# Longtom-3 H

Date: 18-08-2006 Last Casing: 273 mm (10 3/4") at

2374.3 mMDRT

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

2484 mMDRT

**Report Period:** 24hrs to 24:00 Current hole size: 241 mm (9½ ") 3774 m

Depth @ 2400 Hrs: Mud Weight: 1.43 sg 3576 m ECD: Last Depth: 1.55 sg SBM Petrofree Progress: 198 m Mud Type:

TD Lithology: Massive Siltstone V: 6/3 9/8 Water Depth: 56.0 m Mud Fluid Loss: 3.0 cc

RT Elevation: 21.5 m Bit Type: Smith M716PXC

## **OPERATIONS SUMMARY**

**24 HOUR SUMMARY** Drilled 9 1/2" hole from 3576m MDRT to 3720m MDRT. Top drive 00:00 - 24:00:

swivel packing leaking. Change out for back up assembly. Drilled

9 1/2" hole from 3720m MDRT to 3774m MDRT.

06:00 Update Drill ahead 9 1/2" hole at 3822m.

Drill ahead 9 1/2" hole holding angle at 93 deg until 4165 mMDRT **NEXT 24 HOURS:** 

then build to intersect the 200 Sand.

# **GEOLOGICAL SUMMARY**

#### LITHOLOGIC DESCRIPTION:

Interval mMDRT	Description
3576 – 3612 ROP:2.1 – 40	Massive Sandstone with minor Siltstone at the base of the section
Av: 14.6 m/hr	SANDSTONE: light olive grey, greenish olive/grey, light yellowish grey, occasionally mottled pale green/light grey, grains; clear to translucent, occasional pale green, orange brown and black and carbonaceous, fine to medium, well sorted, sub rounded to sub angular, trace calcareous grains, 60-95% loose, 5 - 40% very soft aggregate with 5-30% argillaceous matrix, white kaolinitic matrix in part, slightly calcareous, carbonaceous grains with occasional large carbonaceous fragments, fair - good inferred porosity.  SILTSTONE: brownish grey, firm to occasionally hard, blocky, carbonaceous specks, occasional carbonaceous laminae.
3612 – 3676 ROP:2.5 – 34.6	Massive Sandstone with trace Siltstone.
Av: 10.6 m/hr	SANDSTONE (100%): light olive grey, greenish olive/grey, light yellowish grey, occasionally mottled pale green/light grey, grains; clear to translucent, occasional pale green, orange brown and black and carbonaceous, dominantly fine to medium, well sorted, sub rounded to sub angular, trace calcareous grains, 70-90% loose, 10-30% very soft aggregate with 10-20% argillaceous matrix, white kaolinitic matrix in part, slightly calcareous, trace carbonaceous grains, fair - good

	inferred porosity.								
	SILTSTONE (Nil-Trace): brownish grey, firm to moderately hard, blocky, carbonaceous specks, occasional carbonaceous laminae.								
3676 – 3715	Massive Sandstone with trace Siltstone.								
ROP:4.5 – 34.2 Av: 14.4 m/hr	SANDSTONE (100%): light olive grey, greenish olive/grey, light yellowish grey, clear to translucent, occasional pale green, trace orange brown and black and carbonaceous, dominantly fine to rare medium, well sorted, sub rounded to sub angular, 30-50% loose, 50-70% very soft aggregate with 50-60% argillaceous matrix, white kaolinitic matrix in part, trace carbonaceous grains, poor to fair inferred porosity.								
	SILTSTONE (Nil-Trace): brownish grey to olive grey, firm to moderately hard, blocky, carbonaceous specks, occasional carbonaceous laminae.								
3715 – 3758 BOD:40 626	Massive Sandstone with minor Siltstone at the top of the section								
ROP:4.9 – 62.6 Av: 13.4 m/hr	SANDSTONE (95-100%): clear, translucent, light olive grey, very pale green, rare black and carbonaceous, 90% loose, 10% friable aggregates, fine to coarse, dominantly medium, sub angular to dominantly sub rounded, moderately well sorted, 10% argillaceous matrix, trace orange brown lithic grains, fair to good inferred porosity.								
	SILTSTONE (Trace-5%): brownish grey to olive grey, firm to moderately hard, blocky, carbonaceous specks, occasional carbonaceous laminae.								
3758 – 3774 ROP:3.2 – 23	Massive Siltstone with minor Sandstone (cavings from the 100 sand)								
Av: 6.6 m/hr	Top 100 sand at vertical section 1864.6m: 3758.0 mMDRT/2538.4 mTVDRT/2517.0 mTVDSS								
	SILTSTONE (50-90%): medium grey to olive grey, occasionally brownish grey, sub firm, friable, sub blocky, arenaceous, carbonaceous specks, rare indistinctly laminated.								
	SANDSTONE: (50-10%) (abundance declining with depth, cavings from the 100 sand) clear, translucent, light olive grey, very pale green, rare black and carbonaceous, loose, fine to medium, rare coarse, sub angular to dominantly sub rounded, moderately well sorted, trace orange brown lithic grains, good inferred porosity.								

#### **HYDROCARBON FLUORESCENCE:**

INTERVAL (mMDRT)	FLUORESCENCE
	No fluorescence.

#### **GAS SUMMARY:**

INTERVAL (mMDKB)	Total	C1	C2	C3	IC4	NC4	IC5	NC5
` ,	GAS (%)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
3576 - 3612	4	39886	1470	422	80	69	14	8
Peak @ 3601m	7.6	75245	2655	743	125	112	19	11
3612 - 3676	2.2	23019	735	205	47	46	11	6
Peak @ 3672m	26.6	209104	6440	1526	218	205	32	19
3676 - 3715	2.7	27248	997	292	61	49	11	6
Peak @ 3687m	13.9	137124	4143	1048	169	152	23	15
3715 - 3758	2.9	28542	936	264	61	48	10	6
Peak @ 3723m	17.4	154510	4244	1022	158	144	21	14
3758 - 3774	1.5	13737	539	180	54	40	12	6

#### **SURVEYS**

Tie in point to Longtom -3 ST1 is 2400.00m

MD	ANGLE	Azi	TVD	MD	ANGLE	Azi	TVD
3573.26	90.54	186.93	2549.7	3773.20	92.61	190.86	2537.7
3601.57	91.8	188.54	2549.2				
3630.25	96.11	193.54	2547.2				
3658.23	93.93	191.97	2544.7				
3684.28	93.79	191.14	2543.0				
3712.88	93.70	190.56	2541.1				
3741.42	93.41	191.64	2539.3				

## **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	
Top 200 sand	2405.0	2182.0	199.5	2406.0	2182.1	0.1 LO			
Base 200 sand at				2649	2289.3				
vertical section 800.4m									
Base 200 sand at				2740	2327.9				
vertical section 882.4m									
Base 200 sand at				2912	2385.9				
vertical section 1044.1m									
Top 100 sand at				3268.0	2507.2				
vertical section 1376.4m				3200.0	2307.2				
Top 100 sand at				3758.0	2517.0				
vertical section 1864.6m				37 30.0	2317.0				
Sand 1 target	2852.36	2381.5							
Sand 2 target	3006.9	2450.0							
Sand 3 target	3431.5	2549.5							
Sand Drain target	3957.1	2539.5							
Sand 4 target	4481.2	2463.5						•	
TD	5833.0	2489.3	_						

#### **COMMENTS:**

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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