

01 Jan 2006

From: Ron King/ Geoff Webster  
To: J Ah-Cann

**DRILLING MORNING REPORT # 21**

**Culverin 1**

Well Data							
Country	Australia	MDBRT	3571.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 22699889
Field	Gippsland Basin	TVDBRT	3567.1m	Last Casing OD	13.375in	AFE No.	3433-1001
Drill Co.	DOGC	Progress	98.0m	Shoe TVDBRT	1511.8m	Daily Cost	\$ 466881
Rig	OCEAN PATRIOT	Days from spud	16.44	Shoe MDBRT	1511.8m	Cum Cost	\$ 15076709
Wtr Dpth(MSL)	585.0m	Days on well	19.77	FIT/LOT:	/ 15.80ppg	Days Since Last LTI	957
RT-ASL(MSL)	21.5m	Planned TD MD					
RT-ML	606.5m	Planned TD TVDRT					
Current Op @ 0600		POOH from 85m MDRT and inspected BHA for washout					
Planned Op		Drill ahead 311 mm (12 1/4") hole to TD.					

**Summary of Period 0000 to 2400 Hrs**

Drilled ahead from 3473.0 mMDRT to 3571.0 mMDRT. POOH for suspected washout.

**FORMATION**

Name	Top
Base Funa Flounder Channel	2835.00m
Top 67.5 Ma Sand	2836.00m
Near 68.5 Ma Sand	3103.00m
Near 70.3 Ma Sand	3478.00m
TD	

**Operations For Period 0000 Hrs to 2400 Hrs on 01 Jan 2006**

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	1830	18.50	3571.0m	Continued to drill 311mm (12 1/4") hole from 3473m MDRT to 3571m MDRT Average ROP = 5.3m/hr, WOB = 20-24 klbs, Rotary RPM = 110, DH RPM = 228, Tq = 6000-8000 ftlb, Flow = 872 GPM Encountered drilling break at 3481m MDRT to 3487m MDRT, flow checked well (76m/hr, Gas = 45 units) Max Gas = 186 units @ 3543.5m MDRT
IH	P	WSH	1830	2400	5.50	3571.0m	Conducted 15 minute flow check, good. POOH wet, checking for washout. Pulled 2 stands and made up top drive, circulated to confirm continued pressure loss. POOH 10 stands, flow checked 10 minutes, good. Continued POOH checking for washout. Visually inspected tool joint seal faces of each stand for wear.

**Operations For Period 0000 Hrs to 0600 Hrs on 02 Jan 2006**

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	WSH	0000	0600	6.00	3571.0m	Continued POOH checking for washout. Visually inspect tool joint seal faces of each stand for wear. Flow checked at casing shoe and at HWD. Downloaded sources from LWD tools. POOH and inspected BHA for washout. Broke off bit and laid out motor

**Operations For Period Hrs to Hrs on**

**Phase Data to 2400hrs, 01 Jan 2006**

Phase	Phase Hrs	Start On	Finish On	Cum Hrs	Cum Days	Max Depth
RIG MOVE/RIG-UP/PRESPUD(RM)	23.5	05 Nov 2005	14 Dec 2005	23.50	0.979	0.0m
ANCHORING(A)	33	14 Dec 2005	15 Dec 2005	56.50	2.354	0.0m
SURFACE HOLE(SH)	30	15 Dec 2005	17 Dec 2005	86.50	3.604	650.0m
SURFACE CASING(SC)	16.5	16 Dec 2005	17 Dec 2005	103.00	4.292	650.0m
INTERMEDIATE CASING(IC)	1	17 Dec 2005	17 Dec 2005	104.00	4.333	650.0m
RISER AND BOP STACK(BOP)	54	21 Dec 2005	23 Dec 2005	158.00	6.583	1525.0m
INTERMEDIATE HOLE(IH)	316.5	17 Dec 2005	01 Jan 2006	474.50	19.771	3571.0m

WBM Data				Cost Today \$ 20199					
Mud Type:KCL-NaCl-Polymer		API FL:	3.6cc/30min	Cl:	82000mg/l	Solids(%vol):	10%	Viscosity	62sec/qt
Sample-From:	Active Pit	Filter-Cake:	1/32nd"	K+C*1000:	7%	H2O:	90%	PV	18cp
Time:	19:00	HTHP-FL:	12.0cc/30min	Hard/Ca:	260mg/l	Oil(%):	0%	YP	27lb/100ft²
Weight:	10.20ppg	HTHP-cake:	1/32nd"	MBT:	6	Sand:	1.25	Gels 10s	7
Temp:	33C°			PM:	0.2	pH:	9	Gels 10m	9
				PF:	0.04	PHPA:	1ppb	Fann 003	6
								Fann 006	8
								Fann 100	27
								Fann 200	37
Comment	NaCl 8%. Ditch magnet recovery = 220 grams							Fann 300	45
								Fann 600	64

Bit # 4				Wear	I	O1	D	L	B	G	O2 NO	R
				Bitwear Comments:								
Size ("):	12.250in	IADC#	M422	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run				
Mfr:	REED HYCALOG	WOB(avg)	24.30klb	No.	Size	Progress	98.0m	Cum. Progress		169.0m		
Type:	PDC	RPM(avg)		2	28/32nd"	On Bottom Hrs	15.2h	Cum. On Btm Hrs		27.0h		
Serial No.:	211406	F.Rate	18.90bpm	4	18/32nd"	IADC Drill Hrs	18.5h	Cum IADC Drill Hrs		30.0h		
Bit Model	RSX 616	SPP	3737psi			Total Revs		Cum Total Revs		0		
Depth In	3402.0m	HSI				ROP(avg)	6.45 m/hr	ROP(avg)	6.26 m/hr			
Depth Out		TFA	2.197									
Bit Comment												

BHA # 4							
Weight(Wet)	57.00klb	Length	268.3m	Torque(max)	14ft-lbs	D.C. (1) Ann Velocity	256fpm
Wt Below Jar(Wet)	30.00klb	String	365.00klb	Torque(Off.Btm)	5ft-lbs	D.C. (2) Ann Velocity	384fpm
		Pick-Up	355.00klb	Torque(On.Btm)	8ft-lbs	H.W.D.P. Ann Velocity	176fpm
		Slack-Off	365.00klb			D.P. Ann Velocity	176fpm

BHA Run Description Annular velocity based on 900gpm

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.24m	12.250in		211406	Reed Hycalog RSX 616M
Mud Motor	8.54m	9.625in	6.135in	963271	244mm(9 5/8") Sperrydrill Lobe 6/7 - 5.0 stg Motor
X/O	1.22m	9.438in	2.875in	S18819-11	
Stab	1.81m	12.125in	2.875in	694776	Non-mag integral blade string stab
MWD	24.39m	8.000in	1.920in		DIR/HCIM-EWR-DGR-CTN-SLD-ACAL-HOC.
8in DC	9.06m	8.000in	2.875in	18600035	
Stab	2.10m	12.125in	2.875in	47607	Integral blade string stabilizer
8in DC	8.68m	8.000in	2.875in	1860026	
Drilling Jars	9.31m	8.188in	3.063in	11150D	Drilling jars used in surface hole section.
8in DC	8.81m	8.000in	2.875in	18600031	
X/O	1.16m	8.500in	2.875in	MSO1930-2	
5in HWDP	192.98m	5.000in	2.875in		

Survey								
MD	Incl	Azim	TVD	Vsec	N/-S	E/-W	DLS	Tool Type
(m)	(deg)	(deg)	(m)	(deg)	(m)	(m)	(deg/30m)	
3519.26	3.3	50.1	3515.46	100.7	81.6	59.1	0.1	MWD
3547.59	3.3	50.0	3543.75	102.3	82.6	60.3	0.0	MWD

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite Bulk	MT	0	0	0	113.8

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Bentonite Bulk	MT		0	0	38.1
Diesel	m3	0	27.8	0	362.5
Fresh Water	m3	28	30.5	0.1	160.8
Drill Water	m3	0	108.5	-0.3	270.8
Cement G	MT		0	0	79.9
Cement HT (Silica)	MT		0	0	0.0

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM (SPM)	SPP (psi)	Flow (bpm)	Depth (m)	SPM1 (SPM)	SPP1 (psi)	Flow1 (bpm)	SPM2 (SPM)	SPP2 (psi)	Flow2 (bpm)	SPM3 (SPM)	SPP3 (psi)	Flow3 (bpm)
2	12P160	6.000	10.20	97	101	4100	10.24	3275.0	30	320	3.00	40	360	4.00	50	450	5.00
3	12P160	6.000	10.20	97	101	4100	10.24	3275.0	30	320	3.00	40	360	4.00	50	450	5.00

Casing					
OD (in)	Csg Shoe MD (m)	Csg Shoe TVD (m)	Csg Landing Depth MD (m)	Csg Landing Depth TVD (m)	LOT/FIT (ppg)
	650.30	650.30	604.40	604.40	
	1511.77	1511.77	603.50	603.50	

Personnel On Board		
Company	Pax	Comment
DOGC	43	extra Crane operator, dogman, welder
ESS	8	
NEXUS	5	
FUGRO SURVEY LTD (ROV)	3	
DOWELL SCHLUMBERGER	2	One swaco hand for new shaker being assessed for Diamond
M-1 AUSTRALIA PTY LTD	3	
GEOSERVICES OVERSEAS S.A.	6	
HALLIBURTON AUSTRALIA PTY LTD - SPERRY SUN	5	One trainee
Total	75	

HSE Summary				
Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	01 Jan 2006	0 Days	Held weekly abandon rig drill	Environmental audit by Nexus shorebase personnel.
Environmental Issue	29 Dec 2005	3 Days	Environmental Audit	
Fire Drill	01 Jan 2006	0 Days	Held weekly fire drill	
JSA	01 Jan 2006	0 Days	Deck = 6, Drill = 6, Welder = 2, Mech = 1	
Man Overboard Drill	30 Dec 2005	2 Days	Held Man Over Board Drill	
Safety Meeting	01 Jan 2006	0 Days	Weekly safety meetings with all crew members.	
STOP Card	01 Jan 2006	0 Days	Safe = 7, Un-safe = 2	

Shakers, Volumes and Losses Data				
Available	3,276bbl	Losses	0bbl	
				Equip.

Marine
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Weather on 01 Jan 2006								Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	40kn	240.0deg	1011.0mbar	19C°	2.0m	248.0deg	2s	1	247.0
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Period	Weather Comments			
272.0deg	456.00klb	4578.40klb	2.0m	248.0deg	6s				
Comments									
						2	269.0		
						3	198.0		
						4	262.0		
						5	366.0		
						6	359.0		
						7	298.0		
						8	284.0		