



07 Sep 2009

From: Tim Lee / Kevin Monkhouse
To: Iain Robertson

Spikey Beach-1

Well Data							
Country	Australia	MDBRT	200.0 m	Cur. Hole Size	17.500 in	AFE Cost	AUD 24,270,065
Field	Spikey Beach	TVDBRT	200.0 m	Last Casing OD	30.000 in	AFE No.	09/036
Drill Co.	Diamond Offshore	Progress	45.00 m	Shoe TVDBRT	151.4 m	Daily Cost	AUD 701,000
Rig	Ocean Patriot (semi)	Days From Spud	0.00	Shoe MDBRT	151.4 m	Cum Cost	AUD 5,234,000
Wtr Depth (MSL)	74 m	Days On Well	5.48	FIT/LOT	sg / sg		
Datum	21.50 m RT MSL	Planned TD MD	2,062 m	Current Op @ 0600	Drilled 17.5in hole to 428m		
RT To Seabed	95.5 m	Planned TD TVDRT	2,062 m	Planned Op	Drill 17.5in hole to TD at ca 810m. Sweep pill, displace well to weighted mud and POOH. Rig up and run 13.375in casing		

Summary of Period 0000 to 2400 Hrs

Picked up and racked back 67stands of 5in DP. Made up 17.5in BHA and racked in derrick. Made up 18.75in WHRT and racked back in derrick. Made up Dowell cement head and racked back in derrick. Diamond performed Shallow gas JSA, Rig maintenance, changed out Kill hose in moon pool while Schlumberger MWD Engineers arrived on board and prepared tools. Made up and tested MWD/LWD tools. Made up BHA, tagged TOC, drilled out cement, shoe and rat hole. Drilled 17½in hole from 155m to 196m. Pull back and make up stand of 8in DC. Drilled 17½in hole from 196m to 200m

HSE Summary					
Events	Num. Events	Days Since	Description	Remarks	
Incident	1	0	First Aid	Individual sustained minor cut while installing Geograph line to Top Drive. The cut was treated by the Medic and the IP returned to work	
Days Since LTI	0	1,005			
STOP Card	63	0	Safe 47 Unsafe 12	DODI 45 Third Party 9 ADA 2 Catering 7	
JSA	50	0		Drill 4 Trip 13 Pump Room 2 Crane Crew 12 Mechanic 7 Electrician 1 Welder 6 Subsea 5	
Permit To Work	21	1	Hot 4 Cold 9		
Safety Meeting	0	1			
Abandon Drill	0	2			
Fire Drill	0	2			
JHA/HSE Audit	1	1	Supervisor Audit		

Operations For Period 0000 Hrs to 2400 Hrs On 07 Sep 2009							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P4	P	G2	00:00	04:00	4.00	155.0 m	Picked up 5in DP from deck. 26 stands picked up. Total of 67stds 5in DP racked back in derrick
P4	P	G2	04:00	05:30	1.50	155.0 m	Made up 3 jts of 8in DCs and racked stand back in derrick
P4	P	G2	05:30	06:30	1.00	155.0 m	Performed rig maintenance while waited on jars to be off loaded from Emerald.
P4	P	G2	06:30	07:30	1.00	155.0 m	Pick up 2 x 8in DCs and made up to drilling jar. Racked stand back in derrick
P4	P	G2	07:30	09:00	1.50	155.0 m	Changed out Kill Hose in Moonpool. Offline: Prepared MWD/LWD equipment.



Operations For Period 0000 Hrs to 2400 Hrs On 07 Sep 2009							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P4	P	G2	09:00	12:00	3.00	155.0 m	Made up 18.75in WHRT and racked back in derrick. Made up Dowell cement head and racked back in derrick. Offline: Prepared MWD/LWD equipment.
P4	P	G11	12:00	13:00	1.00	155.0 m	Rig serviced Top Drive and TDS Dollies. Offline: Prepared MWD/LWD equipment.
P4	P	G6	13:00	16:00	3.00	155.0 m	Schlumberger MWD Engineers prepared and programmed tools for BHA. (Held shallow gas JSA with Drill Crews. Shell tested choke manifold valves #7 & #8 to 15,000psi. Completed Kill hose change out in moonpool).
P4	P	G6	16:00	19:30	3.50	155.0 m	Made up Drilling Stand with bit, n/bit stab, Arc-9 tool, stab, MWD P/Pulse, Sonic Vision 900. Shallow tested Schlumberger tools.
P4	P	G6	19:30	21:00	1.50	155.0 m	Made up BHA. Entered well head at 20:00hr. Tag TOC at 148.4mRT MSL.
P4	P	D1	21:00	22:00	1.00	155.0 m	Drilled out shoe track (600gpm, 60 rpm, 10k wob.) to bottom of rat hole at 155m. Ream shoe twice. Shoe at 151.4m
P4	P	D2	22:00	23:00	1.00	196.0 m	Drilled 17.5in hole from 155m to 196m. Maintained 60 rpm until top stabiliser clear of casing. Pump 50bbl PHG every 15m spotted pill around BHA on connections.
P4	P	G6	23:00	23:30	0.50	196.0 m	POOH from 196m to 140m. Racked back 2 stands of HWDP, made up 1 stand of 8in DCs and ran back to bottom on HWDP.
P4	P	D2	23:30	24:00	0.50	200.0 m	Drilled 17.5in hole from 196m to 200m. Attempted to take MWD survey. Survey failed due to noise interference of casing.

Operations For Period 0000 Hrs to 0600 Hrs On 08 Sep 2009							
PHSE	CLS (RC)	OP	From	To	Hrs	Depth	Activity Description
P4	P	D2	00:00	06:00	6.00	460.0 m	Drilled 17.5in hole from 200m to 428m. Pump 50bbl PHG sweeps every 15m. Spot PHG pill around BHA on connections. MWD Survey every 90m. 0-10k WOB, 1100gpm 2700psi, 100rpm, 6kft-lbs torq.

Phase Data to 2400hrs, 07 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)	29.00	06 Sep 2009	07 Sep 2009	131.50	5.479	200.0 m

General Comments	
00:00 TO 24:00 Hrs ON 07 Sep 2009	
Operational Comments	Beach Co Rep witnessed loading of the Dowell Cement Head. Beach Co Rep witnessed satisfactory draw down of BOP accumulator unit.

WBM Data		Cost Today AUD10,099							
Mud Type:	Water Based	API FL:	cm ³ /30min	Cl:	mg/L	Solids:	%	Viscosity	100 s/qt
Sample-From:	Pit 3	Filter-Cake:	/32nd"	K+C*1000:	%	Low-Gravity	%vol	PV	cP
Time:	09:00	HTHP-FL:	cm ³ /30min	Hard/Ca:	mg/L	Solids:		YP	lbf/100ft ²
Weight:	10.00 ppg	HTHP-cake:	/32nd"	MBT:	23.0	H2O:	%	Gels 10s	lbf/100ft ²
Temp:	°C			Pm:		Oil:	%	Gels 10m	lbf/100ft ²
				Pf:		Sand:		Fann 003	
						pH:	9.0	Fann 006	
						PHPA(Density):	kg/m ³	Fann 100	
								Fann 200	
								Fann 300	
								Fann 600	
Comment									

WBM Data				Cost Today AUD					
Mud Type:	Water Based	API FL:	cm ³ /30min	Cl:	mg/L	Solids:	%	Viscosity	100 s/qt
Sample-From:	Pit #5	Filter-Cake:	/32nd"	K+C*1000:	%	Low-Gravity Solids:	%vol	PV	cP
Time:	14:00	HTHP-FL:	cm ³ /30min	Hard/Ca:	mg/L	H2O:	%	YP	lbf/100ft ²
Weight:	8.80 ppg	HTHP-cake:	/32nd"	MBT:	30.0	Oil:	%	Gels 10s	lbf/100ft ²
Temp:	°C			Pm:		Sand:		Gels 10m	lbf/100ft ²
				Pf:		pH:	9.5	Fann 003	
						PHPA(Density):	kg/m ³	Fann 006	
								Fann 100	
								Fann 200	
								Fann 300	
								Fann 600	
Comment									

WBM Data				Cost Today AUD					
Mud Type:	Water Based	API FL:	cm ³ /30min	Cl:	mg/L	Solids:	%	Viscosity	100 s/qt
Sample-From:	Pit #4	Filter-Cake:	/32nd"	K+C*1000:	%	Low-Gravity Solids:	%vol	PV	cP
Time:	21:00	HTHP-FL:	cm ³ /30min	Hard/Ca:	mg/L	H2O:	%	YP	lbf/100ft ²
Weight:	8.80 ppg	HTHP-cake:	/32nd"	MBT:	30.0	Oil:	%	Gels 10s	lbf/100ft ²
Temp:	°C			Pm:		Sand:		Gels 10m	lbf/100ft ²
				Pf:		pH:	9.0	Fann 003	
						PHPA(Density):	kg/m ³	Fann 006	
								Fann 100	
								Fann 200	
								Fann 300	
								Fann 600	
Comment									

Bit #2		Wear	I	O1	D	L	B	G	O2	R
Bit wear comment:										
Size ("):	444 mm (17 1/2")	IADC#	115	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run		
MfBHI (Hughes Christensen)		WOB(avg)	3.00 klb	No.	Size	Progress	45.0 m	Cum. Progress	45.0 m	
Type:	Milled Tooth	RPM(avg)	71 rpm	1	16/32nd"	On Bottom Hrs	1.0 h	Cum. On Btm Hrs	1.0 h	
Serial No.:	6079221	F.Rate	767 gpm	3	18/32nd"	IADC Drill Hrs	1.5 h	Cum IADC Drill Hrs	1.5 h	
Bit Model	GX-CIV	SPP	1,243 psi			Total Revs	4,300	Cum Total Revs	4,300	
Depth In	155.0 m	HSI	1.95 hp/in ²			ROP(avg)	45.00 m/h	ROP(avg)	45.00 m/h	
Depth Out	m	TFA	0.001 m ²							
Bit Comment										

BHA #2		Weight(Wet)	75.00 klb	Length	226.6 m	Torque(max)	2,500 ft.lbf	D.C. (1) Ann Velocity	78 ft/min
Wt Below Jar(Wet)	65.00 klb	String Weight	210.00 klb	Torque(Off.Btm)	200 ft.lbf	D.C. (2) Ann Velocity	87 ft/min		
		Pick-Up Weight	210.00 klb	Torque(On.Btm)	1,800 ft.lbf	H.W.D.P. Ann Velocity	67 ft/min		
		Slack-Off Weight	210.00 klb			D.P. Ann Velocity	67 ft/min		

BHA Run Description Rotary drilling assembly with ARC-9 and MWD toolstring

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
17 1/2" Bit	0.42 m	17.50 in	in	6079221	Tri-cone mill tooth
NB Stabiliser	2.84 m	in	3.00 in	207A85	17 3/8" Stab with non ported float installed
ARC Tool	6.00 m	10.00 in	3.50 in	4126	
string stabilizer	0.98 m	in	4.25 in	550902164	17 3/8" Stab
PowerPulse MWD	8.22 m	9.06 in	4.25 in	KA-ZA90	
Sonic	8.24 m	in	4.25 in	41250	With 17 3/8 in line stab
String Stabiliser	2.17 m	in	3.00 in	207A211	17 3/8 Stab
9 1/2 drill collars	28.43 m	9.56 in	3.19 in		



Equipment	Length	OD	ID	Serial #	Comment
X/Over	1.09 m	9.50 in	3.00 in	508A360	
8in DC	72.83 m	8.00 in	2.81 in		
Drilling Jars	8.77 m	7.82 in	2.81 in	101663H	
8in DC	28.01 m	8.00 in	2.81 in		
X/O	1.16 m	8.00 in	2.81 in	508A336	
HWDP	56.51 m	in	in		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Barite	MT	0.0	0.0	0.0	47.00	
Bentonite	MT	69.0	16.0	0.0	69.00	
Cement - G Neat	MT	82.0	0.0	0.0	129.00	
Fuel	M3	0.0	15.1	0.0	406.00	
Potable Water	m3	31.0	30.0	0.0	329.00	
Drill Water	m3	120.0	45.0	0.0	513.00	

Pumps												
Pump Data - Last 24 Hrs									Slow Pump Data			
No.	Type	Liner (in)	MW (ppg)	Eff (%)	SPM	SPP (psi)	Flow (gpm)	Depth (m)	Check	SPM	Pressure ()	Flow ()
1	National	6.00	8.80	97	77	1,990	329					
2	National	6.00	8.80	97	77	1,990	329					
3	National	6.00	8.80	97	76	1,990	325					

Personnel On Board	
Company	Pax
Diamond Offshore	54
Catering	8
ADA Services	4
Cameron	1
Dowell Schlumberger	4
Schlumberger (Wireline)	0
MI Drilling Fluids	2
BJ Tubulars	3
Subsea 7	6
Other Contractor	2
Go Offshore	1
Baker Hughes Inteq	2
Beach Petroleum Ltd	1
Total	88

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : Manfred Olejniczak			
Available	2,362.0	Losses	255.0	Equipment	Description	Mesh Size	Comments
Active	462.0 bbl	Downhole	255.0 bbl				
Mixing		Surf+ Equip					
Hole		Dumped					
Slug		De-Gasser					
Reserve	777.0 bbl	De-Sander					
Kill	661.0 bbl	De-Silter					
KCL Brine	462.0 bbl	Centrifuge					



Marine								Rig Support	
Weather on 07 Sep 2009								Anchors	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Frequency	Tension	
10.0 NM	4 kn	135.0 °	1,007.0 mbar	13 °C	0.5 m	135.0 °	2 s	#1 Anchor	260.00 klb
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Frequency	Weather Comments			
240.0 °	klb	4,721.00 klb	1.5 m	90.0 °	11 s	Part Cloud			
Comments									
						#8 Anchor 254.00 klb			

Support Vessels										
Boats	Arrived Time	Departed Time	Status	Bulks						
Lewek Emerald	02 Sep 2009 12:30	07 Sep 2009 19:35	In transit to Geelong	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity
				Cement - G Neat (MT)	MT	0.0	0.0	87.00	0.0	0
				Barite (MT)	MT	0.0	0.0	0.00	0.0	75
				Bentonite Bulk (MT)	MT	0.0	0.0	43.00	0.0	0
				Brine (bbl)	bbl	0.0	0.0	0.00	0.0	1220
				Fuel (M3)	M3	0.0	18.0	0.00	0.0	480.4
				Potable Water (m3)	m3	0.0	5.0	0.00	40.0	220
				Drill Water (m3)	m3	0.0	0.0	46.00	0.0	222
Emerald released from rig at 19:30. ETA pilot loading at 08:00 8/9/09.										
Lewek Swift	02 Sep 2009 12:30		Stand by on Rig	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity
				Bentonite Bulk (MT)	MT	0.0	0.0	25.00	0.0	0
				Fuel (M3)	M3	0.0	17.9	0.00	0.0	226.4
				Potable Water (m3)	m3	0.0	0.0	0.00	0.0	180
				Drill Water (m3)	m3	0.0	0.0	0.00	0.0	171
				Brine (bbl)	bbl	0.0	0.0	0.00	0.0	1564

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow Helicopters	09:10 / 09:20	8 / 6	