# Longtom- 3 H

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|---|---|---|---|
| **Date:** | 13-08-2006 | Last Casing: | 273 mm (10 ¾") at 2374.3 mMDRT |
| **Report Number:** | 2 | 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:** | 2564 m | Mud Weight: | 1.44 sg |
| **Last Depth:** | 2385m | ECD: | 1.55 sg |
| **Progress:** | 179 m | Mud Type: | SBM Petrofree |
| **TD Lithology:** | 100% Sandstone | V: 6 / 3 | 10 / 8 |
| **Water Depth:** | 56.0 m | Mud Fluid Loss: | 3.4 cc |
| **RT Elevation:** | 21.5 m | Bit Type: | Smith M716PXC |

## OPERATIONS SUMMARY

| | |
|---|---|
| **24 HOUR SUMMARY 00:00 - 24:00:** | Wash down from 2330mRT tagged top plug at 2347mRT. Drilled cement plugs, float collar, shoe track and shoe. Washed to 2384mRT. Pulled back into the casing and circulated the hole clean. Performed FIT to an equivalent mud weight of 15 ppg, applying 1120 psi to 12.0 ppg mud. Drilled ahead 9 ½" hole to 2564m. |
| **06:00 Update** | Drill ahead 9 ½" hole at 2652m. |
| **NEXT 24 HOURS:** | Drill ahead 9 ½" hole. |

## GEOLOGICAL SUMMARY

**LITHOLOGIC DESCRIPTION:**

| **Interval mMDRT** | **Description** |
|---|---|
| 2384-2406<br><br>ROP: 0.8-96.3 m/hr<br><br>Av: 3.8 m/hr | **Siltstone interbedded with Claystone, minor Sandstone and trace Coal.**<br><br>CLAYSTONE (15-55%): dark grey to brownish grey, firm to rare moderately hard, slightly silty, carbonaceous specks and laminae, sub blocky to blocky.<br><br>SILTSTONE (50-55%): medium dark grey, dark brownish grey, firm to moderately hard, sub blocky to sub fissile, common carbonaceous specks in part, dominantly argillaceous in part grading to SILTY CLAYSTONE.<br><br>SANDSTONE (10-35%): clear to translucent grains, medium to dominantly coarse, moderately well sorted, sub angular to sub rounded, trace carbonaceous specks, fair visual porosity, no show.<br><br>COAL (Nil-Trace): black to dull brownish black, sub vitreous, firm, blocky, hackly, silty. |
| 2406-2564<br><br>ROP: 4.8 -84 m/hr | **Top 200 Sand: 2406.0 mMDRT (2203.6 mTVDRT / 2182.1 mTVDSS)**<br><br>**Massive Sandstone interbedded with minor Siltstone, trace Claystone and trace Coal.** |

| | |
|---|---|
| Av: 32 m/hr | SANDSTONE (35-90%): 70% loose, clear to translucent, trace pinkish grey to light greenish grey grains, dominantly fine to medium grains, sub angular to sub rounded, moderately well sorted, trace pyrite nodules, 30% light yellowish grey, light greenish grey, very soft aggregates, very fine to fine, well sorted, sub rounded to well rounded, abundant white to light greenish grey argillaceous matrix to 80%, commonly matrix supported, common lithics and carbonaceous grains, poor to fair visual porosity, no show.<br><br>SILTSTONE (8-45%): brownish grey, medium grey, rare olive grey, firm, sub blocky to sub fissile, common carbonaceous specks in part, dominantly arenaceous to argillaceous in part grading to SILTY CLAYSTONE.<br><br>CLAYSTONE (Nil-15%): dark grey to brownish grey, firm to rare moderately hard, slightly silty, carbonaceous specks and laminae, sub blocky to blocky.<br><br>COAL (Nil to 2%): brownish black to black, dull to sub vitreous, firm, blocky, silty in part gradational to Carbonaceous Siltstone. |

**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) |
|---|---|---|---|---|---|---|---|---|
| 2384-2406 | 0.1 | 769 | 20 | 6 | 5 | 4 | 9 | 2 |
| 2406-2564 | 12 | 99779 | 2735 | 632 | 84 | 85 | 19 | 7 |
| Peak Sandstone at 2462.5 m | 28.76 | 204498 | 5808 | 1278 | 157 | 160 | 25 | 11 |

**SURVEYS**

Tie in point to Longtom -3 ST1 is 2400.00m

| MD | ANGLE | Azi | TVD | MD | ANGLE | Azi | TVD |
|---|---|---|---|---|---|---|---|
| 2388.00 | 52.18 | 190.57 | 2192.9 | | | | |
| 2399.84 | 53.53 | 190.44 | 2200.1 | | | | |
| 2428.91 | 57.75 | 191.18 | 2216.5 | | | | |
| 2457.79 | 59.95 | 191.19 | 2231.4 | | | | |
| 2486.82 | 62.12 | 191.78 | 2245.5 | | | | |
| 2514.63 | 65.25 | 192.99 | 2257.8 | | | | |
| 2543.19 | 67.51 | 193.21 | 2269.2 | | | | |

2571.24 67.63 192.35 2279.9

**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:**

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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