



## DAILY GEOLOGICAL REPORT

DGR 8

<b>Date:</b>	21 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>	7	<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>	1156m MDRT	<b>PTD:</b>	4000.0 m MDRT
	1156m TVDRT	<b>Spud Date:</b>	14 December 2008
	-1118m SS		
<b>24 Hr Progress:</b>	129m		
<b>06:00 – 06:00 EST</b>			
<b>Current Operation:</b>	Drilling ahead 12.25" hole in the Timboon Sandstone at 35m/hr.		
<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
22:25	KCI Polymer	9.5	153	4.4	9.5	8.5%	38k	30/42	-

Bit Data	No.	Make	Type		Size	Hours	Meters	Condition
Present	4	Reed	PDC	RSR616M -A10	311mm (12.25")	7	129	
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)
29	MWD	1023.76	2.63	224.84	1023.6	6.39	227.89
30	MWD	1053.62	2.63	224.67	1053.43	7.75	227.34
33	MWD	1141.71	2.61	223.95	1141.42	11.83	226.51

Fluid Loss	Interval MDRT	Total or Rate (bbl)	Remarks
Mud	1027-1156	Up to 40bbl/hr	Losses over shakers

## OPERATIONS SUMMARY

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

Broke out Junk Basket – recovered 175gm metal. Made up new 311mm (12.25") drilling assembly – shallow tested MWD. Picked up and racked back 21 joints of drill pipe. RIH 151-979m whilst picking up drill pipe. Calibrated LWD depth at casing shoe. Washed and logged with LWD 987-1027m. Drilled ahead 311mm (12.25") hole 1027-1156m.

### Anticipated operations:

Drill ahead 311mm (12.25")

### FORMATION TOPS

FORMATION	ACTUAL TOP		High / Low	High / Low	PROGNOSED TOP	
	(MDmRT)	(mSS)	Prognosis	Offset	(MDmRT)	(mSS)
Heytesbury Group	76.7	-38.7	0m Low		76.7	-38.7
Nirranda Group	492	-454	49m Low		443.0	-405.0
Dilwyn Formation	576	-538	38m Low		538.0	-500.0
Pember Mudstone	963	-925	15m Low		948.0	-910.0
Pebble Point Formation	1075	-1037	47m Low		1028.0	-990.0
Timboon Sandstone	1092	-1054	44m Low		1048.0	-1010.0
Paarratte Formation					1223.0	-1185.0
Skull Creek Mudstone					1703.0	-1665.0
Nullawarre Greensand					1823.0	-1785.0
Belfast C & B Mudstone					1878.0	-1840.0
Belfast A Mudstone					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
1027-1156m	Nil	0.02u

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

### GEOLOGICAL SUMMARY

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition %
1027-1040m  5-48m/hr 25m/h avg	<p><b>Sandstone with interbedded Siltstone and Claystone</b></p> <p>SANDSTONE: (50-80%) Quartzose, clear to translucent to light smokey grey, frosted, with trace yellow-white milky quartz, fine to very coarse, subangular to subrounded, poorly sorted (bimodal), pyrite cement on grain boundaries, trace microcrystalline pyrite granules, trace muscovite, disaggregated with minor pyrite cemented fine to medium sand aggregates, no fluorescence</p> <p>SILTSTONE: (20-25%) Dark olive-grey to dusky brown to light grey, moderately calcareous, commonly pyritic, common lithic fragments, soft to very hard, blocky to subfissile.</p> <p>CLAYSTONE: (0-25%) Olive grey to moderate olivine brown, moderately calcareous, slightly silty, trace white calcite spar inclusions, trace carbonaceous material, soft, massive to amorphous.</p>	0.02u BG 100

<p>1040-1075m  11-39m/hr 22m/h avg</p>	<p><b>Claystone with interbedded Sandstone and Siltstone</b>            CLAYSTONE: (50-90%) Olive grey to moderate olivine brown, moderately calcareous, slightly silty, trace white calcite spar inclusions, trace carbonaceous material, soft, massive to amorphous.            SANDSTONE: (10-30%) Quartzose, clear to translucent, frosted, very fine to fine, subrounded, well sorted, pyrite cement on grain boundaries, trace microcrystalline pyrite granules, disaggregated with minor pyrite cemented fine sand aggregates, no fluorescence            SILTSTONE: (10-25%) Dark olive-grey to dusky brown, moderately calcareous, commonly pyritic, common lithic fragments, soft to very hard, blocky to subfissile.</p>	<p>0.03u BG 100</p>
<p>1075-1092m  15-40m/hr 35m/hr avg</p>	<p><b>Pebble Point Formation</b>  <b>Sandstone with interbedded Siltstone and Claystone</b>            SANDSTONE: (50-85%) Quartzose-feldspathic, clear to translucent to light smokey grey, frosted, with moderately abundant K-feldspar (microcline), fine to very coarse, angular to subrounded, poorly sorted (bimodal), pyrite cement on grain boundaries, trace microcrystalline pyrite granules, trace muscovite, disaggregated with minor pyrite cemented fine to medium sand aggregates, no fluorescence.            SILTSTONE: (5-45%) Dark olive-grey to dusky brown to light grey, moderately to strongly calcareous, commonly pyritic, common lithic fragments, soft, blocky.            CLAYSTONE: (5-15%) Olive grey to moderate olivine brown, moderately calcareous, slightly silty, trace white calcite spar inclusions, trace carbonaceous material, soft, massive to amorphous.</p>	<p>0.02u BG 100</p>
<p>1092-1056  16-40m/hr 35m/hr avg</p>	<p><b>Timboon Sandstone</b>  <b>Sandstone with Interbedded Siltstone</b>            SANDSTONE: (70-90%) Quartzose-feldspathic, clear to translucent to light smokey grey, frosted, with moderately abundant K-feldspar (microcline), fine to very coarse, subangular to subrounded, poorly sorted (bimodal), pyrite cement on grain boundaries, trace microcrystalline pyrite granules, trace muscovite, disaggregated with minor pyrite cemented fine to medium sand aggregates, no fluorescence.            SILTSTONE: (10-30%) Dark grey to olive, slightly calcareous in part, commonly carbonaceous, common lithic fragments, soft, blocky.</p>	<p>0.01u BG 100</p>

**REMARKS:**

DGR 8 links to DDR 11

**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**