# Santos-

## **NETHERBY 1DW1**

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#### DAILY GEOLOGICAL REPORT

**DGR 01** 

3<sup>rd</sup> August 2008 – 06:00 EST Licence / State: VIC/P44 Date:

**Report Period:** 06:00 - 06:00 Hours EST OCEAN PATRIOT Rig:

Days From Sidetrack:

RT - SEAFLOOR: 86.9m **Current Hole Size:** 311mm (12 1/4") **WATER DEPTH** 66.1m MSL RT: 20.8m MSL Depth @ 06:00 Hrs EST: 1650m MDRT PTD: 2504m MDRT

21:00 hrs on 2<sup>nd</sup> August 1555.9m TVDRT Sidetrack from

> -1535.1m SS MSL Netherby 1: 2008

24 Hr Progress: 145m

06:00 - 06:00 EST

**Current Operation:** Drilling 311mm (121/4") directional hole in the Skull Creek Mudstone at 20 m/hr.

Nope Cost (Drill)\$ (C&S)\$ 25.4 million Cost To Date:

(P&A)\$

Casing Data	Hole Size	Depth	Casing Size	Wt:	Туре	Shoe Depth	LOT
	914 mm (36")	130.9m	762mm (30")	461 kg/m (310 lb/ft)	Conductor	130.9m	
	445mm (17.5")	647.5m	340mm (13.375")	101 kg/m (68 lb/ft)	L80	642.2m	2.12sg (17.7ppg)
	311mm (12.25")		244mm (9 5/8")	70 kg/m (47lb/ft)			
	216mm (8½")						

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCI:	CI -:	PV/YP:	Rmf:
	KCI/GLY	11.0	54	7.4	12.0	8.3	45k	21/36	0.100Ωm @ 22.1°C

Bit Data	No.	Make	Туре		Size	Hours	Meters	Condition
Current	1	Reed	PDC	RSX616	311mm (12¼")	4.4	145	In Hole
Previous								

	Surveys	Туре	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
		LWD	1569.8	40	109	1497.0	296	117
Г		LWD	1600.6	42	111	1520.3	316	117

#### **OPERATIONS SUMMARY**

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

Netherby 1DW1 sidetracked from the Netherby 1 wellbore from 1505m at 21:00hrs on 2<sup>nd</sup> August 2008. Drill 311mm (121/4") hole sidetracking the well from 1505m to 1608m. Trouble shoot problem with mud pump 3. Drill ahead from 1608m to 1652m.

## **Anticipated Operations:**

Drill 311mm (121/4") directional hole to 244mm (9 5/8") casing depth at +/- 1895m.

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	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					1896.0	-1619.0
WAARRE 'B"						
WAARRE "A"					1896.0	-1619.0
EUMERALLA FM					NP	NP
TOTAL DEPTH					2504	-1622.0

## **HYDROCARBON SHOW SUMMARY**

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS

GAS	MD (m)	Peak	Background	Chromatograph

## **GEOLOGICAL SUMMARY**

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition
1505 – 1561m 1 – 90 m/hr Av: 30 m/hr	SILTSTONE WITH OCCASIONAL INTERBEDDED FINE GRAINED SANDSTONE.  SILTSTONE: medium dark brownish grey, dark grey, very finely arenaceous, argillaceous in part, minor fine grained glauconite, trace very fine lithics, soft, dispersive with argillaceous content easily washed from samples, locally moderately hard, blocky.  SANDSTONE: translucent, clear, very fine to fine grained, minor medium loose quartz grains, sub angular to predominately sub rounded, moderately well sorted, common grey silty / argillaceous matrix, minor very fine glauconite, trace fine grained lithics, predominately loose quartz grains, poor inferred porosity, no fluorescence.	2 - 5 U 100/-
	SKULL CREEK MUDSTONE 1561m MDRT (-1469.5m SS MSL)	

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Dantos	DAILY GEOLOGICAL REPORT	DGR 01
1561 – 1650m 3 – 75 m/hr Av: 20 m/hr	SILTSTONE WITH MINOR INTERBEDDED SANDSTONE  SILTSTONE: pale to medium brown, medium to dark grey in part, argillaceous to minor arenaceous, occasional carbonaceous specks, soft to firm, occasionally hard, sub-blocky, amorphous.  SANDSTONE: clear to translucent, off white, generally medium, minor coarse, moderately sorted, sub-round to occasionally round, moderately calcareous cement, occasional off white argillaceous matrix, occasional glauconite grains, friable to moderately hard, loose, poor to very poor visual & inferred porosity, no fluorescence.	1 - 10 U 100/-

## **REMARKS:**

## LWD Sensor Offsets from the Bit:

GR: 11.41m Res: 11.36m D&I: 18.87m