

WELL: Shortland 1 CRAE No: RD92MB24

Status: Plugged and abandoned

Hole Size: 121/4" to 59m

Plugs:

81/2" to 553.5m 6" to 1020m (T.D.)

Casing & Tubing Details: 13 3/8" Conductor Surface to 9m 9 5/8" to 59m 7" to 532.2m

Perforations: Nil

Plug No. 1 960-840m (Class "A" Cement)

Plug No. 2 570-490m (Class "A" Cement)

Surface Plug 45m to cellar floor (Class "A" Cement)

Operator: Pacific Oil & Gas Pty Limited

Participants: Pacific Oil & Gas Pty Limited 90%

Omega Oil N.L. 10% \*

Tenement: EP18

Seismic Location: Line MA91-109; S.P. 600

Location: Lat: 16<sup>0</sup>44'47.924" South

Long: 133<sup>o</sup>41'14.354" East AMG: Zone 53, 360 077.0E 8148 003.6N

Basin: Beetaloo sub-Basin, McArthur Basin

Elevation: (DF) 267.7m (Datum) G.L.:264.2m AHD

Spudded: 13 November 1992 Rig Released: 3 December 1992

Rig: Rig 23

**Drilling Contractor: Rockdril Contractors** 

STRATIGRAPHY:								*(NB: Non-Contributory Interest)							
AGE				UNIT AND SUB-UNIT						MBDF (Logger)			Metres AHD (Logger)		Thickness (m)
Tertiary/ Cretaceous			Undi	Undifferentiated						Surface (3.5)			264.2		60.0
Cambrian			Jind	Jinduckin Formation						63.5			204.2		60.5
			Tind	all Lime	eston	Θ				124	1.0		143.7		231.5
			Antri	im Plate	eau V	/olcanics				355	5.5		- 87.8	3	131.5
Proterozoic			"Can	"Cambrian Sandstone"						487.0			-219.3		3.6
			"Hay	"Hayfield Mudstone"						490.6			-222.9		400.7
			"Jan	"Jamison Sandstone"						891.3			-623.6		89.7
				linn For						981	1.0		- 713.3	3	39.0+
- Kyalla Member Total Depth (Driller) (m)							┪	1020 752.3							
Total Depth (Logger (m)								1018				750.3			
FORMA	TION	TES	rs:				C	HOKE	<u>:</u>	N/A	(Close	d Cha	mber (	OST)	
TES	TIMES	3 (min)	)		PRES			SSURES (psi)					RESULT		
		PF	FSI	F	SS	I IHH	IPP	FPP		BP	IFP	FFP	FBP	FHH	
DST 1		6	121	237	660	Inside gauge									Recovered approx
817.87-836.0r	——— n					1183.7	677.2	673.2	89	3.1	676.3	97.5	630.7	1185.8	8 litres of formation
	-					Outside									water cut rat-hole
					l	Gauge									mud.
						1214.9	708.3	703.3	92	3.5	708.0	126.9	660.9	1187.3	Gas was present in too
						Recovery									
				<u>.</u>		Gauge			L					<u> </u>	
				<u> </u>	<u> </u>	<u> </u>	675.8	675.6	<u> </u>		674.5	85.0	ļ	·	
						drostatic Head									
							eflow Pressure FFP: Final Flow Pressure								
							eflow Pressure FBP : Final Build Up Pressure								
SSI:	Sec	ond St	nut In		- 1	BP:	Build (	Jo Pre	SSI	ure		FHH	I: H	ydrosta	atic Head

## CORES:

TYPE LOG	RUN NO	INTERVAL (m)	DATE	NO	INTERVAL (m)	RECOVERY	NO	interval (m)	RECOVERY
Velocity Data Well Shoot	1	12.0 - 38.0	13/11/92						
BPB RR2	1	12.7 - 59.0	13/11/92						
Velocity Data Well Shoot	1	38.0 - 316.0	21/11/92						
Schlumberger DLL-GR-BHC-	1		30/11/92						
MSFL-SP LDL-CNL-NGS	1	50.0 - 1515.5 532 .0 - 1017.0	30/11/92 30/11/92						
DIL Well Shoot WST	1	532 .0 - 1016.0 67.7 - 1010.0	30/11/92 2/12/92		4				

Chemical Analysis (water, oil, gas)

## DST 1

Water samples, three samples (3229799 - 3229801) were submitted for standard water analysis.

Gas samples, two samples (3229802 and 3229803) were submitted for gas analysis.

## Summary & Conclusions:

Shortland 1 was designed to test a structural closure interpreted from seismic, approximately 9 kilometres west north-west of Jamison 1. The well came within expectations down to the base of the Antrim Plateau Volcanics. Below the Volcanics the "Cambrian Sandstone" is interpreted to be present. It should be noted however, that this section in Shortland 1 was drilled without returns and the presence or absence of this sand can only be deduced by correlating wireline logs from the nearby wells.

Below the Antrim Plateau Volcanics the well passed into the claystones and siltstones of the "Hayfield Mudstone". The section drilled from the top of the "Hayfield Mudstone" to total depth, is as expected, very similar to that drilled in the surrounding wells, with the data from Mason 1 giving very good geological control whilst drilling Shortland 1, once several correlatable features had been intersected.

The observation that the well was approximately 84 metres low to prognosis at the top "Jamison Sandstone" level indicates a questionable seismic interpretation over this prospect. A post drilling review of the seismic has identified a problem in the interval velocities in determining depths within the Proterozoic section at this locality. This is likely to change the form of the structure as presently mapped and hence the structural integrity of the prospect. Conclusions as to the relative absence of hydrocarbon cannot be drawn.

Only poor to fair hydrocarbon shows were encountered in the reservoir targets and only small recoveries of gas are inferred from DST data, similar to the result at Mason 1. It is noteworthy that minor gas is reservoired within the basal "Hayfield Mudstone" sands at both Shortland 1 and Mason 1 where no apparent structure exists.

The well was plugged and abandoned.

Bottom hole temperature = 58.9°C

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WELLSITE GEOLOGISTS:	CARD PREPARED BY:	APPROVED BY:	DATE:
Shane Hibbird	Shane Hibbird		
Sandy Menpes			
John Torkington			