

DRILLING MORNING REPORT # 15
Trefoil-2

15 Oct 2009

 From: John Mcgarrity/ Peter Dane
 To: Texas Richards

Well Data							
Country	Australia	MDBRT	938.0m	Cur. Hole Size	12.250in	AFE Cost	US\$33,167,745
Field	Trefoil	TVDBRT	938.0m	Last Casing OD	13.375in	AFE No.	Trefoil-2
Drill Co.	Maersk	Progress	3.0m	Shoe TVDBRT	930.0m	Daily Cost	US\$634,342
Rig	Kan Tan IV	Days from spud	9.67	Shoe MDBRT	930.0m	Cumul. Cost	US\$13,548,314
Wtr Dpth(MSL)	69.0m	Days on well	14.13	FIT/LOT:	/ 15.15ppg		
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m	Current Op @ 0600	Drilling ahead with 12.25" hole. Depth at 06:00 hrs 1062m.		
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Planned Op	Drill ahead with 12.25" hole.		

Summary of Period 0000 to 2400 Hrs

Laid down 17.5" BHA. Made up 12.25" BHA.
 RIH tagged top of cement at 917m
 Drilled out cement and shoe track.
 Displaced hole with 9.1 ppg KCL mud.
 Rigged up and performed a LOT.
 Installed RBS pins. Geoservices and Halliburton geograph lines.

HSE Summary

Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	3 Days	Held abandon drill	
Fire Drill	1	3 Days	Main deck - Fire in rubbish container	
Permit To Work	15	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	2	5 Days	Held 2 x General Safety Meeting	
STOP Card	40	0 Days	Number of STOP Cards submitted	

FORMATION

Name	Top
Torquay Group	95.00m
Lower Miocene Seismic Marker	918.00m

Operations For Period 0000 Hrs to 2400 Hrs on 15 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P6	P	G6	0000	0330	3.50	935.0m	Laid down 17.5" BHA, drill bit, float sub, 2 x 17.5" stabilisers, MWD tools.
P11	P	G6	0330	0830	5.00	935.0m	Made up 12.25" BHA. Directional driller checked bearing gap and orientation of motor (0.78 deg). Halliburton MWD plugged into tool and down linked data. Scribed motor and RIH with BHA to 140m.
P11	P	G6	0830	0900	0.50	935.0m	Shallow tested MWD at 800 gpm, 1100 psi. Good test.
P11	P	G6	0900	1030	1.50	935.0m	Made up BHA and RIH from 140m to 252m.
P11	P	G8	1030	1200	1.50	935.0m	RIH with 12.25" BHA on 5" drill pipe from 252m to 890m.
P11	P	F1	1200	1300	1.00	935.0m	Washed down from 890m to 917m. Tagged cement with 5 klbs.
P11	P	D1	1300	1630	3.50	938.0m	Drilled cement and shoe track from 917m to 930m. Drilled rathole and 3m of new formation to 938m. Displaced well to mud and closed in system.
P11	P	F4	1630	1830	2.00	938.0m	Circulated and conditioned mud until 9.1 ppg even in and out.
P11	P	F3	1830	2000	1.50	938.0m	Displaced choke and kill lines to mud. Racked back 1 stand and made up TIW and side entry sub. Rigged up surface hose.
P11	P	E1	2000	2100	1.00	938.0m	Cement unit pumped 5 bbls of mud ahead and pressure tested surface lines to 1000psi. Performed a leak off 1025psi EMW 15.15 ppg. Mud weight in use 9.1 ppg. TVD 930m. Volume pumped 2.58 bbls. Volume returned 2.0 bbls.
P11	P	G7	2100	2230	1.50	938.0m	Rigged down cement hose. Laid out FOSV, side entry sub. Pulled diverter packer. Picked up Dril-Quip emergency drill pipe hang off tool. Made up same and racked in derrick.
P11	P	G1	2230	2330	1.00	938.0m	Installed raised back system (RBS) pins.
P11	P	G1	2330	2400	0.50	938.0m	Installed Geoservices and Halliburton MWD geograph lines. Installed diverter packer.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
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Operations For Period 0000 Hrs to 0600 Hrs on 16 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	D8	0000	0030	0.50	942.0m	Drilled 12.25" hole from 938m to 942m
P11	TP (RE)	G2	0030	0300	2.50	942.0m	Whilst making a connection with RBS damage was sustained to pin and box connections due to incorrect alignment resulting in laying out 2 x damaged joints.
P11	P	D2	0300	0600	3.00	1062.0m	Drilled 12.25" hole from 942m to 1062m. Average Parameters: ROP 40.0 m/hr, RPM 100, WOB -16k, flow rate 1150 gpm, SPP 1820 psi, Torque 4-7 Klbs/ft.

Operations For Period Hrs to Hrs on

Phase Data to 2400hrs, 15 Oct 2009						
Phase	Phase Hrs	Start On	Finish On	Cumul. Hrs	Cumul. Days	Max Depth
Mob/Demob(P1)	69.5	21 Sep 2009	04 Oct 2009	69.50	2.896	0.0m
Conductor Hole(P2)	46.5	04 Oct 2009	06 Oct 2009	116.00	4.833	155.0m
Conductor Casing(P3)	37	06 Oct 2009	08 Oct 2009	153.00	6.375	155.0m
Surface Hole(P4)	68	08 Oct 2009	11 Oct 2009	221.00	9.208	935.0m
Surface Casing(P5)	36	11 Oct 2009	12 Oct 2009	257.00	10.708	935.0m
BOPs/Risers(P6)	61.5	12 Oct 2009	15 Oct 2009	318.50	13.271	935.0m
Production Hole (1)(P11)	20.5	15 Oct 2009	15 Oct 2009	339.00	14.125	938.0m

General Comments

00:00 TO 24:00 Hrs ON 15 Oct 2009

WBM Data
Cost Today US\$ 82438

Mud Type:	KCI POLYMER	API FL:	5.8cc/30min	Cl:	41000mg/l	Solids(%vol):	2%	Viscosity	46sec/qt
Sample-From:	1	Filter-Cake:	1/32nd"	K+C*1000:		H2O:	95%	PV	10cp
Time:	2135	HTHP-FL:	11.2cc/30min	Hard/Ca:	280mg/l	Oil(%):		YP	20lb/100ft²
Weight:	9.00ppg	HTHP-cake:	2/32nd"	MBT:	10	Sand:		Gels 10s	8
Temp:	20C°			PM:	2.2	pH:	9.5	Gels 10m	10
				PF:	1.1	PHPA:	2ppb	Fann 003	9
								Fann 006	11
								Fann 100	18
								Fann 200	23
								Fann 300	30
								Fann 600	40
Comment	Note: Cost is in AUD								

Bit # 3	Wear	I	O1	D	L	B	G	O2	R
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Bitwear Comments:

Size ("):	12.25in	IADC#	M432	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run	
Mfr:	REED	WOB(avg)	14.00klb	No.	Size	Progress	3.0m	Cumul. Progress	3.0m
Type:	PDC	RPM(avg)	80	8	13/32nd"	On Bottom Hrs	0.4h	Cumul. On Btm Hrs	0.4h
Serial No.:	222369	F.Rate	660gpm			IADC Drill Hrs	0.4h	Cumul. IADC Drill Hrs	0.4h
Bit Model	RSX616M	SPP	1200psi			Total Revs	27	Cumul. Total Revs	27
Depth In	935.0m	HSI				ROP(avg)	7.50 m/hr	ROP(avg)	7.50 m/hr
Depth Out		TFA	1.037						

Bit Comment

BHA # 3

Weight(Wet)	68340.00klb	Length	252.7m	Torque(max)	10000ft-lbs	D.C. (1) Ann Velocity	197fpm
Wt Below Jar(Wet)	36205.00klb	String	265000.00klb	Torque(Off.Btm)	6000ft-lbs	D.C. (2) Ann Velocity	0fpm
		Pick-Up	265000.00klb	Torque(On.Btm)	4000ft-lbs	H.W.D.P. Ann Velocity	129fpm
		Slack-Off	275000.00klb			D.P. Ann Velocity	129fpm

BHA Run Description

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.30m	12.25in		222369	
Mud Motor	9.22m	9.63in		963448	
String Stab	1.86m	12.25in	3.00in	701049	
LWD Tools	12.08m	8.00in			
NM Drill Collar	4.80m	8.00in		246906	
String Stab	1.88m	12.25in	3.00in	231931	
Drill Collar	84.74m	8.25in	2.88in		
Drilling Jars	9.68m	8.00in		17621339	
Drill Collar	18.63m	8.25in	2.88in		
X/Over Sub	1.09m	6.75in			
HWDP	141.54m	5.00in	3.00in		

Survey

MD (m)	Incl (deg)	Azim (deg)	TVD (m)	Vsec (deg)	N-S (m)	E-W (m)	DLS (deg/30m)	Tool Type
981.35	0.7		981.31	8.3	8.3	0.0	0.3	MWD

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	9	0	440.0
Drill Water	m3	0	350	0	263.0
Pot Water	m3	37	30	0	257.0
Brine	m3	0	24	0	64.0
Barite	MT	0	0	0	91.0
Baradefoam-W300	can	0	0	0	16.0
Barolift	boxes	0	0	0	18.0
Bentonite	MT	0	0	0	48.2
Caustic Soda	pail	0	0	0	26.0
Lime	sx	0	0	0	54.0
Soda Ash	sx	0	5	0	58.0
Shaker Screen 110	box	0	0	0	24.0
Shaker Screen 140	box	0	0	0	40.0
Shaker Screen 175	box	0	0	0	24.0
Shaker Screen 50	box	0	16	0	8.0
Shaker Screen 210	box	0	0	0	24.0
Sodium Bicarbonate	25kg sx	0	9	0	39.0
Rig Fuel	m3	0	0	0	561.0
Drill Water	m3	0	0	0	416.0
Potable Water	m3	0	0	0	208.0

Pumps

Pump Data - Last 24 Hrs								Slow Pump Data									
No.	Type	Liner (in)	MW (sg)	Eff (%)	SPM (SPM)	SPP (psi)	Flow (gpm)	Depth (m)	SPM1 (SPM)	SPP1Flow1 (psi)	Flow1 (gpm)	SPM2 (SPM)	SPP2 (psi)	Flow2 (gpm)	SPM3 (SPM)	SPP3 (psi)	Flow3 (gpm)
1	Continental Emsco	6.50		97	80	1200	400	938.0	30	50	150	40	70	200	50	80	250
2	Continental Emsco	6.50		97	80	1200	400	938.0	30	70	150	40	120	200	50	140	250
3	Continental Emsco	6.50		97	80	1200	400	938.0	30	50	150	40	180	200	50	180	250

Casing

OD	LOT / FIT	Csg Shoe (MD/TVD)	Cementing
30 "	/	153.00m / 153.00m	30" Cement Job: Pumped 50 bbls spacer ahead. Mixed 260 bbls of 15.8ppg (53 MT) class G cement with 155 bbls of seawater. Displaced with 72.4 bbls of seawater.
13.38	/	930.00m / 930.00m	13 3/8" Cement Job: Pumped 50 bbls of spacer ahead. Mixed 436 bbls (35 MT) of 11.5 ppg lead cement with 368 bbls of mix water. Mixed 67 bbls (14 MT) of 15.8 ppg tail cement with 40 bbls of mix water. Displaced with 412 bbls of seawater.
13.38	/	930.00m / 930.00m	

Personnel On Board	
Company	Pax
ADA	6
Maersk	42
GRN	2
OMS	17
Reach	1
Geoservices	6
Halliburton Cementers	2
Halliburton Directional Drilling	1
Halliburton	3
Halliburton (Baroid)	2
Fugro ROV	6
Dril-Quip	1
Swaco	1
Others	3
Total	93

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : MikeLawrance / Kosta Georgiou			
Available	1762.5bbl	Losses	431.8bbl	Equipment	Description	Mesh Size	Comments
Active	168.0bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/50bottom	
Mixing		Surf+ Equip	0.0bbl	Shaker 1	Brandt VSM 300	20 top/50bottom	
Hole	471.5bbl	Dumped	431.8bbl	Shaker 2	Brandt VSM 300	20 top/50bottom	
Slug Reserve	1123.0bbl	De-Gasser		Shaker 3	Brandt VSM 300	20 top/50bottom	
Kill		De-Sander		Shaker 3	Brandt VSM 300	20 top/50bottom	
		De-Silting Centrifuge		Shaker 4	Brandt VSM 300	20 top/50bottom	
				Shaker 4	Brandt VSM 300	20 top/50bottom	

Marine								Rig Support	
Weather on 15 Oct 2009									
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	19kn	240.0deg	1006.0mbar	10C°	1.5m	240.0deg	3s	1	281.0
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	139.0
317.0deg	111583.00klb	42637.00klb	1.8m	240.0deg	5s			3	135.0
Comments								4	211.0
								5	138.0
								6	125.0
								7	204.0
								8	206.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
				Item	Unit	Used	Quantity
Far Scimitar	08:30 hrs 13/10/09		Standby rig	Rig Fuel	M3		593
				Potable Water	M3		547
				Drill Water	M3		196
					t		55
				Barite	t		0
				Bentonite	t		0
				Brine	M3		165
Far Fosna		08:30 hrs 13/10/09	Melbourne	Rig Fuel	M3		398
				Pot Water	M3		490
				Drill Water	M3		202
				Bentonite	t		0
				Barite	t		42
					t		0
				Brine	M3		84

No midnight report received.

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment

Helicopter Movement				
1	Bristow Helicopters	09:15 hrs / 09:25 hrs	9 / 10	Crew Change