

DRILLING MORNING REPORT # 46
Trefoil-2

15 Nov 2009

 From: Bryan Houston / Paul Leathem
 To: Phil Stratford

Trefoil-2					
Date:	15 Nov 2009	Well Site Representative:	Bryan Houston	Rig Manager:	
Report Number:	46	Night Representative:	Paul Leathem	Drilling Company:	Maersk
Latitude (South):	39 ° 53 ' 07.89 "	Longitude (East):	145 ° 22 ' 14.87 "	Geologist:	Dennis Archer

Well Data							
Country	Australia	MDBRT	3153.0m	Cur. Hole Size	8.500in	AFE Cost	US\$33,167,745
Field	Trefoil	TVDBRT	3153.0m	Last Casing OD	9.625in	AFE No.	Trefoil-2
Drill Co.	Maersk	Progress	132.0m	Shoe TVDBRT	2520.0m	Daily Cost	US\$564,034
Rig	Kan Tan IV	Days from spud	40.67	Shoe MDBRT	2520.0m	Cumul. Cost	US\$31,874,368
Wtr Dpth(MSL)	69.0m	Days on well	45.13	FIT/LOT:	11.00ppg /	Last LTI Date	01 Nov 2009
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m			Days Since Last LTI	14
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Current Op @ 0600	POOH with core barrel at controlled rate..		
Datum	GDA 94	Last BOP Date	05 Nov 2009	Planned Op	Continue to POOH with core barrel. Lay out same. Slip & cut drill line. RIH with 8 1/2 bit & drilling BHA.		

Summary of Period 0000 to 2400 Hrs
Continued to drill 8-1/2" to 3145m Core Point. Circulated bottoms up to allow geologist to collect sample & until shakers are clean. Flow checked - OK. Pumped slug. POOH from 3145m to 2520m. No overpull or tight spots observed. Performed trip drill (30 sec). Flow checked. Continued to POOH in casing - 288m BHA. Flow checked prior to pulling BHA through BOPs. POOH BHA to 32m. Removed sources, down loaded MWD tools & broke off bit. Prepared & ran core barrel to 32m. M/Up BHA & RIH - 288m. RIH BHA on 5" DP - 2050m, shoe depth. Flow checked at shoe. Serviced top drive. Took SCRs & drilling parameters. Cont'd to RIH in open hole - 3089m M/Up top drive, wash & light ream - 3145m Tagged bottom @ 3245m, dropped the ball & observed a 60psi increase on landing out. Drilled core F/ 3145m - 3153m.

HSE Summary					
Events	Num. Events	Days Since	Descr.	Remarks	
Last BOP Test	05 Nov 2009				
Abandon Drill	0	1 Day	Held abandon Drill		
Emergency Drill	0	11 Days	Full Emergency drill performed.		
Fire Drill	0	1 Day	Main deck - Fire in Control room		
Permit To Work	12	0 Days	Permits administerd.		
Pre-tour Meeting	2	0 Days	Shift change meetings		
Safety Meeting	12	0 Days	Prejob safety meetings		
Safety Meeting	2	0 Days	General safety meetings	Dropped object awareness presentation.	
STOP Card	58	1 Day	Number of STOP Cards submitted		
Trip / Kick Drill	1	0 Days	Trip Drill 35sec	Held while RIH	

FORMATION	
Name	Top
Base Low A1 Zone	2937.80m
TL40 Sand	2976.50m
TL50 Sand	2985.00m
TL60 Sand	2994.50m
Cretaceous	3068.00m

Operations For Period 0000 Hrs to 2400 Hrs on 15 Nov 2009							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	D2	0000	0130	1.50	3145.0m	Continued to drill 8-1/2" hole from 3139m to 3145m (700gpm/ 2800psi /130 rpm/5-10klbs WOB/Mud weight 9.4ppg) as per geologist request. Adjusted parameters to reduce vibration and whirl on down hole tools when required.
P17	P	F4	0130	0200	0.50	3145.0m	Circulated bottoms up to allow geologist to collect sample at 700gpm/2800psi/70rpm.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	P3	0200	0230	0.50	3145.0m	Continued to circulate until shakers are clean.
P17	P	G8	0230	0500	2.50	3145.0m	Flow checked - OK. Pumped slug.
P17	P	G8	0500	0730	2.50	3145.0m	POOH from 3145m to 2520m. No overpull or tight spots observed.
P17	TP (RE)	G8	0730	0800	0.50	3145.0m	Performed trip drill (30 sec). Flow checked at the shoe and filled trip tank. Continued to POOH in casing from 2520m - 895m.
P17	P	G8	0800	0930	1.50	3145.0m	Secured indicator hose for compensator due to it hanging up in derrick.
P17	P	G8	0930	1100	1.50	3145.0m	Cont/ to POOH F/895m - 288m BHA. Flow checked prior to pulling BHA through BOPs.
P17	P	G7	1100	1300	2.00	3145.0m	POOH BHA F/288m - 32m
P17	P	G7	1300	1400	1.00	3145.0m	Removed sources, down loaded MWD tools & broke off bit.
P17	P	G7	1400	1500	1.00	3145.0m	Prepared & ran core barrel to 32m.
P17	P	G8	1500	2000	5.00	3145.0m	M/Up BHA to core barrel & RIH F/ 32m - 288m.
P17	P	G14	2000	2030	0.50	3145.0m	RIH BHA on 5" DP F/288m - 2520m, shoe depth.
P17	P	G8	2030	2200	1.50	3145.0m	Flow checked at shoe. Serviced top drive. Took SCRs & drilling parameters.
P17	P	F1	2200	2230	0.50	3145.0m	Cont/ to RIH in open hole F/2520m - 3089m
P17	P	E7	2230	2300	0.50	3145.0m	M/Up top drive, washed & light reamed F/3089m - 3145m W/ 60spm/ 300gpm/ 650psi.
P17	P	E7	2300	2400	1.00	3153.0m	Tagged bottom @ 3245m, Took parameters, spaced out & made connection. Dropped the ball & observed a 60psi increase on landing out. F/550psi - 610psi. Took SCRs @ 30-40 & 50 spm. Take new parameters
							Drilled core F/ 3145m - 3153m, W/42spm/ 210gpm/ 644psi.70rpm/ 5k torque.

Operations For Period 0000 Hrs to 0600 Hrs on 16 Nov 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	P	E7	0000	0300	3.00	3175.0m	Cont/ to drill core F/ 3153m - 3175m, W/42spm/ 210gpm/ 644psi.70rpm/ 5k torque.
P17	P	E7	0300	0330	0.50	3175.0m	Pulled 1 stand of DP F/ 3175 - 3145m. Performed flow check, OK. Removed Geoservice geolograph line & pumped slug.
P17	P	G8	0330	0600	2.50	3175.0m	POOH at controlled rate of 3 mins per stand, monitoring well on trip tank. POOH F/3145m - 2520m, shoe depth.

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 15 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)	229	06 Nov 2009	15 Nov 2009	1,083.00	45.125	3153.0m

General Comments

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

WBM Data
Cost Today US\$ 10739

Mud Type:	KCl POLYMER	API FL:	5.0cc/30min	Cl:	40000mg/l	Solids(%vol):	3%	Viscosity	64sec/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:	375mg/l	Oil(%):		YP	27lb/100ft ²
Weight:	9.50ppg	HTHP-cake:	1/32nd"	MBT:	11	Sand:	.25	Gels 10s	9
Temp:				PM:	0.2	pH:	9	Gels 10m	12
				PF:	0.2	PHPA:	2ppb	Fann 003	8
								Fann 006	10
								Fann 100	27
								Fann 200	35
								Fann 300	41
								Fann 600	55
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)	11.00klb	No.	Size	Progress	132.0m	Cumul. Progress		273.0m		
Type:	PDC	RPM(avg)	100	6	14/32nd"	On Bottom Hrs	11.6h	Cumul. On Btm Hrs		20.4h		
Serial No.:	TX2104	F.Rate	679gpm			IADC Drill Hrs	0.0h	Cumul. IADC Drill Hrs		12.5h		
Bit Model	MI616	SPP	2860psi			Total Revs	59	Cumul. Total Revs		59		
Depth In	2633.0m	HSI				ROP(avg)	11.38 m/hr	ROP(avg)		13.38 m/hr		
Depth Out	2983.0m	TFA	0.902									
Bit Comment				Re Runx3 Bit # 5								

Bit # 6 RRx1				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	Nozzles		Drilled over last 24 hrs			Calculated over Bit Run			
Mfr:	CORPRO	WOB(avg)		No.	Size	Progress		Cumul. Progress		0.0m		
Type:	ch	RPM(avg)				On Bottom Hrs		Cumul. On Btm Hrs		0.0h		
Serial No.:	083691	F.Rate				IADC Drill Hrs		Cumul. IADC Drill Hrs		0.0h		
Bit Model	MCP572	SPP				Total Revs		Cumul. Total Revs		0		
Depth In	3145.0m	HSI				ROP(avg)	N/A	ROP(avg)		0.00 m/hr		
Depth Out	3013.0m	TFA	0.000									
Bit Comment				Coring Run #1								

BHA # 28							
Weight(Wet)	50000.00klb	Length	288.4m	Torque(max)	24ft-lbs	D.C. (1) Ann Velocity	623fpm
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	352fpm
		Slack-Off	370.00klb			D.P. Ann Velocity	352fpm
BHA Run Description		8 1/2 Drilling BHA					
BHA Run Comment		3rd 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	

Equipment	Length	OD	ID	Serial #	Comment
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		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	22	0	439.0
Drill Water	m3	23	5	0	845.0
Pot Water	m3	39	39	0	260.0
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	0	0	17.0
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	1	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)	SPP1 (psi)	Flow1 (gpm)	SPM2 (SPM)	SPP2 (psi)	Flow2 (gpm)	SPM3 (SPM)	SPP3 (psi)	Flow3 (gpm)
1	Continental Emsco	6.50	1.12	97	71	2726	678	2520.0	30	400	252	40	500	336	50	650	420
2	Continental Emsco	6.50	1.12	97	73	2726	678	2520.0	30	340	252	40	440	336	50	560	420
3	Continental Emsco	6.50	1.12	97	85	2726	678	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	49
GRN	2
OMS	13
Reach	1
Geoservices	6
Halliburton Cementers	2
Halliburton (Baroid)	1
Dril-Quip	1
Fugro ROV	3
Swaco	1
Sperry Sun	3
CORPRO	2
Other Contractor	1
Origin Energy	2
Total	91

Mud Volumes, Mud Losses and Shale Shaker Data

Engineer : Jay Wan / Fergus Spencer

Available	1706.0bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	650.0bbl	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	689.0bbl	Dumped		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 4	Brandt VSM 300	20 top/50 bottom	
Reserve	367.0bbl	De-Sander					
Kill		De-Silter					
		Centrifuge					

Marine

Weather on 15 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	1005.0mbar	15C°	2.0m	240.0deg	3s	1	192.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather Comments			
1.0m	0.5deg	1.1deg	317.0deg	240000.00klb	116684.00klb	Fine			
Swell Height	Swell Dir.	Swell Period	Comments						
3.0m	240.0deg	5s							
								2	191.0
								3	186.0
								4	194.0
								5	217.0
								6	206.0
								7	201.0
								8	209.0

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		690
				Pot Water	M3		452
				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
1	Bristow Helicopters	09:10 / 09:25	12 / 11	Crew Change