

Longtom-4 H



<b>Date:</b>	04-08-2008	<b>Last Casing:</b>	273 mm (10.75") @ 2590.8 mMDRT
<b>Report Number:</b>	4	<b>Leak Off Test:</b>	1.64 sg EMW
<b>Report Period:</b>	24hrs to 24:00	<b>Current hole size:</b>	241 mm (9½")
<b>Depth @ 2400 Hrs:</b>	3259 mMDRT	<b>Mud Weight:</b>	1.45 sg
<b>Last Depth:</b>	3006 mMDRT	<b>ECD:</b>	1.46 sg
<b>Progress:</b>	253 m	<b>Mud Type:</b>	SOBM
<b>TD Lithology:</b>	Claystone	<b>Vis:</b>	85 sec/qt
<b>Water Depth:</b>	55.97 m (LAT)	<b>Mud Fluid Loss:</b>	3.0cc/30min
<b>RT Elevation:</b>	41.06 m (LAT)	<b>Bit Type:</b>	REED RSR616M-B3

**OPERATIONS SUMMARY**

<b>24 HOUR SUMMARY</b>	
<b>00:00 - 24:00:</b>	Drilling ahead as per DD requirements from 3006m to 3259m (2632.9mTVD).
<b>06:00 Update</b>	Drill ahead 9½" hole as per DD requirements from 3259m to 3400m.
<b>NEXT 24 HOURS:</b>	Continue drilling as per DD requirements to intersect the "100" sands.

**GEOLOGICAL SUMMARY**

**LITHOLOGIC DESCRIPTION:**

Interval mMDRT (mTVDSS)	Description
3080 – 3132m (2556.6 – 2571.3) ROP:3 – 27m/hr	<b>Claystone with minor interbedded Sandstone</b> <b>CLAYSTONE:</b> (95%) medium grey to dark grey, moderately firm to firm, amorphous to blocky, dominantly sub blocky, rare finely disseminated carbonaceous material, non calcareous <b>SANDSTONE:</b> (5%) very light grey to light grey, clear to translucent grains, dominantly soft friable aggregates, very fine to predominantly fine grained, angular to sub rounded, rare well rounded, well to very well sorted, moderate sphericity, minor light grey argillaceous matrix, poor visual porosity. No Shows.
3132 – 3151m (2571.3 – 2575.6) ROP: 9 – 32m/hr	<b>Sandstone with minor interbedded Claystone</b> <b>SANDSTONE:</b> (90%) very light grey to light grey, clear to translucent grains, common friable aggregates, minor loose, very fine to very coarse grained, predominantly fine, trace coarse and very coarse, angular to sub rounded, rare well rounded, moderate sphericity, well sorted, minor light grey argillaceous matrix, common greyish black lithics, rare fresh and weathered feldspars, trace moderate red lithics, trace carbonaceous/coaly fragments, poor visual porosity. No Shows <b>CLAYSTONE:</b> (10%) medium grey to dark grey, moderately firm to firm, amorphous to blocky, dominantly sub blocky, rare finely disseminated carbonaceous material, non calcareous
3151 – 3173m (2575.6 – 2579.7) ROP: 8 – 18 m/hr	<b>Claystone</b> <b>Claystone:</b> as above

3173 – 3265m (2579.7-2593.0m) ROP: 8 – 31m/hr	<b>Sandstone with minor interbedded Claystone</b> SANDSTONE: (90%) very light grey to light grey, clear to translucent grains, common friable aggregates, minor loose, very fine to very coarse grained, predominantly fine, trace coarse and very coarse, angular to sub rounded, rare well rounded, moderate sphericity, well sorted, minor light grey argillaceous matrix, common greyish black lithics, rare fresh and weathered feldspars, trace moderate red lithics, trace carbonaceous/coaly fragments, poor visual porosity. No Shows
3173 – 3265m cont'	<b>CLAYSTONE:</b> (10%) medium grey to dark grey, moderately firm to firm, amorphous to blocky, dominantly sub blocky, rare finely disseminated carbonaceous material, non calcareous
3265 – 3340m (2579.7 – 2594.1) ROP: 17- 47m/hr	<b>Claystone with interbedded Sandstone</b> <b>CLAYSTONE:</b> (80-90%) medium grey to dark grey, soft to firm, dominantly firm, sub blocky to blocky, dominantly blocky, rare finely disseminated carbonaceous material, non calcareous <b>Sandstone:</b> (10-20%) as above

**HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
3080 - 3340	Nil

**GAS SUMMARY:**

INTERVAL (mMDRT)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
3080 – 3132m	0.07 -0.2	483- 1296	3-14	2-8	-	-	-	-
3132 – 3151m Broad peak	1.73	15250	194	65	6	9	1	1
3151 – 3173m	0.07- 0.134	322- 4994	7-68	4-25	0-2	0-3	-	-
3173 – 3265m	0.7-1.1	4458- 13210	43-159	19-59	0-5	1-7	0-1	0-1
3239m Peak	2.65	22377	293	101	10	13	2	2
3265 -3340m	0.1-0.76	389- 7349	3-76	3-33	0-3	0-5	-	-

**SURVEYS**

MD	ANGLE	Azi	TVD					
3313.51	90.41	179.55	2635.6					
3343.47	93.13	182.41	2634.7					
3373.36	94.02	181.60	2632.8					

**FORMATION TOPS**

WD = 55.97 m LAT RTE = 41.06 m LAT								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDRT	TVDSS	THICK	MDRT	TVDSS	HI/LO	THICK	DIFF
Sea Floor/ Gippsland Limestone	78.5	-57	n/a	97.0	-55.97			
Lakes Entrance	-	-						
Latrobe	1299.2	-1223.8		1291	-1214.6	9.2 Hi		
K/T Boundary	-	-						
Un-named Volcanics	1690.5	-1561.7		1695	-1562.8	1.1 Lo		
Chimaera	1724.1	-1590.7		1710	-1575.8	14.2 Hi		
Kipper Shale	1757.4	-1619.5		1755	-1614.6	4.9 Hi		
Admiral Formation	2179	-1983.9		2215	-2015.9	32 Lo		
500 Sands	2287.8	-2077.7		2316	-2101.7	24 Lo		
400 Sands	2418.8	-2187.3		2494	-2241.5	54.2 Lo		
300 Sands	2544.2	-2278.6		2610	-2316.6	37.7 Lo		
200 Sands	2696.3	-2367.2		2696.3	-2367.2			
100 Sands	2828.8	-2450.9		2828.2	-2449.6	1.3 Lo		
50 Sands	3092.2	-2659.9		3132.0	-2571.3	11.4 Lo		
Emperor Volcanics								
TD								

**COMMENTS:**

Surveys are from the Exceed tool.  
Ultrasonic Caliper continues providing erroneous data

MWD/LWD Sensor Offsets BHA # 7 (Anadrill), Bit # 10

Sensor	Distance to bit	Record Rate
Gamma Ray	9.73 m	2 seconds
Resistivity	12.77 m	2 seconds
Thermal Neutron Porosity	13.17 m	4 seconds
Density	10.98 m	4 seconds
Spectroscopy	13.32 m	4 seconds
Ultrasonic Caliper	11.35 m	4 seconds
Pressure Whilst Drilling	9.89 m	4 seconds
Direction & Inclination	20.08 m	

Tools have 227 hours remaining memory (circulation time above 400GPM) 06:00hrs

Water depth and RT elevation are referenced to LAT.

- RT to Sea Level (LAT) = 41.06m
- RT to Sea Bed = 97.03m
- Water Depth = 55.97m (LAT)

**WELLSITE GEOLOGISTS: Cliff Menhennitt Hamish Little**