

## Longtom- 3 ST1



<b>Date:</b>	04-08-2006	<b>Last Casing:</b>	406 mm (16") @ 995.32 mMDRT
<b>Report Number:</b>	5	<b>Leak Off Test:</b>	1.62 sg EMW @ 1008.0 mMDRT
<b>Report Period:</b>	24hrs to 24:00	<b>Current hole size:</b>	343 mm (13½ ")
<b>Depth @ 2400 Hrs:</b>	1726	<b>Mud Weight:</b>	1.45 sg
<b>Last Depth:</b>	1727	<b>ECD:</b>	1.47 sg
<b>Progress:</b>	1m	<b>Mud Type:</b>	SBM Petrofree
<b>TD Lithology:</b>	Massive Claystone with minor Sandstone	<b>V: 6 / 3</b>	14 / 13
<b>Water Depth:</b>	56.0 m	<b>Mud Fluid Loss:</b>	3.4 cc
<b>RT Elevation:</b>	21.5 m	<b>Bit Type:</b>	Reed Hycalog RSX616M TFA 1.67

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**OPERATIONS SUMMARY**


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

Drilling ahead to 13 ½" directional hole from 1726m to 1727m. Pulled out for a bit change. Encountered several over-pulls up to 40klb's requiring 1 reciprocation. Worked through tight section f/ 1235 to 1230mrt, 45klb's overpull requiring 5 reciprocations to clear.

Continued to pull out of the hole to the BHA. Schlumberger removed radio active source & downloaded LWD memory. Made up Cameron 18 3/4" Housing Running Tool and ran to the wellhead. Pressure tested the BOP: Tested pipe rams, fail safe valves, kill / choke lines & choke manifold to 250 psi (low) / 5,000 psi (high) 5 mins each. Annular preventers 250 (low) / 3,500 psi (high) 5 mins each. Pressure tests performed with yellow pod, function tested w/ blue pod from the rig floor. Tested stand pipe manifolds, safety valve & shock hose 250 psi (low) / 5,000 psi (high) 5 mins each.

**06:00 Update**

Running in the hole to drill 13 1/2" hole.

**NEXT 24 HOURS:**

RIH & drill ahead 13 1/5" hole through the Kipper Shale and Admiral Formation.

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**GEOLOGICAL SUMMARY**


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**LITHOLOGIC DESCRIPTION:**

Interval mMDRT	Description
1726 – 1727 Av: 12 m/hr	<p><b>Massive Claystone with minor Sandstone</b></p> <p>CLAYSTONE: (70%) medium – dark grey, brownish grey, rare medium to light grey, soft – firm, sub blocky, carbonaceous in part, silty in part.</p> <p>SANDSTONE: (30%) clear – translucent to off white, fine to medium, rare coarse to very coarse grains, dominantly loose to occasionally soft aggregates, sub angular to rounded, moderately sorted, aggregates have up to 20% argillaceous matrix, trace pyrite cement, good inferred porosity</p>

**HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
	No fluorescence observed

**GAS SUMMARY:**

INTERVAL (mMDKB)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
1726 - 1727	0.6	4900	145	27	9	9	17	1

**SURVEYS**

Tie in point to Longtom -3 ST1 is 1005.00m

MD	ANGLE	Azi	TVD	MD	ANGLE	Azi	TVD
1703.59	29.2	185.09	1676.2				

**FORMATION TOPS**

WD = 56.7 m RTE = 21.5 m								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDKB	TVDSS	THICK	MDKB	TVDSS	HI/LO	THICK	DIFF
Sea Floor/ Gippsland Limestone	77.5	56	1096	77.5	56		1104	+8
Lakes Entrance	1172.0	1150.0	64	1182	1160.0	10.0 LO	33.5	-30.5
Latrobe	1236	1214.0	234	1216	1193.5	20.5 HI	261.8	+27.8
K/T Boundary	1476	1448	37	1484	1455.3	7.3 LO	61.3	+24.3
Un-named Volcanics	1515	1485	37	1546	1513.8	28.8 LO	15	n/a
Kipper Shale	1555	1522	201	1603	1565.9	43.9 LO		
Admiral Formation (Nexus)	1777	1723	163					
Admiral Formation (SRD)	1963	1889	N/A					
500 sand	1963	1889	154					
400 sand	2166	2043	117					
300 sand	2366	2160	77					
200 sand	2502	2237	47					
100 sand	2584	2284	44					
Emperor Volcanics	2661	2328	N/A					
TD	2733	2370						

**COMMENTS:**

Prognosed measured depths for the formations have been adjusted to the directional plan Longtom-3 ST1 Plan1 Rev1 (2)

Anadrill Schlumberger LWD sensor to bit distances: Resistivity: 11.78m Gamma 11.83m, Ultrasonic Caliper 26.9m, Density: 26.90, Neutron Porosity 27.95m.

LWD Neutron Density and Porosity values are suspect, this is due in part to the hole being of low angle and therefore the LWD tools sensors not having consistent contact with the well bore. Also the hole orientation is near parallel to the magnetic field. This results in the tool not being able to determine which way is down and hence a lot of the data points are measuring the mud to the side and above the LWD tool. Once the hole angle exceeds 30deg the tool should be able to determine its orientation and commence measuring formation densities in only the down direction where the detector pad will be in contact with the formation.

**WELLSITE GEOLOGISTS:****Mike Woodmansee****Trevor Lobo**