DAILY GEOLOGICAL REPORT

WELL:	Shenandoah #1	**REPORT No.:**	9	**DAYS FROM SPUD:**	9	**DATE:**	09/08/07
PEL:	EP 98	**00:00 DEPTH:**	162mKB	**LAST 24hr DEPTH:**	130mKB	**PROGRESS:**	32m
LOCATION:	Beetaloo Basin	**RIG:**	Century Rig 7	**KB:** (Final Survey)	232.55m	**9 5/8" Csg:**	m
GEOLOGIST:	M. D. Berry			**GL:** (Final Survey)	226.75m	**PTD:**	2,900m

NEARBY WELLS: Balmain #1

06:00 Depth/Operation: **191mKB /** Air foam drilling 17 ½" hole.

Operations 00:00 to 06:00: Air foam drilling 17 ½" hole.

Previous 24 Hours Operations: POOH and repair universal joint. Make up BHA and RIH. Install Washington rubber, continue to RIH. Tight at 85m. Carry out rig service. Drill ahead in 17 ½" hole to 150m at which point the bolts sheared again in the rotary drive shaft. Lay out one single and work pipe while repairing drive shaft. Ream and wash to 150m and drill ahead in 17 ½" hole to 162m.

Formation Tops	Actual Depths (m)			Prognosed Depths (m)			Diff to Prog.	Diff to Balmain
	MDKB	TVD	TVDSS	MDKB	TVD	TVDSS	H/L	H/L
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				265.3	265.3	-32.5		
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		

Interval (m) ROP (min/m) Average ROP	**Lithology Description**	**Gas/Background Breakdown C1/C2/C3/C4/C5**

Formation: Tindall Limestone

130 -190m ROP: 1.7 – 69.5 Min/m Ave = 4.0	Limestone: 100-95%: White, buff, pale yellow and pale grey, hard to very hard, angular and blocky, microcrystalline, granular, sucrosic texture, locally sparry, micritic in part, trace calcite crystals possibly representing fracture mineralisation, locally dolomitic, no to rare pinpoint intra-crystalline porosity development, no show. Siltstone: Trace to just <5%; Pale to medium grey and pale red brown, firm to hard, blocky, dolomitic and locally slightly calcareous. Chert: Trace to 5%: Medium grey, extremely hard, angular, conchoidal fracture, translucent in part, occasionally displays very thin outer calcareous layer confirming its origin as broken fragments of nodular concretions of chert from the limestone.	BG = Nil
Fluorescence	No Fluorescence	
Gas Flaring	No Flare	

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Notes on this section of the hole

	The upper part of the hole is continually caving with loose unconsolidated sand grains in all samples through this interval. This is adding to the difficulty in hole cleaning and time is spent at connections and during individual singles in unloading the hole. The limestone is fractured and cavernous and is now making considerable amounts of water. Tom Ahlbrandt and I attempted to put together a predictive log for Tim based on Balmain 1 (using ROP, GR, Lithology and Sonic – a copy of the log provided to Tim is attached below) which (we hoped) would provide some idea of where they should expect the most difficult zones. Based on this, Tim then provided the drillers with indicative drilling parameters that they should be using in each zone. This has certainly helped with the worst zones. However, it is still impossible to predict the caverns, some of which have caused the bit to drop from 1 to 2m. We are however, still getting returns.	
Fluorescence		
Gas Flaring		