



**DAILY GEOLOGICAL REPORT**

**DGR 12**

<b>Date:</b>	25 December 2008	<b>Licence / State:</b>	VIC/P46
<b>Report Period:</b>	06:00 – 06:00 hrs AEDT	<b>Rig:</b>	Seadrill: West Triton
<b>Days From Spud:</b>	11	<b>RT - SEAFLOOR:</b>	76.7m
<b>Current Hole Size:</b>	311mm (12.25")	<b>WATER DEPTH</b>	38.7 m MSL
		<b>RT:</b>	38.0 m MSL
<b>Depth @ 06:00 Hrs EST:</b>	2317m MDRT	<b>PTD:</b>	4000.0 m MDRT
	2314.90m TVDRT	<b>Spud Date:</b>	14 December 2008
	-2276.90m SS		
<b>24 Hr Progress:</b>	179m		
<b>06:00 – 06:00 EST</b>			
<b>Current Operation:</b>	<b>Drilling ahead 12 ¼" hole in the Belfast Mudstone.</b>		
<b>AFE Cost (Drill)\$</b>	<b>(C&amp;S)\$</b>	<b>Cost To Date:</b>	
	<b>(P&amp;A)\$</b>		

Casing Data	Hole Size	Depth	Casing Size	Wt:	Type	Shoe Depth	LOT
1	914 mm (36")	119m	762mm (30")		X52	116m	
2	444mm (17.5")	999m	340mm(13.375")	68lb/ft	NT80HE	987m	15.0ppg EMW
3	311mm(12.25")		244mm(9.675")				

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCI:	Cl -:	PV/YP:	Rmf
04:00	KCI Polymer	9.70	53	4.4	9.0	7.0%	50k	16/30	-

Bit Data	No.	Make	Type	Size	Hours	Meters	Condition
Present	4	Reed	PDC RSR616M-A10	311mm (12.25")	77.2	1290	
Last	3	Hughes	Rock GT-1	311mm (12.25")	2	28	0 0 NO A E I NO BHA

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
56	MWD	2086.92	3.34	227.82	2085.23	63.10	227.57
58	MWD	2146.40	3.29	227.47	2144.61	66.60	227.56
61	MWD	2264.44	3.46	226.56	2262.44	73.65	227.56

Fluid Loss	Interval MDRT	Total or Rate (bbl)	Remarks
	2138-2317m	235 total	

**OPERATIONS SUMMARY**

**Previous 24 hrs Operations Summary at 06:00 hrs AEDT**

Drilled ahead 311mm (12.25") hole 2138-2317m.

**Anticipated operations:**

Drill ahead 311mm (12.25") hole.

### FORMATION TOPS

FORMATION	ACTUAL TOP		High / Low	High / Low	PROGNOSED TOP	
	(MDmRT)	(mSS)	Prognosis	Normanby-1	(MDmRT)	(mSS)
Heytesbury Group	76.7	-38.7	0m	10 High	76.7	-38.7
Nirranda Group	492	-454	49m Low	145 High	443.0	-405.0
Dilwyn Formation	576	-538	38m Low	152 High	538.0	-500.0
Pember Mudstone	963	-925	15m Low	255 High	948.0	-910.0
Pebble Point Formation	1075	-1037	47m Low	227 High	1028.0	-990.0
Timboon Sandstone	1092	-1054	44m Low	236 High	1048.0	-1010.0
Paarratte Formation	1245	-1207	22m Low	251 High	1223.0	-1185.0
Skull Creek Mudstone	1705	-1666	1m Low	258 High	1703.0	-1665.0
Nullawarre Greensand	1850	-1811	26m Low	232 High	1823.0	-1785.0
Belfast C & B Mudstone	1905	-1867	27m Low	220 High	1878.0	-1840.0
Belfast A Mudstone	2160	-2122	3m High	240 High	2163.0	-2125.0
Flaxman Formation					2938.0	-2900.0
Waarre Formation Unit C					3228.0	-3190.0
Waarre Formation Unit B					3533.0	-3495.0
Waarre Formation Unit A					3588.0	-3550.0
Eumeralla Formation					3988.0	-3950.0
Total Depth					4000.0	-3962.0

### HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS
2138-2317m	Nil	

GAS	MD (m)	Peak	Background	Chromatograph
Trip Gas				
Connection Gas				

### GEOLOGICAL SUMMARY

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition %
2120-2160m  4-41m/hr 14m/hr avg	<p><b>Sandstone with minor interlaminated Claystone and Siltstone</b></p> <p>SANDSTONE: (30-70%) Quartzose, clear to translucent, frosted, light grey, very fine to coarse, subangular to subrounded, moderately to well sorted, predominantly clean, moderate to strong siliceous, calcareous and dolomitic cement, argillaceous matrix dispersing in mud, trace nodular pyrite, trace muscovite, trace to common carbonaceous fragments, trace hard siltstone, disaggregated with common hard cemented fine to medium sand aggregates, fair to good porosity, no fluorescence.</p> <p>SILTSTONE: (5-60%) Dark grey to olive grey, locally very argillaceous grades to silty claystone in part, slightly arenaceous, micromicaceous, moderately abundant carbonaceous specks, trace lithic fragments, firm, blocky to subfissile.</p> <p>CLAYSTONE: (5-45%) Light grey to olive grey, silty in part, common carbonaceous fragments, micromicaceous, slightly arenaceous in part, soft to slightly dispersive, massive to amorphous.</p>	4.1 u BG 88/8/3/2/0



2160-2302m  4-26m/hr 8.5m/hr avg	<b>Belfast Mudstone Unit A</b> <b>Claystone with minor interbedded Siltstone and Sandstone</b> SANDSTONE (tr-70%) Quartzose, clear to translucent, frosted, light grey, fine to coarse, angular to subrounded, moderately to very well sorted, predominantly clean, with argillaceous to silty matrix dispersing in mud, moderate to strong siliceous, calcareous and dolomitic cement in part, trace nodular pyrite, trace to common carbonaceous fragments, trace muscovite, locally trace dolomitic calcarenite, predominantly disaggregated with common firm to hard cemented aggregates, fair to good porosity, no fluorescence. SILTSTONE (5-65%) Light grey to olive grey to dark grey to black, arenaceous to argillaceous, moderately to non calcareous, firm to very hard, blocky to fissile (black shale). CLAYSTONE (20-90%) Light grey to light olive grey to yellowish grey, silty in part, common carbonaceous fragments, micromicaceous, soft to firm to slightly dispersive, massive to amorphous.	7.2 u BG 91/6/3/0/0  31.5 u PK at 2302m 96/3/1/0/0
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**REMARKS:**

DGR 12 links to DDR 15

**LWD Offsets from Bit:****Run 2:**GR: 4.9m  
Res: 4.85m  
ECD: 4.14m  
Survey: 12.96m  
Sonic: 22.37m**Geologists: Roman Leslie / Greg Clota**