

### DAILY GEOLOGICAL REPORT

DGR 14

<b>Date:</b>	8 <sup>th</sup> September 2008 06:00 EST	<b>Licence / State:</b>	VIC/P44
<b>Report Period:</b>	06:00 – 06:00 Hours EST	<b>Rig:</b>	OCEAN PATRIOT
<b>Days From Spud:</b>	14	<b>RT - SEAFLOOR:</b>	87.8m
<b>Current Hole Size:</b>	311mm (12¼")	<b>WATER DEPTH</b>	67.0m MSL
		<b>RT:</b>	20.8m MSL
<b>Depth @ 06:00 Hrs EST:</b>	1393m MDRT	<b>PTD:</b>	2047m MDRT
	-1320.4m SS MSL	<b>Spud Date:</b>	03:15 hrs 25 <sup>th</sup> August,08
<b>24 Hr Progress:</b>	330m		
<b>06:00 – 06:00 EST</b>			
<b>Current Operation:</b>	Drilling 311mm (12¼") hole in the Timboon Formation at 12 m/hr.		
<b>Nope Cost (Drill)\$</b>	<b>(C&amp;S)\$</b> 37.4 million	<b>Cost To Date:</b>	
	<b>(P&amp;A)\$</b>		

Casing Data	Hole Size	Depth	Casing Size	Wt:	Type	Shoe Depth	LOT
	914 mm (36")	131.7m	762mm (30")	461 kg/m (310 lb/ft)	Conductor	131.7m	n/a
	445mm (17.5")	657m	340mm (13.375mm)	101 kg/m (68 lb/ft)	L80 BTC	652m	2.21sg (18.4ppg)
	311mm (12.25")						

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCl:	Cl -:	PV/YP:	Rmf:
	KGlycol	10.0	76	4.2	8.5	9.2	61k	23/42	0.082Ω @ 19.5 deg C

Bit Data	No.	Make	Type	Size	Hours	Meters	Condition	
<b>Current</b>	3	Hughes	Mill	MXL-1X	311mm (12¼")	19.9	672	Drilling
<b>Previous</b>								

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	MWD	1315.4	37	116	1280.8	155	133
	MWD	1344.6	39	113	1303.9	172	131

### OPERATIONS SUMMARY

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

Drill ahead 311mm (12¼") hole from 1063m to 1393m.

#### Anticipated Operations:

Drill ahead 311mm (12¼") directional hole to +/-1450m. Pull out of hole, change to a PDC bit.

FORMATION	FORMATION TOPS					
	ACTUAL TOP		High / Low	High / Low	PROGNOSED TOP	
	(mMDRT)	(mSS MSL)	Prognosis (m)	Henry 1	(MDmRT)	(mSS MSL)
SEA LEVEL	20.8	0.0			20.8	0.0
HEYTSBURY GP	87.8	-67.0	1.0 High	0.5 High	88.8	-68.0
MEPUNGA FM	720.0	-699.2	0.2 Low	56.1 High	720.0	-699.0
DILWYN FM / WANGERRIP GP	848.0	-827.1	24.1 Low	24.4 High	824.0	-803.0
PEMBER MUDSTONE	1092.5	-1066.1	12.1 Low	31.4 High	1086.7	-1054.0
PEBBLE POINT FM	1132.5	-1101.1	22.1 Low	21.8 High	1113.6	-1079.0
MASSACRE SHALE	1207.0	-1168.3	33.3 Low	18.6 High	1173.9	-1135.0
TIMBOON FM	1222.0	-1181.4	36.4 Low	17.2 High	1184.7	-1145.0
PAARATTE FM					1389.4	-1333.0
SKULL CREEK MDST					1637.1	-1524.0
K85 UNCONFORMITY					1885.8	-1658.0
WAARRE A					1885.8	-1658.0
EUMERALLA FM					1935.8	-1683.0
TOTAL DEPTH					1977.0	-1703.6

## HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS

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

## GEOLOGICAL SUMMARY

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition
1050 – 1092.5m 3 – 72 m/hr Av: 35 m/hr	SILTSTONE WITH MINOR INTERBEDDED SANDSTONE. <u>SANDSTONE</u> : clear, translucent, off white, light brownish grey, fine to medium grained, trace coarse, poor sorting, sub angular to sub rounded, trace weak siliceous cement, trace weak calcareous cement, minor light brownish grey argillaceous matrix, trace lithics, trace carbonaceous specks, poor to locally fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : medium brown, argillaceous, locally very fine arenaceous, minor carbonaceous fragments, trace very fine glauconite, soft to firm, sub blocky.	trace 100/-
	<b>PEMBER MUDSTONE 1092.5m MDRT 1086.9m TVDRT(-1066.1m SS MSL)</b>	
1092.5 – 1120m 21 – 47 m/hr Av: 33 m/hr	SILTSTONE WITH MINOR INTERBEDDED SANDSTONE. <u>SANDSTONE</u> : clear, translucent, off white, light brownish grey, fine to medium grained, trace coarse, poor sorting, sub angular to sub rounded, minor weak calcareous cement, minor light brownish grey argillaceous matrix, trace lithics, trace carbonaceous specks, poor to locally fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : medium brown, argillaceous, locally very fine arenaceous, minor carbonaceous fragments, trace very fine glauconite, soft to firm, sub blocky.	trace 100/-

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1120 – 1132.5m 7 – 48 m/hr Av: 18 m/hr	INTERBEDDED SANDSTONE AND SILTSTONE. <u>SANDSTONE</u> : translucent, clear, light grey, light brownish grey, greenish grey, very fine to fine grained, rare medium to coarse, sub angular to sub rounded, poor sorting, rare siliceous cement, common light brown argillaceous matrix, abundant glauconite, common nodular pyrite, trace lithics, friable to moderately hard very fine grained aggregates, loose medium to coarse grains, poor inferred porosity, no fluorescence. <u>SILTSTONE</u> : light to medium grey brown, medium brown, very finely arenaceous in part, commonly argillaceous, rare glauconite, rare carbonaceous flecks, friable to firm, blocky.	trace 100/-
	<b>PEBBLE POINT FORMATION 1132.5m MDRT 1121.9m TVDRT (-1101.1m SS MSL)</b>	
1132.5 – 1207m 15 – 103 m/hr Av: 37 m/hr	<u>SANDSTONE</u> : translucent, clear, white, light grey, very fine to coarse, occasionally very coarse, poor sorting, sub angular to sub rounded, no visible cement or matrix, trace lithics, trace to locally common nodular pyrite, predominately loose clean quartz grains, good inferred porosity, no fluorescence.	2 U 100/-
	<b>MASSACRE SHALE 1207.0m MDRT 1189.1m TVDRT (-1168.3m SS MSL)</b>	
1207 – 1222m 5 – 101 m/hr Av: 16 m/hr	INTERBEDDED SANDSTONE AND SILTSTONE. <u>SANDSTONE</u> : clear, translucent, light brown to light grey, generally fine to medium grained, minor coarse to very coarse, poorly sorted, sub-angular to sub-round, weak siliceous cement, minor off white to light brown argillaceous matrix, minor pyrite nodules, loose clean grains, poor to fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : medium to dark brownish grey, minor medium greenish grey, argillaceous, siliceous in part, minor glauconite, dispersive to very soft, occasionally hard, amorphous, occasionally sub-blocky to blocky.	4 U 100/-
	<b>TIMBOON FORMATION 1222.0m MDRT 1202.2m TVDRT (-1181.4m SS MSL)</b>	
1222 – 1380m 4 – 133 m/hr Av: 36 m/hr	INTERBEDDED SANDSTONE AND SILTSTONE. <u>SANDSTONE</u> : translucent, clear light brownish grey, fine to medium grained, minor coarse, poor to moderately sorted, sub angular to sub round, weak siliceous and calcareous cement, minor off white argillaceous matrix, trace to common nodular pyrite, trace fine grained glauconite, friable fine grained aggregates, loose medium to coarse grains, poor to fair inferred porosity, no fluorescence. <u>SILTSTONE</u> : medium brownish grey, light to medium grey, occasionally dark brown, argillaceous, rare micro mica, rare carbonaceous specks / fragments, soft to firm, dispersive in part, sub blocky to blocky.	7 U 100/-

**REMARKS:**LWD Sensor Offsets from the Bit:

GR: 11.53m  
Resistivity: 11.48m  
D & I: 19.38m  
HeFar: 36.24m  
Density: 35.19m  
Caliper: 34.81m