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### Longtom-3 H

Date:	19-08-2006	Last Casing:	273 mm (10 ¾") at 2374 3 mMDRT
Report Number:	8	Leak Off Test:	1.80 sg EMW at 2484 mMDRT
Report Period:	24hrs to 24:00	Current hole size:	241 mm (9½ ")
Depth @ 2400 Hrs:	3946 m	Mud Weight:	1.45 sg
Last Depth:	3774 m	ECD:	1.60 sg
Progress:	172 m	Mud Type:	SBM Petrofree
TD Lithology:	Massive Claystone	V: 6 / 3	9/7
Water Depth:	56.0 m	Mud Fluid Loss:	3.0 cc
<b>RT Elevation:</b>	21.5 m	Bit Type:	Smith M716PXC

# **OPERATIONS SUMMARY**

24 HOUR SUMMARY 00:00 - 24:00:	Drilled 9 1/2" hole from 3774m MDRT to 3909m MDRT as per directional plan rev 6. Re-log LWD over section 3881m MDRT to 3909m MDRT, LWD data while drilling this section was poor due to pump noise. Drilled 9 1/2" hole from 3909m MDRT to 3946m MDR <sup>T</sup> as per directional plan rev 6.				
06:00 Update	Drill ahead 9 ½" hole at 3993m.				
NEXT 24 HOURS:	Drill ahead 9 $\frac{1}{2}$ " hole holding angle at 93 deg until 4165 mMDRT then build to intersect the 200 Sand.				

# **GEOLOGICAL SUMMARY**

#### LITHOLOGIC DESCRIPTION:

Interval mMDRT	Description					
3774 – 3785 ROP:2.6 - 9.3	Massive SILTSTONE and SANDSTONE cavings from the 100 sand.					
Av: 5.1 m/hr	SILTSTONE: (50-90%) medium to medium dark grey, soft, friable, sub blocky, arenaceous, carbonaceous specks, indistinctly laminated in part.					
	SANDSTONE: (50-10% decreasing with depth) 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.					
3785 – 3833 DOD:4 7 25 8	Massive SILTSTONE with minor SANDSTONE					
Av: 10.6 m/hr	SILTSTONE (70-100%): medium dark grey, soft to firm, friable, sub blocky, arenaceous, carbonaceous specks in part, uniform, occasionally very fine sand.					
	SANDSTONE (Nil-30%): light grey, aggregates, friable, very fine to fine, sub angular to rounded, well sorted grains, clear to translucent, pale green, black and carbonaceous, 5-20% silty matrix, siltstone lithics, poor porosity.					
3833 - 3890 ROP:2 5 - 41 6	Massive SANDTONE with minor SILTSTONE					
Av: 12.7 m/hr	3833.0 mMDRT / 2533.9 mTVDRT / 2512.4 mTVDSS					

	SANDSTONE (30-85%): light yellowish grey, occasionally light grey, grains, clear to translucent, trace pale green, very fine to fine rare medium, moderately well sorted, sub rounded to sub angular, trace calcareous grains, very soft aggregates with 30-70% argillaceous matrix, slightly calcareous, white kaolinitic matrix in part, poor to fair inferred porosity. SILTSTONE (15-70%): medium grey, brownish grey to olive grey, firm to moderately hard, blocky, carbonaceous specks, occasional carbonaceous
	laminae.
3890 – 3922 ROP:2.7 – 27.1 Av: 10.2 m/hr	Massive SANDTONE with minor SILTSTONE SANDSTONE: clear, translucent, light olive grey, very pale green, rare black and carbonaceous, trace calcareous grains, 95% loose, 5% very soft aggregates with 10% argillaceous matrix, medium to dominantly coarse, sub angular to dominantly sub rounded, well sorted, trace orange brown lithic grains, good inferred porosity. SILTSTONE: medium grey, brownish grey to olive grey, firm to moderately hard, blocky, carbonaceous specks, occasional carbonaceous laminae.
3922 – 3946 ROP:3.3 - 34 Av: 8.8 m/hr	Massive CLAYSTONE Top 100 sand at vertical section 2028.3m: 3922.0 mMDRT / 2528.9 mTVDRT / 2507.5 mTVDSS CLAYSTONE: dark brownish grey, medium dark grey, rare light brownish grey, trace carbonaceous specks, rare carbonaceous laminae, silty in part grading to SILTY CLAYSTONE, soft to firm, blocky, massive.

### 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)
3774 - 3785	0.6	5493	178	58	31	16	8	3
3785 - 3833	0.2	2312	83	25	26	8	6	3
Peak 3789m	3.7	35471	1011	232	50	34	8	4
3833 - 3890	0.5	4609	171	49	29	10	4	3
Peak 3889m	8.4	81412	2357	542	90	71	11	6
3890 - 3922	0.8	7002	436	147	47	36	8	4
Peak 3900m	14.3	130008	3682	865	137	114	17	10
3922 – 3946	0.48	4291	207	72	38	20	6	3

### SURVEYS

Tie in point to Longtom -3 ST1 is 2400.00m

ANGLE	Azi	TVD	MD	ANGLE	Azi	TVD
92.61	190.86	2537.7				
94.21	191.80	2536.0				
93.47	190.50	2534.1				
93.44	191.18	2532.5				
92.78	190.08	2529.3				
93.01	190.03	2527.8				
	<b>ANGLE</b> 92.61 94.21 93.47 93.44 92.78 93.01	ANGLEAzi92.61190.8694.21191.8093.47190.5093.44191.1892.78190.0893.01190.03	ANGLEAziTVD92.61190.862537.794.21191.802536.093.47190.502534.193.44191.182532.592.78190.082529.393.01190.032527.8	ANGLEAziTVDMD92.61190.862537.794.21191.802536.093.47190.502534.193.44191.182532.592.78190.082529.393.01190.032527.8	ANGLEAziTVDMDANGLE92.61190.862537.794.21191.802536.093.47190.502534.193.44191.182532.592.78190.082529.393.01190.032527.8	ANGLEAziTVDMDANGLEAzi92.61190.862537.794.21191.802536.093.47190.502534.193.44191.182532.592.78190.082529.393.01190.032527.8

### FORMATION TOPS

WD = 56.7 m RTF = 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 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			
Top 100 sand at vertical section 1864.6m				3758.0	2517.0			
100 sand at vertical section 1939.5m				3833.0	2512.4			
Top 100 sand at vertical section 2028.3m				3922.0	2507.5			
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:

At 06:00 hrs Memory time for LWD is 46 hours remaining.

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:

Mike Woodmansee

**Trevor Lobo**