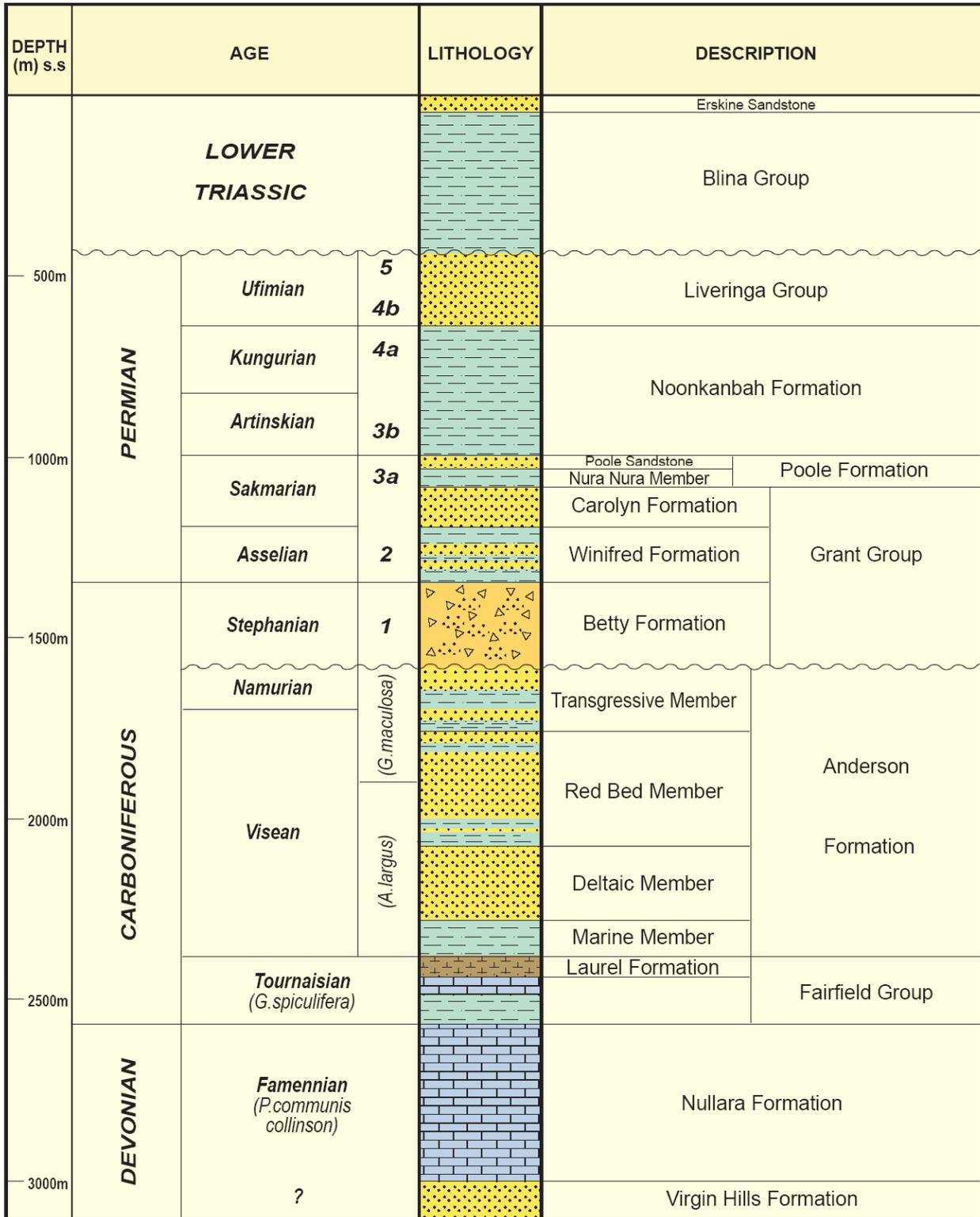
FIGURE 1



EMPIRE OIL & GAS NL

PREDICTED SECTION STOKES BAY - I RETENTION LEASE - RI





**GENERALISED STRATIGRAPHY
FITZROY SUB-BASIN
R1 CANNING BASIN**

FIGURE 4

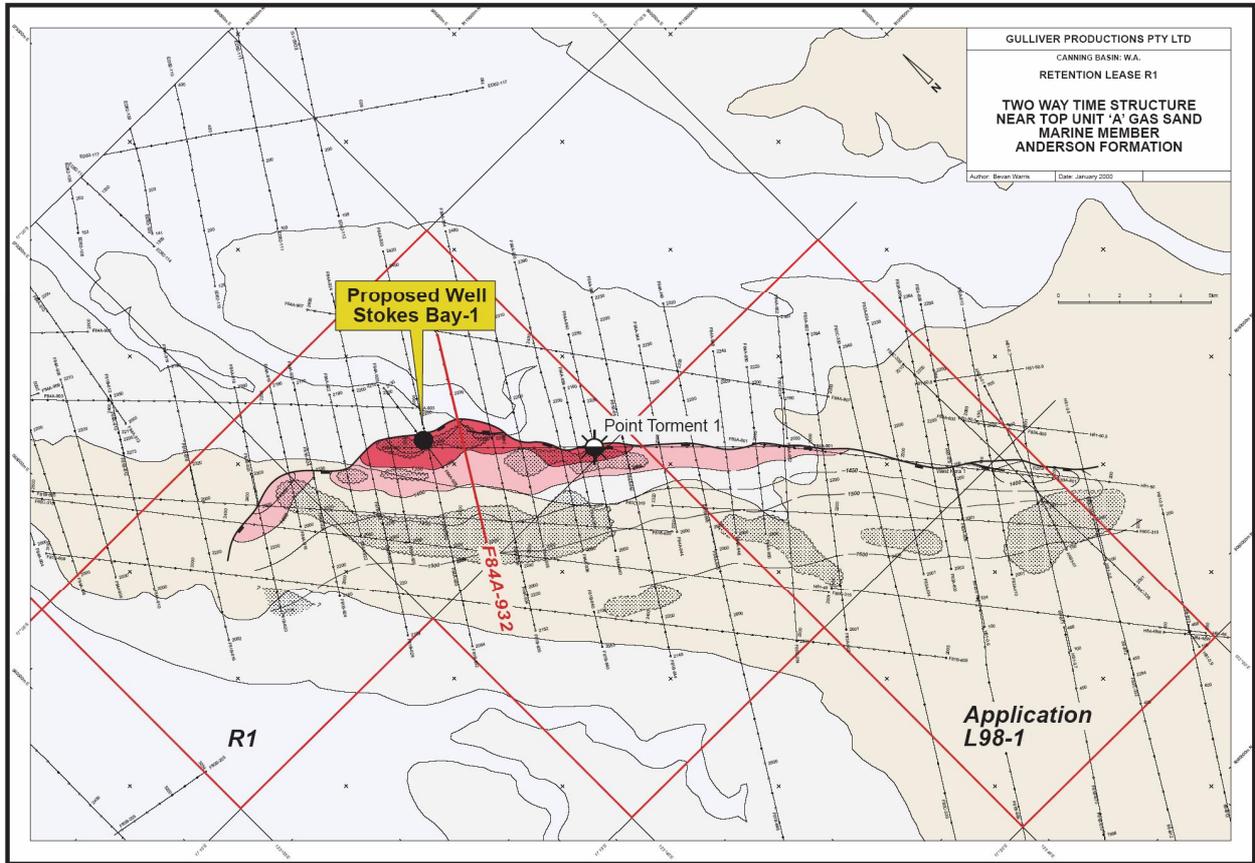


FIGURE 5

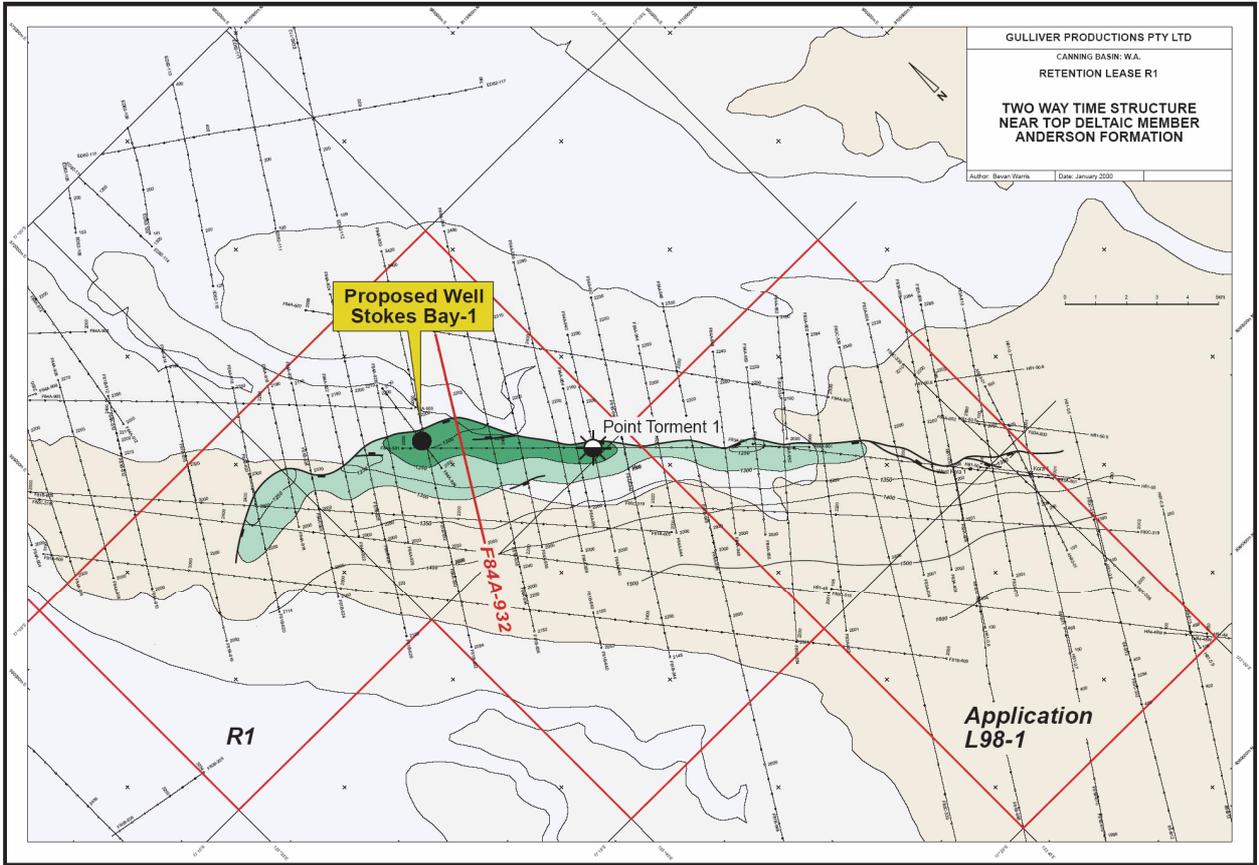


FIGURE 6

**PROPOSED STOKES BAY-1
(Projected)**

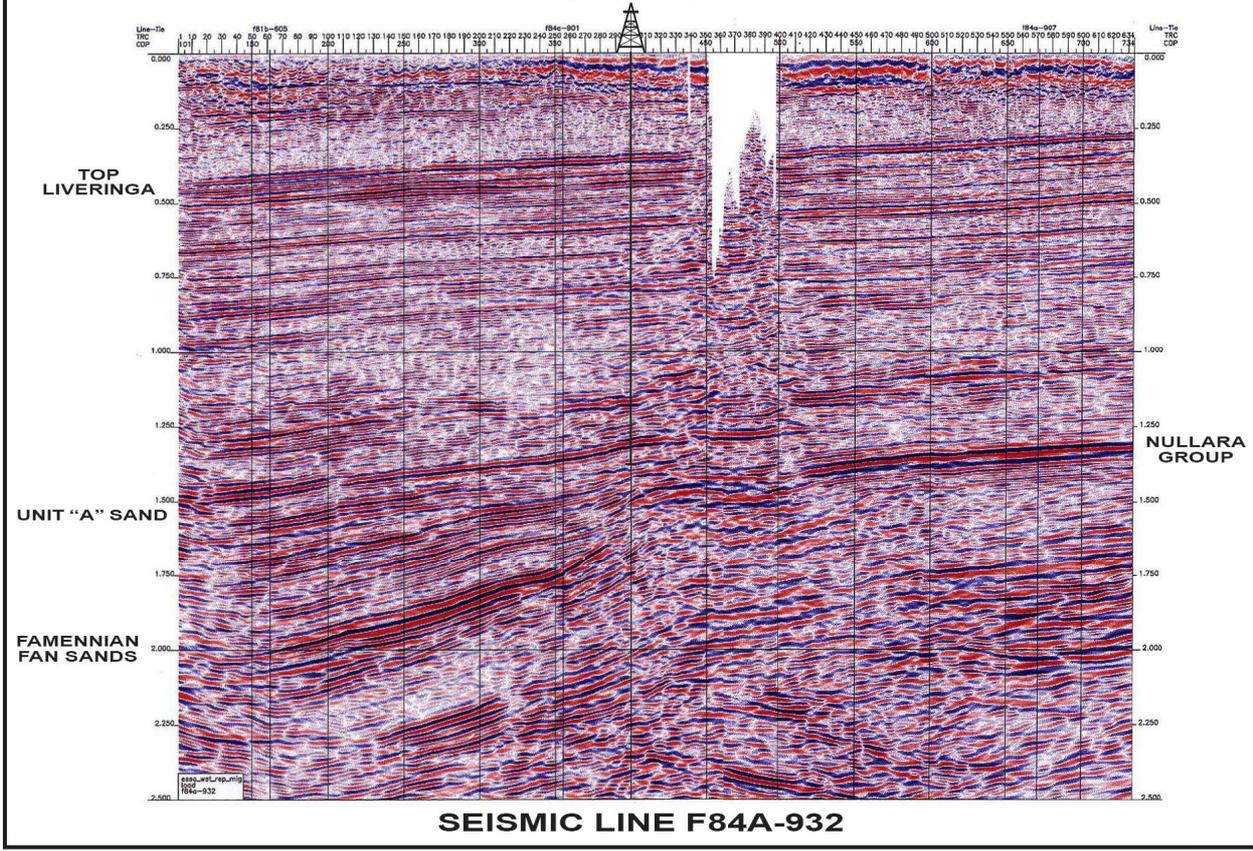


FIGURE 7

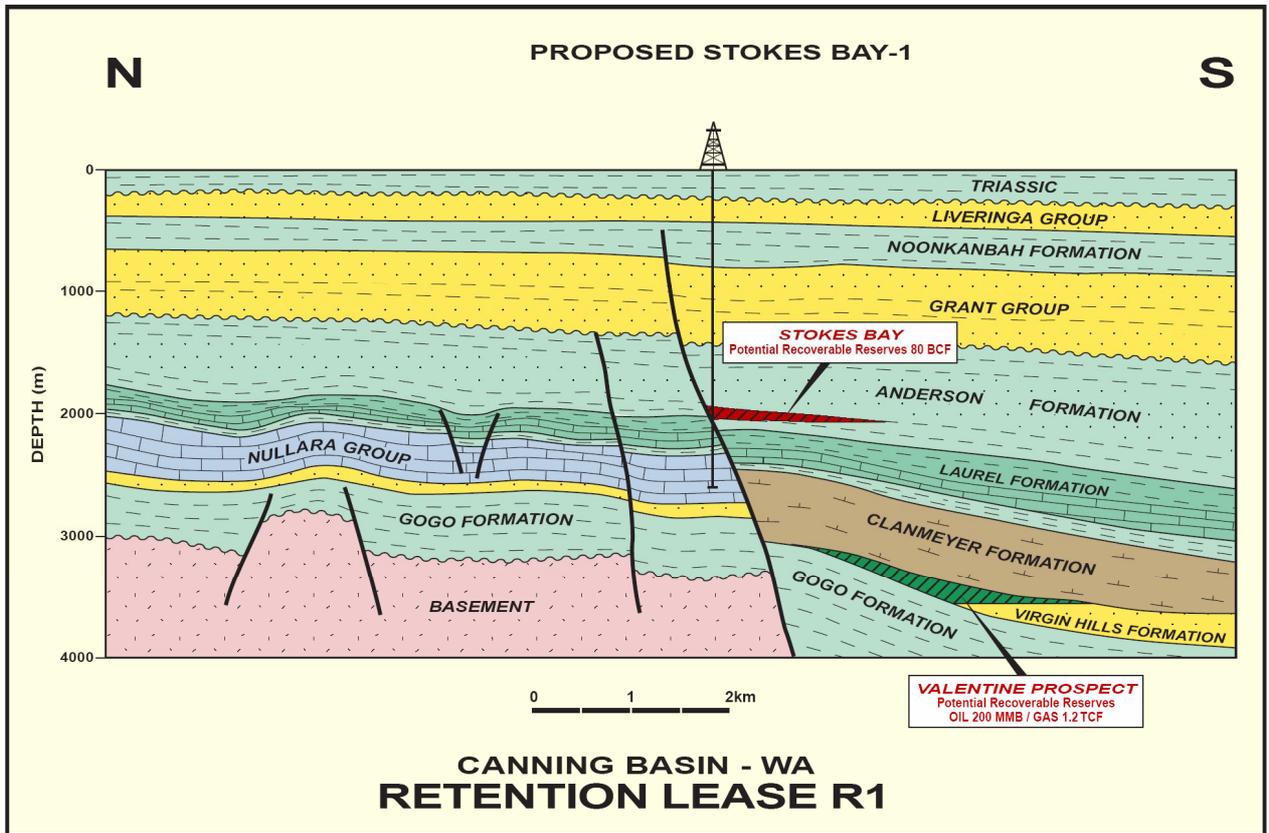


FIGURE 8