



# DRILLING MORNING REPORT # 53 Trefoil-2

22 Nov 2009 From: Bryan Houston / Paul Leathem

To: Texas Richards

Trefoil-2					
Date:	22 Nov 2009	Well Site Representative:	Bryan Houston	OIM:	Brian Meechan
Report Number:	53	Night Representative:	Paul Leathem	<b>Drilling Company:</b>	Maersk
Latitude (South):	39 ° 53 ' 07.89 "	Longitude (East):	145 ° 22 ' 14.87 "	Geologist:	Dennis Archer

Well Data								
Country	Australia	MDBRT	3235.0m	Cur. Hole Size	8.500in	AFE Cost	US\$1	
Field	Trefoil	TVDBRT	3235.0m	Last Casing OD	9.625in	AFE No.	Trefoil-2	
Drill Co.	Maersk	Progress	0.0m	Shoe TVDBRT	2520.0m	Daily Cost	US\$580,181	
Rig	Kan Tan IV	Days from spud	47.67	Shoe MDBRT	2520.0m	Cumul. Cost	US\$37,148,241	
Wtr Dpth(MSL)	69.0m	Days on well	52.13	FIT/LOT:	11.00ppg /	Last LTI Date	01 Nov 2009	
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m			Days Since Last	LTI 21	
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Current Op @ 0600	Waiting or	weather		
Datum	GDA 94	Last BOP Test	05 Nov 2009	Planned Op	Continue to lay out DP. Jet well head and ERUN Bridg plug. RIH and cut 9 5/8" casing a retrieve same. Pull BOPs.			

## Summary of Period 0000 to 2400 Hrs

Continued with cement plug #1B. POOH to 2935m. Circulated bottoms up. Pumped cement plug #1C. POOH to 2520m. Circulated bottoms up. Laid out 5" DP while wait on cement. RIH and tagged cement plug at 2,749m. POOH to 2,620m and broke circulation. Spotted 12bbl Hi-Vis pill. POOH to 2,570m and mixed and pumped cement plug #2. Circulated bottoms up. RIH and tagged top of cement @ 2337m. Performed line test to 2000psi and pressure tested cement plug against pipe rams to 2000psi @ 500psi intervals.

<b>HSE Summary</b>				
Events	Num. Events	Days Since	Descr.	Remarks
Last BOP Test	05 Nov 2009			
Abandon Drill	1	0 Days	Held abandon drill	
Emergency Drill	0	18 Days	Full Emergency drill performed	
Fire Drill	0	8 Days	Main deck - Fire in Control room	
Permit To Work	13	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	0	7 Days	General safety meetings	Dropped object awareness presentation.
Safety Meeting	13	0 Days	Prejob safety meetings	
Safety Meeting	6	0 Days	Safety Meetings	
STOP Card	40	0 Days	Number of STOP Cards submitted	

FORMATION	
Name	Тор
Cretaceous	3068.00m
TF50 Sand	3130.50m
TF80 Sand	3149.80m
Base TF110 Sand	3180.00m
Total Depth (TD)	3235.00m

#### Operations For Period 0000 Hrs to 2400 Hrs on 22 Nov 2009

Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P21	Р	F3	0000	0030	0.50	3235.0m	Continued with cement plug #1B. Pumped 15bbls of drill water followed by 43.2bbls of 15.8ppg cement. Displaced with 156bbls of 9.4ppg mud.
P21	Р	G8	0030	0100	0.50	3235.0m	POOH from 3085m to 2935m.
P21	Р	F4	0100	0200	1.00	3235.0m	Circulated bottoms up @ 700gpm/ 1800psi. Diverted and treated 35bbls of cement contaminated mud.
P21	Р	F3	0200	0300	1.00	3235.0m	Cement plug 1C: Made up cement head and pumped 5 bbls of mud. Pressure tested





Phse	Cls (RC)	Op	From	То	Hrs	Depth	Activity Description	
							surface lines to 3000psi (5min) - ok. Pumped 15bbls of drill water followed by 43.2bbls of 15.8ppg cement. Displaced with 148 bbls of 9.4ppg mud. Plug set in place 0300hrs.	
P21	Р	G8	0300	0400	1.00	3235.0m	POOH from 2935m to 2520m.	
P21	Р	F4	0400	0500	1.00	3235.0m	Circulated bottoms up at 700gpm/1800psi.	
P21	Р	G4	0500	0730	2.50	3235.0m	Laid out 5" DP while wait on cement.	
P21	Р	G8	0730	0900	1.50	3235.0m	RIH from 2241m to 2702m.	
P21	Р	G8	0900	1000	1.00	3235.0m	Made up top drive and washed from 2702m and tagged cement plug at 2749m with 5klbs.	
P21	Р	G8	1000	1030	0.50	3235.0m	POOH from 2749m to 2620m.	
P21	Р	F3	1030	1100	0.50	3235.0m	Make up top drive and broke circulation. Spotted 12 blls of Hi-Vis pill at 2620m.	
P21	Р	G8	1100	1130	0.50	3235.0m	POOH from 2620m to 2570m.	
P21	Р	F3	1130	1230	1.00	3235.0m Made up cement assembly and installed hose. Tested to 3,000psi - ok. P of fresh water ahead. Mixed and pumped 35bbls of 15.8ppg slurry. Displation 125bbls of 9.5ppg WBM. Checked back flow - ok.		
P21	Р	G8	1230	1300	0.50	3235.0m	Laid down cement assembly. POOH from 2570m to 2412m.	
P21	Р	F4	1300	1500	2.00	3235.0m	Circulated bottoms up. No cement contaminated WBM observed.	
P21	Р	G4	1500	1700	2.00	3235.0m	Laid down 2 stands of DP. Picked up and racked back 1 stand of 8 1/4" DCs while waiting on cement.	
P21	Р	G11	1700	1730	0.50	3235.0m	Carried out rig service while waiting on cement.	
P21	Р	G4	1730	1930	2.00	3235.0m	Continued to lay out 6 stands of 5" DP while waiting on cement.	
P21	P	G4	1930	2030	1.00	3235.0m	Laid down 1 stand of 6 3/4" DC. Cranes shut down due to weather conditions during this operation. Held toolbox talk to discuss change of plans for the laying out of the DCs while waiting on cement.	
P21	Р	G8	2030	2130	1.00	3235.0m	RIH and tagged top of cement at 2337m with 5 - 10klbs down weight.	
P21	Р	P1	2130	2230	1.00	3235.0m	Performed line test to 2000psi and pressure tested cement plug against pipe rams to 2000psi @ 500psi intervals - ok.	
P21	Р	G8	2230	2400	1.50	3235.0m	Racked back 1 stand of DP. Pumped slug and POOH laying down DP from 2307m to 2100m.	

#### Operations For Period 0000 Hrs to 0600 Hrs on 23 Nov 2009

Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P21	Р	G8	0000	0330	3.50	3235.0m	Continued to POOH laying out drill pipe from 2100m to 1596m. Cranes shut down at 0200 hrs. Continued to lay out pipe untill pipe bay was full.
P21	U	G25	0330	0600	2.50	3235.0m	Waited on weather. Wind speed: 30+ Knots Roll: 3.2 deg Heave: 4m Pitch: 1.1 deg

# **Operations For Period Hrs to Hrs on**

Phase Data to 2400hrs, 22 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)	359.5	06 Nov 2009	21 Nov 2009	1,213.50	50.563	3235.0m
Suspend and Abandon(P21)	37.5	21 Nov 2009	22 Nov 2009	1,251.00	52.125	3235.0m

## **General Comments**

00:00 TO 24:00 Hrs ON 22 Nov 2009







WBM Data				Cost Toda	ay US\$ 126				
Mud Type:	KCI	KCI API FL: 5.2cc/30min C		CI:	39000mg/l	Solids(%vol): 4%		Viscosity	55sec/qt
	POLYMER	Filter-Cake:	1/32nd"	K+C*1000:	7%	H2O: 93%		PV	14cp
Sample-From:	2	i illei-Cake.	1/32110	N+C 1000.	1 /0	1120.	9376	YP	29lb/100ft <sup>2</sup>
Sample-Floin.	2	HTHP-FL:	11.2cc/30min	Hard/Ca:	800mg/l	Oil(%):		Gels 10s	9
Time:	19:00 hrs	HTHP-cake:	4/22 - 41	MBT:	0	Condi	2	Gels 10m	11
Weight:	0.50ppg	HTHP-cake:	1/32nd"	IVIB I :	9	Sand:	.3	Fann 003	8
vveignt.	9.50ppg			PM:	0.2	pH:	8.5	Fann 006	10
Temp:				DE.	0.4	DUDA:	2000	Fann 100	26
				PF:	0.1	PHPA:	2ppb	Fann 200	37
Comment		Note: Cost is in	n AUD					Fann 300	43
								Fann 600	57

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Rig Fuel	m3	0	18	0	347.0	
Drill Water	m3	0	10	0	814.0	
Pot Water	m3	10	29	0	168.0	
Brine	m3	0	0	0	180.0	
Barite	MT	0	0	0	81.6	
Baradefoam-W300	can	0	1	0	8.0	
Barolift	boxes	0	0	0	16.0	
Bentonite	MT	0	0	0	46.0	
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	

Ρι	ımps																
Pu	Pump Data - Last 24 Hrs								Slow Pump Data								
No.	Туре	Liner (in)	MW (sg)	Eff (%)	SPM (SPM)	SPP (psi)	Flow (gpm)	Depth (m)	SPM1 (SPM)	SPP1F (psi)	low1(gpr	n)SPM2 (SPM)	SPP2 (psi)		SPM3 (SPM)		Flow3 (gpm)
1	Continental Emsco	6.50	1.12	97					30			40			50		
2	Continental Emsco	6.50	1.12	97					30			40		336	50	560	420
3	Continental	6.50	1.12	97					30			40			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	43				
GRN	5				
OMS	20				
Dril-Quip	1				
Geoservices	2				
Halliburton Cementers	2				
Halliburton (Baroid)	2				
PCS	3				
Fugro ROV	3				





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210.0

Personnel On Board	
Smith Services	2
Other Contractor	1
Total	88

Mud Volumes, Mud Losses and Shale Shaker Data			Engineer : Jay W				
Available	1458.2bbl	Losses	100.6bbl	Equipment	Description	Mesh Size	Comments
Active	764.8bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/50 bottom	
Mixing	0.0bbl	Surf+ Equip	0.0bbl	Shaker 1 Shaker 2	Brandt VSM 300 Brandt VSM 300	20 top/50 bottom 20 top/50 bottom	
Hole	548.4bbl	Dumped	35.0bbl	Shaker 2	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Reserve	145.0bbl	De-Sander		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Kill		De-Silter		Shaker 4	Brandt VSM 300	20 top/50 bottom	
		Centrifuge Left Behind	65.6bbl	Shaker 4	Brandt VSM 300	20 top/50 bottom	

Marine									
Weather on 22	2 Nov 2009							Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	26kn	254.0deg	1005.0mbar	12C°	3.0m	230.0deg	2s	1	207.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather (	Comments	2	187.0
1.0m	0.9deg	2.0deg	317.0deg	240000.00klb	116684.00klb	Fi	ne	3	149.0
1.0111	0.5dcg	2.0009	317.0dcg	240000.00Kib	1 10004.00Kib			4	185.0
Swell Height	Swell Dir.	Swell Period		Comments				5	197.0
4.0m	230.0deg	5s						6	192.0
								7	185.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status		Bulks		
Far Scimitar		14.30 19th Nov 09	KT4 Standby.	Item	Unit	Used	Quantity
				Rig Fuel	M3		504
				Potable Water	M3		145
			Drill Water	M3		817	
					t		C
				Barite	t		C
				Bentonite	t		C
				Brine	M3		112

0200 - 2400 Running stby

3	,						
Far Fosna	06.20 13/11/09	22/11/09	Melbourne	Item	Unit	Used	Quantity
				Rig Fuel	M3		635
				Pot Water	M3		396
				Drill Water	M3		600
				Bentonite	t		42
				Barite	t		40
					t		130
				Brine	M3		0

0001 - 0810 r/stby 0810 - 0815 s/s rig 0820 - 2130 En route to Melb. 2130 - 2400 28 south wharf

Helicopter	Movement -			
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow Helicopters	17.10 / 17.30	12 / 8	Crew Change for Geologist, Schlumberger, Geo-Service, Reach.