



DAILY GEOLOGICAL REPORT

WELL: Shenandoah #1 **REPORT No.:** 18 **DAYS FROM SPUD:** 18 **DATE:** 18/08/07
PEL: EP 98 **00:00 DEPTH:** 328mKB **LAST 24hr DEPTH:** 307mKB **24 hr Progress:** 21m
LOCATION: Beetaloo Basin **RIG:** Century Rig 7 **KB:** (Final Survey) 232.55m **13 3/8" Csg:** - m
GEOLOGIST: J Hulse **GL:** (Final Survey) 226.75m **PTD:** 2,900m

NEARBY WELLS: Balmain #1 (Twin)

06:00 Depth/Operation: 328mKB / Continue to run 13 3/8" casing.
Operations 00:00 to 06:00: Run 13 3/8" casing
Previous 24 Hours Operations: Drill ahead 17 1/2" hole from 307mRT to 326mRT, wiper trip to surface, drill 2m more due to more depth required for casing, TD 17 1/2" hole section at 328mRT, prepare to run casing.

Formation Tops	Actual Depths (m)			Prognosed Depths (m)			Diff to Prog. H/L	Diff to Balmain H/L
	MDKB	TVD	TVDSS	MDKB	TVD	TVDSS		
Undifferentiated Tertiary	5.8	5.8	+227	5.8	5.8	+227	-	-
Jinduckin Formation	51.5	51.5	+181.3	54.8	54.8	+178	+3.3	+3.3
Tindall Limestone	84.2	84.2	+148.6	83.8	83.8	+149	-0.4	-0.4
Antrim Volcanics	263.0	263.0	-30.5	265.3	265.3	-32.5	-2.0	-2.0
Bukalara Sandstone				348.3	348.3	-115.5		
Hayfield Mudstone				406.3	406.3	-173.5		
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: Distinctive dark brown to red brown semi translucent grains at 305-315mKB may be a useful marker to Top Bukalara. Insufficient data for existing holes but may prove useful in future penetrations.

Interval (m) ROP (min/m)	Lithology Description	Gas/Background Breakdown C1/C2/C3/C4/C5
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Formation: Antrim Volcanics

307 - 315mKB 3m/hr	Volcanics (100%): Minor light – medium grey moderately hard moderately fresh. 50% calcareous – non calcareous multicoloured weathering / alteration clays, 50% dark brown – red brown semi translucent grains, vug / fracture secondary mineralisation?	Nil
315 – 328mKB	Volcanics (100%): Predominantly light - medium grey, minor dark grey, very fine, hard, sub platy, common sub conchoidal fracture, common disseminated black phenocrysts, minor orange weathering clays, minor white silicic soft minerals (secondary?).	
Fluorescence	Nil	
Gas Flaring	Nil	



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06:00 SUMMARY

Formation: Antrim Volcanics

	NO NEW FORMATION	Nil
Fluorescence	Nil	
Gas Flaring	Nil	