



DAILY GEOLOGICAL REPORT

WELL: Shenandoah #1 **REPORT No.:** 28 **DAYS FROM SPUD:** 28 **DATE:** 28/08/07
PEL: EP 98 **00:00 DEPTH:** 517mKB **LAST 24hr DEPTH:** 432mKB **24 hr Progress:** 85m
LOCATION: Beetaloo Basin **RIG:** Century Rig 7 **KB:** (Final Survey) 232.55m **13³/₈" Csg:** 312m
GEOLOGIST: J Hulse **GL:** (Final Survey) 226.75m **PTD:** 2,900m

NEARBY WELLS: Balmain #1 (Twin)

06:00 Depth/Operation: 574mKB / Rotary water drilling in Hayfield Mudstone
Operations 00:00 to 06:00: Rotary water drilling Hayfield Mudstone
Previous 24 Hours Operations: Air Hammer drill 432-445mKB, POOH Hammer drill assembly plugged with cement, had parted and reconnected down-hole. RIH 12 1/4" Rotary Bit, Drill ahead with aerated water.

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/B'ground Breakdown C1/C2/C3/C4/C5
Formation: HAYFIELD MUDSTONE		
432-440mKB (28min/m)	Siltstone: Predominantly reddish brown, minor pale green and light grey, banded. Pale green: Sub platy, soft – moderately firm, nil – minor disseminated carbonaceous detritus, trace white feldspar grains, trace – nil disseminated pyrite, siliceous, weakly laminar. Reddish Brown: Soft – firm, sub platy – minor sub blocky, massive – weakly laminar, trace carbonaceous fragments, trace pyrite, trace opaque metalliferous fragments.	Nil
440-530mKB (4min/m)	Siltstone (100%): Light – medium grey, green grey in lower part, hard, sub platy, common micromicaceous, weakly – moderately laminar, common arenaceous, trace – minor disseminated pyrite, trace – minor carbonaceous fragments, trace – common calcite, grading to thin very fine sandstone layers in part. Sandstone (Trace): Light – medium grey, very fine, grading to siltstone, common – abundant siliceous or calcareous cement, minor pyrite matrix, nil visible porosity.	Nil
Fluorescence	Trace dull – moderately bright yellow fluorescence, no natural solvent cut, nil - very dull diffuse yellow crush cut.	
Gas Flaring	Nil	



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06:00 SUMMARY

Formation: HAYFIELD MUDSTONE

530-574mKB (6min/m)	Siltstone (0-95%): Pale green – grey green, moderately hard, sub platy, weakly – moderately laminar, micromicaceous, common biotite mica, trace pyrite, grading to very fine sandstone in part, minor medium green glauconite, trace carbonaceous fragments. Mudstone (5-100%): Orange brown – pale green, moderately hard, sub blocky, common micromicaceous, trace biotite, trace medium green glauconite, minor grading to siltstone.	Nil
Fluorescence	Nil	
Gas Flaring	Nil	