

14 Sep 2009 From: Tim Lee / Kevin Monkhouse

To: Iain Robertson

## DRILLING MORNING REPORT # 13 Spikey Beach-1

Well Data							
Country	Australia	MDBRT	2,100.0 m	Cur. Hole Size	12.250 in	AFE Cost	AUD 24,270,065
Field	Spikey Beach	TVDBRT	2,100.0 m	Last Casing OD	13.375 in	AFE No.	09/036
Drill Co.	Diamond Offshore	Progress		Shoe TVDBRT	805.8 m	Daily Cost	AUD 791,293
Rig	Ocean Patriot	Days From Spud	9.13	Shoe MDBRT	805.8 m	Cum Cost	AUD 10,789,000
Wtr Depth (MSL)	(semi) 74 m	Days On Well	12.48	FIT/LOT	sg / 1.47 sg		
Datum	21.50 m RT	Planned TD MD	2,062 m	Current Op @ 0600	RIH with 5ir	mule shoe.	
RT To Seabed	MSL 95.5 m	Planned TD TVDRT	2,062 m	Planned Op	Cement aba seawater. P		ug #3. Displace riser to

## Summary of Period 0000 to 2400 Hrs

Laid out Schlumberger drilling tools. Made up 2.875in cement stinger and RIH to 1620. Set hi vis pill on bottom. Pull back to 1520m and set cement plug #1. Laid out pipe while WOC. Tagged TOC at 1385m. POOH and set cement plug #2 at 850m. POOH to 650m and circulated.

HSE Summary				
Events	Num. Events	Days Since	Description	Remarks
Incident	0	7		
Days Since LTI	0	1,012		
STOP Card	52	0	Safe 36 Unsafe 16	DODI 38 Third Party 6 ADA 0 Catering 8
JSA	51	0		Drill 6 Trip 18 Pump Room 1 Crane Crew 15 Mechanic 2 Electrician 1 Welder 8 Subsea 0
Permit To Work	21	1	Hot 5 Cold 9	
Safety Meeting	1	1		
Abandon Drill	1	2		
Fire Drill	1	2		
JHA/HSE Audit	0	2	Supervisor Audit	

Opera	tions	For Pe	eriod 00	000 Hr	s to 24	100 Hrs On 1	14 Sep 2009
Phse	Cls (RC)	Op	From	То	Hrs	Depth	Activity Description
P11	Р	G6	00:00	00:30	0.50	2,100.0 m	Broke off bit (1-1-CT-N-X-1-ER-TD). Racked back mud motor in derrick on double of DP. (Bearing play in motor 5mm)
P21	Р	G6	00:30	01:30	1.00	2,100.0 m	Made up cementing stand and stood back in derrick.
P21	Р	G6	01:30	02:00	0.50	2,100.0 m	Prepared to run 2.875in tubing cement stinger.
P21	Р	G2	02:00	04:30	2.50	2,100.0 m	Wind dropped below 40knts allowing cranes to resume work. Layed out Schlumberger MWD/LWD tools and mud motor.
P21	Р	G2	04:30	06:30	2.00	2,100.0 m	Rigged up 2.875in stinger handling equipment and made up 8 joints of 2.875in cement stinger to 98m
P21	Р	G8	06:30	09:30	3.00	2,100.0 m	Ran stinger in hole to 1620m
P21	Р	G8	09:30	10:30	1.00	2,100.0 m	Spotted 50bbl 12.6ppg hi vis pill on bottom. Pulled out to 1520m and made up cement stand.
P21	Р	G1	10:30	11:00	0.50	2,100.0 m	Held JSA. Rigged up surface lines and pressure tested same to 2000psi



Phse	Cls (RC)	Op	From	То	Hrs	Depth	Activity Description
P21	Р	CMT	11:00	11:30	0.50	2,100.0 m	Dowell mixed and pumped 79bbl of 15.8ppg slurry. (16.3MT G cement, 44bbl of FW, Yield 1.16). Dowell displaced cement slurry with 2bbl FW followed by 72bbl 10ppg mud.
P21	Р	G8	11:30	13:00	1.50	2,100.0 m	Racked cement stand back in derrick. POOH from 1520m to 1450m slowly
P21	Р	F4	13:00	14:00	1.00	2,100.0 m	Rigged up and reverse circulated cement contamination out at 60spm, 300psi. 40bbls contaminated mud dumped at shakers
P21	Р	G2	14:00	16:00	2.00	2,100.0 m	Racked back cement stand and laid out 33 joints of 5in DP
P21	Р	G8	16:00	17:30	1.50	2,100.0 m	Ran in hole and tagged top of cement at 1385m with 5klbs weight down
P21	Р	G8	17:30	20:00	2.50	2,100.0 m	Pumped slug and POOH to 950m. Laid out 42 joints of 5in DP on way out
P21	Р	G8	20:00	21:00	1.00	2,100.0 m	Spotted 50bbl 12.6ppg hi vis pill on bottom and POOH from 950m to 838m
P21	Р	G1	21:00	21:15	0.25	2,100.0 m	Held JSA. Picked up cement head and rigged up surface lines. Positioned at 850m. Pressure tested surface lines to 2000psi
P21	Р	CMT	21:15	21:45	0.50	2,100.0 m	Dowell pumped ahead 15bbl FW. Mixed and pumped 81bbl 16ppg cement slurry. (17.2MT G cement, 46bbl of fresh water. Yield 1.13). Dowell displaced slurry with 2 bbl of fresh water followed by 33bbl of 10ppg mud.
P21	Р	G8	21:45	22:45	1.00	2,100.0 m	Racked back cement stand and pulled out slowly from 850m to 637m
P21	Р	F4	22:45	23:30	0.75	2,100.0 m	Made up cement stand and positioned at 650m. Closed upper annular and reverse circulated cement contamination out of well. (37bbl of contaminated mud dumped at shakers.)
P21	Р	F4	23:30	24:00	0.50	2,100.0 m	Lined up to circulate conventionally. Pumped 100bbls mud at high rate to flush pipe. Pumped slug

Opera	ations	For Pe	riod 00	000 Hrs	s to 06	00 Hrs On 15	5 Sep 2009
PHSE	CLS (RC)	OP	From	То	Hrs	Depth	Activity Description
P21	Р	G2	00:00	03:15	3.25	2,100.0 m	Racked back 10stds of DP (Total of 850m DP remaining in derrick). Laid out 60 joints of 5in DP and 10 joints of 2.875in cement stinger.
P21	Р	G8	03:15	03:45	0.50	2,100.0 m	Made up jet sub and stand below WBRT. RIH to 80m.
P21	Р	G16	03:45	04:15	0.50	2,100.0 m	Jetted BOP and wellhead 810gpm, 650psi, 3 rpm.
P21	Р	G10	04:15	05:30	1.25	2,100.0 m	RIH and engaged WB with RT. Pulled wear bushing free with 30k over pull. POOH with wear bushing. Laid out wear bushing and RT. Racked back stand with jet tool.
							Offline: Attempted pressure test of cement plug #2 to 1050psi against Blind/Shear rams. Leak in cement unit.
P21	Р	G8	05:30	06:00	0.50	2,100.0 m	Made up 5in mule shoe and RIH to 67m

Phase Data to 2400hrs, 14 Sep 2009						
Phase	Phase Hrs	Start On	Finish On	Cum Hrs	Cum Days	Max Depth
Mob(P1)	71.00	02 Sep 2009	05 Sep 2009	71.00	2.958	
Conductor Hole(P2)	16.00	05 Sep 2009	06 Sep 2009	87.00	3.625	155.0 m
Conductor Casing(P3)	15.50	06 Sep 2009	06 Sep 2009	102.50	4.271	155.0 m
Surface Hole(P4)	50.50	06 Sep 2009	08 Sep 2009	153.00	6.375	816.0 m
Surface Casing(P5)	20.00	08 Sep 2009	09 Sep 2009	173.00	7.208	816.0 m
BOPs/Risers(P6)	24.50	09 Sep 2009	10 Sep 2009	197.50	8.229	816.0 m
Production Hole (1)(P11)	78.50	10 Sep 2009	14 Sep 2009	276.00	11.5	2,100.0 m
Suspend and Abandon(P21)	23.50	14 Sep 2009	14 Sep 2009	299.50	12.479	2,100.0 m

## **General Comments**

00:00 TO 24:00 Hrs ON 14 Sep 2009

**Operational Comments** 

Pressure tested #2 cement plug offline to 1050psi. Pressure bled off 52psi in 10mins. Leak identified on cement unit.



WBM Data				Cost Toda	y AUD22,17	4			
Mud Type:	Water Based	API FL:	4.5 cm <sup>3</sup> /30min	CI:	50,000 mg/L	Solids:	10 %	Viscosity	55 s/qt
Sample-From: Time:	Active 11:00	Filter- Cake:	1 /32nd"	K+C*1000: Hard/Ca:	9 %	Low-Gravity Solids:	%vol	PV YP Gels 10s	16 cF 36 lbf/100ft <sup>2</sup> 10 lbf/100ft <sup>2</sup>
		HTHP-FL:	cm³/30min	MBT:	400 mg/L 4.0	H2O:	90 %	Gels 10s Gels 10m	15 lbf/100ft
Weight: Temp:	10.10 ppg °C	HTHP- cake:	/32nd"	Pm:	4.0	Oil:	0 %	Fann 003 Fann 006	£
		care.		Pf:	0.4	Sand:	.5	Fann 100	33
						pH: PHPA(Density):	9.5 kg/m³	Fann 200 Fann 300	52
Comment						1		Fann 600	68
WBM Data				Cost Toda	y AUD				
Mud Type:	Water Based	API FL:	4.5 cm <sup>3</sup> /30min	CI:	50,000 mg/L	Solids:	10 %	Viscosity	54 s/q
Sample-From: Time:	Active 22:00	Filter- Cake:	1 /32nd"	K+C*1000: Hard/Ca:	9 % 400 mg/L	Low-Gravity Solids:	%vol	PV YP Gels 10s	16 cF 34 lbf/100ft 10 lbf/100ft
Weight:	10.15 ppg	HTHP-FL:	cm³/30min	MBT:	4.0	H2O:		Gels 10m Fann 003	15 lbf/100ft
Temp:	°C	HTHP- cake:	/32nd"	Pm:	1.0	Oil: Sand:	0 % .5	Fann 006	12
				Pf:	0.5	pH:	9.5	Fann 100 Fann 200	31
						PHPA(Density):	kg/m³	Fann 300 Fann 600	50 66
Comment									

Survey								
MD	Incl	Azim	TVD	VSect	N/-S	E/-W	DLS	Tool Type
(m)	(°)	(°)	(m)	(m)	(m)	(m)	(deg/30m)	
1,858.33	0.3	65.2	1,858.29	1.2	1.2	7.6	0.1	Telescope 825NF
1,913.35	0.5	64.2	1,913.31	1.0	1.0	8.1	0.1	Telescope 825NF
1,941.91	0.5	69.2	1,941.87	1.1	1.1	8.3	0.0	Telescope 825NF
2,028.47	0.6	92.2	2,028.43	1.2	1.2	9.1	0.1	Telescope 825NF
2,076.18	0.7	87.1	2,076.13	1.2	1.2	9.6	0.1	Telescope 825NF

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Barite	MT	0.0	0.0	0.0	42.00
Bentonite	MT	0.0	0.0	0.0	54.00
Cement - G Neat	MT	0.0	36.0	0.0	66.00
Fuel	M3	0.0	11.9	0.0	512.00
Potable Water	m3	32.0	21.0	0.0	368.00
Drill Water	m3	0.0	30.0	0.0	276.00

Pu	mps											
Pun	np Data - Last 24 Hrs								Slow Pum	p Data		
No.	Туре	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	Check	SPM	Pressure (psi)	Flow (gpm)
1	National	6.00	10.00	97	0	0	0	2,100.0		30	260	128
										20	230	85
										40	340	170
2	National	6.00	10.00	97	0	0	0					
3	National	6.00	10.00	97	0	0	0	2,100.0		40	320	170
										20	220	85
										30	260	128



Personnel On Board	
Company	Pax
Diamond Offshore	53
Catering	8
ADA Services	4
Cameron	1
Dowell Schlumberger	2
Schlumberger MWD/LWD	0
MI Drilling Fluids	2
BJ Tubulars	0
Subsea 7	6
Go Offshore	0
Baker Hughes Inteq	4
Beach Petroleum Ltd	1
Schlumberger DD	0
Schlumberger - Wireline	0
Total	81

Mud Volumes, Mud Losses and Shale Engineer : Manfred Olejiniczak Shaker Data								
Available	1,683.0	Losses	85.0	Equipment	Description	Mesh Size	Comments	
Active	447.0 bbl	Downhole						
Mixing		Surf+ Equip	5.0 bbl					
Hole		Dumped	80.0 bbl					
Slug		De-Gasser						
Reserve	1236.0 bbl	De-Sander						
Kill		De-Silter						
		Centrifuge						

Marine										
Weather on 14 Sep 2009							Rig Support			
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Frequency	Anchors #1 Anchor	Tension 256.00 klb	
10.0 NM	12 kn	250.0 °	1,021.0 mbar	12 °C	0.5 m	250.0 °	3 s	#2 Anchor	258.00 klb	
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Frequency	Weather	Comments	#3 Anchor #4 Anchor	258.00 klb 240.00 klb	
240.0 °	240.00 klb	3,905.00 klb	1.0 m	290.0 °	12 s	Mainly Cloudy		#5 Anchor	249.00 klb	
Comments							#6 Anchor	247.00 klb		
							#7 Anchor	262.00 klb		
								#8 Anchor	256.00 klb	



Support Ve	essels											
Boats	Arrived Time	<b>Departed Time</b> 13 Sep 2009 12:30		Status	Bulks							
Lewek Emeral	d 10 Sep 2009 03:20		On route to rig location		Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity	
					Cement - G Neat (MT)	MT	0.0	0.0	0.00	0.0	C	
					Barite (MT)	MT	0.0	0.0	0.00	0.0	C	
					Bentonite Bulk (MT)	MT	0.0	0.0	0.00	0.0	C	
					Brine (bbl)	bbl	0.0	0.0	0.00	30.0	30	
					Fuel (M3)	М3	336.4	8.0	0.00	-15.2	743.2	
					Potable Water (m3)	m3	145.0	5.0	0.00	-10.0	225	
					Drill Water (m3)	m3	138.0	0.0	0.00	0.0	138	
Lewek Swift	13 Sep 2009 06:30		Standby	on rig location	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity	
					Bentonite Bulk (MT)	MT	0.0	0.0	0.00	0.0	(	
					Fuel (M3)	МЗ	0.0	9.1	0.00	0.0	576.2	
					Potable Water (m3)	m3	0.0	4.0	0.00	0.0	466	
					Drill Water (m3)	m3	0.0	0.0	0.00	0.0	215	
					Brine (bbl)	bbl	0.0	0.0	491.00	0.0	C	
Helicopte	Movement											
Flight #	Company	Arr/Dep. Time		Pax In/Out		Comment						
		•										