

## Longtom-4 H



<b>Date:</b>	03-08-2008	<b>Last Casing:</b>	273 mm (10.75") @ 2590.8 mMDRT
<b>Report Number:</b>	3	<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>	3006 mMDRT	<b>Mud Weight:</b>	1.45 sg
<b>Last Depth:</b>	2719 mMDRT (TOC)	<b>ECD:</b>	1.52 sg
<b>Progress:</b>	287 m	<b>Mud Type:</b>	SOBM
<b>TD Lithology:</b>	Claystone	<b>Vis:</b>	92 sec/qt
<b>Water Depth:</b>	55.97 m (LAT)	<b>Mud Fluid Loss:</b>	4.0cc/30min
<b>RT Elevation:</b>	41.06 m (LAT)	<b>Bit Type:</b>	REED RSR616M-B3

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**OPERATIONS SUMMARY**


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

Drilled 9½" hole as per DD requirements from 2719m to 3006m (2573.4mTVD).

**06:00 Update**

Drilled 9½" controlled drilling as per DD requirements from 3006m to 3081m. Repaired hydraulic leak on TDS. Made connection and drilled ahead 9½" controlled drilling as per DD requirements from 3081m to 3083m

**NEXT 24 HOURS:**

Continue drilling ahead as per Directional Driller's requirements to intersect the "50" sands.

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**GEOLOGICAL SUMMARY**


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**LITHOLOGIC DESCRIPTION:**

Interval mMDRT (mTVDSS)	Description
2730 – 2762m (2389.4 – 2409.7m) ROP: 4 - 45m/hr	<p><b>Sandstone with trace Claystone</b></p> <p><b>SANDSTONE: (100%)</b> light grey to medium light grey, predominantly clear, minor translucent and rare pink quartz, friable aggregates, minor loose, common bit generated texture, sub rounded to rounded, very fine to fine grained, trace medium, moderately well sorted, moderate to high sphericity, trace light grey argillaceous matrix, minor dark grey to greyish black lithic grains, rare black vitreous coal fragments, trace moderate red lithic grains, trace to rare fresh and weathered feldspar grains, poor to fair visual and inferred porosity. No Shows.</p> <p><b>CLAYSTONE: (Trace)</b> medium dark grey, hard, blocky, sub fissile in part, non calcareous</p>
2762 – 2828m (2409.7 – 2449.5m) ROP: 17 - 41m/hr	<p><b>Claystone with Interbedded Sandstone</b></p> <p><b>CLAYSTONE: (5-100%)</b> medium grey to medium dark grey, moderately hard, blocky, trace silt, trace carbonaceous fragments, non calcareous.</p> <p><b>SANDSTONE: (5-95%)</b> light grey to medium light grey, predominantly clear, minor translucent, friable aggregates, minor loose, common bit generated texture, very fine to fine grained, trace medium, sub rounded to rounded, moderately well sorted, moderate to high sphericity, trace light grey argillaceous matrix, minor dark grey to greyish black lithic grains, rare black vitreous coal fragments, trace moderate red lithic grains, trace to rare fresh and weathered feldspar grains, poor to fair visual and inferred porosity. No Shows.</p>

2828 – 2862m (2449.5 – 2469.0m) ROP 9 – 30m/hr	<p><b>Sandstone with minor Claystone interbeds</b>  <b>SANDSTONE:</b> (70-90%) light grey to medium light grey, clear to translucent grains, trace pink grains, returned loose, trace friable aggregates, very fine to medium grained, predominantly fine to medium, sub rounded to rounded, minor angular to sub angular, well sorted, moderate to high sphericity, trace light grey argillaceous matrix, minor greyish black lithic grains, trace fresh and weathered feldspar grains, trace moderate red lithics, fair inferred porosity. No Shows.  <b>CLAYSTONE:</b> (10-30%) medium grey to medium dark grey, moderately hard, blocky, trace silt and very fine grained quartz, trace finely disseminated carbonaceous fragments, non calcareous.</p>
2862 – 3080m (2469 – 2556.6m) ROP: 7-44 m/hr	<p><b>Claystone with thin Sandstone and Coal interbeds</b>  <b>CLAYSTONE:</b> (70-90%) medium grey to dark grey, moderately hard, blocky, trace finely disseminated carbonaceous material, non calcareous, trace very fine sand grains, grading in part to SILTSTONE  <b>COAL:</b> (Tr-10%) brownish black to black, moderately hard, blocky, brittle, sub vitreous lustre  <b>SANDSTONE:</b> (10-30%) light grey to medium light grey, clear to translucent grains, returned loose, trace friable aggregates, very fine to medium grained, predominantly fine to medium, sub rounded to rounded, minor angular to sub angular, well sorted, moderate to high sphericity, trace light grey argillaceous matrix, minor greyish black lithic grains, trace fresh and weathered feldspar grains, fair inferred porosity. No Shows.</p>

**HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
	Nil

**GAS SUMMARY:**

INTERVAL (mMDRT)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
2730-2762	3.84	32160	375	173	16	23	3	2
2762-2828	0.15- 0.31	1250- 3552	22-60	15-32	1-3	3-6	-	-
2828-2862	3.48	30420	523	174	23	25	6	4
2862-3080m	0.1-0.2	1020- 1820	27-57	18-29	3-5	4-7	1-2	0-1

**SURVEYS**

MD	ANGLE	Azi	TVD					
2941.41	65.11	188.76	2548.7		D&I			
2987.04	68.43	190.05	2566.7		Xceed			
3016.23	69.92	189.15	2577.1		Xceed			

**FORMATION TOPS**

WD = 55.97 m LAT RTE = 41.06 m LAT								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDRT	TVDSS	THICK	MDRT	TVDSS	H/L0	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			
50 Sands	3092.2	-2659.9						
Emperor Volcanics								
TD								

**COMMENTS:**

The D&I MWD tool started sending erroneous data following survey at 2941m. Surveys from then on are from Xceed.

Ultrasonic Caliper providing erroneous data from 3025m

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 250 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**