



## DAILY GEOLOGICAL REPORT

**WELL:** Shenandoah #1 **REPORT No.:** 44 **DAYS FROM SPUD:** 44 **DATE:** 13/09/07  
**PEL:** EP 98 **00:00 DEPTH:** 1555mKB **LAST 24hr DEPTH:** 1555mKB **24 hr Progress:** 0m  
**LOCATION:** Beetaloo Basin **RIG:** Century Rig 7 **KB: (Final Survey)** 232.55m **13 <sup>3</sup>/<sub>8</sub>" Csg:** 312.11m  
**GEOLOGIST:** M. Berry **GL: (Final Survey)** 226.75m **PTD:** 2,900m

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

**06:00 Depth/Operation:** 1555mKB / RIH to ream and circulate prior to Log/run casing.  
**Operations 00:00 to 06:00:** RIH with 12 1/4" bit and BHA in preparation to ream out the hole and clean to TD.  
**Previous 24 Hours Operations:** Continue reaming operations over the interval above and below 600m until 6:00am. POOH in preparation to run wireline logs. RIH with PEX suite (Run 1); at 800m POOH as resistivity tool indicated a malfunction. Change over the resistivity tool and RIH with PEX suite. At 1479.5m the tool hung up and after multiple attempts would not go further. Proceed with logging operations completing Run 1 (PEX) and Run 2 (FMI).

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	3.3H	32.7
Tindall Limestone	84.2	84.2	+148.6	83.8	83.8	+149	0.4L	179.3
Antrim Volcanics	263.5	263.5	-31.0	265.3	265.3	-32.5	1.5H	84.0
Bukalara Sandstone	347.5	347.5	-115.0	348.3	348.3	-115.5	0.5H	58.0
Hayfield Mudstone	405.5	405.5	-173.0	406.3	406.3	-173.5	0.5H	374.5
Hayfield Sand	780.0	780.0	-547.5	782.2	782.2	-549.4	1.9H	(10.0)
Jamison Sandstone	856.0	856.0	-623.5	856.3	856.3	-623.5	0	83.5
Kyalla Formation	939.5	939.5	-707.0	940.8	940.8	-708.0	1.0H	
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:** Highlighted tops are from Wireline logs. There is very little definition on the GR log through casing from surface to 312m which makes confirming the upper formation picks difficult. The Jinduckin/Tindall Limestone boundary was picked on spot samples and a very distinct Lithology change from Quartzitic Conglomerate to Limestone over a short interval. Therefore, these formation tops remain unchanged.

Interval (m) ROP (min/m)	Lithology Description	Gas/B'ground Breakdown C1/C2/C3/C4/C5
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**Formation: No New Formation Penetrated**

<b>Fluorescence</b>	Nil	
<b>Gas Flaring</b>	Nil	