

DRILLING MORNING REPORT # 48
Trefoil-2

17 Nov 2009

 From: Bryan Houston / Paul Leatham
 To: Texas Richards

Trefoil-2					
Date:	17 Nov 2009	Well Site Representative:	Bryan Houston	OIM:	
Report Number:	48	Night Representative:	Paul Leatham	Drilling Company:	Maersk
Latitude (South):	39 ° 53 ' 07.89 "	Longitude (East):	145 ° 22 ' 14.87 "	Geologist:	Dennis Archer

Well Data						
Country	Australia	MDBRT	3208.0m	Cur. Hole Size	8.500in	AFE Cost US\$1
Field	Trefoil	TVDBRT	3208.0m	Last Casing OD	9.625in	AFE No. Trefoil-2
Drill Co.	Maersk	Progress	33.0m	Shoe TVDBRT	2520.0m	Daily Cost US\$622,117
Rig	Kan Tan IV	Days from spud	42.67	Shoe MDBRT	2520.0m	Cumul. Cost US\$33,104,296
Wtr Dpth(MSL)	69.0m	Days on well	47.13	FIT/LOT:	11.00ppg /	Last LTI Date 01 Nov 2009
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m			Days Since Last LTI 16
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Current Op @ 0600	POOH with BHA at 3000m.	
Datum	GDA 94	Last BOP Test	05 Nov 2009	Planned Op	POOH BHA and rig up Schlumberger wire line.	

Summary of Period 0000 to 2400 Hrs

Continued to RIH from 147m to 1908m. Troubleshot draw works problems. Draw works jumped out of gear while driller was running blocks up the mast. Could not get draw works back into gear. Coupling on A motor was found to be stripped. Performed pull test on draw works prior to putting back in service. RIH from 1908m to 2520m. Broke circulation and continued to RIH in open hole to 2937m. Washed and reamed tight spot 2937m to 3120m. Re-logged with Sperry Sun from 3120m to 3175m. Drilled 8 1/2" hole from 3175m to 3208m.

HSE Summary				
Events	Num. Events	Days Since	Descr.	Remarks
Last BOP Test	05 Nov 2009			
Abandon Drill	0	3 Days	Held abandon drill	
Emergency Drill	0	13 Days	Full Emergency drill performed	
Fire Drill	0	3 Days	Main deck - Fire in Control room	
Permit To Work	12	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	0	2 Days	General safety meetings	Dropped object awareness presentation.
Safety Meeting	7	0 Days	Prejob safety meetings	
STOP Card	43	0 Days	Number of STOP Cards submitted	
Trip / Kick Drill	1	0 Days	Trip Drill 37sec	Held while RIH

FORMATION	
Name	Top
TL60 Sand	2994.50m
Cretaceous	3068.00m
TF50 Sand	3130.50m
TF80 Sand	3149.80m
Base TF110 Sand	3180.00m

Operations For Period 0000 Hrs to 2400 Hrs on 17 Nov 2009							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	G8	0000	0400	4.00	3175.0m	Continued to RIH from 147m to 1908m. Filled pipe every 25 stands.
P17	TP (RE)	G11	0400	1430	10.50	3175.0m	Troubleshot draw works problems. Draw works jumped out of gear while driller was running blocks up the mast. Could not get draw works back into gear. Coupling on A motor was found to be stripped. Performed pull test on draw works prior to putting back in service.
P17	P	G8	1430	1530	1.00	3175.0m	RIH from 1908m to 2520m (9-5/8" shoe).
P17	P	G8	1530	1630	1.00	3175.0m	Made up top drive and broke circulation. Continued to RIH in open hole from 2520m to 2937m.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	D6	1630	1700	0.50	3175.0m	Washed and reamed tight spot from 2937m to 3120m with 700gpm/ 2900psi/ 70rpm.
P17	P	G8	1700	1930	2.50	3175.0m	Re-logged with Sperry Sun from 3120m to 3175m with 700gpm/ 2900psi/ 70rpm.
P17	P	D2	1930	2400	4.50	3208.0m	Drilled 8 1/2" hole from 3175m - 3208 with 700gpm/ 2900psi/ 100rpm/15 WOB/ 10k torque.

Operations For Period 0000 Hrs to 0600 Hrs on 18 Nov 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	D2	0000	0300	3.00	3235.0m	Continued to drill ahead 8 1/2" hole with 700gpm/ 2900psi/ 100rpm/ 15 WOB/ 10k torque to TD at 3235m.
P17	P	F4	0300	0430	1.50	3235.0m	Circulated 2x bottoms up with 700gpm/ 2900psi to allow Geoservices to retrieve sample. No gas on bottoms up recorded. Shakers clean.
P17	P	D7	0430	0530	1.00	3235.0m	Pumped out of the hole from 3235m to 3151m.
P17	P	G8	0530	0600	0.50	3235.0m	Pumped slug and continued to POOH on elevators from 3151m to 3000m. Monitored well on the trip tank.

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 17 Nov 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)	176.5	15 Oct 2009	22 Oct 2009	495.00	20.625	2520.0m
Production Casing(1)(P13)	359	22 Oct 2009	06 Nov 2009	854.00	35.583	2520.0m
Liner Hole (1)(P17)	277	06 Nov 2009	17 Nov 2009	1,131.00	47.125	3208.0m

General Comments

00:00 TO 24:00 Hrs ON 17 Nov 2009

WBM Data
Cost Today US\$ 3677

Mud Type:	KCI POLYMER	API FL:	5.0cc/30min	Cl:	38000mg/l	Solids(%vol):	3%	Viscosity	56sec/qt
Sample-From:	2	Filter-Cake:	1/32nd"	K+C*1000:	8%	H2O:	93%	PV	14cp
Time:	22:00 hrs	HTHP-FL:	11.0cc/30min	Hard/Ca:	400mg/l	Oil(%):		YP	29lb/100ft²
Weight:	9.50ppg	HTHP-cake:	1/32nd"	MBT:	11	Sand:	.25	Gels 10s	8
Temp:				PM:	0.3	pH:	9	Gels 10m	12
				PF:	0.25	PHPA:	2ppb	Fann 003	9
Comment	Note: Cost is in AUD							Fann 006	10
								Fann 100	28
								Fann 200	37
								Fann 300	43
								Fann 600	57

Bit # 5 RR

	Wear	I	O1	D	L	B	G	O2	R
								NO	
Bitwear Comments:									
Size ("):	8.50in	IADC#	M223	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run	
Mfr:	SMITH	WOB(avg)	12.00klb	No.	Size	Progress	33.0m	Cumul. Progress	306.0m
Type:	PDC	RPM(avg)	100	6	14/32nd"	On Bottom Hrs	3.5h	Cumul. On Btm Hrs	23.9h
Serial No.:	TX2104	F.Rate	683gpm			IADC Drill Hrs	0.0h	Cumul. IADC Drill Hrs	12.5h
Bit Model	MI616	SPP	2788psi			Total Revs		Cumul. Total Revs	59
Depth In	3175.0m	HSI				ROP(avg)	9.43 m/hr	ROP(avg)	12.80 m/hr
Depth Out		TFA	0.902						
Bit Comment	Re Run x4 Bit # 5								

BHA # 31

Weight(Wet)	50000.00klb	Length	288.4m	Torque(max)	24ft-lbs	D.C. (1) Ann Velocity	627fpm
Wt Below Jar(Wet)	25000.00klb	String	380.00klb	Torque(Off.Btm)	14ft-lbs	D.C. (2) Ann Velocity	0fpm

Pick-Up	395.00klb	Torque(On.Btm)	14ft-lbs	H.W.D.P. Ann Velocity	354fpm
Slack-Off	370.00klb			D.P. Ann Velocity	354fpm

BHA Run Description 8 1/2 Drilling BHA

BHA Run Comment 4th ReRun Bit #5

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.28m	8.50in	2.25in	TX2104	
NB Stab	1.50m	6.88in	3.25in	700172	
Gamma-Ray	7.07m	8.25in	3.00in	90222505	
DM sub	2.81m	6.63in	2.88in	1025744	
MWD	9.20m	8.25in	3.25in	922683	
Sonic 6	6.76m	7.38in	3.00in	922755-06	
Pulser	3.03m	6.81in	2.88in	302842	
MWD	1.81m	7.13in	1.88in	92223063B6	
8-1/2" String Stab	1.70m	8.38in	2.81in	700802	
6 3/4" DC	9.32m	6.75in	2.88in	1185	
6 3/4" DC	9.45m	6.75in	2.88in	1764	
6 3/4" DC	9.44m	6.75in	2.88in	1180	
6 3/4" DC	9.26m	6.75in	2.88in	1191	
6 3/4" DC	9.47m	6.75in	2.88in	1761	
6 3/4" DC	9.20m	6.75in	2.88in	1188	
6 3/4" DC	9.45m	6.75in	2.88in	1759	
6 3/4" DC	9.38m	6.75in	2.88in	1760	
Jar	9.91m	6.50in	2.88in	17602018	
6 3/4" DC	9.47m	6.75in	2.88in	1190	
6 3/4" DC	9.29m	6.75in	2.88in	1766	
6 3/4" DC	9.45m	6.75in	2.88in	1183	
HWDP	141.13m	5.00in	3.00in		

MD (m)	Incl (deg)	Azim (deg)	TVD (m)	Vsec (deg)	N-S (m)	E-W (m)	DLS (deg/30m)	Tool Type
3167.65	3.8	84.1	3166.80	34.0			0.1	MWD
3194.79	3.9	83.3	3193.88	35.4			0.1	MWD
3223.60	4.3	83.4	3222.62	36.9			0.5	MWD
3235.00	4.3	83.4	3233.99	37.6			0.0	MWD

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	23	0	396.0
Drill Water	m3	0	5	0	854.0
Pot Water	m3	0	26	0	220.0
Brine	m3	0	0	0	180.0
Barite	MT	0	0	-2.1	95.4
Baradefoam-W300	can	0	0	0	9.0
Barolift	boxes	0	0	0	16.0
Bentonite	MT	0	0	0	33.0
Caustic Soda	pail	0	0	0	0.0
Lime	sx	0	0	0	0.0
Soda Ash	sx	0	0	0	33.0
Sodium Bicarbonate	25kg sx	0	0	0	38.0
Shaker Screen 50	Screens	0	0	0	8.0
Citric Acid	Sacks	0	0	0	78.0

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(gpm) (psi)	SPM2 (SPM)	SPP2 (psi)	Flow2 (gpm)	SPM3 (SPM)	SPP3 (psi)	Flow3 (gpm)

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
1	Continental Emsco	6.50	1.12	97	71	2700	703	2520.0	30	400	252	40	500	336	50	650	420
2	Continental Emsco	6.50	1.12	97	73	2700	703	2520.0	30	340	252	40	440	336	50	560	420
3	Continental Emsco	6.50	1.12	97	85	2700	729	2850.0	30	400	252	40	500	336	50	600	420

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	15.15ppg /	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.
9.63	/ 11.00ppg	2520.00m / 2520.00m	No Cmt

Personnel On Board	
Company	Pax
ADA	4
Maersk	46
GRN	3
OMS	14
Reach	1
Geoservices	6
Halliburton Cementers	2
Halliburton (Baroid)	2
Fugro ROV	3
Swaco	1
Sperry Sun	3
CORPRO	2
Other Contractor	1
Origin Energy	2
Schlumberger (Wireline)	7
Total	97

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : Mike Lawrance / Fergus Spencer			
Available	1601.0bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	680.0bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/50 bottom	
Mixing	0.0bbl	Surf+ Equip	0.0bbl	Shaker 1	Brandt VSM 300	20 top/50 bottom	
Hole	683.0bbl	Dumped		Shaker 2	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Reserve	238.0bbl	De-Sander		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Kill		De-Silter		Shaker 4	Brandt VSM 300	20 top/50 bottom	
		Centrifuge		Shaker 4	Brandt VSM 300	20 top/50 bottom	

Marine

Weather on 17 Nov 2009								Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	8kn	50.0deg	1009.0mbar	17C°	0.0m	90.0deg	3s	1	201.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather Comments			
0.0m	0.9deg	0.9deg	317.0deg	240000.00klb	116684.00klb	Fine			
Swell Height	Swell Dir.	Swell Period	Comments						
3.0m	90.0deg	5s							
								8	198.0
Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks					
Far Scimitar		11:05 hours 13/11/09	Alongside Melbourne.	Item	Unit	Used	Quantity		
				Rig Fuel	M3		570		
				Potable Water	M3		160		
				Drill Water	M3		817		
					t		0		
				Barite	t		0		
				Bentonite	t		0		
				Brine	M3		112		
#1 Main engine out of service due to fly wheel problem.									
Far Fosna	06.20 13/		Stand-By at KT4	Item	Unit	Used	Quantity		
				Rig Fuel	M3		675		
				Pot Water	M3		436		
				Drill Water	M3		600		
				Bentonite	t		42		
				Barite	t		0		
					t		130		
				Brine	M3		0		