

16 Nov 2009

 From: Bryan Houston / Paul Leathem  
 To: Texas Richards

**DRILLING MORNING REPORT # 47**  
**Trefoil-2**

<b>Trefoil-2</b>					
<b>Date:</b>	16 Nov 2009	<b>Well Site Representative:</b>	Bryan Houston	<b>Rig Manager:</b>	
<b>Report Number:</b>	47	<b>Night Representative:</b>	Paul Leathem	<b>Drilling Company:</b>	Maersk
<b>Latitude (South):</b>	39 ° 53 ' 07.89 "	<b>Longitude (East):</b>	145 ° 22 ' 14.87 "	<b>Geologist:</b>	Dennis Archer

Well Data							
Country	Australia	MDBRT	3175.0m	Cur. Hole Size	8.500in	AFE Cost	US\$33,167,745
Field	Trefoil	TVDBRT	3175.0m	Last Casing OD	9.625in	AFE No.	Trefoil-2
Drill Co.	Maersk	Progress	30.0m	Shoe TVDBRT	2520.0m	Daily Cost	US\$570,732
Rig	Kan Tan IV	Days from spud	41.67	Shoe MDBRT	2520.0m	Cumul. Cost	US\$32,481,066
Wtr Dpth(MSL)	69.0m	Days on well	46.13	FIT/LOT:	11.00ppg /	Last LTI Date	01 Nov 2009
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m			Days Since Last LTI	15
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Current Op @ 0600	Troubleshoot and attempt to repair drawworks gearing problem.		
Datum	GDA 94	Last BOP Date	05 Nov 2009	Planned Op	Repaired drawworks. Continued to RIH and drill ahead 8 1/2" hole.		

**Summary of Period 0000 to 2400 Hrs**

Continued to cut core #2 from 3153m to 3175m. Performed flow check - ok. POOH at controlled rate of 3 mins per stand to 2050m. Flow checked - ok. Slipped and cut drilling line. Continued to POOH to 32m. At 12:00 hours rig held a 15 minutes remembrance for Mr. Flower. Recovered core and inner barrel and laid out same. Laid out outer barrel. Break off bit and made up 8 1/2" bit to MWD tools. Installed radio active sources and loaded tools. Continued to RIH with 8 1/2" drilling assy to 147m. Shallow tested MWD.

**HSE Summary**

Events	Num. Events	Days Since	Descr.	Remarks
Last BOP Test	05 Nov 2009			
Abandon Drill	0	2 Days	Held abandon drill	
Emergency Drill	0	12 Days	Full Emergency drill performed	
Fire Drill	0	2 Days	Main deck - Fire in Control room	
Permit To Work	15	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	0	1 Day	General safety meetings	Dropped object awareness presentation.
Safety Meeting	15	0 Days	Prejob safety meetings	
STOP Card	40	0 Days	Number of STOP cards submitted	
Trip / Kick Drill	1	0 Days	Trip Drill 35sec	Held while POOH

**FORMATION**

Name	Top
TL40 Sand	2976.50m
TL50 Sand	2985.00m
TL60 Sand	2994.50m
Cretaceous	3068.00m
TF50 Sand	3130.50m

**Operations For Period 0000 Hrs to 2400 Hrs on 16 Nov 2009**

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	E7	0000	0300	3.00	3175.0m	Continued to cut core #2 from 3153m to 3175m with 42spm/210gpm/644psi/70rpm/5k torque.
P17	P	G8	0300	0330	0.50	3175.0m	Pulled back 1 stand of DP from 3175m to 3145m. Performed flow check - OK. Removed Geoservice geolograph line and pumped slug.
P17	P	G8	0330	0730	4.00	3175.0m	POOH at controlled rate of 3 mins per stand monitoring well on trip tank. POOH from 3145m to 2050m.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	G11	0730	0930	2.00	3175.0m	Performed trip drill. Flow checked - ok. Slipped and cut drilling line.
P17	P	G8	0930	1700	7.50	3175.0m	POOH from 2050m to 32m as per Copro trip speed procedures. At 12:00 hours rig held a 15 minutes remembrance for Mr. Flower.
P17	P	E7	1700	2030	3.50	3175.0m	Recovered core and inner barrel and lay out same. A total of 29.25m of core recovered (97.5%). Service broke and laid out outer barrel. Broke off bit - no additional wear to bit (1-1-NO-A-X-I-NO-BHA).
P17	P	G7	2030	2200	1.50	3175.0m	Made up 8 1/2" bit to MWD tools from mast. Installed radio active sources and loaded tools.
P17	P	G8	2200	2330	1.50	3175.0m	Continued to RIH with 8 1/2" drilling assy to 147m.
P17	P	G7	2330	2400	0.50	3175.0m	Shallow tested MWD at 120 spm/600gpm/1020psi.

**Operations For Period 0000 Hrs to 0600 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 - 1908m. Filled pipe every 25 stands.
P17	TP (RE)	G11	0400	0600	2.00	3175.0m	Troubleshoot drawworks problems. Drawworks jumped out of gear while driller was running blocks up the mast. Could not get drawworks back into gear.

**Operations For Period Hrs to Hrs on**
**Phase Data to 2400hrs, 16 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)	253	06 Nov 2009	16 Nov 2009	1,107.00	46.125	3175.0m

**General Comments**

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

**WBM Data**
**Cost Today US\$ 318**

Mud Type:	KCI POLYMER	API FL:	5.0cc/30min	Cl:	38000mg/l	Solids(%vol):	3%	Viscosity	58sec/qt
Sample-From:	2	Filter-Cake:	1/32nd"	K+C*1000:	8%	H2O:	93%	PV	29cp
Time:	20:00 hrs	HTHP-FL:	11.0cc/30min	Hard/Ca:	375mg/l	Oil(%):		YP	29lb/100ft <sup>2</sup>
Weight:	9.50ppg	HTHP-cake:	1/32nd"	MBT:	11	Sand:	.25	Gels 10s	7
Temp:				PM:	0.3	pH:	9	Gels 10m	12
				PF:	0.25	PHPA:	2ppb	Fann 003	8
								Fann 006	9
								Fann 100	25
								Fann 200	32
								Fann 300	41
								Fann 600	53
Comment	Note: Cost is in AUD								

**Bit # 5 RR**

Wear	I	O1	D	L	B	G	O2	R
	1	2	CT	S	X	I	NO	CP

**Bitwear Comments:**

Size ("):	8.50in	IADC#	M223	Nozzles	Drilled over last 24 hrs	Calculated over Bit Run		
Mfr:	SMITH	WOB(avg)	12.30klb	No. Size	Progress	0.0m	Cumul. Progress	273.0m
Type:	PDC	RPM(avg)	123	6 14/32nd"	On Bottom Hrs	0.0h	Cumul. On Btm Hrs	20.4h
Serial No.:	TX2104	F.Rate	714gpm		IADC Drill Hrs	0.0h	Cumul. IADC Drill Hrs	12.5h
Bit Model	MI616	SPP	2520psi		Total Revs		Cumul. Total Revs	59
Depth In	3175.0m	HSI			ROP(avg)	N/A	ROP(avg)	13.38 m/hr
Depth Out		TFA	0.902					
Bit Comment	Re Run x4 Bit # 5							

<b>Bit # 6 RRx1</b>				Wear	I	O1	D	L	B	G	O2	R
					1	1	NO	FC	X	I	NO	CP
				Bitwear Comments:								
Size ("):	8.50in	IADC#	M 233	<b>Nozzles</b>		<b>Drilled over last 24 hrs</b>			<b>Calculated over Bit Run</b>			
Mfr:	CORPRO	WOB(avg)	11.00klb	No.	Size	Progress	30.0m	Cumul. Progress		30.0m		
Type:	ch	RPM(avg)	70			On Bottom Hrs	3.3h	Cumul. On Btm Hrs		3.3h		
Serial No.:	083691	F.Rate	205gpm			IADC Drill Hrs		Cumul. IADC Drill Hrs		0.0h		
Bit Model	MCP572	SPP	203psi			Total Revs		Cumul. Total Revs		0		
Depth In	3145.0m	HSI				ROP(avg)	9.09 m/hr	ROP(avg)		9.09 m/hr		
Depth Out	3175.0m	TFA	0.000									
Bit Comment				Coring Run #2								

<b>BHA # 31</b>							
Weight(Wet)	50000.00klb	Length	288.4m	Torque(max)	24ft-lbs	D.C. (1) Ann Velocity	656fpm
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	370fpm
		Slack-Off	370.00klb			D.P. Ann Velocity	370fpm
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		

<b>BHA # 30</b>							
Weight(Wet)	65.00klb	Length	286.4m	Torque(max)		D.C. (1) Ann Velocity	0fpm
Wt Below Jar(Wet)	22.00klb	String	375.00klb	Torque(Off.Btm)		D.C. (2) Ann Velocity	0fpm
		Pick-Up	385.00klb	Torque(On.Btm)		H.W.D.P. Ann Velocity	0fpm
		Slack-Off	360.00klb			D.P. Ann Velocity	0fpm
BHA Run Description		Coring BHA Run #2 Bit#6 RRx2					

BHA Run Comment						
Equipment	Length	OD	ID	Serial #	Comment	
Core Bit	0.37m	8.50in	4.00in	83691		
stabilizer	0.76m	8.44in	5.63in	W0137319		
Core Barrel	5.33m	7.13in	5.63in	W0135110		
stabilizer	0.76m	8.44in	5.63in	W0137237		
Core Barrel	5.33m	7.13in	5.63in	W0135194		
stabilizer	0.76m	8.44in	5.63in	W0137312		
Core Barrel	5.33m	7.13in	5.63in	S8413		
stabilizer	0.76m	8.44in	5.63in	W0137258		
Core Barrel	5.33m	7.13in	5.63in	723189		
Stabiliser	0.76m	8.44in	5.63in	W0137219		
Core Barrel	5.33m	7.13in	5.63in	SBO6		
stabilizer	0.76m	8.44in	5.63in	W0137014		
Top Head	0.61m	7.13in	5.63in	W1856027		
6 3/4" DC	75.42m	6.75in	2.88in	MAERSK		
Jars	9.91m	6.50in	2.75in	17602018		
6 3/4" DC	28.21m	6.75in	2.88in	MAERSK		
HWDP	141.13m	5.00in	3.00in	MAERSK		

Bulk Stocks						
Name	Unit	In	Used	Adjust	Balance	
Rig Fuel	m3	0	20	0	419.0	
Drill Water	m3	20	6	0	859.0	
Pot Water	m3	19	33	0	246.0	
Brine	m3	0	0	0	180.0	
Barite	MT	0	0	0	97.5	
Baradefoam-W300	can	0	0	0	9.0	
Barolift	boxes	0	1	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	

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

**Personnel On Board**

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
<b>Total</b>	<b>97</b>

**Mud Volumes, Mud Losses and Shale Shaker Data**

Engineer : Mike Lawrance / Fergus Spencer

Available	1674.0bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	590.0bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/50 bottom	
Mixing	0.0bbl	Surf+ Equip	0.0bbl	Shaker 2	Brandt VSM 300	20 top/50 bottom	
Hole	823.0bbl	Dumped		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 4	Brandt VSM 300	20 top/50 bottom	
Reserve	261.0bbl	De-Sander					
Kill		De-Silter					
		Centrifuge					

**Marine**

Weather on 16 Nov 2009								Rig Support	
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	17kn	58.0deg	1006.0mbar	22C°	4.0m	210.0deg	3s	1	201.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather Comments			
1.0m	0.5deg	2.5deg	317.0deg	240000.00klb	116684.00klb	Fine			
Swell Height	Swell Dir.	Swell Period	Comments						
5.0m	210.0deg	5s							
								2	192.0
								3	188.0
								4	176.0
								5	190.0
								6	199.0
								7	183.0
								8	215.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
				Item	Unit	Used	Quantity
Far Scimitar		11:05 hours 13/11/09	Alongside Melbourne.	Rig Fuel	M3		572
				Potable Water	M3		110
				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.

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
				Item	Unit	Used	Quantity
Far Fosna	06.20 13/		Stand-By at KT4	Rig Fuel	M3		683
				Pot Water	M3		444
				Drill Water	M3		600
				Bentonite	t		42
				Barite	t		0
					t		130
				Brine	M3		0

**Helicopter Movement**

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

<b>Helicopter Movement</b>				
1	BRISTOW HELICOPTERS AUSTRALIA PTY LTD	09:05 / 09:25	6 / 7	Crew Change
2	Bristow Helicopters	13:00 / 13:15	7 / 0	Crew Change