

## Longtom- 3 H



<b>Date:</b>	16-08-2006	<b>Last Casing:</b>	273 mm (10 ¾") at 2374.3 mMDRT
<b>Report Number:</b>	5	<b>Leak Off Test:</b>	1.80 sg EMW at 2484 mMDRT
<b>Report Period:</b>	24hrs to 24:00	<b>Current hole size:</b>	241 mm (9½ ")
<b>Depth @ 2400 Hrs:</b>	3338 m	<b>Mud Weight:</b>	1.43 sg
<b>Last Depth:</b>	3059 m	<b>ECD:</b>	1.6 sg
<b>Progress:</b>	279 m	<b>Mud Type:</b>	SBM Petrofree
<b>TD Lithology:</b>	Sandstone and minor Siltstone	<b>V: 6 / 3</b>	9 / 7
<b>Water Depth:</b>	56.0 m	<b>Mud Fluid Loss:</b>	3.2 cc
<b>RT Elevation:</b>	21.5 m	<b>Bit Type:</b>	Smith M716PXC

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**OPERATIONS SUMMARY**


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**24 HOUR SUMMARY****00:00 - 24:00:**

Continued to drill 9 1/2" directional hole f/ 3059 to 3338mrt. Flow check at 3268 mRT, top of 100 sand.

**06:00 Update**

Drill ahead 9 ½" hole at 3416m. Drilling Sandstone in the 100 sand.

**NEXT 24 HOURS:**

Drill ahead 9 ½" hole in the Admiral Formation 100 sand.

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**GEOLOGICAL SUMMARY**


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**LITHOLOGIC DESCRIPTION:**

<b>Interval mMDRT</b>	<b>Description</b>
3059 – 3090 6.2- 31 m/hr Av: 14.5	<b>Massive Silty Claystone</b>  SILTY CLAYSTONE: (100%) medium grey, medium dark grey, very soft to soft, sub blocky, commonly deformed by the bit, very rare carbonaceous specks, rare very fine sand, uniform.
3090 – 3110 6 – 30 m/hr Av:15	<b>Massive Claystone</b>  CLAYSTONE: (100%) brownish grey, olive grey, very soft – soft, sub blocky to commonly deformed by the bit, very rarely slightly silty, uniform.
3110 – 3268 1.7– 67.2 m/hr Av: 14.4 m/hr	<b>Silty Claystone and Claystone interbedded with Argillaceous Sandstone and trace Sandstone.</b>  SILTY CLAYSTONE (Nil-90%): medium dark grey, rare olive grey, sub blocky, soft to firm, carbonaceous specks in part, rare carbonaceous laminae.  CLAYSTONE (Nil-95%): dark brownish grey, trace carbonaceous specks, rare carbonaceous laminae, very soft – soft, blocky, massive and uniform.  ARGILLACEOUS SANDSTONE (Nil-90%): light brownish grey, rare light grey,

	<p>very soft amorphous aggregates, very fine to fine, sub angular to rounded, well sorted, abundant argillaceous matrix 60 – 70% gradational to Claystone.</p> <p>SANDSTONE (Nil-5%): clear to translucent to occasionally white, dominantly medium to coarse, well sorted, sub angular to dominantly sub rounded, loose, fair to good inferred porosity, no show.</p>
<p>3268 – 3315 4.6– 78 m/hr Av: 40 m/hr</p>	<p><b>Top 100 Sand at Vertical Section 1376.4 m: 3268.0 mMDRT (2528.7 mTVDRT / 2507.2 mTVDSS)</b></p> <p><b>Massive Sandstone with minor Siltstone.</b></p> <p>SANDSTONE (80-100%): clear, translucent, very pale green, light yellowish grey, 70-90% loose, 10-30% friable aggregates, dominantly fine to medium, sub angular to dominantly sub rounded, moderately well sorted, 10 - 30% light greenish grey argillaceous matrix, trace pale orange lithic grains, good inferred porosity, gas show.</p> <p>SILTSTONE (0-20%): medium grey to olive grey, firm to occasionally moderately hard, blocky, arenaceous, carbonaceous specks.</p>
<p>3315 – 3338 7.5 - 103 m/hr Av: 51 m/hr</p>	<p><b>Massive Sandstone</b></p> <p>SANDSTONE: light grey, light yellow grey, grains, clear to translucent, green, orange / brown, black and carbonaceous, fine – medium, sub angular to rounded, moderately well sorted, 60 -90% loose, 10-40% soft aggregate, 10-40% off white argillaceous matrix, common carbonaceous grains and occasional carbonaceous laminae, trace lithics, fair-good porosity, gas show.</p>

**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)
3059 – 3090	0.26	2458	73	16	13	4	4	1
3090 – 3110	0.41	3825	110	24	20	5	5	1
3110 – 3268	0.2	1852	89	31	20	8	4	1
3202 Peak	1.2	11734	318	82	26	13	5	2
3268 – 3315	13.8	113457	3805	997	145	136	21	12
3315 – 3338	19	150070	4947	1288	182	175	27	15
3331m Peak in 100 Sandstone	35.7	237860	8599	2238	306	296	49	27

**SURVEYS**

Tie in point to Longtom -3 ST1 is 2400.00m

MD	ANGLE	Azi	TVD	MD	ANGLE	Azi	TVD
3058.53	67.97	193.57	2472.5	3287.16	79.84	188.47	2532.1
3087.51	70.4	194.12	2482.8	3316.29	81.38	189.94	2536.9
3116.03	72.13	193.56	2492.0				
3145.00	73.65	190.97	2500.5				
3173.42	75.00	189.71	2508.2				
3202.02	76.15	188.50	2515.3				
3229.90	78.21	189.04	2521.5				
3257.85	79.55	189.72	2526.9				

**FORMATION TOPS**

<i>WD = 56.7 m</i>								
<i>RTE = 21.5 m</i>								
FORMATION	PROGNOSSED 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 vertical section 800.4m				2649	2289.3			
Base 200 sand at vertical section 882.4m				2740	2327.9			
Base 200 sand at vertical section 1044.1m				2912	2385.9			
Top 100 sand at vertical section 1376.4m				3268.0	2507.2			
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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