# Longtom-4 H



 Date:
 09-08-2008
 Last Casing:
 273 mm (10.¾") @

 2590.8 mMDRT

 Report Number:
 9
 Leak Off Test:
 1.64 sg EMW

**Report Period:** 24hrs to 24:00 Current hole size: 241 mm (9½") 4582 mMDRT Depth @ 2400 Hrs: 1.45sg Mud Weight: Last Depth: 4220 mMDRT ECD: 1.6sg SOBM Progress: 362 m Mud Type: TD Lithology: Sandstone Vis: 75sec/qt

 Water Depth:
 55.97 m (LAT)
 Mud Fluid Loss:
 5cc/30min

 RT Elevation:
 41.06 m (LAT)
 Bit Type:
 REED RSX616M-A4

### **OPERATIONS SUMMARY**

24 HOUR SUMMARY
00:00 - 24:00:

Drilled 9½" hole as per DD and geology requirements from 4220m

to 4558m. Repaired leaking wash pipe. Decision from Nexus to continue drilling requiring picking up of extra DP. POOH 5 stands, RIH picking up 10 joints HT55 and 2 joints XT57 DP - first joint requiring reaming to enable RIH. Drilled from 4558m to 4582m

(2688.3m TVD).

**06:00 Update**Continued drilling 9½" hole as per DD requirements from 4582m to

4648m. (2695.9m TVD). Final depth of well as confirmed by Nexus.

**NEXT 24 HOURS:** Circulated hole clean at 760gpm, 150rpm racking back one stand of

DP every hour (1x bottoms up). Bit depth currently 4590m.

# **GEOLOGICAL SUMMARY**

#### LITHOLOGIC DESCRIPTION:

Interval mMDRT (mTVDSS)	Description
4238 – 4405m	SANDSTONE
	<b>SANDSTONE</b> (100%): very light grey to light grey, clear to translucent grains,
(2635.3 - 2632.2)	trace light greenish grey and moderate reddish orange, returned loose, common
	friable aggregates, very fine to fine grained, predominantly fine, sub angular to
ROP: 10–61m/hr	sub rounded, minor angular, sub spheroidal to spheroidal, well sorted, trace
	light grey argillaceous matrix, rare greyish black lithics, trace fresh and
	weathered feldspars, trace carbonaceous/coaly fragments, fair inferred porosity.
	No Shows.
4405 – 4440m	Claystone with minor Sandstone
	<b>CLAYSTONE</b> (90-100%): medium grey to medium dark grey, light brownish
(2632.2–2635.2)	grey in part, firm, blocky, homogeneous, non calcareous.
	SANDSTONE (Tr-10%): as above
ROP: 6-58m/hr	
4440 – 4460m	Siltstone with minor Claystone
	<b>SILTSTONE</b> (40-80%): light grey to medium light grey, medium grey in part,
2635.2-2636.8)	firm to friable, sub blocky, minor light grey argillaceous matrix, minor very fine
	grained quartz, grading to very fine grained sandstone, trace carbonaceous
ROP: 7-29m/hr	wisps and fragments, very poor inferred porosity. No Shows
	<b>CLAYSTONE</b> (20-60%): medium grey to medium dark grey, light brownish grey

	in part, firm, blocky, homogeneous, non calcareous.
4460 – 4614m	Claystone with minor Siltstone
	<b>CLAYSTONE</b> (70-100%): medium dark grey to dark grey, greyish black in part,
(2636.8-2650.9)	firm, blocky, homogeneous, common bit generated texture, non calcareous.
ROP: 2-41m/hr	SILTSTONE (0-30%): as above
	Sandstone
4614 – 4648mTD	<b>SANDSTONE</b> (100%): very light grey to light grey, clear to translucent, rare light
	greenish grey grains, dominantly returned loose, common friable aggregates,
(2650.9-2655.5)	trace bit generated rock flour, very fine to fine grained, predominantly fine, sub
	angular to sub rounded, minor angular, sub spheroidal to spheroidal, well
ROP: 17-42m/hr	sorted, trace light grey argillaceous matrix, rare greyish black lithics, trace fresh
	and weathered feldspars, trace carbonaceous/coaly fragments, fair inferred
	porosity. No Shows

### **HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
4238 - 4648mTD	Nil

## **GAS SUMMARY:**

INTERVAL (mMDRT)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
4238 – 4405m	2.7-6.2	20998- 53715	542- 1671	187-556	18-75	27-86	5-22	3-17
4405 – 4440m	0.13- 0.50	803- 4852	31-202	28-96	6-16	9-22	3-7	3-6
4440 – 4460m	0.06- 0.09	210-542	16-48	13-30	3-7	5-10	2-4	2-4
4460 – 4614m	0.06- 0.17	327- 1315	6-27	5-22	0-3	1-6	0-2	0-2
4614 – 4648m	0.1-0.2	660- 1721	4-17	5-13	0-2	2-3	-	-

### **SURVEYS**

MD	ANGLE	Azi	TVD			
IVID	ANGLL	AZI	ועט			
4568.77	84.96	189.40	2687.1			
4598.48	84.84	186.02	2689.8			
4627.92	82.10	185.79	2693.1			

## **FORMATION TOPS**

WD = 55.97 m LAT RTE = 41.06 m LAT								
FORMATION	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	-	-						

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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			4648	-2655.5		

#### **COMMENTS:**

This report completes all lithology intervals to TD

Ultrasonic Caliper continues giving erroneous readings.

MWD/LWD Sensor Offsets BHA # 8 (Anadrill), Bit # 11

Sensor	Distance to bit	Record Rate
Gamma Ray	9.69 m	2 seconds
Resistivity	12.73 m	2 seconds
Thermal Neutron Porosity	13.14 m	4 seconds
Density	10.95 m	4 seconds
Spectroscopy	13.29 m	4 seconds
Ultrasonic Caliper	11.32 m	4 seconds
Pressure Whilst Drilling	9.86 m	4 seconds
Direction & Inclination	20.07 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