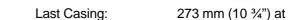
# Longtom-3 H

Date:



2374.3 mMDRT

1.80 sg EMW at **Report Number:** Leak Off Test:

2484 mMDRT

**Report Period:** 24hrs to 24:00 Current hole size: 241 mm (9½ ") 2793 m

Depth @ 2400 Hrs: Mud Weight: 1.44 sg Last Depth: 2564 m ECD: 1.55 sg SBM Petrofree Progress: 229 m Mud Type:

TD Lithology: 100% Sandstone V: 6/3 12 / 11

Water Depth: 56.0 m Mud Fluid Loss: 3.2 cc

RT Elevation: 21.5 m Bit Type: Smith M716PXC

## **OPERATIONS SUMMARY**

**24 HOUR SUMMARY** Drill ahead 9 ½" hole from 2564 to 2649m in the Admiral Formation 00:00 - 24:00:

200 sand. 2649m - 2740m drilled below 200 sand. Re-entered 200

sand at 2740m and drilled ahead.

06:00 Update Drill ahead 9 1/2" hole at 2882m.

Drill ahead 9 1/2" hole. **NEXT 24 HOURS:** 

14-08-2006

# **GEOLOGICAL SUMMARY**

### LITHOLOGIC DESCRIPTION:

Interval mMDRT	Description
2564 – 2645 ROP:6 – 83m/hr	Massive Sandstone with minor thin Coals and Carbonaceous Siltstones
Av: 29 m/hr	SANDSTONE: 60 - 80% loose, clear to translucent, occasionally green grains, fine – medium, sub angular to rounded, well sorted, good inferred porosity. 20 - 40% soft aggregates, off white, light grey, greenish / white, matrix to 50%, lithics, carbonaceous grains, trace calcareous grains, poor visual porosity. Gas shows see table below.
	COAL, black, brownish black, dul to sub vitreous, blocky, very silty in part and gradational to CARBONACEOUS SILTSTONE.
2645 - 2654 ROP: 3.5 – 18	Sandstone with strong calcareous cement
Av: 9.5 m/hr	SANDSTONE: off white to light grey, grains clear to translucent, rare green, fine to medium, sub angular to rounded, well sorted, loose 50%, soft aggregates 50%, off white argillaceous matrix to 40%, occasional hard calcareous cement, calcareous clay matrix in part, kaolinite, carbonaceous grains, lithic grains, poor to fair visible porosity.
2654 – 2685 ROP: 3.5 – 60	Massive SILTSTONE and minor SANDSTONE (probably cavings in part)
Av: 21 m/hr	SILTSTONE: (65-80%) medium grey – medium dark grey, firm to moderately hard, blocky, dominantly arenaceous to argillaceous in part, common carbonaceous specks, slightly laminated in part.

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	SANDSTONE: (20-35%) clear to translucent, occasionally light yellow grey, dominantly fine to medium, sub rounded to sub angular, moderately well sorted, 40% loose, 60% soft aggregates, off white calcareous matrix in part, poor to fair inferred porosity, no show.					
2685 – 2705	SILTSTONE and SANDSTONE					
ROP: 2.7 – 23						
Av: 6 m/hr	SILTSTONE: (35-70%) medium grey – medium dark grey, firm to moderately hard, blocky, dominantly arenaceous to argillaceous in part, common carbonaceous specks, slightly laminated in part.					
	SANDSTONE: (30-65%) clear to translucent, occasionally light yellow grey, light greenish grey, dominantly fine to medium, rare very coarse, sub rounded to sub angular, moderately well sorted, 40% loose, 60% soft aggregates, off white calcareous matrix in part, fair inferred porosity, no show.					
2705 – 2735 ROP: 4.2 – 41	Massive Siltstone with minor Sandstone (probably cavings in part)					
Av: 13.5 m/hr	SILTSTONE (20-100%): medium grey – medium dark grey, firm, blocky, arenaceous, argillaceous in part, common carbonaceous specks, slightly laminated in part.					
	SANDSTONE (Tr-80%): off white, light yellowish grey, fine to medium, sub angular to rounded, moderately well sorted. 20-80% loose, 80-20% soft aggregate with matrix to 40-60%, calcareous, good inferred porosity, no show.					
2735 - 2751 ROP: 3.1 – 14.8	Sandstone with strong calcareous cement with minor Siltstone.					
Av: 5.4 m/hr	SANDSTONE (65-85%): 30% loose, off white to translucent, occasionally light grey, rare light green, dominantly fine to medium, sub rounded to sub angular, moderately well sorted, trace pale orange lithics, 70% soft aggregates, common off white calcareous matrix, trace carbonaceous grains, poor to fair inferred porosity, no fluorescence.					
	SILTSTONE (15-35%): medium grey to medium dark grey, firm to moderately hard, sub fissile to sub blocky, dominantly arenaceous to argillaceous in part, common carbonaceous specks.					
2751 – 2793 ROP:6.6 – 72 m/hr	Massive Sandstone with trace minor thin Coal grading to Carbonaceous Siltstone.					
Av: 37 m/hr	SANDSTONE: (100%) off white, light grey, light yellowish grey, grains clear to translucent occ pale grey, 30- 60% soft aggregates, 70 -40% loose grains, very fine to fine, occasionally fine to medium, sub angular to rounded, well sorted, argillaceous matrix to 30- 80%, very common carbonaceous grains and fragments, lithics, poor to fair porosity. Gas shows see table below.					
	COAL: (trace) black to brownish black, dull to sub vitreous, firm, blocky, silty, gradational to Carbonaceous Siltstone in part.					

## **HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
	No fluorescence.

## **GAS SUMMARY:**

INTERVAL (mMDKB)	Total GAS (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	IC4 (ppm)	NC4 (ppm)	IC5 (ppm)	NC5 (ppm)
2564 - 2620	14.5	122355	3469	843	115	123	23	11
2580 peak	25.3	188091	5151	1184	153	164	25	14
2620 - 2645	4.5	44026	1558	477	76	85	23	9
2621 peak	11	110918	3162	815	114	123	26	11
2645 - 2654	0.6	5958	446	195	45	51	22	6
2645 peak	2.3	22089	1062	361	63	75	24	8
2654 - 2685	0.7	5684	304	116	30	34	17	5
2670.5 peak	0.9	7980	357	126	29	35	18	4
2685 - 2705	0.2	1620	160	45	18	18	14	2
2751 peak	1.5	14243	384	90	22	18	8	1
2705-2735	0.4	3277	136	36	16	11	9	1
2735 - 2751	0.3	2836	150	35	16	11	9	2
2751 – 2793	9.4	77303	2049	444	61	56	11	4
2793m peak in Sandstone	19.5	154420	4182	893	115	115	16	9

#### **SURVEYS**

Tie in point to Longtom -3 ST1 is 2400.00m

TVD

## **FORMATION TOPS**

WD = 56.7 m RTE = 21.5 m								
FORMATION	PROGNOSED DEPTHS (m)			ACTUAL DEPTHS (m)				
	MDKB	TVDSS	THICK	MDKB	TVDSS	HI/LO	THICK	DIFF
200 sand	2405.0	2182.0	199.5	2406.0	2182.1	0.1 LO		
Sand 1 target	2852.36	2381.5						
Sand 2 target	3009.68	2450.0						
Sand 3 target	3353.56	2549.5						
Sand Drain target	4005.47	2539.5						
Sand 4 target	4486.03	2463.5						
TD								

#### **COMMENTS:**

The well path dropped below the base of the 200 sand at 2649m (2310.78m TVD) and re-entered the 200 sand at 2740m (2349.38m TVD) indicating a dip of the beds at this location of 25 deg.

Sensor Distances: Xceed D&I 4.2m, GR 9.8m, APWD 9.96m, Density 11m, Ultrasonic Caliper 11.42m, Resistivity 12.84m, Neutron Porosity 13.09, TeleScope D&I 20.16m

**WELLSITE GEOLOGISTS:** 

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**Trevor Lobo**