Santos

NETHERBY 1DW1

Page 1 of 3

DGR 08

DAILY GEOLOGICAL REPORT

Date: **Report Period:** 10th August 2008 – 06:00 EST

Licence / State: VIC/P44 Rig:

06:00 - 06:00 Hours EST

RT - SEAFLOOR:

OCEAN PATRIOT

Days From Sidetrack: Current Hole Size:

216mm (8 ½")

86.9m **WATER DEPTH** 66.1m MSL RT: 20.8m MSL

Depth @ 06:00 Hrs EST:

2040m MDRT 1689.3m TVDRT 2510m MDRT

(-1668.5m SS MSL)

21:00 hrs on 2nd August Sidetrack from

96m

Netherby 1: 2008

24 Hr Progress:

06:00 - 06:00 EST

Current Operation:

(Drill)\$

Drilling ahead 216mm (8 1/2") directional hole in the Waarre A at 20m/hr.

PTD:

Nope Cost

(C&S)\$ 25.4 million

Cost To Date:

(P&A)\$

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	Type:	Wt:	Visc:	WL:	PH:	KCI:	CI -:	PV/YP:	Rmf:
	WFW	9.5	48	3.6	9.5	-	89k	10/24	0.075Ωm @ 15.7°C

Bit Data	No.	Make	-	Туре	Size	Hours	Meters	Condition
Current	2	Reed	PDC	RSX519M	216mm (8 ½")	4.4	96	In Hole
Previous								

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	LWD	1974.0	84	122	1685.8	638	119
	LWD	2011.2	88	121	1688.6	675	119

OPERATIONS SUMMARY

Previous 24 hrs Operations Summary at 06:00 hrs EST

Run in hole with the 216mm (81/2") directional assembly. Wash down from 1830m to the top of cement at 1900m. Drill cement and plugs to 1934m. Displace well to DIF mud system cleaning surface pits and lines as required. Drill the casing shoe, clean the rat hole to 1944m. Drill ahead 216mm (8½") directional production hole from 1944m to 1998m. Flow check and test gas system. Drill ahead from 1998m to 2040m.

Anticipated Operations:

Drill ahead 216mm (8½") directional production hole to total depth at +/- 2510m.



	FORMATION TOPS						
FORMATION	ACTUAL TOP		High / Low	High / Low	PROGN	OSED 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
1966 – 1970m 12 – 39 m/hr Av: 24 m/hr	SANDSTONE: off white to pale grey, clear to translucent, medium to coarse, rare fine to very coarse, angular to occasionally sub-round, weak siliceous cement, occasional off white argillaceous matrix, occasional to common carbonaceous specks, minor lithics, rare pyrite nodules, generally loose clean grains, minor friable, fair visual & inferred porosity, no fluorescence.	70 U 97/2/1/- Peak: 1969m 223U Chrom. not recorded.

	GAS	MD (m)	Peak	Background	Chromatograph
ſ					

GEOLOGICAL SUMMARY

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition
	WAARRE "A" 1929m MDRT (-1658.5m SS MSL)	
1944 – 2040m 7 – 49 m/hr Av: 24 m/hr	SANDSTONE WITH MINOR SILTSTONE. SANDSTONE: clear to translucent, minor pale grey, fine to medium, rare coarse, moderately to well sorted, angular to sub-round, minor sub-round, weak siliceous cement, rare off white argillaceous matrix, occasional carbonaceous specks and fragments, minor lithics, loose clean grains, fair to good inferred porosity, no fluorescence. SILTSTONE: pale grey, arenaceous, occasional carbonaceous specks and minor fragments, locally micro mica, firm to occasionally moderately hard, blocky to sub-blocky.	70 U 97/2/1/- Peak: 1969m 223U Chrom. not recorded.

REMARKS:

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

Xceed-Ecoscope-MWD GR: 9.73m Res: 12.77m

Santos	NETHERBY 1DW1	Page 3 of 3
Santos	DAILY GEOLOGICAL REPORT	DGR 08

D&I: 20.68m HeFar: 13.02m Den: 10.93m Caliper: 11.35 PWD: 9.98m