

27 Dec 2005

From: Ron King/ Webby
To: J Ah-Cann

DRILLING MORNING REPORT # 16
Culverin 1

Well Data							
Country	Australia	MDBRT	3115.0m	Cur. Hole Size	12.250in	AFE Cost	\$ 22699889
Field	Gippsland Basin	TVDBRT	3112.0m	Last Casing OD	13.375in	AFE No.	3433-1001
Drill Co.	DOGC	Progress	474.0m	Shoe TVDBRT	1511.8m	Daily Cost	\$ 472057
Rig	OCEAN PATRIOT	Days from spud	11.44	Shoe MDBRT	1511.8m	Cum Cost	\$ 12618670
Wtr Dpth(MSL)	585.0m	Days on well	15.35	FIT/LOT:	/ 15.80ppg	Days Since Last LTI	952
RT-ASL(MSL)	21.5m	Planned TD MD					
RT-ML	606.5m	Planned TD TVDRT					
Current Op @ 0600		Drilling ahead 311mm (12 1/4") @3195mMDRT					
Planned Op		Drill ahead 311 mm (12 1/4") hole.					

Summary of Period 0000 to 2400 Hrs
Drilled ahead from 2641.0 mMDRT to 3115.0 mMDRT. Top of the Latrobe Formation picked from LWD logs and cuttings at 2824.0 mMDRT.

FORMATION	
Name	Top
Near 68.5 Ma Sand	3103.00m
Near 70.3 Ma Sand	
Near 70.3 Ma Sand	
TD	
TD	

Operations For Period 0000 Hrs to 2400 Hrs on 27 Dec 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0830	8.50	2787.0m	Drilled 311mm (12 1/4") hole from 2641m to 2787m MDRT String wt 310klbs, Tq 4-8000ftlbs, 150 rpm surface, 259rpm DH, WOB 12-20klbs, 3300psi, 900gpm. Boost riser while drilling. ROP average 17.17m/hr (including connections) Survey results @2772.65m, 3.83deg, 43.73azimuth
IH	TP (RE)	DA	0830	0900	0.50	2787.0m	Backed out saver sub on Top Drive during routine connection. Layed out single, installed new saver sub on Top Drive and picked up a replacement single of 127mm (5")dp.
IH	P	DA	0900	1800	9.00	2991.0m	Drilled 311mm (12 1/4") hole from 2787m to 2991m MDRT String wt 330klbs, Tq 5-10000ftlbs, 150 rpm surface, 259rpm DH, WOB 5-10klbs, 3300psi, 900gpm. Boost riser while drilling. ROP average 22.6m/hr (including connections) Survey results @2973.53m, 3.73deg, 46.71azimuth
IH	TP (RE)	DA	1800	1830	0.50	2991.0m	Top Drive pipe handler failed to break out drill pipe during routine connection, change out front carrier die while circulating down string.
IH	P	DA	1830	2400	5.50	3115.0m	Drilled 311mm (12 1/4") hole from 2991m to 3115m MDRT String wt 340klbs, Tq 6-8000ftlbs, 150 rpm surface, 259rpm DH, WOB 10-12klbs, 3300psi, 900gpm. Boost riser while drilling. Max gas for 24hr period 0.276%. ROP average 22.5m/hr (including connections) Survey results @3088.21m, 3.81deg, 46.46azimuth

Operations For Period 0000 Hrs to 0600 Hrs on 28 Dec 2005

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
IH	P	DA	0000	0600	6.00	3195.0m	Drilled 311mm (12 1/4") hole from 3115m to 3195m MDRT String wt 340klbs, Tq 6-14000ftlbs, 80-150 rpm surface, 180-256rpm DH, WOB 5-20klbs, 3900psi, 875gpm. Boost riser while drilling. Max gas for 24hr period 0.112%. ROP average 13.3m/hr (including connections) Survey results @3173.79m, 3.67deg, 49.59 azimuth

Operations For Period Hrs to Hrs on

Phase Data to 2400hrs, 27 Dec 2005

Phase	Phase Hrs	Start On	Finish On	Cum Hrs	Cum Days	Max Depth
RIG MOVE/RIG-UP/PRESPUD(RM)	25.75	05 Nov 2005	14 Dec 2005	25.75	1.073	0.0m
ANCHORING(A)	44.75	14 Dec 2005	15 Dec 2005	70.50	2.938	0.0m
SURFACE HOLE(SH)	30	15 Dec 2005	17 Dec 2005	100.50	4.188	650.0m
SURFACE CASING(SC)	16.5	16 Dec 2005	17 Dec 2005	117.00	4.875	650.0m
INTERMEDIATE CASING(IC)	1	17 Dec 2005	17 Dec 2005	118.00	4.917	650.0m
RISER AND BOP STACK(BOP)	54	21 Dec 2005	23 Dec 2005	172.00	7.167	1525.0m
INTERMEDIATE HOLE(IH)	196.5	17 Dec 2005	27 Dec 2005	368.50	15.354	3115.0m

WBM Data

Cost Today \$ 20507

Mud Type:KCL-NaCl-Polymer	API FL:	4.0cc/30min	Cl:	75000mg/l	Solids(%vol):	10%	Viscosity	57sec/qt
Sample-From: Active Pit	Filter-Cake:	1/32nd"	K+C*1000:	6%	H2O:	90%	PV	17cp
Time: 2100	HTHP-FL:	12.8cc/30min	Hard/Ca:	260mg/l	Oil(%):	0%	YP	26lb/100ft²
Weight: 10.20ppg	HTHP-cake:	1/32nd"	MBT:	6	Sand:	1.25	Gels 10s	7
Temp: 25C°			PM:		pH:	9	Gels 10m	9
			PF:	0.05	PHPA:	1ppb	Fann 003	5
							Fann 006	7
							Fann 100	26
							Fann 200	36
							Fann 300	43
							Fann 600	60
Comment NaCl 8%.								

Bit # 3

Bit # 3				Wear	I	O1	D	L	B	G	O2	R							
				Bitwear Comments:															
Size ("):		12.250in		IADC#		M422		Nozzles		Drilled over last 24 hrs		Calculated over Bit Run							
Mfr:		REED HYCALOG		WOB(avg)		11.90klb		No.		Size		Progress		474.0m		Cum. Progress		1590.0m	
Type:		PDC		RPM(avg)		150		2		28/32nd"		On Bottom Hrs		16.2h		Cum. On Btm Hrs		54.9h	
Serial No.:		211010		F.Rate		20.90bpm		4		18/32nd"		IADC Drill Hrs		0.0h		Cum IADC Drill Hrs		51.0h	
Bit Model		RSX 616		SPP		3420psi						Total Revs		255		Cum Total Revs		857	
Depth In		1525.0m		HSI								ROP(avg)		29.26 m/hr		ROP(avg)		28.96 m/hr	
Depth Out				TFA		2.197													
Bit Comment																			

BHA # 3

Weight(Wet)	40.00klb	Length	268.4m	Torque(max)	14400ft-lbs	D.C. (1) Ann Velocity	256fpm
Wt Below Jar(Wet)	30.00klb	String	340.00klb	Torque(Off.Btm)	4100ft-lbs	D.C. (2) Ann Velocity	384fpm
		Pick-Up	330.00klb	Torque(On.Btm)	7700ft-lbs	H.W.D.P. Ann Velocity	176fpm
		Slack-Off	340.00klb			D.P. Ann Velocity	176fpm

BHA Run Description Annular velocity based on 900gpm

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.25m	12.250in		211010	Reed Hycalog RSX 616M 244mm(9 5/8") Sperrydrill Lobe 6/7 - 5.0 stg Motor
Mud Motor	8.58m	9.625in	6.135in	963006	
X/O	1.22m	9.438in	2.875in	A639	Non-mag integral blade string stab
Stab	1.81m	12.125in	2.875in	694776	
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	

Equipment	Length	OD	ID	Serial #	Comment
5in HWDP	192.98m	5.000in	2.875in		

Survey

MD (m)	Incl (deg)	Azim (deg)	TVD (m)	Vsec (deg)	N-S (m)	E-W (m)	DLS (deg/30m)	Tool Type
2772.65	3.8	43.7	2770.41	54.4	49.3	23.3	0.1	MWD
2887.70	3.9	45.7	2885.20	62.0	54.9	28.7	0.1	MWD
2973.53	3.7	46.7	2970.84	67.4	58.9	32.8	0.1	MWD
3088.21	3.8	46.5	3085.28	64.0	64.0	38.3	0.1	MWD

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Barite Bulk	MT	0	0	0	123.1
Bentonite Bulk	MT		0	0	38.1
Diesel	m3	0	16.8	0	375.2
Fresh Water	m3	30	28.8	0	150.1
Drill Water	m3	0	151.5	0	403.7
Cement G	MT	79.93	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	103	3740	10.48	3074.0	30	340	3.00	40	400	4.00	50	490	5.00
3	12P160	6.000	10.20	97	103	3740	10.48	3074.0	30	340	3.00	40	400	4.00	50	490	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	
DOGC	3	extra Crane operator, dogman, welder
ESS	8	
NEXUS	5	
FUGRO SURVEY LTD (ROV)	3	
DOWELL SCHLUMBERGER	3	
M-1 AUSTRALIA PTY LTD	3	One swaco hand for new shaker being assessed for Diamond
GEOSERVICES OVERSEAS S.A.	6	
HALLIBURTON AUSTRALIA PTY LTD - SPERRY SUN	5	One trainee
Total	79	

HSE Summary

Events	Date of last	Days Since	Descr.	Remarks
Abandon Drill	26 Dec 2005	1 Day	Held weekly abandon rig drill	
Fire Drill	26 Dec 2005	1 Day	Held weekly fire drill	
JSA	27 Dec 2005	0 Days	Deck = 6, Mech = 3, Drill = 7, Welder = 2, Marine = 1	
Safety Meeting	26 Dec 2005	1 Day	Weekly safety meetings with all crew members.	
STOP Card	27 Dec 2005	0 Days	Safe = 2, Un-safe = 5	

Shakers, Volumes and Losses Data

Available	2,540bbl	Losses	335bbl	Equip.	Descr.	Mesh Size
Active	386.3bbl	Equipment	335bbl	Shaker1	VSM 100	4 x 165
Hole	1,882.7bbl			Shaker2	VSM 100	4 x 120
Reserve	271bbl			Shaker3	VSM 100	4 x 120
				Shaker4	BEM650	4 x 165

Marine

Weather on 27 Dec 2005								Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	12kn	45.0deg	1020.0mbar	18C°	0.2m	45.0deg	3s	1	320.0
								2	269.0
								3	216.0
								4	251.0
								5	273.0
								6	342.0
								7	397.0
								8	359.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
Far Grip			At rig receiving Crystal Ocean's cargo which was offloaded from the Pacific Wrangler at 2330hrs	Item	Unit	Used	Quantity
				Diesel	CuMtr		488
				Fresh Water	CuMtr		73
				Drill Water	CuMtr		50
				Cement G	Mt		0
				Cement HT (Silica)	Mt		54
				Barite Bulk	Mt		89
On completion of receiving 9 lifts she will travel to the Crystal Ocean and wait for first light to transfer fuel and cargo.							
Pacific Wrangler			Arrived at rig 2315hrs, off loaded 9 lifts for Crystal Ocean.	Item	Unit	Used	Quantity
				Diesel	CuMtr		621.3
				Fresh Water	CuMtr		195
				Drill Water	CuMtr		620
				Cement G	Mt		0
				Cement HT (Silica)	Mt		0
				Barite Bulk	Mt		0
Bentonite Bulk	Mt		42				
Once Far Grip has completed her cargo transfer she will off load deck cargo.							

Helicopter Movement

Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	BRISTOW HELICOPTERS AUSTRALIA PTY LTD	0925 / 0940	12 / 12	