

## **NETHERBY 1DW1**

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## DAILY GEOLOGICAL REPORT

#### **DGR 09**

Date: Report Period: Days From Sidetrack: Current Hole Size:	11th August 2008 – 06:00 EST       Licence / State:         06:00 – 06:00 Hours EST       Rig:         09       RT - SEAFLOOR:         216mm (8 ½")       WATER DEPTH         RT:       RT:		VIC/P44 OCEAN PATRIOT 86.9m 66.1m MSL 20.8m MSL
Depth @ 06:00 Hrs EST: 24 Hr Progress: 06:00 – 06:00 EST	2270m MDRT 1677.3m TVDRT (-1656.5m SS MSL) 230m	PTD: Sidetrack from Netherby 1:	2510m MDRT 21:00 hrs on 2 <sup>nd</sup> August 2008
Current Operation:	Drilling ahead 216mm (8 1/2") dire	ectional hole in the Wa	arre A at 15m/hr.
Nope Cost (Drill)\$	(C&S)\$ 25.4 million (P&A)\$		Cost To Date:

Casing Data	Hole Size	Depth	Casing Size	Wt:	Туре	Shoe Depth	LOT
	914 mm	130.9m	762mm (30")	461 kg/m	Conductor	130.9m	
	(36")			(310 lb/ft)			
	445mm	647.5m	340mm	101 kg/m	L80	642.2m	2.12sg (17.7ppg)
	(17.5")		(13.375")	(68 lb/ft)			
	311mm	1944m	244mm (9 5/8") /	70 kg/m	L80	1936.0m	
	(12.25")		273mm (10 ¾")	(47lb/ft)			
	216mm						
	(81⁄2")						

Mud Data	Туре:	Wt:	Visc:	WL:	PH:	KCI:	CI -:	PV/YP:	Rmf:
	WFW	9.6	44	3.5	9.5	-	88k	11/28	0.077Ωm @ 15.7°C

Bit Data	No.	Make		Туре	Size	Hours	Meters	Condition
Current	2	Reed	PDC	RSX519M	216mm (8 ½")	15.4	326	In Hole
Previous								

Surveys	Туре	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	LWD	2205.0	96	121	1684.3	869	119
	LWD	2234.2	96	120	1681.1	898	119

## **OPERATIONS SUMMARY**

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

Drill ahead 216mm ( $8\frac{1}{2}$ ") directional production hole from 2040m to 2142m. Work on top drive saver sub. Drill ahead 216mm ( $8\frac{1}{2}$ ") directional production hole from 2142m to 2165m. Rack back 1 stand and replace top drive saver sub. LWD geolograph cable broken. Circulate and repair. Continue to directional drill 216mm ( $8\frac{1}{2}$ ") production hole from 2165m to 2182m while repairing geolograph cable. Ream down for LWD data. Drill ahead 216mm ( $8\frac{1}{2}$ ") production hole from 2182m to 2257m. Circulate while repairing hydraulic problem with pipe handling equipment. Drill ahead 216mm ( $8\frac{1}{2}$ ") production hole from 2257m to 2270m.

#### Anticipated Operations:

Drill ahead 216mm  $(8\frac{1}{2}")$  directional production hole to total depth at +/- 2510m.



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	FORMATION TOPS						
FORMATION	ACTUAL TOP		High / Low	High / Low	PROGNOSED TOP		
	(mMDRT)	(mSS MSL)	Prognosis (m)	Netherby 1	(MDmRT)	(mSS MSL)	
SEA LEVEL	20.8	0.0			20.8	0.0	
HEYTSBURY GP	86.9	-66.1		-	87.0	-65.0	
MEPUNGA FM	674.0	-653.2	9.8 High	-	685.0	-663.0	
DILWYN FM/	778.0	-757.2	6.2 Low	-	773.0	-751.0	
WANGERRIP GP							
PEMBER MUDSTONE	1004.5	-979.6	22.4 High	-	1027.0	-1002.0	
PEBBLE POINT FM	1069.0	-1042.2	17.2 Low	-	1051.0	-1025.0	
MASSACRE SHALE	1139.0	-1110.4	17.4 Low	-	1123.0	-1093.0	
TIMBOON FM	1155.0	-1125.4	21.4 Low	-	1135.0	-1104.0	
PAARATTE FM	1346.0	-1293.6	9.6 Low	-	1337.0	-1284.0	
SKULL CREEK MDST	1561.0	-1469.5	15.5 Low	0.2 High	1555.0	-1454.0	
K85 UNCONFORMITY	1898.0	-1652.7	-	0.1 Low	NP	NP	
WAARRE "A"	1929.0	-1658.5	0.5 High	3.6 High	1939.0	-1659.0	
EUMERALLA FM					NP	NP	
TOTAL DEPTH					2504	-1622.0	

## HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS

GAS	MD (m)	Peak	Background	Chromatograph
Peak Gas	2153m	897 U	60 U	97/2/1/trace

## **GEOLOGICAL SUMMARY**

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition
	WAARRE "A" 1929m MDRT (-1658.5m SS MSL)	
2040 – 2120m 6 – 40 m/hr Av: 20 m/hr	MASSIVE SANDSTONE. <u>SANDSTONE</u> : clear, translucent, minor pale grey, fine to medium grained, well sorted, dominantly sub-angular to sub-round, weak siliceous cement, minor pale grey argillaceous matrix, minor lithics, minor carbonaceous specks, rare pale orange quartz grains, loose, minor friable, poor visual porosity, fair inferred porosity, no fluorescence.	100-150 U 97/2/1 Peak: 2076m 234 U 97/2/1
2120 – 2140m 4 – 35 m/hr Av: 24 m/hr	CALCAREOUS SANDSTONE WITH TRACE INTERBEDDED SILTSTONE. <u>SANDSTONE</u> : white, light grey, translucent, clear in part, fine to predominately medium grained, sub angular to sub rounded, moderately sorted, abundant white calcareous cement, minor light grey argillaceous matrix, trace fine pyrite nodules, trace orange and light green lithics, minor carbonaceous flecks, friable to occasionally moderately hard aggregates, poor visual porosity, 90% dull orange mineral fluorescence. <u>SILTSTONE</u> : medium to dark brownish grey, dark grey, common carbonaceous flecks, trace micro mica, moderately hard, sub blocky to sub fissile.	60 U 97/2/1/trace Peak: 2132m 176 U 97/2/1/trace/trace

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2140 – 2180m 10 – 70 m/hr Av: 25 m/hr	<u>SANDSTONE</u> : light grey, translucent, clear, fine to predominately medium occasionally coarse, poor too fair sorting, sub angular to predominately sub rounded, rare weak siliceous cement, minor light grey argillaceous matrix, trace red lithics, common carbonaceous flecks, loose to friable aggregates, fair inferred porosity, no fluorescence.	100 U 97/2/1/trace Peak: 2145- 2162m 300-900 U 97/2/1/trace
2180 – 2199m 6 – 25 m/hr Av: 15 m/hr	CALCAREOUS SANDSTONE WITH TRACE INTERBEDDED SILTSTONE. <u>SANDSTONE</u> : light grey, translucent, clear, fine to medium grained, sub angular to sub rounded, well sorted, rare weak siliceous cement, common calcareous cement, minor light grey argillaceous matrix, common carbonaceous fragments, trace nodular pyrite, trace light green and red lithics, rare biotite flecks, loose to friable aggregates, minor moderately hard, fair visual and fair to good inferred porosity, 30% dull orange mineral fluorescence. <u>SILTSTONE</u> : medium to dark brownish grey, carbonaceous in part, dark grey, common carbonaceous flecks, trace disseminated pyrite, moderately hard, sub blocky to sub fissile.	10 U 97/2/1
2199 – 2270m 11 – 68 m/hr Av: 23 m/hr	SANDSTONE WITH TRACE INTERBEDDED SILTSTONE. <u>SANDSTONE</u> : clear to translucent, off white, fine to medium grains, occasionally very fine, well sorted, sub-angular to sub-round, weak siliceous cement, occasional to common off white argillaceous matrix, occasional carbonaceous specks and fragments, minor orange lithics, generally loose clean grains, rare friable aggregates, poor to fair visual porosity, fair to good inferred porosity, no fluorescence. <u>SILTSTONE</u> : pale grey, argillaceous, minor carbonaceous specks, dispersive to firm, amorphous, occasionally sub-blocky.	50 U 97/2/1/trace

### **REMARKS:**

LWD Sensor Offsets from the Bit: (216mm (81/2") hole section)

 Xceed-Ecoscope-MWD

 GR:
 9.73m

 Res:
 12.77m

 D&I:
 20.68m

 HeFar:
 13.02m

 Den:
 10.93m

 Caliper:
 11.35

 PWD:
 9.98m