

DRILLING MORNING REPORT # 16
Trefoil-2

16 Oct 2009

 From: John Mcgarrity/ Peter Dane
 To: Texas Richards

Well Data							
Country	Australia	MDBRT	1540.0m	Cur. Hole Size	12.250in	AFE Cost	US\$33,167,745
Field	Trefoil	TVDBRT	1540.0m	Last Casing OD	13.375in	AFE No.	Trefoil-2
Drill Co.	Maersk	Progress	602.0m	Shoe TVDBRT	930.0m	Daily Cost	US\$600,000
Rig	Kan Tan IV	Days from spud	10.67	Shoe MDBRT	930.0m	Cumul Cost	US\$13,591,445
Wtr Dpth(MSL)	69.0m	Days on well	15.13	FIT/LOT:	/ 15.15ppg		
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m	Current Op @ 0600	Drilling ahead with 12.25" Bit Depth at 06:00 hrs 1696m. RPM 100, WOB -10k flow rate 1000 gpm, SPP		
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Planned Op	Drill 12.25" Bit to section TD.2510m		

Summary of Period 0000 to 2400 Hrs

Drilled 12.25" hole from 938m to 1423m.
 Slide from 1423m to 1432m
 Drilled 12.25" hole from 1432m to 1504m.
 Slide from 1504m to 1514m.
 Drilled 12.25" hole from 1514m to 1540m.

HSE Summary

Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	4 Days	Held abandon Drill	
Fire Drill	1	4 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	6 Days	Held 2 x General Safety Meeting	
STOP Card	31	0 Days	Number of STOP Cards submitted	

FORMATION

Name	Top
Torquay Group	95.00m
Lower Miocene Seismic Marker	918.00m
Upper Angahook	1162.00m
Angahook Volcanics Equiv	1331.00m

Operations For Period 0000 Hrs to 2400 Hrs on 16 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	D2	0000	0030	0.50	942.0m	Drilled 12.25" hole from 938m to 942m. RPM 100, WOB -10k, flow rate 1000 gpm, SPP
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 -10k, flow rate 1000 gpm, SPP 1860 psi, Torque 4-7 Klbs/ft.
P11	P	F4	0600	0630	0.50	1062.0m	Circulated whilst clearing over loaded shakers
P11	P	D2	0630	1200	5.50	1275.0m	Drilled 12.25" hole from 1062m to 1275m. Average Parameters: ROP 38.7.0 m/hr, RPM 100, WOB -10k, flow rate 1000 gpm, SPP 2280 psi, Torque 5-10 Klbs/ft.
P11	P	D2	1200	1500	3.00	1352.0m	Drilled 12.25" hole from 1275m to 1352m. Average Parameters: ROP 25.70. m/hr, RPM 100, WOB -10k, flow rate 1000 gpm, SPP 2280 psi, Torque 2-8 Klbs/ft.
P11	TP (RE)	F4	1500	1530	0.50	1352.0m	Circulated whilst trouble shooting 5 inch drill pipe elevators.
P11	P	D2	1530	1730	2.00	1423.0m	Drilled 12.25" hole from 1352m to 1423m. Average Parameters: ROP 35.50. m/hr, RPM 100, WOB -10k, flow rate 1000 gpm, SPP 2400 psi, Torque 2-10 Klbs/ft.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	D3	1730	1830	1.00	1432.0m	Slide from 1423m to 1432m.
P11	P	D2	1830	2130	3.00	1504.0m	Drilled 12.25" hole from 1432m to 1504m. Average Parameters: ROP 24.00. m/hr, RPM 100, WOB - 4k, flow rate 1000 gpm, SPP 2430 psi, Torque 3-10 Klbs/ft.
P11	P	D3	2130	2230	1.00	1514.0m	Slide from 1504m to 1514m
P11	P	D2	2230	2400	1.50	1540.0m	Drilled 12.25" hole from 1514m to 1540m. Average Parameters: ROP 17.30. m/hr, RPM 100, WOB - 8-10k, flow rate 1000 gpm, SPP 2430 psi, Torque 3-10 Klbs/ft.

Operations For Period 0000 Hrs to 0600 Hrs on 17 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	D2	0000	0600	6.00	1696.0m	Drilled 12.25" hole from 1540m to 1696m. Average Parameters: ROP 26.00. m/hr, RPM 100, WOB - 8-10k, flow rate 1000 gpm, SPP 2550 psi, Torque 3-10 Klbs/ft.

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 16 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)	53.5	04 Oct 2009	06 Oct 2009	123.00	5.125	155.0m
Conductor Casing(P3)	30	07 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)	44.5	15 Oct 2009	16 Oct 2009	363.00	15.125	1540.0m

General Comments

00:00 TO 24:00 Hrs ON 16 Oct 2009

WBM Data
Cost Today US\$ 48359

Mud Type:	KCI POLYMER	API FL:	5.1cc/30min	Cl:	40000mg/l	Solids(%vol):	2%	Viscosity	56sec/qt
Sample-From:	4	Filter-Cake:	1/32nd"	K+C*1000:	9%	H2O:	95%	PV	13cp
Time:	2020	HTHP-FL:	9.9cc/30min	Hard/Ca:	240mg/l	Oil(%):		YP	22lb/100ft²
Weight:	9.00ppg	HTHP-cake:	2/32nd"	MBT:	5	Sand:		Gels 10s	11
Temp:	20C°			PM:	0.78	pH:	9	Gels 10m	14
				PF:	0.7	PHPA:	2ppb	Fann 003	10
								Fann 006	12
								Fann 100	23
								Fann 200	30
								Fann 300	35
								Fann 600	48
Comment	Note: Cost is in AUD								

Bit # 3

Wear	I	O1	D	L	B	G	O2	R	
Bitwear Comments:									
Size ("):	12.25in	IADC#	M432	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run	
Mfr:	REED	WOB(avg)	8.00klb	No.	Size	Progress	602.0m	Cumul. Progress	605.0m
Type:	PDC	RPM(avg)	100	8	13/32nd"	On Bottom Hrs	11.3h	Cumul. On Btm Hrs	11.7h
Serial No.:	222369	F.Rate	1000gpm			IADC Drill Hrs	21.0h	Cumul IADC Drill Hrs	21.4h
Bit Model	RSX616M	SPP	2350psi			Total Revs	139000	Cumul Total Revs	139027
Depth In	935.0m	HSI				ROP(avg)	53.27 m/hr	ROP(avg)	51.71 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	299fpm
Wt Below Jar(Wet)	36205.00klb	String	320000.00klb	Torque(Off.Btm)	6000ft-lbs	D.C. (2) Ann Velocity	0fpm
		Pick-Up	310000.00klb	Torque(On.Btm)	4000ft-lbs	H.W.D.P. Ann Velocity	196fpm
		Slack-Off	320000.00klb			D.P. Ann Velocity	196fpm

BHA Run Description					
BHA Run Comment					
Equipment	Length	OD	ID	Serial #	Comment
Bit	0.30m	12.25in		222369	8x13 Jets Ported float installed
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
1010.20	0.8		1010.15	8.7	8.7	0.0	0.3	MWD
1067.21	0.9		1067.16	9.5	9.5	0.0	0.2	MWD
1095.87	0.8		1095.82	10.0	10.0	0.0	0.3	MWD
1153.51	1.1		1153.45	10.9	10.9	0.0	0.5	MWD
1182.36	1.3		1182.29	11.5	11.5	0.0	0.7	MWD
1211.30	1.0		1211.22	12.1	12.1	0.0	1.0	MWD
1240.32	1.0		1240.24	12.6	12.6	0.0	0.0	MWD
1269.44	1.0		1269.36	13.1	13.1	0.0	0.0	MWD
1298.71	1.1		1298.62	13.7	13.7	0.0	0.3	MWD
1327.95	1.3		1327.85	14.3	14.3	0.0	0.7	MWD
1357.12	1.3		1357.02	14.9	14.9	0.0	0.0	MWD
1385.95	1.4		1385.84	15.6	15.6	0.0	0.3	MWD
1414.80	1.3		1414.68	16.3	16.3	0.0	0.3	MWD
1443.26	1.4		1443.13	17.0	17.0	0.0	0.4	MWD
1471.76	1.4		1471.62	17.7	17.7	0.0	0.0	MWD
1500.56	1.4		1500.42	18.4	18.4	0.0	0.0	MWD
1529.74	1.0		1529.59	19.0	19.0	0.0	1.4	MWD

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Rig Fuel	m3	0	7	0	433.0	
Drill Water	m3	0	0	177	440.0	
Pot Water	m3	13	28	0	242.0	
Brine	m3	0	0	26	90.0	
Barazan D+	25kg/sx	0	22	0	-4.0	
Barite	MT	0	0	0	47.0	
Baradefoam-W300	can	0	0	0	16.0	
Barolift	boxes	0	0	0	18.0	
Bentonite	MT	0	0	0	0.0	
Caustic Soda	pail	0	0	0	26.0	
Con-Det	5 gal/pail	0	0	0	32.0	
Dextrid Lte	25kg/sx	0	50	0	101.0	
Guar Gum	25kg/sx	0	0	0	20.0	
Lime	sx	0	0	0	50.0	
Mica	25kg/sx	0	0	0	40.0	
Omyacarb 5	25kg/sx	0	50	0	155.0	
Pac-LE	25kg/sx	0	16	0	85.0	
Soda Ash	sx	0	2	0	56.0	
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	

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Shaker Screen 50	box	0	16	0	-8.0	
Shaker Screen 210	box	0	0	0	24.0	
Sodium Bicarbonate	25kg sx	0	0	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	
Aldacide	25kg/pail	0	0	0	22.0	

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)	SPP1 (psi)	Flow1 (gpm)	SPM2 (SPM)	SPP2 (psi)	Flow2 (gpm)	SPM3 (SPM)	SPP3 (psi)	Flow3 (gpm)
1	Continental Emsco	6.50		97	80	1200	400	1204.0	30	200	150	40	260	200	50	300	250
2	Continental Emsco	6.50		97	80	1200	400	1204.0	30	200	150	40	260	200	50	300	250
3	Continental Emsco	6.50		97	80	1200	400	1204.0	30	200	150	40	250	200	50	300	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	43
GRN	2
OMS	17
Geoservices	6
Halliburton Cementers	2
Haliburton Directional Drilling	1
Halliburton	3
Halliburton (Baroid)	2
Fugro ROV	3
Dril-Quip	2
Swaco	1
Others	3
Total	91

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : MikeLawrance / Kosta Georgiou			
Available	Losses	Equipment	Description	Mesh Size	Comments		
4058.6bbl	131.0bbl	Shaker 1	Brandt VSM 300	20 top/50bottom			
Active 1200.0bbl	Downhole	Shaker 2	Brandt VSM 300	20 top/50bottom			
Mixing 450.0bbl	Surf+ Equip 131.0bbl	Shaker 3	Brandt VSM 300	20 top/50bottom			
Hole 722.6bbl	Dumped	Shaker 4	Brandt VSM 300	20 top/50bottom			
Slug 53.0bbl	De-Gasser						
Reserve 1633.0bbl	De-Sander						
Kill	De-Sifter Centrifuge						

Marine

Weather on 16 Oct 2009								Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	26kn	226.0deg	1016.0mbar	10C°	2.1m	226.0deg	3s	1	278.0
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Period	Weather Comments			
317.0deg	111583.00klb	94492.00klb	1.8m	226.0deg	5s				
Comments								2	131.0
								3	138.0
								4	201.0
								5	130.0
								6	124.0
								7	198.0
								8	215.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
Far Scimitar	08:30 hrs 13/10/09		Standby rig	Item	Unit	Used	Quantity
				Rig Fuel	M3		579
				Potable Water	M3		544
				Drill Water	M3		196
					t		55
				Barite	t		0
				Bentonite	t		0
				Brine	M3		165
Far Fosna		08:30 hrs 13/10/09	Geelong	Item	Unit	Used	Quantity
				Rig Fuel	M3		374
				Pot Water	M3		478
				Drill Water	M3		582
				Bentonite	t		48
				Barite	t		42
					t		130
				Brine	M3		130

No midnight report received.

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow Helicopters	09:109hrs / 09:22 hrs	9 / 11	Crew Change