

DRILLING MORNING REPORT # 37
Trefoil-2
06 Nov 2009

 From: Bryan Houston / Paul Leathem
 To: Texas Richards

Well Data							
Country	Australia	MDBRT	2520.0m	Cur. Hole Size	12.250in	AFE Cost	US\$33,167,745
Field	Trefoil	TVDBRT	2520.0m	Last Casing OD	13.375in	AFE No.	Trefoil-2
Drill Co.	Maersk	Progress	0.0m	Shoe TVDBRT	930.0m	Daily Cost	US\$600,000
Rig	Kan Tan IV	Days from spud	31.67	Shoe MDBRT	930.0m	Cumul. Cost	US\$26,485,500
Wtr Dpth(MSL)	69.0m	Days on well	36.13	FIT/LOT:	/ 15.15ppg		
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m	Current Op @ 0600	Continued to RIH filling every 20 stands. Controlled tripping speed.		
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Planned Op	Drill out 9 5/8" casing float and shoe. Drill 3m of new hole. Perform FIT. POOH change BHA.		

Summary of Period 0000 to 2400 Hrs

Continued to troubleshoot top drive hydraulic system, pipe handler and alignment problems. Changed out saver sub. Performed alignment test and checked hook position indicator on compensator. Picked up and RIH wear bushing. Made up emergency hang off tool and racked back in mast. Made up 8 1/2" drillout BHA and RIH. Made up RTTS packer and RIH to 190m (packer depth, 445m bit depth). Set RTTS Packer. Broke circulation. Pressure tested lines to 4000psi/5 min. Pressure tested casing patch to 4000psi. Unseated packer and POOH to 255m. Laid out RTTS packer and picked up drill pipe from deck and RIH .

HSE Summary

Events	Num. Events	Days Since	Descr.	Remarks
Last BOP Test	05 Nov 2009			
Abandon Drill	1	3 Days	Held abandon drill	
Emergency Drill	1	2 Days	Full Emergency drill performed.	
Fire Drill	1	3 Days	Main deck - Fire in rubbish container	
Permit To Work	14	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	6	0 Days	Prejob safety meetings	
STOP Card	60	0 Days	Number of STOP Cards submitted	

FORMATION

Name	Top
Upper Angahook	1162.00m
Angahook Volcanics Equiv	1331.00m
Lower Angahook	1569.00m
Demons Bluff	1850.00m
Eastern View Coal Measures	2105.00m

Operations For Period 0000 Hrs to 2400 Hrs on 06 Nov 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P13	TP (RE)	G11	0000	1100	11.00	2520.0m	Continued to troubleshoot top drive hydraulic system, pipe handler and alignment problems. Prepared 8 1/2" drillout BHA. Changed out saver sub. Tested TDS and pipe handler. Perform alignment test and checked hook position indicator on compenstor. ADA Drilling Supervisor witnessed and excepted repairs and improvements.
P17	TP (WB)	G12	1100	1400	3.00	2520.0m	Picked up wear bushing running tool and made up wear bushing. RIH and landed out in wellhead @ 92.5m. 25klbs down weight applied and overpulled 30klbs - bushing set. POOH running tool.
P17	TP (WB)	G21	1400	1430	0.50	2520.0m	Picked up jammed wear bushing running tool with bushing attached from deck and attempted to free from running tool - no success. Laid out same.
P17	TP (WB)	G5	1430	1530	1.00	2520.0m	Made up emergency hang off tool and racked in mast.
P17	TP (WB)	G6	1530	1900	3.50	2520.0m	Made up 8 1/2" drillout BHA and RIH to 255m while checking serial numbers on all components.
P17	TP (WB)	G2	1900	2000	1.00	2520.0m	Made up RTTS packer to string and RIH packer to 190m packer depth (445m bit depth).
P17	TP	F4	2000	2030	0.50	2520.0m	Broke circulation and held prejob toolbox talk.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	(WB) TP (WB)	P1	2030	2130	1.00	2520.0m	Set RTTS Packer. Lined up cement pump to pump down choke line. Broke circulation with 5bbls. Pressure tested lines to 4000psi/5 min. Closed lower annular and performed pressure test on casing patch to 4000psi in 500psi increments, held for 10 min - good test. Total amount of bbls pumped = 1.75bbls. Volume returned 1.5bbls.
P17	TP (WB)	G8	2130	2300	1.50	2520.0m	Unseat packer & POOH to 255m. Laid out RTTS packer.
P17	U	G8	2300	2400	1.00	2520.0m	Picked up drill pipe from deck and RIH from 255m to 402m.

Operations For Period 0000 Hrs to 0600 Hrs on 07 Nov 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P17	U	G8	0000	0300	3.00	2520.0m	Continued to pick up drill pipe from deck and RIH from 402m to 900m. Filled pipe. 75 joints total picked up.
P17	U	G8	0300	0600	3.00	2520.0m	Continued to RIH with stands from 900m to 1884m. Filled pipe every 20 stands.

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 06 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)	46.5	04 Oct 2009	06 Oct 2009	116.00	4.833	155.0m
Conductor Casing(P3)	37	06 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)	13	06 Nov 2009	06 Nov 2009	867.00	36.125	2520.0m

General Comments

00:00 TO 24:00 Hrs ON 06 Nov 2009

WBM Data
Cost Today US\$ 227

Mud Type:	KCI POLYMER	API FL:	4.0cc/30min	Cl:	42500mg/l	Solids(%vol):	3%	Viscosity	65sec/qt
Sample-From:	2	Filter-Cake:	1/32nd"	K+C*1000:	9%	H2O:	93%	PV	11cp
Time:	11:00 hrs	HTHP-FL:	9.8cc/30min	Hard/Ca:	380mg/l	Oil(%):		YP	26lb/100ft²
Weight:	9.40ppg	HTHP-cake:	2/32nd"	MBT:	11	Sand:	.3	Gels 10s	11
Temp:				PM:	0.3	pH:	9.5	Gels 10m	15
Comment	Note: Cost is in AUD							Fann 003	10
				PF:	0.2	PHPA:	2ppb	Fann 006	12
								Fann 100	26
								Fann 200	32
								Fann 300	37
								Fann 600	48

Bit # 4

Wear	I	O1	D	L	B	G	O2	R
Bitwear Comments:								

Size ("):	8.50in	IADC#	Nozzles	Drilled over last 24 hrs	Calculated over Bit Run
Mfr:	Baker Huges Chistensen	WOB(avg)	No. Size	Progress	Cumul. Progress 0.0m
Type:	Rock	RPM(avg)		On Bottom Hrs	Cumul. On Btm Hrs 0.0h
Serial No.:	6076381	F.Rate		IADC Drill Hrs	Cumul. IADC Drill Hrs 0.0h
Bit Model	8 1/2 GT-1	SPP		Total Revs	Cumul. Total Revs 0
Depth In		HSI		ROP(avg)	ROP(avg) 0.00 m/hr
Depth Out		TFA 0.000			

Bit Comment

BHA # 24

Weight(Wet)	50000.00klb	Length	Torque(max)	D.C. (1) Ann Velocity	0fpm
Wt Below Jar(Wet)	25000.00klb	String	Torque(Off.Btm)	D.C. (2) Ann Velocity	0fpm

Pick-Up	Torque(On.Btm)	H.W.D.P. Ann Velocity	0fpm
Slack-Off		D.P. Ann Velocity	0fpm

BHA Run Description Drill out 9 5/8 casing shoe BHA.

BHA Run Comment Note/ No jets installed in bit incase cmt squeeze job is required.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.25m	8.50in	2.25in	6076381	
Bit Sub	1.19m	6.88in	2.38in	87	
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		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	13	0	542.0
Drill Water	m3	0	0	0	604.0
Pot Water	m3	46	27	0	266.0
Brine	m3	0	0	0	71.0
Barite	MT	0	0	0	167.0
Baradefoam-W300	can	0	0	0	9.0
Barolift	boxes	0	0	0	17.0
Bentonite	MT	0	0	0	81.2
Caustic Soda	pail	0	1	0	24.0
Lime	sx	0	0	0	4.0
Soda Ash	sx	0	0	0	37.0
Sodium Bicarbonate	25kg sx	0	0	0	38.0
Shaker Screen 50	Screens	0	0	0	8.0
Citric Acid	Sacks	0	0	0	80.0

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	1.09	97					30			40			50		
2	Continental Emsco	6.50	1.09	97					30			40			50		
3	Continental Emsco	6.50	1.09	97					30			40			50		

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.

Personnel On Board	
Company	Pax
ADA	4
Maersk	48
GRN	4
OMS	14
Reach	1
Geoservices	4
Halliburton Cementers	2
Halliburton	3
Halliburton (Baroid)	2
Dril-Quip	1
Fugro ROV	3
Swaco	1
Sperry Sun	3
Origin Energy	2
Other Contractor	1
Total	93

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : Mike Lawrance / James Munford / Fergus Spencer			
Available	2776.1bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	734.5bbl	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	1150.6bbl	Dumped		Shaker 2	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Reserve	891.0bbl	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								Rig Support	
Weather on 06 Nov 2009								Anchors	Tension (klb)
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.0nm	12kn	65.0deg	1026.0mbar	10C°	1.0m	60.0deg	3s	1	182.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather Comments		2	195.0
0.9m	0.4deg	1.0deg	317.0deg	240000.00klb	116684.00klb			3	150.0
Swell Height	Swell Dir.	Swell Period	Comments					4	197.0
3.0m	260.0deg	5s						5	209.0
								6	196.0
								7	180.0
								8	195.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
Far Scimitar			Alongside Melbourne	Item	Unit	Used	Quantity
				Rig Fuel	M3		630
Potable Water	M3		495				
Drill Water	M3		530				
	t		0				
Barite	t		0				
Bentonite	t		0				
Brine	M3		165				
Far Fosna	0630 hrs 3/10/09		Rig Standby.	Item	Unit	Used	Quantity
				Rig Fuel	M3		463
				Pot Water	M3		524
				Drill Water	M3		600
				Bentonite	t		42
				Barite	t		0
					t		130
				Brine	M3		0

1310 - 1515 hrs, Cargo operations.

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow Helicopters	0859 / 0914	11 / 12	Crew Change