# DAILY GEOLOGICAL REPORT

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|---|---|---|---|---|---|---|---|
| **WELL:** | Shenandoah #1 | **REPORT No.:** | 30 | **DAYS FROM SPUD:** | 30 | **DATE:** | 30/08/07 |
| **PEL:** | EP 98 | **00:00 DEPTH:** | 771mKB | **LAST 24hr DEPTH:** | 771mKB | **24 hr Progress:** | 56m |
| **LOCATION:** | Beetaloo Basin | **RIG:** | Century Rig 7 | **KB:** (Final Survey) | 232.55m | **13 $^{3}/_{8}$" Csg:** | 312m |
| **GEOLOGIST:** | J Hulse | | | **GL:** (Final Survey) | 226.75m | **PTD:** | 2,900m |

**NEARBY WELLS:** Balmain #1 (Twin)

**06:00 Depth/Operation:** **771mKB /** Wait on Rotary Drive repair
**Operations 00:00 to 06:00:** Wait on parts
**Previous 24 Hours Operations:** Drill ahead with aerated water in 12.25" hole to 771mKB, Rotary Drive failure, POOH to shoe, tight between 771-749mKB and 730-621mKB, assess Rotary Drive, remove damaged Rotary components, POOH, replace bit.

| Formation Tops | Actual Depths (m) | | | Prognosed Depths (m) | | | Diff to Prog. | Thickness |
|---|---|---|---|---|---|---|---|---|
| | MDKB | TVD | TVDSS | MDKB | TVD | TVDSS | H/L | (m) |
| Undifferentiated Tertiary | 5.8 | 5.8 | +227 | 5.8 | 5.8 | +227 | - | 45.7 |
| Jinduckin Formation | 51.5 | 51.5 | +181.3 | 54.8 | 54.8 | +178 | +3.3 | 32.7 |
| Tindall Limestone | 84.2 | 84.2 | +148.6 | 83.8 | 83.8 | +149 | -0.4 | 178.8 |
| Antrim Volcanics | 263.0 | 263.0 | -30.5 | 265.3 | 265.3 | -32.5 | -2.0 | 85.0 |
| Bukalara Sandstone | 348.0 | 348.0 | -115.5 | 348.3 | 348.3 | -115.5 | 0.0 | 58.0 |
| Hayfield Mudstone | 406.0 | 406.0 | -173.5 | 406.3 | 406.3 | -173.5 | 0.0 | |
| Hayfield Sand | | | | 782.2 | 782.2 | -549.4 | | |
| Jamison Sandstone | | | | 856.3 | 856.3 | -623.5 | | |
| Kyalla Formation | | | | 940.8 | 940.8 | -708 | | |
| Moroak Sandstone | | | | 1551.8 | 1551.8 | -1319 | | |
| Velkerri Formation | | | | 1641.8 | 1641.8 | -1409 | | |
| Bessie Creek Sandstone | | | | 2481.8 | 2481.8 | -2249 | | |
| Total Depth | | | | 2900.0 | 2900.0 | -2667.2 | | |

**Remarks:**

| **Interval (m) ROP (min/m)** | **Lithology Description** | **Gas/B'ground Breakdown C1/C2/C3/C4/C5** |
|---|---|---|
| **Formation: HAYFIELD MUDSTONE** | | |
| 715-770mKB (5min/m) | Siltstone (0-10%): Light green grey – predominantly m grey, firm – moderately hard, common arenaceous, very weakly laminar, minor micromicaceous, trace carbonaceous specks.<br>Mudstone (90-100%): Predominantly pale grey green, grey, hard, blocky – sub tabular – sub platy, micromicaceous, weakly laminar, minor sub fissile, uniform. | 100/-/-/-/-<br>Bkg 0.4U Nil |
| **Fluorescence** | Nil | |
| **Gas Flaring** | Nil | |

**06:00 SUMMARY**

**Formation: HAYFIELD MUDSTONE**

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|---|---|---|
| | **NO NEW FORMATION** | |
| **Fluorescence** | Nil | |
| **Gas Flaring** | Nil | |