# Longtom-4 P



**Date:** 28-07-2008 Last Casing: 273 mm (10.75") @

2590.8 mMDRT

Report Number:5Leak Off Test:1.64 sg EMWReport Period:24hrs to 24:00Current hole size:241 mm (9½")

Depth @ 2400 Hrs: 2987 mMDRT Mud Weight: 1.45 sg Last Depth: 2896 mMDRT ECD: 1.55 **Progress:** 91 m Mud Type: SOBM Volcanics 78 sec/qt TD Lithology: Vis: Water Depth: 55.97 m (LAT) Mud Fluid Loss: 2.0cc/30min RT Elevation: 41.06 m (LAT) Smith M716PXC Bit Type:

#### **OPERATIONS SUMMARY**

24 HOUR SUMMARY
00:00 - 24:00:

RIH with 9½" BHA from 143m to 209m. Shallow tested tools and

continued RIH to 2637m washing down the last 17m. Recaptured missing MWD/LWD data from 4 sections over total interval from 2640m to 2813m. Reamed the cored section and continued to drill 9½" hole from 2896m to 2987m - final TD of Pilot hole. Circulated

sample up and POOH to 2430m.

**06:00 Update**Continued to POOH from 2430m to top of BHA, flow checked and

continued POOH BHA. Laid out Jars, unloaded RA source, broke out bit and bit sub and laid down Schlumberger MWD/LWD tools.

Cleaned rig floor, held PJSM and commenced rig up for

Schlumberger wireline logs.

**NEXT 24 HOURS:** Run wireline logs.

# **GEOLOGICAL SUMMARY**

#### LITHOLOGIC DESCRIPTION:

Interval mMDRT (mTVDSS)	Description
2896 – 2968m	Interbedded Sandstone and Claystone
(2500.2 – 2550.7) ROP 10.5 – 97.4m/hr 58.2m/hr avg	<b>SANDSTONE:</b> very light grey to light grey, clear to translucent grains, returned loose, minor friable aggregates, very fine to predominantly fine grained, trace medium, sub angular to sub rounded, trace angular, moderate to high sphericity, well sorted quartz, trace silica cement, trace black lithic grains, trace weathered feldspar grains, poor visual porosity. No Shows.
	<b>CLAYSTONE:</b> medium dark grey to dark grey, hard, sub blocky to blocky, common bit generated texture, trace quartz silt, trace carbonaceous fragments, non calcareous.
2968 – 2987m	Volcanics
(2550.7 – 2563.7)	<b>VOLCANICS:</b> varicoloured, predominantly shades of light grey and greenish grey, minor white and pale reddish brown, returned as loose grains and minor
ROP 0.5 – 51.7m/hr	microcrystalline rock fragments, common clear quartz, common black Basalt(?), medium to granule sized grains, dominantly coarse to granule, sub angular to

12.2m/hr avg	very angular, rare nodular Pyrite, trace fresh and weathered feldspathic grains

### **HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
2896 – 2987m	Nil

### **GAS SUMMARY:**

INTERVAL (mMDRT)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
2966m	3.33	11325	156	44	4	5	1	1
2896-2968	0-0.58	434- 2194	15-28	2-8	0	0	0	0
2968-2987	0-0.17	11-1437	0-21	0-13	0	0	0	0

# **SURVEYS**

MD	ANGLE	Azi	TVD			
2916.37	46.19	183.31	2555.10			
2946.06	45.04	184.18	2575.87			
2970.49	45.14	184.59	2593.11			

### **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	78.5	-57	n/a	97.0	-55.97			
Limestone								
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		2564	-2288.2	9.6 Lo		
200 Sands	2696.3	-2367.2		2683	-2359.8	7.4 Hi		
100 Sands	2819.9	-2439.5	_	2821	-2448.6	9.1 Lo		
50 Sands	2970.4	-2527.4		2957	-2542.7	15.3 Lo		
Emperor Volcanics	3041.8	-2569.1		2968	-2550.7	18.4 Hi		
TD	3080.0	-2591.4		2987	-2563.7	-		

#### **COMMENTS:**

TD Pilot hole reached at 20:50 hours.

#### MWD/LWD Sensor Offsets BHA # 11

Sensor	Distance to bit	Record Rate
Gamma Ray	3.75 m	2 seconds
Resistivity	6.80 m	2 seconds
Thermal Neutron Porosity	7.20 m	4 seconds
Density	5.01 m	4 seconds
Spectroscopy	7.35 m	4 seconds
Ultrasonic Caliper	5.38 m	4 seconds
Pressure Whilst Drilling	3.92 m	4 seconds
Direction & Inclination	14.11 m	

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