# Longtom-4

00:00 - 24:00:



**Date:** 02-07-2008 Last Casing: 406.4 mm (16") @ 750

mMDRT

**Report Number:** 6 Leak Off Test: 1.64 ppg EMW **Report Period:** 24hrs to 24:00 Current hole size: 343 mm (13 ½")

Depth @ 2400 Hrs: 2031 mMDRT Mud Weight: 1.43 SG Last Depth: 1720 mMDRT ECD: - SG **SOBM Progress:** 311 m Mud Type: Claystone 72 TD Lithology: Vis: Water Depth: 57.1 m Mud Fluid Loss:

**RT Elevation:** 39.9 m Bit Type: REED RSX616M-A3

# **OPERATIONS SUMMARY**

24 HOUR SUMMARY

Drilled 13 1/2" to 2031m, unable to hold angle at 30 degrees.

Circulated hole clean. POOH to change out Powerdrive. Lost 1.5 hours due to top drive RPM fault and 1 hour for cyber chair camera

being inoperable.

O6:00 Update

Continued to POOH to BHA. Hole in good condition. Flow checked at also and prior BHA at BOD'S BOOH with BHA removed BA

at shoe and prior BHA at BOP'S. POOH with BHA, removed RA

source from ADN tool.

NEXT 24 HOURS: Change out Powerdrive, RIH and drill 13 1/2"

hole to sectional TD at +/-2600m.

## **GEOLOGICAL SUMMARY**

#### LITHOLOGIC DESCRIPTION:

Interval mMDRT	Description
(mTVDSS)	
1720-1755 (1585.6-1615.7)	SANDSTONE, SILTSTONE, trace VOLCANICS:
ROP: 15-100 m/hr Avg: 45 m/hr	SANDSTONE (60-100%): white to very light grey, loose to soft, fine to granule, dominantly coarse to granule, moderately sorted, angular to sub angular, minor sub rounded, low to moderate sphericity, common soft fine to medium grained aggregates with white to brown argillaceous matrix, carbonaceous in parts, minor to common rock flour, moderate inferred porosity. No shows.  SILTSTONE (nil-40%): medium grey to brownish grey, friable to moderately firm, sub blocky to flakey, common argillaceous matrix, trace microcrystalline pyrite, minor carbonaceous fragments and laminae, grading to argillaceous Siltstone.
	<b>VOLCANICS (trace):</b> white to orange clay, soft to firm, irregular masses, coarse to very coarse grain size, trace relict hornblende crystal form.
1755-1805	CLAYSTONE, SILTSTONE, minor SANDSTONE
(1615.7-1659) ROP: 11-44 m/hr Avg: 26 m/hr	CLAYSTONE (20-95%): dark grey to olive black, soft, amorphous to subblocky, sticky, slightly silty.  SILTSTONE (5-60%): medium grey to brownish grey, friable to moderately firm, sub blocky to flakey, common argillaceous matrix, trace microcrystalline pyrite, minor carbonaceous fragments and laminae, grading to argillaceous Siltstone.  SANDSTONE (Tr-20%): white to very light grey, loose to soft, fine to granule,

	dominantly coarse to granule, moderately sorted, angular to sub angular, minor sub rounded, low to moderate sphericity, common soft fine to medium grained aggregates with white to brown argillaceous matrix, carbonaceous in parts, minor to common rock flour, moderate inferred porosity. No shows.
1805-1865	CLAYSTONE with minor SANDSTONE
(1659-1711.7)	
ROP: 10-66 m/hr Avg: 29 m/hr	<b>CLAYSTONE (80-100%):</b> dark grey to olive black, soft to moderately firm, amorphous to subblocky, trace to rare quartz silt, trace to rare carbonaceous fragments, non calcareous.
	<b>SANDSTONE (0-20%):</b> quartzose, light grey to medium light grey, friable, very fine to fine grained, sub angular to sub rounded, minor rounded, high sphericity, well sorted, weak siliceous cement, trace black lithic grains, poor visible porosity. No Shows
1865-1915	SANDSTONE with minor CLAYSTONE, trace COAL
(1711.7-1755.5)	SAME TO THE WILL HAND SEAT OF STATE , MASS SOAL
ROP: 8-89 m/hr Avg: 48 m/hr	<b>SANDSTONE (70-100%):</b> quartzose, light grey to medium light grey, friable to firm aggregates, very fine to medium grained, sub angular to sub rounded, minor rounded, moderate to high sphericity, well sorted, weak siliceous cement, rare light grey to light brownish grey argillaceous matrix, trace black and moderate red lithic grains, trace weathered feldspar grains, trace coaly fragments, poor visible porosity. No Shows
	CLAYSTONE (0-25%): dark grey to olive black, soft to moderately firm,
	amorphous to subblocky, trace to rare quartz silt, trace carbonaceous fragments, non calcareous.
	COAL (0-5%): brownish black to black, firm, brittle, sub vitreous to vitreous
	lustre, earthy in part, common silt, interbedded in Sandstone.
1915-2015	CLAYSTONE with minor SANDSTONE and COAL
(1755.5-1843.5)	
ROP: 6-41m/hr Avg: 23 m/hr	<b>CLAYSTONE (60-100%):</b> dark grey to olive black, soft, soft to moderately firm, amorphous to subblocky, trace quartz silt, trace carbonaceous fragments, non
	calcareous.
	<b>SANDSTONE (Nil-15%, 30% at 1935m):</b> quartzose, light grey to medium light grey, predominantly returned loose, trace friable to firm aggregates, very fine to fine grained, sub angular to sub rounded, minor rounded, moderate to high sphericity, very well sorted, rare light grey to light brownish grey argillaceous matrix, trace black and moderate red lithic grains, trace coaly fragments, poor
	visible porosity. No Shows.
	COAL (nil-5%, 40% at 2005m): brownish black to black, firm, brittle, sub
2045 2024	vitreous to vitreous lustre, earthy in part, common silt.
2015-2031 (1843.5-1858.5)	SILTY CLAYSTONE with minor SANDSTONE
ROP: 7-31 m/hr	SILTY CLAYSTONE (80-90%): medium to dark grey to olive black, soft to firm,
Avg: 16 m/hr	amorphous to subblocky, minor flakey, silty, trace to common carbonaceous
	fragments, non calcareous.
	SANDSTONE (10-20%): as above.
	COAL (tr): as above.
	SILTSTONE (tr): pale to medium yellow brown, firm, blocky, argillaceous.

## **HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
1720 - 2031	Nil

#### **GAS SUMMARY:**

INTERVAL (mMDKB)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
1720-1755	0.01-0.04	18-145	3-10	1-7	-	0-2	0-tr	0-tr
1755-1805	0-0.05	38-761	5-30	2-24	0-2	1-4	-	0
1805-1865	0.03-0.06	91-530	6-23	5-13	0-1	0-2	0-tr	0-tr
1865-1915	0.03-0.08	101- 573	5-10	3-6	0-1	-	0-tr	0-tr
1915-2015	0.01-0.04	66- 1324	2-32	1-7	0-1	0-2	0-2	0-tr
2015-2031	0.01-0.03	88-316	1-4	1-3	0-tr	0-1	0-tr	0-tr

## **SURVEYS**

MD	ANGLE	Azi	TVD			
1,938.97	29.25	182.37	1,816.36			
1,968.51	27.81	181.63	1,842.32			
1,998.05	27.26	181.66	1,868.51			

## **FORMATION TOPS**

WD = 57.1 m									
RTE = 39.9 m									
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)					
	MDKB	TVDSS	THICK	MDKB	TVDSS	HI/LO	THICK	DIFF	
Sea Floor/ Gippsland	78.5	-57	n/a	97.0	-57.1	0.1 Lo			
Limestone									
Lakes Entrance	-	-							
Latrobe	1299.2	-1223.8		1291	-1215.7	8.1 Hi			
K/T Boundary	-	-							
Un-named Volcanics	1690. 5	-1561.7		1695	1563.9	2.2 Lo			
Chimaera	1724.1	-1590.7		1710	1576.9	13.8 Hi			
Kipper Shale	1757.4	-1619.5		1755	1615.7	3.8 Hi			
Admiral Formation	2179	-1983.9							
500 Sands	2287.8	-2077.7							
400 Sands	2418.8	-2187.3							
300 Sands	2544.2	-2278.6							
200 Sands	2595.3	-2310.9							
100 Sands	2682.0	-2361.9							
50 Sands	2789.9	-2425.0							
Emperor Volcanics	2849.4	-2459.7							
TD						-		-	

#### **COMMENTS:**

POOH at 2031m to change out PowerDrive due to poor directional control.

5m sample interval from 1600m.

MWD Sensor offsets;

Resistivity: 10.47m GR: 10.52m Directional: 18.94m

Density: 26.67m Neutron: 27.5m

WELLSITE GEOLOGISTS: Cliff Menhennitt Simon Ward