



## DAILY GEOLOGICAL REPORT

**WELL:** Shenandoah #1 **REPORT No.:** 27 **DAYS FROM SPUD:** 27 **DATE:** 27/08/07  
**PEL:** EP 98 **00:00 DEPTH:** 432mKB **LAST 24hr DEPTH:** 424mKB **24 hr Progress:** 8m  
**LOCATION:** Beetaloo Basin **RIG:** Century Rig 7 **KB:** (Final Survey) 232.55m **13<sup>3/8</sup>" Csg:** 312m  
**GEOLOGIST:** J Hulse **GL:** (Final Survey) 226.75m **PTD:** 2,900m

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

**06:00 Depth/Operation:** 444mKB / Air Hammer drilling Hayfield Mudstone  
**Operations 00:00 to 06:00:** Air Hammer Drill Hayfield Mudstone  
**Previous 24 Hours Operations:** RIH Hammer Bit, D/O cement 341-382mKB, hammer not firing, POOH, M/U new Hammer, RIH, D/O cement 382-424mKB, drill new formation 424-432mKB.

Formation Tops	Actual Depths (m)			Prognosed Depths (m)			Diff to Prog. H/L	Thickness (m)
	MDKB	TVD	TVDSS	MDKB	TVD	TVDSS		
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/Background Breakdown C1/C2/C3/C4/C5
<b>Formation: HAYFIELD MUDSTONE</b>		
424-432mKB	<b>Siltstone:</b> Pale green and red-orange-grey brown, banded, grading from mudstone to rarely arenaceous siltstone. Pale green: sub platy, soft – moderately firm, silicic, weakly laminar, trace – abundant disseminated pyrite, common crystalline pyrite, trace disseminated carbonaceous detritus, trace siliceous vein fill, and trace siderite cement. Brown: Soft – firm, sub platy – minor sub blocky, massive – weakly laminar, trace carbonaceous fragments, trace – common disseminated pyrite, trace metalliferous opaques.	Nil
<b>Fluorescence</b>	Nil	
<b>Gas Flaring</b>	Nil	

### 06:00 SUMMARY

#### Formation: HAYFIELD MUDSTONE

432-444mKB	Siltstone: a/a rare dark green glauconite? grains	Nil
<b>Fluorescence</b>	Nil	
<b>Gas Flaring</b>	Nil	