

**Culverin-1**

<b>Date:</b>	24-12-2005	<b>Last Casing:</b>	340 mm (13 3/8") @ 1511.14 mMDRT
<b>Report Number:</b>	5	<b>Leak Off Test:</b>	1.89 sg EMW @ 1528.0 mMDRT
<b>Report Period:</b>	24hrs to 24:00	<b>Current hole size:</b>	311 mm (12 1/4")
<b>Depth @ 2400 Hrs:</b>	1544.0 mMDRT	<b>Mud Weight:</b>	1.14 sg
<b>Last Depth:</b>	1525.0 mMDRT	<b>ECD:</b>	1.22 sg
<b>Progress:</b>	19 m	<b>Mud Type:</b>	KCl-NaCl Polymer
<b>TD Lithology:</b>	Argillaceous Calcilutite	<b>Mud Chlorides:</b>	35,500 ppm
<b>Water Depth:</b>	585.0 m	<b>Mud Fluid Loss:</b>	6.8 cc
<b>RT Elevation:</b>	21.5 m	<b>Bit Type:</b>	PDC (Reed-Hycalog)

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**OPERATIONS SUMMARY**


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**24 HOUR SUMMARY****00:00 - 24:00:**

Completed making up 311 mm (12 1/4") BHA. RIH and picked up drillpipe on the way in hole. Drilled out the shoetrack. Displaced the well to mud. Drilled ahead 3 m of new formation. Conducted LOT to 1.89 sg EMW at 1528.0 mMDRT. Drilled ahead to 1544.0 mMDRT.

**06:00 Update**

Drilling ahead at 1670.0 mMDRT in the Gippsland Limestone.

**NEXT 24 HOURS:**

Drill ahead 311 mm (12 1/4") hole.

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**GEOLOGICAL SUMMARY**


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- LITHOLOGIC DESCRIPTION:**

Interval mMDRT	Description
1525-1530	<b>ARGILLACEOUS CALCILUTITE with trace DOLOMITE stringers</b>
ROP 2 – 19 m/hr Ave 2 m/hr (drilling with reduced parameters while clearing BHA from the 340mm casing shoe)	ARGILLACEOUS CALCILUTITE (100%): light to medium grey, occasionally olive grey, soft to rarely firm, amorphous to very rarely sub-blocky, trace arenaceous grains, common forams, common fossil fragments, strongly calcareous, trace pyrite, trace black carbonaceous specks. DOLOMITE (Nil-Trace): light brown to yellowish-brown, hard to very hard, conchoidal fracture, trace forams visible within matrix, reacts weakly to acid when crushed.

- HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
	Nil.

▪ **GAS SUMMARY:**

INTERVAL (mMDKB)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	C5 (%)
1525-1530	0.03	0.03	0.0002	0.0002	0.0015	0.0001	-

▪ **SURVEYS**

MD	ANGLE	Azi		MD	ANGLE	Azi		
681.95	1.26	227.0		1540.46	0.33	354.58		
767.68	0.81	263.55		1569.11	0.36	350.12		
825.04	0.93	254.57		1597.73	0.50	2.93		
911.19	1.09	257.49		1626.44	0.63	1.96		
1027.78	0.85	252.60						
1056.46	0.79	254.04						
1085.16	0.77	260.55						
1113.81	0.62	255.11						
1142.54	0.51	257.73						
1171.11	0.43	257.64						
1228.35	0.22	250.90						
1257.08	0.17	244.39						
1342.79	0.06	257.65						
1371.46	0.03	247.14						
1428.75	0.11	336.43						
1486.03	0.16	21.18						
1509.77	0.09	0.70						
1525.00	0.09	0.70						

▪ **WELLSITE GEOLOGISTS:**

Mike Woodmansee

Rob Blackmore

▪ **FORMATION TOPS**

WD = 585.0 m RTE = 21.5 m								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDKB	SS	THICK	MDKB	SS	HI/LO	THICK	DIFF
Sea Floor	607	585	-	606.5	585.0	0.0	-	0.0
Lakes Entrance	2582	2560						
Latrobe	2907	2885						
Base TF Channel	2937	2915						
Top 67.5 Ma Sand	2947	2925						
Near 68.5 Ma Sand	3257	3235						
Near 70.3 Ma Sand	3542	3520						
TD	3612	3590						

▪ **COMMENTS:**

**Sperry-Sun LWD sensor to bit distances:**

Directional = 13.13 m

Gamma-Ray = 15.73 m

Resistivity = 18.04 m

Density = 25.66 m

Porosity = 30.97 m

ACAL = 29.93 m